RABIES BULLETIN EUROPE

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1. Editorial

The international tourism and travel has increased enormously over the last decades. While more and more areas of Europe have been successfully freed from rabies by means of oral immunisation of foxes (OIF), importation of rabid animals may be a threat of (re)introducing the disease.
Providing effective safeguard measures and, at the same time, enabling pet travel as demanded by people is a balancing act for European authorities. The regulations in Europe have been harmonized in the regulation EC 998/2003. For travel with pets from certain countries the protective status through vaccination has to be determined before departure by a neutralizing essay. Both FAVN and RFFIT are prescribed methods to determine the antibody titre of neutralizing antibodies. Only laboratories approved by the European Union can perform tests for pet travel.
In the first miscellaneous article, Dr Cliquet et al. from the reference laboratory on rabies and wildlife diseases in Nancy (AFSSA) reflect the rabies serology proficiency test meeting held in Nancy, France – 11th and 12th May 2006.
Representatives of approved laboratories for rabies serological controls for international trade of pets gathered to discuss about the serological tests, the results of proficiency tests and the EU regulations.
The Rabies Bulletin Europe has served as a source of information on rabies in Europe ever since 1977. In the second miscellaneous article, the new web-based version of the WHO RBE is presented. As database queries are possible the page changed from a static to a dynamic internet information portal providing up-to-date rabies information at an international level. All subscribers of the WHO RABIES BULLETIN EUROPE are invited to make suggestions for improvements and further topics to be included.
In May 27th - 30th 2007 there will be an international conference: "Towards the Elimination of Rabies in Eurasia" held in Paris, France. This Rabies Bulletin Europe covers a preannouncement to this important rabies conference. The conference will be organised by the World Organisation for Animal Health (OIE), the World Health Organisation (WHO), and the European Commission in collaboration with the three WHO Collaborating Centres for Rabies in Europe (Nancy, Wusterhausen, Weybridge).

Thomas Müller, Conrad Freuling

2. SUMMARY OF RABIES CASES IN EUROPE

RABIES CASES 1st QUARTER 2006 01.01.06 -31.03.06

Name	Code	Total	Wildlife	Domestic animals	Bats	Human
ALBANIA	ALB	1	0	1	0	0
AUSTRIA	AUT	0	0	0	0	0
BELARUS	BLR	463	386	77	0	0
BELGIUM	BEL	0	0	0	0	0
BOSNIA - HERCEGOVINA	BIH	23	23	0	0	0
BULGARIA	BGR	4	2	2	0	0
CROATIA	HRV	159	147	12	0	0
CYPRUS	CYP	0	0	0	0	0
CZECH REPUBLIC	CZH	0	0	0	0	0
DENMARK	DNK	0	0	0	0	0
ESTONIA	EST	68	60	8	0	0
FINLAND	FIN	0	0	0	0	0
FRANCE	FRA	0	0	0	0	0
GERMANY	DEU	3	3	0	0	0
GREECE	GRC	0	0	0	0	0
HUNGARY	HUN	1	1	0	0	0
ICELAND	ISL	0	0	0	0	0
IRELAND	IRE	0	0	0	0	0
ITALY	ITA	0	0	0	0	0
LATVIA	LVA	151	131	20	0	0
LITHUANIA	LTU	768	691	77	0	0
LUXEMBOURG	LUX	0	0	0	0	0
MACEDONIA	MKD	0	0	0	0	0
MALTA	MLT	0	0	0	0	0
MOLDOVA *	MDA					
NETHERLANDS	NED	0	0	0	0	0
NORWAY	NOR	0	0	0	0	0
POLAND	POL	24	22	2	0	0
PORTUGAL	PRT	0	0	0	0	0
ROMANIA	ROU	106	84	22	0	0
RUSSIAN FEDERATION	RUS	416	173	241	0	2
SERBIA AND MONTENEGRO*	SCG					
SLOVAK REPUBLIC	SVK	3	3	0	0	0
SLOVENIA*	SVN					
SPAIN	ESP	0	0	0	0	0
SWEDEN	SWE	0	0	0	0	0
SWITZERLAND + LIEC.	CHE	0	0	0	0	0
TURKEY	TUR	33	4	29	0	0
UNITED KINGDOM	UNK	0	0	0	0	0
UKRAINE	UKR	519	265	254	0	0
TOTAL		2742	1995	745	0	2

Wildlife: excluding bats *** no data**

3. Miscellaneous Articles

3.1 RABIES SEROLOGY PROFICIENCY TEST MEETING, NANCY (FRANCE), 11-12 MAY 2006

F. Cliquet, A. Servat, A. Hamen, S. Kempff, A. Labadie, J.L. Schereffer, P. Grosgeorge, F. Boué, M. Wasniewski[1]

I. Introduction

In the frame of the mandate which has been assigned in March 2000 by the European Commission (EC) to the reference laboratory on rabies and wildlife diseases of Nancy (France), a first meeting was organised in January 2001 (at the European Commission Brussels, Belgium), gathering representatives of approved laboratories for rabies serological controls for international trade of cats and dogs.

With the recent enlargement of the European Union on 1st May 2004 (from 15 to 25 member states) and the new rules adopted in 2003 and applied in 2004 by EC regarding movements of pets within EU and from third countries (EC regulation 998/2003), laboratories involved in rabies serology needed various information regarding tests for rabies antibody titrations, regulations and proficiency testing.

Therefore, this meeting was intended:

- To discuss about rabies serological tests used in laboratories and to analyse the different procedures used for these titrations.
- To provide an analysis of performances of approved laboratories during proficiency tests organised from 1999 to 2004.
- To discuss about EC regulation.

Several oral presentations have been given for giving rise to discussions. Recommendations and perspectives have been established at the end of the meeting. This paper is relating the main issues of this two day meeting.

II. Participants

The list of participants is recorded in the acknowledgment section. The meeting gathered a total of 49 participants from 35 laboratories and 26 countries.

III. Rabies serology and proficiency testing

Vaccination of domestic carnivores against rabies, compulsory only in some EU members, is one of the prophylactic measures associated with control of disease in wild animals, aiming to protect human health. On the basis of accumulated data obtained by many scientists, it has been clearly demonstrated that neutralising antibodies produced in response to rabies vaccination are considered to be the most convenient means for predicting the protection against rabies infection: dogs and cats that produce rabies neutralising above 0.5 IU/ml after vaccination, whatever the period of time elapsed since the injection, have a very high probability of survival after a rabies infection.

This rabies antibody titration is, since 1993, used in different rabies free countries as a reliable way, together with other requirements, in place of quarantine.

As soon as in 1993, national authorities from Sweden and Norway followed by those of UK in 1999, nominated our laboratory to organise regular proficiency testing to deliver technical advises on laboratories performances.

