

Foot and Mouth Disease outbreak report

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agriculture, land reform
& rural development

Department:
Agriculture, Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Report compiled by:
Directorate: Animal Health

1. Introduction and summary

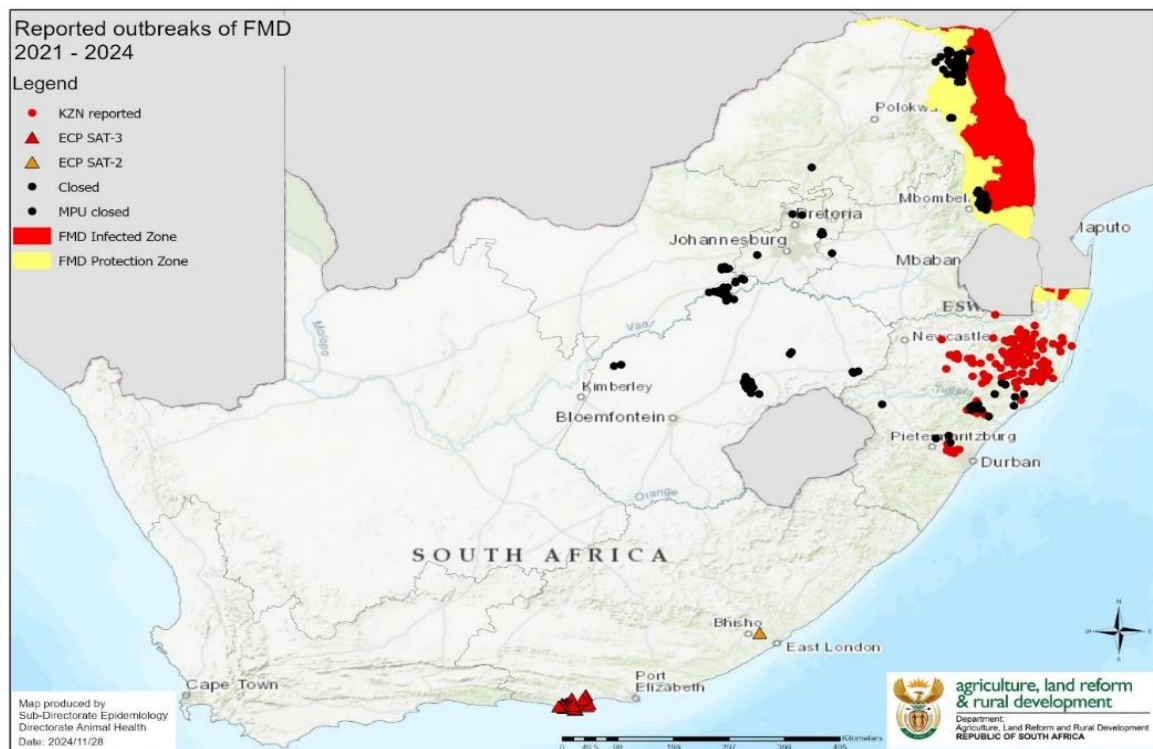
Prior to January 2019, South Africa maintained a Foot and Mouth Disease (FMD)-free zone without vaccination. However, since then, the country has reported ten outbreak events that have affected this FMD-free zone. Currently, three outbreaks remain unresolved in the KwaZulu-Natal and Eastern Cape provinces, while seven have been successfully managed and closed with the World Organisation for Animal Health (WOAH).

Details of the resolved outbreaks, which have been closed with the WOAH, were included in earlier technical update reports and can be provided upon request.

The details of the following outbreak events are included in this report.

- SAT2 FMD outbreak event in KwaZulu Natal Province
- SAT3 FMD outbreak event in the Eastern Cape Province
- SAT2 FMD outbreak event in the Eastern Cape Province

Map 1: Open and closed FMD outbreaks since 2021



2. Provinces with no outbreaks/resolved outbreaks

Table 1: Summary of resolved outbreaks per province since 2021

Province	Nr of outbreaks reported	Date all outbreaks resolved
Free State	41	18 Oct 2024
Gauteng	7	13 Mar 2024
Limpopo	8	29 Aug 2023
Mpumalanga	1	26 Jun 2023
Mpumalanga (protection zone)	20	31 May 2024
North West	18	5 Mar 2024
Northern Cape	No outbreaks reported	Not applicable
Western Cape	No outbreaks reported	Not applicable

3. Provinces with unresolved outbreaks

Table 2: Summary of open outbreaks per province since 2021

Province	Number of open outbreaks	Number of closed outbreaks	Total number of outbreaks	Start date of last reported outbreak
Eastern Cape	38	1	39	05 Sep 2024
KwaZulu Natal	140	17	157	08 Nov 2024
Totals	178	18	196	

