# RABIES BULLETIN EUROPE - Vol. 9/No 1/1985

|    | CONTENTS   | Dago     |
|----|--|----------|
|    |  | Page     |
| 1. | INTRODUCTION   | 1        |
|    |  |          |
| 2. | RABIES IN EUROPE, 1ST QUARTER 1985   | 1        |
|    | 2.1 - 2.27 Situation in Individual Countries   | 1 - 6    |
|    |  |          |
| 3. | MISCELLANEOUS  | 7        |
|    | 3.1 Report on the Concertation Meeting on the Control<br>of Rabies in Europe - Strasbourg, January 3-4, 1985         | 7 - 10   |
|    | 3.2 Rabies in Canada - 1984  | 10 - 12  |
|    |  |          |
| 4. | RABIES CASE DATA   |          |
|    | 4.1 Table 1, Europe, 1st Quarter 1985  | 13       |
|    | 4.2 Table 2, Europe, Other Animal Species,   | 8011/160 |
|    | 1st Quarter 1985   | 14       |
|    | 4.3 Tables, European Countries in the 1st Quarter 1985   | 15 - 24  |
|    |  |          |
| 5. | LIST OF CONTRIBURS   | 25 - 26  |
|    |  |          |
| 6. | ANNEX 1: Map of Rabies Cases in Europe, 1st Quarter 1985<br>ANNEX 2: Map of Rabies Cases in Turkey, 1st Quarter 1985 |          |

The RABIES BULLETIN EUROPE is compiled and edited by the

WHO Collaborating Centre for Rabies Surveillance and Research

> Dr. L.G. Schneider, Chief Dr. W.W. Mueller, Ass.Chief K.-P. Hohnsbeen, Statistician

at the Federal Research Institute for Animal Virus Diseases

D 7400 TUEBINGEN, Postfach 1149 Federal Republic of Germany

The BULLETIN is sponsored by the WORLD HEALTH ORGANIZATION in Geneva, and the INTERNATIONAL OFFICE OF EPIZOOTICS in Paris.

The financial support of the WHO Centre by the BUNDESMINISTERIUM FUR JUGEND, FAMILIE UND GESUNDHEIT, Bonn-Bad Godesberg, is gratefully acknowledged.

## 1. INTRODUCTION

This BULLETIN describes the reported rabies cases in Europe for the first quarter 1985. The situation in general appears under 2., and in individual countries under 2.1 to 2.27.

Rabies data have not yet been received for this quarter for the European part of the Union of Soviet Socialist Republics (USSR) and Czechoslovakia (CZE).

A more detailed report is given on the outcome of the Concertation Meeting on Control of Rabies in Europe, held on January 3-4, 1985, in Strasbourg (France) in the miscellaneous section under 3.1. A review on rabies in Canada 1984 follows under 3.2.

The rabies case data are tabulated for the first quarter 1985 under 4.

The last part lists the official contributors to the BULLETIN.

The geographical distribution of cases in Europe of the first quarter 1985 is shown on the maps of Europe and Turkey in the Annex.

# 2. RABIES IN EUROPE, 1ST QUARTER 1985

During the first quarter 1985, 4520 cases of rabies were reported in Europe by the countries participating in the surveillance. These were 3664 cases in wild animals (81.1%) and 856 cases in domestic animals (18.9%). Of the cases in wild animals 3338 (73.8% of total) were foxes, 57 badgers, 75 other mustelids, 161 deer and 33 other and unspecified species. Of the 856 in domestic animals 333 were dogs (of which 246 (73.9%) were reported from Turkey), 190 cats, 199 cattle, 22 horses, 101 small ruminants and 11 other domestic animals. Table 2 of this BULLETIN lists 'other animal species', less frequently involved in rabies.

Rabies-free countries are: Bulgaria, Denmark, Finland, United Kingdom, Ireland, Iceland, Norway, the mainland of Spain and Sweden. There were no cases reported for this quarter from Greece, Portugal and the northern part of Africa belonging to Spain.

Individual country reports follow:

# 2.1 Rabies in Austria (AUT) by W. Krocza and E. Scharfen

During the first quarter 1985, 385 rabies cases were diagnosed in animals, namely 341 in foxes (88.6% of total), 32 (8.3%) in other wild animals and 12 (3.1%) in domestic animals (of these were 8 cases in cats, 2 in cattle and 2 in dogs). One notices an increase of cases compared to the previous quarter (277 cases) by ca. 39% and compared to the first quarter 1984 (401 cases) a decrease by ca. 4%.

The epizootic advances in the south of Austria from the Bundesland (federal province) Kärnten via Styria (the districts of Deutschlandsberg, Voitsberg, Graz/Umgebung, Weiz, Knittelfeld, Judenburg, Murau) into the Bundesland Salzburg (the districts of Tamsweg, St. Johann im Pongau,

Zell am See). In Tyrol rabies is scattered along the northern national border (the districts of Kufstein, Schwaz, Innsbruck-Land, Reutte). The Bundesland Vorarlberg too is affected all along the national border. In the federal provinces Lower and Upper Austria the disease occurs to the north of the river Danube in all districts of the Mühl-, Wald- and Weinviertel. There are isolated cases in the district of Oberpullendorf in the Bundesland Burgenland. Vienna and Lower and Upper Austria to the south of the river Danube are rabies-free at this time.

