

Information about the epidemiological situation and the co-financed control and monitoring programme in Hungary regarding CSF in wild boars

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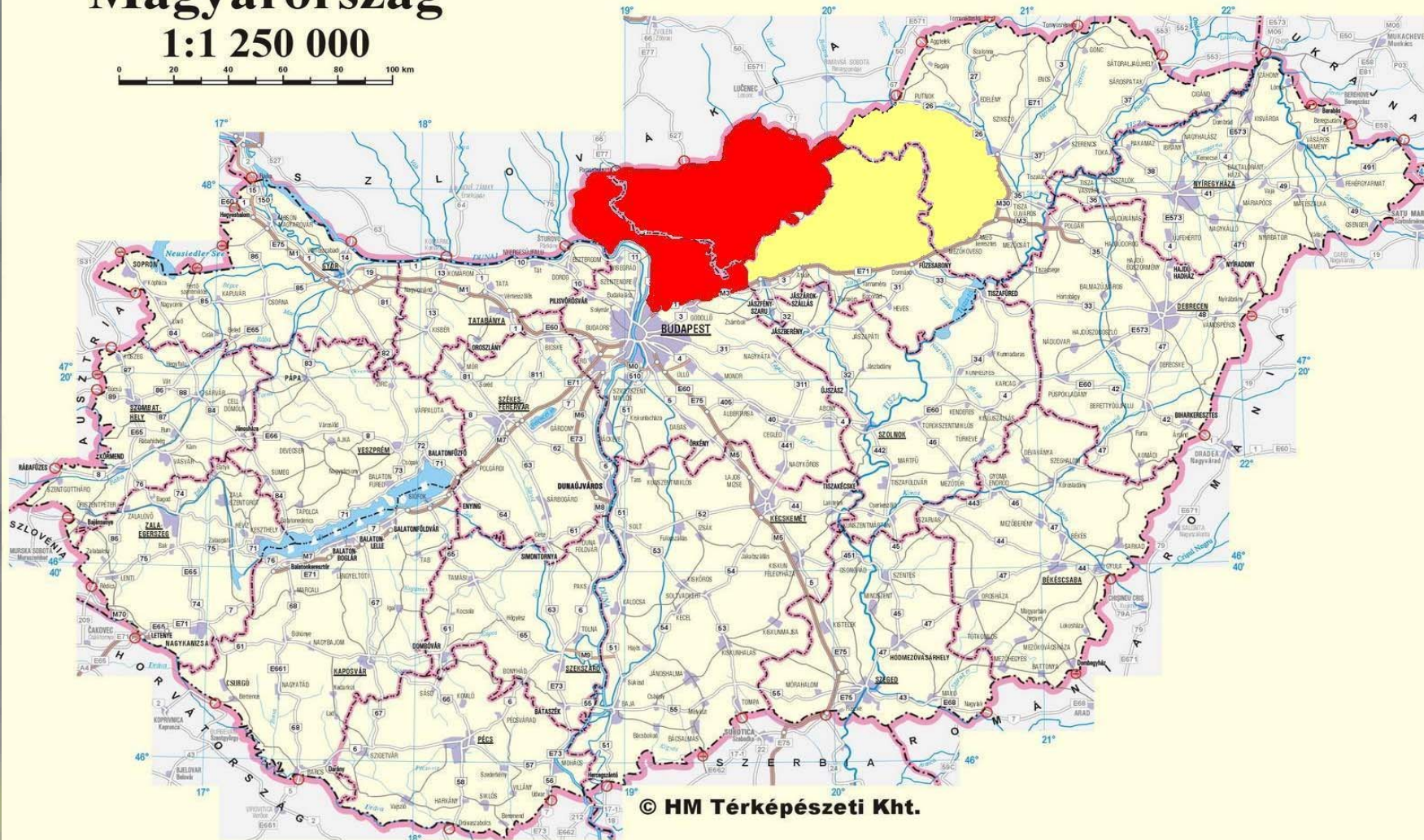
CSF cases in wild boar in Nógrád county and specified part of Pest county

