# 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

# **July 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 (148) submitted reports during July 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

Malalane - Drs. Van Sittert an Van Sittert

Nelspruit – Dr. André Beytel

Standerton - Dr. Kobie Kroon

Volksrust – Dr. Johan Blaauw

#### Gauteng (12)

Bapsfontein - Drs. Engelbrecht, Olivier and Nagel

Bronkhorstspruit - Dr. De Bruin, De Bruin and Labuschagne

Hammanskraal - Dr. Hentie Engelbrecht

Krugersdorp – 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

Rayton -Dr. Frans Malan

Vanderbijlpark – Dr. Kobus Kok

#### Limpopo (8)

Bela-Bela (Warmbaths) - Dr. Nele Sabbe

Bela-Bela – Drs. Du Toit, Hansen, Bester, Herbst and Malan

Hoedspruit – Dr. Llana van Wyk

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 (17)

Beestekraal - Dr. Alwyn Venter

Bloemhof - Dr. Cizelle Naudé

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

Ottosdal - Dr, Sharnelle Ferreira

Potchefstroom - Dr. Martin Ferreira

Potchefstroom – Dr. Martin Jordaan

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

Schweizer-Reneke - Dr. Pieter Venter

Stella - Dr. Magdaleen Vosser

Ventersdorp/ Koster – Drs. Benadé and Van der Merwe

Vryburg - Dr. Jurie Kritzinger

Vryburg - Drs. De Jager and Rautenbach

#### Free State (30)

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. 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 van Niekerk

Reitz - Dr. Murray Smith

Senekal – Dr. Jan Blignaut

Senekal – Dr. Theo Kotze

Smithfield – Dr. Nienke van Hasselt

Viljoenskroon – Dr. Johan Kahts

Villiers – Drs. Hattingh, Krüger, Maree and Muller

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 (11)

Bergville – Dr. Jubie Muller

Bergville – Ariena Shepherd

Camperdown – Dr. Anthony van Tonder

Dundee - Drs. Marais and Fynn

Eshowe – Drs. Pryke and Hoffman

Kokstad – Drs. Clowes, Shrives and Lees

Mooi River – Drs. Edmunds, Fowler and Still

Mtubatuba – Dr. Trevor Viljoen

Newcastle – Dr. Barry Rafferty

Underberg - Drs. King, Delaney and Huysamen

Vryheid – Drs. Theron and Theron

#### Eastern Cape (19)

Adelaide – Dr. Steve Cockroft

Alexandria – Dr. Charlene Boy

Alexandria – Dr. Johan Olivier

Aliwal North – Drs. Troskie and Strauss

Bathurst – Dr. Jane Pistorius

Cradock – Dr. Frans Erasmus

Elliot – Drs. Clowes, Shrives and Lees

Graaff- Reinet - Dr. Roland Larson

Graaff-Reinet – Hobson, Strydom and Hennesy

Grahamstown - Drs Mendez and Dreyer

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

Jeffreys Bay - Drs. Lategan and Hoek

Kareedouw - Dr. Martin Bootsma

Port Alfred – drs. De Bruyn and Jonk

Queenstown – Drs. Du Preez, Klopper, De Klerk, Catherine en Wentzel

Steynsburg – Dr. Johan van Rooyen

Stutterheim – Dr Dave Watermann

Uitenhage – Drs. Mulder and Krüger

Witelsbos - Dr. Elmien Kotze

#### Western Cape (20)

Beaufort West - Dr. Jaco Pienaar

Beaufort West – Dr. Bennie Grobler

Caledon – Drs. Louw and Viljoen

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. Bosman and Groenewald

Malmebury – Drs. Heyns and Zolner

Malmesbury – Dr. Francois de Villiers

Oudtshoorn - Dr. Glen Carlisle

Oudtshoorn - Dr. Adriaan Olivier

Paarl – Dr. Carla van der Merwe

Piketberg – Dr. André van der Merwe

Plettenberg Bay – Dr. André Reitz

Stellenbosch - Dr. Alfred Kidd

Swellendam – Drs. Malan and Fourie

Vredenburg – Dr. Izak Rust

Worcester - Dr. Kobus Rabe

#### Northern Cape (9)

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 Westhuizen

Upington – Drs. Vorster and Visser

#### Feedlots (2)

Dr. Eben Du Preez

Dr. Shaun Morris

#### 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 – Johannesburg

Dr. Annelie Cloete - Elsenburg

Dr. Sophette Gers – Pathcare, Cape Town

Prof. Emily Mitchell – University of Pretoria

Dr. Mark Chimes – Dairy Standards, George

Amanda McKenzie – Vryburg Veterinary Laboratory

### Brucella health status for the sale of breeding animals

#### **Brucellosis steering committee August 2020**

Brucellosis is a highly contagious disease of cattle caused by the bacteria *Brucella abortus*. The disease can have a very long incubation period (time from exposure until disease is present) which makes diagnosis difficult. Brucellosis is considered a herd disease as cattle that test negative in an infected herd may still be in the incubation period of the disease and not yet test positive.

Cattle in the incubation period can easily be sold as "negative" to another farmer, and when on the new farm they calve or abort and each release around 46 million bacteria into the environment to infect other cattle.

If a heifer calf is infected in utero when the mother is infected, the heifer will not test positive (known as latent infection) until she is at least 4-5 months pregnant, or only after calving. This is because the pregnant uterus forms the sugar erythritol from around 4 months pregnancy, and the bacteria require

this sugar to grow. This growth will result in the formation of antibodies that are measured in the blood tests.

Beware of heifers that individually test "negative" for brucellosis prior to calving if they do not originate from a brucellosis negative <u>herd</u>.

If there is no herd history of annual negative Brucella testing then individual cow or bull testing is worthless.

Only if the following conditions are adhered to will the testing of individual animals before a sale be sufficient:

Up to date and regular herd tests that are negative.

No cattle of unknown health status should be introduced into the herd, only cattle from tested brucella negative herds can be introduced.

Basic biosecurity measures should be applied (e.g. proper fencing, no contact with other cattle of unknown disease status, quarantine and test newly introduced cattle for disease before letting them join your herd)

With the above in mind, the following "rules" should be adhered to when sending cattle to an auction or sale:

In your cattle herd, all (i) bulls, (ii) female cattle that have calved and (iii) heifers that are >4 months pregnant must be tested for brucellosis with negative results. This herd test should be done annually. Heifers should be re-tested 14 to 30 days after calving.

All heifers should be vaccinated between the ages of 4 and 8 months using a registered Brucella vaccine (S19 or RB51). Female cattle older than 8 months may not be vaccinated with S19 as it can cause false positive test reactions. Booster vaccination of female cattle is only allowed with RB51 with permission of State Vet (according to Table 2 of the Animal Diseases Regulations). Bulls should not be vaccinated as they can become sterile.

It is a very good biosecurity measure to once a new animal(s) is introduced onto a property, to keep it completely separate (in quarantine) and have it tested for disease, and treat for external and internal parasites before introducing the animal(s) into your herd. This will help you to ensure that your new animals are healthy and it will protect your existing herd from accidental introduction of diseases and parasites.

# The Veterinary Strategy 2016 -2026 is 4 years down the line How are we doing?

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

The core strategies are depicted in the table below:

CORE STRATEGIES		OBJECTIVES		
	Strengthening of the veterinary authority for	Restore national chain of command for all		
	better governance and service delivery	aspects of veterinary services and form the		
		legislative and procedural basis to effectively		
Foundation		further animal health and welfare, food safety,		
Bpui		food security and market access in South		
교		Africa.		
	Strengthening competencies for animal	To strengthen animal disease surveillance,		
	health	prevention, control and eradication		
		programmes to improve animal production,		
Pillar 1		market access and contributing to the one		
		health initiative.		
	Strengthening competencies for veterinary	To strengthen control systems for enhanced		
Pillar 2	public health, feed and food safety	public health, feed and food safety and trade.		
≣				
	Strengthening competencies for veterinary	To strengthen competencies and accreditation		
Pillar 3	laboratory diagnostics	for food safety and animal health diagnostic		
薑		laboratories and research.		
	Development and implementation of an	To improve animal identification and		
	Animal and Products Identification,	traceability, which will aid in the control of		
Pillar 4	Recording and Traceability (AIRT) System	animal diseases, promote food safety and the		
₩		quality of livestock data for trade purposes.		
	Strengthening competencies for animal	To improve animal welfare legislation and		
ar 5	welfare	standards and ensure that animal keepers fulfil		
Pillar		their responsibilities.		

#### CRITICAL SUCCESS FACTORS

Critical to the success of the implementation of this strategy is to ensure:

- (a) A clear chain of command for animal disease management.
- (b) Establishment of an animal identification and traceability system.
- (c) Ensuring overall ownership and participation of government and all industry stakeholders irrespective of level of development and the necessary awareness creation.
- (d) Obtaining the necessary financial support for the identified improvement areas.
- (e) Preparation of supporting legislation and regulations.

With reference to surveillance, the VS should maintain and improve the current passive surveillance programmes and progressively extend the passive surveillance systems to the private veterinary network. VS should consult with private veterinarians, industry, smallholders and their representatives in the development of official delegation to private veterinarians. VS should train producers and veterinarians in their responsibilities in relation to recognition and reporting of controlled/notifiable and other diseases and develop and implement a comprehensive national disease reporting system from field to national level. The system should specify consistent reporting procedures (consider the utilisation of mobile devices and apps), data management and collation and include formal inputs from private veterinarians and abattoirs. Veterinary services should have their own courier service for the submission of samples.

#### 5.5.2 Animal identification

# 5.5.2.1 Animal identification and movement control 36

For a progressive livestock industry, the VS need to standardise all private sector identification systems (such as those currently used for the purposes of trade, breeding etc.) through developing an accreditation process. These ID systems should be easily aligned with future longer term planning for a national ID system. The VS must ensure that data collected at all levels are collated to actualise the national livestock census and develop and implement a national livestock property identification system. The VS should undertake a thorough planning, including cost analysis, for national compulsory lifelong individual identification of livestock, especially considering:

- relevant legislation and regulations, and their economic and social impact
- the complexity and cost of ongoing database management, including recording and data entry for all movements/births/deaths etc
- the human resources and the conditions under which animal identification should be implemented (farmers, private veterinarians, government AHTs),
- the way the overall system might be financed (cost recovery system)

The VS should further consult and request business plans from farmer groups to ensure that the process to standardise systems also incorporates their needs and perspectives on a national compulsory life-long identification system. The VS should develop and implement legislation/regulations to standardise existing private individual identification systems and explore requirements for a legislative framework to impose a national standardised compulsory identification system for permanent individual identification of all livestock including farmed game. If initiated, there will be a need to progressively train staff, farmers or private veterinarians in tagging and data entry for livestock identification. The VS should develop a stakeholder communications plan relating to both standardised and compulsory livestock identification and explore the development of a database to record all identified animals, updating their movements, treatments, deaths etc. This will also need to ensure compatibility for other aspects such as animal production/management/breeding etc. It was further suggested that a cell phone application could be developed to load information into the database.

An independent agency/organisation may be needed to administer the animal identification system. Cattle should be used as the species to pilot the programme.

# **CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS**

Prioritisation of the objectives of this strategy can be divided into short, medium and long term as shown in the table below:

	Core Stratugy	Short term (1-3 years)	Medjum term (3-5 years)	Long term (5:10 years)
Found ation	Strengthening of the veterinary authority for better governance	Establish specialised legal support team     Establish national risk analysis unit     Develop system of authorisation     Veterinary and para-veterinary professional development	- Develop joint programmes with stakeholders	- Restore national chain of command for all aspects of veterinary services (changes in structuring)
Pillar 1	Strengthening competencies for animal health	<ul> <li>Address the challenges of implementation of the Animal Diseases Act (Act 35 of 1984)</li> <li>Improve animal disease surveillance system</li> </ul>	Run pilot project for brucellosis control in cattle (develop model)     Develop and implement control programmes for other animal diseases	Establish effective and efficient administration for animal disease control
Pillar 2	Strengthening competencies for veterinary public health, feed and food safety	<ul> <li>Define veterinary services' contribution to the national antimicrobial resistance strategy framework</li> <li>Consult and implement VPH strategic implementation plan (Inci iMI)</li> </ul>	Develop a single Veterinary Medicine Act     Revise Meat Safety Act (Act 40 of 2000)	- Establish effective and efficient administration for food safety system
Pillar 3	Strengthening competencies for veterinary laboratory diagnostics	<ul> <li>Laboratory approval plan, including SANAS accreditation, to be further developed and consulted</li> </ul>	- Expand laboratory capacity under veterinary services	<ul> <li>Expand laboratory capacity under veterinary services</li> </ul>
Pillar 4	Development and implementation of an Animal and Products identification, Recording and Traceability (AIRT) System	Policy for individual animal identification and value chain traceability to be developed and consulted     Draft legislation     Provide framework for animal identification     Develop government controlled database	Implement legislation     Establish effective and     efficient administration for     AIRT system     Run pilot project on cattle	Comprehensive animal movement recording and relevant controls
Pillar 5	Strengthening competencies for animal welfare	Update/revise legislation     Establish national animal welfare unit     Animal Welfare Strategic Implementation Plan further developed and consulted	Develop welfare guidelines for the keeping of various animal species and industries     Develop welfare guidelines for the various types of significant for the various.	Implementation of all animal welfare legislation and standards

# **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 www.securebeef.org
- 9. Quarantine:
- a. For extra security cattle should be quarantined 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/

# Summary of disease report for July 2020

148 Reports from veterinary practices and laboratories were received (Mpumalanga (MP) 11; Gauteng (G) 12; Limpopo (L) 8; Northwest (NW) 17; Free State (FS) 30; KwaZulu-Natal (KZN) 11; Eastern Cape (EC) 19; Western Cape (WC) 20: Northern Cape (NC) 9; Feedlots (FL) 2; Mastitis consultant (MC) 1 and Laboratories (Lab) 8)

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

Disease or condition	Number of provinces reporting
Resistant roundworms	9
Wireworm	9
Orf	9

Abortions	9
Abscesses	9
Eye infections	9
Mastitis	9
Dystochia	9
Coccidiosis	8
Anaplasmosis	8
Warts	8
Ringworm	8
Energy deficiency	8
Diarrhoea	8
Eye cancer	8
Lameness/foot problems	8
Lung infection	8
Poor concption	8
Retained afterbirth	8
Uterine prolaps	8
Roundworms	7
Blue ticks	7
Trichomonosis	7
Blackquarter	7
Pulpy kidney	7

Tetanus	7
E. coli	7
Pasteurellosis	7
Protein deficiency	7
Stillbirths	7
Joint ill	7
Navel ill	7
Trauma	7
Milk fever	7
Tapeworms	6
Cryptosporidiosis	6
Biting lice	6
African red water	6
Vibriosis	6
Enzootic abortion	6
BMC (snotsiekte)	6
Tulip toxicity	6
Traumatic reticulo-peritonitis	6
Downer	6
Metritis	6
Exposure to cold	6
Bont-legged ticks	5

Asiatic red water	5
Red gut (cattle)	5
IBR	5
Urea	5
Calcium deficiency	5
Selenium deficiency	5
Blue udder	5
Acidosis	5
Theft	5
Trauma (fractures)	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

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

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

## 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.				
2.	2. The sheep for sale are clearly identified in the accompanying description.				
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		
<ol> <li>The sheep on my properties have been vaccinated against Ovine Johne's Disease and are clearly marked with the approved ear tag.</li> </ol>					
9. All lambs born are vaccinated					
10	If vaccinated, the number of years that the vaccinations have been done is		years		
N	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 p	erson:		

		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. http://nahf.co.za/category/diseases/brucellosis/ 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	
Resistant roundworms	х	х	х	х	х	х	х	х	Х
Wireworm	х	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				х	Х				
Parafilaria									
Tapeworms	х	Х		х	Х		Х		х
Liver fluke	х				Х		Х	х	
Conical fluke	х				х	х	х		

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

As can be seen from the reports, wireworm, cryptosporidiosis and coccidiosis were the main internal parasite problems. Most farmers tink that parasites are not a roblem in winter, but these reports prove ths to be wrong. Alarming was the reporting of internal parasite resistance to anthelmintics. He Presently 10 groups of anthelmintics (numbers are on the lables of drugs) are registered, make sure by doing regular evaluations whether the anthelmintics used are still effective in your flock. Contact your veterinarian to assist you in making the correct active group choice!

As animals graze in vieis during the winter months, be aware of liver fluke outbreaks. Water and mud snails are the intermediate hosts of liver flukes.

#### 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.

#### I 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 are 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 control, 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

(Revised: August 2006)

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

**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

# **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		
Brown ear-ticks						х			
Bont-legged ticks	х	х		х	Х				Х
Red-legged ticks	х			х	Х				
Paralysis ticks						х			
Tampans									
Biting lice		х		х	х	х		х	х
Sucking lice				х	х		х		х
Fleas									
Itch mites					х		х		
Sheep scab	х	х			Х				
Mange mites	х	х		х	Х				
Nuisance flies					Х	х		х	

Midges						
Mosquitoes						
Blowflies				х		
Screw-worm						
Gedoelstia (uitpeuloogsiekte)						
Nasal bot	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. Immature stages of multi-host ticks are prevalent in winter, especially in the ears. By treating cattle where brown ear-ticks are a problem, fewer adult ticks will be seen in summer!

Lice and mange infections increase during the colder winter months. Immunity to these parasites decreases as protein and energy become less available due to malnutrition.

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	
Anaplasmosis	х	х	х	х	х	х	х	х	
Heartwater	х	х				х	х		

Lumpy skin disease			х	х		х	
Corridor disease							
Theileriosis					х		

Asiatic red water is spreading and is one of the deadliest diseases in cattle.

Numerous mortalities were reported!

Anaplasmosis outbreaks were reported from 8 provinces. Biting flies are the main transmitters of this disease.

Red water and analasmosis 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	х		х	
Pseudo Lumpy skin disease (Allerton virus)									
Ephemeral fever (Three-day-stiff sickness)									
Blue tongue				х				х	х
Rift Valley Fever									
Wesselsbron									
Nagana						х			

Due to colder weather conditions insct numbers have died down. Vaccines are available, the only reason why there were so many outbreaks of lumpy skin disease, blue tongue and three-day-stiff sickness could be that animals were not vaccinated or that the cold chain was broken! Now is the time to plan your vaccination programme!

### 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		х
Vibriosis				х	х				
Pizzle disease					х			х	
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 (7 provinces) and vibriosis were also reported from 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	х	
Clostridial disease				х					
Botulism				х		х			
Pulpy kidney		х		х	х	х	х	х	х
Lamb dysentery	х								х
Swelled head	х	х			х	х			
Red gut (cattle)	х	х	х		х	х			
Blood gut (sheep)		х			х			х	х
Tetanus		х		х	х	х	х	х	х
Salmonellosis							х		
Klebsiella									
Bovine brucellosis	х			х	х	х			
Brucella melitensis (goats)									
Ovine brucellosis (Ram's disease)					х				
Bovine tuberculosis									
Johne's							х		
Leptospirosis	х								
Listeriosis						х			
Pseudomonas	х							х	

Pasteurella multocida								
Pasteurellosis (see pneumonia -lungs)	х	х	х	х		х	х	х
Fusibacterium necrophorum				х			х	
Septicaemia	х			х			х	
E. coli	х		х	х	х	х	х	х
Klebsiella							х	
Coxiella (Q-fever)				х				
Mycoplasma								
Enzootic abortion		х	х	х		х	х	х
Lumpy wool (Dermatophilus)							х	
Bovine dermatophilosis (Senkobo disease)								
Uterine gangrene							х	х
Wooden tongue			х					
Lumpy jaw								
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 inactivate 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	х	х		х
Rabies (cattle)									
BVD	х				х				
IBR	х	х			х	х		х	
BRSV						х			
PI3						х			
Maedi visna virus									
Rotavirus				х		х		х	

Coronavirus									
Enzootic bovine leucosis (EBL)					х	х	х	х	
Sheep leucosis									
Jaagsiekte						х			
Orf	х	х	х	х	х	х	х	х	х
Warts	х	х		х	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 6 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.

# **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	X	X		х	X	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	х	
Slangkop									
Crotalaria									
Gifblaar				х					
Gousiekte									
Cestrum (ink berry)		х			х		х		
Tulip	х			х	х	х	х	х	
Cynanchum (bobbejaantou)									
Facial eczema									
Lantana		х				х			
Prussic acid	х				х				
Damkweek (cyanide)									
Acacia nilotica									
Senecio					х				
Cotula nigellifolia (stagger wood)									
Geeldikkop (duwweltjies) and dikoor									
Vermeersiekte									
Hertia pallens (Nenta, krimpsiekte)							х		
Chrysocoma ciliata (bitterbos)									

Crotolaria (stywesiekte bossie)						
Solanum incanum (maldronksiekte)						
·						
Gnidia burchelli (Januariebos, besembossie, harpuisbos))						
Gomphocarpus (Asclepias) fruticosus						
(milkweed)						
Heliotropium (potato weed)						
Bracken fern						
January bush (Gnidia polycephalatus)						
Chinkerinchee					х	
Ceylons rose						
Datura	х		х			
Sarcostemme viminale (melktou, caustic						
bush)						
Malva parviflora (kiesieblaar)						
Bitou						
Cotula nigellifolia (Stagger weed,						
stootsiektebossie)						
Eucalyptus (bloekom) bark						
Kikuyu						
Ryegrass						
Grass staggers						
Lush pastures (Dikkop)						
Lasiospermum (Ganskweek)						
Paspalum staggers						
Phalaris aquaticum (Phalaris staggers)						

<b>51</b>					l		l	I
Photosensitivity (Turknael, Erodium							Х	
moschatum)								
Photosensitivity (Stellenbosch)								
Photosensitivity								
Swelled head (toxicity)							х	
Lusern								
Mycotoxicosis							Х	
,								
Apergillus								
1.6.9								
Aflatoxin								
, material								
Diplodiosis				х				
Diplodiosis				X				
Lunina								
Lupins								
Soya								
Syringa berries								
Acorn								
Cycad								
Kraalbos, Geelbos (Galenia africana)								
, , , ,								
Radish								
Carrot poisoning								
curror poisoning								
Onion poisoning								
Official poisoning								
Bracken fern								
Bracken fern								
Dellas hashla (Astalus et es es et e)								
Pollen beetle (Astylus atromaculatus)								
Water contamination								
Oxalates							х	
Nitrate								
Amaranthus								
<u> </u>		1	L		·			

Tannins						
Urea	х	х	х	х		х
Salt						
Snake bite			х			
Moth cocoons (impaction)						
Blue green algae			х			
Copper						
Selenium				х		
Zinc						
Zinc sulphite						
Fluoride						
Lead						
Alcohol poisoning						
Paraquat						
Phosamine						
Aldicarb						
Organophosphate						
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 tulp (6 provnces) and ink berries (*Cestrum*).

Geeldikkop, due to sheep eating wilted duwweltjies have been reported.

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 of the dosage rate and rain wetting urea..

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

Make sure that licks containing urea are mixed and formulated properly. Many mortalities were reported wher mixing instructions and calculations were not followed correctly!

### **Nutritional deficiencies**

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

Deficiencies	MP	G	L	NW	FS	KZN	EC	wc	NC

Energy	х		х	х	х	х	х	х	х
Protein	х		х	х	х	х	х		х
Phosphate				х		х			х
Calcium	х	х			х	х		х	

Nutritional deficiencies were reported. It is important that ewes and cows receive sufficient supplementation so as to have optimal colostrum quality for their offspring!

### 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		
Zinc						х	х	х	
Selenium		х		х	х	х	х		
Magnesium									
Manganese							х		
Vitamin A	х			х	x				х
Vitamin B 1					Х			х	

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

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	х
Stillbirths	х	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	
Blue udder	х		х		х	х		х	
Diarrhoea	х	х		х	х	х	х	х	х
Epididymitis	х				х			х	х
Eye cancer	х	х		х	х	х	х	х	х
Eye infections	х	х	х	х	х	х	х	х	х
Skin lymphoma									
Joint ill	х	х		х	х	х	х	х	
Cystitis									
Icterus									
Lameness/foot problems	х	х		х	х	х	х	х	х
Lung infection	х	х		х	х	х	х	х	х
Mastitis	х	х	х	х	х	х	х	х	х

Navel ill	х	х		х	х	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	х		х	х	
Trauma	х	х	х		х	х		х	х
Teeth wear									
Plastic bags (ingestion)									
Downer	х	х			х	х		х	х
Poor condition									
Anaphylactic shock									
Vestibular syndrome (middle ear infection)									х
Hernia									
Deformaties									
Wet carcases at abattoir				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.

Lung diseases are killers in the winter. Excellent vaccines are available!

### **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	
Displaced abomasum						х		х	
Ketosis (Domsiekte)		х			х			х	х
Milk fever	х	х			х	х	х	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	
Metritis	х	х		х	х	х		х	
Hydrops									
Poor conception		х	х	х	х	х	х	х	х
Retained afterbirth	х	х		х	х	х	х	х	х
Sheath prolaps					х	х			х
Uterine prolaps	х	х	х		х	х	х	х	х
Vaginal prolaps	х	х		х	Х	х	х	х	Х

Penis injury					
Orchitis					

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!!

Vitamin A deficiencies occur in winter and supplementation may be worthwhile

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			х	х	х		х
Frozen to death				х	х		х	х	
Heat stress									
Lightning									
Electrocution									
Drought							х	х	

### Other conditions

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

Trauma (fractures etc)		х	х	х	х		х	
Trauma (veldfires)	х	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

Adelaide \_ Dr. Steve Cockroft Beestekraal – Dr. Alwyn Venter Cape Town – Dr. Sophette Gers George – Dr. Mark Chimes

Grahamstown – Dr. Mendez Harrismith – Dr. Wim Slabber

Kareedouw - Dr. Marten Bootsma

Malalane - Drs. Van Sittert and Van Sittert

Ottosdal – Dr. Sharnelle Ferreira Stellenbosch – Dr. Annelie Cloete Vanderbylpark- Dr. Kobus Kok

# **Ostriches**

# Western Cape

### **Oudtshoorn**

Tapeworms	1
	3 - Feed intake up and down/ leads to gastro-intestinal tract disturbance and red gut – clostridial enteroxaemia

Mycoplasma	3 - Airsacculitis, wind cold, poor body condition Temp fluctuations/ dust/ cold – increased moist rales, rhinitus and sinusitis, more pronounce post cold spell.
Selenium deficiency	2
Lameness	3
Diarrhoea	3
Soil pica and rectal prolaps	3 - Adaption to intensive feeding in cold wet weatehr = moist areas in camps and soil pica
Protein, Energy deficiency, poor growth	3 - Energy playing an important role, insufficient eating time with shorter days, last chciks of season severe heato f late summer and now cold spell and rain– becomes a negative/catabolic downard spiral
Cold exposure	3
Rectal prolaps/ Cryptosporidium	3 -Soil pica and heat stress = cryptosporidium overgrowth
Cloacal prolaps	1
Weakness	3 - Protein and energy deficiency – late chicks more severely affected, insufficient time to feed (daylight/ high temp), high demand for energy (cold evenings), underlying infections chronic enterotoxaemia and airsacculitis.
Capture myopathy	1 - Suspect Vit E Se def as birds respond well to treatment byinfeed medication Common simptoms are weakness/ unable to stand in birds with a good body condition. Captured chicks on game farm showing capture myopathy
Cold exposure	3

# **Equines**

**Limpopo Hoedspruit**Babesia – 1

### African Horse Sickness - 1 survived

### Free State

### **Parys**

Opthalmia - 2

### **Eastern Cape**

### Humansdorp

Babesia – 1

African Horse Sickness – 1 survived

### **Port Alfred**

Neorological case – 1 Suspect *Cynanchum* toxicity, Bathurst

### Game

### Gauteng

### **Bapsfontein**

Capture myopathy - 1

### Magaliesburg

Heartwater - 2

### **Pretoria**

Intestinal roundworms - 1

# Limpopo

### Bela-Bela

Snare – Springbuck with rope around foot (died)

Diarrhoea - Sable with severe diarrhoea

Poor condition – Sable cow, boosted her, improved

Trauma – White rhino bull fought with other bull

Capture myopathy – Buffalo, inflamed intestines, euthanazed animal

Trauma – Eland with broken horn

### **Brits**

Wireworm – 5 out of 25 sables treated

Trauma - Elephant in veld fire, trated burn wounds, recovered

### Hoedspruit

Internal parasites - Sable

Orf - 2

Closantel toxicity – 2

Opthalmia – 3

Abscesses – 2

Snares - Zebra, Giraffe

Trauma – Rhino fighting

### Modimolle

Snares - numerous

### **North West**

### Klerksdorp

Intestinal roundworms - 1

Copper deficiency - 1

### Schweizer-Reneke

Blue ticks – 2

Red-legged ticks – 2

Acute pasteurellosis – 3 poor condition

Protein, energy malnutrition -3 (Buffalo, springbuck)

### **Free State**

### **Smithfield**

Rabies - Aardwolf

### **Eastern Cape**

### Humansdorp

Illthrift - Blesbuck, anaemia, emaciation on sandstone and dunes

### Llama

# Limpopo

Bela-Bela

Dystocia - recovered

### **Swine**

### Gauteng

Ondertepoort

Dog bite wounds - 1

### **Eastern Cape**

### **Graaff-Reinet**

Tulip poisoning – 2

### **Port Alfred**

Trotter cracks and infection - 2 cases, Clumber

Mastitis – 1 case, Clumber

# **Western Cape**

### Ceres

Bruising, resemblesdiamond skin disease- 1

### Malmesbury

Metritis – 1

Trauma - 1

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

(henton@vetdx.co.za)

RuVASA monthly reports

Vetdiagnostix; bacteriology

Bovine Respiratory Disease yielded *Pasteurella multocida* [10], *Mannheimia haemolytica* [9], *Histophilus somni* [8], *Mycoplasma* [2] and one each of *Trueperella pyogenes, Mannheimia* biovar 10, *Mannheimia* biovar 8b and a methicillin resistant *Staphylococcus aureus*.

