



Ministry of Agriculture

**The current epidemiological situation regarding
African swine fever in Hungary**

Zsolt FÖLDI DVM
National Disease Control Centre,
Meeting of the Standing Committee of Plants, Animals,
Food and Feed
Brussels, 13-14 June 2018



Most important events in 2018 regarding ASF in Hungary 1.

1. The **risk assessment** regarding the risk of introducing of ASF to Hungary was finalised in **February 2018** by a Working Group of experts.
 2. **Decision No. 1/2018. of the Chief Veterinary Officer** about the ASF surveillance programme published in the Official Journal of Ministry of Agriculture on **8 March 2018**, pages 83-117 (it is based on the results of risk assessment)
 3. On **21 April 2018** the **first ASF case** was confirmed in Hungary, in a dead wild boar found in **Heves county**
 4. On **23 April 2018** the **Internal instruction of the CVO No. ÉFHÁT/20/2018.** - about the **measures regarding the confirmation of ASF in Heves county** - was issued
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Most important events in 2018 regarding ASF in Hungary 2.

5. On **23 April 2018** – The CVO ordered the establishing of the **National Disease Control Centre** within the National Food Chain Safety Office
 6. Between **24 and 25 April 2018** **CVET** mission in Hungary regarding ASF
 7. On **27 April 2018** – **Internal instruction of the Head of the NDCC** No. 02.3/815-14/2018 about the modification of the measures regarding the infected area in Heves county, (according to the proposals of CVET)
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Most important events in 2018 regarding ASF in Hungary 3.

8. On **3 May 2018** – the **Meeting of the National Classical and African Swine Fever Expert Group**
 9. On **16 May 2018** - the first ASF case confirmed in **Szabolcs-Szatmár-Bereg county**, in dead wild boar near to the Ukrainian border
 10. On **17 May 2018** - the **Internal instruction of the CVO No. ÉFHÁT/20-40/2018.** - about the measures regarding the **confirmation of ASF in Szabolcs-Szatmár-Bereg county** - was issued
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Most important events in 2018 regarding ASF in Hungary 1.

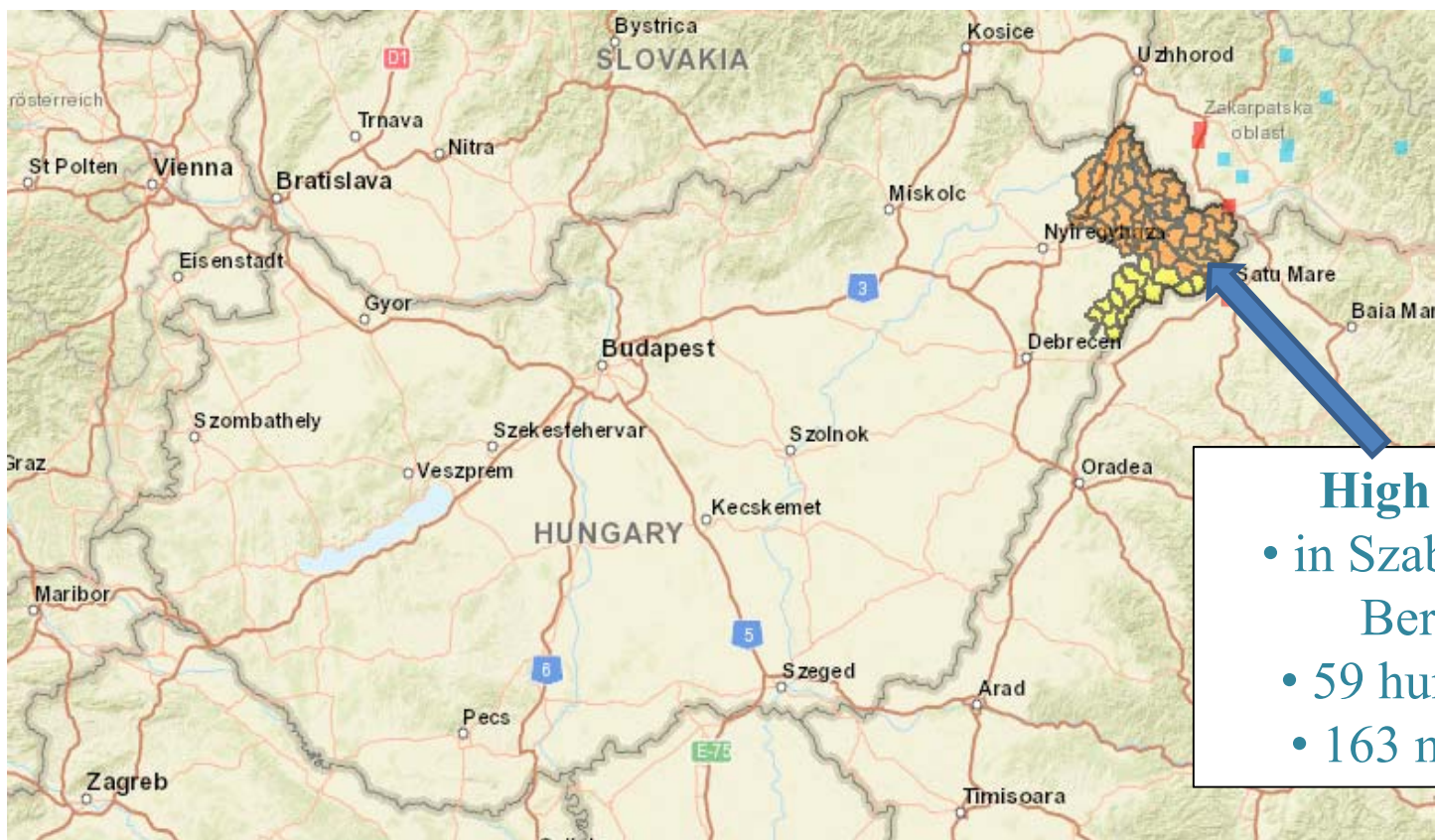
11. On **11 June 2018** – **Internal instruction of the Head of the NDCC No. 02.3/1205-1/2018** about the **diagnostic shooting of wild boars** in the infected area in **Heves county**, excluding the exceptionally controlled area and the puffer zone around exceptionally controlled area.
 12. **Decision No. 2/2018. of the Chief Veterinary Officer** about the ASF surveillance programme published in the Official Journal of Ministry of Agriculture on 12 June 2018, pages 170-207. It replaces the Decision No. 1/2018. of the Chief Veterinary Officer. The most important change is that it has a new list of areas classified under the different risk categories according to the current epidemiological situation.
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Risk assessment in February

- Performed by a Working Group of experts
- Taking into consideration:
 - The estimated wild boar population and density of wild boars
 - The density of domestic pig population
 - Land coverage (forests)
 - Public road net
 - Number and distance of reported ASF domestic pig outbreaks and wild boar cases in neighbouring and other countries

