

# RABIES BULLETIN EUROPE

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## 1. Introduction

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

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

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

In the Miscellaneous SECTION under 4.1 an im-

ported human rabies case in France is described and under 4.2 a human case in California in the United States of America. Under 4.3 an account of the control efforts by oral immunization of foxes against rabies in the Czech Republic of Czechoslovakia is given. 4.4 presents an annual report on rabies in Latvia for the year 1991.

The rabies case data are

tabulated for the second quarter 1992 in SECTION 5.

SECTION 6 lists the official contributors to the BULLETIN.

The geographical distribution of rabies cases in Europe for the second quarter 1992 is shown on maps of Europe, the Russian Federation (European part only) and Turkey in the ANNEX.

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## 2. Summary of Rabies in Europe

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During "*This Quarter*", 2022 rabies cases were reported in Europe. Of these were 1445 in wild animals (71.5% of total), 576 in domestic animals and one human case.

Of the cases in wild animals 1247 were foxes, 30 raccoon dogs, 55 badgers, 46 stone martens, 16 pine martens, 2 polecats, 1 arctic fox, 38 roe deer, 1 red deer, 1 fallow deer, 2 wild boars, 4 bats and 2 other wild animals. Of the 576 domestic animals 209 were

dogs, 122 cats, 22 horses, 4 donkeys, 108 cattle, 102 sheep, 5 goats, 1 pig, 3 other domesticated animals. These data are summarized in TABLES 1 and 3.

TABLE 2 summarizes the quarters 1 and 2 of 1992.

There were four bat rabies cases, 2 in the Netherlands and 2 in Germany.

One imported human case was reported from France.

Rabies-free countries in Europe participating in the surveillance were Denmark,

Finland, Greece, Iceland, Ireland, Portugal, Sweden, the United Kingdom of Britain and Northern Ireland, and the mainlands of Norway and Spain.

There were no cases during "*This Quarter*" reported from Luxembourg, but the last indigenously acquired case (in terrestrial animals or bats) was recorded less than 2 years ago.

In some countries regular surveillance has not yet been established.

### 3. Rabies in Individual Countries

#### 3.1 Albania ALB

No data.

#### 3.2 Austria AUT

by Helmut Schnabl

Of 7346 samples examined during "*This Quarter*", 283 (3.85%) were diagnosed rabid. There has been a decrease of rabies cases in comparison with the previous quarter (586 cases) by 51.71%.

268 of the rabies cases during "*This Quarter*" occurred in wild animals (94.7% of total) and 15 in domestic animals (5.3%). The distribution of these animals was as follows:

Wild animals - 221 foxes, 25 badgers, 17 martens, 5 roe deer;

Domestic animals - 4 cattle, 3 sheep, 1 goat, 1 horse, 6 cats.

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

Burgenland: 6 cases in the Bezirke Güssing, Jennersdorf and Oberpullendorf.

Kärnten: 1 case in Bezirk Spital/Drau

Niederösterreich: 222 cases (78.4% of total) in the Bezirke Baden, Bruck/Leitha, Gänserndorf, Gmünd, Hollabrunn, Korneuburg, Lilienfeld, Melk,

Mistelbach, Mödling, Neukirchen, Scheibbs, St. Pölten, Wien-Umgebung and Wiener Neustadt.

Oberösterreich: 3 cases in the Bezirke Gmunden and Freistadt.

Salzburg: 14 cases in the Bezirke Hallein, Salzburg-Umgebung, St. Johann/Pongau and Tamsweg.

Steiermark: 18 cases in the Bezirke Graz, Graz-Umgebung, Liezen and Murau.

Tirol: 11 cases in the Bezirke Innsbruck-Land and Landeck.

Vorarlberg: 7 cases in the Bezirke Bludenz and Bregenz.

Wien: 1 case in the Bezirk Wien 21.

#### 3.3 Belgium BEL

by J. Tambour

During "*This Quarter*", 6 rabies cases were registered in 6 localities of the province of Luxembourg (3 foxes, 2 cattle and 1 equine).

All cases were situated in the Semois Valley in the very south of the country covering an area of 1600 km<sup>2</sup>.

The oral vaccination of foxes against rabies is going to be continued in infected areas and in a 30 km safety zone. The area vaccinated during spring 1992 was 9000 km<sup>2</sup>. 135.000 "Raboral" vaccine baits were distributed by a small airplane. Another vac-

ination campaign for the same area is planned for next autumn.

#### 3.4 Bulgaria BUL

No data.

#### 3.5 Belarus BYE

No data.

#### 3.6 Croatia CRO

by Mate Brstilo

During "*This Quarter*", a total of 245 brain samples of domestic and wild animals were examined for rabies, 130 samples less than during the 1st quarter 1992. Of these 99 were foxes and 146 other animals. Rabies was diagnosed in 20 foxes and 7 other animals.

Two cases in 2 dogs occurred in the municipalities Podravska Slatina and Vinkovci, three cases in cats in the municipalities Duga Resa, Split and Vrgorac, one case in a bovine in the municipality Solin.

One case was diagnosed in a deer in the municipality Valpovo.

The following points were noteworthy during "*This Quarter*":

- there were 130 samples less

to be examined compared to the previous quarter

- relatively many domestic animals were rabid
- rabies is present in all municipalities in Croatia except the municipality Dubrovnik and the island municipalities
- there was no human rabies case in Croatia
- rabies vaccination campaigns of dogs were carried out in the country.

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### 3.7 Czechoslovakia CZE

by Oldrich Matouch

During "*This Quarter*", the total of rabies cases confirmed in Czechoslovakia amounted to 146. Of these 133 cases were in wild animals (91.1%) and 13 in domestic animals (8.9%). Of the wild animals the disease was registered in 125 foxes, 4 badgers, 3 martens and 1 roe-deer and of the domestic animals in 5 dogs and 8 cats.

There were 190 cases less compared to the same period of 1991 (336 cases). The disease occurred most frequently in the region of South Moravia (36 cases), East Bohemia (26) and East Slovakia (19).

There was no case of human rabies reported.

A campaign of oral vaccination of foxes against rabies was carried out in May 1992. 350.000 of Tuebingen vaccine baits were distributed in West and South Bohemia covering an area of 23.300 km<sup>2</sup>.

For the first time, the

oral vaccination was extended into 15 districts of South Moravia. 245.000 doses of an indigenously manufactured vaccine by BIOVETA Ivanovice deriving from the SAD Bern strain were distributed on a territory of 16360 km<sup>2</sup> (see also 4.3 of this BULLETIN).

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### 3.8 Denmark DEN

by Eric Stougaard

The country remained rabies-free.

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### 3.9 Germany, Federal Republic DEU

by Winfried W. Müller and Thomas Müller

A total of 270 rabies cases was reported during "*This Quarter*". There was a reduction of cases compared to the previous quarter by 49.6% (67.4% for the six eastern federal states only, the city state Berlin included). In comparison with the second quarter 1991 (884 cases) there was a reduction of cases by 69.5% (85.6% for the forementioned six federal states).

Oral vaccination of foxes was practiced throughout the country. Five Bundesländer (federal states) in the eastern part of the country (Mecklenburg-Vorpommern, Brandenburg, Sachsen-Anhalt, Thüringen and Sachsen) were vaccinated completely (108.000 km<sup>2</sup>) during "*This Quarter*". The other Bundesländer followed specific plans according

to infected areas left.

Five out of 16 Bundesländer had no rabies: Nordrhein-Westfalen, Schleswig-Holstein (1 bat but no terrestrial animal), the city states Bremen and Hamburg, and Thüringen (for the first time). Three Bundesländer reported very few cases: Berlin (1 fox and 1 bat), Hessen (4 cases), Sachsen (4 cases). There were three very active foci: in the Regierungsbezirk (department) Lüneburg in Niedersachsen, the Regierungsbezirk Freiburg (infected during the previous quarter) in Baden-Württemberg and at the border of Bayern/Baden-Württemberg in the Regierungsbezirke Karlsruhe and Unterfranken.

Two bat rabies cases were reported, one in Schleswig-Holstein and one in Berlin.

Again, there was an obvious difference in regard to the distribution of two animals species involved in rabies, dogs and cats, in the eastern and the western half of the country. There were 12 dogs affected in the 6 eastern Bundesländer (13.6% of cases in the area looked at) compared to 2 dogs (1.1%) in the 10 other Bundesländer. 10 cats were registered in the 6 eastern Bundesländer (11.4% of cases in the area looked at) compared to 7 in the other 10 Bundesländer (3.8%).

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### 3.10 Estonia EST

by M. Nautras

During "*This Quarter*", 19 rabies cases were reported from Estonia, 11 cases

less than during the previous quarter. There were 12 cases in wild animals (6 foxes, 5 raccoon dogs, 1 badger) and 7 cases in domestic animals (3 dogs and 4 cats).

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**3.11 Finland FIN**  
by Bengt Westerling

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The country remained rabies-free.

Surveillance during 1st and 2nd Quarters of 1992

During the said quarters a total of 187 animals, including 12 dogs, 14 cats, 49 foxes, 90 raccoon dogs, 6 badgers, 2 wolves and 4 lynx were examined for rabies by immunofluorescence on brain tissue, all with negative result.

Until 15.04.1992, 64 raccoon dogs and 40 foxes from the 4000 km<sup>2</sup> large south-eastern border area vaccinated by air with Tübingen vaccine baits in early fall 1991 had been tested for antibodies against rabies. Seroversion was recorded in 67% of the raccoon dogs and 60% of the foxes.

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**3.12 France FRA**  
by Michel F.A. Aubert

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During "This Quarter", 261 rabies cases have been diagnosed in wild animals and 63 in domestic animals. Compared to the same time span last year this is a 37% decrease of rabies cases in wild animals and a 29% decrease in domestic animals. The decrease was genuine as it is supported by the fact that at the same time

the figure of samples examined was only 10% lower (second quarter 1991 2244, 2022 during "This Quarter").

The rabies cases made up 34% of all samples examined one year ago. During "This Quarter", there were only 24% rabies cases of all samples examined. These are no doubt encouraging results of the oral vaccination of foxes.

One fox rabies case occurred in the centre of France. Here it can be asked: was it an indigenous case or did the rabid animal move there, though the distance to the next infected area was very far? Of course, such events can jeopardize the success of oral vaccination.

There was one imported human rabies case in France during "This Quarter" (see as well this BULLETIN under 4.1).

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**3.13 Greece GRE**  
by A. Zambounis

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The country remained rabies-free.

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**3.14 Hungary HUN**  
by Balint Kerekes

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107 rabies cases were registered during "This Quarter", 23% less than during the second quarter 1991 (139 cases).

