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

August 2015

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

Click on Disease Reports

The following practices and laboratories (115) submitted reports during August 2015:

Mpumalanga (10)
Bethal – Dr. Hardus Pieters
Ermelo – Drs. Potgieter and Steinberg
Grootvlei – Dr. Neels van Wyk
Lydenburg – Drs. Trümpelmann and Steyn
Nelspruit – Dr. André Beytell
Middelburg – Drs. Fourie and Erasmus
Piet Retief - Drs. Niebuhr and Weber
Standerton – Dr. Kobie Kroon
Standerton – Drs. Nel, Swart, Van der Merwe en Berg
Volksrust – Drs. Watson and Solomon

Gauteng (8)
Bapsfontein – Drs. Engelbrecht, Olivier and Ribbens
Bronkhorstspruit – Drs. De Bruin, De Bruin, Rudolph and Slabber
Johannesburg – Dr. Sheelagh Higgerty
Krugersdorp – Drs. Jeffery, Van Eeden and Walker
Nigel – Dr. Cindy van der Westhuizen
Onderstepoort Veterinary Academic Hospital – Proff. Annandale, Prozesky, Shakespear, Holm and Drs. Blignaut, Carrington, Gratwick, Grobler, Harmse and O'Dell
Pretoria – Dr. Hanneke Pienaar

Limpopo (5)
Lephalale (Ellisras) – Dr. Brigitte Luck
Mokopane (Potgietersrus) - Dr. Henk Visser
Naboomspruit – Prof. Dietmar Holm
Polokwane (Pietersburg) – Drs. Watson, Viljoen, Jansen Van Vuuren, Van Rooyen, Snyman and Cremona
Vaalwater - Dr. Hampie van Staden

North West (8)
Bloemhof/Schweizer-Reneke – Dr. Cizelle Naude
Brits – Drs. Boshoff and Coertze
Christiana - Dr. Pieter Nel
Klerksdorp – Drs. Van den Berg and Theron
Klerksdorp – Dr. Pieter Venter
Leeudoringstad - Dr. Ian Jonker
Stella - Dr. Magdaleen Vosser
Vryburg – Dr. Jurie Kritzinger

Free State (24)
Bethlehem – Drs. Strydom and Strydom
Bothaville – Dr. Johan Blaauw
Bultfontein – Dr. Santjie Pieterse
Clocolan – Dr. Liezel Wasserman
Dewetsdorp – Dr. Marike Badenhorst
Ficksburg – Drs.Kotze and Coetzer
Frankfort - Drs. Lessing, Cilliers and Janse van Rensburg
Harrismith - Drs.Thirion, Pretorius and Nel
Hertzogville – Dr. Nico Hendrikz
Hoopstad - Dr. Kobus Pretorius
Kroonstad – Drs. Daffue, Eksteen, Van Zyl and Van der Walt
Ladybrand/Excelsior - Drs. De Vos and Nel
Memel – Drs. Nixon and Nixon
Parys – Drs. Wessels and Wessels
Phillipolis – Dr. Stephan van Niekerk
Reitz - Dr. Murray Smith
Sasolburg – Dr. Letitia Swartz
Senekal – Dr. Theo Kotzé
Viljoenskroon - Dr. Johan Kahts
Villiers – Drs. Hattingh en Hauptfleisch
Vrede – Drs. Myburgh and Bester-Cloete
Vrede – Dr. Rudolph Fourie
Wesselsbron –Dr. Johan Jacobs
Zastron – Dr. Phillip Brand

KwaZulu-Natal (19)
Bergville - Dr. Ariena Shepherd
Bergville – Dr. Jubie Muller
Camperdown – Dr. Anthony van Tonder
Dundee - Dr. Tony Grace
Dundee – Drs. Marais and Fynn
Estcourt – Drs.Turner, Tedder, Taylor, Tratschler, Van Rooyen and Alwar
Greytown – Dr. Mike Caldicott

Howick – Drs. Hughes, Lund, Gordon, Allison and Taylor
Ingogo – Dr. Trish Oglesby
Kokstad- Drs. Clowes and Shrives
Mooi River - Drs. Fowler, Hartley, Waterman and Mallet
Mtubatuba – Dr. Trever Viljoen
Newcastle – Dr. Barry Rafferty
Pietermaritzburg – Dr. Rick Mapham
Pietermaritzburg – Dr. Phillip Kretzmann
Pongola – Dr. Heinz Kohrs
Underberg - Drs. Collins, King and Delaney
Underberg – Dr. Pete Dommett
Vryheid – Drs.Theron and Theron

