The National Sanitary Veterinary and Food Safety Authority of Romania

Evolution of African Swine Fever in Romania

PAFF Committee
17-18 January 2018
Proper preparedness in view to cope with ASF starting in Romania since 2012, having regard that the notification of the disease in Ukraine, in 2012, represented a really warning for Romania.

Therefore, was created since peacetime the framework for disease control (contingency plans and operational manuals, simulation exercises, legal basis for disease control, for preparedness and awareness etc.)

Were evaluated the risks posed by ASF and the possible ways of introduction in our country. The biggest risks was considered to be the non-professional backyards, with poor biosecurity measures (half of Romanian pig livestock is raised in backyards), and the low level of passive surveillance in wild boars. Following to this, the human factor was also considered with huge potential.

Our activities were turned on streighten up these risks and the preparedness followed this line.
On 31 July 2017 was notified the first ASF outbreak in domestic pigs in Romania, in a backyard. This was followed by notification of a secondary outbreak, also in a backyard.

- The importance of early notification of the cases was of major importance, the veterinary officials intervening immediately and containing the virus. It was a rapid intervention, with positive results.

- The restriction zone was maintained until 21-th November 2017, when both outbreaks were closed. No other suspicions were notified meantime, since January.

- After the notification of the two outbreaks in the Summer of 2017, Romania did not get slack the tempo of preparedness, having regard that a reintroduction of the virus was anytime possible, especially by human activity.

- Therefore, more trainings took place with the local offices and veterinarian, more task notes were released from central, to local level, underlining the importance of early warning and awareness, and the importance of targeted awareness: farmers of all types, rangers, hunters, transporters, personnel in slaughterhouses etc.
Other general measures for effective early warning:

- Each outbreak in the third countries neighbored to Romania was notified to the CSVFSD by e-mail, and followed by indication of raising the awareness among farmers, hunters, general public etc. and intensify the checks in BIP’S and BCP, being underlined the importance of the early warning and of the human factor in disease transmission;

- Local veterinary authorities strenghtened the checks at borders on personal goods at the BIP’s and BCP’s; in accordance with art. 3 of Reg. 206/2009 EC, Romania has made available to travelers and the general public, at all points of entry into the Community and to customs Postal Offices, informations to draw out the attention of travelers arriving from third countries on the veterinary conditions applicable to personal goods introduced into the Community.

- In the airports are running the TV filler on the introduction of the personal goods in personal luggages.

- Information campaigns were addressed to farmers, hunters, general public on the ASF clinical signs and biosecurity measures.

- Press releases concerning the danger pose by ASF.
Confiscates in the personal luggages of travelers coming from third countries in 2017

<table>
<thead>
<tr>
<th>No.</th>
<th>Third country</th>
<th>Products</th>
<th>Quantities ( Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Pork meat and pork meat products</td>
<td>5881,922</td>
</tr>
<tr>
<td>2.</td>
<td>Ukraine</td>
<td></td>
<td>839,318</td>
</tr>
<tr>
<td>3.</td>
<td>Kazakhstan</td>
<td></td>
<td>18,1</td>
</tr>
<tr>
<td>4.</td>
<td>China</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>6741,34 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Poultry meat and poultry meat products</td>
<td>4709,47</td>
</tr>
<tr>
<td>2.</td>
<td>Ukraine</td>
<td></td>
<td>1044,526</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>5753,996 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Milk and milk products</td>
<td>2911,413</td>
</tr>
<tr>
<td>2.</td>
<td>Ukraine</td>
<td></td>
<td>423,935</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>3335,348 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Sheep meat</td>
<td>237,2</td>
</tr>
<tr>
<td>2.</td>
<td>Ukraine</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>255,2 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Rabbit meat</td>
<td>276,76</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>276,76 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Beef meat</td>
<td>80,17</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>80,17 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Fresh fish eviscerated</td>
<td>131,592</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>131,592 kg</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Republic of Moldavia</td>
<td>Honey</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>20 kg</strong></td>
</tr>
</tbody>
</table>

GENERAL TOTAL = 16.594,406 Kg
Notice to travelers for BIP’s, BCP and International Airports

ATENȚIE!
Măsuri de avertizare și protecție împotriva pesta porcine africane
Peșta porcină africann este o boală răspândită în țările estice ale continentului.