Foxes accounted for 71% of the total (2/91 = 75%), cats for 13.1% (2/91 = 8.6%) and dogs for 8.4% (2/91 = 5%).

The Komitate (provinces) mostly affected by the disease were:

Baranya (13 cases)	south of the country
Somogy (10 cases)	south-west
Vas (9 cases)	west
Fejer (9 cases)	central

There was no case in the capital Budapest.

Few cases were registered in the Komitate Nógrád (1), Heves (2), Jász-Nagykem-Szolnok (2) and Zala (2).

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**3.15 Iceland ICE**

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The country remained rabies-free.

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**3.16 Ireland IRE**

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The country remained rabies-free.

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**3.17 Italy ITA**  
by Santino Prosperi

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During "This Quarter", 4 cases of rabies have been diagnosed in Italy, all in foxes. The cases were reported in 2 provinces of Venezia Giulia Region (Trieste, Udine) previously infected. These cases were reported during the months of April and May.

Oral vaccination of foxes was carried out in spring 1992 in the provinces of Trieste, Gorizia and Udine.

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**3.18 Lithuania LTU**  
by Algis Dranseika

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During "This Quarter", 13 animal rabies cases

were diagnosed in 9 districts. Of these were 2 cattle, 4 cats, 6 dogs and 1 pine marten. Among the dogs and cats were strays.

During "*This Quarter*", more than 80.000 dogs and 2200 cats received preventive rabies vaccination.

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### 3.19 Luxembourg LUX

by Joseph Kremer

There was no case of rabies diagnosed during "*This Quarter*".

To reduce the danger of reintroducing rabies into the presently dense fox population, a bounty of 1000 Lux. Francs per fox is paid to hunters.

In September 1992 a further oral vaccination campaign is carried out covering the whole country. The French vaccine bait "Raboral" is going to be used.

Surveillance: 15 animals (5 foxes, 5 martens, 3 roe deer, 1 squirrel, 1 hare) were examined for rabies during "*This Quarter*" but revealed negative results.

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### 3.20 Latvia LVA

by Z. Andersons and J. Remeicans

During "*This Quarter*", there were 33 cases of rabies registered in Latvia. Of the total number of cases 19 (57.6%) were in wild animals - 13 foxes, 4 raccoon dogs, 1 pine marten, 1 badger. Of 14 domestic animals rabies was diagnosed in 6 dogs, 7 cats and 1 bovine (42.4% of total).

The districts registering the greatest number of cases during "*This Quarter*" were Ogre with 7, Liepāja with 5 and Saldus with 5 cases.

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### 3.21 Moldova MLD

No data.

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### 3.22 Netherlands NET

by J.H.M. Nieuwenhuijs

During "*This Quarter*", 2 bats were diagnosed rabid.

261 animals were investigated - 177 adult foxes, 21 young foxes, 2 dogs, 2 cats, 16 badgers, 1 cow, 1 squirrel, 39 local bats, 2 *Rousettus aegyptiacus* bats from the Blijdorp Zoo in Rotterdam.

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### 3.23 Norway NOR

by Gudbrand Bakken

One case of rabies in an arctic fox has been reported in Svalbard during "*This Quarter*".

The mainland of Norway remained rabies-free.

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### 3.24 Poland POL

by Jan Kolacz

A total of 367 rabies cases in animals was reported in Poland during "*This Quarter*", 278 cases less than during the previous quarter (645) and 11 cases less than during the second quarter 1991 (378).

The most affected provinces were in the western half of the country: Poznan and Bydgoszcz with 38 and 30 cases respectively, and Eblag and Gdansk with 24 cases each.

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### 3.25 Portugal POR

The country remained rabies-free.

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### 3.26 Romania ROM

by Horatiu Olaru

During "*This Quarter*", 14 rabies cases were diagnosed. 9 cases were in domestic animals (5 dogs, 2 cats, 2 cattle) and five in foxes.

The cases occurred in 8 provinces scattered throughout the country. In 33 provinces no cases were reported.

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### 3.27 Russia RUS (European part only)

by V.A. Vedernikov and  
S.A. Chernichenko

A total of 190 animal rabies cases were reported during "*This Quarter*", 148 cases less than during the previous quarter and 15 cases less than during the second quarter 1991.

92.6% of the total cases were in domestic animals - 40 dogs, 8 cats, 51 cattle, 4 horses, 71 sheep, 2 pigs - and 14 in wild animals - 12 foxes, 1 raccoon dog (Kaluga Region) and 1 wolf (Tver Region).

23 of the total of 46 districts were affected. The distribution of cases was similar as in the previous quarter. Nearly all cases reported occurred in the southern half of the country. The two most affected provinces were Astrakhan Region and the Republic of Kalmykiya with 47 and 21 cases respectively.

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### 3.28 Spain SPA

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by T. Maté Maté

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

There were 4 cases of dog rabies in Ceuta and Melilla (North Africa).

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### 3.29 Slovenia SVN

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by Armin Tomašič

During "*This Quarter*", 40 rabies cases were reported from Slovenia. There were 38 cases in wild animals (27 foxes, 8 badger, 1 stone marten, 1 wild boar, 1 roe deer), and 2 cases in dogs.

There was concentration of cases in the centre of the country. Districts reported 1 to 6 cases.

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### 3.30 Sweden SWE

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The country remained rabies-free.

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### 3.31 Switzerland SWI

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by Andreas Kappeler

During "*This Quarter*", the Swiss Rabies Center received 454 animals for examination. 42 (9.3%) of these were positive for rabies. In the previous quarter 39 cases had been recorded (4.5% of 870), whereas 29 of 457 (6.3%) were positive in the second quarter of 1991. 35 cases were observed in foxes, 5 in badgers, 1 in a roe deer, and 1 in a cat. More than half of the cases (22) were reported during the month of April. 41 cases were observed in the border zone towards France (1 to 20 km from border) with a distribution very similar to the previous quarter, i.e. a high concentration of cases in the vicinity of Basel. A single case in a fox was recorded outside the vaccination zone in the Swiss Midlands that had been rabies free for almost 6 years now. In the beginning of July, within 10 days of the case's occurrence, its immediate vicinity has been vaccinated. The vaccination zone will be further extended in autumn.

7 bats (1 *Pipistrellus pipistrellus*, 1 *P.nathusii*, 1 *Myotis daubentoni*, 1 *M.mystacinus*, 1 *Plecotus auritus*, 1 *Eptesicus serotinus*, 1 not yet determined) were examined - and found to be negative - during the reporting period.

No bite exposures of people to proven rabid animals were recorded. The number of people treated for non-bite exposures is not recorded.

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### 3.32 Turkey TUR

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During "*This Quarter*", 105 rabies cases were reported from Turkey, 38 cases more than during the previous quarter.

There were 104 cases in domestic animals (84 dogs, 3 cats, 11 cattle, 1 horse, 1 sheep, 1 goat, 3 donkeys) and only one case in a wild animal, a badger.

Cases were more concentrated in the western part of the country and in Gaziantep province at the border to Syria.

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### 3.33 Ukraine UKR

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No data.

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### 3.34 United Kingdom UNK

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by P.J. Thomas

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

#### Surveillance 1st and 2nd Quarter 1992

Reports of suspect rabies outside quarantine were investigated on 9 occasions during the period, involving 5 dogs, 2 cats, 1 rat and 1 fox. Biting, scratching or licking of humans was reported in 6 cases. MAFF Veterinary staff resolved 4 incidents at the initial clinical investigation but in 5 cases it was necessary to submit material to the Central Veterinary Laboratory, Weybridge for examination, in each case with negative results.



A further case was reported in a dog in quarantine but was cleared when found to be clinically normal after 15 days. 70 dogs and cats died whilst in quarantine and in every case material was submitted to the Central Veterinary Laboratory, in every case with negative results.

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

No cases of human rabies occurred during the period.

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### 3.35 Yugoslavia YUG

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by Dušan Jakovljević

24 rabies cases were reported during "*This Quarter*", 11 in domestic animals (2 dogs, 2 cats, 7 sheep) and 13 in foxes. 13 cases were reported from Vojvodine, 9 cases from Serbia and 1 case each from Bosnia and Hercegovina and Montenegro.

### Editors note:

In the previous issue of the BULLETIN - 1/92 - the rabies data for Yugoslavia were recorded as fourth quarter 1991 by mistake. In fact the data were for the first quarter 1992. There are tables presented in this issue for the first quarter 1992 and "*This Quarter*".

- The editors apologize.

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## 4. MISCELLANEOUS ARTICLES

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### 4.1 A Case of Imported Human Rabies in France

by P. Sureau, M. Herzog and H. Bourhy  
National Reference Center for Rabies, Rabies Unit,  
Pasteur Institute, Paris, France

On April 23, 1992, a 3 1/2 years old Algerian boy was transferred from a hospital in Batna, Algeria to an intensive care unit at the Necker Hospital, Paris, France with suspicion of viral encephalitis of unknown origin. Onset of symptoms on April 15, including aerophobia and hydrophobia, had led to hospitalization on April 19 in Algeria. Pursued by a dog on March 17, the boy fell and presented a wound on his forehead. Witnesses denied any bite or licking by the dog and no rabies treatment was started. The boy died on May 9, twenty five days after the onset of symptoms and 17 days in the Necker intensive care

unit where he was under respiratory monitoring since April 30 when he fell into a coma. He had received external cardiac pacing after atrioventricular dissociation since May 4.

Rabies antibody detection in serum and cerebrospinal fluid (CSF) on April 24 was negative. A second serum sample on May 5 was positive by ELISA technique and the rapid fluorescent focus inhibition test (RFFIT). Daily controls afterwards showed raising antibody titers until death on May 9.

Two skin biopsies performed on May 5 and May 9 remained negative by FAT as well as two corneal smears

performed the same days.

CSF samples obtained on April 24 and 27 and on May 5 and 9 remained negative for rabies antigen detection by rapid rabies enzyme immuno diagnosis (RREID) test and for rabies virus isolation on neuroblastoma cells. The last sample was positive for rabies antibodies.

Daily saliva samples were obtained between May 5 and 9. The samples of May 7 and May 9 were positive by RREID on cell sediment.

Complete necropsy was not authorized by the family but a post mortem retro-orbital brain sample confirmed rabies diagnosis by FAT, isolation on

neuroblastoma cells, RREID and mouse inoculation test. Preliminary identification of the rabies strain by PCR was performed.

Mouse inoculation tests with saliva and CSF remained negative.

