# Foot and Mouth Disease: Vhembe Outbreak and Surveillance Update

25 April 2019



Report compiled by:

Directorate: Animal Health

## 1. Introduction and summary

On 7 January 2019, an outbreak of Foot and Mouth Disease (FMD) was confirmed in cattle in the Vhembe district of Limpopo Province. The outbreak occurred in the high surveillance area of the FMD Free Zone, immediately adjacent to the protection zone. The outbreak was reported to the World Organisation for Animal Health (OIE) and, as a result, South Africa lost its FMD free zone without vaccination status.



Map 1: Location of the FMD outbreak in the FMD free zone of South Africa

# 2. Outbreaks reported

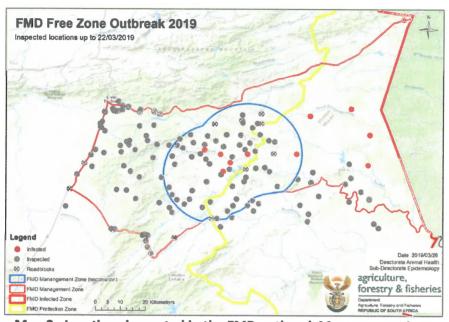
It is more than 10 weeks since the last positive location was reported to the OIE on 4 February 2019. In total, 5 positive locations have been confirmed by the Transboundary Animal Disease programme of Onderstepoort Veterinary Research and reported to the OIE. These locations are all in close proximity within the Disease Management area that was declared in Limpopo Province. The affected animals are cattle kept in rural villages with communal diptanks and grazing.

# 3. Control measures implemented

A Disease Management area was declared and the details published in the Government gazette. Clinical inspections, vaccination and movement control are implemented within this area, as well as roadblocks to prevent movement of live animals and products out of the area. The Joint Operations Committee (JOC) and Veterinary Operations Committee (VOC) meet on a daily basis to ensure that all the measures that have been put in place inside this area are maintained.

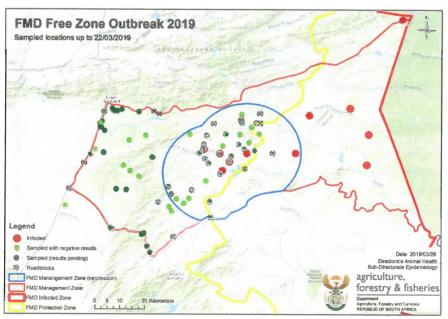
### 3.1 Inspections / surveillance in Disease Management Area:

Clinical inspections have been performed at approximately 144 locations within the Disease Management area (including the part in the Protection Zone and the part in the former FMD free area). These locations are visited on a regular basis and more than 1000 inspection visits in total have been made to these locations. If any suspicious clinical signs are found during these visits, samples are collected and sent to the laboratory for FMD testing.



Map 2: Locations inspected in the FMD outbreak Management Area

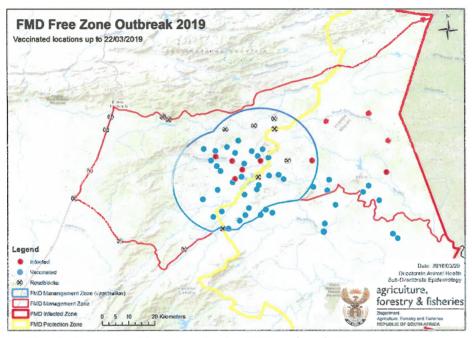
Samples have been collected at several locations, including locations that have been inspected and where no clinical signs were found. These samples are being tested to confirm that there has been no undetected spread of the infection.



Map 3: Locations sampled in the Disease Management Area

#### 3.2 Vaccination:

Cattle in approximately 62 diptanks / villages in the Disease Management area have been vaccinated, which includes diptanks in the former FMD free zone as well as in the FMD protection zone. In the former FMD free area, roughly 14 100 cattle distributed across 28 diptanks have been vaccinated and identified as such. The first round of vaccination of cattle started on 14 January 2019 and the second round started on 25 February 2019.



Map 3: Vaccinated locations in the FMD outbreak Management Area

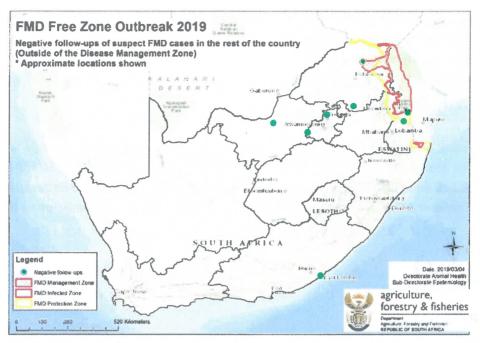
#### 3.3 Movement control:

Movement control is applied, with particular emphasis on preventing live cloven hoofed animals and their unprocessed products from moving out of the area. There is no sign that the disease has spread beyond the declared Disease Management area. It is likely that the roadblocks will be discontinued by the end of April. However, the restriction on movements out of the area will remain in place and the roadblocks will be replaced by more intensified roaming patrols.

# 4. Epidemiological investigation and surveillance

The virus was identified as SAT2 and the origin of the original outbreak in 2018 was most likely due to contact between stray buffalo, escaping from the FMD infected zone and coming into contact with adjacent communal cattle.

Passive surveillance in the rest of the country (outside of the Disease Management area) has been continuing as always and any suspicion of FMD is investigated. The following map shows the approximate locations of the follow-up investigations that have been reported so far. They have all been found to be negative for FMD (either based on clinical inspection or based on testing for FMD).



Map 4: Negative follow-ups of suspect FMD cases in the rest of the country

## 5. Trade implications

As a result of this outbreak, South Africa lost its OIE recognised FMD free zone without vaccination status and exports where FMD free zone attestation is required cannot be certified. The continuation of trade in safe commodities is prioritized and negotiations are ongoing with various trade partners. DAFF received confirmation from Angola, Botswana, Lesotho, Namibia, eSwatini and Zimbabwe that they will accept importation of processed commodities that were inactivated to ensure destruction of the FMD virus.

DAFF successfully negotiated the revision of veterinary health certificates for beef to Bahrain, Egypt, Jordan, Kuwait, Lesotho, Mozambique, Qatar, Seychelles, eSwatini and the UAE. Namibia agreed to accept beef and venison produced before 05 December 2018 and negotiations for reopening of markets for beef and venison produced after this date are ongoing with Namibia and Mauritius. Trade in pork from FMD free pig compartments has been re-opened to Lesotho, Mozambique, Namibia (partially), Seychelles and eSwatini and negotiations with Botswana and Mauritius are continuing. The markets for dairy products to various trade partners have been restored and negotiations are continuing with Malawi, Mauritius and Tanzania. The export of raw and processed wool to Egypt was re-opened and DAFF is still in negotiation with China and Malaysia on the export of hides, skins and wool.

## 6. Awareness and extension

More than 400 local livestock owners across 16 rural villages in the disease management area were interviewed in February 2019, in order to determine the impact of the disease control measures on the ground. The outcome of this effort assisted the technical task team in crafting a viable and sustainable solution to regain the FMD free zone status for the country.

Further education and awareness events on FMD were held at 6 villages in the disease management area. 15 000 Foot and Mouth disease pamphlets were translated in Venda and Xitsonga for distribution by the state vet office to the local communities.

## 7. Way forward

DAFF is assessing all available information to develop the most appropriate strategy to regain the FMD free zone status for the country. The next steps have to be considered, carefully taking into account timelines and available resources. DAFF is intending to apply for the declaration of a FMD containment zone and the required documentation is being compiled for submission to the OIE.

Director Animal H

Date:

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