Prevention and control of African swine fever in the EU
- the principle of regionalisation -

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(FLI – International Animal Health Team)

African swine fever (ASF)

- Devastating viral disease of pigs: up to 100% mortality
- Symptoms and lesions are similar to classical swine fever (CSF)
- No vaccine !!!!!
- Easy to diagnose (good lab tests)
- Endemic in Africa in ticks and warthogs: eradication is impossible
- Endemic in Russian Federation and Caucasus
- Long distance transmission via food waste containing infected pork
African swine fever history in Europe (EU)

- Introduced from Africa in Portugal (1957, 1960) and Spain (1960)


- Still present in Sardinia, regionalization/zoning in place

2000-2013 historical data

CSF

ASF
ASF in eastern Europe in recent years

- Introduced from Africa in Georgia
- Virus different from the one in Sardinia
- Spread to bordering countries including Russia
- Unprecedented spread within Russia and from there to Ukraine and Belarus
2007-2014 (Caucasus, RF)

General critical points (Caucasus & RF)
- free ranging pigs
- poor bio-security
- swill feeding
- home slaughtering
- no registration of farms and animals
- unknown situation in wild boar & back yard system
- only clinical confirmation of disease
- lack of effective BIP
- understaffed VS
- lack of epidemiological tracing
- lack of compensation scheme
- ...

EU situation for ASF

4 cases in wild boar only in Jan-Feb 2014 in Lithuania and Poland – domestic pigs unaffected

Zoning applied according to EU legislation in
- Sardinia
- part of Lithuania and Poland

Currently ASF present only in Sardinia, no cases since mid-February 2014 on mainland
Regionalisation an prescribed in Decision 2014/178/EU

The EU main strategies for ASF control and eradication

- Identification and registration
- Surveillance
- Animal movement control
- **Zoning and regionalization**
- Stamping out policy
- Cleansing and disinfection
- Farm bio-security
- Swill feeding
- **Eradication programmes in case of disease in wild boar**
EU tools for control

- Legislation
- Contingency plans
- The EU Reference Laboratory – diagnostic manuals
- The EU co-financed eradication programmes
- Financial support in case of new outbreaks
- **The missions of the Community Veterinary Emergency Team - CVET**
  - Better training for safer food – BTSF
  - Scientific advise - EFSA
  - EU research projects – RTD
- **Commission guidance document on ASF in wild boar**

Terms of Reference

- To provide scientific, technical, managerial and practical on-the-spot assistance on the development of the most suitable control and eradication measures for African swine fever (ASF) under local conditions

- To support the authorities to elaborate a plan on the surveillance and possible eradication of ASF
Poland

- **PL1**, Male, <1y, found dead about 900 m from border to BY on 3 Feb 2014  
  Infection around: ~20 Jan

- **PL2**, Female, 3y, found dead about 3 km from border to BY on 17 Feb 2014  
  Infection around: ~10 Feb

- Time interval regarding infection between PL1 and PL2 about 3 weeks

- PL1 same time as LT1 and LT2
Potential sources of infection

Three working hypothesis

I. ASFV introduced by wild boar from BY

II. ASFV introduced by contaminated meat products ("Sandwich theory")

III. Wild boar infected by undetected positive back yard pigs

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>LT</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infected wild boar from BY</td>
<td>+/-</td>
<td>++</td>
</tr>
<tr>
<td>Sandwich theory</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>Infected back yard pigs</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**Hypothesis I: Movement of infected wild boar from other infected areas (Belarus)**

- Most likely hypothesis
- ASF Polish virus identical with viruses from BY
- Intensive hunting activities on the Byelorussian side
- But situation in Belarus remains unclear

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**Hypothesis II: Infection of wild boar by uptake of infected material available in the area**

- Rather unlikely hypothesis
- Both cases were far from communication axis
- The time laps between the estimated dates of infection of both cases do not match
**Hypothesis III: Infection of wild boar coming from domestic pigs**

- Most unlikely hypothesis
- No evidence has been found that domestic pigs in the back yard sector were affected
- Finding is supported by the laboratory investigations conducted
- Good surveillance programme has been in place since mid-2013

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**Commission Decision 2014/178/EC**

**3 zones by level of risk:**
- higher risk (endemic disease in pigs and wild boar in Sardinia)
- infected area in Lithuania and Poland along borders with Belarus where the disease is present only in wild boar
- buffer zone adjacent the infected area in Poland and Lithuania to further prevent the spread of the disease
Commission Decision 2014/178/EC

Restrictions applied depend on the level of risk:

