

GF-TADS Africa

GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES









African swine fever control in South Africa

- Leana Janse van Rensburg
- South Africa Western Cape Veterinary Services

Brief history of ASF in South Africa

- Since 1928 reports of ASF in RSA in northern provinces of country
- ► In 1935 declared an ASF controlled area in South Africa
- Requirements as to how pigs need to be kept/housed to be able to keep pigs in this area
- Movement control



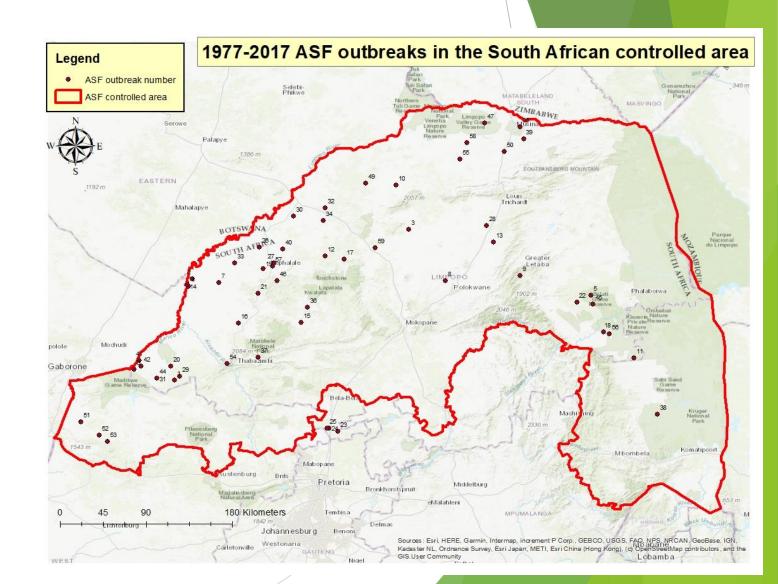
Brief history of ASF in South Africa

- ▶ Later found to be due to the ASF sylvatic cycle which is endemic in this area
- ► The sylvatic cycle is between warthogs and the soft ticks (tampans) living in warthog burrows in the ground
- Warthogs are resistant to the effects of the ASF virus they do not get sick or die from the virus
- Was always thought that tampans remain in the burrows, but the nymphs have been found on warthog hides in studies
- Certain tampans (Ornithodoros spp.) can remain infected with ASFV for up to 8 years and may survive without feeding for 5 years



Brief history of ASF in South Africa

- Historically had occasional spill-over to domestic pigs if not kept adequately separated
- Isolated events with no spread
- Between 1977-2017 were59 outbreaks
- Compartments were first shown to be successful in this area to prevent ASF in domestic pigs in a sylvatic endemic area



Legislated control measures

• Control measures for ASF legislated in terms of the Animal Diseases Act, 1984 (Act 35 of 1984) in South Africa:

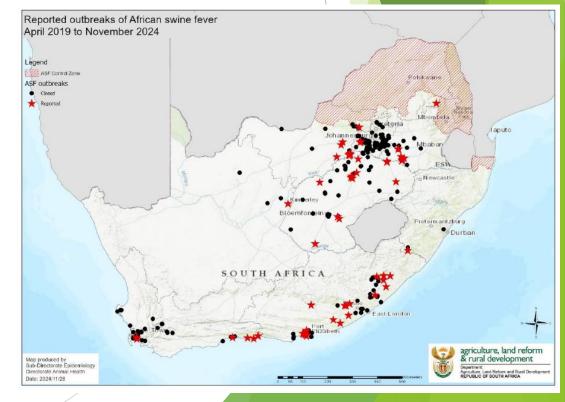
African Highly contagious viral Pigs, transmitted by Wild pigs, swine disease wild warthogs, bushpigs fever pigs, bushpigs and the tampan and (Ornithodoros moubata), warthogs and characterised by high fever, reddish discolouration of the skin of the abdomen and hind quarters, in co-ordination, somnolence, high mortality and haemorrhage in all internal organs, especially in lymph nodes

- . All pigs in a controlled area excluding wild pigs, isolated and destroyed be isolated and warthogs and bushpigs under the supervision of that are not tamed, shall or by an officer or supervision of or by an officer or authorised camps, kraals or pens contact animals shall be infected animals shall be isolated and destroyed be isolated and destroyed under the supervision of or by an officer or authorised person.
- 2. All infectious or contaminated things fed to pigs in the Republic, shall be cooked beforehand for at least 60 minutes or sterilised

Changes in ASF epidemiology

- ASF sylvatic cycle has expanded
- Gradual change to a predominant domestic pig cycle
- Epidemics
 - 2012
 - 2016/17
 - 2019-present
- Necessitates change in the approach to ASF control





Pig keeping changes

- ► Stats SA (2016) Community Survey on Agricultural Households
 - 112 674 in 2011 to 267 623 households in 2022 keeping pigs
 - Of these households, 95% keep less than 20 pigs
- Pigs kept as a low input protein source or means of supplementing income
- Many pigs kept in peri-urban areas not suitable for agriculture
- Many pig owners don't have the resources to confine pigs or buy safe feed
- ▶ Difficult to define epidemiological units in communal areas
- The disease will cause devastation in some communities due to the large number of informal pig keepers and the threat to food security
- ASF has become a socio-economic rather than a veterinary animal disease problem