Clostridial myositis in cattle was due to *Clostridium chauvoei* [4], *C. novyi* [3] and one case of *C. perfringens* type A.

Calf enteritis was associated with *E. coli* [11], with over half [6] of them due to ESBL [Extended Spectrum Beta Lactamase] isolates, which are not only resistant to all the penicillins and cephalosporins, but many other antibiotics as well. There were also cases of *Salmonella* Dublin and *S.* Typhimurium.

Abortion in cattle was due to *Trueperella pyogenes* [2], *Brucella abortus* and *Salmonella* Typhimurium. Infertility in bulls on a farm was due to *Histophilus somni* and *Trueperella pyogenes*.

Trueperella pyogenes also caused septicaemia in cattle.

Pneumonia in sheep was due to combined *Pasteurella multocida* and the anaerobe *Prevotella* in one case. *Histophilus somni, Mannheimia haemolytica* and *Trueperella pyogenes* [one case each] were also isolated from pneumonia. Septicaemia in sheep was due to *T. pyogenes* [2] and ESBL *E. coli* [2].

Abscesses in goats and sheep was due to Corynebacterium pseudotuberculosis on two farms.

E. coli caused enteritis in three cases.

An unexpected cause of myositis was *C. chauvoei* in sheep.

Eye infections yielded *Klebsiella pneumoniae* and *Pseudomonas aeruginosa*. Both would only be secondary infections, and not primary ocular pathogens.

*E. coli* caused septicaemia on one pig farm, and enteritis on another. *Streptococcus suis* caused pleuritis on another farm.

No significant wildlife pathogens were isolated during July.

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

**Veterinary Mastitis Consultant: Bovine Industry** 

0827849706

# **DIAGNOSTIC REPORT: July 2020**

No new zoonotic AMR (antimicrobial resistant) organisms or State controlled diseases reported for July 2020

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

Condition	Comments and Specie
Parafilaria	В 3
Red legged-ticks	B 3, O3
Biting lice	В 3
Anaplasmosis	B 1
Red gut	В 3
Blood gut	01
Histophilus somni	В 3
Bovine brucellosis	B 1
Ringworm	В 3
BVD	B 1
IBR	В 3
EBL (beef cattle seen at abattoir)	B 2
Warts	В 3
Urea poisoning	В 3
Energy overload	В 3
Poor condition	03

Phosphate deficiency (calves)	B 3
Vitamin A deficiency	03
Abortion	B 2, O 1
Mastitis	B 1
Blue udder	01
Joint ill	B 1
Navell ill	B 1
Lameness (including foot rot)	B 3, O 2
Lungs	B 3, O 3
Eyes	03
Diarrhoea	B 3, O 3
Abscesses	B 3, O 1
Dystocia	B 1
Retained afterbirth	B 2
Trauma	B 2, O 3
Pericarditis	B 1
Deaths reported by farmers:	
Pneumonia	

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

Condition	Comments and Specie				
IBR	В 3				
Atypical interstitial pneumonia (AIP)	В 3				

Trichomonsis	5 bulls one farm
Bovine brucellosis	50 heifers moved from a quarantined posite farm to a feedlot
Macrolide resistance	Resistance increasing in testing
Tapeworms	03

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

# Specialist Veterinary Pathologist, Vetdiagnostix - Veterinary Pathology Services

LIVESTOCK DISEASE SURVEILANCE						
LIVESTOCK		NO.				
SPECIES	DISEASE AGENT	CASES	LOCATION			
BOVINE, CALF	CRYPTOSPORIDIOSIS	1	RUSTENBERG, N WEST			
OVINE LAMB	CRYPTOSPORIDIOSIS	1	SWELLENDAM, W CAPE			
BOVINE ADULT	PASTEURELLA PNEUMONIA	1	POTCHEFSTROOM, N WEST			
BOVINE ADULT	PULMONARY THROMBOEMBOLISM	1	DUNDEE, KZN			
BOVINE CALF	SALMONELLA TYPHIMURIUM ENTERITIS	1	KROONSTAD, FREE STATE			
OVINE LAMB	CRYPTOSPORIDIOSIS	1	RUSTENBERG, N WEST			
BOVINE CALF	CRYPTOSPORIDIOSIS	1	HOWICK, KZN			
BOVINE ADULT	ENZOOTIC BOVINE LEUKOSIS	1	BRITS, GAUTENG			
BOVINE ADULT	MICROCYSTIS BLUE GREEN ALGAE	1	BRITS, GAUTENG			
BOVINE FETUS	BOVINE HERPESVIRUS (IBR) ABORTION	1	MEMEL, FREE STATE			
BOVINE CALF	CRYPTOSPORIDIOSIS	1	RUSTENBERG, N WEST			
BOVINE CALF	CRYPTOSPORIDIOSIS	1	ERMELO, MPUMULANGA			
GOAT KID	CONTAGIOUS ECTHYMA (ORF)	1	PARYS, FREE STATE			
BOVINE CALF	CRYPTOSPORIDIOSIS	1	RUSTENBERG, N WEST			
BOVINE CALF	PNEUMONIC MANHEIMENALLOSIS	1	RUSTENBERG, N WEST			
BOVINE ADULT	THROMBOEMBOLIC PNEUMONIA	1	RICHMOND KZN			
BOVINE ADULT	CESTRUM POISONING	1	HUMANSDORP E CAPE			
BOVINE ADULT	VISCERAL "HEART-PLUCK" CLOSTRIDIA	1	FRANKFORT, FREE STATE			
BOVINE FETUS	VACUOLAR HEPATOPATHY MYCOTOXIN	1	DUNDEE, KZN			
BOVINE YEARLING	TOXIC HEPATOSIS	1	MOOI RIVER KZN			
BOVINE FETUS	TRUPERELLA PYOGENIES ABORTION	1	STANDERTON, MPUMULANGA			
OVINE LAMB	CONGENITAL BILIARY ATRESIA	1	HOWICK, KZN			

WILDLIFE DISEASE SURVEILANCE						
WILDLIFE SPECIES	DISEASE AGENT	NO. CASES	LOCATION			
NYALA ANTELOPE	GOUSIEKTE	1	MODIMOLE LIMPOPO			
WHITE RHINO CALF	HITE RHINO CALF CLOSTRIDIAL ENTEROTOXAEMIA		POLOKWANE LIMPOPO			

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

Condition	Comments and Specie			
Red gut	B 1			
Septicaemia	B 1, G 1			
Equine sarcoid	E 2			
Cardiac glycoside	01			
Protein, energy malnutrition (PEM)	O 2, G 2			
Hepatotoxicity	01			
Abortion	B 1 , C 1, E 1			
Lung (Bacterial infection)	G 1			



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

7/28/20 DAFF Import/Export Policy Unit Subdirectorate

# Monthly report: Faculty of Veterinary Science cases Wildlife cases sent to referring veterinarians between 26th June and 28th July 2020

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

PMDate	Species	Final	Histo No
07-May-20	African Elephant	Normal lung and lymph node (TB monitoring)	S1135-20
07-May-20	African Elephant	Granulomatous lymphadenitis	S1134-20
08-Jun-20	White faced Owl	Yolk sac peritonitis	S1444-20
08-Jun-20	Bald Ibis	Intestinal abscess while suffering from atherosclerosis	S1443-20
08-Jun-20	Samango Monkey	Possible multiple myeloma	S1442-20
08-Jun-20	Tartar Sand Boa	Malignant melanoma	S141-20
08-Jun-20	African Grey Parrot	Aspergillosis	S1406-20
20-Jul-20	Cheetah	Multiple cutaneous fibrolipomas	S1876-20

Kind regards,

Mily Mitchell

Prof. Emily Mitchell

# DISEASE DISTRIBUTION REPORT AS REPORTED BY VETERINARIANS

<b>Table of Contents</b>	
<u>Internal Parasites</u>	Roundworms in general, Resistant Round Worms, Wireworm, Brown stomach-worm, Nodular worm, Eye worm ( <i>Thelazia rhodesii</i> ), Tape Worms, Liver fluke, Conical Flukes, Cysticercosis
External Parasites	Blue ticks, Resistant blue Ticks, Heartwater (Bont) ticks, Bont-legged ticks, Red-legged ticks, Paralysis ticks, Biting lice (red lice), Sucking lice (blue lice), Scab mites, Mange Mites, Nuisance Flies, Blowflies, Nasal bot larvae, Itch mite
<u>Tick-borne Diseases</u>	African red water, Asiatic red water, Anaplasmosis, Heartwater, Sweating Sickness, Theileriosis
Insect Transmittable Diseases	Lumpy skin disease, Blue tongue, Nagana
Venereal Diseases	<u>Trichomonosis</u> , <u>Vibriosis</u> , <u>Pizzle disease</u>
Bacterial Disease (other)	Blackquarter, Botulism, Pulpy Kidney, Lamb dysentry, Swelled head disease, Red gut (cattle), Blood gut (Sheep), Tetanus, Salmonellosis, Brucella abortus, Brucella ovis, Johne`s disease, Leptospirosis, Pseudomonas, Septicaemia, E. coli, Enzootic Abortion, Dermatophilosis (Lumpy Wool), Intrauterine Gangrene, Fusibacterium necrophorum, Listeriosis, Other, Pasteurellosis
Protozoal diseases (other)	Coccidiosis, Cryptosporidium
<u>Fungal diseases</u>	<u>Ringworm</u>
<u>Viral Diseases (other)</u>	BMC (snotsiekte), BVD (Bovine viral diarrhoea), IBR (Infectious bovine rhinotracheitis), BRSV (Bovine respiratory syncytial virus), PI3, Enzootic Bovine Leucosis (EBL), Jaagsiekte, Orf, Warts, Rota virus
Poisonings (Plant) and Fungal	Cardiac glycoside poisoning, <i>Cestrum</i> , Gifblaar, <i>Lantana</i> , Nenta poisoning (Krimpsiekte), Prussic acid poisoning, Seneciosis, Tulip Poisoning, Mycotoxicosis, Diplodiosis, Other
<u>Poisonings</u>	<u>Urea Poisoning</u> , <u>Snake Bite</u> , <u>Blue-green algae</u> , <u>Other</u>
Macro Nutritional Problems	Energy deficiency, Protein deficiency, Phosphate deficiency, Calcium deficiency
<u>Micro Nutritional Problems</u>	Copper deficiency, Zinc deficiency, Selenium deficiency, Manganese 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 Ill, Lameness/Foot Problems, Lung infection, Mastitis in general, Navel Ill, Red gut (Torsion of the Gut) Sheep, Trauma, Downer, Other, Vestibular syndrome (Middle ear infection), Wet carcases, Yellow carcases at abattoir						
<u>Metabolic I</u>	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, Frozen to death						
Non specifi	<u>Cause of death not established, Genetic</u> <u>disorders, Preditors, Sabotation/Theft, Trauma, Veld fires, other, Traumatic</u> <u>Reticulo-pericarditis</u>								
Internal	Parasites								
Roundwo	orms in gen	eral							^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (2)	1.3 (3)		2.0 (4)	1.8 (5)	1.8 (6)	1.5 (2)	1.7 (7)	
Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported									
Beef		r			1.0 (1)	1.7 (3)		1.0 (1)	
Sheep	2.0 (1)	1.5 (2)		2.0 (4)	2.0 (4)	2.0 (1)	1.0 (1)	2.0 (4)	
Goat	2.0 (1)	1.0(1)		-		2.0 (2)	2.0 (1)	1.5 (2)	
Mpumalang	ja	, ,							_
	Longtom Dier	ekliniek							
Sheep: 2, Goat: 2									
Gauteng Pretoria, Anima Veterinary Consulting Rooms									
Sheep: 2									
Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic									
Sheep: 1, Goat: 1									
North West									
Christiana, Christiana Dierehospitaal									
Sheep: 3									
	, Klerksdorp Di	erehospit	aal						
Sheep: 2									
Ventersdorn, Ventersdorn Dierekliniek									

Ventersdorp, Ventersdorp Dierekliniek

Sheep: 1
Vryburg, Vryburg Dierehospitaal
Sheep: 2
Free State

Bloemfonte	in, Dr Stephan	Wessels							
Sheep: 3									
	ocolan Dierek	liniek							
Sheep: 1									
	Kroonstad Die	rehospita	al						
Sheep: 2									
	gepoort Veedi	enste							
Beef: 1, Shee		Ciloco							
Kwazulu-Na									
	ugela Vet Clini	ic							
Beef: 1									
	howe Veterina	rv Hospita	al						
Sheep: 2		,оор							
•	<b>Mooirivier Vet</b>	t Clinic							
Beef: 2									
Mtubatuba,	Mtubatuba Ar	nimal Clini	ic						
Beef: 2, Goat									
	heid Privaat \	/eeartse							
Goat: 2									
Eastern Cap									
	et, Camdeboo	Veterinar	y Clinic						
Goat: 2									
	Uitenhage Die	rehospita	al						
Sheep: 1									
Western Ca									
	est, Beaufort I	Diereklinie	ek						
Sheep: 1									
-	ledon Dierekli	niek							
Sheep: 3, Go									
	jerberg Diereh	ospitaal [	Darling						
Sheep: 3									
	h, Stellenbosc	n Anımai	Hospital						
Beef: 1, Shee	ep: 1, Goat: 1								
Resistant	Round Wo	rms							<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North		Kwazulu-	Eastern	Western	Northern
. KOVINGE	. ipamaianga	Cautering	шроро	West	State	Natal	Cape	Cape	Cape
Average				2.0 (1)	2.0	2.0 (1)			
Average				2.0 (1)	2.0 (3)	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
					2.0				
Sheep				2.0 (1)	2.0 (3)				
Goat						2.0(1)			
North West									
Christiana,	Christiana Die	rehospita	al						
Sheep: 2									
Free State									
<b>Bloemfonte</b>	in, Dr Stephan	Wessels							
Sheep: 3									
J. ICCP. J									

#### Viljoenskroon, Viljoenskroon Dierekliniek Sheep: 1 Villiers, Wilgepoort Veedienste Sheep: 2 Kwazulu-Natal **Vryheid, Vryheid Privaat Veeartse** Goat: 2 Wireworm Kwazulu- Eastern Western Northern North Free **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape 1.8 2.5 (4) 1.0(2)1.8(6)1.5 (4) **Average** 2.0(2)1.5 (2) 1.5 (2) 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 1.0 **Beef** 1.0(1)1.0(1)(1) 2.3 2.5 (2) 1.0(1)1.8(4)1.5 (2) 1.5(2)Sheep 2.0(1)1.5 (2) (4) 1.0 1.5(2)Goat 2.0(1)2.5 (2) 1.0(1)3.0(1)2.0(1)(1) **Mpumalanga** Lydenburg, Longtom Dierekliniek Sheep: 2, Goat: 2 Gauteng Hammanskraal, Themba Animal Clinic Sheep: 2, Goat: 2 Nigel, Nigel Diere Spreekkamer Goat: 3 Nigel, Welgelegen Dierekliniek Sheep: 3 Limpopo **Mokopane, Bundu Veterinary Services** Sheep: 1, Goat: 1 **North West Brits, Brits Dierekliniek** Goat: 3 **Brits, Zodiac Dierekliniek** Sheep: 1 Leeudoringstad, Leeudoringstad Dierekliniek Sheep: 3 Irrigated pastures, feed lots Rustenburg, Bergbos Dierekliniek Beef: 1, Sheep: 2 Schweizer-Reneke, Buffeldoorn Dierekliniek SR Sheep: 1

Goat: 1
Clocolan, Clocolan Dierekliniek

**Bethlehem, Bethlehem Animal Hospital** 

**Free State** 

Sheep: 1									
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	gepoort Veedi	oncto							
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	n, Camperdov	vn vet Cii	піс						
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	dumeni Herd I	neaith							
Goat: 2									
	zburg, Veterin	ary House	Hospital						
Sheep: 2									
Eastern Cap			-II I						
	et, Camdeboo	Veterinai	y Clinic						
Goat: 1									
	Kowie Veterin	nary Clinic	}						
Goat: 2									
Five cases, P									
Western Ca	-								
	est, Beaufort \	West State	e Vet						
Sheep: 1									
Malmesbur	y, Capevet								
Sheep: 2									
Severe infest									
Northern Ca	-								
	Kimberley Die	rekliniek							
Sheep: 1									
Kimberley,	Vets4all								
Sheep: 2									
Brown st	omach-wor	m							<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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	10 cases
Sheep								2.0 (1)	
Goat							2.0 (1)		
Eastern Cap	е								
	et, Camdeboo	Veterina	y Clinic						
Goat: 2	•		•						
Western Ca	pe								
	(WC), Heidelb	erg Diere	kliniek						
Sheep: 2	· - //	J							
Nodular	worm								^

PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					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
Sheep					1.0 (1)				
Free State									
Memel, Men Sheep: 1	nel Veterinary	Clinic							
	n ( <i>Thelazia</i> )	rhodesii	7)						^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				2.0 (1)	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)	1.0 (1)				
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Beef: 2	yburg Diereno	Spitaai							
Free State	nakal Diarakli	niol:							
Beef: 1	nekal Dierekli	піек							
Tape Wor	rms								^
	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (2)	1.0 (1)		2.0 (4)	2.1 (7)		1.0 (1)		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	10 cases
Beef	1.0(1)								
Sheep	1.0 (1)	1.0 (1)		2.0 (4)	2.1 (7)		1.0 (1)		3.0 (1)
Beef: 1	a four Diereklin Iooiplaas Vete		enste						

Chaon: 1									
Sheep: 1									
Gauteng									
	n, Bapsfontein	Dierenos	oitaai						
Sheep: 1									
North West									
•	c Dierekliniek								
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	Klerksdorp Di	erehospit	aal						
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	om, Morvet								
Sheep: 3									
	yburg Diereho	spitaal							
Sheep: 3									
Free State									
	in, Dr Stephan	Wessels							
Sheep: 3									
-	locolan Dierek	liniek							
Sheep: 1									
	Grasveld Kud	degesond	heid						
Sheep: 2									
	nekal Dierekli	niek							
Sheep: 2									
	on, Viljoenskr	oon Dierel	kliniek						
Sheep: 2									
	gepoort Veedi	enste							
Sheep: 3									
	arden Dierekli	niek							
Sheep: 2									
Eastern Cap									
	h, Hertzogbrug	g Diereklii	niek						
Sheep: 1									
Northern Ca									
	Karoo Veterina	ary Hospit	al						
Sheep: 3									
Liver fluk	æ								<u>^</u>
			_	North	Free	Kwazulu-	Fastern	Western	Northern
PROVINCE	Mpumalanga	Gauteng	Limpopo	West		Natal	Cape	Cape	Cape
					1.8				
Average	1.0 (2)				(6)		3.0 (1)	1.5 (2)	
l aal a6 :			. 2	. Albana ana	h		d 2		10
reported	ortance scale: 1	= one case	e, 2 = more	e tnan on	e case b	ut iess than t	en and 3 =	more than	to cases
Beef	1.0(1)				2.0		3.0 (1)		
					(4)				
Dairy					1.5			2.0 (1)	
	1.0 (1)				(2)			<u> </u>	
Sheep	1.0(1)							1.0 (1)	
Mpumalang									
<b>Bethal, Bet</b> l Sheep: 1	hal Diereklinie	k							

	Cape Cross Vol	ksrust Die	erehospita	al					
Beef: 1									
Free State									
	Bethlehem Ar	nimal Hos <sub>l</sub>	pital						
Dairy: 1									
	locolan Dierek	liniek							
Beef: 2									
	Veltevrede Die	rekliniek							
Dairy: 2	C								
	Grasveld Kud	aegesona	neia						
Beef: 2									
Beef: 2	gepoort Veedi	enste							
	arden Dierekli	niak							
Beef: 2	arden Dierekii	IIIEK							
Eastern Cap	10								
_	, Steynsburg [	)ierehosni	itaal						
Beef: 3	, Steynsburg L	ici ci lospi	ltaai						
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	orge Herd Hea	th Consul	t						
Dairy: 2	orge riera riea	tii Coiisui							
	Dierehospita	al:							
Sheep: 1	Diciciospitat	41/							
эпеср. 1									
Conical F	lukes								<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West			Eastern Cape	Western Cape	Northern Cape
Average	1.5 (4)				1.9 (8)	2.0 (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	1.5 (4)				1.8	3.0 (1)	2.0 (1)		
Beef	1.5 (4)				(6)	3.0 (1)	2.0 (1)		
Beef Sheep	1.5 (4)					3.0 (1)	2.0 (1)		
	1.5 (4)				(6) 2.0	3.0 (1)	2.0 (1)		
Sheep Goat					(6) 2.0		2.0 (1)		
Sheep Goat Mpumalang	ıa .	nêre Snre	ekkamer		(6) 2.0		2.0 (1)		
Sheep Goat Mpumalang Ermelo, Mô		nêre Spre	ekkamer		(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô	ja regloed Veteri	-	ekkamer		(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg,	ıa .	-	ekkamer		(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg, Beef: 2	ja regloed Veteri Longtom Dier	-	ekkamer		(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg,	ja regloed Veteri Longtom Dier	-	ekkamer		(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Môn Beef: 1  Lydenburg, Beef: 2  Standerton, Beef: 2	ja regloed Veteri Longtom Dier , Econovet	ekliniek		al	(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Môn Beef: 1  Lydenburg, Beef: 2  Standerton, Beef: 2  Volksrust, C	ja regloed Veteri Longtom Dier	ekliniek		al	(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Môn Beef: 1  Lydenburg, Beef: 2  Standerton, Beef: 2	ja regloed Veteri Longtom Dier , Econovet	ekliniek		al	(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg, Beef: 2 Standerton, Beef: 2 Volksrust, C Beef: 1 Free State	ja regloed Veteri Longtom Dier , Econovet Cape Cross Vol	ekliniek ksrust Die		al	(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg, Beef: 2 Standerton, Beef: 2 Volksrust, C Beef: 1 Free State	ja regloed Veteri Longtom Dier , Econovet	ekliniek ksrust Die		al	(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg, Beef: 2 Standerton, Beef: 2 Volksrust, C Beef: 1 Free State Clocolan, Cl Beef: 2	regloed Veteri Longtom Dier , Econovet Cape Cross Vol	ekliniek ksrust Die		al	(6) 2.0		2.0 (1)		
Sheep  Goat  Mpumalang Ermelo, Mô Beef: 1 Lydenburg, Beef: 2 Standerton, Beef: 2 Volksrust, C Beef: 1 Free State Clocolan, Cl Beef: 2	ja regloed Veteri Longtom Dier , Econovet Cape Cross Vol	ekliniek ksrust Die		al	(6) 2.0		2.0 (1)		

Mamal Marra	nal Vatarinam	Clinia							
Beef: 2, Shee	nel Veterinary	CIIIIC							
	ب. ع land Dierehos	nitaal							
Beef: 1	ialiu Dielelios	pitaai							
	gepoort Veedi	enste							
Beef: 2, Shee		Cliste							
	shoek Dierege	sondheid	_						
Beef: 2	onock Dicrege	Jonandia	•						
Kwazulu-Na	ital								
	Mtubatuba Ar	nimal Clin	ic						
Goat: 1									
	Underberg Ve	terinary S	Surgery						
Beef: 3									
Eastern Cap	е								
	, Steynsburg D	Dierehospi	itaal						
Beef: 2		<u> </u>							
Cysticerc	osis								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				2.0 (1)				2.0 (2)	1.5 (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	10 cases
Beef				2.0 (1)				3.0 (1)	1.0 (1)
Dairy								1.0 (1)	
Sheep									2.0 (1)
<b>North West</b>									
Vryburg, Vr	yburg Diereho	spitaal							
Beef: 2									
Western Ca	ре								
George, Geo	orge Herd Hea	th Consul	t						
Dairy: 1									
	,, Dr Otto Krie	k							
Beef: 3									
Northern Ca	•								
	Kimberley Die	rekliniek							
Beef: 1									
Abattoir inspe									
	g, Postmasbu	rg Dierek	liniek						
Sheep: 2									
<b>External</b>	<b>Parasites</b>								
Blue ticks	5								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape

					2.5				
Average	2.0 (2)	2.0 (2)	1.0 (1)	3.0(1)	(4)	2.0 (4)		2.3 (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
Торогсо									
Beef	2.0 (2)	2.0 (2)	1.0(1)	3.0 (1)	2.3 (3)	2.0 (4)		2.0 (1)	
Dairy								2.5 (2)	
-					3.0				
Sheep					(1)				
<b>Mpumalang</b>	a								
Lydenburg,	Lydenburg Die	erespreek	kamer						
Beef: 2									
	elspruit Anim	al Hospita	l						
Beef: 2									
Gauteng									
	raal, Themba <i>l</i>	Animal Cli	nic						
Beef: 2									
	Diere Spreekl	kamer							
Beef: 2									
Limpopo	Domeio Veterin	anni Camila							
Beef: 1	Bundu Veterin	iary Servic	æs						
North West									
	, Ventersdorp	Niereklin	iok						
Beef: 3	o, ventersuorp	Diciekiiii	ICK						
Free State									
	loopstad Diere	ekliniek							
Beef: 3, Shee									
	gepoort Veedi	enste							
Beef: 2	<u>, , , , , , , , , , , , , , , , , , , </u>								
Warden, Wa	arden Dierekli	niek							
Beef: 2									
Kwazulu-Na	ıtal								
Bergville, Be	ergville Veteri	nary Clinic	2						
Beef: 2									
	Mooirivier Vet	t Clinic							
Beef: 2									
	Mtubatuba Ar	nimal Clini	C						
Beef: 2									
	Underberg Ve	terinary S	urgery						
Beef: 2									
Western Ca		•••							
	orge Animal H	ospitai							
Beef: 2, Dairy			<u></u>						
	orge Herd Hea	tn Consult							
Dairy: 3									
Resistant	blue ticks								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape

Average 2.5 (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 2.5 (2) 1.0 (1)

Free State

Villiers, Wilgepoort Veedienste

Beef: 2

Winburg, Winburg Dierekliniek

Beef: 3

Kwazulu-Natal

Mtubatuba, Mtubatuba Animal Clinic

Beef: 1

Heartwat	Heartwater (Bont) ticks										
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape		
Average	2.0 (3)	1.7 (3)				2.0 (3)	1.3 (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	2.0(2)	2.0 (2)	2.0 (2)	1.0(2)	
Sheep				2.0(1)	
Goat	2.0(1)	1.0(1)	2.0 (1)		

Mpumalanga

Lydenburg, Lydenburg Dierespreekkamer

Beef: 2

Nelspruit, Nelspruit Animal Hospital

Beef: 2, Goat: 2

Gauteng

Hammanskraal, Themba Animal Clinic

Beef: 1, Goat: 1

**Pretoria, Anima Veterinary Consulting Rooms** 

Beef: 3

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

Mtubatuba, Mtubatuba Animal Clinic

Beef: 2, Goat: 2 **Eastern Cape** 

**Alexandria, Riverview Trading Vet Consulting Services** 

Beef: 1, Sheep: 2

**Humansdorp, Humansdorp Veterinary Clinic** 

Beef: 1

**Bont-legged ticks** 

PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	1.0 (2)		3.0 (1)	2.5 (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	1.0 (1)	1.0 (1)		3.0 (1)	(2)				
Sheep		1.0 (1)			2.5 (2)				2.0 (1)
<b>Mpumalang</b>	a								
Balfour, Bal	four Diereklin	iek							
Beef: 1									
Gauteng									
Pretoria, An	ima Veterinar	y Consulti	ing Rooms	3					
Beef: 1, Shee	p: 1								
North West									
<b>Christiana,</b> ( Beef: 3	Christiana Die	rehospita	al						
Free State									
	loopstad Dier	ekliniek							
Beef: 3, Shee									
	Kroonstad Die	rehospita	al						
Sheep: 2									
	arden Dierekli	niek							
Beef: 2									
Northern Ca	-								
	Aar Veterinary	Clinic							
Sheep: 2									
Red-legg	ed ticks								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (3)			3.0 (1)	2.3 (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	2.0 (3)			3.0 (1)	2.5 (2)				
Sheep					2.0 (2)				
Mpumalang	a								
i ipainalang									
Balfour, Bal	four Diereklin	iek							
	four Diereklin	iek							
<b>Balfour, Bal</b> Beef: 2	four Diereklin Lydenburg Die		kamer						

lorth West	Chairte na Bir		- •						
	Christiana Die	renospita	al						
Beef: 3									
ree State	la au ata d Diau	.   .   ! !   .							
	loopstad Diere	екипіек							
eef: 3, Shee									
eef: 2	s Dierehospita	Idi							
	n, Wesselsbro	n Diorokli	niok						
heep: 1	ii, wesselsbio	ii Dielekii	illek						
леер. 1									
Paralysis	ticks								-
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					1.0 (2)				
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	10 cases
Beef					1.0 (1)				
Sheep					1.0 (1)				
ree State									
	in, Dr Stephan	<b>Wessels</b>							
Beef: 1									
	gepoort Veedi	enste							
Sheep: 1									
Biting lice	e (red lice)								2
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State		Eastern Cape	Western Cape	Northern Cape
Average		2.0 (1)		3.0 (2)	2.3 (10)	1.0 (1)		1.0 (2)	3.0 (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
Level of impo reported									
		2.0 (1)		3.0 (2)	(0)		•	1.0 (1)	3.0 (1)
reported		2.0 (1)		3.0 (2)		1.0 (1)			3.0 (1)
reported Seef		2.0 (1)		3.0 (2)	(8) 1.0	1.0 (1)		1.0 (1)	3.0 (1)

