

Disease-specific WOA Standards on ASF, focusing on trade - Overview

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Webinar on WOA standards, trade and ASF

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and other swine diseases



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- 1) Overview of WOAH Standards for ASF: Terrestrial Code and Terrestrial Manual
- 2) Case definition
- 3) Prescribed diagnostic tests
- 4) ASF status
- 5) Zoning and compartmentalisation

Agenda

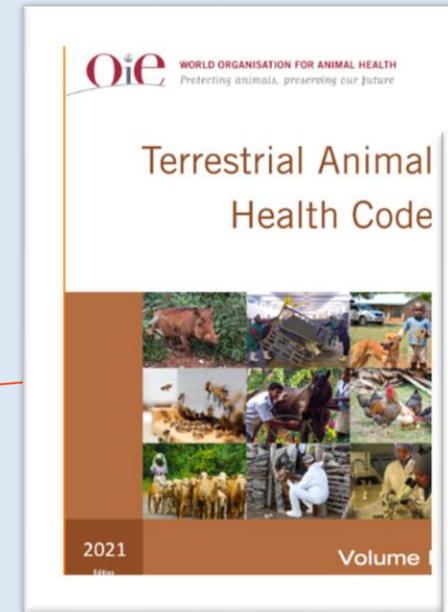
/Recap\

The WOAH develops and publishes standards related to its mandate:

- **Codes:** standards for improvement of animal health and welfare and veterinary public health, ensure safe trade
- **Manuals:** standards for diagnostic tests and vaccines

May be found on the WOAH website:

<https://www.woah.org/en/what-we-do/standards/>



- ASF chapter in Terrestrial Code: **Chapter 15.1.** (last updated 2019)
- ASF chapter in Terrestrial Manual: **Chapter 3.9.1.** (last updated 2021)

Case definition for ASF

The following defines the occurrence of infection with ASFV:

1. ASFV has been **isolated** from samples from a suid;
or
2. **antigen or nucleic acid** specific to ASFV has been identified in samples from a suid showing clinical signs or pathological lesions suggestive of ASF or epidemiologically linked to a suspected or confirmed case of ASF, or from a suid giving cause for suspicion of previous association or contact with ASFV;
or
3. **antibodies** specific to ASFV have been detected in samples from a suid showing clinical signs or pathological lesions consistent with ASF, or epidemiologically linked to a suspected or confirmed case of ASF, or giving cause for suspicion of previous association or contact with ASFV.



Case definition for ASF ⁵



Suids include all varieties of *Sus scrofa* (pig), both domestic and wild, and African wild suid species including warthogs (*Phacochoerus spp.*), bushpigs (*Potamochoerus spp.*) and the giant forest hog (*Hylochoerus meinertzhageni*).

Chapter 3.9.1. of WOAHA Terrestrial Manual

B. DIAGNOSTIC TECHNIQUES

Table 1. Test methods available and their purpose

| Method | Purpose | | | | | |
|--|-----------------------------------|--|------------------------------------|--------------------------------|--|---|
| | Population freedom from infection | Individual animal freedom from infection prior to movement | Contribute to eradication policies | Confirmation of clinical cases | Prevalence of infection – surveillance | Immune status in individual animals or populations post-vaccination |
| Agent identification | | | | | | |
| Virus isolation/ HAD test ¹ | n/a | n/a | ++ | +++ | ++ | - |
| FAT | n/a | n/a | ++ | ++ | + | - |
| ELISA for antigen detection | + | ++ | + | + | + | - |
| Conventional PCR | ++ | ++ | ++ | ++ | ++ | - |
| Real-time PCR | +++ | +++ | +++ | +++ | +++ | - |
| Detection of immune response | | | | | | |
| ELISA | +++ | +++ | +++ | + | +++ | - |
| IPT* | +++ | +++ | +++ | + | +++ | - |
| IFAT* | +++ | +++ | +++ | + | +++ | - |
| IBT* | ++ | ++ | ++ | + | ++ | - |

Key: +++ = recommended for this purpose; ++ recommended but has limitations; + = suitable in very limited circumstances; - = not appropriate for this purpose.

HAD = haemadsorption; FAT= fluorescent antibody test; ELISA = enzyme-linked immunosorbent assay;

PCR = polymerase chain reaction; IPT= indirect immunoperoxidase test;

IFAT = indirect fluorescent antibody test; IBT = immunoblotting test.

*Recommended method as confirmatory serological test.

