



State
Veterinary
Administration

African swine fever in wild boars in the Czech Republic

Petr Šatrán, GF TADs, Chisinau, Moldova 20. 9. 2017

Passive surveillance

From 2014 passive surveillance in wild boars is performed

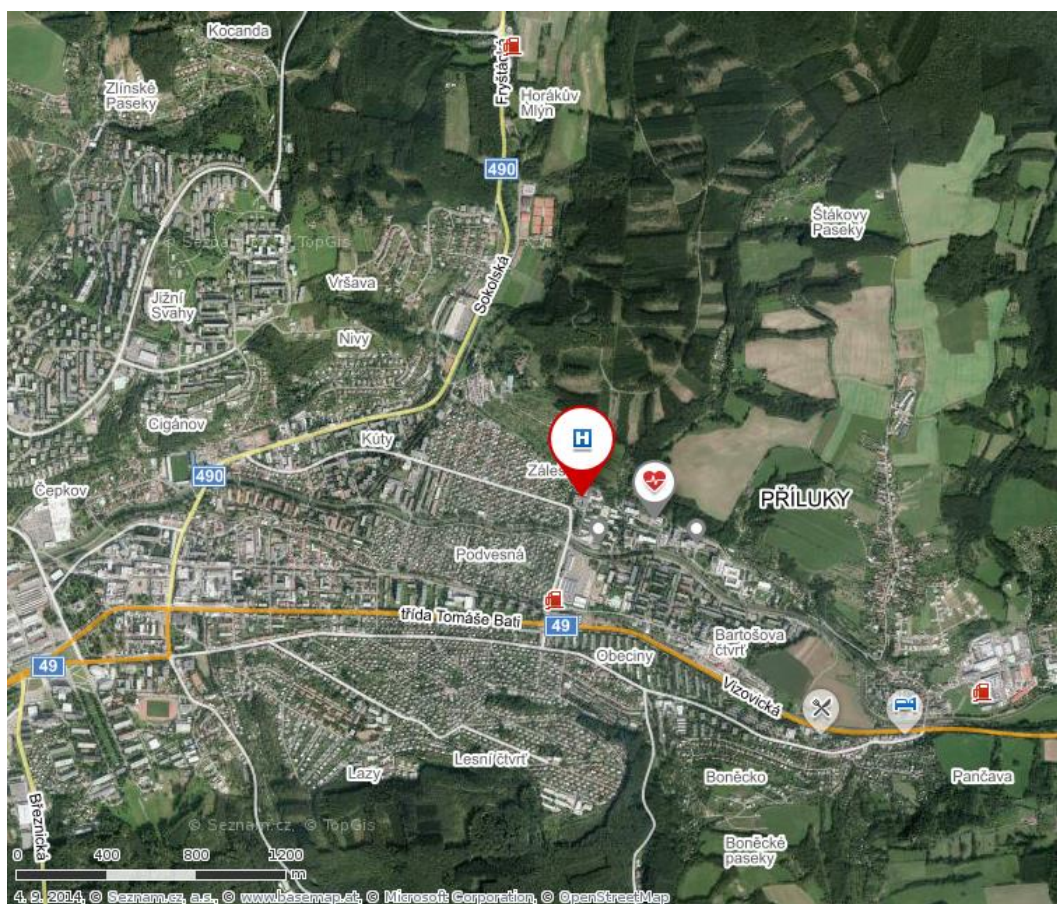
- all wild boars find death are tested for ASF and CSF

1. 1. 2014 - 15. 9. 2017								
Year	2014		2015		2016		2017	
Czech Republic	243	0	348	0	404	0	855	101

First occurrence of ASF virus in wild board in the Czech Republic

Date of finding: 21.6.2017, confirmation: 26.6.2017 (NRL SVI Jihlava)

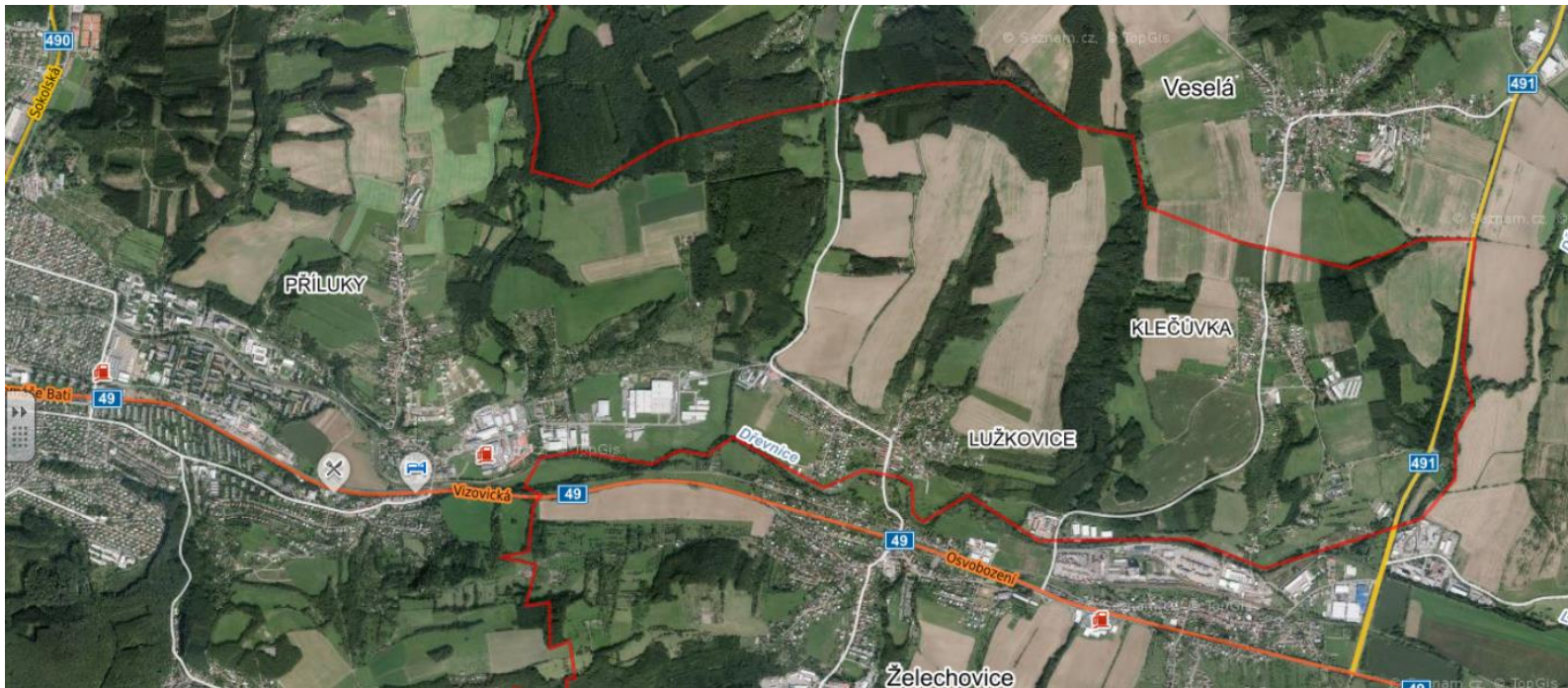
Location of finding: Příluky u Zlína, GPS 49°13'44.303"N, 17°42'1.996"E



Possible ways of disease introduction

Introduction by:

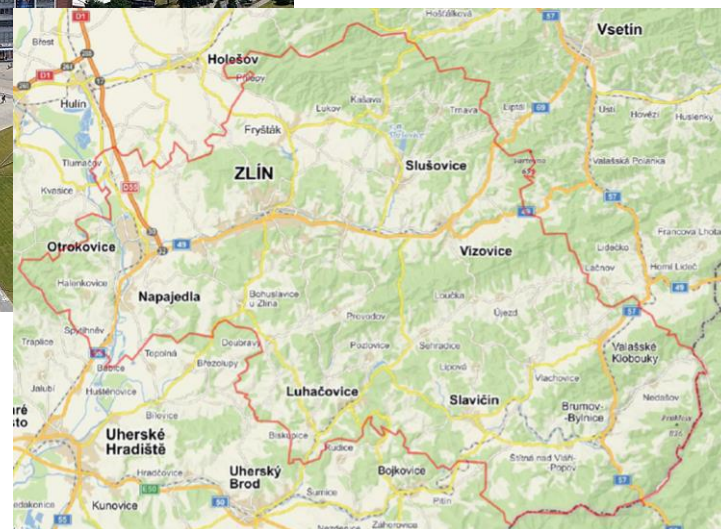
- ✓ wild boars - not probable (nearest reported cases of AMP about 400-500 km)
- ✓ human activities – probable (most of the dead positive wild boars found in inhabited areas)



Demarcation of the infected area



In accordance with the Council Directive 2002/60/EC the whole District Zlín has been declared as an infected area (1 034 km²), 37 municipalities, 89 hunting grounds

