

# African swine fever outbreak and surveillance update report

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## agriculture, forestry & fisheries

Department:

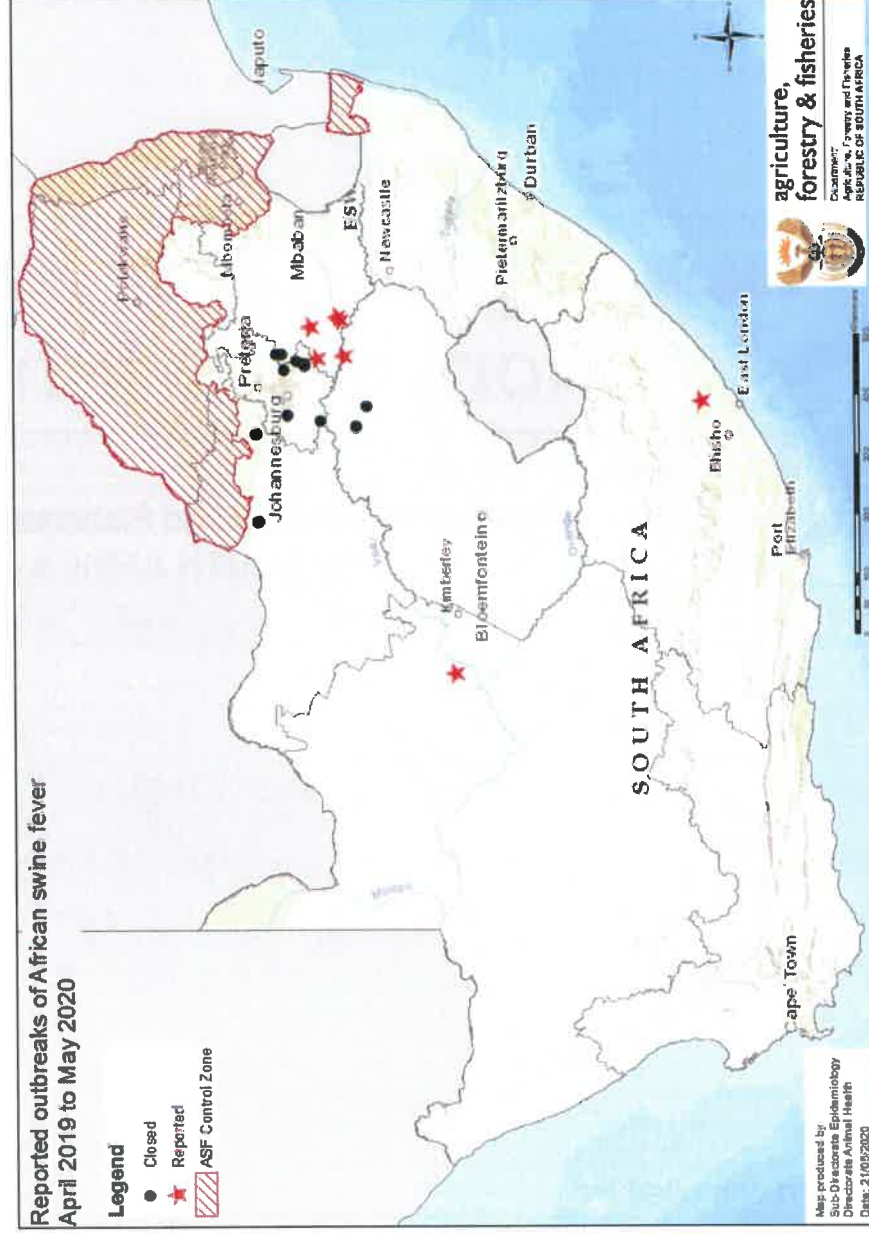
Agriculture, Forestry and Fisheries

**REPUBLIC OF SOUTH AFRICA**

Report compiled by:  
Directorate: Animal Health  
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## 1. Introduction and summary

Since April 2019 South Africa has reported twenty-three (23) outbreaks of African Swine Fever (ASF) outside the ASF controlled area of South Africa. Fifteen (15) of these outbreaks have since been closed, which includes all the outbreaks in North West and Gauteng, the remaining open outbreaks are in Mpumalanga, Northern Cape, Free State and Eastern Cape Provinces.



**Summary of open outbreaks:**

OIE reporting date	OIE reference	Area	Municipality	Province
6 September 2019	ASF_MPU_2019_015	Secunda area	Govan Mbeki	Mpumalanga Province
6 September 2019	ASF_MPU_2019_016	Standerton area	Lekwa	Mpumalanga Province
11 September 2019	ASF_NCP_2019_001	Kimberley area	Siyancuma	Northern Cape Province
1 November 2019	ASF_MPU_2019_017	Standerton area	Dipaleseng	Mpumalanga Province
26 November 2019	ASF_MPU_2019_018	Standerton area	Lekwa	Mpumalanga Province
6 May 2020	ASF_ECP_2020_001	Nggamakwe area	Mnquma	Eastern Cape Province
8 May 2020	ASF_MPU_2019_019	Standerton area	Lekwa	Mpumalanga Province
19 May 2020	ASF_MPU_2019_020	Villiers area	Mafube	Free State Province