South African ASF working group

- ► To brainstorm and address these concerns the ASF working group was established in 2019
- Representatives from:
 - National veterinary services
 - All 9 provincial veterinary services
 - Agricultural Research Council-OVR
 - University of Pretoria, Faculty of Veterinary Science
 - South African Pork Producers' Organisation
 - South African National Animal Health Forum
 - South African Pig veterinary society
- ► To provide strategic guidance for disease control and prevention measures for ASF

ASF outbreak contingency plan

- The ASF working group assisted in drafting an ASF contingency plan which was published in 2020, which provides guidelines to state veterinarians on:
 - sampling,
 - reporting,
 - quarantine,
 - forward/backward tracing,
 - action plans for control of the outbreak,
 - closure of outbreaks



DIRECTORATE: ANIMAL HEALTH

AFRICAN SWINE FEVER OUTBREAK CONTINGENCY PLAN

Quarantine

- On suspicion of ASF (history/clinical signs/PM findings) property placed under quarantine in writing.
- Prohibit movement of pigs/pig products unless under state veterinary permit and in compliance with conditions of said permit.
- Need to report any further morbidity/mortality.
- Correct disposal of deceased animals (to prevent spread).
- Effective perimeter control to protect adjoining land.
- Keep a register of all susceptible species present on the property.



VEEARTSENTYDIENS: DIEREGESONDHEID

Tel: 044 803 3770 Email: svgeorge@ekenburg.com ENQUIRIES/NAVRAE: Dr Janse van Rensburg

VETERINARY QUARANTINE NOTICE/VEEARTSENY KWARANTYN KENNISGEWI

You as the owner/person responsible are hereby notified that/ U as the elensar/verantwoordelike persoon word hiermee in kennis gestel dat: die varke/pigs on the propertylop die perseel: "......" in the municipal area of/ in die munisipale area: 🕟 🏬 are infected or suspected of being infected with is besmet of is vermoedelik besmet met: Afrika Varkpes/African Swine Fever and are therefore placed under quarantine/ en word dearom onde

No pig or pig products products may be moved, or caused or permitted to be moved to or through or from this property except upon the authority of a written permit issued by a State Veterinarian and in accordance with the conditions set out in such a permit/ open dier of dierlike produkte inslutende mis mag varief of deur die eiendom vervoer word tensy a skriftelike permit deur die Staatsveearts uitgereik is en al die voorwaardes in die permit nagekon

The following animal disease control measures must be applied on this propertyl die volgende dieresiekti beheermaatreëts moet op die eiendom toegepas word:

- 1. Dead pics must be disposed of safely and effectively, as agreed with the responsible State veterinarian and
- 2. No person may leave the premises without cleansing and disinfecting all shoes (and clothing) and preferably changing footwear.
- All pig pens to be cleansed and disinfected once depopulated
- 4. Any mortalities must be reported to the State Veterinarian George

This notice is issued in terms of the newlations of the Animal Diseases Act, 1984 (Act, 35 of 1984), as amended, and remains in force until repealed in writing by a State Veterinarian when the State Veterinarian is satisfied that the disease has been eradicated or poses no further risk/ Hierdie kennisgewing is uitgereik ingevolge van die Dieresiekte Wet 1964 (Wet 35 van 1964) soos gewysig, en bly van krag totdat die Staatsveearts dit skriftelik ophef wanneer die

STATE VETERINARIAN



Backwards & Forwards tracing

 Full forward tracing of where live pigs or potentially contaminated products moved from at least 15 days prior to first clinical signs.

• Full backward tracing of any new pigs introduced from 15 days before the first clinical signs as well as potentially infected feed sources.

Appropriate action/investigation to be taken by State vets at origins and

destinations.



Specific action plan for the outbreak

 Recommended to follow a consultative approach with the farmer, community, local municipality and any other role players and should address the following aspects:

- Biosecurity
- Movement controls
- Resources required
- Culling
- Disposal
- Disinfection
- Surveillance
- Requirements for lifting of quarantine
- Needs to be on a case by case basis based on the merits of the situation/property



Challenges for ASF outbreak management

- Many challenges in communal/informal pig keeping as pigs mostly not effectively confined - different owners.
- Difficult to determine which pigs infected and in-contact.
- Enforcement often difficult in these farming systems and find it only works to manage the outbreaks if the community is on-board with the proposed control measures.
- Need to engage other Government departments to assist with waste disposal and to engage disaster management structures to be able to access additional resources.

ASF Control - way forward

- Need to find a way to preserve livelihoods without posing a risk of ASF
- Long term farming practices need to change pig owners need to form part of the solution
- Need a broad/holistic approach
- Control measures need to be coordinated across the country
- Prevention is the ultimate goal Biosecurity!





GF-TADS Africa

GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES







