

# **RABIES BULLETIN EUROPE**

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# 1. Editorial

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Despite the successful control of rabies in large parts of the continent resulting in more areas where rabies is not reported, two countries lost their OIE status of being free from terrestrial rabies during 2008: in France, an illegally imported dog caused secondary cases in dogs and in Italy, fox rabies re-emerged possibly introduced via migrating foxes from Croatia. Both situations highlight the ongoing need for high vigilance across Europe to timely detect introduced cases. As all those rabies cases in domestic animals originated from illegal importation, border controls are of eminent importance to prevent the introduction of rabies via this route.

As proposed in a previous issue, we are grateful for the French colleagues to provide information on two rabies cases in cats in France associated with EBLV-1 in the context of a miscellaneous article.

During the this quarter (IV/2008) 2238 rabies cases were reported of which 4 were found in bats. Six human rabies cases occurred in Russia.

All data is shown in tables and a map. Also, at the end of the issue a map showing the area covered by ORV campaigns in Europe in 2008 is included. Compared to previous years, only little changes were obvious. Due to the emergence of fox rabies in Italy, Austria increased the vaccination area close to the border to Slovenia and Italy.

Conrad Freuling

**RABIES CASES**
**4th QUARTER 2008**
**TOTAL 2008**

Name	Code	Total	Wildlife	Domestic animals	Bats	Human	Total	Wildlife	Domestic animals	Bats	Human	Remarks
ALBANIA	ALB											
AUSTRIA	AUT											rabies free
BELARUS	BLR	247	173	74	0	0	964	735	229			
BELGIUM	BEL											rabies free
BOSNIA A HERCEGOVINA	BIH	11	7	4	0	0	83	71	12			
BULGARIA	BGR	18	15	3	0	0	51	41	10			
CROATIA	HRV	239	224	15	0	0	1061	982	79			
CYPRUS	CYP											rabies free
CZECH REPUBLIC	CZH											rabies free
DENMARK	DNK											rabies free
ESTONIA	EST						3	1	2			
FINLAND	FIN											rabies free
FRANCE	FRA	2	0	1	1	0	8		3	5		
GERMANY	DEU	3	0	1	2	0	11		1	10		rabies free
GREECE	GRC											rabies free
HUNGARY	HUN	3	2	1	0	0	7	6	1			
ICELAND	ISL											rabies free
IRELAND	IRE											rabies free
ITALY	ITA	9	9	0	0	0	9	9				
LATVIA	LVA	23	21	2	0	0	110	90	20			
LITHUANIA	LTU	11	7	4	0	0	69	47	22			
LUXEMBOURG	LUX											rabies free
MACEDONIA	MKD											
MALTA	MLT											rabies free
MOLDOVA	MDA	12	3	9	0	0	46	12	34			
MONTENEGRO	MNE	8	7	1	0	0	43	38	5			
NORWAY	NOR											rabies free
POLAND	POL	7	6	1	0	0	29	21	5	3		
PORTUGAL	PRT											rabies free
ROMANIA	ROU	240	158	82	0	0	1089	906	183			
RUSSIAN FEDERATION	RUS	763	373	384	0	6	3353	1628	1713		12	
SERBIA	SRB	66	52	14	0	0	234	201	33			
SLOVAK REPUBLIC	SVK						0					
SLOVENIA	SVN	13	12	1			55	53	2			
SPAIN	ESP						3		2	1		rabies free
SWEDEN	SWE											rabies free
SWITZERLAND + LIEC.	CHE											rabies free
THE NETHERLANDS	NED						11			11		rabies free
TURKEY	TUR	65	5	60	0	0	301	44	257			
UKRAINE	UKR	497	215	282	0	0	2164	822	1339	1	2	
UNITED KINGDOM	UNK	1	0	0	1	0	3		1	2		rabies free
<b>total</b>		<b>2238</b>	<b>1289</b>	<b>939</b>	<b>4</b>	<b>6</b>	<b>9707</b>	<b>5707</b>	<b>3953</b>	<b>33</b>	<b>14</b>	

Wildlife: excluding bat/dements and additional information see table 4.2

## 3. Miscellaneous Articles

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### 3.1 First description of European bat lyssavirus spill-overs to domestic cats in France and in Europe

Dacheux, L.<sup>1</sup>, Larrous, F. , Mailles, A. , Boisseleau, D. , Delmas, O. , Biron, O. , Bouchier, C. , Capek, I. , Raffi, F. , Goudal, M. , Bourhy, H.<sup>1</sup>

(1) Institut Pasteur, Centre National de Référence de la Rage, Paris, France

The full text with all authors' affiliations, tables and figures can be found in: Dacheux et al. European bat lyssavirus transmission among cats, Europe. Emerg Infect Dis. 2009, 15(2): p. 280-4.

#### Introduction

Most countries from Western Europe are currently free of rabies in terrestrial non-flying mammals [1]. However, rabies still remains a public health problem in these countries due to natural circulation of European bat lyssaviruses (EBLVs) 1 and 2. EBLVs are widespread in European bats and reported mainly in Denmark, the Netherlands, Germany, Poland, France and Spain [2-4]. However knowledge of the prevalence and epidemiology of EBLV is limited and little is known concerning spill-over of EBLV to terrestrial mammals and humans. To date, natural transmission of EBLV-1 has been reported only in sheep in Denmark [5] and a stone marten in Germany [6]. Since 1977, three confirmed cases of human death from EBLVs infection were noticed (two other cases were also suspected but never confirmed) [3]. We describe here the first descriptions of spill-over transmission in domestic carnivores (cat, *Felis domesticus*) in Europe.

#### Case one

In November 2003, a 6-month-old female stray cat (cat#1) was found

ill in a public garden of Vannes city (Morbihan county, Brittany, Western France) and was taken to a veterinary clinic. This animal suffered from convulsions, emaciation and moderate dehydration. It was found to be infected by feline immunodeficiency virus which was compatible with the clinical presentation. After few days of health care, the cat recovered and was impounded for veterinary surveillance. It died suddenly the following night. No information about potential contact with bats was available.