One hundred and forty three rabies treatments were

given to exposed hospital staff and family members in Paris due to the long period of nursing and hospital care before diagnosis and non protected handling of saliva and body samples by hospital laboratory staff.

Investigations in Khenchela, the hometown of the

little boy in Algeria, revealed that the dog which pursued him in March did not remain healthy as reported to the family but died (or was killed) shortly after the incident and is probably implicated in another rabies fatality in a child at the end of April 1992.

## 4.2 Human Case - California, United States, 1992

The following article was taken from the Morbidity and Mortality Weekly Report (MMWR) Series prepared by the Centers for Disease Control, U.S. Department of Health and Human Services, July 3, 1992, Vol. 41/No. 26:

On May 8, 1992, an 11-year-old boy died of rabies encephalitis in Fresno County, California. This was the 10th case of human rabies in the United States since 1980 known to be acquired outside the country and the first case reported in California since 1987. This report summarizes the investigation of the case.

On April 21, 1 day after he sustained a shoulder injury, the boy was evaluated at an outpatient clinic and treated with acetaminophen and codeine. On April 22, he refused to drink water with his medication; the next morning, he could not bathe because he was afraid of water. His hydrophobia and anxiety increased, and he was examined in another outpatient clinic; that evening he was evaluated in an emergency room, where he began hallucinating. Because of combativeness, excessive salivation, and respiratory distress, the patient required sedation, intubation, and ventilatory

assistance. A fever of 105.4 F (40.8 C) was recorded on April 24; computed tomography of the brain and cerebrospinal fluid (CSF) analysis were normal. He subsequently experienced two episodes of cardiac arrest and was successfully resuscitated. Because rabies had been considered in the differential diagnosis, on April 24, 1 dose (800 IU) of human rabies immune globulin (HRIG) and 1 mL of human diploid cell rabies vaccine (HDCV) were administered intramuscularly, and he was transferred to a pediatric hospital.

At the pediatric hospital, the patient was hemodynamically unstable, and studies were consistent with myocarditis. Carnitine and acyclovir were administered for cardiomyopathy and rabies encephalitis, respectively. The patient's neurologic condition worsened during the next 14 days; after evidence that brain and brainstem activity had

ceased, the patient was pronounced dead on May 8.

Serum specimens obtained before the administration of HRIG and HDCV were negative for rabies antibody at the California Department of Health Services' Viral and Rickettsial Disease Laboratory (VRDL). Although a skin biopsy obtained from the nape of the neck on April 24 was negative for rabies antigen by a direct fluorescent antibody (DFA) test at CDC, a skin biopsy taken on April 28 was positive. Antemortem tests for other causes of encephalitis were negative, and postmortem DFA tests on brain samples were positive for rabies antigen in the Fresno County Public Health Laboratory, the VRDL, and CDC. Characterization of the virus isolate from the patient by monoclonal antibody assay and nucleotide sequence analysis showed the virus to be similar to that found in dogs in Pakistan and India.

The patient was born in India and moved to the United States 2 years before onset of illness. He traveled to India in December 1991 and returned to the United States in February 1992. During that visit, he was bitten on the finger by a stray dog. A local pharmacist gave him a bandage to apply to the wound site. He did not receive proper wound care or rabies postexposure treatment and did not report the bite to his parents. No other family member who traveled to India with the patient had contact with the dog.

During April 8-10, the patient traveled to Tuolumne County in central California with his classmates and teacher for a camping trip. Extensive interviews with his teacher, friends, family members, and local animal-control officials did not reveal any exposure to a wild or domestic animal during this trip.

Based on extensive interviews and evaluation, three family members and 14 health-care workers from the two facilities where the patient was hospitalized were identified as having contact with potentially infectious material (e.g., saliva, CSF, or nerve tissue) from the patient. Rabies postexposure treatment was initiated for all 17 persons.

*Editorial Note:* Diagnosis of human rabies is difficult because of the nonspecific initial clinical presentation. This patient's hydrophobia, copious salivation, and hallucinations resulted in an early suspicion

of rabies even in the initial absence of a definite history of exposure to rabies. Early suspicion of rabies, as in this case, permits the rapid institution of isolation measures, therefore reducing the number of persons potentially exposed to the rabies virus and the overall costs of postexposure treatment.

Rabies should be considered in any case of encephalitis or myelitis of unknown etiology, even in the absence of an exposure history, especially in persons who have lived or traveled outside the United States. In the United States, state and local health departments should be consulted for assistance in reviewing the techniques for diagnosing rabies and treating any person potentially exposed to rabies. U.S. citizens requiring assistance outside the United States can contact a U.S. embassy or consulate.

The risk for rabies transmission to health-care workers caring for patients with rabies is low (1,2). Postexposure treatment is recommended after contact with human rabies only if a bite or nonbite exposure (e.g., contamination of abraded skin or mucous membranes with saliva, nerve tissue, urine sediments, or other potentially infectious material) can be documented. Persons who have been bitten by animals suspected or proven rabid should begin treatment within 24 hours. Because vaccine and HRIG administered after onset of disease is of no known benefit, postexposure

treatment for patients after onset of clinical rabies is not recommended.

In experimental studies, interferon alpha has offered protection against rabies virus only when administered before or shortly after virus challenge (3,4). Once clinical disease develops, the use of carnitine, acyclovir, or any other drug for rabies treatment is not recommended because there is no evidence that any pharmacologic intervention is effective for the treatment of human rabies.

This case emphasizes the importance of providing rabies preexposure prophylaxis to travelers who plan visits of more than 30 days to India or other countries where rabies is enzootic (5).

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### 4.3 Control of Fox Rabies by Oral Immunization in the Czech Republic

by O. Matouch and J. Jaroš

National Reference Laboratory for Rabies,  
Liberec, Czechoslovakia

#### Oral Immunization 1989-1992

The field trial of oral immunization of foxes was started in the Czech Republic in 1989. Project planning and organization was carried out in close cooperation with the WHO Collaborating Centre for Rabies Surveillance and Research in Tübingen.

The first application of oral rabies vaccine was practiced in parts of three districts - Klatovy, Domažlice, Tachov bordering with Germany. The treated belt along the border covered an area of 2133 km<sup>2</sup>.

The vaccine baits used were prepared in Tübingen, making use of an attenuated rabies strain (SAD B19) and a machine made bait. The "Bavarian model" was applied: hunters placed the vaccine baits manually. 15 vaccine baits per km<sup>2</sup> were distributed evenly.

During the spring campaign in 1989 the local hunters placed 32.000 vaccine baits.

The second campaign (autumn 1989) covered an area of 3307 km<sup>2</sup> and 29600 vaccine baits were distributed in the forementioned three districts.

The third campaign of oral vaccination was performed in spring 1990. Here 13 districts of West and South Bohemia 14520 km<sup>2</sup> were vaccinated with 217.800 vaccine baits.

The fourth and fifth campaigns (autumn 1990,

spring 1991) were carried out like the third one.

In autumn 1991, during the sixth campaign, 25 districts were vaccinated. The vaccination area involved in addition to the forementioned the North Bohemia region and the Rakovník and Beroun districts. An area of 23300 km<sup>2</sup> was vaccinated and 349.500 vaccine baits were distributed.

The latter area of 25 districts was treated again in spring 1992.

Also in 1992, a field trial was started in South Moravia with vaccine manufactured by BIOVETA Ivanovice making use of the SAD Bern strain. Altogether 595.000 vaccine baits were distributed in an area of 39660 km<sup>2</sup> in spring 1992.

Vaccination areas and development of rabies cases from 1989 to 1991 can be seen on page 13.

#### Results

Up to now the results of six campaigns were evaluated. Brain samples, serum and mandible were collected from foxes which were shot in the vaccination area to diagnose rabies, to titrate antibodies, to detect the tetracycline marker and to distinguish wildlife and vaccine virus.

More than 5000 animals from the vaccination area were examined for rabies dur-

ing 6 campaigns. Rabies was noticed in 362 foxes and in 33 animals of other species. No case of "vaccine" rabies was determined by monoclonal antibody characterization.

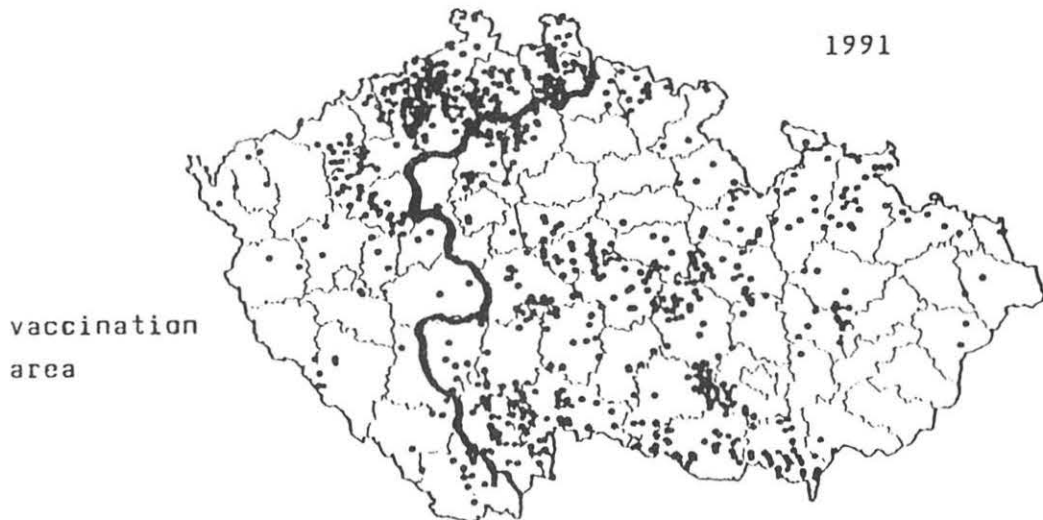
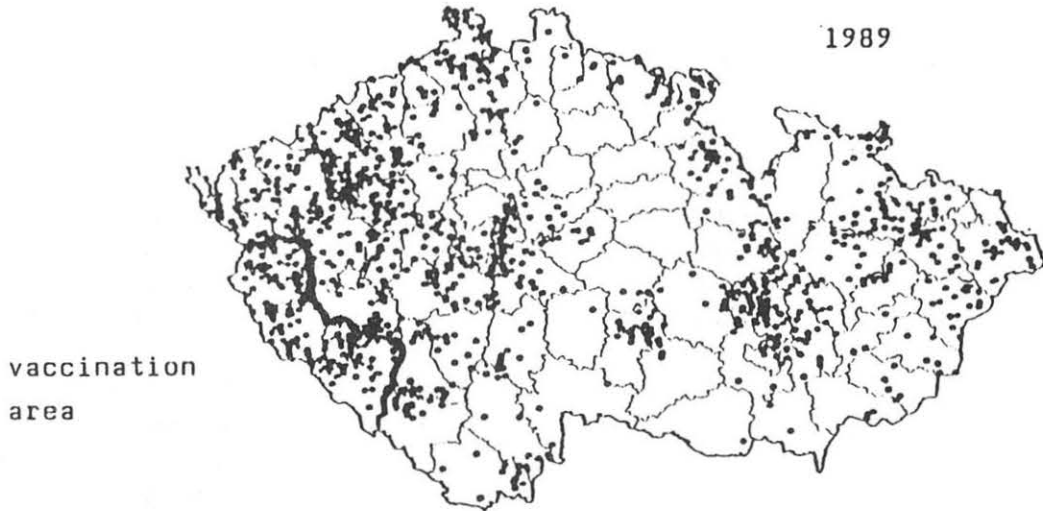
A total of 1937 foxes were examined for the tetracycline marker. An average of 70.8% bait uptake (it varied from 55% to 75%) was registered which compares well with results obtained in other countries.

The blood samples were sent to the WHO Rabies Centre in Tübingen (FRG) for antibody determination. There was a noticeable titer in 48% to 84% of the control animals.

The evaluation of the rabies incidence showed a considerable improvement of the epidemiological situation in the vaccination area. The rabies incidence decreased markedly since the beginning of the vaccination in 1989. In the treated area, there were 497 rabies cases registered in 1989 and 224 cases in 1990. In 1991 only 54 cases were registered and in the repeatedly vaccinated districts of Klatovy, Domažlice and Tachov only 8 cases.

These epidemiological data demonstrate the efficacy of the oral vaccination of foxes. It is intended to extend the vaccination areas during the next years toward the east.

RABIES CASES IN THE CZECH REPUBLIC 1989 - 1991



#### 4.4 Report on Rabies in Latvia for the Year 1991

by Z. Andersons

Latvian State Scientific Research Institute of Animal Husbandry and Veterinary Sciences  
and

J. Rimeicans

Director of Veterinary Department

During 1991, there were 283 rabies cases diagnosed in Latvia. Of these 172 cases were in wild animals (60.78%) and 111 in domestic animals (39.22%). Of the wild animals 113 were foxes, 45 raccoon dogs, 8 badgers, 2 lynx, 1 wolf, 1 pine marten and 2 others. Of the domestic animals 42 were dogs, 34 cats, 33 cattle and 2 sheep. There was no case of human rabies.

The four quarters compare as follows:

1st quarter - 53 cases  
2nd quarter - 70 cases  
3rd quarter - 64 cases  
4th quarter - 96 cases

Rabies occurred throughout the country. All 26 districts were affected. The districts registering the greatest number of cases during 1991 were Saldus with 35, Talsi with 19, Liepaja with 19 and Ogre with 17 cases.

The wildlife rabies epizootic of Latvia has the red fox and the raccoon dog as

reservoir and these are also the animals passing the infection frequently on to other animals (wild and domestic). Other wild carnivores, such as wolf, badger, marten, lynx and domestic carnivores like dog and cat may additionally be important to the reservoir species in the transmission of the disease especially to wild and domestic herbivores, but also to animals less frequently involved in rabies, and man.

TABLE 1

EUR		EUROPE		2/92		RABIES CASES							1. 4.92 - 30. 6.92				
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS					HUMAN CASES	TOTAL			
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER			OTHERS	TOTAL	
ALB	ALBANIA	**						0						0	0		
AUT	AUSTRIA		-	6	4	1	4	15	221	25	17	5	-	268	269		
BEL	BELGIUM		-	-	2	1	-	3	3	-	-	-	-	3	6		
BUL	BULGARIA	**						0						0	0		
BYE	BELARUS	**						0						0	0		
CRO	CROATIA		2	3	1	-	-	6	20	-	-	1	-	21	27		
CZE	CZECHOSLOVAKIA		5	8	-	-	-	13	125	4	3	1	-	133	146		
DEN	DENMARK	*						0						0	0		
DEU	FED.REP. OF GERMANY		14	17	10	3	5	49	194	3	14	7	3	221	270		
EST	ESTONIA		3	4	-	-	-	7	6	1	-	-	5	12	19		
FIN	FINLAND	*						0						0	0		
FRA	FRANCE	1)	9	17	10	10	16	63	247	4	9	1	-	261	325		
GRE	GREECE	*						0						0	0		
HUN	HUNGARY		9	14	2	1	2	28	76	-	3	-	-	79	107		
ICE	ICELAND	*						0						0	0		
IRE	IRELAND	*						0						0	0		
ITA	ITALY							0	4	-	-	-	-	4	4		
LTU	LITHUANIA		6	4	2	-	-	12	-	-	1	-	-	1	13		
LUX	LUXEMBOURG	*						0						0	0		
LVA	LATVIA		6	7	1	-	-	14	13	1	1	-	4	19	33		
MLD	MOLDOVA	**						0						0	0		
NET	NETHERLANDS							0	-	-	-	-	2	2	2		
NOR	NORWAY	2)						0	-	-	-	-	1	1	1		
POL	POLAND		18	26	12	1	-	59	246	3	15	23	21	308	367		
POR	PORTUGAL	*						0						0	0		
ROM	ROMANIA		5	2	2	-	-	9	5	-	-	-	-	5	14		
RUS	RUSSIAN FEDERATION		40	8	51	4	71	176	12	-	-	-	2	14	190		
SPA	SPAIN	3)	4	-	-	-	-	4						0	4		
SVN	SLOVENIA		2	-	-	-	-	2	27	8	1	1	1	38	40		
SWE	SWEDEN	*						0						0	0		
SWI	SWITZERLAND + LIECHT		-	1	-	-	-	1	35	5	-	1	-	41	42		
TUR	TURKEY		84	3	11	1	2	104	-	1	-	-	-	1	105		
UKR	UKRAINE	**						0						0	0		
UNK	UNITED KINGDOM	*						0						0	0		
YUG	YUGOSLAVIA		2	2	-	-	7	11	13	-	-	-	-	13	24		
TOTAL			209	122	108	22	107	8	576	1247	55	64	40	39	1445	1	2022
PER CENT			10.3	6.0	5.3	1.1	5.3	0.4	28.5	61.7	2.7	3.2	2.0	1.9	71.5	0.0	100.0

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

TABLE 2

EUR		EUROPE		1-2/92		RABIES CASES							1. 1.92 - 30.06.92		
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS					HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER			OTHERS
ALB	ALBANIA	**						0						0	0
AUT	AUSTRIA	**	2	10	10	1	13	36	721	50	32	30	-	833	869
BEL	BELGIUM	**	-	-	7	1	8	16	14	-	-	-	-	14	30
BUL	BULGARIA	**						0						0	0
BYE	BELARUS	**						0						0	0
CRO	CROATIA	**	4	4	2	-	-	10	71	-	-	1	2	74	84
CZE	CZECHOSLOVAKIA	**	9	19	-	-	-	28	472	8	9	3	1	493	521
DEN	DENMARK	*						0						0	0
DEU	FED.REP. OF GERMANY	*	50	41	19	4	24	139	590	8	34	31	4	667	806
EST	ESTONIA	*	11	6	1	-	-	18	12	2	-	-	17	31	49
FIN	FINLAND	*						0						0	0
FRA	FRANCE	1)	22	29	29	18	35	135	742	11	19	5	1	778	914
GRE	GREECE	*						0						0	0
HUN	HUNGARY	*	32	33	9	1	3	78	264	-	4	-	1	269	347
ICE	ICELAND	*						0						0	0
IRE	IRELAND	*						0						0	0
ITA	ITALY	*						0	14	1	-	-	-	15	15
LTU	LITHUANIA	*	11	5	6	-	1	24	3	-	2	-	-	5	29
LUX	LUXEMBOURG	*	-	-	1	-	-	1						0	1
LVA	LATVIA	*	12	11	3	-	-	26	22	1	3	-	16	42	68
MLD	MOLDOVA	**						0						0	0
NET	NETHERLANDS	**						0						0	0
NOR	NORWAY	2)						0					2	2	2
POL	POLAND	2)	59	69	26	3	-	159	695	8	29	41	80	853	1012
POR	PORTUGAL	*						0						0	0
ROM	ROMANIA	*	7	4	3	-	7	22	9	-	-	-	-	9	31
RUS	RUSSIAN FEDERATION	*	99	23	199	8	142	473	49	-	1	-	5	55	531
SPA	SPAIN	3)	9	-	-	-	-	9						0	9
SVN	SLOVENIA	*	5	1	-	-	-	6	106	8	7	5	1	127	133
SWE	SWEDEN	*						0						0	0
SWI	SWITZERLAND + LIECHT	*	-	2	-	-	-	2	70	8	-	1	-	79	81
TUR	TURKEY	*	139	3	21	1	4	171	-	1	-	-	-	1	172
UKR	UKRAINE	**						0						0	0
UNK	UNITED KINGDOM	*						0						0	0
YUG	YUGOSLAVIA	*	3	3	1	-	7	14	34	-	-	1	-	35	49
TOTAL			474	263	337	37	244	1367	3888	106	140	118	131	4383	5754
PER CENT			8.2	4.6	5.9	0.6	4.2	23.8	67.6	1.8	2.4	2.1	2.3	76.2	100.0

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



TABLE 3

EUR		EUROPE		2/92		RABIES CASES 'OTHER ANIMAL SPECIES'					1. 4.92 - 30. 6.92	
LOCATION		OTHER DOMESTIC ANIMALS				OTHER WILD ANIMALS					TOTAL	
CODE	NAME	OTH.DOM. CARNIVOR	DONKEY	PIG	OTHERS	ARCTIC FOX	RACCOON DOG	WILD BOAR	INSECTIVOR. BAT	OTHERS		
DEU	FED.REP. OF GERMANY	-	-	-	-	-	-	1	2	-	3	
EST	ESTONIA	-	-	-	-	-	5	-	-	-	5	
FRA	FRANCE	-	1	-	-	-	-	-	-	-	1	
LVA	LATVIA	-	-	-	-	-	4	-	-	-	4	
NET	NETHERLANDS	-	-	-	-	-	-	-	2	-	2	
NOR	NORWAY	-	-	-	-	1	-	-	-	-	1	
POL	POLAND	1	-	1	-	-	21	-	-	-	23	
RUS	RUSSIAN FEDERATION	-	-	-	2	-	-	-	-	2	4	
SVN	SLOVENIA	-	-	-	-	-	-	1	-	-	1	
TUR	TURKEY	-	3	-	-	-	-	-	-	-	3	
TOTAL		1	4	1	2	1	30	2	4	2	47	
PER CENT		2.1	8.5	2.1	4.3	2.1	63.8	4.3	8.5	4.3	100.0	

2nd Quarter: April - June 1992

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AUT AUSTRIA		RABIES CASES												1. 4.92 - 30. 6.92		
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
104	GUESSING							0	3	-	-	-	-	3		3
105	JENNERSDORF							0	2	-	-	-	-	2		2
108	OBERPULLENDORF							0	1	-	-	-	-	1		1
206	SPITTAL AN DER DRAU							0	1	-	-	-	-	1		1
306	BADEN	-	1	-	-	-	-	1	95	3	1	-	-	99		100
307	BRUCK AN DER LEITHA							0	1	-	-	-	-	1		1
308	GAENSERNDORF							0	4	-	-	-	-	4		4
309	GMUEND							0	-	-	1	-	-	1		1
310	HOLLABRUNN							0	10	-	1	-	-	11		11
312	KORNEUBURG	-	1	-	-	1	-	2	6	-	2	-	-	8		10
314	LILIENTELD							0	16	7	-	1	-	24		24
315	MELK							0	2	-	-	-	-	2		2
316	MISTELBACH							0	6	2	1	1	-	10		10
317	MOEDLING							0	1	-	-	-	-	1		1
318	NEUNKIRCHEN	-	-	4	-	-	-	4	6	1	-	-	-	7		11
319	SANKT POELTEN-LAND							0	2	1	-	-	-	3		3
320	SCHEIBBS	-	1	-	-	3	-	4	14	5	-	3	-	22		26
323	WIENER NEUSTADT-LAND							0	6	3	2	-	-	11		11
324	WIEN-LAND							0	6	-	1	-	-	7		7
406	FREISTADT							0	1	-	1	-	-	2		2
407	GMUNDEN							0	-	-	1	-	-	1		1
502	HALLEIN							0	3	-	-	-	-	3		3
503	SALZBURG-LAND	-	1	-	-	-	-	1	1	-	-	-	-	1		2
504	SANKT JOHANN IM PONG							0	1	-	-	-	-	1		1
505	TAMSWEG							0	7	1	-	-	-	8		8
601	GRAZ-STADT							0	-	-	1	-	-	1		1
606	GRAZ-LAND	-	1	-	1	-	-	2	1	1	3	-	-	5		7
612	LIEZEN							0	1	1	2	-	-	4		4
614	MURAU							0	6	-	-	-	-	6		6
703	INNSBRUCK-LAND							0	2	-	-	-	-	2		2
706	LANDECK							0	9	-	-	-	-	9		9
801	BLUDENZ							0	2	-	-	-	-	2		2
802	BREGENZ							0	5	-	-	-	-	5		5
901	WIEN	-	1	-	-	-	-	1								1
TOTAL		0	6	4	1	4	0	15	221	25	17	5	0	268	0	283
PER CENT		0.0	2.1	1.4	0.4	1.4	0.0	5.3	78.1	8.8	6.0	1.8	0.0	94.7	0.0	100.0

R A B I E S   C A S E S																1. 4.92 - 30. 6.92	
LOCATION		D O M E S T I C   A N I M A L S						W I L D   A N I M A L S						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
<b>BEL</b>																<b>B E L G I U M</b>	
LX	LUXEMBOURG	-	-	2	1	-	-	3	3	-	-	-	-	3		6	
<b>TOTAL</b>		0	0	2	1	0	0	3	3	0	0	0	0	3	0	6	
<b>CRO</b>																<b>C R O A T I A</b>	
007	BUZET							0	1	-	-	-	-	1		1	
020	DUGA RESA	-	1	-	-	-	-	1	4	-	-	-	-	4		5	
032	IVANEC							0	1	-	-	-	-	1		1	
043	KRAPINA	1	-	-	-	-	-	1						0		1	
050	MAKARSKA							0	1	-	-	-	-	1		1	
052	NASICE							0	2	-	-	-	-	2		2	
068	PODRAVSKA SLATINA							0	1	-	-	-	-	1		1	
077	SISAK							0	1	-	-	-	-	1		1	
081	SOLIN	-	-	1	-	-	-	1						0		1	
082	SPLIT	-	1	-	-	-	-	1	1	-	-	-	-	1		2	
086	VALPOVO							0	-	-	-	1	-	1		1	
087	VARAZDIN							0	3	-	-	-	-	3		3	
088	VINKOVCI	1	-	-	-	-	-	1						0		1	
089	VIROVITICA							0	1	-	-	-	-	1		1	
095	VRGORAC	-	1	-	-	-	-	1						0		1	
102	GRAD ZAGREB							0	4	-	-	-	-	4		4	
<b>TOTAL</b>		2	3	1	0	0	0	6	20	0	0	1	0	21	0	27	
<b>PER CENT</b>		7.4	11.1	3.7	0.0	0.0	0.0	22.2	74.1	0.0	0.0	3.7	0.0	77.8	0.0	100.0	

DEU		FEDERAL REPUBLIC OF GERMANY						R A B I E S   C A S E S						1. 4.92 - 30. 6.92		
LOCATION		D O M E S T I C   A N I M A L S						W I L D   A N I M A L S						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
010	SCHLESWIG-HOLSTEIN							0	-	-	-	-	1	1		1
020	HAMBURG							0						0		0
031	BRAUNSCHWEIG	-	-	1	-	1	-	2	4	-	1	1	-	6		6
032	HANNOVER							0	5	-	-	-	-	5		5
033	LUENEBURG	1	-	1	-	-	-	2	20	-	-	-	-	20		22
034	WESER-EMS							0						0		0
040	BREMEN							0						0		0
051	DUESSELDORF							0						0		0
053	KOELN							0						0		0
055	MUENSTER							0						0		0
057	DETMOLD							0						0		0
059	ARNSBERG							0						0		0
064	DARMSTADT							0	3	-	-	1	-	4		4
065	GIESSEN							0						0		0
066	KASSEL							0						0		0
071	KOBLENZ	-	-	2	-	1	-	3	12	-	-	-	-	12		15
072	TRIER	1	2	-	-	-	-	3	3	-	-	-	-	3		6
073	RHEINHESSEN-PFALZ							0						0		0
081	STUTT GART							0	3	1	-	-	-	4		4
082	KARLSRUHE	-	-	-	-	1	-	1	16	-	2	-	-	18		19
083	FREIBURG	-		-	-	-	-	1	33	1	2	-	-	36		37
084	TUEBINGEN		1					0	8	-	-	2	-	10		10
091	OBERBAYERN							0	6	-	-	-	-	6		6
092	NIEDERBAYERN							0						0		0
093	OBERPFALZ							0						0		0

DEU CONTINUED																
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		
094	OBERFRANKEN							0	1	-	-	-	-	1		1
095	MITTELFANKEN							0	2	-	-	-	-	2		2
096	UNTERFRANKEN	-	1	2	-	2	-	5	11	-	-	2	1	14		19
097	SCHWABEN	-	1	1	1	-	-	3	10	-	2	-	-	12		15
100	SAARLAND	-	2	-	-	-	-	2	4	-	1	1	-	6		8
110	BERLIN							0	1	-	-	-	1	2		2
121	POTSDAM	-	1	-	-	-	-	1	10	-	1	-	-	11		12
122	FRANKFURT	1	-	-	-	-	-	1	4	-	-	-	-	4		5
123	COTTBUS							0	-	-	1	-	-	1		1
131	ROSTOCK	1	2	-	-	-	-	3	5	-	-	-	-	5		8
132	SCHWERIN	3	2	1	-	-	-	6	1	1	-	-	-	2		8
133	NEUBRANDENBURG	4	1	1	1	-	-	7	8	-	2	-	-	10		17
141	DRESDEN	-	1	-	-	-	-	1	1	-	-	-	-	1		2
142	LEIPZIG							0						0		0
143	CHEMNITZ	-	1	-	-	-	-	1	1	-	-	-	-	1		2
151	MAGDEBURG	2	1	1	1	-	-	5	10	-	1	-	-	11		16
152	HALLE	1	1	-	-	-	-	2	12	-	1	-	-	13		15
161	ERFURT							0						0		0
162	GERA							0						0		0
163	SUHL							0						0		0
TOTAL		14	17	10	3	5	0	49	194	3	14	7	3	221	0	270
PER CENT		5.2	6.3	3.7	1.1	1.9	0.0	18.1	71.9	1.1	5.2	2.6	1.1	81.9	0.0	100.0

2nd Quarter: April - June 1992

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CZE		CZECHOSLOVAKIA											RABIES CASES			1. 4.92 - 30. 6.92	
LOCATION CODE	NAME	DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
00	DISTRICT OF PRAGUE							0							0		0
01	CENTRAL BOHEMIA							0	6	-	-	-	-	6		6	
02	SOUTH BOHEMIA	1	-	-	-	-	-	1	17	-	-	-	-	17		18	
03	WEST BOHEMIA							0	1	-	-	-	-	1		1	
04	NORTH BOHEMIA							0	13	1	1	-	-	15		15	
05	EAST BOHEMIA	1	2	-	-	-	-	3	21	2	-	-	-	23		26	
06	SOUTH MORAVIA	1	-	-	-	-	-	1	33	-	2	-	-	35		36	
07	NORTH MORAVIA							0	5	-	-	-	-	5		5	
0	CZECH REPUBLIC	3	2	-	-	-	-	5	96	3	3	-	-	102		107	
10	DISTRICT OF BRATISLAV							0						0		0	
11	WEST SLOVAKIA	-	3	-	-	-	-	3	8	-	-	1	-	9		12	
12	CENTRAL SLOVAKIA	-	1	-	-	-	-	1	7	-	-	-	-	7		8	
13	EAST SLOVAKIA	2	2	-	-	-	-	4	14	1	-	-	-	15		19	
1	SLOVAK REPUBLIC	2	6	-	-	-	-	8	29	1	-	1	-	31		39	
TOTAL		5	8	0	0	0	0	13	125	4	3	1	0	133	0	146	
PER CENT		3.4	5.5	0.0	0.0	0.0	0.0	8.9	85.6	2.7	2.1	0.7	0.0	91.1	0.0	100.0	