Eastern Cape (11)
Alexandria - Drs. Olivier and Dreyer
Aliwal North – Drs. Troskie and Strauss
Cradock – Dr. Frans Erasmus
Graaff- Reinet - Dr. Roland Larson
Graaff –Reinet – Drs. Hobson, Strydom and Hennesy
Humansdorp - Drs. Van Niekerk, Jansen Van Vuuren, Barker and Kotze
Jeffreys Bay – Drs. Lategan, Hoek and McFarlane
Middelburg, Steynsburg, Barkly East – Drs. Van Rooyen and Viljoen
Port Alfred – Dr. Leon de Bruyn
Stutterheim - Dr. Dave Waterman
Uitenhage – Drs. Mulder and Krüger

Western Cape (16)
Beaufort West - Drs. Pienaar and Grobler
Caledon – Drs.Retief and Rissik
Ceres – Drs. Pieterse, Wium, Freeman, De Villiers and Scheepers
Darling – Drs. Van der Merwe, Adam and Senekal
George - Drs. Strydom, Truter, and Pettifer
Heidelberg – Dr. Albert van Zyl
Malmesbury – Dr. Otto Kriek
Malmesbury – Dr. Markus Fourie
Oudtshoorn – Dr. Glen Carlisle
Oudtshoorn – Dr. Adriaan Olivier
Piketberg – Dr. André van der Merwe
Plettenberg Bay – Dr. André Reitz
Stellenbosch – Dr. Alfred Kidd
Swellendam – Drs. Malan and Venter
Swellendam – Dr. Norman Pearson
Vredenburg - Dr. Izak Rust

Northern Cape (6)

Calvinia – Dr. Bertus Nel
De Aar – Dr. Donald Anderson
Jan Kempdorp – Dr. Jan Brand
Kathu – Dr. Jan Vorster
Kimberley – Drs. Van Heerden and Swart
Kimberley – Dr. Trudie Prinsloo

Feedlots (2)
Drs. Morris and Du Preez
Dr. Andy Hentzen

Laboratory reports (6)
Dr. Marijke Henton - Idexx SA Johannesburg
Dr. Liza du Plessis – Idexx SA Onderstepoort
Dr. Lucy Lange – Pathcare Laboratory, Cape Town
Dr. Annelize Jonker – Provicial Vet Lab, Stellenbosch
Dr. Alan Fischer – Queenstown Provincial laboratory
Dr. Rick Last – Vetdiagnostix, Pietermaritzburg

Summary of disease report for July 2015

115 Reports from veterinary practices and laboratories were received (Mpumalanga (MP) 10; Gauteng (G) 8; Limpopo (L) 5; North West (NW) 8; Free State (FS) 24; KwaZulu-Natal (KZN) 19; Eastern Cape (EC) 11; Western Cape (WC) 16; Northern Cape (NC) 6; Feedlots (FL) 2 and Laboratories (Lab) 6).

Reports were also received from practices regarding ostriches, horses and game. These reports as well as the feedlot and laboratory reports are to be seen below the Disease distribution report as reported by veterinarians.

Take home message: Spring is here and this is the time to check on your management and vaccination programmes. Once summer rains fall ticks, internal parasites and insect numbers will increase and then diseases such as African and Asiatic red water, anaplasmosis, blue tongue, lumpy skin disease, three day stiff sickness, Rift Valley Fever, Wesselsbron and African horse sickness may occur. Sit down with your herd veterinarian and update your biosecurity plan!

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	x	x	x	x	x	x	x	x	
Resistant roundworms		x	x		x				
Wireworm	x	x			x	x	x	x	

Brown stomach-worm						x	x	x	
Large-mouthed bowelworm							x		
Lungworm						x			
Tapeworms	x	x			x	x	x	x	
Parafilaria				x		x			
Liver fluke	x	x			x	x	x	x	
Conical fluke	x				x	x	x	x	
Cysticercosis (measles)	x							x	x
Schistosomiasis (bilharzia)									
Coccidiosis	x	x			x	x	x	x	x

The perception is that internal parasites are not causing a problem in winter. As can be seen from information in the table above farmers should be on the alert for signs indicating internal parasite infestation: anaemia, bottle jaw, weight loss and diarrhoea.

Discuss control and preventative measures with 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	x	x	x		x	x	x	x	
Resistant blue ticks	x					x	x		
Heartwater ticks	x	x	x	x	x	x			
Brown ear-ticks			x			x		x	
Bont-legged ticks	x		x	x	x			x	x
Red-legged ticks	x			x	x	x			
Paralysis ticks	x								
Biting lice	x			x	x	x	x		
Sucking lice				x	x				
Itch mites							x		
Sheep scab			x		x		x		
Mange mites	x	x			x			x	
Nuisance flies								x	
Midges									
Blowflies					x				
Screw-worm						x			
Nasal bot	x	x			x				x

Immature stages of the multi-host ticks are present on animals in the winter. Check the inner ear and spot treat if necessary.

Reports of an increase in blue tick (one host tick) numbers were received.

Winter time is lice time. Animals in a poor nutritional state are the most affected. Sucking lice cause anaemia and biting lice cause severe irritation and animals do not feed well.

