

# Short overview of the epidemiological situation in Hungary regarding CSF in wild boars

**SCoFcAH**  
**2 May 2011**  
**Dr. Zsolt FÖLDI**

Animal Health and Animal Welfare Directorate  
Central Agricultural Office, Hungary

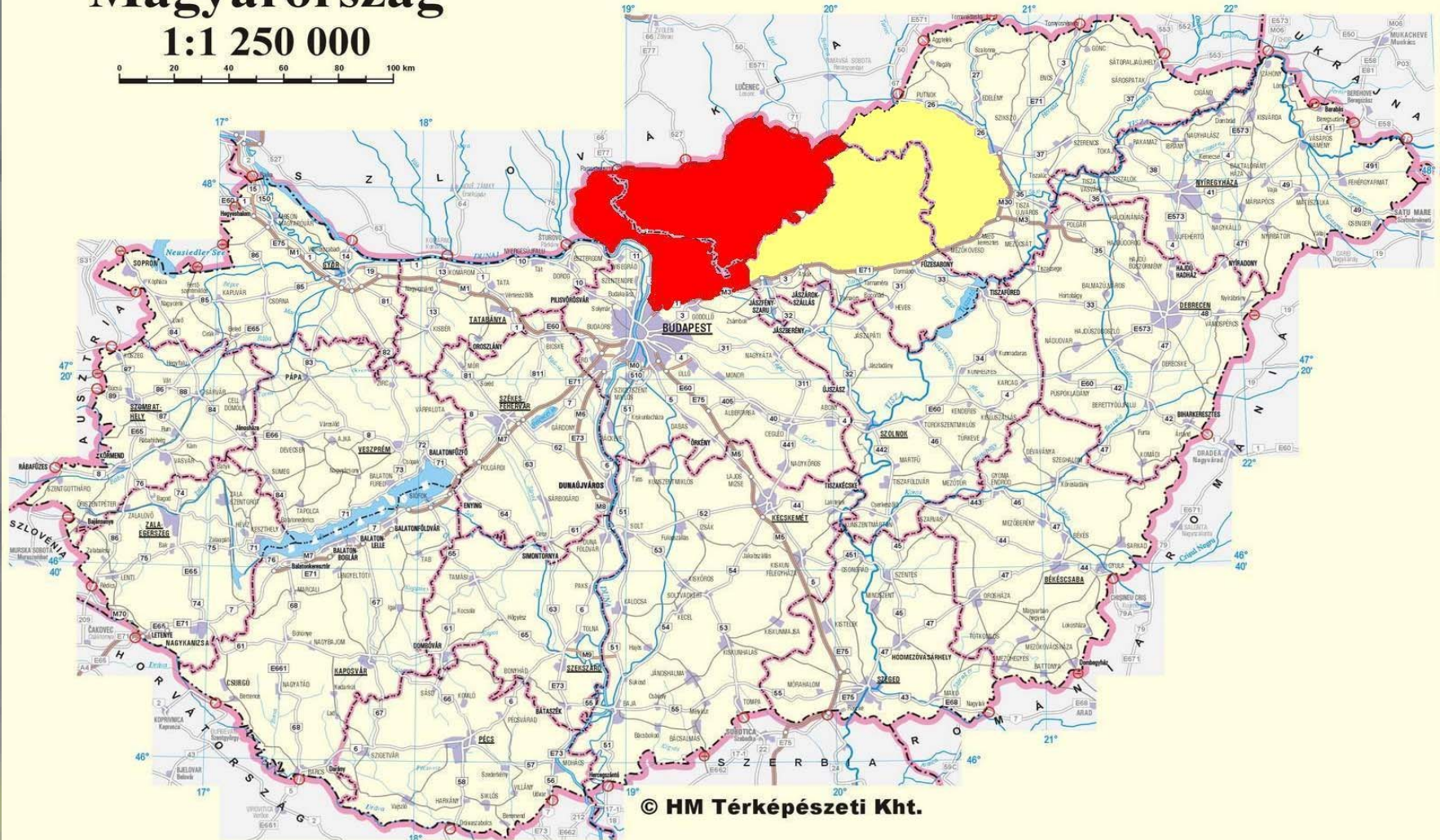
## CSF cases in wild boar in Nógrád county and specified part of Pest county

- 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 the same measures has been applied as in Nógrád county)
- Totally 268 cases were found in wild boars, 120 cases in Nógrád county, and 148 cases in the specified part of Pest county. In domestic pigs there were no cases.
- The last case was on 30 October 2009 in Pest county (in Nógrád county the last one was confirmed on 23 February 2009).