North West									
Leeudorings	stad, Leeudori	ngstad Di	erekliniek						
Beef: 3									
Stella, Stella	a Dierekliniek								
Beef: 3									
Free State									
Bethlehem,	Bethlehem An	imal Hos	pital						
Sheep: 1									
	in, Dr Stephan	Wessels							
Beef: 3									
Clocolan, Cl	ocolan Dierek	liniek							
Beef: 3									
Dewetsdorp	, Platkop Dier	ekliniek							
Beef: 3	<i>,</i> .								
Hoopstad, F	loopstad Diere	ekliniek							
Beef: 3									
Kroonstad.	Kroonstad Die	rehospita	al						
Beef: 3, Shee									
	nel Veterinary	Clinic							
Beef: 3									
	nekal Dierekli	niek							
Beef: 2									
	n, Wesselsbro	n Dierekli	niek						
Beef: 1	.,								
Kwazulu-Na	ntal								
Beraville, Ti	ugela Vet Clini	С							
Sheep: 1									
Western Ca	pe								
Oudtshoorn	_								
Goat: 1	,								
Stellenbosc	h, Stellenbosc	h Animal	Hospital						
Beef: 1	.,								
Northern Ca	ane								
	Karoo Veterina	rv Hospit	al						
Beef: 3		,оор	· <del></del>						
Sucking I	ice (blue lic	e)							_
PROVINCE	Mpumalanga	Gautena	Limnono	North	Free	Kwazulu-	Eastern	Western	Northern
ROVINCE	ripamaianga	Cautering	Сппроро	West	State	Natal	Cape	Cape	Cape
Avorago				2.5 (2)	2.5		2.5 (2)		2.0.(2)
Average				2.5 (2)	(6)		2.5 (2)		3.0 (2)
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				2.5 (2)	2.5 (6)				3.0 (1)
Goat							2.5 (2)		3.0 (1)
North West									
Leeudorings	stad, Leeudori	ngstad Di	erekliniek						
Beef: 3									
Ventersdor	o, Ventersdorp	Diereklin	iek						

D 6 3									
Beef: 2									
Free State	: D 011								
Beef: 3	in, Dr Stephan	wesseis							
	ocolan Dierek	liniak							
Beef: 3	ocolan bierek	iiiiek							
	Dosvrystaat Di	oro Drodi	ıkto						
Beef: 1	JUSVI YSLAAL DI	ere Prout	IKC						
	loopstad Diere	akliniak							
Beef: 3	loopstaa Diere	CKIIIICK							
	on, Viljoenskro	oon Diere	kliniek						
Beef: 3	, <b>.</b>	210.0							
Vrede, Saul	shoek Dierege	sondheid							
Beef: 2									
Eastern Cap	e								
<b>Graaff-Rein</b>	et, Camdeboo	Veterina	ry Clinic						
Goat: 2									
<b>Graaff-Rein</b>	et, Graaff Reir	net Veteri	nary Clinic	:					
Goat: 3									
Northern Ca									
	Karoo Veterina	ary Hospit	tal						
Beef: 3									
	rg, Postmasbu	rg Dierek	liniek						
Goat: 3									
Scab mit	es								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	2.0 (2)			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
Sheep	1.0 (1)	2.0 (2)			2.0 (3)				
					(3)				
Mpumalang		^ -							
•	regloed Veteri	nere Spre	еккатег						
Sheep: 1									
Gauteng Panefontoir	Panefontoin	Dioroboo	nitaal						
Sheep: 1	n, Bapsfontein	Dierenos	рісааі						
	nima Veterinar	v Consult	ina Rooms						
Sheep: 3	iiiia veteiiiiai	y Consuit	ing Rooms	•					
North West p	rovince								
Free State									
	Freestate Smi	thfield SV							
Sheep: 3									
Mohokare									
	gepoort Veedi	enste							
Villiers, Wil Sheep: 2	-								
Villiers, Wil Sheep: 2 Wesselsbro	gepoort Veedi		niek						
<b>Villiers, Wil</b> Sheep: 2	-		niek						

Mange M	ites								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State		Eastern Cape	Western Cape	Northern Cape
Average	2.0 (2)	3.0 (1)		3.0 (2)	2.1 (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	2.0 (1)	3.0 (1)		3.0 (2)	2.2 (6)				
Dairy					2.0 (1)				
Sheep Mpumalang	2.0 (1)				2.0 (1)				
Sheep: 2 Gauteng Nigel, Welg Beef: 3 200 cows North West Christiana, Beef: 3 Sarcoptes mir Leeudoring: Beef: 3 Free State Bloemfonte Beef: 3 Sarcoptes mir Bloemfonte Dairy: 2 Excelsior, W Beef: 2 Hoopstad, H Beef: 3	Longtom Dierek  Christiana Die  tes  stad, Leeudori  in, Dr Stephar	liniek rehospita ingstad Di n Wessels Free State rekliniek	erekliniek						
Beef: 2, Sheep: 2  Wesselsbron, Wesselsbron Dierekliniek Beef: 1									
	inburg Dierek	liniek							

**Nuisance Flies** 

. KOVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					2.0 (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 t	en and 3 =	more than :	10 cases
Beef					2.0 (1)	2.0 (1)		1.0 (1)	
ree State Vinburg, W	inburg Dierek	liniek							
Beef: 2									
(wazulu-Na	ital								
	Mtubatuba Ar	nimal Clin	ic						
Beef: 2									
Western Ca		la A!	lla audt - l						
S <b>tellenbosc</b> Beef: 1	h, Stellenbosc	n Animai	nospitai						
Blowflies									
	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					2.0				
Average					(1)				
_	ortance scale: 1	= one case	e, 2 = more	than on		ut less than t	en and 3 =	more than :	10 cases
Level of impo	ortance scale: 1	= one case	e, 2 = more	than on		ut less than t	en and 3 =	more than :	10 cases
Level of impore ported	ortance scale: 1	= one case	e, 2 = more	than on	e case b	ut less than t	en and 3 =	more than :	10 cases
Level of impore ported  Beef  Free State			e, 2 = more	than on	e case b	ut less than t	en and 3 =	more than :	10 cases
Level of impore ported  Beef  Free State	ortance scale: 1		e, 2 = more	than on	e case b	ut less than t	en and 3 =	more than :	10 cases
Level of impore reported  Beef  Free State Winburg, W	inburg Dierek		e, 2 = more	than on	e case b	ut less than to	en and 3 =	more than :	10 cases
Level of impore reported  Beef Free State Winburg, Winbur	inburg Dierek	liniek		North West	2.0 (1)	Kwazulu-	en and 3 =  Eastern Cape	western	10 cases  Northern Cape
Level of impore reported  Beef Free State Winburg, Winbur	inburg Dierek	liniek		North	2.0 (1)  Free State	Kwazulu-	Eastern	Western	Northern
Level of impore reported  Beef Free State Winburg, Winbur	inburg Dierek larvae Mpumalanga	liniek Gauteng	Limpopo	North West	2.0 (1)  Free State  2.0 (2)	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Level of impore reported  Beef Free State Winburg, Winbur	Tinburg Dierek Larvae Mpumalanga 2.0 (1) Ortance scale: 1 2.0 (1)	liniek Gauteng	Limpopo	North West	2.0 (1)  Free State  2.0 (2)	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape

Sheep: 2									
North West									
Leeudoring	stad, Leeudori	ngstad Di	erekliniek						
Sheep: 3									
Free State									
	Bethlehem Ar	nimai Hos	pital						
Sheep: 2	land Dierehos	nitaal							
Sheep: 2	iana Dicienos	pitaai							
Itch mite									_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					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 to	en and 3 =	more than	10 cases
Sheep					2.0 (1)		3.0 (1)		
Free State									
	gepoort Veedi	enste							
Sheep: 2	<b>3</b> - <b>p</b>								
Eastern Cap	e e								
	, Steynsburg D	Dierehospi	itaal						
Sheep: 3									
Tick-bor	ne Disease	S							
African re	ed water								_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (1)		1.0 (1)	1.0 (1)	1.0 (1)	1.4 (5)		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)		1.0 (1)	1.0 (1)	1.0 (1)	1.4 (5)			
Dairy								2.0(1)	
Mpumalang	a								
Pipamaiang	·-								
Hendrina, M	looiplaas Vete	rinêre Die	enste						
<b>Hendrina, M</b> Beef: 2		rinêre Die	enste						
Hendrina, M Beef: 2 Limpopo	looiplaas Vete								
Hendrina, M Beef: 2 Limpopo Polokwane,									
Hendrina, M Beef: 2 Limpopo Polokwane, Beef: 1	looiplaas Vete								
Hendrina, M Beef: 2 Limpopo Polokwane, Beef: 1 North West	looiplaas Vete	eterinary	Clinic						

D C - 1									
Beef: 1									
Free State									
Beef: 1	gepoort Veedi	enste							
Seer: 1 Kwazulu-Na	stal								
	ergville Veteri	nary Clini	_						
Beef: 1	ergville veteri	nary Cilli	<u> </u>						
	dumeni Herd h	nealth							
Beef: 1									
	Mtubatuba Ar	nimal Clin	ic						
Beef: 2									
Pietermarit	zburg, Veterin	ary House	Hospital						
Beef: 2									
	Underberg Ve	terinary S	urgery						
Beef: 1									
Western Ca									
	orge Herd Hea	th Consul	t						
Dairy: 2									
Asiatic re	d water								
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.7 (3)				2.0 (1)	1.3 (4)	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	1.7 (3)				2.0 (1)	1.3 (4)	1.0 (1)		
Dairy								2.0(1)	
	2								
	four Diereklin	iek							
Beef: 2									
	looiplaas Vete	rinêre Die	enste						
Beef: 2									
Lydenburg,	<b>Longtom Dier</b>	ekliniek							
Beef: 1									
Free State									
	leltevrede Die	rekliniek							
Beef: 2	1								
Kwazulu-Na		nom. Climi	•						
Bergville, B Beef: 1	ergville Veteri	nary Clini	G						
	ugela Vet Clini	ic							
Beef: 1	ugcia vet Cilli								
	howe Veterina	ry Hospit	al						
Kokstad, E.	G.Veterinary S	ervices							
Beef: 2	-la -ma -1-	ال الحملا	- h t. C	alia i a l			Valation I		ha a <b>6</b> 1-21 - 1
Not sure which cold nights.	ch specie caused	the death	s but from	ciinical si	gns ded	ucted it was A	Asiatic red v	vater. In spi	te of bitterly

Eastern Cap	ne .								
	e Uitenhage Die	rehospita	al						
Beef: 1									
Western Ca	ne								
	orge Herd Hea	th Consul	t e						
Dairy: 2	. ge 116. u 116u		-						
Anaplasn	nosis								^
						1			_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	1.0 (1)	1.0 (1)	2.5 (2)	2.0 (8)	1.7 (7)	2.0 (2)	1.9 (8)	
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	10 cases
Beef	1.0 (1)	1.0 (1)	1.0 (1)	2.5 (2)	2.2 (6)	1.8 (6)	1.0 (1)	1.0 (3)	
Dairy					1.5 (2)	1.0 (1)	3.0 (1)	2.4 (5)	
Mpumalang									
	<b>Longtom Dier</b>	ekliniek							
Beef: 1									
Gauteng									
	ima Veterinar	y Consult	ing Rooms	3					
Beef: 1 Limpopo									
	Bundu Veterin	any Sanyi	205						
Beef: 1	bulluu veteili	iai y Sei vi	LCS						
North West									
	Bloemhof Dier	ekliniek							
Beef: 2									
Christiana,	Christiana Die	rehospita	al						
Beef: 3									
Free State									
	Bethlehem Ar	nimal Hos	pital						
Beef: 1	- D. C: 1								
Bloemfonte Beef: 2	in, Dr Stephar	wessels							
	ocolan Dierek	linick							
Beef: 2	oculati Dierek	iiiiek							
	, Platkop Dier	ekliniek							
Dairy: 2	,a.nop biel								
	loopstad Dier	ekliniek							
Beef: 3									
Kroonstad, Kroonstad Dierehospitaal									
Dairy: 1									
Reitz, Riemland Dierehospitaal									
Beef: 2									
Villiers, Wilgepoort Veedienste									
Beef: 3 Kwazulu-Na	atal								
rwazuiu-Na	ıtaı								

Reraville	Reraville	Veterinary	Clinic
beruville,	<b>Del UVIII</b>	vetel Illai v	CIIIIC

Beef: 2

Bergville, Tugela Vet Clinic

Beef: 1

**Dundee, Endumeni Herd health** 

Dairy: 1

**Mooi River, Mooirivier Vet Clinic** 

Beef: 2

Mtubatuba, Mtubatuba Animal Clinic

Beef: 1

Pietermaritzburg, Veterinary House Hospital

Reef 2

**Underberg, Underberg Veterinary Surgery** 

Beef: 3

**Eastern Cape** 

**Jeffreys Bay, Cape Cross Veterinary Hospital** 

Dairy: 3

**Port Alfred, Kowie Veterinary Clinic** 

Beef: 1

One case Kleinemonde

**Western Cape** 

Caledon, Caledon Dierekliniek

Beef: 1

**Darling, Tygerberg Dierehospitaal Darling** 

Dairy: 3

George, George Herd Heath Consult

Dairy: 2

Heidelberg (WC), Heidelberg Dierekliniek

Dairy: 2

Malmesbury, Bergzight Dierehospitaal

Beef: 1

Malmesbury, Dr Otto Kriek

Dairy: 3

Can become a serious problem at times when stable flies' numbers escalate. Sadly, it takes a long time to turn the tide once confronted with an outbreak. Vaccination is certainly a viable option to address Anaplasmosis because it significantly reduces the incidence of this disease.

# Stellenbosch, Stellenbosch Animal Hospital

Reef· 1

# Swellendam, Swellendam Dierehospitaal

Dairy: 2

Heartwater										
PROVINCE	Mpumalanga	Gauteng	auteng Limpopo North Free Kwazulu- Eastern Cape Western Cape							
Average	1.5 (4)	2.2 (6)				2.0 (6)	1.0 (3)			
Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 reported										

Beef	1.5 (2)	2.0 (4)	1.8 (5) 1.0 (3)
Sheep	1.0(1)	2.0 (1)	
Goat	2.0(1)	3.0 (1)	3.0 (1)

Mpumalang	ıa								
	Longtom Dier	ekliniek							
Beef: 1, Shee		CKIIIICK							
	Lydenburg Die	rosnrook	kamer						
Beef: 2	Lyacibary Di	леэргеск	KuiiiCi						
	lelspruit Anima	al Hosnita	ı						
Goat: 2	teispi dit Ailiili	ai i iospica	•						
Gauteng									
	spruit, Kerkstr	aat Dierel	diniek						
Beef: 1	spran, Kerksti	uut Dicici	XIIIICK						
	raal, Themba A	nimal Cli	nic						
	ep: 2, Goat: 3	anniai Cii							
	rg, Magaliesbu	ıra: Dr Rv	an leffrev						
Beef: 3	rg, maganesic	iig, Di ity	an Jeniey						
	nderstepoort A	cademic I	Insnital a	nd Drodi	uction	Animal Clini	<u> </u>		
Beef: 1	idei stepoort A	caucinic	iospitai ai	ila Fioa	action i	Allilliai Cillii			
Kwazulu-Na	atal								
	ergville Veteri	nary Clinie	<u></u>						
Beef: 1	cigvine veteri	ilar y Cilille							
	dumeni Herd h	ealth							
Beef: 1	aumem mera i	icaitii							
	howe Veterina	ry Hosnit:	 al						
Beef: 3	nowe veterina	i y i iospite	21						
	Mtubatuba Ar	imal Clini	ic						
Beef: 3, Goat		iiiiiai Ciiiii							
•	zburg, Veterin	ary House	Hospital						
Beef: 1	zburg, veteriii	ary riouse	riospicai						
Eastern Cap	10								
	p, Humansdor	n Veterin:	ery Clinic						
Beef: 1	p, mamansaor	p veteriii	ary Cillic						
	Kowie Veterin	ary Clinic	•						
Beef: 1	ROWIC VCCCIII	iary Cirric							
One case Bat	thurst								
	Uitenhage Die	rehosnita	al						
Beef: 1	Ortennage Die	Choopita	w.						
Sweating	y Sickness								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				2.0 (1)	1.0 (1)				
Level of imported	ortance scale: 1	= one case	e, 2 = more	than one	e case b	out less than t	en and 3 =	more than	10 cases
Beef				2.0 (1)	1.0 (1)				
North West									
<b>Christiana,</b> Beef: 2	Christiana Die	rehospita	al						
Free State									
Villiers, Wil Beef: 1	gepoort Veedi	enste							

Theileriosis										
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average							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	
Dairy							2.0(1)			
Eastern Cap	e									
	, Cape Cross \	eterinary/	/ Hospital							
Dairy: 2										
<b>Insect T</b>	r <mark>ansmittab</mark>	le Dise	ases							
Lumpy sk	in disease								^	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average					1.5 (2)	1.0 (1)		2.8 (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 1	10 cases	
Beef					1.5 (2)	1.0(1)		2.5 (2)		
Dairy								3.0 (2)		
Beef: 1 <b>Wesselsbro</b> Beef: 2 <b>Kwazulu-Na</b>	on, Viljoenskro n, Wesselsbro ntal Underberg Ve	n Dierekli	niek							
Beef: 1										
Beef: 3, Dairy	ledon Dierekli		nitaal							
Beef: 2, Dairy	•		p. 10001							
Blue tong	jue								^	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western 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

1.0(1) Sheep 1.0(1)2.0(1)

#### **North West**

#### Leeudoringstad, Leeudoringstad Dierekliniek

Sheep: 1

Ram, reported by farmer

#### **Western Cape**

## Paarl, Paarl Dierehospitaal;

Sheep: 1

5 sheep, Paarl area - PM done on one ram, all signs of Bluetongue - State Vet informed, no samples sent away.

#### **Northern Cape**

#### Kuruman, Kuruman Dierekliniek

Sheep: 2

Nagana										
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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) Beef

# Kwazulu-Natal

# Mtubatuba, Mtubatuba Animal Clinic

Beef: 3

#### **Venereal Diseases Trichomonosis** Kwazulu-Eastern Western Northern North Free **PROVINCE Mpumalanga Gauteng Limpopo West State Natal** Cape Cape Cape 2.0(7) Average 2.5 (2) 2.0(2)1.0(2)2.0(3)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	2.0 (3)	2.5 (2)	2.2		2.2 (14)	2.0 (2)	1.0 (2)	2.0 (1)
Dairy			1.0	(1)				

# Mpumalanga

## **Bethal, Bethal Dierekliniek**

Beef: 1

## Grootvlei, Grootvlei Dierekliniek

Beef: 2

## Standerton, Econovet

Beef: 3

Gauteng **Bronkhorstspruit, Kerkstraat Dierekliniek** Nigel, Nigel Diere Spreekkamer Beef: 3 **North West Bloemhof, Bloemhof Dierekliniek** Beef: 2 Klerksdorp, Klerksdorp Dierehospitaal Beef: 3 Leeudoringstad, Leeudoringstad Dierekliniek Beef: 1 Stella, Stella Dierekliniek Beef: 3 Vryburg, Molopo Dierekliniek Beef: 2, Dairy: 1 Vryburg, Vryburg Dierehospitaal Beef: 2 Free State **Bethlehem, Bethlehem Animal Hospital** Beef: 2 **Bloemfontein, Dr Stephan Wessels** Beef: 1 Two bulls positive in Wepener area Clocolan, Clocolan Dierekliniek Beef: 2 **Excelsior, Weltevrede Dierekliniek** Beef: 2 Frankfort, Frankfort Dierekliniek Beef: 3 **Hoopstad, Hoopstad Dierekliniek Hoopstad, Kameeldoring Dierekliniek** Kroonstad, Kroonstad Dierehospitaal Beef: 2 Senekal, Senekal Dierekliniek Beef: 3 Viljoenskroon, Viljoenskroon Dierekliniek Beef: 1 Villiers, Wilgepoort Veedienste Beef: 3 Vrede, Saulshoek Dieregesondheid. Vrede, Vrede Dierehospitaal Beef: 2 Three farms, one new farm Warden, Warden Dierekliniek Beef: 3 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 2 **Dundee, Endumeni Herd health** Beef: 2 **Eastern Cape** 

	h, Hertzogbrug	g Dierekli	niek						
Beef: 1 Queenstow	n, Queenstowi	n Veterina	ary clinic						
Beef: 1									
Northern Ca									
	uruman Diere	kliniek							
Beef: 2									
Vibriosis									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				2.0 (4)	1.6 (5)				
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				2.0 (4)	1.6 (5)				
North West									
	Bloemhof Diere	ekliniek							
Beef: 2									
Beef: 1	stad, Leeudori	ngstad Di	erekliniek						
	a Dierekliniek								
Beef: 3	olopo Diereklir	niek							
Beef: 2	Diopo Dierekiii	IICK							
Free State									
Clocolan, Cl	ocolan Dierek	liniek							
Beef: 2									
	Cameeldoring	Diereklini	ek						
Beef: 1	mal Vatarinam	Clinia							
Beef: 2	nel Veterinary	Cimic							
	nekal Dierekli	niek							
Beef: 2									
	gepoort Veedi	enste							
Beef: 1									
Pizzle dis	ease								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					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 to	en and 3 =	more than	10 cases

Sheep					1.0 (1)			1.0 (1)			
Free State											
	Greylingsrust	: Dierespr	eekkamer								
Sheep: 1											
Western Ca											
	(WC), Heidelb	erg Diere	Kliniek								
Sheep: 1											
Bacteria	l Disease (	other)									
Blackqua	rter								^		
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape		
Average	1.5 (4)	2.0 (1)		2.0 (1)	1.9 (10)	1.8 (4)	2.0 (2)	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 1.5 (4) 2.0 (1) 2.0 (1) 2.0 (2) 2.0 (2)											
Dairy 1.0 (1)											
Mpumalang	a										
Balfour, Bal	four Diereklin	iek									
Beef: 2											
	nal Diereklinie	k									
Beef: 1		^ -									
	regloed Veteri	nere Spre	ekkamer								
Beef: 2	rootuloi Dioro	klimiak									
Beef: 1	rootvlei Diere	KIIIIIEK									
Gauteng											
	raal, Themba A	Animal Cli	nic								
Beef: 2	,										
North West											
	stad, Leeudori	ngstad Di	erekliniek								
Beef: 2											
Free State											
	Bethlehem Ar	nimal Hos	oital								
Dairy: 1	Inlantada Dia	roklinial-									
Exceisior, w Beef: 2	leltevrede Die	гекипиек									
	Oosvrystaat Di	ere Produ	kte								
Beef: 1	Josvi ystaat Di	Cre Produ	INCC.								
	rankfort Diere	kliniek									
Beef: 3											
One farm											
Hoopstad, H	loopstad Diere	ekliniek									
Beef: 2											

	Mpumalanga	Gauteng	Limpopo	West	State		Cape	Cape	Cape
				North	Free	Kwazulu-	Eastern	Western	Northern
Pulpy Kid	ney								
Beef: 2									
	Ncanduvet Ne	wcastle							
Kwazulu-Na									
Beef: 1									
	Christiana Die	rehospita	al						
North West									
Beef				1.0(1)		2.0 (1)			
reported	rtance scale: 1	= one case	e, z = more	than on	e case b	ut iess than to	en and 3 =	more than	to cases
			. 2						10
Average				1.0(1)		2.0 (1)			
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Botulism									
Dairy: 1									
	orge Herd Hea	tn Consul	T.						
Western Cap		u.							
Beef: 2									
	ı, Queenstowr	n Veterina	ry clinic						
Reported by fa									
Beef: 2									
	adock Veterina	ary Clinic							
Eastern Cap	e								
Beef: 2	HOUITIVIET VEL	Cillic							
	Mooirivier Vet	Clinic							
<b>Estcourt, Es</b> t Beef: 2	tcourt Vet Clir	IIC							
Beef: 2 Esteourt Est	toourt Vot Cli	nic .							
	lumeni Herd h	eaith							
Beef: 1									
	ıgela Vet Clini	С							
Kwazulu-Na									
Beef: 2									
	rden Diereklii	niek							
Beef: 2									
Villiers, Wilg	jepoort Veedi	enste							
Beef: 2									
Reitz, Rieml	and Dierehos	oitaal							
Beef: 2		. ссор	<del></del> -						
Kroonstad, I	Croonstad Die	rehospita	al						
	neer nera								
Beef: 2 Senekal, one l	h £ hd								

_		2.0.(2)		2.0.(2)	1.7	1.0 (1)	1.0.(2)	2.0 (1)	0.5 (0)
Average		2.0 (3)		2.0 (2)	(6)	1.0(1)	1.0 (2)	3.0 (1)	2.5 (2)
					(-)				
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 1	0 cases
reported									
					1.7				
Sheep		1.5 (2)		2.0(2)	1.7	1.0(1)	1.0(1)	3.0 (1)	2.5 (2)
		, í		, ,	(6)	\ /	` ′	` ′	
Goat		3.0 (1)					1.0(1)		
Gauteng									
Hammansk	raal, Themba <i>l</i>	Animal Cli	nic						
Sheep: 2, Go	at: 3								
Krugersdor	p, Veearts Net	werk							
Sheep: 1									
<b>North West</b>									
Christiana,	Christiana Die	rehospita	al						
Sheep: 2									
Leeudoring	stad, Leeudori	ngstad Di	erekliniek						
Sheep: 2	<u> </u>								
Free State									
Clocolan, Cl	ocolan Dierek	liniek							
Sheep: 2									
	<b>Grasveld Kud</b>	degesond	heid						
Sheep: 2									
	on, Viljoenskr	oon Diere	kliniek						
Sheep: 1	- <b>, ,</b>								
•	gepoort Veedi	enste							
Sheep: 2	<u> </u>								
•	e Dierehospita	aal							
Sheep: 2									
•	n, Wesselsbro	n Dierekli	niek						
Sheep: 1	,								
Kwazulu-Na	atal								
	Mooirivier Vet	t Clinic							
Sheep: 1									
Eastern Cap	е								
	et, Camdeboo	Veterina	v Clinic						
Sheep: 1, Go			,						
Western Ca									
	orge Animal H	ospital							
Sheep: 3		<b>p</b>							
Northern Ca	ape								
	Karoo Veterina	arv Hospit	al						
Sheep: 3		,							
	Curuman Diere	kliniek							
Sheep: 2									
Lamb dys	sentry								^
				North	Free	Kwazulu-	Eastern	Western	Northern
PROVINCE	Mpumalanga	Gauteng	Limpopo	West	State		Cape	Cape	Cape
Average	1.0 (1)								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	10 cases
Sheep	1.0(1)								2.0 (1)
Goat									3.0 (1)
Sheep: 1 Northern Ca	nal Diereklinie ape rg, Postmasbu		liniek						
Swelled h	nead diseas	е							<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (1)	1.0 (1)			1.0 (2)	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					1.0 (2)	1.0 (1)			
Sheep	2.0(1)	1.0(1)							
Goat						1.0 (1)			
Sheep: 2  Gauteng	a regloed Veteri spruit, Kerkstr								
Reitz, Riem	land Dierehos	pitaal							
Beef: 1 Senekal, Se Beef: 1	nekal Dierekli	niek							
Kwazulu-Na Bergville, Bo Beef: 1	ntal ergville Veteri dumeni Herd l		c						
Red gut (	cattle)								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	2.0 (1)	1.0 (1)		2.0 (2)	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	1.0 (1)	2.0 (1)	1.0 (1)	2.0 (2)	1.5 (2)
Dairy					2.0 (1)

#### Mpumalanga

## **Ermelo, Môregloed Veterinêre Spreekkamer**

Beef: 1 **Gauteng** 

## Hammanskraal, Themba Animal Clinic

Beef: 2 **Limpopo** 

## **Modimolle, Kranskop Dierekliniek**

Beef: 1
Free State

# **Ficksburg, Oosvrystaat Diere Produkte**

Beef: 2

# Villiers, Wilgepoort Veedienste

Beef: 2

#### Kwazulu-Natal

## **Dundee, Endumeni Herd health**

Dairy: 2

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

Beef: 2

## **Underberg, Underberg Veterinary Surgery**

Beef: 1

Blood gut (Sheep)										
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average		1.0 (2)			1.8 (4)			2.0 (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

#### Gauteng

## Bapsfontein, Bapsfontein Dierehospitaal

Sheep: 1

## **Pretoria, Anima Veterinary Consulting Rooms**

Sheep: 1
Free State

## **Bultfontein, Greylingsrust Dierespreekkamer**

Sheep: 1

## Frankfort, Frankfort Dierekliniek

Sheep: 2

## Oranjeville, Grasveld Kuddegesondheid

Sheep: 2

# Villiers, Wilgepoort Veedienste

Sheep: 2									
<b>Western Ca</b>									
Caledon, Ca	ledon Dierekli	iniek							
Sheep: 1									
Heidelberg	(WC), Heidelb	erg Diere	kliniek						
Sheep: 3									
Northern Ca	•								
	Kimberley Die	rekliniek							
Sheep: 1									
Tetanus									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average		1.0 (1)		3.0 (1)	1.3 (3)	1.0 (2)	1.0 (1)	1.0 (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
Sheep		1.0 (1)		3.0 (1)	1.3 (3)		1.0 (1)	1.0(1)	
Goat						1.0(2)			2.0(2)
Gauteng						<u> </u>	_		
	, Bapsfontein	Dierehos	oitaal						
Sheep: 1	•								
<b>North West</b>									
Stella, Stella	a Dierekliniek								
Sheep: 3									
Free State									
	land Dierehos	pitaal							
Sheep: 1									
	nekal Dierekli	niek							
Sheep: 1	nonocat Vasali	omato							
	gepoort Veedi	enste							
Sheep: 2 Kwazulu-Na	ntal								
	n, Camperdov	vn Vet Cli	nic						
Goat: 1	, camperact								
	zburg, Veterin	ary House	Hospital						
Goat: 1	<b></b>								
Eastern Cap	е								
-	et, Graaff Reir	net Veteri	nary Clinic	3					
Sheep: 1									
Western Ca	pe								
	orge Animal H	ospital							
Sheep: 1									
Northern Ca									
	u Dierekliniek	3							
Goat: 3									
Kuruman, K Goat: 1	uruman Diere	Kliniek							