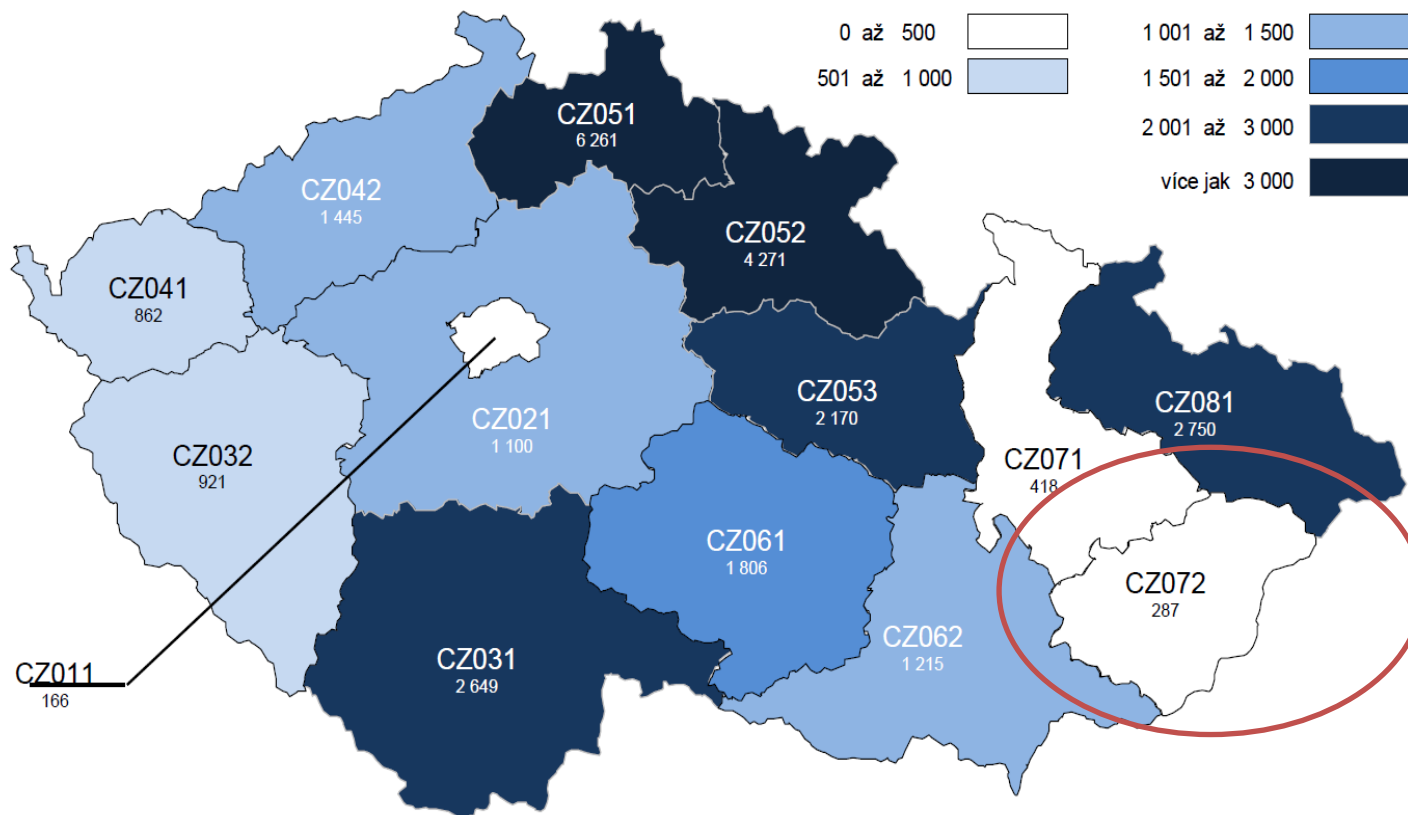


Density of domestic pigs in the Czech Republic (per 100 km²)

CZ 2 160 farms, 1 353 935 pigs

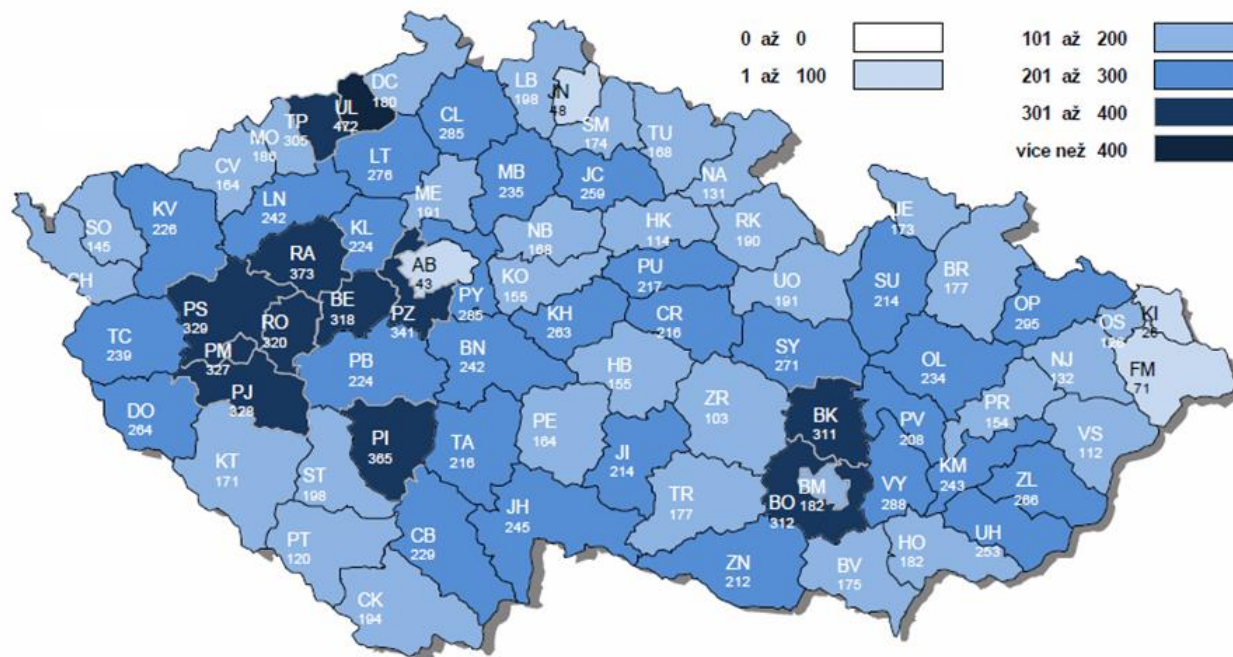
Region of Zlín 83 farms, 74 088 pigs

Infected area (District Zlín) 23 farms, 16 301 pigs



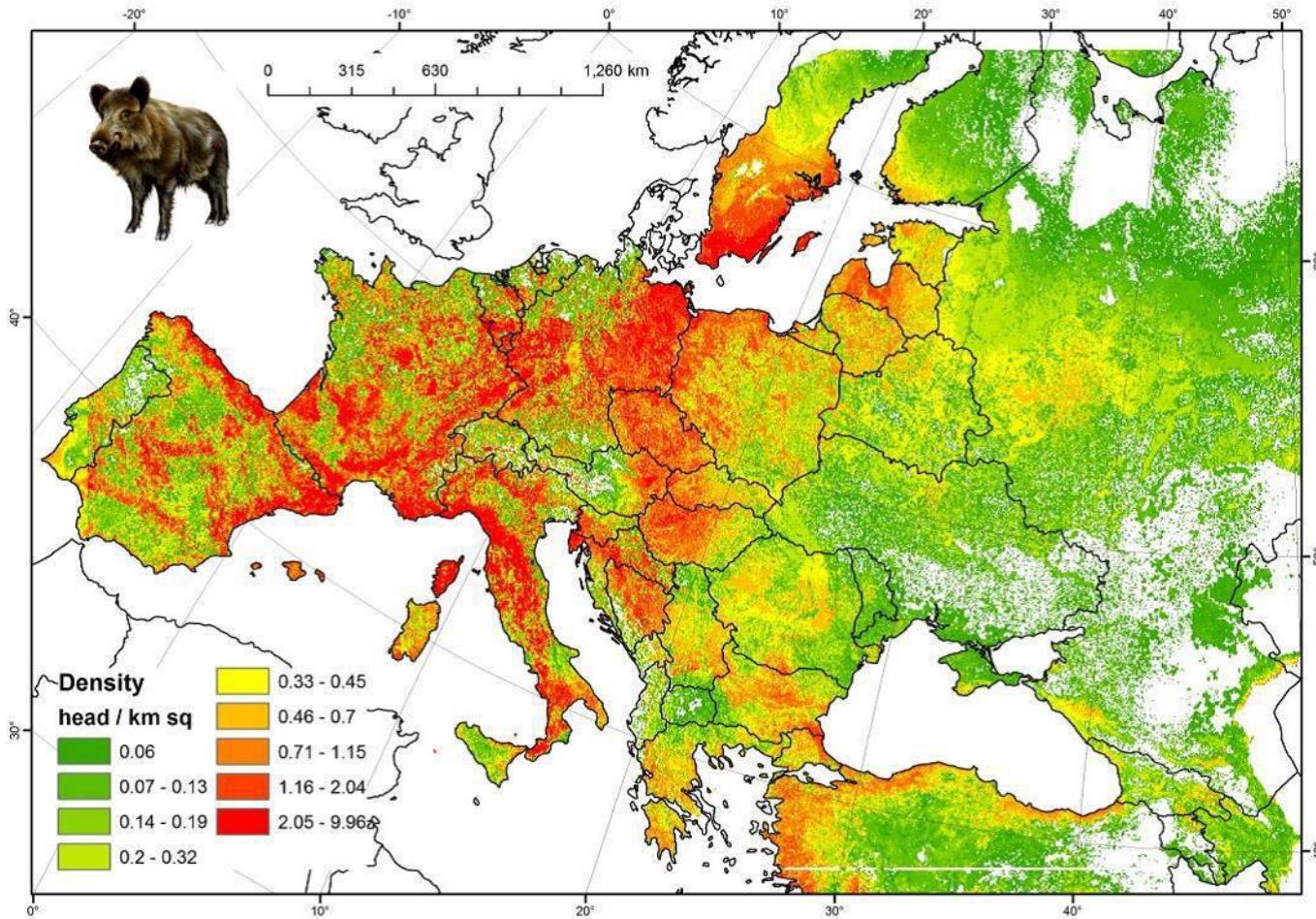
Hunting density of wild boars in the hunting year 2015 (per 100 km²)