EST		ESTONIA											RABIES CASES				1. 4.92 - 30. 6.92	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL			
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL		
ALAT	ALATSKIVI							0	1	-	-	-	-	1		1		
ANTS	Antsla	-	1	-	-	-	-	1						0		1		
HALI	Halinga							0	-	-	-	-	1	1		1		
HALJ	Haljala							0	-	-	-	-	1	1		1		
HANI	Hanila	1	-	-	-	-	-	1						0		1		
J\RI	J\rimaa							0	1	-	-	-	-	1		1		
KARU	Karula							0	-	-	-	-	1	1		1		
KIVI	Kivisli	-	1	-	-	-	-	1						0		1		
KOHI	Kohila							0	-	1	-	-	-	1		1		
LDHT	Ldhte							0	-	-	-	-	1	1		1		
MDO	Mdo	-	1	-	-	-	-	1						0		1		
MVNI	Mvniste	1	-	-	-	-	-	1						0		1		
ORIS	Orissaare							0	1	-	-	-	-	1		1		
SANG	Sangaste	1	-	-	-	-	-	1						0		1		
T\RI	Ti ri							0	1	-	-	-	-	1		1		
VIIR	Viiratsi							0	1	-	-	-	-	1		1		
VDIK	Vdike-Maarja							0	-	-	-	-	1	1		1		
VDDG	Vddgvere							0	1	-	-	-	-	1		1		
VSRU	Vsru	-	1	-	-	-	-	1						0		1		
TOTAL		3	4	0	0	0	0	7	6	1	0	0	5	12	0	19		
PER CENT		15.8	21.1	0.0	0.0	0.0	0.0	36.8	31.6	5.3	0.0	0.0	26.3	63.2	0.0	100.0		

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FRA FRANCE		RABIES CASES												1. 4.92 - 30. 6.92	
LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS		
02 AISNE	-	1	-	-	-	-	1	-	-	-	-	-	0	-	1
08 ARDENNES	-	-	-	1	-	-	1	2	1	-	-	-	3	-	4
10 AUBE	1	1	-	-	-	-	2	6	-	-	-	-	6	-	8
18 CHER	-	-	-	-	-	-	0	1	-	-	-	-	1	-	1
21 COTE D'OR	-	-	-	1	-	-	1	10	-	-	-	-	10	-	11
25 DOUBS	1	-	-	-	4	-	5	13	-	-	-	-	13	-	18
51 MARNE	-	-	-	-	-	-	0	7	-	-	-	-	7	-	7
52 MARNE (HAUTE)	-	-	3	-	3	-	6	17	-	2	-	-	19	-	25
54 MEURTHE ET MOSELLE	2	3	5	-	-	-	10	25	-	2	-	-	27	-	37
55 MEUSE	1	3	1	2	3	-	10	20	-	-	-	-	20	-	30
57 MOSELLE	-	1	-	-	-	-	1	19	-	-	-	-	19	-	20
60 OISE	-	-	-	-	-	-	0	2	-	-	-	-	2	-	2
67 RHIN (BAS)	-	1	-	-	-	-	1	9	1	3	-	-	13	-	14
68 RHIN (HAUT)	-	3	-	3	1	-	7	45	1	-	1	-	47	-	54
70 SAONE (HAUTE)	2	-	1	3	3	-	9	28	-	1	-	-	29	-	38
75 PARIS	-	-	-	-	-	-	0	-	-	-	-	-	0	1	1
76 SEINE MARITIME	-	1	-	-	-	-	1	1	-	-	-	-	1	-	2
88 VOSGES	2	3	-	-	2	1	8	18	1	1	-	-	20	-	28
90 TERR.DE BELFORT	-	-	-	-	-	-	0	21	-	-	-	-	21	-	21
91 ESSONNE	-	-	-	-	-	-	0	1	-	-	-	-	1	-	1
95 VAL D'OISE	-	-	-	-	-	-	0	2	-	-	-	-	2	-	2
TOTAL	9	17	10	10	16	1	63	247	4	9	1	0	261	1	325
PER CENT	2.8	5.2	3.1	3.1	4.9	0.3	19.4	76.0	1.2	2.8	0.3	0.0	80.3	0.3	100.0



HUN HUNGARY		RABIES CASES												1. 4.92 - 30. 6.92		
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
02	BARANYA	-	-	-	-	1	-	0	13	-	-	-	-	13		13
03	BACS-KISKUN	-	-	-	-	1	-	1	2	-	-	-	-	2		3
04	BEKES	1	-	-	-	-	-	1	2	-	1	-	-	3		4
05	BORSOD-ABAUJ-ZEMPLEN	-	1	-	-	-	-	1	3	-	-	-	-	3		4
06	CSONGRAD	-	1	-	-	-	-	1	7	-	-	-	-	7		8
07	FEJER	2	-	-	-	-	-	2	7	-	-	-	-	7		9
08	GYOER-SOPRON	-	1	-	-	-	-	1	1	-	-	-	-	1		2
09	HAJDU-BIHAR	2	1	-	-	-	-	3	3	-	-	-	-	3		6
10	HEVES	1	-	-	-	-	-	1	1	-	-	-	-	1		2
11	KOMAROM	-	1	-	-	-	-	1	4	-	-	-	-	4		5
12	NOGRAD	-	1	-	-	-	-	1	-	-	-	-	-	0		1
13	PEST	-	-	-	1	-	-	1	4	-	1	-	-	5		6
14	SOMOgy	1	1	-	-	1	-	3	6	-	1	-	-	7		10
15	SZABOLCS-SZATMAR	-	3	-	-	-	-	3	3	-	-	-	-	3		6
16	SZOLNOK	1	-	-	-	-	-	1	1	-	-	-	-	1		2
17	TOLNA	1	4	2	-	-	-	7	1	-	-	-	-	1		8
18	VAS	-	-	-	-	-	-	0	9	-	-	-	-	9		9
19	VESZPREM	-	-	-	-	-	-	0	7	-	-	-	-	7		7
20	ZALA	-	-	-	-	-	-	0	2	-	-	-	-	2		2
TOTAL		9	14	2	1	2	0	28	76	0	3	0	0	79	0	107
PER CENT		8.4	13.1	1.9	0.9	1.9	0.0	26.2	71.0	0.0	2.8	0.0	0.0	73.8	0.0	100.0

2nd Quarter: April - June 1992

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RABIES CASES															1. 4.92 - 30. 6.92	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
ITA ITALY																
33	UDINE							0	3	-	-	-	-	3		3
34	TRIESTE E GORIZIA							0	1	-	-	-	-	1		1
TOTAL		0	0	0	0	0	0	0	4	0	0	0	0	4	0	4
LTU LITHUANIA																
41	Viniaus	1	1	-	-	-	-	2						0		2
62	Moletu	1	-	-	-	-	-	1						0		1
67	Pasvalio							0	-	-	1	-	-	1		1
73	Rokiskio			1	-	-	-	1						0		1
75	Skuodo		1	-	-	-	-	1						0		1
78	Telsiu		1	1	-	-	-	2						0		2
81	Ukmerges	2	-	-	-	-	-	2						0		2
85	Salcininku	1	-	-	-	-	-	1						0		1
88	Silutes	1	1	-	-	-	-	2						0		2
TOTAL		6	4	2	0	0	0	12	0	0	1	0	0	1	0	13
PER CENT		46.2	30.8	15.4	0.0	0.0	0.0	92.3	0.0	0.0	7.7	0.0	0.0	7.7	0.0	100.0

LVA

LATVIA

## RABIES CASES

1. 4.92 - 30. 6.92

LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
02	Aluksne							0	2	-	-	-	1	3		3
05	Cesis							0	2	-	-	-	1	3		3
09	Jekabpils	1	-	-	-	-	-	1						0		1
11	Kraslava	-	1	-	-	-	-	1						0		1
12	Kuldiga	-	1	-	-	-	-	1	1	-	-	-	-	1		2
13	Liepaja	2	1	-	-	-	-	3	1	-	-	-	1	2		5
16	Madona							0	-	1	-	-	-	1		1
17	Ogre	1	1	-	-	-	-	2	5	-	-	-	-	5		7
18	Preiļi	1	-	-	-	-	-	1	-	-	1	-	-	1		2
21	Saldus	1	2	1	-	-	-	4	1	-	-	-	-	1		5
24	Valka							0	1	-	-	-	-	1		1
25	Valmiera	-	1	-	-	-	-	1						0		1
26	Ventspils							0	-	-	-	-	1	1		1
TOTAL		6	7	1	0	0	0	14	13	1	1	0	4	19	0	33
PER CENT		18.2	21.2	3.0	0.0	0.0	0.0	42.4	39.4	3.0	3.0	0.0	12.1	57.6	0.0	100.0

2nd Quarter: April - June 1992

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R A B I E S   C A S E S															1. 4.92 - 30. 6.92	
LOCATION		D O M E S T I C   A N I M A L S						W I L D   A N I M A L S						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
NET      N E T H E R L A N D S																
08	OVERIJSEL							0	-	-	-	-	1	1		1
10	ZUID-HOLLAND							0	-	-	-	-	1	1		1
TOTAL		0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
NOR      N O R W A Y																
99	ISLAND OF SVALBARD							0	-	-	-	-	1	1		1
TOTAL		0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
ROM      R O M A N I A																
01	ALBA							0	2	-	-	-	-	2		2
10	BUZAU	1	-	-	-	-	-	1						0		1
19	GIURGIU	1	-	-	-	-	-	1						0		1
20	GORJ	-	-	1	-	-	-	1	3	-	-	-	-	3		4
21	HARGHITA	1	-	-	-	-	-	1						0		1
22	HUNEDOARA	-	1	-	-	-	-	1						0		1
25	MARAMURES	1	1	-	-	-	-	2						0		2
36	TIMIS	1	-	1	-	-	-	2						0		2
TOTAL		5	2	2	0	0	0	9	5	0	0	0	0	5	0	14
PER CENT		35.7	14.3	14.3	0.0	0.0	0.0	64.3	35.7	0.0	0.0	0.0	0.0	35.7	0.0	100.0