- very stringent restrictions in Sardinia
- general restrictions in live pigs, semen and pig meat in the infected area in Poland and Lithuania with sustainable and safe derogations if risk mitigation measures (testing, bio-security) are applied
- light restrictions applicable only to live animals accompanied by surveillance in the buffer zone

Diagram:
- Fresh meat and products from pigs
- Live pigs
- Other EU-MS, Third countries
- Infected zone (Part II)
- Buffer zone (Part I)
- Member State (free of ASF)
- Other EU-MS, Third countries
- Allowed
- Prohibited
- Derogation
- Fresh meat and products from wild boar
- Live wild boar
- Semen, ova, embryo
- Animal by-products

Commission Implementing Decision 2014/178/EU
Main measures applied

- Intensive passive monitoring: all wild boar found dead are tested
- Active monitoring: all hunted wild boar are tested (over >8000/year)
- Categorisation of pig holdings according to biosecurity level. Intensive clinical monitoring

<table>
<thead>
<tr>
<th>Samples collected in the period of:</th>
<th>31/3 – 6/4</th>
<th>7/4 – 13/4</th>
<th>14/4 – 20/4</th>
<th>21/4 – 27/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>pigs</td>
<td>wild boar</td>
<td>pigs</td>
<td>wild boar</td>
<td>pigs</td>
</tr>
<tr>
<td>42 live</td>
<td>9 shot 2 found dead</td>
<td>199 live</td>
<td>19 shot</td>
<td>599 live</td>
</tr>
</tbody>
</table>

No further positive cases detected
Conclusions

- Poland started an intensive surveillance programme monitoring the ASF situation already in 2013
- In addition to EU requirements, Poland has defined an additional zone of 10 km radius around the two positive cases of wild boar. In this zone measures are taken as if it would be the case if domestic pigs would have been found infected (all pigs tested)
- Wildlife collection points and facilities are available and under the supervision of the Official Veterinary Authority
- The implementation of ASF control measures in the wild boar population is well coordinated
- Good passive surveillance
  - The numbers of the found dead animals, as well as sampled and tested wild boar prove the high efficiency and efficacy of the passive surveillance in the early detection of ASF.

Conclusions

- The spread of ASF via wild boar in LT and PL was not unexpected, given that in Russia and Belarus the situation appears out of control
- There is a high level of awareness and preparedness in the MSs
- The risk posed by the wild boar should not be overestimated
- Shooting, shooting, shooting is NOT the solution
- Priority is the containment of disease in the infected areas and prevent infection of domestic pigs
**Endemic Situation???

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NO endemic situation in Poland and Lithuania

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**ASF Legislation in the EU**

*Council Directive 2002/60/EC*: which lays down specific provisions for the control of ASF (including those on contingency plans)


*Commission Decision 2013/426/UE*: on measures to prevent the introduction of ASF from certain third countries

*Commission Decision 2014/178/EC*: concerning animal health protection measures against ASF in certain Member States

- **Disease notification**
- **Measures to be established when:**
  - the presence of ASF on a holding is suspected
  - The presence of ASF is confirmed
- **Epidemiological Investigation**
- **Measures in contact holdings**
- **Establishment of protection and surveillance zones (3 – 10 Km), measures to be applied**


- **Cleansing, disinfection and treatment with insecticides**
- **Repopulation of pig holdings following disease outbreaks**
- **Measures in cases where African swine fever is suspected or confirmed in a slaughterhouse or means of transport**

- Measures in cases where African swine fever is suspected or confirmed in feral pigs and plans for eradication
  - establish an expert group including veterinarians, hunters, wild life biologists and epidemiologists and, inter alia, define the infected area
  - official surveillance in pig holdings in the defined infected area
  - surveillance in all feral pigs (shot or found dead) in the defined infected area
  - ASF virus isolate is subject to the laboratory procedure indicated in the diagnostic manual
  - cooperation among MS


- Measures to prevent the spread of ASFV by means of vectors
- Diagnostic procedures and bio-safety requirements
- EU controls
- Contingency plans
- Disease control centres and expert groups
Commission Decision 2013/426/UE

- Provides measures to prevent the introduction of ASF from certain third countries
- Vehicles which have transported pigs and which enter the Union from infected third countries are appropriately cleansed and disinfected

Guidelines on ASF in feral pigs

- **Objective** is to provide guidance to the MS in controlling ASF when the disease is suspected or confirmed in feral pigs
- surveillance and control of ASF in feral pigs
- preventive measures for pig holdings
- available in in Document SANCO/7138/2013
More resources:


Thank you