Year	number of hunted WB
2010	144 305
2011	109 563
2012	185 381
2013	152 468
2014	169 483
2015	186 148
2016	160 164



Modelled wild boar population density in Europe

(source: FAO/ASFORCE, May 2015)



Current epidemiological situation (15. 9. 2017)

In total **101** cases of African swine fever in wild boar population

No outbreak in population of domestic pigs

All cases confirmed in the NRL in the SVI Jihlava

All cases are from Region Zlín, District Zlín:

Hvozdná: 32 cases

Klečůvka: 11 cases

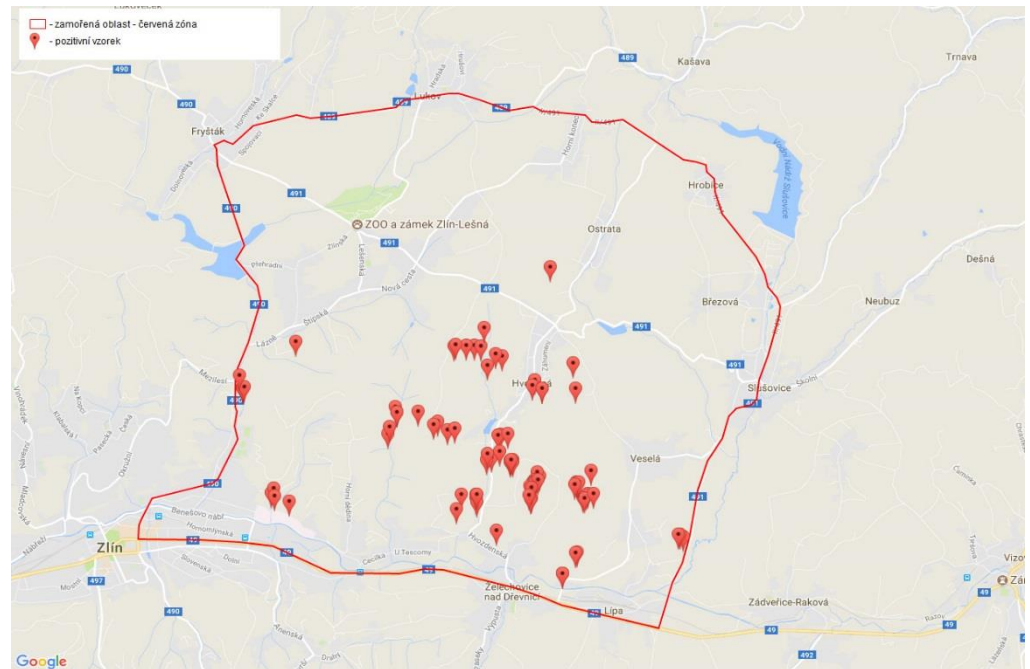
Kostelec u Zlína: 7 cases

Lužkovice: 40 cases

