

RABIES BULLETIN EUROPE

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1. INTRODUCTION

This BULLETIN describes the **reported rabies cases in Europe** for the **Fourth Quarter 1996**, subsequently referred to as "*This Quarter*".

In SECTION 2.1 a **summary** of the rabies situation in general for the **fourth quarter 1996** is given, and in SECTION 2.2 the **development and trends for 1996** are described.

SECTION 3 (3.1-3.38) reflects the **rabies situation for individual countries**. Unfortunately, not all countries report regularly yet. However, their contribution is expected.

In the Miscellaneous SECTION (4) under 4.1 a **review is given of all rabies cases** received at the WHO Collaborating Centre for Rabies Surveillance and Research, Tübingen, from the beginning of **the data collection from 1977 up to date**. In this connection TABLES of quarterly data have been produced and a graph with annual data (ANNEX 3). Data on wildlife, bat and human rabies have been analysed and a map of the distribution of all bat cases recorded is added in the ANNEX (ANNEX 5). Under 4.2 four

recent rabies meetings have been mentioned.

The **rabies case data** are tabulated for the **Fourth Quarter 1996 and the Year 1996** in SECTION 5. The arrangement of countries follows practical considerations, not alphabetical ones.

SECTION 6 lists the **official contributors** to the BULLETIN.

The **geographical distribution** of rabies cases in Europe of the **Fourth Quarter 1996** is shown on maps of the Russian Federation, Turkey and Europe in the ANNEX.

2. SUMMARY OF RABIES IN EUROPE

During "*This Quarter*", **1760 rabies cases** were reported in Europe. Of these 1132 were in wild animals, 626 in domestic animals and 2 in humans.

Of the **1132 cases in wild animals**, 995 were foxes, 73 raccoon dogs, 5 wolves, 2 other fox species, 1 wild cat, 1 lynx, 4 badgers, 4 stone martens, 4 polecats, 11 pine martens, 1 other wild carnivore, 8 roe deer, 1 moose, 2 insectivorous bats, 2 squirrels, 1 black rat, 2 other small rodents and 15 animals unspecified. Of the **626 domestic animals**, 150 were dogs, 179 cats, 28 horses,

2 pigs, 214 bovines, 50 sheep, 2 goats, 1 cat living wild.

The **2 bat rabies cases** mentioned above occurred in Germany. Because of the distinct epidemiological features of the disease, the cases are marked in different colour in the map of the ANNEX.

There were **2 human cases**, 1 in the Russian Federation and 1 imported case from Nigeria to the United Kingdom.

These data are summarized in TABLES 5.1 and 5.3 of SECTION 5 and in the TABLES of the individual countries.

An increase is noticed

(by 313 cases) comparing "*This Quarter*" to the previous quarter (1447 cases). That is expected as **wildlife rabies is seasonal** and the increase in autumn is connected to the dispersal of young foxes born in spring of the year and which causes an increased contact rate. Most of the countries recorded this increase.

Turkey, with the pattern of **dog-mediated rabies** (no wildlife cases during "*This Quarter*") and not showing obvious seasonality, recorded a decrease of cases.

Rabies-free countries in Europe participating in the

surveillance were Finland, Greece, Iceland, Ireland, Norway, Portugal, the mainland and islands of Spain, Sweden Macedonia, United Kingdom (see under 3.38).

There were no cases in Denmark, Italy, Luxembourg and the Netherlands, but the last indigenously acquired case

(terrestrial animal or bat) was less than two years ago.

The status of the countries with data supplied irregularly can not be judged.

2.2 Development and Trends in 1996

Rabies case data sum-

marizing the year 1996 can be found in TABLES 5.2, 5.4 and 5.5 of SECTION 5.

A special description of the development and trends in 1996 has been left out here as the subject has been included in the review article under 4.1 of this BULLETIN.

3. RABIES IN INDIVIDUAL COUNTRIES

3.1 Albania ALB

No data.

3.2 Austria AUT

by Helmut Schnabl

Of 6785 samples examined for rabies during "*This Quarter*" only 2 (0.03%) were diagnosed rabid. Both cases occurred in the federal province of Burgenland in the districts of Eisenstadt-Umgebung and Neusiedl/See.

Summary 1996

The total of rabies cases in 1996 amounted to 14 (13 foxes, 1 roe deer), 81 cases less than in 1995 (95). In all infected areas of Austria oral vaccination of foxes against rabies is practiced.

3.3 Belgium BEL

by L. Hallet

During "*This Quar-*

ter", 8 cases of rabies were diagnosed: 1 fox each in Libin, Rochefort, Libramont and St. Mard, 1 bovine each in Meix-Devant-Virton and Libramont, 1 stone marten in St. Mard and 1 cat in Nassogue.

Summary 1996

In 1996 44 rabies cases were diagnosed: 28 foxes, 7 bovines, 3 horses, 1 sheep, 2 cats, 1 badger, 1 dog and 1 stone marten.

The cases occurred in 22 localities with a frequency of 1 to 6 cases. Libramont recorded 6 cases, Vresse-sur-Semois 4 cases, while 11 other localities recorded only 1 case: Neufchateau, Daverdisse, Sainte-Ode, Bastogne, Bouillon, Etalle, Messancy, Arlon, Chiny, Rochefort and Nassogne. All other localities recorded between 2 and 3 cases.

The distribution of cases in the different provinces was as follows:

Luxembourg	32
Namur	10
Hainaut	2
Oral rabies vaccination	

against foxes in 1996:

- during March an area of 8828 km² was treated with 149 855 vaccine baits applied (17 vaccine baits per km²);
- at the end of May a special campaign to treat cubs at dens was carried out in an area of 4600 km²; 7610 entrances to 1810 dens were treated with 17 340 vaccine baits;
- during November an area of 8991 km² was treated using 154 540 vaccine baits (17 vaccine baits/km²).

3.4 Bosnia and Hercegovina BIH

No data.

3.5 Bulgaria BUL

During "*This Quarter*", 15 rabies cases were reported from Bulgaria, all in the northern part of the country.

Summary 1996

32 rabies cases (not specified) were reported during

the year, 22 cases more than in 1995.

3.6 Belarus BYE

by S.N. Shpilevsky

During "*This Quarter*", 95 rabies cases were diagnosed in animals (49 foxes, 3 wolves, 5 raccoon dogs, 11 dogs, 7 cats, 1 pig, 19 bovines). There was a drastic increase compared to the previous quarter (20 cases). There were especially concentrations of cases in the Vitebsk Region toward the Latvian and Russian state borders.

Summary 1996

With a total of 144 cases in 1996 the total of 1995 (34) was exceeded by 110 cases.

3.7 Croatia CRO

by Sanja Šeparović

During "*This Quarter*", 125 cases of rabies were diagnosed in 51 municipalities of Croatia, 5 cases less compared to the same quarter of the previous year and 58 cases more (86.6%) in comparison with the 3rd quarter 1996. Of the total, rabies occurred in 113 wild animals (111 foxes, 2 others) and 12 domestic animals (4 dogs, 3 cats, 4 bovines, 1 sheep).

Summary 1996

The total for 1996

amounted to 488 cases, 69 cases more than in 1995.

3.8 Czech Republic CZH

by Oldrich Matouch

A total of 75 rabies cases were reported during "*This Quarter*", 29 cases more than during the previous quarter and 20 cases more than during the fourth quarter 1995. Of these were 71 cases (94.7%) in wild animals (69 foxes, 1 roe deer and 1 marten) and 4 cases (2 sheep, 1 cat, 1 goat) in domestic animals.

The districts Benesov (22) in Central Bohemia and Ceska Lipa (12) in North Bohemia remain the most affected districts.

An oral vaccination campaign was carried out in October covering an area of 46,280 km². 830 400 Lysvulpen (BIOVETA SAD-Bern) vaccine baits were placed manually in 59 districts. Aerial distribution was performed in five highly affected districts in North Bohemia and Moravia on a territory of 3500 km² using 25 vaccine baits per km².

Summary 1996

In 1996, a total of 10,990 animals belonging to 51 species were examined for rabies in the Czech Republic. Rabies was diagnosed in 237 cases, 59 more than in 1995.

As in the previous year, the majority of cases originated from North Bohemia and more recently from Central Bohemia. The species mostly affected by

the disease was the fox with 223 cases (94.1% of total). It was followed by the marten (6), cat (3), roe deer (2), sheep (2) and goat (1).

Rabies cases increased by 33% compared to 1995 (178 cases). This is the first increase after a continued six year decline since the beginning of the oral vaccination in 1989. Re-infection appeared in some districts in spite of continuous vaccination campaigns. Hunting bags in the last years have indicated a significant growth of the fox population. It became apparent that the "traditional" twice a year manual vaccination strategy using 16 - 18 vaccine baits per km² is not sufficient to achieve eradication of the disease. Therefore, aerial vaccine bait distribution was introduced and in some districts an increased number of vaccine baits per km² was used.

3.9 Denmark DEN

by Eric Stougaard

The country remained rabies-free in terrestrial animals.

There was no bat rabies case reported during "*This Quarter*".

3.10 Germany, Federal Republic DEU

by Winfried W. Müller
and Hartmut Schlüter

A total of 33 rabies cases in animals was reported

during "This Quarter", 4 cases more than during the previous quarter and 91 cases less than during the fourth quarter 1995 (124).

There were 2 bat rabies cases reported in the 2 northern states Schleswig-Holstein and Niedersachsen. 31 cases in terrestrial animals were recorded in the states of Nordrhein-Westfalen (10), Hessen (13), Rheinland-Pfalz (3), Saarland (3) and Bayern (2).

Summary 1996

The annual total of rabies cases amounted to 153, 703 cases less than in 1995. An intensified application of oral vaccination in 1995 and 1996 by using an increased number of vaccine baits per km² and year has improved the rabies situation. It is now important to continue to treat areas recording no cases for some time as mentioned above to take care of residual foci and finally eradicate the disease.

On the one hand terrestrial rabies improved, however there was an increase of bat rabies cases from 1 case in 1995 to 10 cases in 1996. The question remains whether an increase of cases of greater dimension is to be expected?

There was 1 imported human case in 1996.

3.11 Estonia EST

by Matti Nastras

During "This Quarter", 29 animal rabies cases were registered in Estonia, 6

cases more than during the previous quarter and 13 cases more than during the fourth quarter 1995.

Summary 1996

There were 99 cases recorded in 1996, 25 cases more than in 1995. Of the 99 cases, 64 were in wild animals (45 foxes, 15 raccoon dogs, 1 wolf, 1 lynx, 1 badger, 1 moose) and 35 in domestic animals (12 dogs, 13 cats, 9 bovines, 1 goat).

Of 15 districts in the country 12 were affected by rabies.

3.12 Finland FIN

by Bengt Westerling

The country remained rabies-free.

Surveillance: 61 animals (35 raccoon dogs, 13 arctic foxes, 4 badgers, 1 lynx, 1 pine marten, 1 ermine, 1 mink, 1 dog, 2 bovines, 2 cats) were examined for rabies during "This Quarter" but revealed negative results.

3.13 France FRA

by Michel F.A. Aubert

Only 2 foxes were found rabid in France during "This Quarter". They were located in the Ardennes near the state border to Belgium.

Summary 1996

Altogether 17 cases

were recorded in 1996, 23 cases less than during the previous year.

3.14 Federal Republic FRY of Yugoslavia

by Tihomir Vrebalov

28 rabies cases (in 17 foxes, 2 bovines, 8 cats and 1 dog) were registered during "This Quarter" in the Federal Republic of Yugoslavia, 11 cases more than in the previous quarter.

19 cases were located in Wojwodina, 8 in Serbia and 1 in Montenegro.

Summary 1996

The annual total amounted to 92 cases, 56 in Wojwodina, 35 in Serbia and 1 in Montenegro.

3.15 Greece GRE

by P. Fidiarakis

The country remained rabies-free.

3.16 Hungary HUN

by Bálint Kerekes

During "This Quarter", 260 rabies cases in animals were registered, 4 cases less than during the previous quarter and 130 cases less than during the fourth quarter 1995. The animals affected included foxes with 81.2% (211 cases), cats with 9.6%, bovines with

5% and dogs with 1.2%.

Summary 1996

There was a total of 1357 rabies cases in 1996, 223 cases more than in 1995.

The rabies situation in the west of the country where oral vaccination of foxes is practiced has much improved.

3.17 Iceland ICE

The country remained rabies-free.

3.18 Ireland IRE

The country remained rabies-free.

3.19 Italy ITA

by Santino Proserpi

During "*This Quarter*", no rabies cases were diagnosed in Italy.