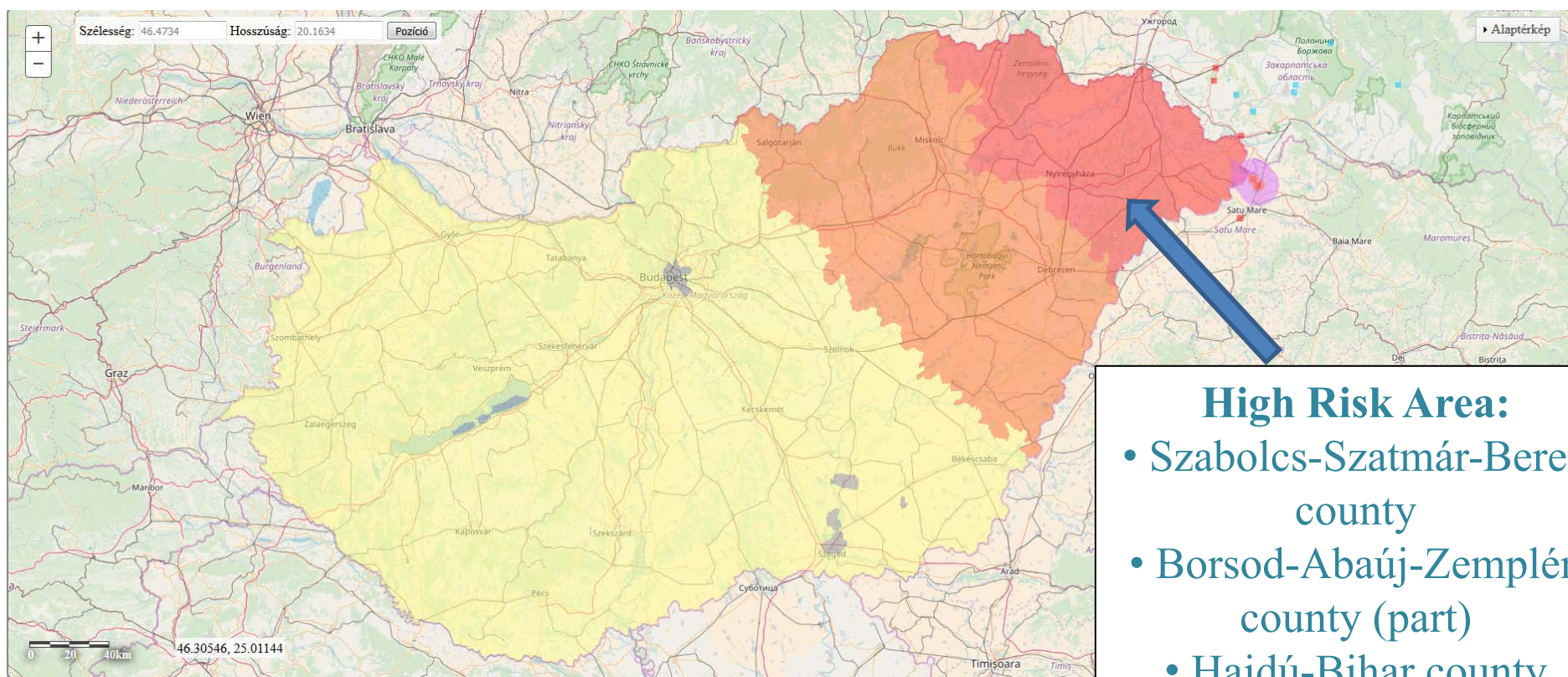
„High Risk Area” before CVO Decision 1/2018



High Risk Area:

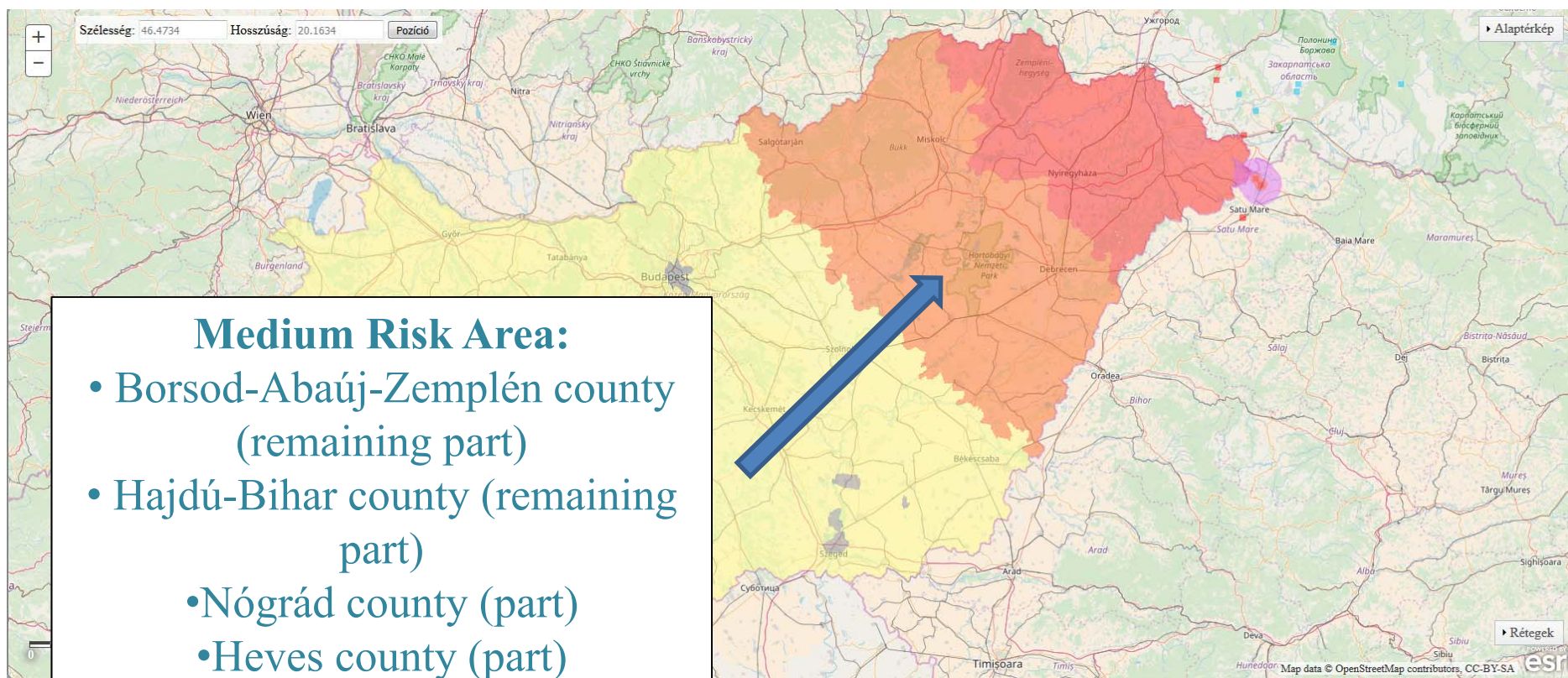
- in Szabolcs-Szatmár-Bereg county
- 59 hunting grounds
- 163 municipalities