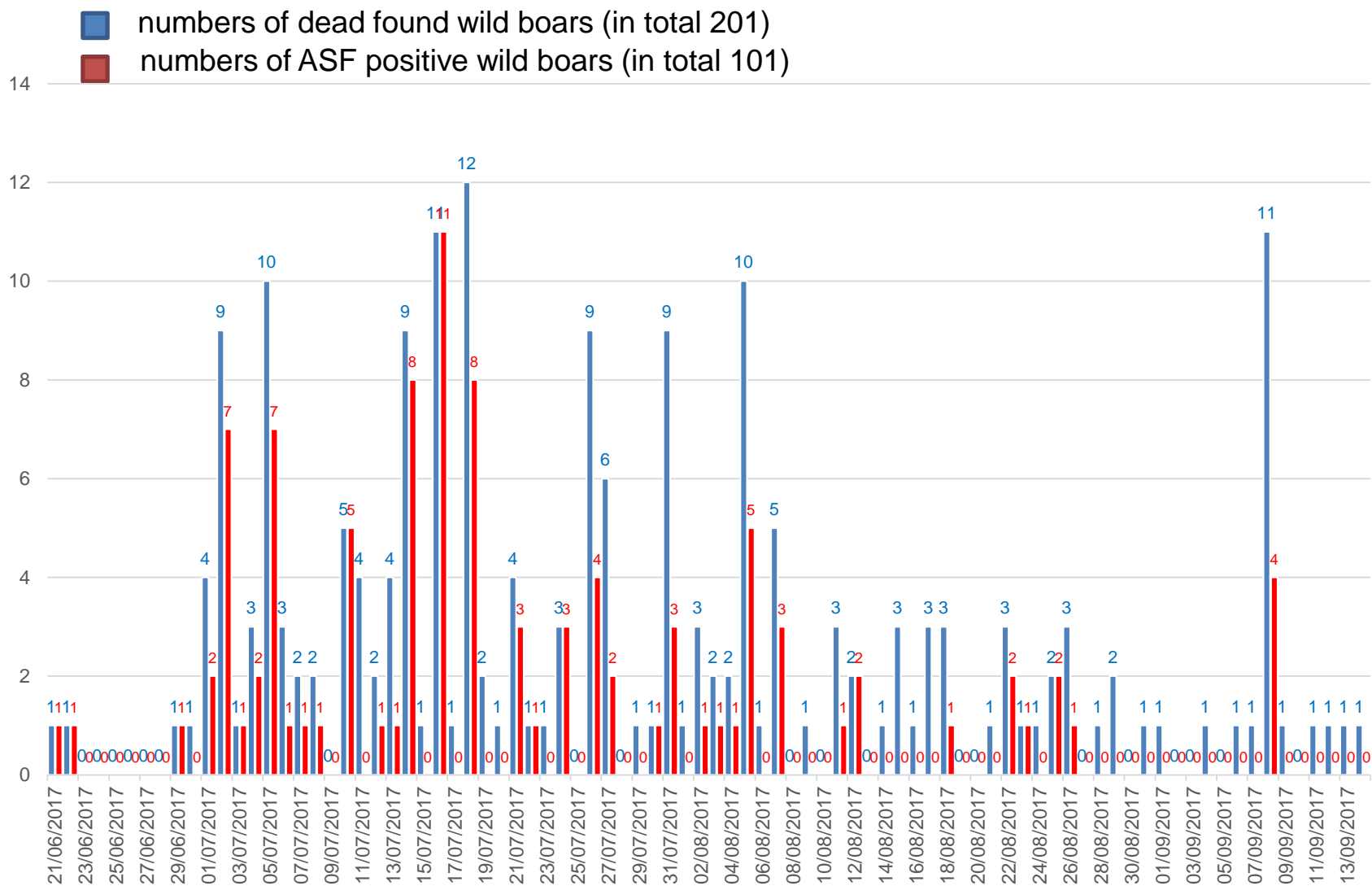
Ostrata: 1 case

Příluky: 8 cases

Želechovice: 2 cases

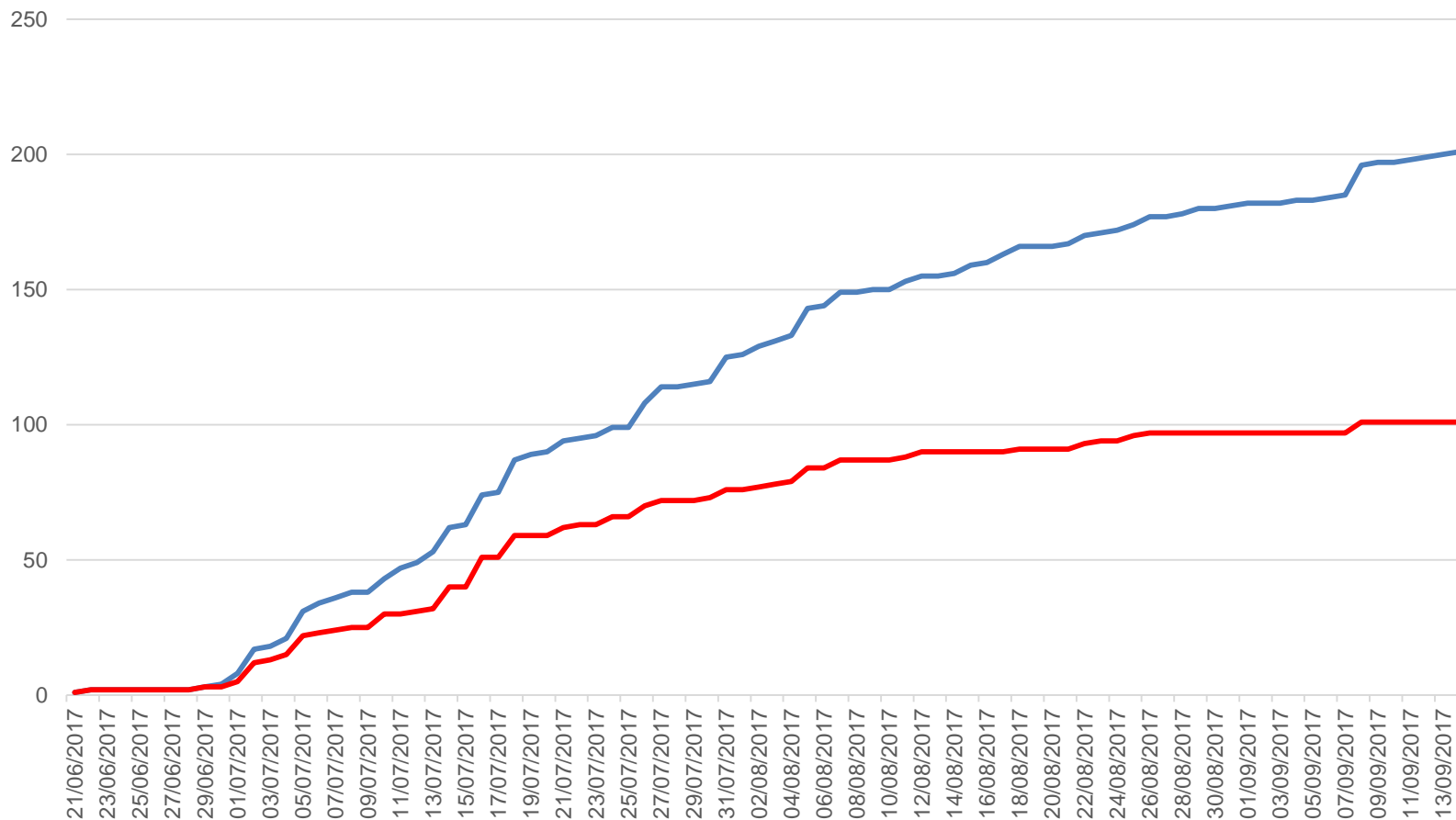


Findings of dead found wild boars – daily incidence



Findings of dead wild boars – cumulative incidence

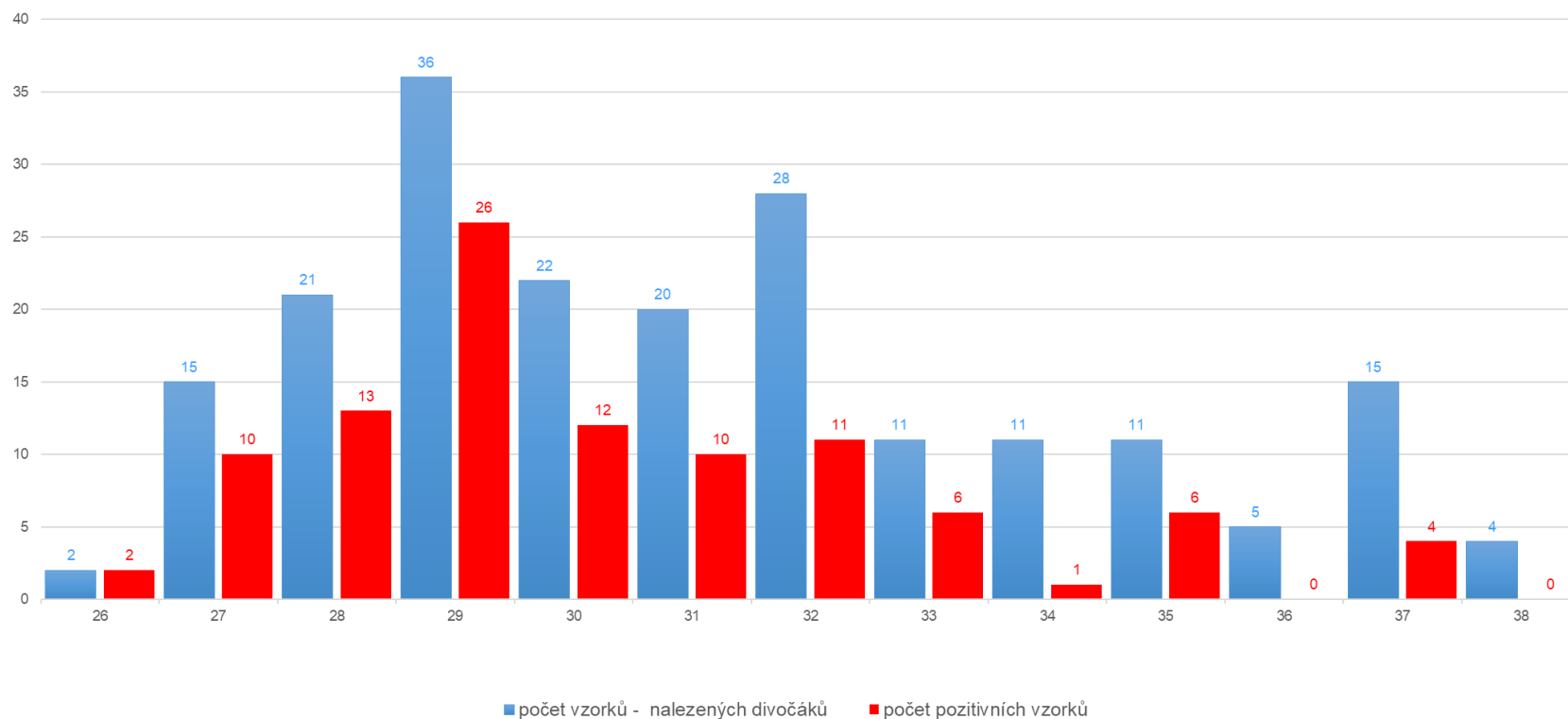
- numbers of dead found wild boars (in total 201)
- numbers of ASF positive wild boars (in total 101)



Findings of dead wild boars - weekly incidence

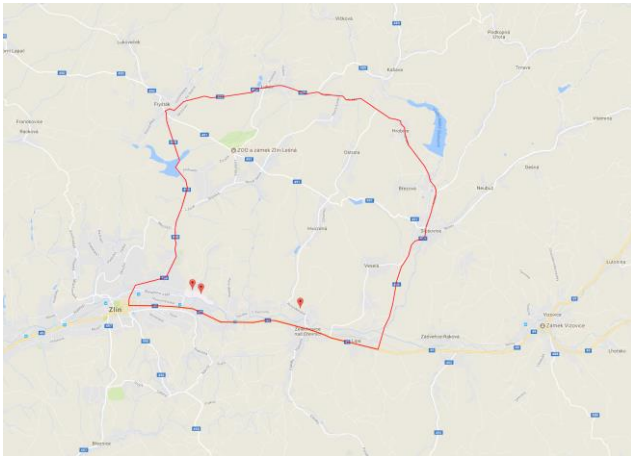
- numbers of dead found wild boars (in total 201)
- numbers of ASF positive wild boars (in total 101)

Týdenní přehled počtu nálezů a pozitivních výsledků AMP

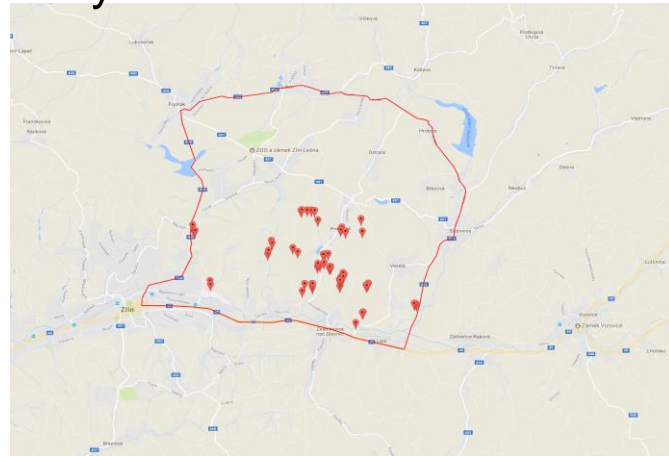


Distribution of positive findings in months

June 2017



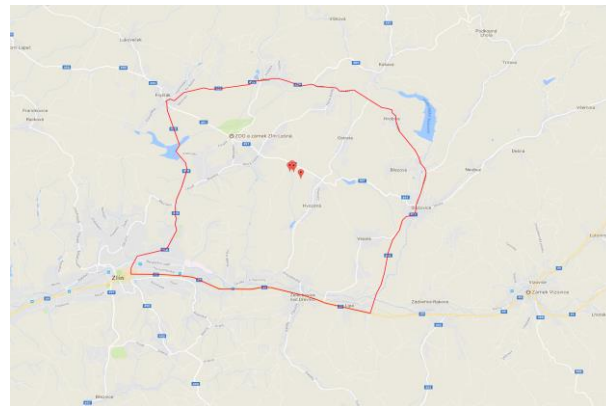
July 2017



August 2017



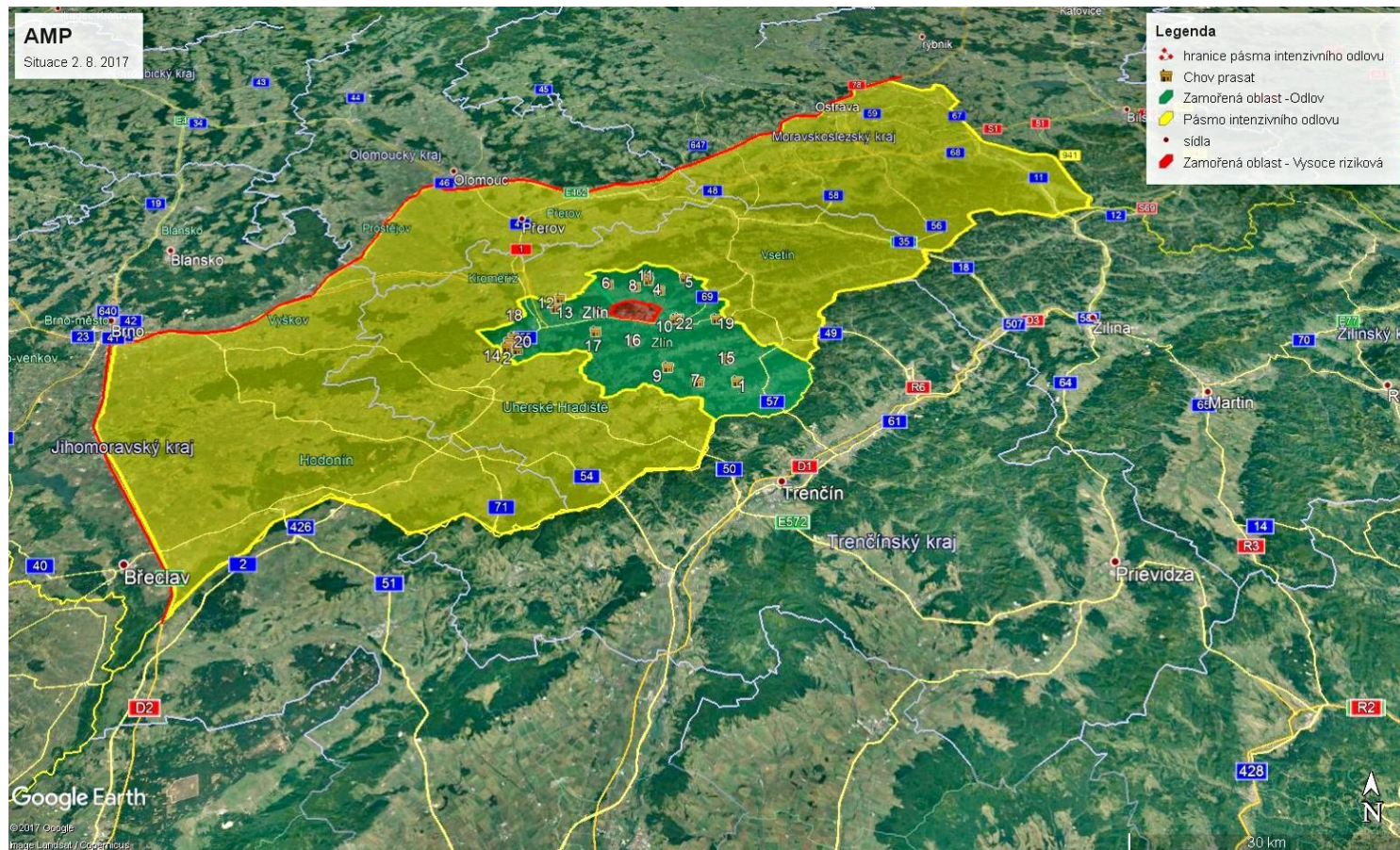
September 2017 (18. 9. 2017)



Veterinary measures have been taken in accordance with the Council Directive 2002/60/EC:

- **Infected area has been defined**
- Veterinary measures have been established, including **ban of hunting and a ban on feeding** wild boars
- Investigation of the epidemiological situation is carried out in the whole defined infected area
- The official list of all categories of domestic pigs in all holdings was ordered
- The area with **intensive hunting** has been determined around the infected area
- The **high-risk zone** for ASF has been defined in the infected area
- The **low-risk zone** for ASF has been defined in the infected area

Map of the Czech Republic with the infected area (red) and the area with intensive hunting (yellow)



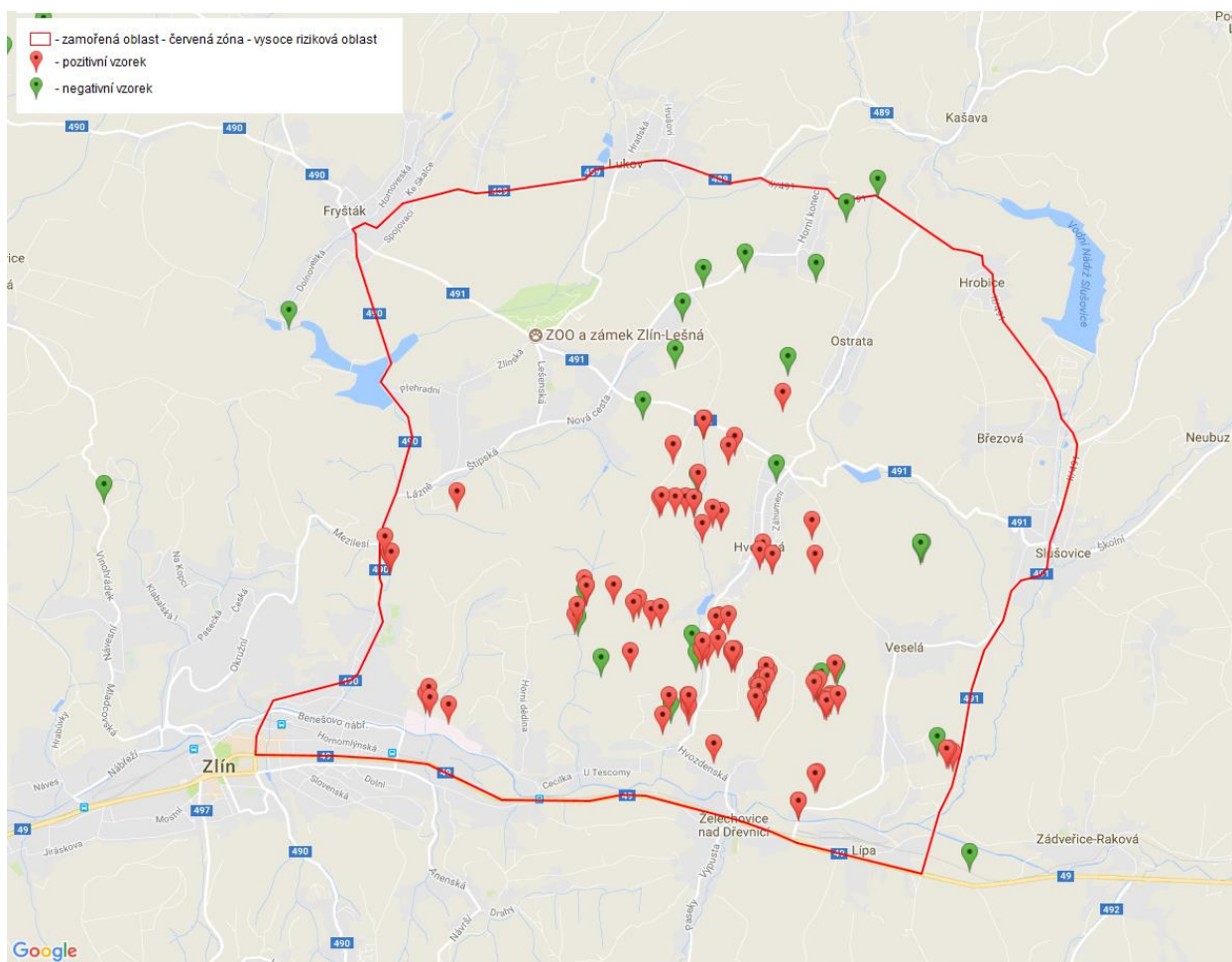
Measures taken

1. Measures in the infected area in domestic pigs
2. Measures in the infected area in wild boars
 - in the high-risk zone
 - in the low-risk zone
3. Measures in the area with intensive hunting
4. Measures on the whole territory of the Czech Republic