Summary 1996

During 1996, no rabies cases were diagnosed in animals in Italy. One case in a human was imported from Nepal. The patient died in March in the province of Venice.

Surveillance was carried out in all Alpine Regions:

1. 121 wild animals (106 foxes) and 170 domestic animals in Piemonte, Valle d'Aosta and Liguria;

2. 861 wild animals (1715 foxes) and 233 domestic animals in Lombardia;

3. 2077 wild animals (1715 foxes) and 248 domestic animals in Trentino Alto Adige, Veneto and Friuli Venezia Giulia.

On 5 January 1996 an Ordinance of the Ministry of Health made the vaccination compulsory for dogs, cattle, sheep, goats and equines in areas at risk of Friuli Venezia Giulia Region. A killed vaccine has to be used. The Health Authorities of Lombardia, Veneto and Trentino Alto Adige Regions will consider the compulsory vaccination in areas at risk in connection with the presence of rabies in the bordering countries.

Oral vaccination of foxes was carried out during spring in the provinces of Trieste, Gorizia and Udine in an area of 1,600 km² using 25,000 baits.

3.20 Lithuania LTU

by K. Lukauskas and A. Dranseika

During "*This Quarter*", rabies was diagnosed in 19 out of 44 districts of Lithuania. Of 45 rabies cases 13 cases were in wild animals and 32 cases in domestic animals. Of the wild animals 10 were in foxes, 2 in raccoon dogs and 1 in a pine marten. Of the domestic animals 26 were in bovines, 2 in dogs, 2 in cats, 1 in a sheep and 1 in a goat.

The most affected districts were Radviliškis - 5 cases, Kelmė - 7, Rokiškis - 7. The other districts reported

between 1 and 4 cases.

During "*This Quarter*", more than 34,000 dogs were vaccinated against rabies.

Summary 1996

The annual total of rabies cases amounted to 104, 24 cases more than in the previous year.

There was no human case reported during the year.

3.21 Luxembourg LUX

by Joseph Kremer

During "*This Quarter*", no rabies case was recorded in the Grand Duchy of Luxembourg. The last case occurred in August 1996.

Surveillance: 7 foxes and 1 squirrel were examined for rabies but revealed negative results.

Summary 1996

Out of a total of 134 animals examined during the year, 17 animals were diagnosed rabid: 10 foxes, 1 roe deer, 4 bovines and 2 sheep.

To control the disease, 3 oral vaccination campaigns were organized:

- a campaign in March and September distributing each time 49,000 RABORAL vaccine baits by helicopter (19 vaccine baits per km²);
- placing additionally with hunters 18,000 vaccine baits at the close vicinity of dens during the second half of May.

To keep up the immunity of the fox population of the country 2 oral vaccination campaigns covering the whole country as above have been planned for 1997.

3.22 Latvia LVA

by J.Rimeicāns, Z. Andersons and
A. Dedzinš

During "*This Quarter*", 40 rabies cases were registered in 12 out of 26 districts, 10 cases less than during the previous quarter. Of these 29 were in wild animals (72.5% of total) and 11 in domestic animals. Of the cases in wild animals 15 were foxes, 12 raccoon dogs and 2 badgers. Of the 11 domestic animals 4 were cats, 3 dogs and 4 bovines.

The most affected districts were Ogre and Liepaja with 10 and 5 cases respectively.

Summary 1996

The annual total amounted to 186 animal rabies cases, 36 cases less than during the previous year.

3.23 Moldova MLD

by V. Bahau

During "*This Quarter*", 23 samples (of 2 bovines, 8 foxes, 7 dogs, 3 cats, 3 rodents) were examined for rabies. 7 animals (2 bovines, 4 foxes and 1 cat) were diagnosed rabid. The cases occurred

in the following districts: Orgeev (2 bovines, 1 fox), New Anena (2 foxes), Edinet (1 fox) and Dubosari (1 cat).

Summary 1996

The total number of cases for the year amounted to 13.

3.24 Netherlands NET

by G. Visser

Out of 9 animals (5 bats, 2 foxes, 1 cat, 1 stone marten) examined for rabies during "*This Quarter*" none were positive.

Summary 1996

In 1996, 94 animals were examined for rabies (12 foxes, 4 dogs, 1 cat, 1 rabbit, 1 rat, 1 ferret, 2 hamsters, 1 stone marten, 71 bats) of which 5 bats were diagnosed rabid. In 1995 3 bats were diagnosed rabid and 1 imported American grey fox.

3.25 Norway NOR

by Gudbrand Bakken

The country remained rabies-free.

3.26 Poland POL

by Jan Smiechowicz

A total of 483 rabies cases was registered in Poland during "*This Quarter*", 46

cases less than during the previous quarter and 137 less than during the fourth quarter 1995. There were 375 cases in wild animals (311 foxes, 43 raccoon dogs, 1 badger, 10 pine martens, 4 polecats, 5 roe deer, 1 squirrel) and 108 in domestic animals (18 dogs, 33 cats, 56 bovines, 1 sheep).

The rabies situation along the state border to Germany and Czech Republic has much improved as oral vaccination of foxes has been practiced here since 1993. Concentration of cases occurred in the eastern half of the country.

Summary 1996

The total in 1996 amounted to 2526 cases, 553 cases more than in the previous year.

3.27 Portugal POR

The country remained rabies-free.

3.28 Romania ROM

by Ion Teveloiu

During "*This Quarter*", 16 rabies cases were registered in Romania in 6 foxes and 10 domestic animals (4 dogs, 1 cat, 5 bovines). These cases were distributed in 9 provinces throughout the country.

Summary 1996

The annual total amounted to 42 cases, 12 more than in the previous year.

3.29 Russia RUS
(European part only)

by V.A.Vedernikov, P.N.Pitalev,
V.E.Semljanova, V.V.Seliverstov,
V.F.Pilin, and B.L.Cherkasskiy

During "*This Quarter*", 353 rabies cases in animals were reported. Of the total number of cases 277 were in domestic animals - 75 dogs, 62 cats, 68 cattle, 26 horses, 45 sheep, 1 pig. Of 76 wild animals rabies was diagnosed in 67 foxes, 5 raccoon dogs, 2 wolves, 1 korskak (*Vulpes corsak* L.), 1 rat.

Most affected were the Stavropol Territory with 48 cases, Krasnodar Territory with 33 cases and Bashkortostan with 31 cases.

There was 1 human case reported in the Voronezh Region.

3.30 Spain SPA

by Carlos Abellán García

During "*This Quarter*", the mainland and islands of Spain remained rabies-free.

There was 1 case in Ceuta on the Spanish territory in North Africa.

3.31 Slovak Republic SVK

by Jozef Sokol and Bohuslav Lovas

A total of 103 rabies cases in animals was reported in the Slovak Republic during "*This Quarter*". Of these were

73 (70.9% of total) wild animals (70 foxes, 3 others) and 30 (29.1% of total) domestic animals (4 dogs, 21 cats, 4 cattle and 1 cat living wild).

Concentration of rabies cases was noticed in the eastern part of the Slovak Republic.

An oral vaccination campaign of foxes against rabies was carried out in November 1996, on the territory of 33 districts covering an area of 36,400 km². 552,800 KAMARK vaccine baits were distributed by hand.

Summary 1996

The annual total amounted to 344 rabies cases. There were 78 cases more compared to 1995.

More than 333,439 dogs, 6685 cats, 8880 cattle, 4782 sheeps, 22 goats and 23,861 fur animals were vaccinated against rabies throughout the year.

3.32 Slovenia SVN

by Zoran Kovač

A total of 14 rabies cases was recorded in Slovenia during "*This Quarter*", 3 cases less than in the previous quarter. 12 cases were noticed in foxes and 2 in cats.

An oral vaccination campaign was carried out in October using 300,000 vaccine baits covering the entire country.

Summary 1996

The total of rabies ca-

ses in 1996 amounted to 247, 837 cases less than during the previous year (1084 cases).

3.33 Sweden SWE

The country remained rabies-free.

3.34 Switzerland SWI

by Urs Breitenmoser

During "*This Quarter*", a total of 322 animals (268 red foxes) were analysed for rabies by the Swiss Rabies Centre. Only one rabies case (0.31%) was diagnosed, a dog from the town of Birsfelden (BL). During the 3rd quarter of 1996, 0.23% of all analyses were positive (1 out of 440), whereas in the 4th quarter of 1995, two rabies cases had been diagnosed (0.32% from 618 samples). The potential area of rabies in Switzerland is situated in the north-west of the country, from the canton of Neuchâtel in the west to the canton of Aargau in the north. This region is the same as the area of oral vaccination of the red fox population, extending over parts of the cantons of Vaud, Neuchâtel, Jura, Bern, Solothurn, Basel-Landschaft, Basel-Stadt, Aargau, Luzern, Zürich, and Schaffhausen.

During 1996 6 rabies cases were diagnosed in Switzerland: one red fox, one stone marten, three domestic cats, and one dog. This was the smallest number of rabies cases

in any year since the epizootic had entered Switzerland in 1967.

The red fox and the stone marten originated from the town of Buus (BL), where a nucleus of rabies still persisted. The other four cases were pet animals from the cantons of Jura, Solothurn, and Basel-Landschaft. Some of these cases were difficult to associate with previous rabies cases; this may be explained by prolonged incubation times or undiscovered cases of rabies persisting in wildlife. Both possibilities stress the importance of an continuing intensive surveillance even if it looks as if a residual focus of the epizootic was extinguished.

The latest case in 1996 was a dog. According to the Federal Office of Public Health, some 60 people have been in contact with this dog and received post-exposure treatment against rabies. The vaccination of dogs against rabies is compulsory, and the status of vaccination is high (probably as much as 95 percent). As a consequence, rabies in dogs is rare in Switzerland, but it does occur from time to time. The rabies case from the town of Birsfelden was the 100th dog found to be rabid in Switzerland since the start of the epizootic in 1967. Most of the cases were recorded in 1984 with 13 cases. The most recent cases were dogs from the cantons of Jura (1993), Aargau (1994), and Basel-Landschaft (1994).

5 bats (3 *Pipistrellus*

nathusii, 1 *Pipistrellus* sp., 1 *Myotis myotis*) were examined for rabies in "This Quarter"; all were found to be negative for rabies.

The quarterly report of the Swiss Rabies Centre at the University of Bern is now available on the Internet (<http://ubeclu.unibe.ch/ivv/index.html>). It is published in English, German, and French, and includes a map showing the distribution of the rabies cases during the last 12 months as well as the current area of oral vaccination of the red fox population.

3.35 Turkey TUR

by Mehmet Alkan

During "This Quarter", 23 rabies cases were reported from Turkey in 21 dogs and 2 bovines. 16 cases were registered in the province (il) of Adiyaman, Izmir, Kirsehir, Kahramanmaraş, Ordu, Sakarya and Batman.

Summary 1996

There was a total of 125 cases (103 dogs, 4 cats, 14 cattle, 4 sheep) recorded in 1996, 43 cases less than during the previous year.

3.36 Macedonia TYM

The country remained rabies-free.

3.37 Ukraine UKR

No data.

3.38 United Kingdom UNK

by W.J. Pollitt

The country remained rabies-free in terrestrial mammals.

No cases of bat rabies have been reported.

One imported human case was diagnosed during this quarter. A 19 year old man contracted rabies from a dog bite in Nigeria and died in the United Kingdom on 6 October 1996.

Surveillance 1996

Third Quarter 1996

Reports of suspect rabies outside quarantine were investigated on eight occasions during the period. One dog, three cats, three foxes and a squirrel were negative for rabies.

206 bats were examined for rabies during the period, all with negative results.

Fourth Quarter 1996

Reports of suspect rabies were investigated on 4 occasions during this quarter, involving one fox, one cat and one dog and one rat. All were found to be negative for rabies.

54 bats were examined during this quarter with negative results.

4. MISCELLANEOUS ARTICLES

4.1 Review of Reported Rabies Case Data in Europe to the WHO Collaborating Centre Tübingen from 1977 to 1996

by W.W. Müller

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at the Federal Research Centre for Virus Diseases of Animals,
P.O. Box 1149, D-72001 Tübingen, FRG

Every two years a review of the data material reported to the WHO Reference Centre, Tübingen, from the beginning in 1977 is given in this BULLETIN. The last review appeared in RABIES BULLETIN EUROPE 4/94. The data are partly supplemented if they were received late for the quarters to be published or when data could be improved on the direction of the contributors. Therefore, contributors are again asked to see if they can further improve data of their country back to 1977.

