Foot and Mouth Disease outbreak report

30 April 2025

agriculture

Department:
Agriculture
REPUBLIC OF SOUTH AFRICA

Report compiled by:
Directorate: Animal Health

1. Introduction and summary

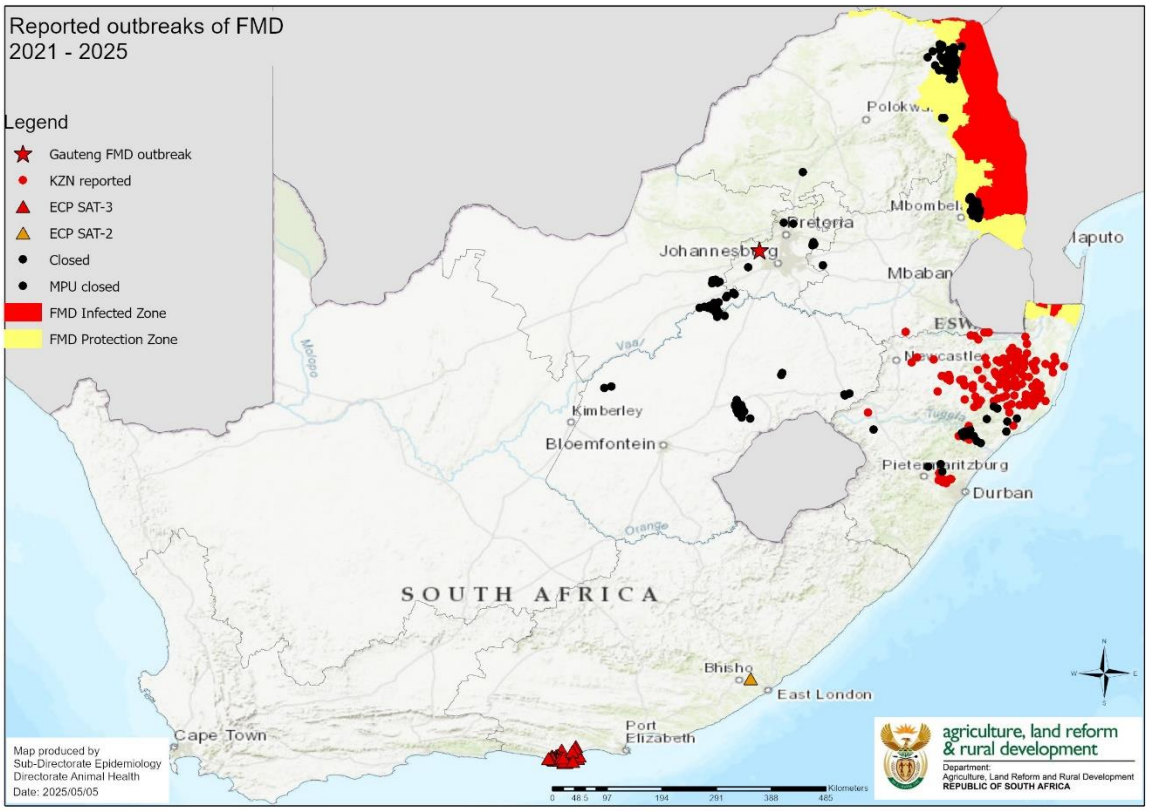
Prior to January 2019, South Africa maintained a Foot and Mouth Disease (FMD)-free zone without vaccination. However, since then, the country has reported eleven outbreak events that have affected this FMD-free zone. Currently, four outbreak events remain unresolved in the KwaZulu-Natal and Eastern Cape 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 previous 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, Mpumalanga and Gauteng Provinces
- SAT1 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

Province	Nr of outbreaks reported	Date all outbreaks resolved
Free State	41	18 Oct 2024
Limpopo	8	29 Aug 2023
Mpumalanga (protection zone)	1	Not applicable
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

Province	Number of open outbreaks	Number of closed outbreaks	Total number of outbreaks	Start date of last reported outbreak
Eastern Cape	39	1	40	01 September 2024
Gauteng	1	0	1	30 April 2025
KwaZulu Natal	149	18	167	01 March 2025
Mpumalanga	1	1	2	13 February 2025
Totals	**189**	**20**	**209**	

3.1 KwaZulu Natal Province: SAT2 and SAT1outbreak events

In April 2025, three new outbreaks were reported in KwaZulu-Natal, bringing the total number of outbreaks in the province to 167. Currently, 149 outbreaks in this event remain open, while 18 have been resolved and officially closed with the WOAH.

