Global ASF Status and Risk-Based Prevention and Control Strategy

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Government counterparts

GF-TADs Standing Group of Experts on African Swine Fever

EFSA 2015. Scientific opinion on African swine fever


V. Guberti, S. Khomenko, M. Masiulus, S. Kerba – African swine fever in wild boar and biosecurity during hunting, 2019 in preparation

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• Lessons Learnt from Genotype II from 2007-2019
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ASF genotype II in Europe and Asia - 2018

ASF events in wild and domestic swine in Europe and Eastern Asia in 2018 (01 Jan - 31 Dec)
ASF genotype II in Europe and Asia - 2019

ASF events in wild and domestic swine in Europe and Asia, 01 Jan. - 29 Mar. 2019 (by month of onset)

Asia: 4 countries: China, Mongolia, Viet Nam and Cambodia
Europe: 11 countries Belgium, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Republic of Moldova, the Russian Federation and Ukraine
> 20 genotypes
By 2013, the OIE WAHIS database indicated that more than 20 countries in Sub Sahara Africa reported ASF
Lack of regular reporting
Lessons learnt from ASF genotype II- 2007-2019

ASF Virus features

• High case fatality rate (>90%)
• Moderate transmissibility
• High persistence of ASFV
• Stable over wide ranges of temperatures and pH levels for long periods in protein rich environment
• Resistant to autolysis and various disinfectants
1. Sylvatic cycle: the common warthogs; bush pigs and soft ticks.
2. Tick-pig cycle: soft ticks; domestic pigs.
3. Domestic cycle: domestic pigs and pig products.
4. Wild boar-habitat cycle: wild boar; pig- and wild boar products and carcasses; the habitat
Transmission

1. Direct transmission from pig to pig, wild boar to wild boar, wild boar to pig:
2. Indirect transmission: fomites-to-pig transmission
3. Feed-to-pig transmission: swill feeding

- Human driven disease (long-distance disease transmission and its introduction in domestic pig population)
- Not necessarily a density dependent process
- Social and economic factors (e.g. poverty level, herd size and gross income)
- Seasonal peaks for domestic pigs June-August and for wild boars June –July and November-December
Preliminary risk pathways for SE Asia

Contaminated pig products

Infected Wild boars ??

Infected Live pigs

Infected Wild boars ??

Swill ??

Wild boars: Natural Farming ??

Border 1

Border 2

Human Vehicles Fomites

Low Bio-secured Commercial sector

Higher Bio-secured Commercial sector

Higher Standard Slaughterhouse

Backyard sector

Environment

Food:
- Households
- Restaurants

Non-regulated Lower biosecured Slaughterhouse

Contaminated pig products

Non-regulated Lower biosecured Slaughterhouse

Environment

Human Vehicles Fomites

Infected Live pigs
Risk Mitigation and Management:

- Overall Prevention – Biosecurity improvement
- Outbreak Containment – in domestic pigs and wild boars
- Preventive measures in infected and surrounding areas
- Surveillance

Will hear more in later sessions
Economic drivers and consequences

- Important sector with global sale of pork USD 39.2 bn in 2017
- The share of pork of global meat trade is 32%.
- Global threat to the livestock sector impacting the livelihoods of farmers and food security
- Cost of ASF prevention and control e.g. since 2013, a total amount of **EUR 95 million ben granted** for EU member states to combat ASF
- Trade restrictions and related economic losses
- Feed industry and pig technology suppliers including pharmaceuticals and vaccines

Source: [https://resourcetrade.earth/data?year=2017&category=80&units=value](https://resourcetrade.earth/data?year=2017&category=80&units=value)

Source: FAOSTAT
ASF Regional Strategy for Asia

Strategic approach to the management of African Swine Fever for the EU

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• Having **better understanding** of *pig sectors, value chains*, possible *risks and drivers* for ASF introduction and spread at the country and sub-regional levels;

• **Advocacy and communication**, including awareness on ASF risks and importance of timely reporting;

• **Capacity development** on the following areas:
  - Laboratory diagnosis
  - Good Emergency Management Practices including development of national policy, contingency plan, standard operating procedures, trainings and exercises, and other enabling environments
  - Early detection and response

• **Pig Sector specific risk management**, including safer movement and trades;

• Overall pig *herd health management*, including biosecurity

• Multi-sectoral and multi-lateral *coordination and collaboration* among stakeholders including *private sectors and other ministries* (e.g. forestry)

• Others including *strengthening of veterinary services* and relevant enabling environments including *compensation schemes*. 
The impact
sustainable development of the global pig sector contributing SDGs

The outcome
global pig sector and associated value chains resilient to high impact diseases

Global Strategy for ASF Prevention and Control
Being drafted jointly by FAO and OIE
The Global Strategy is expected to achieve four outputs:

- Importance of ASF and its impact is **recognized globally**
- ASF is **controlled** in most of countries and **eradicated** in some of countries not free today, while **protecting free status** of other continents/countries
- Prevention and control of **other major diseases of swine** are improved as a result of the ASF control strategy
- Established **sustainable private-public partnership** on disease prevention and control
Global Strategy for ASF Prevention and Control

Will operate according to the following principles:

**Epidemiological principles:**
- Knowledge based approach
- Area/scenario specific approach
- Pig identification, farm/holdings registration and traceability of pigs, pork and pork products
- Wild boars – mapping and population management

**Socio-economic principles:**
- Development of pig production sector and related value chain
- Research and innovations
- Public-private partnership
- Reduction of economic and biological/breed diversity losses:
Global Strategy for ASF Prevention and Control

6 Focused Areas:

1. Global multi-stakeholder platform to develop and harmonize ASF control strategies
2. Development and provision of tools and policies appropriate to control ASF
3. Support the implementation of sub-regional ASF prevention and control strategies
4. Awareness, advocacy, policy dialogue
5. Fund raising for ASF control
6. Re-enforcement of scientific research and its practical application

3-5 Years

The draft will be jointly presented as “Technical Item” at the OIE General Session in May 2019.
Standing Group of Experts on ASF in Asia (SGE-ASF)

• **Objective:** Strengthening regional cooperation and regional dialogue on ASF control
  – Regular exchange of information on the ASF situation and control measures;
  – Regular review of national, regional and global control strategies;
  – Collaboration on laboratory diagnostics;
  – Collaboration in basic research;
  – Collaboration on awareness raising campaigns by exchange best practices and communication tools;
  – Collaboration on border control measures among countries in the region;
  – Regular communication on the outcomes of the group discussion to other countries in East Asia and South East Asia and the general public.

• **Members**
  – Countries at high risk, with value chain link to China and willing to participate
  – Experts (Epidemiologists, Laboratory, Biosecurity, Wildlife, ...)
  – International organizations: FAO, OIE, ...

• **First expert meeting:** 10 April 2019 in China
International Cooperation and Transparency

- Effective, transparent Veterinary Services, meeting the OIE’s quality standards
- Notification to OIE, FAO, regional economic organization and neighbouring countries

Changing Mindset:

Those who report and take actions early must be seen as “heroes”
Conclusions and take-home messages

• ASF is an infectious disease whose control and prevention should be recognized as being a global public good
• Socio-economic studies to advocate more investment in ASF prevention and control
• Eradication of ASF is not feasible in short term perspective
• Efforts should be made to prevent further spread to free countries and ensure sustained pig production in endemic countries

• Global Strategy is to make transparent and available scientific knowledge for member countries to develop national and regional strategy and action plans to address ASF risks.
• Foster international transparency and cooperation
• Share and disseminate best practices
• Foster Public-Private Partnership for ASF prevention and control
THANK YOU
FOR YOUR ATTENTION