# Monthly report on livestock disease trends as informally reported by veterinarians belonging to the Ruminant Veterinary Association of South Africa (RuVASA), a group of the South African Veterinary Association

# October 2020

(Previous disease reports can be seen on the RuVASA website www.ruvasa.co.za)

These reports include data from individual practices

#### **Click on Disease Reports**

## The following practices and laboratories (143) submitted reports during October 2020:

#### Mpumalanga (11)

Balfour - Dr. Louis van Jaarsveld

Bethal – Dr. Hardus Pieters

Ermelo – Dr. Ben Potgieter

Grootvlei – Dr. Neels van Wyk

Hendrina - Dr. Anja Steinberg

Lydenburg – Dr. Marietjie Malan

Lydenburg – Drs. Trümpelmann and Steyn

Middelburg - Dr. Neil Fourie

Piet Retief – Niebuhr and Weber

Standerton - Dr. Kobie Kroon

Volksrust – Dr. Johan Blaauw

#### Gauteng (11)

Bapsfontein – Drs. Engelbrecht and Olivier

Bronkhorstspruit – Dr. De Bruin, De Bruin and Labuschagne

Hammanskraal - Dr. Hentie Engelbrecht

Krugersdorp-Veeartsnetwerk – Dr. Danie Odendaal

Magaliesburg – Dr. Ryan Jeffery

Muldersdrift - Drs. Speedy and Enslin

Nigel – Dr. Cindy van der Westhuizen

Nigel - Dr. Henry Labuschagne

Onderstepoort Veterinary Academic Hospital – Proff. Holm and Leask and Drs. Fitte, Grobler, Hentzen, Koeppel, Leask, Magadu, Magagula, Marufu, Mokoele, O'Dell, Tagwirreyi, Tshuma, Van den Hurk and Van der Leek

Pretoria – Dr. Hanneke Pienaar

Vanderbijlpark – Dr. Kobus Kok

#### Limpopo (6)

Bela-Bela (Warmbaths) - Dr. Nele Sabbe

Modimolle (Nylstroom) - Drs. Huber, Bredell and Barnard

Mokopane (Potgietersburg) – Dr. Henk Visser

Polokwane (Pietersburg) - Drs. Watson, Viljoen, Jansen van Vuuren, Van Rooyen, Snyman and Cremona

Tzaneen – ZZ2 - Dr. Danie Odendaal

Vaalwater – Dr. Hampie van Staden

# North West (16)

Beestekraal - Dr. Alwyn Venter

Bloemhof - Dr. Cizelle Naude

Brits – Dr. Boshoff and Coertze

Brits - Dr. Gerhardus Scheepers

Christiana – Dr. Pieter Nel

Klerksdorp – Drs. Geral, Van den Berg, Van den Berg and Greyling

Leeudoringstad – Dr. Ian Jonker

Lichtenburg - Dr. Nelmarie-Krüger-Rall

Potchefstroom - Dr. Martin Jordaan

Potchefstroom - Dr. Martin Ferreira

Rustenburg – Drs. Goosen, Grobler, Sparks, Van Egdom, Van Rensburg and Van Rooyen

Schweizer-Reneke – Dr. Pieter Venter

Stella - Dr. Magdaleen Vosser

Ventersdorp – Dr. Van der Merwe

Vryburg - Dr. Jurie Kritzinger

Vryburg – Drs. De Jager and Rautenbach

#### Free State (29)

Bethlehem – Drs. Strydom and Strydom

Bethlehem – Dr. J.C du Plessis

Bloemfontein – Dr. Stephan Wessels

Bloemfontein – Dr. Lizanne Meiring

Bultfontein – Dr. Santjie Pieterse

Clocolan – Drs. Wasserman and Kleynhans

Dewetsdorp - Dr. Marike Badenhorst

Excelsior/Ladybrand – Dr. Dedré Nel

Ficksburg – Dr. Woody Kotzé

Frankfort - Drs. Lesssing, Cilliers and Janse van Rensburg

Harrismith – Dr. Wim Slabber

Hoopstad – Dr. Kobus Pretorius

Hoopstad – Dr. Cassie van der Walt

Kroonstad – Drs. Daffue, Eksteen, Van Zyl and Van der Walt

Memel – Drs. Nixon and Nixon

Oranjeville - Dr. D'Wall Hauptfleish

Parys – Drs. Wessels and Wessels

Philippolis – Dr. Stephan Vermeulen

Reitz – Dr. Murray Smith

Senekal – Dr. Jan Blignaut

Senekal – Dr. Theo Kotze

Smithfield – Dr. Nienke van Hasselt

Viljoenskroon – Dr. Johan Kahts

Vrede – Drs. Bester-Cloete, Myburgh and Roos

Vrede – Dr. Rudolph Fourie

Warden - Dr. Paul Reynolds

Wesselsbron - Dr. Johan Jacobs

Winburg – Drs. Albertyn and Albertyn

Zastron – Drs. Troskie and Strauss

#### KwaZulu-Natal (12)

Bergville – Dr. Jubie Muller

Dundee - Drs. Marais and Fynn

Eshowe – Drs. Pryke and Hoffman

Estcourt – Drs. Turner, Tedder, Taylor, Tratschler, Van Rooyen and Alwar

Kokstad – Drs. Clowes, Shrives and Lees

Mooi River – Drs. Edmunds, Fowler and Still

Mtubatuba – Dr. Trevor Viljoen

Newcastle – Dr. Barry Rafferty

Pietermaritzburg - Drs. Kretzmann, Watkins, De Freitas and Barnard

Pongola – Dr. Heinz Kohrs

Underberg – Drs. King, Delaney and Huysamer

Vryheid – Drs. Theron and Theron

#### Eastern Cape (15)

Adelaide – Dr. Steve Cockroft

Alexandria – Dr. Charlene Boy

Alexandria – Dr. Johan Olivier

Aliwal North – Drs. Troskie and Strauss

Bathurst - Dr. Jane Pistorius

Graaff- Reinet - Dr. Roland Larson

Graaff-Reinet – Hobson, Strydom and Hennesy

Humansdorp - Drs. Van Niekerk, Jansen van Vuuren and Davis

Jeffreys Bay - Drs. Lategan and Hoek

Kareedouw – Dr. Marten Bootsma

Queenstown – Drs. Du Preez, Klopper, Jansen van Vuuren, De Klerk, Catherine and Wentzel

Steynsburg – Dr. Johan van Rooyen

Stutterheim – Dr Dave Watermann

Uitenhage – Drs. Mulder and Krüger

Witelsbos - Dr. Elmien Kotze

#### Western Cape (22)

Beaufort West - Dr. Jaco Pienaar

Beaufort West – Dr. Bennie Grobler

Caledon - Drs. Louw and Viljoen

Caledon – Drs. Retief, Coetzer and Jansen

Ceres – Drs. Pieterse, Wium, De Villiers and Scheepers

Darling - Drs. Van der Merwe, Adam, Jenkins and Lord

George – Drs. Strydom, Truter and Pettifer

George - Dr. Riaan Putter

Heidelberg – Dr. Albert van Zyl

Malmesbury – Dr. Otto Kriek

Malmesbury – Drs. Heyns and Zolner

Malmesbury – Drs. Bosman and Groenewald

Moorreesburg – Dr. Suenett Kotzé

Oudtshoorn - Dr. Glen Carlisle

Oudtshoorn - Dr. Adriaan Olivier

Paarl – Dr. Carla van der Merwe

Piketberg – Dr. André van der Merwe

Stellenbosch - Dr. Alfred Kidd

Swellendam – Drs. Malan and Fourie

Vredenburg – Dr. Izak Rust

Wellington – Drs. Van Zyl and Louw

Worcester – Dr. Kobus Rabe

#### Northern Cape (10)

Calvinia – Dr. Bertus Nel

Colesberg – Drs. Rous and Rous

De Aar – Dr. Donald Anderson

Kathu – Dr. Jan Vorster

Kimberley – Drs. Swart, Smith and Hyslop

Kimberley – Drs. Van de Wateren and Van de Wateren

Kuruman – Dr. Gerhard van der Westhuizen

Postmasburg - Dr. Boeta van der Merwe

Kimberley – State Veterinary group (NC)

Upington – Drs. Vorster and Visser

#### Feedlots (2)

Dr. Eben Du Preez

Drs. Morris and Le Riche

# Mastitis consultant (1)

Dr. Theo Kotzé – Moghaka district (Kroonstad municipality)

#### Laboratory reports (8)

Dr. Marijke Henton - Vetdiagnostix, Johannesburg

Dr. Rick Last – Vetdiagnostix, Pietermaritzburg

Dr. Liza du Plessis - Idexx SA

Provincial Veterinary laboratory - Stellenbosch

Dr. Mark Chimes - Dairy Standard, George

Dr. Sophette Gers – Pathcare, Cape Town

Prof. Emily Mitchell – University of Pretoria

Amanda McKenzie – Vryburg Veterinary Laboratory

# Bovine brucellosis – prevent a crisis, learn from experience

I have asked my Veterinary colleagues to send in cases of bovine brucellosis in their practice areas so that we can learn from their experiences. I hope these cases will make you aware of how serious the situation is in South Africa and the longer farmers wait before testing and vaccinating their animals, the bigger the shock and economic losses are going to be!

#### This month two case studies were sent to us:

#### Working together leads to success!

#### Type of herd: Communal farm, mixed breeds

The incident is not recent about 7-8 years ago, but still can be used as a model to control brucellosis in communal areas.

Representatives of a Livestock Association (farmers) in a dip-tank area in KwaZulu Natal Province reported incidences of abortions and reproductive failures in their dip-tank cattle herd, following a talk by a State Vet about Bovine brucellosis. The State vet meets the Livestock Association in Greytown once a month every year.

Since the reported abortion had happened a week ago, the Control Technician in charge of the area decided to do blood testing. The results came back a week later, four cows showed brucellosis titres. They did a re-test, on the day of the re-test the farmers were told the reason why it was necessary to do a re-test and educated about the disease. (Only the representatives attend the meeting, so Veterinary Services wanted the farmers to hear about brucellosis first hand instead of being told by the representative).

The positive test repeated itself - we anticipated this to be a difficult issue to solve. The State Veterinarian, the Control Animal Health Technician (Co-AHT) and the technician (AHT) of the area went to the dip-tank (having invited the dip-tank community) on a Saturday to ensure that even the people who are working could be present. The community herd is not very big, around 500 cattle. The farmers know individual owners of cattle and the cattle are known by names or colour / patterns or owner.

We informed them which cattle are positive, from the laboratory form, identified them, branded them and talked about possible solutions. The complication of a positive dip-tank was discussed with them: the possible spread from animal to animal, the need for branding, and the need for isolation as in quarantine camp (which turned out to be impossible). We asked them to make a choice. Choices that were given:

(i)send the cattle to the abattoir for slaughter,

(ii) if in the community there was going to be a ritual (it was November, some people slaughter animals for rituals around December) exchange the positive animal for slaughter and take the healthy one.

The origin of the positive result was a farmer who bought a cow from a commercial farm. One cow was exchanged for a heifer for a ritual, one owner (old lady) was going to need a cow to slaughter in December anyway (two animals accounted for). The CoAHT arranged a truck to send the other two positive animals to the abattoir.

We had a simple request for the two animals that were to be slaughtered within the community to be slaughtered in the presence of the CoAHT, who was going to remove the reproductive organs for them on the day (they were slaughtered on different days). We wanted to make sure each of the four animal's fates was accounted for by Veterinary Services. Not to mention that on the day of this meeting they slaughtered chickens for a braai at the diptank (not a bribe, just saying...)

A follow up test on this herd was negative. We have not gone for another test though.

Lesson learnt: A combined effort in the office, a dedicated AHT and being up front with the farmers and not forgetting a dedicated community leadership, even communal farmers are willing to sort out their issues. Brucellosis can be controlled even at dip-tanks. And never underestimate the value of cooperation of well-informed community.

#### Brucellosis control can be achieved in rural areas!

A Land Reform & Rural Development departmental farm reported poor calving and pregnancy losses. No foetuses were retrieved and the animal health technician (AHT) suspected brucellosis as a possible cause. There were no ear tags initially and the different owners had not been identified at the first test.

The farm was run as a trust with 3 different cattle owners running livestock independently of each other. The AHT embarked on an intensive extension campaign on brucellosis within the community, focussing on the herd impact and the importance of all role-players participating. The first test with ear tags was done on 189 cattle with a total of 19 positive brucellosis cases.

Each owner's cattle were tested as a separate herd and the farmers were each issued with a quarantine notice. Testing and slaughtering was then implemented with the consent of the farmers. Farmers were cooperative with exception of one who might have moved cattle out. The positive cattle were purchased by a butcher from Newcastle and the cattle slaughtered at the Newcastle Abattoir. The biggest complaint by the farmers at the time was the low price received for their cattle.

A total of 18 red-cross permits were issued during the quarantine period.

The quarantine notices were lifted in September 2013 after 3 consecutive negative tests.

# **BIOSECURITY**

Biosecurity should not be just a word but should be an action. All of us (producer organizations, farmers and their employees, politicians, veterinarians, co-op personnel, representatives, auctioneers, agricultural writers and inhabitants of the Republic of South Africa) should be protecting our national herd becoming infected with organisms which could harm them and the people consuming products of animal origin.

We have been talking and writing, participating in TV and radio programmes, farmer's days and meetings on brucellosis, foot and mouth disease, Rift Valley fever, trichomonosis, Asiatic red water, cryptosporidiosis, *E. coli*, snotsiekte, rabies, fear of East Coast fever, sheep scab, ram's disease, listeriosis, tuberculosis, African swine fever, bird flu to name a few important diseases that we were confronted with during the last year or two. Stock theft and farm murders are on the increase. Water sources are polluted. Welfare issues were problematic.

Farmers had been hit by export restrictions, falling of meat prices and production losses – when will we ever learn to protect our investments with all our might!

We are not doing what we should! Identifying our animals, controlling movement, vaccinating our animals and demanding vendor declarations when buying animals - Buyer beware!

As was recently experienced, an auction could be the most dangerous place to buy animals **if** biosecurity measures are not heeded. All animals should be branded with a registered brand mark and or tattoo,

health certificates in place and seller's home address (not post box number, should be available. Take note that foot and mouth disease, bovine brucellosis, tuberculosis, Johne's disease, trichomonosis, vibriosis, sheep scab (to name a few diseases) and parasites resistant to certain antiparasiticides are **herd and flock** diseases! Contact your veterinarian to assess your risk bringing in animals onto your farming unit. As an additional precaution, quarantine animals for at least 28 days.

All is not doom and gloom – many farmers, although in the minority, are doing the correct thing. Following a closed herd policy, identifying their animals, testing their animals for brucellosis, movement control, animals that are bought and showed are quarantined before introducing them into the herd. Joint action by government and private sector during disease outbreaks through the National Animal Health Forum proved to be successful.

Our main goal now, should be to get a Livestock Identification and Traceability System (LITS) in place. This will enable us to establish certain disease-free compartments and help to contain an outbreak within a short time period.

In unity lies our strenghth – join your producer organization!!

# What to do to pe prepared for future outbreaks

# Get a traceability system in place

# **Biosecurity guidelines**

http://nahf.co.za/wp-content/uploads/FMD-Basic-Biosecurity-Guidelines-2019-11-19-Ver-3-1.pdf

- 1. During a FMD outbreak it is the producer's responsibility to keep their animals from getting infected.
- 2. Although FMD does not pose a food safety or public health concern it has a major impact on animal health and international trade.
- 3. Each commercial farm should appoint a biosecurity manager.
- 4. A written biosecurity plan is a basic requirement.
- 5. Development of a plan must be done by the biosecurity manager with assistance from a veterinarian.
- 6. The biosecurity plan must include a line of separation/demarcation of the biosecurity area.
- 7. Training:
- a. Train all personnel in biosecurity principles at least annually.
- 8. Access: a. Access points to the area must be identified and demarcated clearly.
- b. Loading site must be identified away from animals.
- c. A cleaning and disinfection station needs to be made available and should be away from any animals and an SOP for cleaning of all vehicles entering the biosecurity area must be adhered to.

- d. Parking areas away from animal areas must be provided.
- e. Vehicle movement pathways must be mapped.
- f. Draw up a map demarcating all these areas.
- g. The control boundary should always be respected and identified to all personnel.
- h. No access of vehicles or personnel to the biosecure area unless via proper decontamination protocols. People with any suspected contact with infected animals (or having been in an affected area) should stay away from "clean animals for at least a week.
- i. Access points should be respected, well demarcated and procedures of access described. Biosecurity Guidelines-FMD 2019-11-19 2
- j. Animals arriving on the farm should only be directly from a guaranteed healthy herd accompanied by signed and dated veterinary health certificates.
- k. Personnel entering the biosecure area should shower and change clothing before entering the area.
- I. Logbooks of all persons, vehicles, equipment etc entering or leaving the biosecure area should be kept.
- m. No entry of persons, vehicles or products should be allowed if not expressly permitted by the biosecurity officer.
- n. Feed brought into the biosecure area should only be from sources determined by the biosecurity manager.
- o. For further information go to <a href="https://www.securebeef.org">www.securebeef.org</a>
- 9. Quarantine:
- a. For extra security cattle should be guarantined at least 100 meters for 21 days away from the herd.
- b. There will be absolutely no contact with the herd either directly or indirectly.
- c. They should only be introduced after clinical (and preferably serological) evaluation.

It is now the time that we take ownership of our own industry!!!!!!!

The basis of Disease Control is Animal Identification and Tracebility

Visit: https://www.icar.org/index.php/certifications/animal-identification-certifications/

Very important legislation regarding the biosecurity rules for livestock agents

http://nahf.co.za/biosecurity-rules-for-livestock-agents-gazetted-13-november-2020-no-43900-board-notice-135-of-200/

http://nahf.co.za/wp-content/uploads/Biosecurity-Rules-for-Livestock-Agents-Gazetted-13-November-2020-No-43900-Board-Notice-135-of-200.pdf

#### **BACKGROUND and DEFINITIONS:**

These rules will regulate the livestock agent's industry with specific reference to required precautions to take during the gathering of live animals at auctions to reduce the risk of the spreading controlled, notifiable and other animal diseases.

In summary, each livestock agent/auctioneer will comply with the following:

- a) The rules for auctions in this document.
- b) Registration with the Agricultural Produce Agents Council (APAC) is compulsory and only registered agents will be allowed to conduct business.
- c) Acceptance of responsibilities in terms of Sections 11 and 26 of the Animal Diseases Act, Act 35 of 1984. This gazette is also available free online at www.gpwonline.co.za 206 No. 43900 GOVERNMENT GAZETTE, 13 NOVEMBER 2020
- d) An external audit of the auction facilities and all procedures, including these rules for auctions, will be undertaken by an independent auditor, these audits will need to be submitted to APAC bi-annually.
- e) Every livestock agent must appoint a Biosecurity practitioner (a person registered with the South African Veterinary Council).
- "Biosecure area" is the area where only animals whose documentation has been verified, identification and health status has been confirmed by a SAVC qualified person, i.e. animals unlikely to pose a significant risk of carrying any contagious disease-causing agents, as well as persons who have been decontaminated to the satisfaction of a biosecurity practitioner are allowed to enter;
- "Biosecurity practitioner" a person registered with the South African Veterinary Council, who oversees compliance with minimum biosecurity requirements for animals from different origins congregating for auctioning, in line with the requirements of Sections 11 and 26 of the Animal Diseases Act, Act 35 of 1984 and the rules in this document;
- "Animal Owner Health Attestation" is a signed declaration from the owner of the animals that attests: This gazette is also available free online at www.gpwonline.co.za STAATSKOERANT, 13 NOVEMBER 2020 No. 43900 207 3
- The name and location of the farm/area of origin.
- The absence of overt signs of disease and parasites.
- The absence of unexplained mortalities on the property of origin in the preceding 28 days.
- No new animal introductions to the property of origin in the preceding 14 days.

• Where possible, and especially during periods of disease control restrictions in specific localities, confirmation of this health status by the farm's attending veterinarian is ideal, see Addendum A of this document.

#### Identification of animals

- a) All animals accepted at an auction must be properly and permanently marked with the owner's registered mark in accordance with the Animal Identification Act, Act 6 of 2002, and regulations published in Government Gazette no 25732 of 21 November 2003.
- b) Animals without registered marks shall not be off-loaded at the biosecure area.
- c) No freshly branded animals may be accepted.
- d) No animals with wet paint marks of previous auctions may be accepted within 28 days after the previous sale.
- e) No branding or marking of animals is allowed on the auction premises.
- f) The auctioneer must ensure the registered brand belongs to the owner, check the brand marking certificate and ID of the owner and driver/transporter where applicable and to follow up any suspicious brands with the local Stock Theft Unit. The livestock agent must insist on a confirmation of their reporting of the noncompliance with the Stock Theft Act and keep these on record
- g) The ear tag / identity tag for each animal's individual identification as per the Livestock Identification and Traceability System, shall correspond with the list of animals in the Original Animal Owner Health **Attestation**.

#### Checking animals arriving at auctions

All animals must, upon arrival, be checked for lesions or clinical signs of disease or external parasites. In addition, animals shall be checked for official marks/brands indicating any of the controlled animal diseases such as Brucellosis, Tuberculosis and Foot and mouth disease. If there is any suspicion of any infectious disease, please refer to section 10 below.

# **Summary of disease report for October 2020**

143 Reports from veterinary practices and laboratories were received (Mpumalanga (MP) 11; Gauteng (G) 11; Limpopo (L) 6; Northwest (NW) 16; Free State (FS) 29; KwaZulu-Natal (KZN) 12; Eastern Cape (EC) 15; Western Cape (WC) 22: Northern Cape (NC) 10; Feedlots (FL) 2; Mastitis consultant (MC) 1 and Laboratories (Lab) 8)

Look at this list – these are the most reported diseases, reported by veterinarians.

Also look at toxicities where large number of animals died: gifblaar, urea poisoning, organophosphate poisoning!

# A list of diseases and conditions reported by veterinarians in 5 or more provinces

| Disease or condition  | Number of provinces reporting |
|-----------------------|-------------------------------|
| Abscesses             | 9                             |
| Dystocia              | 9                             |
| Uterine prolaps       | 9                             |
| Intestinal roundworms | 8                             |
| Wireworm              | 8                             |
| Cryptosporidiosis     | 8                             |
| Bont-legged ticks     | 8                             |
| E. coli               | 8                             |
| Pasteurellosis        | 8                             |
| Orf                   | 8                             |
| Ringworm              | 8                             |
| Tulip                 | 8                             |
| Energy deficiency     | 8                             |
| Protein deficiency    | 8                             |
| Abortions             | 8                             |
| Blue udder            | 8                             |
| Lung infection        | 8                             |
| Downer                | 8                             |
| Acidosis              | 8                             |
| Retained afterbirth   | 8                             |

| Tapeworms         7           Asiatic red water         7           Pulpy kidney         7           Warts         7           Eye infections         7           Lameness/foot problems         7           Mastitis         7           Vagnal prolaps         7           Preditors         7           Heartwater ticks         6           Nuisance flies         6           Nasal bot         6           African red water         6           Anaplasmosis         6           Heartwater         6           Trichomonosis         6           Blackquarter         6           Bovine brucellosis         6           Stillbirths         6           Bloat         6           Diarrhoea         6   | Sheath prolaps         | 8 |
|--|------------------------|---|
| Asiatic red water 7 Pulpy kidney 7 Warts 7 Eye infections 7 Lameness/foot problems 7 Mastitis 7 Vagnal prolaps 7 Preditors 7  Heartwater ticks 6 Nuisance flies 6 Nasal bot 6 African red water 6 Anaplasmosis 6 Heartwater 6 Trichomonosis 6 Blackquarter 6 Bovine brucellosis 6 Stillbirths 6 Bloat 6 Bloat 6 Bloat 6  Free Anaplasmosis 6 Bloat 6 Bloat 6 Bloat 6 Bloat 6 Bloat 6 Bloat 6 Free Anaplasmosis 6 Bloat |                        | 1 |
| Pulpy kidney         7           Warts         7           Eye infections         7           Lameness/foot problems         7           Mastitis         7           Vagnal prolaps         7           Preditors         7           Heartwater ticks         6           Nuisance flies         6           Nasal bot         6           African red water         6           Anaplasmosis         6           Heartwater         6           Trichomonosis         6           Blackquarter         6           Bovine brucellosis         6           Stillbirths         6           Bloat         6   | Tapeworms              | 7 |
| Warts         7           Eye infections         7           Lameness/foot problems         7           Mastitis         7           Vagnal prolaps         7           Preditors         7           Heartwater ticks         6           Nuisance flies         6           Nasal bot         6           African red water         6           Anaplasmosis         6           Heartwater         6           Blackquarter         6           Bovine brucellosis         6           Stillbirths         6           Bloat         6  | Asiatic red water      | 7 |
| Eye infections       7         Lameness/foot problems       7         Mastitis       7         Vagnal prolaps       7         Preditors       7         Heartwater ticks       6         Nuisance flies       6         Nasal bot       6         African red water       6         Anaplasmosis       6         Heartwater       6         Trichomonosis       6         Blackquarter       6         Bovine brucellosis       6         Stillbirths       6         Bloat       6  | Pulpy kidney           | 7 |
| Lameness/foot problems       7         Mastitis       7         Vagnal prolaps       7         Preditors       7         Heartwater ticks       6         Nuisance flies       6         Nasal bot       6         African red water       6         Anaplasmosis       6         Heartwater       6         Trichomonosis       6         Blackquarter       6         Bovine brucellosis       6         Stillbirths       6         Bloat       6   | Warts                  | 7 |
| Mastitis         7           Vagnal prolaps         7           Preditors         7           Heartwater ticks           Nuisance flies         6           Nasal bot         6           African red water         6           Anaplasmosis         6           Heartwater         6           Trichomonosis         6           Blackquarter         6           Bovine brucellosis         6           Stillbirths         6           Bloat         6  | Eye infections         | 7 |
| Vagnal prolaps         7           Preditors         7           Heartwater ticks         6           Nuisance flies         6           Nasal bot         6           African red water         6           Anaplasmosis         6           Heartwater         6           Trichomonosis         6           Blackquarter         6           Stillbirths         6           Bloat         6  | Lameness/foot problems | 7 |
| Preditors         7           Heartwater ticks         6           Nuisance flies         6           Nasal bot         6           African red water         6           Anaplasmosis         6           Heartwater         6           Trichomonosis         6           Blackquarter         6           Bovine brucellosis         6           Stillbirths         6           Bloat         6  | Mastitis               | 7 |
| Heartwater ticks 6 Nuisance flies 6 Nasal bot 6 African red water 6 Anaplasmosis 6 Heartwater 6 Trichomonosis 6 Blackquarter 6 Stillbirths 6 Bloat 6   | Vagnal prolaps         | 7 |
| Nuisance flies 6 Nasal bot 6 African red water 6 Anaplasmosis 6 Heartwater 6 Trichomonosis 6 Blackquarter 6 Stillbirths 6 Bloat 6 Bloat 6  | Preditors              | 7 |
| Nasal bot 6  African red water 6  Anaplasmosis 6  Heartwater 6  Trichomonosis 6  Blackquarter 6  Bovine brucellosis 6  Stillbirths 6  Bloat 6  | Heartwater ticks       | 6 |
| African red water 6 Anaplasmosis 6 Heartwater 6 Trichomonosis 6 Blackquarter 6 Bovine brucellosis 6 Stillbirths 6 Bloat 6  | Nuisance flies         | 6 |
| Anaplasmosis 6 Heartwater 6 Trichomonosis 6 Blackquarter 6 Stillbirths 6 Bloat 6   | Nasal bot              | 6 |
| Heartwater 6 Trichomonosis 6 Blackquarter 6 Bovine brucellosis 6 Stillbirths 6 Bloat 6   | African red water      | 6 |
| Trichomonosis 6  Blackquarter 6  Bovine brucellosis 6  Stillbirths 6  Bloat 6  | Anaplasmosis           | 6 |
| Blackquarter 6  Bovine brucellosis 6  Stillbirths 6  Bloat 6   | Heartwater             | 6 |
| Bovine brucellosis 6 Stillbirths 6 Bloat 6   | Trichomonosis          | 6 |
| Stillbirths 6 Bloat 6  | Blackquarter           | 6 |
| Bloat 6  | Bovine brucellosis     | 6 |
|  | Stillbirths            | 6 |
| Diarrhoea 6  | Bloat                  | 6 |
| I I  | Diarrhoea              | 6 |

| Eye cancer          | 6 |
|---------------------|---|
| Joint ill           | 6 |
| Trauma              | 6 |
| Ketosis (Domsiekte) | 6 |
| Trauma (fracture)   | 6 |
|                     | , |
| Liver fluke         | 5 |
| Coccidiosis         | 5 |
| Red-legged ticks    | 5 |
| Mange mites         | 5 |
| Blowflies           | 5 |
| Sweating sickness   | 5 |
| Vibriosis           | 5 |
| Blood gut (sheep)   | 5 |
| Urea                | 5 |
| Calcium deficieny   | 5 |
| Metritis            | 5 |
| Poor oneption       | 5 |
|                     |   |

# **Bovine Brucellosis**

Although we have made positive steps in controlling Bovine brucellosis, the model disease stated in the Veterinary Strategy, we as a country is far from achieving our goal!

# If farmers will just comply by vaccinating their animals against brucellosis, according to law, the incidence of brucellosis will drop dramatically as shedding of bacteria will drop!

Many farmers are still shrugging their shoulders and saying: "Why should I test my animals as it will only cost me money and what if there are positive animals? My farm will be placed under quarantine, so I am not going to test my animals!"

Dr. Trudie Prinsloo a veterinarian and legal advisor has compiled legal aspects regarding brucellosis control and it is VERY IMPORTANT that you should avail yourself with the content of this document.

It is available in English and Afrikaans.

http://nahf.co.za/brucellosis-legal-aspects-2018-12-11/

# When buying cattle this Vendor declaration can help you to minimize risk!

#### **VENDOR DECLARATION BOVINE BRUCELLOSIS**

I hereby declare that I am the legal owner or authorised representative of the cattle on sale and am competent to make this declaration

| 1 | The cattle for sale are clearly and permanently identified   |      | Yes        | No   |
|---|--|------|------------|------|
| 2 | The cattle for sale/slaughter were born on my farm   |      | Yes        | No   |
| 3 | The farm has a closed herd policy i.e. I do not buy in cattle, rent out grazing or speculate with cattle |      | Yes        | No   |
| 4 | I practice bio-security on my farm to a level that is **   | Poor | Moderate   | Good |
| 5 | I vaccinate my heifer calves against Bovine Brucellosis once between the ages of 4 – 8 months            |      | Yes        | No   |
| 6 | In addition, I vaccinate my cattle older than 8 months with RB51   |      | Yes        | No   |
| 7 | I have all the cattle on my farm tested for Bovine Brucellosis   |      | Yes (date) | No   |

| 8  | My herd has been tested negative within the past year  |      | Yes     | No   |
|----|--|------|---------|------|
| 9  | I did not buy in cattle since my last negative brucellosis test  |      | Yes     | No   |
| 10 | I/my vet investigates any abortions on my farm   |      | Yes     | No   |
| 11 | To the best of my knowledge, my immediate neighbours and farms in my area are free of Bovine Brucellosis |      | Yes     | No   |
| 12 | I use a veterinarian to advise me on my cattle's herd health   |      | Yes     | No   |
| 13 | The cattle handling facilities on my farm are  | Poor | Average | Good |

Note: Vaccination does not mean freedom from Bovine Brucellosis as cattle can still be carriers

Please attach the most recent *Brucella* blood test certificate

| Owner or authorised representative:   |      |         |
|---|------|---------|
| Signature:  |      |         |
| Date:   |      |         |
| ** * Biosecurity  |      |         |
| Poor – speculates with cattle, does not vaccinate, poor fences, cattle come | into | contact |
| with other cattle   |      |         |

Good – closed herd/never buys in cattle, vaccinates heifers and no contact with other cattle, follows a herd health plan as advised by his veterinarian, does not allow transport trucks onto property, washes and disinfects truck after returning from the abattoir or auction grounds.

Compiled by: Dr. Sewellyn Davey, Chairman of the Brucellosis Steering committee of the National Animal Health Forum

Medium – Vaccinates heifers, does not buy in cattle of unknown health status

# OVINE JOHNE'S DISEASE VENDOR DECLARATION

# ON THE SALE OF SHEEP

(Updated Draft May 2015)

| 1.   | I hereby declare that I am the owner or authorised representative of the sheep on sale and am competent to make this declaration.                   | YES      | NO    |
|------|---|----------|-------|
| 2.   | The sheep for sale are clearly identified in the accompanying description.  | YES      | NO    |
| 3.   | The sheep for sale were born on my farm.  | YES      | NO    |
| 4.   | The farm has a closed flock policy. (No live sheep are brought onto the farm from elsewhere)  | YES      | NO    |
| 5.   | I know the signs of the disease and to the best of my knowledge, all of my properties are free of cases of Ovine Johne's Disease.                   | YES      | NO    |
| 6.   | I have actively looked for Ovine Johne's Disease and have had tests done for this.  | YES      | NO    |
| 7.   | To the best of my knowledge, my immediate neighbours and farms in my magisterial district of my farm(s) are free of cases of Ovine Johne's Disease. | YES      | NO    |
| 8.   | The sheep on my properties have been vaccinated against Ovine Johne's Disease and are clearly marked with the approved ear tag.                     | YES      | NO    |
| 9.   | All lambs born are vaccinated   | YES      | NO    |
| 10   | If vaccinated, the number of years that the vaccinations have been done is  |          | years |
| NO   | OTE: Vaccination does not mean freedom from OJD, vaccinated animals can still be carriers   |          |       |
| Sta  | atement 8 and 9 apply only to already infected flocks, and such sheep can only be sold to ot  | ther inf | ected |
| flo  | cks by law.   |          |       |
| Bu   | yers should consult their veterinary advisor before any purchases.  |          |       |
|      |   |          |       |
| Sig  | gnature Date  | _        |       |
| NIA. | Farm:   | _        |       |
| N/A  | ME  |          |       |
| _    | District:   | _        |       |
|      | WNER OR AUTHORIZED PRESENTATIVE   |          |       |
| 1    | RESERVATIVE   |          |       |













# **SOP** for the control of Bovine Brucellosis

| Audit date:        |  |
|--------------------|--|
| Authorised person: |  |

|    |  | Y/N | Comment |
|----|--|-----|---------|
| 1  | Fences and gates in good condition                   |     |         |
| 2  | Gate control - log in                                |     |         |
| 3  | Disinfection of vehicles coming onto the farm        |     |         |
| 4  | Protective clothing and boots given to people        |     |         |
|    | visiting the farm (cattle area) coming from high     |     |         |
|    | risk areas eg. veterinarians, nutritionists,         |     |         |
|    | representatives, truck drivers, workers, etc.        |     |         |
| 5  | Sterilizing equipment coming in contact with cattle  |     |         |
| 6  | Run off water/ streams from neighbouring farms       |     |         |
| 7  | All animals identified with a brand mark and ear     |     |         |
|    | tag  |     |         |
| 8  | Data base of all animals                             |     |         |
| 9  | Closed herd  |     |         |
| 10 | When last were animals bought in or moved from       |     |         |
|    | another farm?  |     |         |
| 11 | Only buy in animals from a farm which has a          |     |         |
|    | recent negative tested brucellosis herd certificate  |     |         |
| 12 | Origin(s) of acquired cattle? Bought at an auction?  |     |         |
| 13 | Keep heifers separate from herd until they have      |     |         |
|    | calved and tested negative for brucellosis           |     |         |
| 14 | Quarantine camp available                            |     |         |
| 15 | Separate calving camps                               |     |         |
| 16 | Were all heifers vaccinated between 4 and 8          |     |         |
|    | months vaccinated with Strain 19 or RB51?            |     |         |
| 17 | Any cattle vaccinated with Strain 19 over 8 months   |     |         |
|    | of age? History over last few years.                 |     |         |
| 18 | Were there any abortions on the farm – samples       |     |         |
|    | taken, diagnosis?                                    |     |         |
| 19 | All sexually mature cattle in herd tested for bovine |     |         |
|    | brucellosis (provide proof)                          |     |         |

| 20 | Bovine brucellosis is a State controlled disease. |  |
|----|---|--|
|    | Positive cattle are branded with a C on the right |  |
|    | side of the neck.                                 |  |
| 21 | Isolation of infected animals & separate handling |  |
|    | facilities  |  |
| 22 | Prohibition of movement of animals off            |  |
|    | quarantined property except under cover of a Red  |  |
|    | cross permit for slaughter at an abattoir         |  |
| 23 | Prohibition of use and on-farm disposal of        |  |
|    | unboiled, unpasteurised or unsterilised milk on   |  |
|    | quarantined property                              |  |
| 24 | Disinfection of places where infection is a       |  |
|    | possibility.                                      |  |
| 25 | Neighbours/ recent buyers informed of infected    |  |
|    | herd status                                       |  |
| 26 | Fly, crow and predator control                    |  |
| 27 | Destruction of afterbirths/abortions in a         |  |
|    | responsible manner                                |  |
| 28 | Beware of livestock, game interface               |  |

Websites that are there to help you with information regarding animal health:

#### **National Animal Health Forum**

www.nahf.co.za

Read what the Forum is all about:

http://nahf.co.za/about/

This website will become the information centre of animal health in Southern Africa. On the toolbar click on **Stakeholders** and you will find links to producer organizations and other organizations who are participating in the NAHF <a href="http://nahf.co.za/stakeholders/">http://nahf.co.za/stakeholders/</a>

Provincial Animal Health Forums have their own site – click on **Provinces** <a href="http://nahf.co.za/provinces/">http://nahf.co.za/provinces/</a>

Important is to study the Veterinary Strategy (2016 -2026) as it gives direction to where we are going with Animal Health in South Africa.

http://nahf.co.za/wp-content/uploads/Vet-strategy-final-signed.pdf

Click on **Info centre** for more information on the "war" we have against Bovine Brucellosis. Please be up to date on the role all have to play to control this zoonotic disease. <a href="http://nahf.co.za/category/diseases/brucellosis/">http://nahf.co.za/category/diseases/brucellosis/</a>

Information on other controlled diseases (Foot and Mouth Disease, Ovine Johne's Disease, Pest of small stock – PPR, and African Horse Sickness) is available.

This link will continuously be updated.

Information on **antibiotic resistance** is also available at this address: http://nahf.co.za/category/antibiotic-resistance/

# **Rural Veterinary Association of South Africa**

#### www.ruvasa.co.za

Click on **Disease reporting** where maps and information can be sourced on the prevelance of diseases in all provinces. Abattoir reports are available. Use the information available to update management programmes

# Landbouweekblad's webpage

www.landbou.com

**Kundiges** 

**Vra vir Faffa** 

Lees alle antwoorde

**Beeste** 

**Siektes** 

**Brusellose** 

#### The following can be typed in the "Soekblokkie"

Stop Brusellose

Gevaar om Beesbrusellose (BBR) deur vendusies en skoue te versprei

Rapportering aan bure of ander eienaars oor die voorkoms van brusellose

Inligting oor brusellose op die NAHF se webblad

Kuddebestuur voor die dekseisoen

Bees Brusellose handleiding

Teenliggaamwaardes om beesbrusellose in koeie te bepaal

Veterinêre Strategie 2016 -2026

'n Dosyn dinge wat jy moet weet van beesbrusellose

Vyf kernfeite wat jy van beesbrusellose (Besmetlike misgeboorte – BM) behoort te weet

Veiligheid van vleis en biltong afkomstig van 'n bees met brusellose

Vervoer van diere uit 'n positiewe brusellose kudde

Beheer van brusellose in 'n beeskudde

Boerderypraktyke wat die gevaar van die voorkoms van brusellose verhoog

Pak brusellose by die horings

Brucellose kan jou lewe verwoes

Brusellose in wild

Bestuur van positiewe besmetlike misgeboorte beeste

Aankoop van beeste wat besmetlike misgeboorte het

Antwoorde oor brusellose

Behandeling van besmetlike misgeboorte

Besmetlike misgeboorte uitbreek in 'n kudde

Gevaar van brusellose onderskat

RB51-inenting teen brusellose in dragtige koeie

Alles oor Besmetlike Misgeboorte (BM)

Kompensasie vir BM en TB positiewe beeste?

Nóg vrae oor besmetlike misgeboorte

Koeie positief getoets vir besmetlike misgeboorte

Vrae, antwoorde oor besmetlike misgeboorte

Brucellose: Wat staan ons te doen?

#### **Internal parasite control**

www.wormx.info

# Farm gates, Fences and Forsight, the 3 F's!

Bear this in mind as this is where most disease-causing organisms enter or exit farms!

Major examples are: Foot and mouth disease, brucellosis, Johne's disease, TB, cryptosporidiosis, trichomonosis, vibriosis, sheep scab, resistant parasites such as red lice, blue ticks and internal parasites (Buyer beware programmes).

Insist on VENDOR'S DECLARATIONS when buying animals.

Quarantine

**Immunization programmes** 

Speak to your veterinarian

Abide the law-vaccinate cattle against anthrax and heifers against brucellosis!

For the detailed report and previous reports go to <a href="www.ruvasa.co.za">www.ruvasa.co.za</a> and click on Disease reporting

# **Internal parasites**

The following reports were received from practices regarding internal parasite infestations:

| Internal parasites       | MP | G | L | NW | FS | KZN | EC | WC | NC |
|--------------------------|----|---|---|----|----|-----|----|----|----|
| Roundworms               | х  | х |   | х  | х  | х   | х  | х  | х  |
| Resistant roundworms     |    | х |   |    | х  |     |    |    |    |
| Wireworm                 | х  | Х | х | х  | х  |     | х  | х  | Х  |
| Brown stomach-worm       |    |   |   |    |    | х   |    | х  |    |
| Long-necked bankruptworm |    |   |   |    |    |     |    |    |    |
| White bankruptworm       |    |   |   |    |    |     |    |    |    |
| Large-mouthed bowelworm  |    |   |   |    |    |     |    |    |    |
| Nodularworm              |    |   |   |    |    |     |    |    | х  |
| Lungworm                 |    |   |   |    |    |     |    |    |    |
| Eyeworm                  |    |   |   |    |    |     |    |    |    |
| Parafilaria              |    |   |   |    |    | х   |    |    | х  |
| Tapeworms                |    | Х | х | х  | Х  | х   |    | х  | х  |
| Liver fluke              | х  | Х |   |    | Х  | х   |    | х  |    |
| Conical fluke            | x  |   |   |    | х  |     | х  | х  |    |

| Cysticercosis (measles)     |   |   | Х |   |   |   |   | х |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|
| Schistosomiasis (bilharzia) |   |   |   |   |   |   |   |   |   |
| Coccidiosis                 |   | х |   | х | х |   | х | х | х |
| Cryptosporidiosis           | х | Х |   | х | Х | х | х | Х | Х |

Good summer rains fell in some aeas of the country and temperatures rose which favours the hatching of eggs of most internal parasites. Sheep farmers can be caught unaware. Check for clinical signs of parasitism such as anaemia, bottle jaw, weight loss and diarrhoea.

Beware of liver fluke and conical fluke outbreaks when animals are grazing in vieis and other wet areas where the intermediate hosts, water snails, are abundant.

Coccidiosis outbreaks were reported from 8 provinces. Young animals are most susceptable.

Cryptosporidiosis outbreaks causing huge losses were reported from 6 provinces. A product has been registered to treat animals against this deadly parasite. Good colostrum protects new born animals. Biosecurity should be practised at all levels on the farm.

https://www.google.co.za/search?hl=en&tbm=isch&source=hp&biw=1344&bih=608&ei=PyxyXOO7OcutkwXinK3oCA&q=cryptosporidium+parvum&oq=Cryptosporidium&gs\_l=img.1.1.0l10.2885.9850..16402...0.0..0.708.5719.2-4j4j3j2j1.....0....1..gws-wiz-img.....0.o66yefU7Ric

#### **Prevention of Cryptosporidiosis**

Prevention is the best control method.

Animals with a well-developed immune system will generally overcome *Cryptosporidium* thus this must be the main aim in controlling *Cryptosporidium*.

A consistent, vet approved and farm appropriate vaccination program for other diseases.

Ensure no nutritional deficiencies especially vitamin A and Selenium

Excellent bio-security

Ensure clean pathogen free water sources

Hygiene training of personnel

Consult your veterinarian

#### HOLISTIC INTERNAL PARASITE MANAGEMENT FOR SHEEP AND GOATS

Gareth Bath, Jan van Wyk and Faffa Malan

#### INTRODUCTION

Over the past ten to fifteen years there has been a radical rethink on our previous worm control strategies and assumptions due to the ever-accelerating failure of anthelmintics globally. This has caused a quiet but drastic revolution in many of the "received wisdoms" which governed advice to farmers for close to a century.

For a start, we have to abandon the underlying philosophy that internal parasites are an evil plague which should be maximally suppressed, or preferably eradicated. We have to learn to live with parasites, and prevent only the unacceptable production losses, while simultaneously breeding animals fit for the environment, rather than making the environment fit for existing animals. By regarding parasites as part of the natural order of things, we will be able to see them simply as potential problems to be managed in order to achieve optimum productivity and profitability.

Only well integrated, holistic planning has a long-term chance of success, and unless all elements of our potential armamentarium are harnessed, the results will not match the expectations.

While this paper applies to helminths, and mainly nematodes, the parallels and inferences which can be made for ectoparasites, and indeed other organisms, should be obvious.

# **WORM MANAGEMENT PRINCIPLES**

#### A FLOCK MANAGEMENT REQUIREMENTS

#### **Separation of Groups**

Since different classes of animals vary in their susceptibility to worm infection and its effects, they should be separated into groups, which are grazed, treated and managed as distinct entities. If these distinctions are not made one may be forced to treat the flock according to the most susceptible group. The most susceptible groups can still be managed and treated more intensively in a mixed flock, but this becomes more difficult.

# Identify the groups most at risk

Research has shown that the more susceptible animals are lambs/weanlings; and pregnant/lactating ewes. The former is susceptible because they cannot yet mount an effective immune response to infection, the latter are prone to infection because of a temporary suppression of immunity. (PPRR). These groups must get special attention.

## Separation of pastures

Unless pastures can be divided by fencing or herding, all sheep will be exposed to a similar challenge, regardless of whether they are susceptible or resistant to infection and its effects. This will prevent any differentiation in management and treatment. Diversion of pastures is not only good for internal parasite controll, it also aids pasture management. Electric fences can be used as temporary pasturage dividers. In communally farmed areas, herding or tethering can achieve the same result without fencing.

#### **Resting of pastures**

If pastures can be separated, it is then possible to rest them effectively, which has decided advantages to pasture management and improvement. If such pastures can be rested long enough, this will also have a significant effect on the survival of worm larvae and therefore the infection rate of the flock. Although the time needed for effective resting of pastures will vary with the climate, weather and worm species, a useful rule of thumb for effective resting is at least 3 months in subtropical for temperate climates, but as little as 1 month in the tropics. The longer the rest, the better it is for worm management.

# Alternation of host species

Sheep and goats share the same worm species and alternation with one another is ineffective for worm management. However, other species like cattle, horses and ostriches are generally not susceptible to the worms of sheep and goats. If they are used to graze pastures before or after sheep or goats, they act as "vacuum cleaners" on the pasture, as they ingest many larvae which cannot develop further into egg-laying adults. The other advantage is that the pasture can still be utilised in its growing season, which prevents the grass from becoming senescent, and optimises its usefulness. This aids in maintaining the profitability of the farm.

#### Mend water leaks

Water points (troughs, windmills) should not be allowed to leak, as this encourages the growth of grass. Since this is where sheep concentrate, the area can become lethally contaminated by larvae.

#### Avoid grass in pens

Where sheep or goats have to be penned for lengthy periods (usually at night, to combat theft or predation) there can be a fatal buildup of larvae on the grass growing there. Sheep become hungry overnight and will eat these morsels of food. In consequence they

will ingest massive numbers of larvae. It is therefore necessary to remove all grass from such pens.

# Fence off moist areas

Areas particularly prone to high moisture and therefore the survival of worm larvae, like streams and marshes, should be separated to reduce the challenge of the flock.

# Strategic movement of flocks

The aim should be to create "safe" (not necessarily "worm free") pastures. By planning changes in camps or paddocks, stock will be subject to lower challenges and need less chemical treatment. Any grazing system where a significant proportion of the pasture is rested for a full growing season will be particularly effective.

#### **Quarantine and treatment**

Do not simply introduce purchased animals into the flock or herd. They must be quarantined in a worm-unfriendly pen (bare earth or concrete) and treated intensively using the best drugs and schedule. If financially feasible, do an FECRT to ensure minimum carry-over of drug-resistant parasites. Then place them on infected pasture if there is no multiple resistance.

#### **B** GENETIC SELECTION

#### Selection for resistance

Resistance (the acquired or innate ability to prevent or minimise infection by parasites) is heritable and can be selected for, by measuring the faecal egg counts and using only those sheep with the lowest FEC's for breeding. For practical and economical reasons, this is usually only done for rams. Some successful breeding programmes have been undertaken but they require good organisation and meticulous record keeping. Culling of bad ewes and their offspring is also practical and recommended.

#### Selection for resilience

Resilience (the ability to withstand the effects of infection and produce satisfactorily in spite of it) is also heritable. At present, only two proven methods, FAMACHA® and Haematocrit determination exist, although preliminary results suggest that Body Condition Scoring may also be useful. The FAMACHA® System can be used only where wireworm is the major parasite. By treating according to clinical anaemia (an indicator of poor resilience), only those sheep unable to cope with wireworm are treated. This reduces selection pressure for anthelmintic resistance and at the same time allows the

farmer to cull the non-copers, in the long term thus being able to breed an animal better adapted to the environment.

It is also possible to select rams by a system of allocation of selection indeces. This is currently under investigation and will require measuring individual ram FECs and FAMACHA® scores (or haematocrits) to make the measurement more accurate.

# **C** MONITORING SYSTEMS

#### **FEC**

Regular (monthly or 2 - monthly) monitoring of faecal egg counts on a group or flock basis will help to indicate when dosing is really needed, and equally important, when it can be delayed or even omitted. A bulk (composite) FEC comprising a single count of faeces pooled from equal samples from 10 to 20 sheep is certainly cheaper than dosing the whole flock unnecessarily. Keep graphs or tables of changes to indicate when parasite buildup is likely.

#### **FECRT**

Every farmer should have the flock tested for drug resistance in the worm population on his farm, at regular intervals of not less than two years. Only by knowing exactly what the state of anthelmintic resistance on a farm is, can appropriate action be taken. Generalisations like "benzimidazole resistance is found on most farms" are not much use since they cannot tell us what the situation is on a particular farm. Just as important, we must know not only that resistance is present, but also how bad it is. Can we still use the drug group at all? Separate bulk faecal samples from each drug group will reduce the cost to acceptable levels.

#### FAMACHA® evaluation

Apart from selection and culling, this system also allows frequent, cheap and easy monitoring of the current situation as regards worm infection, but applies only to haemonchosis.

#### D OPTIMISE ANTHELMINTIC USE

# Establish the important parasites species present

Unless the prevalence and importance of worm species is known, worm management becomes dangerous and unpredictable guesswork. It can also be ineffective and very costly.

#### Use the most suitable drug

If the parasites are ranked in order of economic importance and their susceptibility to groups of anthelmintics is known and combined with knowledge on the anthelmintic resistance situation on the farm, it is then possible to decide which drug(s) and formulations will be the most suitable in each situation. This includes their cost and a cost/benefit analysis. Neither the cheapest nor the most expensive drug is necessarily the best one to use. Beware of generic drugs sold by an unknown company.

#### **Avoid too frequent treatment**

The old approach of "dosing clean" must be completely abandoned, although not by reducing the dosage rate per animal. The aim has to be to treat only sufficient times and enough individual animals to maintain the equilibrium between parasite, host and environment (that is, worm management). Overtreatment ensures that only resistant parasites can survive. Minimal treatment programmes must be the new watchword, but is must be ensured that every treatment is effective.

# Treat all and stay

This is a major departure from the recommendations made for close to a century. If **all** sheep are to be treated, they should remain in the camp (paddock) where they were grazing before treatment. This will prevent sheep from contaminating a new pasture with only those resistant parasites which survived treatment, thus in the process unwittingly causing the selection for resistance parasites. In most cases they should remain in the paddock for at least 2-3 weeks after treatment to pick up unselected larvae for propagation of the susceptible worms in the new camp/paddock. However, should a long-acting anthelmintic be used, this period will have to be longer (2 to 3 weeks after the effective residual action ends). Particularly bolus (slow release) formulations should be used with great caution.

#### **Treat selectively**

It is preferable to treat only those sheep or goats unable to cope with the current infection challenge, provided the percentage of non-copers remains below 20%. This can be done with the FAMACHA® system for haemonchosis, or possibly with Body Condition Scoring for other parasites. If clinically unaffected animals are left untreated, an immediate move to new pasture will not be detrimental. In the absence of such selective treatment, just leaving a small percentage (10-25%) of the flock intentionally untreated can be beneficial to slow AR development.

#### Move then treat

Another way of achieving the same result as "treat all and stay" is to move the flock to a new "safe" pasture and delay treatment for 2-3 weeks, to allow the seeding of the new pasture with unselected worms, before treating the flock.

#### **Herbal Remedies**

These are often touted as the answer to worm control. However, unless they have been properly tested an proven by an independent body, they may be useless or even harmful.

#### E IMPROVED ANTHELMINTIC EFFICACY

## Dose over the tongue

By placing the tip of the gun towards the back of the mouth, over the tongue, closure of the oesophageal groove does not occur and thus the full dose lands in the rumen where it is absorbed more slowly - this is particularly important for anthelmintic groups which rely on prolonged blood levels for their effect, like the benzimidazoles and macrocyclic lactones.

This prolonged level of activity (a long so-called "killing zone") means that the drug against which worms have developed a moderate degree of resistance can be made more effective, although of course the resistance of the worms is not reduced, but rather partially overcome. However, dosing (drenching) over the tongue, if done carelessly, can result in two very severe consequences:

the dose can land up the lungs, and cause pneumonia the nozzle of the dosing gun can penetrate he pharynx and cause severe, fatal infection. If the sheep jumps forward, the operator must let the gun 'ride' with the sheep, and not oppose it, and the dose must be delivered by a measured, steady pressure rather than a single squeeze.

#### Reduce feed intake

It has been shown in the case of benzimidazoles and closantel that reducing feed intake (i.e. starvation) for 24 hours prior to treatment will improve the absorption of the remedy because of the lower rate of flow of ingesta. As in the previous case, this results in a more effective exposure of the parasite to the drug.

In turn, this means that the drug is clinically more effective and can partially overcome drug resistance.

# Repeat the dose

This only applies to benzimidazoles and macrocyclic lactones. Two doses given 12 hours apart will again increase the "killing zone" of these drugs, allowing more time for a cumulative killing effect. Thus, resistant worms can still be killed, although this is achieved at a cost since two normal doses rather than one are needed. A double dose, given at one time, will have **no** beneficial effect with these two groups of anthelmintics.

#### Increase the dose

This only applies to drugs which rely mainly on peak concentrations for their effect. In this case, a double amount of drug given at one time can overcome drug resistance in worms. This is useful for the imidasothiazoles (levamisole). There is however a relatively low safety margin, only 2x - 3x the therapeutic dose may sometimes cause problems of toxicity.

#### Correct dosage

It may seem too obvious, but a lot of problems are caused by not weighing sheep, not calibrating and checking the dosing gun for accuracy and repeatability, and not reconciling the amount of drug used with the number of sheep treated. Underdosing may be a factor leading to anthelmintic resistance, but it is more likely to be the cause of ineffective treatment.

# **Drug combinations**

Combining drugs from different activity groups in one dose may temporarily improve the effective clinical action of these drugs, but only if each drug concerned is unaffected by resistance. However, many authorities believe that this will not slow the development of resistance and could even enhance it. If drugs are mixed, this can only be done if the formulation has been fully tested and carried by experts, in registered products. Home made combinations are dangerous and illegal. Such combinations often just give temporary relief and disguise the emergence of AR until it is severe and multiple.

# **Sustained delivery**

Medicated blocks or controlled release capsules will increase the clinical efficacy of those drugs which rely on prolonged action for their effectiveness. However, we have to bear in mind that prolonged exposure to a drug at low levels will increase selection for resistance. This approach will therefore not be permanent, and should only be used for very specific, limited purposes (e.g. weaners on green pasture) and not the entire flock in all circumstances.

#### Goats are different

Because of differences in the rate of metabolising drugs, goats must be treated as different to sheep. This means that goats must often be given a higher dosage rate than sheep except where there is a possibility of toxicity. Note that many anthelmintics may not be registered for use in goats, or that the recommended dose given is the same as for sheep. Unfortunately, therefore if the product is not registered for use in goats, or the dosage rate is increases, the user has no legal redress if the product is used and fails, or causes losses.

# F EFFECTIVE PLANNING

#### Use the expert

Knowledgeable veterinarians, who know the area, farming systems and risks can construct a simple, practical, economic and effective holistic worm management strategy. They can consult helminthologists where necessary.

#### Use a programme

Unless a basic planned system is in place and is used, actions will inevitably be largely reactive and based on *ad hoc* or panic decisions. But this does not imply a rigid adherence to the basic plan.

#### **Flexibility**

The programme must be flexible to allow for changes in weather, management and farming systems, drug costs or other factors.

## Treatment strategy

It is probably true that on most farms animals are either dosed too often, or with inappropriate drugs, or at the wrong times, or with no coherent plan. By setting up a well thought out dosing plan, we can cut out ineffective doses which only add to the selection pressure for parasite resistance. This is one of the areas in which the knowledge and skills of the local vet are vital for success.

#### II OTHER MEASURES AND FACTORS

# **Protein supplementation**

Since resistance and resilience are dependent on adequate nutrition, and the most important factor identified is protein, it is possible to ameliorate the effects of parasites by feeding animals better. We need to know when and how much of what supplement must be supplied to which class of animal, and what the cost / benefit ratio would be before this aspect can be fully integrated into our overall approach.

#### **Condition scoring**

The early indications are that this may be useful for identifying individual animals for treatment against some non-haematophagous worm species. The principle is that animals with a condition score which is more than half a score **below** the flock or herd average are treated. If the animals have a condition score below 2 and the risk of worm infestation is high, then treatment should be given.

# Weather monitoring

Factors which affect the survival, development and infectivity of larvae on pastures must be considered. Temperature, rainfall, rainfall pattern, humidity and could cover will all have an effect and must be considered when making worm management decisions.

#### Flock/Herd history

Without knowing details of numbers, types, ages, reproductive stages, treatment, stocking rates, grazing pressures and livestock movements, decision making is at best arbitrary and at worst potentially disastrous.

# **Veld/pasture assessment and history**

Coupled with livestock data, the advisor has to consider details of the veld or pasture type, its condition, growth stage, the soil cover, soil moisture, slope land the grazing history.

#### Assessment and decision support computer programmes

A few of these are available internationally, others are under development. Using computer power, they evaluate all the known risk factors and advocate alternative actions based on the given situation and data provided. The evaluation is of course only as good as the inputs given and these programmes cannot substitute entirely for the skills, knowledge and assessment of the advisor or the farmer.

#### III CONTROL MEASURES UNDER DEVELOPMENT

# **Predacious fungi**

Nematophagous fungi in the soil can severely constrain larval survival by immobilizing and killing them. Practical implementation is, however, still a long way off.

#### Dilution of resistance

By the re-introduction of susceptible strains to a farm where a parasite strain has become resistant to anthelmintics, it is possible to significantly reduce the degree of resistance by a dilution effect. There is some indication that this can be effective on severely affected farms, by the process is slow, labour-intensive and costly.

#### Vaccination

Although this "holy grail" of worm control still remains a mirage as a practical, economical solution to worms, it is theoretically attainable and may be a potent factor when the problems which have prevented its commercial implementation are eventually overcome.

#### **Condensed Tannins**

Plants containing higher levels of tannins suppress worm egg counts, but also have problems with palatability and digestibility.

## **Cupric oxide**

Needles of oxidised copper wire dosed into the rumen will reduce worm egg counts, but the longterm toxic effects (especially with sheep) have to be considered, especially if the diet is high in copper.

#### Change in body weight

Lack of satisfactory weights gain, or even weight loss, can be considered as indicators for the treatment of individual animals in a flock. However, weighing is time consuming and may not be applicable in a given situation.

#### IV INTEGRATED PARASITE MANAGEMENT

If any of the foregoing principles are used exclusively, failure will be certain. It is only by using a prudent mix of strategies that sustainable, cost-effective measures can be established. The decision on which measures are to be used in a given situation can only be made by an expert who is conversant with local conditions. This programme will of course have to be drawn up in close consultation with the livestock owner(s).

Whether the farming system is based on communal ownership, subsistence farming, small-scale farming, commercial farming or stud farming, the principles remain the same. Only the mixture and weighting of measures used to manage parasites will vary according to circumstances.

#### V ACTION CHECKLIST

To implement the holistic use of all the available worm control strategies and principles, the veterinary advisor needs to go about setting up a sustainable programme methodically. The starting point is always the basic management programme, although even this may need to be modified to accommodate sustainable parasite control. Once the key activities like lambing, mating and shearing have been established, and the basic grazing programme has been decided, the requirements of effective parasite management may be superimposed. Planning is a dynamic and never-ending activity, and plans need to be revised each year as necessary.

By following the checklist, advisors can ensure that all appropriate measures have been considered and used.

Make sure that the farmer understands and supports the need for change Ensure that all measures are practical, integrated and financially defensible Use an incremented approach, do not try to do everything at once

Evaluate and use knowledge in stock flow, reproductive programme, grazing systems, pasture or veld conditions and weather to decide on appropriate and integrated worm management actions. Are the groups/classes of animals properly separated? If not, implement this if possible. Give weanlings and late pregnant/lactating ewes most attention and the best circumstances

Are the pastures properly fenced, and are there enough camps for effective management?