- In Nógrád county the first case was confirmed on 22 January 2007 by NRL
- In the specified part of Pest county the first case was confirmed 10 December 2007 (after that this area had been recognised as CSF infected area).
- Until now 268 cases were found in wild boars, 120 cases in Nógrád county, and 148 cases in the specified part of Pest county
- The last case was on 30 October 2009 in Pest county

The Map of the determined CSF infected area

Magyarország

1:1 250 000



Comparison of the CSF cases in 2007, 2008, 2009 and 2010

	2007	2008	2009	2010
January	5	82	9	0
February	0	18	3	0
March	0	6	1	0
April	0	3	2	0
May	2	23	2	0
June	8	12	5	0
July	5	10	0	0
August	6	6	4	0
September	1	8	0	0
October	2	6	1	0
November	6	11	0	?
December	16	5	0	?
Total	51	190	27	?

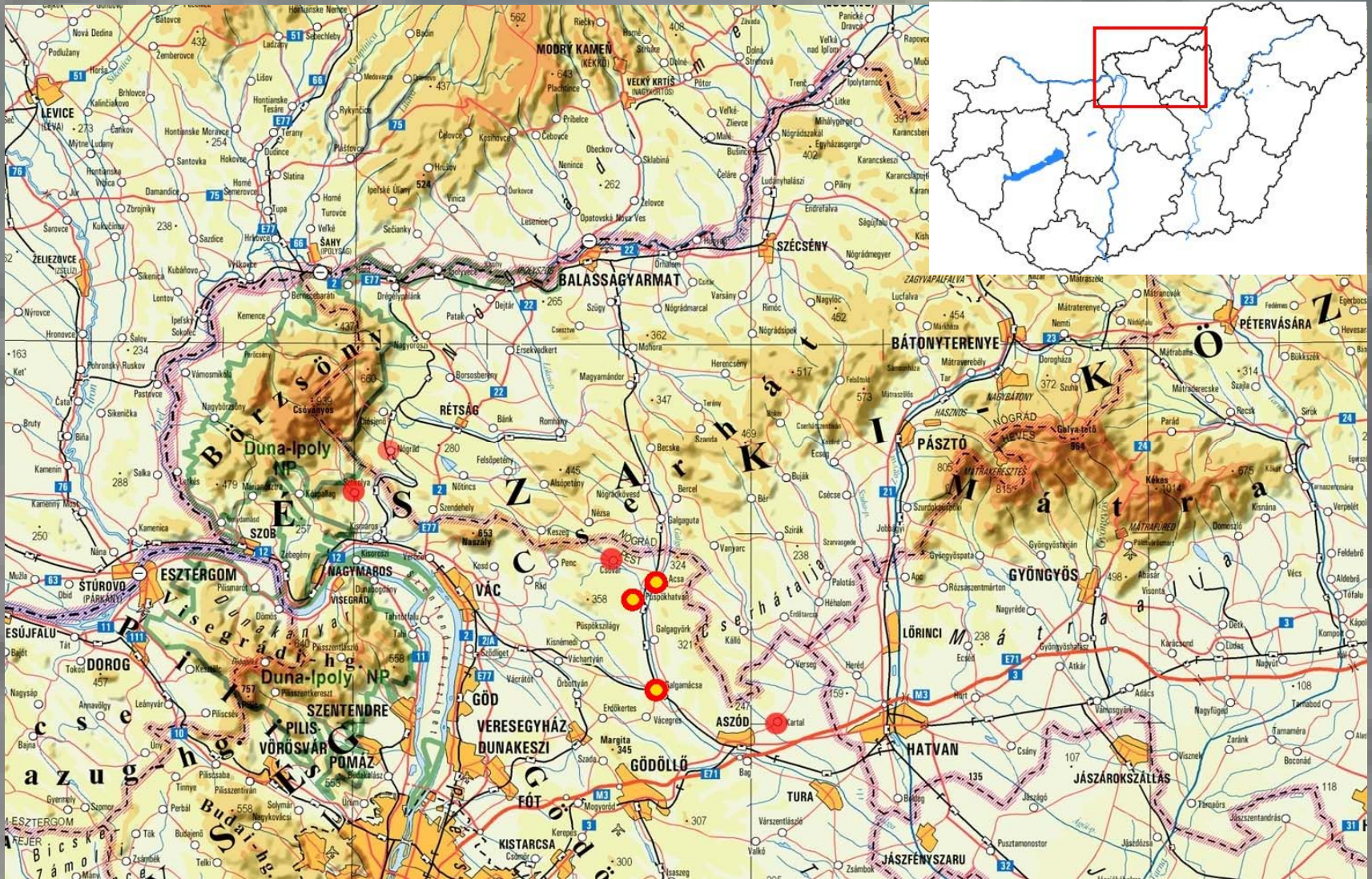
Comparison of the CSF cases in 2007, 2008 and 2009 (calendar year)

Month	2007		2008		2009	
	Nógrád	Pest	Nógrád	Pest	Nógrád	Pest
1.	5	0	35	47	0	9
2.	0	0	9	9	1	2
3.	0	0	3	3	0	1
4.	0	0	1	2	0	2
5.	2	0	17	6	0	2
6.	8	0	4	8	0	5
7.	5	0	4	6	0	0
8.	6	0	4	2	0	4
9.	1	0	2	6	0	0
10.	2	0	0	6	0	1
11.	6	0	1	10	0	0
12.	4	12	0	5	0	0
Total	39	12	80	110	1	26

Comparison of the CSF cases in 2006/2007, 2007/2008, 2008/2009 and 2009/2010 hunting years

Month	2006/2007		2007/2008		2008/2009		2009/2010	
	Nógrád	Pest	Nógrád	Pest	Nógrád	Pest	Nóg.	Pes.
3.	0	0	0	0	3	3	0	1
4.	0	0	0	0	1	2	0	2
5.	0	0	2	0	17	6	0	2
6.	0	0	8	0	4	8	0	5
7.	0	0	5	0	4	6	0	0
8.	0	0	6	0	4	2	0	4
9.	0	0	1	0	2	6	0	0
10.	0	0	2	0	0	6	0	1
11.	0	0	6	0	1	10	0	0
12	0	0	4	12	0	5	0	0
1.	5	0	35	47	0	9	0	0
2.	0	0	9	9	1	2	0	0
Total	5	0	78	68	37	65	0	15

Cases in 2009 (calendar year)



CSF Surveillance in Wild boars

CSF free area (excluding surveillance zone)

- In each county the sampling units and the minimum sample size have been determined on the basis of the point H of Chapter IV in CSF diagnostic manual
- Samples: clotted blood and tonsil
- Antibody ELISA from each blood sample sent to the laboratory
- Virology (PCR) only from seropositive animals and from every second wild boar has been shot within 3 km radius of the place where the seropositive one was shot during the period of maximum 42 days

CSF Surveillance in Wild boars

Infected area

There are two parallel rules regarding targeted surveillance:

- The first has been effective since 2007: all shot wild boar has to be tested serologically (antibody ELISA) and virologically (PCR).
- The second one is introduced as part of the Action plan for the recommendations of the FVO Mission of 2008: sampling units and a minimum sample size for each sampling units has been determined on the basis of the point H of Chapter IV in CSF Diagnostic Manual . (If more wild boars are shot than the minimum sample size the first rule must be used)

CSF Surveillance in Wild boars

Infected area (continuation)

- Samples: clotted blood and tonsil
- The dispatch of the meat of wild boars and meat products containing such meat may be authorised according to Article 1 of paragraph (2) of Commission Decision 2010/354/EU. (negative virology (and serology) and prior approval of the competent authority of destination)
- All wild boars found dead has to be tested virologically

CSF Surveillance in Wild boars

Surveillance zone

- Around the infected are a surveillance zone has been established. It is a 10 km wide belt, excluding the south part of Pest county, where about 40 km wide belt counted from the highway M3 (E71) in south direction.
- All shot wild boar has to be tested serologically (antibody ELISA) and virologically (PCR)
- Samples: clotted blood and tonsil

**The results of CSF surveillance in wild boars in
whole territory of Hungary between 01-03-2010
and 31-10-2010
Antibody ELISA**

County	Number of tests	Negative	Positive
<i>CSF free counties</i>	2635	2633	2
Affected 4 counties	9810	9495	315
<i>Total</i>	<i>12445</i>	<i>12128</i>	<i>317</i>

The results of CSF surveillance in wild boars in whole territory of Hungary between 01-03-2010 and 31-10-2010
Virology (PCR)

County	Number of tests	Negative	Positive
<i>CSF free counties</i>	25	25	0
Affected 4 counties	9042	9042	0
<i>Total</i>	<i>9067</i>	<i>9067</i>	<i>0</i>

The results of CSF surveillance in wild boars in the whole territory of the four affected counties between 01-03-2010 and 31-10-2010

Antibody ELISA

County	Number of tests	Number of negative	Number of Positive	Positive %
Nógrád	3321	3192	129	3,8 %
Pest	2212	2052	160	7,2 %
Borsod-A-Z	1981	1966	15	0,8 %
Heves	2296	2285	11	0,5 %

The results of CSF surveillance in wild boars in the whole territory of the four affected counties between 01-03-2010 and 31-10-2010

Virology (PCR)

County	Estimated number of wild boar County (inf. area)	Number of tests	Number of negative	Number of Positive
Nógrád	3931	3325	3325	0
Pest	6981 (3240)	1768	1768	0
Borsod-A-Z	7086 (1820)	1684	1884	0
Heves	4896 (3770)	2265	2265	0

Virological examination of wild boars found dead

County	2009/2010 hunting year			2010/2011 hunting year till 31 October 2010		
	Tested	Negative	Positive	Tested	Negative	Positive
Nógrád	27	27	0	20	20	0
Pest	8	8	0	1	1	0
Borsod-A-Z	6	6	0	5	5	0
Heves	11	11	0	5	5	0

Comparison of seropositivity in the infected areas during the last (2009/2010) and the current (2010/2011) hunting year
Wild boars of all age groups

Infected Area	2009/2010 hunting year			2010/2011 hunting year till 31 October 2010		
	Tested	Positive	%	Tested	Positive	%
Nógrád	5440	642	11,80	3321	129	3,88
Pest	3375	819	24,27	1766	157	8,89
Borsod-A-Z	2027	47	2,32	1367	13	0,95
Heves	4313	73	1,69	2264	11	0,49

Comparison of seropositivity in the infected areas during the last (2009/2010) and the current (2010/2011) hunting year
Wild boars under 1 year

Infected Area	2009/2010 hunting year			2010/2011 hunting year till 31 October 2010		
	Tested	Positive	%	Tested	Positive	%
Nógrád	1527	145	9,50	1191	28	2,35
Pest	1801	218	12,10	925	31	3,35
Borsod-A-Z	684	8	1,17	394	1	0,25
Heves	1808	16	0,88	989	2	0,20

Comparison of seropositivity in the infected areas during the last (2009/2010) and the current (2010/2011) hunting year
Wild boars over 1 year

Infected Area	2009/2010 hunting year			2010/2011 hunting year till 31 October 2010		
	Tested	Positive	%	Tested	Positive	%
Nógrád	3913	497	12,70	2130	101	4,74
Pest	1574	601	38,18	841	126	14,98
Borsod-A-Z	1343	39	2,9	973	12	1,23
Heves	2505	57	2,28	1275	9	0,71

Short analysis of the situation

- The last CSF case occurred on 30 October 2009 more than one year ago in the specified part of Pest county
- In Nógrád county the last case was found near to the border of Pest county on 23 February 2009, more than one and half years ago.
- It is clear that the seropositivity has been decreased significantly in all age groups during the current hunting year in comparison with the last one

CSF Surveillance in wild boar - New measures 1.

The last meeting of the National CSF Expert Group was held on 4 November 2010. According to their proposals the following new measures have been introduced regarding CSF surveillance in wild boars:

- Possibility to pay state compensation of 20000 HUF for wild boars shot for diagnostic purposes under 30 kgs of bodyweight and over one year of age, because these animals are backwarded in growth and it would be caused by the CSF infection. (Formerly this compensation was possible in case of animals under one year).