Risk areas according to CVO Decision 1/2018

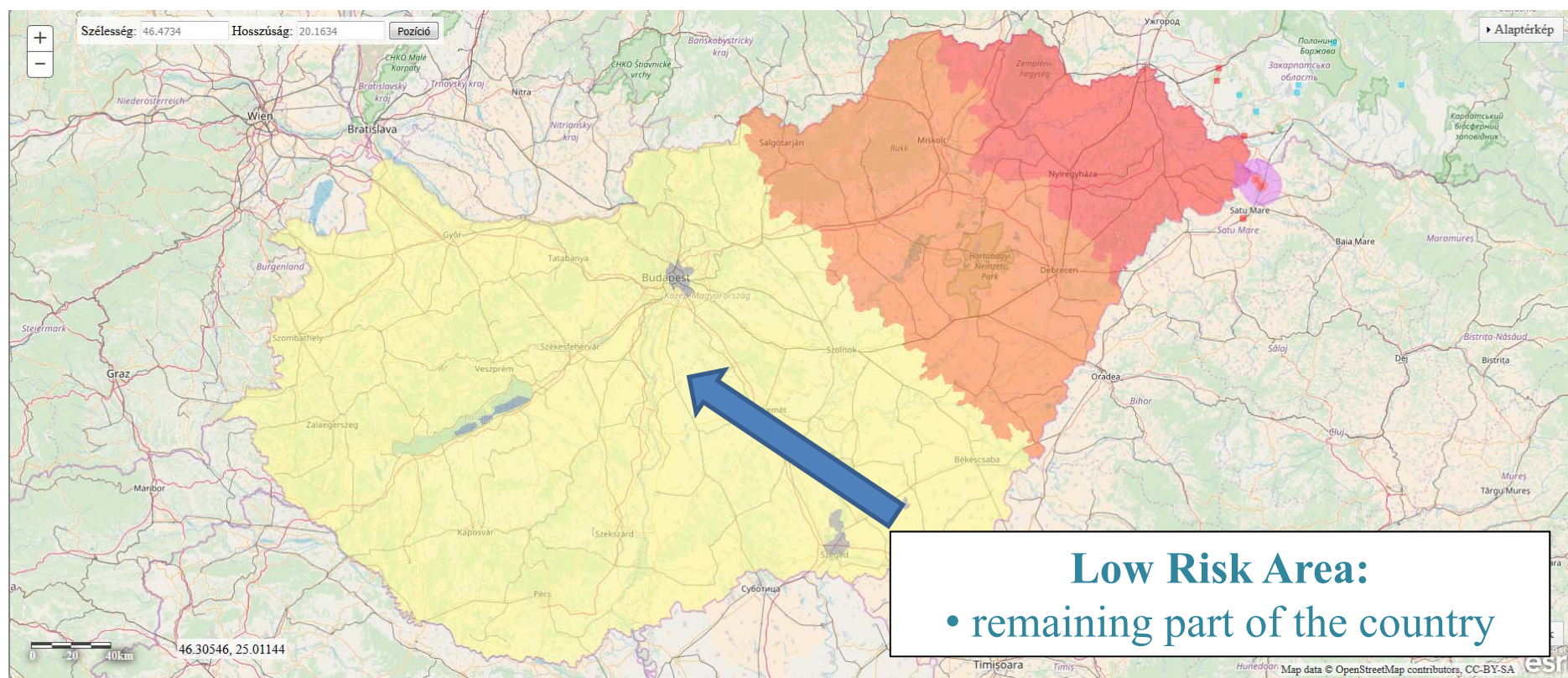


- High Risk Area:**
- Szabolcs-Szatmár-Bereg county
 - Borsod-Abaúj-Zemplén county (part)
 - Hajdú-Bihar county (small part)

Risk areas according to CVO Decision 1/2018



Risk areas according to CVO Decision 1/2018



<http://airterkep.nebih.gov.hu/aaijo/asp/asp.htm>



The first ASF case in Hungary in wild boar

- A **dead wild boar** was found around the locality of Gyöngyös (Heves county) on **19 April**.
- Sample was taken and sent to the NRL (Veterinary Diagnostic Directorate of National Food Chain Safety Office, Budapest)
- **ASF virus presence was confirmed** on **21 April** by **PCR** test
- **National Disease Control Centre (NDCC)** was set up on 23 April.
- The **temporary infected area** has been set up as a direct CVO order as the part of Heves county north from the M3 motorway (E71) in accordance with Council Directive 2002/60/EC.
- An **exceptionally controlled area** within the infected area has also been set up with further measures



The first ASF case in Hungary in wild boar 2.

Size of infected area: **2222.1 km²**

- 92 municipalities
- 47 hunting grounds

Size of exceptionally controlled area: **164.4 km²**

- 12 municipalities
- 5 hunting grounds

- Estimated number of wild boars in Hungary: **102600 ***
- Estimated number of wild boars in Heves county: **3087***
- Area of Heves county suitable for hunting: **3512.44 km²**
- Density of wild boars in Heves county: **0.88 /km²**

* According to estimation carried out in 2017



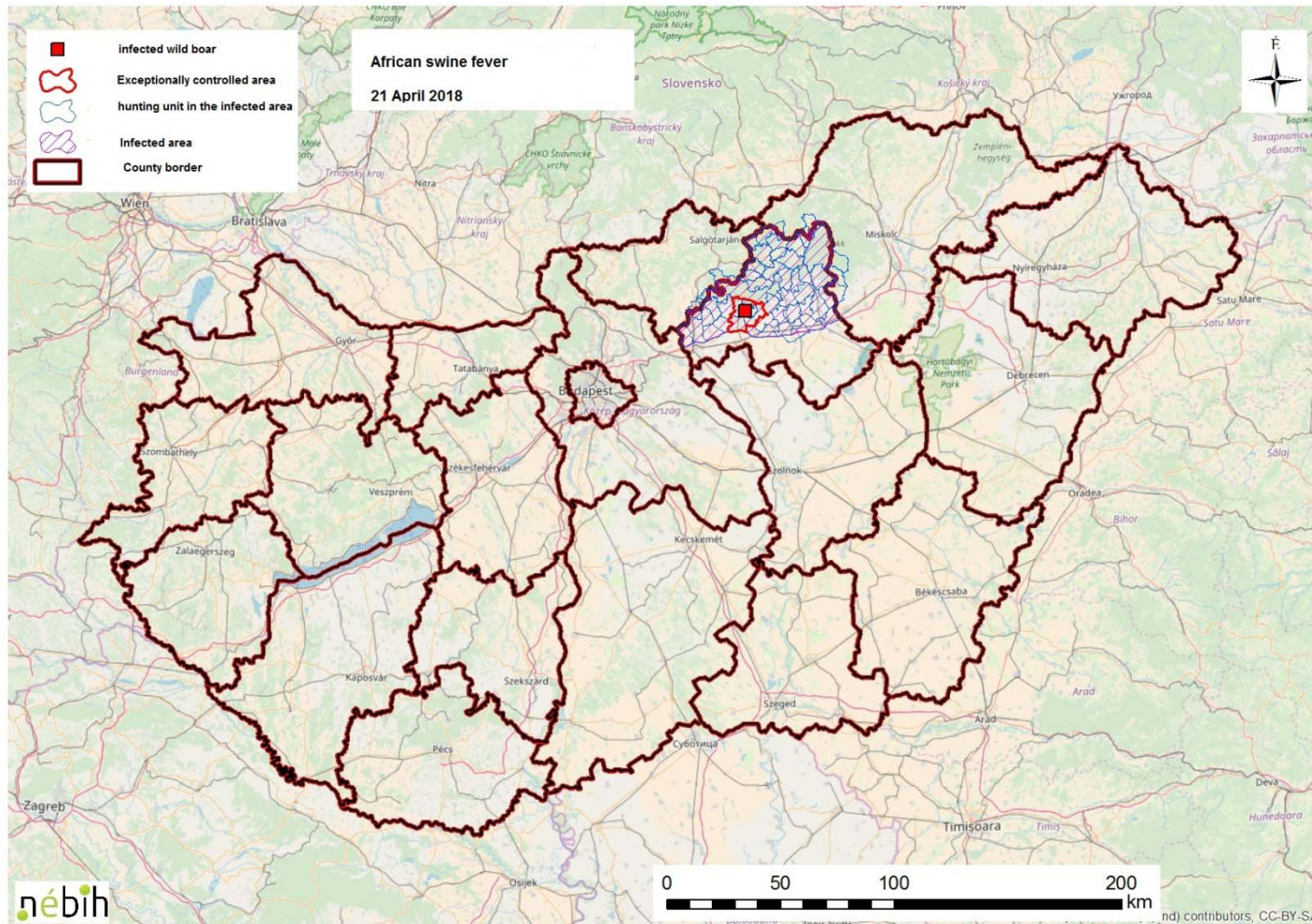
The first ASF case in Hungary in wild boar 3.

- On 27 April virus isolation positive
- Sequencing of p72, p54 and B602L genes show **99-100% identity with Georgia 2007 strain**

- Epidemiological investigation
 - Possible source of the infection was **waste from pork product illegally imported by workers from Ukraine**
 - Some bigger factories of the area hire a great number of workers from Ukraine, residing in hostel-like facilities in the neighbouring villages.

