

RABIES BULLETIN EUROPE

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1. Introduction

This BULLETIN describes the reported rabies cases in Europe for the **Fourth Quarter 1992**, subsequently referred to as "*This Quarter*".

In SECTION 2 a summary of the rabies situation is given on the Fourth Quarter 1992 and the development of rabies in Europe for the year 1992.

SECTION 3 (3.1-3.35) reflects the situation for individual countries.

In the Miscellaneous SECTION under 4.1 information is given on human rabies

cases in Estland from 1947 to 1992. In an article under 4.2 the extension of the raccoon rabies epizootic in the United States in 1992 is described. 4.3 is a review of all rabies cases received at the WHO Collaborating Centre for Rabies Surveillance and Research, Tübingen, from the beginning of the data collection in 1977 up to date. In this connection tables of quarterly data have been produced, a graph with annual data, and tables on human and bat rabies cases.

The rabies case data are tabulated for the fourth quarter 1992 in SECTION 5.

SECTION 6 lists the official contributors to the BULLETIN.

The geographical distribution of rabies cases in Europe for the fourth quarter 1992 is shown on maps of Europe, the Russian Federation and Turkey in the ANNEX. One graph in the ANNEX refers to the text under 4.1.

2. Summary of Rabies in Europe

Fourth Quarter 1992

During "*This Quarter*", 3178 rabies cases were reported in Europe. Of these were 2342 cases in wild animals (73.4% of total) and 831 in domestic animals. Of a total of 22 cases in Bulgaria in 1992 none were considered in "*This Quarter*" as the date of occurrence was not reported. However, they were considered for the annual total in 1992.

Of the cases in wild animals 2023 were foxes, 2

wolves, 127 raccoon dogs, 32 badgers, 64 other mustelids, 69 roe deer, 3 red deer, 1 fallow deer, 1 moose, 10 wild boars, 2 hedgehogs, 2 bats, 1 squirrel, 3 house mice, 1 hare, 1 other wild animal. Of the 831 cases in domestic animals 193 were dogs (of which 53 were reported from Turkey, a country with dog-mediated rabies), 228 cats, 357 cattle, 7 horses, 44 small ruminants, 1 donkey, 1 pig.

There were 5 human rabies cases reported during

"*This Quarter*", 4 in the Russian Federation and 1 in Lithuania.

The above data are presented in TABLE 1/SECTION 5. TABLE 4/SECTION 5 lists other animal species less frequently involved in rabies and not mentioned in TABLE 1.

There were 2 bat rabies cases registered in Germany. They appear on the map of Europe in a different colour.

Compared to the previous quarter (2119 cases) an increase is noticed (by 1059 cases). That is expected as wildlife rabies is seasonal. Most of the countries recorded the increase. For the countries practicing oral vaccination of foxes against rabies the increase of the case incidence was less pronounced.

Rabies-free countries in Europe participating in the surveillance were: Denmark, Finland, Greece, Iceland, Ireland, the mainland of Norway, Portugal, the mainland and islands of Spain, Sweden, and the United Kingdom of Britain and Northern Ireland.

There were no cases reported during "*This Quarter*" from the Netherlands and from Svalbard of Norway, but the last indigenously acquired case (in terrestrial animals or bats) was recorded less than two years ago.

Development and Trends in 1992

Summary:

Rabies case data summarizing the year 1992 can be found in TABLES 2, 3 and 5 of SECTION 5.

The number of rabies cases in 1992 total 11075. The four quarters compare as follows:

1st quarter	- 3733
2nd quarter	- 2022
3rd quarter	- 2120
4th quarter	- 3200

The figure for the total of rabies cases in Bulgaria is

included in the fourth quarter 1992 (see text under 3.4 of this BULLETIN). Two human cases in the first and third quarter 1992 have been supplemented in this issue.

The annual total in 1992 is the lowest figure recorded for one year since the start of the surveillance in 1977. Nevertheless, reporting was not always complete (see as well the summary article under 4.3 of this BULLETIN).

Wildlife or fox-mediated rabies:

The wildlife rabies epizootic of central Europe has the red fox as reservoir and this is also the animal that passes the infection frequently on to other animals (wild and domestic). TABLE 2 with annual figures shows that the fox participates with 66.1% of all rabies cases in Europe as animal No. 1, in spite of a large unknown figure. Approx. 10% of other rabid wild animals share the same habitat with the fox. The same can be said for the farm animals in summer (cattle participate with 8.3% of the total as animal No. 2).

After the year 1989 with a high rabies incidence in Europe (24,373 rabies cases), a reduction of cases was noticed in 1990 (21,044 cases) and 1991 (16,479 cases). Reasons are the effect of a diminished fox population by the fatal disease itself and on the other hand the efforts of many countries to eradicate rabies by oral vaccination. The reduction to 11,075 cases in 1992 is no

doubt to be connected to oral vaccination. And here especially the countries Austria, Czechoslovakia, Germany and France had substantial reductions of rabies cases compared to 1991.

There was one country with an substantial increase: Poland.

Urban- or dog-mediated rabies:

Unfortunately, Turkey is often counted among the other European countries. However, it is of a different rabies pattern altogether. In 1992 though it accounted only for 2.9% of the total rabies cases in Europe. Of all animal cases, 98.1% were in domestic animals, 1.9% in wild animals.

Turkey has continually diminishing annual rabies figures from 1981 with 2260 reported cases to 1992 with 320 cases.

Bat rabies:

There were 14 cases of bat rabies reported in 1992. 18 cases in the Netherlands, 3 cases in Germany and 1 case in Switzerland. Since 1987 (142 cases) diminishing annual figures are registered in Europe.

Human rabies:

There were 12 human cases reported in 1992. 9 cases occurred in the Russian Federation, two in Lithuania and one in France. The latter case was imported from Algeria.

3. Rabies in Individual Countries

3.1 Albania ALB

No data.

3.2 Austria AUT

by Helmut Schnabl

Of 6579 samples examined for rabies during "*This Quarter*", 126 cases (1.9%) were diagnosed rabid. There has been an increase of rabies cases compared to the previous quarter by 3.3%.

111 rabies cases occurred in wild animals. Of these were 98 foxes (77.8% of total), 2 badgers, 7 stone martens, 4 roe deer. Of 15 rabies cases in domestic animals were 10 cattle, 2 sheep, 1 dog and 2 cats.

The distribution of rabies cases by Bundesländer (federal provinces) and Bezirke (districts) was as follows:

Burgenland: 9 cases (7.1% of total) in the Bezirke Güssing, Jennersdorf, Neusiedl/See, Oberpullendorf, Oberwart.

Niederösterreich: 36 cases (28.6%) in the Bezirke Baden, Gmünd, Korneuburg, Melk, Mistelbach, Mödling, Neunkirchen, Scheibbs.

Oberösterreich: 6 cases in the Bezirke Freistadt and Perg.

Salzburg: 5 cases in the Bezirke Hallein, Salzburg/Umgebung, Tamsweg.

Steiermark: 1 case in the Bezirk Leibnitz.

Tirol: 40 cases (31.7%) in the Bezirke Mag.Innsbruck, Innsbruck-Land, Kufstein, Landeck, Schwaz.

Vorarlberg: 29 cases (23%) in the Bezirke Bludenz and Bregenz.

Summary 1992

The total of rabies cases in 1992 amounted to 1117, 1343 cases less than in 1991 (2460).

3.3 Belgium BEL

by L. Hallet

During "*This Quarter*", 3 rabies cases were confirmed, 1 fox in October at Chiny (Suxy), 1 fox in December at Florenceville (Chassepierre) and 1 bovine in December at Reuland.

An autumn campaign to vaccinate foxes was carried out during "*This Quarter*". It covered an area of 8453 km². 124,400 vaccine baits were distributed by an aircraft flying at 100 m altitude.

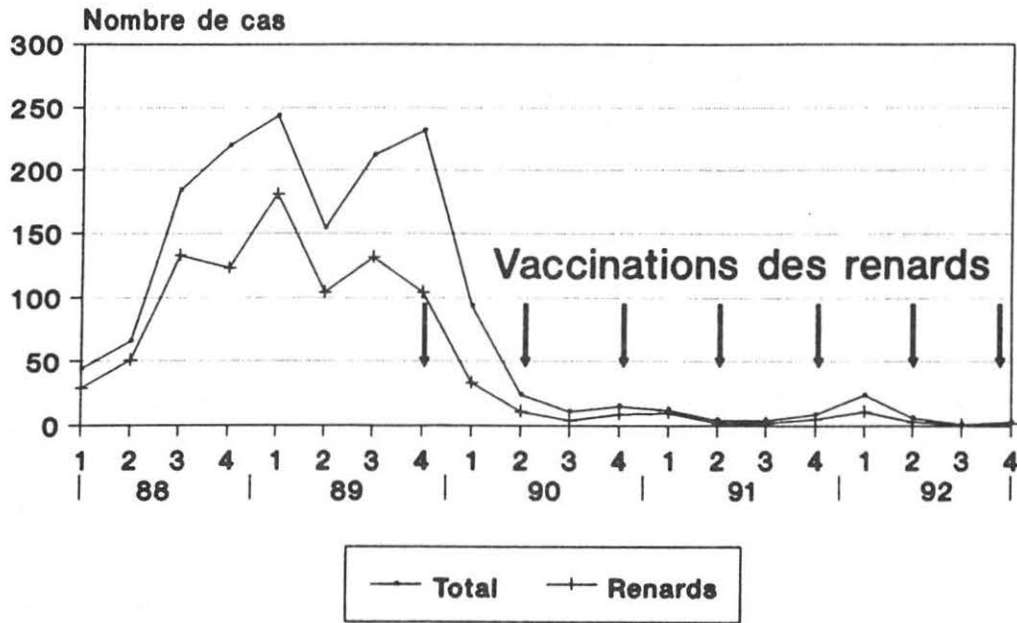
Summary 1992

The following two figures present a summary of rabies cases in 1992 and the development of rabies by quarters while practicing oral vaccination from 1988 to 1992.

FIGURE 1: Summary of rabies cases in Belgium in 1992

Provinces	Luxembourg	Namur	Liège	Total
<i>Communes</i>	19	1	1	1
Bovins	6	1	1	8
Equin	1	0	0	1
Ovins	8	0	0	8
Renards	17	0	0	17
Total	32	1	1	34

FIGURE 2 **EVOLUTION TRIMESTRIELLE RAGE ANIMALE**



3.4 Bulgaria BUL

4th Quarter 1992

Number of animals affected by rabies and the places where the cases occurred could not be identified.

Summary 1992

A total of 22 rabies cases in animals were reported from Bulgaria. Of these 7 were foxes, 6 cats, 5 cattle, 1 sheep and 3 goats.

The cases occurred in the north west of the country in the following provinces: Vidin (2), Mihailovgrad (9), Vratza (6), Pleven (2), Sofia (2), Pernik (1).

There has been an increase from 6 cases (all fox

es) in 1991 to 22 cases in 1992.

3.5 Belarus BYE

No data.

3.6 Croatia CRO

by Mate Brstilo

During "This Quarter", a total of 343 brain samples of domestic and wild animals were examined for rabies, double than during the 3rd quarter 1992. Rabies was diagnosed in 82 cases (23.9%). Of these 82 cases, 73 were in foxes (89% of total) and 10 in domestic animals (11%). Of the

domestic animals 7 were cats and 2 sheep.

The rabies cases in foxes occurred in 31 different municipalities.

During "This Quarter", silvatic rabies was diagnosed in 9 new municipalities (Cakovec, Cazma, Daruvar, Dugo Selo, Dakovo, Ogulin, Osijek, Rijeka, Vrbovsko).

The following points were noteworthy during "This Quarter":

- there was no rabies case in the region of the peninsula Istra;
- in the coastal area rabies was registered in three municipalities - Rijeka, Sibenik and Split;
- the island municipalit-

ies are free from rabies;
- rabies cases were more concentrated along the border with Slovenia.

Summary 1992

The total of rabies cases in 1992 amounted to 193.

3.7 Czechoslovakia CZE

by Oldrich Matouch

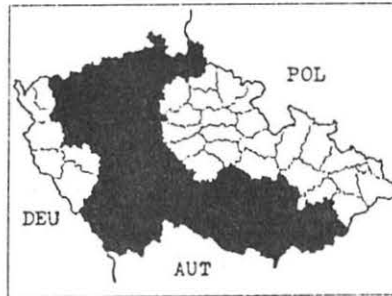
During "*This Quarter*", 232 rabies cases were diagnosed in Czechoslovakia. Of these, 209 cases were in wild animals (90.1% of total) and 23 in domestic animals (9.9%). Of the total number of wild animals the disease occurred in 204 foxes, 3 martens, 1 polecat and 1 roe deer. Of the domestic animals diagnosed rabid 6 were dogs and 17 cats. There were 16 cases fewer compared to the same period of 1991.

The distribution of cases remained about the same as in the previous quarter. Rabies cases were most frequent in the region of South Moravia (63), followed by West Slovakia (33), East Bohemia (31), East Slovakia (31) and Central Slovakia (30).

There was no human rabies case reported.