In the context of our CRI duties, a detailed procedure has been established in 1999 following a meeting where all technical points of proficiency have been discussed. Evaluation criteria to assess laboratory's performance are the specificity, the intra-laboratory repeatability and consistency and the inter-laboratory consistency. From 1999 to 2004, 13 sessions have been organised, with 315 appraisals representing 43 different laboratories. Results were highly satisfactory (for 95.9 % of appraisals). It should be noted that failures have never been attributed to the specificity (value of 100 %) but to a lack of intra-laboratory consistency.

IV. Technical analysis of tests used in laboratories

Out of 53 laboratories participating in the last September 2005 proficiency tests, 44 used the FAVN test and 9 used the RFFIT. Twenty four laboratories have sent their procedures. The analysis of different protocols revealed more or less important changes or adaptations of the OIE prescribed techniques (no negative control, variations cell lines and virus strain…). Following discussions about all technical parameters of the tests to consider, the participants asked for more harmonisation of the current tests; it was then decided to precise in the protocols referenced in the OIE manual of standards the different technical parameters to strictly follow for rabies antibody titration.

An important issue has been discussed regarding the value of the positive reference serum (participants claimed for using only value of the OIE serum) to consider for calculation of titres; in our laboratory we are using a mean of OIE log D50 of all previous validated tests (as proven by the control cards) instead of the day value. We have presented experimental results showing that values of serum titres are statistically similar irrespectively of the OIE log D50 considered (mean or day value) for calculation. Therefore, the calculation may use either the mean of OIE log D50 or the day value; however, use of control cards for the validation of results has been strongly recommended.

A presentation given by Dr Hirayama suggested non specific reactions in cat sera due to conditions of decomplementation temperatures.

V. A new ELISA test for rabies serology

The need to replace the current serological tests for quantifying rabies virus-specific antibodies from blood has been advocated in many international meetings and expert committees (1st Rabies in Europe meeting held in Kiev, Ukraine in June 2005 for instance). A new ELISA kit (Platelia II, Biorad) for detection and quantification of rabies anti-glycoprotein antibodies in human as well as several animal species has been presented during this meeting. The performances of the kit test obtained on veterinary samples (dogs, cats and foxes) are encouraging: good diagnostics specificity (more than 98%), satisfactory diagnostic sensitivity, and weak dispersion of results in intra and inter-assay repeatability studies. An inter-laboratory trial gathering 5 participants (including OIE reference laboratory, and laboratories approved to perform rabies serological controls) demonstrated a quite satisfactory reproducibility of results between the different laboratories. Moreover, results obtained by participants perfectly met the criterions evaluated by the proficiency tests currently conducted to evaluate the performance of laboratories using FAVN test and RFFIT.
Discussions were mainly focused on discordant results (which can be detected around the cut-off value of 0.5 IU/mL), and on the ELISA 's future in the frame of the international trades of pets. Even in the event of the recognition of the ELISA as a prescribed method by the OIE, some participants reminded their attachment to keep the seroneutralisation techniques at least as confirmatory tests for ELISA negative results.

VI. International trade of pets: EU regulation

The regulation provides the conditions applicable to non-commercial

movements of pets between member states or from third countries.

Information has been given on the requirements which differ depending on different countries and territories which are currently classified in three lists. Briefly, to simplify depending on countries and territories from origin, and depending on EU countries for pet importation, blood sampling following rabies vaccination for checking rabies antibody levels is compulsory or not.

VII. Conclusions and recommendations

This meeting allows discussing thoroughly about all technical points of the serological tests and criteria used for proficiency test analysis. A common goal is desired by all participants, i.e., harmonisation of tests and quality assurance of laboratories performing rabies serology. Recommendations have been established by all participants:

1. The inter-laboratory criterion will be added in the next proficiency testing reports for informative consideration only. This parameter is not a pass/fail criterion. In consequence, the procedure for rabies antibody proficiency testing will be updated.
2. For information and comparisons, the logD50 values of the OIE serum obtained by all laboratories will be analysed (if possible) and reported in the proficiency testing reports (from 2007).
3. Control cards should be systematically used as quality controls for virus dose, naïve and positive sera.
4. The laboratories must use one of the two prescribed tests described in the OIE manual of diagnostic tests and vaccines for terrestrial animals (2004), as clearly specified in the current procedure.
5. For new laboratories willing to be approved, they have to succeed in two successive rabies proficiency tests to obtain the approval for rabies serological controls.
6. As only one proficiency test is organised annually, we could consider as important for the CRI to receive protocols of FAVN test and/or RFFIT at the date of proficiency testing.
7. If a non permissible adaptation of existing tests is used by laboratories, they should provide to the CRI information on scientific comparison and validation results.
8. The Rabies chapter of the OIE manual will have to be updated for the next sixth edition (2008). To improve harmonisation of testing methods, we will propose to the OIE some additional points considering the two prescribed methods: We will detail all parameters of the tests which have to be strictly respected.
9. Addition of the calculation formula to calculate LogD50 values and conversion in IU/ml in the OIE manual rabies chapter.
10. Addition of the range 30-300 TCID50 for the CVS dose.
11. The CVS titration must be performed by FAVN to establish the infective dose in TCID50.
12. Each laboratory should record the number of cell passages.

Parameters of serological tests

1. Rabies virus : only CVS-11 (ATCC VR 959)
2. Cells: only BHK21 (ATCC CCL 10) for FAVN test and BHK21/MNA (ATCC CCL 131) cells for RFFIT.
3. Cell culture support: only 96 well microplate for FAVN test and Labtek chamber slides for RFFIT.
4. Control cards for virus, naïve and positive sera titrations.
5. Reading methods: only +/- for FAVN test and 25-50 fields (using a 160-200 magnification) for RFFIT.
6. Minimum of four threefold dilutions of sera for FAVN test and 3 or 5 fold dilutions for RFFIT.
7. Negative and positive controls for each test.
8. CVS back titration for each test.
9. Four replicates of each dilution for FAVN test.
10. Use of OIE reference serum for calculation of titres (and not WHO preparation or an internal serum).

VIII. ACKNOWLEDGMENTS

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[1] WHO Collaborating Centre for Research and Management in Zoonoses Control, OIE Reference Laboratory for Rabies, Community Reference Institute for Rabies Serology, National Reference Laboratory on Rabies and Wildlife Diseases, Domaine de Pixérécourt, B.P. 9, 54220 Malzéville (France)

3.2 RABIES BULLETIN EUROPE – NEW WEB-BASED RABIES INFORMATION SYSTEM FOR EUROPE

C. Freuling, D. Kloess, R. Schröder, and T. Müller[1]

For more than 25 years the WHO-RABIES BULLETIN EUROPE has served as a source of information on rabies surveillance and research. During this time the way in which data is presented has changed a few times. Especially online publishing was an improvement in convenience. Currently, a total number of 39 European countries submit rabies data to the RBE. The number of hardcopies distributed worldwide ranged between 370 and 400 in 2005.