Implement a satisfactory pasture resting programme. Keep well rested pastures for susceptible groups

Graze camps sequentially by cattle, small stock and other host species if available Make sure that animals are getting the right nutrition, especially protein, and avoid putting animals in poor condition onto high risk pastures

Mend water leaks and fence off moist areas

Remove all grass from pens where animals are routinely held for long periods Buy rams selected for resistance (FEC) and/or resilience (FAMACHA®/haematocrit) Cull the minority of ewes which are unable to cope with prevailing parasite burdens Institute a planned programme for FECs to monitor the parasite situation

Ensure that the FECRT is done every second year

Introduce TST and Institute the FAMACHA® system for haemonchosis or BCS for other worm species

Ensure that the types and relative importance of parasites have been established on each farm as well as when they are likely to occur

Select and use the best drug for each situation

If all animals are treated, do not move to new pastures for 2-3 weeks or longer depending on the drug and formulation used

Ensure that the drug used is given in the most effective way

Quarantine and treat all introductions and put them onto infected pasture

Stick to what is possible in a given situation

FAMACHA cards can be obtained through your veterinarian (famachasystem@gmail.com)

Serious problems due to diarrhoea in lambs and calves were received from many areas. In many instances *Cryptosporidium* and pathogenic strains of *E. coli* were involved. Consult your veterinarian for help!

https://www.google.co.za/search?hl=en&tbm=isch&source=hp&biw=1344&bih=608&ei=PyxyXOO7OcutkwXinK3oCA&q=cryptosporidium+parvum&oq=Cryptosporidium&gs\_l=img.1.1.0l10.2885.9850..16402...0.0.0.708.5719.2-4j4j3j2j1.....0...1..gws-wiz-img.....0.o66yefU7Ric

#### **External parasites**

# The following reports were received from practices regarding external parasite infestations:

| External parasites            | MP | G | L | NW | FS | KZN | EC | WC | NC |
|-------------------------------|----|---|---|----|----|-----|----|----|----|
| Blue ticks                    | х  | х | х | х  | х  | х   | х  | х  |    |
| Resistant blue ticks          |    |   |   |    | х  | х   |    |    |    |
| Heartwater ticks              | х  | х | х | х  |    | х   | х  |    |    |
| Brown ear-ticks               | х  | х |   |    |    | х   |    |    |    |
| Bont-legged ticks             | х  | х |   | х  | х  | х   | х  | х  | х  |
| Red-legged ticks              | х  | х |   | х  | х  | х   |    |    |    |
| Paralysis ticks               |    |   |   |    | х  |     |    |    |    |
| Tampans                       |    |   |   |    |    |     |    |    |    |
| Biting lice                   | х  |   |   |    | х  |     |    | х  |    |
| Sucking lice                  |    |   |   |    | х  |     | х  |    | х  |
| Fleas                         |    |   |   |    |    |     |    |    |    |
| Itch mites                    |    |   |   |    |    |     |    |    |    |
| Sheep scab                    |    | х |   | х  |    |     | х  |    |    |
| Mange mites                   | х  | х |   | х  | х  |     |    | х  |    |
| Nuisance flies                | х  |   |   | х  | х  | х   | х  | х  |    |
| Midges                        | х  | х |   |    | х  |     |    | х  |    |
| Mosquitoes                    |    | х |   |    | х  |     |    | х  |    |
| Blowflies                     | х  | х | х |    | Х  |     |    | х  |    |
| Screw-worm                    |    |   | х |    |    |     |    |    |    |
| Gedoelstia (uitpeuloogsiekte) |    |   |   |    | Х  |     |    |    |    |
| Nasal bot                     | х  | х |   | х  | Х  |     |    | х  | х  |
|                               |    |   |   |    |    |     |    |    |    |

Blue ticks (African and Asiatic blue ticks) are able to transmit red water, anaplasmosis and lumpy skin disease.

Make sure to assess the blue tick resistance status on your farm before buying tickicides. Your veterinarian will be able to collect engorged blue ticks to be tested for resistance.

Actives to be tested for resistance are: organophosphates, pyrethroids, amidines, fipronil. Actives registered only for controlling blue ticks are: macrocyclic lactones, fluazuron (acaracide growth regulator).

Discuss your tick control programme with your veterinarian.

Most important is to prevent udder damage. Ticks with long mouth parts such as bont and bont-legged ticks, can cause irrepairable damage to teats and the udder.

Now is the time to update your management programme with the help of your veterinarian!

#### Tick borne diseases

The following tick-borne diseases were reported by practices in the provinces:

| Tick borne diseases | MP | G | L | NW | FS | KZN | EC | wc | NC |
|---------------------|----|---|---|----|----|-----|----|----|----|
| African red water   | х  |   |   | х  | х  | х   | х  | х  |    |
| Asiatic red water   | х  | х | х | х  | Х  | х   |    | х  |    |
| Anaplasmosis        | х  |   |   | х  | Х  | х   | х  | х  |    |
| Heartwater          | х  | х | х | х  |    | х   | х  |    |    |
| Lumpy skin disease  |    |   |   |    |    |     |    | х  |    |
| Corridor disease    |    |   |   |    |    |     |    |    |    |
| Theileriosis        |    |   |   |    |    | х   |    |    |    |

Asiatic red water is spreading and is one of the deadliest diseases in cattle (7 provinces).

Numerous mortalities were reported!

Anaplasmosis outbreaks were reported from 7 provinces. Biting flies are the main transmitters of this disease.

Red water and anaplasmosis can be confirmed by examining blood smears under a microscope.

The keyword is: vaccinate your animals! Contact your veterinarian.

#### **Tick toxicosis**

| Tick toxicosis    | MP | G | L | NW | FS | KZN | EC | WC | NC |
|-------------------|----|---|---|----|----|-----|----|----|----|
| Sweating sickness |    |   |   | х  |    |     |    |    |    |

#### **Insect transmittable diseases**

The following insect transmittable diseases were reported by practices in the provinces:

| Insect transmittable diseases              | MP | G | L | NW | FS | KZN | EC | wc | NC |
|--|----|---|---|----|----|-----|----|----|----|
| Lumpy skin disease                         |    |   |   |    |    |     |    | х  |    |
| Pseudo Lumpy skin disease (Allerton virus) |    |   |   |    |    |     |    |    |    |
| Ephemeral fever (Three-day-stiff sickness) | х  | х |   |    |    | х   |    | х  |    |
| Blue tongue                                |    | х |   |    |    |     |    |    | х  |
| Rift Valley Fever                          |    |   |   |    |    |     |    |    |    |
| Wesselsbron                                |    |   |   |    |    |     |    |    |    |
| Nagana                                     |    |   |   |    |    | х   |    |    |    |

Vaccines are available, the only reason why there were so many outbreaks of lumpy skin disease, blue tongue and three-day-stiff sickness last season, could have been that animals were not vaccinated or that the cold chain was broken! Now is the time to plan your vaccination programme for the upcoming disease season.

## You still have a chance to vaccinate before the insects are rife.

#### **Venerial diseases**

The following venereal diseases were reported by practices in the provinces:

| Venereal diseases | MP | G | L | NW | FS | KZN | EC | WC | NC |
|-------------------|----|---|---|----|----|-----|----|----|----|
| Trichomonosis     | х  |   |   | х  | х  | х   | х  |    | х  |

| Vibriosis                       | Х |  | х | х | х | х |
|---------------------------------|---|--|---|---|---|---|
|                                 |   |  |   |   |   |   |
| Pizzle disease                  |   |  |   |   |   |   |
| Actinobacillus seminis plus HPA |   |  |   |   |   |   |

# New cases of trichomonosis are reported every month and this disease is out of control.

Make sure to buy bulls from farmers where biosecurity measures are in place and bulls are tested for these diseases at regular intervals. Trichomonosis (6 provinces).

Venerial disease is a HERD disease! Calculate your losses if these diseases are not eradicated on your farm!

Make sure that fences are in tact and gates closed so that bulls cannot escape to neighbouring cows that may be infected with *Tritrichomonas* and become infected or infected neighbouring bulls are jumping fences.

Cattle study groups should discuss preventative and control measures with their veterinarians. **Be sure to test bulls regularly for these diseases**.

Beware when buying in or sharing bulls! Remember female animals may also be infected.

Study the Good management SOP's for cattle farmers on the RPO website

http://www.rpo.co.za/wp-content/uploads/2016/04/nuutRPO-NERPO-Code-Addendum.pdf

http://www.rpo.co.za/wp-content/uploads/2016/04/nuutRPO-NERPO-Code-Addendum-4-Good-management-practices-and-SOPs-for-cattle-farmers-1.pdf

Consider Trichomonosis as an area disease, farmers should work together to keep areas free from diseases such as trichomonosis, brucellosis, tuberculosis, Johne's disease and sheep scab.

#### **Bacterial diseases**

The following bacterial diseases were reported by practices in the provinces:

| Bacterial diseases | MP | G | L | NW | FS | KZN | EC | WC | NC |
|--------------------|----|---|---|----|----|-----|----|----|----|
| Anthrax            |    |   |   |    |    |     |    |    |    |
| Blackquarter       | х  | х |   | х  | х  | х   |    | х  |    |

| Clostridial disease                   |   |   |   |   |   | х |   | х |
|---------------------------------------|---|---|---|---|---|---|---|---|
| Botulism                              |   |   | х | х |   |   | х |   |
| Pulpy kidney                          | х | х | х | х |   | х | х | х |
| Lamb dysentery                        |   |   |   |   |   |   |   |   |
| Swelled head                          |   | х | х |   | х |   | х |   |
| Red gut (cattle)                      | х |   |   |   | х |   |   |   |
| Blood gut (sheep)                     | х | х | х | х |   |   | х |   |
| Tetanus                               |   |   |   | х |   |   | х |   |
| Salmonellosis                         |   |   |   | х |   |   | х |   |
| Klebsiella                            |   |   |   |   |   |   |   |   |
| Bovine brucellosis                    | х |   | х | х | х | х |   | х |
| Brucella melitensis (goats)           |   |   |   |   |   |   |   |   |
| Ovine brucellosis (Ram's disease)     |   |   |   |   |   |   |   | х |
| Bovine tuberculosis                   |   |   |   |   |   |   |   |   |
| Johne's                               |   |   |   |   |   |   | х |   |
| Leptospirosis                         | х |   |   |   |   |   |   |   |
| Listeriosis                           |   |   |   | х |   |   |   |   |
| Pseudomonas                           |   |   |   |   |   |   |   |   |
| Pasteurella multocida                 |   |   |   |   |   |   |   |   |
| Pasteurellosis (see pneumonia -lungs) | х | х | х | х | х | х | х | х |
| Fusibacterium necrophorum             |   |   |   |   |   |   | х | х |
| Septicaemia                           | х |   |   |   | х |   | х |   |
| E. coli                               | х | х | х | х | х | х | х | х |
| Klebsiella                            |   |   |   |   |   |   |   |   |

| Coxiella (Q-fever)                       | х |   |  |   |   |   |   |
|--|---|---|--|---|---|---|---|
| Mycoplasma                               |   |   |  |   |   |   |   |
| Enzootic abortion                        |   |   |  |   |   | х | х |
| Lumpy wool (Dermatophilus)               |   |   |  | х |   |   |   |
| Bovine dermatophilosis (Senkobo disease) | х | х |  |   | х |   |   |
| Uterine gangrene                         |   |   |  | х |   |   | х |
| Wooden tongue                            |   |   |  |   |   |   |   |
| Lumpy jaw                                |   |   |  | х |   |   |   |
| Interdigital dermatitis                  |   |   |  |   |   |   |   |

Multiclostridial vaccines should be used if blackquarter outbreaks still occur when only using a vaccine containing *Clostridium chauvoei*. Remember to give a booster vaccine when using an inactivated vaccine for the first time. Read the packet insert!! Study the table above and determine the risk for animals on your farm.

Get advice from your veterinarian on *Cryptosporidium/E. coli* outbreaks in your area and what to do to prevent losses in lambs and calves.

Enzootic abortion contributes to the disappearance of foetuses in sheep and goats scanned pregnant. Vaccinate replacement ewes with the live vaccine before putting them to the ram!

Pulpy kidney (*Clostridium perfringens* type D – epsilon toxin) is still the biggest killer of sheep. There are various factors that could lead to pulpy kidney such as: the intestinal tract stops functioning (stasis), sudden change from poor veld to lush artificial pastures; sudden change in diet; grazing of fodder crops such as lucerne, green wheat and green oats, diet high in protein, overeating of concentrates or fertile pastures, deworming and coccidiosis infection. Sudden changes in the weather and grazing in wilted pastures, may also play a predispositional role.

Be sure to vaccinate animals against botulism especially if chicken litter is going to be fed to animals.

Q-fever, a zoonosis, seems to be more prevalent, beware! An abortion storm in sheep should make farmers aware of Q-fever!

Challenging farmer's unions and study groups to eradicate brucellosis in their area!! Many success stories are received!

Ask for vendor's declarations before buying in animals and quarantine them before releasing them onto the farm!!!!

A positive heifer is a TROJAN HORSE!!! This latent carrier of brucellosis may only test positive after calving!!!!!

#### PREVENTION IS BETTER AND CHEAPER THAN TREATMENT!

#### Do not save yourself bankrupt!

Q-fever, enzootic abortion, brucellosis, are all zoonotic diseases and should be handled with utmost care!

#### Viral diseases

The following viral diseases were reported by practices in the provinces:

| Viral diseases                 | MP | G | L | NW | FS | KZN | EC | WC | NC |
|--------------------------------|----|---|---|----|----|-----|----|----|----|
| BMC (snotsiekte)               |    |   | х | х  | х  |     |    |    |    |
| Rabies (cattle)                |    |   |   |    | х  |     |    |    |    |
| BVD                            |    |   |   |    |    | х   |    |    |    |
| IBR                            |    | х |   |    | х  | х   |    |    |    |
| BRSV                           |    |   |   |    |    |     |    |    |    |
| PI3                            |    |   |   |    |    |     |    |    |    |
| Maedi visna virus              |    |   |   |    |    |     |    |    |    |
| Rotavirus                      |    |   |   |    | х  | х   |    | х  |    |
| Coronavirus                    |    |   |   |    | х  |     |    |    |    |
| Enzootic bovine leucosis (EBL) |    |   |   |    | х  | х   | х  | х  |    |
| Sheep leucosis                 |    |   |   |    |    |     |    |    |    |
| Jaagsiekte                     |    |   |   |    |    |     |    |    |    |
| Orf                            | х  | х |   | х  | х  | х   | х  | х  | х  |
| Warts                          | х  | x |   | х  | х  | х   |    | х  | х  |

| Herpes mammillitis - goats |  |  |  |  |  |
|----------------------------|--|--|--|--|--|
|                            |  |  |  |  |  |

There is no treatment for viral diseases with the result that animals have to be protected by vaccinations if they are available.

Preventative vaccinations are the best way to protect animals against viruses and bacteria causing pneumonia.

Keep cattle and wildebeest well separated especially when wildebeest are under stress to prevent snotsiekte outbreaks! There is also a sheep associated form of the disease.

Snotsiekte was reported from 5 provinces!! Have a dialogue with your neighbour if wildebeest are in the area.

BMC is a notifiable disease and have to be reported to the State Veterinarian.

http://nahf.co.za/controlled-and-notifiable-diseases/

Discuss vaccination programmes and biosecurity measures with your veterinarian.

Orf is a zoonosis.

Enzootic bovine leucosis virus is transmitted by blood (vaccinations, rectal examinations, certain procedures, etc.) This disease, EBL, can be latent in your herd. As there is no vaccine available, be extra carefull not to introduce the disease ino your herd. More information is received warning us that this disease is also a zoonosis. Talk to your veterinarian as to take necessary precautionary measures.

#### **Fungal diseases**

The following fungal disease was reported by practices in the provinces:

| Fungal diseases | MP | G | L | NW | FS | KZN | EC | wc | NC |
|-----------------|----|---|---|----|----|-----|----|----|----|
| Ringworm        | х  | х |   | х  | х  | х   | х  | х  | х  |

#### **Protozoal diseases**

| Protozoal diseases               | MP | G | L | NW | FS | KZN | EC | WC | NC |
|----------------------------------|----|---|---|----|----|-----|----|----|----|
| Besnoitiosis (olifantsvelsiekte) |    |   |   |    |    |     |    |    |    |

# **Toxicities**

The following toxicities were reported by practices in the provinces:

| Toxicities                          | MP | G | L | NW | FS | KZN | EC | WC | NC |
|-------------------------------------|----|---|---|----|----|-----|----|----|----|
| Cardiac glycoside                   |    |   |   |    |    |     |    | х  | х  |
| Slangkop                            |    |   |   |    |    |     |    |    |    |
| Crotalaria                          |    |   |   |    |    |     |    |    |    |
| Gifblaar                            | х  |   | х |    |    |     |    |    |    |
| Gousiekte                           |    |   | х |    |    |     |    |    |    |
| Cestrum (ink berry)                 | х  |   |   |    | х  |     | х  |    |    |
| Tulip                               | х  | х |   | х  | х  | х   | х  | х  | х  |
| Cynanchum (bobbejaantou)            |    |   |   |    |    |     |    | х  |    |
| Facial eczema                       |    |   |   |    | Х  |     | х  | х  |    |
| Lantana                             |    | х |   |    |    | х   |    | х  |    |
| Prussic acid                        |    |   |   |    |    | х   |    | х  |    |
| Damkweek (cyanide)                  |    |   |   |    |    |     |    |    |    |
| Acacia nilotica                     |    |   |   |    |    |     |    |    |    |
| Senecio                             | х  |   |   |    |    | х   |    |    |    |
| Cotula nigellifolia (stagger wood)  |    |   |   |    |    |     |    |    |    |
| Geeldikkop (duwweltjies) and dikoor |    |   |   | х  | Х  |     |    | х  |    |
| Vermeersiekte                       |    |   |   |    |    |     |    |    |    |
| Misbek (plant poisoning)            |    |   |   |    |    |     |    |    |    |
| Hertia pallens (Nenta, krimpsiekte) |    |   |   |    |    |     | х  | х  |    |
| Chrysocoma ciliata (bitterbos)      |    |   |   |    |    |     |    |    |    |
| Crotolaria (stywesiekte bossie)     |    |   |   |    |    |     |    |    |    |

|  |          | 1 |   | ı |   | 1 | 1   | ı |
|--|----------|---|---|---|---|---|-----|---|
| Solanum incanum (maldronksiekte)   |          |   |   |   |   |   |     |   |
| Gnidia burchelli (Januariebos, besembossie,  |          |   |   |   |   |   |     |   |
| harpuisbos))   |          |   |   |   |   |   |     |   |
|  | <u> </u> |   |   |   |   |   |     |   |
| Gomphocarpus (Asclepias) fruticosus  |          |   |   |   |   |   |     |   |
| (milkweed)   |          |   |   |   |   |   |     |   |
| Halistranium (natata wasd)   |          |   |   |   |   |   |     |   |
| Heliotropium (potato weed)   |          |   |   |   |   |   |     |   |
| Bracken fern   |          |   |   |   |   |   |     |   |
|  |          |   |   |   |   |   |     |   |
| January bush (Gnidia polycephalatus)   |          |   |   |   |   |   |     |   |
|  |          |   |   |   |   |   |     |   |
| Chinkerinchee  |          |   |   |   |   |   |     | Х |
| Ceylons rose   |          |   |   |   |   |   |     |   |
| ceyions rose   |          |   |   |   |   |   |     |   |
| Datura   | х        |   |   |   |   |   |     |   |
|  |          |   |   |   |   |   |     |   |
| Sarcostemme viminale (melktou, caustic   |          |   |   |   |   |   |     |   |
| bush)  |          |   |   |   |   |   |     |   |
| Malva parviflora (kiesieblaar)   |          |   |   |   |   |   |     |   |
| Walva parvijiora (kiesiebiaar)   |          |   |   |   |   |   |     |   |
| Bitou  |          |   |   |   |   |   |     |   |
|  |          |   |   |   |   |   |     |   |
| Cotula nigellifolia (Stagger weed,   |          |   |   |   |   |   |     |   |
| stootsiektebossie)   |          |   |   |   |   |   |     |   |
| Freehington (blockers) hould leaves  |          |   |   |   |   |   |     |   |
| Eucalyptus (bloekom) bark/leaves   |          |   |   |   |   |   |     |   |
| Kikuyu   |          |   |   |   | х |   |     |   |
|  |          |   |   |   |   |   |     |   |
| Ryegrass   |          |   |   |   | х |   |     |   |
|  |          |   |   |   |   |   |     |   |
| Grass staggers   |          |   |   |   |   |   |     |   |
| Lush pastures (Dikkop)   | +        |   |   | - |   |   |     |   |
| pastares (Simop)   |          |   |   |   |   |   |     |   |
| Lasiospermum (Ganskweek)   |          |   |   |   |   |   |     |   |
|  |          |   |   |   |   |   |     |   |
| Paspalum staggers  |          |   |   |   |   |   |     |   |
| Physical and the state of the s | 1        |   | - |   |   |   |     |   |
| Phalaris aquaticum (Phalaris staggers)   |          |   |   |   |   |   |     |   |
|  |          |   |   | 1 |   |   | j . |   |

| Dhotoconcitivity /Turkenceld Fredience       |  |  |   |      |      |
|--|--|--|---|------|------|
| Photosensitivity (Turksnaald, <i>Erodium</i> |  |  |   |      |      |
| moschatum)                                   |  |  |   |      |      |
| Photosensitivity (Stellenbosch)              |  |  |   |      |      |
| Thotoschistarty (Stelleriboschi)             |  |  |   |      |      |
| Photosensitivity                             |  |  |   |      |      |
|  |  |  |   |      |      |
| Swelled head (Dikkop) toxicity)              |  |  |   |      |      |
|  |  |  |   |      |      |
| Lusern                                       |  |  |   |      |      |
| Mucataviancia                                |  |  |   |      |      |
| Mycotoxicosis                                |  |  |   |      |      |
| Apergillus                                   |  |  |   |      |      |
| , the S                                      |  |  |   |      |      |
| Aflatoxin                                    |  |  |   |      |      |
|  |  |  |   |      |      |
| Diplodiosis                                  |  |  | X |      | X    |
|  |  |  |   |      |      |
| Lupins                                       |  |  |   |      |      |
| Soya   |  |  |   |      |      |
| Soya   |  |  |   |      |      |
| Syringa berries                              |  |  |   |      |      |
| Syringa berries                              |  |  |   |      |      |
| Acorn  |  |  |   |      |      |
|  |  |  |   |      |      |
| Cycad  |  |  |   |      |      |
|  |  |  |   |      |      |
| Kraalbos, Geelbos (Galenia africana)         |  |  |   |      |      |
| Radish                                       |  |  |   |      |      |
| Radish                                       |  |  |   |      |      |
| Carrot poisoning                             |  |  |   |      |      |
| currer poisoning                             |  |  |   |      |      |
| Onion poisoning                              |  |  |   |      |      |
|  |  |  |   |      |      |
| Bracken fern                                 |  |  |   |      |      |
|  |  |  |   |      |      |
| Pollen beetle (Astylus atromaculatus)        |  |  |   |      |      |
| Water contamination                          |  |  |   |      |      |
| water contamination                          |  |  |   |      |      |
| Oxalates                                     |  |  |   |      |      |
|  |  |  |   |      |      |
| Nitrate                                      |  |  |   |      |      |
|  |  |  |   |      |      |
| Amaranthus                                   |  |  |   | <br> | <br> |
|  |  |  |   |      |      |

| Tannins                  |   |   |   |   |   |   |   |
|--------------------------|---|---|---|---|---|---|---|
| Urea                     |   | х | х | х | х |   | х |
| Salt                     |   |   |   |   |   |   |   |
| Snake bite               |   |   |   | х |   | х | х |
| Moth cocoons (impaction) |   |   |   |   |   |   |   |
| Blue green algae         |   |   |   |   |   |   |   |
| Copper                   |   |   |   |   |   |   |   |
| Selenium                 | х |   |   |   |   |   |   |
| Zinc                     |   |   |   |   |   |   |   |
| Zinc sulphite            |   |   |   |   |   |   |   |
| Fluoride                 |   |   |   |   |   |   |   |
| Lead                     |   |   |   |   |   |   |   |
| Alcohol poisoning        |   |   |   |   |   |   |   |
| Paraquat                 |   |   |   |   |   |   |   |
| Phosamine                |   |   |   |   |   |   |   |
| Aldicarb                 |   |   |   |   |   |   |   |
| Organophosphate          |   |   | х |   |   |   |   |
| Zinc phosphide           |   |   |   |   |   |   |   |
| Xanthium                 |   |   |   |   |   |   |   |
| Pyrethroid               |   |   |   |   |   |   |   |
| Amitraz                  |   |   |   |   |   |   |   |
| Levamisole               |   |   |   |   |   |   |   |
| Ivermectin               |   |   |   |   |   |   |   |
| Moxidectin               |   |   |   |   |   |   |   |

| Oxytetracycline      |  |  |  |  |  |
|----------------------|--|--|--|--|--|
| Tilmicosin           |  |  |  |  |  |
| Bromoxynil nitrate   |  |  |  |  |  |
| Ionophor             |  |  |  |  |  |
| Monensin             |  |  |  |  |  |
| Нуро                 |  |  |  |  |  |
| Diazinon             |  |  |  |  |  |
| Glyphosate           |  |  |  |  |  |
| Chicken litter       |  |  |  |  |  |
| Medicated maize seed |  |  |  |  |  |

Beware when buying in animals or moving them into rested grazing camps as they are the animals which usually eat toxic plants such as tulip (8 provinces) and ink berries (*Cestrum*).

Do have activated charcoal on the farm as the antidote for tulip poisoning! Dosage: 2 gram per Kg body weight, 1 Kg charcoal for 500kg animal. Toxic plants are sometimes eaten by young animals that do not know these plants. Be aware of this situation and know where these plants are growing on the farm.

Urea poisoning occurs every month on some farms. Make sure that licks containing urea are mixed and formulated properly. Many mortalities were reported wher mixing instructions and calculations were not followed correctly!

Every now and then goats die when thet are injected in the neck area, rather inject them in the tail fold.

#### **Nutritional deficiencies**

The following nutritional deficiencies were reported by practices in the provinces:

| Deficiencies | MP | G | L | NW | FS | KZN | EC | WC | NC |
|--------------|----|---|---|----|----|-----|----|----|----|
|              |    |   |   |    |    |     |    |    | l  |

| Energy    | х | х | х | х | х | х | х |   | х |
|-----------|---|---|---|---|---|---|---|---|---|
| Protein   | х | х | х | х | х | х | х |   | х |
| Phosphate |   | х |   | х |   |   |   |   | х |
| Calcium   | х | х |   |   | х | х |   | х |   |

Nutritional deficiencies were reported from most provinces. It is important that ewes and cows receive sufficient supplementation so as to have optimal colostrum quality for their offspring! Some parts of South Africa is still severly drought stricken.

Members of RuVASA's hearts go out to our colleagues and their clients in drought-stricken areas!

#### Micro-nutritional and vitamin deficiencies

The following micro-nutritional deficiencies and vitamins were reported by practices in the provinces:

| Deficiencies | MP | G | L | NW | FS | KZN | EC | wc | NC |
|--------------|----|---|---|----|----|-----|----|----|----|
| Iodine       |    |   |   |    |    |     |    |    |    |
| Copper       | х  | х |   |    |    | х   |    |    |    |
| Zinc         |    | х |   |    |    | х   |    |    |    |
| Selenium     | х  | х |   | х  |    | х   |    |    |    |
| Magnesium    |    |   |   |    |    | х   |    |    |    |
| Manganese    |    |   |   |    |    |     |    |    |    |
| Vitamin A    | х  |   |   | х  | х  |     |    | х  |    |
| Vitamin B 1  |    |   |   |    | Х  |     |    | х  |    |

There are antagonists such as calcium, iron and sulphur which hamper the uptake of micro-minerals. Have water and soil samples analysed to see what the levels of these antagonists are. Arrange with your veterinarian to have liver samples analysed to determine the status of these micro-minerals in your herd or flock.

Selenium is a powerful anti-oxidant and necessary for immunity. Check the status of the herd.

Beware of fluoride poisoning as borehole water levels drop.

Supplement animals with vitamin A and Zinc during winter and drought conditions.

## Multifactorial diseases and other conditions

The following conditions were reported by practices in the provinces

| Multifactorial diseases and other conditions | MP | G | L | NW | FS | KZN | EC | wc | NC |
|--|----|---|---|----|----|-----|----|----|----|
| Abortions                                    | х  | х |   | х  | х  | х   | х  | х  | х  |
| Stillbirths                                  |    | х |   | х  | х  | х   | х  | х  |    |
| Abscesses                                    | х  | х | х | х  | х  | х   | х  | х  | х  |
| Intestinal ulcers                            |    |   |   |    |    |     |    |    |    |
| Bladder stones –urolithiasis                 |    | х |   |    | х  |     |    | х  | х  |
| Blindness                                    |    |   |   |    | х  | х   |    | х  | х  |
| Bloat  | х  |   | х |    | х  | х   |    | х  | х  |
| Blue udder                                   | х  | х |   | х  | х  | х   | х  | х  | х  |
| Diarrhoea                                    | х  |   |   | х  | х  | х   |    | х  | х  |
| Epididymitis                                 | х  |   |   | х  |    |     |    |    | х  |
| Eye cancer                                   | х  | х |   |    | х  | х   | х  |    | х  |
| Eye infections                               | х  | х |   | х  | х  | х   | х  | х  |    |
| Skin lymphoma                                |    |   |   |    |    |     |    |    |    |
| Joint ill                                    | х  | х |   | х  | х  | х   | х  |    |    |
| Cystitis                                     |    |   |   |    |    |     |    |    |    |
| Icterus                                      |    |   |   |    |    |     |    |    |    |
| Lameness/foot problems                       | х  | х |   | х  | х  | х   |    | х  | х  |
| Lung infection                               | х  | х |   | х  | х  | х   | х  | х  | х  |
| Mastitis                                     | х  | X |   | х  | х  | х   | х  | х  |    |

| Navel ill                                  | х |   |   |   | х | х |   |   |   |
|--|---|---|---|---|---|---|---|---|---|
| Umbilical hernia                           |   |   |   |   |   |   |   |   |   |
| Red gut (sheep, torsion of gut)            |   |   |   |   |   |   | х | х |   |
| Rectal prolaps                             |   |   |   |   |   |   |   |   |   |
| Rumen stasis                               |   |   |   |   |   |   |   |   |   |
| Abdominal impaction                        |   |   |   |   |   |   |   |   |   |
| Abdominal hernia                           |   |   |   |   |   |   |   |   |   |
| Floppy kid synrome                         |   |   |   |   |   |   |   |   |   |
| Swelsiekte                                 |   |   |   |   |   |   |   |   |   |
| Traumatic reticulo-pericarditis            | х |   |   | х | х |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |
| Trauma                                     | х | х | х |   | х |   |   | х | х |
| Teeth wear                                 |   |   |   |   |   |   |   |   |   |
| Plastic bags (ingestion)                   |   |   |   |   |   |   |   |   |   |
| Downer                                     | х | х |   | х | х | х | х | х | х |
| Poor condition                             |   |   |   |   |   |   |   |   |   |
| Anaphylactic shock                         |   |   |   |   |   |   |   |   |   |
| Vestibular syndrome (middle ear infection) | х |   |   |   |   | х | х |   |   |
| Hernia                                     |   |   |   |   |   |   |   |   |   |
| Deformaties                                |   |   |   |   |   |   |   |   |   |
| Wet carcases at abattoir                   |   |   |   |   | х |   |   | х | х |
| Yellow carcases at abattoir                |   |   |   |   |   |   |   | х |   |

Discuss the origin, treatment and prevention of these diseases with your veterinarian.

The cause of abortions should be established: brucellosis, enzootic abortion, Q-fever, leptospirosis, Rift valley fever, etc. The necessary preventative measures can then be taken.

#### **Metabolic diseases**

The following diseases were reported by practices in the provinces:

| Metabolic diseases  | MP | G | L | NW | FS | KZN | EC | wc | NC |
|---------------------|----|---|---|----|----|-----|----|----|----|
| Acidosis            | х  | х |   | х  | х  | х   | х  | х  | х  |
| Displaced abomasum  |    |   |   |    |    | х   |    | х  |    |
| Ketosis (Domsiekte) |    | х |   |    | х  | х   | х  | х  | х  |
| Milk fever          |    |   |   |    | х  |     |    | х  |    |

Make sure that you adapt animals to feed containing concentrates as more and more cases of acidosis are reported when grazing animals on harvested maize fields.

Discuss the etiology, treatment and prevention of these diseases with your veterinarian.

# **Reproductive diseases**

| Reproductive diseases       | MP | G | L | NW | FS | KZN | EC | wc | NC |
|-----------------------------|----|---|---|----|----|-----|----|----|----|
| Dystocia (difficult births) | х  | х | х | х  | х  | х   | х  | х  | х  |
| Endometritis                |    |   |   |    | х  | х   |    | х  |    |
| Metritis                    | х  |   |   | х  | х  | х   |    | х  |    |
| Hydrops                     |    |   |   |    |    |     |    |    |    |
| Poor conception             |    |   | х | х  | х  | х   | х  |    |    |
| Retained afterbirth         | х  | х |   | х  | х  | х   | х  | х  | х  |
| Sheath prolaps              | х  | х | х | х  | х  | х   |    | х  | х  |
| Uterine prolaps             | х  | х | х | х  | х  | х   | х  | х  | х  |
| Vaginal prolaps             | х  | х | х | х  | х  | х   |    | х  |    |
| Penis injury                |    |   |   |    |    |     |    |    |    |

| - 10.0   |  |  |  |  |  |
|----------|--|--|--|--|--|
| Orchitis |  |  |  |  |  |
| Orcincis |  |  |  |  |  |
|          |  |  |  |  |  |
|          |  |  |  |  |  |
|          |  |  |  |  |  |

Secret of making money is to have an offspring of EACH heifer, cow, ewe or doe on the farm and wean that calf, lamb or kid EVERY YEAR!!

A poor conception rate on many farms is a huge issue. Visit your veterinarian to rectify this problem.

## **Environmental conditions**

|                  | MP | G | L | NW | FS | KZN | EC | WC | NC |
|------------------|----|---|---|----|----|-----|----|----|----|
| Exposure to cold |    |   | х |    | х  |     |    |    |    |
| Frozen to death  |    |   |   |    |    |     |    |    |    |
| Heat stress      |    |   |   |    |    | х   |    |    |    |
| Lightning        | х  |   |   |    | х  | х   | х  |    |    |
| Electrocution    |    |   |   |    |    |     |    |    |    |
| Drought          |    |   |   |    | Х  |     |    |    | х  |

# **Other conditions**

|   | MP | G | L | NW | FS | KZN | EC | wc | NC |
|---|----|---|---|----|----|-----|----|----|----|
| Dermatospraxis                                |    |   |   |    | х  |     |    |    |    |
| Genetic disorders                             |    | х |   |    | х  |     |    |    |    |
| Drug residues (milk, meat, liver, kidney etc) |    |   |   |    |    |     |    |    |    |
| Preditors                                     | х  | х | х | х  | х  |     | х  |    | х  |
| Theft/Sabotation                              |    | х |   |    | х  | х   |    |    | х  |
| Trauma (fractures etc)                        |    | х | х | х  | х  |     |    | х  | х  |
| Trauma (veldfires)                            |    | x |   | х  | х  |     |    |    |    |

In the CODE OF CONDUCT of the RPO the following standard operating procedures are documented. The local veterinarian should be your partner to help you achieve the necessary standards. http://www.rpo.co.za/BestPractices/English.aspx

#### PRECAUTIONARY MEASURES TO SUPPORT BIO-SECURITY.

Precautionary measures are required to protect the herd against diseases acquired because of external contact. The following categories are of concern:

#### 1. DIRECT LIVESTOCK PURCHASES (and own animals returning):

The following should be *verified* before importing new animals into the herd:

How long animals have resided at the purchase or previous location?

Have there been any recent disease outbreaks in the location?

Do brand marks clearly confirm ownership?

Was a vaccination program followed (need paper or veterinarian proof). What are the local prevalent external parasites and the routinely implemented control program?

Is a veterinarian supported control program against transmittable diseases followed?

Dates and sufficient number of tests for reproductive diseases of both male and female

Dates and tests for zoonotic diseases

The above should also be verified with the purchaser's own veterinarian.

#### 2. PURCHASES FROM SALES OR SPECULATORS

Purchase only in areas which are not in close proximity to scheduled areas Visually inspect the animals before purchasing for:

- \* brand marks
- \* parasite infestation

#### 3. TRANSPORT TO THE FARM

Use only reputable transporters

Has the truck been cleaned and disinfected?

Truck to follow the shortest uninterrupted route

Truck to take the shortest route to the handling facilities

Do not allow the truck personnel to get in contact with the farm herd

#### 4. ARRIVAL ON THE FARM

Off-load the livestock to limit stress and to be visually evaluated for any unnatural conditions.

Isolate them from the farm herd and shared facilities for at least 21 days (quarantine) Retest for diseases of concern if needed, before mixing with the rest of the herd Process new arrivals within 24 hrs after arrival (unique ID tag brand, dip, dose, vaccinate) Inspect regularly

#### **5. FEED PURCHASES**

Ensure bales of hay are sourced from areas that are not bordering scheduled areas Purchase feed from reputable dealers only Avoid buying feed in second hand bags

Ensure feed trucks are also disinfected and cleaned, especially if also used to transport animals to abattoirs

#### 6. VISITORS

Do not allow strangers or their vehicles amongst the livestock Ensure fences are well maintained and preferably jackal and warthog proof

#### 7. EMPLOYEES

Do not allow the employees to eat in feed stores

Supply employees with sufficient ablution facilities

Regularly arrange to let employees be medicated for tape worm and have health check-ups

Keep record of all employee livestock on the property

Treat employee livestock with separate but dedicated health programs

Ensure employees understand the reason behind the implemented bio-security measures to help ensure compliance.

#### **GENERAL AND REPRODUCTION MANAGEMENT**

Record keeping: All animals are individually identified and recorded.

To prove ownership: All animals are marked with the registered brand mark according to the Animal Identification Act, No 6 of 2002.

A defined breeding season is the basis of effective management: The breeding season coincides with the rainy season, i.e. the period when nutritive value of the pasture is at its best.

Sufficient energy reserves in the herd as measured by condition scoring are vital, especially for effective breeding, and when inadequate the herd is supplemented in consultation with a nutritionist: Condition scoring of bulls and cows are regularly done, particularly at the onset of the breeding season and supplemented if necessary.

Bull - cow ratios are maintained: A ratio of 1 to 25 is maintained in every separate herd.

Fertility of breeding bulls: All breeding bulls are tested for mating ability and semen quality before the breeding season.

Sexually transferable diseases: Sheath washes or scrapes on bulls are performed annually.

Diseases that can cause poor conception, abortion or weak calves: Cows are vaccinated against such diseases in consultation with the veterinarian.

Breeding success monitored by a veterinarian: Rectal pregnancy or scan diagnosis is done by the veterinarian 8 weeks after the breeding season.

Twenty percent of cows or more not pregnant: Further tests are done to determine cause of low pregnancy rate.

Culling of non-pregnant cows: Non-pregnant cows are removed from the herd and considered a necessary bonus to supporting herd income.

#### **HERD HEALTH AND BIO-SECURITY**

Maintenance of herd health is key to a successful enterprise: A veterinarian should visit the farm biannually at least.

Calf mortality before 3 months of age is an important reason for poor weaning percentage: Good management practices are applied to limit early calf deaths.

Some diseases and parasites (internal and external) are more often encountered in specific areas: Annual vaccinations and a parasite control program should be applied according to regional requirements and in liaison with the veterinarian.

Farmers selling weaned calves to feedlots may want to have a market advantage compared to others: A specific vaccination program is applied before weaning for that purpose.

Herds may be at risk of being exposed to CA and TB: The herd is tested annually for CA and all heifers are vaccinated against CA between 4 and 8 months of age with an efficient, approved remedy. The herd is tested at least every 5 years for TB

Precautionary measures are required to prevent diseases being imported into the herd: A quarantine program to keep incoming animals separate is followed. All incoming animals have a suitable certificate of negative test results or are of a certified clean, closed herd.

Stock remedies and medicines should be registered, correctly stored and used before the transpire date: All medicines and stock remedies are registered, stored and applied according to prescription.

Prescribed medicines with a specific application are under the control of the veterinary profession: All prescription medicines are obtained and applied under prescription from a veterinarian.

## Practices that had nothing to report

Beestekraal – Dr. Alwyn Venter Harrismith – Dr. Wim Slabbert Kareedouw – Dr. Marten Bootsma Vanderbylpark- Dr. Kobus Kok Vryburg – Dr. Jurie Kritzinger Wellington – Dr. William van Zyl

#### **Ostriches**

# **Western Cape**

#### Oudtshoorn

| Tapeworms         | 2  |
|-------------------|--|
| Bont-legged ticks | 1  |
| Red gut           | 1 - On planted pastures – small grain, severe temp fluctuations birds eating and then not  |
| Mycoplasma        | 3 - Airsacculitis, wind cold, poor body condition Temp fluctuations/ dust/ cold – increased moist rales, rhinitus and sinusitis, more pronounce post cold spell. |
| Navell ill        | 3  |
| Soil pica         | 3 - Adaption to intensive feeding in cold wet weatehr = moist areas in camps and soil pica   |

| Soil pica and rectal prolaps                  | 3 - Adaption to intensive feeding in cold wet weather = moist areas in camps and soil pica  |
|---|---|
| Protein, Energy<br>deficiency, poor<br>growth | 3 - Producers are using hominy chop but not well aware of qaulity issues. Resulting in feed refusal and poor growth. Still some very cold weather resulting in mortalities  |
| Cloacal prolaps                               | 3   |
| Rectal prolaps/                               | 3 -Soil pica and heat stress = cryptosporidium overgrowth   |
| Cryptosporidium                               |   |
| Dysbacteriosis                                | 3 - New chick season, spill over of nutrients diarrhoea   |
| Mycoplasmosis                                 | 3 - Severe wind and dust – drought and season change Airsacculitis, wind cold, poor body condition. Temprature fluctuations/ dust/ cold – increased moist rales, rhinitis and sinusitis, more pronounced post cold spell.                 |
| Diarrhoea                                     | 3 - Intensive systems with breakdown in potable water supply/inappropriate management   |
| New Castle Disease                            | Previous findings of August/ September was found to be false positive or avirulent  |
| Poor growth                                   | 3   |
| Weakness                                      | 3 - Poor starters of day old chicks. Protein and energy deficiency –chicks more severely affected, insufficient time to feed (daylight/ high temp), high demand for energy (cold evenings), underlying infections chronic enterotoxaemia. |

# **Equines**

Gauteng
Maldersdrift
African Horse Sickness - 1
Pretoria
Dystocia – 1

#### Limpopo

Bela-Bela

Retained afterbirth – 1 Friesian mare

#### Eastern - Cape

#### Colesberg

Strongyles – Horses

Diarrhoea - Foals

Omphalophlebitis - Foal

#### Game

#### Mpumalanga

Lydenburg

MBC (snotsiekte) - 1 Buffalo

#### Gauteng

**Pretoria** 

Bont ticks - 2

#### Limpopo

Bela-Bela

Split claw - 1 Sable

Modimolle

Snares - Kudu, Giraffe

Protein-energy-manutrtion (PEM) – 3 nyalas died on one farm

#### **North West**

Schweizer-Reneke

PEM – 3 Game

#### Swine

No reports received

# Monthly report on Livestock and Wildlife isolations for October 2020 from Vetdiagnostix – Microbiology Laboratory, supplied by dr. Marijke Henton

(henton@vetdx.co.za)

Enteritis in calves yielded 13 cases of colibacillosis, together with *Cryptosporidium* in one case. Six of the *E. coli* isolates were ESBL producers, which means that they were resistant to the whole penicillin and cephalosporin group, as well as to many other antibiotics. Septicaemia in calves also yielded E. coli [4 cases] and one case of *Salmonella* Dublin.

Respiratory disease yielded *Histophilus somni* [3], *Pasteurella multocida* [3], *Mannheimia haemolytica* [1] and *Mycoplasma* [1]. *Histophilus somni* was also isolated from semen.

*Staphylococcus aureus* was isolated from the milk of 18 out of 22 cows on one farm. Two of the cows had methicillin resistant strains [MRSA].

Bovine clostridial myositis was due to C. chauvoei [2], C. septicum [2] and C. novyi [1].

Enteritis in sheep [3] and goats [1] was due to *E. coli*. The goat isolate was an ESBL strain. *E. coli* also caused septicaemia in a sheep flock and a goat herd.

Mannheimia haemolytica was isolated from Blue Udder in an ewe and *Trueperella pyogenes* from mastitis in a goat herd. *Trueperella pyogenes* also caused eye infections in sheep. An abscess in a sheep was due to a combination of *Corynebacterium pseudotuberculosis* and the anaerobe *Porphyromonas*.

*E. coli* caused enteritis in pigs [2] with one of the isolates being an ESBL producer. *E. coli* was also isolated from a case of cystitis.

Pneumonia in pigs was due to *Actinobacillus pleuropneumoniae* [2], *Streptococcus dysgalactiae* [2] and *Pasteurella multocida*.

Sudden death in a sow was due to *Clostridium novyi* [Aero chocolate liver]

There were only two significant isolates from wildlife, and both were due to *Trueperella pyogenes*. One was an abscess in a bushbuck, and the other a purulent vaginal discharge in a rhino.

Monthly report: Dr Theo Kotzé – Moghaka (Kroonstad) district

**Veterinary Mastitis Consultant: Bovine Industry** 

0827849706@vodamail.co.za

0827849706

No new zoonotic anti microbial resistant organisms or controlled or notifiable diseases to report for October 2020

# Feedlot report received from Dr. Eben du Preez for October 2020 (<a href="mailto:edupreez1@telkomsa.net">edupreez1@telkomsa.net</a>)

| Condition                               | Comments and Specie |
|---|---------------------|
| Wireworm                                | 03                  |
| Conical fluke (adults seen in abattoir) | В 3                 |
| Measles                                 | B 2                 |
| Blue ticks                              | В 3                 |

| Bont ticks           | В 3      |
|----------------------|----------|
| Red legged-ticks     | B 3, O 3 |
| Anaplasmosis         | В 3      |
| Heartwater           | В 3      |
| Coccidiosis          | B 2, O 2 |
| Red gut              | B 1      |
| Ringworm             | В 3      |
| Warts                | В 3      |
| Vitamin A deficiency | B 2, O 3 |
| Joint ill            | B 2      |
| Lameness, foot rot   | В 3      |
| Laminitis            | В 3      |
| Lungs                | B 2, O 1 |
| Eye infection        | В 3, О 3 |
| Diarrhoea            | B 3, O 3 |
| Abscesses            | B 3, O 3 |
| Lightning            | B 1      |

# Feedlot report received from Drs. Morris and Le Riche October 2020 (<a href="mailto:shaun@octavoscene.co.za">shaun@octavoscene.co.za</a>)

| Condition                       | Comments and Specie        |
|---------------------------------|----------------------------|
| Parafilaria                     | В 3                        |
| Cryptosporidiosis               | В3                         |
| Atypical interstitial pneumonia | In cattle in many feedlots |

| Multifactorial causes           |                       |
|---------------------------------|-----------------------|
| Urea poisoning                  | B 3                   |
| Bloat – wind and rain           | B 3                   |
| Bovine brucellosis              | B 3                   |
| Cold exposure (frozen to death) | O 3                   |
| Swine fever                     | 1 500 pigs euthanazed |

# Monthly report for October 2020 from Dr R D Last (BVSc; M.Med.Vet(Path); MRCVS)

## Specialist Veterinary Pathologist, Vetdiagnostix - Veterinary Pathology Services

| LIVESTOCK DISEASE SURVEILANCE |                                     |              |                        |  |  |
|-------------------------------|-------------------------------------|--------------|------------------------|--|--|
| LIVESTOCK SPECIES             | DISEASE AGENT                       | NO.<br>CASES | LOCATION               |  |  |
| BOVINE FETUS                  | BOVINE HERPESVIRUS-1 (IBR) ABORTION | 1            | ERMELO, MPUMULANGA     |  |  |
| BOVINE ADULT COW              | ENZOOTIC BOVINE LEUKOSIS            | 1            | HOWICK, KZN            |  |  |
| BOVINE YEARLING               | SPORADIC BOCINE LEUKOSIS            | 1            | HOWICK, KZN            |  |  |
| BOVINE CALF                   | CONGENITAL HEPATIC FIBROSIS         | 1            | JEFFERIES BAY, E. CAPE |  |  |
| BOVINE CALVES                 | CRYPTOSPORIDIOSIS                   | 1            | UNDERBERG, KZN         |  |  |
| BOVINE FEEDLOT STEER          | PULMONARY HYPERTENSION              | 1            | WARTBURG, KZN          |  |  |
|                               |                                     |              |                        |  |  |

| WILDLIFE DISEASE SURVEILANCE |                            |           |                     |  |  |
|------------------------------|----------------------------|-----------|---------------------|--|--|
| WILDLIFE SPECIES             | DISEASE AGENT              | NO. CASES | LOCATION            |  |  |
| DASSIE ADULT                 | SUSPECT YERSINIOSIS        | 1         | CAPE TOWN, W. CAPE  |  |  |
| RHINO WHITE ADULT            | ACUTE EXERTIONAL MYOPATHY  | 1         | ALLDAYS, LIMPOPO    |  |  |
| SABLE ANTELOPE BULL          | SUSPECT YERSINIOSIS        | 1         | WELLINGTON, W. CAPE |  |  |
| BUFFALO BULL                 | HYPERSENSITIVITY PNEUMONIA | 1         | LIMPOPO             |  |  |

# Monthly report on Livestock and Wildlife isolations for October 2020 from IDEXX Laboratories supplied by dr. Liza du Plessis (<u>Liza-DuPlessis@idexx.com</u>)

| Condition           | Comments and Specie |
|---------------------|---------------------|
| Cerebral babesiosis | B 1                 |

| Septicaemia                        | 01       |
|------------------------------------|----------|
| BMC (snotsiekte)                   | B 1      |
| Cardiotoxicity                     | B 1, C 1 |
| Toxic nephrosis                    | B 1      |
| Hepatotoxicity                     | B 1      |
| Protein, Energy Malnutrition (PEM) | B 1, G 1 |
| Acidosis                           | G 1      |
| Rumenitis                          | G 1      |
| Abortion                           | BO 1     |
| Diarrhoea (bacterial enteritis)    | B 1, G 1 |
| Lung, (bacterial infection)        | B 1, O 1 |
| Bronchitis                         | G 1      |
| Dystocia                           | C 1      |

# Monthly report from Dr. Mark Chimes for Ocober 2020 – Dairy Standards

Lumpy skin disease -2, Swellendam

Monthly report from Dr. Emily Mitchell October 2020 - Wildlife cases: Faculty of Veterinary Science



#### Section of Pathology Department of Paraclinical Sciences Faculty of Veterinary Science

29<sup>th</sup> October 2020 DAFF Import/Export Policy Unit Subdirectorate

# Monthly report: Faculty of Veterinary Science cases Wildlife cases sent to referring veterinarians between 5th and 29th October 2020

Cases from State vet Skukuza or Orpen (none)
Cases imported with master permit

| PMDate    | Species | Final                                | Histo No  |
|-----------|---------|--------------------------------------|-----------|
| 17-Jun-20 | Cheetah | Acute heart failure                  | S1531-20  |
| 17-Jun-20 | Cheetah | Abandoned cub                        | S1530-20  |
| 22-Jun-20 | Cheetah | Suspected traumatic injury           | S01591-20 |
| 23-Jun-20 | Cheetah | Possible heart failure               | S01609-20 |
| 24-Jun-20 | Cheetah | Meningitis                           | S1921-20  |
| 30-Jun-20 | Lion    | Complications of chronic spondylosis | S1681-20  |
| 20-Jul-20 | Lion    | Normal reproductive tract            | S1875-20  |
| 20-Jul-20 | Lion    | Endometrial cysts                    | S01871-20 |
| 14-Sep-20 | Lion    | Cutaneous angiomatosis               | S2465-20  |
| 30-Sep-20 | Caracal | Cutaneous hybrid follicular cyst     | S02633-20 |

Kind regards,

mily Mitchell

Prof. Emily Mitchell

Fakulteit Veeartsenykunde Lefapha la Diseanse tša Bongakadiruiwa

# Month: Oct 2020 Table of Contents

| <u>Internal Parasites</u>          | Roundworms in general, Resistant Round Worms, Wireworm, Brown stomach-worm, Nodular worm, Tape Worms, Parafilaria, Liver fluke, Conical Flukes, Cysticercosis   |
|------------------------------------|---|
| External Parasites                 | Blue ticks, Resistant blue Ticks, Heartwater (Bont) ticks, Brown earticks, Bont-legged ticks, Red-legged ticks, Paralysis ticks, Biting lice (red lice), Sucking lice (blue lice), Scab mites, Mange Mites, Nuisance Flies, Blowflies, Screw-worm, Nasal bot larvae, Midges, Mosquitoes   |
| <u>Tick-borne Diseases</u>         | African red water, Asiatic red water, Anaplasmosis, Heartwater, Sweating Sickness, Theileriosis   |
| Insect Transmittable Diseases      | Lumpy skin disease, Three-day-stiffsickness, Blue tonque, Nagana  |
| Venereal Diseases                  | <u>Trichomonosis</u> , <u>Vibriosis</u>   |
| Bacterial Disease (other)          | Q-Fever Coxiella, Blackquarter, Botulism, Pulpy Kidney, Swelled head disease, Red qut (cattle), Blood qut (Sheep), Tetanus, Salmonellosis, Brucella abortus, Brucella ovis, Johne`s disease, Leptospirosis, Septicaemia, E. coli, Enzootic Abortion, Dermatophilosis (Lumpy Wool), Intrauterine Gangrene, Bovine Dermatophilosis (Senkobo disease), Fusibacterium necrophorum, Listeriosis, Other, Pasteurellosis |
| Protozoal diseases (other)         | Coccidiosis, Cryptosporidiosis  |
| <u>Fungal diseases</u>             | Ringworm  |
| <u>Viral Diseases (other)</u>      | BMC (snotsiekte), Rabies, BVD (Bovine viral diarrhoea), IBR (Infectious bovine rhinotracheitis), Enzootic Bovine Leucosis (EBL), Orf, Warts, Rota virus, Corona Virus   |
| Poisonings (Plant) and Fungal      | Cardiac glycoside poisoning, <i>Cestrum</i> , <i>Cynanchum</i> poisoning, Facial eczema, Geeldikkop/Dikoor, Gifblaar, Gousiekte, Kikuyu poisoning, <i>Lantana</i> , Nenta poisoning (Krimpsiekte), Prussic acid poisoning, Rye grass poisoning, Seneciosis, Tulip Poisoning, Diplodiosis, Other   |
| <u>Poisonings</u>                  | <u>Urea Poisoning</u> , <u>Snake Bite</u> , <u>Chemical products</u> , <u>Other</u>   |
| <u>Macro Nutritional Problems</u>  | Energy deficiency, Protein deficiency, Phosphate deficiency, Calcium deficiency   |
| <u>Micro Nutritional Problems</u>  | Copper deficiency, Zinc deficiency, Selenium deficiency, Magnesium deficiency, Vitamin A deficiency, Vitamin B1 deficiency  |
| Multi-factorial Disease Conditions | Abortions, Stillbirths, Abscesses, Bladder stones, Blindness, Bloat, Red gut (torsion sheep and goats), Blue udder, Diarrhoea, Epididymitis, Eye Cancer, Eye infections, Joint III, Lameness/Foot Problems, Lung infection, Mastitis in general, Navel III, Trauma, Downer, Other, Vestubular syndrome (Middle ear infection), Wet carcasses, Yellow cascases at abattoir   |
| Metabolic Diseases                 | Acidosis, Displaced abomasum, Ketosis, Milk Fever   |

| Reproductive diseases | <u>Dystocia (Difficult Births), Endometritis, Metritis, Poor conception, Retained afterbirth, Sheath Prolaps, Uterus prolaps, Vaginal (Cervical) prolaps</u> |
|-----------------------|--|
| Climatical Cause      | Cold exposure, Drought, Heat stress, Lightning   |
| Non specific diseases | Cause of death not established, Dermatosparaxis, Genetic disorders, Preditors, Sabotation/Theft, Trauma, Veld fires, other, Traumatic Reticulo-pericarditis  |

| Tillerilai Parasiles  |          |            |         |         |         |               |                   |                 |                 |                  |
|-----------------------|----------|------------|---------|---------|---------|---------------|-------------------|-----------------|-----------------|------------------|
| Roundworms in general |          |            |         |         |         |               |                   |                 |                 | <u>^</u>         |
|                       | PROVINCE | Mpumalanga | Gauteng | Limpopo |         | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|                       | Average  | 1.0 (2)    | 2.0 (3) |         | 2.0 (3) | 2.0<br>(9)    | 1.7 (3)           | 1.6 (5)         | 1.7 (6)         | 2.0 (1)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 1.0(1)  |         |                 | 1.5 (2) |         |         |         |
|-------|---------|---------|-----------------|---------|---------|---------|---------|
| Sheep | 1.0 (1) | 2.5 (2) | 2.0 (3) 2.0 (9) |         | 1.5 (4) | 1.6 (5) | 2.0 (1) |
| Goat  |         | 1.0(1)  |                 | 2.0 (1) | 2.0 (1) | 2.0 (1) |         |