In 2021, the Minister of Agriculture, Land Reform, and Rural Development declared a Disease Management Area (DMA) in the Government Gazette to encompass epidemiologically high-risk areas. The DMA limits had been amended several times since in order to improve the efficacy of disease control efforts while protecting local agricultural production. Based on ongoing risk assessments and monitoring of the affected areas, the boundaries of the DMA

were recently again updated in Government Gazette Notice No. 52318 dated 17 March 2025, after the outbreaks had unfortunately spread to areas not previously affected.

A few infected locations have been detected outside of the newly declared DMA. Infected locations outside the DMA are similarly quarantined until the disease is eradicated.

Serological and clinical surveillance are ongoing in all affected areas to ensure early detection of disease, and to determine absence of disease in previously affected diptanks. Vaccination is continuing in diptanks, feedlots and around infected game reserves.

3.1.1 SAT2 outbreak event in KwaZulu Natal

Positive cases of Foot and Mouth Disease (FMD) were detected and reported in the Newcastle and Bergville areas of KwaZulu Natal Province (KZN). During the traceback epidemiological investigation, the cases could be linked to an auction that took place in February 2025 in the Utrecht area in KZN Province.

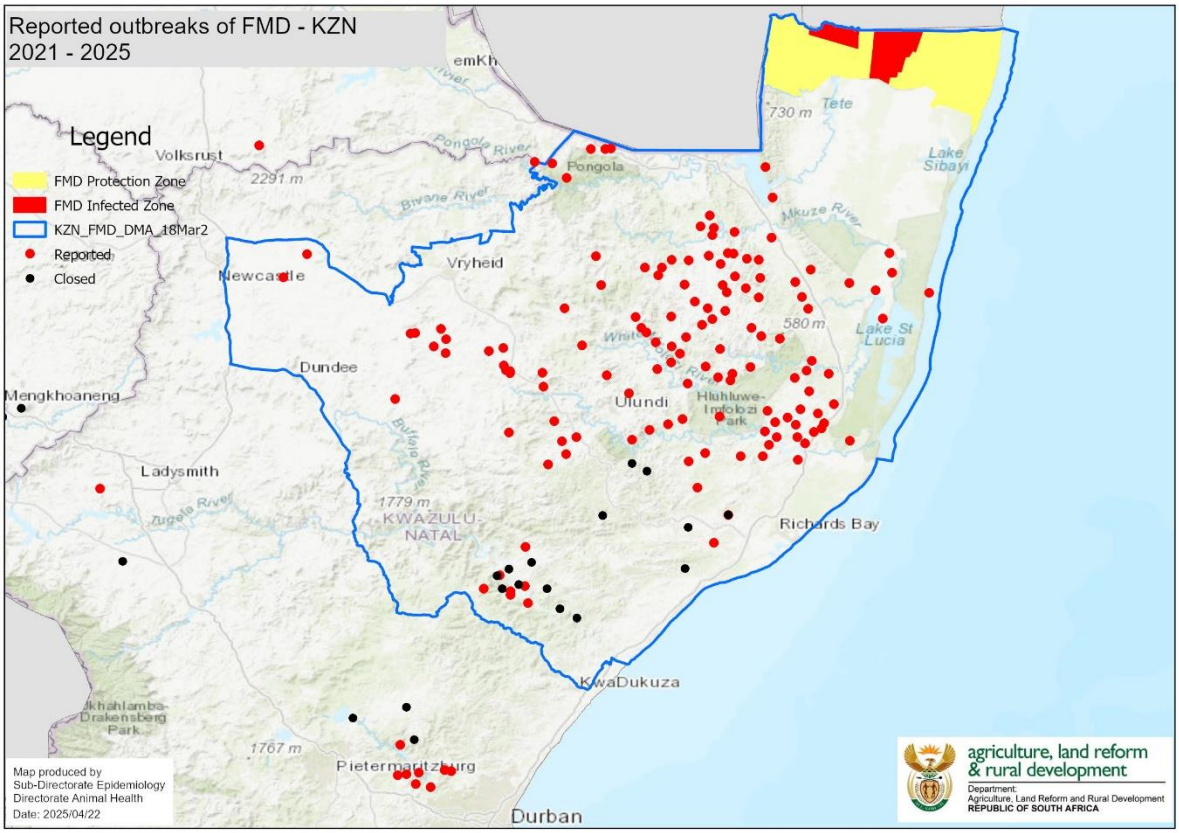
The new outbreaks are linked to the ongoing SAT2 FMD event in the area that began in May 2021. Most open outbreaks are in communal dip tanks and small-scale farms. There are also five affected game reserves, all located in close proximity to one another. Complete resolution of this event is unlikely due to the FMD carrier status of the buffalo populations in these affected game reserves.