Measures in the infected area in domestic pigs

1. **Official checks in domestic pig farms**
2. Monitoring of all sick or dead pigs
3. A list of pig farms in the infected area including backyards farms
4. **Movement control**
5. **Ban of feeding with fresh grass**
6. **Ban of straw using**
7. Testing of pigs from farms with negative result (total number of pigs farm: 23, total pigs: 16 301)
8. **Measures of biosecurity in backyard farm (pigs for home slaughter)**

Map of the high-risk zone with locations of positive and negative tested dead found wild boars to 15. 9. 2017



Measures in the infected area in the high-risk zone in wild boars

1. **Passive surveillance in dead wild boars**
2. **Payment is 4000 CZK (153 EUR) for one dead found wild boar**
3. **Ban of hunting**
4. **Ban of feeding**
5. **Smell and electric fences around the high-risk zone**
6. Sampling of all dead found wild boars and testing in the NRL
7. Disposal of all dead found wild boars under official supervision in accordance with Regulation (EC) No 1069/2009
8. **The ban on entering to the high-risk zone**

Smell fence installed around the high-risk zone



Luděk Ovesný, MAFRA



Electric fence installed around the high-risk zone





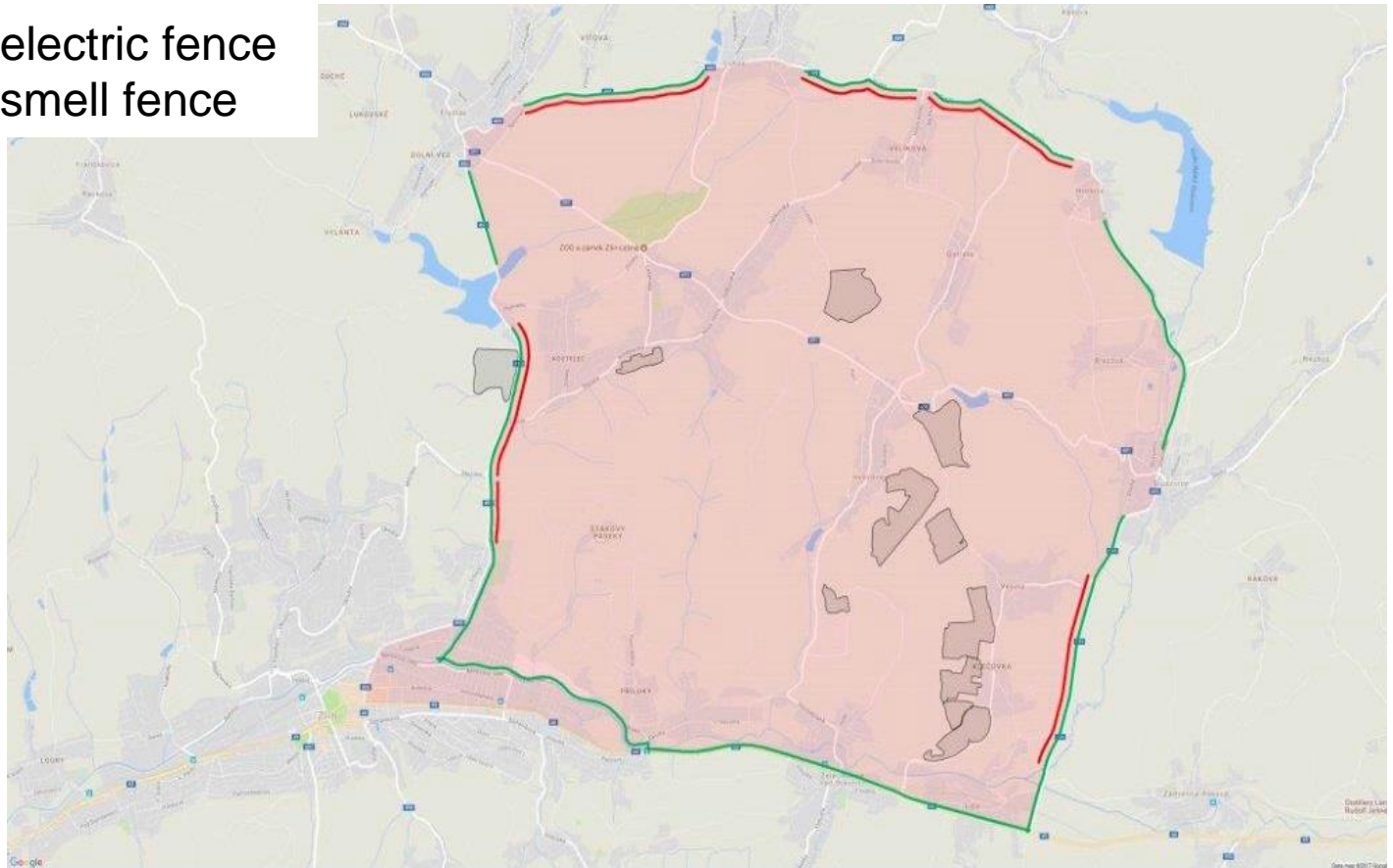
CT 24

<http://www.africkymorprasat.cz>



Map of the high-risk zone with the location of the smell fences and electric fences

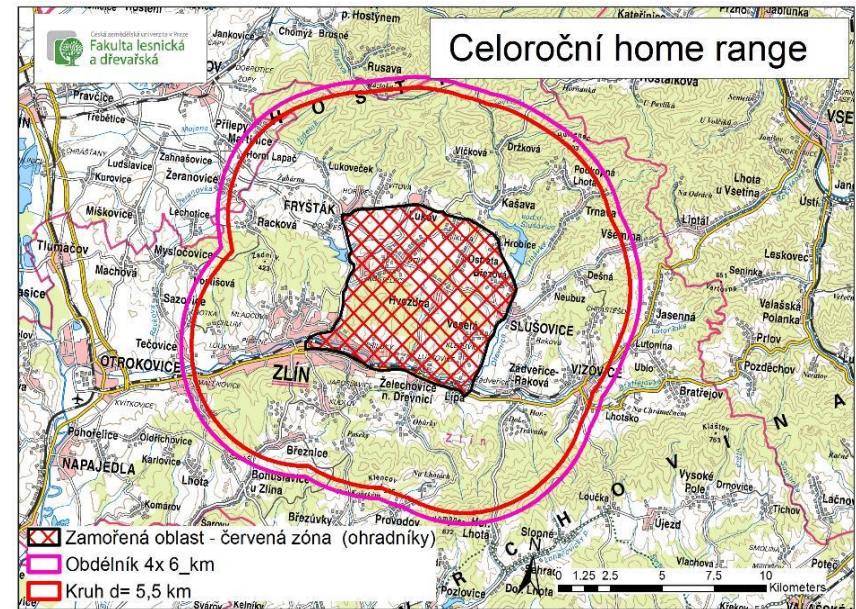
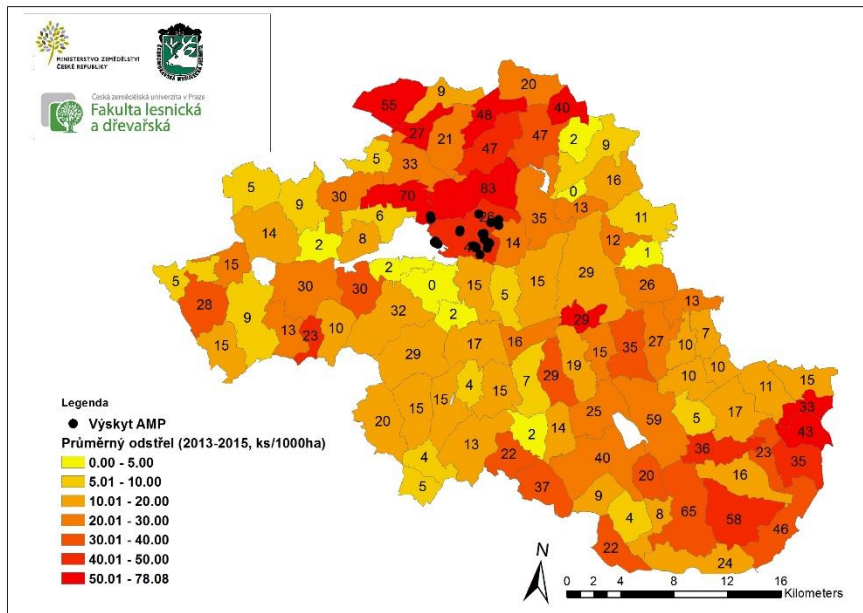
 electric fence
 smell fence



