

# Foot and Mouth Disease: Mtubatuba Outbreak Follow-up Report and Surveillance Update

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30 July 2021



agriculture, land reform  
& rural development

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Department:

Agriculture, Land Reform and Rural Development  
**REPUBLIC OF SOUTH AFRICA**

Report compiled by:

Directorate: Animal Health

This report includes all information as available by close of business 30 July 2021.

## 1. Introduction and summary

In May 2021, an outbreak of Foot and Mouth Disease (FMD) in cattle was confirmed in the Umkhanyakude District Municipality of the KwaZulu-Natal Province. Twenty-two locations in KwaZulu-Natal Province have been identified as FMD positive and reported to the OIE. Disease investigations to determine the extent of the spread of disease are nearing completion. The following map shows positive locations. Note that locations with close proximity may appear as a single location on this map.

**Map 1: FMD positive locations in KwaZulu-Natal, South Africa**



## 2. Affected locations

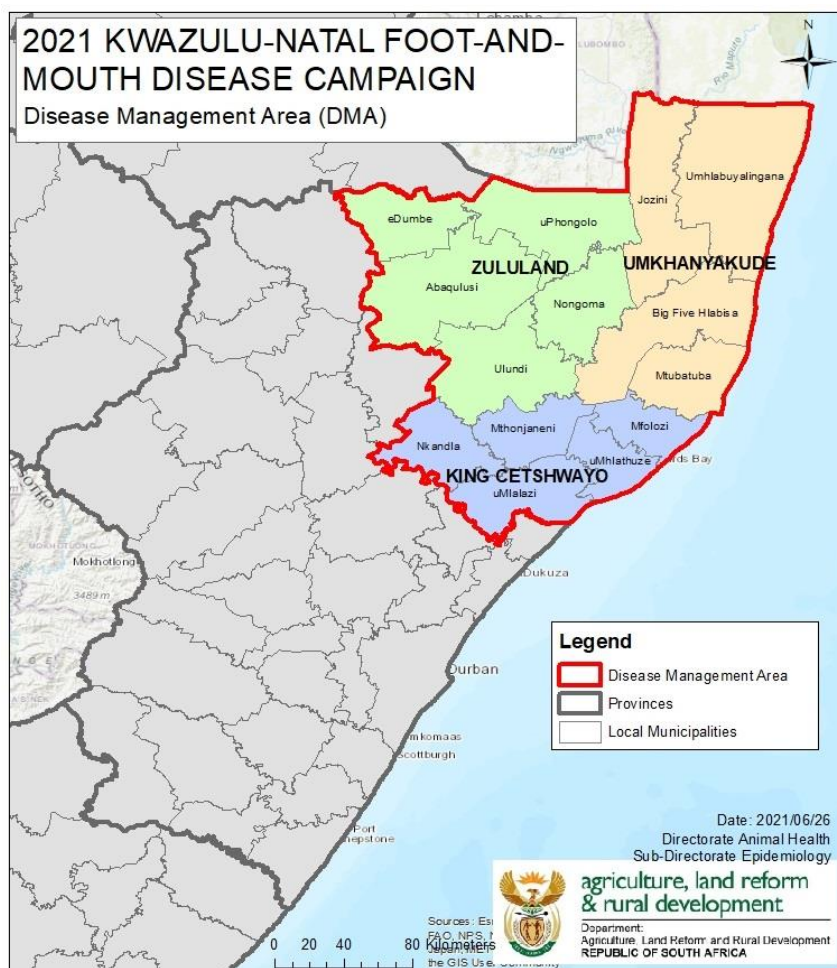
The index case of the outbreak was detected on 27 May 2021 in a communal grazing area in the Mtubatuba Local Municipality in the Umkhanyakude District Municipality of the KwaZulu-Natal Province. The twenty-two positive locations identified to date encompass two clusters of dip tanks in communal grazing land, as well as two commercial feedlots. Varied clinical signs have been reported in these locations, with cattle in some serologically positive locations showing no visible signs of infection, while others show classical clinical signs of FMD. Clinical and serological surveillance is underway at the feedlots in order to get a better picture of the status of the animals. Polymerase Chain Reaction (PCR) as well as serological detection of antibodies against the virus at the Onderstepoort Veterinary Research OIE Reference Laboratory - Agricultural Research Council, confirmed all infections to date.

### 3. Control measures implemented

#### 3.1 Declaration of a Disease Management Area:

The Minister of Agriculture, Land Reform and Rural Development has declared a Disease Management Area (DMA) in the KwaZulu-Natal Province in the Government Gazette No. 44783 on 30 June 2021. The DMA includes the district municipalities of King Cetshwayo, Umkhanyakude and Zululand. No cloven-hoofed animals, their products and genetic material are allowed to move out of, into, within or through the Disease Management Area, herein after referred to as KZN DMA, except on authority of a permit issued by the Veterinary Services of the area. The margins of the DMA will be reconsidered once the investigations on the extent of the outbreak has been concluded.