Recommended techniques for rabies diagnosis were used for biological diagnosis [7]. Repeated direct immunofluorescence antibody tests (FAT) were negative as was viral isolation using rabies tissue culture infection test (RTCIT) or mouse inoculation test (MIT). The only positive test routinely used was the detection of rabies antigen using an antigen capture ELISA (WELYSSA) [8]. The presence of EBLV RNA (03011FRA) was determined by reverse transcription-PCR (RT-PCR). [4]. Nucleotide sequencing and phylogenetic analysis identified isolate 03011FRA as EBLV-1b.

### **Case two**

On November 8th, 2007, a neutered female approximately 18 months old (cat#2) was brought by its owner to a veterinary in Fontenay-le-Comte city (Vendée county, Western France) due to abnormal behavior. The next day, it presented severe central neurological disorders and strong aggressiveness. It died during the following night. Contact of the cat with bats could not be excluded. Diagnosis of rabies was realized as previously described for cat#1. Detection of rabies antigens by FAT was repeatedly found weakly positive. This result was confirmed using RTCIT (positive only after the second cell passage, with only few infected cells observed), MIT and RT-PCR. Results obtained with WELYSSA were variable, depending on the part of the brain tested. Finally, detection of viral RNA by nucleotide sequencing and phylogenetic analysis identified isolates 07240FRA as EBLV-1a.

### **Discussion**

This study presents the first two descriptions of natural infection of domestic cats by EBLV-1, lyssaviruses presently circulating in European bats [10]. It demonstrates that both subtypes EBLV-1a and 1b are able to cross the species barrier, although cat#1 probably died due to leukosis. However, cat#2 died with neurological signs of rabies and was found positive by FAT, the reference technique. Direct transmission of EBLV-1 from bats to cats seems the most realistic explanation for these cases, as cats prey on bats and therefore have numerous contact with them [11, 12].

Difficulties of EBLV-1 detection in brain of these two spill-over cases are reminiscent of those previously

reported [5, 6], potentially due to a low amount of virus antigen in the brain. This further underlines the importance of using different techniques of rabies diagnosis [8]. This raised the problem of the real incidence of these viruses in cats. Data from Institut Pasteur from 1997 to 2007 suggest that transmission of EBLV from bats to cats, although possible, remains exceptional. Furthermore, terrestrial mammals seem to represent dead-end host for EBLVs, as it was suggested with experimental EBLV inoculations of several mammals as cat, dog, ferret, mouse, red fox or sheep [5, 6, 13]. All these animals are susceptible to EBLV infection, but seem unlikely to actively transmit EBLVs to a new host.

Three confirmed and two other suspected human cases of EBLV infection have been recorded in Europe so far, for which none of them received post-exposure prophylaxis (PEP). Cross-neutralization data obtained with human sera and in rodents models suggest that pre-exposure and post-exposure treatments for rabies are effective against EBLV-1 [14]. All exposed persons received appropriate PEPs according to WHO and national recommendations [7, 15]. Veterinary control measures included booster vaccination, census and identification of pets, leashing of dogs and enhanced surveillance. Throughout mainland France, the standard recommendations concerning the veterinary surveillance of biting animals were being stressed. No secondary case to cat#1 and #2 were reported. However, improving surveillance and awareness to better understand epidemiology of these lyssaviruses appears still necessary in this context.

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1. Bourhy, H., et al., Rabies in Europe in 2005. *Euro Surveill*, 2005. 10(11): p. 213-6.
2. Serra-Cobo, J., et al., European bat lyssavirus infection in Spanish bat populations. *Emerg Infect Dis*, 2002. 8(4): p. 413-20.
3. Fooks, A.R., et al., European bat lyssaviruses: an emerging zoonosis. *Epidemiol Infect*, 2003. 131(3): p. 1029-39.
4. Amengual, B., et al., Temporal dynamics of European bat Lyssavirus type 1 and survival of *Myotis myotis* bats in natural colonies. *PLoS ONE*, 2007. 2(6): p. e566.
5. Tjornehoj, K., et al., Natural and experimental infection of sheep with European bat lyssavirus type-1 of Danish bat origin. *J Comp Pathol*, 2006. 134(2-3): p. 190-201.
6. Muller, T., et al., Spill-over of European bat lyssavirus type 1 into a stone marten (*Martes foina*) in Germany. *J Vet Med B Infect Dis Vet Public Health*, 2004. 51(2): p. 49-54.
7. WHO, WHO Expert Consultation on Rabies. Technical Report Series 931- First Report 2005. 2005.

8. Xu, G., et al., A simple sandwich ELISA (WELYSSA) for the detection of lyssavirus nucleocapsid in rabies suspected specimens using mouse monoclonal antibodies. *Biologicals*, 2007. 35(4): p. 297-302.

9. Delmas O., et al., Genomic diversity and evolution of the lyssaviruses. *PLoS ONE*. 2008;3:e2057.

10. Davis, P.L., et al., Phylogeography, population dynamics, and molecular evolution of European bat lyssaviruses. *J Virol*, 2005. 79(16): p. 10487-97.

11. Takumi, K., et al., Public health risk analysis of European bat lyssavirus infection in The Netherlands. *Epidemiol Infect*, 2008: p. 1-7.

12. Tjornehoj, K., et al., Antibodies to EBLV-1 in a domestic cat in Denmark. *Vet Rec*, 2004. 155(18): p. 571-2.

13. Brookes, S.M., et al., Susceptibility of sheep to European bat lyssavirus type-1 and -2 infection: a clinical pathogenesis study. *Vet Microbiol*, 2007. 125(3-4): p. 210-23.

14. Brookes, S.M., et al., Rabies human diploid cell vaccine elicits cross-neutralising and cross-protecting immune responses against European and Australian bat lyssaviruses. *Vaccine*, 2005. 23(32): p. 4101-9.

15. CSHPF, Recommandations pour limiter l'exposition du public aux virus de la rage des chauves-souris. *Bulletin Epidémiologique Hebdomadaire*, 2001(39): p. 193.

