African swine fever outbreak and surveillance update report

31 August 2024



agriculture, land reform & rural development

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

Report compiled by: Directorate: Animal Health

1. Introduction and summary

African Swine fever (ASF) is a controlled disease in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984). Historically, ASF only occurred within the legislated ASF controlled area in South Africa, as described in Table 1 of the Animal Diseases Regulations (R.2026 of 1986). Specific additional control measures are described for this area in Table 2 Animal Diseases Regulations, due to the presence of the sylvatic cycle of ASF (between warthogs and soft ticks) in this area.

More recently, two main epidemics of ASF in domestic pigs were identified outside of the South African ASF-controlled area. The first occurred in 2012 with outbreaks in Gauteng and Mpumalanga provinces, and the second occurred in 2016–2017 with outbreaks in the North West, Free State and Northern Cape provinces. These outbreaks involved ASF outbreaks in domestic pigs, in the area previously free from ASF, by means of the domestic cycle of ASF (spread via pig to pig contact and contact with pig products). Since 2019, South Africa has experienced wider spread outbreaks of ASF in North West, Mpumalanga, Gauteng, Free State and Northern Cape Provinces, with the Western Cape and Eastern Cape Provinces affected for the first time.

Outside of the legislated ASF controlled area, South Africa currently has four open ASF outbreak events, and one outbreak event which was resolved and closed with the World Organisation for Animal Health (WOAH):

- The first outbreak event started in 2019 and is affecting Free State, Gauteng, Mpumalanga, North-West and Northern Cape provinces, with a total of 198 reported outbreaks (46 open and 152 resolved).
- The second outbreak event started in 2020 and is in Eastern Cape Province with 49 reported outbreaks (25 open and 24 resolved).
- The third outbreak event started in 2021 and is in Western Cape Province with 56 outbreaks (15 open and 41 resolved).
- The fourth outbreak event started in 2022 and is in KwaZulu-Natal Province with 2 reported outbreaks (both resolved) and has now been closed.
- The fifth outbreak event started in 2023 in KwaZulu-Natal with 2 reported outbreaks (1 open and 1 resolved).

There were four ASF outbreaks reported within the legislated ASF controlled area. Three outbreaks were reported in Limpopo (two occurred in 2022 and one in 2023), while one outbreak was reported in Mpumalanga Province (occurred in 2023).

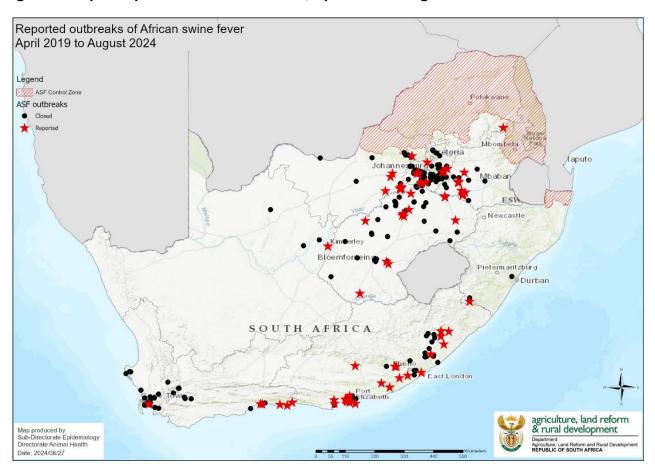




Table 1: Summary of active outbreaks per province*:

Province	Number of open outbreaks	Number of resolved outbreaks	Total number of outbreaks	Start date of last reported outbreak
Eastern Cape	25	24	49	27 June 2024
Free State	14	34	48	15 May 2024
Gauteng	7	96	103	29 July 2024
KwaZulu-Natal	1	1	2	28 September 2023
Mpumalanga	14	12	26	12 May 2023
North West	10	8	18	20 March 2024
Northern Cape	1	2	3	12 May 2024
Western Cape	15	41	56	1 August 2024
Total	87	218	305	

*This table does not reflect outbreaks in the legislated ASF controlled area

2. Details of new outbreaks

2.1 Status update since the last update report issued on 31 July 2024

No new outbreaks were reported in the KwaZulu-Natal, Mpumalanga, Limpopo, North West, Free State and Northern Cape, Provinces during the month of August 2024.

Gauteng

One new outbreak located in the Midvaal Local Municipality was reported to WOAH during the month of August 2024.

Eastern Cape

One new outbreak located in the Raymond Mhlaba Local Municipality was reported to WOAH during the month of August 2024.

Western Cape

One new outbreak located in the George area was reported to WOAH during the month of August 2024.

2.2 Confirmation of diagnosis

For all reported outbreaks, confirmation of disease was achieved by positive PCR on organ samples (in some cases whole blood samples) at the ARC Onderstepoort Veterinary Research Transboundary Animal Diseases laboratory (OVR-TAD). Serology is not indicated for confirmation of an acute outbreak.