RUS		RUSSIAN FEDERATION											R A B I E S C A S E S				1. 4.92 - 30. 6.92	
LOCATION		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL			
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL		
08	Pskov Region	2	-	-	-	-	-	2	-	-	-	-	-	0	2			
12	Tver Region	-	-	-	-	-	-	0	-	-	-	-	1	1	1			
13	Kaluga Region	-	-	-	1	-	-	1	1	-	-	-	1	2	3			
15	Moscow Region	-	-	-	-	-	-	0	2	-	-	-	-	2	2			
16	Oryol Region	2	-	1	-	-	-	3	-	-	-	-	-	0	3			
18	Smolensk Region	-	-	-	-	-	-	0	1	-	-	-	-	1	1			
19	Tula Region	-	-	-	-	-	-	0	1	-	-	-	-	1	1			
26	Belgorod Region	5	1	5	-	-	-	11	-	-	-	-	-	0	11			
27	Voronezh Region	1	-	9	1	1	2	14	-	-	-	-	-	0	14			
28	Kursk Region	6	2	1	-	-	-	9	1	-	-	-	-	1	10			
31	Astrakhan Region	-	-	3	-	41	-	44	3	-	-	-	-	3	47			
32	Volgograd Region	5	-	8	-	2	-	15	-	-	-	-	-	0	15			
33	Samara Region	-	-	1	-	-	-	1	-	-	-	-	-	0	1			
34	Penza Region	3	1	-	-	-	-	4	1	-	-	-	-	1	5			
35	Saratov Region	5	1	2	-	-	-	8	-	-	-	-	-	0	8			
37	Republic of Kalmykiya	-	-	1	-	20	-	21	-	-	-	-	-	0	21			
38	Republic of Tatarstan	-	-	2	-	-	-	2	-	-	-	-	-	0	2			
39	Krasnodar Territory	3	-	1	-	-	-	4	-	-	-	-	-	0	4			
40	Stavropol Territory	1	1	4	-	7	-	13	-	-	-	-	-	0	13			
41	Rostov Region	1	-	5	-	-	-	6	-	-	-	-	-	0	6			
42	Orenburg Region	4	2	5	1	-	-	12	2	-	-	-	-	2	14			
44	Republic of Bashkorto	2	-	1	1	-	-	4	-	-	-	-	-	0	4			
46	Kaliningrad Region	-	-	2	-	-	-	2	-	-	-	-	-	0	2			
TOTAL		40	8	51	4	71	2	176	12	0	0	0	2	14	0	190		
PER CENT		21.1	4.2	26.8	2.1	37.4	1.1	92.6	6.3	0.0	0.0	0.0	1.1	7.4	0.0	100.0		

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POL		POLAND												RABIES CASES			1. 4.92 - 30. 6.92	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL			
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL		
01	WARSZAWA	1	-	-	-	-	-	1	3	-	-	-	-	3		4		
03	BIALA PODLASKA	-	-	-	-	-	-	0	2	-	-	-	-	2		2		
05	BIALYSTOK	-	-	-	-	-	-	0	2	-	-	-	-	2		2		
09	BYDGOSZCZ	-	-	2	-	-	-	2	25	-	2	1	-	28		30		
11	CHELM	-	1	-	-	-	-	1	1	-	1	-	-	2		3		
13	CIECHANOW	-	1	-	-	-	-	1	4	-	-	-	-	4		5		
15	CZESTOCHOWA	-	1	-	-	-	-	1	1	-	-	-	-	1		2		
17	ELBLAG	2	2	-	1	-	-	5	12	-	1	-	6	19		24		
19	GDANSK	2	-	2	-	-	-	4	14	-	-	1	5	20		24		
21	GORZOW	1	2	1	-	-	-	4	10	-	-	-	-	10		14		
23	JELENIA GORA	1	2	-	-	-	-	3	6	-	-	1	-	7		10		
25	KALISZ	1	1	-	-	-	-	2	-	-	1	-	-	1		3		
27	KATOWICE	1	1	-	-	-	-	2	1	-	-	-	-	1		3		
29	KIELCE	-	-	-	-	-	-	0	1	-	-	-	-	1		1		
31	KONIN	-	1	-	-	-	-	1	7	-	1	-	-	8		9		
33	KOSZALIN	-	-	-	-	-	-	0	8	-	1	3	1	13		13		
37	KROSNO	-	1	3	-	-	-	4	6	-	1	-	-	7		11		
39	LEGNICA	-	-	-	-	-	-	0	2	-	-	-	-	2		2		
41	LESZNO	2	-	-	-	-	-	2	14	-	-	1	-	15		17		
43	LUBLIN	-	-	-	-	-	-	0	3	-	-	-	-	3		3		
47	LODZ	-	1	-	-	-	-	1	-	-	-	-	-	0		1		
49	NOWY SACZ	-	-	-	-	-	-	0	2	-	-	-	-	2		2		
51	OLSZTYN	2	-	-	-	-	-	2	1	-	-	1	3	5		7		
53	OPOLE	1	-	-	-	-	-	1	8	-	-	-	-	8		9		
55	OSTROLEKA	-	-	-	-	-	-	0	2	-	-	-	-	2		2		

## 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		
57 PILA	-	1	-	-	-	-	1	7	-	-	3	-	10		11
59 PIOTRKOW TRYB							0	1	-	1	-	-	2		2
61 PLOCK							0	1	-	-	-	-	1		1
63 POZNAK	3	-	1	-	-	-	4	27	-	1	6	-	34		38
65 PRZEMYSL							0	4	1	-	-	-	5		5
67 RADOM	-	2	-	-	-	-	2	1	-	-	-	-	1		3
69 RZESZOW	-	4	-	-	-	-	4	7	-	-	2	-	9		13
71 SIEDLCE							0	2	-	-	-	1	3		3
73 SIERADZ							0	4	-	-	-	-	4		4
75 SKIERNIEWICE	-	1	-	-	-	-	1	2	-	-	-	-	2		3
77 SLUPSK	-	-	-	-	-	1	1	4	1	-	3	2	10		11
79 SUWALKI	-	1	2	-	-	-	3	2	-	-	-	3	5		8
81 SZCZECIN							0	12	-	-	-	-	12		12
83 TARNOBRZEG							0	3	-	1	-	-	4		4
85 TARNOW	-	1	-	-	-	-	1	1	-	-	-	-	1		2
87 TORUN	-	-	1	-	-	1	2	1	-	-	-	-	1		3
89 WALBRZYCH	-	1	-	-	-	-	1	11	-	-	-	-	11		12
93 WROCLAW							0	7	1	-	-	-	8		8
95 ZAMOSC							0	2	-	1	-	-	3		3
97 ZIELONA GORA	1	1	-	-	-	-	2	12	-	2	1	-	15		17
TOTAL	18	26	12	1	0	2	59	246	3	15	23	21	308	0	367
PER CENT	4.9	7.1	3.3	0.3	0.0	0.5	16.1	67.0	0.8	4.1	6.3	5.7	83.9	0.0	100.0

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RABIES CASES																1. 4.92 - 30. 6.92	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL			
<b>SPA</b>																<b>S P A I N</b>	
51	CEUTA (NORTH AFRICA)	2	-	-	-	-	-	2						0		2	
52	MELILLA (NORTH AFRICA)	2	-	-	-	-	-	2						0		2	
<b>TOTAL</b>		<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	
<b>SWI</b>																<b>SWITZERLAND AND LIECHTENSTEIN</b>	
05	BASEL-LAND							0	16	4	-	1	-	21		21	
06	BERN							0	4	-	-	-	-	4		4	
17	SOLOTHURN	-	1	-	-	-	-	1	4	1	-	-	-	5		6	
26	JURA							0	11	-	-	-	-	11		11	
<b>TOTAL</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>35</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>42</b>	
<b>PER CENT</b>		<b>0.0</b>	<b>2.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.4</b>	<b>83.3</b>	<b>11.9</b>	<b>0.0</b>	<b>2.4</b>	<b>0.0</b>	<b>97.6</b>	<b>0.0</b>	<b>100.0</b>	



SVN

SLOVENIA

RABIES CASES

1. 4.92 - 30. 6.92

LOCATION CODE NAME	DOMESTIC ANIMALS							WILD ANIMALS					HUMAN CASES	TOTAL	
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
04 CERKNICA	2	-	-	-	-	-	2	1	-	-	-	-	1		3
09 GROSUPLJE							0	1	-	-	-	-	1		1
11 IDRIJA							0	1	-	-	-	-	1		1
19 KRSKO							0	1	-	-	-	-	1		1
23 LITIJA							0	1	1	-	1	-	3		3
24 LJUBLJANA BEZIGRAD							0	1	-	-	-	-	1		1
28 LJUBLJANA VIC RUDNIK							0	4	1	-	-	1	6		6
30 LOGATEC							0	1	-	-	-	-	1		1
35 MOZIRJE							0	1	4	-	-	-	5		5
37 NOVA GORICA							0	2	-	-	-	-	2		2
41 POSTOJNA							0	2	-	-	-	-	2		2
42 PTUJ							0	1	-	-	-	-	1		1
45 RAVNE NA KOROSKEM							0	1	-	-	-	-	1		1
48 SEZANA							0	2	-	-	-	-	2		2
52 SENTJUR PRI CELJU							0	1	-	-	-	-	1		1
55 TOLMIN							0	-	1	-	-	-	1		1
56 TRBOVLJE							0	1	-	-	-	-	1		1
57 TREBNJE							0	1	-	-	-	-	1		1
59 VELENJE							0	1	-	-	-	-	1		1
61 ZAGORJE OB SAVI							0	2	-	1	-	-	3		3
62 ZALEC							0	1	1	-	-	-	2		2
TOTAL	2	0	0	0	0	0	2	27	8	1	1	1	38	0	40
PER CENT	5.0	0.0	0.0	0.0	0.0	0.0	5.0	67.5	20.0	2.5	2.5	2.5	95.0	0.0	100.0

