RABIES BULLETIN EUROPE

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Contents

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1. Introduction

This BULLETIN describes the reported rabies cases in **Europe** for the **Fourth Quarter 1995**, subsequently referred to as ***"This Quarter"***.

In SECTION 2 a summary of the rabies situation in general is given.

SECTION 3 (3.1-3.36) reflects the situation for individual countries.

In the Miscellaneous SECTION (4) under 4.1 a concept for the eradication of sylvatic rabies in Switzerland is presented. Under 4.2 there is an epidemiologic investigation, the follow-up management and a cost assessment in connection to a rabies case in a puppy in South Dakota, U.S.A.

The rabies case data are tabulated for the **Fourth Quarter 1995** 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 for the **Fourth Quarter 1995** is shown on maps of Europe, the Russian Federation and Turkey in the ANNEX.

2. Summary of Rabies in Europe

2.1 Fourth Quarter 1995

During ***"This Quarter"***, 2610 rabies cases were reported in Europe. Of these were 1723 in wild animals (66% of total), 884 in domestic animals and 3 in humans.

Of the cases in wild animals, 1583 were foxes (60.7% of total), 50 raccoon dogs, 2 wolves, 25 badgers, 6 stone martens, 9 pine martens, 6 polecats, 34 roe deer, 1 wild boar, 1 bat, 1 squirrel, 1 black rat and 4 unspecified animals. Of the 884 domestic animals, 167 were dogs, 224 cats, 453 bovines, 13 horses, 2 pigs and 25 small ruminants.

There were 3 human cases, all in the Russian Federation.

The above data are presented in TABLES 5.1 and 5.3 of SECTION 5 and in the TABLES of the individual countries.

Compared to the previous quarter (1482 cases - corrected figure) an increase is noticed (by 1128 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 which causes an increased contact rate. Most of the countries recorded this increase.

Turkey following the pattern of dog-mediated rabies and not showing obvious seasonality recorded a decrease.

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

There were no cases in Denmark and the Netherlands, but the last indigenously acquired case (in both instances a bat rabies case) was less than two years ago.

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

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2.2 Development and Trends in 1995

Summary:

Rabies case data summarizing the year 1995 can be found in TABLES 5.2, 5.4 and 5.5 of SECTION 5.

The number of cases in 1995 totals 8,134. The four quarters compare as follows (corrected figures):

1st quarter	- 2623
2nd quarter	- 1419
3rd quarter	- 1482
4th quarter	- 2610

The total in 1995 is the lowest figure recorded for one year since the beginning of this surveillance system in 1977, the highest figure being 24,377 in 1989 (corrected figure).

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 most frequently on to other animals (wild and domestic). TABLE 5.2 with annual figures shows that the fox participates with 65.1% of all rabies cases in Europe as the principal vector, in spite of a large unknown figure, which we do not have in domestic animals. 6.8% of the other rabid wild animals in TABLE 5.2 share the same habitat with the fox. The same can be said for the greater part of farm animals in summer (cattle for example participate with 10.9% of the total as the second largest group of affected animals).

After the year 1989 with a high rabies incidence in Europe (24,377 rabies cases), a reduction of cases was noticed every year. Reasons are the efforts of many countries to eradicate rabies by oral vaccination. Nevertheless, the countries practicing oral vaccination over a lengthy time have experienced different results. While countries like Austria, the Czech Republic and France record a continuous decline of cases, countries like Belgium, Germany, Slovenia and Switzerland recorded a rabies incidence in 1994 higher than in the previous year. The reasons were reinfections of formerly rabies-free areas or outbreaks which developed from residual foci. Germany and Switzerland had meanwhile a substantial decrease of rabies cases in 1995 compared to 1994, the situation in Belgium and Slovenia worsened though.

A continued decrease of cases in Europe from 1989 to 1995 happened inspite of the above mentioned. There is fast progress in many countries practicing oral vaccination and in a few countries one has managed to cope with set-backs by using an increased number of vaccine baits per area and year.

Urban- or dog-mediated rabies:

Normally, Turkey is counted among the other European countries. However, it is of a different rabies pattern altogether -the urban or dog-mediated rabies. In 1995 it accounted for only 2% of the total rabies cases in Europe. Only 1 case occurred in a wild animal.

Turkey recorded 2 cases less in 1995 compared to the previous year.

Bat rabies:

Bat rabies has its own epidemiological pattern and is therefore separately presented.

There were 6 cases of bat rabies reported in 1995, 3 in the Netherlands, 1 in Germany, 1 in France and 1 in Denmark.

Since 1987 (142 cases) there is a diminishing tendency of bat cases registered in Europe.

Human rabies:

There were 10 human cases reported in 1995. All of them occurred in the Russian Federation.

3. Rabies in Individual Countries

3.1 Albania ALB

No data.

3.2 Austria AUT

by Helmut Schnabl

Of 6981 samples examined for rabies during ***"This Quarter"*** 23 animals (0.33%) were diagnosed rabid. There was an increase of 8 cases compared to the previous quarter and a decrease of 46 cases compared to the fourth quarter 1994.

The cases occurred in the Bundesländer (federal provinces) of Tirol (9) and in the national border areas of Steiermark (4), Burgenland (9) and Niederösterreich (1).

Summary 1995

A total of 95 cases were registered in the country for 1995, 159 cases less than in 1994 (254). Due to an oral vaccination programme of foxes which was started in 1986 (1387 cases at that time), cases have continuously decreased in spite of some reinfections originating in bordering countries.

3.3 Belgium BEL

by L. Hallet

During ***"This Quarter"***, 58 rabies cases were diagnosed in animals. 30 cases occurred in foxes, 16 in bovines, 8 in sheep, 2 in badgers, 1 in an equine and 1 in a cat.

Three foxes, 3 bovines and 1 cat were recorded at LIBIN, 3 foxes and 1 bovine at PALISEUL. Six foxes, 2 bovines and 1 horse were recorded at GEDINNE, 5 foxes, 1 bovine and 1 sheep at VAUX-SUR-SURE. Two foxes each were recorded at MARCHE-EN-FAMENNE, LIBRAMONT, MEIX-DEVANT-VIRTON, BOUILLON and SAINTE-ODE. One fox each was recorded at VRESSE-SUR-SEMOIS, BERTRIX, DAVERDISSE, ROUVROY, CHINY and SAINT-LEGER. Two foxes, 2 badgers, and 1 sheep were recorded at BIEVRE, 1 fox, 1 bovine and 2 sheep at SAINT-HUBERT. Two bovines each were recorded at LIBRAMONT and BOULLION. One bovine each was recorded at BERTRIX, NEUFCHATEAU, DAVERDISSE and LEGLISE and 2 sheep at LEGLISE. One sheep each was recorded at DEVERDISSE and SAINTE-ODE.

Summary 1995

In 1995 a total of 213 cases were diagnosed in the country: 135 foxes, 44 bovines, 23 ovines, 5 equines, 4 cats and 2 badgers. These cases occurred in 30 communities registering 1 to 31 cases. PALISEUL (31 cases), BIEVRE and NEUFCHATEAU (24 cases each) recorded the highest figures; 7 communities on the other hand recorded one case only: HERBEUMONT, NASSOGNE, ETALLE, VIRTON, GOUVY, ROCHEFORT and SAINT-LEGER.

A total of four oral vaccination campaigns were carried out in 1995

- *In March* an area of 5193 km² was vaccinated using 89,400 vaccine baits. It reinforced a campaign carried out in December 1994.
- *In the beginning of June* a campaign was carried out to specially reach young foxes at the den covering a zone to the north of the infected area of the country. At 585 fox dens 2366 places were baited using 2993 vaccine baits.
- *In July* an emergency campaign was carried out as 2 rabies cases were diagnosed in foxes at VIELSALM. The area vaccinated represented a 30 km radius around VIELSALM. 30,600 vaccine baits were distributed on an area of 1800 km².
- *Finally, in November* a campaign was carried out covering an area of 8600 km² using 147,200 vaccine baits.

3.4 Bulgaria BUL

During ***"This Quarter"***, 4 rabies cases were reported from 2 provinces (Lovetch and Pleven).

Summary 1995

A total of 10 cases were diagnosed in the country in 1995.

Note of the editor:

There were no monthly reports from February and May received in 1995.

3.5 Belarus BYE

by S.N. Shpilevsky

During ***"This Quarter"***, 14 rabies cases were diagnosed in animals (5 foxes, 3 dogs, 3 cats, 2 bovines, 1 horse).

All 6 regions of the country were affected by the disease recording 1 to 7 cases.

Summary 1995

There were 34 animal rabies cases recorded in 1995. However, a report for the first quarter was not received.

3.6 Croatia CRO

by Mate Brstilo

During ***"This Quarter"***, 130 cases of rabies in wild and domestic animals were diagnosed in 47 municipalities of Croatia, 65 cases more compared to the previous quarter, and 42 cases less compared to the 4th quarter 1994. Municipalities recording most of the cases were Varazdin (9 cases), Pakrac (8 cases), Koprivnica (7 cases) and Bjelovar (7 cases).

Of the total, rabies was noticed in 122 wild animals (119 foxes, 2 martens, 1 badger) and 8 domestic animals (3 dogs, 4 cats, 1 goat).

"This Quarter" highlights especially two points:

- there was a drastic increase of cases compared to the previous quarter (by 100 %) and,
- there was a concentration of cases in the north of the country.

Summary 1995

There were 419 animal rabies cases recorded in 1995 compared to 540 cases in 1994.

3.7 Czech Republic CZH

by Oldrich Matouch

A total of 55 rabies cases was reported from the territory of the Czech Republic during ***"This Quarter"***.

The disease was confirmed in 50 foxes (90.9% of total), 2 roe-deer, 1 badger and 2 domestic cats.

There was an increase of cases compared to the 4th quarter 1994 (by 14) as well as to the 3rd quarter 1995 (5).

There was one very active focus in North Bohemia recording 28 cases (50.9% of total) in the country during ***"This Quarter"***. 18 cases were reported in North Moravia. All the other cases were scattered.

An oral vaccination of foxes was carried out in October covering all infected areas of the country (49,600 km^2). 900,000 Lysvulpen (BIO-VETA, SAD-Bern) vaccine doses were distributed in 62 districts.

Summary 1995

In 1995, a total of 10,608 animals was examined for rabies in the Czech Republic. Rabies was diagnosed in 178 cases, 43 less than in 1994.

As in the previous year, the majority of cases recorded came from North Bohemia and North Moravia.

The highest incidence was registered in foxes - 157 cases (88.2%). The other animal species involved were marten (5), roe deer (4), badger (3), squirrel (1), cat (5), dog (2) and bovine (1).

The continued reduction of rabies cases which has been experienced during the last years was undoubtedly connected to the oral vaccination of foxes practiced since 1989.

3.8 Denmark DEN

by Eric Stougaard

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

In 1995 only 1 rabies case in a bat was diagnosed in Denmark.

3.9 Germany, Federal Republic DEU

by Winfried W. Müller and Hartmut Schlüter

A total of 124 rabies cases was reported during *"This Quarter"*, 28 cases less than in the previous quarter and 331 cases less than in the fourth quarter 1994.

In spite of an expected seasonal rise in *"This Quarter"* cases have now continuously declined for one year. The epidemiological pattern though has remained: there were the more heavily infected areas of the western Bundesländer (federal states) Nordrhein-Westfalen, Hessen, Rheinland-Pfalz and Saarland plus an extending focus in Baden-Württemberg, and some isolated cases in Berlin, Sachsen, Bayern and in the north of Baden-Württemberg.