2.3 Control measures implemented

There is no effective vaccination or treatment available for ASF. Control measures are based on quarantine and movement controls. Awareness drives, highlighting essential biosecurity measures to enable pig owners to prevent infection of their pigs, have been ongoing and include the following recommendations:

- Confinement of pigs to prevent contact with other free roaming pigs or wildlife;
- Strictly purchase pigs directly from healthy herds;
- Feed only safe, recommended feed to pigs;
- Do not allow visitors to make contact with pigs;
- Wash hands before making contact with pigs and only use clean clothes, shoes, equipment and vehicles (that have not been in contact with other pigs);

 Carcasses of infected pigs must be disposed of in a responsible manner to prevent further spread of disease, and must be in line with local environmental legislation.

3. Details of closed outbreaks

3.1 Status update since the last update report issued on 31 July 2024

Eastern Cape

Two outbreaks were closed with WOAH during the month of August 2024. One in Amahlati and one in Nelson Mandela Bay Local Municipality.

Mpumalanga

One outbreak was closed with WOAH during the month of August 2024 in the Steve Tshwete Local Municipality

4. Epidemiology

Through sequencing of relevant ASF outbreaks, the OVR-TAD has determined that two genotypes are currently involved:

- The outbreak event in Free State, Gauteng, Mpumalanga, and North West have been caused by both Genotype I and II viruses.
- The Eastern Cape and Western Cape outbreak events have been caused by Genotype II only.

The epidemiological curves show the trend of ASF outbreaks reported per month per outbreak event. Figure 2 shows that the Mpumalanga, Free State, North West, Gauteng and Northern Cape Provinces outbreaks are ongoing, but seem to be decreasing after the major peaks in May 2021 and February 2023. Figure 3 shows that the Eastern Cape Province outbreaks are ongoing at a stable level, despite a peak of cases in January 2023. Figure 4 shows that the Western Cape Province outbreaks have been resolving, but a new incidence of cases was reported in February 2024. Figure 4 shows that the Kwa Zulu Natal Province outbreaks that were reported seem to have been once off events in June 2023 and September 2023, with no recent cases reported.

Figure 2: Mpumalanga, Free State, North West, Gauteng and Northern Cape Provinces outbreaks per month since start of event in 2019

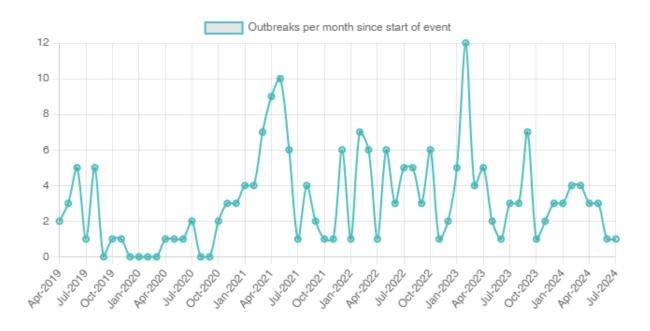
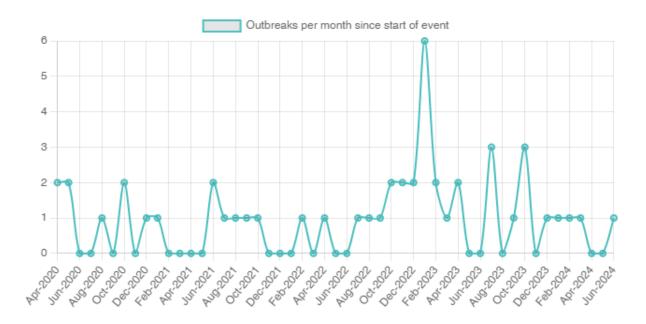


Figure 3: Eastern Cape Province outbreaks per month since start of event in 2020



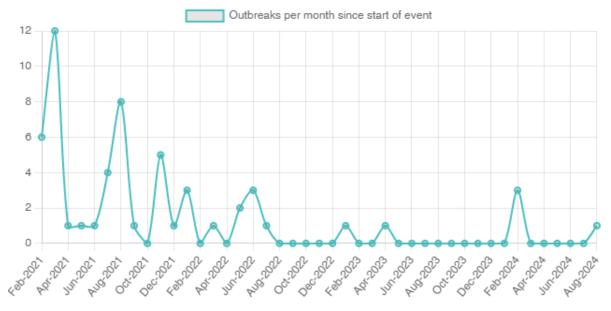
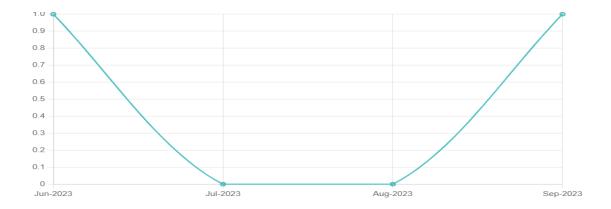


Figure 4: Western Cape Province outbreaks per month since start of event in 2021

Figure 5: Kwa Zulu Natal Province outbreaks per month since start of event in 2023



5. Surveillance

Surveillance for ASF remains ongoing. All movements of pigs from infected properties and areas, during the period prior to and following diagnosis, are traced and any suspect disease outbreaks in pigs are investigated. If suspect clinical signs are observed, samples are collected to verify the diagnosis. Furthermore, any suspect cases of ASF must be reported to the responsible state veterinary office for investigation. This includes any sudden increase in mortalities of unknown cause.

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