New interactive web-based version of the RBE

Previously, the Rabies Bulletin Europe homepage was a static web-based version of the journal. Tables, maps and articles from 1999 onwards were presented.
In order to provide up-to-date rabies information at an international level, software developers at the Institute of Epidemiology of the Friedrich-Loeffler-Institute which also developed the German animal disease reporting and information system (Tierseuchen-Nachrichten-System, TSN) developed a new interactive web-based version of the RBE for Europe. This was made possible by financial support of the regional WHO Regional Office for Europe. The new web-based version of the RBE will provide the following features:

- Interactive database containing current and previous European rabies data
- Online publication of the Rabies Bulletin Europe
- Archive of Bulletins in pdf-version
- Rabies information platform for news and meetings
- Dynamic depiction of the rabies situation in individual European countries in tables, graphs and maps

The rabies data collected during the years has been included into a database. Interactivity means that these data can be grouped and displayed in a specific way which can be chosen by the user. This rabies information system will allow

a detailed overview on the rabies situation in different European countries for veterinary and public health services as well as international organisations, research groups and the internet community. But interactivity also means cooperation with users. For example, when analysing historical data the administrative units may have changed during the years, and rabies authorities are invited to improve or correct the data shown.

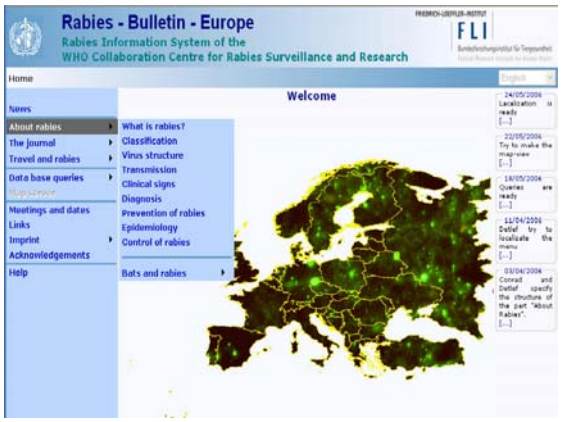
The internet is a rapidly developing communication medium for information, education, entertainment, etc. In the beginning of the online version of the RABIES BULLETIN EUROPE in 2000, about 200 visits per month were counted. In 2002 the number of visits per month was on average about 800. Currently, we are counting 10,000 visits per month. While 50 percent of all users go directly to the web site, the remainder used internet search engines. As the requests cover all aspects of rabies the new version also provides general information about rabies, e.g. classification, virus structure, epidemiology, bat rabies, etc.

The increasing international travel and people's need for information about the current regulations on pet travel have become a time consuming consultancy for all people involved. To meet the demand, this new homepage provides information for travellers as well as for people who want to take their pets abroad. This can be regarded as a service both for public authorities as well as a service to the public.

The following few screen shots provide a short picture of the current development status and the features of this new rabies information system.

1. Start-page: Rabies-Bulletin-Europe

On the start-page a menu is available, which leads to data queries and static HTML-pages covering information about rabies as to be seen on the left hand side (Fig. 1). On the opposite side a column providing news related to rabies or rabies control will be on-hand.



2. The Journal: the web-version of the Rabies-Bulletin-Europe

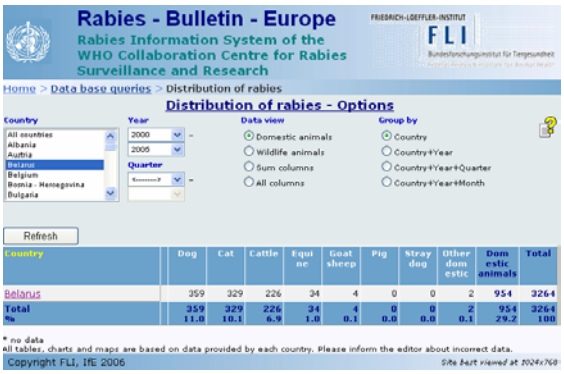
This domain represents the new web-version of the RBE (Fig. 2). Miscellaneous articles to be published in the RBE will be available using static HTML-pages. Rabies data to be published for the reporting quarter of a specific year will be provided using data queries as shown in the menu on the left.

3. Data queries: distribution of rabies in Europe

Rabies data analysis for any reporting quarter or year can be done via data queries. The following queries are available:

- distribution of rabies
- rabies dynamics
- trends

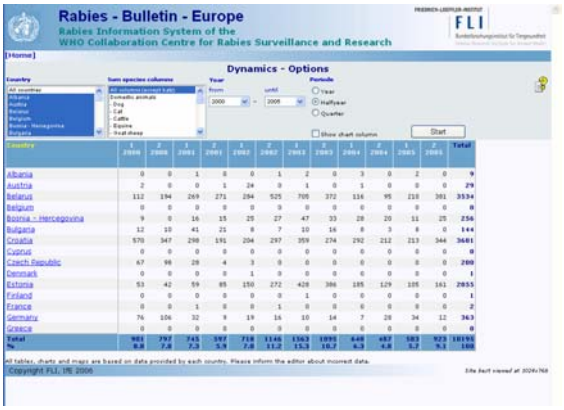
The distribution of rabies can be analysed on the country level for a distinct period of time to be defined using the combo-box. The resulting tables will provide rabies cases per country and time period as selected according to the animal species affected (Figure 3). Rabies data will be shown for each year separately.



If a specific country is selected, a click on the country's name will allow a breakdown of the rabies cases reported for the selected time period according to administrative units

4. Data analysis: rabies dynamics – development of rabies cases in time

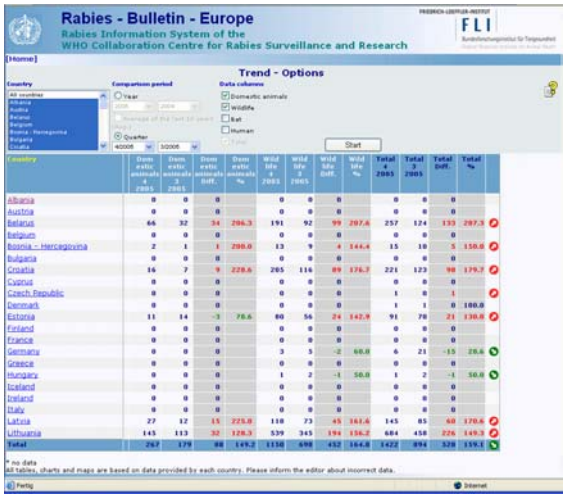
Using the data query 'Rabies dynamics' the development of rabies cases over time for selected countries and a selected time period can be followed. The resulting table provides the total number of rabies cases reported for a selected country on a yearly basis. The cumulative total number of reported rabies cases for the selected time period is provided in the right column of the table (Fig. 4).



The information of the table can also be visualized as a chart, making it easier to recognize trends in time.