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	x	x		x	x	x	x	x	
Asiatic red water		x		x	x	x	x	x	
Anaplasmosis	x			x	x	x	x	x	
Heartwater	x	x	x		x	x	x		
Lumpy skin disease		x	x	x	x	x		x	

The belief is that tick transmitted diseases mainly occur in summer. Reports received from most provinces show that this is not the case and farmers should be on the lookout for clinical signs in order to treat animals in time.

Vaccines are available to control all these diseases. Discuss preventative measures with your veterinarian.

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		x	x	x		x		x	
Ephemeral fever (Three day stiff sickness)						x			
Blue tongue			x						
Rift Valley Fever									
Wesselsbron									

Insect numbers are at a low during the winter months. Now is the time to order vaccines for these diseases so that animals can be vaccinated in time before the rainy season starts in the summer rainfall areas.

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	x			x	x	x	x	x	x
Vibriosis				x	x	x	x		
Pizzle disease							x		x

New cases of trichomonosis are reported every month and this disease is getting out of hand. Cattle study groups should discuss preventative and control measures with their veterinarians. Farmers are losing millions of Rand due to this disease!

Bacterial diseases

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

Bacterial diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Blackquarter	x		x	x	x	x	x		
Botulism				x		x			
Pulpy kidney	x			x	x	x	x	x	x
Lamb dysentery					x			x	
Swelled head									
Red gut (cattle)		x			x	x	x		
Blood gut (sheep)	x	x			x	x	x	x	
Tetanus				x	x	x			
Salmonellosis	x			x			x	x	x
Bovine brucellosis	x		x	x	x		x		
Ovine brucellosis					x			x	x
Johne's							x	x	
Leptospirosis			x						
Pseudomonas				x					
Septicaemia						x			x
E. coli	x	x		x	x	x	x	x	
Enzootic abortion				x	x		x	x	
Lumpy wool					x			x	
Uterine gangrene					x		x		
Wooden tongue				x					

Biosecurity for Bovine Brucellosis

As this is so important, I will keep this very important information on the report for a few months. It seems to me that not many farmers realize the danger of not controlling this disease!

The disease

Bovine brucellosis is a contagious bacterial disease of cattle with a very varied incubation period. The only clinical sign that a heifer or cow has the disease may be an abortion and then she will shed millions of bacteria into the environment. Infected heifers or cows that carry their calf to full term will also shed millions of bacteria into the environment at calving. Weak calves may also be born from infected heifers and cows and they may die soon after birth. The incubation period can vary from a few days to a few months and in extreme cases a few years. Heifer calves of infected cows can become infected before birth while in the uterus, and carry the disease without showing any symptoms or reacting positively on blood tests (latent carriers) until they are 4-5 months pregnant when they may abort or seroconvert (become positive on blood tests).

Vaccination

It is very important to vaccinate heifer calves at the age of 4-6 months with *Brucella abortus* Strain 19 vaccine (and mark the heifer calf as vaccinated) as calves should not be vaccinated a second time with Strain 19 as it interferes with the blood tests. Re-vaccination can occur with RB51 without interfering with the blood tests giving false positive reactions. Both vaccines will not give a complete immunity so if a heifer or cow comes into contact with large numbers of bacteria the infective dose

may overpower the immune system and the animal will become infected. Both Strain 19 and RB51 are live vaccines so should be handled with care.

Zoonosis

Brucella abortus is a zoonotic disease i.e. it can infect humans and cause a chronic debilitating disease known as "Undulant Fever". People can become infected accidently when working with vaccine – either by injecting themselves (does not have to be a full dose of vaccine to cause disease) or spraying vaccine onto their mucous membranes eg. conjunctiva of the eyes if the calf moves during vaccination; or by helping infected heifers/cows with calving; by removing afterbirths that have not been expelled from infected cows; by handling the weak calf at birth as the amniotic fluids that cover the calf contain millions of bacteria; and drinking raw milk from infected cows.

Blood tests

Another important fact is that not all infected animals are positive on blood tests which means that although infected, they are "negative". It is because of this that brucellosis is considered a herd disease as one cannot pinpoint all the infected cattle, and the herd is therefore quarantined.

Biosecurity plan

The above knowledge is essential when drawing up a biosecurity plan for your herd. Each plan should be drawn up in consultation with your vet as it must be specific for an individual farm. This biosecurity plan should be adapted as circumstances change.

<u>Tests</u>

First establish if your herd is free of, or infected with bovine brucellosis. Blood samples should be taken from all heifers and cows over the age of 18 months and from bulls. Testing of younger animals can lead to false positive blood results if the animals were vaccinated with Strain 19. Latent carriers will start seroconverting (becoming positive on blood tests) once the heifer has passed 4-5 months of pregnancy. The initial test should be followed up by a second test 3-5 months later, then herd tests every 1 to 2 years. If the herd is infected, the state will take over the control and eradication of the disease.

<u>Vaccination procedure</u>

Vaccinate all heifer calves once with Strain 19 at 4 – 6 months of age and mark the calf as vaccinated. Do not give a second vaccination with Strain 19 as this will interfere with future blood tests. RB51 will not interfere with blood tests and can be used as a booster when the heifer is about a year old to improve individual and herd immunity against brucellosis. Any vaccinations with RB 51 after this age should be done in consultation with your vet.

Use only specific syringes and needles for vaccination against brucellosis. If not cleaned thoroughly these syringes and needles can cause small blood reactions with Strain 19. Ensure that when you are vaccinating against a disease that you have not taken Strain 19 by mistake. Read the instructions on the packaging as Strain 19 vaccine has been changed from a 5ml to a 2ml vaccinate. If you give 5ml of the new 2ml Strain 19 vaccine you will be over vaccinating your calf.

Buying in cattle

Keep your herd as closed as possible and only buy in cattle from another negative herd of the same level of biosecurity or higher than your herd. Ask the seller for a herd history of brucellosis and ask for copies of the regular negative and recent herd tests. Ask whether the herd is closed or not and if the heifer calves were correctly vaccinated with Strain 19 or RB51. If none of the above is in place the risk of buying in any infection is high.

When you buy in cattle keep them isolated from your herd and have them tested for diseases (including brucellosis), and use the opportunity to vaccinate them for other diseases. Treat for internal and external parasites. Once you have done this and are sure that they are free of infectious diseases, then introduce them into your herd.

Be very wary of buying in heifer calves from herds of unknown health status as this is considered an extremely high risk practice.

Fences

Keep your fences in good condition to prevent unwanted cattle from straying onto your farm as you may not know their health status. If your neighbour has a brucella infected herd, keep your cattle from boundary fences if at all possible. If not, do not allow them to graze in camps adjacent to camps where his cows are grazing as brucellosis is a contagious disease and infected uterine material and afterbirths from his infected cows could contaminate your pastures. Ensure that any run off from his farm does not contaminate your pastures or your water (streams, dams etc.) as the brucella bacteria can survive in damp conditions for a few months and infect your cattle.

Abortions

Any abortion occurring on the farm should be presented to a laboratory if at all possible to try and identify the cause of the abortion and exclude brucellosis.

Dogs and wild carnivores can play a role in the spread of infection by dragging infected fetuses or afterbirths between camps or farms.

Infected herds:

If you have an infected herd, biosecurity measures will have to be greatly improved. Immediately inform your neighbours so that they can improve their level of biosecurity. The herd will be tested at regular intervals and once there are no more positive animals on the farm will go through a series of negative tests to declare the herd free of the disease. This is to take the breeding cycle and incubation period into consideration. If at any stage a positive heifer/cow is diagnosed, the whole process will start again.

Remember not all infected cows are initially positive on blood tests so each negative cow should be treated with suspicion as she is potentially infected.

Calving

Cows should calve in isolation and the calving stalls disinfected after each calving.

As infected cows can calve normally and still excrete millions of bactera, remove the afterbirth immediately and destroy it and disinfect the area on the pasture where a cow has calved.

Cows should be kept in smaller groups so if a cow aborts she will infect fewer cows.

Isolation of positive cows

Positive cows should be isolated from negative cows immediately and not allowed to calve down on the farm as this increases the risk to spread the disease dramatically.

Heifer calves from infected cows should be marked as such and sent for slaughter at an abattoir when they have reached slaughter weight. The risk of them being latent carriers of the disease is too high to leave them in the herd. The risk of a "two year breakdown" when they calve and infect the farm once more is too great.

Colostrum of positive cows

Colostrum from positive cows should not be collected and used for calves from negative cows. The colostrum contains millions of bacteria that can infect the calf who will become a latent carrier and become a source of infection when she aborts or calves. All milk should be pasterurised/boiled before consumption to prevent infection of humans.

RB 51

The herd immunity can be improved by adult vaccination with RB51 to reduce spreading of the disease and reduce the number of bacteria shed during calving. This vaccination must only be done in consultation with your veterinarian.

The blood tests for bovine brucellosis done at state laboratories are done for free whether the herd is infected or free of the disease.

The above are guidelines for a biosecurity programme to exclude or eradicate bovine brucellosis from a herd and does not consider other diseases. A comprehensive programme on biosecurity should be discussed with your vet.

Written by Dr. Sewellyn Davey, State Veterinarian, Western Cape (SewellynD@elsenburg.com)

Update your vaccination programme and order vaccines and booster doses in advance!

Viral diseases

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

Viral diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
BMC (snotsiekte)	x	x	x		x	x	x		x
Rabies					x		x		
BVD	x				x	x		x	

IBR	x	x		x	x	x		x	
BRSV						x			
PI3									
Enzootic bovine leucosis (EBL)	x					x	x	x	
Jaagsiekte						x			
Orf	x	x		x	x	x	x	x	
Warts	x	x		x	x	x	x	x	
Sheep leucosis									

The incidence of snotsiekte is increasing due to game farming. As there is no vaccine at present against this disease, this disease has to be managed. Discuss measures with your veterinarian.