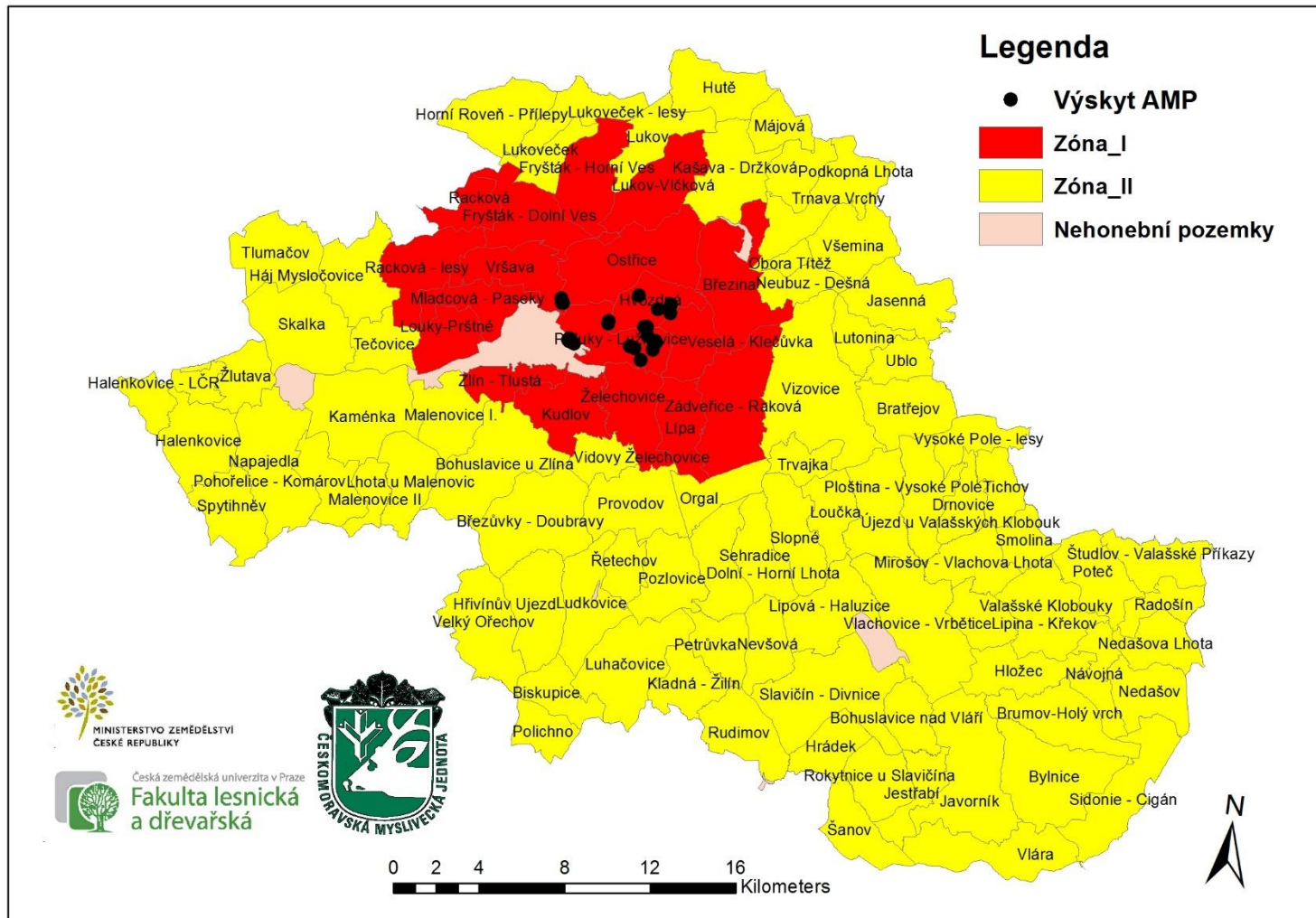
Setting up high and low risk zone in the framework of infected zone in relation to wild boar hunting

Hunting

Home range – 100% one year



High and low risk zone for hunting rules



Measures in the infected area in the high-risk zone in wild boars

- RED zone - area around the outbreak has been set as “off-limit area”. (18 hunting areas – 16 000 hectares). **Wild boar hunting activities have been banned.**
- **Some agriculture fields have been left unharvested to provide food and shelter for wild boar in order to keep them in the area.**
- **Public is not allowed to enter this area** apart from farmers, hunters and police.
- Wild boar will be soon available for hunting by trapping. All collective hunts (even for other hoofed game) have been banned. Motivation fee for **finding dead wild boar is 4 000 CZK**. As soon as the trapping is allowed, motivation fee for trapping will also be 4 000 CZK.

Trapping of wild boar

Trapping (plan to use 31 in high risk zone)



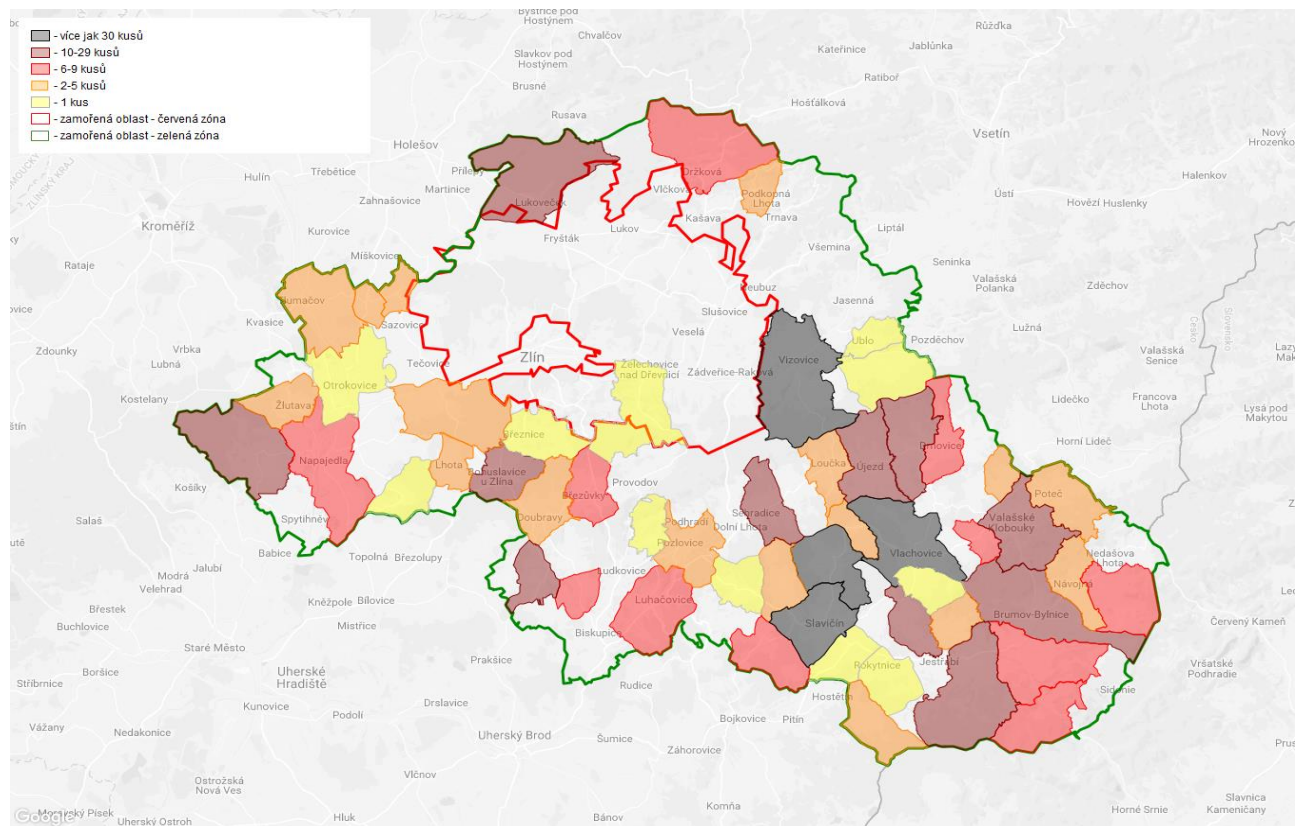
Measures in the infected area in the low-risk zone in wild boars

- GREEN zone – area of Zlín district (green zone is contaminated area reported to EC), where hunting of wild boar is allowed and motivated by financial reward (3 000 CZK/ each shot wild boar) but all shot and found wild boar must be disposed in the rendering plant.
- With the “hunting reward” the hunters are also compensated for the loss of venison (piglet 37 EUR, one-year old 74 EUR, adult saw 120 EUR).
- All collective hunts (even for other hoofed game) are banned.
- Motivation fee for finding of dead wild boar is also 3 000 CZK.
- Some prohibited methods of hunting have been allowed - hunting all age classes, and both sexes, hunting from cars and other vehicles, hunting at night using night vision and other artificial lights, hunting during crop harvest, hunting near the hunting area borders, using firearms (short and long with energy more than 300 J) for shooting wild boar in traps.