## 4 DISTRIBUTION OF RABIES IN EUROPE

### 4.1 Country summaries of rabies cases, 4th quarter 2008

01.10.08-31.12.08

Country		Domestic animals									Wildlife											bat	Human cases	total			
		dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer				fallow deer	other	subtotal
Name	Code																										
Albania	ALB *								0														0			0	
Austria	AUT *								0														0			0	
Belarus	BLR	14	28	24	8				74	145	23		1										173			247	
Belgium	BEL *								0								4						0			0	
Bosnia - Hercegovina	BIH	1		3					4	7													7			11	
Bulgaria	BGR	2	1						3	12							3						15			18	
Croatia	HRV	6	5	2	1	1			15	218	2								1			1	224			239	
Cyprus	CYP *								0														0			0	
Czech Republic	CZH *								0														0			0	
Denmark	DNK *								0														0			0	
Estonia	EST *								0														0			0	
Finland	FIN *								0														0			0	
France	FRA	1							1														0	1		2	
Germany	DEU	1							1														0	2		3	
Greece	GRC *								0														0			0	
Hungary	HUN	1							1	2													2			3	
Iceland	ISL *								0														0			0	
Ireland	IRE *								0														0			0	
Italy	ITA								0	8				1									9			9	
Latvia	LVA	2							2	9	10			1	1								21			23	
Lithuania	LTU		1	3					4	4	2				1								7			11	
Luxembourg	LUX *								0														0			0	
Macedonia	MKD *								0														0			0	
Malta	MLT *								0														0			0	
Moldova	MDA	3	2	4					9	3													3			12	
Montenegro	MNE			1					1	7													7			8	
Norway	NOR *								0														0			0	
Poland	POL		1						1	6													6			7	
Portugal	PRT *								0														0			0	
Romania	ROU	50	8	17	5	1	1		82	153			1	1	1		1				1	158			240		
Russian Federation	RUS	167	118	83	2	10		4	384	281	76			1	5	4	1					5	373	6	763		
Serbia	SRB		12			2			14	50							2						52			66	
Slovak Republic	SVK *								0														0			0	
Slovenia	SVN				1				1	12													12			13	
Spain	ESP *								0														0			0	
Sweden	SWE *								0														0			0	
Switzerland + Lichtenstein	CHE *								0														0			0	
The Netherlands	NED *								0														0			0	
Turkey	TUR	26	1	26	6	1			60	5													5			65	
Ukraine	UKR	89	158	27	2	6			282	189	7	7	4	2	2				1	1			2	215		497	
United Kingdom	UNK								0														0	1		1	
<b>TOTAL</b>		<b>363</b>	<b>335</b>	<b>190</b>	<b>25</b>	<b>21</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>939</b>	<b>1111</b>	<b>120</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>10</b>	<b>13</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>1289</b>	<b>4</b>	<b>6</b>	<b>2238</b>
<b>PER CENT</b>		<b>16.2%</b>	<b>15.0%</b>	<b>8.5%</b>	<b>1.1%</b>	<b>0.9%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>42.0%</b>	<b>49.6%</b>	<b>5.4%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>57.6%</b>	<b>0.2%</b>	<b>0.3%</b>	<b>100%</b>

\* NO CASES

\*\* NO DATA



## 4 DISTRIBUTION OF RABIES IN EUROPE

### 4.2 Country summaries of rabies cases, 2008 total

01.01.08-31.12.08

Country		Domestic animals									Wildlife													bat	Human cases	total	
		dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelids	other carnivores	wild boar	roe deer	red deer	fallow deer	other				subtotal
Name	Code																										
Albania	ALB *								0														0			0	
Austria	AUT *								0														0			0	
Belarus	BLR	79	75	61	14				229	627	76		9	3		14						6	735			964	
Belgium	BEL *								0														0			0	
Bosnia - Hercegovina	BIH	7		5					12	68			2									1	71			83	
Bulgaria	BGR	5	4	1					10	34						3	1					3	41			51	
Croatia	HRV	29	30	8	2	9	1		79	970	2			1		6			1			2	982			1061	
Cyprus	CYP *								0														0			0	
Czech Republic	CZH *								0														0			0	
Denmark	DNK *								0														0			0	
Estonia	EST	1				1			2	1													1			3	
Finland	FIN *								0														0			0	
France	FRA	3							3														0	5		8	
Germany	DEU	1							1														0	10		11	
Greece	GRC *								0														0			0	
Hungary	HUN	1							1	6													6			7	
Iceland	ISL *								0														0			0	
Ireland	IRE *								0														0			0	
Italy	ITA								0	8				1									9			9	
Latvia	LVA	8	10	2					20	43	42		1	1	1	1						1	90			110	
Lithuania	LTU	5	6	11					22	13	21				9	3			1				47			69	
Luxembourg	LUX *								0														0			0	
Macedonia	MKD *								0														0			0	
Malta	MLT *								0														0			0	
Moldova	MDA	14	9	10		1			34	12													12			46	
Montenegro	MNE	1	1	2		1			5	35				2	1								38			43	
Norway	NOR *								0														0			0	
Poland	POL	1	1	3					5	19	2												21	3		29	
Portugal	PRT *								0														0			0	
Romania	ROU	79	47	33	15	8	1		183	883			5	3	2	3	7		1	1		1	906			1089	
Russian Federation	RUS	758	501	350	13	52	1	38	1713	1372	195		4	9	14	10	6	1	1			16	1628	12		3353	
Serbia	SRB	7	23			3			33	192				2			7						201			234	
Slovak Republic	SVK *								0														0			0	
Slovenia	SVN	1			1				2	51				2									53			55	
Spain	ESP	2							2														0	1		3	
Sweden	SWE *								0														0			0	
Switzerland + Lichtenstein	CHE *								0														0			0	
The Netherlands	NED								0														0	11		11	
Turkey	TUR	146	8	85	12	6			257	39			1		3		1						44			301	
Ukraine	UKR	545	628	132	15	19			1339	733	21	14	13	9	18	1		1	4				8	1	2	2164	
United Kingdom	UNK	1							1														0	2			3
<b>TOTAL</b>		<b>1694</b>	<b>1343</b>	<b>703</b>	<b>72</b>	<b>100</b>	<b>3</b>	<b>38</b>	<b>0</b>	<b>3953</b>	<b>5106</b>	<b>359</b>	<b>14</b>	<b>35</b>	<b>33</b>	<b>48</b>	<b>41</b>	<b>22</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>38</b>	<b>5707</b>	<b>33</b>	<b>14</b>	<b>9707</b>
<b>PER CENT</b>		<b>17.5%</b>	<b>13.8%</b>	<b>7.2%</b>	<b>0.7%</b>	<b>1.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>40.7%</b>	<b>52.6%</b>	<b>3.7%</b>	<b>0.1%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>58.8%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>100%</b>

