

# Foot and Mouth Disease outbreak and surveillance update report

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30 November 2022\*



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

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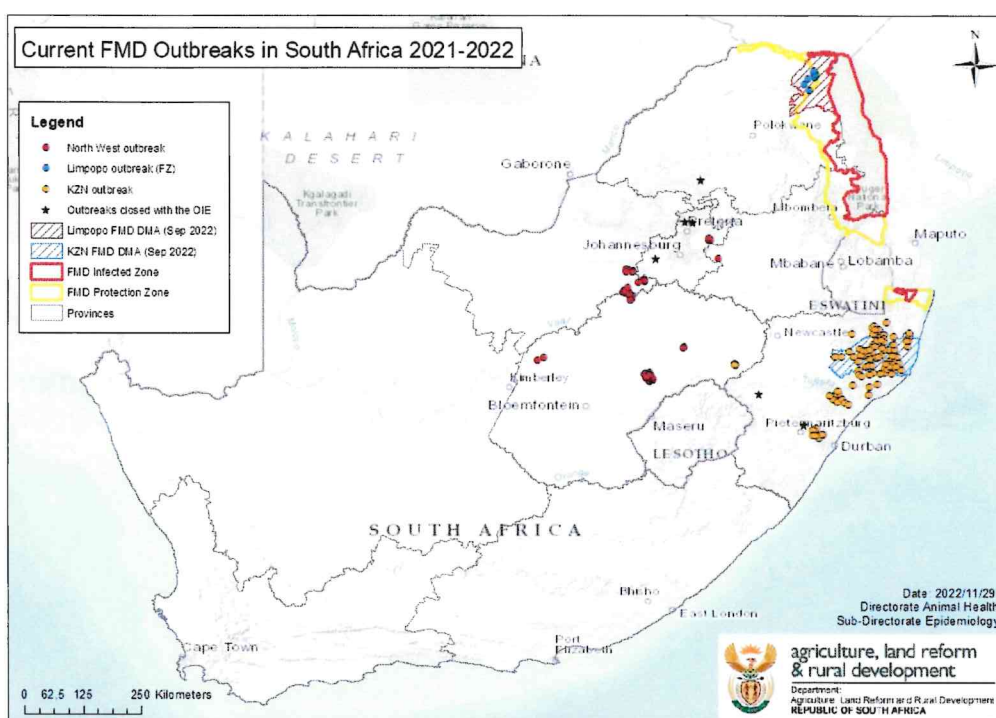
\* This report includes all information as available by close of business on the indicated date. All the updates contained in this report may not currently reflect on the WOH AH WAHIS system due to technical difficulties with the WOH AH reporting system. This report reflects changes since the previous update report of 15 November 2022.

## 1. Summary of Outbreaks

- South Africa currently has 183 open Foot and Mouth Disease (FMD) outbreaks.
- The last outbreak was reported on 31 October 2022 and there were no new cases reported to the World Organization for Animal Health (WOAH founded as OIE) in the past month.
- 8 premises have been resolved and closed with the WOA.

**Map 1: Reported outbreaks in the previous FMD free zone 2021 - 2022**

Note: Dots on the maps that indicate locations in close proximity might appear as single dots.



**Table 1: Summary of active outbreaks per province:**

Province	Number of open outbreaks	Number of resolved outbreaks	Total number of outbreaks	Last reported outbreak
KwaZulu-Natal	115	2	117	31 October 2022
Limpopo (previous free zone)	7	1	8	13 June 2022
North West	16	1	17	21 October 2022
Gauteng	4	3	7	15 September 2022
Free State	40	1	41	31 October 2022
Mpumalanga	1	0	1	5 August 2022
<b>Total</b>	<b>183</b>	<b>8</b>	<b>191</b>	

## **2. Control Measures Implemented**

### **2.1 Control measures on movement of cattle, sheep and goats**

The control measures on movement of cattle, sheep and goats in the two Disease Management Areas (DMAs) in Limpopo and KwaZulu-Natal Provinces, remain in place. Should farmers wish to move such animals into, through, within, or out of these two DMAs, their local state veterinary office must be contacted to find out whether the intended movements will be allowed, and under which conditions.