3.1 KwaZulu Natal Province:

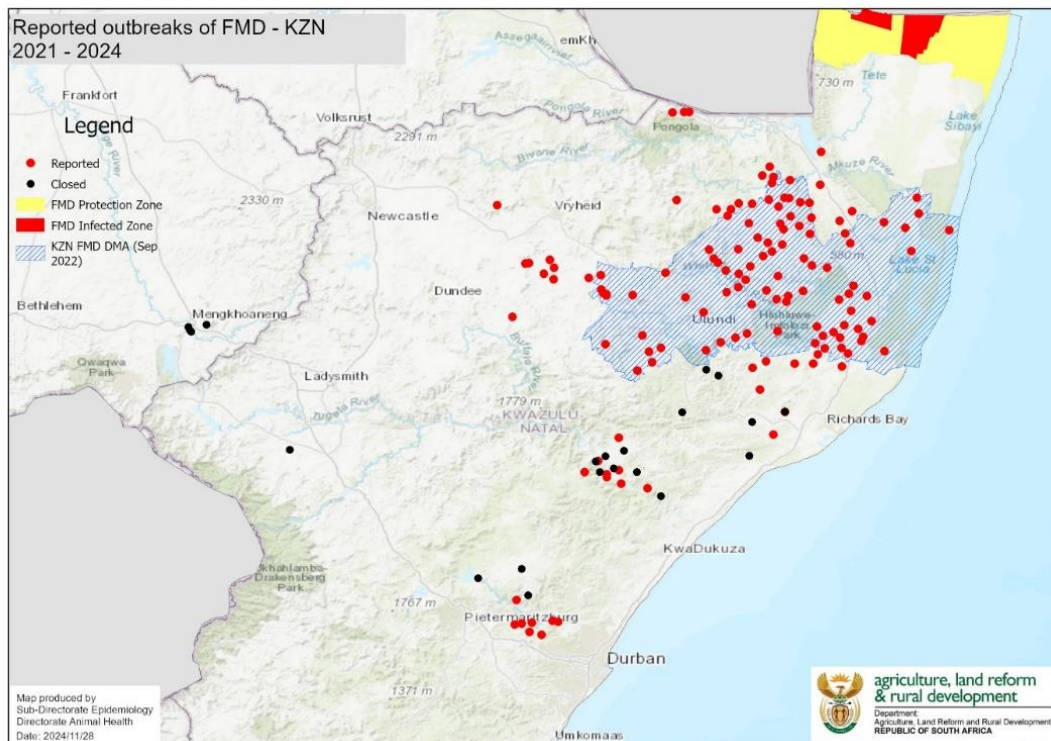
In KwaZulu-Natal, no new cases were detected since December 2024. A total of 157 outbreaks were reported as part of the SAT2 FMD event that began in May 2021. Currently there are still 140 open outbreaks, while 17 outbreaks were resolved and closed.

Most open outbreaks are in communal dip tanks and small-scale farms. There are also five affected game reserves, all located in close proximity to one another. The resolution of this event is unlikely due to the FMD carrier status of the buffalo populations in these affected game reserves.

With regards to the seventeen outbreaks in this KZN event that have been resolved and closed with the WOAAH, two feedlots outside the main outbreak area were depopulated through controlled slaughter and closed with the WOAAH in 2021. Quarantine was also lifted on fifteen diptanks after negative testing and absence of clinical disease, and consequently closed with the WOAAH on 3 April 2024.

Movement control is applied on affected locations. In addition, the Minister of Agriculture, Land Reform and Rural Development declared a Disease Management Area (DMA) in the Government Gazette in 2021 to cover the wider epidemiologically high-risk areas. The DMA was made smaller in October 2022, based on risk assessment and surveillance of the areas involved. The movement of cattle, sheep and goats in the DMA remains under state veterinary permit control but is allowed if deemed low risk and under specific risk mitigation conditions. Infected locations outside the DMA are similarly quarantined until the disease is eradicated. Clinical surveillance is ongoing to ensure early detection of disease, and to determine absence of disease in previously affected diptanks. Vaccination is continuing in diptanks around infected game reserves.

Map 2: Open and closed FMD outbreaks in KwaZulu-Natal Province



3.2 Eastern Cape Province

3.2.1 SAT3 outbreak event in Humansdorp

Clinical signs of FMD were detected on 30 April 2024 on a farm in Humansdorp in the Eastern Cape Province. Samples were submitted to the laboratory at Onderstepoort Veterinary Research and tested positive for FMD SAT3 on serology and PCR. The virus responsible for the outbreak is similar to the one that caused the 2021 Multiple Province outbreak event that has since been closed with the WOAAH in March 2024 (see Table 1 above).

A total of 37 farms were found FMD positive, placed under quarantine and animals were vaccinated. In addition, a further 36 farms were pre-emptively vaccinated and also placed under quarantine. Movement controls have been implemented on all farms under quarantine.

