Outbreak of CSF in Lithuania

State Food and Veterinary Service of the Lithuanian Republic
Outbreak of CSF in Lithuania

• General information
  – Increased mortality of pigs at the pig farm of the JSC "Beržų kompleksas", Herd No. LT40571400893, kept 15919 pigs on 17\textsuperscript{th} of May 2011. Suspected feed borne toxicosis. Postmortem examination of dead pigs did not show typical findings for CSF

  – State Food and Veterinary Service of Jonava district was informed about increased mortality of pigs at the farm on 23\textsuperscript{rd} of May 2011

  – Blood samples were taken and tested negatively for CSF, ASF and Aujeszky's disease on the 24\textsuperscript{th} of May 2011

  – Morbidity and mortality of pigs was increasing. Treatment of pigs was not successful.
Outbreak of CSF in Lithuania

• General information
  – Emergency team of the Animal Disease Control Centre went to the farm to find out the cause of the pig illness on 31st of May 2011.

• Clinical signs were classical for CSF: fever, conjunctivitis, sudden death, some slight diarrhea, disturbances of the CNS like tremor, swimming movements etc.

• Post mortem lesions were classical for CSF: hyperemia and cyanosis of the skin, and hemorrhages in skin, subcutaneous tissues, muscles, mucous membranes, pleura, peritoneum, cardiac sack, lymph nodes, kidneys, myocardium, urinary bladder, acute inflammation of lungs, lymph nodes, stomach, small and large intestines, pleuritis, peritonitis, enlarged spleen and infarcts in some cases

• Tissue and blood samples were taken for laboratory investigation
Outbreak of CSF in Lithuania

- **General information**
  - In the morning of the 1\textsuperscript{st} of June 2011 laboratory investigation showed that:
    - 36 blood samples were positive for antibodies, 13 blood samples were inconclusive and 14 blood samples were negative
    - 3 blood samples were positive by RT-PCR
    - All tissue samples were positive for CSF virus by RT-PCR
  - Blood and tissue samples were sent to CRL for confirmation of CSF
  - Outbreak of classical swine fever was confirmed and European Commission, OIE and and neighboring countries were informed
  - Secondary outbreaks were confirmed on 2\textsuperscript{nd} of June 2011 at the 2 fattening pig farms belonging to the JSC “Beržų kompleksas” which were located within surveillance zone
Outbreak of CSF in Lithuania

Pig farm of the JSC "Beržų kompleksas", Herd No. LT40571400893, kept 15919 pigs)

Primary outbreak
Outbreak of CSF in Lithuania

Primary outbreak
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Primary outbreak
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<table>
<thead>
<tr>
<th>Category of pigs</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piglets</td>
<td>3080</td>
</tr>
<tr>
<td>Weaning Piglets</td>
<td>6395</td>
</tr>
<tr>
<td>Fattening pigs (weight &gt; 70 kg)</td>
<td>3207</td>
</tr>
<tr>
<td>Sows</td>
<td>3232</td>
</tr>
<tr>
<td>Boars</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL No.</strong></td>
<td><strong>15919</strong></td>
</tr>
</tbody>
</table>
Outbreak of CSF in Lithuania

09-05-2011 anorexia, some cases of death
17-05-2011 anorexia, increased mortality

Category of pigs

- Suckling sows
- Weaning piglets
- Fattening pigs
- Sows

Anorexia, increased mortality from May
Outbreak of CSF in Lithuania

Reported to Jonavos SFVS 23-05-2011
Reported to SFVS 31-05-2011

0-1mén. 1-3mén. 3-6mén. Paršavedės
Movement of 1-3 months piglets from place of primary outbreak

Pig farm “Žeimių ferma”
(on 19-05-2011
910 piglets)

Secondary outbreak

Pig farm “Praulių ferma”
(598 piglets
On 10-05-2011)

Primary outbreak

Pig farm UAB “Beržų kompleksas”
(No. of pigs 15919, herd No. LT40571400893)

Secondary outbreak
Outbreak of CSF in Lithuania

- Emergency measures:
  - Standstill on movement of within territory of Lithuania
  - Established 3 km protection and 10 km surveillance zones
  - Stamping out pigs in infected farm.
  - Clinical and laboratory investigation of pigs in pigs farms in protection and surveillance zones
  - Clinical and laboratory investigation of pigs in pigs farms in the whole territory of Lithuania
  - Intensified testing of wild boars
Outbreak of CSF in Lithuania

• Emergency measures:
  – Establishment of the crisis management centre in Jonavos district
  
  – Rendering dead pigs at the approved 1 category animal by-product processing plant JSC “Rietavo veterinarinė sanitarija” in Telšiai county
  
  – Information provided to local people living within protection and surveillance zones and in the country
  
  – Regular supply of information to the EC and third countries
  
  – All Measures implemented in accordance with Directive 2001/89EC on Community measures for the control of CSF and Commission Decision 2002/106/EC approving a Diagnostic Manual establishing diagnostic procedures, sampling methods and criteria for evaluation of the laboratory tests for the confirmation CSF
Restriction zones
Contact holding within protection zone

