KWAZULU-NATAL PROVINCE
AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

Quarterly Report

1 July 2023
To
30 September 2023

GROWING KWAZULU-NATAL TOGETHER

#PHEZ'KOMKHONO

Contents

Introduction

This report covers the animal diseases status of KwaZulu Natal (KZN) province for the 3rd quarter of 2023 (July-September 2023).

Purpose

The purpose of the report is to inform farmers, veterinary communities and general members of the public of the current disease trends in the province. Furthermore, these reports will assist KZN farmers in planning their herd health programmes. Quarterly reports will be released in the second week of April, July, October, and January.

Controlled diseases: Overview

State veterinary services are legally obliged to provide resources and disease management programmes aimed at detecting, preventing, managing, or controlling state-controlled diseases. In addition, private veterinarians and farmers are under legal obligation to report any incidences of suspected state-controlled or notifiable diseases to the nearest state vet office.

This past quarter, the province has witnessed the detection and control of notifiable Avian Influenza (NAI), African Horse Sickness (AHS), bovine brucellosis (BR \ CA) and rabies, as depicted in **Figure 1 and Figure 3 (rabies)**.

Controlled animal disease cases

Please see attached **Annexure 1** for a list of State controlled and notifiable animal diseases in South Africa.

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PROVINCE OF KWAZULU-NATAL

POSITIVE CONTROLLED DISEASES JULY- SEPT 2023

11 CASES

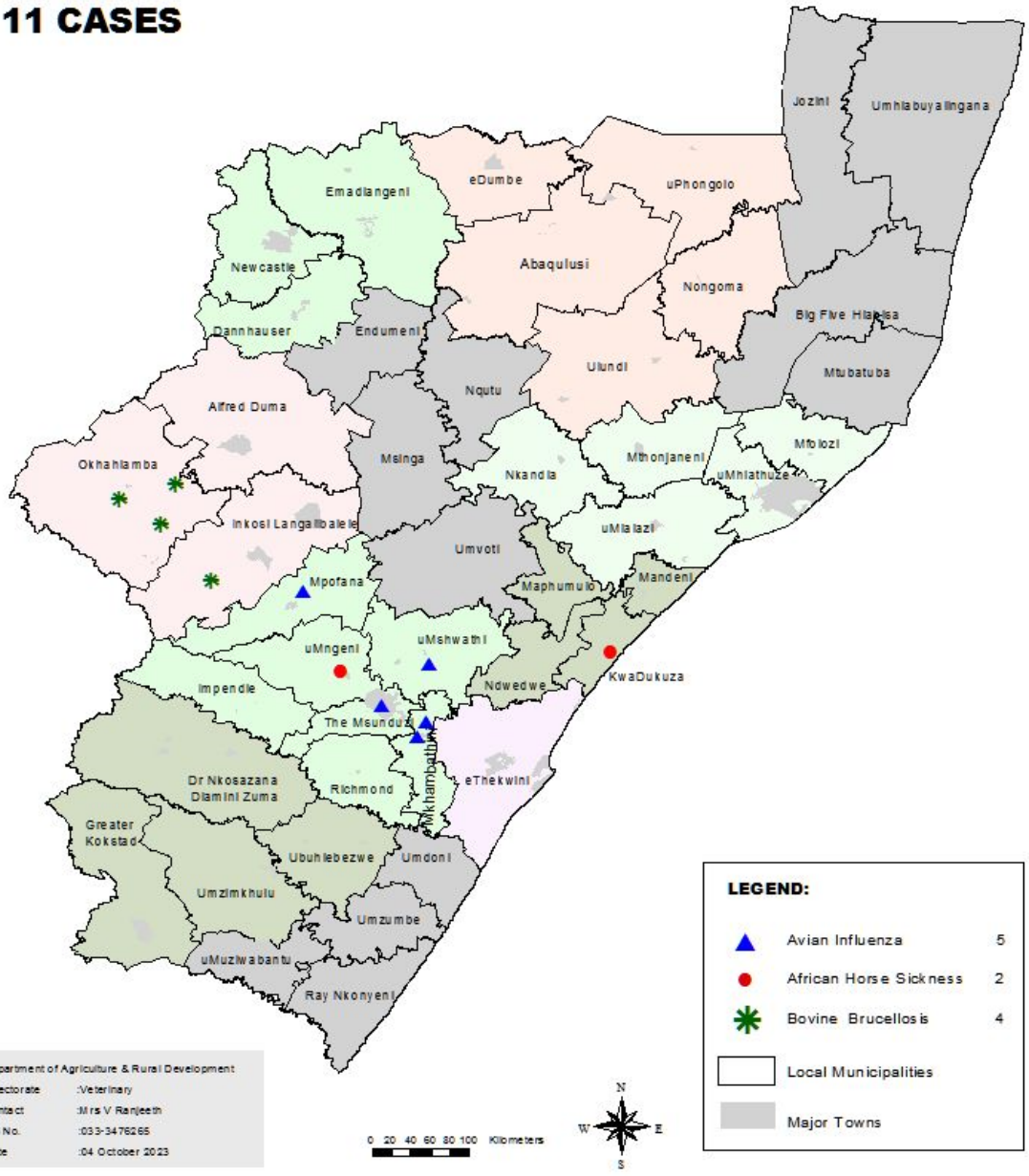

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Figure 1. Map of KZN showing all controlled disease cases between June -September 2023. (Map provided by Epidemiology, KZNDARD).

African horse sickness (AHS)

Two cases of AHS were detected in horses from uMgeni and Kwadukuza local municipalities and were confirmed by PCR testing done at University of Pretoria.
Please see **Figure 1** for location of these cases.

Bovine brucellosis (in all animal species)

Commercial farms in the Midlands and adjacent areas are currently facing an outbreak of bovine brucellosis. *Brucella abortus*, the bacteria that causes bovine brucellosis, was cultured and isolated on four farms in Omkahlamba and Inkosi Langalibalele local municipalities. Please see **Figure 1.**

Foot-and-mouth Disease (FMD)

No new cases of FMD in cattle have been reported in the past quarter. **Figure 2** indicates the location of previously reported positive cases in KwaZulu Natal province.

However, one more game reserve tested positive for FMD. This farm neighbours one of the three positive game reserves.

State veterinary offices are currently busy with a calf surveillance program. This surveillance will assist authorities in resolving FMD outbreaks with an intended objective of closing the outbreak and lifting restrictions, if evidence suggests that animal populations are free from FMD.