#### Mpumalanga

**Balfour, Balfour Dierekliniek** 

Beef: 1, Sheep: 1

Gauteng

Nigel, Nigel Diere Spreekkamer

Sheen: 3

**Pretoria, Anima Veterinary Consulting Rooms** 

Sheep: 2

Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Goat: 1
North West

Christiana, Christiana Dierehospitaal

Sheep: 2

Klerksdorp, Klerksdorp Dierehospitaal

Sheep: 2

Stella, Stella Dierekliniek

Sheep: 2
Free State

**Bloemfontein, Dr Stephan Wessels** 

Sheep: 3

Clocolan, Clocolan Dierekliniek

Sheep: 1

**Excelsior, Weltevrede Dierekliniek** 

Sheep: 3

Hoopstad, Hoopstad Dierekliniek

Sheep: 3

**Kroonstad, Kroonstad Dierehospitaal** 

| Sheep: 2                              | Sheep: 2                             |              |                |         |          |                |            |           |          |  |  |
|---------------------------------------|--------------------------------------|--------------|----------------|---------|----------|----------------|------------|-----------|----------|--|--|
| Oranjeville, Grasveld Kuddegesondheid |                                      |              |                |         |          |                |            |           |          |  |  |
| Sheep: 1                              |                                      |              |                |         |          |                |            |           |          |  |  |
| Philippolis,                          | Rowelsfontein                        | veearts 9    | Spreekkan      | ner     |          |                |            |           |          |  |  |
| Sheep: 2                              |                                      |              | -              |         |          |                |            |           |          |  |  |
|                                       | on, Viljoenskro                      | oon Dierel   | kliniek        |         |          |                |            |           |          |  |  |
| Sheep: 2                              |                                      |              |                |         |          |                |            |           |          |  |  |
| •                                     | arden Dierekli                       | niek         |                |         |          |                |            |           |          |  |  |
| Sheep: 1                              | Warden, Warden Dierekliniek Sheen: 1 |              |                |         |          |                |            |           |          |  |  |
|                                       | Kwazulu-Natal                        |              |                |         |          |                |            |           |          |  |  |
|                                       | Mooirivier Vet                       | t Clinic     |                |         |          |                |            |           |          |  |  |
| Beef: 1                               |                                      |              |                |         |          |                |            |           |          |  |  |
| Mtubatuba.                            | Mtubatuba Ar                         | nimal Clin   | ic             |         |          |                |            |           |          |  |  |
| Beef: 2, Goat                         |                                      |              |                |         |          |                |            |           |          |  |  |
| Eastern Cap                           |                                      |              |                |         |          |                |            |           |          |  |  |
|                                       | et, Camdeboo                         | Veterinar    | v Clinic       |         |          |                |            |           |          |  |  |
| Sheep: 1, Go                          |                                      |              | ,              |         |          |                |            |           |          |  |  |
|                                       | et, Graaff Reir                      | net Veteri   | narv Clinio    | 2       |          |                |            |           |          |  |  |
| Sheep: 2                              | ou, craaii itoii                     |              | inan y Cillina | -       |          |                |            |           |          |  |  |
| •                                     | Uitenhage Die                        | rehosnita    | al             |         |          |                |            |           |          |  |  |
| Sheep: 1                              | Orteniage Die                        | Споэрна      | <b>u</b> .     |         |          |                |            |           |          |  |  |
|                                       | Witelsbos Vete                       | rinary Co    | nsultina R     | noms    |          |                |            |           |          |  |  |
| Sheep: 2                              | Witcisbos Vete                       | iniary co    | iisaidiig i    |         |          |                |            |           |          |  |  |
| Western Ca                            | ne                                   |              |                |         |          |                |            |           |          |  |  |
|                                       | est, Beaufort I                      | Diereklinie  | k              |         |          |                |            |           |          |  |  |
| Sheep: 1                              | ,                                    | on Gramme    |                |         |          |                |            |           |          |  |  |
|                                       | erberg Veteri                        | nary Hosn    | ital           |         |          |                |            |           |          |  |  |
| Sheep: 2                              | ciberg veterii                       | ilai y 1103p | icai           |         |          |                |            |           |          |  |  |
| •                                     | (WC), Heidelb                        | era Dierel   | kliniek        |         |          |                |            |           |          |  |  |
| Sheep: 2                              | (We), Heldelb                        | cig Dicici   | KIIIICK        |         |          |                |            |           |          |  |  |
| •                                     | h, Prov Vet lab                      | Flsenhui     | ·a             |         |          |                |            |           |          |  |  |
| Sheep: 1                              | ii, i iot teelal                     | Liscinsui    | 9              |         |          |                |            |           |          |  |  |
| •                                     | h, Stellenbosc                       | h Animal     | Hosnital       |         |          |                |            |           |          |  |  |
| Sheep: 2, Go                          |                                      | II AIIIIIIQI | i ioopitai     |         |          |                |            |           |          |  |  |
| Northern Ca                           |                                      |              |                |         |          |                |            |           |          |  |  |
|                                       | Staatsveeartse                       | e Groen N    | C              |         |          |                |            |           |          |  |  |
| Sheep: 2                              | Staats veedi ts                      | e diocp it   |                |         |          |                |            |           |          |  |  |
| Kimberley are                         |                                      |              |                |         |          |                |            |           |          |  |  |
| Killiberiey are                       | sa —                                 |              |                |         |          |                |            |           |          |  |  |
| Resistant                             | Round Wo                             | rms          |                |         |          |                |            |           | ^        |  |  |
|                                       |                                      |              |                |         |          |                |            |           |          |  |  |
|                                       |                                      | _            |                | North   | Free     | Kwazulu-       | Eastern    | Western   | Northern |  |  |
| PROVINCE                              | Mpumalanga                           | Gauteng      | Limpopo        | West    | State    | Natal          | Cape       | Cape      | Cape     |  |  |
|                                       |                                      |              |                |         |          |                | -          | _         | -        |  |  |
|                                       |                                      |              |                |         | 2.0      |                |            |           |          |  |  |
| Average                               |                                      | 1.0(1)       |                |         |          |                |            |           |          |  |  |
|                                       |                                      |              |                |         | (3)      |                |            |           |          |  |  |
| 1 1                                   |                                      |              |                | . II.   |          |                |            |           | 10       |  |  |
|                                       | ortance scale: 1                     | = one case   | e, $2 = more$  | than on | e case b | ut less than t | en and 3 = | more than | 10 cases |  |  |
| reported                              | reported                             |              |                |         |          |                |            |           |          |  |  |
| 2.0                                   |                                      |              |                |         |          |                |            |           |          |  |  |
| Sheep                                 |                                      | 1.0(1)       |                |         | (3)      |                |            |           |          |  |  |
|                                       |                                      |              |                |         | (3)      |                |            |           |          |  |  |
| Gauteng                               | -                                    |              |                |         |          |                |            |           |          |  |  |
|                                       | , Bapsfontein                        | Dierehos     | pitaal         |         |          |                |            |           |          |  |  |
| Sheep: 1                              |                                      |              |                |         |          |                |            |           |          |  |  |
|                                       |                                      |              |                |         |          |                |            |           |          |  |  |

| Free State                      |                            |              |             |               |               |                 |                 |                 |                  |
|---------------------------------|----------------------------|--------------|-------------|---------------|---------------|-----------------|-----------------|-----------------|------------------|
| Bloemfonte                      | in, Dr Stephan             | Wessels      |             |               |               |                 |                 |                 |                  |
| Sheep: 2                        |                            |              |             |               |               |                 |                 |                 |                  |
| Hoopstad, Hoopstad Dierekliniek |                            |              |             |               |               |                 |                 |                 |                  |
| Sheep: 3                        |                            |              |             |               |               |                 |                 |                 |                  |
| Reitz, Riem                     | land Dierehos <sub>l</sub> | pitaal       |             |               |               |                 |                 |                 |                  |
| Sheep: 1                        |                            |              |             |               |               |                 |                 |                 |                  |
| Wirewori                        | n                          |              |             |               |               |                 |                 |                 | ^                |
|                                 |                            |              |             |               |               |                 |                 |                 |                  |
| PROVINCE                        | Mpumalanga                 | Gauteng      | Limpopo     | North<br>West | Free<br>State |                 | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                         | 2.3 (4)                    | 2.5 (4)      | 2.0 (2)     | 3.0 (2)       | 2.0<br>(10)   |                 | 1.7 (3)         | 1.0 (1)         | 1.0 (1)          |
| Level of impo                   | ortance scale: 1           | = one case   | e, 2 = more | than on       | e case b      | ut less than to | en and 3 =      | more than :     | 10 cases         |
| reported                        |                            |              |             |               |               |                 |                 |                 |                  |
| Sheep                           | 2.0 (3)                    | 2.3 (3)      | 2.0 (1)     | 3.0 (2)       | 2.0 (10)      |                 | 1.5 (2)         | 1.0 (1)         |                  |
| Goat                            | 3.0 (1)                    | 3.0 (1)      | 2.0 (1)     |               | ( - )         |                 | 2.0 (1)         |                 | 1.0(1)           |
| Mpumalang                       | <u></u>                    |              |             |               |               |                 |                 |                 |                  |
| Hendrina, M                     | looiplaas Vete             | rinêre Die   | enste       |               |               |                 |                 |                 |                  |
| Sheep: 1                        |                            |              |             |               |               |                 |                 |                 |                  |
|                                 | <b>Longtom Dier</b>        | ekliniek     |             |               |               |                 |                 |                 |                  |
| Sheep: 3, Go                    |                            |              |             |               |               |                 |                 |                 |                  |
| •                               | Pets Vet Hosp              | ital         |             |               |               |                 |                 |                 |                  |
| Sheep: 2                        |                            |              |             |               |               |                 |                 |                 |                  |
| Gauteng                         | . Dawafautain              | D:           | !ul         |               |               |                 |                 |                 |                  |
| Sheep: 2                        | , Bapsfontein              | Dierenos     | pitaai      |               |               |                 |                 |                 |                  |
| •                               | spruit, Kerkstr            | aat Diere    | kliniak     |               |               |                 |                 |                 |                  |
| Sheep: 2                        | spiuit, Keiksti            | aat Diele    | KIIIIICK    |               |               |                 |                 |                 |                  |
|                                 | raal, Themba <i>F</i>      | Animal Cli   | nic         |               |               |                 |                 |                 |                  |
| Sheep: 3, Go                    |                            |              |             |               |               |                 |                 |                 |                  |
| Limpopo                         |                            |              |             |               |               |                 |                 |                 |                  |
|                                 | Pietersburg V              | eterinary    | Clinic      |               |               |                 |                 |                 |                  |
| Sheep: 2, Go                    |                            |              |             |               |               |                 |                 |                 |                  |
| North West                      |                            |              |             |               |               |                 |                 |                 |                  |
|                                 | om, Bult Diere             | ekliniek     |             |               |               |                 |                 |                 |                  |
| Sheep: 3                        |                            |              |             |               |               |                 |                 |                 |                  |
| Potchefstro                     | om, Morvet                 |              |             |               |               |                 |                 |                 |                  |
| Sheep: 3                        |                            |              |             |               |               |                 |                 |                 |                  |
| Free State                      | Pothloham A.               | imal Us-     | mital       |               |               |                 |                 |                 |                  |
| Sheep: 2                        | Bethlehem An               | ıımaı Hos    | pitai       |               |               |                 |                 |                 |                  |
|                                 | in, University             | Fraa State   | 9           |               |               |                 |                 |                 |                  |
| Sheep: 2                        | iii, Oiliveisity           | i i ee Stati | -           |               |               |                 |                 |                 |                  |
|                                 | ocolan Dierek              | liniek       |             |               |               |                 |                 |                 |                  |
| Sheep: 1                        | JJOIGH BICICK              |              |             |               |               |                 |                 |                 |                  |
|                                 | /eltevrede Die             | rekliniek    |             |               |               |                 |                 |                 |                  |
| Sheep: 3                        |                            |              |             |               |               |                 |                 |                 |                  |
| Hoopstad, H                     | loopstad Diere             | ekliniek     |             |               |               |                 |                 |                 |                  |
|                                 |                            |              |             |               |               |                 |                 |                 |                  |

| Kampoldoring                                      | Dioroklini  | ok   |   |   |   |   |  |   |  |
|---|---|--|---|---|---|---|--|---|--|
| Kameeldomig                                       | Dierekiiiii   | ek   |   |   |   |   |  |   |  |
| Cracyold Kud                                      | dogocond  | hoid   |   |   |   |   |  |   |  |
| Oranjeville, Grasveld Kuddegesondheid<br>Sheep: 1 |   |  |   |   |   |   |  |   |  |
| Powelsfonteir                                     | vooarte (   | Snrookkan  | 10r   |   |   |   |  |   |  |
| Roweisionten                                      | i vecaits .   | эргесккап  | ICI   |   |   |   |  |   |  |
| land Dierehoe                                     | nitaal  |  |   |   |   |   |  |   |  |
| ilalia Dielelios                                  | pitaai  |  |   |   |   |   |  |   |  |
| arden Dierekli                                    | niek  |  |   |   |   |   |  |   |  |
| aracii bici ckii                                  | ····Cix   |  |   |   |   |   |  |   |  |
| ne  |   |  |   |   |   |   |  |   |  |
|   | a Diereklii   | niek   |   |   |   |   |  |   |  |
| ,   | ,   |  |   |   |   |   |  |   |  |
| net, Camdeboo                                     | Veterina  | ry Clinic  |   |   |   |   |  |   |  |
|   |   | ,  |   |   |   |   |  |   |  |
| ре  |   |  |   |   |   |   |  |   |  |
|   | Elsenbu   | rg   |   |   |   |   |  |   |  |
| •   |   | _  |   |   |   |   |  |   |  |
| аре   |   |  |   |   |   |   |  |   |  |
|   | rekliniek   |  |   |   |   |   |  |   |  |
|   |   |  |   |   |   |   |  |   |  |
| tomach-wor  | 200   |  |   |   |   |   |  | _   |  |
| tomach-wor  | 111   |  |   |   |   |   |  | _   |  |
| Mpumalanga  | Gauteng   | Limpopo  | North<br>West   |   |   | Eastern<br>Cape   | Western<br>Cape  | Northern<br>Cape  |  |
|   |   |  |   |   | 1.0 (1)   |   | 2.0 (1)  |   |  |
| ortance scale: 1                                  | = one case  | e, 2 = more  | than on   | e case b  | ut less than to   | en and 3 =  | more than  | 10 cases  |  |
|   |   |  |   |   | 1.0(1)  |   |  |   |  |
|   |   |  |   |   |   |   | 20(1)  |   |  |
| -4-1  |   |  |   |   |   |   | 2.0 (1)  |   |  |
|   | t Clinia  |  |   |   |   |   |  |   |  |
| , Modifivier ve                                   | Cillic  |  |   |   |   |   |  |   |  |
| no  |   |  |   |   |   |   |  |   |  |
|   | era Diere   | kliniek  |   |   |   |   |  |   |  |
| (WC), Heidelb                                     | erg Diere   | KIIIICK  |   |   |   |   |  |   |  |
|   |   |  |   |   |   |   |  |   |  |
| worm  |   |  |   |   |   |   |  | ^   |  |
|   |   |  | North   | Free  | Kwazulu-  | Eastern   | Western  | Northern  |  |
| Mpumalanga  | Gauteng   | Limpopo  | West  | State   | Natal   | Cape  | Cape   | Cape  |  |
| Mpumalanga  | Gauteng   | Limpopo  |   | State   | Natal   | Cape  | Cape   | 2.0 (1)   |  |
| Mpumalanga ortance scale: 1                       |   |  | West  |   |   |   | •  | 2.0 (1)   |  |
|   |   |  | West  |   |   |   | •  | 2.0 (1)   |  |
|   |   |  | West  |   |   |   | •  | 2.0 (1)<br>10 cases   |  |
|   | Rowelsfontein land Dierehos arden Dierekli pe ch, Hertzogbrug net, Camdeboo pat: 2 npe ch, Prov Vet Ial ape Kimberley Die comach-wor Mpumalanga portance scale: 1 atal Mooirivier Ver | Rowelsfontein veearts stalland Dierehospitaal arden Dierekliniek  pe ch, Hertzogbrug Dierekliniek  pe ch, Prov Vet lab Elsenburg  ape ch, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  comach-worm  Mpumalanga Gauteng  ortance scale: 1 = one case  atal  Mooirivier Vet Clinic  ape  (WC), Heidelberg Diere | arden Dierekliniek  pe ch, Hertzogbrug Dierekliniek  net, Camdeboo Veterinary Clinic bat: 2  pe ch, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  comach-worm  Mpumalanga Gauteng Limpopo  ortance scale: 1 = one case, 2 = more  atal Mooirivier Vet Clinic  ape (WC), Heidelberg Dierekliniek | Rowelsfontein veearts Spreekkamer  Iland Dierehospitaal  arden Dierekliniek  pe th, Hertzogbrug Dierekliniek  net, Camdeboo Veterinary Clinic bat: 2  ape th, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  Comach-worm  Mpumalanga Gauteng Limpopo North West  ortance scale: 1 = one case, 2 = more than one  atal Mooirivier Vet Clinic  ape (WC), Heidelberg Dierekliniek | Rowelsfontein veearts Spreekkamer  Island Dierehospitaal  arden Dierekliniek  pe th, Hertzogbrug Dierekliniek  net, Camdeboo Veterinary Clinic  nat: 2  npe th, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  Comach-worm  Mpumalanga Gauteng Limpopo North Free West State  ortance scale: 1 = one case, 2 = more than one case b  atal Mooirivier Vet Clinic  npe (WC), Heidelberg Dierekliniek | Rowelsfontein veearts Spreekkamer  Island Dierehospitaal  arden Dierekliniek  pe th, Hertzogbrug Dierekliniek  met, Camdeboo Veterinary Clinic  pate 2 ppe th, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  Comach-worm  Mpumalanga Gauteng Limpopo North West State Kwazulu- Natal  1.0 (1)  ortance scale: 1 = one case, 2 = more than one case but less than to  1.0 (1)  atal Mooirivier Vet Clinic  ape (WC), Heidelberg Dierekliniek | Rowelsfontein veearts Spreekkamer  Island Dierehospitaal  arden Dierekliniek  pe th, Hertzogbrug Dierekliniek  net, Camdeboo Veterinary Clinic  bat: 2  ppe th, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  Tomach-worm  Mpumalanga Gauteng Limpopo North West State Natal  Lington Dierekliniek  Tomach-worm  Mpumalanga Gauteng Limpopo North North Natal  Lington Dierekliniek  Tomach-worm  Mouth Free Kwazulu-Natal  Lington Dierekliniek  Lington Dierekliniek  Lington Dierekliniek  Rowell Essen Kwazulu-Natal  Lington Dierekliniek  Mooirivier Vet Clinic  Lington Dierekliniek  Lington | Rowelsfontein veearts Spreekkamer  Island Dierehospitaal  arden Dierekliniek  pe h, Hertzogbrug Dierekliniek  net, Camdeboo Veterinary Clinic  bat: 2  ppe ch, Prov Vet lab Elsenburg  ape Kimberley Dierekliniek  Tomach-worm  Mpumalanga Gauteng Limpopo North Free Kwazulu-  cortance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than stall  Mooirivier Vet Clinic  ppe (WC), Heidelberg Dierekliniek  Muumalanga Gauteng Limpopo North Free Kwazulu-  Eastern Western  2.0 (1)  2.0 (1) |  |

| Sheep: 2                          | Sheep: 2   |              |           |               |               |                   |                 |                 |                  |  |
|-----------------------------------|--|--------------|-----------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| Tape Wor                          | ms   |              |           |               |               |                   |                 |                 | <u>^</u>         |  |
| PROVINCE                          | Mpumalanga   | Gauteng      | Limpopo   | North<br>West |               | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average                           |  | 2.0 (3)      | 1.0 (2)   | 1.0 (1)       | 2.0 (2)       | 1.0 (1)           |                 | 2.0 (3)         | 1.0 (1)          |  |
| Level of impore                   | Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 1 reported |              |           |               |               |                   |                 |                 |                  |  |
| Beef                              |  | 2.0 (1)      |           |               |               |                   |                 |                 | 1.0(1)           |  |
| Sheep                             |  | 2.0 (1)      | 1.0 (1)   | 1.0 (1)       | 2.0 (2)       | 1.0 (1)           |                 | 2.0 (3)         |                  |  |
| Goat                              |  | 2.0 (1)      | 1.0(1)    |               |               |                   |                 |                 |                  |  |
| Gauteng                           |  |              |           | •             |               |                   |                 |                 |                  |  |
|                                   | , Bapsfontein  | Dierehos     | pitaal    |               |               |                   |                 |                 |                  |  |
| Sheep: 2                          |  |              |           |               |               |                   |                 |                 |                  |  |
|                                   | Diere Spreekl  | kamer        |           |               |               |                   |                 |                 |                  |  |
| Beef: 2                           |  |              |           |               |               |                   |                 |                 |                  |  |
|                                   | ima Veterinar  | y Consult    | ing Rooms | 5             |               |                   |                 |                 |                  |  |
| Goat: 2                           |  |              |           |               |               |                   |                 |                 |                  |  |
| Limpopo                           | Pietersburg V  | /otorinary   | Clinic    |               |               |                   |                 |                 |                  |  |
| Sheep: 1, Go                      |  | etermai y    | Cillic    |               |               |                   |                 |                 |                  |  |
| North West                        | ut. I  |              |           |               |               |                   |                 |                 |                  |  |
|                                   | Klerksdorp Di  | erehospit    | aal       |               |               |                   |                 |                 |                  |  |
| Sheep: 1                          |  |              |           |               |               |                   |                 |                 |                  |  |
| Free State                        |  |              |           |               |               |                   |                 |                 |                  |  |
| <b>Bloemfonte</b>                 | in, Dr Stephan   | Wessels      |           |               |               |                   |                 |                 |                  |  |
| Sheep: 2                          |  |              |           |               |               |                   |                 |                 |                  |  |
| •                                 | and Dierehos   | pitaal       |           |               |               |                   |                 |                 |                  |  |
| Sheep: 2                          |  |              |           |               |               |                   |                 |                 |                  |  |
| Kwazulu-Na                        |  |              |           |               |               |                   |                 |                 |                  |  |
|                                   | Underberg Ve   | terinary S   | urgery    |               |               |                   |                 |                 |                  |  |
| Sheep: 1 Western Ca               | <b>no</b>  |              |           |               |               |                   |                 |                 |                  |  |
|                                   | pe<br>erberg Veterii   | nary Hosn    | ital      |               |               |                   |                 |                 |                  |  |
| Sheep: 3                          | erberg vetern  | ilai y 1103p | ricai     |               |               |                   |                 |                 |                  |  |
| ·                                 | orge Animal Ho   | ospital      |           |               |               |                   |                 |                 |                  |  |
| Sheep: 1                          | George, George Animal Hospital Sheep: 1  |              |           |               |               |                   |                 |                 |                  |  |
| •                                 | Durban Straat  | Diereklin    | iek Worce | ster          |               |                   |                 |                 |                  |  |
| Sheep: 2                          |  |              |           |               |               |                   |                 |                 |                  |  |
| Northern Ca                       | -  |              |           |               |               |                   |                 |                 |                  |  |
| Kimberley, Kimberley Dierekliniek |  |              |           |               |               |                   |                 |                 |                  |  |
| Beef: 1                           |  |              |           |               |               |                   |                 |                 |                  |  |
| Parafilari                        | ia   |              |           |               |               |                   |                 |                 | ^                |  |
| PROVINCE                          | Mpumalanga   | Gauteng      | Limpopo   | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |

| Average         |                  |            |             |               |               | 1.5 (2)           |                 |                 | 1.0 (1)          |
|-----------------|------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Level of impore | ortance scale: 1 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            |                  |            |             |               |               | 1.5 (2)           |                 |                 | 1.0(1)           |
| Kwazulu-Na      | atal             |            |             |               |               |                   |                 |                 |                  |
| Mtubatuba,      | Mtubatuba Ar     | nimal Clin | ic          |               |               |                   |                 |                 |                  |
| Beef: 2         |                  |            |             |               |               |                   |                 |                 |                  |
| Pongola, Po     | ngola Animal     | Clinic     |             |               |               |                   |                 |                 |                  |
| Beef: 1         |                  |            |             |               |               |                   |                 |                 |                  |
| Northern Ca     | <del>-</del>     |            |             |               |               |                   |                 |                 |                  |
|                 | Kimberley Die    | rekliniek  |             |               |               |                   |                 |                 |                  |
| Beef: 1         | •                |            |             |               |               |                   |                 |                 |                  |
| Seen at abatt   | toir             |            |             |               |               |                   |                 |                 |                  |
| Liver fluk      | re e             |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE        | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         | 1.0 (1)          | 1.0 (1)    |             |               | 1.0<br>(2)    | 1.0 (1)           |                 | 1.8 (4)         |                  |
| Level of impore | ortance scale: 1 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            |                  |            |             |               | 1.0<br>(1)    |                   |                 | 1.5 (2)         |                  |
| Dairy           |                  |            |             |               |               | 1.0(1)            |                 | 2.0(2)          |                  |
| Sheep           | 1.0 (1)          | 1.0 (1)    |             |               | 1.0<br>(1)    | 210 (2)           |                 | (_)             |                  |
| Mpumalang       | a                |            |             |               | · ( )         |                   |                 |                 |                  |
|                 | hal Diereklinie  | k          |             |               |               |                   |                 |                 |                  |
| Sheep: 1        |                  |            |             |               |               |                   |                 |                 |                  |
| Gauteng         |                  |            |             |               |               |                   |                 |                 |                  |
|                 | , Bapsfontein    | Dierehos   | pitaal      |               |               |                   |                 |                 |                  |
| Sheep: 1        |                  |            |             |               |               |                   |                 |                 |                  |
| Free State      |                  |            |             |               |               |                   |                 |                 |                  |
| Bethlehem,      | Bethlehem An     | nimal Hos  | pital       |               |               |                   |                 |                 |                  |
| Beef: 1         |                  |            |             |               |               |                   |                 |                 |                  |
|                 | Union Street     | Animal Co  | nsulting R  | Rooms         |               |                   |                 |                 |                  |
| Sheep: 1        |                  |            |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na      |                  |            |             |               |               |                   |                 |                 |                  |
|                 | Mooirivier Vet   | Clinic     |             |               |               |                   |                 |                 |                  |
| Dairy: 1        |                  |            |             |               |               |                   |                 |                 |                  |
| Western Ca      | •                | !k-1       |             |               |               |                   |                 |                 |                  |
|                 | orge Animal Ho   | ospital    |             |               |               |                   |                 |                 |                  |
| Beef: 2, Dairy  |                  | th Caraul  | <b>.</b>    |               |               |                   |                 |                 |                  |
| Dairy: 2        | orge Herd Hea    | ui Consul  |             |               |               |                   |                 |                 |                  |
|                 | h, Stellenbosc   | h Animəl   | Hosnital    |               |               |                   |                 |                 |                  |
| Reef: 1         | ii, stellelibust | Amiliai    | i iospitai  |               |               |                   |                 |                 |                  |

Beef: 1

|  | lukes                                  |                         |             |               |               |                   |                 |                 | ^                |
|--|--|-------------------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE   | Mpumalanga                             | Gauteng                 | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average  | 2.5 (2)                                |                         |             |               | 2.0 (2)       |                   | 2.0 (1)         | 1.0 (1)         |                  |
| Level of imported  | ortance scale: 1                       | = one case              | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef   | 3.0 (1)                                |                         |             |               | 2.0 (2)       |                   |                 | 1.0 (1)         |                  |
| Dairy  |  |                         |             |               |               |                   | 2.0 (1)         |                 |                  |
| Sheep  | 2.0(1)                                 |                         |             |               |               |                   |                 |                 |                  |
| Beef: 2<br>Vrede, Sauls<br>Beef: 2<br>Eastern Cap<br>Alexandria,<br>Dairy: 2<br>Western Ca | Alexandria Pla<br>pe<br>h, Stellenbosc | sondheid.<br>atteland S | preekkam    | er            |               |                   |                 |                 |                  |
| PROVINCE   | Mpumalanga                             | Gauteng                 | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|  |  |                         |             |               |               |                   |                 |                 |                  |
| Average  |  |                         | 2.0 (1)     |               |               |                   |                 | 2.0 (2)         |                  |
|  | ortance scale: 1                       | = one case              |             | than on       | e case b      | ut less than t    | en and 3 =      |                 | 10 cases         |
| Level of impore  | ortance scale: 1                       | = one case              |             | than on       | e case b      | ut less than t    | en and 3 =      |                 | 10 cases         |
| Level of impo  | ortance scale: 1                       | = one case              | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |

| PROVINCE        | Mpumalanga          | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|-----------------|---------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Average         | 2.5 (6)             | 2.5 (2)    | 2.3 (4)     | 2.3 (4)       | 2.4 (8)       | 1.9 (7)           | 2.7 (3)         | 2.5 (2)         |                  |
| Level of impore | ortance scale: 1    | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than 1     | 10 cases         |
| Beef            | 2.6 (5)             | 2.5 (2)    | 2.5 (2)     | 2.3 (4)       | 2.4 (8)       | 2.0 (6)           | 2.5 (2)         |                 |                  |
| Dairy           |                     |            |             |               |               | 1.0(1)            |                 | 2.5 (2)         |                  |
| Sheep           | 2.0(1)              |            | 2.0(1)      |               |               |                   | 3.0 (1)         |                 |                  |
| Goat            | ( )                 |            | 2.0 (1)     |               |               |                   |                 |                 |                  |
|                 |                     |            | 2.0 (1)     |               |               |                   |                 |                 |                  |
| Mpumalang       | a<br>four Diereklin | iok        |             |               |               |                   |                 |                 |                  |
| Beef: 2, Shee   |                     | iek        |             |               |               |                   |                 |                 |                  |
| •               | looiplaas Vete      | rinêre Die | enste       |               |               |                   |                 |                 |                  |
| Beef: 2         |                     |            |             |               |               |                   |                 |                 |                  |
| Lydenburg,      | Longtom Dier        | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 3         |                     |            |             |               |               |                   |                 |                 |                  |
|                 | Lydenburg Die       | erespreek  | kamer       |               |               |                   |                 |                 |                  |
| Beef: 3         |                     |            |             |               |               |                   |                 |                 |                  |
| Standerton,     | Econovet            |            |             |               |               |                   |                 |                 |                  |
| Beef: 3         |                     |            |             |               |               |                   |                 |                 |                  |
| Gauteng         |                     |            |             |               |               |                   |                 |                 |                  |
| Beef: 2         | , Bapsfontein       | Dierenos   | pitaai      |               |               |                   |                 |                 |                  |
|                 | Diere Spreek        | /amor      |             |               |               |                   |                 |                 |                  |
| Beef: 3         | Diere Spreek        | Valliel    |             |               |               |                   |                 |                 |                  |
| Limpopo         |                     |            |             |               |               |                   |                 |                 |                  |
|                 | Pietersburg V       | eterinary  | Clinic      |               |               |                   |                 |                 |                  |
| Beef: 3, Shee   |                     | ,          |             |               |               |                   |                 |                 |                  |
|                 | 2 Farm Practi       | ce         |             |               |               |                   |                 |                 |                  |
| Beef: 2         |                     |            |             |               |               |                   |                 |                 |                  |
| North West      |                     |            |             |               |               |                   |                 |                 |                  |
|                 | Klerksdorp Di       | erehospit  | aal         |               |               |                   |                 |                 |                  |
| Beef: 2         |                     |            |             |               |               |                   |                 |                 |                  |
| Beef: 3         | stad, Leeudori      | ngstad Di  | erekiiniek  |               |               |                   |                 |                 |                  |
|                 | Reneke, Buffel      | doorn Die  | rokliniok   | SP            |               |                   |                 |                 |                  |
| Beef: 3         | cheke, builei       | uoonii Die | - CRIIIIEK  | J.K           |               |                   |                 |                 |                  |
|                 | olopo Diereklir     | niek       |             |               |               |                   |                 |                 |                  |
| Beef: 1         | po zici cidii       |            |             |               |               |                   |                 |                 |                  |
| Free State      |                     |            |             |               |               |                   |                 |                 |                  |
| Bethlehem,      | Bethlehem An        | imal Hos   | pital       |               |               |                   |                 |                 |                  |
| Beef: 2         |                     |            |             |               |               |                   |                 |                 |                  |
|                 | , Platkop Dier      | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 2         |                     |            |             |               |               |                   |                 |                 |                  |
|                 | eltevrede Die       | rekliniek  |             |               |               |                   |                 |                 |                  |
| Beef: 3         |                     |            |             |               |               |                   |                 |                 |                  |
| Beef: 3         | Oosvrystaat Di      | ere Produ  | ikte        |               |               |                   |                 |                 |                  |

| Frankfort F     | rankfort Diere                  | kliniak       |             |               |          |                   |                 |                 |                  |
|-----------------|---------------------------------|---------------|-------------|---------------|----------|-------------------|-----------------|-----------------|------------------|
| Beef: 3         | Talikioit Diele                 | KIIIICK       |             |               |          |                   |                 |                 |                  |
|                 | nel Veterinary                  | Clinic        |             |               |          |                   |                 |                 |                  |
| Beef: 1         | nei vetermary                   | CIIIIC        |             |               |          |                   |                 |                 |                  |
|                 | arden Dierekli                  | niok          |             |               |          |                   |                 |                 |                  |
| Beef: 2         | ai deli Dielekii                | IIICK         |             |               |          |                   |                 |                 |                  |
|                 | inburg Dierek                   | liniak        |             |               |          |                   |                 |                 |                  |
| Beef: 3         | ilibuly Dielek                  | IIIIEK        |             |               |          |                   |                 |                 |                  |
| Kwazulu-Na      | stal                            |               |             |               |          |                   |                 |                 |                  |
|                 | ergville Veteri                 | nanı Clini    |             |               |          |                   |                 |                 |                  |
| Beef: 3         | ergville veteri                 | nary Cilli    | <u> </u>    |               |          |                   |                 |                 |                  |
|                 | dumeni Herd l                   | analth        |             |               |          |                   |                 |                 |                  |
| Beef: 2         | uumem neru i                    | ICaltii       |             |               |          |                   |                 |                 |                  |
|                 | Mooirivier Vet                  | · Clinic      |             |               |          |                   |                 |                 |                  |
| Beef: 1, Dairy  |                                 | Cillic        |             |               |          |                   |                 |                 |                  |
|                 | <sup>,.</sup> ⊥<br>Mtubatuba Aı | simal Clin    | ic          |               |          |                   |                 |                 |                  |
| Beef: 2         | ritubatuba Ai                   | IIIIIai Ciiii | IC .        |               |          |                   |                 |                 |                  |
|                 | zburg, Veterin                  | ary House     | Hoenital    |               |          |                   |                 |                 |                  |
| Beef: 1         | zbarg, veterm                   | ary mouse     | z 1105pitai |               |          |                   |                 |                 |                  |
|                 | Underberg Ve                    | tarinary 9    | Surgery     |               |          |                   |                 |                 |                  |
| Beef: 3         | Officer being ve                | termary c     | urgery      |               |          |                   |                 |                 |                  |
| Eastern Can     | 16                              |               |             |               |          |                   |                 |                 |                  |
|                 | Alexandria Pla                  | atteland S    | Spreekkan   | ner           |          |                   |                 |                 |                  |
| Beef: 2         | Alexandria                      | accolaria c   | preekkan    |               |          |                   |                 |                 |                  |
|                 | h, Hertzogbrug                  | Diereklii     | niek        |               |          |                   |                 |                 |                  |
| Beef: 3, Shee   |                                 | , Dici cian   | inok        |               |          |                   |                 |                 |                  |
| Western Ca      |                                 |               |             |               |          |                   |                 |                 |                  |
|                 | orge Animal H                   | osnital       |             |               |          |                   |                 |                 |                  |
| Dairy: 2        | <u>g</u>                        | оор           |             |               |          |                   |                 |                 |                  |
| •               | orge Herd Hea                   | th Consul     | t           |               |          |                   |                 |                 |                  |
| Dairy: 3        | _ <b>J</b>                      |               |             |               |          |                   |                 |                 |                  |
| Resistant       | blue Ticks                      |               |             |               |          |                   |                 |                 | ^                |
| PROVINCE        | Mpumalanga                      | Gauteng       | Limpopo     | North<br>West |          | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         |                                 |               |             |               | 3.0 (1)  | 1.0 (1)           |                 |                 |                  |
| Level of impore | ortance scale: 1                | = one case    | e, 2 = more | than on       | e case b | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            |                                 |               |             |               | 3.0 (1)  | 1.0 (1)           |                 |                 |                  |
| Free State      |                                 |               |             |               |          |                   |                 |                 |                  |
| Winburg, W      | inburg Dierek                   | liniek        |             |               |          |                   |                 |                 |                  |
| Beef: 3         |                                 |               |             |               |          |                   |                 |                 |                  |
| Kwazulu-Na      | atal                            |               |             |               |          |                   |                 |                 |                  |
| Mtubatuba,      | Mtubatuba Ar                    | nimal Clin    | ic          |               |          |                   |                 |                 |                  |
| Beef: 1         |                                 |               |             |               |          |                   |                 |                 |                  |
| Heartwat        | ter (Bont) ti                   | cks           |             |               |          |                   |                 |                 | ^                |

| PROVINCE   | Mpumalanga          | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|--|---------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Average  | 2.3 (3)             | 2.0 (5)     | 1.5 (6)     | 2.0 (2)       |               | 2.0 (7)           | 1.0 (1)         |                 |                  |
| Level of impore  | ortance scale: 1    | = one case  | e, 2 = more | than one      | e case b      | ut less than to   | en and 3 =      | more than 1     | 10 cases         |
| Beef   | 2.5 (2)             | 2.0(2)      | 1.5 (2)     | 2.0(2)        |               | 2.3 (4)           | 1.0(1)          |                 |                  |
| Sheep  | 2.0 (1)             | 2.0 (2)     | 1.5 (2)     |               |               | 1.0(1)            |                 |                 |                  |
| Goat   |                     | 2.0 (1)     | 1.5 (2)     |               |               | 2.0 (2)           |                 |                 |                  |
| Mpumalang  | а                   |             |             |               |               |                   |                 |                 |                  |
|  | <b>Longtom Dier</b> | ekliniek    |             |               |               |                   |                 |                 |                  |
| Beef: 3, Shee  |                     |             |             |               |               |                   |                 |                 |                  |
|  | Lydenburg Die       | erespreek   | kamer       |               |               |                   |                 |                 |                  |
| Beef: 2  |                     |             |             |               |               |                   |                 |                 |                  |
| Gauteng  | raal, Themba A      | \nimal Cli  | nic         |               |               |                   |                 |                 |                  |
|  | •                   | anninai Cii | 1110        |               |               |                   |                 |                 |                  |
| Beef: 2, Sheep: 2, Goat: 2 Pretoria, Anima Veterinary Consulting Rooms |                     |             |             |               |               |                   |                 |                 |                  |
| Beef: 2, Shee  |                     | ,           | J           |               |               |                   |                 |                 |                  |
| Limpopo  |                     |             |             |               |               |                   |                 |                 |                  |
| Malaaaaa   | Donado Vataria      |             |             |               |               |                   |                 |                 |                  |

**Mokopane, Bundu Veterinary Services** 

Beef: 2, Sheep: 2, Goat: 2

Polokwane, Pietersburg Veterinary Clinic

Beef: 1, Sheep: 1, Goat: 1

North West

Christiana, Christiana Dierehospitaal

Beef: 1

Stella, Stella Dierekliniek

Beef: 3

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 3

**Dundee, Endumeni Herd health** 

Beef: 2

Mtubatuba, Mtubatuba Animal Clinic

Beef: 3, Goat: 3

Pongola, Pongola Animal Clinic

Beef: 1, Sheep: 1, Goat: 1

**Eastern Cape** 

**Humansdorp, Humansdorp Veterinary Clinic** 

Beef: 1

| Brown ear-ticks |            |         |         |               |               |                   |                 |                 |                  |  |
|-----------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE        | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average         | 3.0 (1)    | 1.0 (1) |         |               |               | 2.0 (1)           |                 |                 |                  |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

Beef 3.0 (1) 1.0(1)2.0(1)Mpumalanga Standerton, Econovet Beef: 3 Gauteng **Bronkhorstspruit, Kerkstraat Dierekliniek** Beef: 1 **Kwazulu-Natal** Mtubatuba, Mtubatuba Animal Clinic Beef: 2 **Bont-legged ticks** North Free Kwazulu-Eastern Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape 3.0(1) **Average** 2.3(3)1.7 (3) 2.5(4)2.5 (6) 3.0(1)2.3 (8) Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported Beef 2.5 (2) 2.0(1)3.0(1) 2.5 (2) 2.0(3)3.0(1) 2.0(1)1.0(1)2.0(1)2.5 (2) 2.5 (4) Sheep 2.5 (2) 2.0(1)2.0(1)Goat **Mpumalanga** Lydenburg, Longtom Dierekliniek Beef: 2, Sheep: 2 Lydenburg, Lydenburg Dierespreekkamer Beef: 3 Gauteng Hammanskraal, Themba Animal Clinic Beef: 2, Sheep: 1, Goat: 2 **North West** Christiana, Christiana Dierehospitaal Beef: 3 Klerksdorp, Klerksdorp Dierehospitaal Beef: 2, Sheep: 2 Stella, Stella Dierekliniek Beef: 3 **Bethlehem, Union Street Animal Consulting Rooms** Beef: 2 **Bloemfontein, Dr Stephan Wessels** Beef: 3, Sheep: 3 **Excelsior, Weltevrede Dierekliniek** Beef: 3 Ficksburg, Oosvrystaat Diere Produkte Beef: 3 Frankfort, Frankfort Dierekliniek

Beef: 3

| Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State State Kwazulu- Rate Cape Northern Cape  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  | Howard Howard Dioreklinisk |                  |             |             |         |          |                |            |           |          |  |
|--|----------------------------|------------------|-------------|-------------|---------|----------|----------------|------------|-----------|----------|--|
| Kroonstad, Kroonstad Dierehospitaal Beef: 2, Sheep: 2  Memel, Memel Veterinary Clinic Beef: 3  Memel, Memel Veterinary Clinic Beef: 3  Milliponis, Rowelsfontein veearts Spreekkamer Sheep: 3  Virdea, Saulshoek Dieregesondheid. Beef: 2  Warden, Warden Dierekliniek Beef: 2  Warden, Warden Dierekliniek Beef: 2  Winburg, Winburg Dierekliniek Beef: 3  Kwazulu-Natal  Vryheid, Vryheid Privaat Veeartse Beef: 3  Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2  Steynsburg, Steynsburg Dierekspitaal Beef: 3, Sheep: 3, Goat: 3  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Rathu, Kathu Dierekliniek Beef: 2, Sheep: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North Free Kwazulu- Eastern Rape  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  | ekiiniek    |             |         |          |                |            |           |          |  |
| Beef: 2, Sheep: 2  Memel, Memel Veterinary Clinic Beef: 3 Philippolis, Rowelsfontein veearts Spreekkamer Sheep: 3 Vidjoenskroon, Viljoenskroon Dierekliniek Beef: 3, Sheep: 3 Vrede, Saulshoek Dieregesondheid. Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Winburg, Winburg Dierekliniek Beef: 3 Kawzulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Beef: 3, Sheep: 3, Goat: 3  Veestern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Coat: 2  Steynsburg, Steynsburg Dierekliniek Sheep: 3, Sheep: 3, Soat: 3  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Beaufort West, Beaufort Dierekliniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Beef: 2, Sheep: 2, Goat: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North Free Kwazulu- Cape Northern Cape  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef (2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  |             |             |         |          |                |            |           |          |  |
| Memel, Memel Veterinary Clinic Beef: 3 Philippolis, Rowelsfontein veearts Spreekkamer Sheep: 3 Virigioenskroon, Viljoenskroon Dierekliniek Beef: 3, Sheep: 3 Vorde, Saulshoek Dieregesondheid. Beef: 2 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Sestern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierekliniek Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 Northern Cape Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2 Rouman, Kuruman Dierekliniek Beef: 2, Sheep: 2 Rouman, Kuruman Dierekliniek Beef: 2, Sheep: 2 Rouman, Verman Dierekliniek Beef: 3, Sheep: 3 Rouman, Verman Dierekliniek Beef: 3, Sheep: 3 Rouman, Verman Dierekliniek Beef: 3, Sheep: 3 Rouman, Verman Dierekliniek |                            |                  | rehospita   | al          |         |          |                |            |           |          |  |
| Beef: 3 Philippois, Rowelsfontein veearts Spreekkamer Sheep: 3 Viljoenskroon, Viljoenskroon Dierekliniek Beef: 3, Sheep: 3 Vrede, Saulshoek Dieregesondheid. Beef: 2 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4) 2.0 (2) 2.4 (5) 2.0 (2)   |                            |                  | ·           |             |         |          |                |            |           |          |  |
| Philippolis, Rowelsfontein veearts Spreekkamer Sneep: 3  Wiljoenskroon, Viljoenskroon Dierekliniek Beef: 3, Sheep: 3  Warden, Warden Dierekliniek Beef: 2  Winburg, Winburg Dierekliniek Beef: 3  Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3, Sheep: 2, Goat: 2  Steynsburg, Steynsburg Dierekniek Beef: 3, Sheep: 3, Goat: 3  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  Northern Cape Beaf: 3, Sheep: 2, Goat: 2  Steynsburg, Steynsburg Dierekniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  Northern Cape Beaf: 2, Sheep: 2, Goat: 2  Steynsburg, Steynsburg Dierekniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State Kwazulu- Cape Cape Cape Cape  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2 2.4 (5) 2.0 (2)  |                            | nel Veterinary   | Clinic      |             |         |          |                |            |           |          |  |
| Sheep: 3 Vrede, Saulshoek Dieregesondheid. Beef: 2, Sheep: 3 Wrede, Saulshoek Dieregesondheid. Beef: 2 Warden, Warden Dierekliniek Beef: 3 Warden, Warden Dierekliniek Beef: 3 Warden, Warden Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Beef: 3, Sheep: 3, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 2, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2 Red-legged ticks  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4) Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            |                  |             |             |         |          |                |            |           |          |  |
| Viljoenskroon, Viljoenskroon Dierekliniek Beef: 3, Sheep: 3 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierehospital Beef: 2, Sheep: 2 Red-legged ticks  Average  2, 5 (4) 2, 0 (3) 3, 0 (2) 2, 3 4, 5, 5 (2) 2, 6 (2) 2, 6 (2) 2, 6 (2) 2, 6 (3) 3, 6 (2) 2, 4 3, 6 (2) 2, 4 4, 6 (5) 2, 6 (2) 2, 6 (2) 2, 6 (2) 3, 6 (2) 3, 6 (2) 3, 6 (2) 3, 7 (2) 4, 7 (3) 4, 7 (3) 4, 7 (3) 4, 7 (3) 4, 7 (4) 4, 7 (5) 4, 7 (6) 4, 7 (7) 4, 7  |                            | Rowelsfonteir    | veearts S   | Spreekkan   | ner     |          |                |            |           |          |  |
| Beef: 3, Sheep: 3 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Warden, Warden Dierekliniek Beef: 3 Beef: 3 Beef: 3 Beef: 3 Beef: 3 Beef: 2, Sheep: 2, Goat: 2 Stevnsburg, Stevnsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Beef: 3, Sheep: 3, Foeth Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Beef: 2, Sheep: 3 Nathu, Kathu Dierekliniek Beef: 2, Sheep: 3 Rathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  Average  2, 5 (4) 2, 0 (3) 3, 0 (2) 2, 3, (8) 1, 5 (4) 2, 0 (2) Beef (2, 4, 2, 0 (2)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef (2, 5, 4) 2, 0 (1) 3, 0 (2) 2, 4, (5) 2, 0 (2)  |                            |                  |             |             |         |          |                |            |           |          |  |
| Vrede, Saulshoek Dieregesondheid. Beef: 2 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Sastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Stevnsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  Average  2.5 (4) 2.0 (3) Norther Free Kwazulu- West State Natal Eastern Western Northern Cape  Average  2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  | oon Diere   | kliniek     |         |          |                |            |           |          |  |
| Beef: 2 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4) 2.0 (2) 4.0 (2)   |                            |                  |             |             |         |          |                |            |           |          |  |
| Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Beatern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Rathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2 Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- West State Kwazulu- Ratal Eastern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            | shoek Dierege    | sondheid    | i           |         |          |                |            |           |          |  |
| Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Sastern Cape Beef: 3, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehspitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Cathy Calvinia, Calvinia Veeartskliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2 Red-legged ticks  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Beef Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            |                  |             |             |         |          |                |            |           |          |  |
| Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 Skathu, Kathu Dierekliniek Beef: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State Kwazulu-Natal Eastern Cape  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            | arden Dierekli   | niek        |             |         |          |                |            |           |          |  |
| Beef: 3 Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 2 Beatern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 Poe Aar, De Aar Veterinary Clinic Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  Average  2.5 (4)  2.0 (3)  3.0 (2)  2.3  8  1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef  2.5 (4)  2.0 (1)  3.0 (2)  2.4  (5)  2.0 (2)  |                            |                  |             |             |         |          |                |            |           |          |  |
| Kwazulu-Natal Vryheid, Vryheid Privaat Veeartse Beef: 3 Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu-Natal Eastern Cape Cape  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            | inburg Dierek    | liniek      |             |         |          |                |            |           |          |  |
| Vryheid, Vryheid Privaat Veeartse Beef: 3 Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3  Ckathu, Kathu Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State Natal Eastern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Beef: 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            |                  |             |             |         |          |                |            |           |          |  |
| Beef: 3 Eastern Cape Gradff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2 Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State Natal Cape Northern Cape  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  |             |             |         |          |                |            |           |          |  |
| Eastern Cape Graaff Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2 Kuruman, Kuruman Dierekliniek Beef: 2 Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State State State Natal Cape Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            | yheid Privaat \  | /eeartse    |             |         |          |                |            |           |          |  |
| Graff-Reinet, Graaff Reinet Veterinary Clinic Beef: 2, Sheep: 2, Goat: 2  Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  Beef: 2, Sheep: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Reserved Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef: 2, Sheep: 2  A. Control Cape Cape Cape Cape Cape Cape Cape Cape   |                            |                  |             |             |         |          |                |            |           |          |  |
| Beef: 2, Sheep: 2, Goat: 2  Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North Free State Kwazulu-Ratal Cape Northern Cape  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  |             |             |         |          |                |            |           |          |  |
| Steynsburg, Steynsburg Dierehospitaal Beef: 3, Sheep: 3, Goat: 3 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2  Fostmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State Kwazulu-Natal Eastern Cape Northern Cape  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  | net Veteri  | nary Clinic | :       |          |                |            |           |          |  |
| Beef: 3, Sheep: 3, Goat: 3  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3  Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  Rathu, Calvinia Veerinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2  Postmaspurg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  Average  2.5 (4)  2.0 (3)  3.0 (2)  2.3 (8)  1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef  2.5 (4)  2.0 (1)  3.0 (2)  2.4 (5)  2.0 (2)   |                            | •                |             |             |         |          |                |            |           |          |  |
| Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West Free Kwazulu-State Natal Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            |                  | Dierehospi  | taal        |         |          |                |            |           |          |  |
| Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State State Natal Cape Cape Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  |             |             |         |          |                |            |           |          |  |
| Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3 De Aar, De Aar Veterinary Clinic Sheep: 3 Kathu, Kathu Dierekliniek Beef: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State Kwazulu-Natal Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | Western Ca                 | pe               |             |             |         |          |                |            |           |          |  |
| Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Natal Eastern Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   |                            | est, Beaufort I  | Diereklinie | ek          |         |          |                |            |           |          |  |
| Calvinia, Calvinia Veeartskliniek Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo West State Natal Eastern Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  | Sheep: 3                   |                  |             |             |         |          |                |            |           |          |  |
| Sheep: 3  De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu-Natal Eastern Cape Cape  Average  2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | <b>Northern Ca</b>         | аре              |             |             |         |          |                |            |           |          |  |
| De Aar, De Aar Veterinary Clinic Sheep: 3  Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo West State Kwazulu- Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | Calvinia, Ca               | Ivinia Veearts   | kliniek     |             |         |          |                |            |           |          |  |
| Kathu, Kathu Dierekliniek Beef: 2  Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Natal Eastern Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  | Sheep: 3                   |                  |             |             |         |          |                |            |           |          |  |
| Kathu, Kathu Dierekliniek Beef: 2 Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2 Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North State State Natal Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  | De Aar, De                 | Aar Veterinary   | Clinic      |             |         |          |                |            |           |          |  |
| Reef: 2  Kuruman, Kuruman Dierekliniek  Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek  Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State State Natal Eastern Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  | Sheep: 3                   |                  |             |             |         |          |                |            |           |          |  |
| Kuruman, Kuruman Dierekliniek Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State Natal Eastern Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | Kathu, Kath                | u Dierekliniek   | <b>T</b>    |             |         |          |                |            |           |          |  |
| Beef: 2, Sheep: 2  Postmasburg, Postmasburg Dierekliniek Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State State Kwazulu-Natal Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  | Beef: 2                    |                  |             |             |         |          |                |            |           |          |  |
| Postmasburg, Postmasburg Dierekliniek  Beef: 2, Sheep: 2, Goat: 2  Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo North West State State Northern Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | Kuruman, K                 | uruman Diere     | kliniek     |             |         |          |                |            |           |          |  |
| Red-legged ticks  PROVINCE Mpumalanga Gauteng Limpopo West State Kwazulu- Cape Western Cape Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | Beef: 2, Shee              | ep: 2            |             |             |         |          |                |            |           |          |  |
| PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rastern Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  |                            |                  | rg Dierek   | iniek       |         |          |                |            |           |          |  |
| PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rastern Cape Cape Northern Cape  Average 2.5 (4) 2.0 (3) 3.0 (2) 2.3 (8) 1.5 (4)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)  | Beef: 2, Shee              | ep: 2, Goat: 2   | _           |             |         |          |                |            |           |          |  |
| Average 2.5 (4) 2.0 (3) 3.0 (2) $\frac{2.3}{(8)}$ 1.5 (4) Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 2.5 (4) 2.0 (1) 3.0 (2) $\frac{2.4}{(5)}$ 2.0 (2)  |                            |                  |             |             |         |          |                |            |           | ^        |  |
| Level of importance scale: $1 = $ one case, $2 = $ more than one case but less than ten and $3 = $ more than 10 cases reported  Beef $2.5 (4)$ $2.0 (1)$ $3.0 (2)$ $2.4$ $2.0 (2)$   | PROVINCE                   | Mpumalanga       | Gauteng     | Limpopo     |         |          |                |            |           |          |  |
| reported  8eef 2.5 (4) 2.0 (1) 3.0 (2) 2.4 (5) 2.0 (2)   | Average                    | 2.5 (4)          | 2.0 (3)     |             | 3.0 (2) |          | 1.5 (4)        |            |           |          |  |
| 2.5 (4) 2.0 (1) 3.0 (2) (5) 2.0 (2)  |                            | ortance scale: 1 | = one case  | e, 2 = more | than on | e case b | ut less than t | en and 3 = | more than | 10 cases |  |
|  | Beef                       | 2.5 (4)          | 2.0 (1)     |             | 3.0 (2) |          | 2.0 (2)        |            |           |          |  |
| 1.0 (1)  | Daime                      |                  |             |             |         | (-)      | 1.0 (1)        |            |           |          |  |
|  | Dairy                      |                  |             |             |         |          | 1.0(1)         |            |           |          |  |

|                                       |                                  |            | •           |               |               |                   |                 |                 |                  |
|---------------------------------------|----------------------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Sheep                                 |                                  | 2.0 (1)    |             |               | 2.0 (3)       | 1.0 (1)           |                 |                 |                  |
| Goat                                  |                                  | 2.0 (1)    |             |               |               |                   |                 |                 |                  |
| Mpumalang                             | ja                               |            |             |               |               |                   |                 |                 |                  |
| Balfour, Bal                          | lfour Diereklin                  | iek        |             |               |               |                   |                 |                 |                  |
| Beef: 2                               |                                  |            |             |               |               |                   |                 |                 |                  |
| Hendrina, N                           | 1ooiplaas Vete                   | rinêre Die | enste       |               |               |                   |                 |                 |                  |
| Beef: 2                               |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | <b>Longtom Dier</b>              | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | Lydenburg Di                     | erespreek  | kamer       |               |               |                   |                 |                 |                  |
| Beef: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
| Gauteng                               |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | raal, Themba /<br>ep: 2, Goat: 2 | Animal Cli | nic         |               |               |                   |                 |                 |                  |
| <b>North West</b>                     |                                  |            |             |               |               |                   |                 |                 |                  |
| Christiana,                           | Christiana Die                   | rehospita  | al          |               |               |                   |                 |                 |                  |
| Beef: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
| Schweizer-                            | Reneke, Buffe                    | doorn Die  | erekliniek  | SR            |               |                   |                 |                 |                  |
| Beef: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
| Free State                            |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | Veltevrede Die                   | rekliniek  |             |               |               |                   |                 |                 |                  |
| Beef: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | Hoopstad Dier                    | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 3, Shee                         | •                                |            |             |               |               |                   |                 |                 |                  |
|                                       | Kroonstad Die                    | rehospita  | al          |               |               |                   |                 |                 |                  |
| Beef: 2, Shee                         |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | mel Veterinary                   | Clinic     |             |               |               |                   |                 |                 |                  |
| Beef: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
|                                       | Grasveld Kud                     | degesond   | heid        |               |               |                   |                 |                 |                  |
| Beef: 1, Shee                         | •                                |            |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na                            |                                  | . 61::.    |             |               |               |                   |                 |                 |                  |
|                                       | Mooirivier Ve                    | Clinic     |             |               |               |                   |                 |                 |                  |
|                                       | y: 1, Sheep: 1                   |            |             |               |               |                   |                 |                 |                  |
| Beef: 3                               | Underberg Ve                     | terinary S | ourgery     |               |               |                   |                 |                 |                  |
| Beel: 3                               |                                  |            |             |               |               |                   |                 |                 |                  |
| Paralysis                             | ticks                            |            |             |               |               |                   |                 |                 | <u>^</u>         |
| PROVINCE                              | Mpumalanga                       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                                  |            |             |               | 2.0 (2)       |                   |                 |                 |                  |
| Level of impereported                 | ortance scale: 1                 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Sheep                                 |                                  |            |             |               | 2.0 (2)       |                   |                 |                 |                  |
| Free State                            |                                  |            |             |               |               |                   |                 |                 |                  |
| Oranjeville,<br>Sheep: 2              | Grasveld Kud                     | degesond   | heid        |               |               |                   |                 |                 |                  |
| · · · · · · · · · · · · · · · · · · · | arden Dierekli                   | niek       |             |               |               |                   |                 |                 |                  |
| aracii, W                             | a. acii Dici Ckii                |            |             |               |               |                   |                 |                 |                  |

| Sheep: 2                                 |                  |                        |             |               |               |                   |                 |                 |                  |
|--|------------------|------------------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Biting lice                              | e (red lice)     |                        |             |               |               |                   |                 |                 | ^                |
| PROVINCE                                 | Mpumalanga       | Gauteng                | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                                  | 2.5 (2)          |                        |             |               | 2.3<br>(4)    |                   |                 | 1.0 (1)         |                  |
| Level of impore                          | ortance scale: 1 | = one case             | e, 2 = more | than one      | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                     | 2.0 (1)          |                        |             |               | 2.3<br>(4)    |                   |                 |                 |                  |
| Sheep                                    | 3.0 (1)          |                        |             |               |               |                   |                 | 1.0(1)          |                  |
| Mpumalang                                | a                |                        |             |               |               |                   |                 |                 |                  |
| Standerton,                              | Econovet         |                        |             |               |               |                   |                 |                 |                  |
| Beef: 2, Shee                            | ep: 3            |                        |             |               |               |                   |                 |                 |                  |
| Free State                               |                  |                        |             |               |               |                   |                 |                 |                  |
|  | Bethlehem Ar     | nimal Hos <sub>l</sub> | pital       |               |               |                   |                 |                 |                  |
| Beef: 2                                  |                  |                        |             |               |               |                   |                 |                 |                  |
|  | ocolan Dierek    | liniek                 |             |               |               |                   |                 |                 |                  |
| Beef: 2                                  |                  |                        |             |               |               |                   |                 |                 |                  |
|  | o, Platkop Dier  | ekliniek               |             |               |               |                   |                 |                 |                  |
| Beef: 2                                  |                  |                        |             |               |               |                   |                 |                 |                  |
|  | loopstad Diere   | ekliniek               |             |               |               |                   |                 |                 |                  |
| Beef: 3                                  |                  |                        |             |               |               |                   |                 |                 |                  |
| Western Ca                               | •                |                        |             |               |               |                   |                 |                 |                  |
|  | est, Beaufort \  | Nest State             | e Vet       |               |               |                   |                 |                 |                  |
| Sheep: 1                                 | . h              | J                      |             |               |               |                   |                 |                 |                  |
| Merino sneep                             | heavily infested | J.                     |             |               |               |                   |                 |                 |                  |
| Sucking I                                | ice (blue lic    | e)                     |             |               |               |                   |                 |                 | ^                |
| PROVINCE                                 | Mpumalanga       | Gauteng                | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                                  |                  |                        |             |               | 2.0 (3)       |                   | 2.0 (1)         |                 | 3.0 (2)          |
| Level of impore                          | ortance scale: 1 | = one case             | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                     |                  |                        |             |               | 2.0 (3)       |                   |                 |                 | 3.0 (1)          |
| Goat                                     |                  |                        |             |               |               |                   | 2.0 (1)         |                 | 3.0 (1)          |
| Free State                               |                  |                        |             |               |               |                   |                 |                 |                  |
| Clocolan, Cl                             | ocolan Dierek    | liniek                 |             |               |               |                   |                 |                 |                  |
| Beef: 2                                  |                  |                        |             |               |               |                   |                 |                 |                  |
|  | loopstad Diere   | ekliniek               |             |               |               |                   |                 |                 |                  |
|  |                  |                        |             |               |               |                   |                 |                 |                  |
|  |                  |                        |             |               |               |                   |                 |                 |                  |
| Beef: 3<br><b>Senekal, Se</b><br>Beef: 1 | nekal Dierekli   | niek                   |             |               |               |                   |                 |                 |                  |

| Eastern Cap     |                     |             |             |               |               |                   |                 |                 |                  |
|-----------------|---------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
|                 | et, Camdeboo        | Veterina    | ry Clinic   |               |               |                   |                 |                 |                  |
| Goat: 2         |                     |             |             |               |               |                   |                 |                 |                  |
| Northern Ca     |                     |             |             |               |               |                   |                 |                 |                  |
| Kuruman, K      | uruman Diere        | kliniek     |             |               |               |                   |                 |                 |                  |
| Beef: 3         |                     |             |             |               |               |                   |                 |                 |                  |
| Postmasbui      | rg, Postmasbu       | rg Dierek   | liniek      |               |               |                   |                 |                 |                  |
| Goat: 3         |                     |             |             |               |               |                   |                 |                 | ,                |
| Scab mit        | es                  |             |             |               |               |                   |                 |                 | <u>^</u>         |
| PROVINCE        | Mpumalanga          | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         |                     | 2.0 (1)     |             | 1.0 (1)       |               |                   | 1.0 (1)         |                 |                  |
| Level of impore | ortance scale: 1    | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Sheep           |                     | 2.0(1)      |             | 1.0(1)        |               |                   | 1.0(1)          |                 |                  |
| Gauteng         |                     | (-)         |             | (4)           | <u> </u>      |                   | (=)             |                 |                  |
|                 | , Bapsfontein       | Dierehos    | nitaal      |               |               |                   |                 |                 |                  |
| Sheep: 2        | i, bapsiontein      | Dicicios    | picaui      |               |               |                   |                 |                 |                  |
| North West      |                     |             |             |               |               |                   |                 |                 |                  |
|                 | Christiana Die      | rehosnita   | al          |               |               |                   |                 |                 |                  |
| Sheep: 1        |                     | Споориа     | <b>u</b> .  |               |               |                   |                 |                 |                  |
| Eastern Cap     | ne                  |             |             |               |               |                   |                 |                 |                  |
|                 | , Steynsburg D      | )ierehosni  | itaal       |               |               |                   |                 |                 |                  |
| Sheep: 1        | , 000,              | ло: С.:ООР  |             |               |               |                   |                 |                 |                  |
| One outbreak    |                     |             |             |               |               |                   |                 |                 |                  |
| Mange M         | ites                |             |             |               |               |                   |                 |                 | ^                |
| PROVINCE        | Mpumalanga          | Gauteng     | Limpopo     | North<br>West |               | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         | 2.0 (1)             | 1.5 (2)     |             | 3.0 (1)       | 2.5<br>(2)    |                   |                 | 2.0 (1)         |                  |
| Level of impore | ortance scale: 1    | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            | 2.0 (1)             | 1.0 (1)     |             | 3.0 (1)       | 2.5 (2)       |                   |                 | 2.0 (1)         |                  |
| Goat            |                     | 2.0(1)      |             |               |               |                   |                 |                 |                  |
| Mpumalang       | la                  | =: ( - )    |             |               |               |                   |                 |                 |                  |
|                 | a<br>four Diereklin | iek         |             |               |               |                   |                 |                 |                  |
| Beef: 2         | iodi Diciekilli     | .CR         |             |               |               |                   |                 |                 |                  |
| Sarcoptes mi    | tes                 |             |             |               |               |                   |                 |                 |                  |
| Gauteng         |                     |             |             |               |               |                   |                 |                 |                  |
|                 | raal, Themba A      | Animal Cli  | nic         |               |               |                   |                 |                 |                  |
|                 |                     | Annilai Cli | IIIC        |               |               |                   |                 |                 |                  |
| Beef: 1, Goat   |                     |             |             |               |               |                   |                 |                 |                  |
| North West      |                     | nobocuit-   |             |               |               |                   |                 |                 |                  |
| unristiana,     | Christiana Die      | renospita   | di          |               |               |                   |                 |                 |                  |

| Beef: 3                     |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
|-----------------------------|------------------------------------|------------|-------------|---------------|----------|-------------------|-----------------|-----------------|------------------|--|--|
| Sarcoptes                   |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| Free State                  |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | land Dierehos                      | nitaal     |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 2                     | iana Dierenos                      | picaai     |             |               |          |                   |                 |                 |                  |  |  |
|                             | inburg Dierek                      | liniek     |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 3                     | induig Dicick                      | iiiick     |             |               |          |                   |                 |                 |                  |  |  |
| Western Ca                  | ne                                 |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | Durban Straat                      | Diereklin  | iek Worce   | ster          |          |                   |                 |                 |                  |  |  |
| Beef: 2                     |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| Nuisance                    | Flies                              |            |             |               |          |                   |                 |                 | ^                |  |  |
| PROVINCE                    | Mpumalanga                         | Gauteng    | Limpopo     | North<br>West |          | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |
| Average                     | 1.5 (4)                            |            |             | 3.0 (2)       | 2.2 (6)  | 2.0 (2)           | 2.0 (1)         | 2.0 (4)         |                  |  |  |
| Level of impore             | ortance scale: 1                   | = one case | e, 2 = more | than on       | e case b | ut less than t    | en and 3 =      | more than       | 10 cases         |  |  |
| Beef                        | 1.7 (3)                            |            |             | 3.0 (1)       | (2)      | 2.0 (1)           |                 | 1.5 (2)         |                  |  |  |
| Dairy                       |                                    |            |             |               | 2.0 (1)  |                   | 2.0 (1)         | 3.0 (1)         |                  |  |  |
| Sheep                       | 1.0 (1)                            |            |             | 3.0 (1)       | 2.0 (3)  |                   |                 | 2.0 (1)         |                  |  |  |
| Goat                        |                                    |            |             |               |          | 2.0 (1)           |                 |                 |                  |  |  |
| Mpumalang                   | a                                  |            |             |               |          |                   |                 |                 |                  |  |  |
| Balfour, Bal                | four Diereklin                     | iek        |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 1, Shee               | ep: 1                              |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | <b>Longtom Dier</b>                | ekliniek   |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 2                     |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | Lydenburg Di                       | erespreek  | kamer       |               |          |                   |                 |                 |                  |  |  |
| Beef: 2                     |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| North West                  |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | a Dierekliniek                     |            |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 3, Shee<br>Free State | .μ. J                              |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | Bethlehem Ar                       | nimal Hos  | nital       |               |          |                   |                 |                 |                  |  |  |
|                             | y: 2, Sheep: 2                     |            | y. 641      |               |          |                   |                 |                 |                  |  |  |
|                             | loopstad Dier                      | ekliniek   |             |               |          |                   |                 |                 |                  |  |  |
| Sheep: 3                    |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| •                           | Kroonstad Die                      | rehospita  | al          |               |          |                   |                 |                 |                  |  |  |
| Sheep: 1                    |                                    | •          |             |               |          |                   |                 |                 |                  |  |  |
| Winburg, W                  | inburg Dierek                      | liniek     |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 3                     |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| Kwazulu-Na                  |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
|                             | Mtubatuba, Mtubatuba Animal Clinic |            |             |               |          |                   |                 |                 |                  |  |  |
| Beef: 2, Goat               |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| Eastern Cap                 |                                    |            |             |               |          |                   |                 |                 |                  |  |  |
| Alexandria,                 | Alexandria Pla                     | atteland S | preekkam    | er            |          |                   |                 |                 |                  |  |  |

| Dairy: 2   |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
|--|---------------------|------------|-------------|---------------|----------|-------------------|-----------------|-----------------|------------------|--|--|--|
|  | Western Cape        |            |             |               |          |                   |                 |                 |                  |  |  |  |
|  | y, Dr Otto Krie     | k          |             |               |          |                   |                 |                 |                  |  |  |  |
| Dairy: 3   | ,, 5. 000 14.10     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Oudtshoorn   | . Ostrimed          |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Beef: 1  | ,                   |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Oudtshoorn, Oudtshoorn Dierekliniek  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Beef: 2, Shee  |                     |            | <u> </u>    |               |          |                   |                 |                 |                  |  |  |  |
| Blowflies  |                     |            |             |               |          |                   |                 |                 | _                |  |  |  |
|  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| PROVINCE   | Mpumalanga          | Gauteng    | Limpopo     | North<br>West |          | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average $1.4 (5)$ $2.0 (1)$ $1.0 (1)$ $2.3$ $4$ $1.5 (2)$ Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Level of impore  | ortance scale: 1    | = one case | e, 2 = more | than on       | e case b | ut less than t    | en and 3 =      | more than       | 10 cases         |  |  |  |
| Beef   | 1.5 (2)             |            | 1.0 (1)     |               | 3.0 (1)  |                   |                 |                 | _                |  |  |  |
| Sheep  | 1.5 (2)             | 2.0 (1)    |             |               | 2.0 (3)  |                   |                 | 1.5 (2)         |                  |  |  |  |
| Goat   | 1.0(1)              |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Mpumalang  | а                   |            |             |               |          |                   |                 |                 |                  |  |  |  |
|  | four Diereklin      | iek        |             |               |          |                   |                 |                 |                  |  |  |  |
| Beef: 1, Shee  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Lydenburg,   | <b>Longtom Dier</b> | ekliniek   |             |               |          |                   |                 |                 |                  |  |  |  |
| Beef: 2, Shee  | ep: 2               |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Gauteng  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Nigel, Nigel   | Diere Spreekl       | kamer      |             |               |          |                   |                 |                 |                  |  |  |  |
| Sheep: 2   |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Limpopo  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
|  | Bundu Veterin       | ary Servi  | ces         |               |          |                   |                 |                 |                  |  |  |  |
| Beef: 1  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Free State   |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
|  | Union Street        | Animal Co  | nsulting R  | looms         |          |                   |                 |                 |                  |  |  |  |
| Sheep: 2   | in Hair             | Funn Ctot  | _           |               |          |                   |                 |                 |                  |  |  |  |
|  | in, University      | rree State | 9           |               |          |                   |                 |                 |                  |  |  |  |
| Sheep: 1   | loonstad Dis        | akliniak   |             |               |          |                   |                 |                 |                  |  |  |  |
| Sheep: 3   | loopstad Diere      | EKIIIIEK   |             |               |          |                   |                 |                 |                  |  |  |  |
|  | inburg Dierek       | liniok     |             |               |          |                   |                 |                 |                  |  |  |  |
| Beef: 3  | mburg bierek        | IIIIIEK    |             |               |          |                   |                 |                 |                  |  |  |  |
| Western Cape   |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Beaufort West, Beaufort Dierekliniek   |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
| Sheep: 1   |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |
|  | (WC), Heidelb       | era Diere  | kliniek     |               |          |                   |                 |                 |                  |  |  |  |
| Sheep: 2   | (1.0), 1.0.000      |            |             |               |          |                   |                 |                 |                  |  |  |  |
| - · ·  |                     |            |             |               |          |                   |                 |                 |                  |  |  |  |