# The Map of the CSF infected area

## Magyarország

1:1 250 000

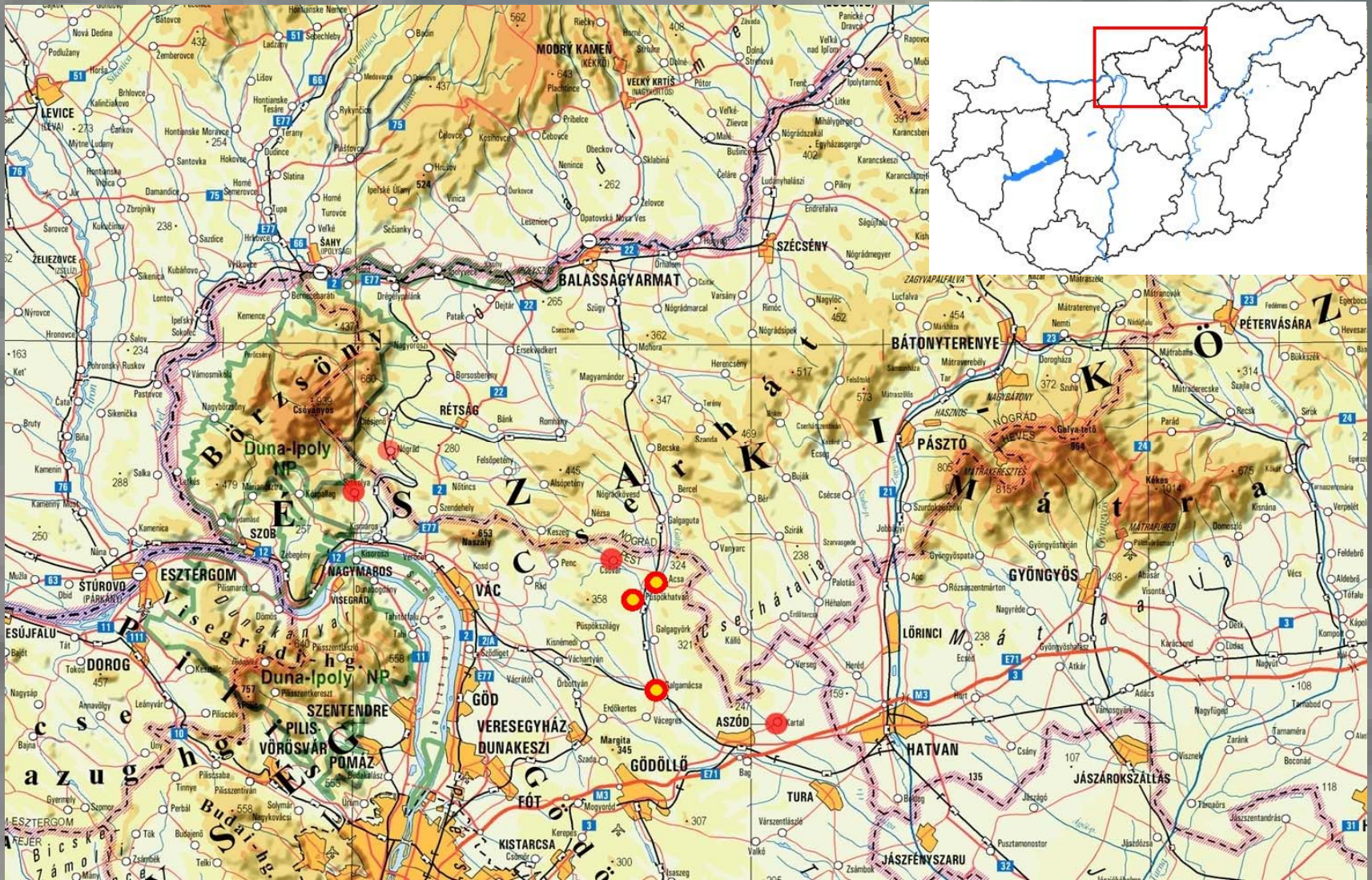


© HM Térképészeti Kht.

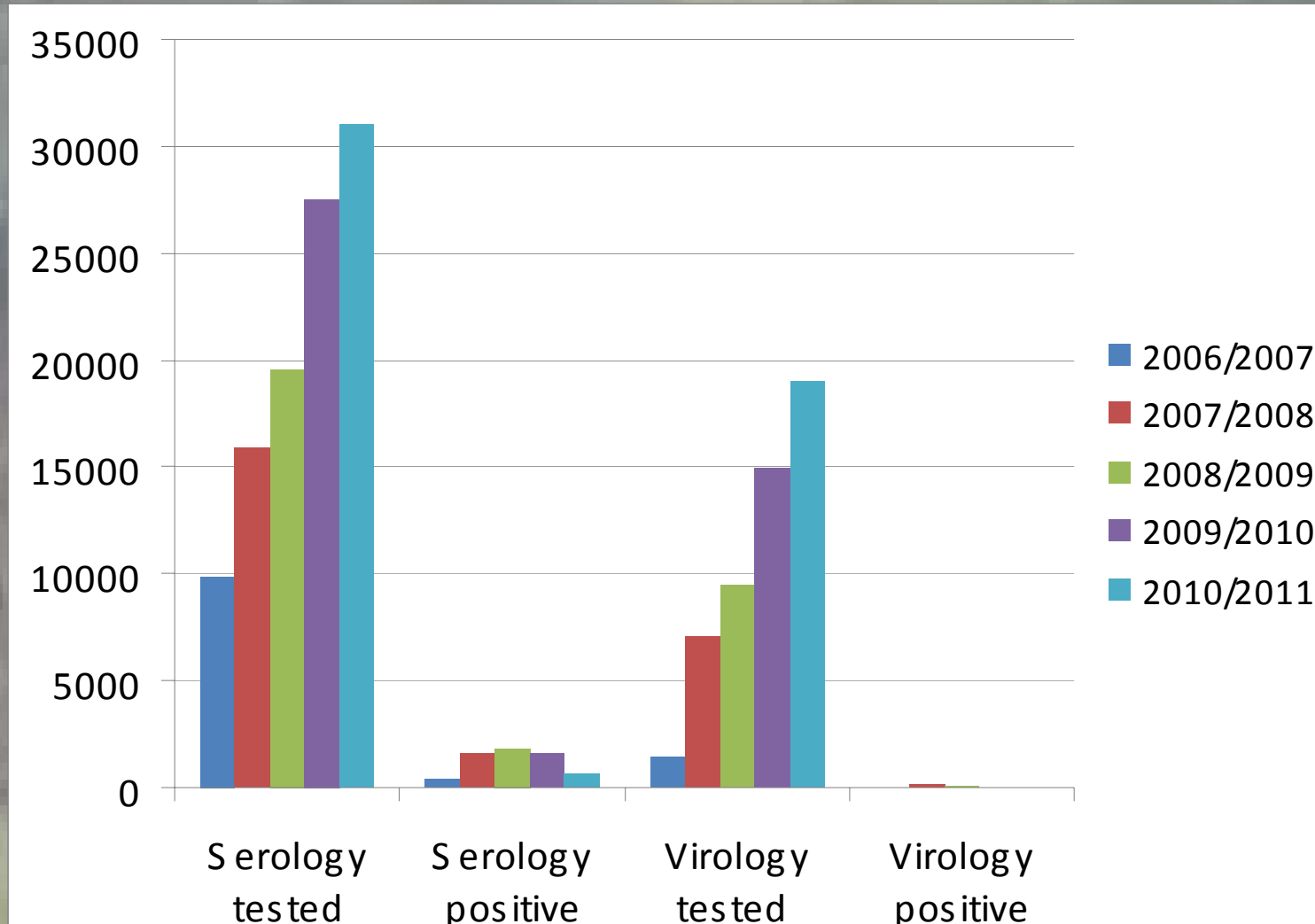
## Comparison of the CSF cases in 2006/2007, 2007/2008, 2008/2009 and 2009/2010 hunting years

