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 **First Quarter 1991**, subsequently referred to as ***"This Quarter"***.

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

SECTION 3 (3.1 - 3.26) reflects the situation for individual countries.

There are three articles in the Miscellaneous SECTION: Under 4.1 an abstract points at a special volume of articles on epidemiological information systems published by the Office International des Epizooties, Paris, France; the implications of the Channel tunnel for the United Kingdom's freedom from rabies is presented under 4.2; and a more detailed description of an imported human rabies case into France during ***"This Quarter"*** is given under 4.3.

The rabies case data are tabulated for the first quarter 1991 in SECTION 5.

SECTION 6 lists the official contributors to the BULLETIN.

The geographical distribution of rabies cases in Europe for the first quarter 1991 is shown on maps of Europe and Turkey in the ANNEX.

2. Summary of Rabies in Europe

During ***"This Quarter"***, 5711 rabies cases were reported in Europe. Of these were 4257 in wild animals (74.5% of total) and 1453 in domestic animals. One imported human rabies case was diagnosed in France.

Of the cases in wild animals 3869 were foxes, 93 raccoon dogs, 63 badgers, 90 stone martens, 8 pine martens, 6 polecats, 112 roe deer, 4 red deer, 2 fallow deer, 3 wild boars, 1 squirrel and 1 other small rodent and 5 other wild animals not specified. Of the 1453 cases in domestic animals 365 were dogs, 245 cats, 350 cattle, 455 small ruminants, 27 horses, 1 donkey, 2 pigs, 1 domestic rabbit and 7 other domesticated animals. These data are summarized in Tables 1 and 2, SECTION 5.

In countries with fox-mediated rabies there is usually an increase of cases expected when compared to the fourth quarter of the previous year, because of the mating season of foxes. An increase was noticed in the countries Austria, Czechoslovakia, Yugoslavia and Switzerland. Countries which had little changes were: Belgium, France and Hungary. A decrease was experienced in Germany, Poland, Romania, Luxembourg and also Turkey as a country with dog-mediated rabies.

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

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

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

The one human case already mentioned above was imported.

3. Rabies in Individual Countries

3.1 Austria AUT

by Helmut Schnabl

During *"This Quarter"*, 839 animal rabies cases were diagnosed out of 6453 samples examined. Compared to the previous quarter (628 rabid animals) there was an increase of cases by 33.6%.

Of 822 rabid wild animals (98% of total) 708 were foxes (84.4%), 40 badgers (4.8%), 32 stone martens, 3 polecats, 1 coypu, 36 roe deer, 1 red deer, 1 fallow deer. Of 17 rabid domestic animals 3 were dogs, 11 cats, 2 cattle, 1 sheep.

The distribution of rabies cases by Bundesländer (federal provinces) and Bezirke (districts) was as follows:
Burgenland: 154 cases (18.4% of total) covering the entire province.
Niederösterreich: 318 cases (37.9%); Bezirke affected - Amstetten, Baden, Bruck/L., Gänserndorf, Gmünd, Korneuburg, Krems, Horn, Hollabrunn, Lilienfeld, Scheibbs, Melk, Neunkirchen, St.Pölten, Wiener Neustadt, Tullen, Waidhofen/Thaya, Zwettl
Oberösterreich: 93 cases (11.1%); Bezirke affected - Kirchdorf/Krems, Freistadt, Braunau, Perg, Gmunden
Salzburg: 12 cases (1.4%); Bezirke affected - Salzburg/Umgebung, St. Johann/Pongau, Tamsweg
Steiermark: 259 cases (30.9%); Bezirke affected - Liezen, Graz/Umgebung, Leoben, Feldbach, Hartberg, Bruck-/Mur, Judenburg, Fürstenfeld,Leibnitz
Tirol: 3 cases (0.3%); only Bezirk Reutte was affected

No rabies cases were reported from the federal provinces Vorarlberg, Kärnten and Wien.

3.2 Belgium BEL

by J. Tambeur

During *"This Quarter"*, 12 rabies cases were confirmed in 10 foxes, 1 bovine and 1 horse in 11 localities of the provinces Hainaut, Liège, Limbourg, Luxembourg and Namur. Of the 11 infected localities 9 were near the national border.

There was a decrease of cases by 87% compared to the first quarter 1990, and by 20% compared to the previous quarter.
The favourable present situation follows three campaigns of oral vaccination of foxes against rabies covering the entire infected area of the country - in autumn 1989, spring and autumn 1990. In order to assure a situation like this for the future two further vaccination campaigns have been planned in 1991.

The first one is going to be carried out in April. At this point only recombinant rabies vaccine is used, the vaccine baits are dropped from airplanes at low altitude.

3.3 Bulgaria BUL

The country remained rabies-free.

3.4 Czechoslovakia CZE

by Oldrich Matouch

The number of rabies cases diagnosed on the Czechoslovak territory during *"This Quarter"* was 533 (in the Czech Republic 451 and the Slovak Republic 82). Compared to the first quarter 1990 there was an increase by 152 cases.

519 cases were registered in wild animals (97.4%) and 14 cases in domestic animals (2.6%). Of the wild animals the disease was diagnosed in 500 foxes, 2 badgers, 13 martens, 3 roe deer and one red deer. In domestic animals rabies was found in 6 dogs and 8 cats.

The highest number of rabid animals was noticed in the districts (okresy) of Jindrichuv Hradec (38), Ceská Lípa (37), Litomerice (30), Liberec (24), Ustí n. Labem (23), Rakovník and Louny (14), Breclav and Ceské Budejovice (13).

There was no case of rabies reported in man.

3.5 Denmark DEN

by Eric Stougaard

No case of bat rabies was reported during *"This Quarter"*.

The country remained **rabies-free** in terrestrial animals.

3.6 Germany, Federal Republic DEU

by Winfried W. Müller and Klaus Stöhr

A total of 1230 rabies cases was reported during *"This Quarter"*. There was a reduction of cases compared to the previous quarter by 15%. As usually an increase of cases is expected from fourth quarter of the previous year to the first of the new year because of the mating season of the foxes during the first quarter, the reduction may well be explained with the country-wide oral vaccination campaign in autumn 1990. The relatively low percentage of affected domestic animals (12-.6%) compared to the fourth quarter 1990 (25.1%) relates to the indoor-keeping of farm animals during winter.

Of the 1075 rabies cases in wild animals 988 were foxes, 2 raccoon dogs, 13 badgers, 33 stone martens, 38 roe deer, 1 fallow deer; of the 155 cases in domestic animals 54 were dogs, 61 cats, 6 horses, 1 pig, 18 cattle, 13 sheep, 1 goat, 1 domestic rabbit.

Two raccoon dogs were diagnosed rabid in the federal state of Brandenburg near the German/Polish border. In this area already 16 cases were diagnosed rabid since 1986, a sign that this animal species adapts to the area and is likely to move further west.

There was concentration of cases in nearly all federal states except for Nordrhein-Westfalen, Schleswig-Holstein, and the city state Hamburg. Most heavily infected were the departments (Regierungsbezirke) Potsdam, Erfurt, Dresden, Rheinhessen, Schwaben and Frankfurt/Oder with 86, 74, 71, 63, 62 and 62 cases respectively.

According to financial resources and to a well planned strategy most of the states carry out oral vaccination campaigns during spring mainly in the months March and April.

3.7 Finland FIN

by Bengt Westerling

During *"This Quarter"*, no cases of rabies were detected in Finland.

A total of 169 animals including 5 cats, 7 dogs, 94 raccoon dogs and 51 foxes were examined for rabies by immunofluorescence.

The last case of rabies was diagnosed on the 16.2.1989. During the following 2-year period a total of 377 raccoon dogs, foxes and badgers, i.e. 22 animals/100 km², have been examined from the estimated epidemic area of 1700 km².

The sample size was regarded large enough to declare Finland rabies-free.

3.8 France FRA

by M.F.A. Aubert

655 animal rabies cases were registered during *"This Quarter"*, 477 cases less than during the first quarter 1990. The decrease of cases noticed in 1990 after a peak in 1989 could continue in 1991. 539 cases were diagnosed in foxes (82.2% of total), 15 cases in other wild animals and 101 cases in domestic animals (13 dogs, 16 cats, 25 cattle, 40 small ruminants and 7 horses).

The departments (départements) recording the greatest number of cases were Seine-Maritime (66) and Vosges (57).

One imported human case was reported from Nice, Département Alpes-Maritimes (see as well under 4.3 of this **BULLETIN**).

3.9 Greece GRE

by A. Zambounis

The country remained rabies-free.

3.10 Hungary HUN

by Lazlo Koltai

During *"This Quarter"*, 325 rabies cases in animals were diagnosed in Hungary. There was a decrese of cases by 11.2% compared to the first quarter 1990. 80.6% of all rabid animals were foxes (85.-0% during first quarter 1990) and 8.3% dogs (4.1% during first quarter 1990). Most of the affected dogs were young ones. They had not been reached during the campaigns for obligatory vaccination.

The provinces (Komitate) with the greatest number of cases registered were Vas (37), Pest (32), Baranya (27), Fejer (22) and Tolna (21). These provinces are located in Transdanubia except for Pest. Least infected of all provinces were Komaron with 5 cases and Budapest with 4 cases.

3.11 Iceland ICE

The country remained rabies-free.

3.12 Ireland IRE

The country remained rabies-free.

3.13 Italy ITA

by Santino Prosperi

During *"This Quarter"*, no cases of rabies were registered in Italy. An intensive surveillance continued in areas at risk.

3.14 Luxembourg LUX

by Joseph Kremer

During *"This Quarter"*, there was only one rabies case in a fox and a bovine each. Accordingly, the two oral vaccination campaigns of May and September 1990 seem to bear fruit. Nevertheless, there is some concern as one of the two cases during *"This Quarter"* occurred in the very centre of the Grand Duchy of Luxembourg.

To reduce the rabies risk of the country to a minimum two further oral vaccination campaigns are planned for May and September 1991.

During *"This Quarter"*, 6 foxes and 1 stone marten were examined for rabies but reveiled negative results.

3.15 Netherlands NET

by J.H.M. Nieuwenhuijs

During *"This Quarter"*, no rabies case was reported in the Netherlands.

The following animals were investigated but had negative results: 159 foxes, 3 dogs, 4 cats, 4 badgers, 2 rats, 1 muskrat and 15 bats.

3.16 Norway NOR

by Gudbrand Bakken

There was no case of rabies reported during *"This Quarter"* on the island of Svalbard.

The mainland of Norway remained rabies-free.

3.17 Poland POL

A total of 508 animal rabies cases were reported from Poland during *"This Quarter"*. Of these were 339 foxes (66.7% of total), 39 raccoon dogs (7.7%), 47 other wild animals and 83 domestic animals (44 dogs, 27 cats, 12 cattle).

There was a decrease of 95 cases compared to the previous quarter and a decrease of 156 cases compared to the first quarter 1990.

In regard to the distribution of cases the map of the western half of the country shows a more densely picture with the 2 most infected provinces (voivodeships) in the north-west: Koszalin (61 cases) and Slupsk (45).

3.18 Portugal POR

The country remained rabies-free.

3.19 Romania ROM

by Horatiu Olaru

During *"This Quarter"*, 11 rabies cases were reported from Romania. They occurred in 5 foxes, 2 mustelids, 2 dogs, 1 horse and 1 bovine.

The 11 cases were distributed in the following provinces: Salaj (4 cases) Satu-Mare (3), Maramures (2) in the north of the country and two single cases in Hunedoara and in Prahova.

3.20 Spain SPA

by José Luis de Felipe Gardón

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

There was **no case of rabies** in the Spanish territory in North Africa (Ceuta and Melilla).

There was **no case of bat rabies.**

3.21 European Part of the Soviet Socialist Republics SSR

by G.F.Koromyslov

During *"This Quarter"* , 1141 rabies cases in animals were reported in the European part of the Soviet Union. 904 of these in domestic animals (133 dogs, 92 cats, 273 cattle, 390 sheep, 10 horses and 6 others) and 237 cases in wild animals (180 foxes, 52 raccoon dogs and 5 others).

According to the size of area there were more cases in the RSFSR (700) and Ukrainian SSR (234) and less cases in the other Republics (less than 87 cases).

Human cases were not reported.

3.22 Sweden SWE

The country remained rabies-free.

3.23 Switzerland SWI

by Hans Matter

During *"This Quarter"*, the Swiss Rabies Center received 904 animals for examination. 25 (2.8%) of these were positive for rabies. In the previous quarter 11 cases had been recorded (1.0% of 1148), whereas 5 of 744 (0.7%) were positive in the first quarter of 1990.

All 25 cases were observed in foxes. As in previous quarters all cases were relatively close to an area in France which is known to be heavily infested. Eighteen of these cases were observed within a range of 0 to 5 km from the French border, 3 cases within 5.1 to 10 km and an other 3 cases at a distance of more than 10 km (maximum distance: 11 km). The French area has been vaccinated for the first time in October 1990, whereas vaccination campaigns on the Swiss side of the border were performed for the 6th to 14th time (depending on the region).

Five bats (1 *Nyctalus noctula*, 4 *Pipistrellus nathusii*) examined with immunofluorescence revealed no rabies virus. Switzerland has not experienced any rabies cases in bats yet.

A single human bite exposure to a proven rabid fox was recorded in the first quarter of 1991. The number of people treated for non-bite exposures is not recorded.

3.24 Turkey TUR

During *"This Quarter"*, 891 rabies cases were reported from Turkey. All these cases occurred in domestic animals - 76 dogs (85.4% of total), 2 cats, 9 cattle, 1 sheep, 1 donkey. This quarters report reveals the lowest figure for one quarter since the beginning of the reporting of this BULLETIN in 1977.

Concentration of cases were registered in provinces (Il) of the west of the country: Bursa (13), Izmir (8), Sakarya (7), Istanbul (7).

3.25 United Kingdom UNK

by P.J. Thomas

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

3.26 Yugoslavia YUG

340 cases of rabies were reported in Yugoslavia during *"This Quarter"*. 237 cases occurred in Croatia (70% of total). Of the 340 cases were 312 in foxes (91.8% of total), 5 in other wild animals and 23 in domestic animals (7 dogs, 8 cats, 1 bovine, 6 small ruminants, 1 other domestic animal).

