

Mission of the Community Veterinary Emergency Team to ESTONIA

(16-19 August 2016)



Terms of Reference

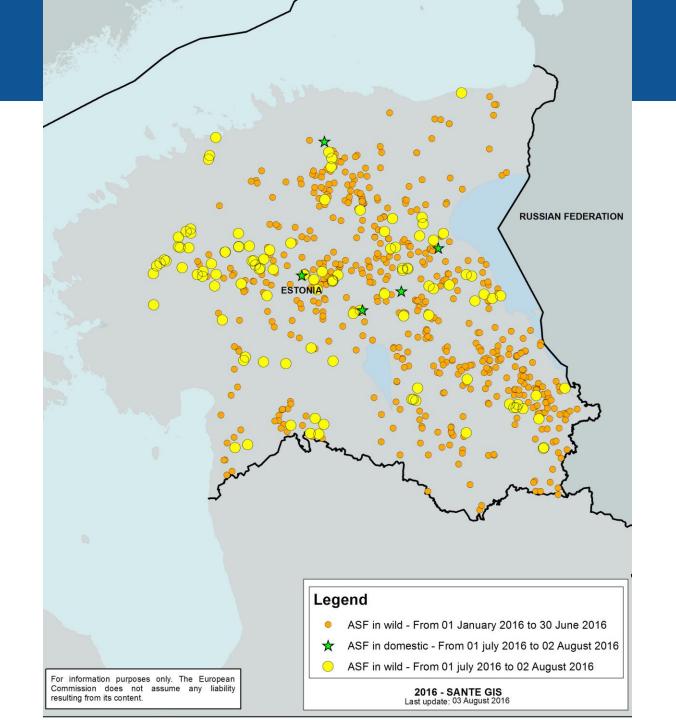
The expert should provide assistance to the scientific, technical, managerial and practical on-the-spot assistance on the refinement of the most suitable control and eradication measures for African Swine Fever (ASF) under local conditions, in particular in light of the recent epidemiological events.

Taking into account the latest EFSA conclusions on ASF, the CVET previous report for Estonia and the working document SANTE/7113/2015 (Rev 4.1) on the ASF Strategy for Eastern Part of the EU, the expert should provide recommendations to the Estonian Authorities on how to refine the measures in place for domestic pigs and the ASF strategy for wild boar.



CVET experts

- Dr Silvia Bellini team leader, IT
- Dr Vittorio Guberti IT





The ASF situation

In 2016, 5 outbreaks were identified in domestic pigs, 4 in small scale holdings (backyards), 1 in a commercial holding located in Lääne-Virumaa County.

Based on the information collected during the epidemiological investigations, deficiencies were detected in the application of the basic biosecurity requirements: pigs kept outside, introduction of grass not properly treated, external movement of animals of other species (cattle pasture), possible swill feeding, vehicles movements, disposal of carcasses, deficiencies in cleaning and disinfection procedures.

Based on the information reported by the veterinary services, in 3 out of 5 ASF outbreaks reported in 2016, **only blood samples were collected** at the time of suspicion, for disease confirmation. **All the outbreaks in backyards were detected at an early stage of infection** indeed, none of the pigs was yet sero-positive. In all backyard outbreaks, it was the farm veterinarians or the pig's owner, to contact the veterinary services to report the suspicious.



ASF in Wild boar

From 1 January to 14 August 2016, **885** ASF cases were detected in wild boar;

- Virus prevalence in hunted animals = 3%;
- Sero-prevalence in hunted animals = 2,4%;
- Hunted animals which were virus and sero-positive = 0,9%
- However: ASF data are organized in calendar year (1.1-31.12), this means that epidemiological trends belonging to the same hunting year (1.4-31.3) or hunting season (1.11-28.2) are difficult to identify.



Wild boar management

- In 2016, Estonia has a wild boar estimated population of 12.220 animals (pre-reproductive population) and an hunting bag of 17.850 wild boars. From 2015, the wild boar population of Estonia has decreased of about 40%. The wild boar population has been reduced.
- The final goal of the Estonian hunting strategy is to reduce the Estonian wild boar population to a density of about 0.15 animals/km² (1,5/1000 ha hunting ground), since at the above mentioned threshold ASF is expected to fade out.