The same can be said for EBL –this debilitating disease is costing the dairy farmer huge amounts of money.

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

Discuss vaccination programmes with your veterinarian.

Toxicities

The following toxicities were reported by practices in the provinces:

Toxicities	MP	G	L	NW	FS	KZN	EC	WC	NC
Cardiac glycoside					x	x		x	
***Cestrum* (ink berry)**		x					x		
***Cynanchum* (bobbejaantou)**									
Facial eczema									
Lantana						x	x		
Nitrate									
Prussic acid									
Senecio						x	x		
Tulip	x	x			x	x	x	x	
Geeldikkop (duwweltjies)								x	
Vermeersiekte									
Mycotoxicosis									
Diplodiosis					x	x	x	x	
Harpuisbos								x	
Syringa berries		x							
Kraalbos									
Crotolaria									
Radish									
Bracken fern									
Water contamination					x				
Urea	x			x	x	x	x		
Snake bite					x				

Blue green algae						**x**			**x**
Copper									
Selenium									
Zinc								**x**	
Paraquat									
Phosamine									

With the present dry conditions in many parts of the country the only green vegetation is tulip leaves. Young animals graze the leaves and are poisoned and many deaths were reported. The antidote is activated charcoal at 2 gram per kg body weight.

http://landbou.com/kundiges/vra-vir-faffa/gif-en-geaktiveerde-houtskool/

Look for ink berry plants which are deadly if eaten by animals. This plant is spread by birds eating the fruits.

Nutritional deficiencies

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

Deficiencies	MP	G	L	NW	FS	KZN	EC	WC	NC
Energy	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	
Protein	**x**	**x**		**x**	**x**	**x**	**x**	**x**	**x**
Phosphate	**x**			**x**	**x**	**x**			
Calcium	**x**			**x**	**x**	**x**	**x**	**x**	

Due to winter and drought conditions the energy and protein values of grazing are decreasing. Additional licks and supplementation are therefore needed.

Micro-nutritional deficiencies

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

Deficiencies	MP	G	L	NW	FS	KZN	EC	WC	NC
Iodine						**x**			
Copper						**x**		**x**	
Zinc						**x**			
Selenium	**x**			**x**	**x**	**x**			
Magnesium	**x**						**x**	**x**	
Manganese									
Vitamin A	**x**			**x**	**x**	**x**			
Vitamin B		**x**							

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.

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	x	x	x	x	x	x	x	x	x
Stillbirths					x	x			
Abscesses	x	x	x	x	x	x	x	x	x
Bladder stones	x				x			x	
	mp	g	l	nw	fs	kz	ec	wc	nc
Blindness						x		x	
Bloat				x	x	x		x	
Blood gut (sheep)					x			x	
Blue udder	x	x		x	x	x	x	x	
Diarrhoea	x	x		x	x	x	x	x	
Epididymitis	x				x				
Eye cancer	x				x	x		x	
Eye infections	x	x		x	x	x	x	x	
Joint ill		x		x			x	x	
Lameness/foot problems	x	x		x	x	x	x	x	
Lung infection	x	x	x	x	x	x	x	x	x
Mastitis	x	x		x	x	x	x	x	
Navel ill				x	x	x		x	
Red gut (sheep)					x			x	
Trauma	x	x			x	x			
Downer	x			x	x	x		x	

Other conditions: cystitis and rectal prolapse

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

Metabolic diseases

The following diseases were reported by practices in the provinces:

Metabolic diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Acidosis	x	x		x	x	x	x	x	
Displaced abomasum	x				x	x	x	x	
Ketosis	x	x		x	x	x	x	x	
Milk fever	x			x	x	x	x	x	

Due to a lack of energy many ewes with twins contract domsiekte.

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)	x	x	x	x	x	x	x	x	x
Endometritis	x			x	x	x		x	
Metritis	x	x		x	x	x	x	x	
Poor conception	x			x	x	x	x	x	
Retained afterbirth	x			x	x	x	x	x	
Sheath prolapse	x	x				x			
Uterine prolapse	x	x		x	x	x	x	x	
Vaginal prolapse	x	x		x	x	x		x	x

Fertility of animals is one of the most important factors determining the success of farming. Discuss all issues with your veterinarian.

Environmental conditions

	MP	G	L	NW	FS	KZN	EC	WC	NC
Exposure to cold	x				x	x	x	x	
Lightning	x								

Other conditions: drug residues (KZN); Predators (MP,FS, KZ); Theft and sabotage (MP,FS,KZN).

Comment:

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 bi-annually 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

Krugersdorp (Dr. Jeffery), Mokopane, Underberg, Malmesbury (Dr. Markus Fourie), Plettenberg Bay) and Vredenburg

Reports were also received from practices regarding ostriches, horses and game. These reports as well as the feedlot and laboratory reports are to be seen below the Disease distribution report as reported by veterinarians.