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
<b>Total</b>	<b>5</b>	<b>0</b>	<b>78</b>	<b>68</b>	<b>37</b>	<b>65</b>	<b>0</b>	<b>15</b>

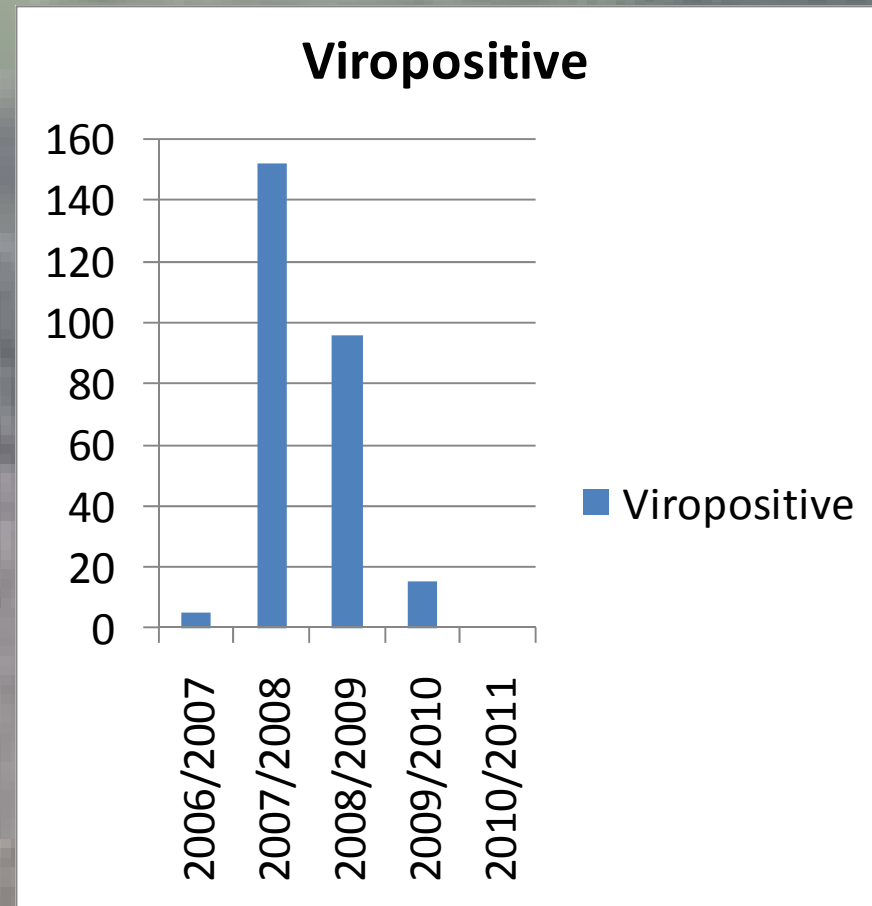
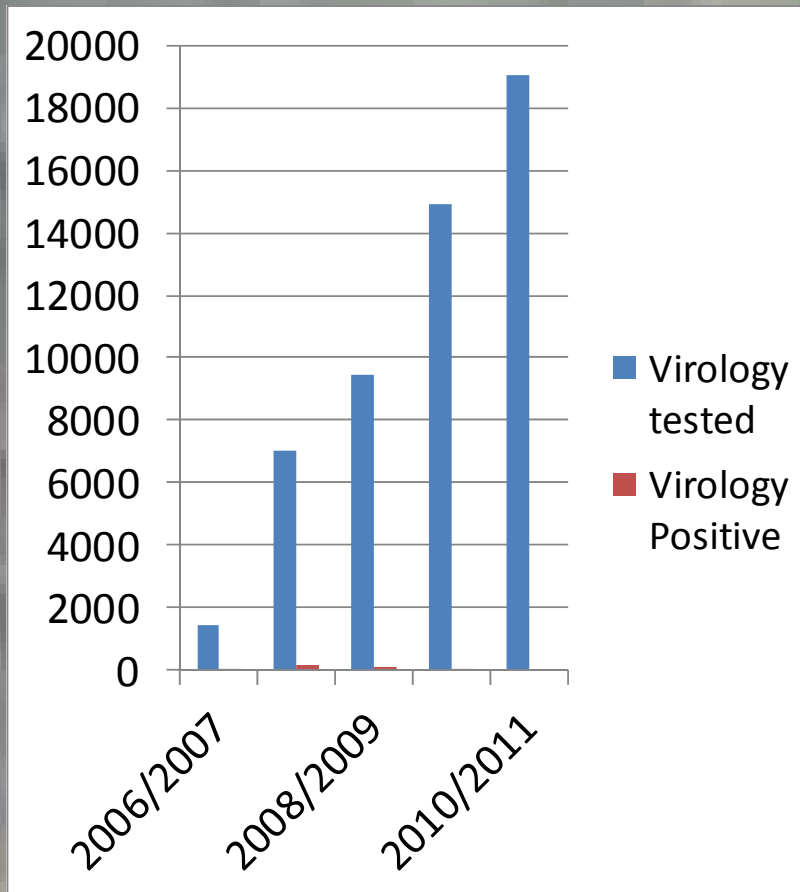
# Cases in 2009 (calendar year)