Annual Development 1995

In 1994 the annual total amounted to 1378 animal rabies cases in Germany, 533 cases more than in 1993. In 1995 the total amounted to 856, close to the figure of 1993.

Similar setbacks as in 1994 were experienced in other European countries and since that time there were common efforts in finding alternative methods for the oral vaccination. It became apparent that over the recent years the density of fox populations had risen, especially in all countries practicing oral vaccination which had to be answered with an increased vaccine bait application to reach the critical point of seroconversion for an eradication of the disease.

There were principally three alternative ways of practicing oral vaccination in Germany when needed:
- using up to 30 and more vaccine baits per km^2;
- practicing a third (summer) vaccination campaign;
- practicing two vaccine applications at an interval of 2 to 4 weeks during 1 vaccination campaign (increasing the use of vaccine baits to 35-40 per km^2).

Alternative methods were especially observed to treat rabies-free areas which had to be protected from fiercely expanding outbreaks.

Nevertheless, the larger areas of Germany which were infected, were still treated the conventional way - twice a year using ca. 15-20 vaccine baits per km^2.

To motivate the Bundesländer responsible for the control of notifiable diseases (rabies is one of them), a meeting was held in November 1995 for background information. Permanent groups of officers and scientists were established (on strategy, laboratory technology and wildlife biology) to promote research in connection to oral vaccination.

3.10 Estonia EST

by Matti Nautras

During *"This Quarter"*, 16 animal rabies cases were registered in Estonia, 11 cases less than during the previous quarter and 5 cases less than during the fourth quarter in 1994.

Summary 1995

There were 74 animal rabies cases recorded in 1995, 34 cases less than in the previous year. Of the 74 cases, 49 were in wild animals (30 foxes, 13 raccoon dogs, 4 badgers, 1 roe deer, 1 beaver) and 25 in domestic animals (12 dogs, 7 cats, 6 bovines).

Of 15 districts 12 were affected by rabies. There was a concentration of cases in the south-east of the country.

3.11 Finland FIN

by Bengt Westerling

The country remained rabies-free.

Surveillance: 15 animals (4 foxes, 2 raccoon dogs, 3 dogs, 4 cats, 1 bovine, 1 rat) were examined for rabies but revealed negative results.

3.12 France FRA

by Michel F.A. Aubert

A total of 6 rabies cases was reported from France during *"This Quarter"*. There were 4 cases (3 foxes, 1 bovine) along the borders of Belgium and Germany, 1 bat rabies case in the département Cher in the centre of the count-

ry, and 1 imported dog rabies case in the département Vaucluse in the south.

The imported dog case referred to a puppy which was imported from Burkina Faso. It was not vaccinated because of young age, though an exact age was not given. The animal entered France via the airport of the Marseille-Province on 3rd November 1995. It died on 8th November 1995 in the département Vaucluse.

17 persons received anti rabies treatment in this connection. Two animals (1 cat and 1 dog), which had contact to the puppy, were euthanized.

Summary 1995

A total of 40 cases were registered in France in 1995, 59 cases (60%) less than in the previous year.

3.13 Greece GRE

by I. Koykidis

The country remained rabies-free.

Review and surveillance:

In Greece no rabies case was reported since 1984. The last case which was investigated proved to be a dog from Turkey which came on a sailing boat to Athens.

There is no wildlife rabies in Greece, and it is not expected in the near future.

There are reports of rabies cases from Bulgaria and Turkey, but there are no such reports from Albania and Macedonia.

Today vaccination of all owned dogs in the area of the northern borders of Greece is free of charge. It is estimated that 85 % of the owned dogs in Greece are either vaccinated as mentioned above or by private practitioners.

There were few samples received over the last years by the laboratories to examine wild or domestic carnivores for rabies.

As most of the hospitals or private doctors do not report dog bites, it is difficult to practice a reliable surveillance on rabies suspected animals. People bitten by rabies suspected dogs receive wound treatment and the dogs, if owned, are kept under observation for 15 days.

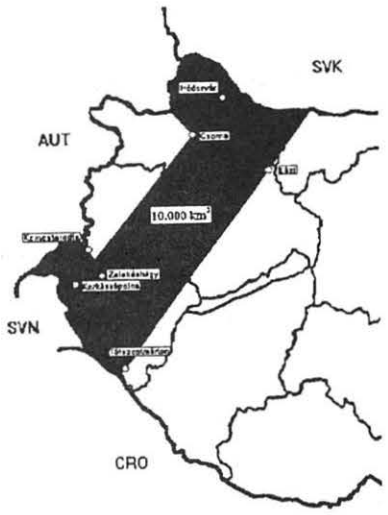
3.14 Hungary HUN

by Balint Kerekes

During *"This Quarter"*, 390 rabies cases in animals were registered, 31 cases less (7.4%) than during the fourth quarter 1994.

Komitate (provinces) with the highest rabies incidence were Somogy, Baranya and Fejér with 48, 45 and 41 cases respectively. All other provinces recorded less than 33 cases.

In October 1995 an oral vaccination campaign was carried out (see map below). It covered an area of 10,000 km^2. The vaccine baits were distributed by airplane.



Summary 1995

There was a total of 1,134 rabies cases in 1995, 185 cases (19.5%) more than in 1994. The 4 Komitate mostly affected were Baranya, Somogy, Borsod-Abanj-Zemplen and Fejér (with 124, 119, 112 and 104 cases respectively.

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"*, rabies was diagnosed in 2 foxes, one in the province of Trieste and another in the province of Gorizia. Both cases

occurred in close vicinity to the border with Slovenia.

Summary 1995

In 1995, the surveillance was carried out in the Alpine Region as follows:

1) 142 wild animals (108 foxes) and 194 domestic ones were examined in Piemonte, Valle d'Aosta and Liguria. All were negative.

2) 910 wild animals (856 foxes) and 197 domestic ones were examined in Lombardia. All were negative.

3) 3163 wild animals (2555 foxes) and 261 domestic ones were examined in Trentino Alto Adige, Veneto and Friuli Venezia Giulia. Of these 1 dog, 8 foxes, 1 roe deer and 1 pine marten were rabid.

On 30 January 1995 an Ordinance of the Ministry of Health made the rabies vaccination compulsory for dogs, cattle, sheep, goats and equines in the Friuli Venezia Giulia Region and Bolzano province. A killed vaccine was used in all cases. The Health Authorities of Piemonte, Valle d'Aosta, Liguria, Lombardia, Veneto and Trento province will consider the compulsory vaccination in areas at risk, in connection with the presence of rabies in the bordering countries.

The oral vaccination of foxes was carried out during spring in the provinces of Trieste, Gorizia and Udine in an area of 1,600 km², by using 25,000 vaccine baits. The oral vaccination of foxes was also performed in the province of Bolzano in an area of 645 km², by using 7,000 vaccine baits.

3.18 Lithuania LTU

by K. Lukauskas and A. Dranseika

During ***"This Quarter"***, 36 rabies cases were diagnosed in 12 districts. Of these, 20 cases were in domestic animals (4 dogs, 5 cats and 11 bovines) and 16 in wild animals (12 foxes, 2 raccoon dogs, 1 pine marten and 1 polecat).

The most affected districts of the country were Plunges with 7 and Joniskis with 6 cases. All other affected districts reported between 1 and 4 cases.

During ***"This Quarter"***, 27,000 dogs were vaccinated against rabies.

Summary 1995

The annual total of rabies cases amounted to 80. In the previous year 63 cases were registered.

There was no human rabies case reported in the country.

3.19 Luxembourg LUX

by Joseph Kremer

During ***"This Quarter"***, 9 rabies cases were noticed out of 25 samples examined (19 foxes, 4 bovines, 1 sheep, 1 roe deer). The cases were all located at the German border toward the Saarland.

The cases occurred in 4 foxes, 4 bovines and 1 sheep.

To avoid a spreading of the epizootic into other parts of the country it is planned to carry out the oral vaccination of foxes in 1996 in March and September covering each time the entire country (approx. 49,000 vaccine baits are to be distributed on 2586 km²).

In 1995 a total of 89 animals were examined for rabies and 15 were diagnosed rabid (9 foxes, 5 bovines, 1 sheep). In 1994 there was only 1 case.

3.20 Latvia LVA

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

A total of 54 rabies cases was registered in Latvia during ***"This Quarter"*** in 16 districts, 4 cases more than during the previous quarter. There were 25 rabies cases less than in the fourth quarter 1994. 39 cases were diagnosed in wild animals (72.2% of total). Of the cases in wild animals 29 were foxes and 10 raccoon dogs. Of 15 domestic animals 6 were dogs, 6 cats and 3 bovines.

Third Quarter 1995

A total of 50 rabies cases were registered in Latvia during the third quarter 1995 in 15 districts, 8 cases less than during the previous quarter and 6 cases less than during the third quarter 1994. 32 cases were diagnosed in wild animals (64% of total). Of the cases in wild animals 25 were foxes, 4

raccoon dogs, 1 beaver, 1 hedgehog and 1 other wild animal. Of 18 cases in domestic animals 3 were dogs, 4 cats, 10 cattle and 1 pig.

The most affected district was Liepāja with 10 cases. Riga and Saldus recorded 6 cases, Jelgava and Krāslava 5 cases.

There were no rabies cases in humans.

Summary 1995

The annual total amounted to 222 animal rabies cases, 56 cases less than during the previous year.

3.21 Moldova MLD

by V. Bahau

During ***"This Quarter"***, 12 animals were examined for rabies (2 bovines, 5 cats, 1 dog, 2 rabbits, 2 foxes). Out of these animals 1 bovine in Orgeev Region was diagnosed rabid.

131,251 dogs were vaccinated against rabies in the country.

3.22 Netherlands NET

by G. Visser

During ***"This Quarter"***, only 5 animals (4 bats and 1 cat) were investigated for rabies; none of these was rabid.

Summary 1995

In 1995, 85 animals were sent in for rabies investigation. One animal, a bat, was not suitable for investigation.

Of the investigated animals (19 adult foxes, 7 dogs, 3 cats, 1 polecat, 1 Liberian mouse weasel, 4 porcupines, 1 squirrel and 48 bats), 3 bats and 1 American grey fox, the latter being imported, were rabid. The rabid fox belonged to a group of 8 foxes (2 American grey foxes and 6 Egyptian foxes) which were imported by a dealer of wild animals into the province of Gelderland, along with other animals (the investigated Liberian mouse weasel, several ringtail cats that were put into quarantine and the investigated porcupines) in January 1995.

3.23 Norway NOR

by Gudbrand Bakken

The country remained rabies-free.

3.24 Poland POL

by Henryk Maciołek

A total of 620 rabies cases was registered in Poland during ***"This Quarter"***, 245 cases more than during the previous quarter and 71 cases less than during the fourth quarter 1994. There were 449 cases in wild animals (378 foxes, 34 raccoon dogs, 10 badgers 8 pine martens, 3 polecats,d 14 roe deer, 1 squirrel, 1 black rat) and 171 cases in domestic animals (34 dogs, 60 cats, 75 bovines, 1 horse, 1 goat).

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

Summary 1995

The total in 1995 amounted to 1973 cases, 254 cases less than in the previous year.

3.25 Portugal POR

The country remained rabies-free.

3.26 Romania ROM

by Gheorge Stratulat

Four cases of rabies (2 in cats and 1 each in a dog and a fox) were reported in Romania during ***"This Quarter"***.