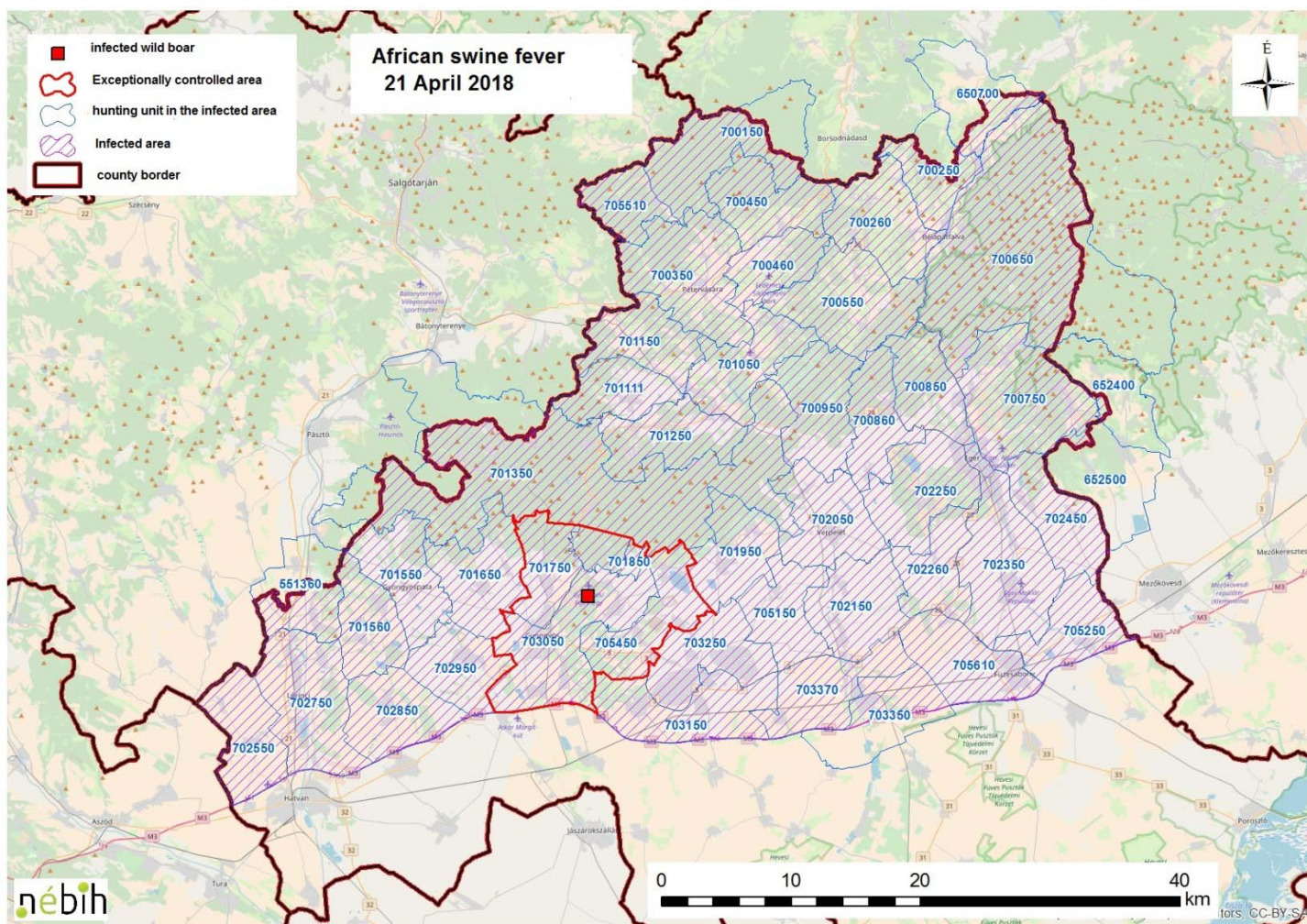


The first ASF case in Hungary in wild boar 4.





The first ASF case in Hungary in wild boar 4.





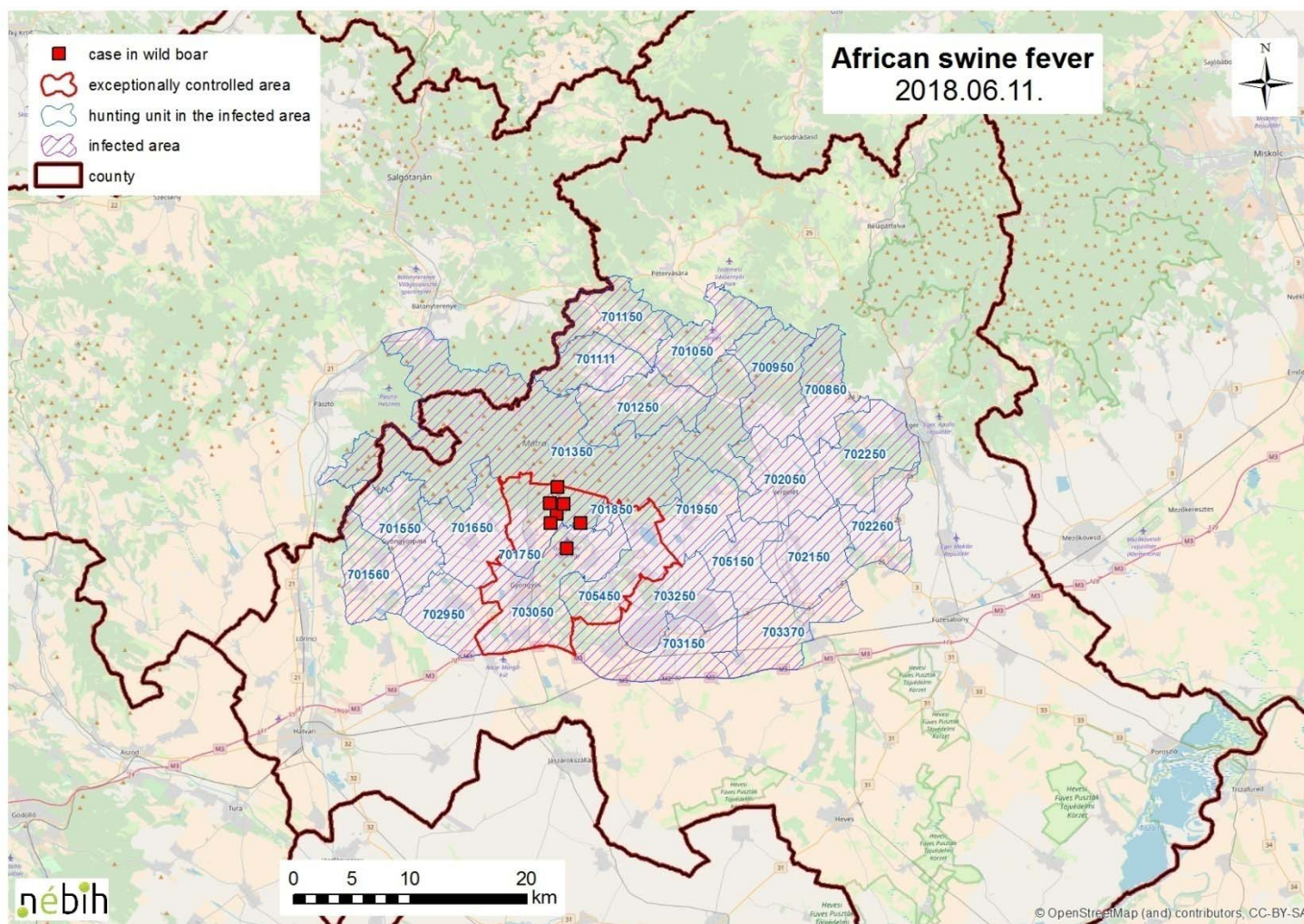
Further cases in dead wild boars in Heves county

- Case 2 29 April, female, 2-3 years old, Mátrafüred
- Cases 3-5 1 May , 2 females, 1 and 2 years old, 1 male, 1 year old, Pálosvörösmart
- Case 6 3 May, female, 1 year old, Gyöngyös
- Case 7 8 May, male, 2 years old, Gyöngyössolymos
- Case 8 18 May, female, 3 years old, Gyöngyös
- Case 9. 1 June, female, 3 years old, Gyöngyössolymos





Further cases in dead wild boars in Heves county 2.