Pentru a preveni pătrunderea ei în România, prin PFP-uri și punctele de trece a frontierelor, este interzisă introducerea în ţară a următoarelor:
- Aiurii de porc preoasălor, refregièrea sau congelată, a produselor din carne de porc (aiuri, brazi, conserve sale, etc.) ducând în condiții neci, prezentate în spațiul extra-comunitar.

Contravencențiilor vor fi pedepșiți în condițiile legii.

ATTENTION!
Warning and protection measures against the African Swine Fever

The African Swine Fever is a disease prevalent in the countries located in the Eastern part of the continent.

In order to prevent its penetration in Romania, it is forbidden to introduce (through the border inspection posts and transit points at border) live pigs and, even in small quantities, fresh, chilled and frozen pig meat and meat products (sausages, hams, salted meat etc.) coming from extra-EU regions.

The transgressors will be punished according to the Romanian law.
Fliers for farmers and hunters

- Pește porcă africană: amenință să se răspândească în Europa. Atenti la semnele ei și anunțați medicul veterinar.

  - Cum va repercutează pește porcă africană în România?
  - Peștele porcă africană este cauzat de un virus.
  - La ce specii este încălcită bolile?
  - La animalele domestice și pot cauza zoonoză în oameni.
  - Pot nume nume să se manifeste cu această vreacă?
    - Nu.
  - A mai fost văzut boala în România?
    - Până în prezent, nu s-a răspândit pe teritoriul României. Vrem un monitorizare constantă.
  - Unde se văzuse boala în Europa?
    - În Uniunea Europeană în Lituană, Letonii, Estonia, Polonia și Italia (însă, Sicilia).
  - Cât de mult durată la infectarea porcilor, până la apariția semnelor de boală?
    - 3-15 zile, în funcție de boală. Semnele pot apare în 3-4 zile.
  - Cum arată un porc bălos de pește porcă africană?
    - Nu există semne specifice. Carne să indice bolă, semnele pot fi atribuite și altor boli.

- Mortalitatea ridicată, înseamnă 100%, intervenții între timp extreme de scutăc.
- Temperaturii foarte ridicate (40.5 – 42°C) și stare fobică.
- Episoze cu însemnări de putere, a unei pași, șapte, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pași, ale unei pașini.
- Lupta puternică cu mâinile, pași și impaze pentru o masă, care pot apărea cu 2-3 zile de la începutul maselor.
- Vominturi, diaree (sensu larg), și urineri la ocazia.

Cât se transmite boală?
- Prin contact direct între animalele infectate și cele boioase sau intoxicate. Prin:
  - infecție urinară cu medianul de la boala, unii semnifica că de pere de boala la pâine sau în urme;
  - Infecții urinare cu medianul de la boala, unii semnifica că de porc;
  - Infecții urinare cu medianul de la boala, unii semnifica că de porc;
  - Infecții urinare cu medianul de la boala, unii semnifica că de porc;
  - Infecții urinare cu medianul de la boala, unii semnifica că de porc;
  - Infecții urinare cu medianul de la boala, unii semnifica că de porc;
  - Infecții urinare cu medianul de la boala, unii semnifica că de porc;

Recoltarea probelor pentru laborator de la animalele vânătoare

Reguli de biosecuritate care trebuie respectate în timpul partidelor de vânătoare
Task notes following to the GF TAD Mission
- one on 18-th December 2017, on drafting an ASF control Plan in commercial holdings since peace-time;
- one on 11-th January 2018, on ASF profilaxy in wildlife, in order to prevent the introduction of the ASF virus;
- one on 11-th January 2018 underlining the importance of early warning and early notification
# ASF Surveillance in 2017