In this issue the following analysis of the data material has been prepared:

TABLES OF QUARTERLY FIGURES

TABLES 4.1.1. - 4.1.4. (pages 12-15) summarize a total of **20 years of rabies cases in animals (including bats) and humans arranged according to quarters.**

Compared to the last review due to political changes

2 new countries have been added: Bosnia and Hercegovina (BIH) and Macedonia (TYM). The 3-letter symbol of the Federal Republic of Yugoslavia has been changed from YUG to FRY.

GRAPH WITH ANNUAL FIGURES

On a map of Europe (ANNEX 3) **continuous columns indicate the annual development of rabies** in Europe and individual countries over 20 years. Figures below 100 are given in digits.

Commentary:

When surveillance was initiated in 1977, wildlife rabies, which is thought to have started at the Polish/Russian border around 1939 and then spread westward was established in most of the European countries. It reached its furthest extension in the west of France around 1982.

Wildlife rabies which could also be called fox-mediated rabies is strongly season-

al due to the biology of the red fox which is the rabies host animal or carrier. Drastic changes during the year are in the beginning the mating season, in spring the birth and raising of the young generation, in late summer and autumn the dispersal of the young foxes born in spring. All that reflects on the case incidence. Another seasonality which is expressed in an increase and decrease of cases over a time span of approximately 3-5 years derives from an increase in the fox population followed by a decrease due to an outbreak of rabies.

Any of the seasonal features are interfered with if oral vaccination of foxes against rabies is practiced. An appropriate number of protected foxes in an evenly vaccinated area hinders the spread of the disease by interrupting the chain of infection. The carrier role of the fox became once more obvious as, when enough foxes were protected, rabies in all other animal species involved in the disease stopped as well.

TABLE 4.1.1

LOC. CODE	QUARTER				YEAR 1977	QUARTER				YEAR 1978	QUARTER				YEAR 1979	QUARTER				YEAR 1980	QUARTER				YEAR 1981	LOC. CODE	
	1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4			
ALB	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	ALB	
AUT	852	683	508	1015	3058	1136	1139	868	901	4044	789	529	404	296	2018	250	288	167	111	816	197	209	188	185	779	AUT	
BEL	36	13	6	13	68	25	15	13	8	61	8	5	4	8	25	11	23	2	11	47	24	23	36	91	174	BEL	
BIH	-	-	-	1	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	BIH
BUL	-	-	-	-	0	1	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	BUL
BYE	-	-	-	-	0	25	7	14	8	54	20	27	22	29	98	28	18	15	14	75	16	8	10	14	48	BYE	
CRO	-	4	-	5	9	-	-	-	23	23	16	29	28	41	114	55	16	19	57	147	87	30	28	42	187	CRO	
CZH	113	87	127	101	428	179	132	150	157	618	120	166	156	221	663	417	274	208	227	1126	248	235	208	321	1012	CZH	
DEN	-	-	3	3	6	14	24	69	56	163	37	41	46	41	165	22	11	2	2	37	2	1	-	-	3	DEN	
DEU	2388	1407	1450	1493	6738	1423	966	1277	1355	5021	1640	1314	1477	2141	6572	2549	1790	2109	2213	8661	2097	1507	1790	1933	7327	DEU	
EST	-	-	-	-	0	5	-	12	5	22	2	2	4	6	14	6	3	3	5	17	4	3	3	3	13	EST	
FIN	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	FIN	
FRA	572	356	354	386	1668	384	289	212	317	1202	533	394	344	435	1706	589	381	275	375	1620	552	412	550	827	2341	FRA	
FRY	7	9	-	100	116	-	-	-	248	248	87	55	30	40	212	87	44	31	33	195	78	23	6	56	163	FRY	
GRE	5	2	-	2	9	1	-	1	-	2	-	-	-	2	2	-	-	-	-	0	-	-	3	-	3	GRE	
HUN	221	166	99	250	736	629	169	192	311	1301	546	159	222	355	1282	381	142	191	204	918	314	122	194	372	1002	HUN	
ICE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	ICE
IRE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	IRE
ITA	3	26	39	29	97	83	82	39	46	250	30	28	17	4	79	3	2	2	5	12	55	120	113	79	367	ITA	
LTU	-	-	-	-	0	-	-	12	13	25	1	2	8	17	28	7	3	8	6	24	2	1	5	5	13	LTU	
LUX	10	6	9	9	34	22	16	16	8	62	3	3	4	13	23	8	1	1	13	23	16	18	25	27	86	LUX	
LVA	-	-	-	-	0	4	3	3	5	15	3	5	4	7	19	14	6	12	9	41	8	4	4	7	23	LVA	
MLD	-	-	-	-	0	4	2	7	7	20	10	5	4	3	22	3	6	5	3	17	7	2	2	3	14	MLD	
NET	1	-	1	-	2	-	-	-	-	0	-	1	-	-	1	-	-	-	-	0	-	-	-	-	-	0	NET
NOR	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	1	15	-	1	17	1	-	-	-	-	1	NOR
POL	297	252	395	343	1287	335	197	251	356	1139	215	189	287	350	1041	275	183	224	263	945	198	67	81	103	449	POL	
POR	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	POR
ROM	33	20	11	49	113	-	-	-	-	0	-	-	-	-	0	35	23	15	14	87	26	20	50	32	128	ROM	
RUS	-	-	-	-	0	191	97	89	147	524	125	100	63	98	386	124	72	69	70	335	52	37	21	60	170	RUS	
SPA	-	1	4	1	6	1	-	-	2	3	-	-	1	-	1	1	-	-	-	1	1	-	-	-	-	1	SPA
SVK	55	47	29	36	167	43	30	22	34	129	23	35	37	29	124	18	27	25	16	86	24	19	17	28	88	SVK	
SVN	3	-	-	7	10	-	-	-	33	33	22	36	14	18	90	82	142	123	246	593	521	805	216	224	1766	SVN	
SWE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	SWE
SWI	330	207	211	293	1041	265	204	232	351	1052	365	312	318	375	1370	376	250	277	287	1190	383	353	349	328	1413	SWI	
TUR	-	-	889	316	1205	313	410	387	372	1482	517	454	316	308	1595	507	486	483	612	2088	497	638	587	538	2260	TUR	
TYM	7	3	-	8	18	-	-	-	9	9	1	-	-	1	2	-	-	-	-	0	-	-	-	-	-	0	TYM
UKR	-	-	1	1	2	80	78	100	155	413	181	123	103	83	490	104	70	55	78	307	53	43	36	68	200	UKR	
UNK	1	-	-	1	2	-	-	-	1	1	-	-	-	-	0	-	-	-	-	0	-	-	1	-	-	1	UNK
TOT.	4934	3289	4136	4462	16821	5163	3860	3966	4928	17917	5294	4014	3913	4921	18142	5953	4276	4321	4875	19425	5463	4700	4523	5346	20032	TOT.	

TABLE 4.1.2

EUR										EUR																		
LOC. CODE	QUARTER				YEAR 1982	QUARTER				YEAR 1983	QUARTER				YEAR 1984	QUARTER				YEAR 1985	QUARTER				YEAR 1986	LOC. CODE		
	1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4				
ALB	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	ALB		
AUT	259	290	154	259	962	406	375	264	329	1374	401	441	303	277	1422	385	524	428	407	1744	367	348	297	375	1387	AUT		
BEL	135	139	128	273	675	208	119	80	109	516	129	87	112	177	505	91	49	137	169	446	116	62	80	84	342	BEL		
BIH	-	-	-	17	17	42	30	5	14	91	12	7	4	18	41	11	4	5	8	28	8	11	2	8	29	BIH		
BUL	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	BUL		
BYE	12	18	22	26	78	17	13	10	10	50	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	BYE		
CRO	260	57	33	78	428	146	104	47	212	509	366	190	104	191	851	233	95	63	135	526	138	52	20	57	267	CRO		
CZH	473	410	325	445	1653	600	437	357	427	1821	669	493	503	441	2106	510	391	277	282	1460	308	262	294	381	1245	CZH		
DEN	1	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	1	9	10	-	3	97	5	105	DEN	
DEU	2242	1646	1974	2645	8507	2754	1866	2014	2529	9163	2662	1931	2180	2298	9071	1989	1747	2197	2337	8270	1829	1391	1647	1963	6830	DEU		
EST	2	2	5	4	13	1	3	5	4	13	-	-	-	1	1	-	-	-	1	1	-	-	-	1	1	EST		
FIN	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	1	-	-	-	-	0	FIN	
FRA	1023	874	771	738	3406	802	464	637	760	2663	1006	687	551	627	2871	579	425	505	504	2013	688	602	605	570	2465	FRA		
FRY	131	34	16	41	222	71	21	17	33	142	67	30	21	68	186	40	23	23	12	98	31	9	10	36	86	FRY		
GRE	1	-	-	-	1	1	-	-	-	1	-	-	-	-	0	-	1	-	-	-	-	-	-	-	-	0	GRE	
HUN	601	246	187	339	1373	413	129	174	260	976	465	156	183	371	1175	361	157	164	351	1033	368	172	240	484	1264	HUN		
ICE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	ICE	
IRE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	IRE	
ITA	112	82	88	63	345	93	115	127	113	448	128	141	54	31	354	49	45	25	3	122	10	17	2	-	29	ITA		
LTU	6	5	9	9	29	5	3	5	5	18	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	LTU	
LUX	33	24	41	107	205	35	15	20	36	106	36	9	9	10	64	5	10	24	28	67	10	13	47	67	137	LUX		
LVA	5	6	7	9	27	5	13	7	9	34	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	LVA	
MLD	4	2	2	2	10	3	4	2	2	11	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	MLD	
NET	-	-	-	-	0	1	-	1	13	15	42	16	2	5	65	7	9	-	-	16	-	-	-	1	-	1	NET	
NOR	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	NOR	
POL	143	99	195	190	627	138	96	259	343	836	382	284	395	455	1516	258	161	349	306	1074	227	145	306	409	1087	POL		
POR	-	-	-	-	0	-	-	-	-	0	-	-	-	1	1	-	-	-	-	-	0	-	-	-	-	-	0	POR
ROM	32	20	20	19	91	23	14	9	15	61	90	16	17	18	141	22	25	8	23	78	25	24	12	12	73	ROM		
RUS	95	44	35	72	246	61	34	25	86	206	-	-	-	-	0	-	-	-	2	2	-	-	-	-	-	0	RUS	
SPA	1	-	-	-	1	5	2	2	1	10	-	-	1	3	4	7	-	7	3	17	2	2	1	5	-	10	SPA	
SVK	77	50	45	64	236	59	29	71	110	269	133	70	46	89	338	64	41	40	45	190	85	61	33	66	245	SVK		
SVN	283	174	77	74	608	122	96	34	155	407	216	179	64	66	525	67	36	21	57	181	56	18	13	30	117	SVN		
SWE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	SWE	
SWI	381	305	258	285	1229	213	204	269	378	1064	370	269	179	110	928	87	96	140	89	412	76	46	41	35	198	SWI		
TUR	503	645	529	495	2172	483	511	549	389	1932	337	426	381	316	1460	334	336	325	289	1284	271	348	311	336	1266	TUR		
TYM	-	1	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	TYM	
UKR	92	61	88	98	339	61	47	46	112	266	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	UKR	
UNK	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	1	-	-	1	UNK	
TOT.	6907	5234	5009	6352	23502	6768	4744	5036	6454	23002	7511	5432	5110	5572	23625	5099	4175	4739	5061	19074	4615	3586	4059	4925	17185	TOT.		