Hunted wild boars in the low-risk zone within the period 2nd August – 15th September

The total number **494**

All hunted wild boars are tested for ASF (virologically and serologically) in the NRL. All of them have been negative.



Disposal of hunted wild boars from infected area in rendering plant



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10		IČO: 484 73 860 DIČ: CZ48473060									
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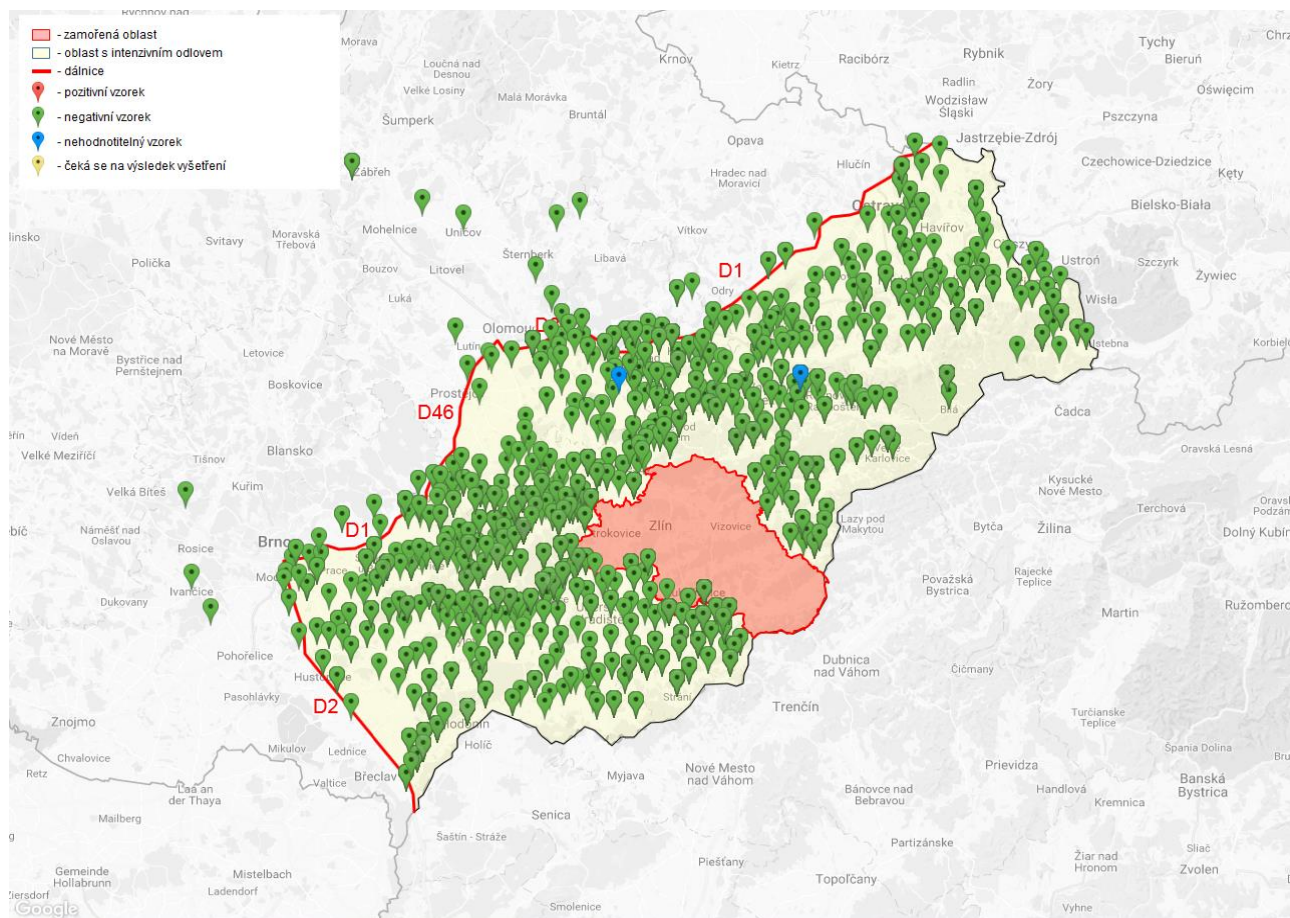
Measures in the area with intensive hunting

1. YELLOW zone (“buffer zone) – area of intensive hunting, where hunters are motivated **by 1 000 CZK (40 €) for each shot wild boar.**
2. The shot wild boar can be used for consumption.
3. **Some prohibited methods of hunting have been allowed** - hunting all age classes, and both sexes, hunting from cars and other vehicles, hunting at night using night vision and other artificial lights, hunting during crop harvest, hunting near the hunting area borders, using firearms (short and long with energy more than 300 J) for shooting wild boar in traps.

Results of testing of hunted wild boars in area with intensive hunting to 15. 9. 2017

The total number of wild boars hunted: **3 607**

All with negative result for ASF



Overview of results of virology testing of samples taken from hunted wild boars in the area with an intensive hunting (15 September 2017)

Region	District	No of tested hunted wild boars	No of positive result	Testing is not possible
Region Pardubice	Ústí nad Orlicí	1	0	
South Moravian Region	Brno-město	4	0	
South Moravian Region	Brno-venkov	24	0	
South Moravian Region	Břeclav	128	0	
South Moravian Region	Hodonín	463	0	
South Moravian Region	Vyškov	237	0	
South Moravian Region	Znojmo	2	0	
Region Olomouc	Olomouc	44	0	
Region Olomouc	Prostějov	7	0	
Region Olomouc	Přerov	223	0	1
Region Olomouc	Šumperk	5	0	
Region Olomouc	Kroměříž	776	0	
Region Zlín	Uherské Hradiště	748	0	
Region Zlín	Vsetín	510	0	1
Moravian-Silesian Region	Frýdek-Místek	291	0	
Moravian-Silesian Region	Karviná	19	0	
Moravian-Silesian Region	Nový Jičín	92	0	
Moravian-Silesian Region	Ostrava-město	33	0	
In total		3607	0	2

Measures on the whole territory of the Czech Republic

1. **Information for public, pig farmers, hunters, veterinarians etc.**
 - Official letters
 - Daily SVA web site updates
 - Biosecurity guide for farmers
 - List of disinfectants
 - Guide for dead WB finding
2. **Established an expert group (NDCC)** including veterinarians, hunters, wild life biologists and epidemiologists with expert from the CVET participation
 - Clarifying of the situation
 - Request for data for the preparation of the eradication plan
 - Studying the epidemiological situation and implementation of the measures
3. Ban of feeding of domestic pigs with kitchen and catering waste was emphasized
4. **A surveillance programme and preventive measures have been applied at holdings with domestic pigs.** Sick or dead pigs, for which ASF cannot be excluded on clinical grounds, have been tested for ASF in accordance with the provisions set up in the Diagnostic Manual
5. **The passive surveillance of dead found wild boars continues**

Hunting in the rest area of the Czech Republic

- Hunting is also intensified.
- Some prohibited methods of hunting have been allowed - hunting all age classes, and both sexes, hunting at night using night vision and other artificial lights, hunting during crop harvest, hunting near the hunting area borders, using firearms (short and long with energy more than 300 J) for shooting wild boar in traps.
- Motivation for **finding dead wild boar is 1 000 CZK (40 €)**.

CZ Results of the monitoring of dead wild boars from 1 January to 15 September 2017

Region	Number of tested animals	Number of positive animals
Prague, the Capital	3	0
Central Bohemian Region	57	0
South Bohemian Region	56	0
Region Pilsen	70	0
Region Karlovy Vary	43	0
Region Ústí nad Labem	102	0
Region Liberec	29	0
Region Hradec Králové	15	0
Region Pardubice	39	0
Region Vysočina	60	0
South Moravian Region	107	0
Region Olomouc	45	0
Region Zlín	201	101
Moravian-Silesian Region	28	0
In total	855	101

Probably source of infection:
contaminated food bring by the Ukraine workers in
laundry in Hospital.



In Russia bacon is called “SALO” and people eat it raw, less meat and more fat is better. The raw bacon is keep in the fridge. It is usually raw with spicy or smoked.

Summary

- Isolated occurrence on a very small territory 56 km² over a long period
- Incidence is decreasing
- No spreading to other territory
- Intensive hunting and surveillance in neighbouring regions, including serological testing
- No positive serological test yet
- No outbreak in domestic pigs

Summary

- ASF can be spread through to long distances by human factors (Russia 2009, Czechia 2017)
- Passive surveillance is necessary for fast and effective response
- Passive surveillance should be done not only in regions neighbouring infected regions
- Only veterinary services are not able to prevent spread of the disease
- Collaboration is necessary among many sectors
- Recommendations for eradication in wild boar should be revised
- Research project for ASF epidemiology, etiology of WB, possible preventive measures etc. should be done

**Thank you
for your attention**