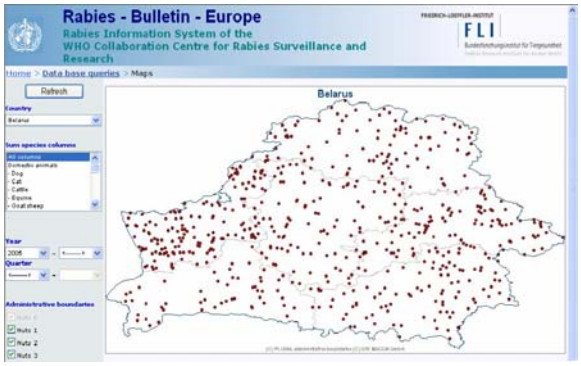
5. Data analysis: trend tables

Trend tables have proven to be a helpful tool to provide immediate information on recent developments in rabies in European countries and might help veterinary and public health services to facilitate decision making. In order to determine increasing or decreasing trends in rabies, the rabies cases of the reporting quarter will be compared with the previous quarter as well as with the same quarter of the previous year on the country level (Fig. 5).



6. Maps

Most people who read the RBE tend to use maps to get a picture of spatial distribution. So far, the rabies maps were only static imagines derived from rabies data. With this new feature maps can be created by choice of the user (Fig 6). Maps can be created for different species, countries and over a certain time span.



Future developments

The described features of this rabies information system including all data and information shall be available as public domain in the 'free' internet in order to facilitate the work of veterinary and public health services in European countries as well as of international organisations.

The data and information in the Rabies Bulletin Europe is provided by contributing countries. The software developers as well as the editors would appreciate any recommendations in terms of the way data is presented, more information on certain points, announcements, etc.
So far, data until the year 2000 has been converted into the new database and it is intended to go as far as 1977, when reporting to the RBE started. A further improvement can be expected in the RBE archive as all RBEs shall be made available as pdf-versions.
Next to the data queries available it is intended to provide an opportunity to generate on-line maps showing the spatial distribution of rabies cases for individual European countries for a given time period. GIS functions such as zoom in, identification of areas, plotting of rabies cases reported or location of vaccination areas are more features to be programmed. It is also intended to implement other domains with limited access for defined user groups of individual European countries in the future. One goal is to establish the on-line reporting of rabies cases for European countries via this web-page using a standardized form.
At the moment the web page is available in English. As an information source for international users it is planned to extend certain static regions of the page for more languages.

To ensure continuous online-publishing and service two web versions of the RBE will be published for a transitional period of time. The user can either use the URL http://www.who-rabies-bulletin.org and follow the link to the new version or go directly to http://www.rbe.fli.bund.de. The RBE II/2006 will then only be published as new version but on the usual URL http://www.who-rabies-bulletin.org.

[1] WHO Collaborating Centre for Rabies Surveillance and Research, OIE and National Reference Laboratory for Rabies, Friedrich-Loeffler-Institute - Federal Research Institute for Animal Health, Institute for Epidemiology, Seestrasse 55, D-16868 Wusterhausen (Germany)

3.3 PRELIMINARY ANNOUNCEMENT – INTERNATIONAL CONFERENCE: TOWARDS THE ELIMINATION OF RABIES IN EURASIA

From 27-30 May there will be a rabies conference in Paris, France. In a joining effort the conference will be organised by the World Organisation for Animal Health (OIE), the World Health Organisation (WHO), the European Commission in collaboration with the three WHO Collaborating Centres for Rabies in Europe (Nancy, Wusterhausen, Weybridge).The scope of the conference is to consider the strategies and policies for the elimination of human and animal rabies in Eurasia. The principal topics will include:

- Epidemiological information: Rabies in Eurasia – regional reports
- Rabies prevention and control strategies
  - Rabies control in dogs
  - Rabies control in wildlife
  - Bat rabies and emerging zoonosis
  - Rabies prevention in humans
- Advances in technologies, diagnostics and vaccines

Participants

The target audience of the conference will be regulatory veterinary services, public health services, medical and veterinary practitioners, scientists and researchers.

Languages

English and Russian (simultaneous translation)

For more information see: www.oie.int

4 DISTRIBUTION OF RABIES IN EUROPE

4.1 Country summaries of rabies cases, 1st quarter 2006

01.01.06-31.03.06

Country		Domestic animals									Wildlife														bat	Human cases	total
Name	Code	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	racoon dog	racoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer	other	subtotal			
Albania	ALB	1								1														0			1
Austria	AUT *									0														0			0
Belarus	BLR	42	27	8						77	352	25		5									4	386			463
Belgium	BEL *									0														0			0
Bosnia - Hercegovina	BIH									0	23													23			23
Bulgaria	BGR		1			1				2	1												1	2			4
Croatia	HRV	4	2	5		1				12	146						1							147			159
Cyprus	CYP *									0														0			0
Czech Republic	CZH *									0														0			0
Denmark	DNK *									0														0			0
Estonia	EST	3	2	2	1					8	19	41												60			68
Finland	FIN *									0														0			0
France	FRA *									0														0			0
Germany	DEU									0	3													3			3
Greece	GRC *									0														0			0
Hungary	HUN									0	1													1			1
Iceland	ISL *									0														0			0
Ireland	IRE *									0														0			0
Italy	ITA *									0														0			0
Latvia	LVA	8	10	2						20	59	57			1	3	4			6			1	131			151
Lithuania	LTU	39	26	9	1	2				77	227	393			1	46	19			5				691			768
Luxembourg	LUX *									0														0			0
Macedonia	MKD *									0														0			0
Malta	MLT *									0														0			0
Moldova	MDA **									0														0			0
Norway	NOR *									0														0			0
Poland	POL	1	1							2	17	4				1								22			24
Portugal	PRT *									0														0			0
Romania	ROU	15	2			4	1			22	78			1									5	84			106
Russian Federation	RUS	90	70	71	1	7	2			241	156	14		2			1							173		2	416
Serbia and Montenegro	SCG **									0														0			0
Slovak Republic	SVK									0	3													3			3
Slovenia	SVN **									0														0			0
Spain	ESP *									0														0			0
Sweden	SWE *									0														0			0
Switzerland + Lichtenstein	CHE *									0														0			0
The Netherlands	NED *									0														0			0
Turkey	TUR	16		10	1	2				29	4													4			33
Ukraine	UKR	126	95	23	3	6			1	254	250	7		7		1								265			519
United Kingdom	UNK *									0														0			0
TOTAL		**345**	**236**	**130**	**7**	**23**	**3**	**0**	**1**	**745**	**1339**	**541**	**0**	**15**	**2**	**51**	**25**	**0**	**0**	**11**	**0**	**0**	**11**	**1995**	**0**	**2**	**2742**
PER CENT		12,6%	8,6%	4,7%	0,3%	0,8%	0,1%	0,0%	0,0%	27,2%	48,8%	19,7%	0,0%	0,5%	0,1%	1,9%	0,9%	0,0%	0,0%	0,4%	0,0%	0,0%	0,4%	72,8%	0,0%	0,1%	100%