Wild boar management

Wild boar feeding

Winter-feeding of wild boar (10kg/feeding point/day) is largely practiced in Estonia. Next winter legislation is going to be stricter and feeding will be effectively reduced.

Surveillance

Both passive and active surveillance are in place in Estonia. Active surveillance is practised in territories under restriction. In 2016 (14.08.2016) 701 dead wild boar have been found, representing 7,1% of the whole pre-reproductive estimate.



Biosecurity measures during hunting

Hunters have been warned regarding the relevant biosecurity measures to be applied during hunting, dressing and transporting animals. Biosecurity during hunting is not regulated and based on the information collected during the visit, it appears that a certain number of shot animals are transported and dressed at the hunters' homes where wild boars are also stored until tested ASF negative. Meaning that a certain number of ASF positive wild boars could have been transported outside hunting areas before being tested.







Domestic pigs

In the county, there are 31 pig holdings:

6 in the category from 1 to 10 pigs

2 in the category from 10 to 100

6 in the category from 100 to 1000

17 in the category >1000

ASF was detected in wild boar (July 2015) then in August 2015 in domestic pigs. The outbreak was detected in a backyard holding. The owner was a hunter and thus considered the possible source of the infection. In 2015, no further ASF outbreak was detected in domestic pigs. On 20 July 2016, ASF was again identified in the area in a commercial farm.



Wild boar

2015: 695-hunted wild boar were tested for ASF, and 48 resulted positive (7%).

60 dead wild boars have been found in 2015 (76,7% ASF+)

2016: (14.08.16), 1263-hunted wild boar and 57 positive **(4,5%)**.

77 dead wild boars have been found (88,3% ASF positive)



Infected commercial farm

Outbreak history:

July 14th the owner contacted the authorized veterinarian for a certificate to send dead animals to the rendering plant. During the visit the vet noticed dead pigs in the farm hospital. Blood samples were collected and **tested ASF negative**.

In the following days, other pigs died and samples (also organs at this occasion) were sent to the lab for bacteriological investigations. In the lab, the samples were also tested for ASF and on July 20, ASF was confirmed by PCR.

4091 pigs were present in the holding



Shortcomings in the farm **bio-security** system were also **detected** in a previous inspection carried out by the local **veterinary service** (fencing).

Some breaches in the management system and in farm biosecurity, such as: vehicles, procedures for carcasses disposal, cleaning and disinfection, etc. have been **detected during the epidemiological investigation**.

The dead animals, and also the positive ones, were in the farm hospital, which is located near the farm's exit for dead animals and not far to the container for dead animals.















RECCOMANDATIONS

The Competent Authority, assisted by the Expert Group, shall carry out checks to verify 1) bio-security, animal identification and traceability and 2) effectiveness of the measures adopted.

In domestic pigs, cases of increased mortality and mortality due to suspected infectious diseases have to be immediately investigated and tested for ASF.

Checking, **sampling** and testing procedures for ASF shall follow the provisions laid down in the **diagnostic manual** (CD 2003/422/EC).



The **expert group** has to collate the information collected by the different Administrations involved in the control strategy for ASF, also filling in the **gaps existing in peacetime amongst the different Administrations**.

An improvement of the management of the data sets is advisable. As an example, the administrative boundaries used by the veterinary services and wildlife management units (hunting districts) mismatch, causing problems in the management of the disease and wildlife. Additionally, timing alignment between calendar dates, hunting season and hunting year shall be considered in order to facilitate data analysis.

The **effectiveness of the control measures** adopted needs to be **verified** in detail at the level of the smallest management units (parish, hunting district).



Biosecurity during hunting has to be improved: hunted wild boar should never be transported outside the forest, unless resulted negative to ASF. An effort should be made to organize a storage point for hunted wild boar in each hunting district and where available hunting lodges should be equipped for the storage of the hunted wild boar.

In the hunting districts in which hunting lodges not present, containers or other means of temporary storage have to be organized. In each storage-point means for cleaning and disinfection have to be available. Hunters have to avoid possible contamination of vehicles, hunting equipment, yards and houses.



Thank you for your attention!