Concentration of cases were in the north-west of the country. More scattered were the cases in Southern Croatia, Bosnia and Hercegovina, and Vojwodina. One isolated case in a fox occurred in the community of Kladovo close to the Romanian border.

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4. MISCELLANEOUS ARTICLES

4.1 Epidemiological Information Systems

by Jean Blancou

Director General of the "Office International des Epizooties", Paris, France

[This article refers in particular to the OIE Scientific and Technical Review, Volume 10, No. 1, March 1991, summarizing the contents of the issue]

Without effective information systems, it is impossible to determine the most appropriate means to combat a given animal diesease. The above mentioned issue of the *Review* presents work conducted by various teams of epidemiologists to improve the efficiency of existing systems, or to outline new approaches which offer a better study of the complex phenomena encountered in the field.

The first group of articles offers a reminder of the principles on which information systems must be based if they are to benefit those who use them. As the aim of these systems is to collect and process ever-increasing quantities of data, special attention is given to the different steps which should be followed when installing a computerised service. Furthermore, achievements obtained by a country should be shared with the international community. Worldwide dissemination of such information is a priority function of the OIE. One paper discusses the OIE information system in this issue.

Two articles are devoted to the development of animal health information systems adapted to traditional farming conditions in Africa. These papers demonstrate that, to be viable, such systems must differ from those used in developed countries; emphasis is placed on the importance of a pluridisciplinary approach to better understand the relationship between animal production and disease.

In industrialised countries, new approaches are also being developed to analyse the relationship between environmental factors associated with intensive farming and disease incidence. This new branch of epidemiology, known as ecopathology, employs sophisticated techniques of statistical analysis first to identify typical "risk factors" on individual farms and then to define health strategies to bring these factors under control.

Until recently, information on the geographical spread of disease could be evaluated only by marking information on physical maps, and assessing patterns of disease by eye. Geographical information systems have become readily available on microcomputers in the last five years, allowing information on disease spread to be handled and analysed in the same way as non-spatial data. This represents a major advance. One paper demonstrates the application of these computer programmes to veterinary problems. An associated technique also presented here is satellite imaging, which allows large-scale data of relevance to animal health to be collected from space and linked to data collected on the ground.

More in-depth studies are now being conducted into the role of wild animals in disease spread, as these animals can serve as reservoirs of serious diseases which may be transmitted to farm animals. The

difficulty experienced in controlling wild animal populations requires that new epidemiological techniques be developed to limit disease spread from affected wild animal populations to domestic livestock. Another paper in this issue describes the implementation of such techniques in the control of tuberculosis among badgers.

This issue of the *Review* closes with a presentation of various possible uses of risk assessment methods in animal health. Veterinary authorities throughout the world should refer to these methods when determining the type and extent of safety measures to be applied when importing animals and animal products.

This wide range of papers provides a clear illustration of the extent to which innovative methods of handling animal health information are finding uses in many different areas of veterinary work. These articles also demonstrate the enormous value of information systems to the activities of veterinary services.

4.2 The Implications of the Channel Tunnel for the United Kingdom's Freedom from Rabies

by A J Crowley

Veterinary Consultant to Eurotunnel

INTRODUCTION

The key factor in the United Kingdom's successful maintenance of its rabies-free status over many years has been the English Channel, presenting an insurmountable natural barrier to the advance, until recent years, of wildlife rabies across Europe.

The construction of the Channel Tunnel, due for completion in 1993, foreshadows an end to the UK's island status by the creation of a permanent land-link between the UK and France - the first since the Ice Age 12,000 years ago. Indeed the first part of this land link became a reality on 1st December 1990 with the breakthrough, under mid-Channel, of the first of the three tunnels - the Service Tunnel. The link will become fully established during 1991 by the completion of the other two tunnels - the Running Tunnels.

Eurotunnel has given an undertaking to the British Government that the Channel Tunnel will not increase the already existing risks of rabies entering the United Kingdom. This article describes the development of the strategy to meet this undertaking, the defence measures which are now operating in the construction phase of the Tunnel and the defences which will be in position in the operational phase when the Tunnel opens in 1993.

To lead to a better understanding of the UK position, the next two sections briefly summarise the history of rabies and its control in the United Kingdom and identify the possible means of entry of the disease into the country.

RABIES IN THE UNITED KINGDOM

Although the UK has been free of rabies for many years, this has not always been the case. It is thought that the disease may have been first introduced by dogs brought over with the legions of Julius Caesar's invading army in 54BC. From then on, rabies was present right through British history, causing countless deaths in humans and animals of all domestic species right up till 1902, when the disease was first eradicated. However, there is no record of it attacking wild life.

In that year, the UK's import controls and six-months quarantine for rabies-susceptible animals were introduced and have kept the country virtually free of rabies ever since. There was a series of 328 animal cases from 1918

to 1922, caused by soldiers bringing dogs back from France at the end of World War I. There was also one isolated case in Camberley in 1969 and another in Newmarket in 1970.

Although many people in the British Isles contracted rabies and died in historical times, no one has contracted the disease in Britain since it was eradicated in animals in 1902. Since 1945, 19 people have become infected abroad and died in Britain.

Bats have been known to fly across the Channel and, since the finding of a rabies-like virus in bats in Europe, bats found dead or dying in Britain have been monitored for presence of the disease. None so far have been found positive.

THE THREAT TO THE UNITED KINGDOM

a) Legal importing of animals

The bringing of rabies-susceptible animals into the UK legally under import licences does not pose any risk because they come into the country in secure cages through a small number of licensed sea ports or airports. They are taken directly by authorised carriers to quarantine kennels or catteries, where they are immediately vaccinated and remain in isolation for the statutory six-month period. The effectiveness of quarantine has stood the test of time, as demonstrated by the fact that, apart from the very few incidents mentioned earlier, the UK has remained free of rabies since the regulation was enforced. There have been 29 cases of rabies in quarantine since 1902 - any one of which might have started a series of outbreaks in the country if the animals had not been confined.

b) Illegal import/smuggling

The risk of the introduction of rabies into the UK lies in irresponsible people attempting to smuggle unlicensed animals through airports and sea ports or yachtsmen landing anywhere along the coast and exercising their dogs or cats on the shore.

Customs officers are on duty at all ports and monitor all passengers for possible smuggling of animals. Many smugglers are detected and prosecuted every year, but little can be done to watch the whole coastline for irresponsible actions by people landing in isolated places in small craft. These risks have always been with us and the opening of the Channel Tunnel will not introduce a new risk merely by providing one more pathway, among many existing ones, for the potential animal smuggler.

RABIES DEFENCE STRATEGY IN THE CHANNEL TUNNEL

From the outset, the British Government required that:

a) import and transit controls for animals imported under licence through the tunnel must operate as effectively as they do at present at sea ports and airports;

b) the tunnel is safeguarded against the entry and passage through of wild or stray rabies-susceptible animals.

Eurotunnels gave an undertaking in 1987, to the Select Committee of the House of Lords considering the Channel Tunnel Bill, that procedures and defence measures whould be incorporated into the construction and operation of the tunnel to meet these two requirements.

Veterinary consultants both in Britain and France advise Eurotunnel on the measures necessary to meet these requirements.