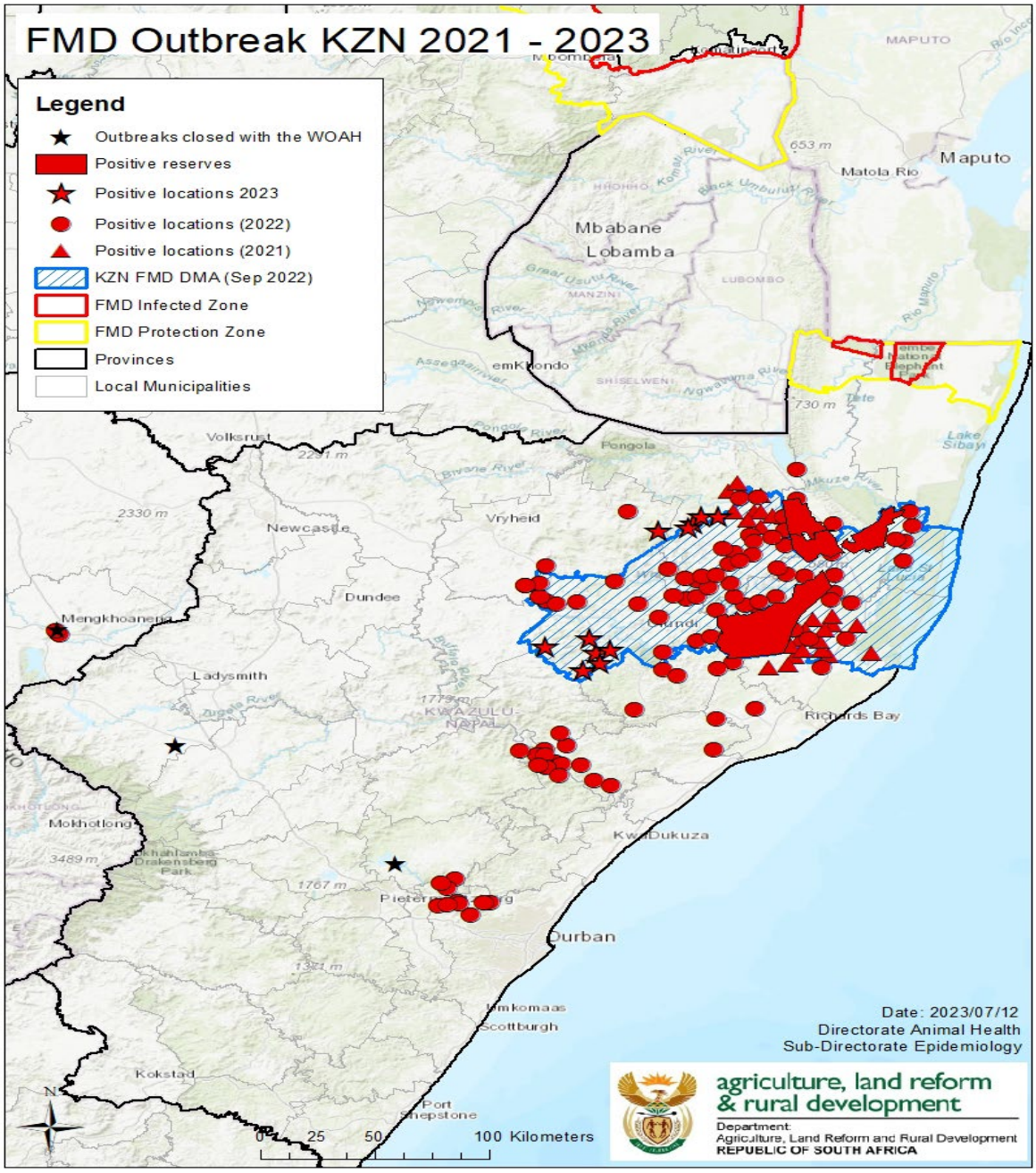


Figure 2. Distribution of FMD positives in KwaZulu Natal between 2021 and 2023.

(*Map provided by DALRRD*).

Notifiable Avian Influenza (NAI)

In the past quarter, *Influenza A*, the virus that causes NAI has been detected in five locations in the uMgungundlovu (State Vet Pietermaritzburg) area i.e., Mkhambathini, Mooi Mpofana, Msunduzi and uMshwathi local municipalities- please refer to **Figure 1**. Highly pathogenic NAI i.e., H5 N1 and H7 sub-types have been detected by molecular techniques (PCR). Farmers are advised to institute strict biosecurity and access control measures on their farms.

Rabies

Rabies cases continue to be detected in various locations throughout the province. eThekwini Metro, Ilembe, King Cetshwayo, uMgungundlovu and Ugu district municipalities continue to experience high numbers of positive cases as depicted in **Figure 3**.