4th Quarter: October - December 1996

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TABLE 4.1.3

EUR										EUR																	
LOC. CODE	QUARTER				YEAR 1987	QUARTER				YEAR 1988	QUARTER				YEAR 1989	QUARTER				YEAR 1990	QUARTER				YEAR 1991	LOC. CODE	
	1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4			
ALB	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	ALB	
AUT	461	570	432	579	2042	681	457	320	328	1786	594	391	295	610	1890	908	572	406	628	2514	839	580	508	533	2460	AUT	
BEL	53	46	55	88	242	44	66	185	220	515	244	154	212	232	842	94	24	11	15	144	12	4	4	9	29	BEL	
BIH	3	6	2	16	27	23	12	3	22	60	20	7	5	14	46	14	8	19	34	75	14	11	1	-	26	BIH	
BUL	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	6	-	6	BUL
BYE	-	-	-	-	0	-	-	-	-	0	-	-	-	196	196	33	37	58	47	175	39	20	44	-	103	BYE	
CRO	53	26	29	62	170	123	53	53	89	318	157	81	83	201	522	151	91	81	159	482	237	83	40	60	420	CRO	
CZE	400	458	335	337	1530	353	296	305	336	1290	499	423	282	259	1463	305	291	238	264	1098	451	272	186	188	1097	CZE	
DEN	1	11	32	4	48	-	-	-	-	0	-	1	-	-	1	-	-	-	-	0	-	-	-	-	-	0	DEN
DEU	1658	1230	1295	1301	5484	1211	820	1217	1771	5019	2010	1335	1612	1866	6823	1698	1078	1354	1444	5574	1230	884	779	706	3599	DEU	
EST	-	-	-	-	0	-	-	-	-	0	-	-	-	164	164	53	36	84	98	271	86	68	55	-	209	EST	
FIN	-	-	-	-	0	-	19	20	24	63	6	-	-	-	6	-	-	-	-	0	-	-	-	-	-	0	FIN
FRA	660	478	432	498	2068	559	408	472	784	2223	1252	940	942	1080	4214	1132	715	507	630	2984	656	512	516	482	2166	FRA	
FRY	39	28	15	32	114	37	14	14	25	90	27	13	18	23	81	4	9	9	11	33	21	9	6	18	54	FRY	
GRE	-	-	1	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	GRE
HUN	568	276	241	381	1466	411	157	236	372	1176	350	138	224	349	1061	366	153	240	333	1092	325	139	184	233	881	HUN	
ICE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	ICE
IRE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	IRE
ITA	-	-	-	-	0	-	-	2	19	21	38	9	6	2	55	-	-	-	-	0	-	-	1	3	4	ITA	
LTU	-	-	-	-	0	-	-	-	-	0	-	-	-	101	101	31	14	33	51	129	20	12	-	-	-	32	LTU
LUX	11	4	4	4	23	2	1	-	1	4	5	8	47	79	139	40	13	5	6	64	2	4	2	8	16	LUX	
LVA	-	-	-	-	0	-	-	-	-	0	-	-	-	247	247	77	79	72	78	306	-	-	-	283	283	LVA	
MLD	-	-	-	-	0	-	-	-	-	0	-	-	-	9	9	3	1	4	5	13	9	2	7	-	-	18	MLD
NET	-	7	70	9	86	-	17	30	5	52	1	7	10	5	23	-	4	15	3	22	-	-	12	-	-	12	NET
NOR	-	-	1	2	3	-	-	-	-	0	-	-	-	-	0	-	1	-	-	1	-	-	-	-	-	0	NOR
POL	317	345	496	528	1686	424	231	401	462	1518	457	293	445	696	1891	664	317	461	603	2045	508	378	642	759	2287	POL	
POR	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	POR
ROM	18	10	13	9	50	11	5	8	17	41	9	5	3	10	27	8	8	10	27	53	11	14	9	28	62	ROM	
RUS	-	-	-	-	0	-	-	-	-	0	-	-	-	1635	1635	537	365	218	334	1454	700	205	149	333	1387	RUS	
SPA	1	2	6	1	10	2	-	2	-	4	-	1	4	1	6	-	1	5	-	6	-	2	2	4	-	8	SPA
SVK	65	46	58	84	253	102	53	55	80	290	70	47	54	79	250	76	54	67	90	287	82	64	56	60	262	SVK	
SVN	42	53	76	117	288	164	128	176	337	805	356	175	108	122	761	84	48	59	55	246	68	50	30	40	188	SVN	
SWE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	SWE
SWI	24	26	24	25	99	40	11	28	16	95	13	8	29	10	60	5	5	4	11	25	25	29	24	27	105	SWI	
TUR	354	242	199	210	1005	207	220	137	146	710	162	118	157	147	584	153	165	138	127	583	89	142	108	89	428	TUR	
TYM	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	TYM
UKR	-	-	-	2	2	-	-	-	-	0	-	-	-	1280	1280	389	194	250	541	1374	234	116	138	-	488	UKR	
UNK	-	1	-	-	1	-	1	-	1	2	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	UNK
TOT.	4728	3865	3816	4289	16698	4394	2969	3664	5055	16082	6270	4154	4536	9417	24377	6825	4283	4348	5594	21050	5658	3600	3503	3869	16630	TOT.	

33000 0110

TABLE 4.1.4

EUR						EUR						EUR																
LOC. CODE	QUARTER				YEAR 1992	QUARTER				YEAR 1993	QUARTER				YEAR 1994	QUARTER				YEAR 1995	QUARTER				YEAR 1996	LOC. CODE		
	1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4				
ALB	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	ALB		
AUT	586	283	122	126	1117	103	100	199	273	675	104	50	31	69	254	40	17	15	23	95	9	1	2	2	14	AUT		
BEL	24	6	1	3	34	1	-	-	1	2	3	7	13	38	61	79	43	33	58	213	22	9	5	8	44	BEL		
BIH	7	1	-	-	8	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	BIH		
BUL	-	-	-	22	22	3	-	-	-	3	5	1	2	5	13	4	1	1	4	10	11	3	3	15	32	BUL		
BYE	-	-	-	-	0	36	36	19	17	108	-	-	19	21	40	-	6	14	14	34	12	17	20	95	144	BYE		
CRO	57	27	27	82	193	119	36	46	157	358	191	95	82	172	540	168	56	65	130	419	230	66	67	125	488	CRO		
CZH	239	107	67	138	551	120	84	107	111	422	95	55	30	41	221	42	31	50	55	178	66	50	46	75	237	CZH		
DEN	-	-	-	-	0	-	1	-	-	1	-	-	3	-	3	1	-	-	-	1	-	-	-	-	-	0	DEN	
DEU	536	270	310	309	1425	207	89	159	390	845	379	263	281	455	1378	376	204	152	124	856	65	26	29	33	153	DEU		
EST	30	19	21	40	110	42	32	40	46	160	31	28	28	21	108	12	19	27	16	74	23	24	23	29	99	EST		
FIN	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	FIN	
FRA	589	325	186	185	1285	114	66	54	27	261	42	29	18	10	99	21	10	3	6	40	5	4	6	2	17	FRA		
FRY	18	23	19	79	139	40	12	17	14	83	20	8	5	13	46	20	12	10	48	90	24	23	17	28	92	FRY		
GRE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	GRE	
HUN	240	107	190	355	892	461	170	220	272	1123	245	133	148	423	949	373	157	214	390	1134	586	247	264	260	1357	HUN		
ICE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	ICE	
IRE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	IRE	
ITA	11	4	6	2	23	6	29	19	28	82	10	14	6	6	36	5	2	2	2	11	1	-	-	-	1	ITA		
LTU	17	13	23	35	88	27	23	27	23	100	15	11	12	25	63	15	14	15	36	80	15	13	31	45	104	LTU		
LUX	1	-	-	1	2	-	1	-	-	1	-	-	-	1	1	2	4	-	9	15	11	4	2	-	-	17	LUX	
LVA	35	33	32	25	125	25	31	63	75	194	65	78	56	79	278	60	58	50	54	222	34	62	50	40	186	LVA		
MLD	-	-	-	-	0	3	-	-	-	3	1	-	-	-	1	-	-	-	1	1	2	1	3	7	-	13	MLD	
NET	-	2	6	-	8	1	4	5	-	10	-	-	1	-	1	2	1	1	-	4	-	-	5	-	-	5	NET	
NOR	-	1	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	NOR
POL	645	367	776	1296	3084	802	572	693	578	2645	541	399	596	691	2227	558	420	375	620	1973	647	867	529	483	2526	POL		
POR	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	POR
ROM	17	14	10	14	55	22	26	17	12	77	12	8	6	6	32	16	6	4	4	30	12	9	5	16	42	ROM		
RUS	341	190	141	230	902	334	208	91	136	769	162	173	107	225	667	277	129	167	534	1107	765	438	227	354	1784	RUS		
SPA	5	4	1	2	12	3	2	-	-	5	-	-	2	1	3	4	1	-	1	6	-	-	-	1	-	1	SPA	
SVK	136	39	52	94	321	113	99	109	168	489	170	151	96	147	564	63	47	57	99	266	96	82	63	103	344	SVK		
SVN	93	40	43	58	234	80	88	104	234	506	271	149	131	288	839	435	129	166	354	1084	165	51	17	14	247	SVN		
SWE	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	SWE
SWI	39	42	20	26	127	13	28	56	78	175	100	44	45	36	225	14	5	2	2	23	2	2	1	1	6	SWI		
TUR	67	105	67	81	320	56	84	79	68	287	72	77	9	12	170	36	47	59	26	168	28	42	32	23	125	TUR		
TYM	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	TYM
UKR	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	UKR
UNK	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	1	-	1	-	-	2	UNK
TOT.	3733	2022	2120	3203	11078	2731	1821	2124	2708	9384	2534	1773	1727	2785	8819	2623	1419	1482	2610	8134	2831	2042	1447	1760	8080	TOT.		

4th Quarter: October - December 1996

Oral vaccination in the field was started in Switzerland in 1978. Looking at the gross total (see columns or quarterly data) a first impact appeared in 1984 after several other countries in western Europe practiced joint oral vaccination. However, in 1989 something happened which statisticians call an "outlier", an incidence not easy to explain: in spite of 10 countries already practicing the oral vaccination an impressive increase of rabies cases occurred, the absolute peak for Europe in our data collection. An attempted explanation could be an abundance of food (the so called rodent years for example) nevertheless, cases increased by imposing 52%.

After the peak in 1989 when fox populations were no doubt reduced by rabies, oral vaccination areas were continuously enlarged and reduction of rabies cases took place in large steps until it slowed down during the last 3-4 years.

Looking at individual countries (see columns in graph or quarterly data) only 2 countries, Austria and France, have a record of continuously reduced rabies case data after application of oral vaccination. An increase after an already much improved rabies situation was experienced in 1994 by Germany and Switzerland, in 1995 by Belgium and Slovenia, in 1996 by the Czech Republic. Reasons for these set-backs have been reinfected areas and recurring residual foci mostly in areas with high density fox populations. In these circum-

stances the method of oral vaccination had to be corrected in as much as vaccine baits per annum and area (km²) were to be increased compared to what was practiced initially.

Considering that countries having previously recorded a high incidence and are now at their lowest level like Austria, France, Germany, Switzerland, and, countries contributing at this time a great number of cases to the European record have large areas treated by oral vaccination, a further reduction of rabies cases for the year 1997 can be expected.

TABLES ON BAT RABIES

Of the total number of bat rabies cases the cases have been singled out by **country** and **year**:

TABLE 4.1.5

<u>Country</u>	<u>Number of Cases</u>
Czech Republic	1
Denmark	169
France	3
Germany	90
Netherlands	214
Poland	2
Spain	8
Slovakia	1
Switzerland	2
Ukraine	4
United Kingdom	1
Total	495

TABLE 4.1.6

<u>Year</u>	<u>Number of cases</u>
1977	1
1982	1
1983	1
1985	15
1986	122
1987	142
1988	53
1989	42
1990	41
1991	15
1992	14
1993	18
1994	8
1995	6
1996	16
Total	495

Commentary:

Bat rabies has its own cycle. The epizootic in Europe occurs mainly in areas without fox-mediated rabies. Within the different bat populations approx. 95% of all cases occur in the species *Eptesicus serotinus*. Due to the life cycle of the bats, rabies is seasonal. Of 495 rabies cases 348 (70.3% of total) occurred during the third quarter of the year. This figure comes about because of great activities in the bat colonies during summer with the possibility to pass on the virus to other animals, plus the incubation period.

MAP WITH BAT RABIES CASES

In ANNEX 5 all 495 recorded rabies cases from 1977 to 1996 are entered on a map of Europe to show distribution and concentration of these cases.

TABLE OF HUMAN RABIES CASES

Unfortunately, **human rabies cases are not reported regularly** by all countries participating in the European surveillance. The cases received have been singled out by year and country (see TABLE 4.1.7, page 18).

Commentary:

In countries of western and central Europe a tendency can be noticed that hardly any indigenously acquired human cases occur.

The 24 cases imported to Europe indicate a risk for travellers in other rabies infected continents.

4.2 Information on Topics of Four Recent Rabies Meetings with WHO Participation

- 4.2.1 75th Anniversary of Pasteur Institute Novi Sad, Yugoslavia - International Meeting on Rabies
3-5 October 1996, Novi Sad, Federal Republic of Yugoslavia
Organizer: Pasteur Institute Novi Sad

Main topics: Human antirabies protection, ecology of sylvatic rabies, oral vaccination of foxes against rabies.