In the construction phase

Foxes, dogs and cats are excluded from the workings by utilisation of the contractor's site security fences as animal barriers. Appropriate numbers of staff and members of the work force have been trained in animal sighting and in the event of an animal being seen in the works area, a capture and removal operation would be invoked. The construction sites and tunnels are kept free of rats and other rodents by a continuous in-house rodent exclusion and control operation.

The possibility of bats entering the tunnels and colonising within them is eliminated by daily inspection of the tunnel portals; any bats or colonies found would be humanely removed and re-sited elsewhere, because bats are a protected species both in France and in England.

All these operations during the construction phase are coordinated by two Animal Control Officers, one appointed at the English construction sites at Dover and Folkestone and the other at the French construction sites at Sangatte and Coquelles.

In the operational phase, 1993 onwards

Both the French and the English terminals will incorporate full facilities for the surveillance of passengers by Customs Officers for the detection of animal smugglers.

Both terminals will contain all necessary facilities for the handling and control of animals being legally imported through the tunnel under licence or seized from smugglers by Customs Officers.

Wild or stray rabies-susceptible animals which may attempt to pass through the tunnel are, in practical terms, foxes, dogs, cats, rodents and bats. To prevent access to the tunnel and the passage through it of these animals, a three-tier system of physical barriers will be installed on both sides of the Channel.

The first line of defence will be an animal-proof security/perimeter fence right around the terminal areas, with surveillance at the entrances to detect the passage of animals.

The second line of defence will be a similar animal-proof fence around the mouths (portals) of the tunnel, combined with the hostile environment of the portals themselves.

The third line of defence will be electrical barriers at each end of the undersea sections of the service tunnel and the two running tunnels to stop any animal which may have got through the terminal perimeter fence and the portal fence.

The terminal areas and the tunnels will be kept free of rats and other rodents by permanent rodent control operations. Rodents will be excluded from all service pipes, drain channels, ducts and ventilators by such structures being meshed off or fitted with bulkheads. Bats will be taken care of by daily inspection of the tunnel portals and the humane removal of any bats or bat colonies found, as already described in the construction phase.

CONCLUSION

The rabies defence procedures and barriers have been designed to minimise the risk of any animal being smuggled through the tunnel or getting through of its own accord. While nothing is absolutely guaranteed to eliminate all risk, these measures will ensure that the Channel Tunnel does not add to the many risks of rabies entering Britain that already exist through other routes.

4.3 Imported Human Rabies -France-

by Pierre E Rollin

National Reference Center for Rabies, Institut Pasteur,
Paris (France)

During a holiday trip in the north of Mexico City (Mexico), two French tourists stopped their car to take care of a young dog that was hit by a car. The dog was severely injured and died 20 minutes later. Both, man and woman were slightly bitten (the man was bitten first). Nothing was done to treat the wounds. Fifty days later, the man showed a fever with restlessness and hydrophobia. A local physician and a local hospital emergency unit were successively consulted for advice and treatment. Although both tourists mentioned the fact that they had been bitten, no relation was made with the observed symptoms. The tourists decided to fly back to France. On the way to the airport, the patient developed typical aerophobia. On arrival in France (Nice airport), he was directly transferred to a hospital emergency unit and then sent to a psychiatric unit for phobias, restlessness, distress. Few hours later, an infectious diseases consultant suspected rabies and transferred the patient to his unit where he died a few hours later from a cardiac arrest. Necropsy was performed and brain specimens sent to the Institut Pasteur, Paris, where rabies was diagnosed by direct immunofluorescence, virus isolation and antigen capture ELISA. Despite the delay, rabies post-exposure prophylaxis was immediately started for the woman. She remained well, more likely because of lack of contamination during the bite than because of treatment.

TABLE 1

EUR EUROPE 1/91 RABIES CASES 1. 1.91 - 31. 3.91

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	3	11	2	-	1	-	17	708	40	35	38	1	822		839
BEL	BELGIUM	-	-	1	1	-	-	2	10	-	-	-	-	10		12
BUL	BULGARIA *							0						0		0
CZE	CZECHOSLOVAKIA	6	8	-	-	-	-	14	500	2	13	4	-	519		533
DEN	DENMARK *							0						0		0
DEU	FED.REP. OF GERMANY	54	61	18	6	14	2	155	988	13	33	39	2	1075		1230
FIN	FINLAND *							0						0		0
FRA	FRANCE 1)	13	16	25	7	40	-	101	539	6	7	2	-	554	1	656
GRE	GREECE *							0						0		0
HUN	HUNGARY	27	19	8	2	3	1	60	262	-	-	3	-	265		325
ICE	ICELAND *							0						0		0
IRE	IRELAND *							0						0		0
ITA	ITALY *							0						0		0
LUX	LUXEMBOURG	-	-	1	-	-	-	1	1	-	-	-	-	1		2
NET	NETHERLANDS *							0						0		0
NOR	NORWAY *							0						0		0
POL	POLAND	44	27	12	-	-	-	83	339	1	11	31	43	425		508
POR	PORTUGAL *							0						0		0
ROM	ROMANIA	2	1	-	1	-	-	4	5	-	2	-	-	7		11
SPA	SPAIN *							0						0		0
SSR	SOVIET SOC. REP.	133	92	273	10	390	6	904	180	-	-	-	57	237		1141
SWE	SWEDEN *							0						0		0
SWI	SWITZERLAND + LIECHT							0	25	-	-	-	-	25		25
TUR	TURKEY	76	2	9	-	1	1	89						0		89
UNK	UNITED KINGDOM *							0						0		0
YUG	YUGOSLAVIA	7	8	1	-	6	1	23	312	1	3	1	-	317		340
TOTAL		365	245	350	27	455	11	1453	3869	63	104	118	103	4257	1	5711
PER CENT		6.4	4.3	6.1	0.5	8.0	0.2	25.4	67.7	1.1	1.8	2.1	1.8	74.5	0.0	100.0

* NO CASES 1) IMPORTED FROM MEXICO

TABLE 2

EUR EUROPE 1/91	RABIES CASES 'OTHER ANIMAL SPECIES'								1. 1.91 - 31. 3.91
LOCATION CODE NAME	OTHER DOMESTIC ANIMALS				OTHER WILD ANIMALS				TOTAL
	DONKEY	PIG	DOM.RABBIT	OTHERS	RACCOON DOG	WILD BOAR	SQUIRREL	OTH.SM. RODENTS	
AUT AUSTRIA	-	-	-	-	-	-	-	1	1
DEU FED.REP. OF GERMANY	-	1	1	-	2	-	-	-	4
HUN HUNGARY	-	1	-	-	-	-	-	-	1
POL POLAND	-	-	-	-	39	3	1	-	43
SSR SOVIET SOC. REP.	-	-	-	6	52	-	-	-	58
TUR TURKEY	1	-	-	-	-	-	-	-	1
YUG YUGOSLAVIA	-	-	-	1	-	-	-	-	1
TOTAL	1	2	1	7	93	3	1	1	109
PER CENT	1.0	2.0	1.0	6.4	85.0	3.0	1.0	1.0	100.0