**Summary of closed outbreaks:**

OIE reporting date	OIE reference	Area	Municipality	Province	Closure date
10 April 2019	ASF_NWP_2019_01	Zeerust area	Ditsobotla	North West Province	2020/02/24
18 April 2019	ASF_MPU_2019_001	Delmas area	Victor Kanye	Mpumalanga Province	2020/03/02
30 April 2019	ASF_MPU_2019_002	Daveyton area	Ekurhuleni	Gauteng Province	2019/10/15
13 May 2019	ASF_MPU_2019_003	Heilbron area	Ngwathe	Free State Province	2019/09/13
22 May 2019	ASF_MPU_2019_004	Vanderbijlpark area	Emfuleni	Gauteng Province	2019/10/16
4 June 2019	ASF_MPU_2019_005	Nigel area	Ekurhuleni	Gauteng Province	2019/11/05
14 June 2019	ASF_MPU_2019_006	Nigel area	Ekurhuleni	Gauteng Province	2019/11/05
14 June 2019	ASF_MPU_2019_007	Nigel area	Ekurhuleni	Gauteng Province	2019/10/16

14 June 2019	ASF_MPU_2019_008	Marikana area	Rustenburg	North West Province	2019/11/27
25 June 2019	ASF_MPU_2019_009	Koppies area	Ngwathe	Free State Province	2019/11/22
11 July 2019	ASF_MPU_2019_010	Nigel area	Ekurhuleni	Gauteng Province	2019/11/05
11 July 2019	ASF_MPU_2019_011	Koppies area	Ngwathe	Free State Province	2019/12/02
8 August 2019	ASF_MPU_2019_012	Delmas area	Victor Kanye	Mpumalanga Province	2020/03/02
8 August 2019	ASF_MPU_2019_013	Nigel area	Lesedi	Gauteng Province	2019/11/07
6 September 2019	ASF_MPU_2019_014	Randfontein area	Mogale City	Gauteng Province	2019/12/12

## **2. Details of outbreaks**

### **2.1 History of affected localities**

#### North West

ASF was reported in April and June 2019 in two localities in the North West province, one in Ditsobotla and one in Rustenburg local municipality. These two outbreaks do not appear to be linked, with the first presumably associated with warthog contact and the second with swill feeding. These outbreaks have been closed and no further cases reported since June 2019.

#### Mpumalanga

In total seven outbreaks have been reported in Mpumalanga province in four local municipalities from April 2019 up until May 2020 and have been associated with auctions and trade in pigs. The outbreaks in Victor Kanye local municipality have been closed whilst the outbreaks in Govan Mbeki, Lekwa and Dipaleseng local municipalities are ongoing, with control measures still being implemented.

#### Gauteng

In total eight outbreaks have been reported in Gauteng province in four local municipalities from April to September 2019 and were associated with auctions and visitor/vehicle spread. These outbreaks have been closed and no further cases reported since September 2019.

#### Free State

Three outbreaks have been reported in Free State province in Ngwathe local municipality from May to July 2019 and were associated with auctions, swill feeding and visitor/vehicle spread. These three outbreaks have been closed. A new outbreak was reported on 15 May 2020 in Mafube local municipality and was associated with trade in animals from an outbreak area in another province.

#### Northern Cape

One outbreak has been reported in the Northern Cape province in Siyancuma local municipality in September 2019 and was presumably associated with warthog contact. No further cases have been reported and follow-up surveillance is almost finalised for closure.

## Eastern Cape

On 13 April 2020, the state veterinary services in the Amathole District of the Eastern Cape Province were notified of a suspect case of African Swine Fever (ASF). After receiving notification of unusual pig deaths, provincial veterinary services visited the affected area to conduct further investigation. A post mortem examination was performed at the provincial veterinary laboratory and the clinical picture was highly suggestive of ASF. Samples were collected and sent to the Onderstepoort Veterinary Research Transboundary Animal Diseases laboratory (OVR-TAD), where the disease was confirmed by positive PCR on organ samples on 6 May 2020. This is the first time that an outbreak of ASF has been reported in the Eastern Cape Province. The provincial veterinary services visited five villages in the Mquma Local Municipality and found that thus far about 200 pigs have died and collected serum samples of which pigs from two villages tested seropositive for ASF virus. The outbreak occurred in a communal setting, which makes movement control and biosecurity between the respective pig herds difficult. It is estimated that there are approximately 40 000 pigs kept in the area. Although some pigs are kept confined to sties, a large number of pigs are free roaming and live largely by scavenging.

### **2.2 Confirmation of diagnosis**

For all reported outbreaks, confirmation of disease was done by positive PCR on organ samples (in some cases whole blood samples) at the Onderstepoort Veterinary Research Transboundary Animal Diseases laboratory (OVR-TAD).