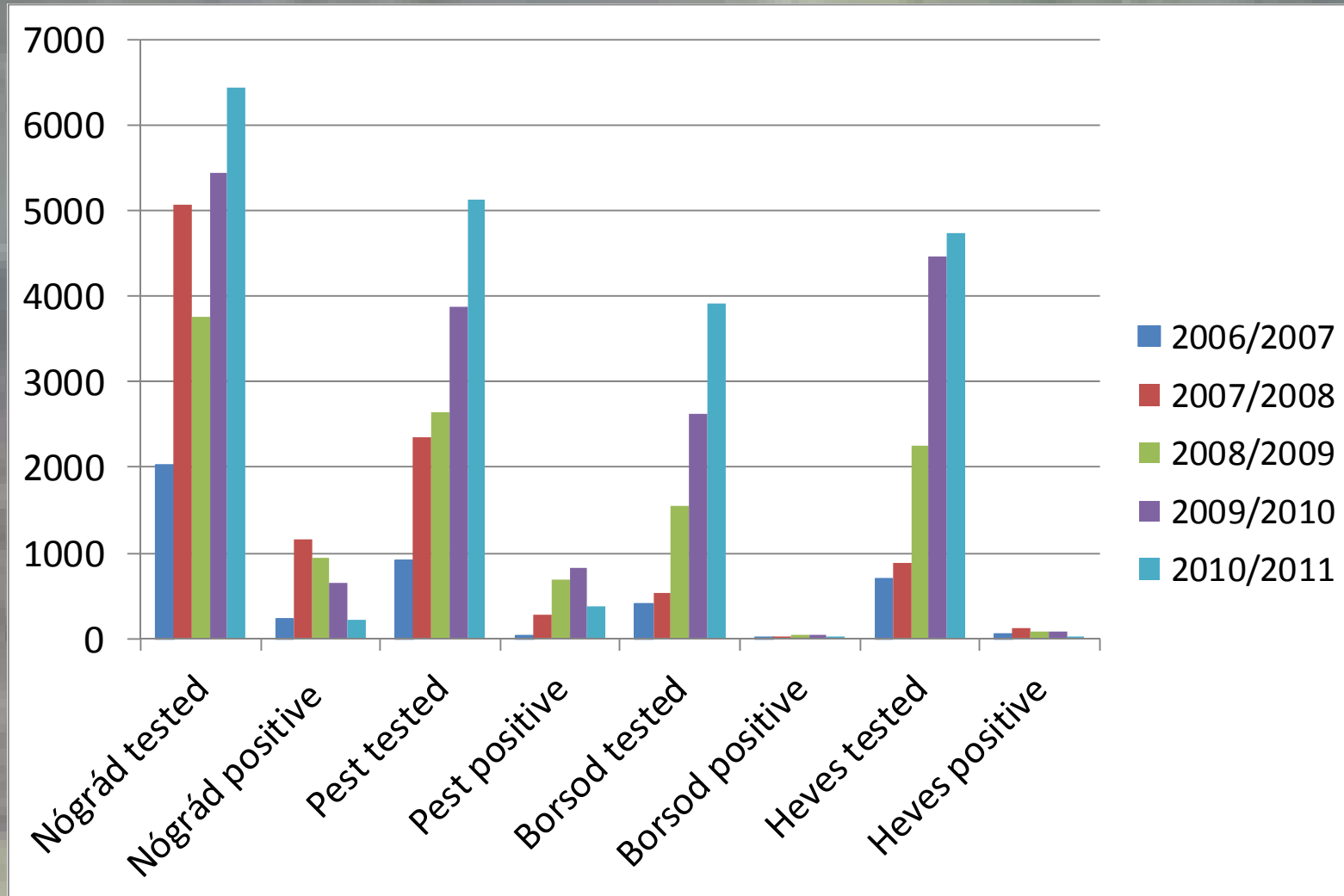
# Surveillance in wild boar during 2006/2007, 2007/2008, 2008/2009, 2009/2010 and 2010/2011 hunting years in Hungary