Salmonel	losis								4
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average							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 :	10 cases
Dairy							2.5 (2)		
Dairy: 3 <b>Jeffreys Bay</b>	e Alexandria Pla ,, Cape Cross \			ier					
Dairy: 2									
Brucella a	<i>abortus</i> (Bo	vine bru	icellosis	)					-
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northerr Cape
Average	1.7 (3)			2.9 (7)	2.4 (7)	1.0 (1)			
Level of impo 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
Beef	1.7 (3)			2.8 (6)	2.4 (7)	1.0 (1)			
Dairy				3.0(1)					
Beef: 2	a nal Diereklinie rootvlei Diere								
Beef: 1 <b>Lydenburg,</b> Beef: 2	Longtom Dier	ekliniek							
North West Bloemhof, B	Bloemhof Diere	ekliniek							
Beef: 3 <b>Brits, Brits I</b> Dairy: 3	Dierekliniek								
•	Klerksdorp Di	erehospit	aal						
Beef: 2	stad, Leeudori								
	ositive, farmer h a Dierekliniek	nas 9 farms	s, never had	ı a positi	ve case l	petore			
	yburg Diereho	cnitaal							

Beef: 3									
tested), Mam Kagisano = 5	herds, 5598 ani usa = ¼ herds, /9 herds, Molop	Mafikeng : o = 2/10 h	= 0/0 herds erds, Potch	s, Lekwa efstroom	Teeman Region	e = 1/1herds, (subcontracte	Greater Ta	aung = 0/1 l	nerds,
	18-24 = 11  anim	nals. Titre:	30-49 = 9	animals.	Titre: >	60 = 83  anim	als)		
Free State									
	ocolan Dierek	liniek							
Beef: 2	/alkarmada Dia	!.!							
Beef: 2	leltevrede Die	rekiiniek							
	loopstad Diere	kliniak							
Beef: 3	ioopstau Diele	KIIIIEK							
	Kameeldoring I	Diereklini	ek						
Beef: 3	unicelaoring i	DICI CKIIIII	<u>CN</u>						
	Kroonstad Die	rehospita	al						
Beef: 2									
Viljoenskro	on, Viljoenskro	on Diere	kliniek						
Beef: 2									
Villiers, Wil	gepoort Veedi	enste							
Beef: 3									
Kwazulu-Na									
	ergville Veteri	nary Clini	С						
Beef: 1									
Brucella	<i>ovis</i> (Ram's	disease	·)						^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					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
Sheep					2.0 (3)				
Free State									
	Grasveld Kud	degesond	heid						
Sheep: 2									
	gepoort Veedi	enste							
Sheep: 2	<u>.</u>								
Vrede, Saul	shoek Dierege	sondheid	•						
Sheep: 2									,
Johne`s	disease								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western 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

Average

1.0(1)

Sheep							1.0(1)		
Eastern Cap									
	n, Queenstow	n Veterina	ry clinic						
Sheep: 1									
Leptospir	osis								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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									
	Longtom Dier	ekliniek							
Sheep: 3	s, weak new bo	rn lambe. I	ah confirm	nd high o	rowth o	f Lantacniraci	c on footus	coc	
Pseudom		iii iaiiiDS. L	.au committe	sa mgn g	i Ovvui O	Leptospiiosi	s on roetus	3C3	^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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 t	en and 3 =	more than	10 cases
Beef	1.0(1)								
Dairy								1.0(1)	
Mpumalang		_						, ,	
<b>Ermelo, Mö</b> i Beef: 1	regloed Veteri	nêre Spre	ekkamer						
Western Ca	pe h, Stellenbosc	h Animal	Hoenital						
Dairy: 1	n, stellelibose	ii Aiiiiiai	поэрна						
Mastitis									
Septicae	nia								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)				2.0 (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	1.0 (1)				2.0 (1)			1.0 (1)	

Sheep					2.0 (1)			2.0 (1)	
Mpumalang									
	<b>Longtom Dier</b>	ekliniek							
Beef: 1									
Free State									
	gepoort Veedi	enste							
Beef: 2, Shee									
Western Ca		-							
	Dierehospitaa	al;							
Beef: 1, Shee	ep: 2								
E. coli									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (2)			1.0 (1)	2.4 (5)	1.0 (3)	2.0 (1)	1.3 (3)	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	2.0 (1)			1.0 (1)	2.5 (2)	1.0 (3)			
Dairy							2.0 (1)	2.0 (1)	
Sheep	2.0 (1)				2.3 (3)			1.0 (2)	
Goat									3.0 (1)
Mpumalang	а								
	four Diereklin	iek							
Beef: 2, Shee									
North West									
Christiana,	Christiana Die	rehospita	al						
Beef: 1									
Free State									
Clocolan, Cl	ocolan Dierek	liniek							
Beef: 2									
	loopstad Diere	ekliniek							
Beef: 3, Shee									
	gepoort Veedi	enste							
Sheep: 2									
	arden Dierekli	niek							
Sheep: 2									
Kwazulu-Na		L CI!							
	Mooirivier Vet	Clinic							
Beef: 1	Neandiniat Na	wesetle							
	Ncanduvet Ne	wcastie							
Beef: 1	Underberg Ve	torinan, S	lirgon						
Beef: 1	Underberg Ve	cermary 5	urgery						
Eastern Cap	Α								
-	Alexandria Pla	atteland S	preekkam	er					
c.anana,	c.anana ri		P. CCRRGIII						

Dairy: 2										
Western Ca	-									
	est, Beaufort \	Nest State	e Vet							
Sheep: 1										
2-3 month, o	ld lambs									
George, Geo	orge Herd Hea	th Consul	t							
Dairy: 2										
Stellenbosc	h, Stellenbosc	h Animal	Hospital							
Sheep: 1	•		<u>_</u>							
Late abortion	S									
Northern Ca										
	rg, Postmasbu	ra Dierek	liniek							
Goat: 3	<b>5,</b>									
Enzootic Abortion										
PROVINCE	INCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cape									
Average		2.0 (1)		3.0 (1)	1.5 (2)		2.0 (2)	1.0 (1)	2.4 (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				3.0 (1)	2.0 (1)		3.0 (1)	1.0 (1)	2.5 (2)	
Goat		2.0 (1)							2.3 (3)	
Gauteng										
	raal, Themba A	Animal Cli	nic							
Goat: 2										
<b>North West</b>										
Vryburg, Vr	yburg Diereho	spitaal								
Sheep: 3										
Free State										
Villiers, Wile	gepoort Veedi	enste								
Beef: 1, Shee										
Eastern Cap										
	p, Humansdor	p Veterin	ary Clinic							
Beef: 1			_							
Steynsburg	, Steynsburg D	Dierehospi	itaal							
Sheep: 3		•								
Western Ca	pe									
	, Oudtshoorn	Diereklini	ek							
Sheep: 1	•									
	m on one farm.	Suspect Ci	hlamydia - a	waiting l	aborator	y results				
Northern Ca			,							
	Karoo Veterina	ary Hospit	al							
Goat: 2		,p.								
	<b>Suruman Diere</b>	kliniek								
Sheep: 2, Go										
	rg, Postmasbu	rg Dierek	liniek							

Sheep: 3, Go	at: 3								
Dermato	philosis (Lu	mpy Wo	ol)						2
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average								1.0 (1)	
_evel 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)								
<b>Vestern Ca</b> <b>Beaufort W</b> o Sheep: 1	pe est, Beaufort I	Diereklinie	ek						
Intrauter	ine Gangre	ne							
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northerr Cape
Average								1.0 (1)	2.5 (2)
evel 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
heep								1.0 (1)	2.0 (1)
Goat Vestern Ca									3.0 (1)
Sheep: 1 <b>Iorthern Ca</b> Kuruman, K Sheep: 2	est, Beaufort \ npe uruman Diere rg, Postmasbu	kliniek							
Fusibacte	erium necro	phorum							
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					1.0 (2)			1.0 (1)	
_evel 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
seef					1.0 (1)			1.0 (1)	
Sheep					1.0				_
пеер					(1)				

	gepoort Veedi	enste							
Beef: 1, Shee									
Western Ca		l. A							
Beef: 1	h, Stellenbosc	n Animai	Hospitai						
beer: 1									
Listeriosi	S								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average						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						3.0 (1)			
Sheep						3.0 (1)			
Kwazulu-Na	ntal								
	Underberg Ve	terinary S	Surgery						
Other									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average			2.0 (1)	1.5 (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	10 cases
Beef			2.0 (1)	1.0 (1)					
Sheep				2.0(1)					
Limpopo									
	Bundu Veterin	arv Servi	ces						
Beef: 2		,							
<b>North West</b>									
Christiana,	Christiana Die	rehospita	al						
Beef: 1									
Blackleg / Qu	arter evil								
Potchefstro	om, Morvet								
Sheep: 2									
Clostridial cas	ses in sheep								
Pasteure	llosis								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (3)	1.3 (3)		2.4 (7)	2.4 (14)		3.0 (1)	1.0 (1)	3.0 (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	2.0 (1)	1.0 (1)	2.4 (5)	2.3 (6)			
Sheep	2.0 (1)	1.5 (2)	2.5 (2)	2.4 (8)	3.0 (1)	1.0(1)	3.0 (2)
Goat	2.0 (1)						3.0 (1)

## **Mpumalanga**

# Lydenburg, Longtom Dierekliniek

Beef: 2, Sheep: 2, Goat: 2

#### Gauteng

## **Bronkhorstspruit, Kerkstraat Dierekliniek**

Sheep: 2

## Nigel, Nigel Diere Spreekkamer

Beef: 1, Sheep: 1
North West

# Leeudoringstad, Leeudoringstad Dierekliniek

Beef: 3

Pasteurella multocida, Mannheimia haemolytica cases

#### **Potchefstroom, Bult Dierekliniek**

Beef: 2 Calves

## **Potchefstroom, Morvet**

Beef: 3, Sheep: 3

## Rustenburg, Bergbos Dierekliniek

Beef: 2, Sheep: 2

### Vryburg, Vryburg Dierehospitaal

Beef: 2
Free State

#### **Bethlehem, Bethlehem Animal Hospital**

Beef: 2, Sheep: 2

# **Dewetsdorp, Platkop Dierekliniek**

Beef: 1, Sheep: 2

# Hoopstad, Hoopstad Dierekliniek

Beef: 3, Sheep: 3

## Kroonstad, Kroonstad Dierehospitaal

Sheep: 1

#### Philippolis, Rowelsfontein veearts Spreekkamer

Sheep: 2

## Villiers, Wilgepoort Veedienste

Beef: 3, Sheep: 3

## Vrede, Saulshoek Dieregesondheid.

Beef: 2

# Vrede, Vrede Dierehospitaal

Sheep: 3

#### Warden, Warden Dierekliniek

Beef: 3, Sheep: 3

## Eastern Cape

# Alexandria, Riverview Trading Vet Consulting Services

Sheep: 3

## **Western Cape**

# **Beaufort West, Beaufort West State Vet**

Sheep: 1

#### **Northern Cape**

Colesberg, Karoo Veterinary Hospital

Sheep: 3, Goat: 3

Postmasburg, Postmasburg Dierekliniek

Sheep: 3

Protozo:	al diseases	(other)
PIULUZU	II UISCASCS I	(ULITEI)

Coccidios	sis								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (1)	1.3 (3)		2.0 (2)	1.7 (3)	2.0 (1)	2.2 (5)	2.3 (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					2.0 (1)			
Dairy						2.5 (2)	3.0 (1)	
Sheep	2.0 (1)	1.3 (3)	2.0 (1)	1.7 (3)		2.0 (2)	2.0 (2)	
Goat			2.0 (1)			2.0 (1)	2.0 (1)	2.0(1)

#### **Mpumalanga**

Lydenburg, Longtom Dierekliniek

Sheep: 2
Gauteng

**Bapsfontein, Bapsfontein Dierehospitaal** 

Sheep: 1

Nigel, Nigel Diere Spreekkamer

Sheep: 2

Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic

Sheep: 1
North West

Klerksdorp, Klerksdorp Dierehospitaal

Sheep: 2, Goat: 2

Free State

Reitz, Riemland Dierehospitaal

Sheep: 1

Villiers, Wilgepoort Veedienste

Sheep: 2

Vrede, Saulshoek Dieregesondheid.

Sheep: 2

Kwazulu-Natal

**Estcourt, Estcourt Vet Clinic** 

Beef: 2

**Eastern Cape** 

**Alexandria, Riverview Trading Vet Consulting Services** 

Dairy: 2, Sheep: 2

**Bathurst, Dr Jane Pistorius** 

Goat: 2 Five cases

**Jeffreys Bay, Cape Cross Veterinary Hospital** 

Dairy: 3									
-	Witelsbos Vete	erinary Co	nsultina R	Rooms					
Sheep: 2									
Western Ca	ре								
	iledon Dierekli	iniek							
Goat: 2									
Darling, Tyg	gerberg Dierel	nospitaal [	Darling						
Sheep: 3									
George, Ge	orge Herd Hea	th Consul	t						
Dairy: 3									
	h, Stellenbosc	h Animal	Hospital						
Sheep: 1									
Northern Ca	-								
	Kuruman Diere	kliniek							
Goat: 2									
Cryptosp	oridiosis								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (2)			2.0 (4)	1.8 (11)	2.4 (7)	2.3 (3)	2.6 (8)	
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 (2)	2.0 (4)	2.3 (3)	1.0 (1)	1.0 (1)	
Dairy	1.0 (1)				2.0 (2)	2.0 (2)	3.0 (2)	2.7 (3)	
Sheep				2.0 (2)	1.6 (5)	3.0 (1)		3.0 (4)	
Goat						3.0 (1)			
Mpumalang	ıa								
	looiplaas Vete	rinêre Die	enste						
Beef: 1, Dair									
<b>North West</b>									
<b>Potchefstro</b>	om, Morvet								
Beef: 2, Shee	ep: 2								
	Reneke, Buffe	ldoorn Die	erekliniek	SR					
Sheep: 2									
Two flocks									
	yburg Diereho	spitaal							
Beef: 2									
Free State	0	. D'							
	, Greylingsrus	Dierespr	eekkamer						
Beef: 2	localan Diassi	liniels							
	l <mark>ocolan Dierek</mark>	iiiileK							
Beef: 2, Shee	ep: 1 Decumetaat Di	oro Prod.	ıkto						

Ficksburg, Oosvrystaat Diere Produkte Beef: 2, Dairy: 2, Sheep: 2

Senekal, Senekal Dierekliniek

Sheep: 1

Villiers, Wilgepoort Veedienste

Sheep: 2

Vrede, Saulshoek Dieregesondheid.

Beef: 2, Sheep: 2

**Warden, Warden Dierekliniek** 

Dairy: 2

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 1

**Dundee, Endumeni Herd health** 

Dairy: 2

**Estcourt, Estcourt Vet Clinic** 

Beef: 3

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

Dairv: 2

Cryptosporidiosis in some dairy calves with diarrhoea

**Pietermaritzburg, Veterinary House Hospital** 

Sheep: 3, Goat: 3

**Underberg, Underberg Veterinary Surgery** 

Beef: 3

**Eastern Cape** 

**Alexandria, Riverview Trading Vet Consulting Services** 

Dairy: 3

2 separate farms.

**Humansdorp, Humansdorp Veterinary Clinic** 

Beef: 1

**Jeffreys Bay, Cape Cross Veterinary Hospital** 

Dairy: 3

**Western Cape** 

**Darling, Tygerberg Dierehospitaal Darling** 

Sheep: 3

George, George Herd Heath Consult

Dairv: 2

Heidelberg (WC), Heidelberg Dierekliniek

Dairy: 3, Sheep: 3

Malmesbury, Bergzight Dierehospitaal

Dairy: 3, Sheep: 3

**Malmesbury, Groenkloof Dierekliniek** 

Beef: 1

Moorreesburg, Korhaanrug Dieregesondheid

Sheep: 3

Two hundred lambs infected on one far, treated with halifuginone, 16 died

# Fungal diseases

Ringworn	n								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.5 (2)	1.5 (4)		3.0 (3)	2.4 (9)	2.0 (3)	2.5 (2)	1.7 (3)	1.5 (2)

Lev	vel of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases
rep	ported

Beef	1.5 (2)	1.5 (2)	3.0 (3)	2.4 (9)	2.0 (3)	2.5 (2)	1.5 (2)	1.0 (1)
Dairy							2.0 (1)	
Sheep		2.0 (1)						2.0(1)
Goat		1.0(1)						

## Mpumalanga

**Balfour, Balfour Dierekliniek** 

Beef: 1

Lydenburg, Longtom Dierekliniek

Beef: 2 Gauteng

**Bronkhorstspruit, Kerkstraat Dierekliniek** 

Beef: 2

Hammanskraal, Themba Animal Clinic

Goat: 1

Nigel, Nigel Diere Spreekkamer

Reef: 1

**Pretoria, Anima Veterinary Consulting Rooms** 

Sheep: 2
North West

**Brits, Zodiac Dierekliniek** 

Beef: 3

**Christiana, Christiana Dierehospitaal** 

Beef: 3

Vryburg, Vryburg Dierehospitaal

Beef: 3
Free State

**Bethlehem, Union Street Animal Consulting Rooms** 

Beef: 1

**Bloemfontein, University Free State** 

Beef: 2

**Dewetsdorp, Platkop Dierekliniek** 

Beef: 3

**Excelsior, Weltevrede Dierekliniek** 

Beef: 3

Frankfort, Frankfort Dierekliniek

Beef: 3

Hoopstad, Hoopstad Dierekliniek

Beef: 3

Kroonstad, Kroonstad Dierehospitaal

Beef: 2

Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3

Vrede, Saulshoek Dieregesondheid.

Beef: 2

**Kwazulu-Natal** 

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

**Mtubatuba, Mtubatuba Animal Clinic** 

Beef: 1

**Underberg, Underberg Veterinary Surgery** 

Beef: 3 **Eastern Cape Graaff-Reinet, Graaff Reinet Veterinary Clinic** Steynsburg, Steynsburg Dierehospitaal Beef: 3 **Western Cape** Caledon, Caledon Dierekliniek Beef: 2 George, George Herd Heath Consult Dairy: 2 Stellenbosch, Stellenbosch Animal Hospital Beef: 1 **Northern Cape** Kimberley, Kimberley Dierekliniek Beef: 1 Kuruman, Kuruman Dierekliniek Sheep: 2 Viral Diseases (other) **BMC** (snotsiekte) Kwazulu-**Eastern** Western **Northern** North Free **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape 1.4(5) 1.0(1)1.5(2)**Average** 3.0(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 1.5 Beef 3.0(1) 1.4(5)1.0(1)1.5(2)2.0(1)(2)**Mpumalanga** Ermelo, Môregloed Veterinêre Spreekkamer Beef: 3 **North West Bloemhof, Bloemhof Dierekliniek** Klerksdorp, Klerksdorp Dierehospitaal Beef: 1 Leeudoringstad, Leeudoringstad Dierekliniek Beef: 2 Four cases, different farms. Wildebeest associated Vryburg, Molopo Dierekliniek Beef: 1 Vryburg, Vryburg Dierehospitaal Beef: 2 **Free State** Hoopstad, Hoopstad Dierekliniek Beef: 2

Parys, Parys Dierehospitaal

Beef: 1

Kwazulu-Natal

Bergville, Tu Beef: 1 Bastern Capo Port Alfred, I	iucia vel Ciiii	<u></u>							
astern Cap	J	iC .							
ort Alfred,		<u> </u>							
	Kowie Veterir	nary Clinic							
Beef: 2									
wo cases wil	ldebeest associa	ated, Alexai	ndria						
<b>Queenstown</b>	ı, Queenstowi	n Veterina	ry clinic						
Beef: 1									
Northern Ca	pe								
Cimberley, V	/ets4all								
Beef: 2									
wo cases									
We cases									
BVD (Bov	ine viral dia	arrhoea)							^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)				1.7 (3)				
Level of impo 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
Beef	1.0(1)				1.7 (3)				
Beef: 3 <b>/illiers, Wilg</b> Beef: 1	nel Veterinary	enste							
	n, Wesselsbro	n Dierekli	niek						
Beef: 1									
IBR (Infe	ctious bovi	ne rhino	tracheit	is)					^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	1.0 (1)			1.7 (3)	2.0 (3)		1.0 (1)	
		- one cac	e, 2 = more	than on	e case b	ut less than t	en and 3 =	more than	10 cases
	ortance scale: 1	- one case							
Level of impo reported	1.0 (1)	1.0 (1)			1.7 (3)	2.0 (3)		1.0 (1)	
Level of impo reported <b>Beef</b> <b>4pumalanga</b>	1.0 (1)					2.0 (3)		1.0 (1)	
Level of impo reported	1.0 (1)					2.0 (3)		1.0 (1)	
Level of impo reported <b>Beef</b> <b>4pumalanga</b>	1.0 (1)					2.0 (3)		1.0 (1)	

Ransfontoir	, Bapsfontein	Dierehos	nitaal						
Beef: 1	i, bapsiontein	Dicicilos	picaai						
Free State									
	nel Veterinary	Clinic							
Beef: 1		C.I.I.I.G							
	on, Viljoenskr	oon Diere	kliniek						
Beef: 2	, <u>.</u>								
	arden Dierekli	niek							
Beef: 2									
(wazulu-Na	ntal								
Bergville, Ti	ugela Vet Clini	ic							
Beef: 1									
Cokstad, E.C	G.Veterinary S	ervices							
Beef: 2	-								
On one farm	4 beef cows abo	orted - conf	firmed as IE	R in ute	ro infecti	on.			
Pietermarit	zburg, Veterin	ary House	e Hospital						
Beef: 3									
<b>Nestern Ca</b>	ре								
Stellenbosc	h, Stellenbosc	h Animal	Hospital						
Beef: 1									,
BRSV (Bo	ovine respira	atory sy	ncytial v	irus)					
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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)			
(wazulu-Na	tal								
	zburg, Veterin	ary House	Hoenital						
Beef: 3	zburg, veteriii	ary mouse	z i iospitai						
occi. 5									
PI3									
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average						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						3.0 (1)			
(wazulu-Na	tal								
	zburg, Veterin	ary House	e Hospital						
	Bovine Leu	cosis (El	BL)						

									_
					1.0				
Average					(1)	1.0(2)	1.0(1)	2.0 (4)	
					(1)				
Level of important	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)	1.0(1)		
Бееі					1.0	1.0 (2)	1.0 (1)		
Dairy					1.0 (1)			2.0 (4)	
Free State									
	Dr. Theo Kotze	<b>Senekal</b>							
Dairy: 1									
	nerd, Rosendal								
Kwazulu-Na									
	ergville Veteri	nary Clini	С						
Beef: 1									
	Underberg Ve	terinary S	Surgery						
Beef: 1									
Eastern Cap									
	p, Humansdor	p Veterina	ary Clinic						
Beef: 1									
Western Ca	-								
	orge Herd Hea	th Consul	t						
Dairy: 2									
		•							
	y, Dr Otto Krie	k							
Dairy: 3						6.50			
Dairy: 3 Massive losse	es are experience	ed due to c							
Dairy: 3 Massive losse concerted eff	es are experience fort is needed to	ed due to c manage th	nis disease.	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted eff instruments is	es are experience fort is needed to s still a real occu	ed due to c manage th irrence on	nis disease.	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted eff instruments is <b>Paarl, Paarl</b>	es are experience fort is needed to	ed due to c manage th irrence on	nis disease.	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted eff instruments is <b>Paarl, Paarl</b> Dairy: 2	es are experience fort is needed to s still a real occu Dierehospitaa	ed due to c manage th urrence on al;	nis disease. some farms	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc	es are experience fort is needed to s still a real occu	ed due to c manage th urrence on al;	nis disease. some farms	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted eff instruments is <b>Paarl, Paarl</b> Dairy: 2	es are experience fort is needed to s still a real occu Dierehospitaa	ed due to c manage th urrence on al;	nis disease. some farms	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to c manage th urrence on al;	nis disease. some farms	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to c manage th urrence on al;	nis disease. some farms	Sadly, th	ne practio	ce of using co	ntaminated	l needles, m	edicine and
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to c manage th urrence on al; h Animal	nis disease. some farms Hospital	Sadly, th	ne praction fect of the	e of using co e EBL virus in	ntaminated n humans n	l needles, m	edicine and
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to c manage th urrence on al; h Animal	nis disease. some farms Hospital	Sadly, the same of	ne praction fect of the fect o	e of using co e EBL virus in	n humans n	needles, meeds to be i	edicine and nvestigated!  A  Northern
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to c manage th urrence on al; h Animal	nis disease. some farms Hospital	Sadly, the same of	ne praction fect of the fect o	e of using co e EBL virus in	n humans n	needles, meeds to be i	edicine and nvestigated!  A  Northern
Dairy: 3 Massive losse concerted eff instruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to c manage th urrence on al; h Animal	nis disease. some farms Hospital	Sadly, the same of	ne praction fect of the fect o	e of using co e EBL virus in Kwazulu- Natal	n humans n	needles, meeds to be i	edicine and nvestigated!  A  Northern
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc	ed due to commanage the command of t	nis disease. some farms  Hospital  Limpopo	Sadly, the s. The eff	Free State	ke of using code EBL virus in Kwazulu-Natal	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted eff instruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc te Mpumalanga	ed due to commanage the command of t	nis disease. some farms  Hospital  Limpopo	Sadly, the s. The eff	Free State	Kwazulu-Natal 3.0 (1) ut less than to	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported Sheep	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc te  Mpumalanga  ortance scale: 1	ed due to commanage the command of t	nis disease. some farms  Hospital  Limpopo	Sadly, the s. The eff	Free State	ke of using code EBL virus in Kwazulu-Natal	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted effinstruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported Sheep Kwazulu-Na	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc  Mpumalanga  ortance scale: 1	ed due to commanage the commanage the commanage the commanage the commanage the commanage of the commanage o	nis disease. some farms  Hospital  Limpopo	Sadly, the s. The eff	Free State	Kwazulu-Natal 3.0 (1) ut less than to	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted eff instruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported Sheep Kwazulu-NaKokstad, E.C.	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc te  Mpumalanga  ortance scale: 1	ed due to commanage the commanage the commanage the commanage the commanage the commanage of the commanage o	nis disease. some farms  Hospital  Limpopo	Sadly, the s. The eff	Free State	Kwazulu-Natal 3.0 (1) ut less than to	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted eff instruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported Sheep Kwazulu-NaKokstad, E.G. Sheep: 3	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc te  Mpumalanga  ortance scale: 1  atal G.Veterinary S	ed due to commanage the commanage the commanage the commanage the commanage the commanage of the commanage o	his disease. some farms  Hospital  Limpopo  e, 2 = more	North West	Free State	Kwazulu-Natal 3.0 (1) ut less than t	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted eff instruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported Sheep Kwazulu-NaKokstad, E.G. Sheep: 3	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc  Mpumalanga  ortance scale: 1	ed due to commanage the commanage the commanage the commanage the commanage the commanage of the commanage o	his disease. some farms  Hospital  Limpopo  e, 2 = more	North West	Free State	Kwazulu-Natal 3.0 (1) ut less than t	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape
Dairy: 3 Massive losse concerted eff instruments is Paarl, Paarl Dairy: 2 Stellenbosc Dairy: 1 Jaagsiekt PROVINCE Average Level of imporeported Sheep Kwazulu-NaKokstad, E.G. Sheep: 3	es are experience fort is needed to s still a real occu Dierehospitaa h, Stellenbosc te  Mpumalanga  ortance scale: 1  atal G.Veterinary S	ed due to commanage the commanage the commanage the commanage the commanage the commanage of the commanage o	his disease. some farms  Hospital  Limpopo  e, 2 = more	North West	Free State	Kwazulu-Natal 3.0 (1) ut less than t	Eastern Cape	Mestern Cape	edicine and nvestigated!  Northern Cape

PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.7 (3)	2.0 (5)	1.0 (2)	2.0 (2)	2.6 (9)	1.0 (2)	3.0 (1)	2.3 (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	10 cases
Beef			1.0(1)						
Sheep	2.0 (1)	2.0 (3)	1.0 (1)	2.0 (1)	2.6 (9)	1.0 (1)	3.0 (1)	3.0 (2)	
Goat	1.5 (2)	2.0 (2)		2.0(1)		1.0(1)		1.0(1)	3.0 (1)
Sheep: 2, Goa Nelspruit, N Goat: 1 Gauteng Bapsfontein Sheep: 2 Bronkhorsts Goat: 2 Hammanskr Goat: 2 Nigel, Nigel Sheep: 2 Pretoria, An Sheep: 2 Limpopo Polokwane, Beef: 1, Shee North West	elspruit Anima , Bapsfontein  pruit, Kerkstr aal, Themba A  Diere Spreekl ima Veterinar  Pietersburg V p: 1	al Hospita Dierehos Taat Diere Animal Cli Kamer Ty Consult	oitaal kliniek nic ing Rooms						
Sheep: 2, Goo Free State									
Sheep: 3 <b>Dewetsdorp</b> Sheep: 3	Greylingsrust , Platkop Dier	ekliniek	ееккатег						
Sheep: 3 <b>Hoopstad, H</b>	eltevrede Die								
Sheep: 3 <b>Kroonstad, I</b> Sheep: 3	Kroonstad Die	-							
Oranjeville,	Cracyald V	dogooomd							

Sheep: 3

Wesselsbron, Wesselsbron Dierekliniek

Sheep: 2									
Kwazulu-Na									
	dumeni Herd l	nealth							
Sheep: 1									
	Mtubatuba Aı	nimal Clin	ic						
Goat: 1									
Eastern Cap									
	, Steynsburg D	Dierehospi	itaal						
Sheep: 3									
Western Ca	•								
	orge Animal H	ospital							
Sheep: 3									
	h, Stellenbosc	h Animal	Hospital						
Goat: 1									
	n, Swellendam	Dierehos	pitaal						
Sheep: 3									
Northern Ca									
	rg, Postmasbu	rg Dierek	iniek						
Goat: 3									
Warts									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North		Kwazulu-	Eastern	Western	Northern
	· ·pa····a·a···ga	Caacong	popo	West	State	Natal	Cape	Cape	Cape
	2.0.(2)	1.0.(2)		2 2 (4)	1.9	20(0)	2.0 (1)	1.0 (1)	2.0 (1)
Average	2.0 (3)	1.0 (3)		2.3 (4)	(8)	2.0 (6)	2.0 (1)	1.0 (1)	2.0 (1)
					(0)				
Level of impo	ortance scale: 1	= one case	e. 2 = more	than one	e case h	ut less than t	en and 3 =	more than	10 cases
reported		0.10 000							
. 000.100									
Beef	2.0 (3)	1.0 (3)		2.3 (4)	1.7	2.0 (6)			2.0(1)
Deei	2.0 (3)	1.0 (3)		2.3 (4)	(7)	2.0 (0)			2.0 (1)
		,			3.0				
Dairy								1.0(1)	
					(1)				
Sheep							2.0 (1)		
Mpumalang	а								
	four Diereklin	iek							
Beef: 1									
Lydenburg,	<b>Longtom Dier</b>	ekliniek							
Beef: 2									
Lydenburg,	Lydenburg Die	erespreek	kamer						
Beef: 3									
Gauteng									
Bapsfontein	n, Bapsfontein	Dierehos	pitaal						
Beef: 1									
Hammanski	raal, Themba <i>l</i>	Animal Cli	nic						
Beef: 1									
Nigel, Nigel	Diere Spreekl	kamer							
Beef: 1									
<b>North West</b>									
Christiana,	Christiana Die	rehospita	al						
Beef: 3									
Klerksdorp,	Klerksdorp Di	erehospit	aal						

Beef: 2

Vryburg, Molopo Dierekliniek

Beef: 2

Vryburg, Vryburg Dierehospitaal

Beef: 2
Free State

**Dewetsdorp, Platkop Dierekliniek** 

Dairy: 3

**Frankfort, Frankfort Dierekliniek** 

Beef: 3

**Kroonstad, Kroonstad Dierehospitaal** 

Beef: 1

**Reitz, Riemland Dierehospitaal** 

Beef: 1

Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3

Villiers, Wilgepoort Veedienste

Beef: 1

Vrede, Saulshoek Dieregesondheid.

