

ASF Situation in Romania



HANNOVER 2018

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Surveillance program for ASF



Taking in consideration the high risk for ASF virus introduction, Romania elaborated a multi-annual program for ASF monitoring and surveillance, for the period 2015-2020.

The main objectives of the program are:

- surveillance and early detection of the presence of ASF virus in the susceptible population of domestic pigs and wild boars, in order to identify the ASFV as soon as possible after the virus entrance in Romania;
- preventing the disease spreading into domestic pig population in the infected area;
- preventing the disease spreading outside the infected area via live domestic pigs, meat or meat products from domestic or feral pigs.
- selective hunting of adult and sub-adult female of wild boar, aimed at decreasing the density of wild boar
- the collection and removal of wild boar carcasses, in order to decrease the infection pressure that those carcasses pose for the environment.

In this program the high risk area is considered to be a zone of 20 km from the border with Ukraine and Moldova, in depth of the territory, where the clinical surveillance in domestic pigs and wild boars is intensified, samples for passive and active surveillance are planned to be taken from all over surface of counties area situated at border.

Target population in surveillance program



The target population is represented by domestic pigs, both in commercial and non-professional systems, and by wild boars.

The surveillance is structured as follows:

- passive surveillance in domestic pigs from nonprofessional holdings, in "type A" holdings and in wild pigs, all country;
- passive surveillance in domestic pigs kept in commercial holdings in all country;
- active surveillance in wild boars in 10 counties (8 county until 2018) found at risk, situated at border with Ukraine and Republic of Moldova: Satu-Mare, Maramures, Bistrita Nasaud, Suceava , Botosani, Iasi, Vaslui, Galati, Braila and Tulcea.

The virological test for ASF passive surveillance, as well as for active surveillance of domestic pigs and wild boars is Real Time-PCR.

Surveillance in domestic pigs



Regular clinical examination in back yard holdings along the border with Ukraine and Moldova in the 10 bordering counties are performed, accordingly to the strategic programme of Romania, for each year 2016-2020.

1. Nonprofessional and Type A holdings

- a) each dead pig which manifested fever with hemorrhagic syndrome: petechial and echymotic haemorrhages, especially in the lymph nodes, kidneys, spleen (which is enlarged and dark, particularly in the acute forms), urinary bladder and ulceration on the gall bladder (organs). Sudden death could be one of the first clinical signs observed. Pigs showing ante or post-mortem signs rising suspicion at home slaughtering, at least within the area covered by Commission Decision 2017/1416/EU establishing some protection measures due to the ASF in Romania (organs).
- b) from those sick animals in non-professional and type "A" holdings which manifest fever, followed by morbidity and mortality (blood on EDTA);

2. Comercial Farms

- a) dead and sick pigs in the 10 counties found at risk following the principle established by the point 2.1.5 of document SANTE/7113/2015 rev7 "ASF strategy for Eastern Part of the EU", as follows:
 - Each week from each production unit, virological testing on organs of at least the first two death (post weaning pigs or pigs older than 2 months), in (organs);
 - In case fever or hemorrhagic lesions (blood on EDTA).
- b) In the commercial farms, in rest of the country:
 - each dead pig when the daily rate of mortality is high and there is no clinical sign or lesion for ASF or CSF

In order to early detect the presence of ASF, pigs slaughtered for own-home consumption are to be inspected by an official veterinarian or by a free practice veterinarian empowered by State. Ante and postmortem examination are to be carried out in the infected area and should focus on detecting ASF signs. In case of animals with suspect or doubtful symptoms/lesions, laboratory tests should be carried out in accordance with the diagnostic manual, in order to rule out the presence of ASF.

Surveillance in wild boar



Wild boars will be sampled and tested for the presence of ASF genome and antibodies, as follows:

- passive surveillance for wild boars, all over the country; in the framework of passive surveillance, will be sampled and tested by Real Time PCR all feral pigs found sick or dead, including the ones killed by car accidents, all over the county.

- active surveillance on hunted wild boars, in the 10 before mentioned counties. Wild boars will be sampled and tested for the presence of ASF genome and antibodies,,

Probably, in scope of ASF detection, would be proper that only passive surveillance on wild boars to be planned, but the reality Romania has confronted in the past years (during the CSF surveillance program) showed that only a very small number of dead wild boars are detected in the wildlife during the year. Therefore, a plus of active surveillance would increase the chance to detect, in due time, the infection in the wild boars population and therefore it is useful the serology be maintained into the program.

Data regarding to surveillance for ASF



Year	Passive surveillance in domestic pigs (PCR)	Passive surveillance in wild boar(PCR)	Active surveillance in wild boar(PCR)	Active surveillance in wild boar (ELISA)
2015	152	21	732	2155
2016	1599	157	4211	3590
2017	4132	278	5035	4032
2018 (31 March)	1982	32	2447	

ASF outbreaks



In 2017 and 2018, in Romania were confirmed a total of 5 outbreaks of African swine fever in domestic pigs, all in non professional holdings, situated at a maximum 10 km distance from the border with Ukraine.

Until now, no cases of ASF in wild boars were diagnosed - based on active and passive virological and serological surveillance in wild boar population from high risk area, and passive surveillance in all country.

The source of virus in all outbreaks that occurred in Romania has been shown to be from illegal meat products contaminated with ASF virus, entering in Romania at border with Ukraine.

ASF Outbreaks 2017



- First outbreaks on 31 -th July 2017, Satu Mare locality: 4 live pigs and 1 dead pigs. The source of the virus could be the meat products introduced in Romania illegally
- Second outbreaks on 1 –st August 2017: 1 dead boar and 3 sows without clinical signs. The source of infection a boar used for mating in the first holding in 21-24 of July.
- EU legislation were put in place and the restriction were enforced until 15-th October 2017.

ASF outbreaks 2018



- First outbreak on 11 –th January, Micula locality, 7 km from border with Ukraine: 34 pigs (1 boar 4 sows, 25 piglets and 4 fattening pigs).
- The second on 13-th January: 4 fattening pigs
- Distance between 2 outbreaks 600m.
- Was not found link between the 2 outbreaks
- EU legislation were put in place and the restriction were enforced until the end of March

ASF outbreaks 2018 II



The last outbreaks in 2018 was notified on 13 of March , Bercu Nou locality, at 4 km from border with Ukraine and 4 km with Hungary.

In infected holding there were initially fattening pigs. This Holding were included in surveillance zone after outbreaks from January. The first clinical sign appear on 9 of March and the first pig died on 11 of March.

EU legislation were put in place and the restriction were enforced until the end of June 2018.

Results at the ASF EURL Laboratory and molecular characterisation of virus



- ASF virus has been isolated from samples sent to EURL showing the hemabsorbing pattern
- The domestic pigs Romanian ASF viruses belong to p72 genotype II, CVR -1, IGR- 2 and MGF1 variants. These are the variants mostly circulating within EU countries as well as described in Moldova (2016), Ukraine (2012, 2015), Belarus (2013) and in certain areas from Russia Federation.

PORK MEAT PRODUCTS CONFISCATED AT THE BORDER



1.01.2017 – 31.12.2107

c	Border country	Quatities (kg)
1	Republic of Moldove	5 881.9
2	Ukraine	839.3
	total	6721.2

c	Border country	Quatities (kg)
1	Republic of Moldove	794.3
2	Ukraine	255.6
	total	1.049.9

Meat product tested for ASF



- Traditionally prepared PorK meat products seized by Halmeu custom authorities from Ukrainian and Belarus citizens were tested by PCR for ASF genom and were pozitiv.



Thank You !