* NO CASES ** NO DATA

4.2 Rabies cases per country and administrative units, 1st quarter 2006

01.01.06-31.03.06

Location	Domestic animals									Wildlife														bat	Human cases	total
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	racoon dog	racoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer	other	subtotal			
ALBANIA																										
Shkoder	1								**1**														**0**			**1**
TOTAL	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
PER CENT	100,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100%
BELARUS																										
Brest	3	1							**4**	24	1												**25**			**29**
Gomel	4	3							**7**	26	4		5									2	**37**			**44**
Grodno	8	5	5						**18**	59	2											1	**62**			**80**
Minsk	11	9	1						**21**	128	4												**132**			**153**
Mogelev	3								**3**	69	2												**71**			**74**
Vitebsk	13	9	2						**24**	46	12											1	**59**			**83**
TOTAL	**42**	**27**	**8**	**0**	**0**	**0**	**0**	**0**	**77**	**352**	**25**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**386**	**0**	**0**	**463**
PER CENT	9,1%	5,8%	1,7%	0,0%	0,0%	0,0%	0,0%	0,0%	16,6%	76,0%	5,4%	0,0%	1,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,9%	83,4%	0,0%	0,0%	100%
ESTONIA																										
Harjumaa	1	1							**2**	1													**1**			**3**
Jäögevamaa											1												**1**			**1**
Järvamaa			1						**1**	1													**1**			**2**
Jögevamaa	1								**1**	3	5												**8**			**9**
Lääne-Virumaa			1						**1**	1	1												**2**			**3**
Pärnumaa				1					**1**	1	7												**8**			**9**
Pölvamaa										1	1												**2**			**2**
Tartumaa	1								**1**	9	16												**25**			**26**
Valgamaa											3												**3**			**3**
Viljandimaa										1	4												**5**			**5**
Vörumaa		1							**1**	1	3												**4**			**5**
TOTAL	**3**	**2**	**2**	**1**	**0**	**0**	**0**	**0**	**8**	**19**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	**0**	**0**	**68**
PER CENT	4,4%	2,9%	2,9%	1,5%	0,0%	0,0%	0,0%	0,0%	11,8%	27,9%	60,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	88,2%	0,0%	0,0%	100%
BOSNIA - HERCEGOVINA																										
Banja Luka									**0**	10													**10**			**10**
Doboj									**0**	2													**2**			**2**
Hercegovacko-neretvanski									**0**	1													**1**			**1**
Tuzlanski									**0**	2													**2**			**2**
Unsko-sanski									**0**	6													**6**			**6**
Vlasenica									**0**	1													**1**			**1**
Zenicko-dobojski									**0**	1													**1**			**1**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**23**
PER CENT	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	100%

4.2 Rabies cases per country and administrative units, 1st quarter 2006

01.01.06-31.03.06

Location	Domestic animals									Wildlife														bat	Human cases	total
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	racoon dog	racoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer	other	subtotal			
C R O A T I A																										
Bjelovarsko - Bilogorska									**0**	6													**6**			**6**
Brodsko - Posavska									**0**	3													**3**			**3**
Istarska									**0**	1													**1**			**1**
Karlovacka									**0**	4													**4**			**4**
Koprivnisko - Krizevaska					1				**1**	32													**32**			**33**
Krapinsko - Zagorska	1								**1**	8													**8**			**9**
Pozesko - Slovanska		1	5						**6**	6													**6**			**12**
Primorsko - Goranska									**0**	1													**1**			**1**
Sisacko - Moslovacka	1								**1**	17													**17**			**18**
Splitsko - Dalmatinska									**0**	12						1							**13**			**13**
Varazdinska									**0**	11													**11**			**11**
Viroticko - Podravska									**0**	3													**3**			**3**
Vukovarsko - Srijemska	1								**1**	6													**6**			**7**
Zagreb									**0**	5													**5**			**5**
Zagrebacka	1	1							**2**	31													**31**			**33**
TOTAL	**4**	**2**	**5**	**0**	**1**	**0**	**0**	**0**	**12**	**146**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**147**	**0**	**0**	**159**
PER CENT	2,5%	1,3%	3,1%	0,0%	0,6%	0,0%	0,0%	0,0%	7,5%	91,8%	0,0%	0,0%	0,0%	0,0%	0,0%	0,6%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	92,5%	0,0%	0,0%	100%
T U R K E Y																										
Aydin	1		1						**2**														**0**			**2**
Elazig	1								**1**	1													**1**			**2**
Hakkari				1					**1**														**0**			**1**
Hatay			1						**1**														**0**			**1**
Izmir			5						**5**	3													**3**			**8**
Igdir					2				**2**														**0**			**2**
K.Maras	1		1						**2**														**0**			**2**
Kars	1								**1**														**0**			**1**
Mugla			1						**1**														**0**			**1**
Samsun	10								**10**														**0**			**10**
Sanliurfa	2		1						**3**														**0**			**3**
TOTAL	**16**	**0**	**10**	**1**	**2**	**0**	**0**	**0**	**29**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**33**
PER CENT	48,5%	0,0%	30,3%	3,0%	6,1%	0,0%	0,0%	0,0%	87,9%	12,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	12,1%	0,0%	0,0%	100%
B U L G A R I A																										
Dobrich									**0**	1												1	**2**			**2**
Varna		1			1				**2**														**0**			**2**
TOTAL	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**4**
PER CENT	0,0%	25,0%	0,0%	0,0%	25,0%	0,0%	0,0%	0,0%	50,0%	25,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	25,0%	50,0%	0,0%	0,0%	100%

4.2 Rabies cases per country and administrative units, 1st quarter 2006

01.01.06-31.03.06

Location	Domestic animals									Wildlife														bat	Human cases	total
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	racoon dog	racoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer	other	subtotal			
LATVIA																										
Aizkraukle			1						**1**		2												**2**			**3**
Alūksne		1							**1**		1												**1**			**2**
Bauska									**0**	1					1								**2**			**2**
Cēsis		2							**2**	5	2											1	**8**			**10**
Daugavpils									**0**		2												**2**			**2**
Dobele									**0**	2	2												**4**			**4**
Jēkabpils									**0**	2													**2**			**2**
Jelgava									**0**	2	3												**5**			**5**
Krāslava									**0**	2	4												**6**			**6**
Kuldīga									**0**	1				1	1								**3**			**3**
Liepāja									**0**	4													**4**			**4**
Limbaži	1	1							**2**	12	15												**27**			**29**
Ludza									**0**	2													**2**			**2**
Madona	1								**1**	2													**2**			**3**
Ogre		1							**1**	1													**1**			**2**
Preili	1		1						**2**	4	3				1				1				**9**			**11**
Rēzekne	4	1							**5**	4	2												**6**			**11**
Riga									**0**	2									2				**4**			**4**
Saldus		1							**1**		1												**1**			**2**
Talsi									**0**	1													**1**			**1**
Tukums									**0**	2	4												**6**			**6**
Valka									**0**	2	2					2			1				**7**			**7**
Valmiera	1	2							**3**	2	12					2			2				**18**			**21**
Ventspils		1							**1**	6	2												**8**			**9**
TOTAL	**8**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**20**	**59**	**57**	**0**	**0**	**1**	**3**	**4**	**0**	**0**	**6**	**0**	**0**	**1**	**131**	**0**	**0**	**151**
PER CENT	5,3%	6,6%	1,3%	0,0%	0,0%	0,0%	0,0%	0,0%	13,2%	39,1%	37,7%	0,0%	0,0%	0,7%	2,0%	2,6%	0,0%	0,0%	4,0%	0,0%	0,0%	0,7%	86,8%	0,0%	0,0%	100%
GERMANY																										
Mainz-Bingen									**0**	3													**3**			**3**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**
PER CENT	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	100%
HUNGARY																										
Heves									**0**	1													**1**			**1**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
PER CENT	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	100%
SLOVAK REPUBLIC																										
Bratislavský kraj									**0**	3													**3**			**3**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**
PER CENT	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	0,0%	100%