\* NO CASES

\*\* NO DATA

## 4.3 Rabies cases per country and administrative units, 4th quarter 2008

01.10.08-31.12.08

Location	Domestic animals										Wildlife										bat	Human cases	total			
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer				fallow deer	other	subtotal
<b>BELARUS</b>																										
Brest		1	1						2	8													8			10
Gomel	1	10	8	2					21	33	6		1										41			62
Grodno	4	8	4	1					17	34	4					2							40			57
Minsk	5	3	3	1					12	27	6												33			45
Mogelev		1	5						6	19	2												21			27
Vitebsk	4	5	3	4					16	24	5				1								30			46
<b>TOTAL</b>	<b>14</b>	<b>28</b>	<b>24</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>145</b>	<b>23</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>173</b>	<b>0</b>	<b>0</b>	<b>247</b>
<b>PER CENT</b>	<b>5.7%</b>	<b>11.3%</b>	<b>9.7%</b>	<b>3.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>30.0%</b>	<b>58.7%</b>	<b>9.3%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>70.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>BOSNIA - HERCEGOVINA</b>																										
Bosansko-podrinjski									0	1													1			1
Sokolac			2						2	1													1			3
Srednjobosanski									0	1													1			1
Tuzlanski									0	2													2			2
Unsko-sanski	1								1														0			1
Zapadnobosanski									0	2													2			2
Zenicko-dobojski			1						1														0			1
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>11</b>
<b>PER CENT</b>	<b>9.1%</b>	<b>0.0%</b>	<b>27.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>36.4%</b>	<b>63.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>63.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>LITHUANIA</b>																										
Kauno		1							1	1	1				1								3			4
Marijampoles			1						1		1												1			2
Telsiu			2						2	1													1			3
Utenos									0	1													1			1
Vilniaus									0	1													1			1
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>11</b>
<b>PER CENT</b>	<b>0.0%</b>	<b>9.1%</b>	<b>27.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>36.4%</b>	<b>36.4%</b>	<b>18.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>9.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>63.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>POLAND</b>																										
Lubelskie		1							1	5													5			6
Pomorskie									0	1													1			1
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>7</b>
<b>PER CENT</b>	<b>0.0%</b>	<b>14.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>14.3%</b>	<b>85.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>85.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>GERMANY</b>																										
Berlin-West,Stadt									0														0	1		1
Lorrach	1								1														0			1
Saarpfalz-Kreis									0														0	1		1
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>3</b>
<b>PER CENT</b>	<b>33.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>33.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>66.7%</b>	<b>0.0%</b>	<b>100%</b>

## 4.3 Rabies cases per country and administrative units, 4th quarter 2008

01.10.08-31.12.08

Location	Domestic animals										Wildlife											bat	Human cases	total			
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer				other	subtotal	
<b>CROATIA</b>																											
Bjelovarsko - Bilogorska								0	8														8				8
Brodsko - Posavska								0	1														1				1
Istarska								0	2														2				2
Karlovacka								0	13														13				13
Koprivniško - Krizevaska	1							1	9														9				10
Krapinsko - Zagorska		1						1	15														15				16
Licko - Senjska								0	8						1								9				9
Osjesko - Baranjska			1					1	6														6				7
Pozesko - Slovanska								0	3														3				3
Primorsko - Goranska	1							1	45	1					1								47				48
Sibensko - Kninska								0	7												1		8				8
Sisacko - Moslavacka	1	1		1				3	9														9				12
Špišsko - Dalmatinska								0	2														2				2
Varaždinska					1			1	30										1				31				32
Virotičko - Podravska	1		1					2	2														2				4
Vukovarsko - Srijemska	1	1						2	1														1				3
Zadarska	1							1	3														3				4
Zagreb								0	17	1													18				18
Zagrebacka		2						2	37														37				39
<b>TOTAL</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>218</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>224</b>	<b>0</b>	<b>0</b>	<b>239</b>	
<b>PER CENT</b>	<b>2.5%</b>	<b>2.1%</b>	<b>0.8%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>6.3%</b>	<b>91.2%</b>	<b>0.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>93.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>	
<b>HUNGARY</b>																											
Békés	1							1	1														1				2
Borsod-Abaúj-Zemplén								0	1														1				1
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	
<b>PER CENT</b>	<b>33.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>33.3%</b>	<b>66.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>66.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>	
<b>ITALY</b>																											
Udine								0	8				1										9				9
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>9</b>	
<b>PER CENT</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>88.9%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>11.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>	
<b>MOLDOVA</b>																											
Moldova	3	2	4					9	3														3				12
<b>TOTAL</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	
<b>PER CENT</b>	<b>25.0%</b>	<b>16.7%</b>	<b>33.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>75.0%</b>	<b>25.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>25.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>	
<b>MONTENEGRO</b>																											
Montenegro			1					1	7														7				8
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	
<b>PER CENT</b>	<b>0.0%</b>	<b>0.0%</b>	<b>12.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>12.5%</b>	<b>87.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>87.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>	