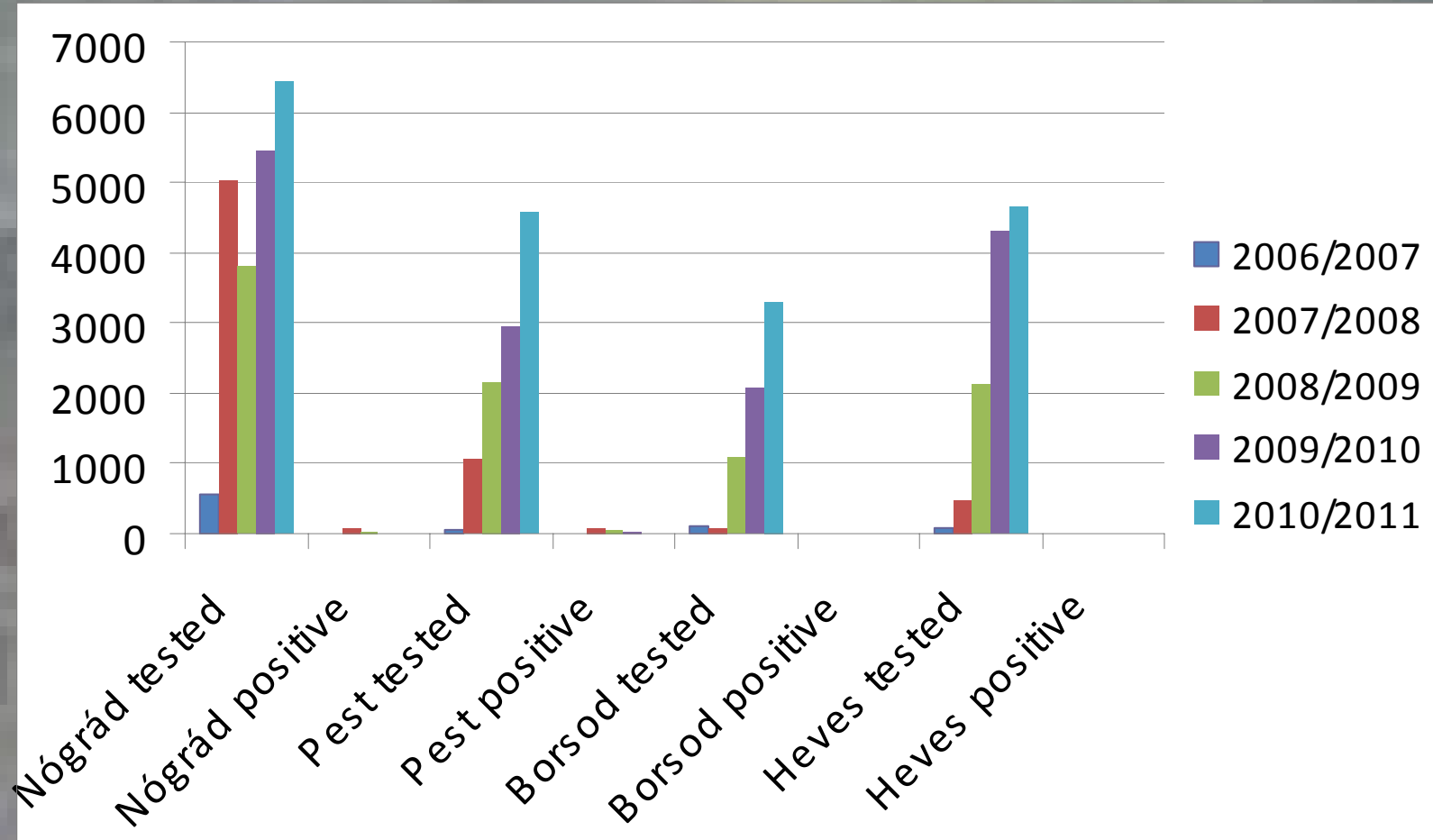
# Virological surveillance in wild boar during 2006/2007, 2007/2008, 2008/2009, 2009/2010 and 2010/2011 hunting years in Hungary



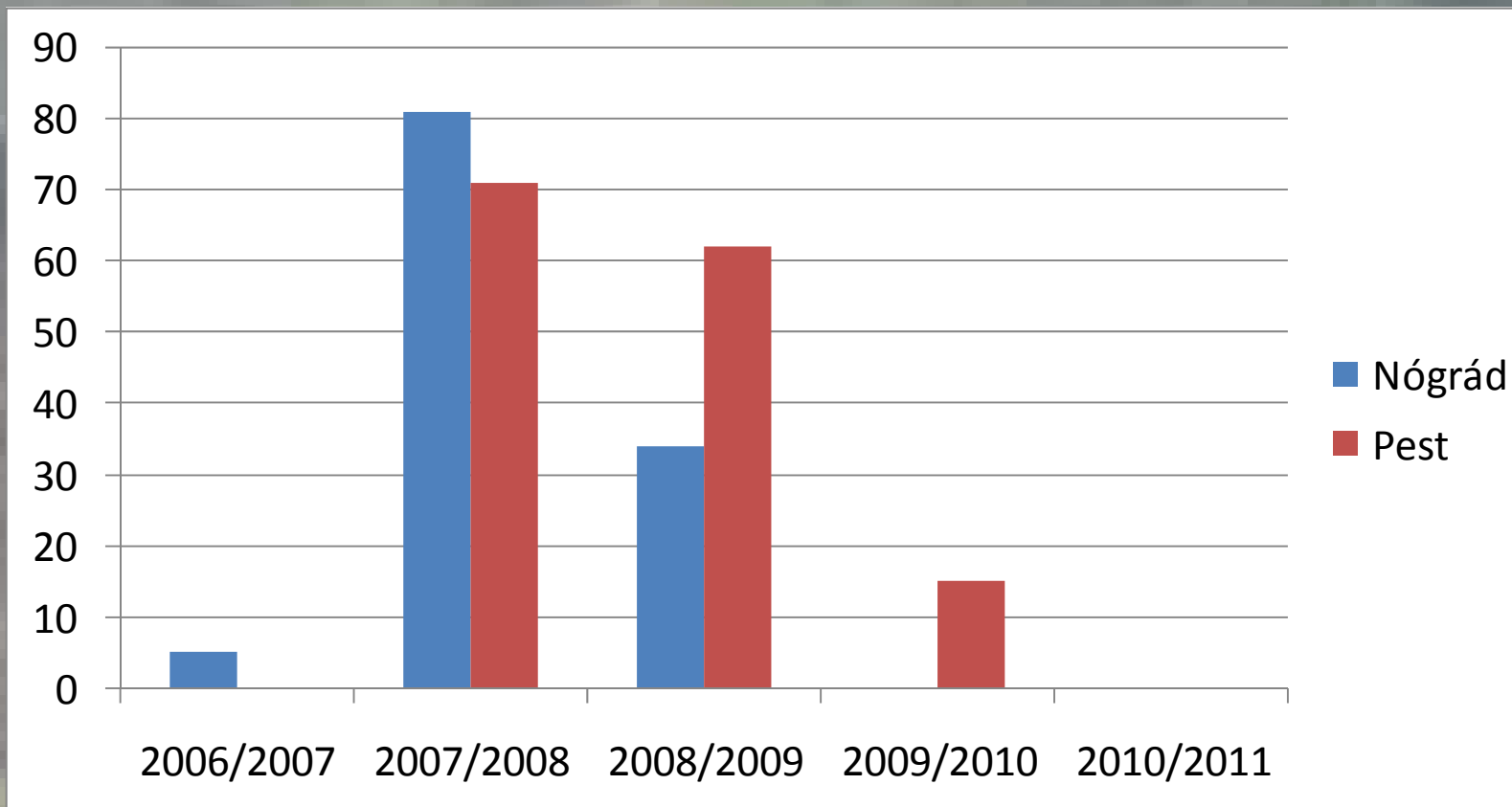
# Serological surveillance in wild boar during 2006/2007, 2007/2008, 2008/2009, 2009/2010 and 2010/2011 hunting years in the whole territory of the 4 affected counties