4.2 Rabies cases per country and administrative units, 1st quarter 2006

01.01.06-31.03.06

Location	Domestic animals									Wildlife														bat	Human cases	total
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	racoon dog	racoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer	other	subtotal			
ROMANIA																										
Arad	1								**1**														**0**			**1**
Bacau									**0**	2													**2**			**2**
Bistrita-Nasaud	1								**1**	1												1	**2**			**3**
Braila	1								**1**	2													**2**			**3**
Calarasi	6								**6**	2													**2**			**8**
Cluj									**0**				1										**1**			**1**
Constanta					4				**4**	7													**7**			**11**
Covasna	1	1							**2**	3													**3**			**5**
Galati									**0**	2													**2**			**2**
Giurgiu									**0**	1													**1**			**1**
Gorj									**0**	3													**3**			**3**
Harghita									**0**	3													**3**			**3**
Hunedoara									**0**	1													**1**			**1**
Ialomita	1								**1**	17												1	**18**			**19**
Ilfov	1								**1**	1													**1**			**2**
Mehedinti									**0**	1													**1**			**1**
Mures									**0**	15													**15**			**15**
Olt	1					1			**2**	1													**1**			**3**
Prahova									**0**	3												1	**4**			**4**
Salaj	1								**1**	1													**1**			**2**
Satu Mare									**0**	3												1	**4**			**4**
Sibiu	1								**1**	2													**2**			**3**
Suceava									**0**	4													**4**			**4**
Vaslui		1							**1**														**0**			**1**
Vrancea									**0**	3												1	**4**			**4**
TOTAL	**15**	**2**	**0**	**0**	**4**	**1**	**0**	**0**	**22**	**78**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**84**	**0**	**0**	**106**
PER CENT	14,2%	1,9%	0,0%	0,0%	3,8%	0,9%	0,0%	0,0%	20,8%	73,6%	0,0%	0,0%	0,9%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	4,7%	79,2%	0,0%	0,0%	100%
LITHUANIA																										
Alytaus	1		1						**2**	17	17					1			1				**36**			**38**
Kauno	3	2		1					**6**	22	74				1	3							**100**			**106**
Klaipedos	5	10	1		1				**17**	37	41				11	4			1				**94**			**111**
Marijampoles	3	2							**5**	33	15				3								**51**			**56**
Panevezio	4	5	1						**10**	16	37				9	1			1				**64**			**74**
Siauliu	5	2	2						**9**	23	28			1	8								**60**			**69**
Taurages	1	2	1						**4**	6	28					1							**35**			**39**
Telsiu	1								**1**	2	9				1	2							**14**			**15**
Utenos	6	1	1		1				**9**	36	80				5	3			1				**125**			**134**
Vilniaus	10	2	2						**14**	35	64				8	4			1				**112**			**126**
TOTAL	**39**	**26**	**9**	**1**	**2**	**0**	**0**	**0**	**77**	**227**	**393**	**0**	**0**	**1**	**46**	**19**	**0**	**0**	**5**	**0**	**0**	**0**	**691**	**0**	**0**	**768**
PER CENT	5,1%	3,4%	1,2%	0,1%	0,3%	0,0%	0,0%	0,0%	10,0%	29,6%	51,2%	0,0%	0,0%	0,1%	6,0%	2,5%	0,0%	0,0%	0,7%	0,0%	0,0%	0,0%	90,0%	0,0%	0,0%	100%

4.2 Rabies cases per country and administrative units, 1st quarter 2006

01.01.06-31.03.06

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UKRAINE																										
Avtonomnaya Respublika Krym									**0**	1													**1**			**1**
Bolynskaja o.	1	2							**3**	11													**11**			**14**
Cherkasskaja o.	10	11	3		1				**25**	15													**15**			**40**
Chernigovskaja o.	19	10	2						**31**	50	5												**55**			**86**
Chernovitskaja o.	1								**1**	1													**1**			**2**
Dnepropetrovskaja o.	5	4	2						**11**	3													**3**			**14**
Donetskskaja o.	5	2							**7**	5													**5**			**12**
Ivano-Frankovskaja o.		1							**1**	2													**2**			**3**
Khar'kovskaja o.	1	1							**2**	3													**3**			**5**
Khersonskaja o.	3	5	1						**9**	8			1										**9**			**18**
Khmel'nitskaja o.	10	2			1			1	**14**	20													**20**			**34**
Kirovogradskaja o.	19	13	2	1	4				**39**	19			1										**20**			**59**
Kiyevskaja o.									**0**	3													**3**			**3**
Luganskaja o.	2	1	1						**4**	1			1										**2**			**6**
L'vovskaja o.		2							**2**	9	1												**10**			**12**
Nikolayevskaja o.	10	6	2	1					**19**	26													**26**			**45**
Odesskaja o.	5	2							**7**	7			4										**11**			**18**
Poltavskaja o.	11	11	5	1					**28**	18	1				1								**20**			**48**
Rovenskaja o.	1	2							**3**	3													**3**			**6**
Sumskaya o.	7	3	1						**11**	8													**8**			**19**
Ternopol'skaja o.	2	1							**3**	5													**5**			**8**
Vinnitskaja o.	8	8	4						**20**	17													**17**			**37**
Zakarpatskaja o.	1								**1**														**0**			**1**
Zaporozhskaja o.	4	6							**10**	5													**5**			**15**
Zhitomirskaja o.	1	2							**3**	10													**10**			**13**
TOTAL	**126**	**95**	**23**	**3**	**6**	**0**	**0**	**1**	**254**	**250**	**7**	**0**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**265**	**0**	**0**	**519**
PER CENT	24,3%	18,3%	4,4%	0,6%	1,2%	0,0%	0,0%	0,2%	48,9%	48,2%	1,3%	0,0%	1,3%	0,0%	0,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	51,1%	0,0%	0,0%	100%
POLAND																										
Lubelskie									**0**	5													**5**			**5**
Opolskie									**0**	2													**2**			**2**
Podkarpackie									**0**	3													**3**			**3**
Podlaskie									**0**		1												**1**			**1**
Warminsko-Mazurskie	1	1							**2**	4	3				1								**8**			**10**
Wielkopolskie									**0**	3													**3**			**3**
TOTAL	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**17**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**	**0**	**0**	**24**
PER CENT	4,2%	4,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	8,3%	70,8%	16,7%	0,0%	0,0%	0,0%	4,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	91,7%	0,0%	0,0%	100%