Resource: ASF Reference Laboratory Network

- Harmonize, standardize and validate ASF diagnostic assays
- Make available and facilitate the exchange reference material to be used for internal verification of ASF diagnostic assays
- Support national reference laboratories in relation to ASFV diagnostics by providing scientific and technical expertise
- Provide expertise and training to WOAHA and WOAHA Members on ASF diagnosis, surveillance and control

Details: <https://www.woaha.org/en/what-we-offer/expertise-network/reference-laboratories/>

- In order to determine ASF status of a country, zone or compartment, requires the following (ref Article 15.1.3.)
 - Notifiable disease
 - Awareness programme
 - Biosecurity
 - Knowledge of domestic and captive wild pig herds, wild and feral pigs and African wild suids spp, distribution and habitat
 - Surveillance programme

Historical freedom

- No case for **25 years**
- For at least past **10 years**: notifiable dz, early warning system, measures to prevent introduction, movement in accordance with trade articles

All suids

- No case for past **3 years** (**12 months** if *Ornithodoros* ticks not involved)
- Surveillance programme **3 years**
- Movement in accordance with trade articles

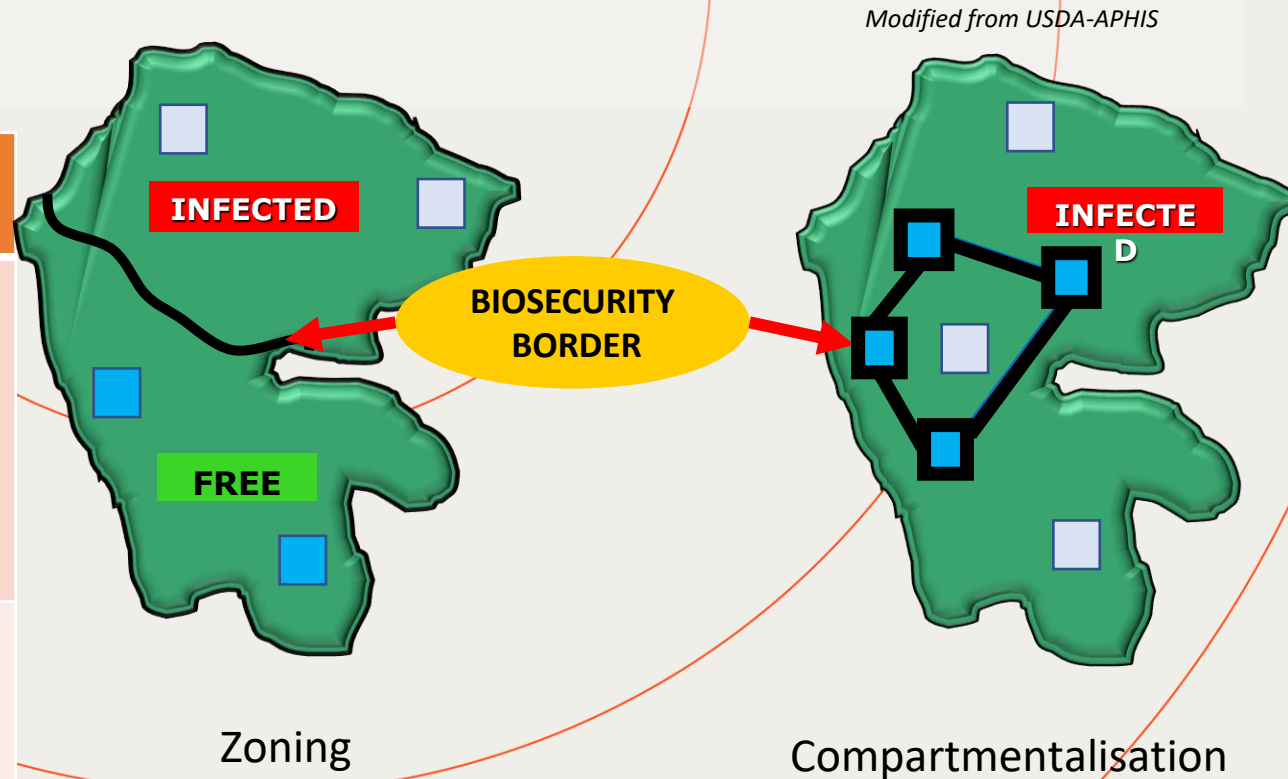
Domestic and captive wild pigs

- Possible to have infection in feral/wild suids
- Same as for all suids, but no case of infection in domestic & captive wild pigs

Zoning and compartmentalisation

- WOAAH standards: Veterinary Services, risk analysis, surveillance, certification etc
- Subpopulations of specific health status
- For trade and disease control

| Zoning | Compartmentalisation |
|---|--|
| defined primarily on a geographical basis (using natural, artificial or legal boundaries) | defined primarily by management and husbandry practices related to biosecurity |
| Implementation: Good risk management, including biosecurity plans | |