In the rest of the country, livestock owners 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 new 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.

### **2.2 Movement control on affected farms / locations**

All affected farms and feedlots in North West, Free State, Gauteng and Mpumalanga Provinces remain under quarantine with strict access control. The locations involved are well fenced and movement of animals from these farms can be effectively prevented. Affected locations in KwaZulu Natal and Limpopo also remain under quarantine and no cloven-hooved animals or their products may move from these locations. The control measures for movement of cloven-hooved animals and products out of the FMD protection zones have not changed.

### **2.3 Vaccination**

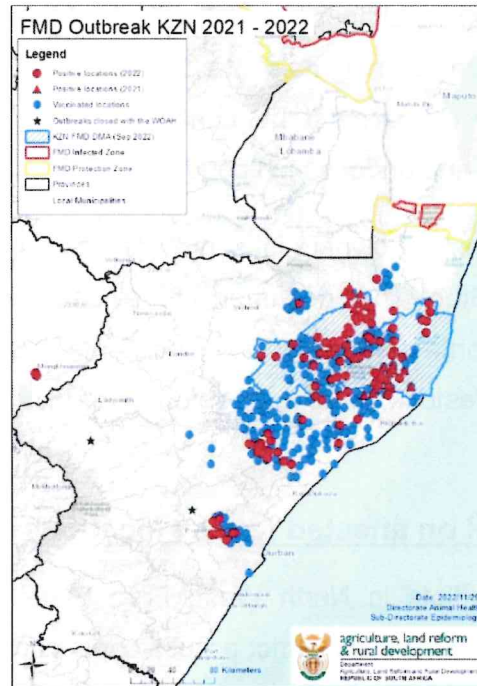
Vaccination campaigns run continuously in affected provinces. For the purpose of these technical update reports, the consolidated information as received at the national office is as follows:

**Table 2: Summary of animals vaccinated per Province and in total:**

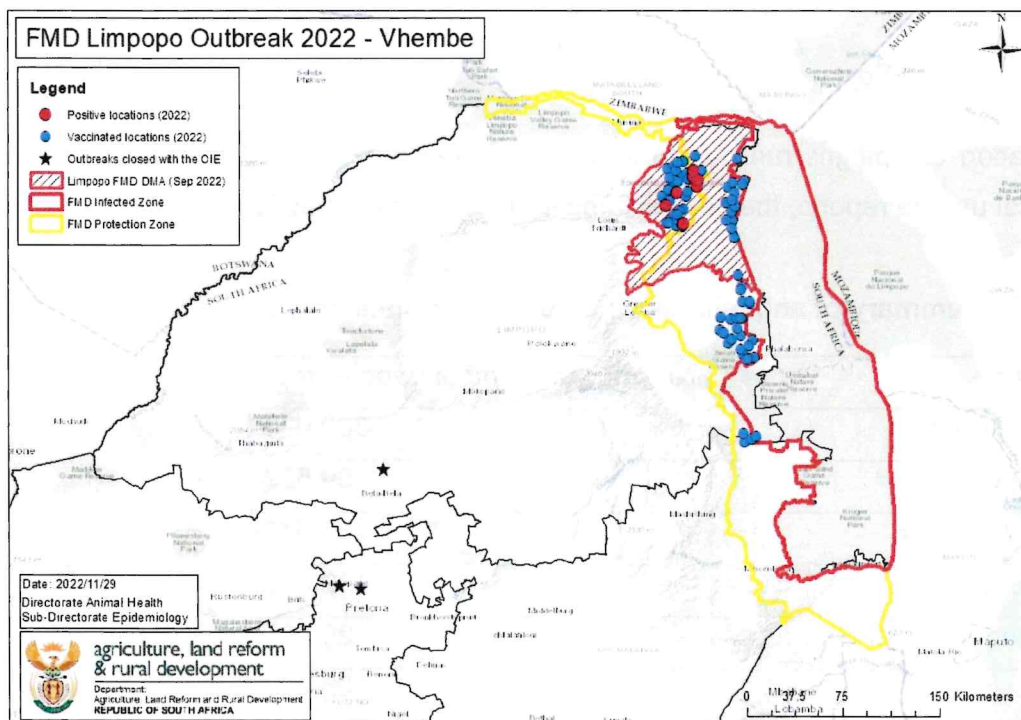
<b>Province</b>	<b>Number of animals vaccinated</b>
KwaZulu Natal	300 000
Limpopo	99 522
North West	33 577
Free State	82 679
Gauteng	29 307
Mpumalanga	26 073
<b>Total animals vaccinated</b>	<b>571 158</b>

The following maps reflect to the most recent consolidated vaccination statistics.