# Virological surveillance in wild boar during 2006/2007, 2007/2008, 2008/2009, 2009/2010 and 2010/2011 hunting years in the whole territory of the 4 affected counties



# Number of viropositive results in wild boar during 2006/2007, 2007/2008, 2008/2009, 2009/2010 and 2010/2011 hunting years in the whole territory of the 4 counties



**The results of CSF surveillance in wild boars in  
whole territory of Hungary between 01-03-2010  
and 28-02-2011  
Antibody ELISA**

<b>County</b>	<b>Number of tests</b>	<b>Negative</b>	<b>Positive</b>
<i>CSF free counties</i>	10824	10816	8
Affected 4 counties	20231	19579	652
<b><i>Total</i></b>	<b>31055</b>	<b>30395</b>	<b>660</b>

**The results of CSF surveillance in wild boars in  
whole territory of Hungary between 01-03-2010  
and 28-02-2011  
Virology (PCR)**

<b>County</b>	<b>Number of tests</b>	<b>Negative</b>	<b>Positive</b>
<i>CSF free counties</i>	68	68	0
Affected 4 counties	18973	18973	0
<b><i>Total</i></b>	<b><i>19041</i></b>	<b><i>19041</i></b>	<b><i>0</i></b>

# The results of CSF surveillance in wild boars in the whole territory of the four affected counties between 01-03-2010 and 28-02-2011

## Antibody ELISA

County	Number of tests	Number of negative	Number of Positive	Positive %
Nógrád	6438	6212	226	3,51 %
Pest	5136	4752	384	7,48 %
Borsod-A-Z	3917	3893	24	0,61 %
Heves	4740	4722	18	0,38 %

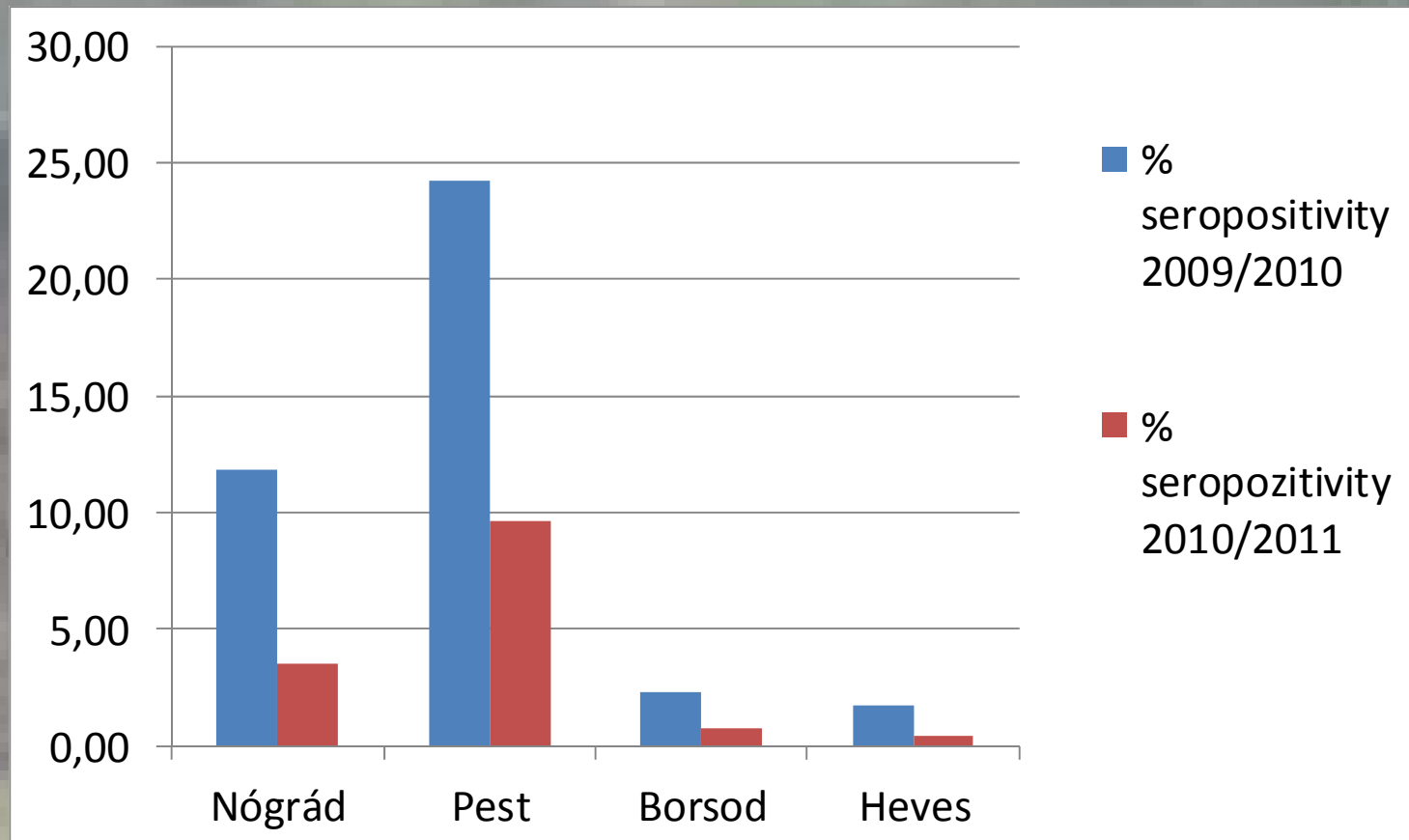
# The results of CSF surveillance in wild boars in the whole territory of the four affected counties between 01-03-2010 and 28-02-2011

## Virology (PCR)

County	Estimated number of wild boar County (inf. area)	Number of tests	Number of negative	Number of Positive
Nógrád	3931	6428	6428	0
Pest	6938 (3240)	4576	4576	0
Borsod-A-Z	7086 (1820)	3303	3303	0
Heves	4896 (4784)	4666	4666	0

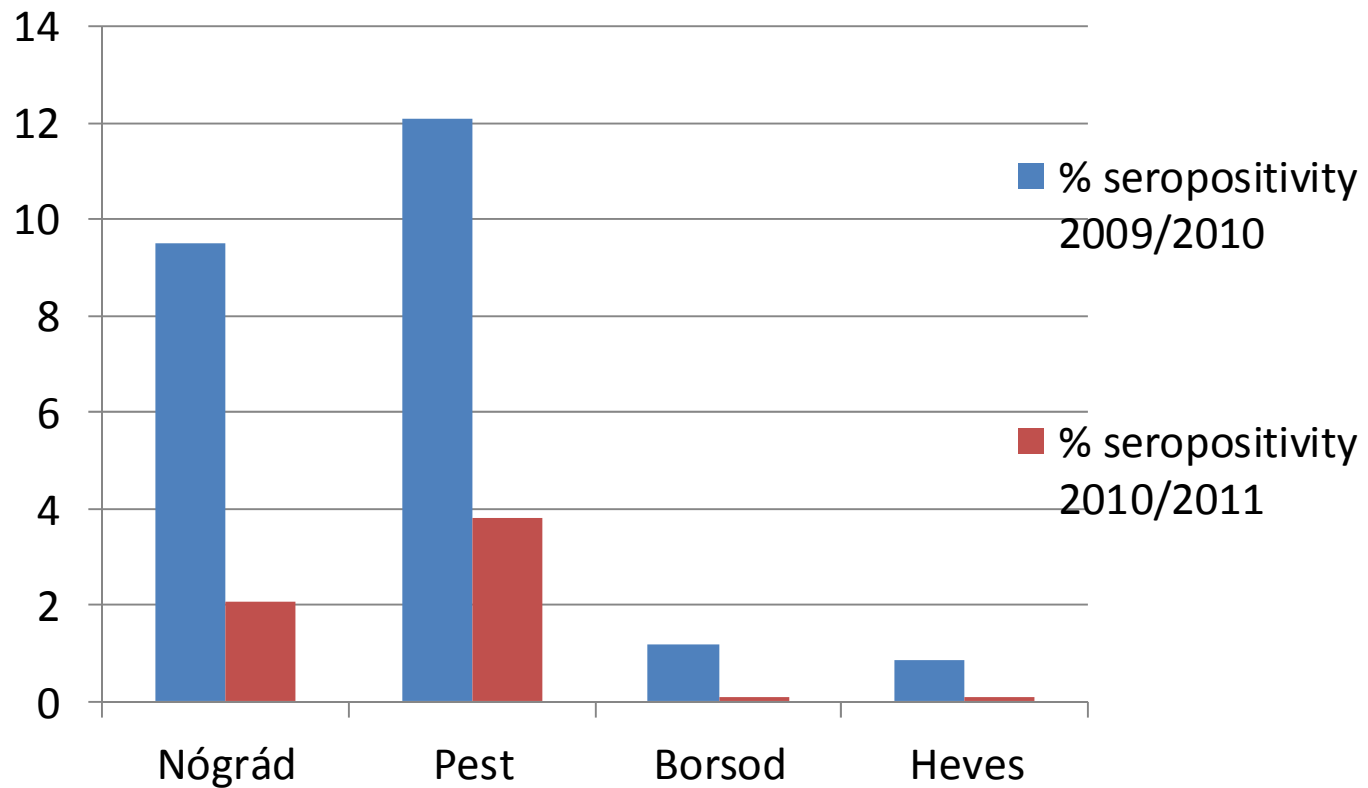
# Comparison of seropositivity in the infected area during the 2009/2010 and the 2010/2011 hunting years