In a further effort to prevent spreading of the disease out of the affected area, the Department of Agriculture declared a Disease Management Area (DMA) on 26 July 2024 to prevent outward spread of the outbreaks and to decrease the viral load and infection pressure of the area. The DMA measures include the control of movements of animals out of, into, through and within the affected area. The main aim of the DMA is to prevent outward spread of the outbreaks, to areas not previously affected. In addition, the DMA aims to decrease further spread of the disease within the affected area, as this will decrease the viral load and infection pressure of the area.

In view of the last outbreak in this event having been detected in September 2024, intensified surveillance within and around the DMA is underway to confirm that virus circulation has been brought under control.

Controlled slaughter of cattle is continuing from farms under quarantine in the Eastern Cape outbreaks. Risk materials are processed or disposed of and only known safe products are released into the local market. No meat from affected animals may enter the export market.

3.2.2 SAT2 outbreak event in East London

A serologically positive location was identified in the East London area of the Eastern Cape Province. Surveillance of the surrounding farms have identified a second positive location, but further testing on this farm and adjacent farms have not yielded any positive results and this farm was resolved with the WOAAH. Cattle on the remaining affected property were

vaccinated and remain under quarantine, while the premises is being depopulated through controlled slaughter. The virus on the index farm was identified as a SAT2, similar to the SAT2 virus that caused the 2021 KZN SAT2 event. In parallel, a SAT 3 virus was also identified in this location, which is the same as virus that caused the outbreaks in Humansdorp, described above.

Map 3: Outbreaks in Eastern Cape Province



4 Resolution of outbreaks

Outbreaks on individual premises are resolved and closed with the WOAHP in one of the following manners:

4.1 Depopulation

Depopulation can be achieved either through controlled slaughter, or by removing animals with prior permission of the Director Animal Health to another approved property, such as another property also under quarantine for FMD. Once the affected premises is no longer populated by any FMD susceptible livestock, cleaning and disinfection for the purpose of lifting quarantine can commence. If the premises can be effectively cleaned and disinfected, then application for lifting of quarantine can be made 28 days after cleaning and disinfection. In the

case of extensive kraals/camps which cannot be effectively disinfected, such kraals/camps will be regarded as disinfected if there have been no FMD susceptible species in the kraal/camp for at least 42 days.

4.2 Post-12 months testing

Premises like breeding farms and diptank areas, that are not depopulated following an outbreak of FMD, remain under quarantine and are subjected to rigorous laboratory testing of the remaining cloven-hoofed livestock to confirm cessation of virus circulation more than 12 months after the outbreak. Adult animals present during the outbreak are likely to test serologically positive due to infection and/or vaccination and the sensitivity of agent identification testing is not considered sufficient. Thus, serological surveillance is conducted more than 12 months after an outbreak, with sampling of young animals that were born after presumed cessation of virus circulation and/or vaccination and that, at the time of sampling, are already more than 6 months old to avoid detection of maternal antibodies. If the serological test results duly confirm the absence of FMD virus circulation, quarantine is lifted, but the adult sero-positive animals remain subject to life-long traceability requirements based on individual animal identification.

5. Confirmation of diagnosis

Confirmation of disease is done using a combination of the Solid Phase Competition ELISA (SPCE), Non-Structural Protein (NSP) ELISA, and Polymerase Chain Reaction (PCR). All diagnostic tests are performed at the ARC Onderstepoort Veterinary Research Transboundary Animal Diseases laboratory (OVR-TAD).

6. Epidemiological investigation

A SAT 3 virus originated in early 2022 in Limpopo Province, causing an event in that province and then spread to North West Province, and from there to Free State, Gauteng and Mpumalanga Provinces as the 2022 multi-province SAT3 FMD event. This same virus has been identified in the outbreak event in the East London and Humansdorp areas in the Eastern Cape Province, which started in May 2024.

In KwaZulu Natal Province, epidemiological investigations to date have not revealed a source for the 2021 SAT2 FMD event. This same virus has been identified in the outbreak event in East London in the Eastern Cape Province, which started in May 2024.

7. FMD Control in South Africa

Although the FMD free zone without vaccination status was lost in 2019, the control measures for FMD remain in place as stipulated in the Veterinary Procedural Notice for the Control of FMD in South Africa. The map hereunder illustrates the FMD control zones that remain in place and references in this report to free zone, protection zone and infected zone must be regarded in this light. For the purposes of trade, this means that export is permanently prohibited from the FMD infected zone and the FMD protection zone, while negotiations with various trade partners are ongoing to sustain trade from areas and premises that are considered free of FMD in the remainder of the country outside the DMAs.

Routine vaccination in the FMD protection zones in Limpopo Province and Mpumalanga Province is continuing. The vaccine being used is procured from the Botswana Vaccine Institute and encompasses all three SAT types. Only government officials are allowed to vaccinate animals as per the outbreak control plans.

Map 4: FMD Control Zones