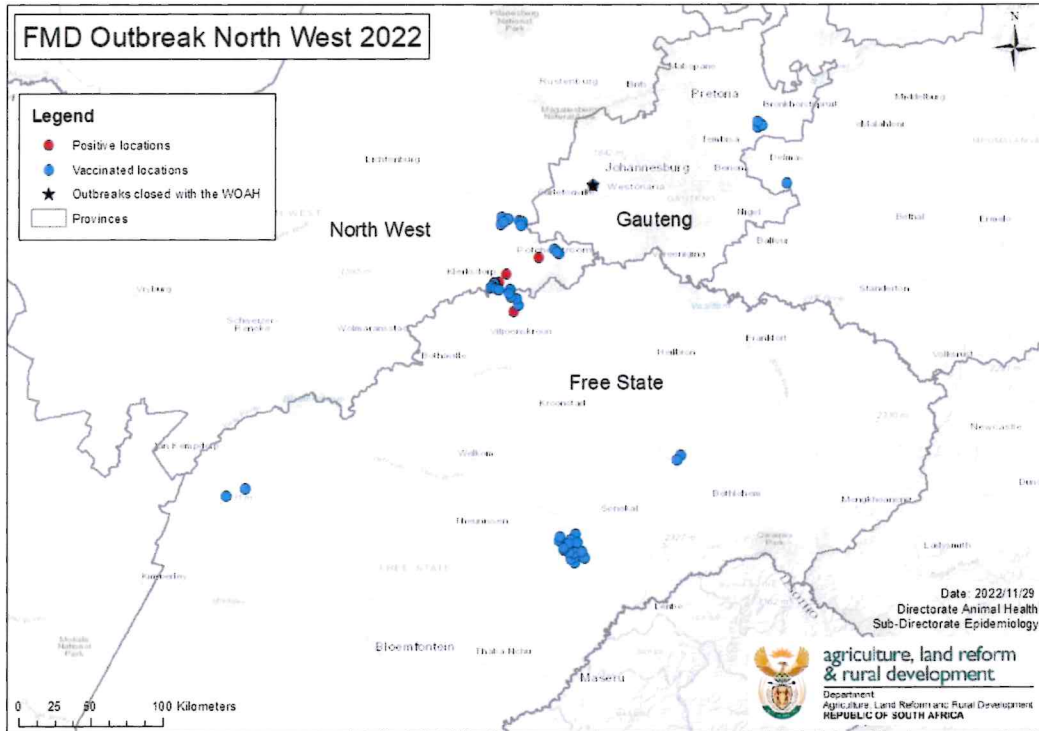
**Map 2: Vaccinated locations in KwaZulu-Natal – Free State Provinces outbreak event** (most positive locations are also vaccinated, therefore vaccinated and positive points are superimposed)



**Map 3: Vaccinated locations in Limpopo Province outbreak event** (most positive locations are also vaccinated, therefore vaccinated and positive points are superimposed)



**Map 4: Vaccinated locations in North West - Free State – Gauteng - Mpumalanga Provinces outbreak event (most positive locations are also vaccinated, therefore vaccinated and positive points are superimposed)**



## **2.4 Controlled slaughter**

The Free State, Mpumalanga and North West Provinces have begun with depopulating animals from positive locations. Cattle are sent to designated abattoirs for controlled slaughter. The infected properties remain under quarantine until 28 days after depopulation and disinfection. The outbreaks on the properties will be officially closed once the disinfection process has been concluded. For the purpose of these technical update reports, the consolidated information as received at the national office is as follows:

**Table 3: Summary of animals slaughtered per Province and in total:**

<b>Province</b>	<b>Number of animals slaughtered</b>
North West	24 366
Free State	10 466
Mpumalanga	9 528
Gauteng	2 051
<b>Total animals slaughtered</b>	<b>46 411</b>

### **3. Diagnostic tests and epidemiology**

There are two viruses responsible for the current outbreaks:

- SAT 2 serotype in KwaZulu Natal Province, with spread to Free State Province
- SAT 3 serotype originating from Limpopo Province, with spread to North West, Free State, Gauteng and Mpumalanga.

Based on epidemiological investigations, the main routes of virus transmission are:

- Movement of clinically healthy animals that are in the incubation period
- Contamination of properties by vehicles, persons, implements and other possible fomites entering the farms
- Nose to nose contact between cattle on neighbouring farms
- Illegal movement of animals out of affected areas

For all reported outbreaks, confirmation of disease was done using a combination of the following diagnostic tests at the ARC Onderstepoort Veterinary Research Transboundary Animal Diseases laboratory (OVR-TAD):

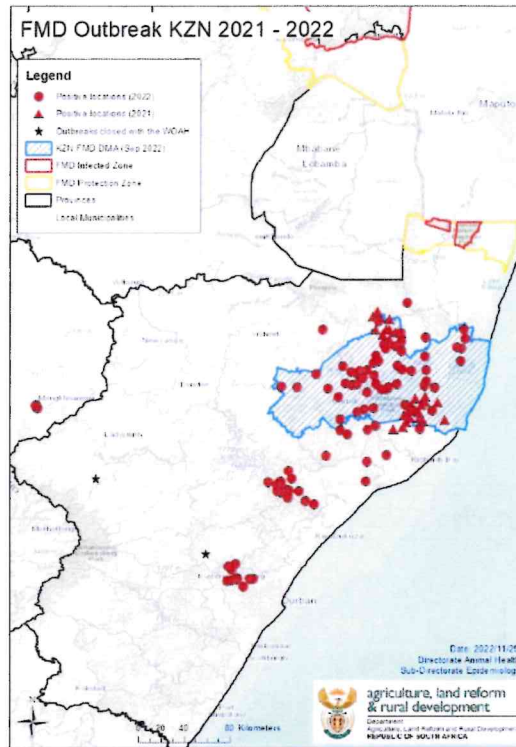
- Solid Phase Competition ELISA (SPCE)
- Non Structural Protein (NSP) ELISA
- Polymerase Chain Reaction (PCR)

### **4. Details of open outbreak events (as reported to the WOA)**

#### **4.1 Outbreak event 1: KwaZulu-Natal – Free State Provinces**

- 119 open outbreaks (115 in KZN and 4 in the Free State)
- Last outbreak reported on 31 October 2022
- 2 outbreaks resolved

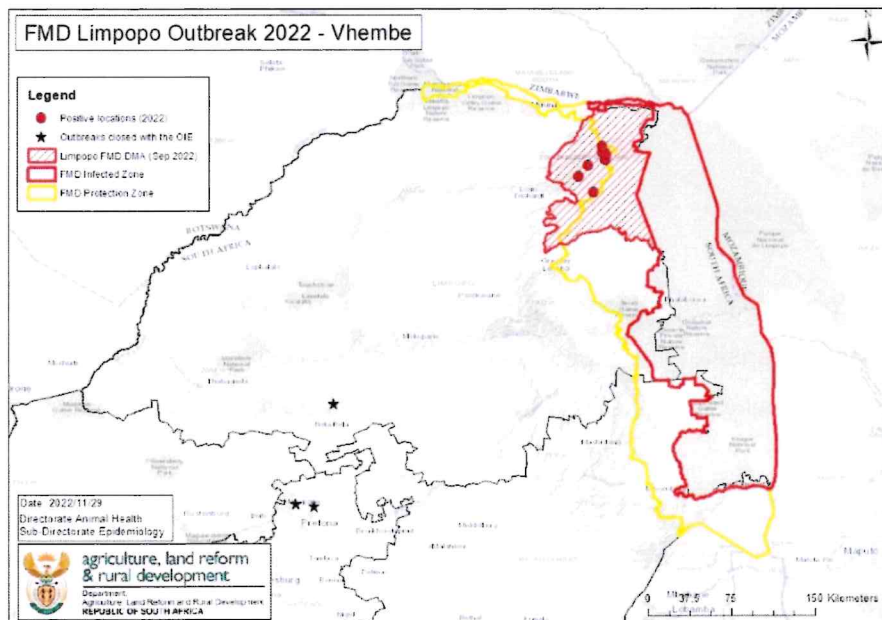
**Map 5: Outbreak event in KwaZulu-Natal – Free State Provinces**



**4.2 Outbreak event 2: Limpopo Province**

- 7 open outbreaks
- Last outbreak reported on 13 June 2022
- 3 outbreaks resolved

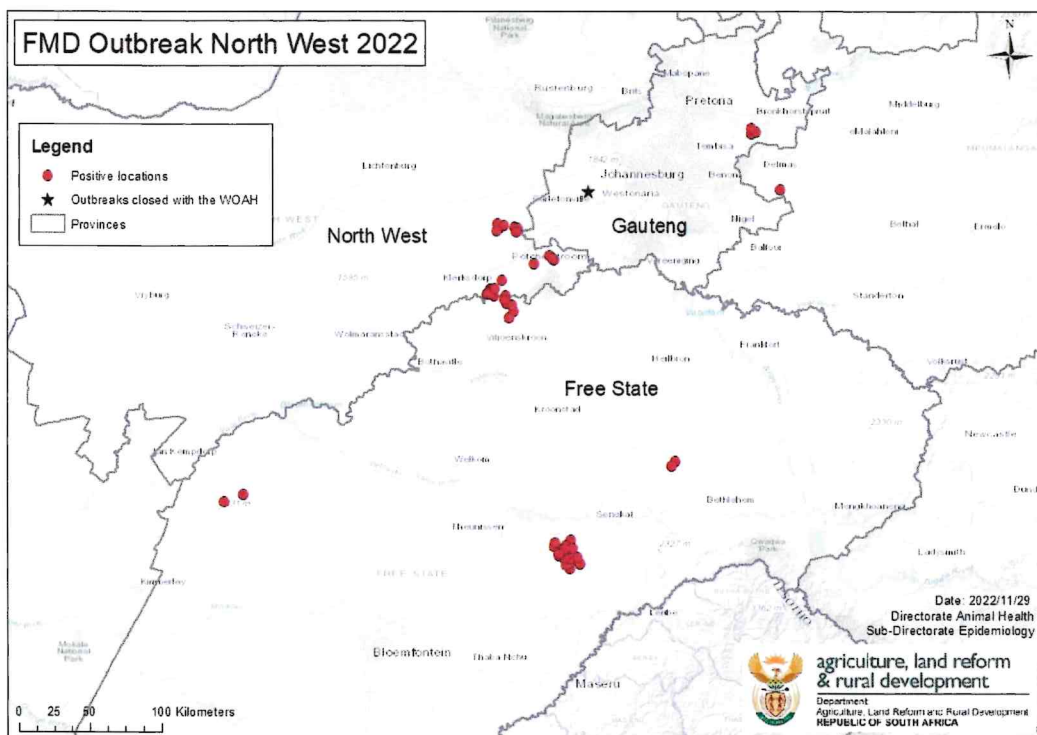
**Map 6: Outbreak event in Limpopo Province**



### 4.3 Outbreak event 3: North West - Free State – Gauteng - Mpumalanga Provinces

- 57 open outbreaks (16 in the North West, 36 in the Free State, 4 in Gauteng and 1 in Mpumalanga)
- Last outbreak reported on 31 October 2022
- 3 outbreaks resolved

**Map 7: Outbreak event North West - Free State – Gauteng – Mpumalanga Provinces**



## **5. Surveillance**

The three outbreak event areas continue to be subjected to clinical and serological surveillance, with intensified inspections around newly identified infected farms and dip tanks and at epidemiologically linked locations identified through forward and backward tracing.

Passive surveillance leads to reporting of suspect outbreaks by veterinarians and farmers that are followed up by intensive clinical inspection and laboratory testing. Some outbreak locations were identified as a result of such reports of varied clinical signs seen in cattle, while



most were identified during trace back and trace forward exercises, including links of movements, as well as surveillance of farms adjacent to positive locations. The varying clinical presentation of the disease in different locations necessitates surveillance based on both clinical inspections, including mouthing, as well as serology.