Screw-worm

| Average 1.0 (1)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef 1.0 (1)  Limpopo Mokopane, Bundu Veterinary Services Beef: 1  Nasal bot larvae  PROVINCE Mpumalanga Gauteng Limpopo West State State Natal Cape Western Cape State St |              |                     |             |             |         |          |                |            |             |                  |
|--|--------------|---------------------|-------------|-------------|---------|----------|----------------|------------|-------------|------------------|
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Beef  | PROVINCE     | Mpumalanga          | Gauteng     | Limpopo     |         |          |                |            |             | Northern<br>Cape |
| Average 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1 | Average      |                     |             | 1.0 (1)     |         |          |                |            |             |                  |
| Mokopane, Bundu Veterinary Services Beef: 1  Nasal bot larvae  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Cape Cape Cape  Average 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3 |              | ortance scale: 1    | = one case  | e, 2 = more | than on | e case b | ut less than t | en and 3 = | more than : | 10 cases         |
| Mokopane, Bundu Veterinary Services Beef: 1  Nasal bot larvae  PROVINCE Mpumalanga Gauteng Limpopo North State State Natal Eastern Cape Cape Cape  Average 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 | Beef         |                     |             | 1.0(1)      |         |          |                |            |             |                  |
| Mokopane, Bundu Veterinary Services Beef: 1  Nasal bot larvae  PROVINCE Mpumalanga Gauteng Limpopo North State State Natal Eastern Cape Cape Cape  Average 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 | Limpopo      |                     |             |             |         |          |                |            |             |                  |
| Nasal bot larvae  PROVINCE Mpumalanga Gauteng Limpopo West State Kwazulu- Cape Cape Cape Cape  Average 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) |              | Bundu Veterin       | ary Servi   | ces         |         |          |                |            |             |                  |
| Average 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 3.0 (1 |              |                     | -           |             |         |          |                |            |             |                  |
| Average 3.0 (1) 2.0 (1) 3.0 (1 | Nasal bot    | : larvae            |             |             |         |          |                |            |             | ^                |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  Sheep 3.0 (1) 2.0 (1) 3.0 (1) 2.0  Mpumalanga Lydenburg, Longtom Dierekliniek Sheep: 3  Gauteng Bronkhorstspruit, Kerkstraat Dierekliniek Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3  Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2  Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2  Midges  PROVINCE Mpumalanga Gauteng Limpopo North Free Kwazulu- Cape Cape  Average 1.7 (3) 2.0 (2)  | PROVINCE     | Mpumalanga          | Gauteng     | Limpopo     |         |          |                |            |             | Northern<br>Cape |
| Sheep 3.0 (1) 2.0 (1) 3.0 (1) 3.0 (1) 3.0 (1) 2.0 (1) 3.0 (1)  | Average      | 3.0 (1)             | 2.0 (1)     |             | 3.0 (1) |          |                |            | 3.0 (1)     | 2.0 (1)          |
| Mpumalanga Lydenburg, Longtom Dierekliniek Sheep: 3 Gauteng Bronkhorstspruit, Kerkstraat Dierekliniek Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North Free Kwazulu- Eastern Cape Cape  Average 1.7 (3) 2.0 (2) 2.0  |              | ortance scale: 1    | = one case  | e, 2 = more | than on | e case b | ut less than t | en and 3 = | more than 1 | 10 cases         |
| Lydenburg, Longtom Dierekliniek Sheep: 3 Gauteng Bronkhorstspruit, Kerkstraat Dierekliniek Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu-Natal Eastern Cape Cape  Average 1.7 (3) 2.0 (2)  Average 2.0  Lington Norther Cape Cape  Lington Norther Cape  Lington  | Sheep        | 3.0 (1)             | 2.0 (1)     |             | 3.0 (1) |          |                |            | 3.0 (1)     | 2.0 (1)          |
| Lydenburg, Longtom Dierekliniek Sheep: 3 Gauteng Bronkhorstspruit, Kerkstraat Dierekliniek Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North Free Kwazulu-Natal Eastern Cape Cape  Average 1.7 (3) 2.0 (2)  Average 2.0  Lington Norther Cape Cape  Average 2.0   | Mpumalang    | a                   |             |             |         |          |                |            |             |                  |
| Gauteng Bronkhorstspruit, Kerkstraat Dierekliniek Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Natal Cape Cape Cape  Average 1.7 (3) 2.0 (2) 2.0  | Lydenburg,   | <b>Longtom Dier</b> | ekliniek    |             |         |          |                |            |             |                  |
| Bronkhorstspruit, Kerkstraat Dierekliniek Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu-Cape Cape  Average 1.7 (3) 2.0 (2) 2.0   | Sheep: 3     |                     |             |             |         |          |                |            |             |                  |
| Sheep: 2 North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cape  Average 1.7 (3) 2.0 (2)  Average 2.0  1.6 (7)  | Gauteng      |                     |             |             |         |          |                |            |             |                  |
| North West Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West Free Kwazulu- Cape Cape  Average 1.7 (3) 2.0 (2) 2.0 2.0 1.6 (7)  | Bronkhorsts  | spruit, Kerkstr     | aat Diere   | kliniek     |         |          |                |            |             |                  |
| Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rastern Cape Cape  Average 1.7 (3) 2.0 (2)  Average 2.0  Limpopo North West State State State Northe Cape Cape Cape Cape Cape Cape Cape Cap   | Sheep: 2     |                     |             |             |         |          |                |            |             |                  |
| Sheep: 3 Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Cape Cape  Average 1.7 (3) 2.0 (2) 2.0 (2) 1.6 (7)  | North West   |                     |             |             |         |          |                |            |             |                  |
| Free State Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Cape Cape Cape  Average 1.7 (3) 2.0 (2) 2.0 1.6 (7)  | Leeudorings  | stad, Leeudori      | ngstad Di   | erekliniek  |         |          |                |            |             |                  |
| Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Natal Cape Cape  Average 1.7 (3) 2.0 (2) 2.0   | Sheep: 3     |                     |             |             |         |          |                |            |             |                  |
| Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2  Midges  PROVINCE Mpumalanga Gauteng Limpopo North West Free State Kwazulu- Cape Cape Cape  1 7 (3) 2 0 (2) 1 6 (7)  | Free State   |                     |             |             |         |          |                |            |             |                  |
| Western Cape Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2  Midges  PROVINCE Mpumalanga Gauteng Limpopo North West Free State Norther Cape Cape  Average 1.7 (3) 2.0 (2) 1.6 (7)  | Oranjeville, | <b>Grasveld Kud</b> | degesond    | heid        |         |          |                |            |             |                  |
| Beaufort West, Beaufort Dierekliniek Sheep: 3 Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2 Midges  PROVINCE Mpumalanga Gauteng Limpopo North West Free State Natal Eastern Cape Cape  Average 1.7 (3) 2.0 (2) 1.6 (7)  | Sheep: 2     |                     |             |             |         |          |                |            |             |                  |
| Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2  Midges  PROVINCE Mpumalanga Gauteng Limpopo North West Free State Northe Cape Cape  1 7 (3) 2 0 (2) 1 6 (7)  | Western Ca   | ре                  |             |             |         |          |                |            |             |                  |
| Northern Cape Calvinia, Calvinia Veeartskliniek Sheep: 2  Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Cape Cape Cape  Average 1.7 (3) 2.0 (2) 2.0 (2) 1.6 (7)  | Beaufort Wo  | est, Beaufort I     | Diereklinie | ek          |         |          |                |            |             |                  |
| Calvinia, Calvinia Veeartskliniek Sheep: 2  Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rate Cape Cape  Average 1.7 (3) 2.0 (2) 1.6 (7)  | Sheep: 3     |                     |             |             |         |          |                |            |             |                  |
| Midges  PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rastern Cape Northe Cape  Average 1.7 (3) 2.0 (2) 2.0  |              | -                   |             |             |         |          |                |            |             |                  |
| Midges  PROVINCE Mpumalanga Gauteng Limpopo North West Free State Kwazulu- Rastern Cape Cape  Average 1.7 (3) 2.0 (2) 2.0  |              | lvinia Veearts      | kliniek     |             |         |          |                |            |             |                  |
| PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rastern Cape Cape  Average 1.7 (3) 2.0 (2) 2.0   | Sheep: 2     |                     |             |             |         |          |                |            |             |                  |
| Average 1.7 (3) 2.0 (2) West State Natal Cape Cape Cape  | Midges       |                     |             |             |         |          |                |            |             | ^                |
| Average 1 / (3) 2 (1 (7)   | PROVINCE     | Mpumalanga          | Gauteng     | Limpopo     |         |          |                |            |             | Northern<br>Cape |
|  | Average      | 1.7 (3)             | 2.0 (2)     |             |         | 2.0 (1)  |                |            | 1.6 (7)     |                  |

| Level of impo                   | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
|---------------------------------|------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| reported                        |                  |             |             |               |               |                   |                 |                 |                  |
| Beef                            | 1.5 (2)          |             |             |               |               |                   |                 | 1.7 (3)         |                  |
| Dairy                           |                  |             |             |               |               |                   |                 | 1.5 (2)         |                  |
| Sheep                           | 2.0 (1)          | 2.0 (1)     |             |               | 2.0 (1)       |                   |                 | 1.5 (2)         |                  |
| Goat                            |                  | 2.0 (1)     |             |               |               |                   |                 |                 |                  |
| <b>Mpumalang</b>                |                  |             |             |               |               |                   |                 |                 |                  |
|                                 | four Diereklin   | iek         |             |               |               |                   |                 |                 |                  |
| Beef: 1                         |                  |             |             |               |               |                   |                 |                 |                  |
|                                 | Longtom Dier     | ekiiniek    |             |               |               |                   |                 |                 |                  |
| Beef: 2, Shee<br><b>Gauteng</b> | p: 2             |             |             |               |               |                   |                 |                 |                  |
|                                 | aal, Themba A    | nimal Cli   | nic         |               |               |                   |                 |                 |                  |
| Goat: 2                         | aai, illelliba F | anninai Cii | IIIC        |               |               |                   |                 |                 |                  |
|                                 | ima Veterinar    | v Consult   | ing Rooms   | 3             |               |                   |                 |                 |                  |
| Sheep: 2                        |                  | , сопошн    |             |               |               |                   |                 |                 |                  |
| Free State                      |                  |             |             |               |               |                   |                 |                 |                  |
| Philippolis,                    | Rowelsfontein    | veearts     | Spreekkan   | ner           |               |                   |                 |                 |                  |
| Sheep: 2                        |                  |             | •           |               |               |                   |                 |                 |                  |
| Western Ca                      | ре               |             |             |               |               |                   |                 |                 |                  |
|                                 | (WC), Heidelb    | erg Diere   | kliniek     |               |               |                   |                 |                 |                  |
| Dairy: 2, Shee                  |                  |             |             |               |               |                   |                 |                 |                  |
|                                 | , Dr Otto Krie   | k           |             |               |               |                   |                 |                 |                  |
|                                 | v: 1, Sheep: 1   |             |             |               |               |                   |                 |                 |                  |
| Oudtshoorn                      | , Ostrimed       |             |             |               |               |                   |                 |                 |                  |
| Beef: 1                         | Durkan Straat    | Diavaldin   | ial: Wasa   |               |               |                   |                 |                 |                  |
| worcester, i<br>Beef: 3         | Durban Straat    | Dierekiin   | iek worce   | ster          |               |                   |                 |                 |                  |
| beer. 3                         |                  |             |             |               |               |                   |                 |                 |                  |
| Mosquito                        | es               |             |             |               |               |                   |                 |                 | _                |
| PROVINCE                        | Mpumalanga       | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                         |                  | 2.0 (1)     |             |               | 1.0<br>(1)    |                   |                 | 2.0 (2)         |                  |
| Level of impore                 | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                            |                  |             |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Dairy                           |                  |             |             |               |               |                   |                 | 2.0(1)          |                  |
| Sheep                           |                  | 2.0 (1)     |             |               |               |                   |                 | 2.0 (1)         |                  |
| C                               |                  |             |             |               |               |                   |                 | ` /             |                  |
| Gauteng                         |                  |             |             |               |               |                   |                 |                 |                  |
|                                 | Diere Spreekl    | camer       |             |               |               |                   |                 |                 |                  |
|                                 | Diere Spreekl    | camer       |             |               |               |                   |                 |                 |                  |

Winburg, Winburg Dierekliniek Beef: 1

## Western Cape

| <b>Heidelberg</b> Dairy: 2, She | (WC), Heidelb   | erg Dierel | kliniek  |               |               |                   |                 |                 |                  |  |  |
|---------------------------------|---|------------|----------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|
|                                 | ne Disease  | es         |          |               |               |                   |                 |                 |                  |  |  |
| African re                      | ed water  |            |          |               |               |                   |                 |                 | ^                |  |  |
| PROVINCE                        | Mpumalanga  | Gauteng    | Limpopo  | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |
| Average                         | 2.0 (5)   |            |          | 3.0 (1)       | 2.0 (2)       | 1.5 (8)           | 1.3 (3)         | 1.5 (4)         |                  |  |  |
| Level of impore                 | Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported |            |          |               |               |                   |                 |                 |                  |  |  |
| Beef                            | 2.0 (5)   |            |          | 3.0 (1)       | 2.0 (2)       | 1.6 (7)           | 1.3 (3)         | ` ′             |                  |  |  |
| Dairy                           |   |            |          |               |               | 1.0(1)            |                 | 1.5 (2)         |                  |  |  |
| Mpumalang                       | a   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | rootvlei Diere  | kliniek    |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 1                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
| Lydenburg,                      | <b>Longtom Dier</b>   | ekliniek   |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 2                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
| Lydenburg,                      | Lydenburg Di  | erespreek  | kamer    |               |               |                   |                 |                 |                  |  |  |
| Beef: 2                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
| Standerton,                     | Econovet  |            |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 3                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | Grasslands vet  | clinic     |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 2                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
| North West                      |   |            |          |               |               |                   |                 |                 |                  |  |  |
| Potchefstro                     | om, Morvet  |            |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 3                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
| Free State                      |   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | rankfort Diere  | ekiiniek   |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 3                         | andan Dianakli  | niak       |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 1                         | arden Dierekli  | IIIEK      |          |               |               |                   |                 |                 |                  |  |  |
| Kwazulu-Na                      | ntal  |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | ergville Veteri   | nary Clini | c        |               |               |                   |                 |                 |                  |  |  |
| Beef: 2                         | 31 10.011   | y Cililly  |          |               |               |                   |                 |                 |                  |  |  |
|                                 | dumeni Herd I   | health     |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 2, Dairy                  |   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | G.Veterinary S  | Services   |          |               |               |                   |                 |                 |                  |  |  |
| Beef: 2                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
| Reported by 1                   |   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | Mtubatuba Aı  | nimal Clin | ic       |               |               |                   |                 |                 |                  |  |  |
| Beef: 2                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | zburg, Veterin  | ary House  | Hospital |               |               |                   |                 |                 |                  |  |  |
| Beef: 1                         |   |            |          |               |               |                   |                 |                 |                  |  |  |
|                                 | Underberg Ve  | terinary S | urgery   |               |               |                   |                 |                 |                  |  |  |
| Beef: 1                         | de aid Directiv   |            |          |               |               |                   |                 |                 |                  |  |  |
| vryneia, vry                    | yheid Privaat \   | veeartse   |          |               |               |                   |                 |                 |                  |  |  |

| Beef: 1                |                  |             |                  |         |          |                |            |             |          |
|------------------------|------------------|-------------|------------------|---------|----------|----------------|------------|-------------|----------|
| Eastern Cap            | e                |             |                  |         |          |                |            |             |          |
| Alexandria,            | Alexandria Pla   | atteland S  | preekkam         | ner     |          |                |            |             |          |
| Beef: 2                |                  |             |                  |         |          |                |            |             |          |
|                        | n, Queenstow     | n Veterina  | ry clinic        |         |          |                |            |             |          |
| Beef: 1                |                  |             |                  |         |          |                |            |             |          |
|                        | Uitenhage Die    | rehospita   | al               |         |          |                |            |             |          |
| Beef: 1                |                  |             |                  |         |          |                |            |             |          |
| Western Ca             |                  |             |                  |         |          |                |            |             |          |
|                        | erberg Veteri    | nary Hosp   | ital             |         |          |                |            |             |          |
| Beef: 1                | l                |             | > I <sup>1</sup> |         |          |                |            |             |          |
| Beef: 2                | gerberg Diereh   | iospitaai i | Jariing          |         |          |                |            |             |          |
|                        | orge Herd Hea    | th Concul   |                  |         |          |                |            |             |          |
| Dairy: 2               | orge neru nea    | ui Consui   | L                |         |          |                |            |             |          |
| •                      | (WC), Heidelb    | era Dierel  | kliniek          |         |          |                |            |             |          |
| Dairy: 1               | (Tre), Heldelb   | cig bicici  | ixiiiii Cix      |         |          |                |            |             |          |
|                        |                  |             |                  |         |          |                |            |             |          |
| Asiatic re             | ed water         |             |                  |         |          |                |            |             | <u>^</u> |
|                        |                  |             |                  |         |          |                |            |             |          |
| PROVINCE               | Mpumalanga       | Gauteng     | Limpopo          | North   |          | Kwazulu-       | Eastern    | Western     | Northern |
|                        |                  |             |                  | West    | State    | Natal          | Cape       | Cape        | Cape     |
|                        |                  |             |                  |         |          |                |            |             |          |
| Average                | 2.3 (3)          | 1.0 (1)     | 2.0 (2)          | 3.0 (1) | 1.7      | 1.3 (6)        |            | 1.5 (2)     |          |
| Aveluge                | 2.3 (3)          | 1.0 (1)     | 2.0 (2)          | 3.0 (1) | (3)      | 1.3 (0)        |            | 1.5 (2)     |          |
|                        |                  |             |                  |         |          |                |            |             |          |
|                        | ortance scale: 1 | = one case  | e, 2 = more      | than on | e case b | ut less than t | en and 3 = | more than : | 10 cases |
| reported               |                  |             |                  |         |          |                |            |             |          |
|                        | 2.5.(2)          | 1.0 (1)     | 2.0.(2)          | 2.0 (1) | 1.7      | 1.2 (6)        |            | 2.0 (1)     |          |
| Beef                   | 2.5 (2)          | 1.0 (1)     | 2.0 (2)          | 3.0 (1) | (3)      | 1.3 (6)        |            | 2.0 (1)     |          |
| Dairy                  | 2.0(1)           |             |                  |         | ( /      |                |            | 1.0(1)      |          |
|                        | ` '              |             |                  |         |          |                |            | 1.0 (1)     |          |
| Mpumalang              |                  | :_l_        |                  |         |          |                |            |             |          |
| Beef: 2                | four Diereklin   | iek         |                  |         |          |                |            |             |          |
|                        | Longtom Dier     | akliniak    |                  |         |          |                |            |             |          |
| Dairy: 2               | Longton Diei     | CKIIIICK    |                  |         |          |                |            |             |          |
| Standerton,            | Econovet         |             |                  |         |          |                |            |             |          |
| Beef: 3                | ,                |             |                  |         |          |                |            |             |          |
| Gauteng                |                  |             |                  |         |          |                |            |             |          |
|                        | spruit, Kerkstr  | aat Dierel  | kliniek          |         |          |                |            |             |          |
| Beef: 1                |                  |             |                  |         |          |                |            |             |          |
| Limpopo                |                  |             |                  |         |          |                |            |             |          |
|                        | Kranskop Die     | rekliniek   |                  |         |          |                |            |             |          |
| Beef: 3                |                  |             | - I              |         |          |                |            |             |          |
|                        | Pietersburg V    | eterinary   | Clinic           |         |          |                |            |             |          |
| Beef: 1                |                  |             |                  |         |          |                |            |             |          |
| North West             |                  |             |                  |         |          |                |            |             |          |
| Potchefstro<br>Beef: 3 | om, Morvet       |             |                  |         |          |                |            |             |          |
| Free State             |                  |             |                  |         |          |                |            |             |          |
|                        | rankfort Diere   | ekliniek    |                  |         |          |                |            |             |          |
| Beef: 3                |                  |             |                  |         |          |                |            |             |          |
|                        | nel Veterinary   | Clinic      |                  |         |          |                |            |             |          |
| •                      |                  |             |                  |         |          |                |            |             |          |

| Beef: | 1  |
|-------|----|
| Vred  | Α. |

Vrede, Vrede Dierehospitaal

Beef: 1 One farm

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 1

**Dundee, Endumeni Herd health** 

Beef: 2

**Kokstad, E.G.Veterinary Services** 

Beef: 2

Reported by farmers

**Mooi River, Mooirivier Vet Clinic** 

Beef: 1

Bull introduced to a known red water farm Died within 8days of arrival

**Mtubatuba, Mtubatuba Animal Clinic** 

Beef: 1

**Underberg, Underberg Veterinary Surgery** 

Beef: 1

**Western Cape** 

George, George Herd Heath Consult

Dairv: 1

Swellendam, Swellendam Dierehospitaal

Beef: 2

| Anaplasn | nosis      |         |         |               |               |                   |                 |                 | ^                |
|----------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average  | 1.7 (3)    |         |         | 2.3 (3)       | 1.6<br>(9)    | 1.3 (3)           | 1.0 (1)         | 2.0 (3)         |                  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 1.7 (3) | 2.3 | (3) 1.6 (9) | 1.3 (3) | 1.0 (1) |         |
|-------|---------|-----|-------------|---------|---------|---------|
| Dairy |         |     |             |         |         | 2.0 (3) |

## **Mpumalanga**

**Balfour, Balfour Dierekliniek** 

Beef: 1

Ermelo, Môregloed Veterinêre Spreekkamer

Beef: 2

Standerton, Econovet

Beef: 2 North West

Christiana, Christiana Dierehospitaal

Beef: 3

Potchefstroom, Morvet

Beef: 2

Schweizer-Reneke, Buffeldoorn Dierekliniek SR

Beef: 2

Reported by farmers

| Free State   |  |   |                                     |                               |                       |  |                       |                 |                  |
|--|--|---|-------------------------------------|-------------------------------|-----------------------|--|-----------------------|-----------------|------------------|
|  | Dathlahan An                                     |   | -:!                                 |                               |                       |  |                       |                 |                  |
|  | Bethlehem Ar                                     | ilmai Hos   | pitai                               |                               |                       |  |                       |                 |                  |
| Beef: 1  | in, Dr Stephar                                   | Wossals   |                                     |                               |                       |  |                       |                 |                  |
| Beef: 2  | iii, Di Stepilai                                 | i wessels   |                                     |                               |                       |  |                       |                 |                  |
|  | o, Platkop Dier                                  | okliniak  |                                     |                               |                       |  |                       |                 |                  |
| Beef: 1  | у, Ріаскор ілеі                                  | ekiiiiek  |                                     |                               |                       |  |                       |                 |                  |
|  | /eltevrede Die                                   | rokliniok   |                                     |                               |                       |  |                       |                 |                  |
| Beef: 2  | reitevieue Die                                   | CKIIIICK  |                                     |                               |                       |  |                       |                 |                  |
|  | rankfort Diere                                   | kliniek   |                                     |                               |                       |  |                       |                 |                  |
| Beef: 2  | Tallkiole Diele                                  | Killick   |                                     |                               |                       |  |                       |                 |                  |
|  | loopstad Diere                                   | ekliniek  |                                     |                               |                       |  |                       |                 |                  |
| Beef: 3  |  |   |                                     |                               |                       |  |                       |                 |                  |
| · · ·  | arden Dierekli                                   | niek  |                                     |                               |                       |  |                       |                 |                  |
| Beef: 1  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Wesselsbro   | n, Wesselsbro                                    | n Dierekli  | niek                                |                               |                       |  |                       |                 |                  |
| Beef: 1  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Winburg, W   | inburg Dierek                                    | liniek  |                                     |                               |                       |  |                       |                 |                  |
| Beef: 1  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Kwazulu-Na   | atal   |   |                                     |                               |                       |  |                       |                 |                  |
| Bergville, B   | ergville Veteri                                  | nary Clini  | С                                   |                               |                       |  |                       |                 |                  |
| Beef: 2  |  |   |                                     |                               |                       |  |                       |                 |                  |
| <b>Pietermarit</b>   | zburg, Veterin                                   | ary House   | <b>Hospital</b>                     |                               |                       |  |                       |                 |                  |
| Beef: 1  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Underberg,   | <b>Underberg Ve</b>                              | terinary S  | Surgery                             |                               |                       |  |                       |                 |                  |
| Beef: 1  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Eastern Cap  |  |   |                                     |                               |                       |  |                       |                 |                  |
|  | h, Hertzogbrug                                   | g Diereklii   | niek                                |                               |                       |  |                       |                 |                  |
| Beef: 1  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Western Ca   | •  |   |                                     |                               |                       |  |                       |                 |                  |
|  | orge Herd Hea                                    | th Consul   | t                                   |                               |                       |  |                       |                 |                  |
| Dairy: 2   |  | _   |                                     |                               |                       |  |                       |                 |                  |
| Malmesbury   | y, Dr Otto Krie                                  | K   |                                     |                               |                       |  |                       |                 |                  |
| <b>D</b> · <b>D</b>  |  |   |                                     |                               |                       |  |                       |                 |                  |
| Dairy: 3   |  |   | Hachital                            |                               |                       |  |                       |                 |                  |
| Stellenbosc  | h, Stellenbosc                                   | h Animal  | nospitai                            |                               |                       |  |                       |                 |                  |
|  | h, Stellenbosc                                   | h Animal  | поэрна                              |                               |                       |  |                       |                 |                  |
| Stellenbosc  | •  | h Animal  | nospitai                            |                               |                       |  |                       |                 | ^                |
| Stellenbosc<br>Dairy: 1<br>Heartwat  | •  |   |                                     | North<br>West                 | Free<br>State         | Kwazulu-<br>Natal                      | Eastern<br>Cape       | Western<br>Cape | Northern Cape    |
| Stellenbosc<br>Dairy: 1<br>Heartwat  | ter  |   |                                     |                               |                       |  | Eastern<br>Cape       |                 | Northern         |
| Stellenbosc<br>Dairy: 1<br>Heartwat  | ter  |   | Limpopo                             |                               | State                 |  |                       |                 | Northern         |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average   | ter<br>Mpumalanga                                | <b>Gauteng</b> 2.1 (7)                                  | Limpopo 1.3 (3)                     | West 2.5 (2)                  | State                 | Natal 1.9 (7)                          | <b>Cape</b> 1.0 (2)   | Cape            | Northern<br>Cape |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average Level of impo   | Mpumalanga                                       | <b>Gauteng</b> 2.1 (7)                                  | <b>Limpopo</b> 1.3 (3)  e, 2 = more | West 2.5 (2)                  | <b>State</b> e case b | Natal 1.9 (7)                          | <b>Cape</b> 1.0 (2)   | Cape            | Northern<br>Cape |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average Level of imporeported                                 | Mpumalanga  1.8 (5)  ortance scale: 1            | Gauteng 2.1 (7) = one case                              | <b>Limpopo</b> 1.3 (3)  e, 2 = more | West  2.5 (2) than one        | <b>State</b> e case b | Natal 1.9 (7) ut less than to          | 1.0 (2)<br>en and 3 = | Cape            | Northern<br>Cape |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average Level of imporeported Beef                            | Mpumalanga  1.8 (5)  ortance scale: 1            | Gauteng 2.1 (7) = one case                              | <b>Limpopo</b> 1.3 (3)  e, 2 = more | West  2.5 (2) than one        | <b>State</b> e case b | Natal 1.9 (7) ut less than to          | 1.0 (2)<br>en and 3 = | Cape            | Northern<br>Cape |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average Level of imporeported Beef Dairy                      | Mpumalanga 1.8 (5)  ortance scale: 1 1.7 (3)     | Gauteng  2.1 (7)  = one case  2.0 (3)                   | <b>Limpopo</b> 1.3 (3)  e, 2 = more | West 2.5 (2) than one 3.0 (1) | <b>State</b> e case b | 1.9 (7) ut less than to 2.0 (3)        | 1.0 (2)<br>en and 3 = | Cape            | Northern<br>Cape |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average Level of imporeported Beef Dairy Sheep Goat           | 1.8 (5) ortance scale: 1 1.7 (3) 2.0 (1) 2.0 (1) | Gauteng  2.1 (7)  = one case  2.0 (3)  2.5 (2)          | 1.3 (3)<br>e, 2 = more<br>1.0 (2)   | West 2.5 (2) than one 3.0 (1) | <b>State</b> e case b | 1.9 (7) ut less than t 2.0 (3) 1.0 (1) | 1.0 (2)<br>en and 3 = | Cape            | Northern<br>Cape |
| Stellenbosc Dairy: 1 Heartwat PROVINCE Average Level of imporeported Beef Dairy Sheep Goat Mpumalang | 1.8 (5) ortance scale: 1 1.7 (3) 2.0 (1) 2.0 (1) | Gauteng  2.1 (7)  = one case  2.0 (3)  2.5 (2)  2.0 (2) | 1.3 (3)<br>e, 2 = more<br>1.0 (2)   | West 2.5 (2) than one 3.0 (1) | <b>State</b> e case b | 1.9 (7) ut less than t 2.0 (3) 1.0 (1) | 1.0 (2)<br>en and 3 = | Cape            | Northern<br>Cape |

| Beef: 1         |                       |            |             |               |               |                   |                 |                 |                  |
|-----------------|-----------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
|                 | Pets Vet Hosp         | ital       |             |               |               |                   |                 |                 |                  |
| Beef: 2         |                       |            |             |               |               |                   |                 |                 |                  |
| Sauteng         |                       |            |             |               |               |                   |                 |                 |                  |
|                 | raal, Themba <i>l</i> | Animal Cli | nic         |               |               |                   |                 |                 |                  |
| •               | p: 3, Goat: 3         |            |             |               |               |                   |                 |                 |                  |
|                 | ima Veterinar         | y Consult  | ing Rooms   | 3             |               |                   |                 |                 |                  |
| Beef: 2, Shee   |                       |            |             |               |               |                   |                 |                 |                  |
|                 | derstepoort A         | cademic I  | Hospital a  | nd Produ      | uction A      | Animal Clini      | C               |                 |                  |
| Beef: 1, Goat   | : 1                   |            |             |               |               |                   |                 |                 |                  |
| impopo          |                       |            |             |               |               |                   |                 |                 |                  |
|                 | Bundu Veterin         | ary Servi  | ces         |               |               |                   |                 |                 |                  |
| Beef: 1, Goat   |                       |            |             |               |               |                   |                 |                 |                  |
| •               | 2 Farm Practi         | ce         |             |               |               |                   |                 |                 |                  |
| Beef: 1         |                       |            |             |               |               |                   |                 |                 |                  |
| North West      |                       |            |             |               |               |                   |                 |                 |                  |
| -               | Dierekliniek          |            |             |               |               |                   |                 |                 |                  |
| Beef: 3         |                       |            |             |               |               |                   |                 |                 |                  |
|                 | Klerksdorp Di         | erehospit  | aal         |               |               |                   |                 |                 |                  |
| Sheep: 2        |                       |            |             |               |               |                   |                 |                 |                  |
| (wazulu-Na      |                       |            |             |               |               |                   |                 |                 |                  |
|                 | ergville Veteri       | nary Clini | С           |               |               |                   |                 |                 |                  |
| Beef: 2         |                       | •          |             |               |               |                   |                 |                 |                  |
| •               | tcourt Vet Clir       | 1IC        |             |               |               |                   |                 |                 |                  |
| Sheep: 1, Go    |                       |            | •           |               |               |                   |                 |                 |                  |
|                 | Mtubatuba Ar          | nimal Clin | IC          |               |               |                   |                 |                 |                  |
| Beef: 3, Goat   |                       |            |             |               |               |                   |                 |                 |                  |
|                 | zburg, Veterin        | ary House  | e Hospital  |               |               |                   |                 |                 |                  |
| Beef: 1         |                       | 61''.      |             |               |               |                   |                 |                 |                  |
|                 | ngola Animal          | Clinic     |             |               |               |                   |                 |                 |                  |
| Goat: 2         | _                     |            |             |               |               |                   |                 |                 |                  |
| astern Cap      |                       |            |             |               |               |                   |                 |                 |                  |
|                 | Alexandria Pla        | atteland S | ргееккат    | er            |               |                   |                 |                 |                  |
| Dairy: 1        |                       | \/_4       | Clii-       |               |               |                   |                 |                 |                  |
|                 | p, Humansdor          | p veterin  | ary Clinic  |               |               |                   |                 |                 |                  |
| Beef: 1         |                       |            |             |               |               |                   |                 |                 |                  |
| Sweating        | Sickness              |            |             |               |               |                   |                 |                 |                  |
| PROVINCE        | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northerr<br>Cape |
| Average         |                       | 2.0 (1)    | 1.0 (1)     | 1.0 (1)       | 1.0<br>(2)    |                   |                 |                 | 2.0 (1)          |
| Level of impore | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            |                       | 2.0 (1)    | 1.0 (1)     | 1.0 (1)       | 1.0<br>(2)    |                   |                 |                 | 2.0 (1)          |
| Gauteng         |                       |            |             |               |               |                   |                 |                 |                  |

Beef: 2 Limpopo

|                                       | 2 Farm Practi          | ce         |             |               |               |                   |                 |                 |                  |
|---------------------------------------|------------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Beef: 1<br>North West                 |                        |            |             |               |               |                   |                 |                 |                  |
|                                       | Diorokliniok           |            |             |               |               |                   |                 |                 |                  |
| Beef: 1                               | Dierekliniek           |            |             |               |               |                   |                 |                 |                  |
| Free State                            |                        |            |             |               |               |                   |                 |                 |                  |
|                                       | in, Dr Stephan         | Wessels    |             |               |               |                   |                 |                 |                  |
| Beef: 1                               | iii, Di Stepiiaii      | Wessels    |             |               |               |                   |                 |                 |                  |
|                                       | Kroonstad Die          | rehosnita  | اد          |               |               |                   |                 |                 |                  |
| Beef: 1                               | Ki oonstaa Die         | i enospita | Q1          |               |               |                   |                 |                 |                  |
| Northern Ca                           | ipe                    |            |             |               |               |                   |                 |                 |                  |
|                                       | Kimberley Die          | rekliniek  |             |               |               |                   |                 |                 |                  |
| Beef: 2                               |                        |            |             |               |               |                   |                 |                 |                  |
| Theilerios                            | sis                    |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE                              | Mpumalanga             | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                        |            |             |               |               | 1.0 (2)           |                 |                 |                  |
| Level of imported                     | ortance scale: 1       | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                        |            |             |               |               | 1.0(2)            |                 |                 |                  |
| Kwazulu-Na                            | utal .                 |            |             |               |               | 1.0 (2)           |                 |                 |                  |
|                                       | ntai<br>Mooirivier Vet | Clinic     |             |               |               |                   |                 |                 |                  |
| Beef: 1                               | Piooiiiviei vei        | Cillic     |             |               |               |                   |                 |                 |                  |
|                                       | otragi seen incid      | dentally   |             |               |               |                   |                 |                 |                  |
|                                       | ngola Animal           |            |             |               |               |                   |                 |                 |                  |
| Beef: 1                               |                        |            |             |               |               |                   |                 |                 |                  |
| Insect T                              | ransmittab             | le Dise    | ases        |               |               |                   |                 |                 |                  |
| Lumpy sk                              | in disease             |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE                              | Mpumalanga             | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                        |            |             |               |               |                   |                 | 2.2 (5)         |                  |
| Level of impore                       | ortance scale: 1       | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                        |            |             |               |               |                   |                 | 2.0(1)          |                  |
| Dairy                                 |                        |            |             |               |               |                   |                 | 2.3 (4)         |                  |
| Western Ca<br>Caledon, Ca<br>Dairy: 3 | pe<br>ledon Dierekli   | niek       |             |               |               |                   |                 |                 |                  |
| George, Dr                            | Mark Chimes            |            |             |               |               |                   |                 |                 |                  |
| Dairy: 2                              |                        |            |             |               |               |                   |                 |                 |                  |
| Swellendam                            |                        |            |             |               |               |                   |                 |                 |                  |
|                                       | (WC), Heidelb          | erg Diere  | kliniek     |               |               |                   |                 |                 |                  |
| Dairy: 1                              | D 01: 17:              |            |             |               |               |                   |                 |                 |                  |
| Maimesbur\                            | , Dr Otto Krie         | K          |             |               |               |                   |                 |                 |                  |

| Dairy: 3  |  |            |             |               |               |                   |                 |                 |                  |
|---|--|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Worcester,<br>Beef: 2   | Durban Straat  | Diereklin  | iek Worce   | ster          |               |                   |                 |                 |                  |
| Three-da  | y-stiffsickno  | ess        |             |               |               |                   |                 |                 | <u>^</u>         |
| PROVINCE  | Mpumalanga   | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   | 1.5 (2)  | 2.0 (1)    |             |               |               | 1.0(1)            |                 | 3.0 (2)         |                  |
| Level of impore   | ortance scale: 1   | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than       | 10 cases         |
| Beef  | 1.5 (2)  | 2.0 (1)    |             |               |               | 1.0(1)            |                 | 3.0 (1)         |                  |
| Dairy   |  |            |             |               |               |                   |                 | 3.0 (1)         |                  |
| Beef: 2<br>Kwazulu-Na<br>Pongola, Po<br>Beef: 1<br>Western Ca<br>Swellendan<br>Beef: 3, Dairy | pe<br>n, Swellendam  | Clinic     |             |               |               |                   |                 |                 |                  |
| Blue tong   | jue  |            |             |               |               |                   |                 |                 | _                |
| PROVINCE  | Mpumalanga   | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   |  | 2.0 (2)    |             |               |               |                   |                 |                 | 2.0 (2)          |
| Level of imported   | ortance scale: 1   | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than       | 10 cases         |
| Sheep   |  | 2.0 (2)    |             |               |               |                   |                 |                 | 2.0 (2)          |
| Sheep: 2<br><b>Pretoria, An</b><br>Sheep: 2<br><b>Northern Ca</b>                             | raal, Themba <i>l</i><br>iima Veterinar<br>ape<br>Vets4all |            |             | 3             |               |                   |                 |                 |                  |

| PROVINCE M  Average  Level of import reported  Beef  Kwazulu-Nata Mtubatuba, M Beef: 3  Venereal I  Trichomono  PROVINCE M  Average  Level of import reported  Beef | Ipumalanga               | Gauteng     | Limnono     | Nauth         |               |                   |                 |                 |                  |
|---|--------------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Level of import reported  Beef  Kwazulu-Nata Mtubatuba, M Beef: 3  Venereal I  Trichomono  PROVINCE M  Average  Level of import reported                            |                          |             | широро      | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| reported  Beef  Kwazulu-Nata Mtubatuba, M Beef: 3  Venereal I  Trichomono  PROVINCE M  Average  Level of import reported  |                          |             |             |               |               | 3.0 (1)           |                 |                 |                  |
| Kwazulu-Nata Mtubatuba, M Beef: 3  Venereal I  Trichomono  PROVINCE M  Average  Level of import reported  | tance scale: 1           | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Kwazulu-Nata Mtubatuba, M Beef: 3  Venereal I  Trichomono  PROVINCE M  Average  Level of import reported  |                          |             |             |               |               | 3.0 (1)           |                 |                 |                  |
| PROVINCE M  Average  Level of import reported   | Itubatuba An<br>Diseases | imal Clini  | ic          |               |               |                   |                 |                 |                  |
| Level of import   |                          | Gauteng     | Limpopo     | North<br>West |               | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northeri<br>Cape |
| reported  | 2.4 (7)                  |             |             | 2.5 (6)       | 2.2<br>(14)   | 2.0 (1)           | 2.5 (2)         |                 | 2.0 (1)          |
| Beef  | ance scale: 1            | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
|   | 2.4 (7)                  |             |             | 2.5 (6)       | 2.2<br>(14)   | 2.0 (1)           | 2.5 (2)         |                 | 2.0 (1)          |
| Mpumalanga  |                          |             |             |               |               |                   |                 |                 |                  |
| Bethal, Bethal  | l Dierekliniel           | k           |             |               |               |                   |                 |                 |                  |
| Beef: 2   |                          |             |             |               |               |                   |                 |                 |                  |
| Grootvlei, Gro  | otvlei Dierel            | kliniek     |             |               |               |                   |                 |                 |                  |
| Beef: 2   |                          |             |             |               |               |                   |                 |                 |                  |
| Hendrina, Mod   | oipiaas vete             | rinere Die  | nste        |               |               |                   |                 |                 |                  |
| Beef: 3<br>L <b>ydenburg, Ly</b>  | rdanhura Dia             | anıaak      | lramau      |               |               |                   |                 |                 |                  |
| Beef: 1   | ydenburg Die             | erespreek   | каппег      |               |               |                   |                 |                 |                  |
| Middelburg, N   | leil Fourie Va           | eartsenv    | dienste     |               |               |                   |                 |                 |                  |
| Beef: 3   | ten i odnie ve           | Jean tseniy | aiciiste    |               |               |                   |                 |                 |                  |
| Standerton, E   | conovet                  |             |             |               |               |                   |                 |                 |                  |
| Beef: 3   |                          |             |             |               |               |                   |                 |                 |                  |
| Volksrust, Gra  | asslands vet             | clinic      |             |               |               |                   |                 |                 |                  |
| Beef: 3   |                          |             |             |               |               |                   |                 |                 |                  |
| North West  |                          |             |             |               |               |                   |                 |                 |                  |
| Klerksdorp, Kl  | lerksdorp Di             | erehospit   | aal         |               |               |                   |                 |                 |                  |
| Beef: 3   |                          |             |             |               |               |                   |                 |                 |                  |
| Potchefstroon   | n, Bult Diere            | kliniek     |             |               |               |                   |                 |                 |                  |

Potchefstroom, Morvet

Schweizer-Reneke, Buffeldoorn Dierekliniek SR

Beef: 3

Beef: 3

| Three farms         |                  |             |              |               |               |                   |                 |                 |                  |
|---------------------|------------------|-------------|--------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
|                     | Dierekliniek     |             |              |               |               |                   |                 |                 |                  |
| Beef: 3             | Diefekililiek    |             |              |               |               |                   |                 |                 |                  |
|                     | burg Prov Vet    | t Laborato  | nn/          |               |               |                   |                 |                 |                  |
| Beef: 1             | burg Prov ve     | Laborati    | эі у         |               |               |                   |                 |                 |                  |
|                     | d in Tswaing Dis | strict with | 1 nocitivo a | nimal A       | total of 9    | P hords and E     | 0 animale i     | ware tested     |                  |
| Free State          | in iswanig Di    | SUICE WILLI | i positive a | IIIIIai. A    | total of c    | o fierus ariu o   | 3 ariirrais v   | were testeu.    |                  |
|                     | Pothlohom An     | imal Has    | aital        |               |               |                   |                 |                 |                  |
| Beef: 3             | Bethlehem An     | illiai nos  | pilai        |               |               |                   |                 |                 |                  |
|                     | Jnion Street A   | Animal Ca   | ncultina B   | loome         |               |                   |                 |                 |                  |
| Beef: 1             | Jillon Street A  | Ammai Co    | nsulting R   | COOMS         |               |                   |                 |                 |                  |
|                     | n, Dr Stephan    | Wossols     |              |               |               |                   |                 |                 |                  |
| Beef: 2             | ii, Di Stepilali | W C33C13    |              |               |               |                   |                 |                 |                  |
|                     | s Tabanchu are   | 22          |              |               |               |                   |                 |                 |                  |
|                     | colan Dierekl    |             |              |               |               |                   |                 |                 |                  |
| Beef: 2             | Colaii Dieleki   | IIIICK      |              |               |               |                   |                 |                 |                  |
|                     | Platkop Dier     | akliniak    |              |               |               |                   |                 |                 |                  |
| Beef: 2             | I lackop biel    | CKIIIICK    |              |               |               |                   |                 |                 |                  |
|                     | eltevrede Die    | rekliniek   |              |               |               |                   |                 |                 |                  |
| Beef: 2             | c.ccricae Die    | . J.M.IIICK |              |               |               |                   |                 |                 |                  |
|                     | ankfort Diere    | kliniek     |              |               |               |                   |                 |                 |                  |
| Beef: 3             |                  |             |              |               |               |                   |                 |                 |                  |
|                     | ameeldoring I    | Diereklini  | ek           |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
|                     | roonstad Die     | rehospita   | al           |               |               |                   |                 |                 |                  |
| Beef: 3             |                  | - СС. р.с.  |              |               |               |                   |                 |                 |                  |
|                     | Dierehospita     | al          |              |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Reitz, Riemla       | and Dierehos     | oitaal      |              |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Senekal, Sen        | ekal Diereklii   | niek        |              |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Warden, Wai         | rden Diereklir   | niek        |              |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Winburg, Win        | nburg Dierek     | liniek      |              |               |               |                   |                 |                 |                  |
| Beef: 3             |                  |             |              |               |               |                   |                 |                 |                  |
| Kwazulu-Nat         | tal              |             |              |               |               |                   |                 |                 |                  |
| <b>Dundee</b> , End | umeni Herd h     | ealth       |              |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Eastern Cape        | •                |             |              |               |               |                   |                 |                 |                  |
| Queenstown          | , Queenstowr     | n Veterina  | ry clinic    |               |               |                   |                 |                 |                  |
| Beef: 3             |                  |             |              |               |               |                   |                 |                 |                  |
| Steynsburg,         | Steynsburg D     | ierehospi   | taal         |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Two bulls           |                  |             |              |               |               |                   |                 |                 |                  |
| <b>Northern Cap</b> | ре               |             |              |               |               |                   |                 |                 |                  |
| Kuruman, Ku         | ıruman Diere     | kliniek     |              |               |               |                   |                 |                 |                  |
| Beef: 2             |                  |             |              |               |               |                   |                 |                 |                  |
| Vibriosis           |                  |             |              |               |               |                   |                 |                 | ^                |
| PROVINCE I          | Mpumalanga       | Gauteng     | Limpopo      | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |

|                 |                      |                          |            | 1.0      |                 |                        |          |
|-----------------|----------------------|--------------------------|------------|----------|-----------------|------------------------|----------|
| Average         | 3.0 (1)              |                          | 1.4 (5)    | (0)      |                 | 3.0 (1)                | 1.5 (2)  |
|                 |                      |                          |            | (9)      |                 |                        |          |
| Level of imr    | oortance scale: 1    | = one case, 2 = more     | than one   | case h   | ut less than te | en and 3 = more than : | 10 cases |
| reported        | or tarree search 1   | 0110 0000, 2 111010      | and in one | cuse s   | at 1000 than t  | on and o               | ro cases |
|                 |                      |                          |            | 1.0      |                 |                        |          |
| Beef            | 3.0(1)               |                          | 1.4 (5)    | 1.9 (9)  |                 | 3.0 (1)                | 1.5 (2)  |
|                 |                      |                          |            | (9)      |                 |                        |          |
| Mpumalan        |                      | uiu ûu a Diamata         |            |          |                 |                        |          |
| Beef: 3         | Mooiplaas Vete       | erinere Dienste          |            |          |                 |                        |          |
| North West      | <b>.</b>             |                          |            |          |                 |                        |          |
|                 | ι<br>, Klerksdorp Di | iorobocnitaal            |            |          |                 |                        |          |
| Beef: 1         | , Kiel Ksuoi p Di    | iei ei iospitaai         |            |          |                 |                        |          |
|                 | istad Leeudori       | ingstad Dierekliniek     |            |          |                 |                        |          |
| Beef: 1         | jstau, Leeuuori      | ingstau Dierekiiniek     |            |          |                 |                        |          |
|                 | Reneke Ruffe         | ldoorn Dierekliniek      | SR         |          |                 |                        |          |
| Beef: 1         | Reflexe, buile       | idoom bicickiiiick       |            |          |                 |                        |          |
|                 | la Dierekliniek      |                          |            |          |                 |                        |          |
| Beef: 3         | ia Dici citimiicit   |                          |            |          |                 |                        |          |
|                 | ryburg Prov Ve       | t Laboratory             |            |          |                 |                        |          |
| Beef: 1         | .,                   |                          |            |          |                 |                        |          |
|                 | erd in Tswaing Di    | strict with 2 positive a | nimals. A  | total of | 8 herds and !   | 59 animals were tested |          |
| Free State      |                      |                          |            |          |                 |                        |          |
| Bloemfonte      | ein, Dr Stephan      | n Wessels                |            |          |                 |                        |          |
| Beef: 1         |                      |                          |            |          |                 |                        |          |
| Clocolan, C     | locolan Dierek       | liniek                   |            |          |                 |                        |          |
| Beef: 2         |                      |                          |            |          |                 |                        |          |
| Dewetsdor       | p, Platkop Dier      | rekliniek                |            |          |                 |                        |          |
| Beef: 3         |                      |                          |            |          |                 |                        |          |
| Excelsior, \    | Weltevrede Die       | rekliniek                |            |          |                 |                        |          |
| Beef: 2         |                      |                          |            |          |                 |                        |          |
| Ficksburg,      | Oosvrystaat Di       | iere Produkte            |            |          |                 |                        |          |
| Beef: 1         |                      |                          |            |          |                 |                        |          |
|                 | Kroonstad Die        | erehospitaal             |            |          |                 |                        |          |
| Beef: 2         |                      |                          |            |          |                 |                        |          |
|                 | nland Dierehos       | pitaal                   |            |          |                 |                        |          |
| Beef: 1         |                      |                          |            |          |                 |                        |          |
| -               | enekal Dierekli      | niek                     |            |          |                 |                        |          |
| Beef: 2         |                      |                          |            |          |                 |                        |          |
|                 | Vinburg Dierek       | iiniek                   |            |          |                 |                        |          |
| Beef: 3         |                      |                          |            |          |                 |                        |          |
| Eastern Ca      |                      | n Votorinam, elimie      |            |          |                 |                        |          |
| Beef: 3         | ii, Queenstowi       | n Veterinary clinic      |            |          |                 |                        |          |
| Northern C      | 'ane                 |                          |            |          |                 |                        |          |
|                 | Kimberley Die        | rokliniok                |            |          |                 |                        |          |
| Beef: 1         | Miliberiey Die       | CAIIIICA                 |            |          |                 |                        |          |
|                 | Kuruman Diere        | kliniek                  |            |          |                 |                        |          |
| Beef: 2         |                      |                          |            |          |                 |                        |          |
|                 |                      |                          |            |          |                 |                        |          |
| <b>Bacteria</b> | al Disease (         | other)                   |            |          |                 |                        |          |
|                 |                      |                          |            |          |                 |                        |          |
| <b>Q-Fever</b>  | (Coxiella)           |                          |            |          |                 |                        | ^        |
|                 |                      |                          |            |          |                 |                        |          |

| Average  1.0 (1)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case reported  Sheep  1.0 (1)  Mpumalanga  Bethal, Bethal Dierekliniek  Sheep: 1  Blackquarter  PROVINCE Mpumalanga Gauteng Limpono North Free Kwazulu- Eastern Western North   |              |                      |             |             |          |          |                |            |             |                  |
|--|--------------|----------------------|-------------|-------------|----------|----------|----------------|------------|-------------|------------------|
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case reported  Sheep 1.0 (1)  Mpumalanga Bethal, Bethal Dierekliniek Sheep: 1  Blackquarter  PROVINCE Mpumalanga Gauteng Limpopo North Free Kwazulu-Rate Cape Cape  Average 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (6) 3.0 (1) 1.0 (1)  But a case Cape Cape Cape Cape Cape Cape Cape Cap  | PROVINCE     | Mpumalanga           | Gauteng     | Limpopo     |          |          |                |            |             | Northern<br>Cape |
| Average 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (5) 3.0 (1) 1.0 (1) 1.0 (1) 2.0 (1) 4.0 (1 | Average      | 1.0(1)               |             |             |          |          |                |            |             |                  |
| Appumalanga Bethal, Bethal Dierekliniek Sineep: 1  Blackquarter  PROVINCE Mpumalanga Gauteng Limpopo West State Kwazulu- Average 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (6) 3.0 (1) 1.0 (1)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case reported  Beef 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (5) 3.0 (1)  Dairy 1.0 (1)  Sineep 2.0 (1)  Appumalanga Balfour, Balfour Dierekliniek Beef: 2  Beef: 1  Berootvlei, Grootvlei Dierekliniek Beef: 1  Berootvlei, Grootvlei Dierekliniek Beef: 1  Bauteng Hammanskraal, Themba Animal Clinic Beef: 1  Bootthel, Bethal Diereklope Dierekliniek Beef: 1  Bauteng Hammanskraal, Themba Animal Clinic Beef: 1  Bootthel, Bethal Diereklope Dierehospitaal Beef: 1  Bethalhem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  |              | ortance scale: 1     | = one case  | e, 2 = more | than on  | e case b | ut less than t | en and 3 = | more than : | 10 cases         |
| Sethal, Bethal Dierekliniek sheep: 1  Blackquarter  PROVINCE Mpumalanga Gauteng Limpopo West State Kwazulu Ratal Cape Cape  Average 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (6) 3.0 (1) 1.0 (1)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case reported  Seef 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (5) 3.0 (1)  Dairy 1.0 (1) 2.0 (1)  Scheep 2.0 (1)  Apumalanga Salfour, Balfour Dierekliniek seef: 2  Seef: 1  Grootvlei, Grootvlei Dierekliniek seef: 2  Genef: 1  Grootvlei, Grootvlei Dierekliniek seef: 2  Seef: 1  Grootvlei, Grootvlei Dierekliniek seef: 2  Seef: 1  Grootvlei, Grootvlei Dierekliniek seef: 2  Seef: 1  Grootvlei, Grootvlei Dierekliniek seef: 2  Seef: 1  Seef: 2  Seef: 2  Seef: 2  Seef: 2  Seef: 2  Seef: 3  Seef: 3  Seef: 4  Seef: 4  Seef: 4  Seef: 5  Seef: 5  Seef: 6  Seef: 6  Seef: 6  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 2  Seef: 2  Seef: 2  Seef: 2  Seef: 3  Seef: 3  Seef: 3  Seef: 4  Seef: 4  Seef: 4  Seef: 5  Seef: 5  Seef: 6  Seef: 6  Seef: 6  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 2  Seef: 2  Seef: 2  Seef: 3  Seef: 3  Seef: 4  Seef: 4  Seef: 5  Seef: 6  Seef: 6  Seef: 6  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 1  Seef: 2  Seef: 2  Seef: 2  Seef: 2  Seef: 3  Seef: 3  Seef: 3  Seef: 4  Seef: 4  Seef: 6  Seef: 6  Seef: 6  Seef: 1   | Sheep        | 1.0(1)               |             |             |          |          |                |            |             |                  |
| PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Cape Cape Cape  Average 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (6) 3.0 (1) 1.0 (1) 2.0 (6) 3.0 (1) 1.0 (1) 2.0 (5) 3.0 (1) 2.0 (5) 3.0 (1)  | Bethal, Beth |                      | k           |             |          |          |                |            |             |                  |
| Average 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (6) 3.0 (1) 1.0 (1)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case reported  Beef 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (5) 3.0 (1)  Bairy 1.0 (1) 2.0 (1)  Brown 1. |              | rter                 |             |             |          |          |                |            |             | _                |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case reported  Beef 1.4 (5) 1.0 (1) 1.0 (1) 2.0 (5) 3.0 (1)  Dairy 1.0 (1) 2.0 (1)  Sheep 2.0 (1)  Mpumalanga 3alfour, Balfour Dierekliniek Beef: 2 Beefal, Bethal Dierekliniek Beef: 1 Brootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1 Gauteng Hammanskraal, Themba Animal Clinic Beef: 1 Bouth West Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  | PROVINCE     | Mpumalanga           | Gauteng     | Limpopo     |          |          |                |            |             | Northern<br>Cape |
| Reef 1.4 (5) 1.0 (1) 2.0 3.0 (1)  Dairy 1.0 (1) 2.0 (1)  Sheep 2.0 (1)  Mpumalanga Salfour, Balfour Dierekliniek Reef: 2 Rethal, Bethal Dierekliniek Reef: 1 Rimelo, Môregloed Veterinêre Spreekkamer Reef: 2 Redndrina, Mooiplaas Veterinêre Dienste Reef: 1 Rorotvlei, Grootvlei Dierekliniek Reef: 1 Rorth West Reefsdorp, Klerksdorp Dierehospitaal Reef: 1 Rorth West Reefsdorp, Klerksdorp Dierehospitaal Reef: 2, Sheep: 2  | Average      | 1.4 (5)              | 1.0 (1)     |             | 1.0 (1)  |          | 3.0 (1)        |            | 1.0 (1)     |                  |
| Dairy  Dairy  Dairy  1.0 (1)   |              | ortance scale: 1     | = one case  | e, 2 = more | than one | e case b | ut less than t | en and 3 = | more than : | 10 cases         |
| Sheep  2.0 (1)  Apumalanga Balfour, Balfour Dierekliniek Beef: 2 Bethal, Bethal Dierekliniek Beef: 1 Groetvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1 Gauteng Hammanskraal, Themba Animal Clinic Beef: 1 Borth West Clerksdorp, Klerksdorp Dierehospitaal Beef: 1 Bree State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  | Beef         | 1.4 (5)              | 1.0 (1)     |             | 1.0 (1)  |          | 3.0 (1)        |            |             |                  |
| Mpumalanga Balfour, Balfour Dierekliniek Beef: 2 Bethal, Bethal Dierekliniek Beef: 1 Ermelo, Môregloed Veterinêre Spreekkamer Beef: 1 Grootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1 Gauteng Hammanskraal, Themba Animal Clinic Beef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 2 Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  | Dairy        |                      |             |             |          | _        |                |            | 1.0(1)      |                  |
| Balfour, Balfour Dierekliniek Beef: 2 Bethal, Bethal Dierekliniek Beef: 1 Ermelo, Môregloed Veterinêre Spreekkamer Beef: 1 Grootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1 Gauteng Hammanskraal, Themba Animal Clinic Beef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  | Sheep        |                      |             |             |          |          |                |            |             |                  |
| Beef: 2 Bethal, Bethal Dierekliniek Beef: 1 Ermelo, Môregloed Veterinêre Spreekkamer Beef: 1 Grootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1 Gauteng Hammanskraal, Themba Animal Clinic Beef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  |              |                      |             |             |          |          |                |            |             |                  |
| Bethal, Bethal Dierekliniek  Beef: 1  Ermelo, Môregloed Veterinêre Spreekkamer  Beef: 1  Grootvlei, Grootvlei Dierekliniek  Beef: 2  Hendrina, Mooiplaas Veterinêre Dienste  Beef: 1  Gauteng  Hammanskraal, Themba Animal Clinic  Beef: 1  North West  Klerksdorp, Klerksdorp Dierehospitaal  Beef: 1  Free State  Bethlehem, Bethlehem Animal Hospital  Beef: 2, Sheep: 2  | •            | four Diereklin       | iek         |             |          |          |                |            |             |                  |
| Seef: 1  Ermelo, Môregloed Veterinêre Spreekkamer  Seef: 1  Grootvlei, Grootvlei Dierekliniek  Seef: 2  Hendrina, Mooiplaas Veterinêre Dienste  Seef: 1  Gauteng Hammanskraal, Themba Animal Clinic  Seef: 1  North West  Klerksdorp, Klerksdorp Dierehospitaal  Seef: 1  Free State  Bethlehem, Bethlehem Animal Hospital  Seef: 2, Sheep: 2  |              | al Diavaldinia       | 1           |             |          |          |                |            |             |                  |
| Ermelo, Môregloed Veterinêre Spreekkamer  Beef: 1 Grootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1 Gauteng Hammanskraal, Themba Animal Clinic Beef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2   | •            | iai Dierekiinie      | K           |             |          |          |                |            |             |                  |
| Seef: 1 Grootvlei, Grootvlei Dierekliniek Seef: 2 Hendrina, Mooiplaas Veterinêre Dienste Seef: 1 Gauteng Hammanskraal, Themba Animal Clinic Seef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Seef: 1 Free State Sethlehem, Bethlehem Animal Hospital Seef: 2, Sheep: 2   |              | ealoed Veteri        | nêre Snre   | ekkamer     |          |          |                |            |             |                  |
| Grootvlei, Grootvlei Dierekliniek  Geef: 2 Hendrina, Mooiplaas Veterinêre Dienste  Geef: 1 Gauteng Hammanskraal, Themba Animal Clinic  Geef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal  Geef: 1 Free State  Gethlehem, Bethlehem Animal Hospital  Geef: 2, Sheep: 2   |              | -3.002 FCCIII        | C Op.C      |             |          |          |                |            |             |                  |
| Geef: 2 Hendrina, Mooiplaas Veterinêre Dienste Geef: 1 Gauteng Hammanskraal, Themba Animal Clinic Geef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Geef: 1 Free State Gethlehem, Bethlehem Animal Hospital Geef: 2, Sheep: 2   |              | rootvlei Diere       | kliniek     |             |          |          |                |            |             |                  |
| Geef: 1 Gauteng Hammanskraal, Themba Animal Clinic Geef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Geef: 1 Free State Bethlehem, Bethlehem Animal Hospital Geef: 2, Sheep: 2  | Beef: 2      |                      |             |             |          |          |                |            |             |                  |
| Gauteng Hammanskraal, Themba Animal Clinic Geef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Geef: 1 Free State Bethlehem, Bethlehem Animal Hospital Geef: 2, Sheep: 2  | •            | looiplaas Vete       | rinêre Die  | enste       |          |          |                |            |             |                  |
| Hammanskraal, Themba Animal Clinic Beef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  |              |                      |             |             |          |          |                |            |             |                  |
| Seef: 1 North West Klerksdorp, Klerksdorp Dierehospitaal Seef: 1 Free State Bethlehem, Bethlehem Animal Hospital Seef: 2, Sheep: 2   |              | aal. Themba <i>l</i> | Animal Cli  | nic         |          |          |                |            |             |                  |
| Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  |              | uu.,                 |             |             |          |          |                |            |             |                  |
| Beef: 1 Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  |              |                      |             |             |          |          |                |            |             |                  |
| Free State Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2  | Klerksdorp,  | Klerksdorp Di        | erehospit   | aal         |          |          |                |            |             |                  |
| Bethlehem, Bethlehem Animal Hospital Beef: 2, Sheep: 2   |              |                      |             |             |          |          |                |            |             |                  |
| Beef: 2, Sheep: 2  |              |                      |             |             |          |          |                |            |             |                  |
|  |              |                      | nimal Hos   | pital       |          |          |                |            |             |                  |
| becine nem, official street Allinial Consulting Rooms  |              | •                    | Animal Ca   | ncultina B  | looms    |          |                |            |             |                  |
| Seef: 2  |              | Gillon Street /      | Aillinai CO | nisululiy K | COUITS   |          |                |            |             |                  |
| Clocolan, Clocolan Dierekliniek  |              | ocolan Dierek        | liniek      |             |          |          |                |            |             |                  |
| Beef: 2  |              |                      |             |             |          |          |                |            |             |                  |