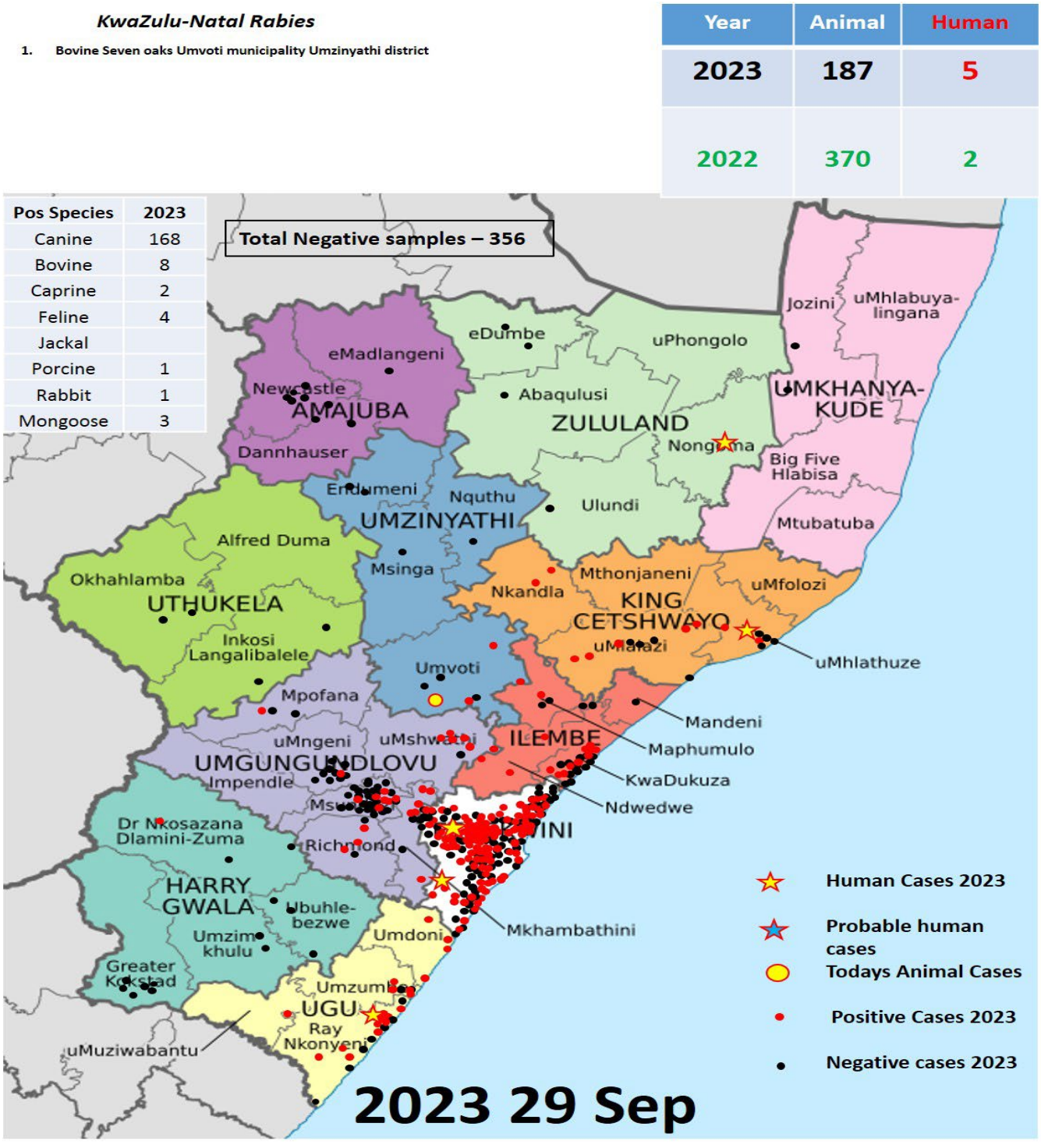


Figure 3. Map of KwaZulu Natal showing positive rabies cases between July - September 2023. (*Map provided by Epidemiology, KZNDARD*).

The percentage of brain samples submitted to Allerton Provincial Veterinary Lab (Allerton PVL) that tested positive to rabies in the last quarter were as follows: 25% (*n=11*) in July, to 33% (*n=17*) in September. There is a slight decline in the proportion of positive brain samples submitted to Allerton lab as demonstrated by the linear trend analysis in **Figure 4**.

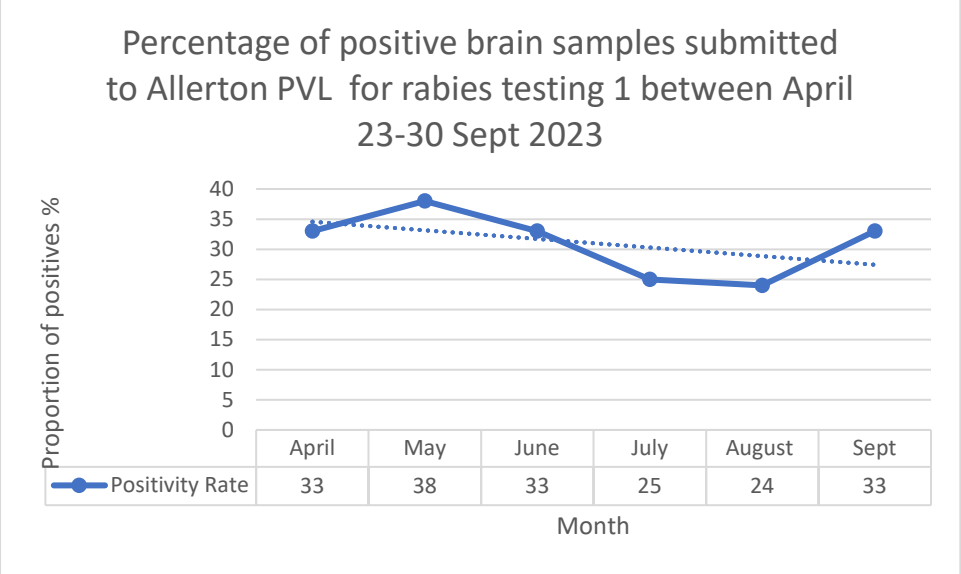


Figure 4. Trend in the proportion of brain samples testing positive for rabies.

Rabies Vaccinations

A total of 161 000 Rabies vaccinations have been administered to dogs and cats in the province over the past three quarters of 2023 (Jan-September 2023).

Rabies in humans

The children of KZN remain the most frequent victims of rabies, and education, remains the biggest failure. None of the human victims between February - September 2023 received any treatment as their bite wounds were considered not severe enough to seek medical intervention and so, no life-saving treatment was administered (**Table 1**). This matter has been addressed at a One-Health meeting involving the Departments of veterinary services, health and education, as well as municipalities and animal welfares. The distribution of human cases is a telling sign as to the extent of rabies in the province.