AUT AUSTRIA — RABIES CASES — 1. 1.91 - 31. 3.91

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		
101	EISENSTADT - STADT							0	1	-	-	-	-	1		1
103	EISENSTADT - LAND							0	23	1	-	-	-	24		24
104	GUESSING							0	19	1	2	3	-	25		25
105	JENNERSDORF							0	4	1	1	1	-	7		7
106	MATTERSBURG							0	2	-	-	-	-	2		2
107	NEUSIEDL AM SEE	1	1	1	-	-	-	3	59	-	1	-	-	60		63
108	OBERPULLENDORF	1	-	-	-	-	-	1	10	-	-	1	-	11		12
109	OBERWART							0	17	-	1	2	-	20		20
301	KREMS AN DER DONAU-S							0	1	1	-	-	-	2		2
305	AMSTETTEN							0	13	-	-	-	-	13		13
306	BADEN							0	1	-	-	-	-	1		1
307	BRUCK AN DER LEITHA							0	5	-	-	-	-	5		5
308	GAENSERNDORF							0	20	-	-	-	-	20		20
309	GMUEND							0	6	-	-	-	-	6		6
310	HOLLABRUNN							0	6	-	1	-	-	7		7
311	HORN	-	1	-	-	-	-	1	8	2	-	-	-	10		11
312	KORNEUBURG							0	3	-	-	-	-	3		3
313	KREMS AN DER DONAU-L							0	8	2	1	-	-	11		11
314	LILIENFELD							0	56	3	-	8	-	67		67
315	MELK							0	4	2	2	-	1	9		9
318	NEUNKIRCHEN							0	50	4	2	3	-	59		59
319	SANKT POELTEN-LAND							0	23	1	-	2	-	26		26
320	SCHEIBBS	-	1	-	-	-	-	1	24	3	-	-	-	27		28
321	TULLN							0	14	-	-	-	-	14		14
322	WAIDHOFEN AN DER THA							0	6	-	1	-	-	7		7
323	WIENER NEUSTADT-LAND							0	17	-	1	-	-	18		18
325	ZWETTL							0	8	-	3	-	-	11		11

AUT 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		
404	BRAUNAU AM INN							0	5	1	-	-	-	6		6
406	FREISTADT	1	1	-	-	-	-	2	33	6	6	1	-	46		48
407	GMUNDEN							0	2	-	-	-	-	2		2
409	KIRCHDORF AN DER KRE							0	5	-	-	-	-	5		5
411	PERG	-	3	-	-	-	-	3	18	4	5	1	-	28		31
417	VOECKLABRUCK	-	1	-	-	-	-	1						0		1
503	SALZBURG-LAND	-	1	-	-	-	-	1	8	1	-	-	-	9		10
504	SANKT JOHANN IM PONG							0	1	-	-	-	-	1		1
505	TAMSWEG							0	1	-	-	-	-	1		1
602	BRUCK AN DER MUR							0	3	2	1	2	-	8		8
604	FELDBACH							0	36	1	1	-	-	38		38
605	FUERSTENFELD							0	9	-	1	-	-	10		10
606	GRAZ-LAND	-	-	-	-	1	-	1	13	-	-	1	-	14		15
607	HARTBERG							0	5	-	1	-	-	6		6
608	JUDENBURG							0	-	-	-	1	-	1		1
610	LEIBNITZ							0	2	-	-	-	-	2		2
611	LEOBEN							0	2	-	-	3	-	5		5
612	LIEZEN	-	2	1	-	-	-	3	152	4	3	9	-	168		171
613	MUERZZUSCHLAG							0	-	-	1	-	-	1		1
615	RADKERSBURG							0	1	-	-	-	-	1		1
617	WEIZ							0	1	-	-	-	-	1		1
704	KITZBUEHEL							0	1	-	-	-	-	1		1
708	REUTTE							0	2	-	-	-	-	2		2
TOTAL		3	11	2	0	1	0	17	708	40	35	38	1	822	0	839
PER CENT		0.4	1.3	0.2	0.0	0.1	0.0	2.0	84.4	4.8	4.2	4.5	0.1	98.0	0.0	100.0

RABIES CASES 1. 1.91 - 31. 3.91

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**															
HH	HAINHAUT							0	1	-	-	-	-	1		1
LG	LIEGE							0	3	-	-	-	-	3		3
LI	LIMBURG							0	1	-	-	-	-	1		1
LX	LUXEMBOURG	-	-	-	1	-	-	1	1	-	-	-	-	1		2
NA	NAMUR	-	-	1	-	-	-	1	4	-	-	-	-	4		5
TOTAL		0	0	1	1	0	0	2	10	0	0	0	0	10	0	12
PER CENT		0.0	0.0	8.3	8.3	0.0	0.0	16.7	83.3	0.0	0.0	0.0	0.0	83.3	0.0	100.0
LUX	**LUXEMBOURG**															
05	MERSCH							0	1	-	-	-	-	1		1
09	WILTZ	-	-	1	-	-	-	1						0		1
TOTAL		0	0	1	0	0	0	1	1	0	0	0	0	1	0	2

CZE CZECHOSLOVAKIA — RABIES CASES — 1. 1.91 - 31. 3.91

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		
00	DISTRICT OF PRAGUE							0	1	-	-	-	-	1		1
01	CENTRAL BOHEMIA	-	1	-	-	-	-	1	46	-	1	-	-	47		48
02	SOUTH BOHEMIA	1	-	-	-	-	-	1	73	-	3	-	-	76		77
03	WEST BOHEMIA	1	-	-	-	-	-	1	17	-	-	-	-	17		18
04	NORTH BOHEMIA	2	-	-	-	-	-	2	167	-	2	-	-	169		171
05	EAST BOHEMIA							0	32	1	3	1	-	37		37
06	SOUTH MORAVIA							0	67	-	1	1	-	69		69
07	NORTH MORAVIA	-	3	-	-	-	-	3	24	-	1	2	-	27		30
0	CZECH REPUBLIC	4	4	-	-	-	-	8	427	1	11	4	-	443		451
10	DISTRICT OF BRATISLAV							0	2	-	1	-	-	3		3
11	WEST SLOVAKIA							0	33	-	-	-	-	33		33
12	CENTRAL SLOVAKIA	2	3	-	-	-	-	5	17	1	1	-	-	19		24
13	EAST SLOVAKIA	-	1	-	-	-	-	1	21	-	-	-	-	21		22
1	SLOVAK REPUBLIC	2	4	-	-	-	-	6	73	1	2	-	-	76		82
TOTAL		6	8	0	0	0	0	14	500	2	13	4	0	519	0	533
PER CENT		1.1	1.5	0.0	0.0	0.0	0.0	2.6	93.8	0.4	2.4	0.8	0.0	97.4	0.0	100.0

DEU FEDERAL REPUBLIC OF GERMANY — RABIES CASES — 1. 1.91 - 31. 3.91

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		
010	SCHLESWIG-HOLSTEIN	-	-	-	1	-	-	1	2	-	-	-	-	2		3
020	HAMBURG							0						0		0
031	BRAUNSCHWEIG	2	2	1	-	-	-	5	26	1	3	1	-	31		36
032	HANNOVER	-	2	-	-	1	-	3	14	1	-	1	-	16		19
033	LUENEBURG	-	1	-	-	-	-	1	20	1	1	5	-	27		28
034	WESER-EMS							0						0		0
040	BREMEN	1	2	-	-	-	-	3	3	-	1	-	-	4		7
051	DUESSELDORF							0						0		0
053	KOELN							0						0		0
055	MUENSTER							0						0		0
057	DETMOLD							0	3	-	-	-	-	3		3
059	ARNSBERG							0						0		0
064	DARMSTADT	-	-	2	-	-	-	2	30	-	2	2	-	34		36
065	GIESSEN	-	-	-	-	1	-	1	15	-	-	2	-	17		18
066	KASSEL	-	1	2	-	2	-	5	11	1	1	1	-	14		19
071	KOBLENZ	-	1	-	-	-	-	1	2	-	-	-	-	2		3
072	TRIER							0	1	-	-	-	-	1		1
073	RHEINHESSEN-PFALZ	-	4	4	-	1	-	9	52	1	1	-	-	54		63
081	STUTTGART	1	-	-	-	-	-	1	18	3	3	1	-	25		26
082	KARLSRUHE							0	14	-	1	1	-	16		16
083	FREIBURG							0						0		0
084	TUEBINGEN	-	-	2	-	-	-	2	21	3	-	2	-	26		28
091	OBERBAYERN	-	1	1	-	-	-	2	36	1	-	-	-	37		39
092	NIEDERBAYERN							0	16	-	-	-	-	16		16
093	OBERPFALZ	1	-	-	-	-	1	2	9	-	-	-	-	9		11

DEU 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		
094	OBERFRANKEN							0	12	-	1	-	-	13		13
095	MITTELFRANKEN							0	2	-	-	-	-	2		2
096	UNTERFRANKEN							0	4	-	1	-	-	5		5
097	SCHWABEN	-	1	1	1	1	-	4	55	-	1	2	-	58		62
100	SAARLAND	-	-	1	-	-	-	1	11	-	-	-	-	11		12
110	BERLIN	1	4	-	1	-	-	6	29	-	2	-	-	31		37
121	ROSTOCK	1	1	1	-	1	-	4	32	-	-	1	-	33		37
122	SCHWERIN	2	1	-	-	-	-	3	23	-	3	2	-	28		31
123	NEUBRANDENBURG	6	3	-	-	1	-	10	40	-	2	-	-	42		52
131	POTSDAM	7	5	-	-	-	-	12	72	-	1	-	1	74		86
132	FRANKFURT	6	4	-	-	-	-	10	48	-	-	3	1	52		62
133	COTTBUS	2	3	-	-	-	-	5	24	-	1	1	-	26		31
141	MAGDEBURG	8	6	2	2	-	-	18	60	-	-	1	-	61		79
142	HALLE	2	1	-	-	-	-	3	54	1	2	-	-	57		60
151	ERFURT	6	6	-	-	1	-	13	54	-	1	6	-	61		74
152	GERA	2	1	-	-	1	-	4	42	-	1	1	-	44		48
153	SUHL	1	1	-	-	-	-	2	10	-	-	-	-	10		12
161	DRESDEN	3	4	-	-	-	-	7	58	-	4	2	-	64		71
162	LEIPZIG	-	2	-	1	-	-	3	26	-	-	3	-	29		32
163	CHEMNITZ	2	4	1	-	4	1	12	39	-	-	1	-	40		52
TOTAL		54	61	18	6	14	2	155	988	13	33	39	2	1075	0	1230
PER CENT		4.4	5.0	1.5	0.5	1.1	0.2	12.6	80.3	1.1	2.7	3.2	0.2	87.4	0.0	100.0

FRA F R A N C E — R A B I E S C A S E S — 1. 1.91 - 31. 3.91

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	AISNE	2	1	2	-	1	-	6	10	1	-	-	-	11		17
06	ALPES MARITIMES 1)							0						0	1	1
08	ARDENNES	3	-	2	-	1	-	6	25	-	-	-	-	25		31
10	AUBE							0	24	-	-	-	-	24		24
21	COTE D'OR	-	1	2	-	-	-	3	19	-	-	-	-	19		22
25	DOUBS	-	1	1	1	1	-	4	35	-	-	-	-	35		39
27	EURE	-	-	-	1	1	-	2	29	-	-	-	-	29		31
39	JURA	-	-	2	-	-	-	2	15	1	-	-	-	16		18
51	MARNE	-	3	-	-	1	-	4	39	-	2	-	-	41		45
52	MARNE (HAUTE)	1	2	3	1	7	-	14	12	-	-	-	-	12		26
54	MEURTHE ET MOSELLE	-	3	-	-	9	-	12	21	1	-	-	-	22		34
55	MEUSE	1	1	2	-	2	-	6	16	-	-	1	-	17		23
57	MOSELLE	-	1	-	1	5	-	7	30	-	-	-	-	30		37
58	NIEVRE							0	-	-	1	-	-	1		1
59	NORD							0	4	-	-	-	-	4		4
60	OISE							0	7	-	1	-	-	8		8
67	RHIN (BAS)	-	1	-	-	1	-	2	11	-	-	-	-	11		13
68	RHIN (HAUT)	-	1	-	-	-	-	1	19	-	-	1	-	20		21
70	SAONE (HAUTE)	-	-	1	2	4	-	7	37	-	2	-	-	39		46
71	SAONE ET LOIRE							0	4	-	-	-	-	4		4
76	SEINE MARITIME	2	1	9	1	1	-	14	51	-	1	-	-	52		66
77	SEINE ET MARNE							0	7	-	-	-	-	7		7
80	SOMME	3	-	1	-	-	-	4	23	2	-	-	-	25		29
88	VOSGES	1	-	-	-	5	-	6	50	1	-	-	-	51		57
89	YONNE	-	-	-	-	1	-	1	37	-	-	-	-	37		38
90	TERR.DE BELFORT							0	2	-	-	-	-	2		2
95	VAL D'OISE							0	12	-	-	-	-	12		12
TOTAL		13	16	25	7	40	0	101	539	6	7	2	0	554	1	656
PER CENT		2.0	2.4	3.8	1.1	6.1	0.0	15.4	82.2	0.9	1.1	0.3	0.0	84.5	0.2	100.0

1) IMPORTED FROM MEXICO

HUN HUNGARY — RABIES CASES — 1. 1.91 - 31. 3.91

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	3	-	-	-	-	3		4
02	BARANYA	1	4	-	-	-	-	5	22	-	-	-	-	22		27
03	BACS-KISKUN	5	2	2	-	-	-	9	7	-	-	-	-	7		16
04	BEKES	2	-	1	-	-	-	3	17	-	-	-	-	17		20
05	BORSOD-ABAUJ-ZEMPLEN	2	-	-	-	-	-	2	12	-	-	-	-	12		14
06	CSONGRAD	-	1	-	-	1	-	2	13	-	-	-	-	13		15
07	FEJER	1	2	-	-	-	-	3	19	-	-	-	-	19		22
08	GYOER-SOPRON	2	1	-	1	-	-	4	8	-	-	-	-	8		12
09	HAJDU-BIHAR	2	1	-	-	-	-	3	13	-	-	1	-	14		17
10	HEVES	2	-	-	-	-	-	2	8	-	-	-	-	8		10
11	KOMAROM	1	1	-	-	-	-	2	3	-	-	-	-	3		5
12	NOGRAD							0	12	-	-	-	-	12		12
13	PEST	2	1	1	1	1	-	6	25	-	-	1	-	26		32
14	SOMOGY	1	1	-	-	-	-	2	10	-	-	-	-	10		12
15	SZABOLCS-SZATMAR	-	-	1	-	1	-	2	13	-	-	-	-	13		15
16	SZOLNOK	1	1	1	-	-	-	3	7	-	-	-	-	7		10
17	TOLNA	4	1	-	-	-	1	6	14	-	-	1	-	15		21
18	VAS	1	1	1	-	-	-	3	34	-	-	-	-	34		37
19	VESZPREM	-	1	-	-	-	-	1	13	-	-	-	-	13		14
20	ZALA	-	-	1	-	-	-	1	9	-	-	-	-	9		10
TOTAL		27	19	8	2	3	1	60	262	0	0	3	0	265	0	325
PER CENT		8.3	5.8	2.5	0.6	0.9	0.3	18.5	80.6	0.0	0.0	0.9	0.0	81.5	0.0	100.0