| Vocala Cavi                     | ahaala Diawaaa   |            |             |               |               |                   |                 |                 |                  |
|---------------------------------|------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| <b>vreae, Sau</b> i:<br>Beef: 1 | shoek Dierege    | sonaneia   | •           |               |               |                   |                 |                 |                  |
|                                 | inburg Dierek    | liniek     |             |               |               |                   |                 |                 |                  |
| Beef: 3                         | induig Dierek    | CX         |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na                      | ital             |            |             |               |               |                   |                 |                 |                  |
| Dundee, En                      | dumeni Herd l    | nealth     |             |               |               |                   |                 |                 |                  |
| Beef: 3                         |                  |            |             |               |               |                   |                 |                 |                  |
| Western Ca                      |                  |            |             |               |               |                   |                 |                 |                  |
| <b>George, Geo</b><br>Dairy: 1  | orge Herd Hea    | th Consul  | t           |               |               |                   |                 |                 |                  |
| Botulism                        |                  |            |             |               |               |                   |                 |                 | _                |
| PROVINCE                        | Mpumalanga       | Gauteng    | Limpopo     | North<br>West |               | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                         |                  |            |             | 2.0 (1)       | 1.0<br>(1)    |                   |                 | 1.0 (1)         |                  |
| Level of imported               | ortance scale: 1 | = one case | e, 2 = more | than one      | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                            |                  |            |             | 2.0 (1)       | 1.0<br>(1)    |                   |                 |                 |                  |
| Dairy                           |                  |            |             |               |               |                   |                 | 1.0(1)          |                  |
| North West                      |                  |            |             |               |               |                   |                 |                 |                  |
| Christiana,                     | Christiana Die   | rehospita  | al          |               |               |                   |                 |                 |                  |
| Beef: 2                         |                  |            |             |               |               |                   |                 |                 |                  |
| Free State                      |                  |            |             |               |               |                   |                 |                 |                  |
| <b>Bloemfonte</b><br>Beef: 1    | in, Dr Stephan   | Wessels    |             |               |               |                   |                 |                 |                  |
| Western Ca                      | ne               |            |             |               |               |                   |                 |                 |                  |
|                                 | (WC), Heidelb    | erg Diere  | kliniek     |               |               |                   |                 |                 |                  |
| Pulpy Kid                       | lney             |            |             |               |               |                   |                 |                 | _                |
| PROVINCE                        | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                         | 1.5 (2)          | 2.0 (4)    |             | 1.5 (2)       | 1.6<br>(8)    |                   | 1.0 (2)         | 1.5 (2)         | 3.0 (2)          |
| Level of imported               | ortance scale: 1 | = one case | e, 2 = more | than one      | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Sheep                           | 1.5 (2)          | 2.0 (3)    |             | 1.5 (2)       | 1.6<br>(8)    |                   | 1.0 (1)         | 1.5 (2)         | 3.0 (1)          |
| Goat                            |                  | 2.0 (1)    |             |               |               |                   | 1.0 (1)         |                 | 3.0 (1)          |
| Mpumalang                       |                  |            |             |               |               |                   |                 |                 |                  |
|                                 | nal Diereklinie  | k          |             |               |               |                   |                 |                 |                  |
| Sheep: 1                        | 4 i - i          | i 2 D'     |             |               |               |                   |                 |                 |                  |
| <b>Hendrina, M</b><br>Sheep: 2  | looiplaas Vete   | rinere Die | enste       |               |               |                   |                 |                 |                  |
| энсер. 2                        |                  |            |             |               |               |                   |                 |                 |                  |

| -                 |                     |             |             |               |               |                   |                 |                 |                  |
|-------------------|---------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Gauteng           |                     |             |             |               |               |                   |                 |                 |                  |
|                   | n, Bapsfontein      | Dierehos    | oitaal      |               |               |                   |                 |                 |                  |
| Sheep: 2          |                     |             |             |               |               |                   |                 |                 |                  |
| <b>Bronkhorst</b> | spruit, Kerkstr     | aat Dierel  | kliniek     |               |               |                   |                 |                 |                  |
| Sheep: 2          |                     |             |             |               |               |                   |                 |                 |                  |
| Hammanski         | raal, Themba        | Animal Cli  | nic         |               |               |                   |                 |                 |                  |
| Sheep: 2, Go      | at: 2               |             |             |               |               |                   |                 |                 |                  |
| <b>North West</b> |                     |             |             |               |               |                   |                 |                 |                  |
| Klerksdorp,       | Klerksdorp Di       | ierehospit  | aal         |               |               |                   |                 |                 |                  |
| Sheep: 1          |                     |             |             |               |               |                   |                 |                 |                  |
|                   | stad, Leeudori      | ingstad Di  | erekliniek  |               |               |                   |                 |                 |                  |
| Sheep: 2          | Juan, 20000011      | gotaa 21    | <u> </u>    |               |               |                   |                 |                 |                  |
| Free State        |                     |             |             |               |               |                   |                 |                 |                  |
|                   | Bethlehem Ar        | nimal Hoci  | nital       |               |               |                   |                 |                 |                  |
| Sheep: 1          | betiliellelli Ai    | iiiiai iios | Jitai       |               |               |                   |                 |                 |                  |
| •                 | Union Street        | Animal Ca   | naultina D  | ) o o ma      |               |                   |                 |                 |                  |
| Sheep: 2          | Union Street        | Ammai Co    | iisuiting R | COUINS        |               |                   |                 |                 |                  |
|                   | in Du Chamber       | . Wassala   |             |               |               |                   |                 |                 |                  |
|                   | in, Dr Stephar      | ı wessels   |             |               |               |                   |                 |                 |                  |
| Sheep: 3          |                     |             |             |               |               |                   |                 |                 |                  |
|                   | in, University      | Free State  | •           |               |               |                   |                 |                 |                  |
| Sheep: 1          |                     |             |             |               |               |                   |                 |                 |                  |
|                   | locolan Dierek      | liniek      |             |               |               |                   |                 |                 |                  |
| Sheep: 1          |                     |             |             |               |               |                   |                 |                 |                  |
|                   | Kroonstad Die       | rehospita   | al          |               |               |                   |                 |                 |                  |
| Sheep: 1          |                     |             |             |               |               |                   |                 |                 |                  |
| Oranjeville,      | <b>Grasveld Kud</b> | degesond    | heid        |               |               |                   |                 |                 |                  |
| Sheep: 2          |                     |             |             |               |               |                   |                 |                 |                  |
| Reitz, Riem       | land Dierehos       | pitaal      |             |               |               |                   |                 |                 |                  |
| Sheep: 2          |                     |             |             |               |               |                   |                 |                 |                  |
| Eastern Cap       | oe .                |             |             |               |               |                   |                 |                 |                  |
|                   | et, Camdeboo        | Veterinar   | v Clinic    |               |               |                   |                 |                 |                  |
| Sheep: 1, Go      | •                   |             | ,           |               |               |                   |                 |                 |                  |
| Western Ca        |                     |             |             |               |               |                   |                 |                 |                  |
|                   | orge Animal H       | osnital     |             |               |               |                   |                 |                 |                  |
| Sheep: 2          | orge Ammai m        | ospitai     |             |               |               |                   |                 |                 |                  |
| Oudtshoorn        | Octrimod            |             |             |               |               |                   |                 |                 |                  |
|                   | i, Ostrilleu        |             |             |               |               |                   |                 |                 |                  |
| Sheep: 1          |                     |             |             |               |               |                   |                 |                 |                  |
| Northern Ca       |                     |             | _           |               |               |                   |                 |                 |                  |
|                   | Staatsveearts       | e Groep N   | L           |               |               |                   |                 |                 |                  |
| Sheep: 3          |                     |             |             |               |               |                   |                 |                 |                  |
|                   | ied from herd of    |             |             |               |               |                   |                 |                 |                  |
|                   | rg, Postmasbu       | rg Dierekl  | iniek       |               |               |                   |                 |                 |                  |
| Goat: 3           |                     |             |             |               |               |                   |                 |                 |                  |
| Swelled I         | nead diseas         | е           |             |               |               |                   |                 |                 | ^                |
| PROVINCE          | Mpumalanga          | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                     | 2.0 (1)     |             | 1.0 (1)       |               | 1.0 (1)           |                 | 2.0 (1)         |                  |
| Level of impore   | ortance scale: 1    | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              |                     | 2.0 (1)     |             |               |               |                   |                 |                 |                  |
|                   |                     |             |             | -             |               |                   |                 |                 |                  |

| Sheep             |                       |            |             | 1.0(1)        |               |                                       |                 | 2.0(1)          |                  |
|-------------------|-----------------------|------------|-------------|---------------|---------------|---------------------------------------|-----------------|-----------------|------------------|
| Goat              |                       |            |             |               |               | 1.0(1)                                |                 | _, (-)          |                  |
| Gauteng           |                       |            |             |               |               | ,                                     |                 |                 |                  |
|                   | spruit, Kerkstr       | aat Diere  | kliniek     |               |               |                                       |                 |                 |                  |
| Beef: 2           |                       |            |             |               |               |                                       |                 |                 |                  |
| <b>North West</b> |                       |            |             |               |               |                                       |                 |                 |                  |
|                   | Christiana Die        | rehospita  | al          |               |               |                                       |                 |                 |                  |
| Sheep: 1          |                       |            |             |               |               |                                       |                 |                 |                  |
| Kwazulu-Na        |                       |            |             |               |               |                                       |                 |                 |                  |
|                   | dumeni Herd l         | nealth     |             |               |               |                                       |                 |                 |                  |
| Goat: 1           |                       |            |             |               |               |                                       |                 |                 |                  |
| Western Ca        | -                     | namı Uaam  | :L_I        |               |               |                                       |                 |                 |                  |
| Sheep: 2          | erberg Veteri         | nary Hosp  | itai        |               |               |                                       |                 |                 |                  |
| эпеер. 2          |                       |            |             |               |               |                                       |                 |                 |                  |
| Red gut (         | (cattle)              |            |             |               |               |                                       |                 |                 | ^                |
| PROVINCE          | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal                     | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           | 1.5 (2)               |            |             |               |               | 3.0 (1)                               |                 |                 |                  |
| Level of impore   | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t                        | en and 3 =      | more than       | 10 cases         |
| Beef              | 1.0(1)                |            |             |               |               |                                       |                 |                 |                  |
| Dairy             |                       |            |             |               |               | 3.0 (1)                               |                 |                 |                  |
| Sheep             | 2.0(1)                |            |             |               |               | · · · · · · · · · · · · · · · · · · · | •               |                 |                  |
| Mpumalang         |                       |            |             |               |               |                                       |                 |                 |                  |
|                   | ra<br>Ifour Diereklin | iek        |             |               |               |                                       |                 |                 |                  |
| Beef: 1           | Tour Diciekiiii       | ick        |             |               |               |                                       |                 |                 |                  |
|                   | Longtom Dier          | ekliniek   |             |               |               |                                       |                 |                 |                  |
| Sheep: 2          |                       |            |             |               |               |                                       |                 |                 |                  |
| Kwazulu-Na        | atal                  |            |             |               |               |                                       |                 |                 |                  |
| Dundee, En        | dumeni Herd l         | nealth     |             |               |               |                                       |                 |                 |                  |
| Dairy: 3          |                       |            |             |               |               |                                       |                 |                 | ,                |
| Blood gu          | t (Sheep)             |            |             |               |               |                                       |                 |                 | ^                |
| PROVINCE          | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal                     | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           | 2.0 (1)               | 1.3 (3)    |             | 1.0 (1)       | 1.8<br>(4)    |                                       |                 | 1.6 (5)         |                  |
| Level of impore   | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t                        | en and 3 =      | more than       | 10 cases         |
| Beef              |                       | 1.0(1)     |             |               |               |                                       |                 |                 |                  |
| Sheep             | 2.0 (1)               | 2.0 (1)    |             | 1.0 (1)       | 1.8<br>(4)    |                                       |                 | 1.8 (4)         |                  |
| Goat              |                       | 1.0 (1)    |             |               |               |                                       |                 | 1.0(1)          |                  |
|                   |                       |            |             |               |               |                                       |                 |                 |                  |

| Mpumalang         | 2                   |                   |             |         |          |                |            |           |          |
|-------------------|---------------------|-------------------|-------------|---------|----------|----------------|------------|-----------|----------|
|                   | a<br>Longtom Dier   | akliniak          |             |         |          |                |            |           |          |
| Sheep: 2          | Longton Dier        | CKIIIICK          |             |         |          |                |            |           |          |
| Gauteng           |                     |                   |             |         |          |                |            |           |          |
|                   | spruit, Kerkstr     | aat Diere         | kliniek     |         |          |                |            |           |          |
| Beef: 1, Goat     |                     | uuc               |             |         |          |                |            |           |          |
| •                 | Diere Spreekl       | kamer             |             |         |          |                |            |           |          |
| Sheep: 2          |                     |                   |             |         |          |                |            |           |          |
| North West        |                     |                   |             |         |          |                |            |           |          |
|                   | Klerksdorp Di       | erehospit         | aal         |         |          |                |            |           |          |
| Sheep: 1          | •                   | •                 |             |         |          |                |            |           |          |
| Free State        |                     |                   |             |         |          |                |            |           |          |
| Bethlehem,        | <b>Bethlehem Ar</b> | nimal Hos         | pital       |         |          |                |            |           |          |
| Sheep: 2          |                     |                   |             |         |          |                |            |           |          |
| <b>Bloemfonte</b> | in, Dr Stephan      | Wessels           |             |         |          |                |            |           |          |
| Sheep: 1          |                     |                   |             |         |          |                |            |           |          |
|                   | <b>Grasveld Kud</b> | degesond          | heid        |         |          |                |            |           |          |
| Sheep: 2          |                     |                   |             |         |          |                |            |           |          |
|                   | on, Viljoenskro     | oon Diere         | kliniek     |         |          |                |            |           |          |
| Sheep: 2          |                     |                   |             |         |          |                |            |           |          |
| Western Ca        | _                   |                   |             |         |          |                |            |           |          |
|                   | erberg Veteri       | nary Hosp         | ital        |         |          |                |            |           |          |
| Sheep: 2          |                     |                   |             |         |          |                |            |           |          |
|                   | orge Animal H       | ospital           |             |         |          |                |            |           |          |
| Sheep: 2          | (14/6) 11 11 11     |                   |             |         |          |                |            |           |          |
|                   | (WC), Heidelb       | erg Diere         | Kliniek     |         |          |                |            |           |          |
| Sheep: 2          | 0-4                 |                   |             |         |          |                |            |           |          |
| Oudtshoorn        | •                   |                   |             |         |          |                |            |           |          |
| Sheep: 1, Go      | al. I               |                   |             |         |          |                |            |           |          |
| Tetanus           |                     |                   |             |         |          |                |            |           | ^        |
| DROVINGE          | NA                  | Conton            |             | North   | Free     | Kwazulu-       | Eastern    | Western   | Northern |
| PROVINCE          | Mpumalanga          | Gauteng           | гішроро     | West    | State    | Natal          | Cape       | Cape      | Cape     |
| Avorago           |                     |                   |             |         | 1.0      |                |            | 1.0.(2)   |          |
| Average           |                     |                   |             |         | (1)      |                |            | 1.0 (3)   |          |
|                   | ortance scale: 1    | = one case        | e, 2 = more | than on | e case b | ut less than t | en and 3 = | more than | 10 cases |
| reported          |                     |                   |             |         |          |                |            | 1.0.(0)   |          |
| Dairy             |                     |                   |             |         | 1.0      |                |            | 1.0 (2)   |          |
| Sheep             |                     |                   |             |         | 1.0 (1)  |                |            | 1.0 (1)   |          |
| Free State        |                     |                   |             |         |          |                |            |           |          |
|                   | Greylingsrust       | t Dierespr        | eekkamer    | •       |          |                |            |           |          |
| Sheep: 1          |                     | •                 |             |         |          |                |            |           |          |
| Western Ca        | ре                  |                   |             |         |          |                |            |           |          |
| Beaufort We       | est, Beaufort \     | <b>Nest State</b> | e Vet       |         |          |                |            |           |          |
| Sheep: 1          |                     |                   |             |         |          |                |            |           |          |
|                   | ,, Dr Otto Krie     | k                 |             |         |          |                |            |           |          |
| Dairy: 1          |                     |                   |             |         |          |                |            |           |          |
|                   | Durban Straat       | Diereklin         | iek Worce   | ester   |          |                |            |           |          |
| Dairy: 1          |                     |                   |             |         |          |                |            |           |          |

| Salmonel          | losis             |              |             |               |               |                   |                 |                 | ^                |
|-------------------|-------------------|--------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE          | Mpumalanga        | Gauteng      | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                   |              |             |               | 2.0 (1)       |                   |                 | 2.0 (1)         |                  |
| Level of impore   | ortance scale: 1  | = one case   | e, 2 = more | than one      | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              |                   |              |             |               | 2.0 (1)       |                   |                 |                 |                  |
| Dairy             |                   |              |             |               |               |                   |                 | 2.0(1)          |                  |
| Free State        |                   |              |             |               |               |                   |                 |                 |                  |
|                   | on, Viljoenskro   | on Dierel    | kliniek     |               |               |                   |                 |                 |                  |
| Beef: 2           |                   |              |             |               |               |                   |                 |                 |                  |
| Western Ca        |                   |              |             |               |               |                   |                 |                 |                  |
|                   | Piketberg Dier    | ehospitaa    | l           |               |               |                   |                 |                 |                  |
| Dairy: 2          |                   |              |             |               |               |                   |                 |                 |                  |
| Diarrhoea in d    | dairy calves - su | spect salm   | onellosis   |               |               |                   |                 |                 |                  |
| Brucella a        | abortus           |              |             |               | ,             |                   |                 |                 |                  |
| PROVINCE          | Mpumalanga        | Gauteng      | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           | 1.7 (3)           |              |             | 3.0 (4)       | 2.4<br>(7)    | 3.0 (1)           | 2.0 (1)         |                 | 2.5 (2)          |
| Level of imported | ortance scale: 1  | = one case   | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              | 1.7 (3)           |              |             | 3.0 (4)       | 2.7 (6)       | 3.0 (1)           | 2.0 (1)         |                 | 2.5 (2)          |
| Dairy             |                   |              |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Mpumalang         |                   |              |             |               |               |                   |                 |                 |                  |
|                   | rootvlei Diere    | kliniek      |             |               |               |                   |                 |                 |                  |
| Beef: 1           |                   |              |             |               |               |                   |                 |                 |                  |
|                   | Longtom Dier      | ekliniek     |             |               |               |                   |                 |                 |                  |
| Beef: 2           | Lydenburg Die     | rocerock     | kamer       |               |               |                   |                 |                 |                  |
| Beef: 2           | Lyuenburg Die     | zi espreek   | raillel     |               |               |                   |                 |                 |                  |
| North West        |                   |              |             |               |               |                   |                 |                 |                  |
|                   | Klerksdorp Di     | erehospit    | aal         |               |               |                   |                 |                 |                  |
| Beef: 3           | •                 | •            |             |               |               |                   |                 |                 |                  |
| Lichtenburg       | , Dr CM Kruge     | r-Rall       |             |               |               |                   |                 |                 |                  |
| Beef: 3           |                   |              |             |               |               |                   |                 |                 |                  |
|                   | ve herds, 46 pos  | sitive anima | als         |               |               |                   |                 |                 |                  |
|                   | a Dierekliniek    |              |             |               |               |                   |                 |                 |                  |
| Beef: 3           |                   |              |             |               |               |                   |                 |                 |                  |

| Beef: 3           |                       |              |               |               |           |                |                 |                 |                 |
|-------------------|-----------------------|--------------|---------------|---------------|-----------|----------------|-----------------|-----------------|-----------------|
| A Total of 55     | herds, 4807 ani       | imals tested | d. 17 Positiv | e herds:      | Naledi =  | = 9/26 herds   | (9 positive     | herds out of    | f 26 herds      |
| tested), Mam      | usa = 2/6 herds       | s, Lekwa Te  | emane = 0     | /1 herds      | , Greater | Taung = $1/4$  | herds, Ka       | gisano = 2/1    | 12 herds,       |
| Molopo = 3/5      | herds, (Titre: 1      | 18-24 = 24   | animals. Tit  | tre: 30-4     | 9 = 27 a  | nimals. Titre: | >60 = 20        | 7 animals)      |                 |
| Free State        |                       |              |               |               |           |                |                 |                 |                 |
| Bethlehem,        | <b>Bethlehem Ar</b>   | nimal Hos    | pital         |               |           |                |                 |                 |                 |
| Beef: 2           |                       |              |               |               |           |                |                 |                 |                 |
| Hoopstad, K       | Cameeldoring          | Diereklini   | ek            |               |           |                |                 |                 |                 |
| Beef: 3, Dairy    |                       |              |               |               |           |                |                 |                 |                 |
|                   | Kroonstad Die         | rehospita    | al            |               |           |                |                 |                 |                 |
| Beef: 3           |                       |              |               |               |           |                |                 |                 |                 |
| Smithfield,       | Freestate Smi         | thfield SV   |               |               |           |                |                 |                 |                 |
| Beef: 3           |                       |              |               |               |           |                |                 |                 |                 |
| 16 cases, nev     | w outbreak, C br      | anded, sla   | ughtered - N  | Mohokare      | 2         |                |                 |                 |                 |
| •                 | arden Dierekli        |              |               |               |           |                |                 |                 |                 |
| Beef: 2           |                       |              |               |               |           |                |                 |                 |                 |
|                   | inburg Dierek         | liniek       |               |               |           |                |                 |                 |                 |
| Beef: 3           |                       |              |               |               |           |                |                 |                 |                 |
| Kwazulu-Na        | atal                  |              |               |               |           |                |                 |                 |                 |
| Underberg,        | Underberg Ve          | terinary S   | Surgery       |               |           |                |                 |                 |                 |
| Beef: 3           |                       | , .          | <u>.</u>      |               |           |                |                 |                 |                 |
| Eastern Cap       | e e                   |              |               |               |           |                |                 |                 |                 |
|                   | , Steynsburg [        | Dierehospi   | itaal         |               |           |                |                 |                 |                 |
| Beef: 2           | , e.e.,e              |              |               |               |           |                |                 |                 |                 |
| Less than 10      | in one herd           |              |               |               |           |                |                 |                 |                 |
| Northern Ca       |                       |              |               |               |           |                |                 |                 |                 |
|                   | Staatsveearts         | e Groep N    | С             |               |           |                |                 |                 |                 |
| Beef: 3           |                       |              |               |               |           |                |                 |                 |                 |
| Brucellosis (3    | 6 out of 124) -       | Honetown     |               |               |           |                |                 |                 |                 |
| Kimberley, \      | •                     | Поресотт     |               |               |           |                |                 |                 |                 |
| Beef: 2           |                       |              |               |               |           |                |                 |                 |                 |
| Brucella (        | ovis                  |              |               |               |           |                |                 |                 |                 |
| PROVINCE          | Mpumalanga            | Gauteng      | Limpopo       | North<br>West |           |                | Eastern<br>Cape | Western<br>Cape | Norther<br>Cape |
| Average           |                       |              |               |               |           |                |                 |                 | 2.0 (2)         |
| Level of imported | ortance scale: 1      | = one case   | e, 2 = more   | than on       | e case b  | ut less than t | en and 3 =      | more than       | 10 cases        |
| Sheep             |                       |              |               |               |           |                |                 |                 | 2.0 (2          |
| Northern Ca       | ano.                  |              |               |               |           |                |                 |                 | _, (_           |
|                   | ipe<br>Ivinia Veearts | kliniek      |               |               |           |                |                 |                 |                 |
| Sheep: 1          | ivilla vecalts        | MIIIICK      |               |               |           |                |                 |                 |                 |
| •                 | Aar Veterinary        | Clinic       |               |               |           |                |                 |                 |                 |
| Sheep: 3          | nai veteiiidiy        | CIIIIC       |               |               |           |                |                 |                 |                 |
| 311EE11 3         |                       |              |               |               |           |                |                 |                 |                 |
|                   | tremely high inf      | oction       |               |               |           |                |                 |                 |                 |

**PROVINCE Mpumalanga Gauteng Limpopo** 

North Free Kwazulu- Eastern Western Northern Cape Cape Cape

1.0(1)**Average** Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported Sheep 1.0(1)**Western Cape** Heidelberg (WC), Heidelberg Dierekliniek Sheep: 1 Leptospirosis North Free Kwazulu- Eastern Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape **Average** 3.0(1) Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported 3.0(1) Sheep Mpumalanga Lydenburg, Longtom Dierekliniek Sheep: 3 **Septicaemia** Kwazulu-North Free **Eastern** Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** State Natal West Cape Cape Cape 1.0(1)**Average** 2.0(1)1.0(1)Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported Beef 1.0(1)2.0(1)1.0(1)**Mpumalanga** Grootvlei, Grootvlei Dierekliniek Beef: 1 **Kwazulu-Natal Eshowe, Eshowe Veterinary Hospital** Beef: 2 Awaiting confirmation from the laboratory on cause **Western Cape** Paarl, Paarl Dierehospitaal; Beef: 1 E. coli North **Free** Kwazulu-**Eastern** Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape

| Average                  | 1 () (9)         | 2.0.(2)      | 1.5 (2)           | 2.0       | 2.5.(2)         | 2.0 (1)    | 1 5 (1)     | 2.0 (1)  |
|--------------------------|------------------|--------------|-------------------|-----------|-----------------|------------|-------------|----------|
| Average                  | 1.9 (8)          | 2.0 (2)      | 1.5 (2)           | 2.0 (8)   | 2.5 (2)         | 2.0 (1)    | 1.5 (4)     | 2.0 (1)  |
|                          |                  |              |                   |           |                 |            |             |          |
|                          | ortance scale: 1 | = one case,  | 2 = more than one | e case bu | ut less than to | en and 3 = | more than 1 | .0 cases |
| reported                 |                  |              |                   |           |                 |            |             |          |
|                          |                  |              |                   | 2.3       |                 |            |             |          |
| Beef                     | 1.5 (4)          | 2.0(2)       | 1.5 (2)           | (3)       | 3.0 (1)         |            |             |          |
|                          |                  |              |                   | . ,       |                 |            |             |          |
| Dairy                    |                  |              |                   | 1.0       |                 | 2.0(1)     | 2.0(1)      |          |
|                          |                  |              |                   | (1)       |                 | . ,        | ` ′         |          |
| Sheep                    | 2.0 (3)          |              |                   | 2.0       | 2.0(1)          |            | 1.0(1)      |          |
| Sileep                   | 2.0 (3)          |              |                   | (4)       | 2.0 (1)         |            | 1.0 (1)     |          |
| Goat                     | 3.0 (1)          |              |                   |           |                 |            | 1.5 (2)     | 2.0(1)   |
| Mpumalang                | . ,              |              |                   |           |                 |            |             | <b>\</b> |
|                          | four Diereklin   | iek          |                   |           |                 |            |             |          |
| Beef: 2, Shee            |                  |              |                   |           |                 |            |             |          |
|                          | hal Diereklinie  | k            |                   |           |                 |            |             |          |
| Beef: 1, Shee            |                  |              |                   |           |                 |            |             |          |
| Grootvlei, G             | irootvlei Diere  | kliniek      |                   |           |                 |            |             |          |
| Beef: 1                  |                  |              |                   |           |                 |            |             |          |
| Standerton,              | , Econovet       |              |                   |           |                 |            |             |          |
| Beef: 2                  |                  |              |                   |           |                 |            |             |          |
|                          | Grasslands vet   | clinic       |                   |           |                 |            |             |          |
| Sheep: 3                 |                  |              |                   |           |                 |            |             |          |
| 12 lambs died<br>Goat: 3 | <u> </u>         |              |                   |           |                 |            |             |          |
| 10 kids died             |                  |              |                   |           |                 |            |             |          |
| Gauteng                  |                  |              |                   |           |                 |            |             |          |
|                          | Diere Spreek     | kamer        |                   |           |                 |            |             |          |
| Beef: 2                  |                  |              |                   |           |                 |            |             |          |
| Nigel, Welg              | elegen Dierek    | liniek       |                   |           |                 |            |             |          |
| Beef: 2                  |                  |              |                   |           |                 |            |             |          |
| E. coli diarrho          |                  |              |                   |           |                 |            |             |          |
| North West               |                  |              | _                 |           |                 |            |             |          |
|                          | Klerksdorp D     | ierehospita  | al                |           |                 |            |             |          |
| Beef: 1                  |                  | inantad Dia  | valdiniale        |           |                 |            |             |          |
| Beef: 2                  | stad, Leeudori   | nigstad Die  | EKIIIIEK          |           |                 |            |             |          |
| Free State               |                  |              |                   |           |                 |            |             |          |
|                          | Dosvrystaat D    | iere Produk  | te                |           |                 |            |             |          |
|                          | y: 1, Sheep: 1   |              |                   |           |                 |            |             |          |
|                          | loopstad Dier    | ekliniek     |                   |           |                 |            |             |          |
| Beef: 3, Shee            |                  |              |                   |           |                 |            |             |          |
|                          | on, Viljoenskr   | oon Dierekl  | iniek             |           |                 |            |             |          |
| Beef: 3, Shee            |                  |              |                   |           |                 |            |             |          |
| •                        | shoek Dierege    | esondheid.   |                   |           |                 |            |             |          |
| Sheep: 1                 |                  |              |                   |           |                 |            |             |          |
| Kwazulu-Na               |                  | anı Harras İ | Hospital          |           |                 |            |             |          |
| Sheep: 2                 | zburg, Veterin   | ary nouse    | nospitai          |           |                 |            |             |          |
|                          | Underberg Ve     | terinary Su  | raerv             |           |                 |            |             |          |
| Beef: 3                  | onderberg ve     | .cermary 3u  | i gei y           |           |                 |            |             |          |
| Eastern Cap              | oe .             |              |                   |           |                 |            |             |          |
| _asserii cap             |                  |              |                   |           |                 |            |             |          |

| Mastaum Ca  |   |                                  |             |               |               |                   |                 |                      |                        |
|---|---|----------------------------------|-------------|---------------|---------------|-------------------|-----------------|----------------------|------------------------|
| Western Ca  | pe<br>est, Beaufort V   | Noct State                       | o Vot       |               |               |                   |                 |                      |                        |
| Goat: 2   | est, beautort v   | vest State                       | e vet       |               |               |                   |                 |                      |                        |
|   | bs about 3 week   | rc old                           |             |               |               |                   |                 |                      |                        |
|   |   |                                  | <u> </u>    |               |               |                   |                 |                      |                        |
|   | orge Herd Hea   | tn Consui                        | L           |               |               |                   |                 |                      |                        |
| Dairy: 2  | October   |                                  |             |               |               |                   |                 |                      |                        |
| Oudtshoorn  |   |                                  |             |               |               |                   |                 |                      |                        |
| Sheep: 1, Go  |   |                                  |             |               |               |                   |                 |                      |                        |
| Northern Ca   | _   |                                  | :ale        |               |               |                   |                 |                      |                        |
|   | pington Veear   | tsenykiin                        | iek         |               |               |                   |                 |                      |                        |
| Goat: 2   | الم عندماد ماماله   | - mah a                          |             |               |               |                   |                 |                      |                        |
| <i>E. COII</i> JOINT III  | l in 3-week old la  | ambs                             |             |               |               |                   |                 |                      |                        |
| Enzootic  | Abortion  |                                  |             |               |               |                   |                 |                      |                        |
| PROVINCE  | Mpumalanga  | Gauteng                          | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape      | Northerr<br>Cape       |
| Average   |   |                                  |             |               |               |                   |                 | 1.5 (2)              | 3.0 (2)                |
| Level of impo<br>reported   | ortance scale: 1  | = one case                       | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than            | 10 cases               |
| nl  |   |                                  |             |               |               |                   |                 | 1.0 (1)              | 2.0 (1)                |
| Sheep   |   |                                  |             |               |               |                   |                 | 1.0 (1)              | 3.0 (1)                |
| Goat<br>Western Ca  | =   |                                  |             |               |               |                   |                 | 1.0 (1)<br>2.0 (1)   | 3.0 (1)                |
| Goat  Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2  | (WC), Heidelb   |                                  |             |               |               |                   |                 |                      |                        |
| Sheep: 1<br><b>Plettenberg</b><br>Goat: 2<br>Four out of 1  | (WC), Heidelber Bay, Plettenber 0 goats aborted                                       |                                  |             |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca  | (WC), Heidelber Bay, Plettenber 0 goats aborted ape                                   | erg Bay A                        | Reitz       |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U  | (WC), Heidelber Bay, Plettenber 0 goats aborted                                       | erg Bay A                        | Reitz       |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3   | (WC), Heidelber<br>Bay, Plettenb<br>0 goats aborted<br>ape<br>pington Veear           | erg Bay A                        | Reitz       |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3 Abortion stori                                | (WC), Heidelber<br>Bay, Plettenb<br>0 goats aborted<br>ape<br>pington Veear           | erg Bay A                        | Reitz       |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3 Abortion store Goat: 3                        | (WC), Heidelber<br>Bay, Plettenb<br>0 goats aborted<br>ape<br>pington Veear           | erg Bay A                        | Reitz       |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3 Abortion store Goat: 3 Abortion store         | (WC), Heidelber<br>Bay, Plettenb<br>0 goats aborted<br>ape<br>pington Veear           | erg Bay A<br>tsenyklin           | Reitz       |               |               |                   |                 |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3 Abortion stori Goat: 3 Abortion stori         | (WC), Heidelbe<br>Bay, Plettenb<br>0 goats aborted<br>ape<br>pington Veear<br>m       | erg Bay A<br>tsenyklin           | iek         | North         | Free          | Kwazulu-<br>Natal | Eastern<br>Cape |                      |                        |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3 Abortion stori Goat: 3 Abortion stori         | (WC), Heidelber<br>Bay, Plettenber<br>O goats aborted<br>ape<br>Opington Veear<br>mem | erg Bay A<br>tsenyklin           | iek         |               |               |                   |                 | 2.0 (1) Western      | 3.0 (1) Northern       |
| Western Ca Heidelberg Sheep: 1 Plettenberg Goat: 2 Four out of 1 Northern Ca Upington, U Sheep: 3 Abortion store Goat: 3 Abortion store Dermato | (WC), Heidelber<br>Bay, Plettenber<br>O goats aborted<br>ape<br>Opington Veear<br>mem | erg Bay A<br>tsenyklin<br>mpy Wo | iek         | West          | 2.0 (2)       | Natal             | Cape            | 2.0 (1) Western Cape | 3.0 (1)  Northerr Cape |

|                                    | Hoopstad, Hoopstad Dierekliniek<br>Sheep: 3 |            |             |               |               |                   |                 |                 |                  |  |  |  |
|------------------------------------|---|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|--|
|                                    | Rowelsfontein                               | veearts 9  | Snreekkan   | ner           |               |                   |                 |                 |                  |  |  |  |
| Sheep: 1                           | Koweisionten                                | vecares .  | эргесккап   |               |               |                   |                 |                 |                  |  |  |  |
|                                    | ine Gangre                                  | ne         |             |               |               |                   |                 |                 | ^                |  |  |  |
| PROVINCE                           | Mpumalanga                                  | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average                            |   |            |             |               | 2.0 (1)       |                   |                 |                 | 2.0 (1)          |  |  |  |
| Level of impore                    | ortance scale: 1                            | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than 1     | 10 cases         |  |  |  |
| Sheep                              |   |            |             |               | 2.0 (1)       |                   |                 |                 |                  |  |  |  |
| Goat                               |   |            |             |               |               |                   |                 |                 | 2.0 (1)          |  |  |  |
|                                    | Bethlehem Ar                                | nimal Hos  | pital       |               |               |                   |                 |                 |                  |  |  |  |
| Sheep: 2                           |   |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Northern Ca                        | ape<br>rg, Postmasbu                        | ra Dierekl | liniek      |               |               |                   |                 |                 |                  |  |  |  |
| Goat: 2                            | g, rostillasbu                              | ig Diereki | IIIICK      |               |               |                   |                 |                 |                  |  |  |  |
| <b>Bovine D</b>                    | ermatophilo                                 | osis (Ser  | nkobo di    | sease)        |               |                   |                 |                 | ^                |  |  |  |
| PROVINCE                           | Mpumalanga                                  | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average                            | 1.0 (1)                                     | 2.0 (1)    |             |               |               | 1.0(1)            |                 |                 |                  |  |  |  |
| Level of imported                  | ortance scale: 1                            | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than :     | 10 cases         |  |  |  |
| Beef                               | 1.0(1)                                      | 2.0(1)     |             |               |               | 1.0(1)            |                 |                 |                  |  |  |  |
| Mpumalang<br>Lydenburg,<br>Beef: 1 | a<br>Longtom Dier                           | ekliniek   |             |               |               |                   |                 |                 |                  |  |  |  |
| Gauteng<br>Hammansk                | raal, Themba <i>l</i>                       | Animal Cli | nic         |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2                            | <u>.</u>                                    |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Kwazulu-Na                         |   | .i         |             |               |               |                   |                 |                 |                  |  |  |  |
| Mtubatuba,<br>Beef: 1              | Mtubatuba Ar                                | nimai Clin | IC          |               |               |                   |                 |                 |                  |  |  |  |
|                                    | erium necro                                 | phorum     |             |               |               |                   |                 |                 | ^                |  |  |  |
| PROVINCE                           | Mpumalanga                                  | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average                            |   |            |             |               |               |                   |                 | 1.0 (1)         | 3.0 (1)          |  |  |  |

| Level of impore              | ortance scale: 1       | = one case  | e, 2 = more | e than on     | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
|------------------------------|------------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Beef                         |                        |             |             |               |               |                   |                 | 1.0(1)          |                  |
| Sheep                        |                        |             |             |               |               |                   |                 |                 | 3.0 (1)          |
| Western Ca                   | pe                     |             |             |               |               |                   |                 |                 |                  |
| Stellenbosc                  | h, Prov Vet lal        | Elsenbu     | g           |               |               |                   |                 |                 |                  |
| Beef: 1                      |                        |             |             |               |               |                   |                 |                 |                  |
| Northern Ca                  | •                      | Uaanit      | _1          |               |               |                   |                 |                 |                  |
| Colesberg, i<br>Sheep: 3     | Karoo Veterina         | ну поѕріт   | aı          |               |               |                   |                 |                 |                  |
| Outbreak in D                | Dorpers                |             |             |               |               |                   |                 |                 |                  |
| Listeriosi                   |                        |             |             |               |               |                   |                 |                 | _                |
| PROVINCE                     | Mpumalanga             | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                      |                        |             |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Level of imported            | ortance scale: 1       | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                         |                        |             |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Free State                   |                        |             |             |               |               |                   |                 |                 |                  |
| <b>waraen, wa</b><br>Beef: 1 | arden Dierekli         | niek        |             |               |               |                   |                 |                 |                  |
| beer: 1                      |                        |             |             |               |               |                   |                 |                 |                  |
| Other                        |                        |             |             |               |               |                   |                 |                 | _                |
| PROVINCE                     | Mpumalanga             | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                      |                        |             |             |               | 1.0<br>(1)    |                   | 3.0 (1)         |                 |                  |
| Level of imported            | ortance scale: 1       | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                         |                        |             |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Sheep                        |                        |             |             |               |               |                   | 3.0 (1)         |                 |                  |
| Free State<br>Smithfield,    | Freestate Smi          | thfield SV  |             |               |               |                   |                 |                 |                  |
| Beef: 1                      |                        |             |             |               |               |                   |                 |                 |                  |
| lumny jaw ca                 |                        |             |             |               |               |                   |                 |                 |                  |
|                              | aused by <i>CorynL</i> | bacterium - | Bethulie    |               |               |                   |                 |                 |                  |
| Eastern Cap                  | e                      |             |             |               |               |                   |                 |                 |                  |
| Eastern Cap                  |                        |             |             |               |               |                   |                 |                 |                  |

| Pasteurellosis |            |         |         |               |               |                   |                 |                 |                  |
|----------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE       | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average        | 2.0 (2)    | 2.0 (1) |         | 2.0 (1)       | 2.4<br>(7)    | 2.0 (2)           | 1.0 (1)         | 1.0 (2)         | 3.0 (2)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 2.0 (1) |         | 2.0 (1) | 2.7 (3)    |         |        | 1.0 (1) |         |
|-------|---------|---------|---------|------------|---------|--------|---------|---------|
| Sheep | 2.0 (1) | 2.0 (1) |         | 2.3<br>(4) | 2.0 (1) |        | 1.0(1)  | 3.0 (1) |
| Goat  |         |         |         |            | 2.0 (1) | 1.0(1) |         | 3.0 (1) |

#### Mpumalanga

## Hendrina, Mooiplaas Veterinere Dienste

Beef: 2, Sheep: 2

#### Gauteng

# Bapsfontein, Bapsfontein Dierehospitaal

Sheep: 2
North West

# Ventersdorp, Ventersdorp Dierekliniek

Beef: 2 Verse

#### **Free State**

## **Bethlehem, Bethlehem Animal Hospital**

Beef: 2, Sheep: 2

# **Bultfontein, Greylingsrust Dierespreekkamer**

Sheep: 3

## Hoopstad, Hoopstad Dierekliniek

Beef: 3, Sheep: 3

## **Hoopstad, Kameeldoring Dierekliniek**

Sheep: 1

## Winburg, Winburg Dierekliniek

Beef: 3

#### Kwazulu-Natal

## **Estcourt, Estcourt Vet Clinic**

Sheep: 2, Goat: 2
Eastern Cape

# **Graaff-Reinet, Camdeboo Veterinary Clinic**

Goat: 1

# **Western Cape**

# Stellenbosch, Stellenbosch Animal Hospital

Beef: 1, Sheep: 1
Northern Cape

# Postmasburg, Postmasburg Dierekliniek

Sheep: 3, Goat: 3

# **Protozoal diseases (other)**

| Coccidios               | sis                   |            |             |               |               |                   |                 |                 |                  |
|-------------------------|-----------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE                | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                 |                       | 3.0 (1)    |             | 1.7 (3)       | 2.0 (4)       |                   | 2.0 (3)         | 1.7 (6)         | 2.5 (2)          |
| Level of imported       | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                    |                       |            |             |               | 2.0 (1)       |                   |                 | 1.0 (1)         |                  |
| Dairy                   |                       |            |             |               |               |                   |                 | 2.0(1)          |                  |
| Sheep                   |                       | 3.0 (1)    |             | 1.7 (3)       | 2.0 (3)       |                   |                 | 2.0 (2)         | 2.5 (2)          |
| Goat                    |                       |            |             |               |               |                   | 2.0 (3)         | 1.5 (2)         |                  |
| Gauteng                 |                       |            |             |               |               |                   | 2.0 (3)         | 1.0 (2)         |                  |
|                         | nderstepoort A        | cademic I  | Hoenital a  | nd Drodi      | uction /      | Animal Clini      |                 |                 |                  |
| Sheep: 3                | idei stepoort A       | caucinic   | iospitai a  | ilu Fiou      | uction ,      | Allilliai Cillii  | <u> </u>        |                 |                  |
| 41 cases                |                       |            |             |               |               |                   |                 |                 |                  |
| North West              |                       |            |             |               |               |                   |                 |                 |                  |
|                         | Christiana Die        | rehosnita  | al          |               |               |                   |                 |                 |                  |
| Sheep: 1                | Cili istialia Die     | renospita  | uı          |               |               |                   |                 |                 |                  |
|                         | Klerksdorp Di         | erehosnit  | aal         |               |               |                   |                 |                 |                  |
| Sheep: 1                | Kici Kadoi p Di       | Ciciospic  | uui         |               |               |                   |                 |                 |                  |
|                         | om, Bult Diere        | kliniek    |             |               |               |                   |                 |                 |                  |
| Sheep: 3                | o, 24 2.0. c          |            |             |               |               |                   |                 |                 |                  |
| Free State              |                       |            |             |               |               |                   |                 |                 |                  |
|                         | Bethlehem An          | imal Hos   | pital       |               |               |                   |                 |                 |                  |
| Sheep: 1                |                       |            |             |               |               |                   |                 |                 |                  |
|                         | in, Dr Stephan        | Wessels    |             |               |               |                   |                 |                 |                  |
| Sheep: 3                |                       |            |             |               |               |                   |                 |                 |                  |
| Reitz, Riem             | land Dierehos         | pitaal     |             |               |               |                   |                 |                 |                  |
| Sheep: 2                |                       |            |             |               |               |                   |                 |                 |                  |
| Viljoenskro             | on, Viljoenskro       | oon Diere  | kliniek     |               |               |                   |                 |                 |                  |
| Beef: 2                 |                       |            |             |               |               |                   |                 |                 |                  |
| Eastern Cap             |                       |            |             |               |               |                   |                 |                 |                  |
|                         | et, Camdeboo          | Veterina   | y Clinic    |               |               |                   |                 |                 |                  |
| Goat: 2                 |                       |            |             |               |               |                   |                 |                 |                  |
|                         | et, Graaff Reir       | net veteri | nary Clinic |               |               |                   |                 |                 |                  |
| Goat: 2                 | Chulthaula alice      | Votori     | Cl:-::-     |               |               |                   |                 |                 |                  |
| Stutterneim<br>Goat: 2  | , Stutterheim         | veterinar  | y Clinic    |               |               |                   |                 |                 |                  |
| Goat: 2<br>One group of | anate                 |            |             |               |               |                   |                 |                 |                  |
| Western Ca              |                       |            |             |               |               |                   |                 |                 |                  |
|                         | pe<br>Iledon Dierekli | niek       |             |               |               |                   |                 |                 |                  |
| Sheep: 2                | iledoli Dielekii      | IIICK      |             |               |               |                   |                 |                 |                  |
|                         | orge Herd Hea         | th Consul  | <b>}</b>    |               |               |                   |                 |                 |                  |
| Dairy: 2                | orge riera rica       | ai consui  | •           |               |               |                   |                 |                 |                  |
| Oudtshoorn              | . Ostrimed            |            |             |               |               |                   |                 |                 |                  |
| Coat: 2                 | , 550                 |            |             |               |               |                   |                 |                 |                  |

Goat: 2

#### Stellenbosch, Stellenbosch Animal Hospital

Beef: 1, Sheep: 2, Goat: 1

**Northern Cape** 

Colesberg, Karoo Veterinary Hospital

Sheep: 3 Lambs in veld

Kuruman, Kuruman Dierekliniek

Sheep: 2

| Cryptosporidiosis |            |         |         |               |               |                   |                 |                 |                  |
|-------------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE          | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           | 1.7 (3)    | 2.0 (1) |         | 2.7 (3)       | 1.8<br>(9)    | 2.3 (8)           | 2.3 (3)         | 2.5 (12)        | 3.0 (1)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 2.0 (2) | 2.0 (1) | 2.5 (2) | 2.3 (4) | 2.4 (5) | 3.0 (1) |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Dairy |         |         |         | 1.0 (1) | 1.0 (1) | 2.0 (1) | 2.6 (7) |         |
| Sheep | 1.0 (1) |         | 3.0 (1) | 1.5 (4) | 2.5 (2) |         | 2.7 (3) |         |
| Goat  |         |         |         |         |         | 2.0 (1) | 2.0 (2) | 3.0 (1) |

## **Mpumalanga**

Hendrina, Mooiplaas Veterinere Dienste

Beef: 1, Sheep: 1

Lydenburg, Longtom Dierekliniek

Beef: 3

Severe outbreak in dairy and extensive beef calves, huge losses

Gauteng

Bronkhorstspruit, Kerkstraat Dierekliniek

Beef: 2
North West

**Brits, Brits Dierekliniek** 

Beef: 2

**Potchefstroom, Morvet** 

Beef: 3, Sheep: 3

**Free State** 

**Bethlehem, Bethlehem Animal Hospital** 

Sheep: 1

Clocolan, Clocolan Dierekliniek

Dairy: 1

**Excelsior, Weltevrede Dierekliniek** 

Beef: 3

**Ficksburg, Oosvrystaat Diere Produkte** 

Beef: 1, Sheep: 1

Frankfort, Frankfort Dierekliniek

Beef: 2, Sheep: 2

**Kroonstad, Kroonstad Dierehospitaal** 

Sheep: 2

#### Parys, Parys Dierehospitaal

Beef: 3

Less than last year

#### Kwazulu-Natal

#### **Bergville, Bergville Veterinary Clinic**

Beef: 2

# **Dundee, Endumeni Herd health**

Beef: 3, Sheep: 3

#### **Kokstad, E.G.Veterinary Services**

Beef: 2

Calves and lambs are mainly over the worst from a cryptosporidiosis standpoint, with just a few cases here and there that are responding well to management changes.

Sheep: 2

Calves and lambs are mainly over the worst from a cryptosporidiosis standpoint, with just a few cases here and there that are responding well to management changes.

## **Mooi River, Mooirivier Vet Clinic**

Dairy: 1

## Pietermaritzburg, Veterinary House Hospital

Beef: 2

#### **Underberg, Underberg Veterinary Surgery**

Beef: 3

#### **Eastern Cape**

#### Alexandria, Alexandria Platteland Spreekkamer

Dairy: 2

#### **Alexandria, Riverview Trading Vet Consulting Services**

Beef: 3

New outbreak

Goat: 2

#### **Western Cape**

# Caledon, Overberg Veterinary Hospital

Dairy: 2, Sheep: 3

#### **Darling, Tygerberg Dierehospitaal Darling**

Dairy: 3 Calves

## George, George Herd Heath Consult

Dairy: 3

#### Heidelberg (WC), Heidelberg Dierekliniek

Dairy: 2, Sheep: 2

#### Malmesbury, Bergzight Dierehospitaal

Dairy: 2

# Malmesbury, Dr Otto Kriek

Dairy: 3

## **Oudtshoorn, Ostrimed**

Sheep: 3, Goat: 3

## Stellenbosch, Stellenbosch Animal Hospital

Goat: 1

#### Swellendam, Swellendam Dierehospitaal

Dairy: 3

# **Northern Cape**

# Postmasburg, Postmasburg Dierekliniek

Goat: 3

# **Fungal diseases**

| Ringworn  | n  |  |                  |               |               |                   |                 |                 | ^                |
|---|--|--|------------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE  | Mpumalanga   | Gauteng  | Limpopo          | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   | 1.5 (4)  | 2.3 (3)  |                  | 3.0 (2)       | 2.0 (2)       | 1.8 (5)           | 2.0 (1)         | 1.5 (2)         | 1.5 (2)          |
| Level of imported   | ortance scale: 1   | = one case   | e, 2 = more      | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef  | 1.5 (4)  | 2.5 (2)  |                  | 3.0 (1)       | 2.0<br>(2)    | 1.8 (5)           | 2.0 (1)         |                 | 1.0(1)           |
| Dairy   |  |  |                  |               |               |                   |                 | 2.0(1)          |                  |
| Sheep   |  | 2.0(1)   |                  | 3.0(1)        |               |                   |                 |                 | 2.0(1)           |
| Goat  |  |  |                  | 210 (2)       |               |                   |                 | 1.0(1)          |                  |
|   |  |  |                  |               |               |                   |                 | 1.0 (1)         |                  |
| Beef: 2 Bethal, Bethe Beef: 1 Lydenburg, Beef: 1 Lydenburg, Beef: 2 Gauteng Hammanskr Beef: 2 Nigel, Nigel Beef: 3 Pretoria, An Sheep: 2 North West | four Diereklinie hal Diereklinie Longtom Dier Lydenburg Die raal, Themba I Diere Spreekl ima Veterinar | k<br>ekliniek<br>erespreek<br>Animal Cli<br>kamer<br>y Consult | nic<br>ing Rooms | 5             |               |                   |                 |                 |                  |
|   | Christiana Die   | renospita  | aı               |               |               |                   |                 |                 |                  |
| Beef: 3, Shee<br>Free State   | p. 3   |  |                  |               |               |                   |                 |                 |                  |
|   | loopstad Diere   | ekliniek   |                  |               |               |                   |                 |                 |                  |
| Beef: 3   |  |  |                  |               |               |                   |                 |                 |                  |
| Kroonstad, I  | Kroonstad Die  | rehospita  | al               |               |               |                   |                 |                 |                  |
| Beef: 1   |  |  |                  |               |               |                   |                 |                 |                  |
| Kwazulu-Na  |  |  |                  |               |               |                   |                 |                 |                  |
|   | ergville Veteri  | nary Clini   | С                |               |               |                   |                 |                 |                  |
| Beef: 2   | Mtubatuba Ar   | nimal Clin   | ic               |               |               |                   |                 |                 |                  |
| Beef: 2   | Mitubatuba Ai  | iiiiai Ciiii   | ic .             |               |               |                   |                 |                 |                  |
|   | Ncanduvet Ne   | wcastle  |                  |               |               |                   |                 |                 |                  |
| Beef: 1   |  |  |                  |               |               |                   |                 |                 |                  |
| Pietermaritz  | zburg, Veterin   | ary House  | Hospital         |               |               |                   |                 |                 |                  |
| Beef: 2   |  |  |                  |               |               |                   |                 |                 |                  |
|   | Underberg Ve   | terinary S   | Surgery          |               |               |                   |                 |                 |                  |
| Beef: 2   |  |  |                  |               |               |                   |                 |                 |                  |
| Eastern Cap   |  | . a.t. \/ = ! !  |                  |               |               |                   |                 |                 |                  |
| Graatt-Rein   | et, Graaff Reii  | net veteri   | nary Clinic      |               |               |                   |                 |                 |                  |

| Beef: 2                      |                   |             |               |               |               |                   |                 |                 |                  |
|------------------------------|-------------------|-------------|---------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Western Ca                   | ne                |             |               |               |               |                   |                 |                 |                  |
|                              | (WC), Heidelb     | era Diere   | kliniek       |               |               |                   |                 |                 |                  |
| Dairy: 2                     | (110), 110:40:5   | 0.9 5.0.0   |               |               |               |                   |                 |                 |                  |
|                              | h, Stellenbosc    | h Animal    | Hospital      |               |               |                   |                 |                 |                  |
| Goat: 1                      | ii, Stellelibose  | ii Aiiiiidi | ilospitai     |               |               |                   |                 |                 |                  |
| Northern Ca                  | ne                |             |               |               |               |                   |                 |                 |                  |
|                              | Kimberley Die     | rokliniok   |               |               |               |                   |                 |                 |                  |
| Beef: 1                      | Killiberiey Die   | CKIIIICK    |               |               |               |                   |                 |                 |                  |
|                              | sions seen at aba | attoir      |               |               |               |                   |                 |                 |                  |
|                              | uruman Diere      |             |               |               |               |                   |                 |                 |                  |
| Sheep: 2                     | didiliali Diere   | KIIIICK     |               |               |               |                   |                 |                 |                  |
| ·                            |                   |             |               |               |               |                   |                 |                 |                  |
| <b>Viral Dis</b>             | eases (oth        | er)         |               |               |               |                   |                 |                 |                  |
| BMC (sno                     | tsiekte)          |             |               |               |               |                   |                 |                 |                  |
| PROVINCE                     | Mpumalanga        | Gauteng     | Limnono       | North         |               | Kwazulu-          | Eastern         | Western         | Northern         |
| I INOVIITOE                  | . ipamaianga      | Cautering   | шроро         | West          | State         | Natal             | Cape            | Cape            | Cape             |
| Average                      |                   |             | 2.0 (2)       | 1.0 (1)       | 2.0           |                   |                 |                 |                  |
| Average                      |                   |             | 2.0 (2)       | 1.0 (1)       | (3)           |                   |                 |                 |                  |
| Level of impo                | ortance scale: 1  | = one case  | e, 2 = more   | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| reported                     |                   |             |               |               |               |                   |                 |                 |                  |
|                              |                   |             |               |               | 2.0           |                   |                 |                 |                  |
| Beef                         |                   |             | 2.0 (2)       | 1.0 (1)       | (3)           |                   |                 |                 |                  |
| Limpopo                      |                   |             |               |               |               |                   |                 |                 |                  |
| Polokwane,                   | Pietersburg V     | eterinary   | Clinic        |               |               |                   |                 |                 |                  |
| Beef: 2                      |                   |             |               |               |               |                   |                 |                 |                  |
|                              | 22 Farm Practi    | ce          |               |               |               |                   |                 |                 |                  |
| Beef: 2                      |                   |             |               |               |               |                   |                 |                 |                  |
| North West                   |                   |             |               |               |               |                   |                 |                 |                  |
|                              | olopo Diereklir   | niek        |               |               |               |                   |                 |                 |                  |
| Beef: 1                      |                   |             |               |               |               |                   |                 |                 |                  |
| Free State                   |                   |             |               |               |               |                   |                 |                 |                  |
|                              | in, Dr Stephan    | Wessels     |               |               |               |                   |                 |                 |                  |
| Beef: 1                      |                   |             |               |               |               |                   |                 |                 |                  |
|                              | Freestate Smit    | thfield SV  |               |               |               |                   |                 |                 |                  |
| Beef: 3                      |                   |             |               |               |               |                   |                 |                 |                  |
|                              | eriod of 2 mont   |             | nals died, so | ome were      | e pregna      | nt                |                 |                 |                  |
| <b>Winburg, W</b><br>Beef: 2 | inburg Dierek     | liniek      |               |               |               |                   |                 |                 |                  |
| Rabies                       |                   |             |               |               |               |                   |                 |                 | 1                |
| PROVINCE                     | Mpumalanga        | Gauteng     | Limpopo       | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|                              |                   |             |               |               |               |                   |                 |                 |                  |
|                              |                   |             |               |               | 1.5           |                   |                 |                 |                  |

| Level of impore                       | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
|---------------------------------------|-----------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Beef                                  |                       |            |             |               | 1.5<br>(2)    |                   |                 |                 |                  |
| Free State<br>Frankfort, F<br>Beef: 2 | rankfort Diere        | ekliniek   |             |               |               |                   |                 |                 |                  |
|                                       | n, Wesselsbro         | n Dierekli | niek        |               |               |                   |                 |                 |                  |
| BVD (Bov                              | vine viral dia        | arrhoea)   |             |               |               |                   |                 |                 | _                |
| PROVINCE                              | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                       |            |             |               |               | 1.0(1)            |                 |                 |                  |
| Level of imported                     | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Dairy                                 |                       |            |             |               |               | 1.0(1)            |                 |                 |                  |
| Kwazulu-Na                            | ntal<br>dumeni Herd l | aealth     |             |               |               |                   |                 |                 |                  |
| Dairy: 1                              | adilielli liela i     | Icaitii    |             |               |               |                   |                 |                 |                  |
|                                       | ectious bovi          | ne rhino   | tracheit    | is)           |               |                   |                 |                 | 1                |
| PROVINCE                              | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                       | 1.0 (1)    |             |               | 3.0 (1)       | 2.0 (2)           |                 |                 |                  |
| Level of imported                     | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                       | 1.0 (1)    |             |               | 3.0 (1)       | 3.0 (1)           |                 |                 |                  |
| Dairy                                 |                       |            |             |               |               | 1.0(1)            |                 |                 |                  |
| Gauteng                               |                       |            |             |               |               |                   |                 |                 |                  |
| <b>Bapsfontein</b><br>Beef: 1         | , Bapsfontein         | Dierehos   | pitaal      |               |               |                   |                 |                 |                  |
| Free State                            |                       |            |             |               |               |                   |                 |                 |                  |
| Viljoenskro                           | on, Viljoenskr        | oon Diere  | kliniek     |               |               |                   |                 |                 |                  |
| Beef: 3                               | ata l                 |            |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na<br>Dundee, En              | ataı<br>dumeni Herd l | nealth     |             |               |               |                   |                 |                 |                  |
| Dairy: 1                              |                       |            |             |               |               |                   |                 |                 |                  |
|                                       | Underberg Ve          | terinary S | Surgery     |               |               |                   |                 |                 |                  |
| Beef: 3                               |                       |            |             |               |               |                   |                 |                 |                  |
| Enzootic                              | <b>Bovine Leu</b>     | cosis (El  | 3L)         |               |               |                   |                 |                 |                  |

| PROVINCE   | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|--|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Average  |            |         |         |               | 1.0<br>(1)    | 1.0 (1)           | 1.0 (2)         | 2.0 (3)         |                  |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases |            |         |         |               |               |                   |                 |                 |                  |

reported

| Beef  | 1.0<br>(1) | 1.0 (1) | 1.0 (1) |         |  |
|-------|------------|---------|---------|---------|--|
| Dairy |            |         | 1.0 (1) | 2.0 (3) |  |