Beef: 2

Wesselsbron, Wesselsbron Dierekliniek

Beef: 1

**Kwazulu-Natal** 

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

**Dundee, Endumeni Herd health** 

Beef: 1

**Eshowe, Eshowe Veterinary Hospital** 

Beef: 2

Mtubatuba, Mtubatuba Animal Clinic

Beef: 1

**Underberg, Underberg Veterinary Surgery** 

Beef: 3

**Vryheid, Vryheid Privaat Veeartse** 

Beef: 3

**Eastern Cape** 

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

Sheep: 2
Western Cape

George, George Herd Heath Consult

Dairy: 1

**Northern Cape** 

Kuruman, Kuruman Dierekliniek

Beef: 2

Rota viru	S								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				2.0 (2)		3.0 (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				2.0(1)	ı	3.0 (1)			
Dairy								2.0 (1)	
Sheep				2.0(1)					
North West									
	om, Morvet								
Beef: 2, Shee									
Kwazulu-Na		_							
	tcourt Vet Clir	nic							
Beef: 3	no.								
Western Ca	pe orge Herd Hea	th Concul							
Dairy: 2	orge rieru riea	ui Consui							
Poisonin	gs (Plant)	and Fu	ngal						
Cardiac g	lycoside po	isoning							^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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 to	en and 3 =	more than	10 cases
Beef		1.0(1)							
Sheep								2.0(1)	
Goat							1.0(1)		
Gauteng							_		
	spruit, Kerkstr	aat Diere	kliniek						
Beef: 1									
Eastern Cap									
	et, Camdeboo	Veterina	y Clinic						
Goat: 1									
Western Ca	pe est, Beaufort \	Noct State	o Vot						
Sheep: 2	est, beautoit v	West State	e vel						
drought									
Cestrum	(ink berry)								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average		2.0 (2)			1.5 (2)		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 (2)			1.5 (2)				

Dairy  Gauteng  Bronkhorstspruit, Kerkstraat Dierekliniek  Beef: 1  Magaliesburg, Magaliesburg; Dr Ryan Jeffrey	
Bronkhorstspruit, Kerkstraat Dierekliniek Beef: 1	
Beef: 1	
and the second of the second of the second of	
Beef: 3	
Free State	
Reitz, Riemland Dierehospitaal	
Beef: 1	
Winburg, Winburg Dierekliniek	
Beef: 2	
Eastern Cape	
Jeffreys Bay, Cape Cross Veterinary Hospital	
Dairy: 2	
Gifblaar	<u>^</u>
PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cap	stern Northern e Cape
<b>Average</b> 2.0 (1)	
Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more reported	e than 10 cases
Goat 2.0 (1)	
North West	
Brits, Zodiac Dierekliniek	
Goat: 2	
Lantana	<u>^</u>
PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cap	stern Northern De Cape
Average 2.0 (1) 1.4 (5)	
	e than 10 cases
Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more reported	
reported	
reported  Beef 1.4 (5)  Sheep 2.0 (1)  Gauteng Hammanskraal, Themba Animal Clinic	
reported  Beef 1.4 (5)  Sheep 2.0 (1)  Gauteng	
Reef 1.4 (5) Sheep 2.0 (1) Gauteng Hammanskraal, Themba Animal Clinic Sheep: 2	
reported  Beef 1.4 (5)  Sheep 2.0 (1)  Gauteng  Hammanskraal, Themba Animal Clinic  Sheep: 2  Kwazulu-Natal	
Reef 1.4 (5)  Sheep 2.0 (1)  Gauteng  Hammanskraal, Themba Animal Clinic Sheep: 2  Kwazulu-Natal Bergville, Bergville Veterinary Clinic	
Reef 1.4 (5)  Sheep 2.0 (1)  Gauteng Hammanskraal, Themba Animal Clinic Sheep: 2 Kwazulu-Natal Bergville, Bergville Veterinary Clinic Beef: 2 Camperdown, Camperdown Vet Clinic Beef: 1	
Reef 1.4 (5)  Sheep 2.0 (1)  Gauteng Hammanskraal, Themba Animal Clinic Sheep: 2 Kwazulu-Natal Bergville, Bergville Veterinary Clinic Beef: 2 Camperdown, Camperdown Vet Clinic Beef: 1 Dundee, Endumeni Herd health	
Reef 1.4 (5)  Sheep 2.0 (1)  Gauteng Hammanskraal, Themba Animal Clinic Sheep: 2  Kwazulu-Natal Bergville, Bergville Veterinary Clinic Beef: 2  Camperdown, Camperdown Vet Clinic Beef: 1  Dundee, Endumeni Herd health Beef: 2	
Reef 1.4 (5)  Sheep 2.0 (1)  Gauteng Hammanskraal, Themba Animal Clinic Sheep: 2 Kwazulu-Natal Bergville, Bergville Veterinary Clinic Beef: 2 Camperdown, Camperdown Vet Clinic Beef: 1 Dundee, Endumeni Herd health	

<b>Newcastle,</b> Beef: 1	Ncanduvet Ne	wcastle								
Nenta po	isoning (Kr	impsiekt	te)						_	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average							1.0 (1)			
Level of imported	yel of importance scale: $1 = $ one case, $2 = $ more than one case but less than ten and $3 = $ more than $1 = $ norted									
Goat							1.0(1)			
Eastern Cap	e e									
	et, Camdeboo	Veterina	y Clinic							
Goat: 1										
Prussic a	cid poisonir	ng 💮							_	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average	2.0 (1)				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	2.0 (1)				1.0 (1)					
Sheep					1.0 (1)					
Mpumalang										
<b>Lydenburg,</b> Beef: 2	Longtom Dier	ekliniek								
Free State										
Ficksburg, (	Dosvrystaat Di	iere Produ	ıkte							
Beef: 1	n Wassalshua	n Diarakli	miak							
<b>wesselsbro</b> Sheep: 1	n, Wesselsbro	ii Dierekii	IIIEK							
Senecios	is									
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average					3.0 (1)					
Level of impo	ortance scale: 1	= one case	e. 2 = more	than on	e case h	ut less than t	en and 3 =	more than	10 cases	

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)				
Free State									
•	rankfort Diere	kliniek							
Sheep: 3									
Old maize fie	lds								
Tulip Pois	soning								<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.5 (2)			2.0 (1)	2.5 (2)	2.0 (5)	1.0 (1)	2.0 (2)	
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	1.5 (2)			2.0 (1)	2.5 (2)	2.0 (5)		_	
Dairy								1.0(1)	
Sheep							1.0(1)	3.0 (1)	
Mpumalang	а								•
Grootvlei, G	rootvlei Diere	kliniek							
Beef: 1									
	looiplaas Vete	rinere Die	enste						
Beef: 2									
North West		doous Dia	، باماناناماد (	- n					
Beef: 2	Reneke, Buffel	aoorn Die	гекипіек :	<b>SK</b>					
Free State									
	Grasveld Kud	deaesond	heid						
Beef: 2	CIUDICIA NUL								
Vrede, Vred	e Dierehospita	aal							
Beef: 3									
Kwazulu-Na									
	ergville Veteri	nary Clini	C						
Beef: 2		1							
Beef: 2	ugela Vet Clini	C							
	tcourt Vet Clir	nic							
Beef: 3	tourt vet on								
	<b>Mooirivier Vet</b>	t Clinic							
Beef: 1									
	/heid Privaat \	/eeartse							
Beef: 2									
Eastern Cap									
	Witelsbos Vete	erinary Co	nsulting R	ooms					
Sheep: 1	<b>n</b> o								
Western Ca	pe h, Stellenbosc	h Animal	Hospital						
Dairy: 1	, 5.0110110030	Allingi	oopitai						
	, Vredenburg	Dierehosp	itaal						

Sheep: 3									
_ambs with s	evere diarrhoea	due to tuli	p poisoning						
Mycotoxi	cosis								_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average								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(1)	
Dairy								2.0 (1)	
Western Ca	pe orge Herd Hea	th Consul	<b>-</b>						
Dairy: 2	nge neru nea	tii Colisui	<u> </u>						
<b>Stellenbosc</b> Beef: 1	h, Stellenbosc	h Animal	Hospital						
Diplodios	is								_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern 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
Beef					2.0 (2)				
Free State						•			
<b>Oranjeville,</b> Beef: 2	<b>Grasveld Kud</b>	degesond	heid						
	gepoort Veedi	enste							
Beef: 2									
Other									_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				1.0 (1)				2.0 (3)	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
Sheep				1.0(1)				2.0 (3)	2.0 (1)
North West									
<b>Potchefstro</b> Sheep: 1	om, Morvet								
псер. 1									

Toxicities in s	sheep								
Western Ca	ре								
Oudtshoorn	, Oudtshoorn	Diereklini	ek						
Sheep: 1									
	sing nephrosis (								
Piketberg, I	Piketberg Dier	ehospitaa							
Sheep: 2									
	snaald poisoning								
	, Vredenburg	Dierehosp	itaal						
Sheep: 3									
	severe diarrhoea	due to chi	kerenchee p	oisoning					
Northern Ca	_								
	Aar Veterinary	Clinic							
Sheep: 2									
Unknown cau	use - sheep shov	ving nervol	ıs signs						
Poisonin	igs								
Urea Pois	soning								4
		01		North	Free	Kwazulu-	Eastern	Western	Northern
PROVINCE	Mpumalanga	Gauteng	штроро	West	State	Natal	Cape	Cape	Cape
		2.0 (1)		1.0 (1)	2.0	2.0 (1)			2.5.(2)
Average		3.0 (1)		1.0 (1)	(1)	2.0 (1)			2.5 (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					• •				
Beef				1.0 (1)	2.0 (1)	2.0 (1)			
Sheep		3.0 (1)							2.5 (2)
Gauteng									
	elegen Dierek	liniek							
Sheep: 3	, <u>-</u>								
47 sheep									
North West									
Christiana,	Christiana Die	rehospita	al						
Beef: 1									
Free State									
Villiers, Wil	gepoort Veedi	enste							
Beef: 2									
Kwazulu-Na	atal								
	stcourt Vet Clir	nic							
Beef: 2									
Northern Ca									
	Kuruman Diere	kliniek							
Sheep: 2									
	rg, Postmasbu	rg Dierek	liniek						
Sheep: 3									
Snake Bi	te								

PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					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
Beef					1.0 (1)				
Free State									
Excelsior, W Beef: 1	/eltevrede Die	rekliniek							
Blue-gree	en algae								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					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	10 cases
Beef					2.0 (1)				
Free State Oranjeville, Beef: 2	Grasveld Kud	degesond	heid						
Other									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average						3.0 (2)		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						3.0 (2)			
Sheep								2.0 (1)	
Beef: 3 Selenium exc	Mooirivier Vet								
Beef: 3	OWD								
Toxicity unkn Western Ca									
	, Groenkloof I	Diereklinie	ek						

Sheep: 2									
Swelled head	, plant poisoning	g							
Macro N	utritional F	Problem	16						
Macio IV	utilitional r	TODICII	15						
Energy d	eficiency								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (4)	2.3 (6)		2.0 (1)	2.4 (13)	2.4 (5)	2.3 (4)	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 1	l0 cases
Beef	2.0 (2)	2.3 (3)		2.0 (1)	2.4 (5)	2.5 (4)	2.0 (1)	2.0 (1)	
Dairy					1.0 (1)				
Sheep	2.0 (2)	2.5 (2)			2.6 (7)	2.0 (1)	3.0 (1)		3.0 (1)
Goat		2.0 (1)					2.0(2)		3.0 (1)
Mpumalang	a								
Balfour, Bal	four Diereklin	iek							
Beef: 2, Shee	ep: 2								
Standerton	Econovet								
Beef: 2, Shee	ep: 2								
Gauteng									
Hammansk	raal, Themba <i>l</i>	Animal Cli	nic						
Beef: 3, Shee	ep: 2, Goat: 2								
	Diere Spreekl	kamer							
Beef: 1									
	elegen Dierek	liniek							
Beef: 3, Shee									
North West									
_	, Bergbos Dier	ekliniek							
Beef: 2									
Free State		F							
	in, University	rree State	2						
Dairy: 1	lacalan Diamili	limini-							
Beef: 2	ocolan Dierek	ппек							
	. Diatkon Dia	oklimiak							
	o, Platkop Dier	екипіек							
Sheep: 3	Kroonstad Dia	robocnito	al						
Sheep: 3	Kroonstad Die	enospita	ai						
•	nel Veterinary	Clinic							
Beef: 3	iici veteilliafy	CITIIC							
	Cracuald Kud		L = ! d						

**Oranjeville, Grasveld Kuddegesondheid** Sheep: 2

Sheep: 3

Philippolis, Rowelsfontein veearts Spreekkamer

Beef: 3, Shee		omete							
	gepoort Veedi	enste							
Beef: 2, Shee									
rede, Saur Sheep: 2	shoek Dierege	sonaneia.							
	inburg Dierek	liniak							
Viriburg, w Beef: 2	indurg Dierek	iiiiek							
eer: z (wazulu-Na	tal								
	ergville Veteri	namı Clini	_						
Beef: 2	ergville veteri	ilai y Cillii	<u> </u>						
	Mooirivier Vet	Clinic							
Beef: 2	1-100111VIEL VE	Cillic							
	Underberg Ve	terinary S	Surgery						
Beef: 3, Shee		cermary 5	urgery						
	heid Privaat \	/eeartse							
Beef: 3	, I IIVaat t	Jean Ge							
astern Cap	e								
	Alexandria Pla	atteland S	preekkam	er					
Beef: 2									
	et, Camdeboo	Veterina	y Clinic						
Soat: 1									
Stevnsburg	, Steynsburg D	ierehospi	taal						
Sheep: 3, Go		<u>-</u>							
Western Ca									
	jerberg Diereh	ospitaal I	Darling						
Beef: 2									
Northern Ca	-								
Postmasbui Sheep: 3, Go	<b>rg, Postmasbu</b> at: 3	rg Diereki	iniek						
Protein d	eficiency								4
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	2.5 (6)		2.0 (2)	2.5 (12)	2.6 (5)	2.7 (3)		2.0 (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	1.0 (1)	3.0 (2)		2.0 (2)	2.4 (7)	2.6 (5)	2.0 (1)		
Sheep		2.3 (3)			2.6 (5)		3.0 (1)		2.0 (1)
Goat		2.0(1)					3.0 (1)		
<b>4pumalang</b>	a								
	four Diereklin	iek							
Beef: 1									
DCCI. I									
Gauteng									
Gauteng	, Bapsfontein	Dierehos	pitaal						

Beef: 3, Shee	ep: 2, Goat: 2								
	elegen Dierek	liniek							
Beef: 3, Shee									
North West	•								
	Klerksdorp Di	erehospit	aal						
Beef: 2	mornouorp 2	C. CC.P	<b></b>						
	, Bergbos Diei	ekliniek							
Beef: 2	, beignes biei	CKIIIICK							
Free State									
	Union Stroot	Animal Ca	ncultina B	loome					
	Union Street	Allilliai Co	iisuitiiig r	COULIS					
Beef: 1									
Downer	. DI-11 D'								
	o, Platkop Dier	ekliniek							
Sheep: 3			• -						
	Dosvrystaat Di	ere Produ	kte						
Beef: 3									
Communal fa	rmers								
Sheep: 3									
	Kroonstad Die	rehospita	al						
Sheep: 3									
Memel, Men	nel Veterinary	Clinic							
Beef: 3									
Viljoenskro	on, Viljoenskr	oon Dierel	kliniek						
Beef: 3									
Villiers, Wil	gepoort Veedi	enste							
Beef: 2, Shee	ep: 2								
Vrede, Saul	shoek Dierege	sondheid.	ı						
Beef: 3, Shee	ep: 2								
Winburg, W	inburg Dierek	liniek							
Beef: 2									
Kwazulu-Na	atal								
Bergville, Be	ergville Veteri	nary Clini	С						
Beef: 2		<u>_</u>							
Estcourt, Es	tcourt Vet Clir	nic							
Beef: 3									
Mooi River.	<b>Mooirivier Vet</b>	Clinic							
Beef: 2									
	Underberg Ve	terinary S	Surgery						
Beef: 3	Onderberg re	commany o	ui goi y						
	yheid Privaat \	/eeartse							
Beef: 3	yiicia i iivaac i	recui ese							
Eastern Cap	10								
_	Alexandria Pla	attaland S	nrookkam	or					
Beef: 2	Alexanuna Pi	atteraniu S	ргесккап	ici					
	, Steynsburg D	Niorobocni	taal						
Sheep: 3, Go		iei eiiospi	Laai						
Northern Ca									
	ape Aar Veterinary	Clinic							
•	наг чесеппагу	CIIIIC							
Sheep: 2	n, malabaarbtian	(DEM)							
Protein energ	y malabsorbtion	I (PEM)							
Phosphat	te deficienc	У							^
				North	Erec	Variation	Encha	Wests	North com
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape

					_								
Average				2.7 (3)		2.0 (1)			2.5 (2)				
Level of impreported	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				2.5 (2)		2.0 (1)			2.5 (2)				
Sheep				3.0 (1)									
North West Christiana, Beef: 3, Shee	Christiana Die	rehospita	al										
	olopo Diereklir	niek											
Beef: 2													
Kwazulu-Na Bergville, B Beef: 2	ergville Veteri	nary Clini	С										
	ape (uruman Diere	kliniek											
Beef: 2	rg, Postmasbu	ra Dierek	liniek										
Beef: 3	ig, i ostiliasba	ig Dicici	iiiick										
Calcium (	deficiency								^				
PROVINCE	Mpumalanga	Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Northern Cape											
Average	1.0 (1)	1.0 (1)			2.2 (5)	2.7 (3)		2.0 (3)					
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)					2.5 (2)		1.5 (2)					
Sheep		1.0 (1)			2.2 (5)	3.0 (1)		3.0 (1)					
Mpumalang	ja												
	lfour Diereklin	iek											
Beef: 1  Gauteng													
	nima Veterinar	v Consult	ina Rooms	•									
Sheep: 1		, сопошн											
Free State													
Sheep: 3	p, Platkop Dier												
Excelsior, V Sheep: 2	Veltevrede Die	rekliniek											
	Kroonstad Die	rehospita	al										
Sheep: 2													
Oranjeville,	Grasveld Kud	degesond	heid										
Sheep: 2													
Villiers, Will Sheep: 2	gepoort Veedi	enste											
Kwazulu-Na	atal												

		nanı Clini	_						
Beef: 2	ergville Veteri	nary Cilli	<u> </u>						
	Underberg Ve	torinary S	Surgery						
Beef: 3, Shee		termary 3	urgery						
Western Ca	•								
	gerberg Diereh	nospitaal I	Darling						
Beef: 2	,		- ug						
Oudtshoorn	, Ostrimed								
Sheep: 3	,								
Lambing over	rfat/ conditioned	d dorpers –	weakness/o	dystocia	prolaps				
	Durban Straat	Diereklin	iek Worce	ster					
Beef: 1									
Micro Nu	utritional P	roblem	s						
Copper de	eficiency								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average						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						2.0(1)	1.0(1)		
Beef: 2 Eastern Cap	Underberg Ve pe p, Humansdor								
Zinc defic	ciency								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North	Free	Kwazulu-	Eastern	Western	Northern
			• •	West	State	Natal	Cape	Cape	Саре
Average			• •	West	State			Саре	
	ortance scale: 1					2.0 (1)	3.0 (1)	<b>Cape</b> 1.0 (1)	Cape
Level of impo	ortance scale: 1					2.0 (1)	3.0 (1)	<b>Cape</b> 1.0 (1)	Cape
Level of imporeported	ortance scale: 1					2.0 (1) ut less than to	3.0 (1) en and 3 =	<b>Cape</b> 1.0 (1)	Саре
Level of imporeported  Beef						2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of imporeported  Beef Sheep Kwazulu-Na Underberg,		= one case	e, 2 = more			2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of imporeported  Beef Sheep Kwazulu-Na Underberg, Beef: 2	atal Underberg Ve	= one case	e, 2 = more			2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of imporeported  Beef Sheep Kwazulu-Na Underberg, Beef: 2 Eastern Cap	atal Underberg Ve pe	= one case	e, 2 = more	than on		2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of imporeported  Beef Sheep Kwazulu-Na Underberg, Beef: 2 Eastern Cap Alexandria,	atal Underberg Ve	= one case	e, 2 = more	than on		2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of impore reported  Beef Sheep  Kwazulu-Na Underberg, Beef: 2 Eastern Cap	atal Underberg Ve De Alexandria Pla	= one case	e, 2 = more	than on		2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of imporeported  Beef Sheep Kwazulu-Na Underberg, Beef: 2 Eastern Cap Alexandria, Beef: 3 Western Ca	atal Underberg Ve De Alexandria Pla	= one case	e, 2 = more Surgery Spreekkam	than on		2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре
Level of imporeported  Beef Sheep Kwazulu-Na Underberg, Beef: 2 Eastern Cap Alexandria, Beef: 3 Western Ca	atal Underberg Ve De Alexandria Pla	= one case	e, 2 = more Surgery Spreekkam	than on		2.0 (1) ut less than to	3.0 (1) en and 3 =	Cape  1.0 (1)  more than 1	Саре

Selenium	deficiency								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average		2.0 (1)		3.0 (2)	2.7 (3)	2.5 (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					3.0 (1)	3.0 (1)	1.0 (1)		
Sheep		2.0 (1)		3.0 (2)	2.5 (2)				
Goat					•	2.0(1)			
	ima Veterinar	y Consult	ing Rooms						
Sheep: 2 North West									
	Christiana Die	rehospita	al						
	yburg Diereho	enitaal							
Sheep: 3	yburg biereno	Spitaai							
Free State									
	/eltevrede Die	rekliniek							
Sheep: 3									
	gepoort Veedi	enste							
Beef: 3, Shee									
Kwazulu-Na	ital								
	dumeni Herd l	nealth							
Goat: 2									
	Underberg Ve	terinary S	Surgery						
Beef: 3									
Eastern Cap			Clii-						
Humansoor Beef: 1	p, Humansdor	h veterina	ary Clinic						
	se deficiend	У							^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average							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
Beef							3.0 (1)		
Dairy							3.0 (1)		
-							-5.0 (1)		
Eastern Cap	e Alexandria Pla								

	y, Cape Cross \	/eterinary	/ Hospital						
Dairy: 3  Vitamin A	A deficiency								^
	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)			3.0 (2)	2.5 (4)				2.0 (2)
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				3.0 (1)	(2)				
Sheep	1.0(1)			3.0 (1)	2.5 (2)				2.0 (1)
Goat									2.0(1)
Sheep: 1 North West Christiana, Beef: 3, Shee Free State Hoopstad, H Beef: 3, Shee Oranjeville, Beef: 2, Shee Northern Ca Kuruman, K Sheep: 2, Go Vitamin E	Christiana Die ep: 3 Hoopstad Diere ep: 3 Grasveld Kude ep: 2 ape Kuruman Diere	rehospita ekliniek degesond kliniek	heid	North	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average					1.0 (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					1.0 (1)				
Sheep								2.0 (1)	
Free State									
	gepoort Veedi	enste							
Beef: 1 Western Ca	ne								
Western Ca	he								

Multi-factorial Disease Conditions	Beaufort West, Beaufort Dierekliniek Sheep: 2												
Rovince   Mpumalanga   Gauteng   Limpopo   North   West   State   State   State   Natal   Cape   Cape   Cape   Cape   Cape		·											
Average 2.0 (6) 1.8 (5) 2.0 (1) 2.0 (1) 2.0 (1) 2.1 (16) 1.9 (9) 2.0 (3) 1.3 (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 2.0 (4) 1.5 (2) 2.0 (1) 2.0 (1) 2.0 (1) 2.1 (10) 2.1 (7) 2.1 (7)  Dairy	Abortions	5								<u>^</u>			
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 (4) 1.5 (2) 2.0 (1) 2.0 (1) 2.1 (10) 2.1 (7) 2.0 (1)  Dairy	PROVINCE	Mpumalanga	Gauteng	Limpopo									
Reef   2.0 (4)   1.5 (2)   2.0 (1)   2.0 (1)   2.1 (10)   2.1 (7)   2.0 (1)   2.0 (1)   2.0 (1)   2.0 (1)   2.0 (1)   3.0 (1)   3.0 (1)   3.0 (1)   3.0 (1)   3.0 (2)   3.0 (1)   3.0 (1)   3.0 (2)   3.0 (1)   3.0 (1)   3.0 (2)   3.0 (1)   3.0 (1)   3.0 (1)   3.0 (2)   3.0 (1)   3.0 (1)   3.0 (1)   3.0 (2)   3.0 (1)   3.0 (1)   3.0 (1)   3.0 (2)   3.0 (1	Average	2.0 (6)	1.8 (5)	2.0 (1)	2.0 (1)	2.2 (16)	1.9 (9)	2.0 (3)	1.3 (4)	2.0 (1)			
Dairy   1.5 (2)   2.0 (1)   2.0 (1)   2.0 (1)   (10)   2.1 (7)   2.0 (1)   1.5 (2)													
Sheep   2.0 (1)   2.0 (1)   2.0 (2)   1.0 (1)   1.0 (1)   1.0 (2)	2.0 (4) 1.5 (2) 2.0 (1) 2.0 (1) (10) 2.1 (7)												
Goat  2.0 (1)  2.0 (2)  Mpumalanga Balfour, Balfour Dierekliniek Beef: 2  Grootvlei, Grootvlei Dierekliniek Beef: 2  Hendrina, Mooiplaas Veterinêre Dienste Beef: 2  Lydenburg, Longtom Dierekliniek Sheep: 2  Lydenburg, Lydenburg Dierespreekkamer Beef: 2  Nelspruit, Nelspruit Animal Hospital Goat: 2  Gauteng Bapsfontein, Bapsfontein Dierehospitaal Sheep: 2  Hammanskraal, Themba Animal Clinic Goat: 2  Nigel, Nigel Diere Spreekkamer Beef: 1  Pretoria, Anima Veterinary Consulting Rooms Beef: 2, Goat: 2  Limpopo  Tzaneen, ZZ2 Farm Practice Beef: 2  North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 2	Dairy								1.5 (2)				
Mpumalanga Balfour, Balfour Dierekliniek Beef: 2 Grootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 2 Lydenburg, Longtom Dierekliniek Sheep: 2 Lydenburg, Lydenburg Dierespreekkamer Beef: 2 Nelspruit, Nelspruit Animal Hospital Goat: 2 Gauteng Bapsfontein, Bapsfontein Dierehospitaal Sheep: 2 Hammanskraal, Themba Animal Clinic Goat: 2 Vigel, Nigel Diere Spreekkamer Beef: 1 Pretoria, Anima Veterinary Consulting Rooms Beef: 2, Goat: 2 Limpopo Tzaneen, ZZ2 Farm Practice Beef: 2 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 2	Sheep	2.0 (1)	2.0 (1)				1.0 (1)	1.0 (1)	1.0 (2)				
Balfour, Balfour Dierekliniek Beef: 2 Grootvlei, Grootvlei Dierekliniek Beef: 2 Hendrina, Mooiplaas Veterinêre Dienste Beef: 2 Lydenburg, Longtom Dierekliniek Sheep: 2 Lydenburg, Lydenburg Dierespreekkamer Beef: 2 Nelspruit, Nelspruit Animal Hospital Goat: 2 Gauteng Bapsfontein, Bapsfontein Dierehospitaal Sheep: 2 Hammanskraal, Themba Animal Clinic Goat: 2 Nigel, Nigel Diere Spreekkamer Beef: 1 Pretoria, Anima Veterinary Consulting Rooms Beef: 2 Limpopo Tzaneen, ZZ2 Farm Practice Beef: 2 North West Klerksdorp, Klerksdorp Dierehospitaal Beef: 2	Goat	2.0 (1)	2.0 (2)				1.0(1)	2.5 (2)					
Free State	Grootvlei, G Beef: 2 Hendrina, M Beef: 2 Lydenburg, Sheep: 2 Lydenburg, Beef: 2 Nelspruit, N Goat: 2 Gauteng Bapsfontein Sheep: 2 Hammanski Goat: 2 Nigel, Nigel Beef: 1 Pretoria, An Beef: 2, Goat Limpopo Tzaneen, ZZ Beef: 2 North West Klerksdorp, Beef: 2	Longtom Dier Lydenburg Die Lydenburg Die lelspruit Anima n, Bapsfontein raal, Themba A Diere Spreekl nima Veterinar 2 2 Farm Practi	erinêre Die ekliniek erespreek al Hospita Dierehos Animal Cli kamer y Consult	kamer									
Bultfontein, Greylingsrust Dierespreekkamer	Beef: 2, Shee		. Dierespi	CERRAIIIEI									