First ASF case in Szabolcs-Szatmár-Bereg county, in wild boar

- A **dead wild boar** was found around the locality of Tizsakerecseny, only around 1 km from the Ukrainian border on 14th May.
- Sample was taken and sent to the National Reference Laboratory and ASF virus was confirmed on **16th May by PCR** test.
- Virus isolation positive on 24th May and the sequencing showed **100% identity with Heves county isolates**
- Source of the infection
 - Distance to the infected neighbouring regions in Ukraine
 - Spring migration of wild boar
 - Natural spread is most likely

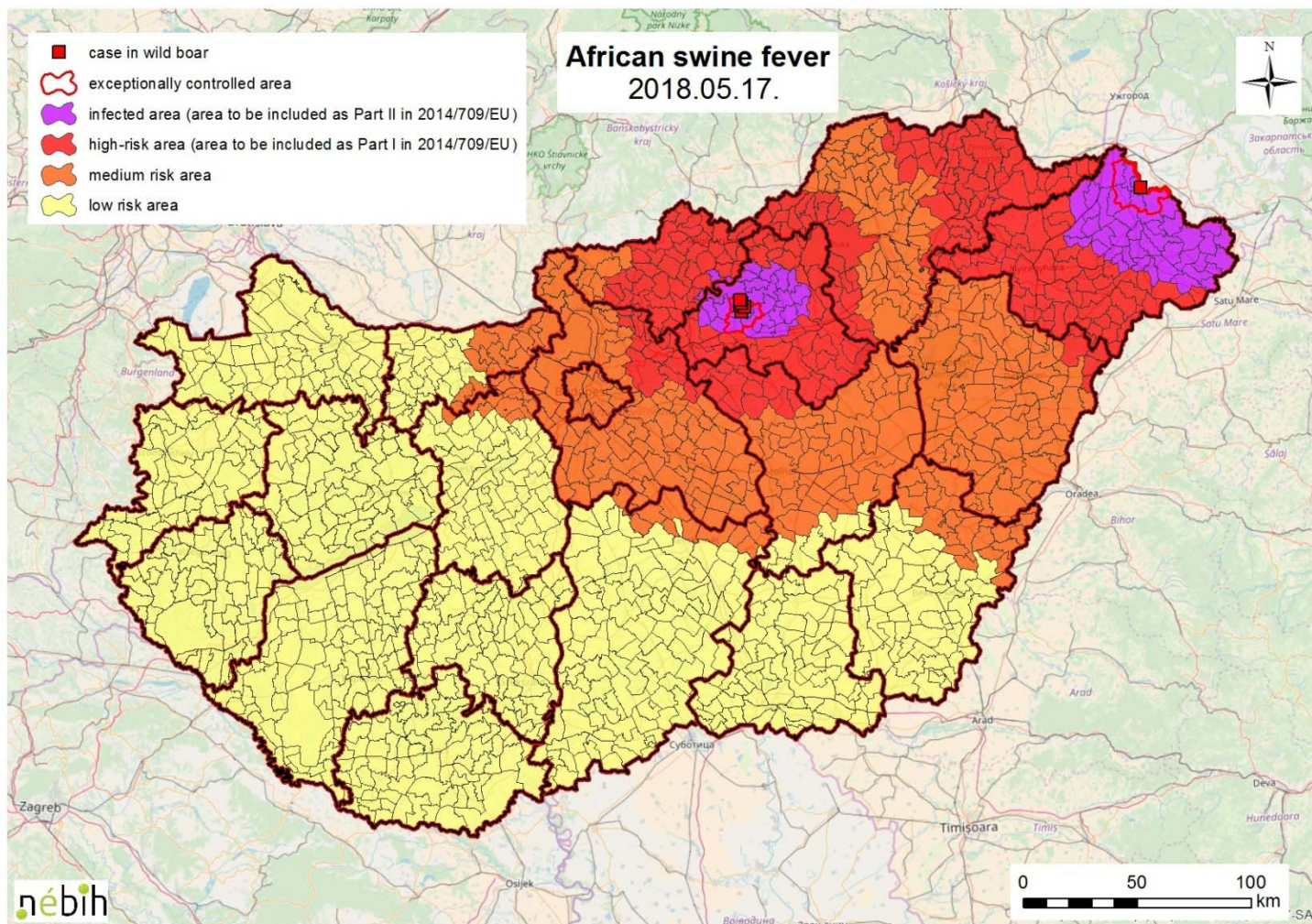


First ASF case in Szabolcs-Szatmár-Bereg county, in wild boar 2.

- The *infected area* has been set up according to the CVO order as the area which was previously identified as high risk (45 hunting units)
- An *exceptionally controlled area* within the infected area has also been set up (originally 6 after 23 May 9 hunting units)
- A puffer zone around the exceptionally controlled area and within the infected has been set up as well (originaly 8 and after 23 May 10 hunting units)
- Estimated number of wild boars in Szabolcs-Szatmár-bereg county: **4880**
- Estimated number of wild boars in infected area: **2517**
- Density of wild boars in the infected area : **1,12/ /km²**

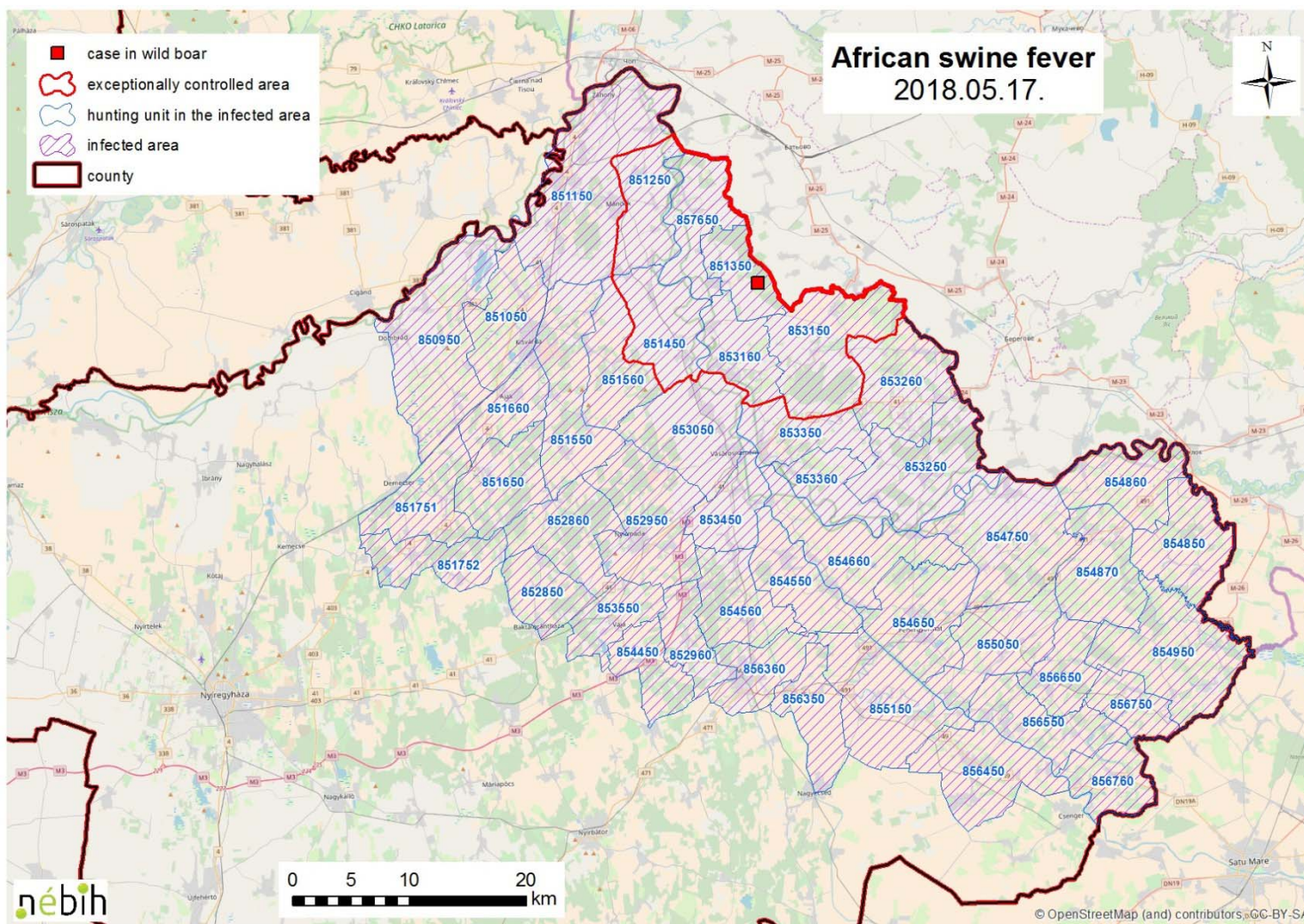


First ASF case in Szabolcs-Szatmár-Bereg county, in wild boar 3.