**Map 2: The outline of the declared DMA in KwaZulu-Natal**



#### 3.2 Movement control in the DMA:

A movement control protocol has been implemented with the aim to monitor and control movement of livestock and livestock products out of, into, within and through the DMA. The full movement protocol is available upon request and in summary, provides the following information:

- Movements of live cloven-hoofed animals out of the DMA is generally not allowed, and if allowed, is subject to stringent risk mitigation measures.
- Movement of live cloven-hoofed animals through the DMA is not permitted.
- Movements of live cloven-hoofed animals into or within the DMA is only permitted for slaughter purposes under specific conditions, and on the basis of a risk assessment of the biosecurity at origin and destination.
- Movement of meat from cloven-hoofed animals is possible out of, within and through the DMA, under specific conditions.
- There is no restriction for meat and meat products moving into the DMA, however products must be accompanied by proof of purchase stating origin of such products.
- Movement of hides, skins, trophies, bones, and horns out of or within the DMA is allowed under specific conditions. Movement of such products into or through the DMA have no restriction.
- There is no restriction for milk and milk products, wool and hair, nor for non-FMD-susceptible animals moving into, out of, within or through the DMA.

Applications to move animals out of, into, within and through the DMA must be sent to the KwaZulu-Natal Veterinary Services and will be evaluated with regards to risk on a case-by-case basis.

### 3.3 No vaccination:

No emergency vaccination has been conducted yet. The use of vaccination will be considered once the extent of the outbreak and the rate of spread have been determined through continued epidemiological investigations.

### 3.4 General biosecurity:

Dip tank and farm inspections are carried out daily by Veterinary Services in the Province. Strict biosecurity measures are in place when inspecting and sampling around infected locations as well as throughout the areas at risk to avoid the spread of disease through direct or indirect contact. Farmers and dip tank associations have also been educated on the importance of biosecurity during a disease outbreak and have been urged to apply these practices to avoid further spread of the disease.

### 3.5 Movement control at affected feedlots:

The two affected feedlots have been placed under quarantine. Cattle may only move out of the feedlots for direct slaughter at designated abattoirs, with specific provision made for risk mitigation measures in line with the OIE Terrestrial Animal Health Code to ensure that the risk of spreading FMD virus is negligible. Meat from affected premises is not eligible for export.

## **4. Epidemiological investigation**

Clinical examinations and serological testing of all cloven-hoofed animals in and around the affected areas are still continuing, with the aim of determining the prevalence of the disease and the extent of the outbreak. The first round of clinical and serological surveillance around the affected areas has

been completed, and a second round of surveillance to assess the rate and extent of the spread of FMD is nearing completion. To date, sera samples have been collected from approximately 435 locations, this includes locations from the first and second round of sampling.

The virus responsible for the outbreak is a SAT 2 serotype and is closely related to a SAT 2 virus responsible for an outbreak that occurred in the Protection Zone in northern Limpopo Province in 2019. Epidemiological investigations to date have not revealed a plausible source for the outbreak in KZN Province.

Passive surveillance is being strengthened in the rest of the country via communication with state and private veterinarians as well as physical visits to owners of cloven-hoofed livestock and chairpersons of dip tank associations. All mentioned parties are urged to be vigilant for any clinical signs that might represent those of Foot and Mouth Disease and are asked to report such suspicions immediately for further epidemiological investigations.

Ground team members in the KwaZulu-Natal Province are governing communication efforts such as visits to livestock associations and traditional authorities in order to raise awareness and provide information verbally, via local radio stations and in the form of pamphlets and posters, which are available in various languages. These visits also aim to address concerns of farmers and livestock owners in and surrounding the affected areas. It also provides feedback of the situations on the ground to the Veterinary Operations Committee and help to create understanding of the challenges that livestock owners face so that methods to provide assistance can be considered.

Much attention has also been paid to educating members of the Joint Operating Committee about the disease and the risks associated with the movement of cloven-hoofed animals in terms of the spread of the disease. The negative impact on the livelihoods of people and the economy of the country is greatly stressed when addressing matters around the disease and help to create perspective in the parties that are not involved on the veterinary side of the disease outbreak control.

## **5. Trade implications**

Following the loss of the OIE recognised FMD free status in January 2019, agreements were negotiated with trade partners on the export of safe commodities, including heat treated meat and dairy products, deboned and matured beef, scoured wool, salted hides and skins and livestock embryos. Most trade partners have thus far still retained the negotiated agreements for these commodities, based on the guarantees provided for processing to ensure inactivation of the virus. South Africa is also confident to certify the safety of pigs, pig semen, raw pork and pork products from known FMD free pig compartments. Communication efforts are conducted to keep trade partners up to date with the disease situation in the country as well as the implementation of control measures to contain the disease.

In May 2021, Botswana announced the banning of the importation of live cloven-hoofed animals and their products as well as veld grass, bedding and manure-contaminated vehicles from South Africa. Live cloven-hoofed animals and their products originating from South Africa are also not allowed to

travel through Botswana to other countries. These regulations from the government of Botswana remain in place until further notice.

In June 2021, it was announced that live cloven-hoofed animals (importation and repatriation of stolen animals) as well as raw products from cloven-hoofed animals is banned from entering Eswatini. Products of cloven-hoofed animal origin that have been adequately processed via canning, cooking and pasteurization from all Provinces except Limpopo and KwaZulu-Natal will be allowed to enter Eswatini. Regulations regarding this importation ban will be adjusted with the changing FMD situation in KwaZulu-Natal Province.

**In conclusion, please note**

Disease outbreak and surveillance reports will be released on a bi-weekly basis to keep stakeholders and veterinary officials informed.

Director Animal Health

Date: