

Experience on epidemiological analysis and difficulties encountered in Latvia

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ASF in Latvia: begining of the story

On **26**th **June** 2014 Latvia notified **first case** of African swine fever (ASF) in three wild boar found dead on the border with Belarus.

On the **26th June** NRL confirmed ASF **outbreak** in three domestic pigs in one back yard holding in Krāslava county, Robežnieki parish about 6 km from Belarus border.







ASF summary

2014

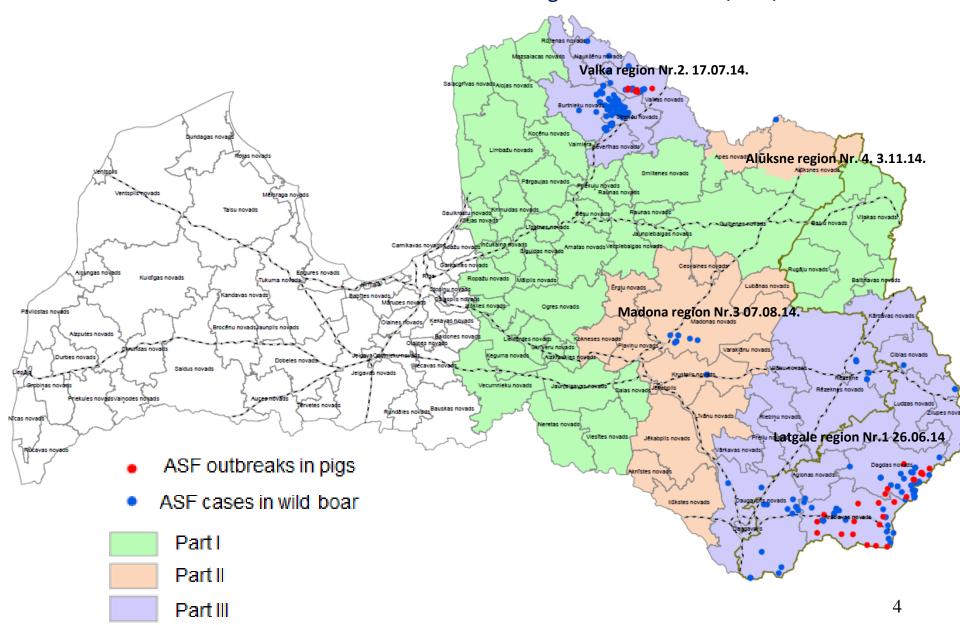
First outbreak - 26.06.2014.

- Domestic pigs **32** outbreaks
- Destroyed 564 pigs
- Wild boar **217** (178 dead; 39 hunted)
- 13 counties and 34 parishes affected

2015 (by 20th November)

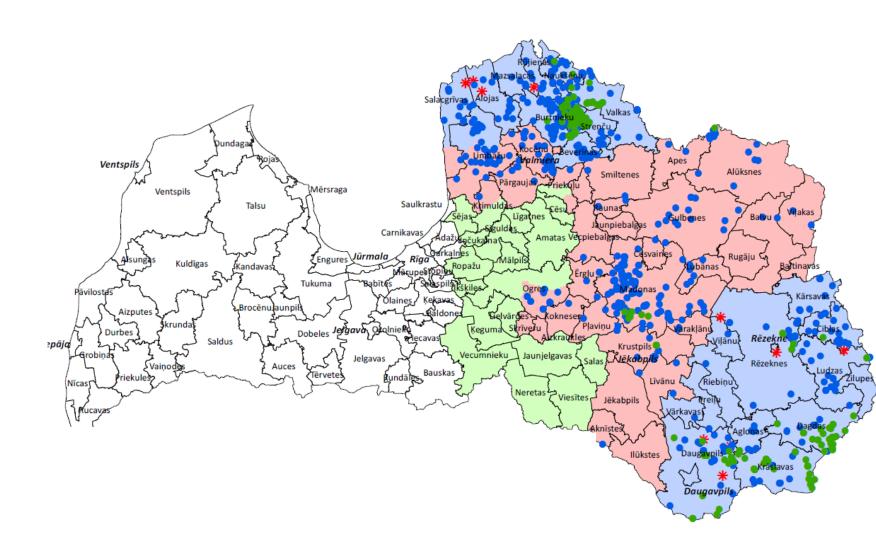
- Domestic pigs **10** outbreaks
- Destroyed 213 pigs
- Wild boar 872 (579 dead; 293 hunted)
- 47 counties and 147 parishes affected

ASF in wild boar and pig farms - summary 2014 and restriction territories according to Decision 2014/709/EU

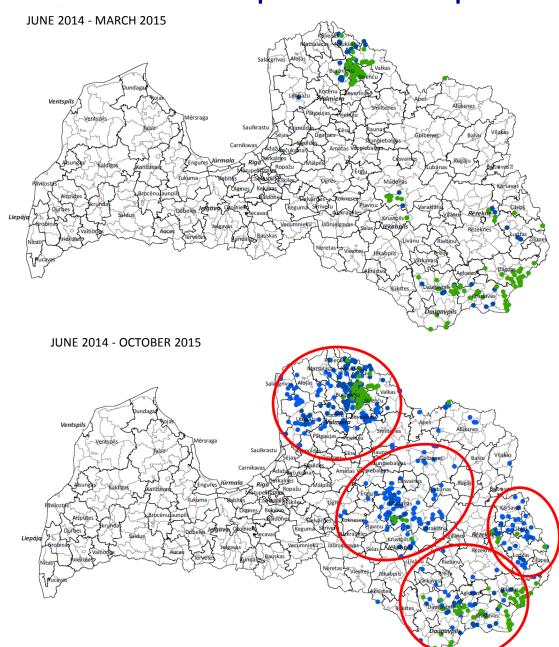




ASF CASES AND OUTBREAKS 2014 - 2015 (I-X)



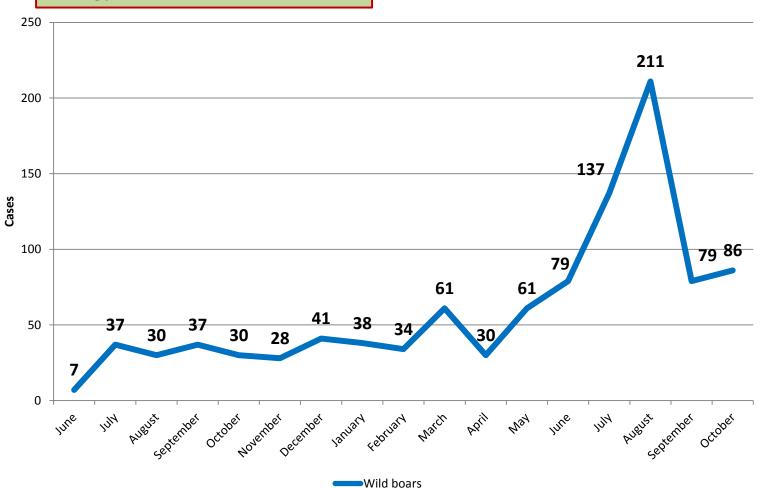
ASF WILD BOAR: Natural spread & seasonal patterns





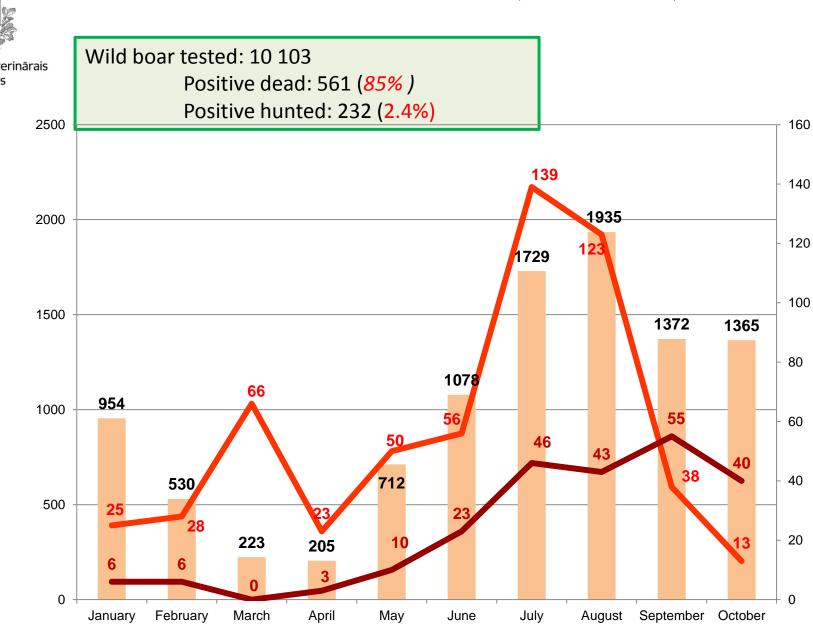
NUMBER OF ASF CASES PER MONTH

Number of ASF cases in wild boar are closely related to wild boar biology



Pārtikas un veterinārais dienests

ASF IN WILD BOAR (30.10.2015.)



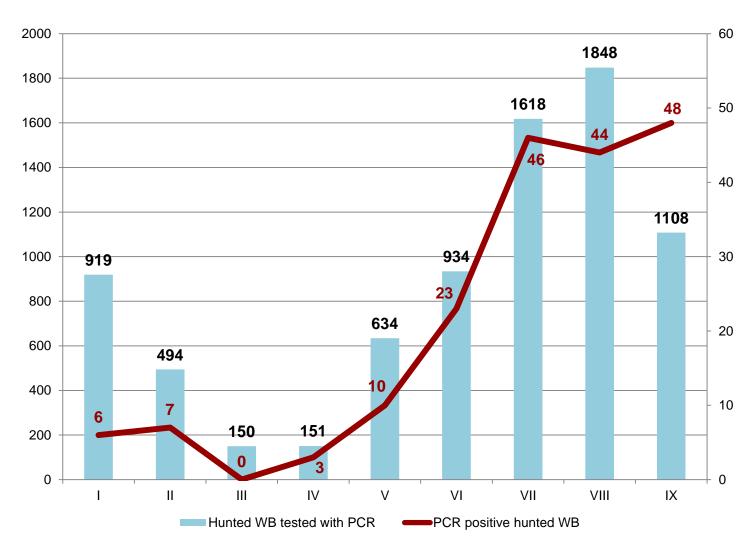
Positive dead

Positive hunted

Tested wild boar with PCR



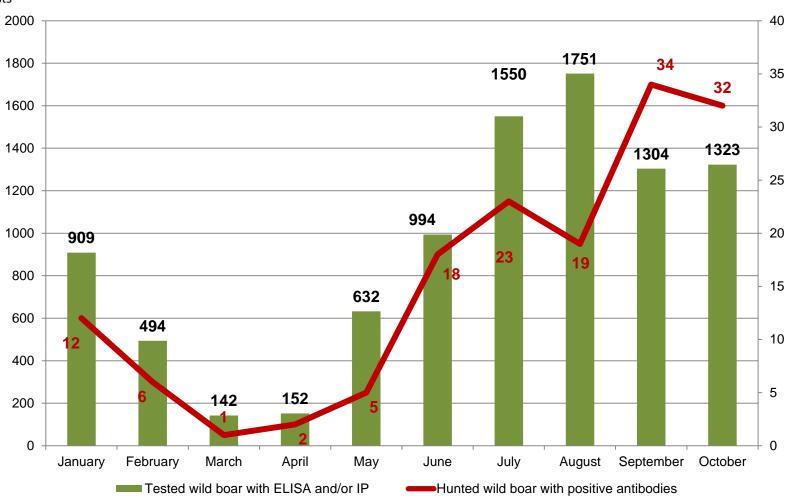
ASF virological surveillance in hunted WB (30.09.2015.)