First ASF case in Szabolcs-Szatmár-Bereg county, in wild boar 4.



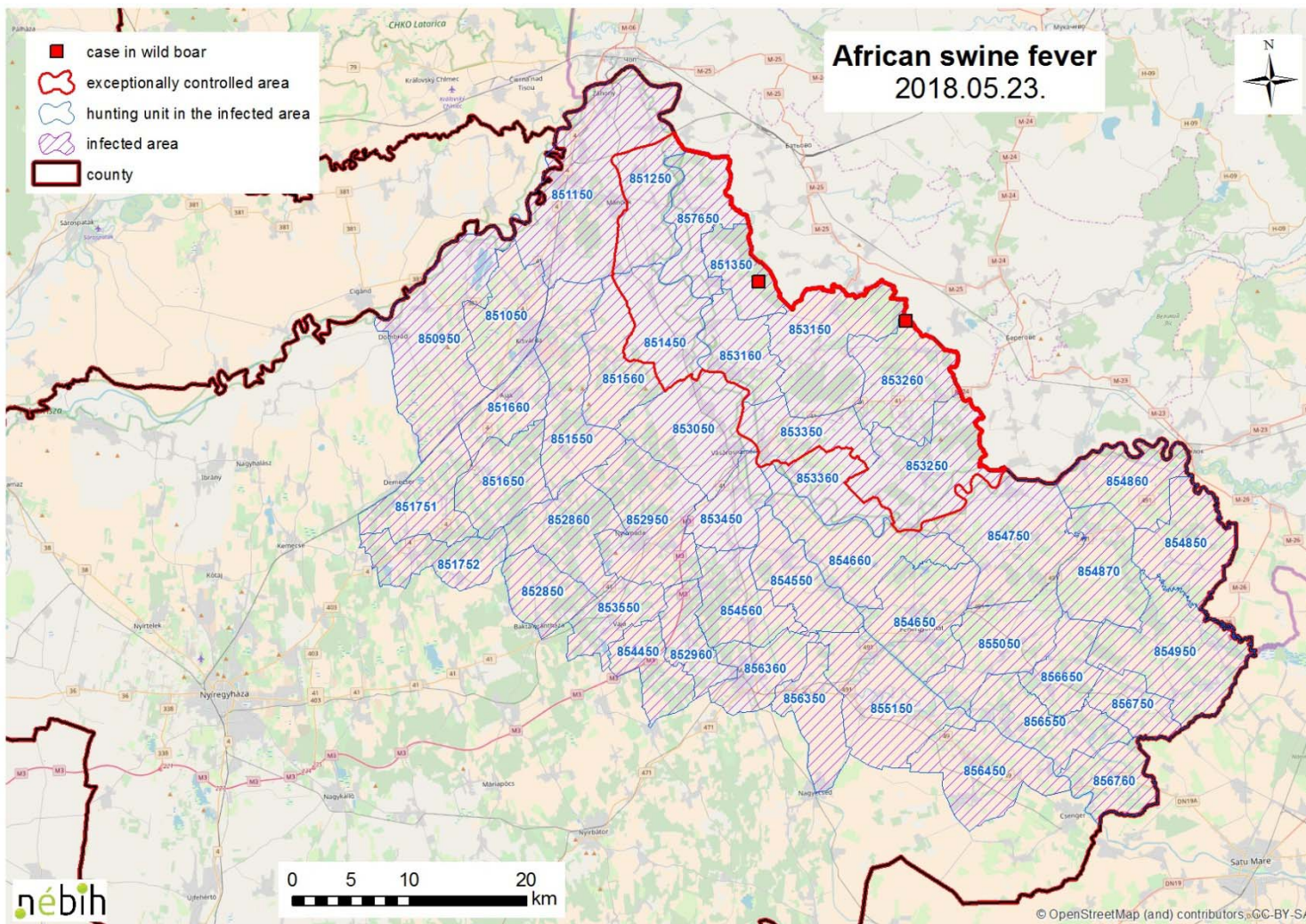


Further cases in dead wild boar in Szabolcs-Szatmár-Bereg county

- Cases 2-3 23 May, two, 3 years old females, Beregdaróc
- Case 4 1 June, 10 months old, Beregsurány
- Cases 5-6 1 June, one 1 years old and one 2 years old male, Lónya
- Case 7 1 June, 2 years old female, Márokpapi
- Case 8 1 June, 2 years old female, Barabás
- Cases 9-12. 10 June, one 2 years old female, one 2 years old, one 1 year old and one 2 months old male
- Case 13 12 June

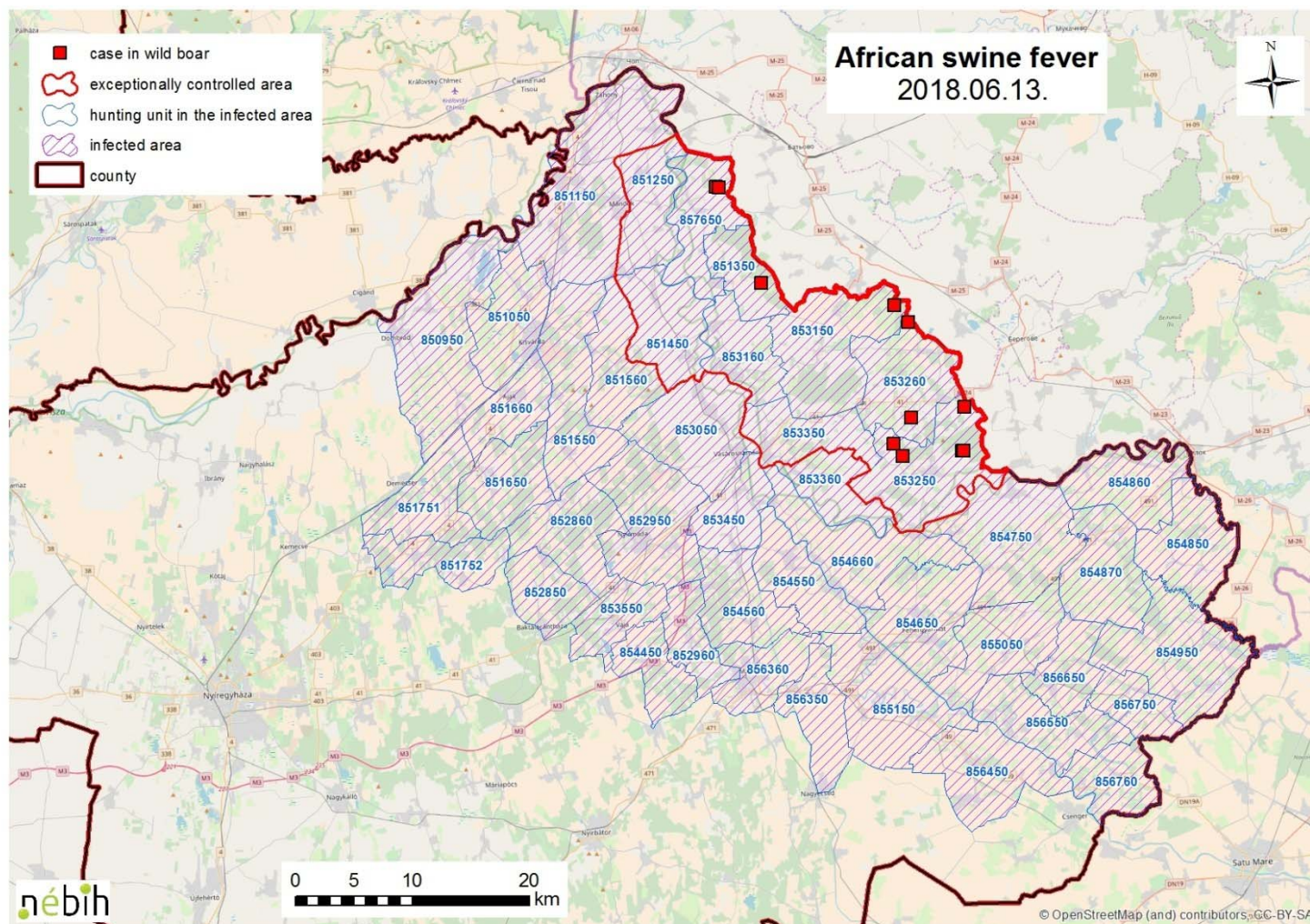


Further cases in dead wild boar in Szabolcs-Szatmár- Bereg county 2.