Compartmentalisation guidelines for ASF

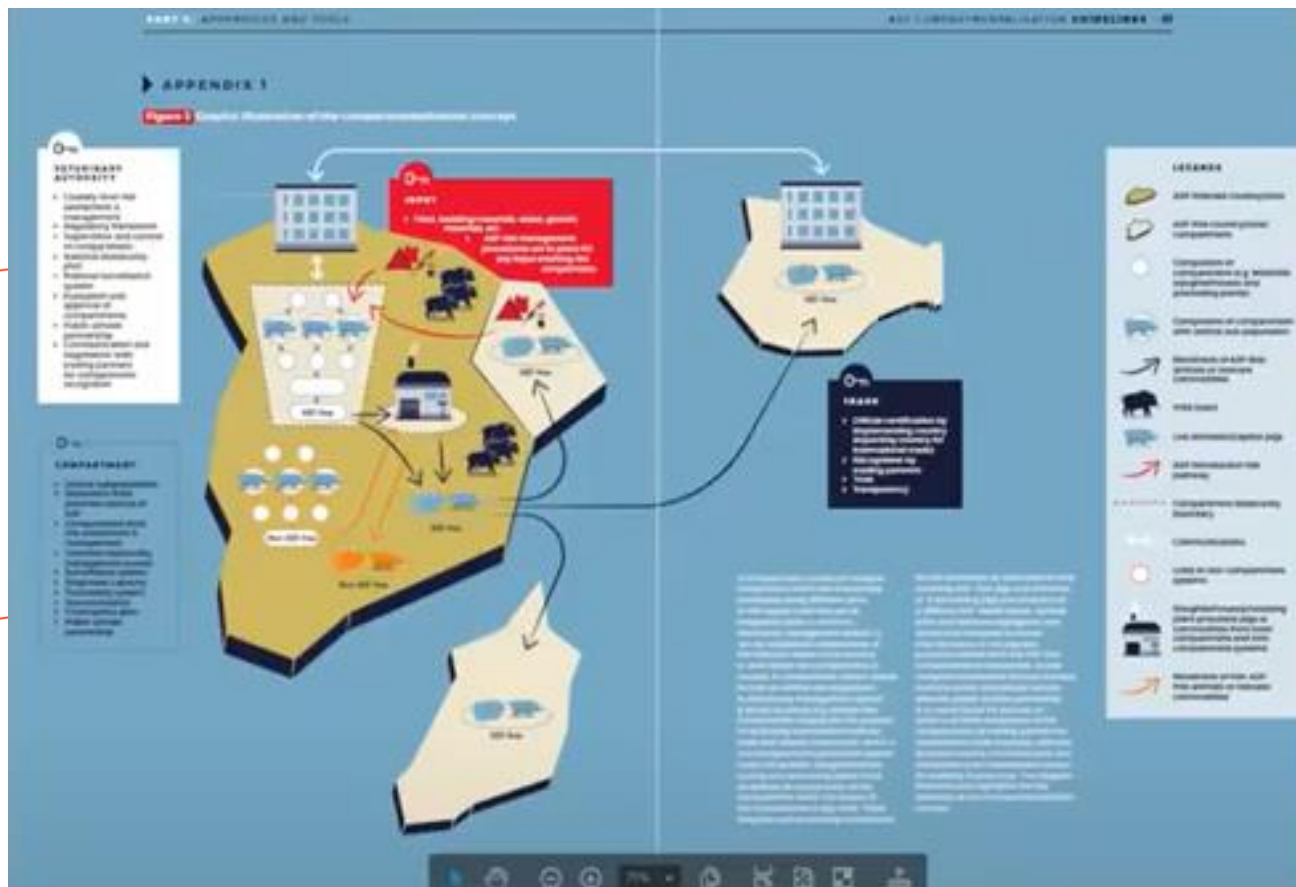


Tool to establish and maintain a swine compartment free from ASF for the purposes of facilitating **safe national and international trade**, and promoting **disease prevention and control**

For Veterinary Authorities, private sector, third parties and technical service providers

Organisation:

- Part 1: principles and implementation of compartmentalisation for ASF
- Part 2: appendices and tools
- Part 3: compartmentalisation as applied by Members



- Outcome-based, not prescriptive
- Practical tools to aid implementation
- Case studies
- Infographics

? WHAT?

⚙️ HOW?

🎯 EXPECTED OUTCOME



- WOAHA standards offer science-based toolbox for risk mitigation and to ensure safe trade and business continuity
- ASF freedom may be established for all suids in the country/ zone or for domestic and captive wild only
- Zoning, compartmentalisation, commodity-risk management
- Guidelines on compartmentalisation available to support practical implementation
- Diagnostic support available from WOAHA Reference Laboratories (2 NEW in the Americas region)

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Thank you

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