Eighteen SAT2 outbreaks in KZN have been resolved and closed with the WOAH. Two feedlots outside the main outbreak area were depopulated through controlled slaughter and closed with the WOAH in 2021. Quarantine was also lifted on sixteen diptanks after negative testing and absence of clinical disease, and consequently closed with the WOAH

3.1.2 SAT1 outbreak event in Mtubatuba

Cattle at a diptank in Mtubatuba were confirmed as FMD positive and the laboratory results indicated introduction of a SAT1 FMD virus into the area. Further investigation and testing of surrounding diptanks did not yield any further positive results and the origin of this virus could not be traced.

Map 2: Open and closed FMD outbreaks and the Disease Management Area in KwaZulu-Natal Province



3.2 Mpumalanga Province: part of KZN SAT 2 outbreak event

An outbreak of FMD was detected in April 2025 in the Gert Sibande Municipality in Mpumalanga Province, which is linked to the outbreaks in KwaZulu Natal Province. Records were obtained about all animals that gathered at the Utrecht auction on the day and trace-forward exercises have commenced. This involved clinical examination of animals at recipient farms to detect signs of FMD, as well as collection of blood samples to determine prior exposure or vaccination.

Cattle on one farm in Mpumalanga Province were tested for FMD as part of the trace-forward from the auction in KZN. These cattle tested positive for antibodies of FMD, though they showed no clinical signs of disease. The farm has been placed under quarantine. Further investigations, including clinical and sero-surveillance, on the neighbouring farms is continuing.

3.3 Gauteng Province: part of KZN SAT2 outbreak event

Clinical signs of FMD were detected on a farm in the West Rand Municipality in April 2025, samples were collected and tested positive. A SAT2 virus was identified, which is the same as the virus circulating in the KZN SAT2 outbreak event. The affected farm was placed under quarantine and an epidemiological investigation has commenced to identify a possible source of the outbreak, as well as any other premises that may have become infected.

3.3 Eastern Cape Province: SAT2 and SAT3 outbreak events

3.3.1 SAT3 outbreak event in Humansdorp

Clinical signs of FMD were detected in 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.

A total of 39 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.

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.

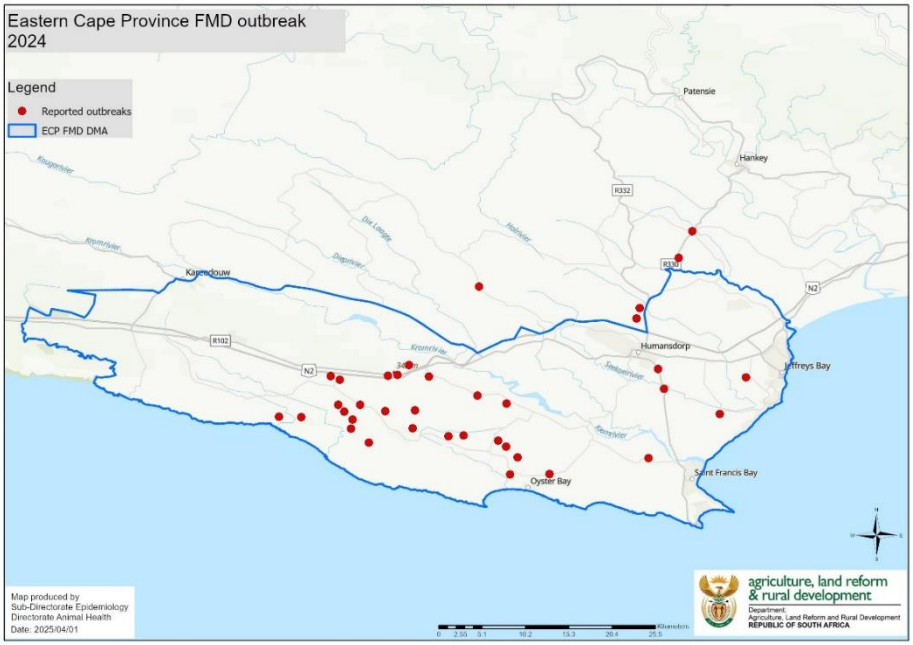
Controlled slaughter of cattle is ongoing on farms under quarantine. A total of 4 215 animals have been slaughtered at designated abattoirs since the onset of the outbreaks in 2024. The risk materials are processed or disposed of and only known safe products are released into the local market. No meat from affected animals may enter the export market.

No new outbreaks were detected since September 2024. Serological surveillance is ongoing in and around the DMA to ensure that the absence of circulating virus can be confirmed.

3.3.2 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 WOAH. 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 SAT3 virus was also identified in this location, which is the same as virus that caused the outbreaks in Humansdorp, described above.