## 4.3 Rabies cases per country and administrative units, 4th quarter 2008

01.10.08-31.12.08

Location	Domestic animals									Wildlife											bat	Human cases	total			
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer				fallow deer	other	subtotal
<b>LATVIA</b>																										
Aizkraukles r.								0		2													2			2
Cesu r.								0	2														2			2
Dobeles r.								0		2													2			2
Kuldigas r.								0		1													1			1
Liepajas r.								0	3	2													5			5
Preiļu r.	1							1	1														1			2
Saldus r.	1							1															0			1
Talsu r.								0						1	1								2			2
Tukuma r.								0	1	2													3			3
Valmieras r.								0	1														1			1
Ventpils r.								0	1	1													2			2
<b>TOTAL</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>23</b>
<b>PER CENT</b>	<b>8,7%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>8,7%</b>	<b>39,1%</b>	<b>43,5%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>4,3%</b>	<b>4,3%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>91,3%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>100%</b>	
<b>UKRAINE</b>																										
Avtonomnaya Respublika Krym	1	1						2	3														3			5
Bolynskaja o.	4	1						5	4														4			9
Cherkasskaja o.	8	13	2		1			24	7	2													9			33
Chernigovskaja o.	2	8	3					13	7	1		1											9			22
Dnepropetrovskaja o.	9	10	6		2			27	20														20			47
Donetskaja o.	3	9	1					13	30		1												31			44
Ivano-Frankovskaja o.	1		1					2							1								1			3
Khar'kovskaja o.	14	35	2	1	1			53	29														29			82
Khersonskaja o.	6	5	3		1			15	4		4	1											9			24
Khmel'nitskaja o.	4	4						8	13														13			21
Kirovogradskaja o.	1	1	1					3	1														1			4
Kijevskaja o.	3	9	1					13	4				1								1		6			19
Luĝanskaja o.	13	8	1	1	1			24	10	2		1		1				1					15			39
L'vovskaja o.		2						2	3														3			5
Nikolajevskaja o.		3						3															0			3
Odesskaja o.	2	5	1					8	3	1													4			12
Poltavskaja o.	1	8						9	1	1													2			11
Rovenskaja o.	1	1						2	7														7			9
Sumskaja o.	5	15	1					21	3														3			24
Ternopol'skaja o.								0	1												1		2			2
Vinnitskaja o.	3	7	2					12	11														11			23
Zakarpatskaja o.	1							1					1										1			2
Zaporozhskaja o.	5	6						11	13			1											14			25
Zhitomirskaja o.	2	7	2					11	15		2						1		1				18			29
<b>TOTAL</b>	<b>89</b>	<b>158</b>	<b>27</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>282</b>	<b>189</b>	<b>7</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>215</b>	<b>0</b>	<b>0</b>	<b>497</b>	
<b>PER CENT</b>	<b>17,9%</b>	<b>31,8%</b>	<b>5,4%</b>	<b>0,4%</b>	<b>1,2%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>56,7%</b>	<b>38,0%</b>	<b>1,4%</b>	<b>1,4%</b>	<b>0,8%</b>	<b>0,4%</b>	<b>0,4%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,2%</b>	<b>0,2%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,4%</b>	<b>43,3%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>100%</b>	

## 4.3 Rabies cases per country and administrative units, 4th quarter 2008

01.10.08-31.12.08

Location	Domestic animals									Wildlife											bat	Human cases	total			
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer				fallow deer	other	subtotal
<b>ROMANIA</b>																										
Alba								0	6														6			6
Arad		1	3					4	8														8			12
Arges				1				1	3														3			4
Bacau	1		3			1		5	13			1								1			15			20
Bistrita-Nasaud			1					1	13														13			14
Braila	1	1						2															0			2
Brasov			2	1				3	4														4			7
Buzau			1		1			2	1														1			3
Calarasi		1						1	1														1			2
Caras-Severin								0	2														2			2
Cluj		1						1	5				1										6			7
Covasna			2					2	5														5			7
Dambovita	4	1						5	14														14			19
Dolj			1					1															0			1
Gorj								0	7														7			7
Harghita	1							1	4														4			5
Hunedoara		1						1	2														2			3
Iasi	42		4					46	2														2			48
Mehedinti								0	1														1			1
Mures	1	1						2	14														14			16
Olt				1				1	8														8			9
Prahova								0	5					1									6			6
Salaj								0	5														5			5
Satu Mare								0	3														3			3
Sibiu								0	8														8			8
Suceava		1						1	3														3			4
Tulcea								0	1								1						2			2
Valcea				2				2	11														11			13
Vaslui								0	3														3			3
Vrancea								0	1														1			1
<b>TOTAL</b>	<b>50</b>	<b>8</b>	<b>17</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>153</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>158</b>	<b>0</b>	<b>0</b>	<b>240</b>
<b>PER CENT</b>	<b>20.8%</b>	<b>3.3%</b>	<b>7.1%</b>	<b>2.1%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>34.2%</b>	<b>63.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>65.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>SLOVENIA</b>																										
Dolenjska								0	2														2			2
Goriska								0	1														1			1
Notranjsko-kraska								0	3														3			3
Podravska				1				1	6														6			7
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>13</b>
<b>PER CENT</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>7.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>7.7%</b>	<b>92.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>92.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>SERBIA</b>																										
Central Serbia		6			2			8	41														42			50
Vojvodina		6						6	9														10			16
<b>TOTAL</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>66</b>
<b>PER CENT</b>	<b>0.0%</b>	<b>18.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>3.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>21.2%</b>	<b>75.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>78.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>

## 4.3 Rabies cases per country and administrative units, 4th quarter 2008

01.10.08-31.12.08

Location	Domestic animals										Wildlife											bat	Human cases	total				
	dog	cat	cattle	equine	goat	sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer				fallow deer	other	subtotal	
<b>TURKEY</b>																												
Osmaniye	2									2															0			2
Adana	6									6															0			6
Afyon	1		4							5	1														1			6
Aydin			1							1															0			1
Bingöl				2						2															0			2
Burdur			3							3															0			3
Denizli			1							1															0			1
Elazig	1									1															0			1
Erzincan	1		3	1	1					6															0			6
Erzurum	5		5							10															0			10
Gaziantep	4			2						6	1														1			7
Gumushane	1		3							4															0			4
Hatay	1									1															0			1
Isparta	2									2															0			2
Izmir			1							1															0			1
Kayseri	1									1															0			1
Kütahya										0	1														1			1
Malatya		1	1							2															0			2
Manisa	1									1															0			1
Mardin				1						1															0			1
Mugla			1							1															0			1
Sanlıurfa			3							3	1														1			4
Zonguldak										0	1														1			1
<b>TOTAL</b>	<b>26</b>	<b>1</b>	<b>26</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>65</b>
<b>PER CENT</b>	<b>40.0%</b>	<b>1.5%</b>	<b>40.0%</b>	<b>9.2%</b>	<b>1.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>92.3%</b>	<b>7.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>7.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>
<b>UNITED KINGDOM</b>																												
Shropshire CC										0															0	1		1
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>PER CENT</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>100%</b>	
<b>BULGARIA</b>																												
Lovech										0	1														1			1
Montana										0	3														3			3
Pernik										0	1														1			1
Pleven										0	1														1			1
Shumen	2	1								3	1					2									3			6
Sofia										0	1														1			1
Vidin										0	3														4			4
Vratsa										0	1														1			1
<b>TOTAL</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>18</b>
<b>PER CENT</b>	<b>11.1%</b>	<b>5.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>16.7%</b>	<b>66.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>16.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>83.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100%</b>