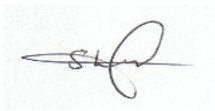
Table 1: Human rabies cases in KZN for 2023.

Year	Month	Age	Sex	Province	District	Source of rabies	Treatment (PEP) defaulted	Category
2023	February	5yrs	Male	KZN	King Cetshwayo	Dog	Yes	Confirmed rabies
2023	April	46yrs	Male	KZN	eThekwini	Dog	Yes	Confirmed rabies
2023	August	5yrs	Male	KZN	Zululand	Dog	yes	Confirmed rabies
2023	August	7yrs	Female	KZN	eThekwini	Dog	Yes	Confirmed rabies
2023	September	17yrs	Male	KZN	Ugu	Dog	Yes	Confirmed rabies

Report produced by Epidemiology Unit, KwaZulu Natal Veterinary Services

Authorized by Dr SL Chisi (Director Veterinary Support Services)

Signature:



Date: 16 October 2023

Annexure 1: CONTROLLED AND NOTIFIABLE DISEASES

UNDER THE ANIMAL DISEASES ACT, ACT 35 OF 1984 AND THE ANIMAL DISEASES REGULATIONS, R.2026 OF 1986:

WHY ARE CERTAIN DISEASES CONTROLLED BY GOVERNMENT?

Certain diseases require government control as they affect individual animal owners and also pose serious risks to other farmers or consumers of animal products. Some diseases may even, through their negative impact on trade, compromise the agricultural sector as a whole. Therefore, the following criteria are proposed for the definition of controlled animal diseases, subject to compliance with at least three of these five risk factors:

• Zoonosis: The disease is transmissible to and able to cause disease in humans.

• Rapid spread: The disease is highly transmissible and has the potential for rapid spread, independent of the actual movement of diseased animals and irrespective of farm boundaries.

• Collective control: The disease is more effectively managed by collective control strategies than by the efforts of an individual animal owner.

• Threat to industry: The disease poses a potential serious threat to the performance of the agricultural industry if the current epidemiological and geographic distribution status in South Africa changes.

• Trade sensitive: The disease can be regarded as a highly trade-sensitive issue and poses a potential serious threat to South Africa's international trading status. According to the provisions of the present legislation, ''any animal disease … which is not indigenous or native to the Republic'' is included automatically in the list of controlled animal diseases.

Controlled Animal Diseases

- Any animal disease or infectious agent that is not known to occur in South Africa
- African horse sickness (AHS)
- African swine fever (ASF)
- Anthrax
- Aujeszky's disease
- Avian influenza
- Bacterial kidney disease (in fish)

- Bovine contagious pleuropneumonia (CBPP)
- Bovine spongiform encephalopathy (BSE)
- Brucellosis (B. abortus, B. melitensis, B. canis, B. suis)
- Classical swine fever (CSF)
- Contagious equine metritis (CEM)
- Contagious hematopoietic necrosis (in fish)
- Contagious pancreatic necrosis (in fish)
- Corridor or Buffalo disease
- Dourine
- East Coast fever
- Equine infectious anaemia (EIA)
- Equine influenza (EI)
- Equine viral arteritis (EVA)
- Foot and mouth disease (FMD)
- Glanders
- Haemorrhagic septicaemia (in fish)
- Johne's disease
- Koi herpes virus disease
- Nagana (Trypanosomiasis)
- Newcastle disease
- Porcine reproductive and respiratory syndrome (PRRS)
- Psittacosis
- Rabies
- Rinderpest
- Salmonella Enteritidis
- Salmonella Gallinarum (Fowl typhoid)
- Salmonella Pullorum (Bacillary white diarrhoea)
- Scrapie
- Sheep scab
- Skin conditions in sheep
- Swine vesicular disease
- Tuberculosis (in all animal species)

Notifiable Animal Diseases

- Bovine malignant catarrhal fever (Snotsiekte)
- Bluetongue
- Lumpy skin disease
- Rift Valley fever
- Strangles
- Swine erysipelas

IF YOU SUSPECT OR HAVE CONFIRMED THAT YOUR ANIMAL(S) OR ANIMAL PATIENT(S) HAS ANY OF THE DISEASES AS LISTED ABOVE - CONTACT YOUR LOCAL STATE VETERINARIAN.

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References:

Animal Diseases Act, Act 35 of 1984
Policy on Animal Disease Control (Veterinary Services)
www.daff.gov.za