#### **Free State**

# Clocolan, Clocolan Dierekliniek

Beef: 1

## Kwazulu-Natal

# **Underberg, Underberg Veterinary Surgery**

Beef: 1 **Eastern Cape** 

## Alexandria, Alexandria Platteland Spreekkamer

Dairy: 1

## **Humansdorp, Humansdorp Veterinary Clinic**

Beef: 1

## **Western Cape**

# George, George Herd Heath Consult

Dairy: 2

# Malmesbury, Bergzight Dierehospitaal

Dairy: 2

## Malmesbury, Dr Otto Kriek

Dairy: 2

| Orf      |            |         |         |               |               |                   |                 |                 |                  |
|----------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average  | 2.3 (3)    | 2.0 (4) |         | 2.0 (4)       | 2.4 (5)       | 1.8 (5)           | 1.0 (1)         | 2.0 (6)         | 2.0 (3)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Sheep | 2.0 (2) | 2.0 (2) | 2.0 (2) | 2.5<br>(4) | 2.0 (3) |         | 2.3 (4) | 2.0 (1) |
|-------|---------|---------|---------|------------|---------|---------|---------|---------|
| Goat  | 3.0 (1) | 2.0 (2) | 2.0 (2) | 2.0 (1)    | 1.5 (2) | 1.0 (1) | 1.5 (2) | 2.0 (2) |

# Mpumalanga

# Lydenburg, Longtom Dierekliniek

Sheep: 2, Goat: 3

# Standerton, Econovet

Sheep: 2 Gauteng

## **Bronkhorstspruit, Kerkstraat Dierekliniek**

Sheep: 2 Hammanskraal, Themba Animal Clinic Sheep: 2, Goat: 2 **Pretoria, Anima Veterinary Consulting Rooms** Goat: 2 **North West** Christiana, Christiana Dierehospitaal Sheep: 2, Goat: 2 Klerksdorp, Klerksdorp Dierehospitaal Sheep: 2, Goat: 2 Free State **Bloemfontein, Dr Stephan Wessels Hoopstad, Hoopstad Dierekliniek** Sheep: 3 **Kroonstad, Kroonstad Dierehospitaal** Sheep: 2 Oranjeville, Grasveld Kuddegesondheid Sheep: 2 Vrede, Saulshoek Dieregesondheid. Goat: 2 Kwazulu-Natal **Dundee, Endumeni Herd health** Sheep: 2 **Estcourt, Estcourt Vet Clinic** Sheep: 2, Goat: 2 Pongola, Pongola Animal Clinic Goat: 1 **Underberg, Underberg Veterinary Surgery** Sheep: 2 **Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic** Goat: 1 **Western Cape Beaufort West, Beaufort Dierekliniek** Sheep: 2 **George, George Animal Hospital** Sheep: 3 Malmesbury, Groenkloof Dierekliniek Piketberg, Piketberg Dierehospitaal Sheep: 3 Weaner lambs Stellenbosch, Stellenbosch Animal Hospital **Worcester, Durban Straat Dierekliniek Worcester** Sheep: 1 **Northern Cape Kimberley, Staatsveeartse Groep NC** Goat: 1 Kuruman Kuruman, Kuruman Dierekliniek Sheep: 2 Postmasburg, Postmasburg Dierekliniek

Goat: 3

| Warts                   |  |            |             |               |               |                   |                 |                 | ^                |
|-------------------------|--|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE                | Mpumalanga                             | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                 | 1.7 (3)                                | 3.0 (1)    |             | 3.0 (1)       | 2.1<br>(7)    | 1.8 (5)           |                 | 2.0 (2)         | 1.5 (2)          |
| Level of imported       | ortance scale: 1                       | = one case | e, 2 = more | than one      | e case b      | ut less than t    | en and 3 =      | more than 1     | .0 cases         |
| Beef                    | 1.7 (3)                                | 3.0 (1)    |             | 3.0 (1)       | 2.1<br>(7)    | 1.8 (5)           |                 | 2.0 (2)         | 1.5 (2)          |
| Mpumalang               |  |            |             |               |               |                   |                 |                 |                  |
|                         | four Diereklin                         | iek        |             |               |               |                   |                 |                 |                  |
| Beef: 1                 |  |            |             |               |               |                   |                 |                 |                  |
|                         | Longtom Dier                           | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 2                 | Ludonburg Di                           | araamraal. | kamar       |               |               |                   |                 |                 |                  |
| Beef: 2                 | Lydenburg Die                          | erespreek  | Kamer       |               |               |                   |                 |                 |                  |
| Gauteng                 |  |            |             |               |               |                   |                 |                 |                  |
|                         | Diere Spreekl                          | camer      |             |               |               |                   |                 |                 |                  |
| Beef: 3                 | Diere Spreeki                          | Name:      |             |               |               |                   |                 |                 |                  |
| North West              |  |            |             |               |               |                   |                 |                 |                  |
|                         | Christiana Die                         | rehospita  | al          |               |               |                   |                 |                 |                  |
| Beef: 3                 |  | CHOSPICA   | <b></b>     |               |               |                   |                 |                 |                  |
| Free State              |  |            |             |               |               |                   |                 |                 |                  |
|                         | in, Dr Stephan                         | Wessels    |             |               |               |                   |                 |                 |                  |
| Beef: 2                 | -                                      |            |             |               |               |                   |                 |                 |                  |
| Clocolan, Cl            | ocolan Dierek                          | liniek     |             |               |               |                   |                 |                 |                  |
| Beef: 2                 |  |            |             |               |               |                   |                 |                 |                  |
| Frankfort, F            | rankfort Diere                         | kliniek    |             |               |               |                   |                 |                 |                  |
| Beef: 2                 |  |            |             |               |               |                   |                 |                 |                  |
| Hoopstad, H             | loopstad Diere                         | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 3                 |  |            |             |               |               |                   |                 |                 |                  |
|                         | on, Viljoenskro                        | oon Diere  | kliniek     |               |               |                   |                 |                 |                  |
| Beef: 2                 |  |            |             |               |               |                   |                 |                 |                  |
|                         | n, Wesselsbro                          | n Dierekli | niek        |               |               |                   |                 |                 |                  |
| Beef: 1                 |  |            |             |               |               |                   |                 |                 |                  |
|                         | inburg Dierek                          | liniek     |             |               |               |                   |                 |                 |                  |
| Beef: 3                 | 4-1                                    |            |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na              |  | namı Cile! |             |               |               |                   |                 |                 |                  |
|                         | ergville Veteri                        | nary Clini | Ľ           |               |               |                   |                 |                 |                  |
| Beef: 2                 | tcourt Vet Clir                        | nic        |             |               |               |                   |                 |                 |                  |
| Estcourt, Es<br>Beef: 1 | tcourt vet CIII                        | IIC .      |             |               |               |                   |                 |                 |                  |
|                         | Mtubatuba Ar                           | nimal Clin | ic          |               |               |                   |                 |                 |                  |
| Beef: 2                 | ······································ | ai Ciill   |             |               |               |                   |                 |                 |                  |
|                         | ngola Animal                           | Clinic     |             |               |               |                   |                 |                 |                  |
| Beef: 1                 | ngvia Ailliidi                         | Citille    |             |               |               |                   |                 |                 |                  |
|                         | Underberg Ve                           |            |             |               |               |                   |                 |                 |                  |

Beef: 3

Western Cape

George, George Animal Hospital

| Beef: 3           |                    |            |             |               |               |                   |                 |                 |                  |
|-------------------|--------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
|                   | h, Stellenbosc     | h Animal   | Hospital    |               |               |                   |                 |                 |                  |
| Beef: 1           | ,                  |            |             |               |               |                   |                 |                 |                  |
| Northern Ca       | ре                 |            |             |               |               |                   |                 |                 |                  |
|                   | Kimberley Die      | rekliniek  |             |               |               |                   |                 |                 |                  |
| Beef: 1           |                    |            |             |               |               |                   |                 |                 |                  |
| Papilloma lesi    | ions seen at aba   | attoir     |             |               |               |                   |                 |                 |                  |
|                   | uruman Diere       |            |             |               |               |                   |                 |                 |                  |
| Beef: 2           |                    |            |             |               |               |                   |                 |                 |                  |
| Rota viru         | S                  |            |             |               |               |                   |                 |                 | <u>^</u>         |
| PROVINCE          | Mpumalanga         | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                    |            |             |               | 2.3 (4)       | 1.5 (2)           |                 | 1.0 (2)         |                  |
| Level of imported | ortance scale: 1   | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than       | 10 cases         |
| Beef              |                    |            |             |               | 2.7 (3)       | 1.5 (2)           |                 |                 |                  |
| Dairy             |                    |            |             |               | 1.0 (1)       |                   |                 | 1.0 (2)         |                  |
| Free State        |                    |            |             |               |               |                   |                 |                 |                  |
| Bethlehem,        | Union Street       | Animal Co  | nsulting R  | looms         |               |                   |                 |                 |                  |
| Dairy: 1          |                    |            |             |               |               |                   |                 |                 |                  |
|                   | Greylingsrust      | t Dierespr | eekkamer    |               |               |                   |                 |                 |                  |
| Beef: 3           |                    |            |             |               |               |                   |                 |                 |                  |
| Frankfort, F      | rankfort Diere     | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 3           |                    |            |             |               |               |                   |                 |                 |                  |
|                   | shoek Dierege      | sondheid   |             |               |               |                   |                 |                 |                  |
| Beef: 2           |                    |            |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na        |                    |            |             |               |               |                   |                 |                 |                  |
|                   | tcourt Vet Clir    | nic        |             |               |               |                   |                 |                 |                  |
| Beef: 2           |                    |            |             |               |               |                   |                 |                 |                  |
|                   | zburg, Veterin     | ary House  | Hospital    |               |               |                   |                 |                 |                  |
| Beef: 1           |                    |            |             |               |               |                   |                 |                 |                  |
| Western Ca        |                    | th Consti  |             |               |               |                   |                 |                 |                  |
| Dairy: 1          | orge Herd Hea      | ui Consul  | L           |               |               |                   |                 |                 |                  |
|                   | , Dr Otto Krie     | k          |             |               |               |                   |                 |                 |                  |
|                   | ,, Di Julio Kile   | IX.        |             |               |               |                   |                 |                 |                  |
| Dairy. I          |                    |            |             |               |               |                   |                 |                 | ^                |
|                   | MI I O             |            |             |               |               |                   |                 |                 | ^                |
| Corona V          | irus               |            |             | 1             |               |                   |                 |                 |                  |
|                   | irus<br>Mpumalanga | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |

| airy  |   |              |              |               | 1.0 (1)                      |                   |                    |                 |                  |
|---|---|--------------|--------------|---------------|------------------------------|-------------------|--------------------|-----------------|------------------|
| ree State   |   |              |              |               |                              |                   |                    |                 |                  |
|   | Union Street  | Animal Co    | nsulting R   | Rooms         |                              |                   |                    |                 |                  |
| Dairy: 1  |   |              |              |               |                              |                   |                    |                 |                  |
| Poisonin  | igs (Plant)   | and Fu       | ngal         |               |                              |                   |                    |                 |                  |
|   |   |              |              |               |                              |                   |                    |                 |                  |
| Cardiac g   | lycoside po   | isoning      |              |               |                              |                   |                    |                 | _                |
| PROVINCE  | Mpumalanga  | Gauteng      | Limpopo      | North<br>West | Free<br>State                | Kwazulu-<br>Natal | Eastern<br>Cape    | Western<br>Cape | Northern<br>Cape |
| Average   |   |              |              |               |                              |                   |                    | 1.8 (4)         | 2.0 (1)          |
| Level of imported   | ortance scale: 1  | = one case   | e, 2 = more  | than on       | e case b                     | ut less than t    | en and 3 =         | more than       | 10 cases         |
| Beef  |   |              |              |               |                              |                   |                    |                 | 2.0(1)           |
| Sheep   |   |              |              |               |                              |                   |                    | 2.0 (2)         |                  |
| Goat  |   |              |              |               |                              |                   |                    | 1.5 (2)         |                  |
| Vestern Ca  | no  |              |              |               |                              |                   |                    | ( )             |                  |
|   | est, Beaufort I   | Diereklinie  | ak           |               |                              |                   |                    |                 |                  |
| Sheep: 2, Go  |   | JICI CKIIIII | <b>-1</b> 1  |               |                              |                   |                    |                 |                  |
|   | est, Beaufort \   | Nest State   | e Vet        |               |                              |                   |                    |                 |                  |
| Sheep: 2  |   |              |              |               |                              |                   |                    |                 |                  |
| The activities ( !  |   |              |              |               |                              |                   |                    |                 |                  |
|   | storm)and <i>Ornit</i>  | thogalum (d  | chinkerinche | ees) mos      | tly the c                    | ause.             |                    |                 |                  |
| Goat: 2   |   |              |              |               | tly the c                    | ause.             |                    |                 |                  |
| Goat: 2<br><i>Thesium</i> and   | <i>Ornithogalum</i> ir  |              |              |               | tly the c                    | ause.             |                    |                 |                  |
| Goat: 2<br><i>Thesium</i> and<br><b>Northern Ca</b>   | <i>Ornithogalum</i> ir<br>a <b>pe</b>                               |              |              |               | tly the ca                   | ause.             |                    |                 |                  |
| Goat: 2<br>Thesium and<br>Northern Ca<br>Kimberley, '   | <i>Ornithogalum</i> ir<br>a <b>pe</b>                               |              |              |               | tly the c                    | ause.             |                    |                 |                  |
| Goat: 2<br>Thesium and<br>Northern Ca<br>Kimberley, '<br>Beef: 2  | <i>Ornithogalum</i> ir<br>a <b>pe</b>                               |              |              |               | tly the c                    | ause.             |                    |                 |                  |
| Goat: 2<br>Thesium and<br>Northern Ca<br>Kimberley, '<br>Beef: 2  | <i>Ornithogalum</i> ir<br>a <b>pe</b>                               |              |              |               | tly the ca                   | ause.             |                    |                 |                  |
| Goat: 2<br>Thesium and<br>Northern Ca<br>Kimberley,<br>Beef: 2<br>Glangkop<br>Cestrum                           | <i>Ornithogalum</i> ir<br>a <b>pe</b>                               | n areas tha  | t received r |               | Free<br>State                | Kwazulu-<br>Natal | Eastern<br>Cape    | Western<br>Cape | Northern<br>Cape |
| Goat: 2<br>Thesium and<br>Northern Ca<br>Kimberley,<br>Beef: 2<br>Glangkop<br>Cestrum                           | <i>Ornithogalum</i> ir<br>ape<br>Vets4all                           | n areas tha  | t received r | ains.         | Free                         | Kwazulu-          |                    |                 | Northern         |
| Goat: 2 Thesium and Northern Ca Kimberley, Geef: 2 Glangkop Cestrum PROVINCE Average Level of impo              | Ornithogalum in ape<br>Vets4all<br>Mpumalanga                       | Gauteng      | t received r | North<br>West | Free State  1.8 (8)          | Kwazulu-<br>Natal | 1.0 (1)            | Cape            | Northern<br>Cape |
| Goat: 2 Thesium and Northern Ca Kimberley, Beef: 2 Glangkop  Cestrum  PROVINCE  Average  Level of impore ported | Ornithogalum in ape Vets4all  Mpumalanga                            | Gauteng      | t received r | North<br>West | Free State  1.8 (8)          | Kwazulu-<br>Natal | 1.0 (1)            | Cape            | Northern<br>Cape |
| Goat: 2 Thesium and Northern Ca Kimberley, Beef: 2 Glangkop Cestrum PROVINCE Average                            | Ornithogalum in ape Vets4all  Mpumalanga  1.0 (1)  ortance scale: 1 | Gauteng      | t received r | North<br>West | Free State  1.8 (8) e case b | Kwazulu-<br>Natal | 1.0 (1) en and 3 = | Cape            | Northern<br>Cape |

| - IC I                        | . D. II.           |               |             |               |               |                   |                 |                 |                  |
|-------------------------------|--------------------|---------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
|                               | four Diereklin     | iek           |             |               |               |                   |                 |                 |                  |
| Beef: 1                       |                    |               |             |               |               |                   |                 |                 |                  |
| Free State                    | D. 61              |               |             |               |               |                   |                 |                 |                  |
|                               | in, Dr Stephar     | wesseis       |             |               |               |                   |                 |                 |                  |
| Beef: 1                       | C                  | h D!          | .           |               |               |                   |                 |                 |                  |
|                               | , Greylingsrust    | Dierespr      | ееккатег    |               |               |                   |                 |                 |                  |
| Beef: 2                       | Is a water of Diam | .   .   !   . |             |               |               |                   |                 |                 |                  |
| <b>Hoopstag, H</b><br>Beef: 2 | loopstad Dier      | екипіек       |             |               |               |                   |                 |                 |                  |
|                               | /amaaldaring       | Diaraklini    | ماد         |               |               |                   |                 |                 |                  |
| Beef: 2                       | Cameeldoring       | Dierekiiiii   | ек          |               |               |                   |                 |                 |                  |
|                               | Grasveld Kud       | dogocond      | hoid        |               |               |                   |                 |                 |                  |
| Sheep: 2                      | Grasveiu Kuu       | uegesonu      | iiiciu      |               |               |                   |                 |                 |                  |
| •                             | land Dierehos      | nitaal        |             |               |               |                   |                 |                 |                  |
| Beef: 2                       | idila Dicicilos    | picaai        |             |               |               |                   |                 |                 |                  |
|                               | arden Dierekli     | niek          |             |               |               |                   |                 |                 |                  |
| Beef: 2                       |                    |               |             |               |               |                   |                 |                 |                  |
|                               | n, Wesselsbro      | n Dierekli    | niek        |               |               |                   |                 |                 |                  |
| Sheep: 1                      | ,                  | J. J          | . =         |               |               |                   |                 |                 |                  |
| Eastern Cap                   | е                  |               |             |               |               |                   |                 |                 |                  |
|                               | Uitenhage Die      | rehospita     | al          |               |               |                   |                 |                 |                  |
| Beef: 1                       |                    |               |             |               |               |                   |                 |                 |                  |
|                               |                    |               |             |               |               |                   |                 |                 |                  |
| Cynanchi                      | <i>um</i> poisonir | <b>ig</b>     |             |               |               |                   |                 |                 | _                |
| PROVINCE                      | Mpumalanga         | Gauteng       | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                       |                    |               |             |               |               |                   |                 | 2.0 (1)         |                  |
| Level of impore               | ortance scale: 1   | = one case    | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                          |                    |               |             |               |               |                   |                 | 2.0(1)          |                  |
|                               |                    |               |             |               |               |                   |                 | 2.0 (1)         |                  |
| Western Ca                    | •                  | iniak         |             |               |               |                   |                 |                 |                  |
| Beef: 2                       | ledon Dierekli     | IIIEK         |             |               |               |                   |                 |                 |                  |
| Facial ecz                    | zema               |               |             |               |               |                   |                 |                 | _                |
| PROVINCE                      | Mpumalanga         | Gauteng       | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                       |                    |               |             |               | 2.0<br>(1)    |                   | 2.0 (2)         | 1.3 (3)         |                  |
| Level of impore               | ortance scale: 1   | = one case    | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                          |                    |               |             |               |               |                   | 3.0 (1)         |                 |                  |
| Dairy                         |                    |               |             |               |               |                   | 1.0 (1)         | 1.0(1)          |                  |
| Sheep                         |                    |               |             |               | 2.0           |                   | 1.0 (1)         | 1.5 (2)         |                  |
| Free State                    |                    |               |             |               | (1)           |                   |                 | 1.3 (2)         |                  |
|                               |                    |               |             |               |               |                   |                 |                 |                  |

| Oranieville       | Grasveld Kud      | deaesond    | heid        |               |               |                   |                 |                 |                  |
|-------------------|-------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Sheep: 2          | 0.45.0.4          |             |             |               |               |                   |                 |                 |                  |
| Eastern Cap       | <b>10</b>         |             |             |               |               |                   |                 |                 |                  |
|                   | Alexandria Pl     | attaland S  | Sprookkam   | or            |               |                   |                 |                 |                  |
| Dairy: 1          | Alexaliulia Pi    | atterariu s | ргесккан    | ICI           |               |                   |                 |                 |                  |
|                   | y, Cape Cross     | /otorinam   | . Hoonital  |               |               |                   |                 |                 |                  |
| Beef: 3           | y, cape cross     | vetermary   | поѕрісаі    |               |               |                   |                 |                 |                  |
| More than 30      | ١                 |             |             |               |               |                   |                 |                 |                  |
|                   |                   |             |             |               |               |                   |                 |                 |                  |
| Western Ca        |                   |             | <u> </u>    |               |               |                   |                 |                 |                  |
|                   | orge Herd Hea     | tn Consui   | τ           |               |               |                   |                 |                 |                  |
| Dairy: 1          | (WC) Usidalb      | ava Diava   | lelimi ale  |               |               |                   |                 |                 |                  |
|                   | (WC), Heidelb     | erg Diere   | Kiiniek     |               |               |                   |                 |                 |                  |
| Sheep: 2          | . Curallandan     | Dioroboo    | mitaal      |               |               |                   |                 |                 |                  |
| Sheep: 1          | n, Swellendam     | Dierenos    | pitaai      |               |               |                   |                 |                 |                  |
|                   |                   |             |             |               |               |                   |                 |                 |                  |
| Geeldikk          | op/Dikoor         |             |             |               |               |                   |                 |                 | ^                |
| PROVINCE          | Mpumalanga        | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                   |             |             | 3.0 (1)       | 1.0<br>(1)    |                   |                 | 3.0 (2)         |                  |
| Level of imported | ortance scale: 1  | = one case  | e, 2 = more | than on       |               | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              |                   |             |             |               | 1.0 (1)       |                   |                 |                 |                  |
| Sheep             |                   |             |             | 3.0 (1)       |               |                   |                 | 3.0 (2)         |                  |
| North West        |                   |             |             |               |               |                   |                 |                 |                  |
|                   | Bloemhof Dier     | ekliniek    |             |               |               |                   |                 |                 |                  |
| Sheep: 3          |                   |             |             |               |               |                   |                 |                 |                  |
|                   | notosensitivity d | ue to duww  | veltjies    |               |               |                   |                 |                 |                  |
| Free State        |                   |             |             |               |               |                   |                 |                 |                  |
| •                 | shoek Dierege     | sondheid    | •           |               |               |                   |                 |                 |                  |
| Beef: 1           |                   |             |             |               |               |                   |                 |                 |                  |
| Western Ca        |                   |             |             |               |               |                   |                 |                 |                  |
|                   | est, Beaufort I   | Diereklinie | eK          |               |               |                   |                 |                 |                  |
| Sheep: 3          | - \/ - 1 1        |             |             |               |               |                   |                 |                 |                  |
| •                 | s Veterinary H    | ospitai     |             |               |               |                   |                 |                 |                  |
| Sheep: 3          |                   |             |             |               |               |                   |                 |                 |                  |
| Gifblaar          |                   |             |             |               |               |                   |                 |                 | _                |
| PROVINCE          | Mpumalanga        | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           | 3.0 (1)           |             | 1.0 (1)     |               |               |                   |                 |                 |                  |
| Level of imported | ortance scale: 1  | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              | 3.0 (1)           |             | 1.0(1)      |               |               |                   |                 |                 |                  |
|                   |                   |             |             |               |               |                   |                 |                 |                  |

| Mpumalang                             |                  |            |             |               |               |                   |                 |                 |                  |
|---------------------------------------|------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
|                                       | , Neil Fourie V  | eeartseny  | dienste     |               |               |                   |                 |                 |                  |
| Beef: 3                               |                  |            |             |               |               |                   |                 |                 |                  |
| Limpopo                               | D'atambana N     |            | Oli . i .   |               |               |                   |                 |                 |                  |
| <b>Polokwane,</b><br>Beef: 1          | , Pietersburg V  | eterinary  | Clinic      |               |               |                   |                 |                 |                  |
| beer. 1                               |                  |            |             |               |               |                   |                 |                 |                  |
| Gousiekt                              | е                |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE                              | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                  |            | 1.0 (1)     |               |               |                   |                 |                 |                  |
| Level of imported                     | ortance scale: 1 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                  |            | 1.0(1)      |               |               |                   |                 |                 |                  |
| Limpopo                               |                  |            | (-)         |               |               |                   |                 |                 |                  |
|                                       | , Pietersburg V  | eterinary  | Clinic      |               |               |                   |                 |                 |                  |
| Beef: 1                               | ,                | ,          |             |               |               |                   |                 |                 |                  |
| Kikuyu p                              | oisoning         |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE                              | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                  |            |             |               |               | 3.0 (1)           |                 |                 |                  |
| Level of imported                     | ortance scale: 1 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                  |            |             |               |               | 3.0 (1)           |                 |                 |                  |
| Kwazulu-Na                            | atal             |            |             |               |               | 3.0 (1)           |                 |                 |                  |
|                                       | dumeni Herd I    | nealth     |             |               |               |                   |                 |                 |                  |
| Lantana                               |                  |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE                              | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                  | 1.0(1)     |             |               |               | 1.0 (1)           |                 | 2.0 (1)         |                  |
| Level of imported                     | ortance scale: 1 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                  | 1.0 (1)    |             |               |               | 1.0 (1)           |                 |                 |                  |
| Dairy                                 |                  |            |             |               |               |                   |                 | 2.0(1)          |                  |
| Gauteng                               |                  |            |             |               |               |                   |                 |                 |                  |
| Pretoria, Or                          | nderstepoort A   | cademic    | Hospital aı | nd Prod       | uction A      | Animal Clinio     | С               |                 |                  |
| Pretoria, Or<br>Beef: 1               |                  | Academic   | Hospital aı | nd Prod       | uction A      | Animal Clini      | С               |                 |                  |
| Pretoria, Or<br>Beef: 1<br>Kwazulu-Na |                  |            |             | nd Prod       | uction /      | Animal Clini      | С               |                 |                  |

| Western Ca                      |  |            |             |               |               |                      |                   |                 |                  |
|---------------------------------|--|------------|-------------|---------------|---------------|----------------------|-------------------|-----------------|------------------|
|                                 | n, Swellendam  | Dierehos   | pitaal      |               |               |                      |                   |                 |                  |
| Dairy: 2                        |  |            |             |               |               |                      |                   |                 |                  |
| Nenta po                        | isoning (Kri   | impsiek    | te)         |               |               |                      |                   |                 | _                |
| PROVINCE                        | Mpumalanga   | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal    | Eastern<br>Cape   | Western<br>Cape | Northern<br>Cape |
| Average                         |  |            |             |               |               |                      | 3.0 (1)           | 1.0 (1)         |                  |
| Level of impore                 | ortance scale: 1   | = one case | e, 2 = more | than on       | e case b      | ut less than to      | en and 3 =        | more than :     | 10 cases         |
| Goat                            |  |            |             |               |               |                      | 3.0 (1)           | 1.0(1)          |                  |
| Goat: 3<br>Goats, Boer g        | e<br>delaide Veterion<br>goats and Angor<br>on upon being dr | as have be |             | fected by     | the bro       | wsing of <i>Coty</i> | <i>ledon</i> (Ner | ita) and vark   | coor, causin     |
| Western Ca                      |  | IVCII      |             |               |               |                      |                   |                 |                  |
| Beaufort We                     | est, Beaufort I  | Diereklini | ek          |               |               |                      |                   |                 |                  |
| Goat: 1                         |  |            |             |               |               |                      |                   |                 |                  |
| Prussic a                       | cid poisonir   | ng .       |             |               |               |                      |                   |                 | _                |
| PROVINCE                        | Mpumalanga   | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal    | Eastern<br>Cape   | Western<br>Cape | Northern<br>Cape |
| Average                         |  |            |             |               |               | 1.0(1)               |                   | 1.0 (1)         |                  |
| Level of imported               | ortance scale: 1   | = one case | e, 2 = more | than on       | e case b      | ut less than to      | en and 3 =        | more than 1     | 10 cases         |
| Beef                            |  |            |             |               |               | 1.0(1)               |                   |                 |                  |
| Dairy                           |  |            |             |               |               | <u> </u>             |                   | 1.0(1)          |                  |
| Kwazulu-Na                      | ntal   |            |             |               |               |                      |                   |                 |                  |
| <b>Underberg,</b><br>Beef: 1    | Underberg Ve   | terinary S | Surgery     |               |               |                      |                   |                 |                  |
| Western Ca                      |  |            |             |               |               |                      |                   |                 |                  |
| <b>Heidelberg</b> (<br>Dairy: 1 | (WC), Heidelb  | erg Diere  | kliniek     |               |               |                      |                   |                 |                  |
| Rye grass                       | s poisoning  |            |             |               |               |                      |                   |                 | _                |
| PROVINCE                        | Mpumalanga   | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal    | Eastern<br>Cape   | Western<br>Cape | Northern<br>Cape |
| Average                         |  |            |             |               |               | 3.0 (1)              |                   |                 |                  |
|                                 | ortance scale: 1   | = one case | e, 2 = more | than on       | e case b      | ut less than to      | en and 3 =        | more than :     | 10 cases         |
| reported                        |  |            |             |               |               |                      |                   |                 |                  |
| Sheep                           |  |            |             |               |               | 3.0 (1)              |                   |                 |                  |

#### Vryheid, Vryheid Privaat Veeartse Sheep: 3 Sheep on ryegrass, fungal or micro feeding disturbance **Seneciosis** North Free Kwazulu-**Eastern** Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West **State** Natal Cape Cape Cape **Average** 2.0(1)3.0 (1) Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported Beef 3.0(1) 2.0(1)Mpumalanga Lydenburg, Longtom Dierekliniek Beef: 2 Kwazulu-Natal **Kokstad, E.G.Veterinary Services** Beef: 3 Seneciosis caused havoc **Tulip Poisoning** Kwazulu-Western Northern North **Free** Eastern **PROVINCE Mpumalanga Gauteng Limpopo** West **State** Natal Cape Cape Cape 1.8 1.5(2)2.3(3)2.0(1)2.0(2)1.0(1)3.0(1) 2.0(1)**Average** (6)Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported 1.8 1.5(2) Beef 2.3 (3) 2.0(1)2.0(2)3.0(1) 2.0(1)(6)1.0(1)Sheep Mpumalanga Hendrina, Mooiplaas Veterinêre Dienste Beef: 2 Lydenburg, Longtom Dierekliniek Beef: 2 Standerton, Econovet Beef: 3 Gauteng Nigel, Nigel Diere Spreekkamer Beef: 2 **North West** Christiana, Christiana Dierehospitaal Vryburg, Molopo Dierekliniek Beef: 2 **Free State Bethlehem, Bethlehem Animal Hospital**

| Beef: 3   |   |   |             |               |                                      |                       |                 |                         |   |
|---|---|---|-------------|---------------|--------------------------------------|-----------------------|-----------------|-------------------------|---|
|   | Cameeldoring  | Diereklini                              | ek          |               |                                      |                       |                 |                         |   |
| Beef: 1   |   |   |             |               |                                      |                       |                 |                         |   |
|   | Grasveld Kud  | deaesond                                | heid        |               |                                      |                       |                 |                         |   |
| Beef: 2   |   |   |             |               |                                      |                       |                 |                         |   |
|   | land Dierehos   | pitaal                                  |             |               |                                      |                       |                 |                         |   |
| Beef: 2   |   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |             |               |                                      |                       |                 |                         |   |
|   | nekal Dierekli  | niek                                    |             |               |                                      |                       |                 |                         |   |
| Beef: 1   | inchai Dici chii  | inex                                    |             |               |                                      |                       |                 |                         |   |
|   | shoek Dierege   | sondheid.                               |             |               |                                      |                       |                 |                         |   |
| Beef: 2   | ondek bierege   | Jonancia                                | •           |               |                                      |                       |                 |                         |   |
| Kwazulu-Na  | atal  |   |             |               |                                      |                       |                 |                         |   |
|   | ergville Veteri   | nary Clini                              | c           |               |                                      |                       |                 |                         |   |
| Beef: 2   |   | ,                                       |             |               |                                      |                       |                 |                         |   |
|   | dumeni Herd l   | nealth                                  |             |               |                                      |                       |                 |                         |   |
| Beef: 2   |   |   |             |               |                                      |                       |                 |                         |   |
| Eastern Cap   | )e  |   |             |               |                                      |                       |                 |                         |   |
| <u>-</u>  | Uitenhage Die   | rehospita                               | al          |               |                                      |                       |                 |                         |   |
| Sheep: 1  |   | p.icu                                   |             |               |                                      |                       |                 |                         |   |
| Western Ca  | pe  |   |             |               |                                      |                       |                 |                         |   |
|   | erberg Veterii  | nary Hosn                               | ital        |               |                                      |                       |                 |                         |   |
| Beef: 3   |   | ,                                       |             |               |                                      |                       |                 |                         |   |
| Northern Ca   | ape   |   |             |               |                                      |                       |                 |                         |   |
|   | Kimberley Die   | rekliniek                               |             |               |                                      |                       |                 |                         |   |
| Beef: 2   |   |   |             |               |                                      |                       |                 |                         |   |
| DCC1 - Z  |   |   |             |               |                                      |                       |                 |                         |   |
|   |   |   |             |               |                                      |                       |                 |                         |   |
| Diplodios   | sis   |   |             |               |                                      |                       |                 |                         | ^                                       |
|   | sis   |   |             |               |                                      |                       |                 |                         | ^                                       |
| Diplodios   |   | Gauteng                                 | Limpopo     | North         |                                      | Kwazulu-              | Eastern         | Western                 | ^<br>Northern                           |
| Diplodios   | sis<br>Mpumalanga   | Gauteng                                 | Limpopo     | North<br>West | Free<br>State                        |                       | Eastern<br>Cape | Western<br>Cape         | ^<br>Northern<br>Cape                   |
| Diplodios   |   | Gauteng                                 | Limpopo     |               | State                                |                       |                 |                         |   |
| Diplodios PROVINCE  |   | Gauteng                                 | Limpopo     |               |                                      |                       |                 |                         | Cape                                    |
| Diplodios   |   | Gauteng                                 | Limpopo     |               | State                                |                       |                 |                         |   |
| Diplodios PROVINCE  |   | Gauteng                                 | Limpopo     |               | <b>State</b> 1.0                     |                       |                 |                         | Cape                                    |
| Diplodios PROVINCE Average  | Mpumalanga  |   |             | West          | 1.0<br>(1)                           | Natal                 | Cape            | Cape                    | 2.0 (1)                                 |
| Diplodios PROVINCE Average  |   |   |             | West          | 1.0<br>(1)                           | Natal                 | Cape            | Cape                    | 2.0 (1)                                 |
| PROVINCE  Average  Level of impo  | Mpumalanga  |   |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1)                                 |
| PROVINCE  Average  Level of imporeported  | Mpumalanga  |   |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of impo  | Mpumalanga  |   |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1)                                 |
| PROVINCE  Average  Level of imporeported  Beef  | Mpumalanga  |   |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State  | Mpumalanga ortance scale: 1                               | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se  | Mpumalanga  | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1  | Mpumalanga  ortance scale: 1                              | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca                                  | Mpumalanga  ortance scale: 1  nekal Dierekli              | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, V                     | Mpumalanga  ortance scale: 1  nekal Dierekli              | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, V Beef: 2             | Mpumalanga  ortance scale: 1  nekal Dierekli              | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, V                     | Mpumalanga  ortance scale: 1  nekal Dierekli              | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, V Beef: 2             | Mpumalanga  ortance scale: 1  nekal Dierekli              | = one case                              |             | West          | 1.0 (1) e case b                     | Natal                 | Cape            | Cape                    | 2.0 (1) 10 cases                        |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, Y Beef: 2  Other      | Mpumalanga  ortance scale: 1  nekal Dierekli ape Vets4all | = one case                              | e, 2 = more | west than one | 1.0 (1) e case b                     | Natal  ut less than t | Cape en and 3 = | more than               | 2.0 (1) 10 cases 2.0 (1)                |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, Y Beef: 2  Other      | Mpumalanga  ortance scale: 1  nekal Dierekli              | = one case                              | e, 2 = more | West          | 1.0<br>(1)<br>e case b<br>1.0<br>(1) | Natal  ut less than t | en and 3 =      | more than  Western      | 2.0 (1)  10 cases  2.0 (1)  A  Northern |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, Y Beef: 2  Other      | Mpumalanga  ortance scale: 1  nekal Dierekli ape Vets4all | = one case                              | e, 2 = more | west than one | 1.0 (1) e case b 1.0 (1)  Free       | Natal  ut less than t | Cape en and 3 = | more than               | 2.0 (1) 10 cases 2.0 (1)                |
| PROVINCE  Average  Level of imported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, 1 Beef: 2 Other  PROVINCE | Mpumalanga  ortance scale: 1  nekal Dierekli ape Vets4all | = one case                              | e, 2 = more | west than one | 1.0 (1) e case b 1.0 (1)  Free       | Natal  ut less than t | en and 3 =      | more than  Western Cape | 2.0 (1)  10 cases  2.0 (1)  A  Northern |
| PROVINCE  Average  Level of imporeported  Beef  Free State Senekal, Se Beef: 1 Northern Ca Kimberley, Y Beef: 2  Other      | Mpumalanga  ortance scale: 1  nekal Dierekli ape Vets4all | = one case                              | e, 2 = more | west than one | 1.0 (1) e case b 1.0 (1)  Free       | Natal  ut less than t | en and 3 =      | more than  Western      | 2.0 (1)  10 cases  2.0 (1)  A  Northern |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Sheep                 |                        |               |             |               |               |                   |                 | 3.0 (1)         |                  |
|-----------------------|------------------------|---------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Western Ca            | ре                     |               |             |               |               |                   |                 |                 | •                |
|                       | s Veterinary H         | ospital       |             |               |               |                   |                 |                 |                  |
| Sheep: 3              | <u>-</u>               | -             |             |               |               |                   |                 |                 |                  |
| Dikkop on nu          | merous farms           |               |             |               |               |                   |                 |                 |                  |
| Poisonin              | ıgs                    |               |             |               |               |                   |                 |                 |                  |
|                       |                        |               |             |               |               |                   |                 |                 |                  |
| <b>Urea Pois</b>      | soning                 |               |             |               |               |                   |                 |                 | ^                |
| PROVINCE              | Mpumalanga             | Gauteng       | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average               |                        | 1.0 (2)       |             | 1.0 (1)       | 1.8<br>(4)    |                   | 3.0 (1)         |                 | 2.0 (1)          |
| Level of impereported | ortance scale: 1       | = one case    | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                  |                        | 1.0(1)        |             | 1.0 (1)       | (2)           |                   |                 |                 | 2.0 (1)          |
| Sheep                 |                        | 1.0(1)        |             |               | 2.0 (1)       |                   | 3.0 (1)         |                 |                  |
| Goat                  |                        |               |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Gauteng               |                        |               |             |               |               |                   |                 |                 |                  |
|                       | n, Bapsfontein         | Dierehos      | pitaal      |               |               |                   |                 |                 |                  |
| Sheep: 1              |                        |               |             |               |               |                   |                 |                 |                  |
|                       | nderstepoort A         | cademic       | Hospital a  | nd Prod       | uction /      | Animal Clini      | С               |                 |                  |
| Beef: 1               |                        |               |             |               |               |                   |                 |                 |                  |
| North West            |                        |               |             |               |               |                   |                 |                 |                  |
|                       | Christiana Die         | rehospita     | al          |               |               |                   |                 |                 |                  |
| Beef: 1               |                        |               |             |               |               |                   |                 |                 |                  |
| Free State            |                        |               |             |               |               |                   |                 |                 |                  |
|                       | Oosvrystaat Di         | ere Proat     | ıkte        |               |               |                   |                 |                 |                  |
| Beef: 1               | s Dierehospita         | al            |             |               |               |                   |                 |                 |                  |
| Sheep: 2, Go          |                        | ldi           |             |               |               |                   |                 |                 |                  |
|                       | ac. 1<br>Inburg Dierek | liniak        |             |               |               |                   |                 |                 |                  |
| Beef: 3               | ilibuly Dielek         | IIIIICK       |             |               |               |                   |                 |                 |                  |
| Eastern Cap           | 10                     |               |             |               |               |                   |                 |                 |                  |
|                       | , Steynsburg D         | )ierehosn     | itaal       |               |               |                   |                 |                 |                  |
| Sheep: 3              | , occyniaddig L        | -ici cilosp   |             |               |               |                   |                 |                 |                  |
|                       | (Late onset of         | colostrum)    | . Many case | s. all ass    | ociated       | with urea in f    | eed. Urea r     | ooisonina in    | neonate          |
| lambs, less th        |                        | -3.00ti aiii) |             | ,             |               |                   | - Ju. 5, Cd     |                 |                  |
| Northern Ca           |                        |               |             |               |               |                   |                 |                 |                  |
|                       | Kuruman Diere          | kliniek       |             |               |               |                   |                 |                 |                  |
| Beef: 2               |                        |               |             |               |               |                   |                 |                 |                  |
|                       |                        |               |             |               |               |                   |                 |                 |                  |

**Snake Bite** 

| PROVINCE          | Mpumalanga       | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|-------------------|------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Average           |                  |             |             |               | 2.0 (1)       |                   |                 | 1.0 (1)         | 2.0 (1)          |
| Level of imported | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              |                  |             |             |               | 2.0 (1)       |                   |                 |                 | 2.0 (1)          |
| Dairy             |                  |             |             |               |               |                   |                 | 1.0(1)          |                  |
| Free State        |                  |             |             |               |               |                   |                 |                 |                  |
| Winburg, W        | inburg Dierek    | liniek      |             |               |               |                   |                 |                 |                  |
| Beef: 2           | -                |             |             |               |               |                   |                 |                 |                  |
| Western Ca        |                  |             |             |               |               |                   |                 |                 |                  |
|                   | orge Herd Hea    | th Consul   | t           |               |               |                   |                 |                 |                  |
| Dairy: 1          |                  |             |             |               |               |                   |                 |                 |                  |
| Northern Ca       | -                | laliasi e l |             |               |               |                   |                 |                 |                  |
|                   | uruman Diere     | KIINIEK     |             |               |               |                   |                 |                 |                  |
| Beef: 2           |                  |             |             |               |               |                   |                 |                 |                  |
| Chemical          | products         |             |             |               |               |                   |                 |                 | _                |
| PROVINCE          | Mpumalanga       | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                  |             |             | 3.0 (1)       |               | 2.0 (1)           |                 |                 |                  |
| Level of impore   | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Sheep             |                  |             |             | 3.0(1)        |               | 2.0 (1)           |                 |                 |                  |
| North West        |                  |             |             |               |               | , ,               |                 |                 |                  |
| Bloemhof, B       | Sloemhof Diere   | ekliniek    |             |               |               |                   |                 |                 |                  |
| Sheep: 3          |                  |             |             |               |               |                   |                 |                 |                  |
|                   | hate poisoning   |             |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na        |                  |             |             |               |               |                   |                 |                 |                  |
|                   | dumeni Herd h    | ealth       |             |               |               |                   |                 |                 |                  |
| Sheep: 2          |                  |             |             |               |               |                   |                 |                 |                  |
| Other             |                  |             |             |               |               |                   |                 |                 | 4                |
| PROVINCE          | Mpumalanga       | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           | 3.0 (1)          |             |             |               |               |                   |                 |                 |                  |
| Level of imported | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Sheep             | 3.0 (1)          |             |             |               |               |                   |                 |                 |                  |
| Mpumalang         |                  | akliniak    |             |               |               |                   |                 |                 |                  |

| C | heep: | -2 |
|---|-------|----|
| 9 | neep. | J  |

60 sheep died due to Multimin overdose. Se toxicity

| Macro Nutritional Problems |   |         |         |         |         |         |         |  |         |  |
|----------------------------|---|---------|---------|---------|---------|---------|---------|--|---------|--|
| Energy deficiency          |   |         |         |         |         |         |         |  |         |  |
| PROVINCE                   | INCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cape |         |         |         |         |         |         |  |         |  |
| Average                    | 2.0 (1)   | 2.3 (4) | 2.0 (2) | 2.6 (5) | 2.2 (9) | 2.3 (3) | 2.5 (8) |  | 2.8 (4) |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 2.0 (1) | 2.5 (2) | 2.0 (2) | 2.5 (4) | 2.2 (6) | 2.3 (3) | 2.5 (2) | 3.0 (1) |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Dairy |         |         |         |         |         |         | 3.0 (1) |         |
| Sheep |         | 2.0 (1) |         | 3.0 (1) | 2.3 (3) |         | 2.3 (3) | 2.5 (2) |
| Goat  |         | 2.0 (1) |         |         |         |         | 2.5 (2) | 3.0 (1) |

## **Mpumalanga**

# Lydenburg, Longtom Dierekliniek

Beef: 2 Gauteng

## Hammanskraal, Themba Animal Clinic

Beef: 2, Sheep: 2, Goat: 2

# Magaliesburg, Magaliesburg; Dr Ryan Jeffrey

Beef: 3

Numerous, heavily pregnant or post-calving downer cows. Combination of PEM (protein-energy malnutrition); calcium phosphate deficiency

#### Limpopo

## **Mokopane, Bundu Veterinary Services**

Beef: 2

## **Tzaneen, ZZ2 Farm Practice**

Beef: 2 North West

# Christiana, Christiana Dierehospitaal

Beef: 3, Sheep: 3

# Klerksdorp, Klerksdorp Dierehospitaal

Beef: 2

# Schweizer-Reneke, Buffeldoorn Dierekliniek SR

Reef: 3

# Vryburg, Molopo Dierekliniek

Beef: 2 Free State

# Clocolan, Clocolan Dierekliniek

Beef: 2

## **Kroonstad, Kroonstad Dierehospitaal**

Beef: 2, Sheep: 2

# Oranjeville, Grasveld Kuddegesondheid

Beef: 2, Sheep: 2

Reitz, Riemland Dierehospitaal

Beef: 2

Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3, Sheep: 3

Winburg, Winburg Dierekliniek

Beef: 2

Kwazulu-Natal

**Dundee, Endumeni Herd health** 

Beef: 2

**Mooi River, Mooirivier Vet Clinic** 

Beef: 2

**Vryheid, Vryheid Privaat Veeartse** 

Beef: 3

**Eastern Cape** 

Alexandria, Alexandria Platteland Spreekkamer

Dairv: 3

Aliwal North, Hertzogbrug Dierekliniek

Beef: 2, Sheep: 2

**Graaff-Reinet, Graaff Reinet Veterinary Clinic** 

Sheep: 2, Goat: 2

Steynsburg, Steynsburg Dierehospitaal

Beef: 3, Sheep: 3, Goat: 3

**Northern Cape** 

De Aar, De Aar Veterinary Clinic

Sheep: 2

Postmasburg, Postmasburg Dierekliniek

Beef: 3, Sheep: 3, Goat: 3

| Protein deficiency |            |         |         |               |               |                   |                 |                 |                  |
|--------------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE           | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average            | 3.0 (3)    | 1.8 (6) | 2.0 (1) | 2.8 (4)       | 2.0 (6)       | 3.0 (1)           | 2.4 (7)         |                 | 2.0 (1)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 3.0 (1) | 2.0 (3) | 2.0 (1) | 2.7 (3) | 2.0<br>(4) | 3.0 (1) | 2.5 (2) |         |
|-------|---------|---------|---------|---------|------------|---------|---------|---------|
| Sheep | 3.0 (1) | 1.5 (2) |         | 3.0 (1) | 2.0<br>(2) |         | 2.3 (3) | 2.0 (1) |
| Goat  | 3.0 (1) | 2.0 (1) |         |         |            |         | 2.5 (2) |         |

Mpumalanga

Lydenburg, Longtom Dierekliniek

Beef: 3, Sheep: 3, Goat: 3

Gauteng

**Bapsfontein, Bapsfontein Dierehospitaal** 

Beef: 1, Sheep: 1

Hammanskraal, Themba Animal Clinic

Beef: 2, Sheep: 2, Goat: 2

Magaliesburg, Magaliesburg; Dr Ryan Jeffrey

Beef: 3

Numerous, heavily pregnant or post-calving downer cows. Combination of PEM (protein-energy malnutrition); calcium phosphate deficiency

#### Limpopo

**Mokopane, Bundu Veterinary Services** 

Beef: 2

**North West** 

Christiana, Christiana Dierehospitaal

Beef: 3, Sheep: 3

Klerksdorp, Klerksdorp Dierehospitaal

Beef: 2

Schweizer-Reneke, Buffeldoorn Dierekliniek SR

Beef: 3
Free State

Clocolan, Clocolan Dierekliniek

Beef: 2

Kroonstad, Kroonstad Dierehospitaal

Beef: 2, Sheep: 2

Oranjeville, Grasveld Kuddegesondheid

Beef: 2, Sheep: 2

Winburg, Winburg Dierekliniek

Beef: 2

**Kwazulu-Natal** 

Vryheid, Vryheid Privaat Veeartse

Beef: 3

**Eastern Cape** 

Aliwal North, Hertzogbrug Dierekliniek

Beef: 2, Sheep: 2

**Graaff-Reinet, Graaff Reinet Veterinary Clinic** 

Sheep: 2, Goat: 2

Steynsburg, Steynsburg Dierehospitaal

Beef: 3, Sheep: 3, Goat: 3

**Northern Cape** 

De Aar, De Aar Veterinary Clinic

Sheep: 2

| Phosphate deficiency   |            |         |         |               |               |                   |                 |                 |                  |
|--|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE   | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average  |            | 3.0 (1) |         | 2.3 (3)       |               |                   |                 |                 | 2.7 (3)          |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 1 reported |            |         |         |               |               |                   |                 |                 | 10 cases         |

| Beef  | 3.0 (1) | 2.0 (2) | 2.7 (3) |
|-------|---------|---------|---------|
| Sheep |         | 3.0(1)  |         |

#### Gauteng

Magaliesburg, Magaliesburg; Dr Ryan Jeffrey

Roof: 3

Numerous, heavily pregnant or post-calving downer cows. Combination of PEM (protein-energy malnutrition); calcium phosphate deficiency

**North West** 

Christiana, Christiana Dierehospitaal

Beef: 3, Sheep: 3

#### Vryburg, Molopo Dierekliniek Beef: 1 **Northern Cape** Kuruman, Kuruman Dierekliniek Beef: 2 Postmasburg, Postmasburg Dierekliniek Beef: 3 **Upington, Upington Veeartsenykliniek** Beef: 3 Deficiency - Western Kalahari **Calcium deficiency** North **Free** Kwazulu-**Eastern** Western Northern PROVINCE Mpumalanga Gauteng Limpopo West State Natal Cape Cape Cape 2.0 **Average** 1.0(2)3.0(1) 3.0 (1) 1.0(1)(4)Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported 1.5 **Beef** 1.0(1)3.0(1) 3.0 (1) (2)**Dairy** 1.0(1)1.0(1)Sheep **Mpumalanga Balfour, Balfour Dierekliniek** Beef: 1 **Bethal, Bethal Dierekliniek** Dairy: 1 Gauteng Magaliesburg, Magaliesburg; Dr Ryan Jeffrey Beef: 3 Numerous, heavily pregnant or post-calving downer cows. Combination of PEM (protein-energy malnutrition); calcium phosphate deficiency **Free State Excelsior, Weltevrede Dierekliniek** Beef: 2, Sheep: 2 Senekal, Senekal Dierekliniek Beef: 1 Vrede, Saulshoek Dieregesondheid. Sheep: 3 Kwazulu-Natal **Underberg, Underberg Veterinary Surgery** Beef: 3 **Western Cape** Malmesbury, Dr Otto Kriek

Subclinical hypocalcaemia: Often manifests in the form of retained placentas. Marked reduction in retained placentas

after correct management of blood calcium levels at or directly after parturition.

# **Micro Nutritional Problems**

Dairy: 1

| Copper d  | eficiency                              |            |             |               |               |                   |                 |                 | _                |
|---|--|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE  | Mpumalanga                             | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   | 2.0 (1)                                | 1.0 (1)    |             |               |               | 2.0 (1)           |                 |                 |                  |
| Level of imported   | ortance scale: 1                       | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef  |  | 1.0(1)     |             |               |               | 2.0 (1)           |                 |                 |                  |
| Dairy   | 2.0(1)                                 |            |             |               |               |                   |                 |                 |                  |
| Mpumalanga Piet Retief, Pets Vet Hospital  Dairy: 2  Gauteng  Bronkhorstspruit, Kerkstraat Dierekliniek  Beef: 1  Kwazulu-Natal  Underberg, Underberg Veterinary Surgery  Beef: 2 |  |            |             |               |               |                   |                 |                 |                  |
| Zinc defic  | ciency                                 |            |             |               |               |                   |                 |                 | 2                |
| PROVINCE  | Mpumalanga                             | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   |  | 2.0 (1)    |             |               |               | 2.0 (1)           |                 |                 |                  |
| Level of imported   | ortance scale: 1                       | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than       | 10 cases         |
| Beef  |  |            |             |               |               | 2.0 (1)           |                 |                 |                  |
| Goat  |  | 2.0 (1)    |             |               |               |                   |                 |                 |                  |
| Goat: 2<br><b>Kwazulu-Na</b>  | nima Veterinar<br>ntal<br>Underberg Ve | •          | _           | <b>3</b>      |               |                   |                 |                 |                  |
| Selenium  | deficiency                             |            |             |               |               |                   |                 |                 | 2                |
| PROVINCE  | Mpumalanga                             | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|   | 2.0.(2)                                | 1.0 (1)    |             | 3.0 (1)       |               | 3.0 (1)           |                 |                 |                  |
| Average   | 2.0 (2)                                | 1.0 (1)    |             | ` '           |               | <u>``</u>         |                 |                 |                  |
| Average Level of imporeported   | 2.0 (2)<br>ortance scale: 1            | ` ′        | e, 2 = more | , ,           |               | ut less than to   | en and 3 =      | more than       | 10 cases         |
| Level of impo   | , í                                    | ` ′        | e, 2 = more | , ,           |               | ut less than to   | en and 3 =      | more than       | 10 cases         |

|   |                  | 1.0 (1)    |             | 2.0 (1)       |               |                   |                 |                 |                  |  |
|---|------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| Sheep   |                  | 1.0 (1)    |             | 3.0 (1)       |               |                   |                 |                 |                  |  |
| Mpumalang   |                  | araemraal: | draman      |               |               |                   |                 |                 |                  |  |
| Beef: 2   | Lydenburg Di     | erespreek  | Kamer       |               |               |                   |                 |                 |                  |  |
|   | Pets Vet Hosp    | ital       |             |               |               |                   |                 |                 |                  |  |
| Dairy: 2  |                  |            |             |               |               |                   |                 |                 |                  |  |
| Gauteng   |                  |            |             |               |               |                   |                 |                 |                  |  |
| Pretoria, An  | ima Veterinar    | y Consult  | ing Rooms   | 3             |               |                   |                 |                 |                  |  |
| Sheep: 1  |                  |            |             |               |               |                   |                 |                 |                  |  |
| North West  |                  |            | _           |               |               |                   |                 |                 |                  |  |
|   | Christiana Die   | rehospita  | al          |               |               |                   |                 |                 |                  |  |
| Sheep: 3 Kwazulu-Na   | .tal             |            |             |               |               |                   |                 |                 |                  |  |
|   | underberg Ve     | terinary S | Surgery     |               |               |                   |                 |                 |                  |  |
| Beef: 3   | Onderberg ve     | cermany c  | ourgery     |               |               |                   |                 |                 |                  |  |
|   | ım deficien      | су         |             |               |               |                   |                 |                 | <u>^</u>         |  |
| PROVINCE  | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average   |                  |            |             |               |               | 2.0 (3)           |                 |                 |                  |  |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported |                  |            |             |               |               |                   |                 |                 |                  |  |
| Beef  |                  |            |             |               |               | 3.0 (1)           |                 |                 |                  |  |
| Dairy   |                  |            |             |               |               | 2.0 (1)           |                 |                 |                  |  |
| Sheep   |                  |            |             |               |               | 1.0 (1)           |                 |                 |                  |  |
| Kwazulu-Na  | tal              |            |             |               |               | 1.0 (1)           |                 |                 |                  |  |
|   | dumeni Herd I    | nealth     |             |               |               |                   |                 |                 |                  |  |
| Beef: 3   |                  |            |             |               |               |                   |                 |                 |                  |  |
| Estcourt, Es  | tcourt Vet Cli   | nic        |             |               |               |                   |                 |                 |                  |  |
| Dairy: 2, She   | ep: 1            |            |             |               |               |                   |                 |                 | į.               |  |
| Vitamin A   | A deficiency     |            |             |               |               |                   |                 |                 | <u>^</u>         |  |
| PROVINCE  | Mpumalanga       | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average   | 1.0 (1)          |            |             | 3.0 (2)       | 2.2 (5)       |                   |                 | 1.0 (2)         |                  |  |
| Level of impore   | ortance scale: 1 | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |  |
| Beef  |                  |            |             | 3.0 (1)       | 2.0 (3)       |                   |                 |                 |                  |  |
| Sheep   | 1.0 (1)          |            |             | 3.0 (1)       | 2.5<br>(2)    |                   |                 | 1.0 (1)         |                  |  |
| Goat  |                  |            |             |               |               |                   |                 | 1.0(1)          |                  |  |
| Mpumalang   | а                |            |             |               |               |                   |                 |                 |                  |  |
|   |                  |            |             |               |               |                   |                 |                 |                  |  |

## **Balfour, Balfour Dierekliniek**

Sheep: 1
North West

Christiana, Christiana Dierehospitaal

Beef: 3, Sheep: 3
Free State

Hoopstad, Hoopstad Dierekliniek

Beef: 3, Sheep: 3

Oranjeville, Grasveld Kuddegesondheid

Beef: 2, Sheep: 2

Senekal, Senekal Dierekliniek

Beef: 1

**Western Cape** 

**Oudtshoorn, Ostrimed** 

Sheep: 1, Goat: 1

| Vitamin B1 deficiency |            |         |         |               |               |                   |                 |                 |                  |  |
|-----------------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE              | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average               |            |         |         |               | 2.5<br>(2)    |                   |                 | 1.0 (1)         |                  |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 3.0 (1) |         |
|-------|---------|---------|
| Sheep | 2.0 (1) | 1.0 (1) |

# **Free State**

Oranjeville, Grasveld Kuddegesondheid

Sheep: 2

Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3

**Western Cape** 

Beaufort West, Beaufort Dierekliniek

Sheep: 1

# **Multi-factorial Disease Conditions**

| Abortions |            |         |         |               |               |                   |                 |                 |                  |
|-----------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE  | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   | 2.0 (4)    | 2.0 (3) |         | 3.0 (2)       | 2.1 (9)       | 1.8 (4)           | 2.0 (2)         | 1.8 (5)         | 3.0 (1)          |

Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported

|                |                 |                |         |         |         |         |         | ı      |
|----------------|-----------------|----------------|---------|---------|---------|---------|---------|--------|
| Beef           | 2.0(3)          | 2.0 (1)        | 3.0 (1) | 2.0 (7) | 2.5 (2) | 1.0(1)  | 2.0(1)  |        |
| Dairy          |                 |                |         | (7)     |         |         | 1.7 (3) |        |
| Juli y         |                 |                |         | ^ ~     |         |         | 1.7 (3) |        |
| Sheep          | 2.0 (1)         | 2.0 (1)        | 3.0 (1) | 2.5 (2) | 1.0 (1) | 3.0 (1) | 2.0 (1) |        |
| Goat           |                 | 2.0 (1)        |         | , ,     | 1.0(1)  |         |         | 3.0 (1 |
| Mpumalanga     | а               |                |         |         |         |         |         |        |
| Balfour, Balf  | four Diereklir  | niek           |         |         |         |         |         |        |
| Beef: 2        |                 |                |         |         |         |         |         |        |
| Lydenburg, l   | Longtom Die     | rekliniek      |         |         |         |         |         |        |
| Beef: 2, Sheep | p: 2            |                |         |         |         |         |         |        |
|                | Lydenburg Di    | ierespreekka   | mer     |         |         |         |         |        |
| Beef: 2        |                 | <u> </u>       |         |         |         |         |         |        |
| Gauteng        |                 |                |         |         |         |         |         |        |
|                | ima Veterina    | ry Consulting  | Rooms   |         |         |         |         |        |
| Beef: 2, Sheer |                 |                |         |         |         |         |         |        |
| North West     |                 |                |         |         |         |         |         |        |
|                | Christiana Die  | erehospitaal   |         |         |         |         |         |        |
| Beef: 3, Sheer |                 | •              |         |         |         |         |         |        |
| Free State     |                 |                |         |         |         |         |         |        |
|                | loopstad Dier   | ekliniek       |         |         |         |         |         |        |
| Beef: 3, Sheer |                 |                |         |         |         |         |         |        |
|                | Kroonstad Die   | erehospitaal   |         |         |         |         |         |        |
| Beef: 2        |                 | <b>-</b>       |         |         |         |         |         |        |
| Oranieville,   | Grasveld Kud    | ldegesondhe    | id      |         |         |         |         |        |
| Beef: 2, Sheep |                 |                |         |         |         |         |         |        |
|                | nekal Dierekli  | iniek          |         |         |         |         |         |        |
| Beef: 1        |                 |                |         |         |         |         |         |        |
| Warden, Wa     | rden Dierekli   | iniek          |         |         |         |         |         |        |
| Beef: 2        |                 |                |         |         |         |         |         |        |
| Wesselsbror    | n, Wesselsbro   | n Diereklinie  | k       |         |         |         |         |        |
| Beef: 1        |                 |                |         |         |         |         |         |        |
| Winburg, Wi    | inburg Dierek   | diniek         |         |         |         |         |         |        |
| Beef: 3        |                 |                |         |         |         |         |         |        |
| Kwazulu-Na     | tal             |                |         |         |         |         |         |        |
| Bergville, Be  | ergville Veter  | inary Clinic   |         |         |         |         |         |        |
| Beef: 2        |                 |                |         |         |         |         |         |        |
| Pietermaritz   | burg, Veterir   | nary House H   | ospital |         |         |         |         |        |
| Sheep: 1       |                 |                |         |         |         |         |         |        |
| Pongola, Por   | ngola Animal    | Clinic         |         |         |         |         |         |        |
| Goat: 1        | _               |                |         |         |         |         |         |        |
| Underberg, l   | Underberg Ve    | eterinary Sur  | gery    |         |         |         |         |        |
| Beef: 3        | _               | •              |         |         |         |         |         |        |
| Eastern Cap    | е               |                |         |         |         |         |         |        |
| -              | p, Humansdo     | rp Veterinary  | Clinic  |         |         |         |         |        |
| Beef: 1        |                 |                |         |         |         |         |         |        |
|                | Steynsburg I    | Dierehospita   | al      |         |         |         |         |        |
| Sheep: 3       |                 | _              |         |         |         |         |         |        |
| •              | th teracyclines | stopped the al | ortions |         |         |         |         |        |
| Western Cap    |                 |                |         |         |         |         |         |        |
|                |                 |                |         |         |         |         |         |        |
| -              | est, Beaufort   | Dierekliniek   |         |         |         |         |         |        |
| -              | est, Beaufort   | Dierekliniek   |         |         |         |         |         |        |

| Sheep: 2                                       |   |            |             |          |            |                |            |             |          |  |
|--|---|------------|-------------|----------|------------|----------------|------------|-------------|----------|--|
|  | orge Herd Hea   | th Consul  | t           |          |            |                |            |             |          |  |
| Dairy: 2                                       |   |            |             |          |            |                |            |             |          |  |
| Malmesbury                                     | y, Bergzight Di   | ierehospit | :aal        |          |            |                |            |             |          |  |
| Dairy: 1                                       |   |            |             |          |            |                |            |             |          |  |
| Malmesbury                                     | y, Dr Otto Krie   | k          |             |          |            |                |            |             |          |  |
| Dairy: 2                                       |   |            |             |          |            |                |            |             |          |  |
| Northern Ca                                    | _   |            |             |          |            |                |            |             |          |  |
| •  | u Dierekliniek  |            |             |          |            |                |            |             |          |  |
| Goat: 3  |   |            |             |          |            |                |            |             |          |  |
| Toxoplasmosis                                  |   |            |             |          |            |                |            |             |          |  |
| Stillbirths                                    |   |            |             |          |            |                |            |             |          |  |
| PROVINCE                                       | PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cape |            |             |          |            |                |            |             |          |  |
| Average  | Average 2.0 (1) 2.4 (5) 2.0 (1) 3.0 (1) 1.3 (3)                                 |            |             |          |            |                |            |             |          |  |
| Level of impore                                | ortance scale: 1  | = one case | e, 2 = more | than one | e case b   | ut less than t | en and 3 = | more than 1 | 10 cases |  |
| Beef   |   | 1.0 (1)    |             | 2.0 (1)  | 2.3<br>(4) | 2.0 (1)        |            | 1.0 (1)     |          |  |
| Dairy  | 1.5 (2)   |            |             |          |            |                |            |             |          |  |
| •  |   |            |             |          |            |                |            |             |          |  |
| Sheep  |   |            |             |          | 3.0 (1)    |                | 3.0 (1)    |             |          |  |
| Gauteng  |   |            |             |          |            |                |            |             |          |  |
|  | Diere Spreekl   | kamer      |             |          |            |                |            |             |          |  |
| Beef: 1  |   |            |             |          |            |                |            |             |          |  |
| North West                                     |   |            |             |          |            |                |            |             |          |  |
|  | , Bergbos Dier  | ekliniek   |             |          |            |                |            |             |          |  |
| Beef: 2  |   |            |             |          |            |                |            |             |          |  |
| Free State                                     |   |            |             |          |            |                |            |             |          |  |
|  | loopstad Diere  | ekliniek   |             |          |            |                |            |             |          |  |
| Beef: 3, Shee                                  |   |            |             |          |            |                |            |             |          |  |
| Beef: 2  | shoek Dierege   | sonaneia   |             |          |            |                |            |             |          |  |
|  | arden Dierekli  | niek       |             |          |            |                |            |             |          |  |
| Beef: 2  | arden Dierekin  | IIICK      |             |          |            |                |            |             |          |  |
|  | inburg Dierek   | liniek     |             |          |            |                |            |             |          |  |
| Beef: 2  |   |            |             |          |            |                |            |             |          |  |
| Kwazulu-Na                                     | atal  |            |             |          |            |                |            |             |          |  |
|  |   | narv Clini | С           |          |            |                |            |             |          |  |
| Beef: 2  | Bergville, Bergville Veterinary Clinic Beef: 2                                  |            |             |          |            |                |            |             |          |  |
| Eastern Cape                                   |   |            |             |          |            |                |            |             |          |  |
|  | , Steynsburg D  | Dierehospi | itaal       |          |            |                |            |             |          |  |
| Sheep: 3                                       |   | •          |             |          |            |                |            |             |          |  |
| Western Ca                                     | ре  |            |             |          |            |                |            |             |          |  |
|  | orge Herd Hea   | th Consul  | t           |          |            |                |            |             |          |  |
| Dairy: 2                                       |   |            |             |          |            |                |            |             |          |  |
| Malmesbury, Bergzight Dierehospitaal  Dairy: 1 |   |            |             |          |            |                |            |             |          |  |
|  |   |            |             |          |            |                |            |             |          |  |

| Stellenbosch, Stellenbosch Animal Hospital Beef: 1   |  |   |                |               |               |                   |                 |                 |                  |  |
|--|--|---|----------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| Abscesse   | S  |   |                |               |               |                   |                 |                 | ^                |  |
| Abscesse   | <b>S</b>   |   |                |               |               |                   |                 |                 | _                |  |
| PROVINCE   | Mpumalanga   | Gauteng   | Limpopo        | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average  | 1.8 (4)  | 1.5 (4)   | 1.0 (1)        | 3.0 (2)       | 2.1<br>(10)   | 2.1 (9)           | 3.0 (1)         | 1.3 (8)         | 1.7 (3)          |  |
| Level of impore  | Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 1 reported |   |                |               |               |                   |                 |                 |                  |  |
| Beef   | 1.0 (1)  | 1.5 (2)   | 1.0 (1)        | 3.0 (1)       | 2.3<br>(4)    | 2.3 (3)           |                 | 1.5 (2)         | 2.0 (1)          |  |
| Dairy  |  |   |                |               |               |                   |                 | 1.0(1)          |                  |  |
| Sheep  | 2.5 (2)  | 2.0 (1)   |                | 3.0 (1)       | 2.0 (6)       | 1.8 (4)           | 3.0 (1)         | 1.5 (2)         | 1.0 (1)          |  |
| Goat   | 1.0(1)   | 1.0(1)  |                |               | •             | 2.5 (2)           |                 | 1.0 (3)         | 2.0 (1)          |  |
| Beef: 1 Bethal, Beth Goat: 1 Lydenburg, Sheep: 3 Lydenburg, Sheep: 2 Gauteng Bronkhorsts Beef: 1, Goat Hammanski Sheep: 2 Pretoria, Or Beef: 2 Preputial abso Limpopo Modimolle, | four Diereklinie<br>nal Diereklinie<br>Longtom Dier<br>Lydenburg Die<br>spruit, Kerkstr                        | k<br>ekliniek<br>erespreek<br>aat Diere<br>Animal Cli | kliniek<br>nic | nd Produ      | uction A      | Animal Clinic     |                 |                 |                  |  |
| Beef: 3, Shee  | Christiana Die   | rehospita   | al             |               |               |                   |                 |                 |                  |  |
| Free State   | Union Chusch   | Animal Ca   | manitima D     | ) a a m = =   |               |                   |                 |                 |                  |  |
| Sheep: 2   | Union Street A   | Allillai Co   | nisulting R    | COINS         |               |                   |                 |                 |                  |  |
|  | Greylingsrust  | t Dierespr  | eekkamer       |               |               |                   |                 |                 |                  |  |
| Sheep: 3   |  | •   |                |               |               |                   |                 |                 |                  |  |
|  | rankfort Diere   | kliniek   |                |               |               |                   |                 |                 |                  |  |
| Beef: 2  |  |   |                |               |               |                   |                 |                 |                  |  |
|  | loopstad Diere   | ekliniek  |                |               |               |                   |                 |                 |                  |  |
| Beef: 3, Shee  | p: 3   |   |                |               |               |                   |                 |                 |                  |  |

| Kioolistau, Kioolistau Dieleliospitaai   |
|--|
| Sheep: 2   |
| Oranjeville, Grasveld Kuddegesondheid  |
| Beef: 2, Sheep: 1  |
| Wesselsbron, Wesselsbron Dierekliniek  |
| Sheep: 1   |
| Winburg, Winburg Dierekliniek  |
| Beef: 2  |
| Kwazulu-Natal  |
| Dundee, Endumeni Herd health   |
| Sheep: 1   |
| Eshowe, Eshowe Veterinary Hospital   |
| Goat: 3  |
| Caused by ticks  |
| Estcourt, Estcourt Vet Clinic  |
| Sheep: 1   |
| Pietermaritzburg, Veterinary House Hospital  |
| Beef: 2, Sheep: 2, Goat: 2   |
| Pongola, Pongola Animal Clinic   |
| Beef: 2  |
| Probably post tick bites   |
| Underberg, Underberg Veterinary Surgery  |
| Beef: 3, Sheep: 3  |
| Eastern Cape   |
| Steynsburg, Steynsburg Dierehospitaal  |
| Sheep: 3   |
| Grass seed causing dermatitis/abscesses and ill thrift in Merino's, widespread problem |
| Western Cape   |
| Beaufort West, Beaufort Dierekliniek   |
| Sheep: 2, Goat: 1  |
| Darling, Tygerberg Dierehospitaal Darling  |
| Beef: 2  |
| Malmesbury, Dr Otto Kriek  |
| Dairy: 1   |
| Oudtshoorn, Ostrimed   |
| Goat: 1  |
| Paarl, Paarl Dierehospitaal;   |
| Beef: 1, Goat: 1   |
| Stellenbosch, Prov Vet lab Elsenburg   |
| Sheep: 1   |
| Northern Cape  |
| Kimberley, Staatsveeartse Groep NC   |
| Choops 1   |

Sheep: 1 Kimberley - injection site

Kuruman, Kuruman Dierekliniek

Kroonstad, Kroonstad Dierehospitaal

Beef: 2, Goat: 2

| Bladder stones |                   |         |         |               |               |                   |                 | <u>^</u>        |                  |
|----------------|-------------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCI       | <b>Mpumalanga</b> | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average        |                   | 2.0 (2) |         |               | 3.0 (1)       |                   |                 | 1.0 (1)         | 1.0 (1)          |

| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 case | S |
|---|---|
| reported  |   |

| reported        |                      |            |             |               |               |                   |                 |                 |                  |
|-----------------|----------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Beef            |                      | 2.0(1)     |             |               |               |                   |                 |                 |                  |
| Sheep           |                      | 2.0 (1)    |             |               |               |                   |                 | 1.0(1)          | 1.0(1)           |
| Goat            |                      |            |             |               | 3.0 (1)       |                   |                 |                 |                  |
| Gauteng         |                      |            |             |               |               |                   |                 |                 |                  |
| Bapsfontein     | , Bapsfontein        | Dierehos   | pitaal      |               |               |                   |                 |                 |                  |
| Beef: 2, Shee   | ep: 2                |            |             |               |               |                   |                 |                 |                  |
| Free State      |                      |            |             |               |               |                   |                 |                 |                  |
| Vrede, Saul     | shoek Dierege        | sondheid.  | ı           |               |               |                   |                 |                 |                  |
| Goat: 3         |                      |            |             |               |               |                   |                 |                 |                  |
| Western Ca      | pe                   |            |             |               |               |                   |                 |                 |                  |
| Malmesbury      | ,<br>y, Bergzight Di | erehospit  | aal         |               |               |                   |                 |                 |                  |
| Sheep: 1        |                      | -          |             |               |               |                   |                 |                 |                  |
| Northern Ca     | аре                  |            |             |               |               |                   |                 |                 |                  |
| Kuruman, K      | Curuman Diere        | kliniek    |             |               |               |                   |                 |                 |                  |
| Sheep: 1        |                      |            |             |               |               |                   |                 |                 |                  |
| Blindness       | 5                    |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE        | Mpumalanga           | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         |                      |            |             |               | 2.3<br>(10)   | 2.0 (1)           |                 | 2.0 (2)         | 2.0 (2)          |
| Level of impore | ortance scale: 1     | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            |                      |            |             |               | 2.3 (4)       | 2.0 (1)           |                 |                 |                  |
| Dairy           |                      |            |             |               |               |                   | _               | 2.0 (1)         |                  |
| Sheep           |                      |            |             |               | 2.3 (6)       |                   |                 | 2.0 (1)         | 2.0 (1)          |
| Goat            |                      |            |             |               |               |                   |                 |                 | 2.0(1)           |
| Free State      |                      |            |             |               |               |                   |                 |                 |                  |
|                 | , Greylingsrust      | Dierespr   | eekkamer    |               |               |                   |                 |                 |                  |
| Sheep: 3        | ,                    |            |             |               |               |                   |                 |                 |                  |
|                 | ocolan Dierek        | liniek     |             |               |               |                   |                 |                 |                  |
| Sheep: 1        |                      |            |             |               |               |                   |                 |                 |                  |
|                 | rankfort Diere       | kliniek    |             |               |               |                   |                 |                 |                  |
| Beef: 3, Shee   |                      |            |             |               |               |                   |                 |                 |                  |
| Hoopstad, F     | loopstad Diere       | ekliniek   |             |               |               |                   |                 |                 |                  |
| Beef: 3, Shee   | •                    |            |             |               |               |                   |                 |                 |                  |
|                 | <b>Grasveld Kud</b>  | degesond   | heid        |               |               |                   |                 |                 |                  |
| Sheep: 1        |                      |            |             |               |               |                   |                 |                 |                  |
|                 | Rowelsfontein        | veearts S  | Spreekkan   | ner           |               |                   |                 |                 |                  |
| Beef: 1, Shee   |                      |            |             |               |               |                   |                 |                 |                  |
|                 | inburg Dierek        | liniek     |             |               |               |                   |                 |                 |                  |
| Beef: 2         |                      |            |             |               |               |                   |                 |                 |                  |
|                 |                      |            |             |               |               |                   |                 |                 |                  |

# Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

**Western Cape** 

Heidelberg (WC), Heidelberg Dierekliniek

Dairy: 2, Sheep: 2
Northern Cape

Kuruman, Kuruman Dierekliniek

Sheep: 2, Goat: 2

| Bloat    |            |         |         |               |            |                   |                 |                 |                  |
|----------|------------|---------|---------|---------------|------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE | Mpumalanga | Gauteng | Limpopo | North<br>West |            | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average  | 1.5 (2)    |         | 1.0 (1) |               | 1.8<br>(4) | 2.0 (2)           |                 | 1.0 (1)         | 2.0 (1)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 1.0 (1) | 1.0 (1) | 2.0 (3)    | 2.0 (1) |        | 2.0 (1) |
|-------|---------|---------|------------|---------|--------|---------|
| Dairy |         |         |            | 2.0(1)  | 1.0(1) |         |
| Sheep | 2.0 (1) |         | 1.0<br>(1) |         |        |         |

#### Mpumalanga

Grootvlei, Grootvlei Dierekliniek

Beef: 1

Lydenburg, Longtom Dierekliniek

Sheep: 2 Limpopo

**Polokwane, Pietersburg Veterinary Clinic** 

Beef: 1
Free State

**Bethlehem, Bethlehem Animal Hospital** 

Beef: 2

Oranjeville, Grasveld Kuddegesondheid

Beef: 2

**Wesselsbron, Wesselsbron Dierekliniek** 

Sheep: 1

Winburg, Winburg Dierekliniek

Beef: 2

Kwazulu-Natal

**Dundee, Endumeni Herd health** 

Beef: 2

**Estcourt, Estcourt Vet Clinic** 

Dairy: 2

Western Cape

Heidelberg (WC), Heidelberg Dierekliniek

Dairy: 1

**Northern Cape** 

Kuruman, Kuruman Dierekliniek

Beef: 2

| Red gut (  | torsion she   | ep and g                          | goats)   |               |               |                   |                 |                 | 2                |  |
|--|---|-----------------------------------|----------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE   | Mpumalanga  | Gauteng                           | Limpopo  | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average  |   | 1.0 (1)                           |          |               |               |                   | 1.5 (2)         | 2.0 (1)         |                  |  |
| Level of importance scale: $1 = $ one case, $2 = $ more than one case but less than ten and $3 = $ more than $10 $ cases reported                                  |   |                                   |          |               |               |                   |                 |                 |                  |  |
| Sheep  |   |                                   |          |               |               |                   | 1.0(1)          | 2.0(1)          |                  |  |
| Goat   |   | 1.0(1)                            |          |               |               |                   | 2.0 (1)         |                 |                  |  |
|  |   | 1.0 (1)                           |          |               |               |                   | 2.0 (1)         |                 |                  |  |
| Gauteng<br>Bronkhorste   | spruit, Kerkstr   | aat Dierel                        | kliniek  |               |               |                   |                 |                 |                  |  |
| Goat: 1  | spiuit, keiksti   | aat Dielei                        | MIIIICK  |               |               |                   |                 |                 |                  |  |
| Eastern Cap  | ne.   |                                   |          |               |               |                   |                 |                 |                  |  |
|  | et, Camdeboo  | Veterinar                         | y Clinic |               |               |                   |                 |                 |                  |  |
| Sheep: 1, Go   |   |                                   |          |               |               |                   |                 |                 |                  |  |
| Western Ca   | pe  |                                   |          |               |               |                   |                 |                 |                  |  |
|  | (WC), Heidelb   | erg Dierel                        | kliniek  |               |               |                   |                 |                 |                  |  |
| Sheep: 2   |   |                                   |          |               |               |                   |                 |                 |                  |  |
| Blue udd   | er  |                                   |          |               |               |                   |                 |                 |                  |  |
| PROVINCE   | Mpumalanga  | Gauteng                           | Limpopo  | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average  | 2.0 (1)   | 2.0 (1)                           |          | 1.5 (2)       | 2.0 (6)       | 2.0 (1)           | 3.0 (1)         | 1.8 (4)         | 3.0 (1)          |  |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported  |   |                                   |          |               |               |                   |                 |                 | 10 cases         |  |
| reported   |   |                                   |          |               |               |                   |                 | 1.5 (2)         |                  |  |
|  |   |                                   |          |               |               |                   |                 | 1.5 (2)         |                  |  |
| Dairy<br>Sheep   | 2.0 (1)   | 2.0 (1)                           |          | 1.5 (2)       | 2.0 (6)       |                   | 3.0 (1)         | 2.0 (2)         | 3.0 (1)          |  |
| Dairy<br>Sheep   | 2.0 (1)   | 2.0 (1)                           |          | 1.5 (2)       | 2.0 (6)       | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy<br>Sheep<br>Goat   | · · · · · · · · · · · · · · · · · · ·                                   | 2.0 (1)                           |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy<br>Sheep<br>Goat<br>Mpumalang  | ıa.   | · · · ·                           |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy<br>Sheep<br>Goat<br>Mpumalang<br>Lydenburg,  | · · · · · · · · · · · · · · · · · · ·                                   | · · · ·                           |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2   | ıa.   | · · · ·                           |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein   | ıa.   | ekliniek                          | pitaal   | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2  | a<br>Longtom Dier<br>n, Bapsfontein                                     | ekliniek                          | pitaal   | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West   | la<br>Longtom Dier<br>n, Bapsfontein                                    | ekliniek                          | pitaal   | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodia  | a<br>Longtom Dier<br>n, Bapsfontein                                     | ekliniek                          | pitaal   | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodiae Sheep: 2  | Longtom Dier<br>n, Bapsfontein<br>c Dierekliniek                        | ekliniek<br>Dierehos <sub>l</sub> |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodian Sheep: 2 Klerksdorp,  | la<br>Longtom Dier<br>n, Bapsfontein                                    | ekliniek<br>Dierehos <sub>l</sub> |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodian Sheep: 2 Klerksdorp, Sheep: 1                                 | Longtom Dier<br>n, Bapsfontein<br>c Dierekliniek                        | ekliniek<br>Dierehos <sub>l</sub> |          | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodian Sheep: 2 Klerksdorp, Sheep: 1 Free State                      | ja<br>Longtom Dier<br>n, Bapsfontein<br>c Dierekliniek<br>Klerksdorp Di | ekliniek<br>Dierehos <sub>j</sub> | aal      | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodian Sheep: 2 Klerksdorp, Sheep: 1 Free State Bultfontein,         | Longtom Dier<br>n, Bapsfontein<br>c Dierekliniek                        | ekliniek<br>Dierehos <sub>j</sub> | aal      | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |
| Dairy Sheep Goat Mpumalang Lydenburg, Sheep: 2 Gauteng Bapsfontein Sheep: 2 North West Brits, Zodia Sheep: 2 Klerksdorp, Sheep: 1 Free State Bultfontein, Sheep: 2 | ja<br>Longtom Dier<br>n, Bapsfontein<br>c Dierekliniek<br>Klerksdorp Di | ekliniek  Dierehospit ierehospit  | aal      | 1.5 (2)       |               | 2.0 (1)           | 3.0 (1)         |                 | 3.0 (1)          |  |

**Kroonstad, Kroonstad Dierehospitaal** 

Sheep: 2

Oranjeville, Grasveld Kuddegesondheid

Sheep: 2

**Reitz, Riemland Dierehospitaal** 

Sheep: 2

Wesselsbron, Wesselsbron Dierekliniek

Sheep: 2

Kwazulu-Natal

**Eshowe, Eshowe Veterinary Hospital** 

Goat: 2

**Eastern Cape** 

Steynsburg, Steynsburg Dierehospitaal

Sheep: 3

**Western Cape** 

Caledon, Overberg Veterinary Hospital

Sheep: 2

George, George Herd Heath Consult

Dairy: 2

Stellenbosch, Stellenbosch Animal Hospital

Dairy: 1

Swellendam, Swellendam Dierehospitaal

Sheep: 2

**Northern Cape** 

Upington, Upington Veeartsenykliniek

Sheep: 3

Dorper ewes, lamb, stay near water sources and feed troughs in veld due to drought. In feedlots

| Diarrhoea |            |         |         |               |               |                   |                 |                 |                  |
|-----------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE  | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average   | 2.0 (8)    |         |         | 3.0 (4)       | 2.8 (8)       | 2.2 (10)          |                 | 2.3 (9)         | 1.7 (3)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| -     |         |         |            |         |         |         |
|-------|---------|---------|------------|---------|---------|---------|
| Beef  | 2.2 (5) | 3.0 (3) | 3.0<br>(6) | 2.1 (9) | 2.5 (2) | 1.5 (2) |
| Dairy |         |         | 1.0<br>(1) |         | 2.2 (5) |         |
| Sheep | 1.7 (3) | 3.0 (1) | 3.0<br>(1) | 3.0 (1) | 2.5 (2) |         |
| Goat  |         |         |            |         |         | 2.0(1)  |

Mpumalanga

**Balfour, Balfour Dierekliniek** 

Beef: 2, Sheep: 2

Grootvlei, Grootvlei Dierekliniek

Beef: 2

Hendrina, Mooiplaas Veterinêre Dienste

Beef: 2, Sheep: 1

Lydenburg, Longtom Dierekliniek Beef: 3, Sheep: 2 Lydenburg, Lydenburg Dierespreekkamer Beef: 2 **North West** Christiana, Christiana Dierehospitaal Beef: 3, Sheep: 3 Lichtenburg, Dr CM Kruger-Rall Beef: 3 Many calves Stella, Stella Dierekliniek Beef: 3 **Free State Bethlehem, Union Street Animal Consulting Rooms Bultfontein, Greylingsrust Dierespreekkamer** Beef: 3 **Excelsior, Weltevrede Dierekliniek** Beef: 3 **Frankfort, Frankfort Dierekliniek** Beef: 3, Sheep: 3 **Memel, Memel Veterinary Clinic** Beef: 3 Vrede, Saulshoek Dieregesondheid. Beef: 3 Rota virus en Giardia Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 3 **Dundee, Endumeni Herd health** Beef: 2 **Estcourt, Estcourt Vet Clinic** Beef: 3 **Mtubatuba, Mtubatuba Animal Clinic** Beef: 2 **Newcastle, Ncanduvet Newcastle** Pietermaritzburg, Veterinary House Hospital Beef: 2 Pongola, Pongola Animal Clinic Beef: 1 **Underberg, Underberg Veterinary Surgery** Beef: 3, Sheep: 3 Vryheid, Vryheid Privaat Veeartse Beef: 2 **Western Cape** Caledon, Caledon Dierekliniek Beef: 2, Dairy: 2 **Darling, Tygerberg Dierehospitaal Darling** Dairy: 2 George, George Herd Heath Consult

Heidelberg (WC), Heidelberg Dierekliniek

Dairy: 2, Sheep: 2

## Malmesbury, Dr Otto Kriek

Dairy: 3

Calf Diarrhoea: Water quality, hygiene, a set routine and colostrum management invariably gets one out of a bad situation when confronted by this recurring problem.

## **Oudtshoorn, Ostrimed**

Beef: 3 Calves Sheep: 3 Lambs

## **Northern Cape**

## Kimberley, Kimberley Dierekliniek

Beef: 1 Calf

## Kimberley, Staatsveeartse Groep NC

Goat: 2

Goats Kimberley

# Kuruman, Kuruman Dierekliniek

Beef: 2

| <b>Epididymitis</b> |            |         |         |               |               |                   |                 |                 |                  |
|---------------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE            | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average             | 1.0 (1)    |         |         | 1.0 (1)       |               |                   |                 |                 | 2.0 (2)          |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  |        |         | 2.0 (1) |
|-------|--------|---------|---------|
| Sheep | 1.0(1) | 1.0 (1) | 2.0 (1) |

#### Mpumalanga

# Lydenburg, Longtom Dierekliniek

Sheep: 1
North West

# **Brits, Brits Dierekliniek**

Sheep: 1

## **Northern Cape**

## Kuruman, Kuruman Dierekliniek

Beef: 2, Sheep: 2

| Eye Cancer |            |         |         |               |               |                   |                 |                 |                  |  |
|------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE   | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average    | 1.0 (1)    | 1.0 (2) |         |               | 1.8<br>(4)    | 1.5 (2)           | 2.0 (1)         |                 | 1.0 (1)          |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

|                        |                                    |             |                  | 2.0 |         |         |  |        |  |  |
|------------------------|------------------------------------|-------------|------------------|-----|---------|---------|--|--------|--|--|
| Beef                   |                                    | 1.0(1)      |                  | 2.0 | 1.0(1)  |         |  | 1.0(1) |  |  |
|                        |                                    |             |                  | (1) |         |         |  |        |  |  |
| Dairy                  | 1.0(1)                             |             |                  | 2.0 | 2.0 (1) | 2.0(1)  |  |        |  |  |
|                        | 110 (1)                            |             |                  | (1) | 2.0 (1) | 2.0 (1) |  |        |  |  |
| Sheep                  |                                    | 1.0 (1)     |                  | 1.5 |         |         |  |        |  |  |
| Sileep                 |                                    | 1.0 (1)     |                  | (2) |         |         |  |        |  |  |
| Mpumalan               | ga                                 |             |                  |     |         |         |  |        |  |  |
| Lydenburg              | , Longtom Die                      | rekliniek   |                  |     |         |         |  |        |  |  |
| Dairy: 1               |                                    |             |                  |     |         |         |  |        |  |  |
| Gauteng                |                                    |             |                  |     |         |         |  |        |  |  |
| <b>Bapsfonte</b>       | in, Bapsfontein                    | Dierehos    | pitaal           |     |         |         |  |        |  |  |
| Beef: 1, She           | eep: 1                             |             |                  |     |         |         |  |        |  |  |
| Free State             |                                    |             |                  |     |         |         |  |        |  |  |
|                        | i, Union Street                    | Animal Co   | nsulting Rooms   |     |         |         |  |        |  |  |
| Sheep: 1               |                                    |             |                  |     |         |         |  |        |  |  |
|                        | Clocolan Dierek                    | diniek      |                  |     |         |         |  |        |  |  |
| Sheep: 2               |                                    |             |                  |     |         |         |  |        |  |  |
|                        | , Kroonstad Die                    | erehospita  | al               |     |         |         |  |        |  |  |
| Dairy: 2               |                                    |             |                  |     |         |         |  |        |  |  |
|                        | Winburg Dierel                     | diniek      |                  |     |         |         |  |        |  |  |
| Beef: 2                |                                    |             |                  |     |         |         |  |        |  |  |
| Kwazulu-N              |                                    |             |                  |     |         |         |  |        |  |  |
|                        | Bergville Veter                    | inary Clini | С                |     |         |         |  |        |  |  |
| Dairy: 2               |                                    |             | • -              |     |         |         |  |        |  |  |
|                        | Mtubatuba, Mtubatuba Animal Clinic |             |                  |     |         |         |  |        |  |  |
|                        | Beef: 1                            |             |                  |     |         |         |  |        |  |  |
| Eastern Ca             | -                                  | lattaland 6 | Smun aldraman    |     |         |         |  |        |  |  |
|                        | , Alexandria P                     | atterand S  | оргееккатег<br>- |     |         |         |  |        |  |  |
| Dairy: 2<br>Northern ( | `ano                               |             |                  |     |         |         |  |        |  |  |
|                        | cape<br>Kuruman Diere              | kliniak     |                  |     |         |         |  |        |  |  |
| rai uillall,           | Rai uiliali Diefe                  | KIIIIIEK    |                  |     |         |         |  |        |  |  |

| Eye infections          |                   |            |             |               |               |                   |                 |                 |                  |  |
|-------------------------|-------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE                | Mpumalanga        | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average                 | 2.0 (2)           | 2.0 (7)    |             | 2.7 (6)       | 2.5<br>(15)   | 1.8 (9)           | 2.0 (3)         | 2.3 (9)         |                  |  |
| Level of impore         | ortance scale: 1  | = one case | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than 1     | l0 cases         |  |
| Beef                    | 2.0 (1)           | 1.7 (3)    |             | 2.7 (3)       | 2.6<br>(9)    | 1.9 (7)           | 2.0 (1)         | 2.0 (4)         |                  |  |
| Dairy                   |                   |            |             |               |               |                   |                 | 2.5 (4)         |                  |  |
| Sheep                   | 2.0 (1)           | 2.0 (3)    |             | 2.7 (3)       | 2.5 (6)       |                   | 2.0 (1)         | 3.0 (1)         |                  |  |
| Goat                    |                   | 3.0 (1)    |             |               |               | 1.5 (2)           | 2.0 (1)         |                 |                  |  |
| Mpumalang<br>Lydenburg, | a<br>Longtom Dier | ekliniek   |             |               |               |                   |                 |                 |                  |  |

Beef: 2, Sheep: 2 Gauteng Hammanskraal, Themba Animal Clinic Beef: 2, Sheep: 3, Goat: 3 **Pretoria, Anima Veterinary Consulting Rooms** Beef: 2, Sheep: 2 Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic Beef: 1, Sheep: 1 **North West** Christiana, Christiana Dierehospitaal Beef: 3, Sheep: 3 Klerksdorp, Klerksdorp Dierehospitaal Beef: 2, Sheep: 2 Lichtenburg, Dr CM Kruger-Rall Beef: 3 Stella, Stella Dierekliniek Sheep: 3 **Free State Bloemfontein, University Free State Bultfontein, Greylingsrust Dierespreekkamer** Sheep: 2 **Dewetsdorp, Platkop Dierekliniek Excelsior, Weltevrede Dierekliniek** Sheep: 3 **Frankfort, Frankfort Dierekliniek** Beef: 3, Sheep: 3 Parys, Parys Dierehospitaal Beef: 3 Moraxella bovis Sheep: 3 Philippolis, Rowelsfontein veearts Spreekkamer Viljoenskroon, Viljoenskroon Dierekliniek Beef: 3 Vrede, Vrede Dierehospitaal Beef: 3 Warden, Warden Dierekliniek Beef: 2, Sheep: 2 Wesselsbron, Wesselsbron Dierekliniek Beef: 1 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 2 **Dundee, Endumeni Herd health** Mtubatuba, Mtubatuba Animal Clinic Beef: 2 Flies Goat: 2 **Newcastle, Ncanduvet Newcastle** 

| Donaela Da                                     | maala Animaal       | Climia     |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|--|---------------------|------------|---------------|-----------|------------|-----------------|------------|-----------|----------|--|--|--|--|--|--|
| Pongola, Pongola Animal Clinic Beef: 1         |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|  | and by Marayalla    | hovia      |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Goat: 1  | sed by Moraxella    | DOVIS      |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Underberg, Underberg Veterinary Surgery        |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 3  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Vryheid, Vryheid Privaat Veeartse              |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 2  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Eastern Cape                                   |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Graaff-Reinet, Graaff Reinet Veterinary Clinic |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Sheep: 2, Goat: 2                              |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Humansdorp, Humansdorp Veterinary Clinic       |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 2  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Western Cape                                   |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|  | ledon Dierekli      | niek       |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 2  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Darling, Tyo                                   | gerberg Diereh      | ospitaal I | Darling       |           |            |                 |            |           |          |  |  |  |  |  |  |
| Dairy: 3                                       |                     | •          |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|  | orge Herd Hea       | th Consul  | t             |           |            |                 |            |           |          |  |  |  |  |  |  |
| Dairy: 2                                       |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Malmesbury                                     | y, Dr Otto Krie     | k          |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 2, Dairy                                 | y: 2                |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Piketberg, F                                   | Piketberg Dier      | ehospitaa  |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 3  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Dry dusty cor                                  | nditions, stubble   | lands with | lots of flies | s, Moraxe | ella bovis | 5               |            |           |          |  |  |  |  |  |  |
| Dairy: 3                                       |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|  | h, Prov Vet lab     | Elsenbu    | rg            |           |            |                 |            |           |          |  |  |  |  |  |  |
| Sheep: 3                                       |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|  | h, Stellenbosc      | h Animal   | Hospital      |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 1  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Joint Ill                                      |                     |            |               |           |            |                 |            |           | ^        |  |  |  |  |  |  |
| DDO//INCE                                      |                     | Cautana    | . :           | North     | Free       | Kwazulu-        | Eastern    | Western   | Northern |  |  |  |  |  |  |
| PROVINCE                                       | Mpumalanga          | Gauteng    | Limpopo       | West      | State      | Natal           | Cape       | Cape      | Cape     |  |  |  |  |  |  |
|  |                     |            |               |           | 2.0        |                 |            |           |          |  |  |  |  |  |  |
| Average  | 1.5 (2)             | 1.0(2)     |               | 2.0(4)    | 2.0        | 1.5 (6)         | 1.3 (3)    |           |          |  |  |  |  |  |  |
| J  | -13 (-)             | -1.5 (-)   |               | _ ( )     | (1)        | -10 (0)         | -1.0 (0)   |           |          |  |  |  |  |  |  |
| Level of impo                                  | ortance scale: 1    | = one case | e. 2 = more   | than on   | e case b   | ut less than to | en and 3 = | more than | 10 cases |  |  |  |  |  |  |
| reported                                       |                     | 2          | -, =          |           |            |                 |            |           |          |  |  |  |  |  |  |
|  |                     |            |               |           | 2.0        |                 |            |           |          |  |  |  |  |  |  |
| Beef   | 1.5 (2)             | 1.0(1)     |               | 1.7 (3)   | 2.0        | 1.5 (6)         | 2.0(1)     |           |          |  |  |  |  |  |  |
|  | 1.5 (2)             | 1.0 (1)    |               | 1.7 (3)   | (1)        | 1.5 (0)         | 2.0 (1)    |           |          |  |  |  |  |  |  |
| Sheep  |                     | 1.0(1)     |               | 3.0 (1)   |            |                 | 1.0 (2)    |           |          |  |  |  |  |  |  |
| Mpumalang                                      |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Balfour, Balfour Dierekliniek                  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 1  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
|  | <b>Longtom Dier</b> | ekliniek   |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Beef: 2  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Gauteng  |                     |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| D  | Gauteng             |            |               |           |            |                 |            |           |          |  |  |  |  |  |  |
| Pretoria, An                                   | ima Veterinar       | y Consult  | ing Rooms     | 5         |            |                 |            |           |          |  |  |  |  |  |  |

Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Sheep: 1 Septic arthritis **North West Brits, Brits Dierekliniek** Beef: 1 Christiana, Christiana Dierehospitaal Beef: 3, Sheep: 3 Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 **Free State Winburg, Winburg Dierekliniek** Beef: 2 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic Eshowe, Eshowe Veterinary Hospital** Beef: 2 **Estcourt, Estcourt Vet Clinic** Beef: 1 **Mtubatuba, Mtubatuba Animal Clinic** Beef: 1 **Underberg, Underberg Veterinary Surgery** Beef: 1 **Vryheid, Vryheid Privaat Veeartse** Beef: 2 **Eastern Cape Alexandria, Riverview Trading Vet Consulting Services Graaff-Reinet, Camdeboo Veterinary Clinic** Sheep: 1 **Uitenhage, Uitenhage Dierehospitaal** Sheep: 1 **Lameness/Foot Problems** Kwazulu-Western Northern North Free **Eastern PROVINCE Mpumalanga Gauteng Limpopo** West State **Natal** Cape Cape Cape 2.8 **Average** 1.6 (7) 2.0(4)2.3(3)2.0 (4) 2.0(4)2.0(1)(4)Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported Beef 1.5 (4) 2.0(2)2.0(2)2.0(3)1.0(1)2.0(1)(3) 3.0 **Dairy** 2.0 (1) 2.3 (3) (1) 1.7 (3) 2.0(1)3.0(1)Sheep Goat 2.0(1)**Mpumalanga Balfour, Balfour Dierekliniek** Beef: 2, Sheep: 2

| Ermelo, Môregloed Veterinêre Spreekkamer       |
|--|
| Sheep: 1                                       |
| Grootvlei, Grootvlei Dierekliniek              |
| Beef: 1  |
| Lydenburg, Longtom Dierekliniek                |
| Beef: 2, Sheep: 2                              |
| Lydenburg, Lydenburg Dierespreekkamer          |
| Beef: 1  |
| Gauteng  |
| Bapsfontein, Bapsfontein Dierehospitaal        |
| Sheep: 2                                       |
| Hammanskraal, Themba Animal Clinic             |
| Beef: 2, Goat: 2                               |
| Nigel, Nigel Diere Spreekkamer                 |
| Beef: 2  |
| North West                                     |
| Christiana, Christiana Dierehospitaal          |
| Beef: 3, Sheep: 3                              |
| Klerksdorp, Klerksdorp Dierehospitaal          |
| Beef: 1  |
| Free State                                     |
| Kroonstad, Kroonstad Dierehospitaal            |
| Dairy: 3                                       |
| Viljoenskroon, Viljoenskroon Dierekliniek      |
| Beef: 3  |
| Warden, Warden Dierekliniek                    |
| Beef: 2  |
| Winburg, Winburg Dierekliniek                  |
| Beef: 3  |
| Kwazulu-Natal                                  |
| Bergville, Bergville Veterinary Clinic         |
| Beef: 2  |
| Estcourt, Estcourt Vet Clinic                  |
| Dairy: 2                                       |
| Newcastle, Ncanduvet Newcastle                 |
| Beef: 1  |
| Underberg, Underberg Veterinary Surgery        |
| Beef: 3  |
| Western Cape                                   |
| George, George Herd Heath Consult              |
| Dairy: 3                                       |
| Malmesbury, Bergzight Dierehospitaal           |
| Dairy: 3                                       |
| Malmesbury, Dr Otto Kriek                      |
| Dairy: 1                                       |
| Swellendam, Swellendam Dierehospitaal Beef: 1  |
|  |
| Northern Cape<br>Kuruman, Kuruman Dierekliniek |
| ·  |
| Beef: 2  |
| Lung infection                                 |
|  |
|  |

North Free

West State Natal

PROVINCE Mpumalanga Gauteng Limpopo

Kwazulu- Eastern Western Northern

Cape

Cape

Cape

| Average   | 1.5 (4)   | 1.7 (9)       | 2.7 (6)          | 2.2<br>(16) | 2.5 (4)      | 1.0 (1) | 1.9 (8) | 1.0 (1) |  |  |  |  |
|---|---|---------------|------------------|-------------|--------------|---------|---------|---------|--|--|--|--|
| Level of impore                                 | Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported |               |                  |             |              |         |         |         |  |  |  |  |
| Beef  | 2.0 (2)   | 1.8 (4)       | 2.5 (2)          | 2.1 (9)     | 2.7 (3)      |         | 1.5 (2) |         |  |  |  |  |
| Dairy   |   |               |                  |             |              |         | 2.3 (4) |         |  |  |  |  |
| Sheep   | 1.0(1)  | 1.8 (4)       | 2.7 (3)          | 2.3<br>(7)  | 2.0 (1)      |         | 1.0 (1) | 1.0 (1) |  |  |  |  |
| Goat  | 1.0(1)  | 1.0(1)        | 3.0 (1)          |             |              | 1.0(1)  | 2.0 (1) |         |  |  |  |  |
| Mpumalang                                       | а   |               |                  |             |              | _       |         |         |  |  |  |  |
|   | four Diereklin  | niek          |                  |             |              |         |         |         |  |  |  |  |
| Beef: 2   |   |               |                  |             |              |         |         |         |  |  |  |  |
| Bethal, Beth                                    | nal Diereklinie   | ek            |                  |             |              |         |         |         |  |  |  |  |
| Goat: 1   |   |               |                  |             |              |         |         |         |  |  |  |  |
|   | irootvlei Diere   | ekliniek      |                  |             |              |         |         |         |  |  |  |  |
| Beef: 2, Shee                                   | ep: 1   |               |                  |             |              |         |         |         |  |  |  |  |
| Gauteng   |   |               | •                |             |              |         |         |         |  |  |  |  |
|   | , Bapsfontein   | Dierehospit   | aal              |             |              |         |         |         |  |  |  |  |
| Beef: 1, Shee                                   | ep:  2<br><b>spruit, Kerkst</b> i   | raat Diorokli | niok             |             |              |         |         |         |  |  |  |  |
| Beef: 2, Goat                                   |   | raat Dierekii | піек             |             |              |         |         |         |  |  |  |  |
|   | . 1<br>Diere Spreek   | kamer         |                  |             |              |         |         |         |  |  |  |  |
| Beef: 3, Shee                                   |   | Kaiiici       |                  |             |              |         |         |         |  |  |  |  |
|   | ima Veterina  | rv Consultin  | a Rooms          |             |              |         |         |         |  |  |  |  |
| Sheep: 2  |   | ,             | <b>,</b>         |             |              |         |         |         |  |  |  |  |
|   | nderstepoort /  | Academic Ho   | spital and Produ | iction A    | nimal Clinic | 3       |         |         |  |  |  |  |
| Beef: 1   |   |               |                  |             |              |         |         |         |  |  |  |  |
| Sinusitis                                       |   |               |                  |             |              |         |         |         |  |  |  |  |
| Sheep: 2  |   |               |                  |             |              |         |         |         |  |  |  |  |
| North West                                      |   |               |                  |             |              |         |         |         |  |  |  |  |
|   | Christiana Die  | erehospitaal  |                  |             |              |         |         |         |  |  |  |  |
| Beef: 3, Shee                                   |   |               |                  |             |              |         |         |         |  |  |  |  |
| Beef: 2, Shee                                   | Klerksdorp D  | rierenospita  | <u>!</u>         |             |              |         |         |         |  |  |  |  |
|   | stad, Leeudor   | ingstad Dier  | ekliniek         |             |              |         |         |         |  |  |  |  |
| Sheep: 3  | Julia, Eccusion   | gotaa Dici    |                  |             |              |         |         |         |  |  |  |  |
| Many deaths                                     |   |               |                  |             |              |         |         |         |  |  |  |  |
| Goat: 3   |   |               |                  |             |              |         |         |         |  |  |  |  |
| Many deaths                                     |   |               |                  |             |              |         |         |         |  |  |  |  |
| Free State                                      |   |               |                  |             |              |         |         |         |  |  |  |  |
| Bethlehem, Bethlehem Animal Hospital            |   |               |                  |             |              |         |         |         |  |  |  |  |
| Beef: 2, Sheep: 2                               |   |               |                  |             |              |         |         |         |  |  |  |  |
| Bethlehem, Union Street Animal Consulting Rooms |   |               |                  |             |              |         |         |         |  |  |  |  |
|   | Beef: 1   |               |                  |             |              |         |         |         |  |  |  |  |
| Sheep: 3  | Bultfontein, Greylingsrust Dierespreekkamer   |               |                  |             |              |         |         |         |  |  |  |  |
|   | rankfort Dier   | ekliniek      |                  |             |              |         |         |         |  |  |  |  |
| Beef: 2   |   |               |                  |             |              |         |         |         |  |  |  |  |
|   | loopstad Dier   | ekliniek      |                  |             |              |         |         |         |  |  |  |  |
| Beef: 3, Shee                                   |   |               |                  |             |              |         |         |         |  |  |  |  |
|   |   |               |                  |             |              |         |         |         |  |  |  |  |

Memel, Memel Veterinary Clinic
Beef: 2
Oranjeville, Grasveld Kuddegesondheid
Beef: 2, Sheep: 2
Reitz, Riemland Dierehospitaal

Sheep: 2

Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3, Sheep: 3

Vrede, Vrede Dierehospitaal

Beef: 1, Sheep: 1

Winburg, Winburg Dierekliniek

Beef: 3

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

**Dundee, Endumeni Herd health** 

Sheep: 2

**Estcourt, Estcourt Vet Clinic** 

Beef: 3

**Underberg, Underberg Veterinary Surgery** 

Beef: 3

**Eastern Cape** 

**Graaff-Reinet, Camdeboo Veterinary Clinic** 

Goat: 1

**Western Cape** 

**Beaufort West, Beaufort Dierekliniek** 

Sheep: 1

**Darling, Tygerberg Dierehospitaal Darling** 

Dairy: 3

George, George Herd Heath Consult

Dairy: 2

Malmesbury, Dr Otto Kriek

Dairy: 1

**Oudtshoorn, Oudtshoorn Dierekliniek** 

Goat: 2

Paarl, Paarl Dierehospitaal;

Beef: 2

Stellenbosch, Prov Vet lab Elsenburg

Beef: 1

**Worcester, Durban Straat Dierekliniek Worcester** 

Dairy: 3

**Northern Cape** 

Kimberley, Kimberley Dierekliniek

Sheep: 1

| Mastitis in general |            |         |         |               |               |                   |                 |                 |                  |  |
|---------------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE            | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average             | 1.7 (3)    |         |         | 3.0 (2)       | 1.8<br>(4)    | 2.0 (7)           | 2.0 (1)         | 2.3 (6)         |                  |  |

| Level of importance scale: $1 = $ one case, $2 = $ more than one case but less than ten and $3 = $ more than 10 cases |
|---|
| reported  |

| Beef  | 2.0 (1) | 3.0 (1) 1.7 (3) | 2.0 (5) |         |         |
|-------|---------|-----------------|---------|---------|---------|
| Dairy | 2.0(1)  |                 |         |         | 2.6 (5) |
| Sheep | 1.0 (1) | 3.0 (1) 2.0 (1) | 2.0 (1) | 2.0 (1) |         |
| Goat  |         |                 | 2.0 (1) |         | 1.0 (1) |

#### **Mpumalanga**

## **Balfour, Balfour Dierekliniek**

Beef: 2

## Lydenburg, Longtom Dierekliniek

Dairy: 2

## Lydenburg, Lydenburg Dierespreekkamer

Sheep: 1
North West

# Christiana, Christiana Dierehospitaal

Beef: 3, Sheep: 3

**Free State** 

#### **Bloemfontein, Dr Stephan Wessels**

Beef: 2

#### **Excelsior, Weltevrede Dierekliniek**

Beef: 1

#### **Kroonstad, Kroonstad Dierehospitaal**

Sheep: 2

# Winburg, Winburg Dierekliniek

Beef: 2

#### Kwazulu-Natal

# **Bergville, Bergville Veterinary Clinic**

Beef: 1

#### Mtubatuba, Mtubatuba Animal Clinic

Beef: 2

## **Pietermaritzburg, Veterinary House Hospital**

Beef: 2, Sheep: 2, Goat: 2

## Pongola, Pongola Animal Clinic

Beef: 2

Many calves supplemented with milk replacement due to udder damages

# **Underberg, Underberg Veterinary Surgery**

Beef: 3

#### **Eastern Cape**

## **Graaff-Reinet, Graaff Reinet Veterinary Clinic**

Sheep: 2

## **Western Cape**

## **Beaufort West, Beaufort Dierekliniek**

Goat: 1

# Caledon, Caledon Dierekliniek

Dairy: 3

#### **George, George Animal Hospital**

Dairy: 3

# George, George Herd Heath Consult

Dairv: 3

## Malmesbury, Bergzight Dierehospitaal

| Dairy: 2  | . D., Otto K.:lo    | •-          |             |               |               |                   |                 |                 |                  |  |
|---|---------------------|-------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| Maimesbury Dairy: 2   | , Dr Otto Krie      | K           |             |               |               |                   |                 |                 |                  |  |
|   |                     |             |             |               |               |                   |                 |                 |                  |  |
| Navel III   |                     |             |             |               |               |                   |                 |                 | ^                |  |
| PROVINCE  | Mpumalanga          | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average   | 1.5 (2)             |             |             |               | 2.3<br>(4)    | 1.3 (4)           |                 |                 |                  |  |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported |                     |             |             |               |               |                   |                 |                 |                  |  |
| Beef  | 1.5 (2)             |             |             |               | 2.3 (3)       | 1.3 (3)           |                 |                 |                  |  |
| Sheep   |                     |             |             |               | 2.0 (1)       | 1.0 (1)           |                 |                 |                  |  |
| Mpumalang   |                     |             |             |               |               |                   |                 |                 |                  |  |
|   | four Diereklin      | iek         |             |               |               |                   |                 |                 |                  |  |
| Beef: 1   | Longtom Dier        | ekliniek    |             |               |               |                   |                 |                 |                  |  |
| Beef: 2   | Longton Diei        | CKIIIICK    |             |               |               |                   |                 |                 |                  |  |
| Free State  |                     |             |             |               |               |                   |                 |                 |                  |  |
|   | Union Street        | Animal Co   | nsulting R  | ooms          |               |                   |                 |                 |                  |  |
| Beef: 1   |                     |             |             |               |               |                   |                 |                 |                  |  |
| Oranjeville,<br>Sheep: 2  | <b>Grasveld Kud</b> | degesond    | heid        |               |               |                   |                 |                 |                  |  |
| •   | on, Viljoenskr      | oon Dierel  | diniek      |               |               |                   |                 |                 |                  |  |
| Beef: 3   | on, unjecnom        | JOIN DIGIGI |             |               |               |                   |                 |                 |                  |  |
| Winburg, W  | inburg Dierek       | liniek      |             |               |               |                   |                 |                 |                  |  |
| Beef: 3   |                     |             |             |               |               |                   |                 |                 |                  |  |
| Kwazulu-Na  |                     | Cli!        | _           |               |               |                   |                 |                 |                  |  |
| Beef: 2   | ergville Veteri     | nary Clinic | С           |               |               |                   |                 |                 |                  |  |
|   | Ncanduvet Ne        | wcastle     |             |               |               |                   |                 |                 |                  |  |
| Beef: 1   |                     |             |             |               |               |                   |                 |                 |                  |  |
|   | Underberg Ve        | terinary S  | urgery      |               |               |                   |                 |                 |                  |  |
| Beef: 1, Shee   | p: 1                |             |             |               |               |                   |                 |                 |                  |  |
| Trauma  |                     |             |             | ì             |               |                   |                 |                 | ^                |  |
| PROVINCE  | Mpumalanga          | Gauteng     | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average   | 2.0 (2)             | 2.0 (1)     | 1.0 (1)     |               | 1.5<br>(2)    |                   |                 | 2.0 (1)         | 3.0 (1)          |  |
| Level of impore   | ortance scale: 1    | = one case  | e, 2 = more | than on       | e case b      | ut less than to   | en and 3 =      | more than 1     | 10 cases         |  |
| Beef  | 2.0 (1)             | 2.0 (1)     | 1.0 (1)     |               | 2.0 (1)       |                   |                 | 2.0 (1)         | 3.0 (1)          |  |

1.0 Sheep 2.0(1)(1) Mpumalanga Lydenburg, Longtom Dierekliniek Beef: 2, Sheep: 2 Gauteng Nigel, Nigel Diere Spreekkamer Beef: 2 Limpopo **Tzaneen, ZZ2 Farm Practice** Beef: 1 Free State **Bethlehem, Union Street Animal Consulting Rooms** Winburg, Winburg Dierekliniek Beef: 2 **Western Cape** Paarl, Paarl Dierehospitaal; Beef: 2 **Northern Cape** Kimberley, Kimberley Dierekliniek Bruising, seen at abattoir **Downer** North **Free** Kwazulu-Eastern Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape 2.0 3.0(1)1.7 (3) 2.2(6)2.0(3)2.0(1)1.5 (4) 1.5 (2) Average (10)Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported 2.5 (4) Beef 1.7 (3) 3.0(1)2.0(3)1.0(1)1.5 (2) (10)1.0(1)2.0(1) 1.7 (3) Dairy Sheep 2.0(1)**Mpumalanga Bethal, Bethal Dierekliniek** Beef: 2 Grootvlei, Grootvlei Dierekliniek Beef: 1 Lydenburg, Longtom Dierekliniek Beef: 2 Gauteng Bapsfontein, Bapsfontein Dierehospitaal Beef: 2, Sheep: 2 **Bronkhorstspruit, Kerkstraat Dierekliniek** 

Dairy: 1

Beef: 3

Hammanskraal, Themba Animal Clinic

## Magaliesburg, Magaliesburg; Dr Ryan Jeffrey

Beef: 3

Numerous, heavily pregnant or post-calving downer cows Combination of PEM (protein-energy malnutrition); calcium phosphate deficiency

#### Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Beef: 2 Four cases

#### North West

# Schweizer-Reneke, Buffeldoorn Dierekliniek SR

Beef: 3

#### **Free State**

#### Bethlehem, Bethlehem Animal Hospital

Beef: 2

#### **Bethlehem, Union Street Animal Consulting Rooms**

Beef: 2

#### **Dewetsdorp, Platkop Dierekliniek**

Beef: 2

## **Excelsior, Weltevrede Dierekliniek**

Beef: 2

#### Kroonstad, Kroonstad Dierehospitaal

Beef: 2

#### Oranjeville, Grasveld Kuddegesondheid

Beef: 2

# Reitz, Riemland Dierehospitaal

Beef: 2

# Senekal, Senekal Dierekliniek

Beef: 2

# Wesselsbron, Wesselsbron Dierekliniek

Beef: 1

#### **Winburg, Winburg Dierekliniek**

Beef: 3

### Kwazulu-Natal

# Bergville, Bergville Veterinary Clinic

Beef: 3

## **Dundee, Endumeni Herd health**

Beef: 1

#### **Estcourt, Estcourt Vet Clinic**

Beef: 2

#### **Eastern Cape**

## Alexandria, Alexandria Platteland Spreekkamer

Dairy: 2

#### **Western Cape**

# Caledon, Caledon Dierekliniek

Dairy: 2

## **George, George Animal Hospital**

Dairy: 1

# George, George Herd Heath Consult

Dairy: 2

## **Worcester, Durban Straat Dierekliniek Worcester**

Beef: 1

#### **Northern Cape**

# Kimberley, Staatsveeartse Groep NC

Beef: 1 Kimberley

#### Kuruman, Kuruman Dierekliniek

| Beef: 2         |                   |             |              |               |               |                   |                 |                 |                  |
|-----------------|-------------------|-------------|--------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Other           |                   |             |              |               |               |                   |                 |                 | ^                |
| PROVINCE        | Mpumalanga        | Gauteng     | Limpopo      | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         |                   |             | 1.0 (1)      |               | 1.0<br>(2)    |                   | 3.0 (1)         |                 |                  |
| Level of impore | ortance scale: 1  | = one case  | e, 2 = more  | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            |                   |             | 1.0(1)       |               |               |                   |                 |                 |                  |
| Dairy           |                   |             | 110 (1)      |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Sheep           |                   |             |              |               | 1.0<br>(1)    |                   | 3.0 (1)         |                 |                  |
| Limpopo         |                   |             |              |               |               |                   |                 |                 |                  |
|                 | Kranskop Dier     | ekliniek    |              |               |               |                   |                 |                 |                  |
| Beef: 1         |                   |             |              |               |               |                   |                 |                 |                  |
| Middle ear in   | fection           |             |              |               |               |                   |                 |                 |                  |
| Free State      |                   |             |              |               |               |                   |                 |                 |                  |
| Bloemfonte      | in, University    | Free State  | 2            |               |               |                   |                 |                 |                  |
| Dairy: 1        |                   |             |              |               |               |                   |                 |                 |                  |
| Vaginal cyst    |                   |             |              |               |               |                   |                 |                 |                  |
| Sheep: 1        |                   |             |              |               |               |                   |                 |                 |                  |
|                 | naemia & gastric  | ulceration  |              |               |               |                   |                 |                 |                  |
| Eastern Cap     |                   |             |              |               |               |                   |                 |                 |                  |
|                 | , Steynsburg D    | ierehospi   | taal         |               |               |                   |                 |                 |                  |
| Sheep: 3        |                   |             |              |               |               |                   |                 |                 |                  |
| Tail docking i  | elated to dehyd   | ration, hyp | erthermia ir | n Merino      | lambs         |                   |                 |                 |                  |
| Vestubul        | ar syndrom        | e (Middl    | e ear inf    | ection        | )             |                   |                 |                 | ^                |
| PROVINCE        | Mpumalanga        | Gauteng     | Limpopo      | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average         | 1.0 (1)           |             |              |               |               | 1.0 (1)           | 1.0 (1)         |                 |                  |
| Level of impore | ortance scale: 1  | = one case  | e, 2 = more  | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef            | 1.0(1)            |             |              |               |               | 1.0 (1)           |                 |                 |                  |
| Dairy           |                   |             |              |               |               |                   | 1.0 (1)         |                 |                  |
|                 | a<br>Longtom Dier | ekliniek    |              |               |               |                   |                 |                 |                  |
| Beef: 1         |                   |             |              |               |               |                   |                 |                 |                  |
| Kwazulu-Na      |                   |             |              |               |               |                   |                 |                 |                  |
|                 | Mtubatuba Ar      | nımal Clin  | IC           |               |               |                   |                 |                 |                  |
| Beef: 1         |                   |             |              |               |               |                   |                 |                 |                  |
| Eastern Cap     |                   |             |              |               |               |                   |                 |                 |                  |
| Alexandria,     | Alexandria Pla    | atteland S  | preekkam     | er            |               |                   |                 |                 |                  |

| Dairy: 1          |                                |            |             |               |               |                   |                 |                 |                  |
|-------------------|--------------------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Wet carca         | asses                          |            |             |               |               |                   |                 |                 | ^                |
| PROVINCE          | Mpumalanga                     | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                                |            |             |               | 1.0<br>(1)    |                   |                 | 1.0 (1)         | 1.5 (2)          |
| Level of imported | ortance scale: 1               | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              |                                |            |             |               | 1.0<br>(1)    |                   |                 |                 | 1.0 (1)          |
| Sheep             |                                |            |             |               |               |                   |                 | 1.0(1)          | 2.0 (1)          |
| Free State        |                                |            |             |               |               |                   |                 |                 |                  |
| Beef: 1           | /eltevrede Die                 | rekliniek  |             |               |               |                   |                 |                 |                  |
| Western Ca        |                                |            |             |               |               |                   |                 |                 |                  |
|                   | Dierehospitaa                  | al;        |             |               |               |                   |                 |                 |                  |
| Sheep: 1          |                                |            |             |               |               |                   |                 |                 |                  |
| Northern Ca       | ape<br>Aar Veterinary          | Clinic     |             |               |               |                   |                 |                 |                  |
| Sheep: 2          | Hai Veterillary                | Cillic     |             |               |               |                   |                 |                 |                  |
| •                 | s -seen at abatt               | oir        |             |               |               |                   |                 |                 |                  |
| Kimberley, I      | Kimberley Die                  | rekliniek  |             |               |               |                   |                 |                 |                  |
| Beef: 1           |                                |            |             |               |               |                   |                 |                 |                  |
| Abattoir          |                                |            |             |               |               |                   |                 |                 |                  |
| Yellow ca         | scases at a                    | battoir    |             |               |               |                   |                 |                 | ^                |
| PROVINCE          | Mpumalanga                     | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average           |                                |            |             |               |               |                   |                 | 1.8 (4)         |                  |
| Level of imported | ortance scale: 1               | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef              |                                |            |             |               |               |                   |                 | 3.0 (1)         |                  |
| Dairy             |                                |            |             |               |               |                   |                 | 1.0 (1)         |                  |
| Sheep             |                                |            |             |               |               |                   |                 | 2.0 (1)         |                  |
| Goat              |                                |            |             |               |               |                   |                 | 1.0(1)          |                  |
|                   | Dierehospitaa                  |            |             |               |               |                   |                 |                 |                  |
|                   | y: 1, Sheep: 2, 0  ic Diseases |            |             |               |               |                   |                 |                 |                  |
|                   |                                | )          |             |               |               |                   |                 |                 |                  |
| Acidosis          |                                |            |             |               |               |                   |                 |                 | ^                |

| PROVINCE                   | Mpumalanga            | Gauteng      | Limpopo     | North<br>West |             | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|----------------------------|-----------------------|--------------|-------------|---------------|-------------|-------------------|-----------------|-----------------|------------------|
| Average                    | 1.0 (1)               | 2.0 (1)      | 1.0 (4)     | 3.0 (1)       | 2.1<br>(12) | 1.5 (2)           | 3.0 (1)         | 2.3 (3)         | 1.0 (1)          |
| Level of impore            | ortance scale: 1      | = one case   | e, 2 = more | than on       | e case b    | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                       |                       |              | 1.0 (1)     | 3.0 (1)       | 2.0 (3)     |                   |                 | 3.0 (1)         |                  |
| Dairy                      |                       |              |             |               |             | 1.5 (2)           |                 |                 |                  |
| Sheep                      | 1.0 (1)               | 2.0 (1)      | 1.0 (1)     |               | 2.1 (9)     |                   | 3.0 (1)         | 2.0 (2)         | 1.0 (1)          |
| Goat                       |                       |              | 1.0(2)      |               |             |                   |                 |                 |                  |
| Mpumalang                  |                       |              |             |               |             |                   |                 |                 |                  |
|                            | <b>Longtom Dier</b>   | ekliniek     |             |               |             |                   |                 |                 |                  |
| Sheep: 1                   |                       |              |             |               |             |                   |                 |                 |                  |
| Gauteng                    |                       |              |             |               |             |                   |                 |                 |                  |
|                            | derstepoort A         | cademic      | Hospital a  | nd Prod       | uction A    | Animal Clinic     | C               |                 |                  |
| Sheep: 2<br><b>Limpopo</b> |                       |              |             |               |             |                   |                 |                 |                  |
|                            | Bundu Veterin         | ary Saryi    | COC         |               |             |                   |                 |                 |                  |
| Goat: 1                    | bulluu veteili        | iai y Sei vi | LES         |               |             |                   |                 |                 |                  |
|                            | Pietersburg V         | eterinary    | Clinic      |               |             |                   |                 |                 |                  |
| Beef: 1, Shee              |                       | ,            |             |               |             |                   |                 |                 |                  |
| North West                 |                       |              |             |               |             |                   |                 |                 |                  |
| Bloemhof, B                | <b>Bloemhof Diere</b> | ekliniek     |             |               |             |                   |                 |                 |                  |
| Beef: 3                    |                       |              |             |               |             |                   |                 |                 |                  |
| Free State                 |                       |              |             |               |             |                   |                 |                 |                  |
|                            | Greylingsrust         | t Dierespr   | eekkamer    |               |             |                   |                 |                 |                  |
| Sheep: 3                   | laltarmada Dia        |              |             |               |             |                   |                 |                 |                  |
| Sheep: 2                   | /eltevrede Die        | rekiiniek    |             |               |             |                   |                 |                 |                  |
|                            | rankfort Diere        | kliniek      |             |               |             |                   |                 |                 |                  |
| Sheep: 3                   |                       |              |             |               |             |                   |                 |                 |                  |
|                            | loopstad Diere        | ekliniek     |             |               |             |                   |                 |                 |                  |
| Beef: 3                    |                       |              |             |               |             |                   |                 |                 |                  |
|                            | Cameeldoring          | Diereklini   | ek          |               |             |                   |                 |                 |                  |
| Sheep: 2                   |                       |              | _           |               |             |                   |                 |                 |                  |
|                            | Kroonstad Die         | rehospita    | al          |               |             |                   |                 |                 |                  |
| Sheep: 2                   | Cuparald Mad          | dog          | haid        |               |             |                   |                 |                 |                  |
| Sheep: 2                   | Grasveld Kud          | uegesona     | neia        |               |             |                   |                 |                 |                  |
|                            | land Dierehos         | nitaal       |             |               |             |                   |                 |                 |                  |
| Beef: 1                    |                       | r.wui        |             |               |             |                   |                 |                 |                  |
|                            | nekal Dierekli        | niek         |             |               |             |                   |                 |                 |                  |
| Sheep: 1                   |                       |              |             |               |             |                   |                 |                 |                  |
|                            | n, Wesselsbro         | n Dierekli   | niek        |               |             |                   |                 |                 |                  |
| Sheep: 1                   |                       |              |             |               |             |                   |                 |                 |                  |
|                            | inburg Dierek         | liniek       |             |               |             |                   |                 |                 |                  |
| Beef: 2, Shee              |                       |              |             |               |             |                   |                 |                 |                  |
| Kwazulu-Na                 | ital                  |              |             |               |             |                   |                 |                 |                  |

| dumeni Herd I       | nealth   |   |                           |                           |                           |  |                           |   |
|---------------------|--|---|---------------------------|---------------------------|---------------------------|--|---------------------------|---|
| Monirivier Vo       | t Clinic   |   |                           |                           |                           |  |                           |   |
| MOOIIIVIEI VE       | Cillic   |   |                           |                           |                           |  |                           |   |
| ne                  |  |   |                           |                           |                           |  |                           |   |
|                     | Dierehosp  | itaal   |                           |                           |                           |  |                           |   |
| , occyniobai g L    | olei elioop  | · caai  |                           |                           |                           |  |                           |   |
| sis in feedlots, r  | nanv cases   |   |                           |                           |                           |  |                           |   |
|                     | , ,  |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| ystems during th    | ne drought   |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| , Oudtshoorn        | Diereklini   | ek  |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| -                   |  |   |                           |                           |                           |  |                           |   |
| rg, Postmasbu       | rg Dierek  | liniek  |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| l abomasun          | n  |   |                           |                           |                           |  |                           | ^   |
| Mpumalanga          | Gauteng  | Limpopo   | North<br>West             |                           | Kwazulu-<br>Natal         | Eastern<br>Cape  | Western<br>Cape           | Northern<br>Cape  |
|                     |  |   |                           |                           | 2.0 (3)                   |  | 1.0 (1)                   |   |
| ortance scale: 1    | = one case   | e, 2 = more   | than on                   | e case b                  | ut less than t            | en and 3 =   | more than 1               | 10 cases  |
|                     |  |   |                           |                           | 2.0 (3)                   |  | 1.0(1)                    |   |
| atal                |  |   |                           |                           |                           |  |                           |   |
| dumeni Herd l       | health   |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| Mooirivier Ve       | t Clinic   |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| Underberg Ve        | terinary S   | Surgery   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
|                     |  |   |                           |                           |                           |  |                           |   |
| pe                  | th Consul  | •   |                           |                           |                           |  |                           |   |
| pe<br>orge Herd Hea | th Consul  | t   |                           |                           |                           |  |                           |   |
| -                   | th Consul  | t   |                           |                           |                           |  |                           | ^   |
| -                   |  |   | North<br>West             | Free<br>State             | Kwazulu-<br>Natal         | Eastern<br>Cape  | Western<br>Cape           | ^<br>Northern<br>Cape   |
| orge Herd Hea       |  |   |                           |                           |                           |  |                           |   |
| orge Herd Hea       | <b>Gauteng</b> 2.0 (2)   | Limpopo   | West                      | 2.7 (3)                   | 1.0 (1)                   | <b>Cape</b> 2.0 (1)  | 1.7 (3)                   | <b>Cape</b> 2.0 (1)   |
|                     | Mooirivier Verbe pe pe psis in feedlots, repe pe poor of the pe po | sis in feedlots, many cases pe 1, Ostrimed ystems during the drought ystems during the drought of Oudtshoorn Diereklinicape rg, Postmasburg Diereklinicape Mpumalanga Gauteng Ortance scale: 1 = one case otal dumeni Herd health Mooirivier Vet Clinic | Mooirivier Vet Clinic  De Control of Steynsburg Dierehospitaal  Sis in feedlots, many cases  pe Control of Strimed  Systems during the drought   Mooirivier Vet Clinic  De | Mooirivier Vet Clinic  pe y, Steynsburg Dierehospitaal  sis in feedlots, many cases pe y, Ostrimed  ystems during the drought ystems during the drought ystems during the drought youtshoorn Dierekliniek  appe gr, Postmasburg Dierekliniek  d abomasum  Mpumalanga Gauteng Limpopo North West Free State Kwazulu- Cape Cape  2.0 (3)  1.0 (1)  ortance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than at a dumeni Herd health  Mooirivier Vet Clinic |

| Sheep                                 |                       | 2.0 (2)                                       |             |               | 2.7 (3)       |                   |                 | 1.7 (3)         | 2.0 (1)          |
|---------------------------------------|-----------------------|---|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Gauteng                               |                       |   |             |               |               |                   |                 |                 |                  |
| <b>Bapsfonteir</b>                    | , Bapsfontein         | Dierehos                                      | pitaal      |               |               |                   |                 |                 |                  |
| Sheep: 2                              | <u> </u>              |   |             |               |               |                   |                 |                 |                  |
|                                       | derstepoort A         | cademic                                       | Hospital a  | nd Prod       | uction A      | Animal Clini      | С               |                 |                  |
| Sheep: 2                              | <u>-</u>              |   | •           |               |               |                   |                 |                 |                  |
| Free State                            |                       |   |             |               |               |                   |                 |                 |                  |
| Frankfort, F                          | rankfort Diere        | ekliniek                                      |             |               |               |                   |                 |                 |                  |
| Sheep: 3                              |                       |   |             |               |               |                   |                 |                 |                  |
|                                       | land Dierehos         | pitaal  |             |               |               |                   |                 |                 |                  |
| Sheep: 2                              |                       | <b>, , , , , , , , , , , , , , , , , , , </b> |             |               |               |                   |                 |                 |                  |
| · · · · · · · · · · · · · · · · · · · | inburg Dierek         | liniek  |             |               |               |                   |                 |                 |                  |
| Sheep: 3                              | mbarg bierek          | CIX   |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na                            | tal                   |   |             |               |               |                   |                 |                 |                  |
|                                       | dumeni Herd h         | nealth  |             |               |               |                   |                 |                 |                  |
| Dairy: 1                              | damem nera i          | icuicii                                       |             |               |               |                   |                 |                 |                  |
| Eastern Cap                           | 10                    |   |             |               |               |                   |                 |                 |                  |
|                                       | Alexandria Pla        | attaland S                                    | Snrookkam   | 10r           |               |                   |                 |                 |                  |
| Dairy: 2                              | Alexaliulia Fie       | atterana s                                    | preekkan    | ici           |               |                   |                 |                 |                  |
| Western Ca                            | no                    |   |             |               |               |                   |                 |                 |                  |
|                                       | pe<br>est, Beaufort [ | Dioroklini                                    | alz.        |               |               |                   |                 |                 |                  |
| Sheep: 2                              | est, beautoit t       | Jiei ekiiiili                                 | er.         |               |               |                   |                 |                 |                  |
|                                       | ladan Diarakli        | miak  |             |               |               |                   |                 |                 |                  |
|                                       | ledon Dierekli        | піек  |             |               |               |                   |                 |                 |                  |
| Sheep: 2                              | (MC) Haidalla         | <b>D</b> !                                    | 1-111       |               |               |                   |                 |                 |                  |
|                                       | (WC), Heidelb         | erg Diere                                     | KIINIEK     |               |               |                   |                 |                 |                  |
| Sheep: 1                              |                       |   |             |               |               |                   |                 |                 |                  |
| Northern Ca                           | •                     |   |             |               |               |                   |                 |                 |                  |
|                                       | Kimberley Die         | rekiiniek                                     |             |               |               |                   |                 |                 |                  |
| Sheep: 2                              |                       |   |             |               |               |                   |                 |                 |                  |
| Milk Feve                             | er                    |   |             |               |               |                   |                 |                 | <u>^</u>         |
| PROVINCE                              | Mpumalanga            | Gauteng                                       | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                               |                       |   |             |               | 1.0<br>(1)    |                   |                 | 2.0 (3)         |                  |
| Level of impore                       | ortance scale: 1      | = one case                                    | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                                  |                       |   |             |               | 1.0<br>(1)    |                   |                 |                 |                  |
| Dairy                                 |                       |   |             |               |               |                   |                 | 2.0 (3)         |                  |
| Free State                            |                       |   |             |               |               |                   |                 | 2.0 (0)         |                  |
|                                       | shook Disease         | condbald                                      |             |               |               |                   |                 |                 |                  |
|                                       | shoek Dierege         | sonuneia                                      |             |               |               |                   |                 |                 |                  |
| Beef: 1                               |                       |   |             |               |               |                   |                 |                 |                  |
| Western Ca                            |                       | !-!-  |             |               |               |                   |                 |                 |                  |
|                                       | ledon Dierekli        | піек  |             |               |               |                   |                 |                 |                  |
| Dairy: 2                              |                       |   | _           |               |               |                   |                 |                 |                  |
|                                       | orge Herd Hea         | tn Consul                                     | t           |               |               |                   |                 |                 |                  |
| Dairy: 3                              |                       |   |             |               |               |                   |                 |                 |                  |
|                                       | h, Stellenbosc        | La A  | Licenstel   |               |               |                   |                 |                 |                  |

| Dairy: 1   |   |                        |             |               |               |                   |                 |                 |                  |
|--|---|------------------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Reprodu  | ctive disea   | ises                   |             |               |               |                   |                 |                 |                  |
| Dystocia   | (Difficult Bi   | rths)                  |             |               |               |                   |                 |                 |                  |
| PROVINCE   | Mpumalanga  | Gauteng                | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average  | 1.9 (11)  | 1.5 (2)                | 1.7 (3)     | 2.6<br>(10)   | 2.2<br>(27)   | 2.1 (14)          | 1.9 (8)         | 1.8 (13)        | 2.0 (5)          |
| Level of imported  | ortance scale: 1  | = one case             | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than 1     | l0 cases         |
| Beef   | 2.1 (8)   | 1.5 (2)                | 1.7 (3)     | 3.0 (6)       | 2.4<br>(21)   | 2.3 (9)           | 1.6 (5)         | 2.0 (5)         | 2.0 (4)          |
| Dairy  | 1.0 (1)   |                        |             |               | 1.0<br>(1)    | 2.0 (1)           | 2.0 (1)         | 1.8 (5)         |                  |
| Sheep  | 1.5 (2)   |                        |             | 2.0 (3)       | 1.8<br>(5)    | 1.7 (3)           | 2.5 (2)         | 1.7 (3)         | 2.0 (1)          |
| Goat   |   |                        |             | 2.0(1)        |               | 1.0(1)            |                 |                 |                  |
| Beef: 2<br>Hendrina, M<br>Beef: 2<br>Lydenburg,<br>Beef: 2, Shee | rootvlei Diere<br>looiplaas Vete<br>Longtom Dier<br>p: 2<br>Lydenburg Die | rinêre Die<br>ekliniek |             |               |               |                   |                 |                 |                  |
| Beef: 3  | Neil Fourie Vorasslands vet   |                        | dienste     |               |               |                   |                 |                 |                  |
| <b>Gauteng<br/>Bronkhorsts</b><br>Beef: 2                        | spruit, Kerkstr   |                        | kliniek     |               |               |                   |                 |                 |                  |
| Nigel, Nigel<br>Beef: 1<br>Limpopo                               | Diere Spreekl   | camer                  |             |               |               |                   |                 |                 |                  |
| <b>Mokopane,</b> l<br>Beef: 2                                    | Bundu Veterin<br>Pietersburg V  |                        |             |               |               |                   |                 |                 |                  |
| Beef: 1  | 2 Farm Practi   |                        |             |               |               |                   |                 |                 |                  |
| North West   | Sloemhof Diere  | ekliniek               |             |               |               |                   |                 |                 |                  |

Beef: 3 Many dystocias due to heifers calving too young **Brits, Brits Dierekliniek** Beef: 3, Sheep: 2, Goat: 2 **Brits, Zodiac Dierekliniek** Sheep: 1 Klerksdorp, Klerksdorp Dierehospitaal Beef: 3, Sheep: 3 Leeudoringstad, Leeudoringstad Dierekliniek Beef: 3 Rustenburg, Bergbos Dierekliniek Beef: 3 Schweizer-Reneke, Buffeldoorn Dierekliniek SR Including one caesarean **Free State Bethlehem, Union Street Animal Consulting Rooms Bloemfontein, Dr Stephan Wessels** Beef: 3 **Bloemfontein, University Free State** Beef: 2 **Bultfontein, Greylingsrust Dierespreekkamer** Beef: 2, Sheep: 2 Clocolan, Clocolan Dierekliniek Beef: 2 **Dewetsdorp, Platkop Dierekliniek** Beef: 2 Ficksburg, Oosvrystaat Diere Produkte Beef: 3 Frankfort, Frankfort Dierekliniek Beef: 3, Sheep: 2 Hoopstad, Hoopstad Dierekliniek Beef: 3, Sheep: 3 Hoopstad, Kameeldoring Dierekliniek Beef: 2, Sheep: 1 Kroonstad, Kroonstad Dierehospitaal Beef: 3, Dairy: 1 Oranjeville, Grasveld Kuddegesondheid Beef: 2, Sheep: 1 Parys, Parys Dierehospitaal Beef: 2 Reitz, Riemland Dierehospitaal Senekal, Senekal Dierekliniek Beef: 2 Viljoenskroon, Viljoenskroon Dierekliniek Beef: 3 Vrede, Saulshoek Dieregesondheid. Beef: 2 Vrede, Vrede Dierehospitaal Beef: 3 Warden, Warden Dierekliniek

Wesselsbron, Wesselsbron Dierekliniek

Beef: 1 Winburg, Winburg Dierekliniek Beef: 3 **Kwazulu-Natal Bergville, Bergville Veterinary Clinic Dundee, Endumeni Herd health** Beef: 3 **Eshowe, Eshowe Veterinary Hospital** Beef: 3 **Estcourt, Estcourt Vet Clinic** Beef: 2 **Mooi River, Mooirivier Vet Clinic** Beef: 2, Dairy: 2, Sheep: 1, Goat: 1 Mtubatuba, Mtubatuba Animal Clinic Beef: 2 **Newcastle, Ncanduvet Newcastle** Beef: 3, Sheep: 3 **Pietermaritzburg, Veterinary House Hospital** Beef: 1 **Underberg, Underberg Veterinary Surgery** Beef: 3, Sheep: 1 **Eastern Cape** Alexandria, Alexandria Platteland Spreekkamer Dairy: 2 **Alexandria, Riverview Trading Vet Consulting Services** Beef: 1 Aliwal North, Hertzogbrug Dierekliniek Beef: 2, Sheep: 2 **Humansdorp, Humansdorp Veterinary Clinic** Beef: 2 Steynsburg, Steynsburg Dierehospitaal Beef: 2, Sheep: 3 **Uitenhage, Uitenhage Dierehospitaal** Beef: 1 **Western Cape Beaufort West, Beaufort Dierekliniek** Sheep: 2 Caledon, Caledon Dierekliniek Dairy: 2 Caledon, Overberg Veterinary Hospital Beef: 2, Dairy: 2, Sheep: 2 **Ceres, Ceres Veterinary Hospital** Beef: 2, Sheep: 1 **Darling, Tygerberg Dierehospitaal Darling** Beef: 2 George, George Herd Heath Consult Dairy: 2 Malmesbury, Bergzight Dierehospitaal Dairy: 2 Malmesbury, Dr Otto Kriek Beef: 2 Stellenbosch, Stellenbosch Animal Hospital Swellendam, Swellendam Dierehospitaal

| Dairy: 1          |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
|-------------------|--------------------------------|--------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|--|
| Northern Ca       |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
|                   | Kimberley Die                  | rekliniek    |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 3           |                                |              | _           |               |               |                   |                 |                 |                  |  |  |  |
|                   | Staatsveeartse                 | e Groep N    | С           |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1           |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
| Koopmansfor       |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
|                   | uruman Diere                   | Kliniek      |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2, Shee     | ep: 2<br>r <b>g, Postmasbu</b> | ra Diorok    | liniak      |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2           | y, Postillasbu                 | ig Dieleki   | iiiiek      |               |               |                   |                 |                 |                  |  |  |  |
| Endometritis      |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
| PROVINCE          | Mpumalanga                     | Gauteng      | Limpopo     | North<br>West |               | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average           |                                |              |             |               | 2.0 (1)       | 2.0 (1)           |                 | 2.7 (3)         |                  |  |  |  |
| Level of imported | ortance scale: 1               | = one case   | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |  |  |  |
| Beef              |                                |              |             |               | 2.0 (1)       |                   |                 |                 |                  |  |  |  |
| Dairy             |                                |              |             |               |               | 2.0(1)            |                 | 2.7 (3)         |                  |  |  |  |
| Free State        |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
| Warden, Wa        | arden Dierekli                 | niek         |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2           |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
| Kwazulu-Na        |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
|                   | Mooirivier Vet                 | t Clinic     |             |               |               |                   |                 |                 |                  |  |  |  |
| Dairy: 2          |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
| Western Ca        | •                              |              | _           |               |               |                   |                 |                 |                  |  |  |  |
|                   | orge Herd Hea                  | th Consul    | t           |               |               |                   |                 |                 |                  |  |  |  |
| Dairy: 3          | (WC), Heidelb                  | ora Dioro    | klimiak     |               |               |                   |                 |                 |                  |  |  |  |
| Dairy: 2          | (wc), neidelb                  | erg Diere    | Kiiniek     |               |               |                   |                 |                 |                  |  |  |  |
|                   | y, Bergzight Di                | iarahasnit   | esal        |               |               |                   |                 |                 |                  |  |  |  |
| Dairy: 3          | y, beigzignit bi               | ici cilospit | .aai        |               |               |                   |                 |                 |                  |  |  |  |
|                   |                                |              |             |               |               |                   |                 |                 |                  |  |  |  |
| Metritis          |                                |              |             |               |               |                   |                 |                 | _                |  |  |  |
| PROVINCE          | Mpumalanga                     | Gauteng      | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average           | 1.0 (1)                        |              |             | 2.0 (1)       | 2.5<br>(2)    | 3.0 (1)           |                 | 2.3 (3)         |                  |  |  |  |
| Level of imported | ortance scale: 1               | = one case   | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |  |  |  |
|                   | 1.0(1)                         |              |             | 2.0(1)        | 2.0           |                   |                 |                 |                  |  |  |  |

| Dairy              |                     |               |             |               | 3.0<br>(1)    |                   |                 | 2.3 (3)         |                  |
|--------------------|---------------------|---------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Mpumalang          |                     |               |             |               |               |                   |                 |                 |                  |
|                    | four Diereklin      | iek           |             |               |               |                   |                 |                 |                  |
| Beef: 1            |                     |               |             |               |               |                   |                 |                 |                  |
| North West         |                     |               | - •         |               |               |                   |                 |                 |                  |
| Beef: 2            | Christiana Die      | renospita     | aı          |               |               |                   |                 |                 |                  |
| Free State         | in Du Chamban       |               |             |               |               |                   |                 |                 |                  |
| Beef: 2            | in, Dr Stephar      | wesseis       |             |               |               |                   |                 |                 |                  |
|                    | nekal Dierekli      | niek          |             |               |               |                   |                 |                 |                  |
| Dairy: 3           | ilekai Dielekii     | iller         |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na         | atal                |               |             |               |               |                   |                 |                 |                  |
|                    | <b>Underberg Ve</b> | terinary S    | Surgery     |               |               |                   |                 |                 |                  |
| Beef: 3            |                     |               |             |               |               |                   |                 |                 |                  |
| Western Ca         | -                   |               |             |               |               |                   |                 |                 |                  |
|                    | gerberg Diereh      | ospitaal l    | Darling     |               |               |                   |                 |                 |                  |
| Dairy: 2           |                     |               |             |               |               |                   |                 |                 |                  |
|                    | orge Herd Hea       | th Consul     | t           |               |               |                   |                 |                 |                  |
| Dairy: 2           | y, Bergzight Di     | iorobocnil    | -aal        |               |               |                   |                 |                 |                  |
| Dairy: 3           | y, bergzigiit Di    | iei ei iospii | ,aai        |               |               |                   |                 |                 |                  |
| Poor con           | ception             |               |             |               |               |                   |                 |                 | _                |
| PROVINCE           | Mpumalanga          | Gauteng       | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average            |                     |               | 1.0 (1)     | 1.0 (1)       | 2.5<br>(2)    | 2.7 (3)           | 3.0 (1)         |                 |                  |
| Level of impore    | ortance scale: 1    | = one case    | e, 2 = more | than one      | e case b      | ut less than t    | en and 3 =      | more than I     | 10 cases         |
| Beef               |                     |               | 1.0 (1)     | 1.0 (1)       | 2.5 (2)       | 2.5 (2)           |                 |                 |                  |
| Dairy              |                     |               |             |               | × /           | 3.0 (1)           |                 |                 |                  |
| Sheep              |                     |               |             |               |               |                   | 3.0 (1)         |                 |                  |
| Limpopo            |                     |               |             |               |               |                   |                 |                 |                  |
|                    | Kranskop Die        | ekliniek      |             |               |               |                   |                 |                 |                  |
| Beef: 1            |                     |               |             |               |               |                   |                 |                 |                  |
| Early embrior      |                     |               |             |               |               |                   |                 |                 |                  |
| North West         |                     |               | _1          |               |               |                   |                 |                 |                  |
| Beef: 1            | Christiana Die      | renospita     | aı          |               |               |                   |                 |                 |                  |
| Free State         |                     |               |             |               |               |                   |                 |                 |                  |
|                    | ocolan Dierek       | liniek        |             |               |               |                   |                 |                 |                  |
| Beef: 2            |                     |               |             |               |               |                   |                 |                 |                  |
|                    | inburg Dierek       | liniek        |             |               |               |                   |                 |                 |                  |
| Beef: 3            |                     |               |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na         |                     |               |             |               |               |                   |                 |                 |                  |
| <b>Pietermarit</b> | zburg, Veterin      | ary House     | Hospital    |               |               |                   |                 |                 |                  |
|                    |                     |               |             |               |               |                   |                 |                 |                  |

Beef: 2

## **Underberg, Underberg Veterinary Surgery**

Beef: 3

Early foetus deaths on scanning.

Dairy: 3

Poor condition leading to non-cyclers in dairy. Nutritional problems

## **Eastern Cape**

# Steynsburg, Steynsburg Dierehospitaal

Sheep: 3 Poor fertility

| Retained afterbirth |            |         |         |               |               |                   |                 |                 |                  |  |  |  |
|---------------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|--|
| PROVINCE            | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average             | 1.7 (3)    | 1.5 (4) |         | 2.0 (1)       | 2.0 (6)       | 1.8 (5)           | 1.5 (2)         | 2.0 (4)         | 2.0 (1)          |  |  |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 1.7 (3) | 1.5 (4) | 2.0 (1) | 2.0<br>(6) | 1.8 (5) | 2.0 (1) | 1.0(1)  | 2.0 (1) |
|-------|---------|---------|---------|------------|---------|---------|---------|---------|
| Dairy |         |         |         |            |         | 1.0(1)  | 3.0 (2) |         |
| Sheep |         |         |         |            |         |         | 1.0(1)  |         |

## Mpumalanga

# **Balfour, Balfour Dierekliniek**

Beef: 1

#### Lydenburg, Longtom Dierekliniek

Beef: 2

## Lydenburg, Lydenburg Dierespreekkamer

Beef: 2

Gauteng

# **Bapsfontein, Bapsfontein Dierehospitaal**

Beef: 2

## **Bronkhorstspruit, Kerkstraat Dierekliniek**

Beef: 1

## Nigel, Nigel Diere Spreekkamer

Beef: 2

## Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Beef: 1
North West

# **Christiana, Christiana Dierehospitaal**

Beef: 2
Free State

# **Bethlehem, Union Street Animal Consulting Rooms**

Beef: 2

#### **Bloemfontein, Dr Stephan Wessels**

Beef: 2

## **Bultfontein, Greylingsrust Dierespreekkamer**

Beef: 2

#### Frankfort, Frankfort Dierekliniek

| <b>Winburg, W</b><br>Beef: 3  | linhura Dierek  |                                      |                                     |                   |                  |                           |                 |                   |                  |
|---|---|--------------------------------------|-------------------------------------|-------------------|------------------|---------------------------|-----------------|-------------------|------------------|
| 3eef: 3   | ilibuig biciek  | liniek                               |                                     |                   |                  |                           |                 |                   |                  |
|   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Kwazulu-Na  | atal  |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Bergville, B  | ergville Veteri   | nary Clini                           | С                                   |                   |                  |                           |                 |                   |                  |
| Beef: 3   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Dundee, En  | dumeni Herd l   | nealth                               |                                     |                   |                  |                           |                 |                   |                  |
| Beef: 1   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Pongola, Po   | ngola Animal  | Clinic                               |                                     |                   |                  |                           |                 |                   |                  |
| Beef: 1   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Jnderberg,  | <b>Underberg Ve</b>   | terinary S                           | Surgery                             |                   |                  |                           |                 |                   |                  |
| Beef: 2   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Vryheid, Vr   | yheid Privaat \   | /eeartse                             |                                     |                   |                  |                           |                 |                   |                  |
| Beef: 2   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Eastern Cap   | oe e  |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Alexandria,   | Alexandria Pla  | atteland S                           | Spreekkam                           | ner               |                  |                           |                 |                   |                  |
| Dairy: 1  |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
|   | p, Humansdor  | p Veterin                            | ary Clinic                          |                   |                  |                           |                 |                   |                  |
| Beef: 2   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Western Ca  | -   |                                      |                                     |                   |                  |                           |                 |                   |                  |
|   | est, Beaufort I   | Diereklinie                          | ek                                  |                   |                  |                           |                 |                   |                  |
| Sheep: 1  |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
|   | iledon Dierekli   | iniek                                |                                     |                   |                  |                           |                 |                   |                  |
| Beef: 1   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
|   | y, Bergzight D  | ierehospit                           | taal                                |                   |                  |                           |                 |                   |                  |
| Dairy: 3  |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
|   | y, Dr Otto Krie   | k                                    |                                     |                   |                  |                           |                 |                   |                  |
| Dairy: 3  |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
|   |   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Northern Ca   | -   |                                      |                                     |                   |                  |                           |                 |                   |                  |
| Northern Ca<br>Kuruman, K   | ape<br>Kuruman Diere  | kliniek                              |                                     |                   |                  |                           |                 |                   |                  |
| Northern Ca   | -   | kliniek                              |                                     |                   |                  |                           |                 |                   |                  |
| Northern Ca<br>Kuruman, K<br>Beef: 2  | Curuman Diere   | kliniek                              |                                     |                   |                  |                           |                 |                   | ^                |
| Northern Ca<br>Kuruman, K   | Curuman Diere   | kliniek                              |                                     |                   |                  |                           |                 |                   | _                |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P  | rolaps  |                                      | Limpopo                             | North             | Free             | Kwazulu-                  | Eastern         | Western           | ^<br>Northern    |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P  | Curuman Diere   |                                      | Limpopo                             | North<br>West     | Free<br>State    |                           | Eastern<br>Cape | Western<br>Cape   | Northern<br>Cape |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P  | rolaps  | Gauteng                              |                                     | West              | State 1.5        |                           |                 | Cape              |                  |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average   | rolaps  Mpumalanga  | <b>Gauteng</b> 1.0 (1)               | 1.0 (1)                             | West 1.0 (1)      | 1.5<br>(4)       | Natal 1.0 (2)             | Cape            | 1.0 (1)           | 1.0 (1)          |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average   | rolaps  Mpumalanga  | <b>Gauteng</b> 1.0 (1)               | 1.0 (1)<br>e, 2 = more              | 1.0 (1) e than on | 1.5 (4) e case b | Natal 1.0 (2)             | Cape            | 1.0 (1)           | 1.0 (1)          |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imporeported<br>Beef  | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)                    | 1.0 (1) = one case 1.0 (1)           | 1.0 (1) e, 2 = more 1.0 (1)         | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imporeported<br>Beef  | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)                    | 1.0 (1) = one case 1.0 (1)           | 1.0 (1) e, 2 = more 1.0 (1)         | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imported<br>Beef<br>Mpumalang<br>Ermelo, Mô   | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)                    | 1.0 (1) = one case 1.0 (1)           | 1.0 (1) e, 2 = more 1.0 (1)         | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imporeported<br>Beef  | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)                    | 1.0 (1) = one case 1.0 (1)           | 1.0 (1) e, 2 = more 1.0 (1)         | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imporeported<br>Beef<br>Mpumalang<br>Ermelo, Mô<br>Beef: 1<br>Gauteng               | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)                    | 1.0 (1) = one case 1.0 (1) nere Spre | 1.0 (1) e, 2 = more 1.0 (1) ekkamer | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imporeported<br>Beef<br>Mpumalang<br>Ermelo, Mô<br>Beef: 1<br>Gauteng               | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)  ja regloed Veteri | 1.0 (1) = one case 1.0 (1) nere Spre | 1.0 (1) e, 2 = more 1.0 (1) ekkamer | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |
| Northern Ca<br>Kuruman, K<br>Beef: 2<br>Sheath P<br>PROVINCE<br>Average<br>Level of imporeported<br>Beef<br>Mpumalang<br>Ermelo, Mô<br>Beef: 1<br>Gauteng<br>Bronkhorst | rolaps  Mpumalanga  1.0 (1)  ortance scale: 1  1.0 (1)  ja regloed Veteri | 1.0 (1) = one case 1.0 (1) nere Spre | 1.0 (1) e, 2 = more 1.0 (1) ekkamer | 1.0 (1) e than on | 1.5 (4) e case b | 1.0 (2)<br>ut less than t | Cape            | 1.0 (1) more than | 1.0 (1) 10 cases |

Kroonstad, Kroonstad Dierehospitaal

Beef: 1

# North West

Vryburg, Molopo Dierekliniek

Beef: 1
Free State

**Bethlehem, Union Street Animal Consulting Rooms** 

Beef: 1

**Hoopstad, Hoopstad Dierekliniek** 

Beef: 1

**Kroonstad, Kroonstad Dierehospitaal** 

Beef: 1

Winburg, Winburg Dierekliniek

Beef: 3

**Kwazulu-Natal** 

**Bergville, Bergville Veterinary Clinic** 

Beef: 1

**Mtubatuba, Mtubatuba Animal Clinic** 

Beef: 1

**Western Cape** 

Stellenbosch, Stellenbosch Animal Hospital

Beef: 1

**Northern Cape** 

Kuruman, Kuruman Dierekliniek

Beef: 1

| Uterus prolaps |            |         |         |               |               |                   |                 |                 |                  |  |  |
|----------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|
| PROVINCE       | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |
| Average        | 1.8 (4)    | 2.0 (3) | 1.0 (2) | 2.5 (2)       | 1.9<br>(16)   | 1.4 (8)           | 1.0 (1)         | 1.3 (3)         | 1.8 (4)          |  |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 1.7 (3) | 2.0 (2) | 1.0 (1) | 2.5 (2) | 1.9<br>(14) | 1.4 (7) |        | 1.0 (2) | 1.5 (2) |
|-------|---------|---------|---------|---------|-------------|---------|--------|---------|---------|
| Dairy |         |         |         |         |             | 1.0(1)  | 1.0(1) | 2.0 (1) |         |
| Sheep | 2.0 (1) | 2.0 (1) | 1.0 (1) |         | 2.0 (2)     |         |        |         | 2.0 (2) |

#### Mpumalanga

**Bethal, Bethal Dierekliniek** 

Beef: 2

Grootvlei, Grootvlei Dierekliniek

Beef: 1

Lydenburg, Longtom Dierekliniek

Beef: 2, Sheep: 2

Gauteng

Bapsfontein, Bapsfontein Dierehospitaal

Beef: 2, Sheep: 2

Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Beef: 2 **Limpopo** 

**Modimolle, Kranskop Dierekliniek** 

Beef: 1 **Polokwane, Pietersburg Veterinary Clinic** Sheep: 1 **North West Brits, Brits Dierekliniek** Beef: 2 Leeudoringstad, Leeudoringstad Dierekliniek Beef: 3 **Free State Bethlehem, Union Street Animal Consulting Rooms Bloemfontein, University Free State** Beef: 1 Clocolan, Clocolan Dierekliniek Beef: 2 **Dewetsdorp, Platkop Dierekliniek** Beef: 1 Ficksburg, Oosvrystaat Diere Produkte Beef: 2 **Frankfort, Frankfort Dierekliniek** Beef: 2, Sheep: 2 **Hoopstad, Hoopstad Dierekliniek** Beef: 2 Hoopstad, Kameeldoring Dierekliniek Beef: 1 Kroonstad, Kroonstad Dierehospitaal Sheep: 2 Reitz, Riemland Dierehospitaal Senekal, Senekal Dierekliniek Beef: 2 Vrede, Saulshoek Dieregesondheid. Beef: 2 Vrede, Vrede Dierehospitaal Beef: 3 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 3 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 2 **Dundee, Endumeni Herd health Eshowe, Eshowe Veterinary Hospital** Beef: 2 **Estcourt, Estcourt Vet Clinic** Beef: 1 **Mooi River, Mooirivier Vet Clinic** Beef: 1, Dairy: 1 Mtubatuba, Mtubatuba Animal Clinic Pietermaritzburg, Veterinary House Hospital Beef: 1

**Eastern Cape** 

|                    | Alexandria Pla      | atteland S | preekkam    | er            |               |                   |                 |                 |                  |  |  |  |
|--------------------|---------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|--|
| Dairy: 1           |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Western Ca         |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | erberg Veteri       | nary Hosp  | ital        |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1            |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | orge Herd Hea       | th Consul  | t           |               |               |                   |                 |                 |                  |  |  |  |
| Dairy: 2           |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | h, Stellenbosc      | h Animal   | Hospital    |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1            |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Northern Ca        |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | Kimberley Die       | rekliniek  |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1            |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | uruman Diere        | kliniek    |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2, Shee      | •                   |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | g, Postmasbu        | rg Diereki | iniek       |               |               |                   |                 |                 |                  |  |  |  |
| Sheep: 2           |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Vaginal (          | Cervical) pr        | olaps      |             |               |               |                   |                 |                 | ^                |  |  |  |
| PROVINCE           | Mpumalanga          | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |  |
| Average            | 18                  |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Level of impore    | ortance scale: 1    | = one case | e, 2 = more | than on       |               | ut less than t    | en and 3 =      | more than 1     | 10 cases         |  |  |  |
| Beef               | 1.8 (4)             | 2.0 (2)    | 1.0 (1)     | 1.0 (1)       | (12)          | 1.8 (5)           |                 | 1.0 (1)         |                  |  |  |  |
| Sheep              | 1.7 (3)             |            |             |               | 2.0 (6)       |                   |                 | 2.0 (2)         |                  |  |  |  |
| <b>Mpumalang</b>   |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | nal Diereklinie     | k          |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1, Shee      |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | rootvlei Diere      | kliniek    |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2, Shee      |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | <b>Longtom Dier</b> | ekliniek   |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2, Shee      | •                   |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | irasslands vet      | clinic     |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2            |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
| Gauteng            | Daniel I            | Dia!       |             |               |               |                   |                 |                 |                  |  |  |  |
| -                  | , Bapsfontein       | pierenos   | pitaal      |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2            | manik Manisak       | nat Diazz  | klimia!.    |               |               |                   |                 |                 |                  |  |  |  |
|                    | spruit, Kerkstr     | aat Diere  | кипиек      |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 2<br>Limpopo |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | Kranskop Dier       | okliniak   |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1            | Manskop Dier        | CKIIIIIEK  |             |               |               |                   |                 |                 |                  |  |  |  |
| North West         |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | olopo Diereklir     | niak       |             |               |               |                   |                 |                 |                  |  |  |  |
| Beef: 1            | nopo Dierekili      | IICK       |             |               |               |                   |                 |                 |                  |  |  |  |
| Free State         |                     |            |             |               |               |                   |                 |                 |                  |  |  |  |
|                    | Union Street        | Animal Co  | nsulting F  | Rooms         |               |                   |                 |                 |                  |  |  |  |
| Sectioned,         | Jilion Juleel       | Ammai Cu   | mounting F  |               |               |                   |                 |                 |                  |  |  |  |

| Beef: 2       |                                       |                    |           |       |       |          |         |         |          |
|---------------|---------------------------------------|--------------------|-----------|-------|-------|----------|---------|---------|----------|
| Bultfontein   | , Greylingsrust                       | t Dierespr         | eekkamer  |       |       |          |         |         |          |
| Sheep: 2      | , , , ,                               | <u> </u>           |           |       |       |          |         |         |          |
|               | locolan Dierek                        | liniek             |           |       |       |          |         |         |          |
| Beef: 2       |                                       |                    |           |       |       |          |         |         |          |
|               | Dosvrystaat Di                        | ere Produ          | kte       |       |       |          |         |         |          |
| Beef: 1       | , , , , , , , , , , , , , , , , , , , |                    |           |       |       |          |         |         |          |
|               | rankfort Diere                        | kliniek            |           |       |       |          |         |         |          |
| Beef: 2, Shee |                                       | , KIIIII CIK       |           |       |       |          |         |         |          |
|               | Hoopstad Dier                         | kliniek            |           |       |       |          |         |         |          |
| Beef: 1, Shee |                                       | CKIIIICK           |           |       |       |          |         |         |          |
|               | Kroonstad Die                         | rehosnita          | al        |       |       |          |         |         |          |
| Sheep: 2      | Ki oonstaa Die                        | Cilospita          | uı        |       |       |          |         |         |          |
| •             | Grasveld Kud                          | denesand           | hoid      |       |       |          |         |         |          |
| Beef: 2, Shee |                                       | uegesona           | iiciu     |       |       |          |         |         |          |
|               | land Dierehos                         | nitaal             |           |       |       |          |         |         |          |
| Beef: 2       | iana Dierenos                         | picaai             |           |       |       |          |         |         |          |
|               | nekal Dierekli                        | niek               |           |       |       |          |         |         |          |
| Beef: 2, Shee |                                       | IIICK              |           |       |       |          |         |         |          |
|               | shoek Dierege                         | sondheid           |           |       |       |          |         |         |          |
| Beef: 2       | onder Dierege                         | Jonancia           |           |       |       |          |         |         |          |
|               | le Dierehospita                       | aal                |           |       |       |          |         |         |          |
| Beef: 1       | ic Biciciiospia                       | .u.                |           |       |       |          |         |         |          |
|               | n, Wesselsbro                         | n Dierekli         | niek      |       |       |          |         |         |          |
| Beef: 1       | , 11033013510                         | ii Dici cian       | illen     |       |       |          |         |         |          |
|               | inburg Dierek                         | liniek             |           |       |       |          |         |         |          |
| Beef: 3       | mbarg breren                          |                    |           |       |       |          |         |         |          |
| Kwazulu-Na    | atal                                  |                    |           |       |       |          |         |         |          |
|               | ergville Veteri                       | nary Clinic        | c         |       |       |          |         |         |          |
| Beef: 2       |                                       | nary Cillin        | -         |       |       |          |         |         |          |
|               | dumeni Herd l                         | nealth             |           |       |       |          |         |         |          |
| Beef: 1       |                                       |                    |           |       |       |          |         |         |          |
|               | howe Veterina                         | rv Hospita         | al        |       |       |          |         |         |          |
| Beef: 2       |                                       | .,оор              |           |       |       |          |         |         |          |
|               | stcourt Vet Clir                      | nic                |           |       |       |          |         |         |          |
| Beef: 2       |                                       |                    |           |       |       |          |         |         |          |
|               | Mtubatuba Ar                          | nimal Clini        | ic        |       |       |          |         |         |          |
| Beef: 2       |                                       |                    |           |       |       |          |         |         |          |
| Western Ca    | pe                                    |                    |           |       |       |          |         |         |          |
|               | erberg Veteri                         | narv Hosp          | ital      |       |       |          |         |         |          |
| Sheep: 3      | render greeter in                     | у 1100р            |           |       |       |          |         |         |          |
| •             | n, Swellendam                         | Dierehos           | nitaal    |       |       |          |         |         |          |
| Beef: 1       | .,                                    | <b>D</b> 101 01100 | predu.    |       |       |          |         |         |          |
|               | Durban Straat                         | Diereklin          | iek Worce | ster  |       |          |         |         |          |
| Sheep: 1      |                                       |                    |           |       |       |          |         |         |          |
| •             |                                       |                    |           |       |       |          |         |         |          |
| Climatic      | al Cause                              |                    |           |       |       |          |         |         |          |
|               |                                       |                    |           |       |       |          |         |         |          |
| Cold exp      | osure                                 |                    |           |       |       |          |         |         | ^        |
|               |                                       |                    |           |       |       |          |         |         |          |
| DDC)/TNC=     | Managarata                            | Carte              | Limens    | North | Free  | Kwazulu- | Eastern | Western | Northern |
| PROVINCE      | Mpumalanga                            | Gauteng            | rimbobo   | West  | State | Natal    | Cape    | Cape    | Cape     |
|               |                                       |                    |           |       |       |          |         |         |          |

| Average             |                   |              | 1.0 (2)     |               | 3.0 (1)       |                   |                 |                 |                  |
|---------------------|-------------------|--------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Level of impore     | ortance scale: 1  | = one case   | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Sheep               |                   |              | 1.0 (1)     |               | 3.0 (1)       |                   |                 |                 |                  |
| Goat                |                   |              | 1.0(1)      |               |               |                   |                 |                 |                  |
| Limpopo             |                   |              |             |               |               |                   |                 |                 |                  |
|                     | Pietersburg V     | eterinary    | Clinic      |               |               |                   |                 |                 |                  |
| Sheep: 1, Goo       | at: 1             |              |             |               |               |                   |                 |                 |                  |
|                     | Grasveld Kud      | deaesond     | heid        |               |               |                   |                 |                 |                  |
| Sheep: 3            |                   |              |             |               |               |                   |                 |                 |                  |
| Drought             |                   |              |             |               |               |                   |                 |                 | ^                |
| PROVINCE            | Mpumalanga        | Gauteng      | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average             |                   |              |             |               | 3.0 (1)       |                   |                 |                 | 3.0 (4)          |
| Level of impore     | ortance scale: 1  | = one case   | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef                |                   |              |             |               | 3.0 (1)       |                   |                 |                 | 3.0 (1)          |
| Dairy               |                   |              |             |               |               |                   |                 |                 | 3.0 (1)          |
| Sheep               |                   |              |             |               |               |                   |                 |                 | 3.0 (1)          |
| Goat                |                   |              |             |               |               |                   |                 |                 | 3.0 (1)          |
| Free State          |                   |              |             |               |               |                   |                 |                 |                  |
|                     | inburg Dierek     | liniek       |             |               |               |                   |                 |                 |                  |
| Beef: 3 Northern Ca | no.               |              |             |               |               |                   |                 |                 |                  |
|                     | staatsveeartse    | e Groep N    | С           |               |               |                   |                 |                 |                  |
| Beef: 3             |                   |              |             |               |               |                   |                 |                 |                  |
|                     | nown. Namakwa     | a land and   | Gordinia    |               |               |                   |                 |                 |                  |
| Dairy: 3            | nown. Namakwa     | a land and   | Gordinia    |               |               |                   |                 |                 |                  |
| Sheep: 3            | TIOWII. INGILIAKW | a laria aria | Gordina     |               |               |                   |                 |                 |                  |
|                     | nown. Namakwa     | a land and   | Gordinia    |               |               |                   |                 |                 |                  |
| Goat: 3             | nown. Namakwa     | a land and   | Cordinia    |               |               |                   |                 |                 |                  |
|                     |                   | a iailu dilu | GOLUILIIA   |               |               |                   |                 |                 |                  |
| Heat stre           | SS                |              |             |               |               |                   |                 |                 | ^                |
| PROVINCE            | Mpumalanga        | Gauteng      | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |

2.0(1)**Average** Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported Beef 2.0(1)Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 2 Lightning North Free Kwazulu- Eastern Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape 1.8 1.3 (4) 2.3 (3) 1.0(1)**Average** (5) Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported 1.8 Beef 1.3 (3) 2.3 (3) 1.0(1)(5) Sheep 1.0(1)**Mpumalanga Balfour, Balfour Dierekliniek** Beef: 1 Hendrina, Mooiplaas Veterinêre Dienste Beef: 1, Sheep: 1 **Standerton, Econovet** Beef: 2 **Free State Dewetsdorp, Platkop Dierekliniek** Beef: 2 Frankfort, Frankfort Dierekliniek Beef: 2 Reitz, Riemland Dierehospitaal Beef: 1 Warden, Warden Dierekliniek Beef: 2 Winburg, Winburg Dierekliniek Beef: 2 Kwazulu-Natal **Dundee, Endumeni Herd health** Beef: 1 **Newcastle, Ncanduvet Newcastle Underberg, Underberg Veterinary Surgery** Beef: 3 **Eastern Cape** Queenstown, Queenstown Veterinary clinic

# Non specific diseases

| Cause of   | death not established |            |             |               |               |                   |                 |                 |                  |  |
|--|-----------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|
| PROVINCE   | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average  |                       |            |             |               | 1.0<br>(1)    | 2.0 (1)           |                 |                 | 2.0 (1)          |  |
| Level of impore                                    | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |  |
| Dairy  |                       |            |             |               |               | 2.0(1)            |                 |                 |                  |  |
| Sheep  |                       |            |             |               | 1.0<br>(1)    |                   |                 |                 | 2.0 (1)          |  |
| Free State<br>Bloemfonte<br>Sheep: 1<br>Kwazulu-Na | in, University        | Free State | 2           |               |               |                   |                 |                 |                  |  |
|  | Mooirivier Vet        | Clinic     |             |               |               |                   |                 |                 |                  |  |
| Dairy: 2<br>Pending path                           | ology report          |            |             |               |               |                   |                 |                 |                  |  |
| Northern Ca  | •                     | - Croon N  | _           |               |               |                   |                 |                 |                  |  |
|  | Staatsveeartse        | e Groep N  | C           |               |               |                   |                 |                 |                  |  |
| Sheep: 2   | lamb sassa            |            |             |               |               |                   |                 |                 |                  |  |
| Trampling in                                       | iamb cages            |            |             |               |               |                   |                 |                 |                  |  |
| Dermatos   | sparaxis              |            |             |               |               |                   |                 |                 | ^                |  |
| PROVINCE   | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average  |                       |            |             |               | 2.0 (1)       |                   |                 |                 |                  |  |
| Level of impore                                    | ortance scale: 1      | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |  |
| Beef   |                       |            |             |               | 2.0 (1)       |                   |                 |                 |                  |  |
| Free State   |                       |            |             |               |               |                   |                 |                 |                  |  |
|  | inburg Dierek         | liniek     |             |               |               |                   |                 |                 |                  |  |
| Beef: 2  |                       |            |             |               |               |                   |                 |                 |                  |  |
| Genetic d  | lisorders             |            |             |               |               |                   |                 |                 | ^                |  |
| PROVINCE   | Mpumalanga            | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |
| Average  |                       | 2.0 (1)    |             |               | 1.5<br>(2)    |                   |                 |                 |                  |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef | 2.0 (1) | 1.5 |
|------|---------|-----|
| beei | 2.0 (1) | (2) |

#### Gauteng

## Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Beef: 2

Atresia ani, born without an anus

**Free State** 

## **Dewetsdorp, Platkop Dierekliniek**

Beef: 1

## Winburg, Winburg Dierekliniek

Beef: 2

| Preditors | Preditors  |         |         |               |               |                   |                 |                 |                  |  |  |
|-----------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|--|--|
| PROVINCE  | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |  |  |
| Average   | 1.0 (1)    | 1.7 (3) | 2.0 (1) | 2.0 (1)       | 2.3 (8)       |                   | 3.0 (1)         |                 | 1.5 (2)          |  |  |

Level of importance scale: 1 =one case, 2 =more than one case but less than ten and 3 =more than 10 cases reported

| Beef  | 1.0(1) | 2.0 (1) | 2.0 (1) | 2.0 (1) | 2.0 (4)    |         | 1.0 (1) |
|-------|--------|---------|---------|---------|------------|---------|---------|
| Sheep |        | 1.5 (2) |         |         | 2.5<br>(4) | 3.0 (1) | 2.0 (1) |

# Mpumalanga

## **Bethal, Bethal Dierekliniek**

Beef: 1

Gauteng

## Hammanskraal, Themba Animal Clinic

Sheep: 2

#### Nigel, Nigel Diere Spreekkamer

Beef: 2

## Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Sheep: 1

Dog bite wounds

## Limpopo

## **Mokopane, Bundu Veterinary Services**

Beef: 2

## **North West**

# Vryburg, Molopo Dierekliniek

Beef: 2 Free State

## Clocolan, Clocolan Dierekliniek

Beef: 1, Sheep: 2

## Oranjeville, Grasveld Kuddegesondheid

Beef: 2, Sheep: 3

# Philippolis, Rowelsfontein veearts Spreekkamer

Sheep: 3

| Poitz Diam        | land Dierehos           | nitaal        |             |               |               |                   |                 |                 |                  |
|-------------------|-------------------------|---------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Beef: 2           | ianu Dierenos           | pitaai        |             |               |               |                   |                 |                 |                  |
|                   | nekal Dierekli          | niek          |             |               |               |                   |                 |                 |                  |
| Sheep: 2          | ilekai Dielekii         | IIICK         |             |               |               |                   |                 |                 |                  |
|                   | inburg Dierek           | liniek        |             |               |               |                   |                 |                 |                  |
| Beef: 3           | induig Dicick           | IIIICK        |             |               |               |                   |                 |                 |                  |
| Eastern Cap       | ne                      |               |             |               |               |                   |                 |                 |                  |
| -                 | , Steynsburg D          | ierehospi     | taal        |               |               |                   |                 |                 |                  |
| Sheep: 3          | , ,                     |               |             |               |               |                   |                 |                 |                  |
| Dog bite wou      | ınds                    |               |             |               |               |                   |                 |                 |                  |
| Northern Ca       |                         |               |             |               |               |                   |                 |                 |                  |
| Kimberley,        | Staatsveeartse          | e Groep N     | С           |               |               |                   |                 |                 |                  |
| Sheep: 2          |                         |               |             |               |               |                   |                 |                 |                  |
| 6 Sheep with      | dog bite wound          | ls -Upingtoi  | ı           |               |               |                   |                 |                 |                  |
| Kuruman, K        | uruman Diere            | kliniek       |             |               |               |                   |                 |                 |                  |
| Beef: 1           |                         |               |             |               |               |                   |                 |                 |                  |
| Cahatatia         | n /Thoft                |               |             |               |               |                   |                 |                 | ^                |
| Sabotatio         | m/ merc                 |               |             |               |               |                   |                 |                 |                  |
| PROVINCE          | Mpumalanga              | Gauteng       | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|                   |                         |               |             |               | Julio         | - Tutu            | Cupo            | Сарс            | Cupe             |
| Average           |                         | 1.0 (1)       |             |               | 2.6<br>(7)    | 2.0 (1)           |                 |                 | 3.0 (1)          |
|                   |                         |               |             |               |               |                   |                 |                 |                  |
| Level of imported | ortance scale: 1        | = one case    | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than :     | 10 cases         |
| Beef              |                         |               |             |               | 2.5<br>(4)    | 2.0 (1)           |                 |                 | 3.0 (1)          |
| Sheep             |                         | 1.0 (1)       |             |               | 2.7 (3)       |                   |                 |                 |                  |
| Gauteng           |                         |               |             |               |               |                   |                 |                 |                  |
| Bronkhorsts       | spruit, Kerkstr         | aat Dierel    | kliniek     |               |               |                   |                 |                 |                  |
| Sheep: 1          |                         |               |             |               |               |                   |                 |                 |                  |
| Free State        |                         |               |             |               |               |                   |                 |                 |                  |
|                   | ocolan Dierek           | liniek        |             |               |               |                   |                 |                 |                  |
| Beef: 3, Shee     |                         |               |             |               |               |                   |                 |                 |                  |
|                   | Grasveld Kud            | degesond      | heid        |               |               |                   |                 |                 |                  |
| Beef: 2, Shee     |                         |               |             |               |               |                   |                 |                 |                  |
|                   | nekal Dierekli          | niek          |             |               |               |                   |                 |                 |                  |
| Beef: 2, Shee     |                         | limial.       |             |               |               |                   |                 |                 |                  |
| Beef: 3           | inburg Dierek           | iiniek        |             |               |               |                   |                 |                 |                  |
| Kwazulu-Na        | <b>+</b> -1             |               |             |               |               |                   |                 |                 |                  |
|                   | ıcaı<br>ergville Veteri | nary Clinia   | 2           |               |               |                   |                 |                 |                  |
| Beef: 2           | cigvine veteri          | ilary Cilille |             |               |               |                   |                 |                 |                  |
| Northern Ca       | ane                     |               |             |               |               |                   |                 |                 |                  |
| Kimberley,        | _                       |               |             |               |               |                   |                 |                 |                  |
| Beef: 3           | - 500 1411              |               |             |               |               |                   |                 |                 |                  |
| Burn wounds       |                         |               |             |               |               |                   |                 |                 |                  |
| Trauma            |                         |               |             |               |               |                   |                 |                 | ^                |

| PROVINCE   | Mpumalanga                      | Gauteng    | Limpopo     | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|--|---------------------------------|------------|-------------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Average  |                                 | 2.0 (4)    | 2.0 (1)     | 1.0 (1)       | 1.3<br>(3)    |                   |                 | 2.0 (1)         | 1.0 (2)          |
| Level of impore  | ortance scale: 1                | = one case | e, 2 = more | than on       | e case b      | ut less than t    | en and 3 =      | more than       | 10 cases         |
| Beef   |                                 | 2.0 (1)    | 2.0 (1)     | 1.0 (1)       | 1.3 (3)       |                   |                 |                 | 1.0 (1)          |
| Sheep  |                                 | 2.0 (1)    |             |               |               |                   |                 | 2.0 (1)         | 1.0(1)           |
| Goat   |                                 | 2.0 (2)    |             |               |               |                   |                 |                 |                  |
| Sheep: 2, Go Pretoria, Or Goat: 2 Fractures Limpopo Mokopane, Beef: 2 North West | nderstepoort A<br>Bundu Veterir | Academic   | Hospital a  | nd Prod       | uction #      | Animal Clinic     | С               |                 |                  |
| Beef: 1<br>Free State<br>Bloemfonte<br>Beef: 1                                   | in, University<br>shoek Dierege | Free State |             |               |               |                   |                 |                 |                  |
| <b>Warden, Wa</b><br>Beef: 2   | arden Dierekli                  | niek       |             |               |               |                   |                 |                 |                  |
| Western Ca<br>Oudtshoorn   |                                 |            |             |               |               |                   |                 |                 |                  |
| Sheep: 2   |                                 |            |             |               |               |                   |                 |                 |                  |

Dog problems

Northern Cape

Kimberley, Staatsveeartse Groep NC

Beef: 1

Broken leg - Kimberley

Sheep: 1

Broken leg - Kuruman

| Veld fires |            |         |         |               |               |                   |                 |                 |                  |
|------------|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| PROVINCE   | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average    |            | 2.0 (1) |         | 2.5 (2)       | 3.0 (3)       |                   |                 |                 |                  |

| Level of imported             | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t | en and 3 =      | more than       | 10 cases         |
|-------------------------------|------------------|-------------|-------------|---------------|---------------|----------------|-----------------|-----------------|------------------|
| Beef                          |                  | 2.0 (1)     |             | 2.5 (2)       | 3.0 (2)       |                |                 |                 |                  |
| Sheep                         |                  |             |             |               | 3.0 (1)       |                |                 |                 |                  |
| Gauteng                       |                  |             |             |               |               |                |                 |                 |                  |
| Nigel, Nigel                  | Diere Spreekl    | kamer       |             |               |               |                |                 |                 |                  |
| Beef: 2                       |                  |             |             |               |               |                |                 |                 |                  |
| North West                    |                  |             |             |               |               |                |                 |                 |                  |
| _                             | stad, Leeudori   | ngstad Di   | erekliniek  |               |               |                |                 |                 |                  |
| Beef: 2                       |                  |             |             |               |               |                |                 |                 |                  |
| 7 Died                        | M                |             |             |               |               |                |                 |                 |                  |
| Potcherstro<br>Beef: 3        | om, Morvet       |             |             |               |               |                |                 |                 |                  |
| Free State                    |                  |             |             |               |               |                |                 |                 |                  |
|                               | , Greylingsrust  | Dieresnr    | eekkamer    |               |               |                |                 |                 |                  |
| Beef: 3, Shee                 |                  | . Бісі сэрі | CCIMATITO   |               |               |                |                 |                 |                  |
|                               | inburg Dierek    | liniek      |             |               |               |                |                 |                 |                  |
| Beef: 3                       |                  |             |             |               |               |                |                 |                 |                  |
| Other                         |                  |             |             |               |               |                |                 |                 |                  |
| Other                         |                  |             |             |               |               |                |                 |                 |                  |
| PROVINCE                      | Mpumalanga       | Gauteng     | Limpopo     | North<br>West | Free<br>State |                | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
| Average                       |                  |             |             |               | 2.8 (5)       |                |                 |                 |                  |
| Level of imported             | ortance scale: 1 | = one case  | e, 2 = more | than on       | e case b      | ut less than t | en and 3 =      | more than       | 10 cases         |
| Beef                          |                  |             |             |               | 2.5<br>(2)    |                |                 |                 |                  |
| Dairy                         |                  |             |             |               | 3.0 (1)       |                |                 |                 |                  |
| Sheep                         |                  |             |             |               | 3.0 (1)       |                |                 |                 |                  |
| Goat                          |                  |             |             |               | 3.0 (1)       |                |                 |                 |                  |
| Free State                    |                  |             |             |               |               |                |                 |                 |                  |
|                               | Oosvrystaat Di   | ere Produ   | ıkte        |               |               |                |                 |                 |                  |
| Beef: 3                       |                  |             |             |               |               |                |                 |                 |                  |
|                               | mals, communal   | areas, ove  | ergrazing.  |               |               |                |                 |                 |                  |
|                               | ep: 3, Goat: 3   | ,           |             |               |               |                |                 |                 |                  |
| <b>Vrede, Saul</b><br>Beef: 2 | shoek Dierege    | sondheid    | •           |               |               |                |                 |                 |                  |
| PERT.                         |                  |             |             |               |               |                |                 |                 |                  |

Giardia in calves

Traumatic Reticulo-pericarditis

| PROVINCE  | Mpumalanga | Gauteng | Limpopo | North<br>West | Free<br>State | Kwazulu-<br>Natal | Eastern<br>Cape | Western<br>Cape | Northern<br>Cape |
|---|------------|---------|---------|---------------|---------------|-------------------|-----------------|-----------------|------------------|
| Average   | 1.0 (1)    |         |         | 2.0 (1)       | 1.5<br>(2)    |                   |                 |                 |                  |
| Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported |            |         |         |               |               |                   |                 |                 |                  |
| Beef  |            |         |         | 2.0 (1)       | 1.5<br>(2)    |                   |                 |                 |                  |
| Dairy   | 1.0(1)     |         |         |               |               |                   |                 |                 |                  |
| Mpumalanga  |            |         |         |               |               |                   |                 |                 |                  |
| Bethal, Bethal Dierekliniek   |            |         |         |               |               |                   |                 |                 |                  |
| Dairy: 1  |            |         |         |               |               |                   |                 |                 |                  |
| North West<br>Vryburg, Molopo Dierekliniek  |            |         |         |               |               |                   |                 |                 |                  |
| Beef: 2   |            |         |         |               |               |                   |                 |                 |                  |
| Free State  |            |         |         |               |               |                   |                 |                 |                  |
| Senekal, Senekal Dierekliniek   |            |         |         |               |               |                   |                 |                 |                  |
| Beef: 1   |            |         |         |               |               |                   |                 |                 |                  |
| Winburg, Winburg Dierekliniek   |            |         |         |               |               |                   |                 |                 |                  |
| Beef: 2   |            |         |         |               |               |                   |                 |                 |                  |