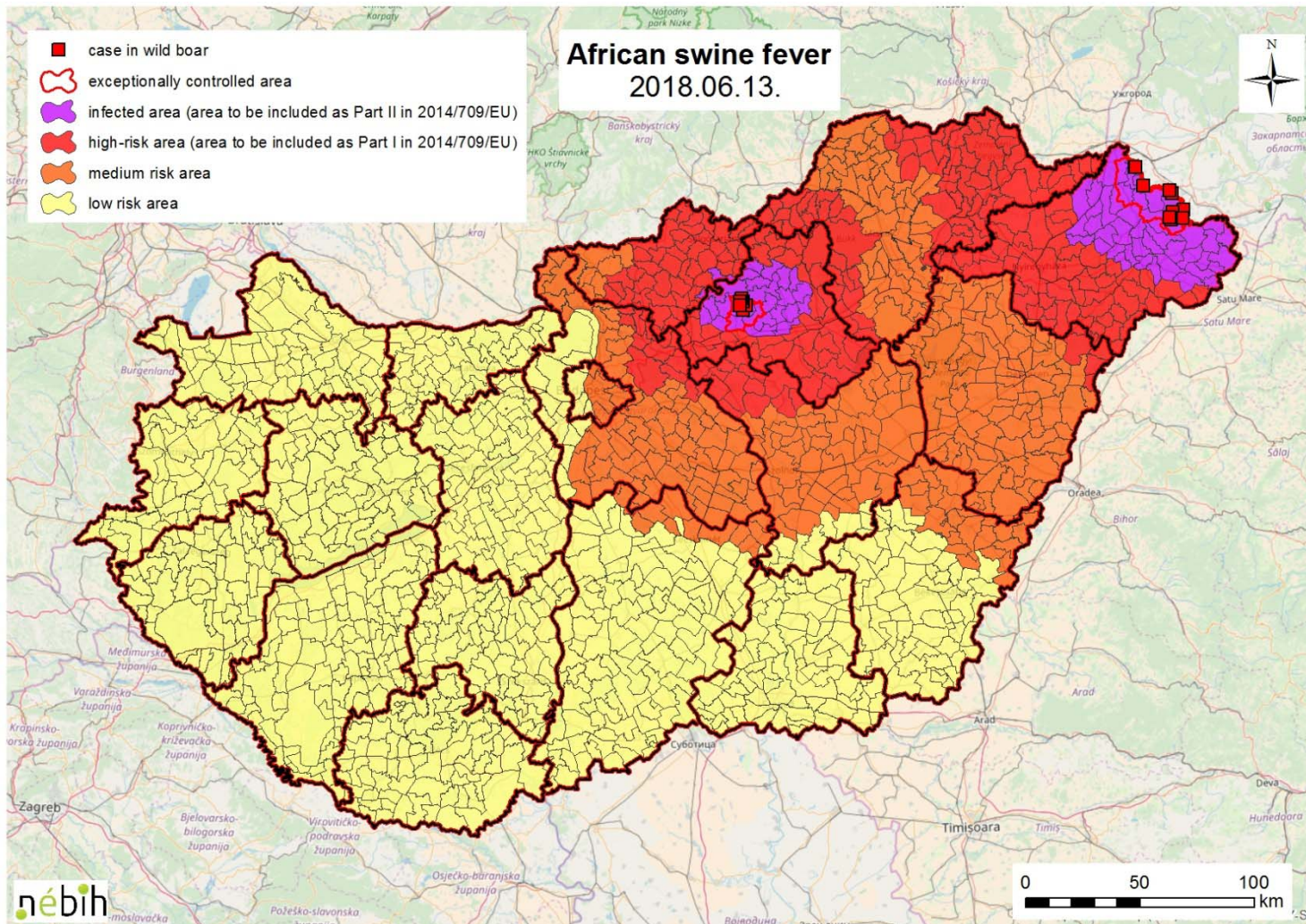
Further cases in dead wild boar in Szabolcs-Szatmár- Bereg county 3.





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ASF risk categories in Hungary after Decision No. 2/2018. of the CVO





Measures that are effective for whole Hungary – wild boars

- **Written report** of every **dead wild boar** within 24 hours after finding (50 EUR),
- **Sampling** of all reported **dead wild boars** by veterinarians (or other qualified persons) appointed by the County Government Office (33 EUR)
- Diagnostic shooting of wild boars showing abnormal behaviour or emaciated
- **PCR testing** of the above mentioned animals



Measures that are effective for whole Hungary – domestic pigs

1.

- Pig owners must report the suspicion of ASF according to the relevant legislation
- Pig owners **must also report the dead or sick pigs** (even if they don't suspect ASF) **within 24 hours after observing** to the veterinarian
- When the **veterinarian cannot exclude** the suspicion of ASF, she/he **shall immediately report** the suspicion of the disease to the **district chief veterinary officer**
- Pig owners of large scale holdings shall report increased mortality to the district veterinary officer



Measures that are effective for whole Hungary – domestic pigs

2.

- If the suspicion of ASF cannot be ruled out, it shall immediately the holding to be placed under official surveillance according to Article 4 of Council Directive 2002/60/EC
 - If the **examination does not suggest the suspicion of ASF, samples for ASF testing** should still be taken in the following cases:
 - the pigs died suddenly without clinical signs, or
 - the pig having fever over 40 °C after 3 days treatment, or
 - the pig having fever over 40 °C and died during the treatment
- „ENHANCED PASSIVE SURVEILLANCE”



Measures that are effective for whole Hungary – domestic pigs

3.

- **District veterinary offices shall classify the pig holdings** each year until 31 March in each year to the following categories:
 - Large scale farms
 - Small scale commercial farms
 - Small scale non-commercial farms
- Keeping a **register of outdoor holdings** of each category
- Possibility to order double fencing of outdoor holdings if considered necessary by the competent authority
- **Biosecurity requirements controlled** in each visited holding



Other measures that are effective for whole Hungary

- Continuous awareness campaign for pig keepers, hunters, veterinarians and other stakeholders
- NFCSO may issue guidelines for the implementation
- Sanctions in case of non-compliance



Measures in the infected area - wild boars

- **Obligatory organized and systematic searching of dead wild boars** in the hunting areas carried out by representatives of the hunting units (3,3 EUR/h for the patrolling and 50 EUR/found dead wild boar)
- **PCR testing of all found dead wild boars** (enhanced passive surveillance)
- **Carcasses of dead wild boars** to be taken to **rendering plant from collection points** (mainly in Heves county)
- **Safe disposal of dead wild boar** in the **disposal pits** or on the spot of finding, followed by disinfection (mainly in Szabolcs-Szatmár-Bereg county, 75 EUR per wb + cost of creation of disposal pits.)



Measures in the infected area - wild boars 2.