Antibodies detected in hunted WB

Pārtikas un veterinārais dienests





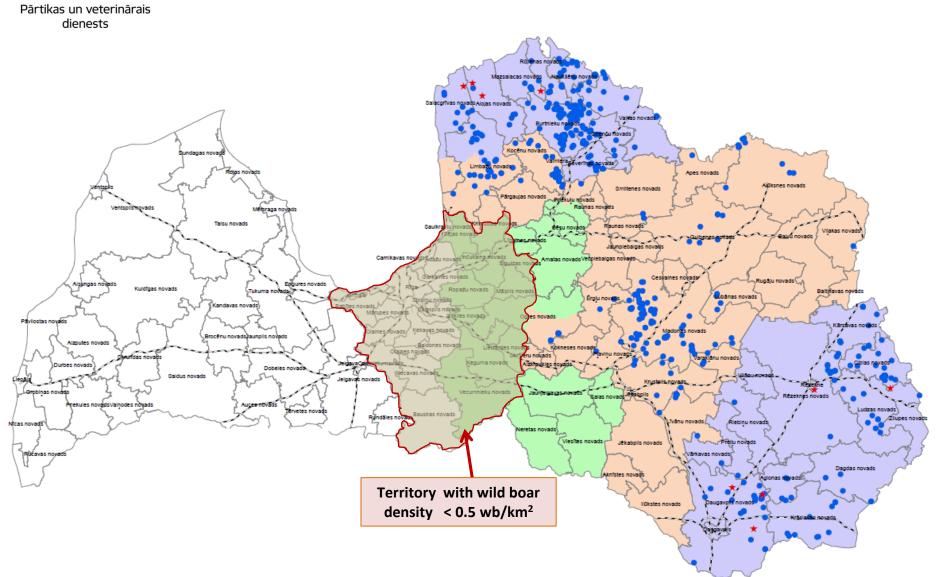
Possible solutions for eradication of ASF in WB population

- 1.Baiting: (non-sustaining feeding of wild boar): Attracting of wild boar with limited food (e.g. maize) only for the purpose of hunting. Sustained feeding is forbidden.
- 2. Targeted hunting practices selecting adult and sub-adult <u>females</u>. Reaching a wild boar density of 0,5 wild boar/km² or lower is expected to reduce the spread of ASF.
- 3. Establishment of a buffer area to establish more stricter requirement for decreasing of wild boar population.



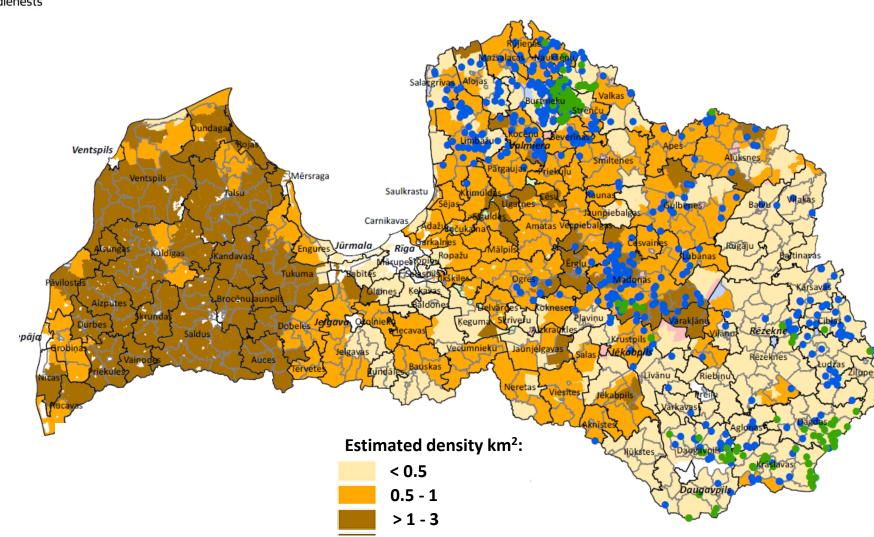


Possible buffer zone to stop ASF



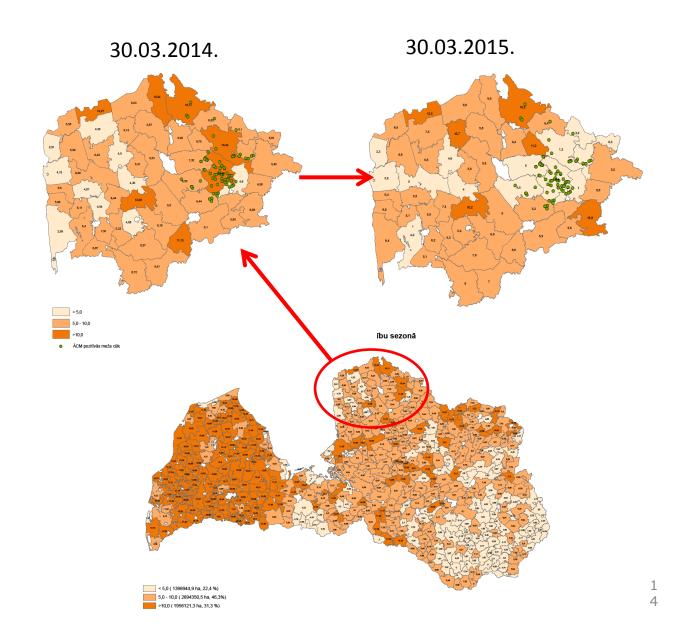


WB POPULATION DENSITY 30.03.2015.





Wild boar density before infection and after few months











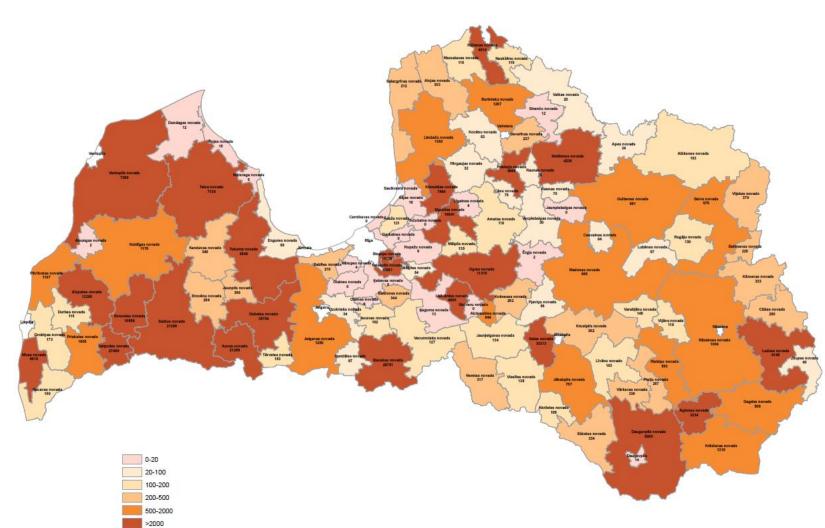








Domestic pig density in Latvia





Difficulties = challenges

Data collection:

- Pig farms / pigs ----- wild boar
- Sample Id number ---- several samples to one animal (blood and tissue)
- Information that accompanies samples
- Laboratory systems need to be adapted
- Location of «samples» GIS coordinates
- Technical issues
- Human mistakes...

Epidemiological analysis:

- Raw Lab data not ready for epidemiological analysis
- Manual work needed for data preparation for analysis
- Data for mapping (from several institutions)
- Wild boar density estimation…

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THANK YOU FOR YOUR ATTENTION!