Pig farm “Praulių ferma” (No. of pigs 3082)

Primary outbreak
Contact holdings within surveillance zone

Pig farm “Žeimių ferma” (No. of pigs 4606)

Pig farm “Trakų ferma” (No. of pigs 1504)
Other neighboring pig farms

- Pig farm UAB "Dainavos kiauliu veislynas" (No. of pigs 3062)
- Pig farm UAB "Miva" (No. of pigs 1716)
- Pig farm "Pauliūkų ŽŪB" (No. of pigs 11192)

Primary outbreak
Outbreak of CSF in Lithuania

- Number of backyard pig farms and pigs within protection and surveillance zones:
  - Protection zone:
    • 35 pig farms
    • 102 pigs
  - Surveillance zone
    • 173 pig farms
    • 646 pigs
Restriction zones after 2nd of June 2011

**Secondary outbreak**
(No. of pigs 4606)

**Primary outbreak**
(No. of pigs 15919)
Protection and surveillance zones

Secondary outbreak

Pig farm “Žeimių ferma” (No. of pigs 4606, herd No. LT40552800042)

Secondary outbreak

Pig farm UAB “Beržų kompleksas” (No. of pigs 15919, herd No. LT40571400893)

Primary outbreak

Pig farm “Praulių ferma” (No. of pigs 3082, herd No. LT40570600562)

Pig farm “Pauliūkų ŽUB” (No. of pigs 11192, herd No. LT4055331417)

Enlarged zone of surveillance

Pig farm UAB “Dainavos kiaulių veislynas” (No. of pigs 3062, herd No. LT40558300140)

Pig farm UAB “Miva” (No. of pigs 2045, herd No. LT40546301080)

Pig farm UAB “Miva” (No. of pigs 1716, herd No. LT40546301080)

Pig farm “Trakų ferma” (No. of pigs 1504, herd No. LT40558700109)

Pig farm UAB “Miva” (No. of pigs 11192, herd No. LT4055331417)

Pig farm UAB “Dainavos kiaulių veislynas” (No. of pigs 3062, herd No. LT40558300140)

Enlarged zone of surveillance

Pig farm UAB “Miva” (No. of pigs 2045, herd No. LT40546301080)
Outbreak of CSF in Lithuania

- Secondary outbreak of CSF on 3rd of July 2011 in surveillance zone in Bukonių municipality, Liutkūnų village, in pig establishment JSC “Miva” (herd number LT 40546301080) with 2045 pigs

- CSF was confirmed by National Food and Veterinary Risk Assessment Institute (NFVRAI)
Secondary outbreak in JSC “Miva”

<table>
<thead>
<tr>
<th>Category of pigs</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Piglets</td>
<td>754</td>
</tr>
<tr>
<td>Fattening pigs</td>
<td>1118</td>
</tr>
<tr>
<td>Sows</td>
<td>173</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2045</strong></td>
</tr>
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</table>
Secondary outbreak on 2nd of July 2011

Enlarged surveillance zone

Secondary outbreak
(No. of pigs 2045)
Outbreak of CSF in Lithuania

- Secondary outbreak on 2\textsuperscript{nd} of July 2011:
  - On 28-06-2011 from JSC “Miva” were taken and tested 30 samples. All the samples were tested negative.
  - On 2\textsuperscript{nd} of July 2011 pigs showed respiratory disease symptoms and additional 68 samples were taken and tested. 6 samples were positive for CSF by ELISA and RT-PCR.
  - The positive samples were sent to the Community Reference Laboratory for further investigation.
Outbreak of CSF in Lithuania

- Emergency measures:
  - All the CSF eradication and prevention measures have been applied in accordance with the provisions of Council Directive 2001/89/EC
  - The clinical examination and all sampling and testing procedures are carried out according to Commission Decision 2002/106/EC
  - No movement, no trade (in or out) of pig from restriction zones. Standstill regime on trade and export of pigs is still introduced on the whole territory of Lithuania.
  - The implementation of measures foreseen in Directive 2001/89/EC in particular in 3 km and 10 km restriction zones are applied, but the zones remain the same, only few villages of Ukmerges (5) and Kedainiu (4) districts are included
  - The investigation and sampling is still ongoing
Outbreak of CSF in Lithuania

• Some statistics:
  – From 1\textsuperscript{st} of June till 14\textsuperscript{th} of June 2011 were culled 23986 pigs which weighted 1382,792 tons
  – On 4\textsuperscript{th} of July 2011 1245 pigs culled
  – All pigs were culled by electric shock or by carbon dioxide
  – All pigs were transported for processing to 1 category animal by-product processing plant JSC “Rietavo veterinarinė sanitarija” in Telšiai county
Outbreak of CSF in Lithuania

• Laboratory examination:
  – In restriction zones:
    • 2123 blood samples have been taken from pigs and 112 from wild boars
  – Outside restriction zones:
    • 5864 samples have been taken from pigs and 202 from wild boars
  – 2.1 type CSF virus was detected by National Food and Veterinary Risk Assessment Institute and CRL on CSF from outbreaks
Thank you for your attention