Map 3: Open and closed outbreaks and the Disease Management Area in the Humansdorp area, Eastern Cape Province



4 Resolution of outbreaks

Outbreaks on individual premises are resolved and closed with the WOAH 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 dairy farms, breeding herds and diptank areas, that are not depopulated following an outbreak of FMD, are subjected to rigorous laboratory testing of the remaining cloven-hoofed livestock to confirm cessation of virus circulation more than 12 month 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 a previous FMD outbreak event in that province (closed in August 2023) and then spread to North West Province, and from there to Free State, Gauteng and Mpumalanga Provinces as the previous 2022 multi-province SAT3 FMD outbreak event that was closed in October 2024. This same virus has been identified in the current SAT 3 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. In April 2025, the SAT2 virus was also implicated in the spread of the KZN outbreak to Mpumalanga province, and the same virus was isolated in an outbreak in Gauteng Province in April 2025.

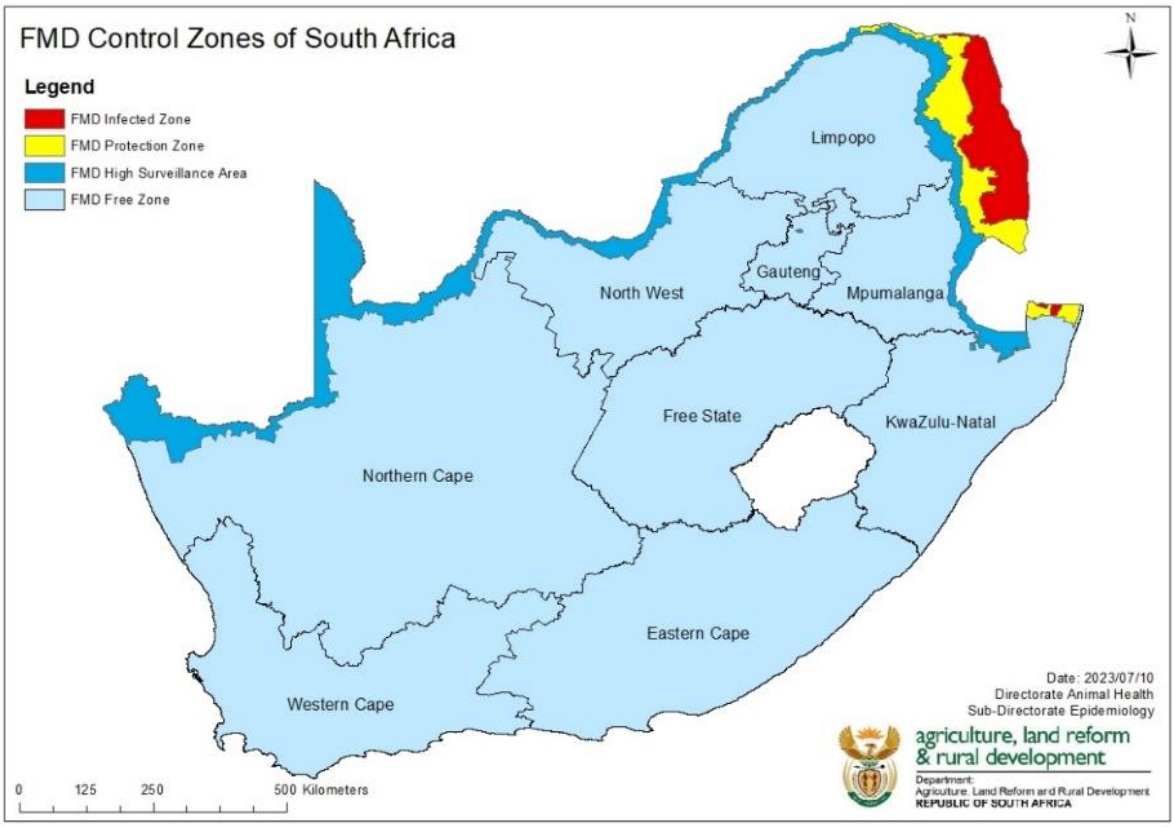
In February 2025, a SAT1 was also identified in the KZN Province. Although the route of introduction is now known, this virus is similar to a virus recently identified in the north of Kruger National Park. No further indications of the presence of this virus has been confirmed in KZN, despite ongoing surveillance.

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.

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



Since October 2022, all livestock owners in the country must provide a declaration of health and origin and must obtain the necessary Stock Theft documents for all cattle, sheep, and goats to be moved from their property of origin onto other properties. Recipients of such animals must give written agreement to isolate new livestock for 28 days before introducing them into the main herds of the destination farm. This requirement was again emphasized in the Government Gazette Notice of 26 July 2024. All cattle presented at auctions are inspected before being admitted to the auction pens. If any animal presents with clinical signs, the auction is suspended while investigations are conducted, including laboratory confirmation ruling out FMD.

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