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Gauteng Veterinary Services (GVS)

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Foot and Mouth Disease Outbreak Update Report

Two outbreaks of foot and mouth disease (FMD) occurred in cattle in Gauteng Province during late March and early April 2022. One was in the Randfontein area and the other was in the Wallmannsthal area north of Pretoria. Find the full description in the March report. This is a brief report about how Gauteng Veterinary Services (GVS) managed the outbreaks.

Quarantine

The Randfontein farm, and the farm and auction where the Wallmannsthal cattle were found were all placed under immediate veterinary quarantine once the suspicion of FMD was found. The quarantines are to remain in place until all cloven-hoofed animals on the positive sites are removed, two sets of negative serology tests (two weeks apart) are received for neighbouring herds, and 28 days have passed after proper cleaning and disinfection. The controlled movements of cloven-hoofed animals from within 10 km of the positive farms remain in place until these quarantines are lifted. The quarantine order was lifted at the auction on 20 May because all the conditions were met. The two positive farms remained under quarantine at the end of May.



Fig 1. Removal of cloven-hoofed animals at the Wallmannsthal site.

Vaccination

The Director for Animal Health gave special permission to vaccinate all cloven-hoofed animals on the Randfontein outbreak farm against FMD. In total, 121 cattle, 6 deer, 16 goats and 13 sheep were vaccinated towards the end of April. This was done to reduce the overall infectious period and viral load at this site as quickly as possible, to shorten the time frame for exposed animals to gain immunity and to minimise the time interval needed for salvage slaughter.

Depopulation of positive locations

After 14 days had passed since vaccination at the Randfontein farm, with no new lesions being observed, they were moved with a red cross permit to a site in Phalaborwa, within the FMD-infected zone. Here they will be finished and then slaughtered at an approved abattoir nearby. The transport was generously sponsored by the South African Feedlot Association. The fallow deer were culled and disposed of on the same day that the cloven-hoofed animals were removed.

The group of FMD-positive cattle that were found at the auction in Onderstepoort were immediately confiscated and destroyed in early April. GVS personnel performed routine quarantine inspections at the Wallmannsthal property to monitor the quarantine there. However, in the last two weeks of April, the owner stopped cooperating and refused to allow the officials access to the property. Thus, the Director for Animal Health instructed all cloven-hoofed animals on the property to be confiscated. A Search-and-Seize warrant was obtained and carried out by the South African Police Service (SAPS). In the end 19 cattle, 27 goats and 17 sheep were confiscated and removed from the property with the help of SAPS and the Stock Theft Unit. Almost all the cloven-hoofed animals were accounted for, except for ten goats. The animals were taken to the same feedlot in Phalaborwa as the Randfontein outbreak animals in mid-May and will be slaughtered at the same approved abattoir once they are ready. This transport was also sponsored by the South African Feedlot association.

Surveillance

Animal Health Technician on alternative days while under quarantine. The four neighbouring farms with cattle were put under precautionary quarantine and serum samples were <30) or a random sample of 30 cattle were tested each time. These neighbouring herds had three rounds of serological testing for FMD, with the last two rounds being done after removal of the positive cattle from the area. All results were negative. Fifty properties within 3 km of the positive farm, with I 734 cloven-hoofed animals, were inspected weekly in April and May. Fifty-six properties within 4-6 km of the movement restrictions in the FMD-control areas. any of the inspections.

The stud herd located on the auction property was similarly inspected and tested negative for FMD on two rounds of testing, two weeks apart. The 36 cloven-hoofed animals present on two properties close to the Wallmannsthal property were inspected twice in May and the first round of GVS urges all farmers, farm workers, veterinary workers, serological testing for FMD was negative.

To date, no other outbreaks have been found. The Transboundary Animal Diseases Facility of the Agricultural Research Council - Onderstepoort Veterinary Research (ARC-OVR) works with live FMD virus for diagnostics, research, and vaccine production. To insure that FMD virus is not carried out of the laboratory, the facility is specially designed and strict biological safety regulations are applied for personnel and visitors. To monitor that no virus escapes from the laboratory to be introduced into nearby animal populations, GVS officials carry out routine active surveillance in the immediate area. Weekly inspections are performed of all cloven-hoofed animals within 3-5 km of the FMD Laboratory. In May, 73 properties and 3 728 animals were inspected. No suspicious FMD cases were detected. To complement this surveillance, the Epidemiology Unit performs quarterly serological testing on serum samples collected from randomly selected cattle located within 0-3 km of the facility. These results have also been negative.

Conclusion

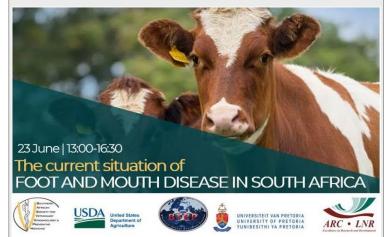
GVS was fortunate to have detected these two outbreaks so rapidly. This gave us the opportunity to act decisively and control the situation quickly before the virus spread to any other herds. However, it must be noted that Gauteng Province is a major economic hub with up to 13 auctions as

well as an active trade in speculation of livestock. This The positive Randfontein farm was inspected by a dedicated environment attracts the trade of livestock owners from neighbouring provinces, who seek to find the best price for their stock. New outbreaks of FMD have continued to be reported in the FMD-free zone around Gauteng Province, collected at two-weekly intervals. Either all the cattle (herds e.g., near Potchefstroom and Ventersdorp areas in North West Province. This indicates inadequate containment of the virus within the former FMD control zones with subsequent spread, which means that all role players must do all that they can to control the disease. The best way to protect cloven-hoofed animals from FMD is to practice a high standard of biosecurity and to abide by the livestock

positive farm, with 11 762 cloven-hoofed animals, were To assist with FMD control in the country, Gauteng inspected every 2 weeks. No FMD lesions were observed at Veterinary Services has seconded 12 Animal Health Technicians (AHT) to Vhembe District, in Limpopo Veterinary Services. They will assist with vaccinations and branding of cattle for FMD for eight weeks. The goal is that this will help to bring the disease under control as soon as possible, until additional personnel can be appointed.