Ostriches

Western Cape

Oudtshoorn – Ostrimed

Chicken season – lots of chickens with diarrhoea

Equines

Mpumalanga

Capecross- Volksrust
Red-legged ticks (2)

Ermelo –Môregloed veterinêre spreekkamer
Opthalmia (1)

KwaZulu-Natal

Port Alfred Veterinary clinic
Dundee – Mpati Veterinary clinic
Impaction/sand colic (1)

Eastern Cape

Port Alfred Veterinary clinic
Equine biliary cases near Kleinemonde

Northern Cape

Kimberley, Kimberley Dierekliniek
Equine herpesvirus 4 and 1 – Thoroughbreds (2) clinical signs varying from poor performance to nasal discharges to severe posterior paresis/paralysis and urinary incontinence - one out of 6 horses euthanased to date.

Secondary photosensitivity: 1 case

Game

Mpumalanga

Ermelo –Môregloed veterinêre spreekkamer
Capture myopathy (3) cold exposure

Limpopo

Pietersburg Veterinary Clinic
Internal roundworms (3)
Capture myopathy (1)
Trauma (1)

North West

Bloemhof Dierekliniek
Blood gut in springbok (3) – 30 died, arrived from the Kalahari and were immediately given game cubes and ground nut hay.

Blackquarter - Buffalo cow died in boma

Free State

Bloemfontein, FS Detea Wildlife Veterinary Services
Brucellosis (1) Sandveld Nature reserve - Positive RBT, SAT and CFT - low titre - will culture in Sept/Oct - First case on reserve

Abscesses (1) on point of hip due to injury

Trauma (2) Lip of eland torn, springbok leg injury, 2 wounded rhino

Bultfontein – Greylingsrustdierespreekkamer
Capture myopathy (2)

KwaZulu-Natal

Memel Veterinary Clinic
Protein deficiency – Impala (1)

Energy deficiency – Impala (1)

Cold exposure – Impala (1)

Pongola animal clinic
Internal roundworms (2)

Protein deficiency (3) – game starting to die on a daily basis on numerous game farms

Energy deficiency (3) – game starting to die on a daily basis on numerous game farms

Vitamin A deficiency (1)

Eastern Cape

Port Alfred Veterinary clinic
Numerous buffalo with diarrhoea and weight loss after heavy rains and grazing shortage at Woody cape near Alexandria. Few wireworm ova and coccidial oocysts present. *E. coli* cultured. Severe cases responded to antibiotic and anti-parasitic therapy. Mild cases just needed some dry hay.

Graaff-Reinet – Camdeboo Veterinary Clinic
Intestinal roundworms – Sable (1)

Pulpy kidney – Sable (1)

Pneumonia - Roan (1)

Western Cape

Beaufort West State vet

Owner lost 6 tsessebe due to unability to adapt to Karoo conditions. On histopathology hypoproteinemia with myonecrosis and hepatocellular atrophy were seen.

Pneumonia – sable (1) died

Stellenbosch, Pathcare lab

Fusibacterium necrophorum- nyala, springbok

Myonecrosis (3) due to transport

Cold exposure (3) – various animals in poor condition transported during winter

Northern Cape

Kimberley, Kimberley Dierekliniek

Selenium deficiency (2) Low selenium concentrations in livers of tsessebe, poor nutrition and stress.

Abscess (1) Massive abscess (*Trueperella pyogenes*) in free ranging roan bull

Lung infection (2) Roan calves – failed to isolate a pathogen. Pneumonia in a sprinkbok – non specific bacterial isolation

Trauma – Giraffe, fatal neck lesion; rhino – serious wounnds as a result of fighting; gemsbok – hoof and leg trauma secondary to offloading; gemsbok – fracture distal femur; buffalo – dislocated fetlock joint; hartebeest – radial paralysis; roan – deep skin and muscle wounds due to fighting; buffalo cow – skin an vaginal lacerations as a result of a mob attack; tigers – deep wounds: skin, muscle, interdigital

Endometritis – Roan cow (1) cycles but fail to conceive, saccular dilatation of the uterus.

Kimberley, Trudie Prinsloo

Anthrax – Sable (1)

Snotsiekte - Buffalo (1)

Also see laboratory reports

Monthly report on Livestock and Wildlife isolations for August 2015 from IDEXX Laboratories supplied by dr. Marijke Henton (marijke-henton@idexxsa.net)

An unusual isolate this month was *Salmonella* Choleraesuis causing well over 100 deaths in pigs of all ages on a well-run, modern piggery. *Salmonella* Choleraesuis is a pig specific *Salmonella,* in the same way that *S.* Gallinarum is poultry specific, and *S.* Dublin is cattle specific. Species specific *Salmonella* strains are not easy to detect, as they often show aberrant characteristics in the laboratory, making them difficult to identify. As *S.* Choleraesuis is specific to pigs, the source of infection is likely to be another pig, or someone who was in contact with an infected pig, and not the environment, feed or

rodents, as is the case with the other *Salmonella* strains. *Salmonella* Typhimurium, which is not host specific, was isolated from calves with diarrhoea.