CSF surveillance in wild boar - New measures 2.

The new proposals of the CSF Expert Group (continuation):

- Written warning for all hunting associations regarding the collecting and laboratory examinations of wild boars found dead. After the hunting year the data reported to the hunting authority and the number of the tested ones will be cross checked and in case of necessity fine will be imposed.
- New sampling sheet for the affected four counties that including more detailed information about age group of wild boars. (Possibility to collect data in three age groups instead of the former two ones)

Targeted surveillance programme in domestic swine

Infected Area

A. In case of large-scale pig holdings:

- Quarterly in every holding: epidemiological control examination (including the clinical examination carried out by the Diagnostic Manual)
- Half-yearly in every holding: serological testing (to detect 5% prevalence with 95% confidence)
- Laboratory examination of every reported abortion: fetus (virology) + sow's blood (serology)

Surveillance programme in domestic swine 2.

Infected Area

B. In case of small-scale pig farms:

- Epidemiological units has to be determined by settlements (or in case of big settlements by parts of settlements) by the competent County Agricultural Office Food Chain Safety and Animal Health Directorate
- Half-yearly in every epidemiological unit: clinical examination (to detect 2% prevalence with 95% confidence)
- Half-yearly in every epidemiological unit: serological testing (to detect 5% prevalence with 95% confidence)
- Laboratory examination of every reported abortion: fetus (virology) + sow's blood (serology)

Surveillance programme in domestic swine 2.

Targeted surveillance in the surveillance zone

A. In case of large-scale pig holdings:

- Yearly in every holding: serological testing (to detect 10% prevalence with 95% confidence)
- Laboratory examination of every abortion: fetus (virology) + sow's blood (serology)

B. In case of small-scale pig farms:

Epidemiological units has to be determined by settlements by the competent County Agricultural Office Food Chain Safety and Animal Health Directorate:

- Half-yearly in every epidemiological unit: serological testing (to detect 10% prevalence with 95% confidence)
- Laboratory examination of every reported abortion: fetus (virology) + sow's blood (serology)

Results of the CSF sero-surveillance in domestic swine

Infected area- first half of 2010

Small-scale holdings

County	No of epidemio. units	No of holdings	No of pigs	No of tested pigs	Positive
Nógrád	114	1743	4809	2652	0
Pest	49	358	1838	996	0
Borsod-A-Z	71	531	2069	547	1*
Heves	79	842	2833	1370	0

*It is a false positive reaction according to the virus neutralisation test: interference reaction of Border disease.

Results of the CSF sero-surveillance in domestic swine

Infected area- first half of 2010

Large-scale holdings

County	No of holdings	No of pigs	No of tested pigs	Positive
Nógrád	3	15990	307	0
Pest	1	918	132	0
Borsod-A-Z	3	2375	306	1*
Heves	7	16268	646	0

* It is a false positive reaction according to the virus neutralisation test: interference reaction of Border disease.

Results of the CSF sero-surveillance in domestic swine

Surveillance zone - first half of 2010

Small-scale holdings

County	No of epidemio. units	No of holdings	No of pigs	No of tested pigs	Positive
Pest	73	1414	6556	1154	0
Borsod-A-Z	56	427	1463	394	1*
Heves	20	390	1100	730	0

* It is a false positive reaction according to the virus neutralisation test results: interference reaction of Border disease.

Results of the CSF sero-surveillance in domestic swine

Surveillance zone – till 31 October 2010

Large-scale holdings

County	No of holdings	No of pigs	No of tested pigs	Positive
Pest	6	21331	171	0
Borsod-A-Z	3	2269	85	0
Heves	8	13485	186	0

A photograph of a wild boar (Sus scrofa) in a forest. The boar is dark brown and is shown from the side, facing right. It is holding a nut in its mouth and appears to be eating it. The background is a dense forest with many thin, bare tree branches and some green foliage. The ground is covered with brown leaves and twigs.

Thank you for your attention!

Vaddiszno (Sus scrofa)