## 4.3 Rabies cases per country and administrative units, 4th quarter 2008

01.10.08-31.12.08

Location	Domestic animals									Wildlife											bat	Human cases	total			
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	raccoon dog	raccoon	wolf	badger	marten	other mustelids	other carnivores	wild boar	roe deer	red deer				fallow deer	other	subtotal
<b>RUSSIAN FEDERATION</b>																										
Astrahanskaja obl.	7	2	1		1				11		5												6		17	
Belgorodskaja obl.	20	15	2						37	11													11	1	49	
Brijanskaja obl.		2	4						6	8													8		14	
Cuvasskaja resp.		1	1	1					3	6													6		9	
Dagestan resp.	1	1	4						6	1													1	3	10	
Ivanovskaja obl.	1								1	3													3		4	
Jaroslavl'skaja obl.	3								3	6	2												8		11	
Kaliningradskaja obl.	1	1							2	9													9		11	
Kalmykija resp.	1	1	1		1				4														0		4	
Kaluz'skaja obl.	5	4	2						11	9	6												15		26	
Karacaevo-Cerkesskaja resp.			1						1														0		1	
Krasnodarskij kr.	18	1							19	2	2												4		23	
Kurskaja obl.	3	7	1		1				12	3													3		15	
Lipeckaja obl.		3	8		1				12	3													3		15	
Mordovija resp.			1						1	7													7		8	
Moskovskaja obl.	6	1	1		1		1		10	25	22												47	1	58	
Nizgorodskaja obl.	2	2			1				5	2													2		7	
Orlovskaja obl.		2	3						5	9				1									10		15	
Penzenskaja obl.	8	1	4						13	22												1	23		36	
Pskovskaja obl.									0	4	1				2	2							9		9	
Rjazanskaja obl.	4	3	1						8	6													6		14	
Rostovskaja obl.	2	3	1						6	4													4		10	
Saratovskaja obl.	13	20	16				2		51	61	1			1		1					3		68		119	
Severnaja Osetija-Alanija resp.	8	1	4						13	1													1	1	15	
Smolenskaja obl.	3	4	1						8	8	5												13		21	
Stavropol'skij kr.	7	5	5		2				19	3													3		22	
Tambovskaja obl.	3	3	2						8	2													2		10	
Tul'skaja obl.	6	7							13	5													5		18	
Tverskaja obl.	8	1	5						14	19	29												48		62	
Ul'janovskaja obl.	7				1				8	11													11		19	
Vladimirska obl.	7	5					1		13	12	3												15		28	
Volgogradskaja obl.	17	12	11	1					41	11												1	12		53	
Vologdskaja obl.	2								2														0		2	
Voronez'skaja obl.	4	10	3		1				18	8				2									10		28	
<b>TOTAL</b>	<b>167</b>	<b>118</b>	<b>83</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>384</b>	<b>281</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>373</b>	<b>0</b>	<b>6</b>	<b>763</b>
<b>PER CENT</b>	<b>21.9%</b>	<b>15.5%</b>	<b>10.9%</b>	<b>0.3%</b>	<b>1.3%</b>	<b>0.0%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>50.3%</b>	<b>36.8%</b>	<b>10.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.7%</b>	<b>0.5%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.7%</b>	<b>48.9%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>100%</b>
<b>FRANCE</b>																										
Aquitaine									0														0	1	1	
Rhône-Alpes	1								1														0		1	
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	
<b>PER CENT</b>	<b>50.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>50.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>50.0%</b>	<b>0.0%</b>	<b>100%</b>	

#### 4.4 Summary of animals tested for rabies in Europe (total 2008)

ANIMAL TESTED

01.01.08-31.12.08

Name	Code	Total	Bats	Wildlife	Domestic animals	Remarks
ALBANIA	ALB	53	13	26	14	
AUSTRIA	AUT*	9478	68	9258	152	
BELARUS	BLR	0				no data
BELGIUM	BEL*	713	25	321	367	
BOSNIA - HERCEGOVINA	BIH	52	0	19	33	
BULGARIA	BGR	187	0	73	114	
CROATIA	HRV	5335	0	4217	1118	
CYPRUS	CYP*					no data
CZECH REPUBLIC	CZH*	5844	10	5473	361	
DENMARK	DNK	22	15	2	5	
ESTONIA	EST	305	1	169	135	
FINLAND	FIN*	838	0	788	50	
FRANCE	FRA*	2416	224	273	1919	
GERMANY	DEU*	14769	64	14140	565	
GREECE	GRC*	0		0	0	no data
HUNGARY	HUN	9645	4	8838	803	
ICELAND	ISL*	0				no data
IRELAND	IRE*	0				no data
ITALY	ITA	2546	2	2148	396	
LATVIA	LVA	870	0	583	287	
LITHUANIA	LTU	1607	4	1203	400	
LUXEMBOURG	LUX*	39	0	28	11	
MACEDONIA	MKD					no data
MALTA	MLT*					no data
MOLDOVA	MDA	60	0	15	45	
MONTENEGRO	MNE	26	0	26	0	
NETHERLANDS	NED*	130	113	8	9	
NORWAY	NOR*					no data
POLAND	POL	23820	73	21995	1752	
PORTUGAL	PRT*					no data
ROMANIA	ROU					no data
RUSSIAN FEDERATION	RUS					no data
SERBIA	SRB	511	0	208	303	
SLOVAK REPUBLIC	SVK	4008	3	3496	509	
SLOVENIA	SVN	2838	219	2417	202	
SPAIN	ESP*					no data
SWEDEN	SWE*					no data
SWITZERLAND + LIEC.	CHE*	103	18	50	35	
TURKEY	TUR	268	0	36	232	
UKRAINE	UKR	8283	0	8283	0	
UNITED KINGDOM	UNK*	1360	1308	15	37	
<b>TOTAL</b>		<b>96126</b>	<b>2164</b>	<b>84108</b>	<b>9854</b>	