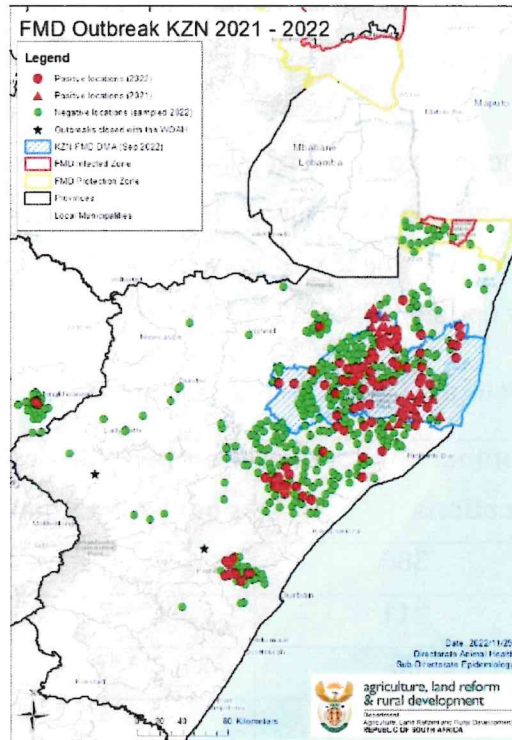
Once any animals are found to be positive at a location, the entire location with all in contact animals at the location, is regarded as positive. The table above therefore reflects the status of locations and not the individual animals at the locations. Note that the number of negative locations statistics are only updated when all the information has been received.

**Table 4: Summary of Serological surveillance per province:**

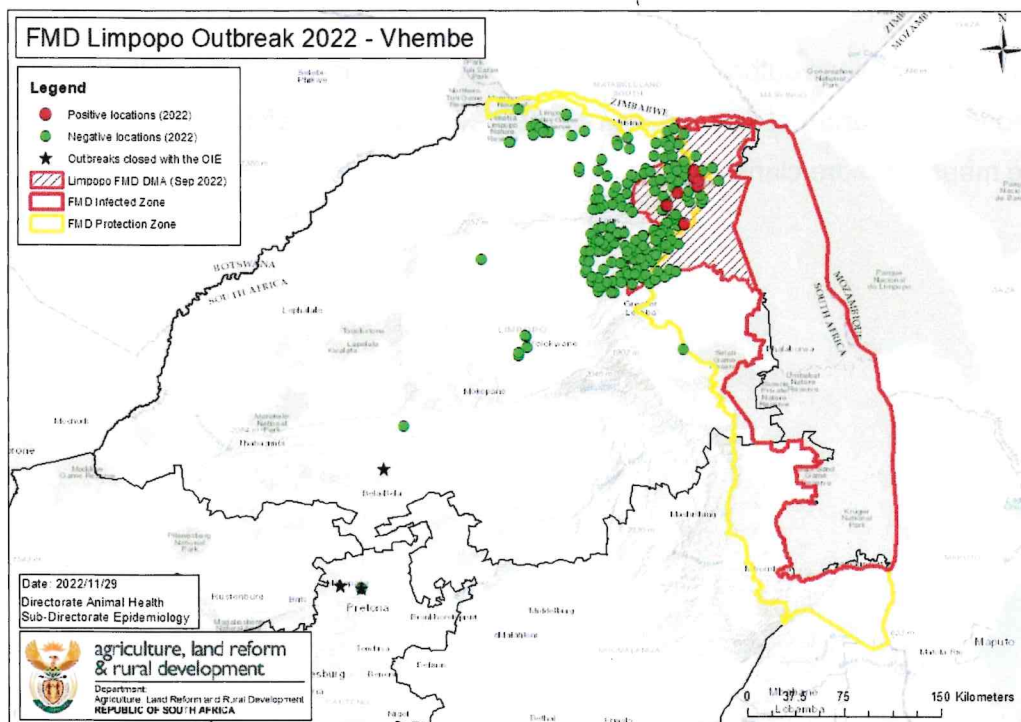
<b>Province</b>	<b>Number negative locations</b>	<b>Number of open positive locations</b>	<b>Total number of locations</b>
KwaZulu-Natal	388	115	503
Limpopo	211	7	218
North West	96	16	112
Gauteng	46	4	50
Free State	223	40	263
Mpumalanga	55	1	56
<b>Total</b>	<b>1019</b>	<b>183</b>	<b>1 202</b>

