Workshop on African swine fever management in wild boar – surveillance and prevention of transmission to/from domestic pigs

How to prevent transmission to/from domestic pigs

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“PREVENTION IS BETTER THAN CURE”

ON-FARM BIO-SECURITY MEASURES ARE CHEAPER THAN OUTBREAK ERADICATION…
The many measures that can be used to improve biosecurity can be categorized in several ways. One way is to classify measures according to three goals: isolation, sanitation and traffic control.

Another way is to classify measures into three steps:
1. segregation;
2. cleaning;
3. disinfection.
Main risk factors for any pig diseases

- Introduction of animals into the holding;
- Introduction of vehicles/means of transport:
  - Animals
  - Runt, rejected pigs
  - Carcasses
  - Feed
- Personnel, veterinarians, inseminators and visitors;
- Introduction of equipment’s;
- Introduction of feed;
- Manure;
- Area: use of common area / pasture (use of manure on agricultural land as fertilizer);
- Presence of wildlife animals;
- Presence of rodents, birds, insects…;
- Introduction of semen;
- Water, air…

Possible risk factors for ASF spread

- Introduction of infected pigs in the herd;
- Swill feeding with contaminated pork (spread and maintenance);
- Wild boar – Domestic pigs interface;
- Contaminated vehicles, people or feed…
Managing risk

Official controls at critical points in the supply chain:
- Commercial pork production (including imports);
- Backyard production and local market;
- Wild boar meat – domestic consumption and informal trade.

Biosecurity measures

The environment, where swine are raised, will vary according to their geographical location and type of facility.

Biosecurity measures will vary and can be modified as needed to meet the needs of the individual operation, but the main principles are as follows – biosecurity should be!
REQUIREMENTS ON BIOSECURITY MEASURES

Should determine:
• minimum biosecurity measures applicable in the pig holdings and intended for the pigs protection against pathogens of infectious diseases,
• responsibilities of animals owners and keepers,
• the persons who work in or visit the pig holdings.

Main Elements of Biosecurity

Segregation:
✓ controlling the entrance of pigs: from outside farms, markets or villages;
✓ implementing quarantine for newly purchased animals;
✓ limiting the number of sources of replacement stocks;
✓ fencing the farm area and controlling access for people, as well as wildlife, birds, bats, rodents, cats and dogs;
✓ maintaining adequate distances between farms;
✓ providing footwear and clothing to be worn only on the farm;
✓ using an all-in-all-out management system.

Cleaning and Disinfection
✓ buildings on the premises, but also vehicles, equipment, clothing and footwear;
✓ Disinfectants.

(FAO/OIE/World Bank, 2008 – Good Practices for Biosecurity in the Pig Sector)
MAIN RISK FACTORS - I

1. the workers, visitors and other persons who can access the keeping location or room for pigs;
2. the vehicles that can access the pig holding;
3. the feed and water used for pigs feeding and watering;
4. tools, equipment and other things potentially infected with the pathogens of contagious diseases which can access the keeping room for pigs;

MAIN RISK FACTORS-II

5. wild, derelict and abandoned animals;
6. dead pigs, the containers intended for the storage of pigs carcasses, the vehicles of the company that is engaged in the activity of animal by-products processing;
7. ventilation systems, the manure removal systems and manure;
8. rodents and other pests and etc.
CLASSIFICATION OF THE PIG FARMS

1. Non-commercial farms: farms where pigs are kept only for fattening for own consumption and neither pigs nor any of their products leave the holding.

2. Commercial farms: farms which sell pigs, send pigs to a slaughterhouse or move pig products off the holding.

3. Outdoor farms: pigs are kept temporarily or permanently outdoor.

Commercial farms

The owner is obliged fully implement national Requirements regarding biosecurity measures applicable in the pig holdings and can have even more stricter.
Back yard production and local market

- Pigs should be kept only for own consumption;

Minimum biosecurity requirements:
- No swill feeding,
- No contact between the pigs and susceptible animals (indoor keeping) and no part of any feral pig (hunted or dead wild boar/meat/by-products),
- The owner should change clothes on entering the stable and leaving the stable, having disinfection at the entrance of holding,
- No unauthorized persons in the pig holding,
- Home slaughtering under veterinary supervision,
- Ban of feeding grass or grains to pigs unless treated to inactivate ASF virus or stored (out of reach of wild boar) for at least 30 days before feeding,
- Ban on using straw for bedding of pigs unless treated to inactivate ASF virus or stored (out of reach of wild boar) for at least 90 days before use.

Requirements on biosecurity measures

...The territory that surrounds the pig holding must be isolated by a physical barrier that would prevent wild boars, derelict or wild animals access to the keeping location (-s) for pigs...

...are recommended to avoid visits to the keeping room for pigs if during the past 48 hours they had a visit abroad, they have visited other locations of pigs, boars, pig and wild boar crossbreeds keeping, the locations of boars hunting and evisceration, slaughterhouses and the locations of animals by-products processing...
SEASONAL DEPENDENCE OF ASF IN DOMESTIC PIGS
(example of Lithuania)
Back yard production and local market

- Identification and registration in place;
- No free-ranging pigs;
- Slaughtering under veterinary supervision only;
- Meat used for own consumption only!

Before the movement of pigs from their keeping place clinical examination should be carried out and veterinary certificate should be issued 24 hours prior their movement.

What can be done additionally?
Strict movement control - Veterinary certification rules
Back yard production and local market
What can be done additionally?

Market control

- Only under veterinary supervision;
- Meat from registered farms and tested pigs;
- Pig farms comply with national biosecurity requirements and correspond health status.

Measures to minimize the risk of ASF

- Pigs should be introduced from trusted and certified sources,
- Visitors should be discouraged to enter the pig holdings, especially the commercial ones,
- Personnel should be well trained/informed and contacts with other pigs forbidden,
- Perimeter fencing preventing contact with feral pigs (double fences) should be install on a pig holding,
- Carcasses, discarded parts from slaughtered pigs and food waste should be disposed of in an appropriate manner,
- No part of any feral pig, whether shot or found dead should be brought into a pig holding,
- Manure management,
Measures to minimize the risk of ASF

• No swill feeding,
• Sharing of equipment between the farms should be avoided,
• Appropriate means for cleaning and disinfection have to be placed at the entrance of the holdings,
• Vehicles and equipment should be properly cleaned and disinfected before entering into contact with pigs; however they should not enter the territory of the holding,
• Appropriate hygiene measures have to be applied by all persons entering into contact with pigs (domestic and/or feral).

Sampling

Samples for ASF testing should be always taken from pigs in case of:
• increased fever (40 and more),
• sudden death,
• mortality due to suspected any infection pig diseases,
• increased morbidity or mortality,
• after clinical inspection at home slaughtering in case of suspicion to any pig disease.
Questions, suggestions, remarks?