Wildlife: excluding bats

\* rabies free



## 4.5 Trend tables

### 4.5.1 Comparison of the reporting quarter (IV/2008) with the previous quarter (III/2008)

NAME	Total			Wildlife			Domestic animals			Bats			Human		
	IV 2008 (no.)	III 2008 (no.)	Difference	IV 2008 (no.)	III 2008 (no.)	Difference	IV 2008 (no.)	III 2008 (no.)	Difference	IV 2008 (no.)	III 2008 (no.)	Difference	IV 2008 (no.)	III 2008 (no.)	Difference
Albania															
Austria															
Belarus	247	235	12	173	189	-16	74	46	28						
Belgium															
Bosnia - Hercegovina	11	13	-2	7	9	-2	4	4							
Bulgaria	18	11	7	15	10	5	3	1	2						
Croatia	239	217	22	224	197	27	15	20	-5						
Cyprus															
Czech Republic															
Denmark															
Estonia															
Finland															
France	2	3	-1				1		1	1	3	-2			
Germany	3	8	-5				1		1	2	8	-6			
Greece															
Hungary	3	2	1	2	2		1		1						
Iceland															
Ireland															
Italy	9		9	9		9									
Latvia	23	20	3	21	20	1	2		2						
Lithuania	11	28	-17	7	20	-13	4	8	-4						
Luxembourg															
Macedonia															
Malta															
Moldova	12	12		3	2	1	9	10	-1						
Montenegro	8	11	-3	7	10	-3	1	1							
Norway															
Poland	7	5	2	6	1	5	1	1		3	-3				
Portugal															
Romania	240	143	97	158	110	48	82	33	49						
Russian Federation	763	592	171	373	329	44	384	260	124				6	3	3
Serbia	66	46	20	52	38	14	14	8	6						
Slovak Republic															
Slovenia	13	7	6	12	7	5	1		1						
Spain		1	-1					1	-1						
Sweden															
Switzerland + Lichtenstein															
The Netherlands		11	-11							11	-11				
Turkey	65	79	-14	5	6	-1	60	73	-13						
Ukraine	497	391	106	215	127	88	282	264	18						
United Kingdom	1		1							1		1			
<b>TOTAL</b>	<b>2238</b>	<b>1835</b>	<b>403</b>	<b>1289</b>	<b>1077</b>	<b>212</b>	<b>939</b>	<b>730</b>	<b>209</b>	<b>4</b>	<b>25</b>	<b>-21</b>	<b>6</b>	<b>3</b>	<b>3</b>

Wildlife: excluding bats

IV/2008 (no.), III/2008 (no.): number of cases

Difference: no. of cases in IV/2008 minus cases in III/2008

\* no data

#### 4.5.2 Comparison of the reporting quarter (IV/2008) with the same quarter of the previous year (IV/2007)

NAME	Total			Wildlife			Domestic animals			Bats			Human		
	IV 2008 (no.)	IV 2007 (no.)	Difference	IV 2008 (no.)	IV 2007 (no.)	Difference	IV 2008 (no.)	IV 2007 (no.)	Difference	IV 2008 (no.)	IV 2007 (no.)	Difference	IV 2008 (no.)	IV 2007 (no.)	Difference
Albania															
Austria															
Belarus	247	240	7	173	179	-6	74	61	13						
Belgium		1	-1					1	-1						
Bosnia - Hercegovina	11	30	-19	7	27	-20	4	3	1						
Bulgaria	18	3	15	15	1	14	3	2	1						
Croatia	239	240	-1	224	229	-5	15	11	4						
Cyprus															
Czech Republic															
Denmark															
Estonia															
Finland															
France	2	3	-1				1	1		1	2	-1			
Germany	3	1	2				1		1	2	1	1			
Greece															
Hungary	3	1	2	2		2	1	1							
Iceland															
Ireland															
Italy	9		9	9		9									
Latvia	23	44	-21	21	39	-18	2	5	-3						
Lithuania	11	53	-42	7	41	-34	4	12	-8						
Luxembourg															
Macedonia															
Malta															
Moldova	12	28	-16	3	12	-9	9	16	-7						
Montenegro	8	6	2	7	5	2	1	1							
Norway															
Poland	7	22	-15	6	16	-10	1	6	-5						
Portugal															
Romania	240	200	40	158	155	3	82	45	37						
Russian Federation	763	1871	-1108	373	797	-424	384	1069	-685				6	5	1
Serbia	66	39	27	52	36	16	14	3	11						
Slovak Republic															
Slovenia	13	2	11	12	2	10	1		1						
Spain		1	-1								1	-1			
Sweden															
Switzerland + Lichtenstein															
The Netherlands		1	-1								1	-1			
Turkey	65	84	-19	5	5		60	79	-19						
Ukraine	497	1461	-964	215	645	-430	282	816	-534						
United Kingdom	1		1							1		1			
<b>TOTAL</b>	<b>2238</b>	<b>4331</b>	<b>-2093</b>	<b>1289</b>	<b>2189</b>	<b>-900</b>	<b>939</b>	<b>2132</b>	<b>-1193</b>	<b>4</b>	<b>5</b>	<b>-1</b>	<b>6</b>	<b>5</b>	<b>1</b>