- **Ban for group and individual hunting of wild boar**
- **Ban for group hunting of other wild species**
- Individual hunting of other species allowed (after training by State Veterinary Service)
- **Diagnostic shooting to decrease the wild boar population** - excluding exceptionally controlled area and the puffer zone - in case of Heves county from 11 June only
- The diagnostic shooting carried out **by hunters trained by the State Veterinary Service** (16 EUR for shooting, 10 EUR for sampling and compensation for the value of game)
- Diagnostically shot wild boars **collected and send the rendering plant after sampling** without dressing and evisceration



Measures in the infected area - wild boars 3.

- Ban of feeding of wild boars except purposes of diagnostic shooting (feeding of other species is allowed in such way that wild boars have no access)
- Double fencing of wild boars farms and closed wild boar hunting areas (other solution excluding the possibility of contact with free wildlife)



Measures in the infected area – domestic pigs

- Official surveillance and census for all pig holdings
 - No pigs could enter or leave the holding, except where authorised by the competent district veterinary officer having regard to the epidemiological situation;
 - Appropriate biosecurity measures (disinfection at entrance and exit points, avoidance of contacts with wild boars, etc);
 - **Ban for the transport of live pigs and their semen, embryos or ova to other member states or third countries.**
- **Double fencing of outdoor pig farms** (or other solution excluding the possibility of contact with free wildlife)



Measures in the infected area – domestic pigs 2.

- Every slaughter of pigs for own consumption in the infected area has to be reported to the relevant District Office
- **Domestic pigs can only be transported** from the infected area **to other parts of Hungary after negative virological test result**
- **Disposal of dead pigs from small scale holdings in rendering plant paid by the state**
- Grass and grains can be used for the feeding of pigs only after 30 days storage, straw can be used as bedding for pigs only after 90 days storage



Measures in the infected area – domestic pigs 3.

- **Enhanced passive surveillance in domestic pigs** (based on EU ASF Strategy)
 - From *small scale holdings*, sampling of **all reported dead domestic pigs** by veterinarians appointed by the County Government Office (6,7 EUR) for virological examination (PCR)
 - From large scale holdings, sampling of **at least 2 dead domestic pigs per week** for virological examination (PCR)



Measures in the infected area – domestic pigs 4. Results of the census

Category		Heves county*		Szabolcs-Szatmár-Bereg county	
		Holdings	Pigs	Holdings	Pigs
Large scale					
a)	Free range	0	0	0	0
b)	Total	7	6029	11	28065
Small scale					
a)	Free range	3	142	2	18
b)	Total	512	2749	696	3698

* The census finished about in 95% of the pig holdings



Further measures in exceptionally controlled area

- **Total ban of group and individual hunting**, for wild boar and other species as well
- **Control of obligatory organized and systematic searching of dead wild boars** in the hunting areas carried out by representatives of the hunting units
- **Clear signals for tourists and campers** entering the this area



Measures in High Risk Area – wild boar

- Obligatory **organized and systematic searching** of dead wild boars in the hunting areas carried out by representatives of the hunting units (3,3 EUR/h for the patrolling and 50 EUR/found dead wild boar)
- **PCR testing** of all found dead wild boars (enhanced passive surveillance)
- **Safe disposal of dead wild boar in the disposal pits** or on the spot of finding, followed by disinfection (75 EUR per wb + cost of creation of disposal pits.) or **disposal in rendering plant**



Measures in High Risk Area – wild boar 2.

- **Sampling and PCR testing of all shot wild boars**
- **Wild boar carcass shall not leave the hunting ground before obtaining the negative results** (some derogation possible if storing capacity are missing)
- **Dressing and evisceration** to be performed in a **dedicated place** within the hunting ground
- **Safe disposal** of ABP from hunted wild boars: **preferably in rendering plant**, probably in the disposal pits used for dead wild boars or on the spot of shooting, followed by disinfection



Measures in High Risk Area – wild boar 3.

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- **Diagnostic shooting to decrease the wild boar population** (+30% of the planned number of sows and +25% of the planned number of young wild boars, above the yearly hunting bag approved by the hunting authority, 16 EUR for shooting, 10 EUR for sampling, compensation for the value of game).
- **Ban of sustaining feeding of wild boars** in the area; baiting, for hunting purposes allowed up to an amount 10 kg feed/km²/month (except for trapping and diagnostically shooting)



Measures in High Risk Area – wild boar 4.

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- **Special rules for group hunting** (only trained person organize group hunting)
- **Ban of dispatch of live wild boars to areas outside the High Risk Area.** Movement only within HRA, with authorisation of the District Veterinary Office (5/95 virological testing within 15 days before dispatch
- **Double fencing of wild boars farms and closed wild boar hunting areas** (or other solution which excludes the possibility of contact with free wildlife)



Measures in High Risk Area – domestic pig

- From **small scale holdings**, sampling of **all reported dead domestic pigs** by veterinarians appointed by the County Government Office (6,7 EUR) for virological examination (PCR)
- From large scale holdings, sampling of **at least 2 dead domestic pigs per week** for virological examination (PCR)
- **Yearly visiting of all pig holdings** in the HRA, **census** and providing **information to pig keepers**
- **Double fencing** of outdoor pig farms (or other solution which excludes the possibility of contact with free wildlife)
- Disposal of dead pigs from small scale holdings in rendering plant paid by the state (in general it would be the obligation of the pig owner)



Measures in Medium Risk Area – wild boars

- Safe disposal of all found dead wild boars and wild boars shot because of suspicion of ASF in rendering plant or possibly in dedicated pits established within the hunting ground (75 EUR per wb + cost of creation of disposal pits)
- Obligatory organized and systematic searching of dead wild boars in the hunting areas carried out by representatives of the hunting units (50 EUR/found dead wild boar)
- Sampling of all healthy shot wild boars, PCR tests performed based on risk assessment
- Carcasses may leave the hunting ground before the obtaining negative results



Measures in Medium Risk Area – wild boars 2.

- **Dispatch of live wild boars to areas outside the Medium Risk Area is banned**, within the MRA it is allowed only with the authorisation of the District Veterinary Office (10/95 virological testing within 15 days before dispatch)
- **Double fencing** of wild boars farms and closed wild boar hunting areas (or other solution which excludes the possibility of contact with free wildlife)



Measures in Medium Risk Area – domestic pig

- From **small scale holdings**, sampling of **at least two** reported **dead** domestic pigs **monthly per district**, carried out by veterinarians appointed by the County Government Office (6,7 EUR) for virological examination (PCR)
 - From large scale holdings, sampling of **at least one** dead domestic pigs **per month** for virological examination (PCR)
 - **Double fencing** of outdoor pig farms (or other solution which excludes the possibility of contact with free wildlife)
-

Results – Passive surveillance wild boars

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	2016/17			2017/18			2018/2019 (10 June)		
	Whole country	SZ-SZ-B county	Heves county	Whole country	SZ-SZ-B County	Heves county	Whole country	SZ-SZ-B County	Heves county
Number of wild boars tested with PCR for ASF	64	3	1	341	193	8	240	134	33
Dead wild boars from it	54	3	1	315	189	8	231	133	33
Number of positive PCR	0	0	0	0	0	0	21	12	9

Results – Active surveillance wild boars

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	2016/17			2017/18			2018/2019 (10 June)		
	Whole country	SZ-SZ-B county	Heves county	Whole country	SZ-SZ-B County	Heves county	Whole country	SZ-SZ-B County	Heves county
Number of PCR tests in WB for ASF	8949	739	374	7848	2544	219	4868	726	307
Number of positive PCR	0	0	0	0	0	0	0	0	0
Number of ELISA tests in WB for ASF	8877	661	378	34	2	0	-	-	-
Number of positive ELISA	0	0	0	0	0	0	-	-	-



Results – Passive surveillance domestic pigs

	2016			2017			2018 (10 June)		
	Whole country	SZ-SZ-B county	Heves county	Whole country	SZ-SZ-B county	Heves county	Whole country	SZ-SZ-B county	Heves county
Number of PCR for ASF	623	125	21	1012	233	13	1582	485	15
Number of positive PCR	0	0	0	0	0	0	0	0	0



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Thank you for your attention!