> auctioneers, and livestock traders to be on high alert and to report any suspicion of FMD to the local state veterinarian immediately. Please help us to keep the province's animals free of this disease. Constant vigilance is vital.

> > Dr Adri Grobler



SASVEPM webinar: The current situation of FMD in South Africa. Don't miss out on this webinar.

Link to Register

Animal Disease Outbreaks during May

There were **nine** new outbreaks of **African horse sickness (AHS)** reported this month, with 12 horses affected. Six of these outbreaks occurred in the City of Tshwane, one in the city of Johannesburg and two in the City of Ekurhuleni. This is a substantial reduction from the 45 outbreaks in April.

Two new outbreaks of African swine fever (ASF) were detected. Six of 14 pigs purchased at an auction by a smallholder pig farmer in Kaalplaats (southern border of Gauteng Province) died within three days of arrival with typical symptoms of ASF. The second outbreak occurred in an informal communal setting in the City of Ekurhuleni. The source of infection was not found but some pigs were allowed to roam freely. Many different owners kept pigs there and it was difficult to get accurate information.

Highly pathogenic avian influenza (HPAI) H5 was confirmed in a free ranging backyard poultry flock on a small holding. There were no new introductions, so it is thought the virus entered from the environment. The chickens had lethargy, dyspnoea and cyanosis before death. Fourteen of the 20 chickens had died when the state veterinarian was notified.

Bluetongue was confirmed as the cause of illness of a ram near Fochville. It was lethargic and anorexic, with coronitis and pyrexia. No vaccinations against bluetongue had been given previously. The farmer was advised on vaccinations and prevention strategies.

There was one outbreak of **Salmonella Enteritidis (SE)** reported in chicks that were hatched from parents known to have had SE. The farm was placed under quarantine and is following a treatment protocol, with strict biosecurity measures in place.

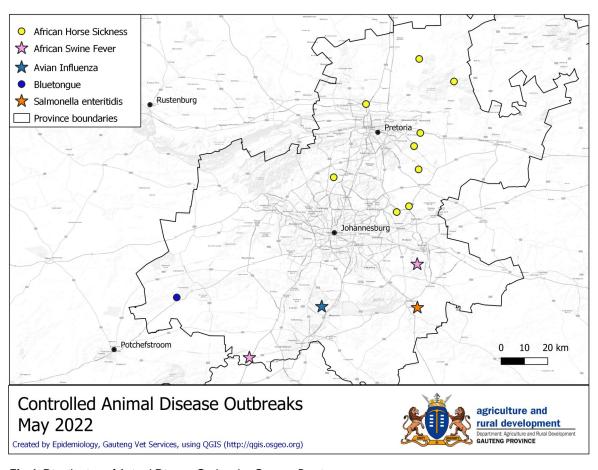
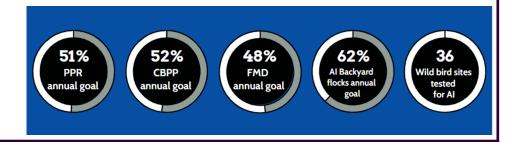


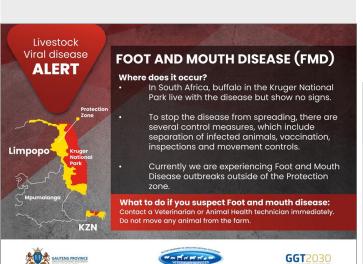
Fig 4. Distribution of Animal Disease Outbreaks, Gauteng Province.

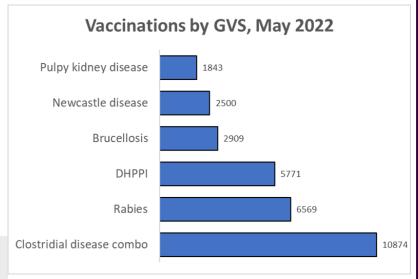
Fig 5. Cumulative Surveillance Summary 2022. Active surveillance for contagious bovine pleuro-pneumonia (CBPP), peste des petits ruminants (PPR), foot and mouth disease (FMD), and avian influenza (Al) is done monthly or quarterly (FMD) in Gauteng as part of the national program. All suspected cases are investigated.



Animal disease vaccination activities

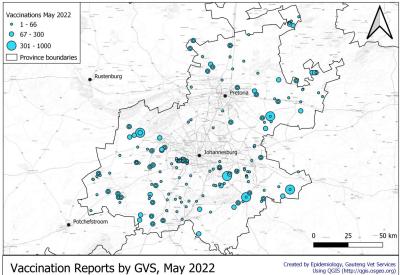
GVS primary animal health and regulatory officials administer vaccinations to pets and livestock on a daily basis. The total number of vaccines administered in May was **30 514.** A breakdown of the types of vaccines and their geographic distribution are provided on the right hand side of this page.





DHPPI: Canine distemper, infectious hepatitis, parvo & parainfluenza virus. **Clostridial disease combo:** Anthrax, botulism & black quarter.

(Data may change)



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