Wildlife: excluding bats

IV/2008 (no.), IV/2007 (no.): number of cases

Difference: no. of cases in IV/2008 minus cases in IV/2007

\* no data

#### 4.5.3 Comparison of the reporting year (2008) with the previous year (2007)

NAME	Total				Wildlife				Domestic animals				EBLV			Human		
	No. 2008	No. 2007	Difference	in %	No. 2008	No. 2007	Difference	in %	No. 2008	No. 2007	Difference	in %	No. 2008	No. 2007	Difference	No. 2008	No. 2007	Difference
ALBANIA																		
AUSTRIA																		
BELARUS	964	823	141	117,1	735	603	132	121,9	229	220	9	104,1						
BELGIUM	0	1	-1							1	-1							
BOSNIA A HERCEGOV	83	62	21	133,9	71	51	20	139,2	12	11	1	109,1						
BULGARIA	51	40	11	127,5	41	27	14	151,9	10	13	-3	76,9						
CROATIA	1061	635	426	167,1	982	596	386	164,8	79	39	40	202,6						
CYPRUS																		
CZECH REPUBLIC																		
DENMARK	0	2	-2	0,0										2	-2			
ESTONIA	3	4	-1	75,0	1	2	-1	50,0	2	2	0	100,0						
FINLAND																		
FRANCE	8	4	4	200,0					3	1			5	3	2			
GERMANY	11	6	5	183,3					1				10	6	4			
GREECE																		
HUNGARY	7	4	3	175,0	6	3	3	200,0	1	1	0	100,0						
ICELAND																		
IRELAND																		
ITALY	9	0	9		9		9											
LATVIA	110	203	-93	54,2	90	145	-55	62,1	20	58	-38	34,5						
LITHUANIA	69	432	-363	16,0	47	313	-266	15,0	22	119	-97	18,5						
LUXEMBOURG																		
MACEDONIA																		
MALTA																		
MOLDOVA	46	79	-33		12	31	-19		34	48								
MONTENEGRO	43	17	26	252,9	38	14	24		5	3								
NORWAY																		
POLAND	29	70	-41	41,4	21	52	-31	40,4	5	15	-10	33,3	3	3				
PORTUGAL																		
ROMANIA	1089	378	711	288,1	906	269	637	336,8	183	108	75	169,4					1	
RUSSIAN FEDERATION	3353	3471	-118	96,6	1628	1610	18	101,1	1713	1854	-141	92,4	0	1	-1	12	6	6
SERBIA	234	160	74	146,3	201	143	58		33	17								
SLOVAK REPUBLIC																		
SLOVENIA	55	3	52	1833,3	53	3	50	1766,7	2									
SPAIN	3	2	1	150,0					2	0	2		1	2	-1			
SWEDEN																		
SWITZERLAND/LIECHTEN.																		
THE NETHERLANDS	11	7	4	157,1									11	7	4			
TURKEY	301	307	-6	98,0	44	20	24	220,0	257	287	-30	89,5						
UKRAINE	2164	2932	-768	73,8	822	1348	-526	61,0	1339	1581	-242	84,7	1	1	0	2	2	0
UNITED KINGDOM	3	1	2	300,0					1				2	1	1			
TOTAL	9707	9643	64	100,7	5707	5230	477	109,1	3953	4378	-425	90,3	33	26	7	14	9	5

Wildlife: excluding bats

\* no data

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**Oral Immunisation of Foxes  
(OIF) Programmes  
2008**

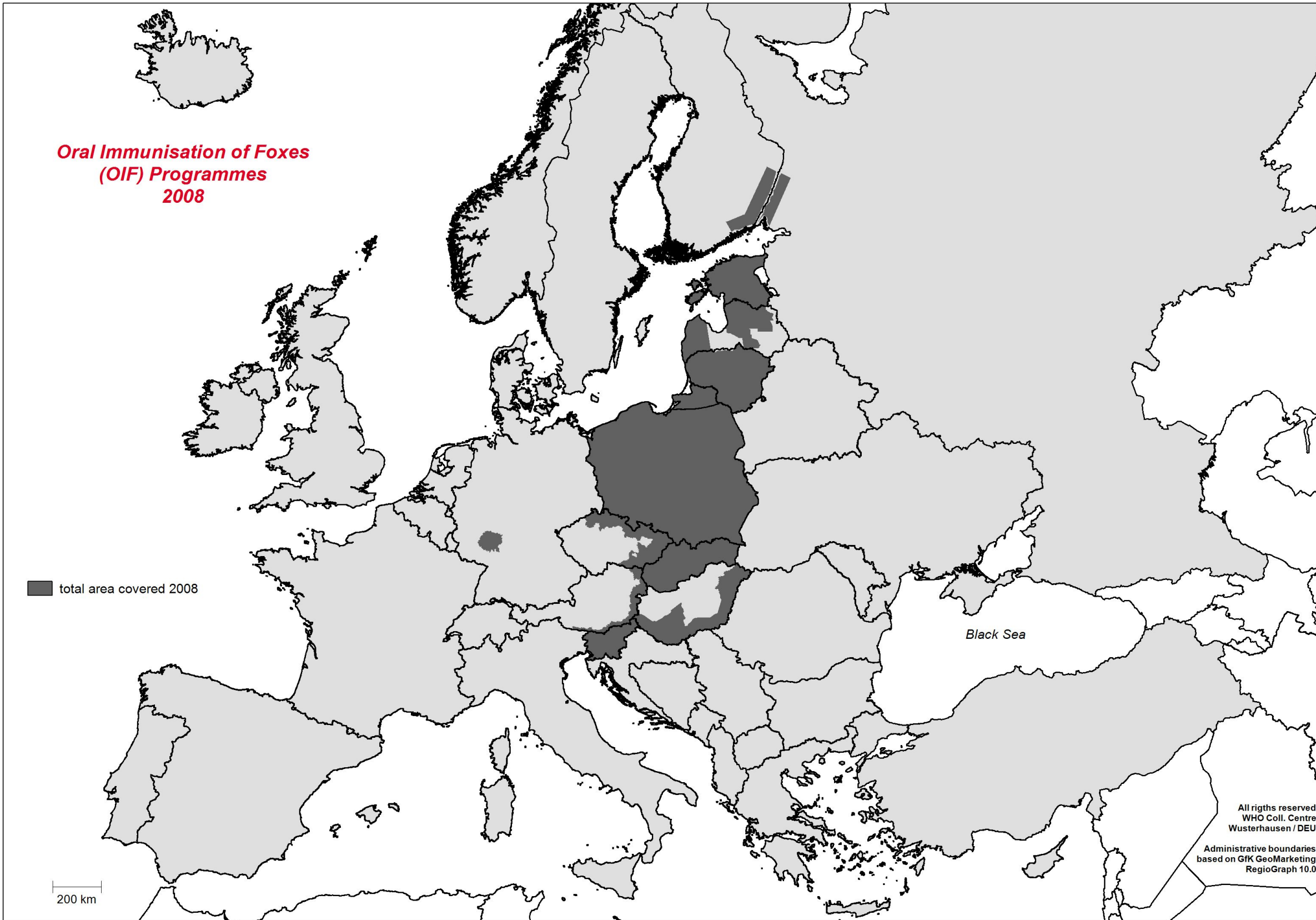
■ total area covered 2008

200 km

Black Sea

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Administrative boundaries  
based on GfK GeoMarketing  
RegioGraph 10.0



**RABIES CASES EUROPE**  
**4th QUARTER 2008**  
**2238 CASES REPORTED**

**4 BAT RABIES CASES INCLUDED**  
**6 HUMAN RABIES CASES INCLUDED**

rabies free (terrestrial rabies)  
no data

200 km

Black Sea

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\* IMPORT