2nd Quarter: April - June 1992

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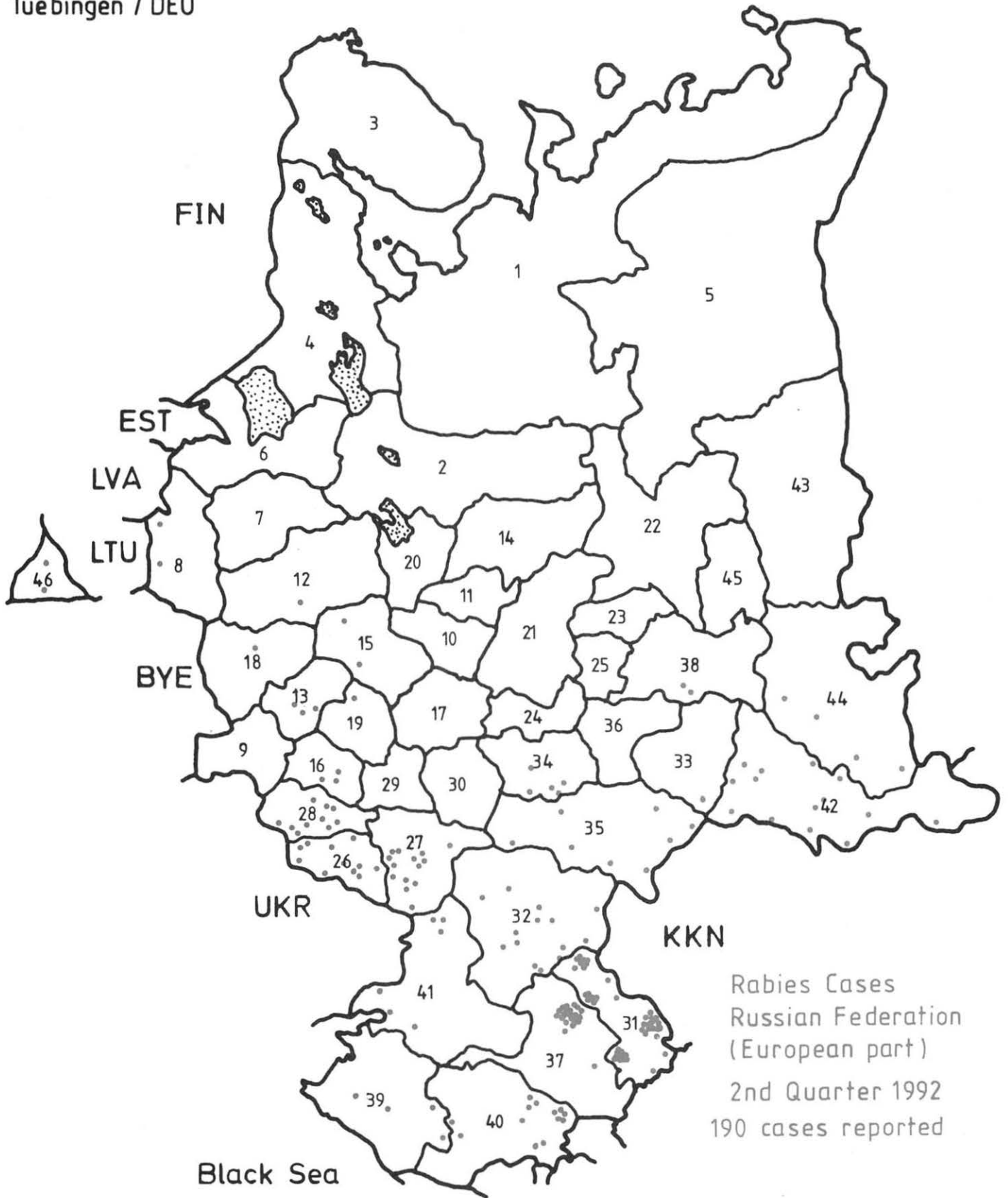
TUR		RABIES CASES											1. 4.92 - 30. 6.92			
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS					HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER			OTHERS	TOTAL
01	ADANA	4	-	-	-	-	-	4						0	4	
02	ADYAMAN	1	-	-	-	1	-	2						0	2	
03	AFYON	1	-	-	-	-	-	1						0	1	
09	AYDIN	1	-	2	-	-	-	3						0	3	
10	BALIKESIR	9	-	-	-	-	-	9						0	9	
11	BILECIK	1	-	-	-	-	-	1						0	1	
12	BINGOEL	1	-	-	-	-	-	1						0	1	
14	BOLU	2	-	-	-	-	-	2						0	2	
16	BURSA	5	1	-	-	-	-	6						0	6	
17	CANAKKALE	1	-	1	-	-	-	2						0	2	
18	CANKIRI	1	-	-	-	-	-	1						0	1	
27	GAZIANTEP	7	-	1	-	-	2	10						0	10	
33	ICEL	1	-	-	-	-	-	1						0	1	
34	ISTANBUL	5	-	-	-	1	-	6						0	6	
35	IZMIR	11	-	3	-	-	1	15						0	15	
40	KIRSEHIR	-	1	-	-	-	-	1						0	1	
42	KONYA	1	-	-	-	-	-	1						0	1	
45	MANISA	12	-	-	-	-	-	12						0	12	
46	KAHRAMANMARAS	5	-	-	-	-	-	5						0	5	
47	MARDIN	1	-	-	1	-	-	2						0	2	
54	SAKARYA	8	-	1	-	-	-	9						0	9	
55	SAMSUN	-	1	-	-	-	-	1						0	1	
57	SINOP	1	-	3	-	-	-	4						0	4	
63	SANLIURFA	4	-	-	-	-	-	4						0	4	
67	ZONGULDAK	1	-	-	-	-	-	1						0	1	
70	KARAMAN							0	-	1	-	-	-	1	1	
TOTAL		84	3	11	1	2	3	104	0	1	0	0	0	1	0	105
PER CENT		80.0	2.9	10.5	1.0	1.9	2.9	99.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	100.0

YUG		YUGOSLAVIA						RABIES CASES						1/92		1. 1.92 - 31. 3.92	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
10 SR	BOSNA I HERCEGOVIN	-	-	1	-	-	-	1	6	-	-	-	-	6		7	
60 SR	SRBIJA							0	2	-	-	-	-	2		2	
61 SAP	VOJVODINA	1	1	-	-	-	-	2	13	-	-	1	-	14		16	
TOTAL		1	1	1	0	0	0	3	21	0	0	1	0	22	0	25	
PER CENT		4.0	4.0	4.0	0.0	0.0	0.0	12.0	84.0	0.0	0.0	4.0	0.0	88.0	0.0	100.0	

YUG		YUGOSLAVIA						RABIES CASES						2/92		1. 4.92 - 30. 6.92	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
10 SR	BOSNA I HERCEGOVIN							0	1	-	-	-	-	1		1	
20 SR	CRNA GORA	-	-	-	-	1	-	1						0		1	
60 SR	SRBIJA	1	-	-	-	6	-	7	2	-	-	-	-	2		9	
61 SAP	VOJVODINA	1	2	-	-	-	-	3	10	-	-	-	-	10		13	
TOTAL		2	2	0	0	7	0	11	13	0	0	0	0	13	0	24	
PER CENT		8.3	8.3	0.0	0.0	29.2	0.0	45.8	54.2	0.0	0.0	0.0	0.0	54.2	0.0	100.0	

## 6. List of Contributors

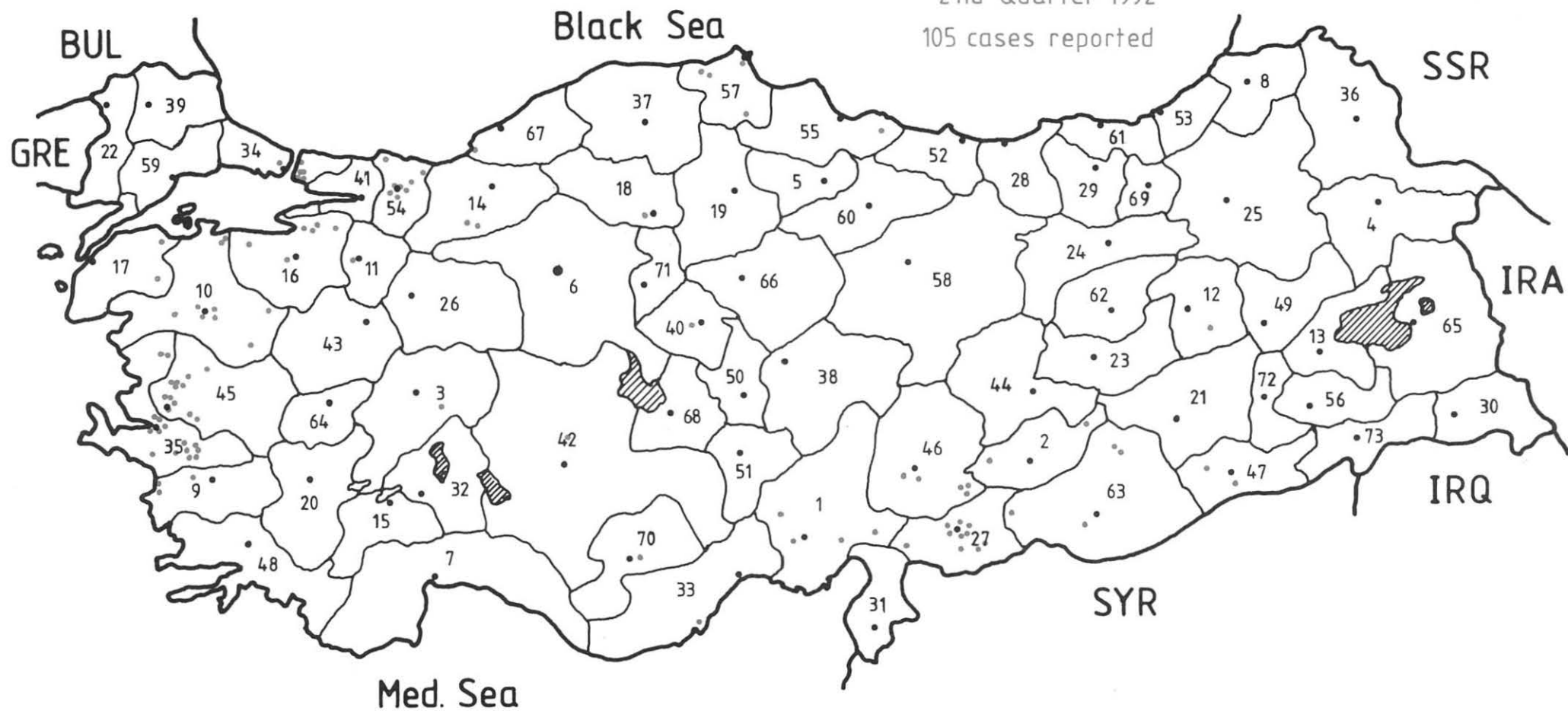
<b>Austria</b>	AUT	<b>Germany</b>	DEU	<b>Netherlands</b>	NET	<b>Slovenia</b>	SVN
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<b>Bulgaria</b>	BUL	<b>Greece</b>	GRE	Dr. G. Bakken			
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Dr. Saara Reinius				State Veterinary Service		Dr. D. Jakovljevic	
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WHO Collaborating Centre for Research and Management in Zoonoses (CNEVA) Nancy				WHO Collaborating Centre on Zoonoses			
				Central Research Institute of Epidemiology, Ministry of Public Health, Moscow			





WHO Coll. Centre  
Tuebingen / DEU

Rabies Cases Turkey  
2nd Quarter 1992  
105 cases reported



WHO Coll. Centre  
Tuebingen / DEU

ICE  
(rabies free)

Rabies Cases Europe  
2nd Quarter 1992  
2022 cases reported  
4 bat rabies cases included



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