

Rapid advice 10-2019 of the Scientific Committee established at the FASFC on African swine fever (ASF):

- additional evaluation of the risk of introduction of ASF virus in pig holdings associated with the reopening of forest roads to hikers in zone II (wildlife infected by ASF);
- evaluation of the measures implemented for the depopulation of wild boars.

Terms of reference

In the context of the geographical spread of African swine fever (ASF) in wildlife (wild boars) in the province of Luxembourg and following the decision to reopen forest roads to hikers in zone II (wildlife infected by ASF), the Scientific Committee established at the FASFC is requested to further explicit its urgent advice 05-2019 concerning:

1. the role of the indirect risk factor (human/pets) in the introduction of ASF virus into pig holdings following reopening of forest roads to hikers in zone II (wildlife infected by ASF);
2. the evaluation of the measures implemented for the depopulation of wild boar in zones I (uncontaminated with ASF) and II.

Methods

The rapid opinion is based on previous opinions of the Scientific Committee in the context of the ASF outbreak in wildlife (wild boars), on expert opinion and on data from the scientific literature.

In its risk assessment, the Scientific Committee has not only evaluated the risk of ASF virus introduction into pig holdings but also the risk of further spread of the virus in the wild fauna, since the latter may result in the former risk having to be re-assessed in the event of geographical extension of outbreaks in wildlife.

Conclusions and recommendations

1. Concerning the risk of reopening of forest roads to hikers and their pets (especially dogs) to introduction of ASF virus in pig holdings and the risk of spreading of ASF in the wild fauna

Considering the role of human beings, both risks can be associated to:

- the disturbance of wild boars by hikers in their natural habitat that could lead wild boars to move to non-contaminated areas causing further spread of ASF in wildlife;
- the fact that hikers can become mechanical carriers of the virus (indirect transmission) following contact with wild boar cadavers or any biological materials from infected wild boars.

The disturbance of wild boars by hikers is considered much less important than that which may be occasioned by the hunt, provided that hikers do not leave the forest roads.

The risk that hikers become mechanical virus carriers is estimated to be low due to:

- biosecurity measures implemented by the risk manager and that hikers must respect;
- the very small number of cadavers found in the direct neighbourhood of the forest roads resulting in a limited chance of contact with hikers.

Concerning the role of pets (dogs), both the risk of disturbance of wild boars and the risk of mechanical carriage are considerably higher than for human beings. Dogs (especially if they are not on a leash) can easily leave the forest roads, disturb and chase the wild boars. They are naturally attracted to carcasses of wild boars and any biological materials from infected boars. Furthermore, decontaminating of dogs is difficult to achieve.

Considering the previous arguments, the Scientific Committee confirms its initial risk assessment (urgent advice 05-2019). In this urgent advice, the risk of ASF introduction into pig holdings following the reopening of forest roads was estimated as 'low', although slightly increased, compared to the initial situation of forest ban to hikers. The explicit condition must be taken into account that all preventive measures stated in the emergency regulations (e.g. changing clothes and footwear after walking in the forest) are respected. On the other hand, the risk is estimated to be considerably higher if it relates to companion animals (especially dogs) since they leave the forest roads much more frequently than humans, cause a greater disruption of wild boar and are attracted to biological materials that may be contaminated.

The Scientific Committee recommends that any presence of dogs during hike in Zone II (contaminated) be prohibited and that due consideration be given to the risk that dogs may pose during any other activity in which they may be involved in an ASF-infected zone.

This risk assessment can be revised in function of the evolution of the epidemiological situation of ASF in wildlife. The vigilance of risk managers should be strengthened during certain periods of specific human activities (in particular mushroom picking, harvesting of deer antlers, plant picking (including *Galium odoratum*), since these activities usually lead people to leave forest paths.

2. Regarding the depopulation of wild boars in zones I and II

The results of the control measures in the west of the infected zone show that the placement of fences in combination with intensive hunting outside the infected zone can be successful. A similar effect can be observed in the south of the infected zone, although the fence turned out to be partially permeable. In the north, where the network of fences cannot hermetically close the infected zone due to the presence of habitation, an expansion of the infected zone was found.

The intensive hunting in the reinforced observation zone and in the vigilance zone show higher numbers of shot animals in comparison with the hunting bags of the previous season, indicating that hunting is actually more intensive. The majority of wild boars shot are vironegative, while the majority of the cadavers are viropositive. The intensive search for cadavers in the infected zone therefore remains an important measure for reducing infection pressure. The traps that were installed show a very good return compared to hunting to the lookout. These traps also allow to capture numerous young animals, which contributes to the reduction of the population. As the Scientific Committee does not yet have hunting bags outside the control areas for ASF, in particular for the zones adjacent to the latter, the effectiveness of the depopulation methods in these zones cannot be evaluated.

Based on the analysis of the results of the various control measures, it appears that a combination of measures, in function of the different management zones, is the most likely to prevent the spread and eradication of infection in wildlife.

The Scientific Committee draws the risk manager's attention to the spread of ASF to the North, in a much larger forest area than the initially infected forest massif exposing new populations of wild boars to the virus. As shooting hunt is not permitted in Wallonia during the summer, the intensive use of traps and the extension of hunting season are recommended to reduce wild boar populations in both vigilance and reinforced observation zones. The network of fencing that has already been installed must be

expanded as quickly as possible both on the periphery of this forest massif and within the massif itself, more to the west.

The Scientific Committee recalls that, in addition to the depopulation measures, the active search for cadavers of infected wild boars for destruction is of particular importance in order to reduce infection pressure in wildlife. The ASF epidemic in Northern European countries has shown that a phase of both spread and endemicity can occur independent of the density of the wild boars in the infected areas. This is probably due to the environmental resistance of the virus in cadavers.

As stated in previous opinions, the Scientific Committee draws the attention to the need to continue the control of ASF in wild boar in the contaminated zone. The control measures that need to be continued in the long term to limit the risk of further expansion of the epidemic are in order of importance:

- ensuring that no contact is possible between infected wild boars and domestic pigs in the infected zone. This amounts to strict in-door confinement of pigs and avoiding any form of outdoor access for all pigs, including the so-called "pet pigs";
- the search for cadavers of wild boars and their removal for destruction;
- the compartmentalization of wild boar populations (via a network of fences) and their reduction in the contaminated area as well as in the adjacent areas (enhanced observation zone and vigilance zone);
- maintain the highest level of awareness in regard to biosecurity among all stakeholders (agents who insure ASF control, hunters, farmers and foresters, citizens, tourists) in the contaminated zone and strict compliance to biosecurity rules (especially external) in all pig holdings.

This advice may need to be revised in function of the epidemiological evolution of the ASF epidemic in Belgium. The advice is given taking into account the available and made available data by the risk managers and taking into account all uncertainties regarding the risk factors associated with ASF wild fauna epidemics.

The Scientific Committee regrets, when drafting this opinion, that it has not been given full and transparent access to all available data on the current state of ASF distribution and control measures for ASF. This incomplete information can have an influence on the quality / completeness of the advice.

The full text is available on this website in dutch and in french.