Below are maps of each outbreak event, indicating all locations surveyed, with negative results indicated in green and positive locations in red. Please also refer to the explanatory notes after the maps for more clarity.

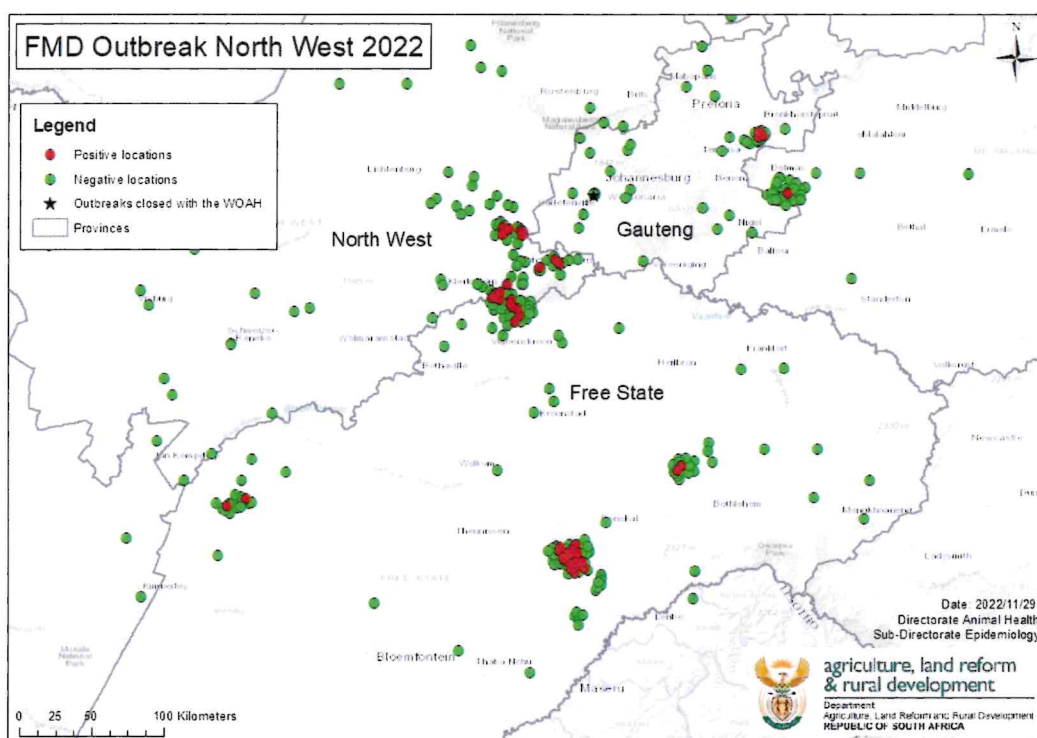
**Map 8: Serological surveillance in KwaZulu-Natal-Free State Province outbreak event, showing 388 negative and 119 positive locations**



**Map 9: Serological surveillance in Limpopo Provinces outbreak event, showing 211 negative and 7 positive locations**




**Map 10: Serological surveillance in North West - Free State – Gauteng – Mpumalanga Provinces outbreak event showing 420 negative and 57 positive locations (please note that some of the points are superimposed due to close proximity)**



Note that in both the table, as well as the maps above, the number of locations that tested negative only indicates the number of locations that tested negative during this year (2022) from when the disease was found to be spreading again. The number of positive locations also includes the locations that were identified as positive last year (2021).

## **6. Notice regarding frequency of reports**

Due to the situation becoming stable, the frequency of the update reports will be reduced. The FMD update report will be made available twice a month, in the middle and end of the month until further notice.

  
**Director Animal Health**  
 Date: 30/11/2022