POL POLAND — RABIES CASES — 1. 1.91 - 31. 3.91

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	WARSZAWA							0	4	-	-	-	-	4		4
05	BIALYSTOK							0	3	-	-	-	1	4		4
07	BIELSKO-BIALA	-	1	-	-	-	-	1	1	-	1	1	-	3		4
09	BYDGOSZCZ	-	2	-	-	-	-	2	15	-	-	-	5	20		22
11	CHELM							0	1	-	-	-	-	1		1
13	CIECHANOW	1	-	-	-	-	-	1	3	-	-	-	1	4		5
15	CZESTOCHOWA							0	2	-	-	-	-	2		2
17	ELBLAG							0	1	-	-	-	-	1		1
19	GDANSK	3	-	-	-	-	-	3	18	-	-	1	3	22		25
21	GORZOW							0	16	-	-	-	-	16		16
23	JELENIA GORA	-	1	-	-	-	-	1	7	-	-	-	-	7		8
25	KALISZ	-	1	-	-	-	-	1	4	-	-	1	-	5		6
27	KATOWICE							0	7	-	1	1	-	9		9
29	KIELCE	1	2	-	-	-	-	3	7	-	-	-	-	7		10
33	KOSZALIN	11	2	-	-	-	-	13	31	-	2	7	8	48		61
35	KRAKOW	1	-	-	-	-	-	1	3	-	-	-	-	3		4
39	LEGNICA	-	1	-	-	-	-	1	7	-	-	-	-	7		8
41	LESZNO							0	2	-	-	1	-	3		3
49	NOWY SACZ	2	1	-	-	-	-	3	4	-	1	-	1	6		9
51	OLSZTYN	1	-	4	-	-	-	5	10	1	-	3	7	21		26
53	OPOLE	-	1	2	-	-	-	3	31	-	1	1	-	33		36
57	PILA	2	1	-	-	-	-	3	7	-	-	-	1	8		11
59	PIOTRKOW TRYB	-	7	-	-	-	-	7	9	-	-	1	-	10		17
61	PLOCK							0	1	-	-	-	-	1		1
63	POZNAN	4	1	-	-	-	-	5	15	-	-	3	1	19		24
67	RADOM	3	-	-	-	-	-	3	5	-	1	-	-	6		9
69	RZESZOW	2	-	-	-	-	-	2	3	-	-	-	-	3		5
71	SIEDLCE	4	-	1	-	-	-	5	12	-	-	-	3	15		20
73	SIERADZ	-	1	-	-	-	-	1	1	-	-	-	-	1		2
75	SKIERNIEWICE	1	1	-	-	-	-	2	9	-	1	-	-	10		12
77	SLUPSK	5	-	-	-	-	-	5	27	-	1	5	7	40		45
79	SUWALKI	-	1	-	-	-	-	1	1	-	-	-	1	2		3
81	SZCZECIN	1	-	-	-	-	-	1	15	-	-	4	-	19		20
83	TARNOBRZEG	-	1	-	-	-	-	1	5	-	-	-	-	5		6
85	TARNOW							0	3	-	-	-	-	3		3
87	TORUN	1	-	3	-	-	-	4	3	-	-	1	4	8		12
89	WALBRZYCH	1	-	-	-	-	-	1	17	-	1	-	-	18		19
91	WLOCLAWEK	-	-	1	-	-	-	1						0		1
93	WROCLAW							0	17	-	-	-	-	17		17
95	ZAMOSC	-	1	1	-	-	-	2	3	-	-	-	-	3		5
97	ZIELONA GORA	-	1	-	-	-	-	1	9	-	1	1	-	11		12
TOTAL		44	27	12	0	0	0	83	339	1	11	31	43	425	0	508
PER CENT		8.7	5.3	2.4	0.0	0.0	0.0	16.3	66.7	0.2	2.2	6.1	8.5	83.7	0.0	100.0

RABIES CASES 1. 1.91 - 31. 3.91

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		
ROM	ROMANIA															
22	HUNEDOARA							0	-	-	1	-	-	1		1
25	MARAMURES	1	-	-	-	-	-	1	1	-	-	-	-	1		2
30	PRAHOVA	1	-	-	-	-	-	1						0		1
31	SATU-MARE							0	3	-	-	-	-	3		3
32	SALAJ	-	1	-	1	-	-	2	1	-	1	-	-	2		4
TOTAL		2	1	0	1	0	0	4	5	0	2	0	0	7	0	11
PER CENT		18.2	9.1	0.0	9.1	0.0	0.0	36.4	45.5	0.0	18.2	0.0	0.0	63.6	0.0	100.0
SWI	SWITZERLAND AND LIECHTENSTEIN															
06	BERN							0	4	-	-	-	-	4		4
12	NEUCHATEL							0	1	-	-	-	-	1		1
26	JURA							0	20	-	-	-	-	20		20
TOTAL		0	0	0	0	0	0	0	25	0	0	0	0	25	0	25
YUG	YUGOSLAVIA															
10	SR BOSNA I HERCEGOVIN	-	-	1	-	-	-	1	13	-	-	-	-	13		14
30	SR HRVATSKA	5	1	-	-	6	1	13	221	-	2	1	-	224		237
50	SR SLOVENIJA	-	4	-	-	-	-	4	62	1	1	-	-	64		68
60	SR SRBIJA							0	1	-	-	-	-	1		1
61	SAP VOJVODINA	2	3	-	-	-	-	5	15	-	-	-	-	15		20
TOTAL		7	8	1	0	6	1	23	312	1	3	1	0	317	0	340
PER CENT		2.1	2.4	0.3	0.0	1.8	0.3	6.8	91.8	0.3	0.9	0.3	0.0	93.2	0.0	100.0

SSR UNION OF SOVIET SOCIALIST REP.	RABIES CASES													1. 1.91 - 31. 3.91	
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 RSFSR	50	18	197	4	386	4	659	35	-	-	-	6	41		700
02 MOLDAVIAN SSR	3	-	5	1	-	-	9						0		9
03 UKRAINIAN SSR	42	52	57	1	4	1	157	69	-	-	-	8	77		234
04 BYELORUSSIAN SSR	7	3	4	4	-	-	18	17	-	-	-	4	21		39
05 LITHUANIAN SSR	6	3	9	-	-	-	18	2	-	-	-	-	2		20
06 LATVIAN SSR	12	8	1	-	-	-	21	24	-	-	-	8	32		53
07 ESTONIAN SSR	13	8	-	-	-	1	22	33	-	-	-	31	64		86
TOTAL	133	92	273	10	390	6	904	180	0	0	0	57	237	0	1141
PER CENT	11.7	8.1	23.9	0.9	34.2	0.5	79.2	15.8	0.0	0.0	0.0	5.0	20.8	0.0	100.0