4.2 Rabies cases per country and administrative units, 1st quarter 2006

01.01.06-31.03.06

Location	Domestic animals									Wildlife														bat	Human cases	total
	dog	cat	cattle	equine	goat sheep	pig	stray dog	other	subtotal	fox	racoon dog	racoon	wolf	badger	marten	other mustelides	other carnivores	wild boar	roe deer	red deer	fallow deer	other	subtotal			
RUSSIAN FEDERATION																										
Astrahanskja obl.	8	4	10		2				**24**	3													**3**			**27**
Belgorodskja obl.	3	2							**5**	3													**3**			**8**
Brjanskaja obl.		1							**1**	16	1												**17**			**18**
Cecenskaja resp.	2		9						**11**														**0**			**11**
Cuvasskaja resp.									**0**	2													**2**			**2**
Dagestan resp.	2	2	1						**5**														**0**			**5**
Ivanovskaja obl.	3								**3**	3													**3**			**6**
Jaroslavskaja obl.		1							**1**	2													**2**		1	**4**
Kabardino-Balkanskaja resp.	2	1			1				**4**														**0**			**4**
Kaliningradskaja obl.	3								**3**	5	1												**6**			**9**
Kalmykija resp.	1	1	4						**6**	1													**1**			**7**
Kaluzskaja obl.	2	3							**5**	12													**12**			**17**
Karacaevo-Cerkesskaja resp.			1						**1**														**0**			**1**
Krasnodarskij kr.	1								**1**	1													**1**			**2**
Kurskaja obl.	1	5	4						**10**	4						1							**5**			**15**
Lipeckaja obl.	1	2							**3**	3													**3**			**6**
Mordovija resp.		2	1						**3**	1													**1**			**4**
Moskovskaja obl.	5	4				1			**10**	10	2												**12**		1	**23**
Moskva g.	2								**2**														**0**			**2**
Nizegorodskaja obl.	1								**1**	5													**5**			**6**
Orlovskaja obl.		4	1						**5**	2													**2**			**7**
Penzenskaja obl.	2	3							**5**	17													**17**			**22**
Pskovskaja obl.	1								**1**	2													**2**			**3**
Rjazanskaja obl.	4	4							**8**	10													**10**			**18**
Rostovskaja obl.	4	4	3			1			**12**	3	1		1										**5**			**17**
Saratovskaja obl.	9	4	10		1				**24**	8	1												**9**			**33**
Severnaja Osetija-Alanija resp.	2	2	2						**6**	1													**1**			**7**
Smolenskaja obl.	3								**3**	13	3												**16**			**19**
Stavropol'skij kr.	9	6	6		2				**23**	1													**1**			**24**
Tambovskaja obl.	2								**2**	3													**3**			**5**
Tul'skaja obl.		1	1		1				**3**	6													**6**			**9**
Tverskaja obl.	3								**3**	10	5												**15**			**18**
Vladimirskja obl.	2	2							**4**	4													**4**			**8**
Volgogradskaja obl.	5	5	14	1					**25**	5													**5**			**30**
Voronezskaja obl.	7	7	4						**18**				1										**1**			**19**
TOTAL	**90**	**70**	**71**	**1**	**7**	**2**	**0**	**0**	**241**	**156**	**14**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**173**	**0**	**2**	**416**
PER CENT	21,6%	16,8%	17,1%	0,2%	1,7%	0,5%	0,0%	0,0%	57,9%	37,5%	3,4%	0,0%	0,5%	0,0%	0,0%	0,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	41,6%	0,0%	0,5%	100%

4.3 Trend tables

4.3.1 Comparison of the reporting quarter (I/2006) with the previous quarter (IV/2005)

NAME	Total			Wildlife			Domestic animals			Bats			Human		
	I 2006 (no.)	IV 2005 (no.)	Difference	I 2006 (no.)	IV 2005 (no.)	Difference	I 2006 (no.)	IV 2005 (no.)	Difference	I 2006 (no.)	IV 2005 (no.)	Difference	I 2006 (no.)	IV 2005 (no.)	Difference
Albania	**1**		**1**				1		1						
Austria															
Belarus	**463**	**257**	**206**	386	191	195	77	66	11						
Belgium															
Bosnia - Hercegovina	**23**	**15**	**8**	23	13	10		2	-2						
Bulgaria	**4**		**4**	2		2	2		2						
Croatia	**159**	**221**	**-62**	147	205	-58	12	16	-4						
Cyprus															
Czech Republic		**1**	**-1**								1	-1			
Denmark		**1**	**-1**								1	-1			
Estonia	**68**	**91**	**-23**	60	80	-20	8	11	-3						
Finland															
France															
Germany	**3**	**6**	**-3**	3	3						3	-3			
Greece															
Hungary	**1**	**1**		1	1										
Iceland															
Ireland															
Italy															
Latvia	**151**	**145**	**6**	131	118	13	20	27	-7						
Lithuania	**768**	**684**	**84**	691	539	152	77	145	-68						
Luxembourg															
Macedonia		*			*			*			*			*	
Malta															
Moldova*															
Norway															
Poland	**24**	**50**	**-26**	22	28	-6	2	20	-18		2	-2			
Portugal															
Romania	**106**	**216**	**-110**	84	134	-50	22	82	-60						
Russian Federation	**416**	**525**	**-109**	173	185	-12	241	340	-99				2		2
Serbia and Montenegro	*	**41**		*	32		*	9		*			*		
Slovak Republic	**3**	**9**	**-6**	3	9	-6									
Slovenia	*			*			*			*			*		
Spain															
Sweden															
Switzerland + Lichtenstein															
The Netherlands		**1**	**-1**								1	-1			
Turkey	**33**	**45**	**-12**	4	3	1	29	42	-13						
Ukraine	**519**	**784**	**-265**	265	359	-94	254	425	-171						
United Kingdom															
TOTAL	**2742**	**3093**	**-310**	**1995**	**1900**	**127**	**745**	**1185**	**-431**	**0**	**8**	**-8**	**2**	**0**	**2**

Wildlife: excluding bats

I/2006 (no.), IV/2005 (no.): number of cases
Difference: no. of cases in I/2006 minus cases in IV/2005

* no data

4.3.2 Comparison of the reporting quarter (I/2006) with the same quarter of the previous year (I/2005)

NAME	Total			Wildlife			Domestic animals			Bats			Human		
	I 2006 (no.)	I 2005 (no.)	Difference	I 2006 (no.)	I 2005 (no.)	Difference	I 2006 (no.)	I 2005 (no.)	Difference	I 2006 (no.)	I 2005 (no.)	Difference	I 2006 (no.)	I 2005 (no.)	Difference
Albania	**1**	**2**	**-1**		2	-2	1		1						
Austria															
Belarus	**463**	**95**	**368**	386	73	313	77	22	55						
Belgium															
Bosnia - Hercegovina	**23**	**7**	**16**	23	6	17		1	-1						
Bulgaria	**4**	**2**	**2**	2		2	2	2							
Croatia	**159**	**153**	**6**	147	147		12	6	6						
Cyprus															
Czech Republic															
Denmark															
Estonia	**68**	**62**	**6**	60	54	6	8	8							
Finland															
France															
Germany	**3**	**25**	**-22**	3	24	-21		1	-1						
Greece															
Hungary	**1**	**4**	**-3**	1	4	-3									
Iceland															
Ireland															
Italy															
Latvia	**151**	**109**	**42**	131	96	35	20	13	7						
Lithuania	**768**	**193**	**575**	691	166	525	77	27	50						
Luxembourg															
Macedonia		*			*			*			*			*	
Malta															
Moldova*															
Norway															
Poland	**24**	**24**		22	22		2	2							
Portugal															
Romania	**106**	**151**	**-45**	84	118	-34	22	33	-11						
Russian Federation	**416**	**839**	**-423**	173	402	-229	241	433	-192				2	4	-2
Serbia and Montenegro	*	**33**		*	28		*	5		*			*		
Slovak Republic	**3**	**21**	**-18**	3	20	-17		1	-1						
Slovenia	*	**2**		*	2		*			*			*		
Spain															
Sweden															
Switzerland + Lichtenstein															
The Netherlands															
Turkey	**33**	**56**	**-23**	4	6	-2	29	50	-21						
Ukraine	**519**	**490**	**29**	265	256	9	254	234	20						
United Kingdom															
TOTAL	**2742**	**2268**	**509**	**1995**	**1426**	**599**	**745**	**838**	**-88**	**0**	**0**	**0**	**2**	**4**	**-2**

Wildlife: excluding bats

I/2006 (no.), I/2005 (no.): number of cases
Difference: no. of cases in I/2006 minus cases in I/2005

* no data

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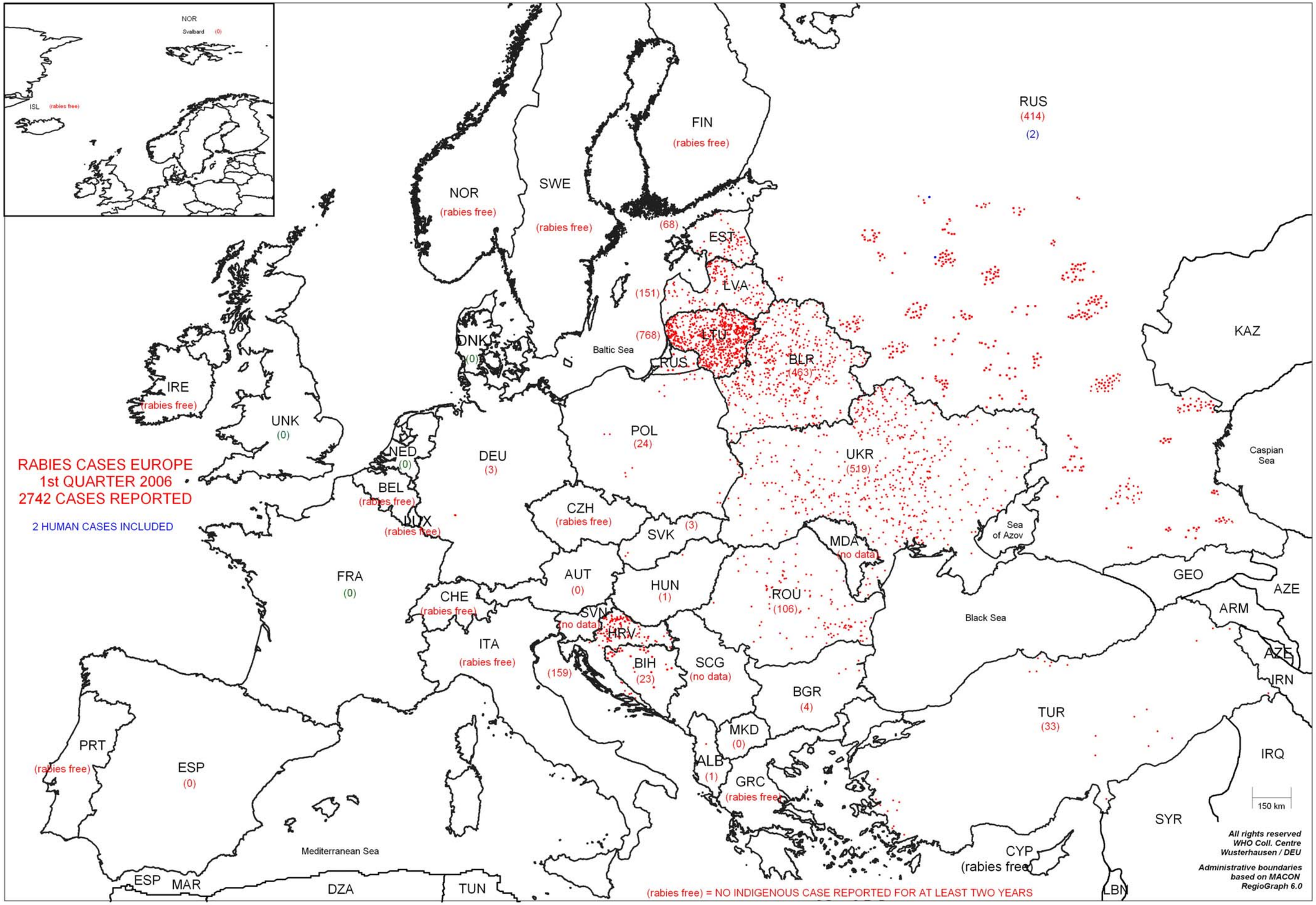
NOR
Svalbard (0)
ISL (rabies free)
RABIES CASES EUROPE
1st QUARTER 2006
2742 CASES REPORTED
2 HUMAN CASES INCLUDED
NOR
(rabies free)
SWE
(rabies free)
FIN
(rabies free)
RUS
(414)
(2)
(68)
EST
LVA
(151)
LTU
(768)
DNK
(0)
Baltic Sea
RUS
BLR
(1463)
KAZ
IRE
(rabies free)
UNK
(0)
POL
(24)
NED
(0)
DEU
(3)
UKR
(519)
Caspian Sea
BEL
(rabies free)
LUX
(rabies free)
CZH
(rabies free)
SVK
(3)
MDA
(no data)
Sea of Azov
FRA
(0)
AUT
(0)
HUN
(1)
ROU
(106)
GEO
AZE
ARM
Black Sea
CHE
(rabies free)
SVN
(no data)
HRV
(159)
ITA
(rabies free)
BIH
(23)
SCG
(no data)
AZE
IRN
BGR
(4)
TUR
(33)
PRT
(rabies free)
ESP
(0)
MKD
(0)
ALB
(1)
GRC
(rabies free)
IRQ
150 km
SYR
Mediterranean Sea
CYP
(rabies free)
ESP
MAR
DZA
TUN
LBN
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