Clocolan, Clocolan Dierekliniek Beef: 1 **Dewetsdorp, Platkop Dierekliniek** Frankfort, Frankfort Dierekliniek Beef: 2 Hoopstad, Hoopstad Dierekliniek Beef: 3, Sheep: 3 **Kroonstad, Kroonstad Dierehospitaal** Beef: 2 Reitz, Riemland Dierehospitaal Sheep: 2 Senekal, Senekal Dierekliniek Beef: 2, Sheep: 2 Viljoenskroon, Viljoenskroon Dierekliniek Beef: 3, Sheep: 3 Villiers, Wilgepoort Veedienste Beef: 2, Sheep: 2 **Winburg, Winburg Dierekliniek** Beef: 2 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 2 **Bergville, Tugela Vet Clinic** Beef: 1 **Kokstad, E.G.Veterinary Services** On one farm 4 beef cows aborted - confirmed as IBR in utero infection. Mooi River, Mooirivier Vet Clinic Beef: 2 **Newcastle, Ncanduvet Newcastle** Sheep: 1, Goat: 1 Pietermaritzburg, Veterinary House Hospital **Underberg, Underberg Veterinary Surgery** Beef: 3 **Vryheid, Vryheid Privaat Veeartse** Beef: 2 **Eastern Cape Graaff-Reinet, Camdeboo Veterinary Clinic** Sheep: 1, Goat: 2 **Graaff-Reinet, Graaff Reinet Veterinary Clinic** Goat: 3 **Western Cape** George, George Herd Heath Consult Dairy: 2 Malmesbury, Dr Otto Kriek Dairy: 1 **Oudtshoorn, Oudtshoorn Dierekliniek** Sheep: 1 Stellenbosch, Stellenbosch Animal Hospital Sheep: 1 **Northern Cape** 

Kuruman, Kuruman Dierekliniek

Beef: 2

Stillbirths	S								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)	2.0 (1)			2.2 (6)	2.0 (1)	2.0 (1)	1.0 (1)	2.0 (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 1	10 cases
Beef					2.0 (4)	2.0 (1)			
Sheep	1.0 (1)				2.5 (2)			1.0 (1)	2.0 (1)
Goat		2.0(1)					2.0(1)		2.0(1)
Mpumalang	а								
	น าลl Diereklinie	k							
Sheep: 1									
Gauteng									
Hammanski	raal, Themba <i>l</i>	Animal Cli	nic						
Goat: 2									
Free State									
	Greylingsrust	t Dierespr	eekkamer						
Sheep: 2									
	ocolan Dierek	liniek							
Beef: 1									
	loopstad Diere	ekliniek							
Beef: 3, Shee									
	arden Dierekli	піек							
Beef: 2	inhura Diarak	liniak							
Beef: 2	inburg Dierek	iiiiek							
Kwazulu-Na	tal								
	ergville Veteri	nary Clini	r						
Beef: 2	ergvine veteri	nary Cinn	•						
Eastern Cap	e								
_	et, Camdeboo	Veterina	y Clinic						
Goat: 2	,		•						
Western Ca	ре								
Beaufort Wo	est, Beaufort I	Diereklinie	ek						
Sheep: 1									
<b>Northern Ca</b>	ре								
	uruman Diere	kliniek							
Sheep: 2, Go	at: 2								
Abscesse	s								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape

Average	1.8 (4)	2.2 (5)	2.0 (1)	2.5 (4)	1.8 (13)	2.0 (3)	1.6 (5)	1.5 (8)	2.3 (4)
Level of imp reported	ortance scale: 1	. = one case	e, 2 = more	e than one	e case bu	ut less than to	en and 3 =	more than 1	l0 cases
Beef	1.5 (2)	2.0 (3)	2.0 (1)	2.5 (2)	1.7 (6)	2.0 (3)	1.5 (2)	2.0 (1)	2.0 (1)
Dairy					2.0 (2)			2.0 (1)	
Sheep	2.0 (1)	2.0 (1)		3.0 (1)	1.8 (5)		2.0 (1)	1.5 (4)	2.5 (2)
Goat	2.0(1)	3.0 (1)		2.0(1)			1.5 (2)	1.0(2)	2.0(1)
Mpumalang		\		. /					
	ja Ifour Diereklin	viok							
Beef: 1	iloui Dielekiii	IICK							
	Longtom Die	rokliniok							
	ep: 2, Goat: 2	ekiiiiek							
Gauteng	ep. 2, Goat. 2								
	n, Bapsfontein	Dierehosi	nitaal						
Beef: 1	i, bapsiontem	Dicicios	Jitaai						
	raal, Themba	Animal Cli	nic						
	ep: 2, Goat: 3	Allilla Cil							
	nderstepoort A	Academic I	Hospital a	nd Produ	iction A	nimal Clinic	••••••••••••••••••••••••••••••••••••••		
Beef: 2	iluci stepoort i	-toudellile i	ioopitai a		iction 7		-		
Cerebral abso	cess								
Limpopo									
	<b>Bundu Veteri</b>	nary Servi	ces						
Beef: 2									
<b>North West</b>									
Christiana,	Christiana Die	erehospita	al						
Beef: 3, Shee									
	p, Ventersdor <sub>l</sub>	p Diereklin	iek						
Beef: 2									
	yburg Diereho	ospitaal							
Goat: 2									
Free State	in University	Eroo State							
	y: 2, Sheep: 1	riee State	<u> </u>						
	Veltevrede Die	rekliniek							
Beef: 1	reiterieue Die	JI CIXIIIII CIX							
	Hoopstad Dier	ekliniek							
Beef: 3, Shee									
	Kroonstad Die	erehospita	al						
Dairy: 2		•							
Viljoenskro	on, Viljoenskr	oon Dierel	kliniek						
Beef: 1									
	gepoort Veedi	ienste							
Beef: 2, Shee									
	arden Dierekli	iniek							
Sheep: 2									
Wesselsbro	n, Wesselsbro	on Dierekli	niek						

Sheep: 1

Winburg, Winb Beef: 2 Kwazulu-Natal Bergville, Berg Beef: 2 Mooi River, Mo Beef: 2 Underberg, Und	ville Veteri								
Kwazulu-Natal Bergville, Berg Beef: 2 Mooi River, Mo Beef: 2	ville Veteri	narv Clinio							
Bergville, Berg Beef: 2 Mooi River, Mo Beef: 2	ville Veteri	narv Clinio							
Beef: 2 <b>Mooi River, Mo</b> Beef: 2			_						
Mooi River, Mo Beef: 2	oirivier Vet	,	L .						
Beef: 2		Clinic							
	onivier vec	· Cillic							
onderberg, one	derhera Ve	tarinary S	Surgery						
Beef: 2	acibeig ve	cermany 5	urgery						
Eastern Cape									
Alexandria, Ale	exandria Pla	atteland S	preekkam	er					
Beef: 1									
Graaff-Reinet,	Camdeboo	Veterinar	y Clinic						
Goat: 1			•						
Graaff-Reinet,	<b>Graaff Rein</b>	et Veteri	nary Clinic	:					
Sheep: 2			-						
Port Alfred, Ko	wie Veterin	ary Clinic							
Beef: 2									
Two cases, Shaw	<i>ı</i> Park								
Goat: 2									
Foot rot/joint abs	scesses - 3 c	ases Port A	lfred						
Western Cape									
Beaufort West,		Diereklinie	ek						
Sheep: 2, Goat: 1									
Malmesbury, B		erehospit	aal						
Dairy: 2, Sheep:									
Moorreesburg,	Korhaanru	g Dierege	sondheid						
Sheep: 2									
Two farms, samp			erial isolatio	n. One fa	irm in h	amels after ta	il docking.	Sitting disea	ise.
Paarl, Paarl Die		11;							
Beef: 2, Sheep: 1									
Northern Cape		leliminte							
<b>Kuruman, Kuru</b> Beef: 2, Sheep: 2		Kiiiiek							
Postmasburg, F		ra Dierekl	iniek						
Sheep: 3	rostiliasbui	ig Dieleki	IIIICK						
леср. 5									
Bladder sto	nes								_
PROVINCE Mp	oumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)		1.0 (3)	1.0 (1)	1.3 (3)				
Level of importai reported	nce scale: 1	= one case	e, 2 = more	than one	e case b	ut less than t	en and 3 =	more than	10 cases
Beef			1.0(1)	1.0(1)					
Sheep					1.3 (3)				
Goat	1.0(1)		1.0(2)						
Mpumalanga									
Nelspruit, Nels	pruit Anima	al Hospita	ı						

Goat: 1									
Limpopo									
	Aardvark vete	erinary se	rvices						
Goat: 1	Adiavaik ved	crinary sc	i vices						
	Bundu Veterin	ary Sarvi	rec						
Beef: 1, Goat		iai y Sci vi	ces						
North West									
	yburg Diereho	cnitaal							
Beef: 1	yburg biereno	Spitaai							
Free State									
	/eltevrede Die	rokliniok							
Sheep: 1	reitevieue Die	CKIIIICK							
•	loopstad Diere	ekliniek							
Sheep: 1	loopstaa Diere	CKIIIICK							
	Grasveld Kud	deaesond	heid						
Sheep: 2	Grasveia Raa	acgesona							
Blindness									_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State		Eastern Cape	Western Cape	Northern Cape
					2.7				
Average	1.0 (1)	1.0 (2)			(6)				2.3 (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		1.0 (1)			3.0 (2)				2.0 (1)
Dairy	1.0(1)								
Sheep					2.5 (4)				
Goat		1.0(1)							2.5 (2)
Mpumalang	a								, /
	u Iooiplaas Vete	rinêre Die	nste						
Dairy: 1	.co.p.uus vete								
Gauteng									
	raal, Themba A	Animal Cli	nic						
Beef: 1, Goat									
Free State									
<b>Bultfontein</b> ,	Greylingsrust	Dierespr	eekkamer						
Beef: 3, Shee		•							
	loopstad Diere	ekliniek							
Beef: 3, Shee									
Kroonstad,	Kroonstad Die	rehospita	al						
Sheep: 2									
	gepoort Veedi	enste							
Sheep: 2									
Northern Ca									
	uruman Diere	kliniek							
Beef: 2, Goat									
Postmasbur	g, Postmasbu	rg Dierekl	iniek						

Goat: 3									
Bloat									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.7 (3)	1.0 (2)			2.2 (6)			1.5 (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 I	10 cases
Beef	1.5 (2)				2.0 (2)				
Dairy								1.5 (2)	
Sheep	2.0 (1)	1.0 (1)			2.3 (4)				
Goat		1.0(1)							
Beef: 2, Shee Nelspruit, N Beef: 1 Gauteng Pretoria, On Sheep: 1, Goo Free State Oranjeville, Sheep: 2 Reitz, Rieml Sheep: 2 Villiers, Wild Beef: 2, Shee Warden, Wa Sheep: 2	Longtom Dier p: 2 elspruit Anima derstepoort A at: 1 Grasveld Kud and Dierehos gepoort Veedi p: 3 arden Diereklii inburg Dierek	al Hospita cademic I degesond pitaal enste niek	Hospital a	nd Prod	uction A	Animal Clinic	C		
	orge Herd Hea	th Consul	t						
Dairy: 2									
	h, Stellenbosc	h Animal	Hospital						
Dairy: 1									
Red gut (	torsion of i	ntestine	, sheep a	and go	ats)				^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average								3.0 (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

Chaon								3.0 (1)	2.0 (1)
Sheep								3.0 (1)	2.0 (1)
Western Ca									
	(WC), Heidelb	erg Diere	kliniek						
Sheep: 3									
Northern Ca									
	Ivinia Veearts	kliniek							
Sheep: 2									
Blue udd	er								<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (1)		2.0 (1)		2.1 (9)	2.0 (1)		1.5 (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	10 cases
Beef						2.0(1)			
Dairy								1.5 (2)	
Juli y					0.1			1.5 (2)	
Sheep	2.0 (1)		2.0 (1)		2.1 (9)				
Mpumalang	a								
	<b>Longtom Dier</b>	ekliniek							
Sheep: 2									
Limpopo									
Modimolle,	Kranskop Diei	ekliniek							
Sheep: 2									
Free State									
	Greylingsrust	t Dierespr	eekkamer						
Sheep: 3									
	ocolan Dierek	liniek							
Sheep: 2									
	loopstad Dier	ekliniek							
Sheep: 3			_						
	Cameeldoring	Diereklini	ек						
Sheep: 2	Vuonnata I B'		-1						
	Kroonstad Die	renospita	aı						
Sheep: 2	Cracycld Vd	dogocor 4	hoid						
	<b>Grasveld Kud</b>	ueyesona	neiu						
Sheep: 2	land Dierehos	nitaal							
Sheep: 2	iana Dierenos	pilaai							
	gepoort Veedi	enste							
Sheep: 2	gepoort veedi	CHISCE							
	n, Wesselsbro	n Dierekli	niek						
Sheep: 1	, 110336131110	DICICKII							
Kwazulu-Na	ntal								
	ergville Veteri	nary Clini	С						
Beef: 2		, C							
Western Ca	pe								
	ledon Dierekli	niek							

Dairy: 1									
•	orge Herd Hea	th Consul	t						
Dairy: 2									
Diarrhoe	a								
Diamine	a								-
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.9 (8)	2.0 (3)		3.0 (3)	2.2 (10)	1.8 (5)	2.0 (1)	2.7 (3)	2.5 (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	1.8 (5)			3.0 (2)	2.3 (6)	1.8 (5)			2.0 (1)
Dairy	2.0 (1)				1.0 (1)		2.0 (1)	2.5 (2)	
Sheep	2.0 (2)	2.0 (2)		3.0 (1)	2.3 (3)			3.0 (1)	
Goat		2.0 (1)							3.0 (1)
Mpumalang	ja –								
	lfour Diereklin	iek							
Beef: 2, Sheep: 2									
	regloed Veteri	nêre Spre	ekkamer						
Beef: 1									
Grootviei, G Beef: 2	irootvlei Diere	kliniek							
	100iplaas Vete	rinara Dia	neto						
Beef: 2	iooipiaas vete	illere Die	HISLE						
	Longtom Dier	akliniak							
Dairy: 2, She		CKIIIICK							
	Lydenburg Die	erespreek	kamer						
Beef: 2	_,								
Gauteng									
	n, Bapsfontein	Dierehos	pitaal						
Sheep: 2									
	raal, Themba A	Animal Cli	nic						
Goat: 2	D:								
	Diere Spreekl	camer							
Sheep: 2									
North West		rohoenita	al						
Beef: 3, Shee	Christiana Die	enospita	aı						
	ဗှား ၁ <b>yburg Diereho</b>	snitaal							
Beef: 3	, July Dictello	Spicadi							
Free State									
	in, University	Free State	2						
Dairy: 1	,								
	, Greylingsrust	Dierespr	eekkamer						
Reef: 3		-							

Clocolan, Clocolan Dierekliniek

Beef: 2, Shee									
Hoopstad, F	loopstad Diere	ekliniek							
Beef: 3, Shee									
Villiers, Wil	gepoort Veedi	enste							
Beef: 3, Shee	ep: 3								
Wesselsbro	n, Wesselsbro	n Dierekli	niek						
Beef: 1									
Winburg, W	inburg Dierek	liniek							
Beef: 2									
Kwazulu-Na	atal								
Bergville, B	ergville Veteri	nary Clini	С						
Beef: 2									
Bergville, T	ugela Vet Clini	ic							
Beef: 1									
Mooi River,	<b>Mooirivier Vet</b>	t Clinic							
Beef: 2									
Newcastle,	Ncanduvet Ne	wcastle							
Beef: 1									
Underberg,	<b>Underberg Ve</b>	terinary S	Surgery						
Beef: 3	-	•							
Eastern Cap	e								
Alexandria,	Alexandria Pla	atteland S	Spreekkam	er					
Dairy: 2			•						
Western Ca	pe								
	orge Herd Hea	th Consul	t						
Dairy: 2	_ <b>J</b>								
-	y, Dr Otto Krie	k							
Dairy: 3	,, = = = = = = = = = = = = = = = = = =								
	cet approach is r	needed wh	en confront	ed with t	his. Man	v calves die d	tue to hypo	thermia in t	he Winter
	t being treated i								
Celsius.	J								J
Oudtshoorn	, Ostrimed								
Sheep: 3	•								
	tems with break	down in po	table water	supply					
Northern Ca									
	uruman Diere	kliniek							
Beef: 2									
	rg, Postmasbu	ra Dierek	liniek						
Goat: 3	g, i ostiliassa	ig Dicion							
Godt. 5									
<b>Epididym</b>	itis								^
		ı		1					
				North	Free	Kwazulu-	Eastern	Western	Northern
PROVINCE	Mpumalanga	Gauteng	Limpopo	West		Natal	Cape	Cape	Cape
				-11000			Cupo	орс	Спрс
					1.2				
Average	1.0(1)							2.0 (1)	3.0 (1)
	1.0 (1)				(4)			2.0 (1)	3.0 (1)
	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									
					1.2				
Sheep	1.0(1)							2.0(1)	3.0(1)
Sheep	1.0 (1)				(4)			2.0 (1)	3.0 (1)
Sheep Mpumalang	` ′							2.0 (1)	3.0 (1)
	1.0 (1) ortance scale: 1	= one case	e, 2 = more	than on	1.3 (4) e case b	ut less than t	en and 3 =	2.0 (1)	3.0 (1) 10 cases

Sheep: 1									
Free State									
	<b>Grasveld Kud</b>	degesond	heid						
Sheep: 2									
Senekal, Se	nekal Dierekli	niek							
Sheep: 1									
Warden, Wa	arden Dierekli	niek							
Sheep: 1									
	n, Wesselsbro	n Dierekli	niek						
Sheep: 1									
Western Ca									
	est, Beaufort I	Diereklinie	ek						
Sheep: 2									
Northern Ca									
	Ivinia Veearts	kliniek							
Sheep: 3									
Eye Canc	er								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (1)	1.0 (2)		2.0 (1)	1.8 (5)	1.0 (1)	2.0 (1)	1.7 (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 (2)		2.0 (1)	1.7 (3)	1.0 (1)		1.0 (1)	1.0(1)
Dairy	2.0 (1)				2.0 (1)			2.0 (2)	
Sheep					2.0 (1)		2.0 (1)		
Mpumalang	a								
Lydenburg,	<b>Longtom Dier</b>	ekliniek							
Dairy: 2									
Gauteng									
Bronkhorsts	spruit, Kerkstr	aat Diere	kliniek						
Beef: 1									
Hammanski	raal, Themba <i>l</i>	Animal Cli	nic						
Beef: 1									
<b>North West</b>									
	stad, Leeudori	ingstad Di	erekliniek						
Beef: 2									
Free State									
	Kroonstad Die	rehospita	al						
Dairy: 2									
	gepoort Veedi	enste							
Beef: 2, Shee									
	n, Wesselsbro	n Dierekli	niek						
Beef: 1									
	inburg Dierek	liniek							
Beef: 2									

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 1

**Eastern Cape** 

Steynsburg, Steynsburg Dierehospitaal

Sheep: 2

**Western Cape** 

George, George Herd Heath Consult

Dairy: 2

Malmesbury, Bergzight Dierehospitaal

Dairy: 2

Stellenbosch, Stellenbosch Animal Hospital

Beef: 1

**Northern Cape** 

Kuruman, Kuruman Dierekliniek

Beef: 1

Eye infec	tions								<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (3)	2.0 (6)	1.0 (1)	3.0 (3)	2.6 (9)	1.8 (4)	1.5 (4)	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 (2)	1.7 (3)	1.0 (1)	3.0 (2)	2.5 (4)	1.8 (4)	1.5 (2)	1.0(1)	1.0(1)
Sheep	2.0 (1)	2.0 (1)		3.0 (1)	2.6 (5)		1.5 (2)		
Goat		2.5 (2)							3.0 (1)

Mpumalanga

Lydenburg, Longtom Dierekliniek

Beef: 2, Sheep: 2

Lydenburg, Lydenburg Dierespreekkamer

Beef: 2

Gauteng

Bapsfontein, Bapsfontein Dierehospitaal

Beef: 1, Sheep: 2

Hammanskraal, Themba Animal Clinic

Beef: 3, Goat: 2

Nigel, Nigel Diere Spreekkamer

Goat: 3

**Pretoria, Anima Veterinary Consulting Rooms** 

Beef: 1 **Limpopo** 

Vaalwater, Vaalwater Dierespreekkamer

Reef· 1

Calf with corneal abscess

North West

Christiana, Christiana Dierehospitaal

Leeudoringstad, Leeudoringstad Dierekliniek

Beef: 3 *Moraxella* 

Vryburg, Vryburg Dierehospitaal

Sheep: 3
Free State

**Bloemfontein, University Free State** 

Sheep: 3

**Bultfontein, Greylingsrust Dierespreekkamer** 

Beef: 3, Sheep: 3

Parys, Parys Dierehospitaal

Beef: 2, Sheep: 2

Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3, Sheep: 3

Villiers, Wilgepoort Veedienste

Beef: 2, Sheep: 2 **Kwazulu-Natal** 

**Mooi River, Mooirivier Vet Clinic** 

Beef: 2

**Newcastle, Ncanduvet Newcastle** 

Beef: 1

**Underberg, Underberg Veterinary Surgery** 

Beef: 2

Vryheid, Vryheid Privaat Veeartse

Beef: 2

**Eastern Cape** 

Alexandria, Alexandria Platteland Spreekkamer

Beef: 1

**Graaff-Reinet, Camdeboo Veterinary Clinic** 

Sheep: 1

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

Sheep: 2

**Port Alfred, Kowie Veterinary Clinic** 

Beef: 2

Nine cases between Port Alfred and Bathurst (wind, flies, midges, moths, etc.)

**Western Cape** 

**Darling, Tygerberg Dierehospitaal Darling** 

Beef: 1

**Northern Cape** 

**Kimberley, Kimberley Dierekliniek** 

Beef: 1 Pink eyes

Postmasburg, Postmasburg Dierekliniek

Goat: 3

Joint Ill									<u>^</u>
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.5 (2)	1.0 (1)		2.5 (4)	1.8 (5)	1.0 (2)	2.0 (2)	1.0 (2)	

Level of impreported	oortance scale: 1	. = one case, 2 = n	nore than one case bu	ut less than t	en and 3 =	more than 1	0 cases
. 000. 100			2.0				
Beef	1.0 (1)	1.0 (1)	2.3 (3) 2.0 (3)	1.0 (2)			
Dairy	2.0(1)					1.0(1)	
			1.5		/->		
Sheep			3.0 (1) (2)		2.0 (2)	1.0 (1)	
Mpumalan	ga						
Balfour, Ba	alfour Diereklir	niek					
Beef: 1							
Lydenburg	, Longtom Die	rekliniek					
Dairy: 2							
Gauteng							
<b>Bronkhors</b>	tspruit, Kerkst	raat Dierekliniek					
Beef: 1							
<b>North Wes</b>	t						
Christiana,	Christiana Die	erehospitaal					
Beef: 3, She	ep: 3						
Klerksdorp	, Klerksdorp D	ierehospitaal					
Beef: 2	-						
Potchefstr	oom, Bult Dier	ekliniek					
Beef: 2							
Septic arthri	tis in calves						
Free State							
Excelsior, \	Weltevrede Die	erekliniek					
Beef: 3							
Villiers, Wi	lgepoort Veed	ienste					
Beef: 1, She							
		n Dierekliniek					
Sheep: 1	•						
	Winburg Dierek	diniek					
Beef: 2							
Kwazulu-N	latal						
<b>Pietermari</b>	tzburg, Veterir	nary House Hospi	ital				
Beef: 1							
Underberg	, Underberg Ve	eterinary Surgery	1				
Beef: 1							
<b>Eastern Ca</b>	ре						
<b>Graaff-Rei</b>	net, Camdeboo	Veterinary Clini	С				
Sheep: 1	<u> </u>						
Steynsburg	g, Steynsburg I	Dierehospitaal					
Sheep: 3	<u>.                                      </u>						
Western Ca	аре						
	-	hospitaal Darling					
Sheep: 1							
	eorge Herd Hea	ath Consult					
Dairy: 1	_						
Lamenes	ss/Foot Prol	olems					_

North Free Kwazu West State Natal

PROVINCE Mpumalanga Gauteng Limpopo

Kwazulu- Eastern Western

Cape

Cape

Northern

Cape

Average	1.8 (6)	2.0 (3)	2.3 (4)	2.0 (7)	1.4 (5)	2.0 (2)	2.2 (5)	3.0 (1)
Level of impore	rtance scale: 1	. = one case	e, 2 = more than or	ie case bi	ut less than t	en and 3 =	more than 1	10 cases
теропец					T.			
Beef	1.8 (4)	2.0 (1)	2.0 (3)	2.3 (4)	1.5 (4)			3.0 (1)
Dairy				2.0 (1)			2.0 (3)	
Sheep	2.0 (2)	2.0 (1)	3.0 (1)	1.5 (2)		2.0 (1)	3.0 (1)	
Goat		2.0 (1)			1.0(1)	2.0 (1)	2.0 (1)	
Mpumalanga	,	, ,				, ,	` ` `	
Balfour, Balf		niek						
Beef: 2, Sheer								
Grootvlei, Gr		ekliniek						
Beef: 2	octrici Dicire	Jannier						
Lydenburg, I	Lonatom Die	rekliniek						
Beef: 2, Sheep								
Lydenburg, I		ierespreek	kamer					
Beef: 1	-, u c	or coproci						
Gauteng								
Bapsfontein,	Bapsfontein	Dierehosi	oitaal					
Sheep: 2	- прополист	. D.G. G.1.05	71.00.01					
Hammanskr	aal, Themba	Animal Cli	nic					
Beef: 2, Goat:								
North West								
Christiana, C	Christiana Die	erehospita	al					
Beef: 3, Sheep		•						
Klerksdorp,		ierehospit	aal					
Beef: 2		-						
Ventersdorp	, Ventersdor	p Diereklin	iek					
Beef: 1								
Free State								
Bloemfontei	n, University	Free State						
Sheep: 1								
Hoopstad, Ka	ameeldoring	Diereklinie	ek					
Beef: 2								
Parys, Parys	Dierehospita	aal						
Dairy: 2								
Viljoenskroo	n, Viljoenskr	oon Dierel	diniek					
Beef: 3								
Villiers, Wilg		ienste						
Beef: 2, Sheep								
Winburg, Wi	nburg Dierek	kiiniek						
Beef: 2	h=1							
Kwazulu-Nat		inamı Climi	_					
Bergville, Be	rgville veter	inary Clinic	3					
Beef: 2	. Camanauda	we Vot CI	ala .					
Camperdowi Goat: 1	ii, Camperdo	wii vet Cili	IIC .					
	Maairindar 1/a	t Clinia						
Mooi River, I	-iooirivier ve	L CHINIC						

Beef: 2

**Newcastle, Ncanduvet Newcastle** 

Beef: 1

**Underberg, Underberg Veterinary Surgery** 

Beef: 1

**Eastern Cape** 

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

Sheep: 2

**Port Alfred, Kowie Veterinary Clinic** 

Goat: 2

Foot rot/joint abscesses - 3 cases Port Alfred

**Western Cape** 

**Ceres, Ceres Veterinary Hospital** 

Goat: 2 Four goats

**Darling, Tygerberg Dierehospitaal Darling** 

Sheep: 3 Foot rot

George, George Herd Heath Consult

Dairy: 2

Malmesbury, Bergzight Dierehospitaal

Dairy: 3

Malmesbury, Dr Otto Kriek

Dairy: 1

**Northern Cape** 

Kuruman, Kuruman Dierekliniek

Beef: 3

Lung infe	ection								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.6 (9)	2.4 (5)		2.4 (12)	2.3 (27)	2.4 (10)	1.5 (2)	2.3 (8)	2.4 (5)

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

•								
Beef	1.8 (5)	2.0 (2)	2.6 (5)	2.3 (14)	2.6 (7)		2.0 (2)	2.5 (2)
Dairy	1.0 (1)			1.7 (3)		2.0 (1)	2.3 (4)	
Sheep	1.3 (3)	3.0 (1)	2.3 (6)	2.4 (10)	2.0 (2)	1.0 (1)	2.5 (2)	2.5 (2)
Goat		2.5 (2)	2.0(1)		2.0 (1)			2.0 (1)

Mpumalanga

**Balfour, Balfour Dierekliniek** 

Beef: 2

Bethal, Bethal Dierekliniek

Beef: 2, Dairy: 1, Sheep: 1

Ermelo, Môregloed Veterinêre Spreekkamer

**Grootvlei, Grootvlei Dierekliniek** Beef: 2, Sheep: 1 Lydenburg, Longtom Dierekliniek Beef: 2, Sheep: 2 Gauteng Bapsfontein, Bapsfontein Dierehospitaal Beef: 2 Hammanskraal, Themba Animal Clinic Beef: 2, Goat: 2 **Pretoria, Anima Veterinary Consulting Rooms** Sheep: 3, Goat: 3 **North West Bloemhof, Bloemhof Dierekliniek** Sheep: 3 **Brits, Zodiac Dierekliniek** Sheep: 1 Christiana, Christiana Dierehospitaal Beef: 3, Sheep: 3 Klerksdorp, Klerksdorp Dierehospitaal Beef: 2, Sheep: 2 Schweizer-Reneke, Buffeldoorn Dierekliniek SR Beef: 3, Sheep: 3 **Ventersdorp, Ventersdorp Dierekliniek** Vryburg, Molopo Dierekliniek Beef: 2, Sheep: 2, Goat: 2 **Free State Bloemfontein, University Free State** Dairy: 1 Clocolan, Clocolan Dierekliniek Beef: 2, Sheep: 2 **Excelsior, Weltevrede Dierekliniek** Beef: 2, Sheep: 2 Frankfort, Frankfort Dierekliniek Beef: 3, Sheep: 3 **Hoopstad, Hoopstad Dierekliniek** Beef: 3, Sheep: 3 **Hoopstad, Kameeldoring Dierekliniek** Beef: 2 Kroonstad, Dr. Theo Kotze Senekal Dairy: 2 Pneumonia in Rosendal, dairy herd Kroonstad, Kroonstad Dierehospitaal **Memel, Memel Veterinary Clinic** Beef: 3 Oranjeville, Grasveld Kuddegesondheid Beef: 2, Sheep: 2 Reitz, Riemland Dierehospitaal Beef: 2, Dairy: 2, Sheep: 2 Senekal, Senekal Dierekliniek Beef: 2, Sheep: 3 Viljoenskroon, Viljoenskroon Dierekliniek

Beef: 3, Sheep: 3

Villiers, Wilgepoort Veedienste

Beef: 3, Sheep: 3

Vrede, Vrede Dierehospitaal

Beef: 2

Wesselsbron, Wesselsbron Dierekliniek

Beef: 1

Winburg, Winburg Dierekliniek

Beef: 2

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

Bergville, Tugela Vet Clinic

Beef: 2, Sheep: 2, Goat: 2

**Dundee, Endumeni Herd health** 

Beef: 2, Sheep: 2

**Estcourt, Estcourt Vet Clinic** 

Beef: 3

**Mooi River, Mooirivier Vet Clinic** 

Beef: 3

**Underberg, Underberg Veterinary Surgery** 

Beef: 3

**Vryheid, Vryheid Privaat Veeartse** 

Beef: 3

**Eastern Cape** 

**Alexandria, Riverview Trading Vet Consulting Services** 

Dairy: 2

Uitenhage, Uitenhage Dierehospitaal

Sheep: 1

**Western Cape** 

**Beaufort West, Beaufort Dierekliniek** 

Sheep: 3

George, George Animal Hospital

Beef: 1, Dairy: 2

George, George Herd Heath Consult

Dairy: 2

Malmesbury, Dr Otto Kriek

Dairy: 3

Pleuritis and pneumonia: It appears that this disease is somewhat neglected in places. Vaccination and early treatment of respiratory conditions can alleviate a lot of severe morbidities and resultant mortalities.