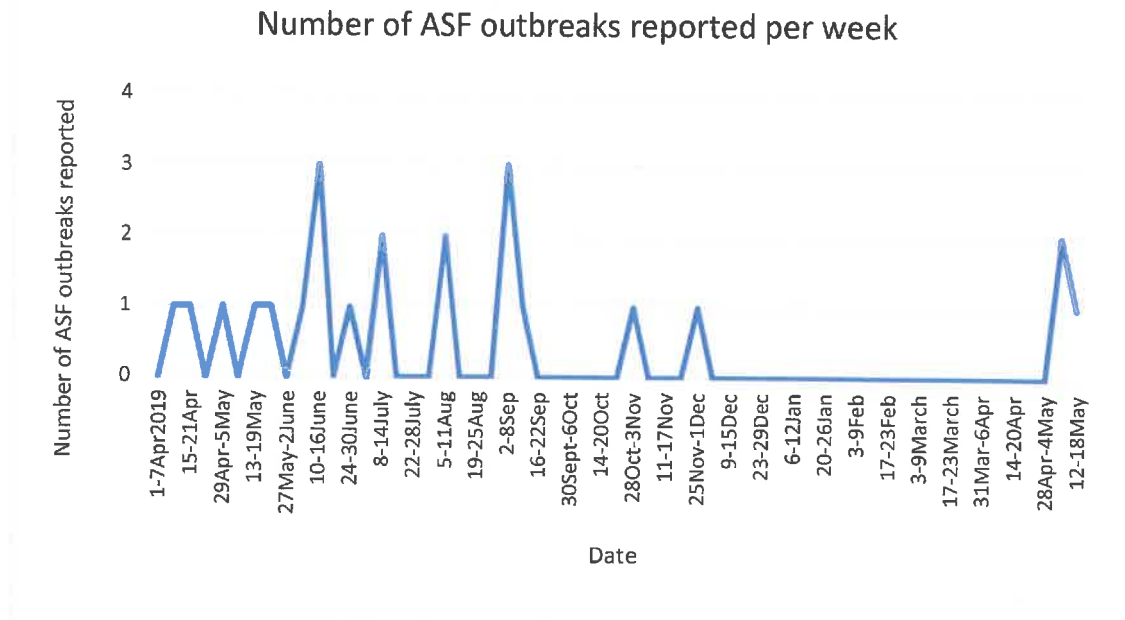
### **2.3 Control measures implemented**

For all these ASF outbreaks, the properties/areas were quarantined and movement controls from these properties/areas implemented. Mortalities were disposed of and registers kept of remaining pigs. Awareness drives highlighting essential biosecurity measures to enable pig owners to prevent infection of their pigs have been initiated including the following recommendations:

- Confining pigs to prevent contact with other pigs or wildlife;
- Only buying pigs directly from healthy herds;
- Only feeding safe feed to pigs;
- Not allowing visitors contact with pigs;
- Before having contact with pigs, wash hands, only use clean clothes, shoes, equipment and vehicles (that have not been in contact with other pigs).

### 3. Epidemiology

The below figure shows the trend of ASF outbreaks reported per week since the first reported ASF outbreaks in 2019 in South Africa.



#### 3.1 Phylogeny of the ASF viruses

Most of the reported outbreaks have had the ASF virus sequenced. OVR-TAD has determined two genotypes involved:

North West, Mpumalanga, Gauteng, Free State and Northern Cape – Genotype I

North West and Eastern Cape – Genotype II

#### 3.2 Epidemiological investigations

The investigations are still ongoing to identify the primary sources of the outbreaks. Based on information available, the following risk factors have been suspected to play a role in spreading the disease in these outbreaks:

- Contact between warthogs and domestic pigs
- Buying and selling pigs at auctions
- Movement of pigs/people/vehicles from infected areas
- Feeding of swill

#### 4. 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 investigated. If suspect clinical signs are observed, samples are collected to confirm the diagnosis.

Some serological surveillance has also been undertaken in surrounding areas from clinically healthy animals. The following is a summary of surveillance done on pig keeping properties with negative results:

Province	Number of properties visited and sampled	Samples collected		
		Serum	Tissue	Blood
North West	82	242	24	3
Mpumalanga	41	15	28	133
Gauteng	21	15	20	4
Free State	10	8	8	1
KwaZulu Natal	2	-	2	-
Northern Cape	2	15	-	-
Limpopo	5	27	2	-

#### 5. Trade implications

ASF is a disease listed by the OIE and thus has trade implications when an outbreak occurs outside of the controlled area. However, South Africa has a system of approving pig compartments that are free of specific diseases, including ASF. No outbreaks of ASF have ever occurred in South Africa's officially approved pig compartments which have specific biosecurity measures in place to prevent the entry of ASF. South Africa can thus provide the necessary guarantees to certify freedom from ASF, FMD, CSF and PRRS for pigs and pig products from these compartments. The list of approved pig compartments is available on our website on the linked titled "List of officially approved South African biosecure pig compartments" on: <https://www.daff.gov.za/daffweb3/Branches/Agricultural-Production-Health-Food-Safety/Animal-Health/importexport/export>.

  
Director Animal Health

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