- 4.2.2 WHO Conference on Oral Immunization of Foxes in Central and Eastern Europe
7-8 November 1996, Portoroz, Slovenia
Organizer: WHO Collaborating Centre for Rabies Surveillance and Research, at the Federal Research Centre for Virus Diseases of Animals in Wusterhausen and Tübingen, Federal Republic of Germany

Main topics: Exchange on progress of oral vaccination in western Europe, plans for the continuation, standardization of laboratory techniques in rabies, administrative aspects of oral vaccination.

- 4.2.3 Cross Border Cooperation on Oral Vaccination of Foxes against Rabies - Western Europe
13 January 1997, Metz, France
Organizer: WHO Collaborating Centre for Research and Management in Zoonosis Control, Malzéville, France

Main topics: Exchange on progress of oral vaccination in western Europe, plans for the continuation.

- 4.2.4 International Rabies Meeting
13-14 March 1997, Paris, France
Organizer: Rabies Unit, Institut Pasteur, Paris, France

Main topics: Molecular virology of the rabies virus, immunology, pathogenesis, epidemiology, animal prophylaxis, human prophylaxis.

TABLE 4.1.7

Human Rabies Cases in Europe 1977-1996

Country	Number of Cases	Imported Cases	Year
Austria	1		1979
Belarus	2		1989, 1993
Belgium	2	2 ¹⁾	1981, 1988
Bulgaria	1		1994
Czech Republic	1	1 ²⁾	1989
Estonia	4		1984, 1985, 1986, 1989
Finland	1 ³⁾		1985
France	5	5 ⁴⁾	1979, 1980, 1982, 1991, 1992
Germany	5	3 ⁵⁾	1978 ⁶⁾ , 1981, 1986 ⁵⁾ , 1990, 1996 ⁵⁾
Hungary	6	1 ⁶⁾	1978 ⁶⁾ , 1985(2), 1991, 1994(2)
Italy	1	1 ⁷⁾	1996 ⁷⁾
Latvia	1		1993
Lithuania	3		1992(2), 1993
Poland	7	1 ⁸⁾	1977, 1979(2), 1980, 1983 ⁸⁾ , 1984, 1985
Romania	40		'77(3), '83(2), '84, '85(4), '86(4), 87(4), '88(3), '89(4), 90(4), '91(8), '92(3)
Russia, Europ. part	67		1985, 1989(6), 1990(11), 1991(16), 1992(9), 1993(5), 1994(4), 1995(10), 1996(5)
Slovakia	1		1990
Switzerland	3		1977
Turkey	40		1977(34), 1978(2), 1979(3), 1991(1)
Ukraine	7		1977, 1989(2), 1990(4)
United Kingdom	9	9 ⁹⁾	1977(2), 1978, 1981, 1986, 1987, 1988(2), 1996
Yugoslavia	9	1 ¹⁰⁾	1977(2), 1978(2), 1979(2), 1980(2), 1989 ¹⁰⁾
Totals	216	24	

- 1) Imported from Ruanda and Zaire
- 2) Imported from Vietnam
- 3) Possibly of bat origin, but until now no confirmed bat rabies in the country
- 4) Imported from Tunisia, Egypt, Senegal, Mexico, Algeria
- 5) Imported from Egypt and India
- 6) Imported from Nigeria
- 7) Imported from Nepal
- 8) Imported from Sudan
- 9) Imported from India (4), Pakistan (2), Zambia, Bangladesh
- 10) Imported from Algeria

TABLE 5.1

EUR		EUROPE		4/96		RABIES CASES							1.10.96 - 31.12.96				
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
ALB	ALBANIA	**						0						0	0		
AUT	AUSTRIA							0	2	-	-	-	-	2	2		
BEL	BELGIUM		1	2	-	-	-	3	4	-	1	-	-	5	8		
BIH	BOSNA I HERCEGOWINA	**						0						0	0		
BUL	BULGARIA	1)						0					15	15	15		
BYE	BELARUS		7	19	-	-	1	38	49	-	-	-	8	57	95		
CRO	CROATIA		4	4	-	1	-	12	111	-	1	-	1	113	125		
CZH	CZECH REPUBLIC		-	1	-	-	3	4	69	-	1	1	-	71	75		
DEN	DENMARK	*						0						0	0		
DEU	FED.REP. OF GERMANY		3	2	-	-	-	5	26	-	-	-	2	28	33		
EST	ESTONIA		2	5	5	-	-	12	9	-	-	1	7	17	29		
FIN	FINLAND	*						0						0	0		
FRA	FRANCE							0	2	-	-	-	-	2	2		
FRY	FED.REP.OF YUGOSLAVI		1	8	2	-	-	11	17	-	-	-	-	17	28		
GRE	GREECE	*						0						0	0		
HUN	HUNGARY		3	25	13	2	-	43	211	1	1	2	2	217	260		
ICE	ICELAND	*						0						0	0		
IRE	IRELAND	*						0						0	0		
ITA	ITALY	*						0						0	0		
LTU	LITHUANIA		2	2	26	-	2	32	10	-	1	-	2	13	45		
LUX	LUXEMBOURG	*						0						0	0		
LVA	LATVIA		3	4	4	-	-	11	15	2	-	-	12	29	40		
MLD	MOLDOVA		-	1	2	-	-	3	4	-	-	-	-	4	7		
NET	NETHERLANDS	*						0						0	0		
NOR	NORWAY	*						0						0	0		
POL	POLAND		18	33	56	-	1	108	311	1	14	5	44	375	483		
POR	PORTUGAL	*						0						0	0		
ROM	ROMANIA		4	1	5	-	-	10	6	-	-	-	-	6	16		
RUS	RUSSIAN FEDERATION		75	62	68	26	45	1	277	67	-	-	9	76	354		
SPA	SPAIN	2)	1	-	-	-	-	1						0	1		
SVK	SLOVAK REPUBLIC		4	21	4	-	-	1	30	70	-	-	3	73	103		
SVN	SLOVENIA		-	2	-	-	-	2	12	-	-	-	-	12	14		
SWE	SWEDEN	*						0						0	0		
SWI	SWITZERLAND + LIECHT		1	-	-	-	-	1						0	1		
TUR	TURKEY		21	-	2	-	-	23						0	23		
TYM	MAKEDONIJA	**						0						0	0		
UKR	UKRAINE	**						0						0	0		
UNK	UNITED KINGDOM	3)						0						0	1		
TOTAL			150	179	214	28	52	3	626	995	4	19	9	105	1132	2	1760
PER CENT			8.5	10.2	12.2	1.6	3.0	0.2	35.6	56.5	0.2	1.1	0.5	6.0	64.3	0.1	100.0

* NO CASES ** NO DATA 1) UNSPECIFIED 2) NORTH AFRICA 3) HUMAN CASE IMPORTED FROM NIGERIA

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TABLE 5.2

EUR		EUROPE						1996						RABIES CASES		1. 1.96 - 31.12.96	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
ALB	ALBANIA	**						0						0	0		
AUT	AUSTRIA							0	13	-	-	1	-	14	14		
BEL	BELGIUM		1	2	7	3	1	14	28	1	1	-	-	30	44		
BIH	BOSNA I HERCEGOWI**							0						0	0		
BUL	BULGARIA	1)						0	-	-	-	-	32	32	32		
BYE	BELARUS		19	16	23	-	-	59	67	-	-	-	18	85	144		
CRO	CROATIA		14	10	6	-	7	38	436	1	5	-	8	450	488		
CZH	CZECH REPUBLIC		-	3	-	-	-	6	223	-	6	2	-	231	237		
DEN	DENMARK	*						0						0	0		
DEU	FED.REP. OF GER.	2)	1	7	14	2	8	32	106	-	1	3	10	120	153		
EST	ESTONIA		12	13	9	-	1	35	45	1	-	1	17	64	99		
FIN	FINLAND	*						0						0	0		
FRA	FRANCE		-	2	1	-	4	7	10	-	-	-	-	10	17		
FRY	FED.REP.OF YUGOSLAVI		7	13	3	1	3	27	65	-	-	-	-	65	92		
GRE	GREECE	*						0						0	0		
HUN	HUNGARY		57	116	64	3	5	246	1086	2	7	12	4	1111	1357		
ICE	ICELAND	*						0						0	0		
IRE	IRELAND	*						0						0	0		
ITA	ITALY	3)						0						0	1		
LTU	LITHUANIA		9	12	43	-	2	67	24	-	5	1	7	37	104		
LUX	LUXEMBOURG		-	-	4	-	-	6	10	-	-	1	-	11	17		
LVA	LATVIA		10	17	8	-	-	35	104	6	2	-	39	151	186		
MLD	MOLDOVA		2	2	2	-	-	6	6	-	-	-	1	7	13		
NET	NETHERLANDS							0	-	-	-	-	5	5	5		
NOR	NORWAY	*						0						0	0		
POL	POLAND		157	173	129	-	1	461	1780	25	72	64	124	2065	2526		
POR	PORTUGAL	*						0						0	0		
ROM	ROMANIA		10	6	9	2	1	28	13	-	-	-	1	14	42		
RUS	RUSSIAN FEDERATION		466	137	548	91	134	1381	332	3	1	34	28	398	1784		
SPA	SPAIN	4)	1	-	-	-	-	1						0	1		
SVK	SLOVAK REPUBLIC		24	43	5	-	-	73	256	-	7	1	7	271	344		
SVN	SLOVENIA		11	14	1	-	-	26	209	1	5	4	2	221	247		
SWE	SWEDEN	*						0						0	0		
SWI	SWITZERLAND + LIECHT		1	3	-	-	-	4	1	-	1	-	-	2	6		
TUR	TURKEY		103	4	14	-	4	125						0	125		
TYM	MAKEDONIJA	**						0						0	0		
UKR	UKRAINE	**						0						0	0		
UNK	UNITED KINGDOM	5)						0	-	-	-	-	1	1	2		
TOTAL			905	593	890	102	176	11	2677	4814	40	113	124	304	5395	8	8080
PER CENT			11.2	7.3	11.0	1.3	2.2	0.1	33.1	59.6	0.5	1.4	1.5	3.8	66.8	0.1	100.0

* NO CASES ** NO DATA

1) UNSPECIFIED 2) HUMAN CASE IMPORTED FROM SRI LANKA 3) HUMAN CASE IMPORTED FROM NEPAL
4) NORTH AFRICA 5) HUMAN CASE IMPORTED FROM NIGERIA

TABLE 5.3

EUR		EUROPE		4/96		RABIES CASES 'OTHER ANIMAL SPECIES'							1.10.96 - 31.12.96		
LOCATION		OTHER DOMESTIC ANIMALS			OTHER WILD ANIMALS								UNSPECIFIED	TOTAL	
CODE	NAME	PIG	CAT LIVING WILD	OTH.FOX SPECIES	WOLF	RACCOON DOG	WILD CAT	LYNK	O.WILD CARNIV	INS. BAT	SQUIRREL	BLACK RAT			O. SMALL RODENTS
BUL	BULGARIA	-	-	-	-	-	-	-	-	-	-	-	-	15	15
BYE	BELARUS	1	-	-	3	5	-	-	-	-	-	-	-	-	9
CRO	CROATIA	-	-	-	-	-	-	-	1	-	-	-	-	-	1
DEU	FED.REP. OF GERMANY	-	-	-	-	-	-	-	-	2	-	-	-	-	2
EST	ESTONIA	-	-	-	-	6	-	1	-	-	-	-	-	-	7
HUN	HUNGARY	-	-	-	-	-	1	-	-	-	1	-	-	-	2
LTU	LITHUANIA	-	-	-	-	2	-	-	-	-	-	-	-	-	2
LVA	LATVIA	-	-	-	-	12	-	-	-	-	-	-	-	-	12
POL	POLAND	-	-	-	-	43	-	-	-	-	1	-	-	-	44
RUS	RUSSIAN FEDERATION	1	-	1	2	5	-	-	-	-	-	1	-	-	10
SVK	SLOVAK REPUBLIC	-	1	1	-	-	-	-	-	-	-	-	2	-	4
TOTAL		2	1	2	5	73	1	1	1	2	2	1	2	15	108
PER CENT		1.9	0.9	1.9	4.6	67.6	0.9	0.9	0.9	1.9	1.9	0.9	1.9	13.9	100.0

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TABLE 5.4

COUNTRY	EUR EUROPE 1996										RABIES CASES 'OTHER ANIMAL SPECIES'										1. 1.96 - 31.12.96				
	OTHER DOMESTIC ANIMALS					OTHER WILD ANIMALS															TOTAL				
	DONKEY	PIG	OTH. DOM. HERBIVOR	CAT LIV. WILD	ARCTIC FOX	OTH. FOX SPECIES	JACKAL	WOLF	RACCOON DOG	WILD CAT	LYNX	OTH. WILD CARNIV	WILDBOAR	HEDGEHOG	INS. BAT	SQUIRREL	BLACK RAT	MUSKRAT	OTH. SM. RODENTS	HARE		OTHERS	UNSPECI- FIED		
BUL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32			
BYE	-	1	-	-	-	-	3	6	-	-	-	-	-	-	-	-	-	-	-	-	3	19			
CRO	1	-	-	-	-	3	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	9			
DEU	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10		
EST	-	-	-	-	-	-	1	15	-	1	-	-	-	-	-	-	-	-	-	-	-	-	17		
HUN	-	1	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	5		
LTU	1	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8		
LVA	-	-	-	-	-	-	2	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39		
MLD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1		
NET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	5		
POL	-	1	-	-	-	-	-	103	-	-	-	1	-	-	-	11	1	2	-	6	-	-	125		
ROM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
RUS	-	4	1	1	-	-	6	13	-	2	1	-	-	-	-	4	-	-	-	-	-	-	33		
SVK	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	8		
SVN	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2		
UNK	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1		
TOT	2	7	1	1	1	4	3	181	6	3	2	1	1	16	12	5	2	2	6	6	7	35	315		
PER	0.6	2.2	0.3	0.3	0.3	1.3	1.0	57.5	1.9	1.0	0.6	0.3	0.3	5.1	3.8	1.6	0.6	0.6	1.9	1.9	2.2	11.1	100.0		

TABLE 5.5 RABIES CASE RATES (% TOTAL) FOR INDIVIDUAL ANIMAL SPECIES AND FOR TOTAL CASES OF 10 EUROPEAN COUNTRIES RANKING HIGHEST IN 1996.

EUR EUROPE 1996																1. 1.96 - 31.12.96	
LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
EUROPE																	
TOTAL RABIES CASES		905	593	890	102	176	11	2677	4814	40	113	124	304	5395	8	8080	
PER CENT INVOLVEMENT / COUNTRY																	
POL POLAND		17.3	29.2	14.5	-	0.6	9.1	17.2	37.0	62.5	63.7	51.6	40.8	38.3		31.3	
RUS RUSSIAN FEDERATION		51.5	23.1	61.6	89.2	76.1	45.5	51.6	6.9	7.5	0.9	27.4	9.2	7.4	62.5	22.1	
HUN HUNGARY		6.3	19.6	7.2	2.9	2.8	9.1	9.2	22.6	5.0	6.2	9.7	1.3	20.6		16.8	
CRO CROATIA		1.5	1.7	0.7	-	4.0	9.1	1.4	9.1	2.5	4.4	-	2.6	8.3		6.0	
SVK SLOVAK REPUBLIC		2.7	7.3	0.6	-	-	9.1	2.7	5.3	-	6.2	0.8	2.3	5.0		4.3	
SVN SLOVENIA		1.2	2.4	0.1	-	-	-	1.0	4.3	2.5	4.4	3.2	0.7	4.1		3.1	
CZH CZECH REPUBLIC		-	0.5	-	-	1.7	-	0.2	4.6	-	5.3	1.6	-	4.3		2.9	
LVA LATVIA		1.1	2.9	0.9	-	-	-	1.3	2.2	15.0	1.8	-	12.8	2.8		2.3	
DEU FED.REP. OF GERMANY		0.1	1.2	1.6	2.0	4.5	-	1.2	2.2	-	0.9	2.4	3.3	2.2	12.5	1.9	
BYE BELARUS		2.1	2.7	2.6	-	-	9.1	2.2	1.4	-	-	-	5.9	1.6		1.8	
TOTAL FROM 10 COUNTRIES		759	536	798	96	158	10	2357	4599	38	106	120	240	5103	6	7466	
EQUAL % TOTAL		83.9	90.4	89.7	94.1	89.8	90.9	88.0	95.5	95.0	93.8	96.8	78.9	94.6	75.0	92.4	

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R A B I E S C A S E S																1.10.96 - 31.12.96	
LOCATION CODE NAME		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL		
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
AUT A U S T R I A																	
103 EISENSTADT - LAND							0	1	-	-	-	-	1				
107 NEUSIEDL AM SEE							0	1	-	-	-	-	1				
TOTAL		0	0	0	0	0	0	2	0	0	0	0	2	0	2		
BEL B E L G I U M																	
LX LUXEMBOURG		-	1	2	-	-	3	3	-	1	-	-	4		7		
NA NAMUR							0	1	-	-	-	-	1		1		
TOTAL		0	1	2	0	0	3	4	0	1	0	0	5	0	8		
PER CENT		0.0	12.5	25.0	0.0	0.0	37.5	50.0	0.0	12.5	0.0	0.0	62.5	0.0	100.0		
DEU F E D E R A L R E P U B L I C O F G E R M A N Y																	
01 SCHLESWIG-HOLSTEIN							0	-	-	-	-	1	1		1		
03 NIEDERSACHSEN							0	-	-	-	-	1	1		1		
05 NORDRHEIN-WESTFALEN		-	2	1	-	-	3	7	-	-	-	-	7		10		
06 HESSEN							0	13	-	-	-	-	13		13		
07 RHEINLAND-PFALZ		-	1	-	-	-	1	2	-	-	-	-	2		3		
09 BAYERN							0	2	-	-	-	-	2		2		
10 SAARLAND		-	-	1	-	-	1	2	-	-	-	-	2		3		
TOTAL		0	3	2	0	0	5	26	0	0	0	2	28	0	33		
PER CENT		0.0	9.1	6.1	0.0	0.0	15.2	78.8	0.0	0.0	0.0	6.1	84.8	0.0	100.0		

RABIES CASES

1.10.96 - 31.12.96

LOCATION CODE NAME	DOMESTIC ANIMALS							WILD ANIMALS					HUMAN CASES	TOTAL	
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
BUL BULGARIA															
05 VIDIN							0	-	-	-	-	3	3		3
06 VRATZA							0	-	-	-	-	1	1		1
15 PLEVEN							0	-	-	-	-	5	5		5
17 RAZGRAD							0	-	-	-	-	1	1		1
18 ROUSSE							0	-	-	-	-	3	3		3
19 SILISTRA							0	-	-	-	-	1	1		1
25 TARGOVITCHE							0	-	-	-	-	1	1		1
TOTAL	0	0	0	0	0	0	0	0	0	0	0	15	15	0	15
ROM ROMANIA															
01 ALBA	2	-	-	-	-	-	2	1	-	-	-	-	1		3
04 BACAU							0	1	-	-	-	-	1		1
09 BRAILA	1	-	-	-	-	-	1						0		1
11 CARAS-SEVERIN	-	-	1	-	-	-	1						0		1
13 CLUJ	-	1	-	-	-	-	1						0		1
23 IALOMITA							0	1	-	-	-	-	1		1
27 MURES	-	-	1	-	-	-	1						0		1
30 PRAHOVA	1	-	2	-	-	-	3	2	-	-	-	-	2		5
31 SATU-MARE	-	-	1	-	-	-	1	1	-	-	-	-	1		2
TOTAL	4	1	5	0	0	0	10	6	0	0	0	0	6	0	16
PER CENT	25.0	6.3	31.3	0.0	0.0	0.0	62.5	37.5	0.0	0.0	0.0	0.0	37.5	0.0	100.0
TUR TURKEY															
02 ADIYAMAN	1	-	-	-	-	-	1						0		1
34 ISTANBUL	15	-	1	-	-	-	16						0		16
35 IZMIR	1	-	-	-	-	-	1						0		1
40 KIRSEHIR	1	-	-	-	-	-	1						0		1
46 KAHRAMANMARAS	1	-	-	-	-	-	1						0		1
52 ORDU	1	-	-	-	-	-	1						0		1
54 SAKARYA	1	-	-	-	-	-	1						0		1
72 BATMAN	-	-	1	-	-	-	1						0		1
TOTAL	21	0	2	0	0	0	23	0	0	0	0	0	0	0	23
PER CENT	91.3	0.0	8.7	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

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R A B I E S C A S E S															1.10.96 - 31.12.96	
LOCATION		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
BYE B E L A R U S																
01	Brest Region	-	-	1	-	-	-	1	3	-	-	-	-	3		4
02	Vitebsk Region	7	7	17	-	-	-	31	23	-	-	-	7	30		61
03	Gomel Region	1	-	-	-	-	-	1	5	-	-	-	-	5		6
04	Grodno Region	1	-	-	-	-	-	1	4	-	-	-	-	4		5
05	Minsk Region	2	-	1	-	-	1	4	14	-	-	-	1	15		19
TOTAL		11	7	19	0	0	1	38	49	0	0	0	8	57	0	95
PER CENT		11.6	7.4	20.0	0.0	0.0	1.1	40.0	51.6	0.0	0.0	0.0	8.4	60.0	0.0	100.0
LTU L I T H U A N I A																
36	Birzu	-	-	2	-	-	-	2						0		2
39	Vilkaviskio	-	-	1	-	1	-	2						0		2
46	Jonavos	-	-	1	-	-	-	1						0		1
47	Joniskio							0	1	-	-	-	-	1		1
52	Kauno							0	1	-	-	-	-	1		1
53	Kedainiu	-	-	1	-	-	-	1						0		1
54	Kelmes	-	-	5	-	-	-	5	1	-	-	-	1	2		7
55	Klaipedos	1	-	-	-	-	-	1	1	-	-	-	-	1		2
56	Kretdingos	-	-	1	-	-	-	1						0		1
65	Pakruojis	-	-	1	-	-	-	1						0		1
71	Radviliškio	-	-	4	-	1	-	5						0		5
72	Raseiniu							0	-	-	-	-	1	1		1
73	Rokiskio	-	-	7	-	-	-	7						0		7
77	Taurages	-	-	1	-	-	-	1	1	-	-	-	-	1		2
81	Ukmerges							0	1	-	-	-	-	1		1
84	Sakiu	-	-	2	-	-	-	2	1	-	-	-	-	1		3
87	Siaulies							0	1	-	-	-	-	1		1
91	Siauliu	-	2	-	-	-	-	2	1	-	1	-	-	2		4
94	Jurbarko	1	-	-	-	-	-	1	1	-	-	-	-	1		2
TOTAL		2	2	26	0	2	0	32	10	0	1	0	2	13	0	45
PER CENT		4.4	4.4	57.8	0.0	4.4	0.0	71.1	22.2	0.0	2.2	0.0	4.4	28.9	0.0	100.0

R A B I E S C A S E S

1.10.96 - 31.12.96

LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
CZH CZECH REPUBLIC																
00 DISTRICT OF PRAGUE								0	4	-	-	-	-	4	4	
01 CENTRAL BOHEMIA								0	31	-	1	1	-	33	33	
02 SOUTH BOHEMIA		-	-	-	-	1	-	1	10	-	-	-	-	10	11	
04 NORTH BOHEMIA		-	1	-	-	2	-	3	16	-	-	-	-	16	19	
06 SOUTH MORAVIA								0	8	-	-	-	-	8	8	
TOTAL		0	1	0	0	3	0	4	69	0	1	1	0	71	0	75
PER CENT		0.0	1.3	0.0	0.0	4.0	0.0	5.3	92.0	0.0	1.3	1.3	0.0	94.7	0.0	100.0
SVK SLOVAK REPUBLIC																
10 DISTRICT OF BRATISLAV								0	1	-	-	-	-	1	1	
11 WEST SLOVAKIA		-	2	-	-	-	1	3	29	-	-	-	1	30	33	
12 CENTRAL SLOVAKIA		1	5	-	-	-	-	6	4	-	-	-	-	4	10	
13 EAST SLOVAKIA		3	14	4	-	-	-	21	36	-	-	-	2	38	59	
TOTAL		4	21	4	0	0	1	30	70	0	0	0	3	73	0	103
PER CENT		3.9	20.4	3.9	0.0	0.0	1.0	29.1	68.0	0.0	0.0	0.0	2.9	70.9	0.0	100.0

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CRO CROATIA		RABIES CASES												1.10.96 - 31.12.96	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS		
012	CAZMA	-	1	-	-	-	-	1	1	-	-	-	-	1	2
013	DARUVAR	-	-	1	-	-	-	1	3	-	-	-	-	3	4
017	DONJI MIHOLJAC	2	-	-	-	-	-	2	-	-	-	-	-	0	2
019	DUBROVNIK	-	-	-	-	1	-	1	-	-	-	-	-	0	1
020	DUGA RESA	1	-	-	-	-	-	1	1	-	-	-	-	1	2
023	DAKOVO	-	-	-	-	-	-	0	3	-	-	-	-	3	3
024	DURDEVAC	-	1	-	-	-	-	1	4	-	-	-	-	4	5
026	GLINA	-	-	-	-	-	-	0	1	-	-	-	-	1	1
027	GOSPIC	-	-	-	-	-	-	0	3	-	-	-	-	3	3
033	IVANIC GRAD	-	-	-	-	-	-	0	4	-	-	-	-	4	4
034	JASTREBARSKO	-	-	-	-	-	-	0	2	-	-	-	-	2	2
036	KARLOVAC	-	-	-	-	-	-	0	2	-	-	-	-	2	2
040	KOPRIVNICA	-	-	-	-	-	-	0	8	-	-	-	-	8	8
044	KRIZEVCI	-	-	-	-	-	-	0	6	-	-	-	-	6	6
049	LUDBREG	-	-	-	-	-	-	0	1	-	-	-	-	1	1
050	MAKARSKA	-	-	-	-	-	-	0	1	-	-	-	-	1	1
051	METKOVIC	-	-	-	-	-	-	0	1	-	-	-	-	1	1
052	NASICE	1	-	-	-	-	-	1	2	-	-	-	-	2	3
053	NOVA GRADISKA	-	-	-	-	-	-	0	1	-	-	-	-	1	1
055	NOVSKA	-	-	-	-	-	-	0	1	-	-	-	1	1	1
057	OSULIN	-	-	-	-	-	-	0	3	-	-	-	-	3	3
059	OPATIJA	-	-	-	-	-	-	0	1	-	-	-	-	1	1
060	ORAOVICA	-	-	-	-	-	-	0	2	-	-	-	-	2	2
062	OTOCAC	-	-	-	-	-	-	0	2	-	-	-	-	2	2
065	PAKRAC	-	-	-	-	-	-	0	3	-	-	-	-	3	3
066	PAZIN	-	-	-	-	-	-	0	1	-	-	-	-	1	1
067	PETRINJA	-	-	-	-	-	-	0	1	-	-	-	-	1	1

CRO

CONTINUED

LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
068	PODRAVSKA SLATINA							0	2	-	-	-	-	2		2
069	POREC							0	2	-	-	-	-	2		2
071	PULA							0	5	-	-	-	-	5		5
073	RIJEKA							0	5	-	-	-	-	5		5
074	ROVINJ							0	5	-	-	-	-	5		5
075	SENJ							0	1	-	-	-	-	1		1
076	SINJ							0	1	-	-	-	-	1		1
077	SISAK							0	1	-	-	-	-	1		1
078	POZEGA							0	2	-	-	-	-	2		2
079	SLAVONSKI BROD							0	1	-	-	-	-	1		1
080	SLUNJ							0	1	-	-	-	-	1		1
081	SOLIN							0	1	-	-	-	-	1		1
083	SIBENIK							0	1	-	-	-	-	1		1
085	TROGIR							0	1	-	-	-	-	1		1
086	VALPOVO	-	1	-	-	-	-	1	1	-	-	-	-	1		2
087	VARAZDIN							0	1	-	-	-	-	1		1
088	VINKOVCI	-	-	2	-	-	-	2	4	-	-	-	-	4		6
089	VIROVITICA							0	1	-	1	-	-	2		2
092	VRBOVEC							0	4	-	-	-	-	4		4
093	VRBOVSKO							0	1	-	-	-	-	1		1
098	ZADAR							0	4	-	-	-	-	4		4
101	ZUPANJA	-	-	1	-	-	-	1	1	-	-	-	-	1		2
102	GRAD ZAGREB							0	8	-	-	-	-	8		8
TOTAL		4	3	4	0	1	0	12	111	0	1	0	1	113	0	125
PER CENT		3.2	2.4	3.2	0.0	0.8	0.0	9.6	88.8	0.0	0.8	0.0	0.8	90.4	0.0	100.0

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RABIES CASES															1.10.96 - 31.12.96	
LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
EST ESTONIA																
01	Harjumaa	1	-	-	-	-	-	1	5	-	-	-	-	5		5
04	Jogevamaa							0	-	-	-	-	2		2	
05	Jaervamaa							0	1	-	-	-	2		3	
07	Laesene-Virumaa							0	1	-	-	-	1		2	
08	Polvamaa	-	2	-	-	-	-	2	-	-	-	-	1		1	
09	Paernumaa	1	1	1	-	-	-	3	-	-	-	-	-		0	
10	Raplamaa	-	1	3	-	-	-	4	-	-	-	-	1		1	
11	Saaremaa	-	1	1	-	-	-	2	-	-	-	1	-		1	
14	Viljandimaa							0	2	-	-	-	-		2	
TOTAL		2	5	5	0	0	0	12	9	0	0	1	7	17	0	29
PER CENT		6.9	17.2	17.2	0.0	0.0	0.0	41.4	31.0	0.0	0.0	3.4	24.1	58.6	0.0	100.0
LVA LATVIA																
01	Aizkraukle							0	1	-	-	-	-	1		1
05	Cesis							0	1	-	-	-	-	1		1
06	Daugavpils							0	-	-	-	-	2		2	
08	Gulbene							0	1	-	-	-	-	1		2
11	Kraslava	1	-	1	-	-	-	2	-	-	-	-	2		2	
13	Liepaja	1	1	-	-	-	-	2	2	1	-	-	-	3		5
15	Ludza	-	1	-	-	-	-	1	1	-	-	-	-	2		3
17	Ogre	1	-	2	-	-	-	3	5	1	-	-	-	1		7
20	Riga							0	3	-	-	-	-	1		4
21	Saldus	-	2	-	-	-	-	2	1	-	-	-	-	1		3
23	Tukums	-	-	1	-	-	-	1	-	-	-	-	-	1		2
25	Vaimiera							0	-	-	-	-	-	1		1
TOTAL		3	4	4	0	0	0	11	15	2	0	0	12	29	0	40
PER CENT		7.5	10.0	10.0	0.0	0.0	0.0	27.5	37.5	5.0	0.0	0.0	30.0	72.5	0.0	100.0

R A B I E S C A S E S															1.10.96 - 31.12.96	
LOCATION CODE NAME		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
FRA F R A N C E																
08	ARDENNES						0	2	-	-	-	-	2		2	
SPA S P A I N																
51	CEUTA (NORTH AFRICA)	1	-	-	-	-	1						0		1	
SWI S W I T Z E R L A N D A N D L I E C H T E N S T E I N																
05	BASEL-LAND	1	-	-	-	-	1						0		1	
UNK U N I T E D K I N G D O M O F G R E A T B R I T .																
01	GREAT LONDON *						0						0	1	1	

* HUMAN CASE IMPORTED FROM NIGERIA

R A B I E S C A S E S															1.10.96 - 31.12.96	
LOCATION CODE NAME		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
FRY F E D . R E P . O F Y U G O S L A V I A																
20 SR CRNA GORA							0	1	-	-	-	-	1		1	
60 SR SRBIJA		-	1	2	-	-	3	5	-	-	-	-	5		8	
61 SAP VOJVODINA		1	7	-	-	-	8	11	-	-	-	-	11		19	
TOTAL		1	8	2	0	0	11	17	0	0	0	0	17	0	28	
PER CENT		3.6	28.6	7.1	0.0	0.0	39.3	60.7	0.0	0.0	0.0	0.0	60.7	0.0	100.0	
MLD M O L D O V A																
01 MOLDOVA		-	1	2	-	-	3	4	-	-	-	-	4		7	
TOTAL		0	1	2	0	0	3	4	0	0	0	0	4	0	7	
PER CENT		0.0	14.3	28.6	0.0	0.0	42.9	57.1	0.0	0.0	0.0	0.0	57.1	0.0	100.0	
SVN S L O V E N I A																
011 CELJE							0	2	-	-	-	-	2		2	
048 KOCEVJE							0	1	-	-	-	-	1		1	
057 LASKO							0	2	-	-	-	-	2		2	
061 LJUBLJANA		-	1	-	-	-	1	1	-	-	-	-	0		1	
080 MURSKA SOBOTA							0	1	-	-	-	-	1		1	
085 NOVO MESTO							0	2	-	-	-	-	2		2	
114 SLOVENSKE KONJICE							0	1	-	-	-	-	1		1	
142 ZAGORJE OB SAVI		-	1	-	-	-	1	1	-	-	-	-	1		2	
145 ZALEC							0	2	-	-	-	-	2		2	
TOTAL		0	2	0	0	0	2	12	0	0	0	0	12	0	14	
PER CENT		0.0	14.3	0.0	0.0	0.0	14.3	85.7	0.0	0.0	0.0	0.0	85.7	0.0	100.0	

HUN HUNGARY		RABIES CASES											1.10.96 - 31.12.96			
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
01	BUDAPEST	-	1	-	-	-	-	1	4	-	-	-	-	4	-	5
02	BARANYA	1	4	-	1	-	-	6	14	-	-	-	1	15	-	21
03	BACS-KISKUN	-	1	6	-	-	-	7	10	-	-	-	-	10	-	17
04	BEKES	-	3	1	-	-	-	4	11	-	-	-	-	11	-	15
05	BORSOD-ABAUJ-ZEMPLEN	-	2	-	-	-	-	2	21	-	-	-	-	21	-	23
06	CSONGRAD	-	-	-	-	-	-	0	9	-	-	-	-	9	-	9
07	FEJER	-	1	1	-	-	-	2	25	-	-	-	-	25	-	27
08	GYOER-SOPRON	-	-	-	-	-	-	0	4	-	-	2	-	6	-	6
09	HAJDU-BIHAR	-	2	-	-	-	-	2	8	-	-	-	1	9	-	11
10	HEVES	-	1	-	-	-	-	1	3	-	-	-	-	3	-	4
11	KOMAROM	1	1	-	-	-	-	2	3	-	-	-	-	3	-	5
12	NOGRAD	-	2	-	-	-	-	2	4	-	-	-	-	4	-	6
13	PEST	1	3	-	-	-	-	4	31	-	-	-	-	31	-	35
14	SOMOgy	-	2	-	-	-	-	2	18	-	1	-	-	19	-	21
15	SZABOLCS-SZAT	-	1	-	1	-	-	2	13	1	-	-	-	14	-	16
16	SZOLNOK	-	-	3	-	-	-	3	5	-	-	-	-	5	-	8
17	TOLNA	-	1	-	-	-	-	1	18	-	-	-	-	18	-	19
19	VESZPREM	-	-	2	-	-	-	2	5	-	-	-	-	5	-	7
20	ZALA	-	-	-	-	-	-	0	5	-	-	-	-	5	-	5
TOTAL		3	25	13	2	0	0	43	211	1	1	2	2	217	0	260
PER CENT		1.2	9.6	5.0	0.8	0.0	0.0	16.5	81.2	0.4	0.4	0.8	0.8	83.5	0.0	100.0

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POL		POLAND											RABIES CASES					1.10.96 - 31.12.96	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL				
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL			
01	WARSZAWA	1	2	-	-	-	-	3	16	-	1	-	-	17		20			
03	BIALA PODLASKA	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
05	BIALYSTOK	-	-	1	-	-	-	1	6	-	-	-	-	6		7			
07	BIELSKO-BIALA	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
09	BYDGOSZCZ	-	1	-	-	-	-	1	1	-	-	-	2	3		4			
13	CIECHANOW	2	1	-	-	-	-	3	12	-	-	-	1	13		16			
15	CZESTOCHOWA	-	2	-	-	-	-	2	5	-	-	-	1	6		8			
17	ELBLAG	-	3	12	-	-	-	15	14	-	-	-	5	19		34			
19	GDANSK	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
23	JELENIA GORA	-	1	-	-	-	-	1	-	-	-	-	-	0		1			
25	KALISZ	-	-	-	-	-	-	0	5	-	1	-	-	6		6			
27	KATOWICE	-	2	1	-	-	-	3	15	-	-	-	-	15		18			
29	KIELCE	-	2	-	-	-	-	2	22	-	-	2	-	24		26			
31	KONIN	-	1	-	-	-	-	1	7	-	-	-	-	7		8			
35	KRAKOW	3	2	1	-	1	-	7	25	-	2	-	-	27		34			
37	KROSNO	1	-	1	-	-	-	2	2	-	-	-	-	2		4			
41	LESZNO	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
43	LUBLIN	-	-	-	-	-	-	0	2	-	-	-	-	2		2			
45	LOMZA	-	1	4	-	-	-	5	8	-	-	-	1	9		14			
49	NOWY SACZ	-	-	-	-	-	-	0	4	-	-	-	-	4		4			
51	OLSZTYN	1	1	10	-	-	-	12	22	-	-	-	22	44		56			
53	OPOLE	-	-	-	-	-	-	0	2	-	1	-	-	3		3			
55	OSTROLEKA	-	2	6	-	-	-	8	23	-	-	-	3	26		34			
57	PILA	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
59	PIOTRKOW TRYB	-	1	-	-	-	-	1	11	-	1	-	-	12		13			
61	PLOCK	2	-	-	-	-	-	2	4	-	-	-	-	4		6			
63	POZNAN	-	-	-	-	-	-	0	6	-	-	-	-	6		6			
65	PRZEMYSL	1	-	-	-	-	-	1	4	-	1	-	-	5		6			
67	RADOM	-	1	-	-	-	-	1	6	-	1	-	-	7		8			
69	RZESZOW	1	2	-	-	-	-	3	7	-	1	-	1	9		12			
71	SIEDLCE	3	3	1	-	-	-	7	33	1	-	1	1	36		43			
73	SIERADZ	-	1	-	-	-	-	1	3	-	-	-	-	3		4			
75	SKIERNIEWICE	-	1	-	-	-	-	1	3	-	-	-	-	3		4			
79	SUWALKI	-	-	2	-	-	-	2	6	-	3	-	5	14		16			
81	SZCZECIN	1	-	-	-	-	-	1	3	-	-	-	-	3		4			
83	TARNOBRZEG	-	-	-	-	-	-	0	9	-	1	-	1	11		11			
85	TARNOW	2	1	7	-	-	-	10	11	-	-	-	1	12		22			
87	TORUN	-	1	8	-	-	-	9	5	-	1	2	-	8		17			
89	WALBRZYCH	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
91	WLOCLAWEK	-	1	2	-	-	-	3	2	-	-	-	-	2		5			
93	WROCLAW	-	-	-	-	-	-	0	1	-	-	-	-	1		1			
TOTAL		18	33	56	0	1	0	108	311	1	14	5	44	375	0	483			
PER CENT		3.7	6.8	11.6	0.0	0.2	0.0	22.4	64.4	0.2	2.9	1.0	9.1	77.6	0.0	100.0			

RUS

RUSSIAN FEDERATION

R A B I E S C A S E S

1.10.96 - 31.12.96

LOCATION CODE NAME	D O M E S T I C A N I M A L S							W I L D A N I M A L S						HUMAN CASES	TOTAL
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
08 Pskov Region	-	1	1	1	-	-	3	4	-	-	-	3	7		10
12 Tver Region	1	-	-	-	-	-	1					0			1
13 Kaluga Region	-	2	-	-	-	-	2	2	-	-	-	-	2		4
15 Moscow Region							0	5	-	-	-	1	6		6
16 Oryol Region	1	1	-	1	-	-	3					0			3
17 Ruzan Region	2	-	-	-	-	-	2					0			2
18 Smolensk Region	2	3	-	-	-	-	5	12	-	-	-	3	15		20
19 Tula Region	9	4	1	-	-	-	14	3	-	-	-	-	3		17
26 Belgorod Region	2	5	5	-	-	-	12	5	-	-	-	-	5		17
27 Voronezh Region	5	3	12	-	1	-	21	2	-	-	-	-	2	1	24
28 Kursk Region	1	2	1	-	-	-	4	1	-	-	-	-	1		5
29 Lipetsk Region	2	3	-	23	-	-	28	1	-	-	-	-	1		29
31 Astrakhan Region	6	1	1	-	-	-	8	-	-	-	-	1	1		9
32 Volgograd Region	1	1	1	-	-	-	3					0			3
33 Samara Region	-	-	11	-	-	-	11	4	-	-	-	-	4		15
34 Penza Region	1	-	-	-	-	-	1	12	-	-	-	-	12		13
35 Saratov Region	2	8	9	1	-	-	20	3	-	-	-	-	3		23
36 Ulyanovsk Region	-	6	1	-	-	-	7	1	-	-	-	-	1		8
37 Republic of Kalmykiya	1	-	-	-	-	-	1					0			1
38 Republic of Tatarstan	-	1	4	-	1	-	6	4	-	-	-	-	4		10
39 Krasnodar Territory	22	10	-	-	-	1	33					0			33
40 Stavropol Territory	-	3	2	-	43	-	48					0			48
41 Rostov Region	1	1	2	-	-	-	4	-	-	-	-	1	1		5
42 Orenburg Region	2	7	5	-	-	-	14	1	-	-	-	-	1		15
43 Perm Region	1	-	1	-	-	-	2					0			2
44 Republic of Bashkorto	13	-	11	-	-	-	24	7	-	-	-	-	7		31
TOTAL	75	62	68	26	45	1	277	67	0	0	0	9	76	1	354
PER CENT	21.2	17.5	19.2	7.3	12.7	0.3	78.2	18.9	0.0	0.0	0.0	2.5	21.5	0.3	100.0

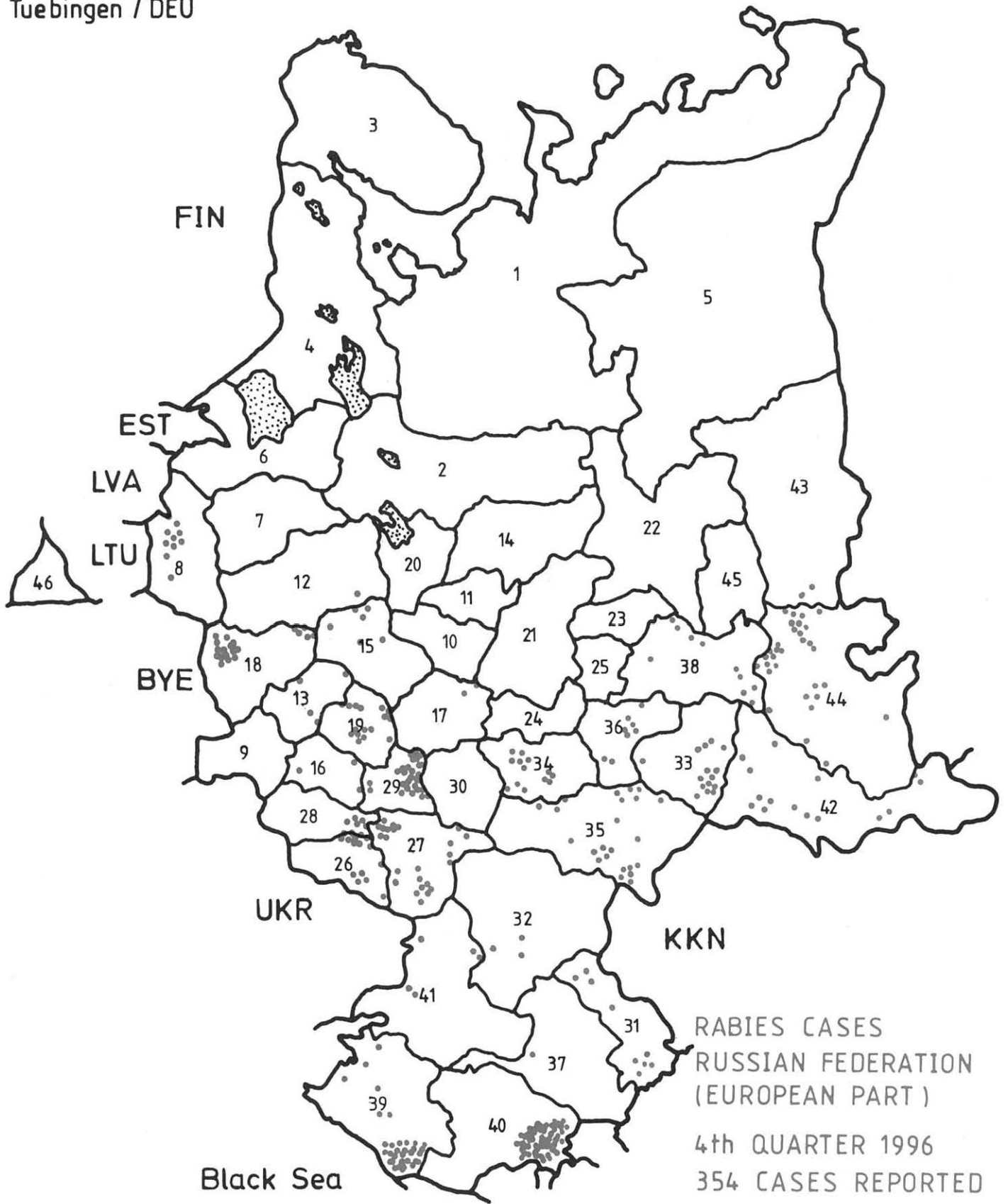
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6. LIST OF CONTRIBUTORS

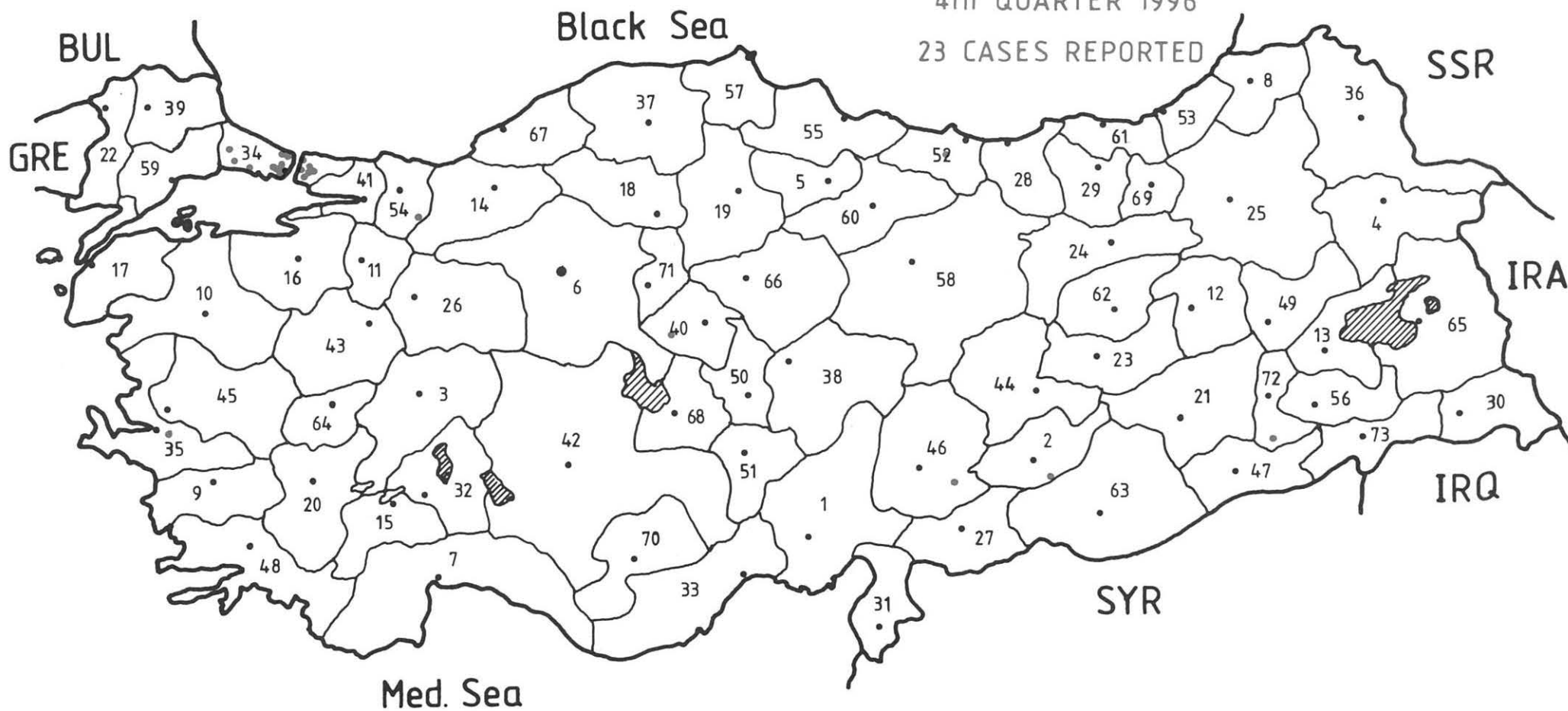
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RABIES CASES TURKEY
4th QUARTER 1996
23 CASES REPORTED



ICE
(rabies free)

2 BAT RABIES CASES INCLUDED

RABIES CASES EUROPE

4th QUARTER 1996

1760 CASES REPORTED



(rabies free) = no indigenous case reported for at least two years

0 50 100 km