An oral vaccination campaign of foxes against rabies was carried out in October 1992. During this vaccination campaign 640,000 LYSVULPEN vaccine baits, manufactured by Bioveta Ivanovice had been distributed over

an area of approximately 42,400 km² covering about 60% of the territory of the Czech Republic. The area is shown on the following map (dark zone).



Summary 1992

The total in 1992 amounts to 872 cases, 487 cases less than during the previous year.

Editors note: The editor quoted by mistake in issue 3/92 of this BULLETIN (page 12) that the entire country was vaccinated once. For the Czech republic it should have read 60%.

3.8 Denmark DEN

by Eric Stougaard

The country remained rabies-free.

3.9 Germany, Federal Republic DEU

by Winfried W. Müller
and Thomas Müller

A total of 309 rabies cases was reported during "*This Quarter*", one case less

than during the previous quarter and 397 cases less compared to the fourth quarter 1991.

Four of 16 Bundesländer (federal states) had no rabies: the city states Bremen and Hamburg, Schleswig-Holstein and Thüringen. The Bundesland Nordrhein-Westfalen was newly infected from Rheinland-Pfalz after having been rabies-free since the 3rd quarter 1991 and registered 15 cases (12 in foxes, 3 in cattle). The highest number of cases for one Bundesland occurred again in Baden-Württemberg (120) with the three active foci already mentioned during the previous quarter: in the southwest, the southeast and the north of the Bundesland. All other Bundesländer had a fairly favourable development of their rabies situation.

All rabies infected parts of Germany were treated by oral vaccination of foxes.

One case occurred in a raccoon dog during "*This Quarter*", in the eastern part of Mecklenburg-Vorpommern. In the area of the eastern 5 Bundesländer, 16 cases of raccoon dog rabies occurred since 1983.

Two cases of bat rabies were noticed in Niedersachsen.

Summary 1992

The annual total amounted to 1425 rabies cases. There were 2174 cases less compared to 1991 (a reduction of 60.4%).

The drastic and steady reduction over several years is undoubtedly connected to the oral vaccination of foxes prac-

ticed in Germany since 1983 (for the new Federal States since 1989). The reduction occurred in spite of set-backs, namely, the reinfestation of already rabies free areas. Reinfestation was experienced across an international border in 1992 in the very southeast of the country and clearly across the border of Bundesländer from Rheinland-Pfalz to Nordrhein-Westfalen.

There was a total of 5 bat rabies cases in 1992.

3.10 Estonia EST

by M. Nautras

During "*This Quarter*", 40 rabies cases were registered in Estonia, 19 cases more than during the previous quarter. There were 30 cases in wild animals (15 red foxes, 13 raccoon dogs, 2 badgers) and 10 in domestic animals (3 dogs, 4 cats, 3 cattle).

Summary 1992

In 1992 a total of 110 rabies cases were reported in Estonia. 77 cases were in wild animals (70% of total) - 34 foxes, 38 raccoon dogs, 4 badgers and 1 roe deer - and 33 in domestic animals - 16 dogs, 10 cats and 7 cattle. Foxes (34) and raccoon dogs (38) make up 65.5% of all cases.

Of the 16 administrative units in Estland there was an average of 0.17 rabies cases per 100 km² in 1992. The districts Lääne-Virumaa (0.43 in

1992) and Viljandimaa (0.44) are usually above average.

45,340 dogs and 479 cats were vaccinated in 1992.

3.11 Finland FIN

by Bengt Westerling

The country remained rabies-free.

During "*This Quarter*" 333 animals were examined for rabies, including 7 dogs, 1 cat, 74 foxes, 223 raccoon dogs, 9 badgers and 7 bats.

Summary 1992

During 1992, a total of 576 animals, including 25 dogs, 20 cats, 141 foxes, 330 raccoon dogs, 15 badgers, 6 lynx, 2 wolves and 14 bats were examined for rabies with immunofluorescence on brain tissue with negative results.

Regardless of the rabies-free status of the country, the vaccination of hunting dogs and dogs put on show is kept compulsory.

Continuing the attempt to prevent spreading of rabies from Russia, the oral vaccination of wildlife along the south-eastern national border which was started in 1990 was continued.

In September 80.000 Tübingen vaccine baits were distributed by air on a 20-25 km deep and 250 km long zone along the border at a total cost of approx. FIM 475.000, surveillance costs not included.

3.12 France FRA

by Michel F.A. Aubert

185 rabies cases were registered during "*This Quarter*", 1 case less than during the previous quarter. 106 cases were diagnosed in foxes (57.3% of total), 18 in other wild animals and 61 cases in domestic animals (6 dogs, 13 cats, 29 cattle, 13 small ruminants).

The departments (Départements) registering the greatest number of cases were Haute-Marne, Vosges and Meurthe-et-Moselle with 38, 26 and 25 cases respectively.

Summary 1992

The total of animal rabies cases in 1992 amounted to 1285. The rabies incidence diminished by 40.7% compared to 1991. Furthermore, not only the case incidence diminished, but the area contaminated as well.

The oral vaccination campaign during autumn 1992 covered the total area of the country contaminated by the disease.

3.13 Greece GRE

by A. Katsaounis

The country remained rabies-free.

3.14 Hungary HUN

by Balint Kerekes

During "*This Quarter*", 355 rabies cases were registered in Hungary, 123 cases more (an increase by 53%) than during the same period last year.

Most of the cases were reported in the province (Komitat) Fejér with 44 cases followed by Baranya with 33 and Veszprém with 30 respectively. All of these provinces are located in Transdanubia.

Development of rabies in 1992:

In 1992 a total of 892 rabies cases were diagnosed, only a few cases more than in 1991 (880 cases). The distribution of cases in the different provinces (Komitate) for 1991 and 1992 is shown in FIGURES 3 and 4).

The following animals were affected by the disease in 1992: 694 foxes (77.8% of total), 101 cats (11.3%), 47 dogs, 29 cattle, 4 sheep, 3 roe deer, 2 horses, 2 wild cats, 5 stone martens, 1 badger, 1 polecat, 2 goats and 1 wild boar.

In 1992 1,679,029 dogs were vaccinated against rabies, 1.6% more than during the previous year.

From 19 to 26 October 1992 a first oral vaccination campaign was carried out in a 25 to 50 km wide vaccination belt along the Austrian border (see FIGURE 5). 80,000

"Fuchsoral ad us. vet." vaccine baits (attenuated vaccine virus SAD B19 and tetracycline-HCl marker in the bait) were used covering an area of approx. 5000 km².

The distribution of vaccine baits was executed by an aircraft with a satellite navigation system (GPS-Geographic Position System).

(see Figures 3-5 on next page)

3.15 Iceland ICE

The country remained rabies-free.

3.16 Ireland IRE

The country remained rabies-free.

3.17 Italy ITA

by Santino Prosperi

During "*This Quarter*", only two rabies cases were diagnosed, one in a fox in the province of Udine on 7th November and one in a dog in Brescia on 12th December. The latter animal, a "Pointer" was used as hunting dog in Hungary in the south-west of Lake Balaton. The dog showed the clinical picture of paralytic rabies. Though it had been vaccinated with an inactivated vaccine, the animal had no antibodies against rabies at the time of its death.

Surveillance, legislation and oral vaccination in 1992:

In 1992 the following samples were examined for rabies in the different Alpine Regions:

1. 196 wild animals (of these 185 were foxes) and 186 domestic animals in Piemonte, Valle d'Aosta and Liguria; all of these were negative for rabies.

2. 811 wild animals (of these 780 were foxes) and 223 domestic animals in Lombardia; only one dog was rabid.

3. 3175 wild animals (of these 2731 were foxes) and 312 domestic animals in Trentino, Alto Adige, Veneto and Friuli Venezia Giulia; 19 foxes, 2 roe deer and 1 badger were rabid (all in the Friuli Venezia Giulia Region).

On 7th March 1992, an Ordinance of the Ministry of Health made the vaccination of dogs, cattle, sheep, goats and equines of Friuli Venezia Giulia Region compulsory. ERA vaccine is to be used. The Health Authorities of Piemonte, Valle d'Aosta, Liguria, Lombardia, Veneto and Trentino Alto Adige will consider compulsory vaccination as soon as their borders are threatened.

Oral vaccination of foxes was carried out in a spring and an autumn campaign in the province of Trieste, Gorizia and Udine in an area covering 1600 km².

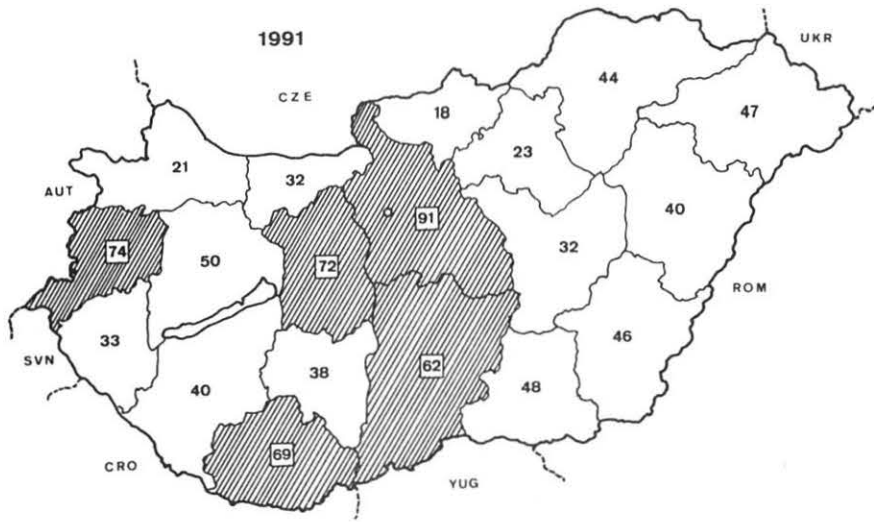


FIGURE 3

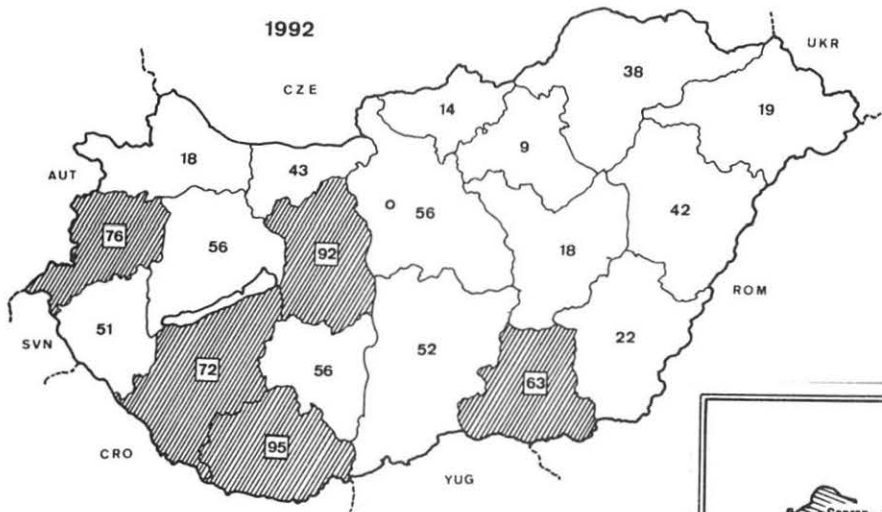


FIGURE 4



FIGURE 5

3.18 Lithuania LTU

by Algis Dranseika

During "*This Quarter*", 34 animal rabies cases occurred in 19 different districts (of a total of 44). There was one human case reported.

Of the 34 animal cases 12 were cattle, 1 horse, 5 cats, 4 dogs, 7 foxes, 1 pine marten, 2 ferrets, 1 elk and 1 badger. Among the dogs and cats were strays.

Summary 1992

There was a total of 88 rabies cases registered in 1992.

There were two human cases included. In January a young man had been exposed to a rabid raccoon dog and in October a young girl to a rabid dog.

More than 132,000 dogs and more than 2000 cattle were vaccinated throughout the year.

3.19 Luxembourg LUX

by Joseph Kremer

During "*This Quarter*", only one case of rabies was registered on 16 November 1992 in a bovine in the far north of the country. In this border area one case was recorded also in a bovine, 3 weeks later in Belgium. There is no doubt a connection between these two cases.

Three foxes and 2

martens were examined for rabies during "*This Quarter*", but revealed negative results.

Summary 1992

Only 2 rabies cases were registered in 1992, 14 cases less than in the previous year. Both cases were diagnosed in cattle.

3.20 Latvia LVA

by Z. Andersons and J. Rimeicans

During "*This Quarter*", 25 animal rabies cases were registered. There has been an increase of 7 cases in comparison with the previous quarter (32) and a decrease of 71 cases when compared to the fourth quarter 1991.

Of 18 wild animals affected (72% of total) 9 were foxes, 7 raccoon dogs, 1 badger and 1 wolf. Of 7 domestic animals 4 were dogs, 2 cats and 1 bovine.

There were 12 districts free of rabies during "*This Quarter*". The most affected districts of the country were Ogre with 6 cases and Riga with 5 cases.

There was no human rabies case in Latvia.

Summary 1992:

After the year 1990 with a high rabies incidence in Latvia (306 rabies cases), a reduction of cases was noticed in 1991 (283 cases) and 1992 (125 cases).

Reasons for the de-

crease should be the diminished fox and raccoon dog populations by the fatal disease itself.

In 1992 100,411 dogs and 8,527 cats were vaccinated throughout the country.

A field trial of oral immunization of foxes was started in the district Limbaži in 1991. In 1992 oral vaccination was continued in 11 districts covering 5882.7 km² of forest (22% of total territory of forests in Latvia). In this territory approx. 2872 fox dens were located and 14,210 vaccine baits were distributed in their vicinity. Vaccine (rabies fixed virus strain 71, experimental series) produced by Vyshlessky Experimental Scientific Veterinary Institute in Minsk (Byelorussia) was used.

3.21 Moldova MLD

Editors note: These are two official notes on the rabies situation in Moldova collected by the Office International des Épizooties (OIE), Paris and WHO Headquarters, Geneva. The editors of this BULLETIN have contacted Moldova and a regular reporting in the future is expected.

1992

There is the following report to OIE:

Two cases of rabies in cattle were reported in Nisporeny district in the private sector. One of the animals died and the other one was slaughtered. Two cases were reported in dogs in Edincy (Grigoriopol

district). In Rybnitsa district, one cat died from rabies. In wildlife, one rabid fox was killed in Novo-Aneny district, and one rabid squirrel was found dead in Orhei district. In none of the cases the animal affected by rabies had been vaccinated against the disease. The carcasses of all these animals were incinerated.

The report from WHO, Headquarters, Geneva says:

In 1990 and 1991 oral vaccination of wildlife was practiced on an experimental base. The vaccine was produced in Minsk, Belarus. A total of 2030 doses were used. Bits of meat and fish (ca. 50-100 g) served as bait.

3.22 Netherlands NET

by J.H.M. Nieuwenhuijs

During "*This Quarter*", 183 animals were investigated for rabies; none of those was found positive.

Summary 1992

In 1992, a total of 803 animals was investigated for rabies (529 adult foxes, 41 young foxes, 6 dogs, 5 cats, 2 cows, 2 deer, 66 badgers, 1 squirrel and 151 bats).

Of the 151 bats, 13 originated from the Blijdorp Zoo in Rotterdam of an approximately 250 bats *Rousettus aegyptiacus* colony held in an artificial cave.

All rabies positive animals (8) were bats. Five

have been specified as *Eptesicus serotinus*; the others still need to be specified.

3.23 Norway NOR

by Gudbrand Bakken

The mainland of Norway remained rabies-free.

No case of rabies has been reported in Svalbard during "*This Quarter*".

3.24 Poland POL

by Jan Kolacz

4th Quarter 1992

A total of 1296 rabies cases in animals was reported in Poland during "*This Quarter*". Of these were 1051 in wild animals (852 foxes, 104 raccoon dogs, 7 badgers, 21 pine martens, 9 polecats, 1 ferret, 43 roe deer, 3 red deer, 9 wild boars, 1 hedgehog, 1 squirrel) and 245 domestic animals (44 dogs, 78 cats, 118 cattle, 1 sheep, 2 goats, 1 horse, 1 pig).

The most affected provinces (voivodeships) of the country were Poznan with 93 cases and Zielona Gora with 86 cases.

Summary 1992

In 1992 a total of 3084 rabies cases were diagnosed in animals. This is an increase by 34.8% in comparison to 1991 (2287 cases) and by 50.8% to 1990 (2045 cases).

The disease has still

been predominant in wildlife (82.6% of total cases). Among 2547 rabid wild animals 2079 were foxes (67.4% of total cases), 231 raccoon dogs (7.5%), 113 deer (3.7%), 67 martens (2.2%), 25 badgers (0.8%), 16 polecats (0.5%), 10 wild boars, 2 squirrels, 2 hedgehogs, 1 ferret and 1 wolf.

Among 534 rabid domestic animals (17.4% of total cases) 115 were dogs (3.7%), 185 cats (60%), 225 cattle (7.3%), 2 sheep, 4 horses, 2 goats, 2 pigs and 2 other domesticated carnivores.

Provinces (there is a total of 49) with a high incidence rate of the disease in 1992 were: Poznan (8.6% of total cases recorded in the country), Gdansk (5.7%), Zielona Gora (5.4%), Elblag (5.3%), Wroclaw (5.2%), Gorzow (4.9%), Szczecin (4.8%), Koszalin (4.6%).

Rabid foxes were reported from 49 provinces, with the highest incidence rate in Poznan (9.0% of rabies cases recorded among foxes in the country), Wroclaw (6.9%), Zielona Gora (6.6%); rabid raccoon dogs were reported from 24 provinces with the highest incidence in Elblag (16.0% of cases recorded among raccoon dogs in the country), Gdansk (15.6%), Suwalki (9.9%), Szczecin (9.1%).

Comparing the development of single animal species involved in the rabies epizootic in 1991 and 1992, an increase can be noticed of the incidence rate among cattle by 65.0%,

martens by 52.3%, foxes by 37.4%, raccoon dogs by 35.9%, cats by 34.0% and deer by 16.5%; and a decrease among dogs by 19.0%.

The animals mostly involved in the epizootic were the red fox (67.5% of all cases in 1992) and the raccoon dog (7.5%).

3.25 Portugal POR

The country remained rabies-free.

3.26 Romania ROM

by Gheorghe Stratulat

During "*This Quarter*", 11 rabies cases were diagnosed in Romania, 4 in foxes, 1 in an other wild animal and 6 in domestic animals (4 dogs, 1 cat, 1 bovine). The cases were distributed in 8 provinces, 6 in the south of the country and two in the north east.

Summary 1992

The annual total amounted to 52 cases, 2 cases less than in the previous year. Out of 41 provinces in the country, 17 were infected. Cases in one province varied from 1 to 10.

3.27 Russia RUS (European part only)

by B.L.Cherkasskiy, V.A. Vedernikov and V.A. Kibasov

During "*This Quarter*", 230 rabies cases were reported in the European part

of the Russian Federation. Of the total number of cases 174 were in domestic animals - 47 dogs, 16 cats, 103 cattle, 5 horses and small ruminants. Of 52 affected wild animals rabies was diagnosed in 49 foxes, 2 raccoon dogs and 1 wolf.

There were 4 human cases, two in the Republic of Bashkortostan, one in Volgograd Region and one in Bryansk Region.

The Republic of Bashkortostan recorded most of the cases (51), all other Regions and Republics recorded less than 23 cases.

Summary 1992

The annual total of rabies cases amounted to 902, 760 cases in animals, 133 in wild animals and 9 in humans.

The areas of the country mostly affected by the disease were: Astrakhan Region (135 cases), Orenburg Region (81), Republic of Bashkortostan (78), Volgograd Region (74), Saratov Region (73) and Kursk Region (68). All other Regions and Republics registered less than 48 cases.

3.28 Spain SPA

by T. Maté Maté

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

There were two dog rabies cases in Ceuta in the Spanish territory in North Africa.

Summary 1992

A total of 12 rabies

cases were registered in Spain in 1992, all in the Spanish territory of North Africa. There were 5 rabid dogs in Ceuta and 7 rabid dogs in Melilla.

3.29 Slovenia SVN

by Armin Tomašič

During "*This Quarter*", 58 rabies cases were noticed in Slovenia, 15 cases more compared to the previous quarter. All cases occurred in wild animals (54 foxes, 1 badger, 2 stone martens, 1 roe deer).

Summary 1992

234 rabies cases occurred in 1992. 224 cases were in wild animals (95.7% of total) and 10 cases in domestic animals. There was an increase of cases in comparison with 1991 (188) by 24.5%.

Mostly affected by the disease were the communities Ljubljana-Vič-Rudnik (28 cases), Nova Gorica (22), Mozirje (21). All other communities reported less than 14 cases.

3.30 Sweden SWE

The country remained rabies-free.

3.31 Switzerland SWI

by Urs Breitenmoser

During "*This Quarter*", the Swiss Rabies Centre examined 716 animals, of which 3.6% (26) were positive for rabies. In the previous

quarter, 3.3% (20 out of 602), and in the fourth quarter of 1991, 5.0% (27 out of 537) had been recorded positive, respectively. The cases of rabies observed involved 16 red foxes, 6 badgers, 1 polecat, 1 domestic cat, and 2 cattle.

All cases recorded came from the same region as in the previous quarters, from the larger vicinity of Basel, in the north of Switzerland. One case in red fox was located outside the area of the 1992 vaccination campaigns. Consequently, in an additional area of 328 km² between the rivers of Rhein and Aare, some 5200 baits were distributed for oral vaccination of red fox in December 1992.

Seventeen bats (1 *Myotis daubentoni*, 1 *Myotis mystacinus*, 4 *Nyctalus noctula*, 1 *Pipistrellus kuhli*, 2 *Pipistrellus nathusii*, 3 *Pipistrellus pipistrellus*, 2 *Pipistrellus spec.*, 2 *Plecotus auritus*, 1 *Plecotus spec.*) were examined during the reporting period. All of them proved to be negative for rabies.

No bite exposures of people to animals positive for rabies occurred. The number of people treated for non-bite exposures is not recorded.

Summary 1992

In 1992, a total of 127 animals (4.8% of 2642 examined) were positive for rabies. This was a slight increase compared to the 1991 figures (105 = 4.3% positive cases out of 2434). The main area of infection remained the Jura

Mountains in northwestern Switzerland. Since 1991, however, the core of the epidemic has moved some 50 km to the northeast and is now centred south of Basel.

3.32 Turkey TUR

During "*This Quarter*", 81 rabies cases were reported from Turkey. Due to dog-mediated rabies occurring in the country 96.3% of the total cases were in domestic animals (53 dogs, 3 cats, 15 cattle, 4 sheep, 2 goats, 1 donkey). Additionally, 3 house mice were diagnosed rabid.

Summary 1992

The annual figure for 1992 amounted to 320 cases, 107 less than during the previous year.

The five provinces mostly affected by rabies in 1992 were Sakarya (36 cases), Izmir (26), Gaziantep (24), Balikesir and Manisa (23 cases each). All other infected provinces reported less than 19 cases.

Turkey has continued diminishing annual figures since 1981 with 2260 reported cases to 1992 with 320.

3.33 Ukraine UKR

No data.

3.34 United Kingdom UNK

by P.J. Thomas

The country remained rabies-free during "*This Quarter*".

Surveillance 1992

3rd and 4th Quarters

Reports of suspect rabies outside quarantine were investigated on 13 occasions during the period, involving 4 dogs, 5 cats and 4 foxes. Biting, scratching or licking of humans was reported in 1 case. MAFF Veterinary staff resolved 6 incidents at the initial clinical investigation but in 7 cases it was necessary to submit material to the Central Veterinary Laboratory, Weybridge for examination, in each case with negative results.

69 dogs and cats died whilst in quarantine and in every case material was submitted to the Central Veterinary Laboratory, with negative results.

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

No cases of human rabies occurred during the period.

3.35 Yugoslavia YUG

by Dušan Jakovljević

79 rabies cases were registered during "*This Quarter*", 77 in Vojvodina and 2 in Serbia. 65 cases were in foxes (82.3% of total) and 14 in domestic animals (4 dogs, 8 cats, 2 cattle).

Summary 1992

The annual total amounted to 147 cases. Of these 125 occurred in Vojvodina, 13 in Serbia, 8 in Bosnia and Hercegovina and 1 in Montenegro.

4. MISCELLANEOUS ARTICLES

4.1 Human rabies cases in Estland

by Matti Nautras
Ministry of Agriculture, Tallin

The following human rabies cases were recorded in Estland from 1947 to 1992:

1947-1	1951-1	1984-1
1948-2	1952-3	1985-1
1949-5	1953-3	1986-1
1950-8	1955-1	

4.2 Extension of the Raccoon Rabies Epizootic - United States, 1992

Raccoon rabies, epizootic among raccoons in the southeastern and mid-Atlantic states, has become an increasingly important problem in the northeastern United States. The extension of the epizootic was largely responsible for the 43% increase in the total number of reported cases of animal rabies in the United States from 1990 (4881) to 1991 (6975). In 1991, 3079 cases of rabies in raccoons were reported, the largest number reported in the history of animal surveillance in the United States. This report summarizes the extension of the epizootic into six additional states since 1989.

Connecticut. The raccoon rabies epizootic was first detected in Connecticut in March

1991, when a rabid raccoon was found in Ridgefield, which borders New York state. As of August 31, 1992, the number of confirmed animal rabies cases associated with the epizootic was 508, compared with 193 in 1991. Of the 1085 raccoons tested in 1992, 456 (42%) were positive for rabies. Rabies has occurred in domestic animals (eight cats, two sheep, and one dog) for the first time since the 1940s. Cases have now been confirmed from 64 of Connecticut's 169 cities. In June 1992, a case of raccoon rabies was confirmed in Scotland, less than 20 miles from the Rhode Island border.

New Jersey. Since the raccoon rabies epizootic was first

detected in New Jersey in November 1989, more than 1880 cases of animal rabies have been diagnosed, with 460 cases in 1990, 983 in 1991, and 420 as of July 14, 1992. New Jersey had been free of terrestrial rabies since 1956, when the last case of canine rabies occurred. Most rabies cases since 1989 have occurred in raccoons (1565), followed by skunks (192); cats (57); groundhogs (41); foxes (14); deer (five); domestic rabbits (four); cattle (three); sheep (two); opossums (two); beaver (one); black bear (one); and horse (one). The epizootic currently affects 18 of 21 counties, with only the southernmost counties of the state unaffected.

New Hampshire. On April 6, 1992, a raccoon caught in Rumney, New Hampshire, was confirmed infected with the mid-Atlantic strain of the rabies virus by CDC. The raccoon was wearing two flea collars, suggesting it had been a pet. No owner was found, despite door-to-door canvassing in the area. As of August 31, no other rabid raccoons have been identified.

New York. The raccoon rabies epizootic was first detected in New York in the summer of 1990 and now extends on a 350-mile front involving 24 counties of southern New York. Recent cases in the Albany area, 60 miles north of the rabies front, suggest that translocation of raccoons remains a problem. In 1991, 666 raccoons were confirmed rabid with extensive spillover to other wild and domestic species. As of July 31, 1992, 804 (44%) of 1818 raccoons tested for rabies have been confirmed rabid. The number of persons receiving postexposure rabies prophylaxis increased from 84 in 1989 to 197 in 1990 to 965 in 1991. During the first half of 1992, 589 treatments were administered, a 60% increase over the same period in 1991.

North Carolina. In North Carolina, the first rabid raccoon was found on June 18, 1991, in a county bordering Virginia. During 1991 in two northeastern counties, 12 raccoons and one fox were found to be

rabid. The epizootic now involves four additional counties. The rabies epizootic entered southern North Carolina in June 1992. Through July 31, five raccoons and four foxes have been confirmed rabid in two neighboring south-central counties adjoining South Carolina, including the Charlotte metropolitan area, representing the first extension of a rabies epizootic into a major population center of North Carolina.

Ohio. On March 4, 1992, the West Virginia State Rabies Laboratory confirmed rabies in a raccoon from Martins Ferry in Belmont County, Ohio. CDC later confirmed the raccoon strain of the rabies virus, the first documented case from Ohio. Martins Ferry borders the Ohio River across from Marshall County, West Virginia, where a dog was found to have the raccoon rabies strain in June 1990. As of June 30, 1992, 15 animals from Belmont County were submitted for rabies testing. Of these, one bat was positive for rabies.

MMWR's editorial note:

Raccoon rabies was probably introduced into the mid-Atlantic region in the mid 1970s when raccoons were transported from raccoon-rabies-enzootic regions of the southeastern United States to the mid-Atlantic area for replenishment of hunting stocks. The first cases occurred in West Virginia (1977), with subsequent spread to Virginia (1978), Maryland (1981), Pennsylvania (1982),

Delaware (1987), New Jersey (1989), New York (1990), and Connecticut (1991). Expansion to New England states other than those reported here is expected during the next several years. With the recent identification of raccoon rabies in North Carolina (1991), raccoon rabies is now enzootic from Florida to Connecticut. Isolated reports of cases from Ohio and New Hampshire may indicate further expansion of the geographic limits of the epizootic to the West and North.

Although raccoon rabies has not been responsible for any known human rabies case, the possibility of transmission exists given the presence of large populations of raccoons in areas of high human population density and the ability of raccoons to coexist with humans in urban and suburban areas, as well as in rural areas.

The rabies threat to humans is greatest when epizootics occur in domestic animals, especially dogs. Reduction of the number of human deaths from rabies in the United States has been largely attributed to vaccination of pets and to stray-animal control. These traditional control measures have been effective in breaking the chain of rabies transmission from domestic animals to humans but do not reduce the vast reservoir of rabies infection present in wildlife in the United States.

The use of oral rabies vaccines has shown promise as a tool to curb the spread of

wildlife rabies (1, 2). In the United States, a newly developed vaccinia-rabies glycoprotein (V-RG) recombinant vaccine for the oral vaccination of raccoons is being tested. Field trial studies of vaccine safety conducted in Virginia (1990) and Pennsylvania (1991) showed no detrimental effects on the environment or in nontarget species (3). As a result, the U.S. Department of Agriculture (USDA) recently gave permission for an efficacy field test with the vaccine to be conducted in a defined area of New Jersey.

Additional field trials of the oral rabies vaccine for raccoons are needed to establish the appropriate distribution method (e.g., airplane, helicopter, or hand placement), minimum effective geographic area, bait density, frequency, and time(s) of year for vaccination in various habitats. Strategies may vary depending on the reason for an oral-vaccination program (i.e., eliminating rabies, preventing its introduction into an area, or reducing the number of rabid animals in an epizootic area). Until these concerns are addressed, the larger question of whether oral vaccination of wildlife is cost effective cannot be adequately answered.

In addition to threatening the health of humans, domestic animals, and other wildlife, the raccoon rabies epizootic has resulted in severe economic consequences for affected states. A recent study conducted in two counties in New

Jersey indicated that private and public expenditures associated with the raccoon rabies epizootic increased from \$405,565 per 100,000 population during a preepizootic period to \$979,027 per 100,000 population during the epizootic period (4). Extrapolated to the entire mid-Atlantic and New England regions, potential costs associated with prevention and control activities during the epizootic period could amount to hundreds of millions of dollars.

A major focus of the public health response to rabies has been education. Education of the public has emphasized ways to reduce the risk of exposure to wild animals in affected areas, the need to keep rabies vaccinations for pet dogs and cats current, and the importance of seeking medical treatment if bitten by or exposed to a potentially rabid animal. Education of veterinarians, animal-control officers, and others in occupations at high-risk for exposure to rabies has emphasized the importance of preexposure prophylaxis against rabies. Education efforts have also targeted physicians and other medical professionals because many physicians in these areas have never given either preexposure or postexposure prophylaxis for rabies.

CDC is working with public health veterinarians and state epidemiologists to develop recommendations concerning alternative strategies for rabies control. A meeting is scheduled

for early 1993 with state epidemiologists, public health veterinarians, officials from the USDA, and rabies researchers to discuss approaches for controlling raccoon rabies in the United States. Information about rabies is available from state and local health departments and CDC's Viral and Rickettsial Zoonoses Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, telephone (404) 639-1075.

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(Taken from: *Morbidity and Mortality Weekly Report*, 41, No. 36, 1992; U.S. Centers for Disease Control).

4.3 Review of Reported Rabies Case Data in Europe to the WHO Collaborating Centre Tübingen from 1977 to 1992

by W.W. Müller

WHO Collaborating Centre for Rabies Surveillance and Research,
at the Federal Research Centre for Virus Diseases of Animals, Tuebingen, Germany

Every two years a review of the data material reported to the WHO Reference Centre, Tübingen from the beginning in 1977 is summarized in this BULLETIN. The last review appeared in RABIES BULLETIN EUROPE 4/90. The new data are partly supplemented if they were received late for the quarter to be published. In this issue we present:

4.3.1 Table of quarterly figures

TABLE 6 of SECTION 5 summarizes 16 years of rabies cases in animals and men. The summary of issue 4/90 has been used again. For the last two years the political changes have been considered in as much as six new countries have been included: Croatia (CRO), Estonia (EST), Lithuania (LTU), Latvia (LVA), the Russian Federation (RUS) and Slovenia (SVN).

4.3.2 Graph with annual figures

On a map of Europe (ANNEX 3) continuous columns indicate the development of rabies in individual countries over 16 years. Figures below 100 are given in digits.

4.3.3 Bat rabies cases

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 very seasonal. Of 446 rabies cases 321 cases occurred during the third quarter of the year, a time of great activities in the bat colonies.

Of the total number of cases the bat cases have been singled out by year and country.

<u>Country</u>	<u>Number of Cases</u>
Czechoslovakia	1
Germany, Dem.Rep.	3
Denmark	164
Germany, Fed.Rep.	68
France	2
Netherlands	194
Poland	2
Spain	7
USSR, European Part	4
Switzerland	1
Total	446

<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	40
1991	15
1992	14
Total	446

4.3.4 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 next page).

Country	Number of Cases	Imported Cases	Year
Austria	1		1979
Belgium	2	2 ¹⁾	1981, 1988
Czechoslovakia	2	1 ²⁾	1989 ²⁾ , 1990
Estonia	3		1984, 1985, 1986
Finland	1 ³⁾		1985
France	5	5 ⁴⁾	1979, 1980, 1982, 1991, 1992
Germany, Dem.Rep.	2		1981, 1990
Germany, Fed.Rep.	1	1 ⁵⁾	1986
Lithuania	2		1992
Poland	7	1 ⁶⁾	1977, 1979(2), 1980, 1983 ⁶⁾ , 1984, 1985
Romania	3		1977
Russia, Europ.part	9		1992
Switzerland	3		1977
Turkey	40 ⁹⁾		1977(34), 1978(2), 1979(3), 1991(1)
United Kingdom	8	8 ⁷⁾	1977(2), 1978, 1981, 1986, 1987, 1988(2)
USSR, European part	43 ⁹⁾		1977, 1985, 1989(10), 1990(15), 1991(16)
Yugoslavia	9	1 ⁸⁾	1977(2), 1978(2), 1979(2), 1980(2), 1989 ⁸⁾
Totals	141	19	

- 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 India
- 6) Imported from Sudan
- 7) Imported from India (4), Pakistan (2), Zambia, Bangladesh
- 8) Imported from Algeria
- 9) Figures not complete

**Rabies Case Data from Europe
are tabulated on the following pages
of Section 5**

TABLE 1

EUR		EUROPE		4/92		RABIES CASES							1.10.92 - 31.12.92			
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		1	2	10	-	2	15	98	2	7	4	-	111	126	
BEL	BELGIUM		-	-	1	-	-	1	2	-	-	-	-	2	3	
BUL	BULGARIA	1)	-	-	-	-	-	0	-	-	-	-	-	0	0	
BYE	BELARUS	**						0						0	0	
CRO	CROATIA		-	7	-	-	2	9	73	-	-	-	-	73	82	
CZE	CZECHOSLOVAKIA		6	17	-	-	-	23	204	-	4	1	-	209	232	
DEN	DENMARK	*						0						0	0	
DEU	FED.REP. OF GERMANY		3	24	47	-	14	88	189	8	8	12	4	221	309	
EST	ESTONIA		3	4	3	-	-	10	15	2	-	-	13	30	40	
FIN	FINLAND	*						0						0	0	
FRA	FRANCE		6	13	29	-	13	61	106	3	7	7	1	124	185	
GRE	GREECE	*						0						0	0	
HUN	HUNGARY		11	47	12	-	1	71	279	1	1	2	1	284	355	
ICE	ICELAND	*						0						0	0	
IRE	IRELAND	*						0						0	0	
ITA	ITALY		1	-	-	-	-	1	1	-	-	-	-	1	2	
LTU	LITHUANIA		4	5	12	1	-	22	7	1	3	1	-	12	35	
LUX	LUXEMBOURG		-	-	1	-	-	1						0	1	
LVA	LATVIA		4	2	1	-	-	7	9	1	-	-	8	18	25	
MLD	MOLDOVA	**						0						0	0	
NET	NETHERLANDS	*						0						0	0	
NOR	NORWAY	*						0						0	0	
POL	POLAND		44	78	118	1	3	245	852	7	31	46	115	1051	1296	
POR	PORTUGAL	*						0						0	0	
ROM	ROMANIA		4	1	1	-	-	6	4	-	-	-	1	5	11	
RUS	RUSSIAN FEDERATION		47	16	103	5	3	174	49	-	-	-	3	52	230	
SPA	SPAIN	2)	2	-	-	-	-	2						0	2	
SVN	SLOVENIA							0	54	1	2	1	-	58	58	
SWE	SWEDEN	*						0						0	0	
SWI	SWITZERLAND + LIECHT		-	1	2	-	-	3	16	6	1	-	-	23	26	
TUR	TURKEY		53	3	15	-	6	78	-	-	-	-	3	3	81	
UKR	UKRAINE	**						0						0	0	
UNK	UNITED KINGDOM	*						0						0	0	
YUG	YUGOSLAVIA		4	8	2	-	-	14	65	-	-	-	-	65	79	
TOTAL			193	228	357	7	44	831	2023	32	64	74	149	2342	5	3178
PER CENT			6.0	7.3	11.3	0.2	1.5	26.4	63.4	1.0	2.0	2.3	4.7	73.4	0.2	100.0

* NO CASES ** NO DATA 1) DATA AVAILABLE AS ANNUAL TOTAL ONLY - SEE TABLE 2 2) NORTH AFRICA

TABLE 2

EUR		EUROPE		1-4/92				RABIES CASES							1. 1.92 - 31.12.92	
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		3	14	26	2	15	-	60	910	55	46	46	-	1057	1117
BEL	BELGIUM		-	-	8	1	8	-	17	17	-	-	-	17		34
BUL	BULGARIA		-	6	5	-	4	-	15	7	-	-	-	7		22
BYE	BELARUS	**						0						0		0
CRO	CROATIA		5	14	2	-	2	-	23	166	-	1	1	2	170	193
CZE	CZECHOSLOVAKIA		18	46	1	-	-	-	65	775	8	19	4	1	807	872
DEN	DENMARK	*						0						0		0
DEU	FED.REP. OF GERMANY		59	77	81	6	50	1	274	1011	24	51	56	9	1151	1425
EST	ESTONIA		16	10	7	-	-	-	33	34	4	-	1	38	77	110
FIN	FINLAND	*						0						0		0
FRA	FRANCE	1)	30	49	63	19	54	2	217	1000	16	32	16	3	1067	1285
GRE	GREECE	*						0						0		0
HUN	HUNGARY		47	101	29	2	6	-	185	694	1	6	3	3	707	892
ICE	ICELAND	*						0						0		0
IRE	IRELAND	*						0						0		0
ITA	ITALY		1	-	-	-	-	-	1	19	1	-	2	-	22	23
LTU	LITHUANIA		18	15	30	1	1	1	66	12	1	6	1	-	20	88
LUX	LUXEMBOURG		-	-	2	-	-	-	2					0		2
LVA	LATVIA		21	18	5	-	-	-	44	44	3	4	-	30	81	125
MLD	MOLDOVA	**						0						0		0
NET	NETHERLANDS							0		-	-	-	-	8	8	8
NOR	NORWAY	2)						0		-	-	-	-	1	1	1
POL	POLAND		115	185	225	4	4	4	537	2079	25	84	113	246	2547	3084
POR	PORTUGAL	*						0						0		0
ROM	ROMANIA		12	6	5	-	7	1	31	18	-	-	-	3	21	52
RUS	RUSSIAN FEDERATION		166	52	379	15	145	3	760	119	-	3	-	11	133	902
SPA	SPAIN	3)	12	-	-	-	-	-	12					0		12
SVN	SLOVENIA		7	2	1	-	-	-	10	196	9	12	6	1	224	234
SWE	SWEDEN	*						0						0		0
SWI	SWITZERLAND + LIECHT		-	3	2	-	-	-	5	103	16	1	1	1	122	127
TUR	TURKEY		239	11	45	2	12	5	314	-	2	-	-	4	6	320
UKR	UKRAINE	**						0						0		0
UNK	UNITED KINGDOM	*						0						0		0
YUG	YUGOSLAVIA		9	13	3	-	7	-	32	114	-	-	1	-	115	147
TOTAL			778	622	919	52	315	17	2703	7318	165	265	251	361	8360	11075
PER CENT			7.0	5.6	8.3	0.5	2.8	0.2	24.4	66.1	1.5	2.4	2.3	3.3	75.5	100.0

* NO CASES ** NO DATA 1) HUMAN CASE IMPORTED FROM ALGERIA 2) ISLAND OF SVALBARD 3) NORTH AFRICA

TABLE 3

EUR		EUROPE		4/92		RABIES CASES 'OTHER ANIMAL SPECIES'						1.10.92 - 31.12.92	
LOCATION		OTHER DOMESTIC ANIMALS		OTHER WILD ANIMALS								TOTAL	
CODE	NAME	DONKEY	PIG	WOLF	RACCOON DOG	WILD BOAR	HEDGEHOG	INSECTIV. BAT	SQUIRREL	HOUSE MOUSE	HARE	OTHERS	
DEU	FED.REP. OF GERMANY	-	-	-	1	-	1	2	-	-	-	-	4
EST	ESTONIA	-	-	-	13	-	-	-	-	-	-	-	13
FRA	FRANCE	-	-	-	-	-	-	-	-	-	1	-	1
HUN	HUNGARY	-	-	-	-	1	-	-	-	-	-	-	1
LVA	LATVIA	-	-	1	7	-	-	-	-	-	-	-	8
POL	POLAND	-	1	-	104	9	1	-	1	-	-	-	116
ROM	ROMANIA	-	-	-	-	-	-	-	-	-	-	1	1
RUS	RUSSIAN FEDERATION	-	-	1	2	-	-	-	-	-	-	-	3
TUR	TURKEY	1	-	-	-	-	-	-	-	3	-	-	4
TOTAL		1	1	2	127	10	2	2	1	3	1	1	151
PER CENT		0.7	0.7	1.3	84.1	6.6	1.3	1.3	0.7	2.0	0.7	0.7	100.0

TABLE 4

EUR			EUROPE			1-4/92			RABIES CASES 'OTHER ANIMAL SPECIES'												1. 1.92 - 31.12.92	
COUNTRY	OTHER DOMESTIC ANIMALS						OTHER WILD ANIMALS														TOTAL	
	OTH. DOM. CARNIVO	DONKEY	PIG	OTH. DOM. HERBIVOR	STRAY DOG	OTHERS	ARCTIC FOX	WOLF	RACCOON DOG	WILD CAT	LYNX	RACCOON	WILD BOAR	HEDGEHOG	INSECTIV BAT	SQUIRREL	BLACK RAT	HOUSE MOUSE	HARE	OTHERS		
CRO	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2
CZE	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
DEU	1	-	-	-	-	-	-	-	1	-	-	1	1	1	5	-	-	-	-	-	-	10
EST	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-	38
FRA	-	1	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	5
HUN	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	3
LTU	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
LVA	-	-	-	-	-	-	-	1	29	-	-	-	-	-	-	-	-	-	-	-	-	30
NET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	8
NOR	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
POL	2	-	2	-	-	-	-	1	231	-	-	-	10	2	-	2	-	-	-	-	-	250
ROM	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	4
RUS	-	-	-	-	-	3	-	4	3	-	-	-	-	-	-	-	2	-	-	2	-	14
SVN	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
SWI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
TUR	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	9
TOT	3	6	2	1	1	4	1	7	302	4	1	1	14	3	14	2	2	4	1	5	-	378
PER	0.8	1.6	0.5	0.3	0.3	1.1	0.3	1.9	79.9	1.1	0.3	0.3	3.7	0.8	3.7	0.5	0.5	1.1	0.3	1.3	-	100.0

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TABLE 5 CONTINUED

EUR LOC COD	EUROPE					EUROPE				
	QUARTER				YEAR	QUARTER				YEAR
	1	2	3	4	1991	1	2	3	4	1992
AUT	839	580	508	533	2460	586	283	122	126	1117
BEL	12	4	4	9	29	24	6	1	3	34
BUL	-	-	-	6	6	-	-	-	22	22
CRO	-	-	-	-	0	57	27	27	82	193
CZE	533	336	242	248	1359	375	146	119	232	872
DEN	-	-	-	-	0	-	-	-	-	0
DEU	1230	884	779	706	3599	536	270	310	309	1425
EST	-	-	-	-	0	30	19	21	40	110
FIN	-	-	-	-	0	-	-	-	-	0
FRA	656	512	516	482	2166	589	325	186	185	1285
GRE	-	-	-	-	0	-	-	-	-	0
HUN	325	139	184	232	880	240	107	190	355	892
ICE	-	-	-	-	0	-	-	-	-	0
IRE	-	-	-	-	0	-	-	-	-	0
ITA	-	-	1	3	4	11	4	6	2	23
LTU	-	-	-	-	0	17	13	23	35	88
LUX	2	4	2	8	16	1	-	-	1	2
LVA	-	-	-	-	0	35	33	32	25	125
NET	-	-	12	-	12	-	2	6	-	8
NOR	-	-	-	-	0	-	1	-	-	1
POL	508	378	642	759	2287	645	367	776	1296	3084
POR	-	-	-	-	0	-	-	-	-	0
ROM	11	14	9	20	54	17	14	10	11	52
RUS	-	-	-	-	0	341	190	141	230	902
SPA	-	2	2	4	8	5	4	1	2	12
SSR	1088	423	393	616	2520	-	-	-	-	0
SVN	-	-	-	-	0	93	40	43	58	234
SWE	-	-	-	-	0	-	-	-	-	0
SWI	25	29	24	27	105	39	42	20	26	127
TUR	89	142	108	89	428	67	105	67	81	320
UNK	-	-	-	-	0	-	-	-	-	0
YUG	340	153	77	118	688	25	24	19	79	147
TOT	5658	3600	3503	3860	16621	3733	2022	2120	3200	11075

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TABLE 6: RABIES CASE RATES (% TOTAL) FOR INDIVIDUAL ANIMAL SPECIES AND FOR TOTAL CASES OF 10 EUROPEAN COUNTRIES RANKING HIGHEST IN 1992.

EUR		EUROPE											1-4/92		1. 1.92 - 31.12.92	
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
EUROPE																
TOTAL RABIES CASES		778	622	919	52	315	17	2703	7318	165	265	251	361	8360	12	11075
PER CENT INVOLVEMENT / COUNTRY																
POL	POLAND	14.8	29.7	24.5	7.7	1.3	23.5	19.9	28.4	15.2	31.7	45.0	68.1	30.5		27.8
DEU	FED.REP. OF GERMANY	7.6	12.4	8.8	11.5	15.9	5.9	10.1	13.8	14.5	19.2	22.3	2.5	13.8		12.9
FRA	FRANCE	3.9	7.9	6.9	36.5	17.1	11.8	8.0	13.7	9.7	12.1	6.4	0.8	12.8	8.3	11.6
AUT	AUSTRIA	0.4	2.3	2.8	3.8	4.8	-	2.2	12.4	33.3	17.4	18.3	-	12.6		10.1
RUS	RUSSIAN FEDERATION	21.3	8.4	41.2	28.8	46.0	17.6	28.1	1.6	-	1.1	-	3.0	1.6	75.0	8.1
HUN	HUNGARY	6.0	16.2	3.2	3.8	1.9	-	6.8	9.5	0.6	2.3	1.2	0.8	8.5		8.1
CZE	CZECHOSLOVAKIA	2.3	7.4	0.1	-	-	-	2.4	10.6	4.8	7.2	1.6	0.3	9.7		7.9
TUR	TURKEY	30.7	1.8	4.9	3.8	3.8	29.4	11.6	-	1.2	-	-	1.1	0.1		2.9
SVN	SLOVENIA	0.9	0.3	0.1	-	-	-	0.4	2.7	5.5	4.5	2.4	0.3	2.7		2.1
CRO	CROATIA	0.6	2.3	0.2	-	0.6	-	0.9	2.3	-	0.4	0.4	0.6	2.0		1.7
TOTAL FROM 10 COUNTRIES		689	551	852	50	288	15	2445	6950	140	254	245	280	7869	10	10324
EQUAL % TOTAL		88.6	88.6	92.7	96.2	91.4	88.2	90.5	95.0	84.8	95.8	97.6	77.6	94.1	83.3	93.2

AUT AUSTRIA		RABIES CASES											1.10.92 - 31.12.92			
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
104	GUESSING							0	2	-	-	-	-	2		2
105	JENNERSDORF							0	1	-	-	-	-	1		1
107	NEUSIEDL AM SEE							0	1	-	-	-	-	1		1
108	OBERPULLENDORF	1	-	-	-	-	-	1	3	-	-	-	-	3		4
109	OBERWART							0	1	-	-	-	-	1		1
306	BADEN	-	1	-	-	-	-	1	4	-	-	2	-	6		7
309	GMUEND							0	1	-	-	-	-	1		1
312	KORNEUBURG							0	2	-	-	-	-	2		2
315	MELK							0	1	-	-	-	-	1		1
316	MISTELBACH							0	6	-	-	-	-	6		6
317	MOEDLING							0	13	-	3	1	-	17		17
318	NEUNKIRCHEN							0	-	1	-	-	-	1		1
320	SCHEIBBS							0	-	1	-	-	-	1		1
406	FREISTADT	-	-	2	-	-	-	2						0		2
411	PERG							0	3	-	1	-	-	4		4
502	HALLEIN							0	1	-	-	-	-	1		1
503	SALZBURG-LAND							0	3	-	-	-	-	3		3
505	TAMSWEG	-	-	1	-	-	-	1						0		1
610	LEIBNITZ							0	1	-	-	-	-	1		1
701	INNSBRUCK-STADT							0	1	-	-	-	-	1		1
703	INNSBRUCK-LAND	-	-	-	-	1	-	1	31	-	2	1	-	34		35
705	KUFSTEIN							0	1	-	-	-	-	1		1
706	LANDECK							0	2	-	-	-	-	2		2
709	SCHWAZ							0	1	-	-	-	-	1		1
801	BLUDENZ	-	-	1	-	-	-	1	7	-	-	-	-	7		8
802	BREGENZ	-	1	6	-	1	-	8	12	-	1	-	-	13		21
TOTAL		1	2	10	0	2	0	15	98	2	7	4	0	111	0	126
PER CENT		0.8	1.6	7.9	0.0	1.6	0.0	11.9	77.8	1.6	5.6	3.2	0.0	88.1	0.0	100.0

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R A B I E S C A S E S																1.10.92 - 31.12.92	
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	
BEL B E L G I U M																	
LG LIEGE		-	-	1	-	-	-	1	-	-	-	-	-	0		1	
LX LUXEMBOURG								0	2	-	-	-	-	2		2	
TOTAL		0	0	1	0	0	0	1	2	0	0	0	0	2	0	3	
FRA F R A N C E																	
08 ARDENNES		-	1	-	-	-	-	1	1	-	-	-	-	1		2	
10 AUBE								0	5	-	-	-	-	5		5	
21 COTE D'OR		-	2	1	-	-	-	3	6	-	1	-	-	7		10	
51 MARNE		-	2	-	-	-	-	2	-	-	-	-	-	0		2	
52 MARNE (HAUTE)		-	1	7	-	6	-	14	22	1	-	1	-	24		38	
54 MEURTHE ET MOSELLE		-	1	4	-	1	-	6	16	1	2	-	-	19		25	
55 MEUSE		1	-	6	-	1	-	8	7	-	-	-	-	7		15	
57 MOSELLE		1	-	2	-	2	-	5	5	-	1	-	-	6		11	
67 RHIN (BAS)		-	1	3	-	-	-	4	10	-	1	1	-	12		16	
68 RHIN (HAUT)		1	1	-	-	-	-	2	3	-	1	3	1	8		10	
70 SAONE (HAUTE)		-	1	4	-	2	-	7	7	-	1	1	-	9		16	
76 SEINE MARITIME		1	1	-	-	-	-	2	2	-	-	-	-	2		4	
88 VOSGES		2	2	2	-	1	-	7	18	-	-	1	-	19		26	
90 TERR.DE BELFORT								0	4	1	-	-	-	5		5	
TOTAL		6	13	29	0	13	0	61	106	3	7	7	1	124	0	185	
PER CENT		3.2	7.0	15.7	0.0	7.0	0.0	33.0	57.3	1.6	3.8	3.8	0.5	67.0	0.0	100.0	
SPA S P A I N																	
51 CEUTA (NORTH AFRICA)		2	-	-	-	-	-	2						0		2	
TOTAL		2	0	0	0	0	0	2	0	0	0	0	0	0	0	2	

CRO CROATIA		RABIES CASES											1.10.92 - 31.12.92			
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
004	BJELOVAR							0	1	-	-	-	-	1		1
011	CAKOVEC							0	3	-	-	-	-	3		3
012	CAZMA	-	-	-	-	2	-	2	1	-	-	-	-	1		3
013	DARUVAR							0	2	-	-	-	-	2		2
014	DELNICE	-	1	-	-	-	-	1	1	-	-	-	-	1		2
017	DONJI MIHOLJAC							0	2	-	-	-	-	2		2
020	DUGA RESA							0	2	-	-	-	-	2		2
021	DUGO SELO							0	2	-	-	-	-	2		2
023	DAKOVO	-	1	-	-	-	-	1		-	-	-	-	0		1
024	DURDEVAC							0	3	-	-	-	-	3		3
034	JASTREBARSKO							0	7	-	-	-	-	7		7
036	KARLOVAC	-	1	-	-	-	-	1		-	-	-	-	0		1
040	KOPRIVNICA							0	3	-	-	-	-	3		3
043	KRAPINA							0	1	-	-	-	-	1		1
044	KRIZEVCI							0	1	-	-	-	-	1		1
046	KUTINA							0	1	-	-	-	-	1		1
052	NASICE	-	1	-	-	-	-	1	8	-	-	-	-	8		9
057	OGULIN							0	2	-	-	-	-	2		2
060	ORAHOVICA							0	1	-	-	-	-	1		1
061	OSIJEK	-	1	-	-	-	-	1	5	-	-	-	-	5		6
073	RIJEKA							0	1	-	-	-	-	1		1
078	POZEGA	-	1	-	-	-	-	1	2	-	-	-	-	2		3
079	SLAVONSKI BROD							0	6	-	-	-	-	6		6
082	SPLIT	-	1	-	-	-	-	1		-	-	-	-	0		1
083	SIBENIK							0	1	-	-	-	-	1		1
088	VINKOVCI							0	1	-	-	-	-	1		1
089	VIROVITICA							0	1	-	-	-	-	1		1
092	VRBOVEC							0	1	-	-	-	-	1		1
093	VRBOVSKO							0	1	-	-	-	-	1		1
097	ZABOK							0	3	-	-	-	-	3		3
101	ZUPANJA							0	2	-	-	-	-	2		2
102	GRAD ZAGREB							0	8	-	-	-	-	8		8
TOTAL		0	7	0	0	2	0	9	73	0	0	0	0	73	0	82
PER CENT		0.0	8.5	0.0	0.0	2.4	0.0	11.0	89.0	0.0	0.0	0.0	0.0	89.0	0.0	100.0

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CZE		CZECHOSLOVAKIA						RABIES CASES						1.10.92 - 31.12.92		
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
00	DISTRICT OF PRAGUE							0						0	0	
01	CENTRAL BOHEMIA	1	-	-	-	-	-	1	3	-	1	-	-	4	5	
02	SOUTH BOHEMIA	1	1	-	-	-	-	2	9	-	-	-	-	9	11	
03	WEST BOHEMIA							0	6	-	-	-	-	6	6	
04	NORTH BOHEMIA	-	1	-	-	-	-	1	16	-	-	-	-	16	17	
05	EAST BOHEMIA							0	31	-	-	-	-	31	31	
06	SOUTH MORAVIA	-	3	-	-	-	-	3	59	-	-	1	-	60	63	
07	NORTH MORAVIA	-	1	-	-	-	-	1	4	-	-	-	-	4	5	
0	CZECH REPUBLIC	2	6	-	-	-	-	8	128	-	1	1	-	130	138	
10	DISTRICT OF BRATISLAV							0						0	0	
11	WEST SLOVAKIA	1	6	-	-	-	-	7	25	-	1	-	-	26	33	
12	CENTRAL SLOVAKIA	-	5	-	-	-	-	5	24	-	1	-	-	25	30	
13	EAST SLOVAKIA	3	-	-	-	-	-	3	27	-	1	-	-	28	31	
1	SLOVAK REPUBLIC	4	11	-	-	-	-	15	76	-	3	-	-	79	94	
TOTAL		6	17	0	0	0	0	23	204	0	4	1	0	209	0	232
PER CENT		2.6	7.3	0.0	0.0	0.0	0.0	9.9	87.9	0.0	1.7	0.4	0.0	90.1	0.0	100.0

DEU		FEDERAL REPUBLIC OF GERMANY						R A B I E S C A S E S						1.10.92 - 31.12.92		
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
01	SCHLESWIG-HOLSTEIN							0						0	0	
02	HAMBURG							0						0	0	
03	NIEDERSACHSEN	-	1	2	-	2	-	5	16	-	2	1	3	22	27	
04	BREMEN							0						0	0	
05	NORDRHEIN-WESTFALEN	-	-	3	-	-	-	3	12	-	-	-	-	12	15	
06	HESSEN							0	2	-	-	-	-	2	2	
07	RHEINLAND-PFALZ	-	1	2	-	-	-	3	11	-	1	1	-	13	16	
08	BADEN-WUERTTEMBERG	-	4	18	-	4	-	26	77	8	2	7	-	94	120	
09	BAYERN	-	2	15	-	1	-	18	36	-	1	1	-	38	56	
10	SAARLAND	-	4	2	-	-	-	6	2	-	-	-	-	2	8	
11	Berlin							0	2	-	1	-	-	3	3	
12	Brandenburg	1	5	1	-	2	-	9	7	-	-	-	-	7	16	
13	Mecklenb.-Vorpommern	1	3	-	-	-	-	4	4	-	-	2	1	7	11	
14	Sachsen	-	2	2	-	3	-	7	1	-	1	-	-	2	9	
15	Sachsen-Anhalt	1	2	2	-	2	-	7	19	-	-	-	-	19	26	
16	Thueringen							0						0	0	
TOTAL		3	24	47	0	14	0	88	189	8	8	12	4	221	0	309
PER CENT		1.0	7.8	15.2	0.0	4.5	0.0	28.5	61.2	2.6	2.6	3.9	1.3	71.5	0.0	100.0

RABIES CASES																1.10.92 - 31.12.92	
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							0	-	1	-	-	-	1		1	
03	Ida-Virumaa							0	1	-	-	-	-	1		1	
04	Joegevamaa							0	1	-	-	-	1	2		2	
05	Jaervamaa	-	-	1	-	-	-	1	1	1	-	-	1	3		4	
07	Laeasene-Virumaa	1	-	2	-	-	-	3	1	-	-	-	1	1		4	
08	Polvamaa	1	1	-	-	-	-	2	1	-	-	-	2	3		5	
09	Paernumaa							0	-	-	-	-	1	1		1	
10	Replamaa	-	1	-	-	-	-	1	1	-	-	-	-	1		2	
11	Saaremaa							0	1	-	-	-	-	1		1	
12	Tartumaa							0	2	-	-	-	3	5		5	
13	Valgamaa							0	1	-	-	-	1	2		2	
14	Viljandimaa	1	1	-	-	-	-	2	2	-	-	-	3	5		7	
15	Vorumaa	-	1	-	-	-	-	1	3	-	-	-	1	4		5	
TOTAL		3	4	3	0	0	0	10	15	2	0	0	13	30	0	40	
PER CENT		7.5	10.0	7.5	0.0	0.0	0.0	25.0	37.5	5.0	0.0	0.0	32.5	75.0	0.0	100.0	
ITA ITALY																	
25	BRESCIA	1	-	-	-	-	-	1						0		1	
33	UDINE							0	1	-	-	-	-	1		1	
TOTAL		1	0	0	0	0	0	1	1	0	0	0	0	1	0	2	
LUX LUXEMBOURG																	
06	CLERVAUX	-	-	1	-	-	-	1						0		1	
TOTAL		0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	

HUN HUNGARY		RABIES CASES												1.10.92 - 31.12.92		
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
01	BUDAPEST	-	1	-	-	-	-	1	-	-	-	-	-	0	-	1
02	BARANYA	1	2	2	-	-	-	5	28	-	-	-	-	28	-	33
03	BACS-KISKUN	3	7	4	-	-	-	14	11	-	-	-	-	11	-	25
04	BEKES	-	-	-	-	-	-	0	6	-	-	-	-	6	-	6
05	BORSOD-ABAUJ-ZEMPLEN	1	3	-	-	1	-	5	7	1	-	-	-	8	-	13
06	CSONGRAD	1	3	-	-	-	-	4	13	-	1	-	-	14	-	18
07	FEJER	3	3	1	-	-	-	7	37	-	-	-	-	37	-	44
08	GYOER-SOPRON	-	1	-	-	-	-	1	9	-	-	-	-	9	-	10
09	HAJDU-BIHAR	-	4	-	-	-	-	4	10	-	-	-	-	10	-	14
10	HEVES	-	1	1	-	-	-	2	2	-	-	-	-	2	-	4
11	KOMAROM	1	2	-	-	-	-	3	14	-	-	-	1	15	-	18
12	NOGRAD	-	1	-	-	-	-	1	3	-	-	-	-	3	-	4
13	PEST	1	3	-	-	-	-	4	23	-	-	-	-	23	-	27
14	SOMOgy	-	4	2	-	-	-	6	20	-	-	2	-	22	-	28
15	SZABOLCS-SZATMAR	-	-	-	-	-	-	0	5	-	-	-	-	5	-	5
16	SZOLNOK	-	1	1	-	-	-	2	4	-	-	-	-	4	-	6
17	TOLNA	-	4	-	-	-	-	4	21	-	-	-	-	21	-	25
18	VAS	-	2	-	-	-	-	2	20	-	-	-	-	20	-	22
19	VESZPREM	-	5	1	-	-	-	6	24	-	-	-	-	24	-	30
20	ZALA	-	-	-	-	-	-	0	22	-	-	-	-	22	-	22
TOTAL		11	47	12	0	1	0	71	279	1	1	2	1	284	0	355
PER CENT		3.1	13.2	3.4	0.0	0.3	0.0	20.0	78.6	0.3	0.3	0.6	0.3	80.0	0.0	100.0

LTU		L I T H U A N I A											R A B I E S C A S E S				1.10.92 - 31.12.92	
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		
34	Anyksciu	-	-	1	-	-	-	1	-	-	-	-	-	0	-	1		
36	Birzu	-	1	-	-	-	-	1	-	-	-	-	-	0	-	1		
41	Viniaus	1	-	2	-	-	-	3	3	-	-	-	-	3	-	6		
45	Ignalinos	-	-	-	-	-	-	0	-	1	-	-	-	1	-	1		
49	Kaisiadoriu	-	1	-	-	-	-	1	-	-	-	-	-	0	-	1		
52	Kauno	-	-	-	-	-	-	0	1	-	-	-	-	1	-	1		
56	Kredingos	-	-	3	-	-	-	3	-	-	-	-	-	0	-	3		
57	Kubiskio	-	1	-	-	-	-	1	-	-	-	-	-	0	-	1		
62	Moletu	-	-	1	1	-	-	2	-	-	1	-	-	0	-	2		
66	Panevezio	-	-	1	-	-	-	1	-	-	1	-	-	1	-	2		
68	Plunges	-	-	1	-	-	-	1	-	-	-	-	-	0	-	1		
71	Radviliskio	-	1	1	-	-	-	2	1	-	-	-	-	1	-	3		
73	Rokiskio	-	-	-	-	-	-	0	-	-	-	1	-	1	-	1		
81	Ukmerges	1	-	-	-	-	-	1	-	-	-	1	-	0	-	1		
82	Utenos	-	-	-	-	-	-	0	1	-	1	-	-	2	-	2		
85	Salcininku	-	-	1	-	-	-	1	-	-	-	-	-	0	-	1		
88	Silutes	1	-	-	-	-	-	1	-	-	-	-	-	0	-	1		
89	Sirvintu	1	-	1	-	-	-	2	-	-	1	-	-	1	-	3		
94	Jurbarko	-	1	-	-	-	-	1	1	-	-	-	-	1	-	2		
99	no Location	-	-	-	-	-	-	0	-	-	-	-	-	0	1	1		
TOTAL		4	5	12	1	0	0	22	7	1	3	1	0	12	1	35		
PER CENT		11.4	14.3	34.3	2.9	0.0	0.0	62.9	20.0	2.9	8.6	2.9	0.0	34.3	2.9	100.0		

LVA		LATVIA											RABIES CASES			1.10.92 - 31.12.92	
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	
02	Alukane							0	-	-	-	-	1	1		1	
05	Cesis							0	1	-	-	-	-	1		1	
07	Dobele							0	1	-	-	-	-	1		1	
08	Gulbene							0	-	-	-	-	1	1		1	
11	Kraslava							0	-	-	-	-	1	1		1	
13	Liepaja	1	-	-	-	-	-	1	1	-	-	-	-	1		2	
16	Madona							0	1	-	-	-	-	1		1	
17	Ogre	3	-	-	-	-	-	3	1	1	-	-	1	3		6	
18	Preiļi	-	1	-	-	-	-	1	-	-	-	-	1	1		2	
19	Rezekne							0	1	-	-	-	-	1		1	
20	Riga							0	2	-	-	-	3	5		5	
21	Saldus	-	-	1	-	-	-	1						0		1	
22	Talsi							0	1	-	-	-	-	1		1	
23	Tukums	-	1	-	-	-	-	1						0		1	
TOTAL		4	2	1	0	0	0	7	9	1	0	0	8	18	0	25	
PER CENT		16.0	8.0	4.0	0.0	0.0	0.0	28.0	36.0	4.0	0.0	0.0	32.0	72.0	0.0	100.0	

POL		POLAND											RABIES CASES					1.10.92 - 31.12.92	
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	3	1	-	-	-	-	4	9	-	2	1	-	12		16			
03	BIALA PODLASKA	-	1	-	-	-	-	1	8	-	-	-	1	9		10			
05	BIALYSTOK	-	-	13	-	-	-	13	13	-	-	-	2	15		28			
07	BIELSKO-BIALA	-	-	-	-	-	-	0	1	-	1	-	-	2		2			
09	BYDGOSZCZ	2	1	2	-	1	-	6	20	-	1	1	9	31		37			
11	CHELM	-	-	-	-	-	-	0	3	-	1	-	-	4		4			
13	CIECHANOW	1	-	3	-	-	-	4	9	-	1	-	5	15		19			
15	CZESTOCHOWA	2	-	1	-	-	-	3	11	-	-	-	-	11		14			
17	ELBLAG	1	5	15	-	1	-	22	18	-	1	1	14	34		56			
19	GDANSK	3	4	18	-	-	-	25	31	-	-	1	17	49		74			
21	GORZOW	-	2	2	-	-	-	4	66	-	1	1	6	74		78			
23	JELENIA GORA	1	4	1	-	-	-	6	12	-	1	-	-	13		19			
25	KALISZ	-	2	1	-	-	-	3	10	-	-	-	-	10		13			
27	KATOWICE	-	3	-	-	-	-	3	4	-	-	-	-	4		7			
29	KIELCE	-	2	-	-	-	-	2	5	-	1	-	1	7		9			
31	KONIN	-	1	1	-	-	1	3	18	1	-	-	-	19		22			
33	KOSZALIN	1	4	2	-	-	-	7	28	1	1	9	12	51		58			
35	KRAKOW	-	1	-	-	-	-	1	3	-	-	-	-	3		4			
37	KROSNO	-	1	-	-	-	-	1	1	-	-	-	-	1		2			
39	LEGNICA	-	1	-	-	-	-	1	23	-	-	-	-	23		24			
41	LESZNO	-	1	1	-	-	-	2	25	1	2	1	-	29		31			
43	LUBLIN	-	-	-	-	-	-	0	12	-	-	-	1	13		13			
45	LOMZA	1	6	2	-	-	-	9	15	-	2	-	2	19		28			
49	NOWY SACZ	1	-	-	-	-	-	1	13	-	-	-	-	13		14			
51	OLSZTYN	2	3	12	-	1	-	18	18	1	2	-	6	27		45			
53	OPOLE	-	1	5	-	-	-	6	23	-	-	-	-	23		29			

POL 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		
55 OSTROLEKA	3	5	2	1	-	-	11	21	-	1	-	-	22		33
57 PILA	3	1	-	-	-	-	4	25	-	-	2	1	28		32
59 PIOTRKOW TRYB							0	5	-	-	-	-	5		5
61 PLOCK							0	2	-	1	-	-	3		3
63 POZNAN	4	6	2	-	-	-	12	63	1	4	8	5	81		93
65 PRZEMYSL	2	3	-	-	-	-	5	11	1	-	-	1	13		18
67 RADOM							0	1	1	-	-	-	2		2
69 RZESZOW							0	11	-	-	3	-	14		14
71 SIEDLCE	2	5	-	-	-	-	7	25	-	-	-	4	29		36
73 SIERADZ	1	1	-	-	-	-	2	6	-	1	-	-	7		9
75 SKIERNIEWICE	3	3	-	-	-	-	6	11	-	1	-	-	12		18
77 SLUPSK	2	1	-	-	-	-	3	22	-	1	8	6	37		40
79 SUWALKI	1	-	8	-	-	-	9	12	-	1	-	5	18		27
81 SZCZECIN	1	3	-	-	-	-	4	56	-	2	2	11	71		75
83 TARNOBRZEG							0	3	-	-	2	-	5		5
85 TARNOW							0	2	-	-	-	-	2		2
87 TORUN	-	2	7	-	-	-	9	5	-	1	-	3	9		18
89 WALBRZYCH	1	3	5	-	-	-	9	33	-	-	-	-	33		42
91 WLOCLAWEK							0	2	-	-	-	-	2		2
93 WROCLAW	3	1	8	-	-	-	12	63	-	-	1	1	65		77
95 ZAMOSC							0	2	-	1	-	-	3		3
97 ZIELONA GORA	-	-	7	-	-	-	7	72	-	-	5	2	79		86
TOTAL	44	78	118	1	3	1	245	852	7	31	46	115	1051	0	1296
PER CENT	3.4	6.0	9.1	0.1	0.2	0.1	18.9	65.7	0.5	2.4	3.5	8.9	81.1	0.0	100.0

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R A B I E S C A S E S																1.10.92 - 31.12.92	
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	
ROM R O M A N I A																	
16	DIMBOVITA	1	-	-	-	-	-	1						0	1		
17	DOLJ							0	1	-	-	-	-	1	1		
19	GIURGIU							0	1	-	-	-	-	1	1		
20	GORJ							0	2	-	-	-	-	2	2		
24	IASI	2	1	-	-	-	-	3						0	3		
26	MEHEDINTI							0					1	1	1		
28	NEAMT	-	-	1	-	-	-	1						0	1		
35	TELEORMAN	1	-	-	-	-	-	1						0	1		
TOTAL		4	1	1	0	0	0	6	4	0	0	0	1	5	0	11	
PER CENT		36.4	9.1	9.1	0.0	0.0	0.0	54.5	36.4	0.0	0.0	0.0	9.1	45.5	0.0	100.0	
SVN S L O V E N I A																	
02	BREZICE							0	1	-	-	-	-	1	1		
11	IDRIJA							0	2	-	-	-	-	2	2		
19	KRSKO							0	4	-	-	-	-	4	4		
22	LENDAVA							0	2	-	-	-	-	2	2		
27	LJUBLJANA SSKA							0	1	-	-	-	-	1	1		
28	LJUBLJANA VIC RUDNIK							0	9	-	-	1	-	10	10		
30	LOGATEC							0	-	-	1	-	-	1	1		
35	MOZIRJE							0	1	-	-	-	-	1	1		
36	MURSKA SOBOTA							0	1	-	-	-	-	1	1		
37	NOVA GORICA							0	12	-	1	-	-	13	13		
38	NOVO MESTO							0	2	-	-	-	-	2	2		
39	ORMOZ							0	1	-	-	-	-	1	1		
41	POSTOJNA							0	2	-	-	-	-	2	2		
45	RAVNE NA KOROSKEM							0	3	-	-	-	-	3	3		
53	SKOFJA LOKA							0	7	-	-	-	-	7	7		
55	TOLMIN							0	4	1	-	-	-	5	5		
60	VRHNIKA							0	2	-	-	-	-	2	2		
TOTAL		0	0	0	0	0	0	0	54	1	2	1	0	58	0	58	
PER CENT		0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.1	1.7	3.4	1.7	0.0	100.0	0.0	100.0	

RUS		RUSSIAN FEDERATION											R A B I E S C A S E S				1.10.92 - 31.12.92	
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		
08	Pskov Region	5	1	3	-	-	-	9	1	-	-	-	-	1		10		
09	Bryansk Region							0						0	1	1		
12	Tver Region							0	1	-	-	-	-	1		1		
13	Kaluga Region							0	1	-	-	-	-	1		1		
15	Moscow Region	1	-	-	-	-	-	1						0		1		
16	Oryol Region	1	-	-	-	-	-	1	1	-	-	-	-	1		2		
19	Tula Region							0	3	-	-	-	-	3		3		
26	Belgorod Region	7	3	4	-	-	-	14	5	-	-	-	-	5		19		
27	Voronezh Region	1	1	16	1	-	-	19	2	-	-	-	1	3		22		
28	Kursk Region	5	1	5	-	-	-	11	4	-	-	-	-	4		15		
29	Lipetsk Region							0	1	-	-	-	-	1		1		
31	Astrakhan Region	1	1	9	-	-	-	11						0		11		
32	Volgograd Region	3	-	7	-	1	-	11	2	-	-	-	-	2	1	14		
33	Samara Region	1	-	5	1	-	-	7	1	-	-	-	-	1		8		
34	Penza Region	4	-	-	-	-	-	4	1	-	-	-	-	1		5		
35	Saratov Region	3	3	2	-	-	-	8	7	-	-	-	-	7		15		
36	Ulyanovsk Region	2	1	2	-	-	-	5	1	-	-	-	-	1		6		
38	Republic of Tatarstan	-	2	1	-	-	-	3	4	-	-	-	-	4		7		
39	Krasnodar Territory	4	-	-	-	-	-	4	-	-	-	-	1	1		5		
40	Stavropol Territory	1	-	9	-	-	-	10						0		10		
41	Rostov Region	1	2	2	-	-	-	5						0		5		
42	Orenburg Region	2	-	4	1	-	-	7	2	-	-	-	-	2		9		
44	Republic of Bashkorto	5	-	29	2	2	-	38	11	-	-	-	-	11	2	51		
46	Kaliningrad Region	-	1	5	-	-	-	6	1	-	-	-	1	2		8		
TOTAL		47	16	103	5	3	0	174	49	0	0	0	3	52	4	230		
PER CENT		20.4	7.0	44.8	2.2	1.3	0.0	75.7	21.3	0.0	0.0	0.0	1.3	22.6	1.7	100.0		

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R A B I E S C A S E S																1.10.92 - 31.12.92	
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	
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																	
01	AARGAU						0	1	-	-	-	-	1		1		
04	BASEL-STADT						0	5	-	-	-	-	5		5		
05	BASEL-LAND	-	-	1	-	-	1	2	-	1	-	-	3		4		
06	BERN						0	2	-	-	-	-	2		2		
17	SOLOTHURN	-	1	1	-	-	2	3	4	-	-	-	7		9		
26	JURA						0	3	2	-	-	-	5		5		
TOTAL		0	1	2	0	0	3	16	6	1	0	0	23	0	26		
PER CENT		0.0	3.8	7.7	0.0	0.0	11.5	61.5	23.1	3.8	0.0	0.0	88.5	0.0	100.0		
YUG Y U G O S L A V I A																	
60	SR SRBIJA	1	-	-	-	-	1	1	-	-	-	-	1		2		
61	SAP VOJVODINA	3	8	2	-	-	13	64	-	-	-	-	64		77		
TOTAL		4	8	2	0	0	14	65	0	0	0	0	65	0	79		

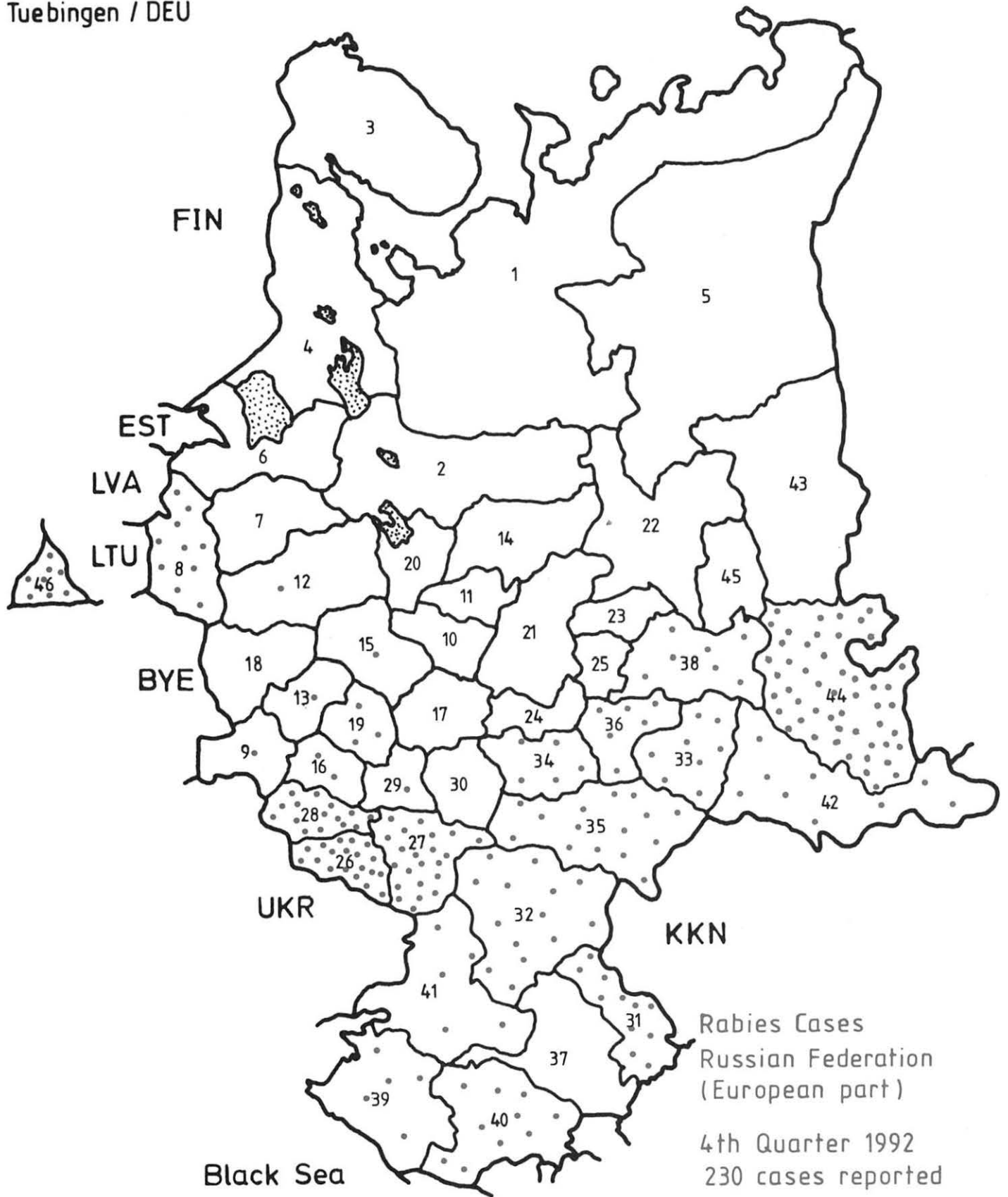
TUR		RABIES CASES											1.10.92 - 31.12.92			
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
01	ADANA	1	1	1	-	-	-	3						0		
02	ADIYAMAN	2	-	6	-	-	-	8						0		
03	AFYON							0	-	-	-	-	1	1		
06	ANKARA	1	-	-	-	-	-	1						0		
09	AYDIN	3	-	-	-	-	1	4						0		
10	BALIKESIR	3	-	1	-	3	-	7						0		
14	BOLU	4	-	-	-	-	-	4						0		
15	BURDUR	1	-	-	-	-	-	1						0		
16	BURSA	2	-	2	-	-	-	4	-	-	-	-	1	1		
20	DENIZLI	2	-	-	-	-	-	2						0		
21	DIYARBAKIR	-	-	2	-	1	-	3						0		
23	ELAZIG	-	1	-	-	-	-	1						0		
27	GAZIANTEP	5	-	-	-	-	-	5						0		
31	HATAY	2	-	-	-	-	-	2						0		
33	ICEL	1	-	-	-	-	-	1	-	-	-	-	1	1		
34	ISTANBUL	3	-	-	-	1	-	4						0		
37	KASTAMONU	1	-	-	-	-	-	1						0		
39	KIRKLARELI	1	-	-	-	-	-	1						0		
41	KOCAELI	1	-	-	-	-	-	1						0		
43	KUETAHYA	-	1	-	-	-	-	1						0		
45	MANISA	2	-	-	-	-	-	2						0		
46	KAHRAMANMARAS	-	-	1	-	-	-	1						0		
47	MARDIN	2	-	-	-	-	-	2						0		
48	MUGLA	1	-	-	-	-	-	1						0		
54	SAKARYA	8	-	2	-	-	-	10						0		
63	SANLIURFA	-	-	-	-	1	-	1						0		
67	ZONGULDAK	2	-	-	-	-	-	2						0		
68	AKSARAY	3	-	-	-	-	-	3						0		
70	KARAMAN	1	-	-	-	-	-	1						0		
71	KIRIKKALE	1	-	-	-	-	-	1						0		
TOTAL		53	3	15	0	6	1	78	0	0	0	0	3	3	0	81
PER CENT		65.4	3.7	18.5	0.0	7.4	1.2	96.3	0.0	0.0	0.0	0.0	3.7	3.7	0.0	100.0

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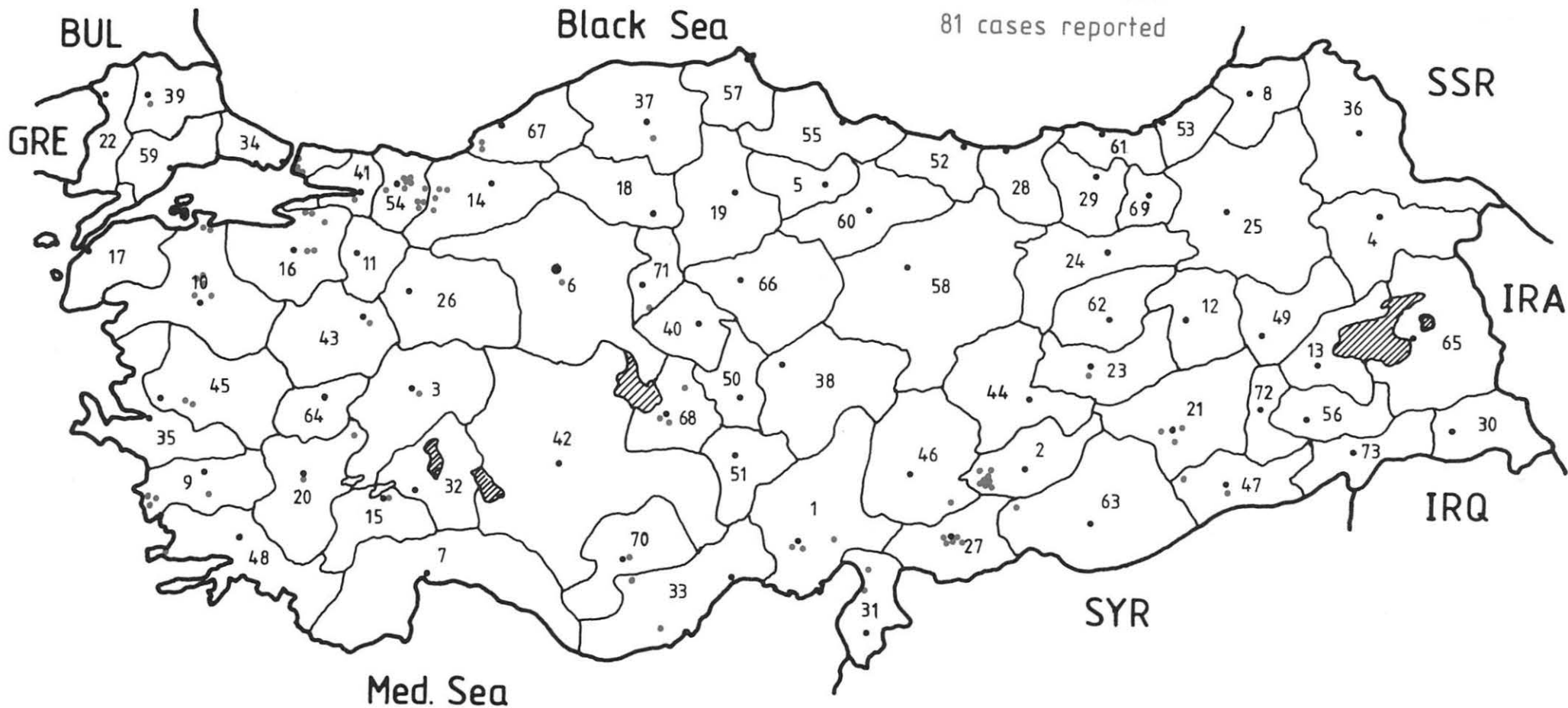
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Rabies Cases Turkey
4th Quarter 1992
81 cases reported

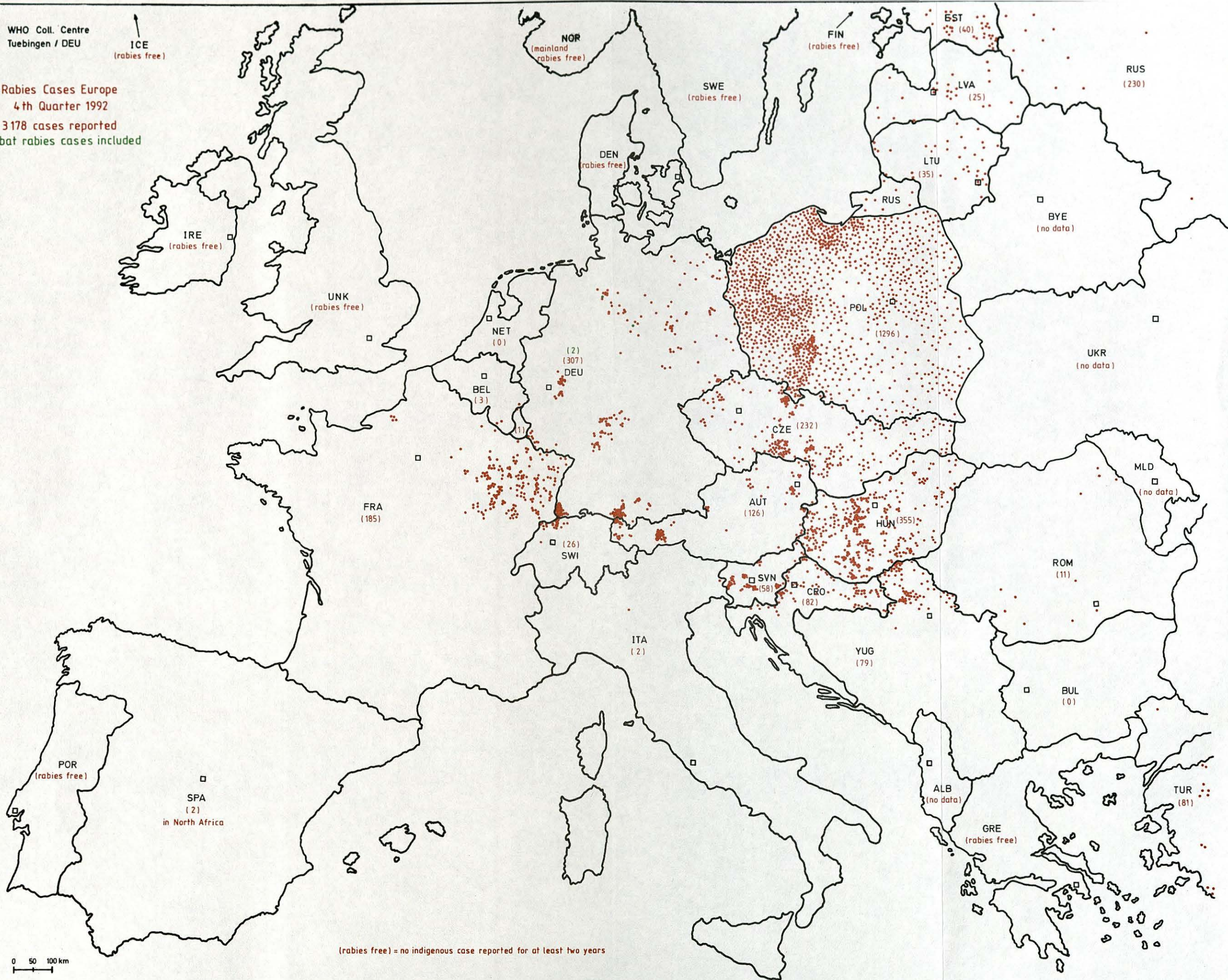


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ICE
(rabies free)

Rabies Cases Europe 4th Quarter 1992

3178 cases reported
2 bat rabies cases included



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

0 50 100 km