Other infections from pigs were *Haemophilus parasuis* (Glasser's Disease), *Staphylococcus aureus* and *Trueperella pyogenes* from purulent lesions, *E. coli* from two cases of enteritis, and *Actinobacillus indolicus,* which does not cause disease, but can be confused with pathogens causing pneumonia.

Pneumonia in feedlot cattle yielded *Mannheimia haemolytica* and *Pasteurella multocida* (3 cases each), *Histophilus somni*, and *Mannheimia* types 9 and 10. There were also two cases due to *Mycoplasma.*

Purulent conditions in goats, cattle, sheep, and as mentioned above, pigs, yielded 8 cases of *T. pyogenes* in total. Only one abscess in a sheep yielded *Corynebacterium pseudotuberculosis. Clostridium novyi* was identified using the FA test from the muscle of a sheep, and *C. perfringens* with enteritis in a bovine and a sheep.

Brucella abortus was isolated from a bovine foetus.

There was another case of the vaccine strain of anthrax causing deaths in goats, after they had been injected with a drug to control helminths.

A buffalo foetus also yielded *B. abortus. Trueperella pyogenes* was isolated from a black impala abscess, together with an anaerobe (*Porphyromonas),* and also from the lung of a wildebeest. *Streptococcus agalactiae* was isolated from an abscess in an elephant. This infection is common in elephants, and is usually very difficult to cure in elephants. A sable with mastitis yielded *Staphylococcus pseudointermedius. Mannheimia* type 8C was isolated from the lung of a Nyala. A cheetah with ringworm yielded *Microsporum canis.*

Feedlot report received from Dr. Shaun Morris and Dr. Eben du Preez (edupreez1@telkomsa.net)

Sheep feedlots

Great losses occurred due to *Salmonella* Typhimurium infection. Infected sheep with diarrhoea arrived at the feedlot and started dying within days. Severe damage occurs in the intestine, especially in the last part of the small intestine and large intestine. Sheep surviving after treatment are not well, eat very little and hardly pick up weight. It is suspected that infection takes place when carrier animals transmit the disease to other animals when they are kraaled. The lambs are more susceptable and together with stress caused by transportation, clinical signs are seen soon after arrival at the feedlot.
Eye infections often occur. Vitamin A deficiency is mostly the contributing factor this time of the year where poor nutrition for sheep is availble.
Clostridium septicum infections (gas gangrene)occurred where shearing wounds were infected.
Prolapses of the rectum occurred in fat sheep where dusty conditions induced coughing of sheep.
A few cases of urolithiasis (stones in the urether)were seen.
Pulpy kidney, blood gut and acidosis were reported.

Cattle feedlots

Many cases of pneumonia occurred causing many deaths. Dust and fluctuating environmental temperatures together with an increase of cattle in feedlots contributed to the increase of lung problems. IBR (infectious bovine rhinotracheitis) infections were a main contributor to pneumonia outbreaks. Deaths due to pneumonia were seen in calves in breeding herds and during backgrounding.
Acidosis, red gut, bloat, damage to the rumen wall and abscesses were due to nutritional disturbances.
Permanent infected BVD carriers were diagnosed in chronic diseased animals.
Lameness due to injuries and foot rot were seen.
Lice infestations were common.
Blue tick numbers increased and cases of red water and anaplasmosis occurred.
Bont-legged ticks were numerous.
Ringworm and warts were numerous. Warts were even seen in the rumen and reticulum of a few animals.
Abscesses were seen.

Monthly Feedlot report for August 2015 from Dr. Andy Hentzen

(andyvet@mweb.co.za)

Conditions	Species
Intestinal roundworms	O 2
Tapeworms	B 3
Liver fluke	B 3
Conical fluke	B 3
Blue ticks	B 3
Biting lice	B 3
Sucking lice	B 3
African red water	B 1
Lumpy skin disease	B 2
Blackleg	B 2
Red gut	B 3
Ringworm	B 3
BVD	B 2
IBR	B 1
Warts	B 3
Protein deficiency	B 3
Energy deficiency	B 3
Vitamin A deficiency	B 2
Micro-mineral deficiencies	B 3
Abortion	B 2
Lameness	B 3
Lung	B 3
Diarrhoea	B 3
Eye problems	B 3
Abscesses	B,C 2

B – bovine; O – ovine; C – caprine; P – pigs; G – game

1 = one case; 2 = 2 to 9 cases; 3 = more than 10 cases

Monthly Laboratory report report for August 2015 from Dr. Lucy Lange, Pathcare Vetlab, Cape Town. (lange@pathcare.co.za)