<table>
<thead>
<tr>
<th>No. counties</th>
<th>Passive surveillance in domestic pigs</th>
<th>Passive surveillance in wild boars</th>
<th>Active surveillance in wild boars (8 counties)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 (passive surveillance, 8 active surveillance (realized))</td>
<td>4132</td>
<td>278</td>
<td>5035</td>
<td>7 (only in domestic pigs)</td>
</tr>
<tr>
<td>42 (passive surveillance, 8 active surveillance (planified))</td>
<td>1962</td>
<td>861</td>
<td>5306</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>+ 2170</td>
<td>- 583</td>
<td>- 271</td>
<td></td>
</tr>
</tbody>
</table>
• On 11-th January 2018, a new outbreak of ASF was confirmed in Satu-Mare County, Micula locality.

• On 13-th January, a second ASF outbreak was confirmed in Micula locality. The distance between the two outbreaks is about 600 m.

• So far, there no epidemiological link was demonstrated between the two outbreaks, but the investigation is ongoing.

• The confirmation of the new outbreak does not change the restriction zones established for the first one.
First outbreak: confirmed on 11-th January 2018, holding code RO 1381730434

34 pigs initially: 1 boar, 4 sows, 25 piglets, and 4 fattening pigs.

The boar get sick on 19-20-th December, and died on 24 December. Was buried in the backyard.

The first sow delivered with birth complications 16 piglets on 17 December, get sick on 26 December and died on 30 December. All piglets died within a few days since births until sow to show clinical signs. Was buried in the backyard.

The second sow get sick on 2-3 January 2018, and died on 5 January. This one was sampled, but the result was negative at the SVL Satu-Mare.

Two piglets died on 10 January 2018. They were sampled, reacted positive for ASF in SVL Satu Mare on 10-th January, by Real Time PCR and positive at NRL-IDAH on 11-th January, by Teal Time PCR and DIF test, when the disease was confirmed and officialy notified to the EC and to OIE.

All pigs showed clinical signs as fever, inapetence, prostration, cyanosis of the ears, legs and abdomen.

Even the owner has notified the private veterinarian on 20 December, this one notified the County Sanitary Veterinary Directorate and Food Safety Directorate (CSVFSD) on 6 January 2018, with delay.

Second outbreak: confirmed on 13-th January 2018, holding code RO1381730426

4 fattening pigs initially.

First one get sick on 13-14 December, died on 25 December;

The second pig get sick on 1-st January and died on 2-nd January;

The third pig get sick on 9 January, and died on 10-th January. Was sampled and reacted positive at the VSL Satu-Mare on 11-th January, wher the sample is positive at the Real Time PCR test.

NRL confirmed the ASF virus on 13-th January, by Real Time-PCR and DIF test.

The last fattening pig was killed on 12-th January 2018, sent to the Satu Mare SVL, sampled and destroyed in the lab incinerator. The result for this pig was negative.

The sick pigs in this holding have showed also clinical signs as fever, inapetence, prostration, cyanosis of the ears, legs and abdomen.

The owner notified the same private veterinarian on 13-th December 2018, but this one notified the CSVFSD only on 9-th January 2018.
Before killing in the first outbreak
Lesions
Before killing in the second outbreak
Disinfection
On 9-th January the holding RO 1381730434 (first outbreak) is placed under official restriction

Was forbidden the exit of live pigs, cadavers, meat and meat products, feeds, equipment, bedding.

Was forbidden the slaughtering of pigs without approval of the veterinary authorities, and also the introduction of new animal in the holding;

Any new diseased or dead pig have to be notified to the CSVFSD and shall be isolated until the sampling and veterinary investigation.