Three provinces were affected by the disease: Bacau, Neamt and Salaj.

Summary 1995

The annual total amounted to 30 animal rabies cases, 2 less than in the previous year. 11 out of 41 provinces were affected by the disease.

3.27 Russia RUS (European part only)

by V.A.Vedernikov, B.L.Cherkasskiy, V.E.Semljanova, P.K. Shumilov, P.N.Pitalev, A.F.Pelin and S.A.Kolomycev

During ***"This Quarter"***, 531 rabies cases in animals were reported from the European Part of Russia. Of the total number of cases 432 were in domestic animals - 53 dogs, 68 cats, 297 bovines, 9 horses, 4 sheep, 1 pig. Of 99 wild animals, rabies was diagnosed in 96 foxes, 1 badger and 2 wolves.

There were 3 human cases reported: in Astrakhan Region, Saratov Region and Orenburg Region.

The regions of the European part of the Russian Federation mostly affected by the disease were as follows: the Orenburg Region with 112 cases, the Belgorod Region with 74 cases, the Voronezh Region with 82 cases, Bashkortostan with 67 cases, the Saratov Region with 56 cases.

Summary 1995

The total of 1995 amounted to 1107 cases compared to 667 in 1994.

3.28 Spain SPA

by Carlos Abellán García

During ***"This Quarter"***, one cat was diagnosed rabid in Melilla in the Spanish territory of North Africa.

Summary 1995

In 1995, 6 rabies cases (5 dogs, 1 cat) occurred in the Spanish territory of North Africa.

The mainland and islands of Spain remained rabies-free of terrestrial animals.

The country is not yet rabies-free of bat rabies as the last case (in Granada during the third quarter 1994) was less than 2 years ago.

3.29 Slovak Republic SVK

by Jozef Sokol and Bohuslav Lovas

During ***"This Quarter"***, 99 rabies cases were reported in the Slovak Republic. Of these, 78 cases were in foxes (78,8 % of total) and 21 in domestic animals (21,2 %). Of the domestic animals the disease occured in 9 dogs, 10 cats and 2 bovines.

An oral vaccination campaign of foxes against rabies was carried out during the months October/November 1995 on the territory of 34 districts of the Slovak Republic covering an area of 37,087 square kilometers. A vaccine produced in the country (KAMARK) was used. A total of 556,300 vaccine baits was distributed by hand.

Summary 1995

The annual total amounted to 266 rabies cases, 298 less than in 1994.

3.30 Slovenia SVN

by Zoran Kovač

A total of 354 rabies cases in animals was recorded during ***"This Quarter"*** in Slovenia. There was an increase of 188 cases compared to the previous quarter. 315 of the total cases (89 %) were in foxes. The high rabies incidence might partly be connected to an increased fox hunting in this season.

In regard to domestic animals there were among others 3 sheep affected, they were infected by a fox on the pasture; and a bovine was bitten by a fox which had entered a cow shed.

As planned, an oral vaccination campaign was conducted during ***"This Quarter"***. 300,000 vaccine baits were distributed by aircraft in an area of 20,000 km^2.

Summary 1995

The total of rabies cases in 1995 amounted to 1,084, 245 cases more than in the previous year.

3.31 Sweden SWE

The country remained rabies-free.

3.32 Switzerland SWI

by Urs Breitenmoser

During ***"This Quarter"***, the Swiss Rabies Centre

examined a total of 618 animals, of which 0.32% (2) were positive for rabies. In the previous quarter, 0.4% (2 out of 505) and in the fourth quarter of 1994, 5.27% (36 out of 683) were recorded positive, respectively. The cases of rabid animals from this quarter were one badger and one domestic goat. In the whole year of 1995, a total of 23 rabies cases (11 red foxes, 12 other animals) were recorded. This is a considerable reduction compared to the year 1994, when a total of 225 animals were found to be rabid. The decline of the epizootic is furthermore demonstrated by the fact that during the last eight months, no rabid fox was discovered in Switzerland.

10 bats (2 *Myotis daubentoni*, 2 *Nyctalus noctula*, 1 *Pipistrellus kuhli*, 2 *Pipistrellus nathusii*, 1 *Pipistrellus pipistrellus*, 1 *Pipistrellus savii*, 1 *Plecotus austriacus*) were received for rabies analysis during this quarter. All were negative for rabies.

No one was known to have been bitten by a rabid animal. The number of people treated for non-bite exposures is not recorded.

3.33 Turkey TUR

by Mehmet Alkan

During ***"This Quarter"***, 26 animal rabies cases were reported from Turkey, all in domestic animals (21 dogs and 5 bovines).

There were only 2 provinces (Il) affected by the disease, 25 cases were reported in Istanbul and 1 case in Bursa.

Summary 1995

A total of 168 rabies cases was reported in Turkey, 2 cases less than in the previous year.

There was only 1 case in a badger. All other cases were in domestic animals. 85.1% of the affected animals were dogs.

The cases occurred in 7 provinces (Il): Adana, Bursa, Denizli, Istanbul, Izmir, Kocaeli, Sakarya. 81.5% of all cases were noticed in Istanbul. All other provinces recorded between 2 and 11 cases.

3.34 Ukraine UKR

No data.

3.35 United Kingdom UNK

by W.J. Pollitt

The country remained rabies-free.

Surveillance 1995

3rd and 4th Quarters 1995

Reports of suspect rabies outside quarantine were investigated on seven occasions during the period, involving three dogs, two cats, one ferret, one horse and one fox. Veterinary staff resolved five incidents at the initial clinical investigation and the other two following examination of material submitted to the Central Veterinary Laboratory, Weybridge.

Material from 57 deaths in quarantine was submitted to the Central Veterinary Laboratory, Weybridge, with negative results in all cases.

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

No cases of human rabies occurred during the period.

3.36 Yugoslavia YUG

by Jan Kišgeci

48 rabies cases (40 foxes, 1 roe deer, 2 dogs, 4 cats, 1 bovine) were registered during ***"This Quarter"***, 38 cases more than during the previous quarter.

There were 28 cases in Vojvodina, 19 cases in Serbia and 1 case in Montenegro.

Summary 1995

The annual total amounted to 90 cases, 64 in Vojvodina, 23 in Serbia and 3 in Montenegro. There were 46 cases in 1994.

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4. MISCELLANEOUS ARTICLES

4.1 An Adapted Concept for the Elimination of Sylvatic Rabies in Switzerland

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Abstract

The objective of the rabies control programme is the elimination of sylvatic rabies in Switzerland by means of oral immunistion of red foxes. This requires a sensitive strategy referring to (1) the technique of oral vaccination (2) a geographical concept for the application of oral vaccination, and (3) a surveillance system for the progress of the epizootic as well as for the efficacy of the immunisation of foxes. The concept for the elimination of sylvatic rabies in Switzerland was based on surveillance zones and geographical compartments for vaccination campaigns. After difficulties in rabies control from 1990-94, as a consequence of an extraordinary growth of the fox population, this strategy was extended with tools to deal with high fox abundance and re-infections. In this paper, we give a brief outline of the concept for the rabies control programme in Switzerland for the years 1996-2000. The concept was prepared by the Swiss Rabies Centre at the University of Bern, together with the Swiss Federal Veterinary Office, and approved by the veterinary services of the cantons.

Since the first successful trials to immunise red foxes (*Vulpes vulpes*) against rabies in the field by means of vaccine baits in 1978 (Wanderler, et al. 1988a), oral vaccination campaigns have been widely accepted as the only efficient instrument to control sylvatic rabies. However, along with an efficient method, one needs a strategy defining how to apply oral immunisation successfully. Such a strategy for Switzerland has been outlined by Kappeler et al. (1988), Wandeler et al. (1988b), and Kappeler (1991). The base of the control strategy is a zonal concept for the surveillance of rabies and the oral vaccination campaigns (BVET 1990, Kappeler 1991). We distinguish four zones (Fig. 4.1.1):

A) rabies area (30 km encircling each positive case of sylvatic rabies);
B) vaccination area (the area treated by means of oral vaccination during the past six months; identical to zone A, where compartment limits (Fig. 4.1.1) do not impose a different determination);
C) surveillance area (the rest of Switzerland):
D) observation area (a zone of 50 km outside the Swiss national border).

Each animal suspicious of rabies, domestic and wild, from zones A, B, and C, has to be transferred to the Swiss Rabies Centre for diagnosis. From zones A and B, a sample of 10 not suspicious foxes per 100 km² have to be additionally analysed for rabies and tetracycline each year. From zone D, each rabies case reported from laboratories of neighbouring countries is taken into consideration to define prophylactic measures.

To apply rabies control measures, Switzerland was divided into 23 epidemiological compartments and 11 sub-compartments (Fig. 1), delimited through natural or artificial barriers to fox movements wherever possible (Kappeler et al. 1988, Kappeler 1991, Wandeler et al. 1988b). An infected compartment will be trated by means of oral vaccination until it is free of rabies; subsequently, the sectors where rabid

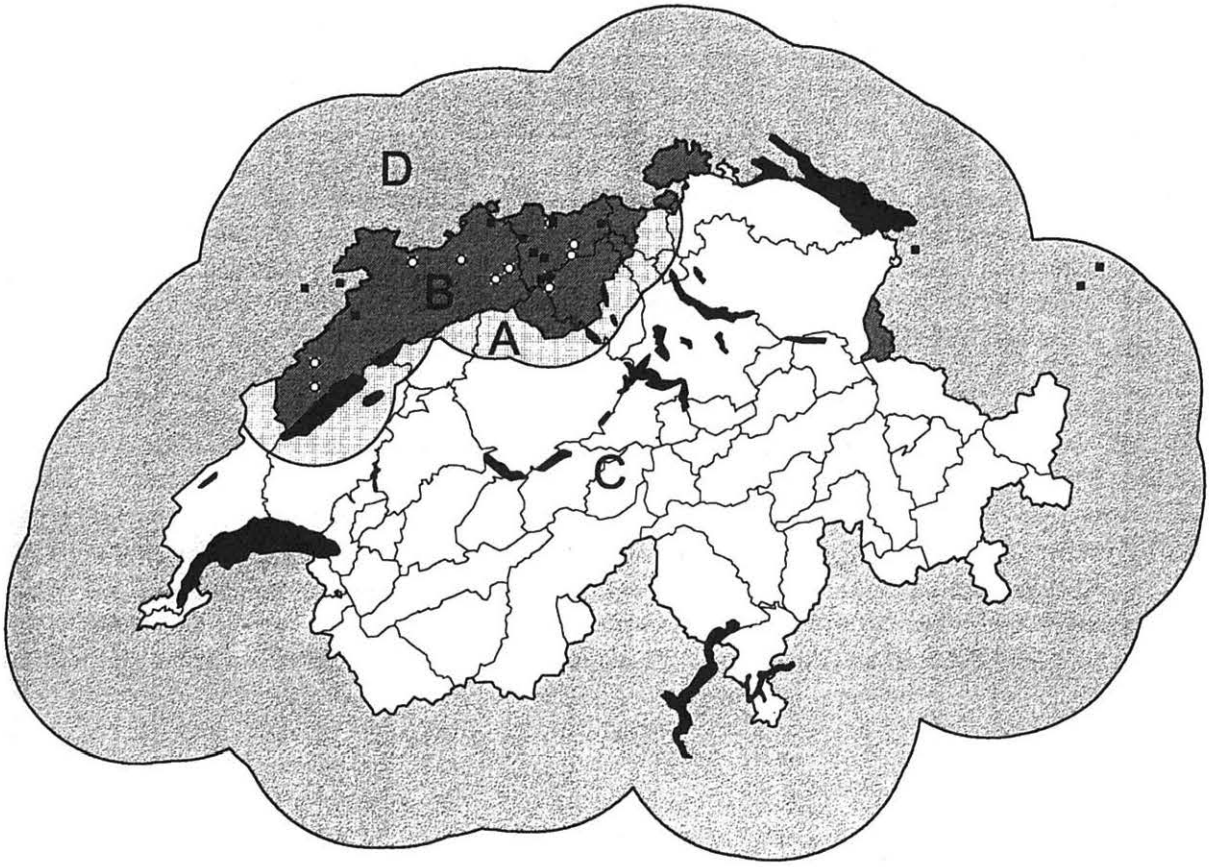
foxes could enter will be protected. This strategy allowed to free all compartments but one from rabies until 1978. Only the large compartment of the Jura Mountains in north-western Switzerland remained infected. This region is a perfect fox habitat, and there are no natural or artificial barriers to restrict the movement of foxes. The cases declined to a total of 25 in the year 1990, but in the same year, the area was re-infected from the French Jura Mts. The number of rabies cases diagnosed increased in the Swiss Jura Mts. from year to year to a total of 225 in 1994, in spite of continuous vaccination campaigns. In the same period, the number of cases declined steadily in the French part of the Jura Mts. due to oral vaccination of red foxes. The reason for the problems in Switzerland was the 4- to 5-fold increase of the fox population within the past ten years and an increasing importance of young foxes for the prersistence of rabies (Breitenmoser et al. 1995). Measures to respond to this problems were tested and incorporated into the control strategy (Breitenmoser and Kaphegyi 1995). Consequently, we added the following elements coping with the increased fox density to the rabies control strategy.

1. adjustment of the vaccine bait distribution to the fox abundance and increase of the number of baits per km² along with the increasing density of foxes;
2. an additional vaccine bait distribution at the fox dens in early summer (May to June) to enhance the immunisation of young foxes before their dispersal;
3. double vaccination campaigns within four weeks for any emergency expansion of the area vaccinated;
4. use of the more thermo-resistant V-RG (vaccinia-rabies glycoprotein recombinant virus) vaccination system if the incidence of rabies does not decrease with the attenuated rabies virus vaccine system;
5. expansion of areas vaccinated prophylactically in space and time;
6. continuation of vaccination campaigns for at least two years after the discovery of the last rabies case within a compartment.

Oral immunisation of foxes against rabies has perfectly worked if applied in situations where the fox abundance was lowered by the disease. In many parts of Western Europe, the high reproductive output of the predominantly immunised adult foxes led to an increasing fox density. Consequently, the common problem recently observed in western European countries, where oral vaccination campaigns had been carried out for many years, was the persistence of rabies in areas of residual foci or afer a re-infection. The particularity of such situations - typically in a final state of a rabies epizootic - calls for a sensible analysis and for a flexible use of the available control tools. To allow such a flexible response, however, we need, additionally to a continuous surveillance of the epizootic, an efficient monitoring of the fox population, too. The control measures described above must therefore be supported by the following procedures: (1) steered monitoring of the fox population in collaboration with local management units; (2) linking of variables of the control programme (e.g. baits per km²) with parameters of the fox population (e.g. fox density); (3) close collaboration with neighbouring countries, leading to collaborative vaccination campaigns in border areas; (4) precise sampling of foxes to determine the efficacy of the immunisation campaigns and to answer specific questions. With these adaptations, rabies control programmes should also work in high density fox populations. There are enough encouraging signals that with an adaptation of the vaccination strategies, oral immunisation will still be the ultimate instrument to eliminate rabies.

Acknowledgement. We thank U. Müller for producing the graphic.

FIGURE 4.1.1.



Caption to figure:
The geographical concept of rabies control in Switzerland and the Principality of Liechtenstein demonstrated with the situation in 1995. Thick lines limit the four surveillance zones: A = rabies area (dotted); B = vaccination area (hatched); C = surveillance area (blank); D = observation area (grey). Thin lines indicate epidemiological compartments within Switzerland, limited by natural (high mountain ridges, lakes, large rivers) or artificial (fenced highways) barriers. Black squares (foxes in Switzerland, all species in the observation area), and blank circles (species other than fox in Switzerland) represent rabies cases diagnosed in 1995.

References:

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4.2 Rabies in a Puppy - South Dakota, 1995

On July 28, 1995, the South Dakota Public Health Laboratory diagnosed rabies in an 8-week-old puppy; on July 23, the puppy had had onset of neurologic signs (e.g., head tilt, ataxia, and somnolence) that culminated in seizures, and the puppy was euthanized on July 31 and tested positive for rabies. This report summarizes the epidemiologic investigation and follow-up management by the South Dakota Department of Health (SDDH), with assistance from the Centers for Disease Control (CDC), of persons and domestic animals potentially exposed to rabies.

On July 8, the neighboring families acquired the two puppies from a private owner near Summit, South Dakota. The puppies were from a litter of nine born on May 29. On June 13 or 14, a skunk attacked the litter in a garage where they were kept. The skunk was killed by the owner of the puppies but was not tested for rabies. All the puppies were free of clinical signs consistent with rabies when given away between July 8 and July 27. However, the original owner of the puppies was uncertain of the identity of all the persons who had adopted them. Through announcements in the local news media and distribution of flyers door-to-door by the Aberdeen Area Indian Health Service in Sisseton, by August 4 the remaining seven puppies were identified to be in private residences located throughout eastern South Dakota. Six of the puppies tested negative for rabies at the South Dakota Public Health Laboratory; the seventh puppy had been killed by the owner because it was part of the exposed litter, and it was unavailable for testing. The dam of the litter and another contact dog - neither of which were currently vaccinated against rabies- were euthanized and tested negative for rabies. Two other potentially exposed pet dogs, past due for rabies vaccination, were identified; they were managed by home quarantine and booster vaccination according to the 1995 animal rabies compendium and remained symptom-free.

The SDDH initiated efforts to identify persons with potential exposure to the two puppies and determine their risk for rabies infection. In response to the alert, the state health department and four major health-care facilities screened by phone or personal interview approximately 150 persons possibly exposed during July 13-31 (the established period of potential rabies transmission). In addition, SDDH conducted town meetings and provided briefings to health-care providers, the news media, and animal-control authorities. Of the 150 persons, 22 (15%) (including nine persons from the veterinary clinic in which the ill puppy had been treated and euthanized and seven persons who had had contact with the puppy that had been destro-

yed and was unavailable for rabies testing) met the criteria used to determine the need for rabies postexposure treatment (PET) for either a bite or nonbite exposure as defined by the Immuniuzation Practices Advisory Committee. Specific antirabies treatment was initiated for 31 persons; the other nine persons requested and received PET despite reassurance they were at low risk for rabies infection.

MMWR's Editorial Note:
In the United States, the most frequently reported rabid wild animals are raccoons, skunks, bats, and foxes. Although the exposure for the two rabid puppies in this report was not confirmed, the skunk that attacked the litter in mid-June was probably the source of infection. Measures for preventing pets from contacting wild animals include keeping them indoors, on leashes, or in fenced outdoor areas. If pets are wounded by wild animals, wounds should be washed immediately with soap and water, and the pet should be evaluated by a veterinarian. Wildlife that attacks persons or pets should be evaluated by a veterinarian. Wildlife that attacks persons or pets should be apprehended by trained personnel, euthanized, and tested for rabies. Wild and stray domestic animals exhibiting signs of neurologic illness or of abnormal behavior (signs of rabies among wild animals cannot be interpreted reliably) should be reported to appropriate local health authorities, especially if the animal bites or scratches a person. Only trained personnel should attempt to trap or capture these animals and submit them for rabies testing.

The economic burden of the exposures in South Dakota was minimized because of the small number of persons requiring PET and as a result of efforts to inform and reassure persons who unnecessarily were seeking medical services for exposures not associated with true risk (e.g., petting a rabid puppy, handling a noninfected littermate, or having contact with a human who had been exposed to a rabid puppy). Nonetheless, substantial resources were required to educate potentially exposed persons about rabid animals and to conduct the prompt and standardized assessment of persons who received PET. The estimated cost associated with the public health response, assessment, and PET was $115,000: $97,900 for chemoprophylaxis and provider services, $16,500 for the investigation by public health officials, and $600 for laboratory testing of animals. In South Dakota, from 1990 through 1995, an estimated $1.4 million was spent for PET for 632 persons exposed to approximately 704 rabies-positive animals. Although this estimate is for a 5-year period, it is similar to the cost ($1.5 million) associated with the single-point source exposure to a rabid kitten in New Hampshire, in which PET was initiated for 665 persons. To facilitate efforts to investigate rabies exposures such as those described in this report, persons involved in the private sale or adoption of pets are encouraged to maintain records of buyers' or adoptees' names and addresses.

RBE's Editorial Note:
In issue 2/95 of the RABIES BULLETIN EUROPE, page 9, a rabies case in a puppy was reported which was taken from Turkey to Germany. In this issue under 3.12 a case in a puppy is mentioned where the animal was taken from Burkina Faso to France and subsequently developed rabies. So it may be accidental to have again this report of a puppy in South Dakota, U.S.A.

All three cases have in common: the dogs develop rabies at a time when the animal cannot yet be protected by vaccination.

An other point in common most likely is: at such an early age exposition to rabies is not expected.

The three above mentioned cases can be a reminder. And, it should be considered that the follow-up management becomes especially complicated when such puppies are transferred from one country to an other.

(Taken from Morbidity and Mortality Weekly Report [MMWR] No. 8, Vol. 45, March 1, 1996; Centers for Disease Control and Prevention, Atlanta, Georgia 30333, U.S.A.)

TABLE 1

EUR EUROPE 4/95 RABIES CASES 1.10.95 - 31.12.95

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		
ALB	ALBANIA **							0						0		0
AUT	AUSTRIA	-	-	1	-	-	-	1	20	1	-	1	-	22		23
BEL	BELGIUM	-	1	15	1	8	-	25	31	2	-	-	-	33		58
BUL	BULGARIA							0	-	-	-	-	4	4		4
BYE	BELARUS	3	3	2	1	-	-	9	5	-	-	-	-	5		14
CRO	CROATIA	3	4	-	-	1	-	8	119	1	2	-	-	122		130
CZH	CZECH REPUBLIC	-	2	-	-	-	-	2	50	1	-	2	-	53		55
DEN	DENMARK *							0						0		0
DEU	FED.REP. OF GERMANY	-	3	18	-	5	-	26	90	3	-	4	1	98		124
EST	ESTONIA	2	2	1	-	-	-	5	6	-	-	1	4	11		16
FIN	FINLAND *							0						0		0
FRA	FRANCE 1)	1	-	1	-	-	-	2	3	-	-	-	1	4		6
GRE	GREECE *							0						0		0
HUN	HUNGARY	21	44	14	-	2	1	82	304	-	1	3	-	308		390
ICE	ICELAND *							0						0		0
IRE	IRELAND *							0						0		0
ITA	ITALY							0	2	-	-	-	-	2		2
LTU	LITHUANIA	4	5	11	-	-	-	20	12	-	2	-	2	16		36
LUX	LUXEMBOURG	-	-	5	-	-	-	5	4	-	-	-	-	4		9
LVA	LATVIA	5	5	3	-	-	-	15	29	-	-	-	10	39		54
MLD	MOLDOVA	-	-	1	-	-	-	1						0		1
NET	NETHERLANDS *							0						0		0
NOR	NORWAY *							0						0		0
POL	POLAND	34	50	75	1	1	-	171	378	10	11	14	36	449		620
POR	PORTUGAL *							0						0		0
ROM	ROMANIA	1	2	-	-	-	-	3	1	-	-	-	-	1		4
RUS	RUSSIAN FEDERATION	53	68	297	9	4	1	432	95	1	-	-	2	99	3	534
SPA	SPAIN	-	1	-	-	-	-	1						0		1
SVK	SLOVAK REPUBLIC	9	10	2	-	-	-	21	78	-	-	-	-	78		99
SVN	SLOVENIA	7	9	1	1	3	-	21	315	5	5	8	-	333		354
SWE	SWEDEN *							0						0		0
SWI	SWITZERLAND + LIECHT	-	-	-	-	1	-	1	-	1	-	-	-	1		2
TUR	TURKEY	21	-	5	-	-	-	26						0		26
UKR	UKRAINE **							0						0		0
UNK	UNITED KINGDOM *							0						0		0
YUG	YUGOSLAVIA	2	4	1	-	-	-	7	40	-	-	1	-	41		48
TOTAL		167	224	453	13	25	2	884	1583	25	21	34	60	1723	3	2610
PER CENT		6.4	8.6	17.4	0.5	1.0	0.1	33.9	60.7	1.0	0.8	1.3	2.3	66.0	0.1	100.0

* NO CASES ** NO DATA 1) 1 DOG IMPORTED

TABLE 2

EUR EUROPE 1995 RABIES CASES 1. 1.95 - 31.12.95

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		
ALB ALBANIA **							0						0		0
AUT AUSTRIA	1	-	1	-	-	-	2	80	7	1	5	-	93		95
BEL BELGIUM	-	4	43	5	23	-	75	136	2	-	-	-	138		213
BUL BULGARIA							0	-	-	-	-	10	10		10
BYE BELARUS	8	9	4	3	-	-	24	10	-	-	-	-	10		34
CRO CROATIA	9	8	-	-	4	-	21	390	2	5	1	-	398		419
CZH CZECH REPUBLIC	2	5	1	-	-	-	8	157	3	5	4	1	170		178
DEN DENMARK							0	-	-	-	-	1	1		1
DEU FED.REP. OF GERMANY	2	21	85	4	43	-	155	635	16	15	33	2	701		856
EST ESTONIA	12	7	6	-	-	-	25	30	4	-	1	14	49		74
FIN FINLAND *							0						0		0
FRA FRANCE 1)	1	-	5	-	6	-	12	26	-	1	-	1	28		40
GRE GREECE *							0						0		0
HUN HUNGARY	64	121	34	-	3	2	224	901	-	2	6	1	910		1134
ICE ICELAND *							0						0		0
IRE IRELAND *							0						0		0
ITA ITALY	1	-	-	-	-	-	1	8	-	1	1	-	10		11
LTU LITHUANIA	11	15	20	-	1	-	47	22	-	4	-	7	33		80
LUX LUXEMBOURG	-	-	5	-	1	-	6	9	-	-	-	-	9		15
LVA LATVIA	21	19	14	-	-	1	55	122	7	1	-	37	167		222
MLD MOLDOVA	-	-	1	-	-	-	1						0		1
NET NETHERLANDS 2)							0	-	-	-	-	4	4		4
NOR NORWAY *							0						0		0
POL POLAND	122	184	127	2	3	4	442	1283	16	84	38	110	1531		1973
POR PORTUGAL *							0						0		0
ROM ROMANIA	5	6	-	-	4	1	16	12	1	-	-	1	14		30
RUS RUSSIAN FEDERATION	151	128	513	18	48	7	865	195	2	-	24	11	232	10	1107
SPA SPAIN 3)	5	1	-	-	-	-	6						0		6
SVK SLOVAK REPUBLIC	32	24	6	-	-	-	62	197	-	4	1	2	204		266
SVN SLOVENIA	12	24	2	1	3	-	42	996	10	21	14	1	1042		1084
SWE SWEDEN *							0						0		0
SWI SWITZERLAND + LIECHT	-	-	1	-	2	-	3	11	6	2	1	-	20		23
TUR TURKEY	143	4	19	-	1	-	167	-	1	-	-	-	1		168
UKR UKRAINE **							0						0		0
UNK UNITED KINGDOM *							0						0		0
YUG YUGOSLAVIA	3	9	3	-	-	-	15	74	-	-	1	-	75		90
TOTAL	605	589	890	33	142	15	2274	5294	77	146	130	203	5850	10	8134
PER CENT	7.4	7.2	10.9	0.4	1.7	0.2	28.0	65.1	0.9	1.8	1.6	2.5	71.9	0.1	100.0

* NO CASES ** NO DATA 1) 1 DOG IMPORTED 2) 1 GREY FOX IMPORTED 3) NORTH AFRICA

TABLE 3

EUR EUROPE 4/95 RABIES CASES 'OTHER ANIMAL SPECIES' 1.10.95 - 31.12.95

LOCATION CODE	NAME	OTHER DOMESTIC ANIMALS	OTHER WILD ANIMALS						TOTAL
		PIG	WOLF	RACCOON DOG	WILD BOAR	INSECTIV. BATS	SQUIRREL	BLACK RAT	UNSPECIFIED	
BUL	BULGARIA	-	-	-	-	-	-	-	4	4
DEU	FED.REP. OF GERMANY	-	-	-	1	-	-	-	-	1
EST	ESTONIA	-	-	4	-	-	-	-	-	4
FRA	FRANCE	-	-	-	-	1	-	-	-	1
HUN	HUNGARY	1	-	-	-	-	-	-	-	1
LTU	LITHUANIA	-	-	2	-	-	-	-	-	2
LVA	LATVIA	-	-	10	-	-	-	-	-	10
POL	POLAND	-	-	34	-	-	1	1	-	36
RUS	RUSSIAN FEDERATION	1	2	-	-	-	-	-	-	3
TOTAL		2	2	50	1	1	1	1	4	62
PER CENT		3.2	3.2	80.6	1.6	1.6	1.6	1.6	6.5	100.0

TABLE 4

EUR EUROPE 1995 RABIES CASES 'OTHER ANIMAL SPECIES' 1. 1.95 - 31.12.95

COUNTRY	OTHER DOMESTIC ANIMALS			OTHER WILD ANIMALS																	TOTAL
	OTH.DOM. CARNIVO	PIG	OTHERS	OTH.FOX SPECIES	WOLF	RACCOON DOG	LYNX	OTH.WILD CARNIV	WILD BOAR	HEDGEHOG	MOLE	INSECT. BATS	SQUIRREL	BEAVER	HAMSTER	BLACK RAT	WILD RABBIT	HARE	OTHERS	UNSPECI-FIED	
BUL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10
CZH	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
DEN	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
DEU	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	2
EST	-	-	-	-	-	13	-	-	-	-	-	-	-	1	-	-	-	-	-	-	14
FRA	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
HUN	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	3
LTU	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	1	-	-	-	7
LVA	-	1	-	-	-	34	-	-	-	1	-	-	-	1	-	-	-	-	1	-	38
NET	-	-	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	4
POL	3	1	-	-	-	103	-	-	1	-	1	-	1	-	1	3	-	-	-	-	114
ROM	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2
RUS	-	7	-	-	2	6	-	1	-	-	-	-	-	-	-	2	-	-	-	-	18
SVK	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	2
SVN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
TOT	3	11	1	1	2	162	1	1	2	1	1	6	2	2	1	7	1	1	2	10	218
PER	1.4	5.0	0.5	0.5	0.9	74.3	0.5	0.5	0.9	0.5	0.5	2.8	0.9	0.9	0.5	3.2	0.5	0.5	0.9	4.6	100.0

TABLE 5 RABIES CASE RATES (% TOTAL) FOR INDIVIDUAL ANIMAL SPECIES AND FOR TOTAL CASES OF 10 EUROPEAN COUNTRIES RANKING HIGHEST IN 1995.

EUR EUROPE 1995 1. 1.95 - 31.12.95

LOCATION	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	
EUROPE															
TOTAL RABIES CASES	605	589	890	33	142	15	2274	5294	77	146	130	203	5850	10	8134
PER CENT INVOLVEMENT / COUNTRY															
POL POLAND	20.2	31.2	14.3	6.1	2.1	26.7	19.4	24.2	20.8	57.5	29.2	54.2	26.2		24.3
HUN HUNGARY	10.6	20.5	3.8	-	2.1	13.3	9.9	17.0	-	1.4	4.6	0.5	15.6		13.9
RUS RUSSIAN FEDERATION	25.0	21.7	57.6	54.5	33.8	46.7	38.0	3.7	2.6	-	18.5	5.4	4.0	100.0	13.6
SVN SLOVENIA	2.0	4.1	0.2	3.0	2.1	-	1.8	18.8	13.0	14.4	10.8	0.5	17.8		13.3
DEU FED.REP. OF GERMANY	0.3	3.6	9.6	12.1	30.3	-	6.8	12.0	20.8	10.3	25.4	1.0	12.0		10.5
CRO CROATIA	1.5	1.4	-	-	2.8	-	0.9	7.4	2.6	3.4	0.8	-	6.8		5.2
SVK SLOVAK REPUBLIC	5.3	4.1	0.7	-	-	-	2.7	3.7	-	2.7	0.8	1.0	3.5		3.3
LVA LATVIA	3.5	3.2	1.6	-	-	6.7	2.4	2.3	9.1	0.7	-	18.2	2.9		2.7
BEL BELGIUM	-	0.7	4.8	15.2	16.2	-	3.3	2.6	2.6	-	-	-	2.4		2.6
CZH CZECH REPUBLIC	0.3	0.8	0.1	-	-	-	0.4	3.0	3.9	3.4	3.1	0.5	2.9		2.2
TOTAL FROM 10 COUNTRIES	415	538	825	30	127	14	1949	5012	58	137	121	165	5493	10	7452
EQUAL % TOTAL	68.6	91.3	92.7	90.9	89.4	93.3	85.7	94.7	75.3	93.8	93.1	81.3	93.9	100.0	91.6

RABIES CASES 1.10.95 - 31.12.95

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		
AUT	**AUSTRIA**															
107	NEUSIEDL AM SEE							0	9	-	-	-	-	9		9
307	BRUCK AN DER LEITHA							0	1	-	-	-	-	1		1
615	RADKERSBURG							0	4	-	-	-	-	4		4
705	KUFSTEIN							0	2	1	-	-	-	3		3
709	SCHWAZ	-	-	1	-	-	-	1	4	-	-	1	-	5		6
TOTAL		0	0	1	0	0	0	1	20	1	0	1	0	22	0	23
PER CENT		0.0	0.0	4.3	0.0	0.0	0.0	4.3	87.0	4.3	0.0	4.3	0.0	95.7	0.0	100.0
CZH	**CZECH REPUBLIC**															
01	CENTRAL BOHEMIA							0	1	-	-	-	-	1		1
02	SOUTH BOHEMIA							0	3	-	-	-	-	3		3
03	WEST BOHEMIA							0	1	-	-	-	-	1		1
04	NORTH BOHEMIA							0	25	1	-	2	-	28		28
05	EAST BOHEMIA	-	2	-	-	-	-	2	1	-	-	-	-	1		3
06	SOUTH MORAVIA							0	1	-	-	-	-	1		1
07	NORTH MORAVIA							0	18	-	-	-	-	18		18
TOTAL		0	2	0	0	0	0	2	50	1	0	2	0	53	0	55
PER CENT		0.0	3.6	0.0	0.0	0.0	0.0	3.6	90.9	1.8	0.0	3.6	0.0	96.4	0.0	100.0
SVK	**SLOVAK REPUBLIC**															
10	DISTRICT OF BRATISLAV							0	1	-	-	-	-	1		1
11	WEST SLOVAKIA	2	3	-	-	-	-	5	25	-	-	-	-	25		30
12	CENTRAL SLOVAKIA	-	4	-	-	-	-	4	10	-	-	-	-	10		14
13	EAST SLOVAKIA	7	3	2	-	-	-	12	42	-	-	-	-	42		54
TOTAL		9	10	2	0	0	0	21	78	0	0	0	0	78	0	99
PER CENT		9.1	10.1	2.0	0.0	0.0	0.0	21.2	78.8	0.0	0.0	0.0	0.0	78.8	0.0	100.0

RABIES CASES 1.10.95 - 31.12.95

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		
BEL	**BELGIUM**															
LX	LUXEMBOURG	-	1	13	-	7	-	21	25	-	-	-	-	25		46
NA	NAMUR	-	-	2	1	1	-	4	6	2	-	-	-	8		12
TOTAL		0	1	15	1	8	0	25	31	2	0	0	0	33	0	58
PER CENT		0.0	1.7	25.9	1.7	13.8	0.0	43.1	53.4	3.4	0.0	0.0	0.0	56.9	0.0	100.0
DEU	**FEDERAL REPUBLIC OF GERMANY**															
05	NORDRHEIN-WESTFALEN	-	-	12	-	1	-	13	27	3	-	2	-	32		45
06	HESSEN	-	-	2	-	-	-	2	19	-	-	-	-	19		21
07	RHEINLAND-PFALZ	-	1	2	-	-	-	3	13	-	-	-	1	14		17
08	BADEN-WUERTTEMBERG							0	11	-	-	-	-	11		11
09	BAYERN	-	-	-	-	1	-	1	1	-	-	1	-	2		3
10	SAARLAND	-	2	2	-	1	-	5	17	-	-	1	-	18		23
11	Berlin							0	1	-	-	-	-	1		1
14	Sachsen	-	-	-	-	2	-	2	1	-	-	-	-	1		3
TOTAL		0	3	18	0	5	0	26	90	3	0	4	1	98	0	124
PER CENT		0.0	2.4	14.5	0.0	4.0	0.0	21.0	72.6	2.4	0.0	3.2	0.8	79.0	0.0	100.0
FRA	**FRANCE**															
08	ARDENNES	-	-	1	-	-	-	1	2	-	-	-	-	2		3
18	CHER							0	-	-	-	-	1	1		1
57	MOSELLE							0	1	-	-	-	-	1		1
84	VAUCLUSE (IMPORTED)	1	-	-	-	-	-	1						0		1
TOTAL		1	0	1	0	0	0	2	3	0	0	0	1	4	0	6
PER CENT		16.7	0.0	16.7	0.0	0.0	0.0	33.3	50.0	0.0	0.0	0.0	16.7	66.7	0.0	100.0

RABIES CASES 1.10.95 - 31.12.95

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**															
11	LOVETCH							0	-	-	-	-	1	1		1
15	PLEVEN							0	-	-	-	-	3	3		3
TOTAL		0	0	0	0	0	0	0	0	0	0	0	4	4	0	4
PER CENT		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	100.0
ROM	**ROMANIA**															
04	BACAU	-	1	-	-	-	-	1	1	-	-	-	-	1		2
28	NEAMT	1	-	-	-	-	-	1						0		1
32	SALAJ	-	1	-	-	-	-	1						0		1
TOTAL		1	2	0	0	0	0	3	1	0	0	0	0	1	0	4
PER CENT		25.0	50.0	0.0	0.0	0.0	0.0	75.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	100.0
TUR	**TURKEY**															
16	BURSA	1	-	-	-	-	-	1						0		1
34	ISTANBUL	20	-	5	-	-	-	25						0		25
TOTAL		21	0	5	0	0	0	26	0	0	0	0	0	0	0	26
PER CENT		80.8	0.0	19.2	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
YUG	**YUGOSLAVIA**															
20	SR CRNA GORA	-	-	1	-	-	-	1						0		1
60	SR SRBIJA							0	19	-	-	-	-	19		19
61	SAP VOJVODINA	2	4	-	-	-	-	6	21	-	-	1	-	22		28
TOTAL		2	4	1	0	0	0	7	40	0	0	1	0	41	0	48
PER CENT		4.2	8.3	2.1	0.0	0.0	0.0	14.6	83.3	0.0	0.0	2.1	0.0	85.4	0.0	100.0

RABIES CASES 1.10.95 - 31.12.95

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		
BYE	**BELARUS**															
01	Brest Region	-	-	1	-	-	-	1						0		1
02	Vitebsk Region	-	2	-	-	-	-	2						0		2
03	Gomel Region							0	1	-	-	-	-	1		1
04	Grodno Region	2	1	-	1	-	-	4	3	-	-	-	-	3		7
05	Minsk Region							0	1	-	-	-	-	1		1
06	Mogilev Region	1	-	1	-	-	-	2						0		2
TOTAL		3	3	2	1	0	0	9	5	0	0	0	0	5	0	14
PER CENT		21.4	21.4	14.3	7.1	0.0	0.0	64.3	35.7	0.0	0.0	0.0	0.0	35.7	0.0	100.0
LTU	**LITHUANIA**															
36	Birzu	-	2	-	-	-	-	2						0		2
39	Vilkaviskio	1	-	1	-	-	-	2						0		2
47	Joniskio							0	3	-	2	-	1	6		6
54	Kelmes	-	-	1	-	-	-	1	3	-	-	-	-	3		4
57	Kupiskio	-	-	1	-	-	-	1	1	-	-	-	1	2		3
65	Pakruojo	-	-	2	-	-	-	2						0		2
66	Panevezio							0	1	-	-	-	-	1		1
68	Plunges	-	1	5	-	-	-	6	1	-	-	-	-	1		7
71	Radviliskio	1	1	-	-	-	-	2						0		2
78	Telsiu							0	1	-	-	-	-	1		1
91	Siauliu	2	-	-	-	-	-	2	2	-	-	-	-	2		4
94	Jurbarko	-	1	1	-	-	-	2						0		2
TOTAL		4	5	11	0	0	0	20	12	0	2	0	2	16	0	36
PER CENT		11.1	13.9	30.6	0.0	0.0	0.0	55.6	33.3	0.0	5.6	0.0	5.6	44.4	0.0	100.0
MLD	**MOLDOVA**															
01	MOLDOVA	-	-	1	-	-	-	1						0		1
TOTAL		0	0	1	0	0	0	1	0	0	0	0	0	0	0	1

RABIES CASES 1.10.95 - 31.12.95

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	-	-	-	-	2						0		2
05	Jaervamaa	-	-	1	-	-	-	1						0		1
07	Laeaene-Virumaa							0	1	-	-	-	1	2		2
08	Polvamaa	1	-	-	-	-	-	1	1	-	-	-	-	1		2
10	Raplamaa							0	2	-	-	1	-	3		3
11	Saaremaa							0	1	-	-	-	1	2		2
12	Tartumaa							0	1	-	-	-	2	3		3
15	Vorumaa	-	1	-	-	-	-	1						0		1
TOTAL		2	2	1	0	0	0	5	6	0	0	1	4	11	0	16
PER CENT		12.5	12.5	6.3	0.0	0.0	0.0	31.3	37.5	0.0	0.0	6.3	25.0	68.8	0.0	100.0
LVA	**LATVIA**															
01	Aizkraukle							0	-	-	-	-	1	1		1
04	Bauska	1	1	-	-	-	-	2	4	-	-	-	1	5		7
05	Cesis							0	6	-	-	-	1	7		7
11	Kraslava							0	1	-	-	-	-	1		1
12	Kuldiga	1	1	-	-	-	-	2	2	-	-	-	-	2		4
13	Liepaja	2	1	3	-	-	-	6	3	-	-	-	3	6		12
16	Madona	1	-	-	-	-	-	1						0		1
17	Ogre	-	1	-	-	-	-	1	2	-	-	-	-	2		3
18	Preili							0	-	-	-	-	1	1		1
19	Rezekne							0	1	-	-	-	-	1		1
20	Riga	1	-	-	-	-	-	1	3	-	-	-	2	5		6
21	Saldus	-	1	-	-	-	-	1	4	-	-	-	-	4		5
22	Talsi							0	-	-	-	-	1	1		1
23	Tukums							0	1	-	-	-	-	1		1
25	Valmiera							0	2	-	-	-	-	2		2
26	Ventspils	-	1	-	-	-	-	1						0		1
TOTAL		6	6	3	0	0	0	15	29	0	0	0	10	39	0	54
PER CENT		11.1	11.1	5.6	0.0	0.0	0.0	27.8	53.7	0.0	0.0	0.0	18.5	72.2	0.0	100.0

CRO CROATIA	RABIES CASES													1.10.95 - 31.12.95	
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	7	-	-	-	-	7		7
010 CABAR							0	1	-	-	-	-	1		1
012 CAZMA							0	2	-	-	-	-	2		2
013 DARUVAR	1	-	-	-	-	-	1	2	-	-	-	-	2		3
014 DELNICE							0	1	-	-	-	-	1		1
017 DONJI MIHOLJAC	1	-	-	-	1	-	2	4	-	-	-	-	4		6
018 DRNIS							0	-	-	1	-	-	1		1
019 DUBROVNIK							0	2	1	-	-	-	3		3
023 DAKOVO							0	3	-	-	-	-	3		3
024 DURDEVAC							0	2	-	-	-	-	2		2
025 GARESNICA							0	2	-	-	-	-	2		2
031 IMOTSKI							0	1	-	-	-	-	1		1
032 IVANEC							0	1	-	-	-	-	1		1
038 KLANJEC							0	1	-	-	-	-	1		1
040 KOPRIVNICA	-	1	-	-	-	-	1	6	-	-	-	-	6		7
043 KRAPINA							0	2	-	-	-	-	2		2
044 KRIZEVCI							0	3	-	-	-	-	3		3
046 KUTINA							0	4	-	-	-	-	4		4
049 LUDBREG							0	1	-	-	-	-	1		1
051 METKOVIC							0	2	-	-	-	-	2		2
052 NASICE							0	4	-	1	-	-	5		5
053 NOVA GRADISKA	-	1	-	-	-	-	1	4	-	-	-	-	4		5
054 NOVI MAROF							0	1	-	-	-	-	1		1
057 OGULIN							0	2	-	-	-	-	2		2
058 OMIS							0	4	-	-	-	-	4		4
059 OPATIJA							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		
061	OSIJEK							0	1	-	-	-	-	1		1
063	OZALJ							0	1	-	-	-	-	1		1
065	PAKRAC							0	8	-	-	-	-	8		8
070	PREGRADA							0	1	-	-	-	-	1		1
071	PULA							0	1	-	-	-	-	1		1
074	ROVINJ							0	1	-	-	-	-	1		1
075	SENJ							0	1	-	-	-	-	1		1
077	SISAK							0	1	-	-	-	-	1		1
078	POZEGA							0	5	-	-	-	-	5		5
079	SLAVONSKI BROD							0	1	-	-	-	-	1		1
080	SLUNJ							0	1	-	-	-	-	1		1
083	SIBENIK							0	2	-	-	-	-	2		2
086	VALPOVO	-	1	-	-	-	-	1	2	-	-	-	-	2		3
087	VARAZDIN							0	9	-	-	-	-	9		9
088	VINKOVCI							0	1	-	-	-	-	1		1
089	VIROVITICA	-	1	-	-	-	-	1	1	-	-	-	-	1		2
092	VRBOVEC							0	2	-	-	-	-	2		2
093	VRBOVSKO							0	3	-	-	-	-	3		3
097	ZABOK							0	4	-	-	-	-	4		4
100	ZLATAR BISTRICA							0	6	-	-	-	-	6		6
102	GRAD ZAGREB	1	-	-	-	-	-	1	4	-	-	-	-	4		5
TOTAL		3	4	0	0	1	0	8	119	1	2	0	0	122	0	130
PER CENT		2.3	3.1	0.0	0.0	0.8	0.0	6.2	91.5	0.8	1.5	0.0	0.0	93.8	0.0	100.0

HUN HUNGARY — RABIES CASES — 1.10.95 - 31.12.95

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							0	5	-	-	-	-	5		5
02	BARANYA	8	5	1	-	-	-	14	31	-	-	-	-	31		45
03	BACS-KISKUN	-	3	2	-	-	-	5	22	-	-	-	-	22		27
04	BEKES	-	2	-	-	-	1	3	4	-	-	-	-	4		7
05	BORSOD-ABAUJ-ZEMPLEN	3	1	-	-	-	-	4	28	-	-	-	-	28		32
06	CSONGRAD	-	-	2	-	-	-	2	9	-	-	-	-	9		11
07	FEJER	-	3	2	-	-	-	5	36	-	-	-	-	36		41
08	GYOER-SOPRON							0	6	-	-	1	-	7		7
09	HAJDU-BIHAR	1	-	1	-	-	-	2	6	-	-	-	-	6		8
10	HEVES	-	1	-	-	-	-	1	8	-	-	-	-	8		9
11	KOMAROM	-	4	1	-	-	-	5	19	-	-	-	-	19		24
12	NOGRAD	-	2	-	-	-	-	2	5	-	-	-	-	5		7
13	PEST	-	3	1	-	-	-	4	22	-	-	-	-	22		26
14	SOMOGY	2	9	1	-	1	-	13	34	-	-	1	-	35		48
15	SZABOLCS-SZAT	1	-	-	-	-	-	1	13	-	-	-	-	13		14
16	SZOLNOK	1	2	1	-	-	-	4	2	-	1	-	-	3		7
17	TOLNA	4	5	2	-	1	-	12	18	-	-	1	-	19		31
18	VAS							0	2	-	-	-	-	2		2
19	VESZPREM	1	3	-	-	-	-	4	27	-	-	-	-	27		31
20	ZALA	-	1	-	-	-	-	1	7	-	-	-	-	7		8
TOTAL		21	44	14	0	2	1	82	304	0	1	3	0	308	0	390
PER CENT		5.4	11.3	3.6	0.0	0.5	0.3	21.0	77.9	0.0	0.3	0.8	0.0	79.0	0.0	100.0

RABIES CASES 1.10.95 - 31.12.95															
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		
ITA ITALY															
34 TRIESTE E GORIZIA							0	2	-	-	-	-	2		2
TOTAL	0	0	0	0	0	0	0	2	0	0	0	0	2	0	2
LUX LUXEMBOURG															
03 ESCH							0	1	-	-	-	-	1		1
04 LUXEMBOURG-CAMPAGNE							0	1	-	-	-	-	1		1
13 REMICH	-	-	5	-	-	-	5	2	-	-	-	-	2		7
TOTAL	0	0	5	0	0	0	5	4	0	0	0	0	4	0	9
PER CENT	0.0	0.0	55.6	0.0	0.0	0.0	55.6	44.4	0.0	0.0	0.0	0.0	44.4	0.0	100.0
SPA SPAIN															
52 MELILLA (NORTH AFRICA	-	1	-	-	-	-	1						0		1
TOTAL	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
SWI SWITZERLAND AND LIECHTENSTEIN															
01 AARGAU							0	-	1	-	-	-	1		1
06 BERN	-	-	-	-	1	-	1						0		1
TOTAL	0	0	0	0	1	0	1	0	1	0	0	0	1	0	2
PER CENT	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	100.0

POL POLAND RABIES CASES 1.10.95 - 31.12.95

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	2	-	-	-	-	-	2	11	-	-	-	1	12		14
05	BIALYSTOK	-	-	3	-	-	-	3	5	-	-	-	1	6		9
07	BIELSKO-BIALA	-	1	-	-	-	-	1	-	-	-	1	-	1		2
09	BYDGOSZCZ	3	2	-	-	-	-	5	11	-	-	1	-	12		17
11	CHELM							0	1	-	-	-	-	1		1
13	CIECHANOW	1	-	-	-	-	-	1	2	-	-	-	1	3		4
15	CZESTOCHOWA	3	1	-	-	-	-	4	8	-	-	-	-	8		12
17	ELBLAG	2	2	40	-	-	-	44	24	1	-	1	8	34		78
19	GDANSK	-	-	1	-	-	-	1	2	1	-	-	2	5		6
21	GORZOW							0	-	-	-	-	1	1		1
23	JELENIA GORA	-	-	1	-	-	-	1	6	-	-	1	-	7		8
25	KALISZ	-	2	-	-	-	-	2	7	-	-	-	-	7		9
27	KATOWICE							0	1	-	-	-	-	1		1
29	KIELCE	1	2	-	-	-	-	3	45	3	3	3	-	54		57
31	KONIN	1	1	-	-	-	-	2	11	-	-	-	-	11		13
33	KOSZALIN	6	20	2	-	-	-	28	17	-	-	2	-	19		47
35	KRAKOW	2	1	-	-	-	-	3						0		3
37	KROSNO							0	6	-	-	-	-	6		6
39	LEGNICA							0	1	-	-	-	-	1		1
41	LESZNO	1	3	-	-	1	-	5	11	-	2	-	-	13		18
43	LUBLIN							0	1	-	-	-	-	1		1
45	LOMZA							0	1	-	-	-	-	1		1
47	LODZ	-	1	-	-	-	-	1	3	-	-	-	-	3		4
51	OLSZTYN	-	1	12	1	-	-	14	15	1	1	-	13	30		44
53	OPOLE	2	3	1	-	-	-	6	12	-	-	-	-	12		18

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	1	1	-	-	-	-	2	2	-	-	-	-	2		4
57 PILA							0	1	-	-	-	-	1		1
59 PIOTRKOW TRYB	-	4	-	-	-	-	4	21	-	-	2	1	24		28
61 PLOCK	1	1	-	-	-	-	2	14	-	-	-	2	16		18
63 POZNAN	1	4	-	-	-	-	5	18	1	-	3	1	23		28
65 PRZEMYSL	-	1	-	-	-	-	1						0		1
67 RADOM	2	2	-	-	-	-	4	23	1	1	-	1	26		30
69 RZESZOW	1	2	-	-	-	-	3	4	-	-	-	1	5		8
71 SIEDLCE	-	-	1	-	-	-	1	7	1	2	-	-	10		11
73 SIERADZ							0	7	-	-	-	-	7		7
75 SKIERNIEWICE							0	11	-	-	-	-	11		11
77 SLUPSK	2	1	-	-	-	-	3	14	-	-	-	-	14		17
79 SUWALKI	-	-	3	-	-	-	3	3	1	-	-	1	5		8
83 TARNOBRZEG	-	1	-	-	-	-	1	8	-	-	-	-	8		9
85 TARNOW	2	-	-	-	-	-	2	2	-	-	-	-	2		4
87 TORUN	-	2	5	-	-	-	7	20	-	-	-	-	20		27
89 WALBRZYCH	-	-	1	-	-	-	1	4	-	-	-	-	4		5
91 WLOCLAWEK	-	-	4	-	-	-	4	2	-	-	-	2	4		8
93 WROCLAW	-	1	-	-	-	-	1	11	-	1	-	-	12		13
95 ZAMOSC	-	-	1	-	-	-	1	4	-	1	-	-	5		6
97 ZIELONA GORA							0	1	-	-	-	-	1		1
TOTAL	34	60	75	1	1	0	171	378	10	11	14	36	449	0	620
PER CENT	5.5	9.7	12.1	0.2	0.2	0.0	27.6	61.0	1.6	1.8	2.3	5.8	72.4	0.0	100.0

SVN SLOVENIA RABIES CASES 1.10.95 - 31.12.95

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	AJDOVSCINA							0	2	-	-	-	-	2		2
02	BREZICE							0	3	-	-	-	-	3		3
03	CELJE							0	6	-	-	-	-	6		6
04	CERKNICA							0	2	-	-	-	-	2		2
05	CRNOMELJ	-	1	-	-	-	-	1	3	-	-	-	-	3		4
06	DOMZALE							0	24	-	-	1	-	25		25
08	GORNJA RADGONA							0	5	-	-	-	-	5		5
09	GROSUPLJE							0	5	-	-	-	-	5		5
10	HRASTNIK							0	1	-	-	-	-	1		1
13	IZOLA							0	1	-	-	-	-	1		1
15	KAMNIK							0	34	-	-	1	-	35		35
16	KOCEVJE							0	4	-	-	-	-	4		4
17	KOPER	-	2	-	-	-	-	2	4	1	-	-	-	5		7
18	KRANJ							0	1	1	-	1	-	3		3
19	KRSKO							0	1	-	-	-	-	1		1
20	LASKO	1	-	-	-	-	-	1	11	-	-	-	-	11		12
21	LENART							0	11	-	-	-	-	11		11
22	LENDAVA	-	-	-	1	-	-	1	1	-	-	-	-	1		2
23	LITIJA	-	3	1	-	3	-	7	26	1	-	1	-	28		35
25	LJUBLJANA CENTAR							0	18	-	1	-	-	19		19
29	LJUTOMER							0	6	-	-	-	-	6		6
35	MOZIRJE							0	2	-	-	-	-	2		2
36	MURSKA SOBOTA							0	25	-	-	-	-	25		25
37	NOVA GORICA							0	6	-	-	-	-	6		6
38	NOVO MESTO							0	5	-	-	-	-	5		5
39	ORMOZ							0	4	-	-	1	-	5		5
40	PIRAN							0	5	-	-	-	-	5		5

SVN 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		
42	PTUJ	4	1	-	-	-	-	5	30	-	1	3	-	34		39
44	RADOVLJICA							0	1	-	-	-	-	1		1
46	RIBNICA							0	3	-	-	-	-	3		3
47	SEVNICA							0	2	-	-	-	-	2		2
48	SEZANA	-	1	-	-	-	-	1	3	-	-	-	-	3		4
50	SLOVENSKA BISTRICA							0	7	-	1	-	-	8		8
51	SLOVENSKE KONJICE							0	4	-	-	-	-	4		4
52	SENTJUR PRI CELJU	-	1	-	-	-	-	1	7	1	1	-	-	9		10
53	SKOFJA LOKA							0	2	-	-	-	-	2		2
54	SMARJE PRI JELSAH	2	-	-	-	-	-	2	6	1	1	-	-	8		10
55	TOLMIN							0	2	-	-	-	-	2		2
57	TREBNJE							0	3	-	-	-	-	3		3
58	TRZIC							0	1	-	-	-	-	1		1
59	VELENJE							0	1	-	-	-	-	1		1
60	VRHNIKA							0	1	-	-	-	-	1		1
61	ZAGORJE OB SAVI							0	14	-	-	-	-	14		14
62	ZALEC							0	1	-	-	-	-	1		1
64	MARIBOR							0	4	-	-	-	-	4		4
65	MARIBOR PESNICA							0	4	-	-	-	-	4		4
68	MARIBOR RUSE							0	1	-	-	-	-	1		1
71	MARIBIR DUBLEK							0	1	-	-	-	-	1		1
72	MARIBOR JURSINCI							0	1	-	-	-	-	1		1
TOTAL		7	9	1	1	3	0	21	315	5	5	8	0	333	0	354
PER CENT		2.0	2.5	0.3	0.3	0.8	0.0	5.9	89.0	1.4	1.4	2.3	0.0	94.1	0.0	100.0

RUS RUSSIAN FEDERATION — RABIES CASES — 1.10.95 - 31.12.95

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		
10	Vladimir Region	1	-	-	-	-	-	1						0		1
12	Twer Region							0	1	-	-	-	-	1		1
15	Moscow Region	-	1	-	-	-	-	1						0		1
16	Oryol Region	1	-	-	-	-	-	1						0		1
17	Ruazan Region	1	-	-	-	-	-	1						0		1
18	Smolensk Region							0	-	-	-	-	1	1		1
19	Tula Region							0	1	-	-	-	-	1		1
26	Belgorod Region	4	18	38	-	-	-	60	14	-	-	-	-	14		74
27	Voronezh Region	2	5	65	2	1	-	75	7	-	-	-	-	7		82
28	Kursk Region	1	-	3	-	-	-	4	3	-	-	-	-	3		7
31	Astrakhan Region	6	1	3	1	-	-	11	-	-	-	-	1	1	1	13
32	Volgograd Region	3	-	30	1	-	-	34	5	-	-	-	-	5		39
33	Samara Region	-	3	4	-	-	-	7	2	-	-	-	-	2		9
34	Penza Region	-	1	-	-	-	-	1	1	-	-	-	-	1		2
35	Saratov Region	9	13	21	-	-	-	43	12	-	-	-	-	12	1	56
36	Ulyanovsk Region	4	8	3	-	-	-	15	3	-	-	-	-	3		18
38	Republic of Tatarstan	1	-	10	-	-	-	11	19	1	-	-	-	20		31
39	Krasnodar Territory	1	1	-	-	-	1	3	1	-	-	-	-	1		4
40	Stavropol Territory	1	-	1	-	-	-	2						0		2
41	Rostov Region	2	4	5	-	-	-	11						0		11
42	Orenburg Region	11	13	74	2	2	-	102	9	-	-	-	-	9	1	112
44	Republic of Bashkorto	5	-	40	3	1	-	49	18	-	-	-	-	18		67
TOTAL		53	68	297	9	4	1	432	96	1	0	0	2	99	3	534
PER CENT		9.9	12.7	55.6	1.7	0.7	0.2	80.9	18.0	0.2	0.0	0.0	0.4	18.5	0.6	100.0

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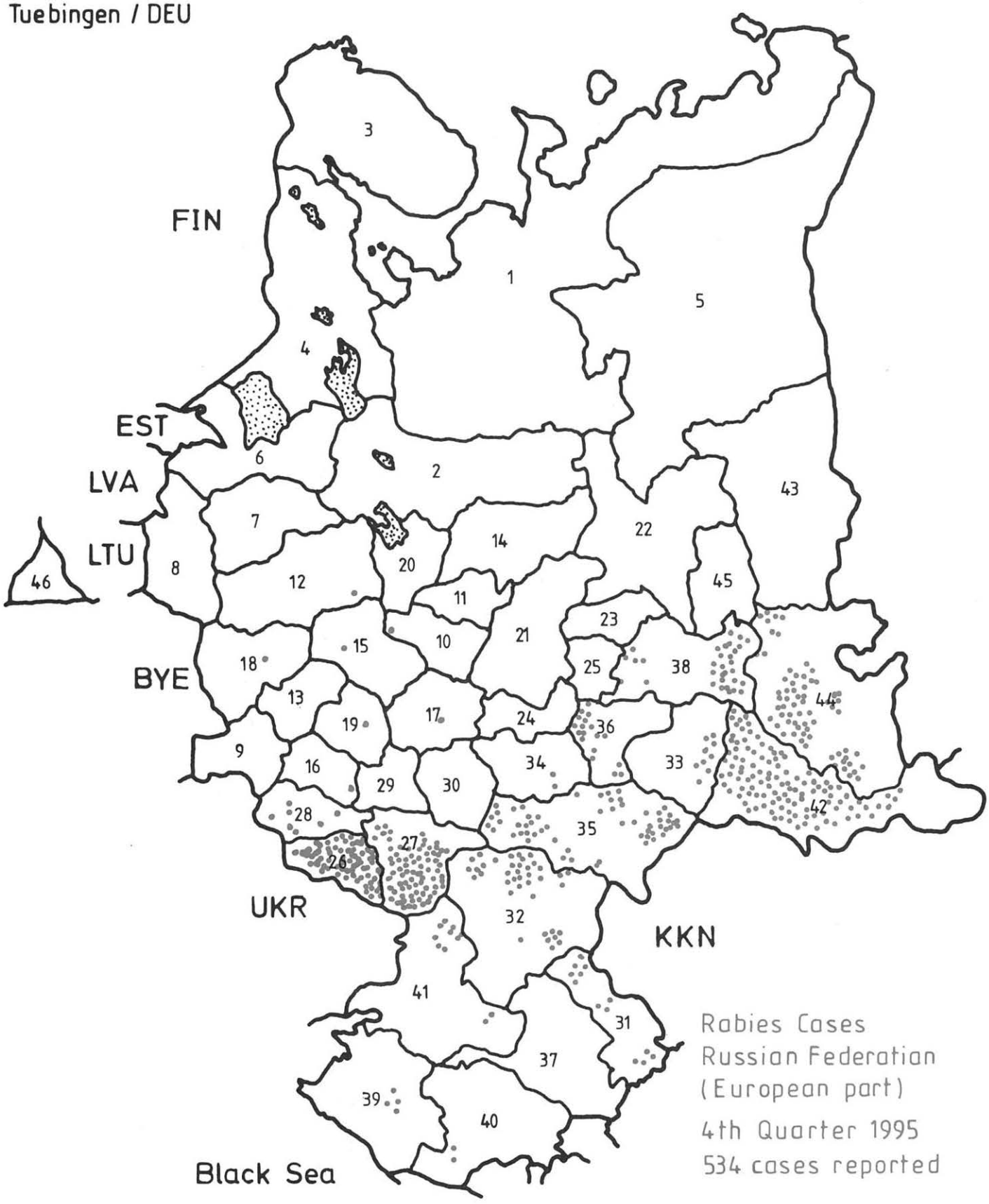
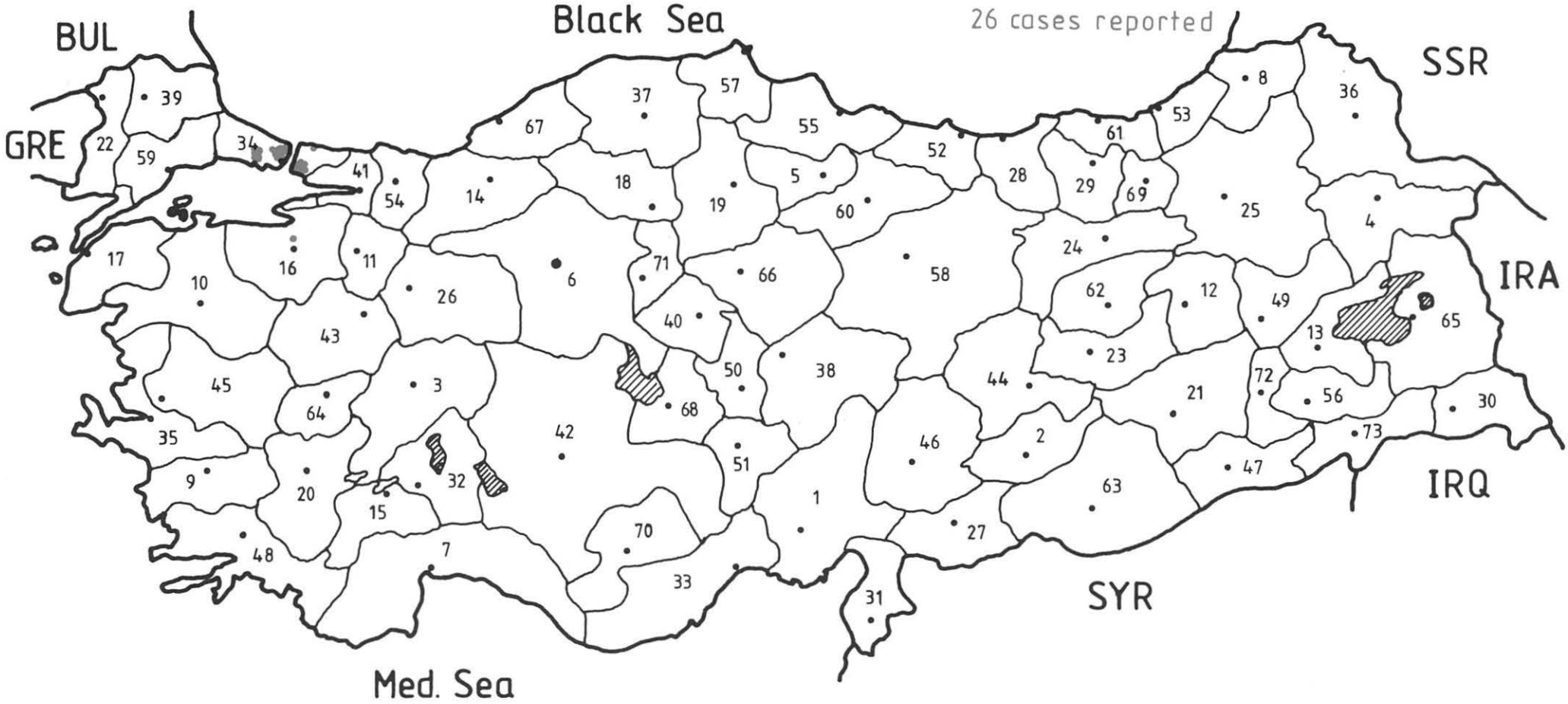


Rabies Cases
Russian Federation
(European part)
4th Quarter 1995
534 cases reported

WHO Coll. Centre
Tuebingen / DEU

Rabies Cases Turkey
4th Quarter 1995
26 cases reported



WHO Coll. Centre
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Rabies Cases Europe
4th Quarter 1995

2610 cases reported

1 bat rabies case included

ICE
(rabies free)

NOR
(rabies free)

FIN
(rabies free)

EST
(16)

SWE
(rabies free)

LVA
(54)

RUS
(534)

DEN
(0)

LTU
(36)

RUS

BYE
(14)

IRE
(rabies free)

UNK
(rabies free)

NET
(0)

POL
(620)

UKR
(no data)

DEU
(124)

BEL
(58)

CZH
(55)

SVK
(99)

MLD
(1)

AUT
(23)

FRA
(5)
(1)

HUN
(390)

(2)
SWI

SVN
(354)

CRO
(130)

ROM
(4)

ITA
(2)

YUG
(48)

BUL
(4)

POR
(rabies free)

SPA
(1)
in North Africa

ALB
(no data)

TUR
(26)

GRE
(rabies free)

0 50 100 km

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