## Wild boars of all age groups



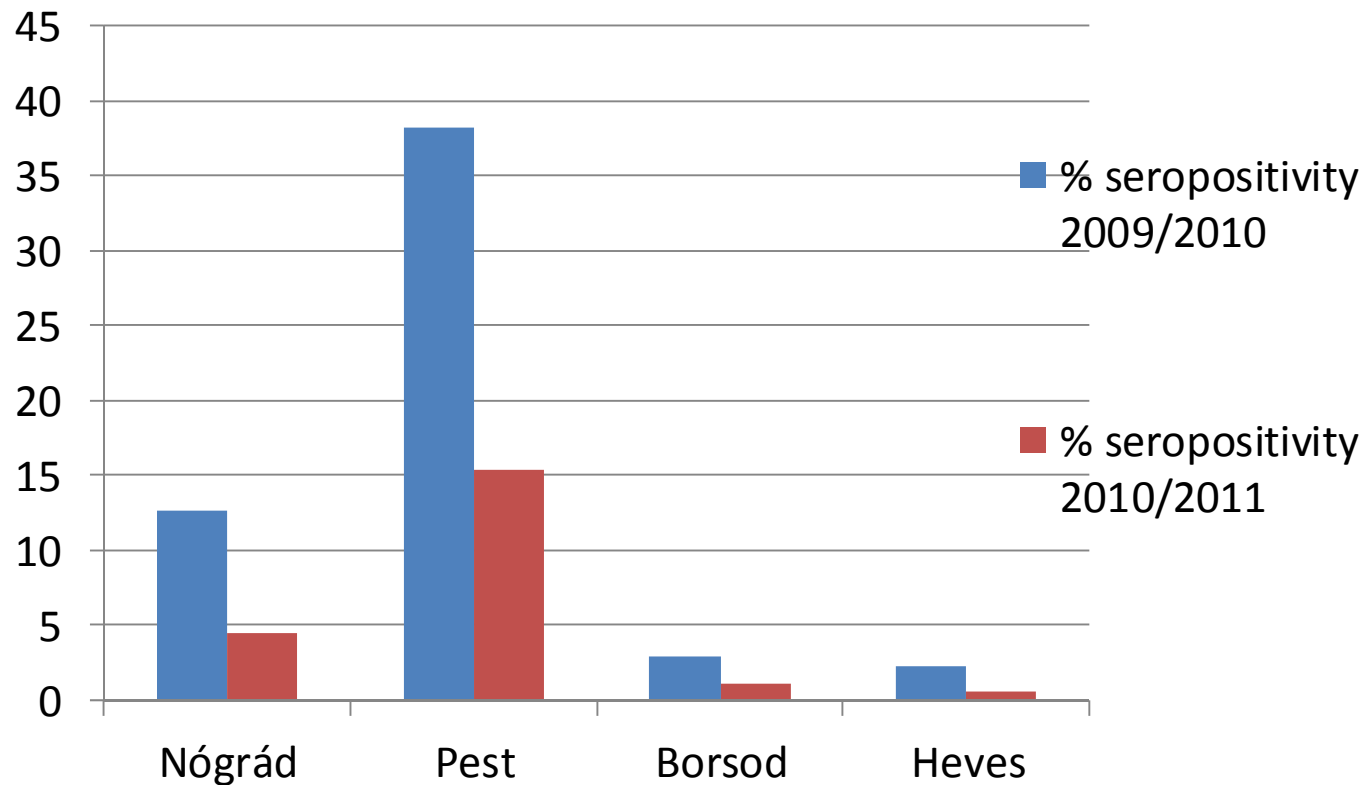
# Comparison of seropositivity in the infected area during the 2009/2010 and the 2010/2011 hunting years

## Wild boars under 1 year



# Comparison of seropositivity in the infected areas during the 2009/2010 and the 2010/2011 hunting years

## Wild boars over 1 year



# Laboratory diagnosis of other Pestiviruses

County	Border disease	Bovine Viral Diarrhoea
Nógrád	7	3
Pest	9	4
Borsod-Abaúj-Zemplén	2	1
Heves	2	0
<b>Total</b>	<b>20</b>	<b>8</b>

The further analysis of the epidemiological data shows that the interference reaction due to border disease and BVD may be the reason of seropositive results during antibody-ELISA test and in case of wild boars under 1 year we can calculate with the maternal immunity as well.

**The results of CSF surveillance in wild boars in  
whole territory of Hungary between 01-03-2011  
and 31-03-2011  
Antibody ELISA**

<b>County</b>	<b>Number of tests</b>	<b>Negative</b>	<b>Positive</b>
<i>CSF free counties</i>	326	326	0
Affected 4 counties	461	457	4
<b><i>Total</i></b>	<b><i>787</i></b>	<b><i>783</i></b>	<b><i>4</i></b>

**The results of CSF surveillance in wild boars in  
whole territory of Hungary between 01-03-2011  
and 31-03-2011  
Virology (PCR)**

<b>County</b>	<b>Number of tests</b>	<b>Negative</b>	<b>Positive</b>
<i>CSF free counties</i>	2	2	0
Affected 4 counties	446	446	0
<b><i>Total</i></b>	<b>448</b>	<b>448</b>	<b>0</b>

# The results of CSF surveillance in wild boars in the whole territory of the four affected counties between 01-03-2011 and 31-03-2011

## Antibody ELISA

County	Number of tests	Number of negative	Number of Positive	Positive %
Nógrád	100	98	2	2 %
Pest	117	115	2	1,71 %
Borsod-A-Z	152	152	0	0 %
Heves	92	92	0	0 %

# The results of CSF surveillance in wild boars in the whole territory of the four affected counties between 01-03-2011 and 31-03-2011

## Virology (PCR)

County	Number of tests	Number of negative	Number of Positive
Nógrád	100	100	0
Pest	111	111	0
Borsod-A-Z	141	141	0
Heves	94	94	0

# Short analysis of the situation

- In domestic pigs there were no CSF cases and the results of the serological surveillance also demonstrated this fact.
- It is clear that the seropositivity of wild boars has been decreased significantly in the 4 affected counties, in all age groups during the 2010/2011 hunting year in comparison with the previous one.
- In Borsod-Abaúj-Zemplén and Heves counties CSF cases have not been confirmed and percentage of seropositivity in wild boar is very low. And the number of seropositive wild boars under 1 years is practically negligible.
- The present of CSF virus in Borsod-Abaúj-Zemplén and Heves counties is excluded according to the available epidemiological data.

A photograph of a wild boar (Sus scrofa) in a forest. The boar is dark brown and hairy, standing on a ground covered with fallen leaves and twigs. It is looking down and to the right. The background is a dense forest with many thin tree trunks and bare branches.

Thank you for your attention!

Vaddiszno (Sus scrofa)