TUR TURKEY — RABIES CASES — 1. 1.91 - 31. 3.91

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		
001	ADANA	1	1	-	-	-	-	2						0		2
002	ADIYAMAN	-	-	-	-	1	-	1						0		1
006	ANKARA	1	-	1	-	-	-	2						0		2
010	BALIKESIR	4	-	-	-	-	-	4						0		4
012	BINGOEL	1	-	-	-	-	-	1						0		1
014	BOLU	1	-	-	-	-	-	1						0		1
016	BURSA	13	-	-	-	-	-	13						0		13
017	CANAKKALE	1	-	-	-	-	-	1						0		1
018	CANKIRI	-	-	1	-	-	-	1						0		1
021	DIYARBAKIR	2	-	2	-	-	-	4						0		4
023	ELAZIG	1	-	1	-	-	-	2						0		2
027	GAZIANTEP	4	-	-	-	-	-	4						0		4
031	HATAY	3	-	-	-	-	-	3						0		3
033	ICEL	1	-	-	-	-	-	1						0		1
034	ISTANBUL	6	1	-	-	-	-	7						0		7
035	IZMIR	8	-	-	-	-	-	8						0		8
038	KAYSERI	1	-	-	-	-	-	1						0		1
040	KIRSEHIR	1	-	-	-	-	-	1						0		1
041	KOCAELI	1	-	-	-	-	-	1						0		1
042	KONYA	2	-	-	-	-	-	2						0		2
045	MANISA	4	-	-	-	-	-	4						0		4
046	KAHRAMAN MARAS	1	-	-	-	-	-	1						0		1
050	NEVSEHIR	2	-	-	-	-	-	2						0		2
051	NIGDE	3	-	2	-	-	-	5						0		5
052	ORDU	1	-	-	-	-	-	1						0		1
054	SAKARYA	6	-	1	-	-	-	7						0		7
057	SINOP	2	-	-	-	-	-	2						0		2
062	TUNCELI	1	-	-	-	-	-	1						0		1
063	URFA	1	-	-	-	-	1	2						0		2
066	YOZGAT	1	-	-	-	-	-	1						0		1
067	ZONGULDAK	2	-	1	-	-	-	3						0		3
TOTAL		76	2	9	0	1	1	89	0	0	0	0	0	0	0	89
PER CENT		85.4	2.2	10.1	0.0	1.1	1.1	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

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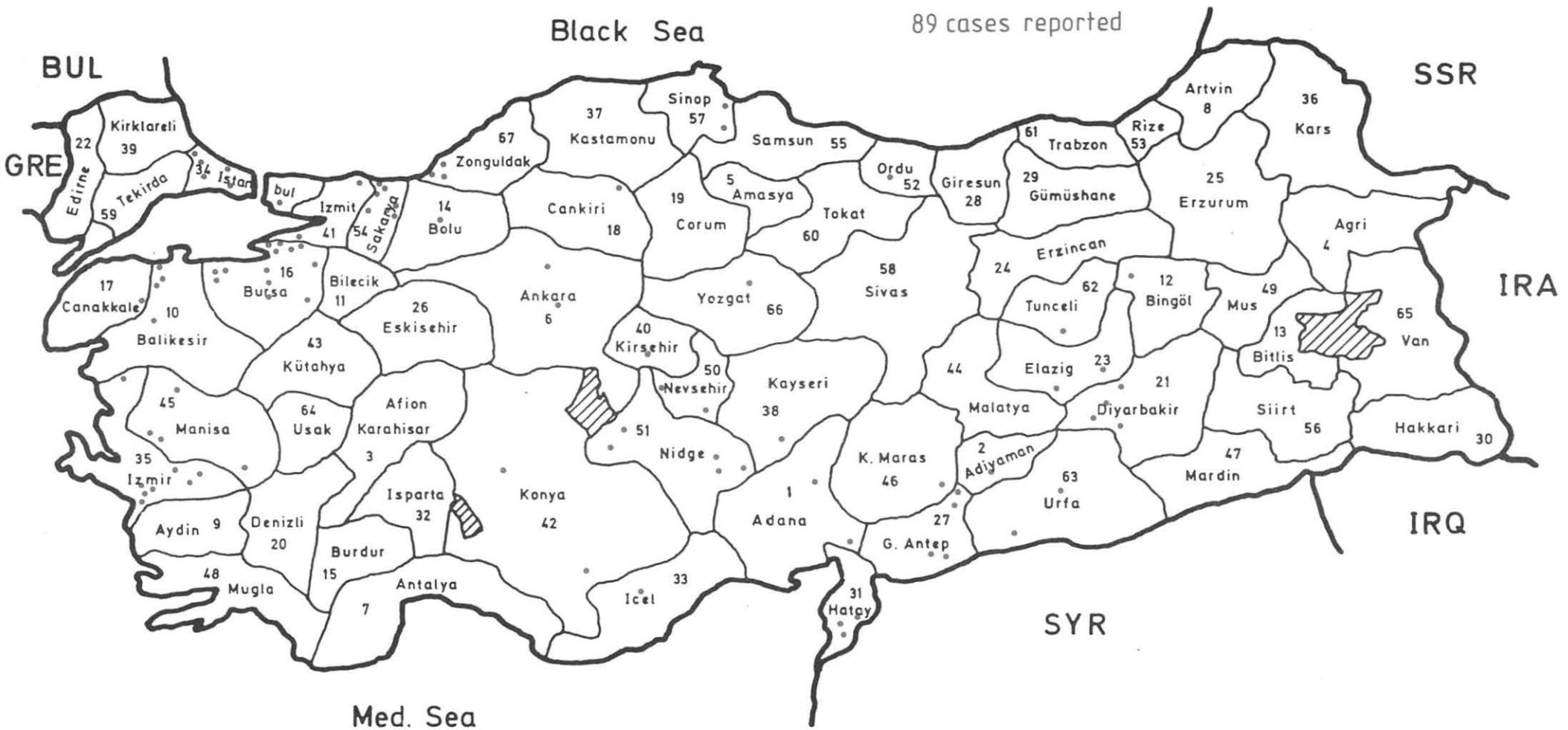

WHO Coll. Centre
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Rabies Cases Europe
1st Quarter 1991

5711 cases reported

ICE
(rabies free)

NOR
(mainland
rabies free)

FIN
(rabies free)

SWE
(rabies free)

DEN
(0)

IRE
(rabies free)

UNK
(rabies free)

NET
(0)

(1230)
DEU

BEL
(12)

(2)

FRA
(656)

(25)
SWI

(533)
CZE

POL
(508)

SSR
(1141)

(839)
AUT

HUN
(325)

ROM
(11)

ITA
(0)

YUG
(340)

BUL
(rabies free)

POR
(rabies free)

SPA
(0)

ALB
(no data)

GRE
(rabies free)

TUR
(89)

0 50 100 km

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