Paarl, Paarl Dierehospitaal;

Beef: 3, Dairy: 2, Sheep: 2

**Northern Cape** 

Calvinia, Calvinia Veeartskliniek

Sheep: 2

Kathu, Kathu Dierekliniek

Goat: 2

Kimberley, Kimberley Dierekliniek

Reef: 3

Pneumonia and pleuritis, also seen at abattoir inspection

Kimberley, Vets4all

Sheep: 3

Kuruman, Kuruman Dierekliniek

PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.3 (3)	1.7 (3)	2.0 (1)	3.0 (2)	1.8 (8)	2.0 (6)	2.0 (1)	2.1 (7)	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 1	10 cases
Beef	1.5 (2)		2.0 (1)	3.0 (1)	(2)	1.8 (5)	2.0 (1)		
Dairy	1.0 (1)	1.0 (1)			1.3 (3)	3.0 (1)		2.6 (5)	
Sheep		2.0 (1)		3.0 (1)	2.0 (3)			1.0 (1)	2.0 (1)
Goat		2.0 (1)						1.0(1)	2.0(1)
Beef: 2 Lydenburg, Dairy: 1 Lydenburg, Beef: 1 Gauteng Bapsfontein Dairy: 1 Hammanski Goat: 2 Pretoria, An Sheep: 2 Limpopo Modimolle, Beef: 2 North West	four Diereklin Longtom Dier Lydenburg Die , Bapsfontein raal, Themba A ima Veterinar Kranskop Dier	ekliniek erespreek Dierehos Animal Cli y Consult rekliniek	pitaal nic ing Rooms						
Beef: 3, Shee Free State	Christiana Die p: 3 in, University								
Hoopstad, K Dairy: 1 Kroonstad,	Cameeldoring								
Dairy: 2	s Dierehospita on, Viljoenskro		kliniek						
Beef: 2 Villiers, Wile Beef: 2, Shee	gepoort Veedi	enste							
Sheep: 2 <b>Kwazulu-Na</b>	n, Wesselsbro								

Bergville, Bergville Veterinary Clinic

Beraville, T	ugela Vet Clini	ic							
Beef: 1									
	Mooirivier Vet	Clinic							
Beef: 3	TIOOHITICI TC	· Cillino							
	Ncanduvet Ne	wcastle							
Beef: 1	incandavet inc	wcastic							
	zburg, Veterin	ary House	Hoenital						
Beef: 2	zburg, veteriii	ary mouse	riospitai						
	Underberg Ve	torinary S	Surgory						
	Oliderberg ve	termary s	urgery						
Dairy: 3	<b>.</b>								
Eastern Cap		ana Clinia	_						
Beef: 2	Kowie Veterir	iary Clinic	3						
	athat								
Four cases, B									
Western Ca	-	N:   -  ! !-							
	est, Beaufort I	Jierekiinie	ek						
Sheep: 1, Go									
	ledon Dierekli	піек							
Dairy: 2									
	gerberg Diereh	iospitaal l	Darling						
Dairy: 3									
	orge Animal H	ospital							
Dairy: 3			_						
	orge Herd Hea	th Consul	t						
Dairy: 3									
	y, Dr Otto Krie	k							
Dairy: 2									
Northern Ca	=								
	uruman Diere	kliniek							
Sheep: 2, Go	at: 2								
Navel III									^
Navel III									_
					<b>-</b>	16		\A/ I	N
<b>PROVINCE</b>	<b>Mpumalanga</b>	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern	Western	
				west	State	Natai	Cape	Cape	Cape
					• •				
Average	1.0 (4)	1.0(1)		1.0(1)	2.0	1.0(2)	2.0 (1)	1.0(2)	
Average	1.0 (4)	1.0 (1)		1.0 (1)	(2)	1.0 (2)	3.0 (1)	1.0 (2)	
					\ /				
Level of impo	ortance scale: 1	= one case	e. 2 = more	than one	e case b	ut less than t	en and 3 =	more than	10 cases
	ortance scale: 1	= one case	e, 2 = more	than one	e case b	ut less than t	en and 3 =	more than	10 cases
reported			e, 2 = more	_		_	en and 3 =	more than	10 cases
	ortance scale: 1	= one case $1.0(1)$	e, 2 = more	than one		ut less than t	en and 3 =	more than	10 cases
reported  Beef			e, 2 = more	_		_	en and 3 =		10 cases
reported			e, 2 = more	_		_	en and 3 =	more than 1	10 cases
reported  Beef  Dairy			e, 2 = more	_		_		1.0 (1)	10 cases
reported  Beef			e, 2 = more	_		_	and 3 =		10 cases
Reef Dairy Sheep	1.0 (4)		e, 2 = more	_	2.0	_		1.0 (1)	10 cases
reported  Beef Dairy Sheep Mpumalang	1.0 (4)	1.0 (1)	e, 2 = more	_	2.0	_		1.0 (1)	10 cases
reported  Beef  Dairy  Sheep  Mpumalang Balfour, Bal	1.0 (4)	1.0 (1)	e, 2 = more	_	2.0	_		1.0 (1)	10 cases
reported  Beef  Dairy  Sheep  Mpumalang Balfour, Bal Beef: 1	1.0 (4) a four Diereklin	1.0 (1)		_	2.0	_		1.0 (1)	10 cases
reported  Beef  Dairy  Sheep  Mpumalang Balfour, Bal Beef: 1 Ermelo, Mô	1.0 (4)	1.0 (1)		_	2.0	_		1.0 (1)	10 cases
reported  Beef  Dairy  Sheep  Mpumalang Balfour, Bal Beef: 1 Ermelo, Môn Beef: 1	1.0 (4) a four Diereklin regloed Veteri	1.0 (1) iek nêre Spre		_	2.0	_		1.0 (1)	10 cases
reported  Beef  Dairy  Sheep  Mpumalang Balfour, Bal Beef: 1 Ermelo, Môn Beef: 1	1.0 (4) a four Diereklin	1.0 (1) iek nêre Spre		_	2.0	_		1.0 (1)	10 cases

Nolonwit N	lalanınıit Anim	al Haanita							
	lelspruit Anim	аі поѕріса	1						
Beef: 1									
Gauteng		D:	-1::-1-						
	spruit, Kerkstr	aat Dierei	KIINIEK						
Beef: 1									
North West			_1						
Beef: 1	Christiana Die	renospita	al						
Free State	Cuperial d Visa	d	ha!d						
	Grasveld Kud	aegesona	neia						
Sheep: 2	nanaart Vaadi	omato							
Sheep: 2	gepoort Veedi	enste							
Kwazulu-Na	.tal								
	ıcaı ergville Veteri	nary Clini	^						
Beef: 1	ergville veteri	ilai y Cillii	L .						
	Underberg Ve	tarinary S	Surgery						
Beef: 1	Cilderberg Ve	Connai y S	ui gei y						
Eastern Cap	e								
	, Steynsburg D	ierehosni	taal						
Sheep: 3	, Jeey iisbuig L	.c. c.103p1							
Western Ca	ne								
	pe Jerberg Diereh	osnitaal [	Darling						
Sheep: 1	jerberg bierer	oopitaai i	- arming						
	orge Herd Hea	th Consul	t						
Dairy: 1	orge riera riea	cii consui	•						
Red gut (	Torsion of t	he Gut)	Sheep				,		^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North	Free	Kwazulu-	Eastern	Western	
	pg			West	State	Natal	Cape	Cape	Northern Cape
Average				West	State	Natal		Саре	
	ortance scale: 1						3.0 (1)	3.0 (1)	Саре
Level of impo							3.0 (1)	3.0 (1)	Саре
Level of imporeported  Dairy							3.0 (1) en and 3 =	3.0 (1)	Саре
Level of imporeported  Dairy Sheep	ortance scale: 1						3.0 (1) en and 3 =	3.0 (1)	Саре
Level of imporeported  Dairy Sheep Eastern Cap	ortance scale: 1	= one case	e, 2 = more				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of imporeported  Dairy Sheep Eastern Cap Jeffreys Bay	ortance scale: 1	= one case	e, 2 = more				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of imporeported  Dairy Sheep  Eastern Cap Jeffreys Bay Dairy: 3	ortance scale: 1	= one case	e, 2 = more				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of impore reported  Dairy Sheep  Eastern Cap Jeffreys Bay Dairy: 3 Western Ca Heidelberg	ortance scale: 1	= one case	e, 2 = more				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of imporeported  Dairy Sheep  Eastern Cap Jeffreys Bay Dairy: 3 Western Ca	ortance scale: 1  oe  y, Cape Cross	= one case	e, 2 = more				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of impore reported  Dairy Sheep  Eastern Cap Jeffreys Bay Dairy: 3 Western Ca Heidelberg	ortance scale: 1  oe  y, Cape Cross	= one case	e, 2 = more				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of impore reported  Dairy Sheep  Eastern Cap Jeffreys Bay Dairy: 3 Western Ca Heidelberg Sheep: 3  Trauma	ortance scale: 1  oe  y, Cape Cross	= one case	e, 2 = more  Hospital				3.0 (1) en and 3 =	3.0 (1)	Саре
Level of impore reported  Dairy Sheep Eastern Cap Jeffreys Bay Dairy: 3 Western Ca Heidelberg Sheep: 3  Trauma	pe y, Cape Cross V pe (WC), Heidelb	= one case	e, 2 = more  Hospital	than on	e case b	ut less than to	Cape  3.0 (1) en and 3 =  3.0 (1)  Eastern	3.0 (1) more than : 3.0 (1)  Western	Cape  10 cases  Northern

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 (2)	1.0 (2)	1.0 (1)	1.0 (1)		2.0 (2)
Dairy				1.0 (1)		1.5 (2)	
Sheep		1.0 (1)		2.0 (1)	1.0 (1)		2.0 (1)

#### Mpumalanga

# Lydenburg, Longtom Dierekliniek

Beef: 2

Gauteng

## Nigel, Nigel Diere Spreekkamer

Beef: 1

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

Beef: 2 PEM Sheep: 1

# Limpopo

## **Bela Bela, Artemis Veterinary Services**

Beef: 1

Bull with service injury, walks with difficulty!

# **Mokopane, Bundu Veterinary Services**

Beef: 1
Free State

# **Bloemfontein, University Free State**

Dairy: 1

# Villiers, Wilgepoort Veedienste

Beef: 1, Sheep: 2

Kwazulu-Natal

## **Eshowe, Eshowe Veterinary Hospital**

Beef: 1

Transport trauma

# **Mooi River, Mooirivier Vet Clinic**

Sheep: 1

#### **Western Cape**

#### George, George Herd Heath Consult

Dairy: 2

# Malmesbury, Dr Otto Kriek

Dairy: 1

#### **Northern Cape**

## Kimberley, Kimberley Dierekliniek

Beef: 2

Injection marks and bruising seen at abattoir inspection

#### Kuruman, Kuruman Dierekliniek

Beef: 2, Sheep: 2

Downer	Downer									
PROVINCE Mpumalan	ga Gauteng Lin	mpopo We		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape			

				2.2				
Average	2.0(1)	2.0(2)		2.2	2.0(1)		1.5 (2)	2.0(1)
	_;; (-)	_,,		(10)	_,,		(-)	_;; (-)
								_
	ortance scale: 1	= one case	e, 2 = more than or	ie case bu	it less than te	en and 3 = mo	ore than 1	0 cases
reported	_							
	2.0 (1)	2.0.(2)		2.0	2.0.(1)			2.0.(1)
Beef	2.0 (1)	2.0 (2)		(6)	2.0 (1)			2.0 (1)
				2.0				
Dairy						1	1.5 (2)	
				(1)				
Sheep				2.7				
энеер				(3)				
Mpumalang	ıa							
	rootvlei Diere	kliniek						
Beef: 2								
Gauteng								
	spruit, Kerkstr	aat Dierel	kliniek					
Beef: 2								
Hammansk	raal, Themba <i>l</i>	Animal Cli	nic					
Beef: 2								
Free State								
	locolan Dierek	liniek						
Beef: 2								
	Frankfort Diere	kliniek						
Beef: 3								
Old animals								
Sheep: 3	Kroonstad Die	roboonito						
Dairy: 2, She		renospita	di					
	, Grasveld Kud	deaecond	hoid					
Beef: 1	, Grasveia Raa	uegesona	ilciu					
	gepoort Veedi	enste						
Beef: 2, Shee		0.1000						
	arden Dierekli	niek						
Beef: 2								
Winburg, W	/inburg Dierek	liniek						
Beef: 2								
Kwazulu-Na								
	ergville Veteri	nary Clinic	C					
Beef: 2								
Western Ca	•							
	orge Herd Hea	th Consul	<u> </u>					
Dairy: 2	. Day Diattani	ana Bass A	Dait-					
	Bay, Plettenb	erg Bay A	Keitz					
Dairy: 1	ng, euthanized a	fter 5 days						
Northern Ca		iitei 5 uays						
	ape (uruman Diere	kliniek						
Beef: 2	aruman Diefe	riiiiek						
DCCI. Z								
Other								^

PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape				
Average		1.0 (1)			1.0 (2)			2.0 (2)					
Level of imported													
Beef		1.0 (1)			1.0 (2)								
Sheep								2.0(2)					
Gauteng Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic Beef: 1 Vagal indigestion Free State Bethlehem, Union Street Animal Consulting Rooms Beef: 1 Calf haemorrhagic syndrome Bultfontein, Greylingsrust Dierespreekkamer Beef: 1 Chronic kidney infection Western Cape Ceres, Ceres Veterinary Hospital Sheep: 2 Four goats, stiff in hind quarters, recovered after treatment Moorreesburg, Korhaanrug Dieregesondheid Sheep: 2 Cystitis													
	r syndrome Mpumalanga			North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape				
Average									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				
Beef									1.0(1)				
Northern Ca Kuruman, K Beef: 1 Wet carca	uruman Diere	kliniek											
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape				
Average				3.0 (1)				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	3.0 (1)	2.0 (1)	
Sheep		2.0 (1)	
Goat		1.0(1)	

## **North West**

Vryburg, Vryburg Dierehospitaal

Beef: 3

**Western Cape** 

# Paarl, Paarl Dierehospitaal;

Beef: 2, Sheep: 2, Goat: 1

Yellow ca	Yellow carcases at abattoir									
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average								1.7 (3)		
Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 careported										

1.0(1)

Beef 2.0(2)

# **Western Cape**

# Paarl, Paarl Dierehospitaal;

Beef: 3, Dairy: 1

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

Dairy

Beef: 1											
Metabolic Diseases											
Acidosis											
PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cape											
Average 1.7 (3) 1.0 (1) 2.5 (24) 2.0 (1) 1.7 (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 1.5 (2) 2.0 (1) 2.0 (1)											
1.0 (1)											
Sheep 2.0 (1) 2.5 (14) 2.0 (1)											
Mpumalang	a										

# Bethal, Bethal Dierekliniek

Grootvlei, Grootvlei Dierekliniek

Beef: 2

Lydenburg, Longtom Dierekliniek

Sheep: 2

**North West** 

**Brits, Zodiac Dierekliniek** 

Sheep: 1

**Free State** 

**Bethlehem, Bethlehem Animal Hospital** 

Beef: 2, Sheep: 3

**Bethlehem, Union Street Animal Consulting Rooms** 

Beef: 3, Sheep: 2

**Bultfontein, Greylingsrust Dierespreekkamer** 

Sheep: 2

**Excelsior, Weltevrede Dierekliniek** 

Sheep: 2

**Frankfort, Frankfort Dierekliniek** 

Beef: 3

Overeating, maize field

Sheep: 3

**Hoopstad, Hoopstad Dierekliniek** 

Beef: 3, Sheep: 3

**Hoopstad, Kameeldoring Dierekliniek** 

Beef: 2

**Kroonstad, Kroonstad Dierehospitaal** 

Sheep: 3

Oranjeville, Grasveld Kuddegesondheid

Beef: 2, Sheep: 2

Reitz, Riemland Dierehospitaal

Beef: 2, Sheep: 3

Senekal, Senekal Dierekliniek

Beef: 2, Sheep: 2

Villiers, Wilgepoort Veedienste

Beef: 3, Sheep: 3

Vrede, Saulshoek Dieregesondheid.

Sheep: 3

Vrede, Vrede Dierehospitaal

Sheep: 3

Wesselsbron, Wesselsbron Dierekliniek

Sheep: 1

Winburg, Winburg Dierekliniek

Beef: 2

Kwazulu-Natal

**Bergville, Bergville Veterinary Clinic** 

Beef: 2

**Western Cape** 

George, George Herd Heath Consult

Dairy: 1

Piketberg, Piketberg Dierehospitaal

Beef: 2

Late rains, animals still on supplement nutrition, sufficient grazing

Sheep: 2

				North	Free	Kwazulu-	Eastern	Western	Northern					
PROVINCE	Mpumalanga	Gauteng	Limpopo	West	State	Natal	Cape	Cape	Cape					
Average						3.0 (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														
Dairy	•													
Kwazulu-Na	ıtal						<u> </u>							
	dumeni Herd l	nealth												
Dairy: 3														
Western Ca	pe													
<b>George, Geo</b> Dairy: 2	orge Herd Hea	th Consul	t											
Ketosis									^					
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape					
Average		1.0 (1)			2.0 (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					
Dairy					1.0 (1)									
Sheep		1.0(1)			2.2 (6)			2.0 (1)	3.0 (1)					
Gauteng														
	spruit, Kerkstr	aat Diere	kliniek											
Sheep: 1														
Free State	Bethlehem Ar	imal Hac	nital											
Sheep: 2	betiliellelli Ai	IIIIIai NOS	pitai											
	in, University	Free State	2											
Dairy: 1														
Dewetsdorp	, Platkop Dier	ekliniek												
Sheep: 2														
	loopstad Diere	ekliniek												
Sheep: 3	/		_1											
Kroonstad, Kroonstad Dierehospitaal														
Sheep: 2 Oranjeville, Grasveld Kuddegesondheid														
Sheep: 2														
	gepoort Veedi	enste												
Sheep: 2														
Western Ca	ре													
Beaufort West, Beaufort Dierekliniek														
Sheep: 2														
Northern Ca	ре													

Colesberg, Karoo Veterinary Hospital Sheep: 3											
Milk Fever											
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape		
Average	1.0 (1)	1.0 (1)			2.0 (4)	1.5 (2)	1.0 (1)	1.8 (5)	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) 2.0 (1) 1.0											
Dairy					2.0 (1)	1.0 (1)		2.0 (3)			
Sheep Mpumalang					2.0 (2)		1.0 (1)	1.5 (2)			
Lydenburg, Longtom Dierekliniek  Beef: 1  Gauteng  Nigel, Nigel Diere Spreekkamer  Beef: 1  Free State  Dewetsdorp, Platkop Dierekliniek  Sheep: 2  Excelsior, Weltevrede Dierekliniek  Sheep: 2  Reitz, Riemland Dierehospitaal  Dairy: 2  Villiers, Wilgepoort Veedienste  Beef: 2  Kwazulu-Natal  Bergville, Bergville Veterinary Clinic  Beef: 2  Dundee, Endumeni Herd health											
Dairy: 1  Eastern Cape Aliwal North, Hertzogbrug Dierekliniek Sheep: 1  Western Cape George, George Herd Heath Consult Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek Sheep: 2  Plettenberg Bay, Plettenberg Bay A Reitz											
Dairy: 2 Milk fever accompanied by rain and green grass Stellenbosch, Stellenbosch Animal Hospital Dairy: 1 Vredenburg, Vredenburg Dierehospitaal											

Sheep: 1

Flock of heavily pregnant ewes on well covered grass grazing. Started eating *Oxalis* (suring) when grazing started to become scarce and cattle added for intensive grazing.

#### **Northern Cape**

# Postmasburg, Postmasburg Dierekliniek

Beef: 1

_				-	
Kei	prod	lucti	ve d	isea	ses

Dystocia	(Difficult Births)									
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average	1.5 (13)	1.6 (5)	1.0 (3)	2.4 (8)	2.1 (29)	2.4 (10)	1.2 (5)	1.9 (11)	1.5 (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	1.7 (6)	2.0 (1)	1.0 (2)	2.4 (5)	2.1 (18)	2.6 (7)	1.0 (2)	2.0 (2)	1.5 (4)
Dairy					2.0 (1)	1.0 (1)		1.8 (6)	
Sheep	1.5 (6)	2.0 (2)		2.3 (3)	2.2 (10)	2.5 (2)	1.5 (2)	2.0 (2)	1.5 (2)
Goat	1.0(1)	1.0(2)	1.0(1)		, ,		1.0(1)	2.0 (1)	

#### Mpumalanga

#### **Balfour, Balfour Dierekliniek**

Beef: 1, Sheep: 1

## **Bethal, Bethal Dierekliniek**

Beef: 2, Sheep: 2

## Ermelo, Môregloed Veterinêre Spreekkamer

Sheep: 2

# Grootvlei, Grootvlei Dierekliniek

Beef: 2, Sheep: 1

#### Hendrina, Mooiplaas Veterinêre Dienste

Beef: 2, Sheep: 1

## Lydenburg, Longtom Dierekliniek

Beef: 2, Sheep: 2

## Lydenburg, Lydenburg Dierespreekkamer

Goat: 1

## **Nelspruit, Nelspruit Animal Hospital**

Beef: 1

Gauteng

# **Bapsfontein, Bapsfontein Dierehospitaal**

Beef: 2, Sheep: 2

## Nigel, Nigel Diere Spreekkamer

Goat: 1

## Pretoria, Anima Veterinary Consulting Rooms

Sheep: 2

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

Goat: 1

Limpopo **Bela Bela, Artemis Veterinary Services** Beef: 1 Cow died, could not calf. **Mokopane, Bundu Veterinary Services** Beef: 1, Goat: 1 **North West Brits, Brits Dierekliniek** Beef: 2 **Brits, Zodiac Dierekliniek** Sheep: 2 Christiana, Christiana Dierehospitaal Beef: 3, Sheep: 3 Klerksdorp, Klerksdorp Dierehospitaal Beef: 2, Sheep: 2 Rustenburg, Bergbos Dierekliniek Beef: 2 Ventersdorp, Ventersdorp Dierekliniek Beef: 3 Free State **Bethlehem, Bethlehem Animal Hospital** Beef: 1, Sheep: 2 **Bethlehem, Union Street Animal Consulting Rooms Bultfontein, Greylingsrust Dierespreekkamer** Beef: 2, Sheep: 2 Clocolan, Clocolan Dierekliniek Beef: 2, Sheep: 2 Frankfort, Frankfort Dierekliniek Beef: 3, Sheep: 3 **Hoopstad, Hoopstad Dierekliniek** Beef: 3, Sheep: 3 **Hoopstad, Kameeldoring Dierekliniek** Kroonstad, Kroonstad Dierehospitaal Beef: 2, Dairy: 2, Sheep: 2 Oranjeville, Grasveld Kuddegesondheid Beef: 2, Sheep: 2 Parys, Parys Dierehospitaal Beef: 2 Reitz, Riemland Dierehospitaal Beef: 2 Senekal, Senekal Dierekliniek Viljoenskroon, Viljoenskroon Dierekliniek Beef: 2, Sheep: 2 Villiers, Wilgepoort Veedienste Beef: 2, Sheep: 2 Vrede, Saulshoek Dieregesondheid. Beef: 2 Vrede, Vrede Dierehospitaal Beef: 3 Including 3 caesareans Warden, Warden Dierekliniek

Wesselsbron, Wesselsbron Dierekliniek Beef: 1 Winburg, Winburg Dierekliniek Beef: 2 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 3 Bergville, Tugela Vet Clinic Beef: 2 **Dundee, Endumeni Herd health** Beef: 3, Dairy: 1, Sheep: 2 **Mooi River, Mooirivier Vet Clinic** Beef: 3 **Newcastle, Ncanduvet Newcastle** Beef: 3, Sheep: 3 Pietermaritzburg, Veterinary House Hospital Beef: 2 **Underberg, Underberg Veterinary Surgery** Beef: 2 **Eastern Cape** Aliwal North, Hertzogbrug Dierekliniek Beef: 1 **Graaff-Reinet, Camdeboo Veterinary Clinic** Sheep: 2, Goat: 1 Uitenhage, Uitenhage Dierehospitaal Beef: 1, Sheep: 1 **Western Cape Beaufort West, Beaufort Dierekliniek** Sheep: 3, Goat: 2 Caledon, Caledon Dierekliniek Dairy: 2 **Ceres, Ceres Veterinary Hospital** Beef: 2 Four cases **Darling, Tygerberg Dierehospitaal Darling** Dairy: 1 George, George Herd Heath Consult Dairy: 3 Malmesbury, Bergzight Dierehospitaal Dairy: 2 Paarl, Paarl Dierehospitaal; Sheep: 1 Stellenbosch, Stellenbosch Animal Hospital Swellendam, Swellendam Dierehospitaal Dairy: 2 **Worcester, Durban Straat Dierekliniek Worcester** Dairy: 1 **Northern Cape** Kathu, Kathu Dierekliniek Beef: 2, Sheep: 2 Kimberley, Kimberley Dierekliniek Beef: 1, Sheep: 1 Kuruman, Kuruman Dierekliniek

PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Rastern Cape 2.8 (6)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than reported  Beef 2.3 (3)  Dairy 2.8 (6)  Free State Bultfontein, Greylingsrust Dierespreekkamer Beef: 2  Hoopstad, Hoopstad Dierekliniek Beef: 3  Villiers, Wilgepoort Veedienste Beef: 2  Western Cape Caledon Dierekliniek Dairy: 3  George, George Herd Heath Consult Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek Dairy: 3	Postmasburg, Postmasburg Dierekliniek Beef: 1										
Average  Limpopo West State Natal Cape Cape  2.3 (3)  Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than reported  Beef  2.3 (3)  Dairy  2.8 (6)  Pree State  Bultfontein, Greylingsrust Dierespreekkamer Beef: 2  Hoopstad, Hoopstad Dierekliniek Beef: 3  Villiers, Wilgepoort Veedienste Beef: 2  Western Cape Caledon, Caledon Dierekliniek Dairy: 3  George, George Herd Heath Consult Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek											
Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than reported  Beef  2.3 (3)  Dairy  2.8 (6)  Free State  Bultfontein, Greylingsrust Dierespreekkamer Beef: 2  Hoopstad, Hoopstad Dierekliniek Beef: 3  Villiers, Wilgepoort Veedienste Beef: 2  Western Cape Caledon, Caledon Dierekliniek Dairy: 3  George, George Herd Heath Consult Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek	Northern Cape										
Beef  2.3 (3)  Dairy  Free State Bultfontein, Greylingsrust Dierespreekkamer Beef: 2 Hoopstad, Hoopstad Dierekliniek Beef: 3 Villiers, Wilgepoort Veedienste Beef: 2 Western Cape Caledon, Caledon Dierekliniek Dairy: 3 George, George Herd Heath Consult Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Dairy  Pree State Bultfontein, Greylingsrust Dierespreekkamer Beef: 2 Hoopstad, Hoopstad Dierekliniek Beef: 3 Villiers, Wilgepoort Veedienste Beef: 2 Western Cape Caledon, Caledon Dierekliniek Dairy: 3 George, George Herd Heath Consult Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek	Level of importance scale: 1 = one case, 2 = more than one case but less than ten and 3 = more than 10 cases reported										
Free State Bultfontein, Greylingsrust Dierespreekkamer Beef: 2 Hoopstad, Hoopstad Dierekliniek Beef: 3 Villiers, Wilgepoort Veedienste Beef: 2 Western Cape Caledon, Caledon Dierekliniek Dairy: 3 George, George Herd Heath Consult Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Bultfontein, Greylingsrust Dierespreekkamer  Beef: 2 Hoopstad, Hoopstad Dierekliniek  Beef: 3 Villiers, Wilgepoort Veedienste  Beef: 2 Western Cape Caledon, Caledon Dierekliniek  Dairy: 3 George, George Herd Heath Consult  Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Beef: 2 Hoopstad, Hoopstad Dierekliniek Beef: 3 Villiers, Wilgepoort Veedienste Beef: 2 Western Cape Caledon, Caledon Dierekliniek Dairy: 3 George, George Herd Heath Consult Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Hoopstad, Hoopstad Dierekliniek Beef: 3 Villiers, Wilgepoort Veedienste Beef: 2 Western Cape Caledon, Caledon Dierekliniek Dairy: 3 George, George Herd Heath Consult Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Beef: 3  Villiers, Wilgepoort Veedienste Beef: 2  Western Cape Caledon, Caledon Dierekliniek Dairy: 3  George, George Herd Heath Consult Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek											
Beef: 2  Western Cape Caledon, Caledon Dierekliniek Dairy: 3  George, George Herd Heath Consult Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek											
Western Cape Caledon, Caledon Dierekliniek Dairy: 3 George, George Herd Heath Consult Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Caledon, Caledon Dierekliniek  Dairy: 3  George, George Herd Heath Consult  Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek											
Dairy: 3  George, George Herd Heath Consult  Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek											
George, George Herd Heath Consult  Dairy: 3  Heidelberg (WC), Heidelberg Dierekliniek											
Dairy: 3 Heidelberg (WC), Heidelberg Dierekliniek											
Heidelberg (WC), Heidelberg Dierekliniek											
Dairy: 3											
Malmesbury, Bergzight Dierehospitaal											
Dairy: 3 Piketberg, Piketberg Dierehospitaal											
Dairy: 2											
Chronic endometritis											
Swellendam, Swellendam Dierehospitaal											
Dairy: 3											
Metritis	4										
PROVINCE Mpumalanga Gauteng Limpopo North West State Kwazulu- Eastern Cape Cape	Northern Cape										
Average     1.0 (1)     1.0 (1)     3.0 (1)     1.7 (3)     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											
3.0 (1) 1.7 (3) 2.0 (2) 3.0 (1)											

Dairy				2.0		2.7 (3)
Sheep		1.0 (1)		(3) 1.0 (1)		
Goat					1.0(1)	
Mpumalang	ja				, ,	
Balfour, Ba	lfour Diereklin	iek				
Beef: 1						
Gauteng						
Bapsfontei	n, Bapsfontein	Dierehospitaa	l			
Sheep: 1						
<b>North West</b>	:					
	Christiana Die	rehospitaal				
Beef: 3						
Free State						
	Hoopstad Dier	ekliniek				
Beef: 3						
	Kroonstad Die	rehospitaal				
Dairy: 2						
	s Dierehospita	al				
Dairy: 2						
	enekal Dierekli	піек				
Dairy: 2						
Beef: 1, She	gepoort Veedi	enste				
	ep. 1 <b>arden Dierekli</b>	niak				
Beef: 1	arden bierekii	illek				
Kwazulu-Na	atal					
	Mooirivier Ve	+ Clinic				
Beef: 2	Pioonivier ve	Cillic				
	Ncanduvet Ne	wcastle				
Goat: 1						
	Underberg Ve	terinary Surge	ery			
Beef: 2			•			
Western Ca	ipe					
	aledon Dierekli	niek				
Dairy: 3						
Darling, Ty	gerberg Dierel	ospitaal Darlii	ng			
Beef: 3						
	y, Bergzight D	ierehospitaal				
Dairy: 2						
	n, Swellendam	Dierehospitaa	al			
Dairy: 3						

Poor conception									
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average		2.0 (2)	1.0 (1)	2.0 (2)	2.6 (9)	1.5 (2)	2.0 (2)	3.0 (1)	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	3.0 (1)	1.0(1)	2.0 (1)	2.6 (7)	1.5 (2)			3.0 (2)
Dairy				2.0 (1)			3.0 (1)	
Sheep	1.0 (1)		2.0 (1)	3.0 (1)		3.0 (1)		
Goat						1.0 (1)		
Gauteng								

#### Bapsfontein, Bapsfontein Dierehospitaal

#### Nigel, Nigel Diere Spreekkamer

Beef: 3 Limpopo

## **Hoedspruit, Aardvark veterinary services**

Beef: 1 **North West** 

## Christiana, Christiana Dierehospitaal

Beef: 2, Sheep: 2

**Free State** 

#### Clocolan, Clocolan Dierekliniek

#### Hoopstad, Kameeldoring Dierekliniek

Beef: 3

#### **Parys, Parys Dierehospitaal**

Dairy: 2

#### Senekal, Senekal Dierekliniek

Beef: 2

#### Villiers, Wilgepoort Veedienste

Beef: 3, Sheep: 3

## Vrede, Saulshoek Dieregesondheid.

Beef: 3

#### Warden, Warden Dierekliniek

Beef: 3

## Winburg, Winburg Dierekliniek

Beef: 3

#### Kwazulu-Natal

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

Beef: 1

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

Beef: 2

#### **Eastern Cape**

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

Goat: 1

#### Steynsburg, Steynsburg Dierehospitaal

Sheep: 3

#### **Western Cape**

## Caledon, Caledon Dierekliniek

Dairy: 3

#### **Northern Cape**

#### Kuruman, Kuruman Dierekliniek

Beef: 3 Postmasburg, Postmasburg Dierekliniek										
Beef: 3 Retained	afterbirth								^	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average	1.6 (5)	1.0 (3)		1.5 (2)	1.6 (8)	1.8 (5)	2.0 (1)	2.5 (2)	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	1.5 (4)	1.0(1)		1.5 (2)	1.7 (7)	1.8 (5)	2.0 (1)		1.0(1)	
Dairy					1.0 (1)			2.5 (2)		
Sheep	2.0(1)	1.0(1)								
Goat		1.0(1)								
Beef: 2, Shee Gauteng Bapsfontein Beef: 1 Hammanski Goat: 1	, Bapsfontein raal, Themba <i>I</i> ima Veterinar	Dierehos	nic	•						
Beef: 2 <b>Klerksdorp,</b> Beef: 1	Klerksdorp Di	erehospit	aal							
Beef: 2 Hoopstad, H	Greylingsrust		eekkamer							
Beef: 3 Parys, Parys Dierehospitaal Dairy: 1 Viljoenskroon, Viljoenskroon Dierekliniek Beef: 1 Villiers, Wilgepoort Veedienste										
Beef: 1	- • · · ·									

Warden, Wa	arden Dierekli	niek							
Beef: 1									
Wesselsbro	n, Wesselsbro	n Dierekli	niek						
Beef: 2	•								
Winburg, W	inburg Dierek	liniek							
Beef: 2	<u> </u>								
Kwazulu-Na	ntal								
	ergville Veteri	nary Clini	c						
Beef: 3		many China							
	n, Camperdov	vn Vet Cli	nic						
Beef: 1	m, camperact	VIII VOC OIII							
	Mooirivier Vet	- Clinic							
Beef: 1	MODITIVIET VE	Cillic							
	zburg, Veterin	any Hauss	. Hospital						
Beef: 2	zburg, veteriii	ai y House	riospitai						
	Undarbara Va	torinam, C	`a.o.m.						
Beef: 2	Underberg Ve	termary 3	urgery						
Eastern Cap		\/ - 1 1	Ol::.						
	p, Humansdor	p veterina	ary Clinic						
Beef: 2									
Western Ca			_						
	orge Herd Hea	th Consul	t						
Dairy: 3									
	y, Bergzight Di	ierehospit	aal						
Dairy: 2									
Northern Ca	_								
Kuruman, K	<b>Suruman Diere</b>	kliniek							
D C - 1									
Beef: 1									
Sheath P	rolaps								^
	rolaps								_
Sheath P	rolaps Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	_
Sheath P		Gauteng	Limpopo						Northern
Sheath P PROVINCE		Gauteng	Limpopo			Natal			Northern Cape
Sheath P		Gauteng	Limpopo		State 1.6				Northern
Sheath P		Gauteng	Limpopo		State	Natal			Northern Cape
Sheath P PROVINCE Average	Mpumalanga			West	1.6 (5)	Natal 2.0 (1)	Cape	Cape	Northern Cape
Sheath P PROVINCE Average Level of impo				West	1.6 (5)	Natal 2.0 (1)	Cape	Cape	Northern Cape
Sheath P PROVINCE Average	Mpumalanga			West	1.6 (5)	Natal 2.0 (1)	Cape	Cape	Northern Cape
Sheath P PROVINCE Average Level of imporeported	Mpumalanga			West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P PROVINCE Average Level of impo	Mpumalanga			West	1.6 (5) e case b	Natal 2.0 (1)	Cape	Cape	Northern Cape
Sheath P PROVINCE Average Level of imporeported Beef	Mpumalanga			West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P PROVINCE Average Level of impore reported Beef Free State	Mpumalanga  ortance scale: 1	= one case	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P PROVINCE  Average  Level of imporeported  Beef  Free State Ficksburg, (	Mpumalanga	= one case	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P PROVINCE  Average  Level of imporeported  Beef  Free State Ficksburg, (Beef: 1	Mpumalanga  ortance scale: 1  Dosvrystaat Di	= one case	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P  PROVINCE  Average  Level of imporeported  Beef  Free State Ficksburg, (Beef: 1 Hoopstad, H	Mpumalanga  ortance scale: 1	= one case	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P PROVINCE  Average  Level of imporeported  Beef  Free State Ficksburg, (Beef: 1	Mpumalanga  ortance scale: 1  Dosvrystaat Di	= one case	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P  PROVINCE  Average  Level of imporeported  Beef  Free State Ficksburg, (Beef: 1 Hoopstad, Heef: 2	Mpumalanga  ortance scale: 1  Dosvrystaat Di	= one case ere Produ ekliniek	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P  PROVINCE  Average  Level of imporeported  Beef  Free State Ficksburg, (Beef: 1 Hoopstad, Heef: 2	Mpumalanga  ortance scale: 1  Oosvrystaat Di	= one case ere Produ ekliniek	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P  PROVINCE  Average  Level of impore reported  Beef  Free State Ficksburg, (Beef: 1 Hoopstad, Hoopstad, Hoef: 2 Villiers, Williers, Willie	Mpumalanga  ortance scale: 1  Oosvrystaat Di	= one case ere Produ ekliniek enste	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Average  Level of imporeported  Beef  Free State Ficksburg, (Beef: 1 Hoopstad, Heef: 2 Villiers, Willers, Willers, Willers, Willers, Willers, Saul	Mpumalanga  ortance scale: 1  Oosvrystaat Di Hoopstad Diere	= one case ere Produ ekliniek enste	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Average  Level of imporeported  Beef  Free State Ficksburg, ( Beef: 1 Hoopstad, H Beef: 2 Villiers, Will Beef: 2 Vrede, Saul: Beef: 1	Mpumalanga  ortance scale: 1  Oosvrystaat Di Hoopstad Diere	= one case ere Produ ekliniek enste esondheid.	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Average  Level of imporeported  Beef  Free State Ficksburg, ( Beef: 1 Hoopstad, H Beef: 2 Villiers, Will Beef: 2 Vrede, Saul: Beef: 1	Mpumalanga  ortance scale: 1  Oosvrystaat Di doopstad Diere gepoort Veedieshoek Dierege	= one case ere Produ ekliniek enste esondheid.	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P  PROVINCE  Average  Level of impore reported  Beef  Free State Ficksburg, ( Beef: 1 Hoopstad, H Beef: 2 Villiers, Williers, Wil	Mpumalanga  Ortance scale: 1  Oosvrystaat Di Hoopstad Diere gepoort Veedi shoek Dierege Vinburg Dierek	= one case ere Produ ekliniek enste esondheid.	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases
Sheath P  PROVINCE  Average  Level of impore ported  Beef  Free State Ficksburg, (Beef: 1 Hoopstad, Heef: 2 Villiers, Wilders, Wi	Mpumalanga  Ortance scale: 1  Oosvrystaat Di Hoopstad Diere gepoort Veedi shoek Dierege Vinburg Dierek	= one case ere Produ ekliniek enste sondheid. liniek	e, 2 = more	West	1.6 (5) e case b	2.0 (1) ut less than t	Cape	Cape	Northern Cape  1.0 (1)  10 cases

Beef: 2	Reef: 2									
Northern Cape										
	uruman Diere	kliniek								
Beef: 1										
Uterus pr	olaps								^	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average	1.3 (4)	1.0 (1)	1.0 (1)		1.8 (10)	2.3 (4)	1.0 (1)	1.7 (3)	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 1.0 (2) 1.0 (1) 1.0 (1) 1.9 (7) 2.3 (4) 2.0 (1)										
Dairy	1.0(1)						1.0(1)	1.7 (3)		
Sheep	2.0 (1)				1.7 (3)				2.0 (1)	
Goat									1.0(1)	
Dairy: 1	a nal Diereklinie rootvlei Diere									
	<b>Longtom Dier</b> p: 2	ekliniek								
Gauteng										
	o, Lammermoo	or Veterin	ary Clinic							
Beef: 1										
Limpopo	Bundu Veterin	ami Cami								
Beef: 1	bundu veterm	iary Servi	ces							
Free State										
	Greylingsrust	: Dierespr	eekkamer							
Sheep: 1										
	ocolan Dierek	liniek								
Beef: 2	16									
Frankfort, F Beef: 3, Shee	rankfort Diere	kiiniek								
	loopstad Diere	ekliniek								
Beef: 2										
Kroonstad,	Kroonstad Die	rehospita	al							
Sheep: 1										
Vrede, Vrede Dierehospitaal										
Beef: 1 Warden, Warden Dierekliniek										
Beef: 2										
Wesselsbron, Wesselsbron Dierekliniek										
Beef: 1	Beef: 1									
Winburg, W	inburg Dierek	liniek								

Beef: 2									
Kwazulu-Na	atal								
Bergville, B	ergville Veteri	nary Clini	ic						
Beef: 2									
Bergville, T	ugela Vet Clini	ic							
Beef: 3	- <b>J</b>								
	month than repo	orted in last	t 2 vears						
	dumeni Herd l		c _ years						
Beef: 2	aamem nera i	- Cuitii							
	zburg, Veterin	ary House	a Hosnital						
Beef: 2	zburg, veterm	ury mouse	c mospitai						
Eastern Cap	<b>10</b>								
	Riverview Tra	ding Vot	Conculting	Somice	20				
	Riverview 11a	idilig vet	Consuming	j Sei vice	=>				
Dairy: 1									
Western Ca	•		I.E.						
	orge Herd Hea	tn Consui	τ						
Dairy: 2	(WG) 11-1-1-11-	<b>n</b> :							
	(WC), Heidelb	erg Diere	Kliniek						
Dairy: 2									
	n, Swellendam	Dierehos	spitaal						
Dairy: 1									
Northern Ca									
	Kuruman Diere	kliniek							
Beef: 2, Shee	ep: 2, Goat: 1								
Vaginal (	cervical) pr	olaps							^
PROVINCE		_	 	North	Free	Kwazulu-	Eastern	Western	Northern
. KOTINCE	Mpumalanga	Gauteng	Limpopo	West		Natal	Cape	Cape	Cape
Average	1.4 (5)		Limpopo	West	State		Саре	Саре	Cape
Average		2.0 (2)		West  2.0 (3)  than on	2.0 (19) e case b	Natal  1.9 (7)  ut less than t	<b>Cape</b> 1.0 (1)	<b>Cape</b> 1.4 (5)	2.0 (1)
Average  Level of impo	1.4 (5)	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b	Natal 1.9 (7)	<b>Cape</b> 1.0 (1)	1.4 (5)	2.0 (1)
Average  Level of impreported	1.4 (5) ortance scale: 1	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b	Natal  1.9 (7)  ut less than t	<b>Cape</b> 1.0 (1)	1.4 (5) more than 1.5 (2)	2.0 (1) 10 cases
Average  Level of impore reported  Beef	1.4 (5) ortance scale: 1	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13)	Natal  1.9 (7)  ut less than t	<b>Cape</b> 1.0 (1)	1.4 (5)	2.0 (1) 10 cases
Average  Level of impore reported  Beef	1.4 (5) ortance scale: 1 1.3 (3)	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) out less than to 2.2 (5)	<b>Cape</b> 1.0 (1)	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy	1.4 (5) ortance scale: 1	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13)	Natal  1.9 (7)  ut less than t	1.0 (1) en and 3 =	1.4 (5) more than 1.5 (2)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy	1.4 (5) ortance scale: 1 1.3 (3)	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat	1.4 (5) ortance scale: 1 1.3 (3) 1.5 (2)	2.0 (2) = one case		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) out less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang	1.4 (5)  ortance scale: 1  1.3 (3)  1.5 (2)	2.0 (2) = one case 2.0 (2)		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal, Betl	1.4 (5)  ortance scale: 1  1.3 (3)  1.5 (2)	2.0 (2) = one case 2.0 (2)		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal, Better Beef: 1, Sheep	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  a hal Diereklinie ep: 1	2.0 (2) = one case 2.0 (2)		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal,	1.4 (5)  ortance scale: 1  1.3 (3)  1.5 (2)	2.0 (2) = one case 2.0 (2)		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal,	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  la hal Diereklinie ep: 1  prootvlei Diere	2.0 (2) = one case 2.0 (2)  k kliniek		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal,	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  la hal Diereklinie ep: 1  prootvlei Diereklinie Dierekli	2.0 (2) = one case 2.0 (2)  k kliniek		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of imporeported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal, Be	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  la hal Diereklinie ep: 1  prootvlei Diereklinie Dierekli	2.0 (2) = one case 2.0 (2)  k kliniek		West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal,	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  la hal Diereklinie ep: 1  prootvlei Diere  Longtom Dierep: 2	2.0 (2) = one case 2.0 (2)  k kliniek ekliniek	e, 2 = more	West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal,	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  la hal Diereklinie ep: 1  prootvlei Diereklinie Dierekli	2.0 (2) = one case 2.0 (2)  k kliniek ekliniek	e, 2 = more	West  2.0 (3)  than on	2.0 (19) e case b 1.9 (13) 2.2	1.9 (7) ut less than to 2.2 (5)	1.0 (1) en and 3 =	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases
Average  Level of impore reported  Beef  Dairy  Sheep  Goat  Mpumalang Bethal,	1.4 (5)  portance scale: 1  1.3 (3)  1.5 (2)  la hal Diereklinie ep: 1  prootvlei Diere  Longtom Dierep: 2	2.0 (2) = one case 2.0 (2)  k kliniek ekliniek Animal Cli	e, 2 = more	West  2.0 (3)  2 than on  2.0 (3)	2.0 (19) e case b 1.9 (13) 2.2 (6)	1.9 (7)  ut less than t  2.2 (5)  1.0 (1)  1.0 (1)	1.0 (1) en and 3 =  1.0 (1)	1.4 (5) more than 1 1.5 (2) 2.0 (1)	2.0 (1) 10 cases

Beef: 2 **North West Brits, Brits Dierekliniek** Leeudoringstad, Leeudoringstad Dierekliniek Vryburg, Vryburg Dierehospitaal Beef: 2 **Free State Bultfontein, Greylingsrust Dierespreekkamer** Clocolan, Clocolan Dierekliniek Beef: 2 **Excelsior, Weltevrede Dierekliniek** Ficksburg, Oosvrystaat Diere Produkte Beef: 2 **Frankfort, Frankfort Dierekliniek** Beef: 3, Sheep: 3 **Hoopstad, Hoopstad Dierekliniek** Beef: 2, Sheep: 3 **Hoopstad, Kameeldoring Dierekliniek** Beef: 2 **Kroonstad, Kroonstad Dierehospitaal** Sheep: 1 Oranjeville, Grasveld Kuddegesondheid Beef: 2, Sheep: 2 Reitz, Riemland Dierehospitaal Beef: 2 Villiers, Wilgepoort Veedienste Beef: 2, Sheep: 2 **Vrede, Vrede Dierehospitaal** Beef: 1 Warden, Warden Dierekliniek Beef: 2 Wesselsbron, Wesselsbron Dierekliniek Beef: 1 Winburg, Winburg Dierekliniek Beef: 2 Kwazulu-Natal **Bergville, Bergville Veterinary Clinic** Beef: 3 Bergville, Tugela Vet Clinic Beef: 3 Camperdown, Camperdown Vet Clinic Goat: 1 **Dundee, Endumeni Herd health** Beef: 1 **Eshowe, Eshowe Veterinary Hospital** Sheep: 1 **Mtubatuba, Mtubatuba Animal Clinic Pietermaritzburg, Veterinary House Hospital** Beef: 2 **Eastern Cape** 

#### **Graaff-Reinet, Camdeboo Veterinary Clinic** Sheep: 1 **Western Cape Caledon, Caledon Dierekliniek** Beef: 1 Malmesbury, Bergzight Dierehospitaal Dairy: 2 **Malmesbury, Groenkloof Dierekliniek** Beef: 2 Paarl, Paarl Dierehospitaal; Sheep: 1 Stellenbosch, Stellenbosch Animal Hospital Sheep: 1 **Northern Cape** Kuruman, Kuruman Dierekliniek Beef: 2 Climatical Cause **Cold exposure** North Free Kwazulu-Eastern Western Northern **PROVINCE Mpumalanga Gauteng Limpopo** West State Natal Cape Cape Cape 2.0 **Average** 2.0(1)1.5 (2) 2.0(1)3.0(1) 1.5 (4) (4) 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 2.0(1)(1) 2.0 2.0(1)Sheep 1.0(1)1.5 (2) (3) Goat 2.0(1)3.0(1) 1.5(2)Mpumalanga Standerton, Econovet Sheep: 2 Gauteng Bapsfontein, Bapsfontein Dierehospitaal Sheep: 1 Hammanskraal, Themba Animal Clinic Goat: 2 **Free State** Philippolis, Rowelsfontein veearts Spreekkamer Sheep: 2 Villiers, Wilgepoort Veedienste Beef: 2, Sheep: 2 Wesselsbron, Wesselsbron Dierekliniek Sheep: 2 **Kwazulu-Natal**

Camperdown, Camperdown Vet Clinic

Beef: 2 calf

Eastern Cap									
	, Steynsburg D	Dierehospi	itaal						
Goat: 3 Northern Ca									
	ape Kuruman Diere	kliniek							
Sheep: 1, Go		KIIIICK							
	rg, Postmasbu	rg Dierek	liniek						
Sheep: 2, Go	at: 2								
Drought									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State		Eastern Cape	Western Cape	Northern Cape
Average							3.0 (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)	
Goat							3.0 (1)		
Eastern Cap	oe .						· /		
_	r Jane Pistoriu	IS							
Goat: 3									
Severe droug	ıht								
Western Ca	pe								
	Bay, Plettenb	erg Bay A	Reitz						
Beef: 2									
Fibre deficier	icy								
Frozen to	death								^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average				2.0 (1)	1.8 (6)		3.0 (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					1.3 (3)				
Sheep				2.0 (1)	2.3 (3)		3.0 (1)	2.0 (1)	
North West									
	yburg Diereho	spitaal							
Sheep: 2 Free State									
	ocolan Dierek	liniek							
Sheep: 3									
	land Dierehos	pitaal							
Beef: 2									
Senekal, Se	nekal Dierekli	niek							

Beef: 1, Shee	ep: 2									
	gepoort Veedi	enste								
Sheep: 2	-									
•	shoek Dierege	sondheid								
Beef: 1			-							
Eastern Cap	ne .									
	Steynsburg D	ierehosni	itaal							
Sheep: 3	Steynsburg b	ici enospi	ıcaaı							
	<b></b>									
Western Ca		ora Dioro	klimiak							
	(WC), Heidelb	erg Diere	Kiiniek							
Sheep: 2										
Non specific diseases										
Cause of death not established										
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average			1.0(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(1)	2.0(1)						
Sheep				2.0(1)						
Limpopo										
Mokopane,	Bundu Veterin	ary Servi	ces							
Beef: 1										
<b>North West</b>										
Brits, Brits I	Dierekliniek									
Beef: 2										
<b>Potchefstro</b>	om, Bult Diere	kliniek								
Sheep: 2										
Lamb deaths										
Genetic d	lisorders								_	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average					1.5 (2)		2.0 (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					1.0 (1)					
Dairy							1.0 (1)			
Sheep					2.0 (1)		3.0 (1)			
Free State										

Senekal, Senekal Dierekliniek										
Beef: 1										
	gepoort Veedi	enste								
Sheep: 2										
Eastern Cap										
	Riverview Tra	ding Vet	Consulting	y Service	es					
Dairy: 1										
	Steynsburg D	Dierehosp	itaal							
Sheep: 3										
Preditors									_	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West		Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	
Average		1.0 (1)			2.5 (8)			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					2.0 (3)					
Sheep					2.8 (5)			1.0(1)		
Goat		1.0(1)								
Gauteng										
Pretoria, On	derstepoort A	cademic	Hospital a	nd Prod	uction A	Animal Clini	С			
Goat: 1										
Dog bite wou	nds									
Free State										
Clocolan, Cl	ocolan Dierek	liniek								
Beef: 2, Shee										
	, Platkop Dier	ekliniek								
Sheep: 3										
	<b>Grasveld Kud</b>	degesond	heid							
Sheep: 3										
	Rowelsfonteir	veearts	Spreekkan	ner						
Sheep: 3										
	gepoort Veedi	enste								
Beef: 2, Shee										
	inburg Dierek	liniek								
Beef: 2										
Western Ca	ре									
	h, Stellenbosc	h Animal	Hospital							
Sheep: 1										
Dogs										
Sabotation/Theft										
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape	

Average	1.5 (2)	3.0 (1)			2.7 (6)		3.0 (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	1.5 (2)	3.0 (1)			2.7 (3)				
Sheep					2.7 (3)		3.0 (1)	2.0 (1)	
Mpumalang	ia					_			
	regloed Veteri	nêre Spre	ekkamer						
Beef: 1									
Nelspruit, N	lelspruit Anima	al Hospita	ı						
Beef: 2									
Gauteng									
	Diere Spreekl	kamer							
Beef: 3	•								
Free State									
Clocolan, C	locolan Dierek	liniek							
Beef: 3, Shee	ep: 3								
Oranjeville,	<b>Grasveld Kud</b>	degesond	heid						
Sheep: 2									
Villiers, Wil	gepoort Veedi	enste							
Beef: 3, Shee									
Winburg, W	inburg Dierek/	liniek							
Beef: 2									
Eastern Cap	oe e								
	ı, Stutterheim	Veterinar	y Clinic						
Sheep: 3									
	rife, very worry	ing!							
Western Ca	•								
	orge Animal H	ospital							
Sheep: 2									
Trauma									^
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average		1.8 (4)	2.0 (1)	2.0 (1)	1.5 (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 reported									
Beef		1.5 (2)	2.0 (1)	2.0 (1)	1.5 (2)			2.0 (1)	
Sheep		2.0 (1)			1.5 (2)			1.0(1)	

2.0 (1)

Goat Gauteng

	raal, Themba	Animal Cli	nic						
	ep: 2, Goat: 2	cademic I	Hospital a	nd Drod	uction /	Inimal Clini			
Pretoria, Onderstepoort Academic Hospital and Production Animal Clinic Beef: 1									
Fractures									
Limpopo									
Mokopane, Bundu Veterinary Services									
Beef: 2									
North West									
Schweizer-Reneke, Buffeldoorn Dierekliniek SR									
Beef: 2									
Fractures, 2 calves									
Free State									
Hoopstad, k	Cameeldoring	Diereklini	ek						
Beef: 2, Shee									
	gepoort Veedi	enste							
Beef: 1, Shee									
Western Ca									
	Dierehospitaa	al;							
Beef: 2, Shee									
Veld fires	5								_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	2.0 (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	2.0 (1)	1.0 (1)			2.0 (1)				
Mpumalang	ja –								
Nelspruit, N	lelspruit Anim	al Hospita	l						
Beef: 2									
Gauteng									
Nigel, Nigel	Diere Spreekl	kamer							
Beef: 1									
Free State									
Winburg, W	inburg Dierek	liniek							
Beef: 2									
Other									_
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average		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 cases reported									
Beef			1.0(1)						
			1.0 (1)						

Sheep		1.0(1)							
Gauteng									
Hammanskraal, Themba Animal Clinic									
Sheep: 1									
	Limpopo								
Mokopane, Bundu Veterinary Services									
Beef: 1									
Traumatic Reticulo-pericarditis								^	
PROVINCE	Mpumalanga	Gauteng	Limpopo	North West	Free State	Kwazulu- Natal	Eastern Cape	Western Cape	Northern Cape
Average	1.0 (1)		1.0 (1)	2.0 (1)	1.0 (1)		1.0 (2)	1.0 (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
Beef	1.0 (1)		1.0(1)	2.0 (1)	1.0 (1)		1.0 (2)	1.0 (1)	
Goat 1.0 (1)									
Mpumalang	а								
Grootvlei, G	rootvlei Diere	kliniek							
Beef: 1									
Limpopo									
	Pietersburg V	eterinary	Clinic						
Beef: 1									
North West	yburg Diereho	cnitaal							
Beef: 2	ybaig bielello	spicaai							
Free State									
Hoopstad, Kameeldoring Dierekliniek									
Beef: 1									
Eastern Cape									
Alexandria, Alexandria Platteland Spreekkamer									
Beef: 1									
Alexandria, Riverview Trading Vet Consulting Services									
Beef: 1									
Western Cape Paarl, Paarl Dierehospitaal;									
Goat: 1	Dierenospita	11,							
	Durban Straat	Diereklin	iek Worce	cter					
Beef: 1	varban Stidat	, DICI CKIIII	ICK WOICE	JUI					
DCCI. 1									