Biosecurity during hunting, carcass disposal and population management

Vittorio Guberti
FAO Consultant
ISPRA, Italy

BIOSECURITY IN FOREST

- Reducing the viral load in the environment

Reduced number of infected wild boar

Reduced probability to indirectly introduce the virus into a pig farm (back yard/non commercial)

- Reducing the probability to observe the long-distance geographical spread of the infection; JUMPS
Biosecurity during hunting

- Aim of hunting: reduce the wild boar population size and density
- Aim of biosecurity during hunting: reduce the virus JUMPS;

- If hunting will indirectly increase the long distance spread of the virus: **hunting is counteractive in respect to ASF eradication/control**;

- It would be better to leave an infected dead wild boar die in the forest, rather than to take the risk of spreading the virus outside the infected forest.

Reducing the environmental load of the virus: management of infected carcasses

- Infected wild boar carcasses are actively searched in order to reduce the environmental load of the virus

- Infected wild boar carcasses: maintain for long time the virus in the environment (NO GEOGRAPHICAL SPREAD)

- The virus, through infected carcasses, overcomes the low density/absence of wild boars during certain periods of time;

- Infected carcasses removal reduces the environmental load of the virus => less infected wild boars, less probability to have outbreaks in domestic animals;
Driven hunt with dogs – effective method to reduce the population density but also effective in contaminating hunting tools

Detection of carcasses

• **Awareness**
• **Economical incentives**
• **Public bodies involvement (Forest workers, Army etc.)**
• **Hunting regulations**
• **Trained dogs;**
• **Etc.**

(Take a walk on the Baltic sea shore)
Training

- Hunters shall be authorised to hunt in the at risk or infected area only after a specific training on basic hygiene and biosecurity practices;

- Provide trainings for hunters;
- Explain the epidemiological role played by wild boars;
- Explain the major risk linked with hunting activities;
- Unfortunately: explain that they have no advantages in declaring the presence of the infection in their hunting grounds

Disposal of carcasses

Disposal of carcasses: reduction of the environmental load
Collection of carcasses
Private cars cleaned and disinfected
How deep

- No magical recipes
- Depends on soil (sand, rocks etc.)
- As deep as possible (sic!!!) winter?
- Use of repellents (available from the market; kerosene, gasoline etc.)

Best options

- Each found dead carcass should be considered as positive (but always tested)
- Carcasses should be safely transported and disposed (rendering) and possibly stored in the hunting ground until transport is provided under Veterinary supervision;

- Carcasses could be buried/burned locally
- Private cars: always disinfected

- How to guaranteed that dead wild boar are buried in a proper way? Check at least **59** buried animals!! You will have a good estimate on how your system works!!
2: from forest to dressing area

- TRANSPORT OF SHOT ANIMALS

Transport of hunted animals to the dressing facility shall be carried out using dedicated vehicles. Private cars shall be parked outside the hunting house, possibly on the main road.

- Difficult to ask and thus to achieve;
- Cars could be highly involved in spreading indirectly the virus;
3 Dressing area

Dressing facilities must ensure the basic biosecurity; They should be authorised by the Veterinary Service

• Dressing areas MUST be organized in order to minimize the risk of viral contamination;

• They can be located in open air, but they have to be used exclusively for dressing animals (no party!!!)

• The dressing area must be perceived as the main at risk area for virus contamination, hunters will recognized it, will avoid it, will enter cautiously
Animal dressing shall be performed using appropriate aprons which must remain in the facility. Working tools cannot be transported to other places.

Hunting suits, including boots/shoes should be kept in specific bags. Boots and apron shall be cleaned and disinfected after each use.

Dressing rooms are to be equipped with effective disinfectants.

- Disinfectants could be supplied by the Veterinary Service or bought directly by hunters. Use only effective disinfectants.

- The requested procedures need short time to be implemented and they are not really expensive.
5 OFFAL

- Offal shall be never abandoned in the forest;
- Offals shall be stored in proper containers inside the dressing areas;
- Containers shall be cleaned and sprayed with effective disinfectants on a regular basis (at least at the beginning and at the end of the main hunting season) and every time an infected wild boar have been stored;

6 Ground pit storage system

- Ground pits can be easily dig and managed; offal can be eliminated once a year by authorized enterprises or supervised veterinary procedures;
- Ground pits for offal disposal should be at least 1,5 meter deep, fenced and closed with a locked closure. Pits should be located in close proximity to the dressing room.
7 Identification of carcasses

- Hunted wild boar shall be checked and tested for ASF (both antigen and antibodies detection) and the carcasses released only when resulted negative to ASF.

- Identification of carcasses is easy and frequently requested by the usual hunting procedures;

- Disinfection of the dressing and storage area should become a simple routine even to increase the quality and safety of the meat.

8 Waiting for test results

- Wild boar carcasses shall be individually identified before storing. In case of ASF positive outcome all stored carcasses have to be disposed under veterinary supervision and the whole dressing room cleaned and disinfected.
No part of hunted wild boar shall leave the hunting area unless tested for ASF and the carcasses released only when resulted negative to ASF.

All the possible infected material HAS to be confined inside the infected hunting ground

Hunting shall minimize the spread of the virus outside the infected forest
Mushroom and forest fruits

Simulated situation:
10.000 ha
100 wild boar
2% weekly incidence

Walking **10.000 steps** (1 hour; 6 km) there is **1/18.000** probability to step on an infected scat;
3 persons walking 8 hours: **1/750** probability to step on infected material

There is a weak probability, but it should be better assessed knowing n. of persons that go in the forest, how long, how often and how many of them have pigs at home;

Thank you