Disease condition	Specie	District	Comment
Pneumonia/*Pasteurella*	Cattle	Namibia	
Nephrotoxicosis	Cattle	Welkom	
Campylobacter	Cattle	Country wide	Confirmed with PCR
Tritrichomonas	Cattle	Country wide	Confirmed with PCR
Septicaemia	Cattle	Western Cape	
Actinobacillosis	Cattle	Boland	
Hypoproteinemia/Starvation	Cattle	Free State	
Abortion/placentitis	Cattle	Riversdale	
Cold exposure	Cattle	Western Cape	
Necrotic enteritis	Cattle	Western Cape	
Cryptosporidiosis	Cattle	Western Cape	
Blackquarter	Cattle	Free State	
Neonatal abortions (*Babesia*)	Horses	Western Cape	
Sarcoid	Horses	Country wide	
Thyroid carcinoma	Horses	Western Cape	
Gastric ulcus	Horses	Boland	
Parasitic dermatitis	Horses	Eastern Cape	
Necrotic enteritis (no parasites)	Horses	West Coast	
Septicemia	Sheep	Free State	
Pneumonia	Sheep	West Coast and Bethlehem	
Johne's disease	Sheep	Boland and West Coast	
Coxiella abortions	Boergoats	Free State	
Muscle necrosis	Boergoats	Western Cape	
Game: Numerous cases			
Nephrosis (plants?)	Buffalo	Northern Cape	
Capture myopathy	Tsessebe, Sable, Letchwe, Nyala,	Northern Cape	
Pneumonia	Tsessebes, Swartwitpens, Springbok, Nyala, Wildebeest,	Country wide	

	Roan, Gemsbok, lion		
Starvation	**Tsessebe, Sable, Bontebok**	**Northern Cape**	
Worms (numerous species)	**Bontebok**	**Western Cape**	
Necrobacillosis	**Steenbok**	**Northern Cape**	
Kidney amyloidosis	**Cheetah**	**Free State**	
Suspected pulpy kidney	**Roan**	**Western Cape**	
Necrotic gastritis	**Cheetah**	**Western Cape**	
Liver fluke	**Alpaca**	**Western Cape**	

Monthly report for August 2015 from Dr R D Last (BVSc; M.Med.Vet(Path); MRCVS)

Specialist Veterinary Pathologist, Vetdiagnostix - Veterinary Pathology Services

Contributors

- Mr Butch Bosch
- Ms Ntando Magoso
- Mrs Beverley Williams
- Ms Nicole Gengan
- Dr Rick Last

LIVESTOCK DISEASE SURVEILANCE			
LIVESTOCK SPECIES	**DISEASE AGENT**	**NO. CASES**	**LOCATION**
Bovine, Dairy Cow	Anaplasmosis	1	Estcourt, KZN
Bovine, Aborted Fetus	In-utero growth retardation	1	Memel, Free State
Bovine, Yearling Bull	Seneciosis	1	Estcourt, KZN
Bovine, Dairy Cow	Ketosis	1	Dundee, KZN
Bovine Bull	Campylobacter fetus	1	Underberg KZN
Giraffe, Sub-adult	Fibropapilloma (sarcoid)	1	Gravelotte, Limpopo
Bovine Bulls	Trichomonas foetus	6	Underberg KZN
Bovine Bulls	Campylobacter fetus	1	Underberg KZN
Bovine Bulls	Trichomonas foetus	1	Bergville KZN
Bovine Bulls	Campylobacter fetus	2	Bergville KZN
Bovine Bulls	Trichomonas foetus	9	Volksrust Mpumalanga
Kudu, Cow	Toxic hepatosis	1	Grahamstown, E.Cape
Bovine, Calf	Group B Salmonella	1	Humansdorp, E. Cape
Bovine Bulls	Campylobacter fetus	2	Underberg KZN
Bovine Bulls	Trichomonas foetus	1	Bergville KZN
Bovine	MCF Wildebees Associated	1	Mtubatuba KZN
Bovine	MCF Wildebees Associated	1	Oudshoorn

Monthly report for August 2015 from IDEXX laboratories (Onderstepoort) supplied by dr. Liza du Plessis

Disease or condition	Specie and numbers
Intestinal roundworms	O,G 1
Heartwater tick	B,G 1
Red-legged tick	G 1
Scabies	C 1
Heartwater	B 1
Sweating sickness	G 1
Theileriosis	G 2
Chlamydophyila pecorum	C 1
Chlamydophila abortus	C 1
Brucellosis	B 2
E. coli	B 1
Coccidiosis	G 1
Rabies	G 1
Jaagsiekte	O 1
Abortion	B,O,C,G 1

B – bovine; O – ovine; C – caprine; P – pigs; G – game

1 = one case; 2 = 2 to 9 cases; 3 = more than 10 cases

For complete disease report visit:

http://ruvasa.co.za/wp-content/uploads/sites/5/2014/09/8-Monthly-disease-report-August-2015.pdf