The epidemiological investigation revealed that, between 25 November to 15 December 2017, four sows were introduced in the RO 1381730434 (place of first outbreak), in mating purposes with the boar as follows:

- Mating on 26.11.2017 a sow from RO RO1381730449; now the sow and 2 other pigs are healthy;
- Mating on 02-03.12.2017 a sow from RO 1381730198, now the sow is healthy;
- Mating on 05-07.12.2017 a sow from RO 3570240262 (now 5 pigs in backyard, all healthy); sow was sampled with negative result.
- Mating on 15.12.2017 a sow from RO3570240061 (now 4 pigs in bakyard, all healthy); sow was sampled with negative result.
Measures adopted in the both outbreaks

- The Local Disease Control Centers (LDCC) was met on 11-th January, adopted the ASF control plan of measures and ordered by Decision:

- The killing of all 13 remained pigs. The killing was done by captive bolt followed by spinalization;

- Disposal in a rendering plant. The disposal was done in an authorized rendering plant with the registration no. RO SM 15 INCP/1,2,3, / 22.08.2017 SC Dacorim Prox SRL

- In the second outbreak, the remained pig was killed by captive bolt followed by spinalization and sent to the SVL Satu-Mare for sampling. This was destroyed in the lab incinerator. Result for ASF was negative.

- Was established the restriction zones - a 3 km protection zone, and a little bit more than 10 km a surveillance zone around outbreak, in order to include all localities around. The protection zone established for the second outbreak does not change significantly the protection zone, and maintains the dimensions of the surveillance zone.

- Desinfection of the shelters, aleys, equipments, bedding etc.

- Masures concerning the hunting ground included in the restriction zones, as follows: forbidden of the hunting games and wild boar feeding, intense monitoring of the wild boars concerning death and health status, and immediately notification of any suspicions.
In the protection zone took place inspections and the census of holding and pigs, as follows:

<table>
<thead>
<tr>
<th>Crt. No.</th>
<th>Locality</th>
<th>Total no. of holdings</th>
<th>Total no. of holdings with pigs</th>
<th>Total no. of pigs</th>
<th>Date of census</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Micula</td>
<td>738</td>
<td>193</td>
<td>754</td>
<td>11-12/01/2018</td>
</tr>
<tr>
<td>2</td>
<td>Micula Noua</td>
<td>45</td>
<td>16</td>
<td>59</td>
<td>13/01/2018</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>783</td>
<td>209</td>
<td>813</td>
<td></td>
</tr>
</tbody>
</table>
Data on Epidemiological investigations

From preliminary data it seems that the re-introduction of ASF virus was done by human factor, by illegal trade of pork meat, or products, or feeds. The border with Ukraine is found at a 7km distance, and an important part of population has ukrainian relatives. But there are not proofs in this regards, we still investigate the cases. On the other hand, even the swill feeding id forbidden by he Dovernment Decision 830/2016, the practice amongst backyard farmers is still present.

Tracing back for the first outbreak: we suppose that the re-introduction of virus took place after 15-th December 2017, the date of mating with the sow in the holding identified as RO3570240061. The four pigs are healthy, and the sow was sampled and tested by ELISA and RT-PCR with negative results.

Tracing forward: no data yet.

So far, was not found a link between the two outbreaks. No other suspicion these days, but we expect that new suspicion to appear in the future, having regard that the disease was notified with a big delay.

The Police is involved in investigation, in order to find out the way the virus was reintroduced in Romania and if there were other cases of dead pigs in the village which were not notified.
Conclusions

• The monitoring of the restriction zone is made with a serious concern, but, so far, there are not other suspicions.

• Romania demonstrated the abilities to contain quickly the virus, when the disease was early notified.

• Romania will continue an intense awareness programme targeted on different risk groups.

• Once that the epidemiological enquiry will be finalized and the conclusion available, the NSVFSA will perform an analysis on the best practice to be followed in view of rising the early warning of the risk factors.
Thank you for your attention! Questions?