# 2.2 Rabies in Belgium (BEL) by R. Depierreux

During the first quarter 1985, 93 rabies cases were registered in 68 communities in 57 foxes, 20 cattle, 4 sheep, 1 goat, 1 dog, 5 cats, 1 roe deer, 1 mouse weasel, 1 mink, 1 ferret and 1 badger.

A drastic reduction of the total number of cases, compared to the previous quarter (177), can be noticed. The area covered by the disease though, has not become much smaller. The fact that in March the number of cases were widely scattered in this area and, although nothing remarkable had happened in the previous two months, does not lead to great optimism. It far more denotes the strong endemic character of the present epizootic.

# 2.3 Bulgaria (BUL)

The country remained rabies-free.

## 2.4 Rabies in Czechoslovakia (CZE)

Data not received before going to press.

## 2.5 Rabies in Germany, Democratic Republic (DDR)

During the first quarter 1985, 348 cases of rabies were registered. This is the lowest figure for a quarter since 1979. In comparison with the previous quarter (570 cases) the reduction of cases is noticed throughout the country, with the exception of the districts (Bezirke) of Erfurt, Magdeburg and Neubrandenburg where a slight increase of cases is reported.

## 2.6 Denmark (DEN)

The country remained rabies-free.

# 2.7 Rabies in Germany, Federal Republic (DEU)

A total of 1641 rabies cases were reported during the first quarter 1985, resulting in a reduction of 10.8% compared to the previous quarter (1839 cases). In comparison with the first quarter 1984 (2092 cases) there has been a reduction of 21.6%.

As the decrease prevails, there are only few areas with an increase. A concentration of cases are found in the Regierungsbezirke (departments) of Arnsberg and Kassel.

There are 13.8% of the total cases in domestic animals in comparison with 19% of the previous quarter, a reduction noticed during the winter due to the indoor-keeping of cattle (4/84 214 cattle = 11.6% of total and 1/85 89 cattle = 5.4%).

# 2.8 Finland (FIN)

The country remained rabies-free.

# 2.9 Rabies in France (FRA) by J. Blancou

579 rabies cases were reported during the first quarter 1985, 48 less than the previous quarter (a 7.7% diminution). 476 cases were registered in foxes (82.2% of total), 16 in other wild animals and 87 in domestic animals (11 dogs, 16 cats, 20 cattle, 32 small ruminants, 7 horses and 1 ferret).

The highest figures during this quarter were noted in the départements (departments) des Voges (57 cases), du Doubs (46 cases) and de l'Oise (45 cases).

The general tendency remains one of a stabilisation of the front, including the region around Paris where rabies made a major advance during 1984.

## 2.10 Rabies in Greece (GRE)

During the first quarter 1985, no case of rabies was reported.

## 2.11 United Kingdom (GBR)

The country remained rabies-free.

# 2.12 Rabies in Hungary (HUN) by L. Koltai

There were 361 rabies cases diagnosed in Hungary during the first quarter 1985. Compared to the first quarter 1984 (465 cases) this results in a 22.4% reduction. That is interesting, as rabies in Hungary experienced over the last 11 years a fairly constant cycle of three years and, for 1985 still a rising trend would have been expected. There was no change in the use of control methods.

During this quarter, there were more cases in deer, in the hilly and forest regions of Transdanubia, compared to the last year.

# 2.13 Iceland (ISL)

The country remained rabies-free.

# 2.14 Ireland (IRE)

The country remained rabies-free.

# 2.15 Rabies in Italy (ITA) by S. Prosperi

During the first quarter 1985, 49 cases of animal rabies were diagnosed, namely 45 foxes, 1 badger, 1 stone marten, 1 pine marten and 1 roe deer.

Twenty-five communities were infected for the first time. All in the province of Trento, comprising a total of 270 km<sup>2</sup>. At present, the disease is spreading in the area of Lake Garda.

One community bordering with the National Park of Stelvio (Martello-Bolzano) was reinfected.

# 2.16 Rabies in Luxembourg (LUX) by R. Frisch

The favourable development of rabies in the fourth quarter 1984 continued during the first quarter 1985, with only 4 cases in foxes and one case in a cow.

The cow, six years old, which was kept in-doors after the grazing season in November 1984, developed first signs of rabies on 23rd March this year. She had delivered a healthy calf in February.

Nevertheless, this case is again proof that occasionally the incubation period of rabies in cattle may exceed three months.

# 2.17 Rabies in the Netherlands (NET) by C.J. Vermeulen

During the first quarter of 1985, 7 foxes were diagnosed rabies positive in the Netherlands. All cases were located in the south-east part of the province of Limburg. Again, very close to the Belgian and German border.

## 2.18 Norway (NOR)

The country remained rabies-free.

# 2.19 Rabies in Poland (POL) by A. Badyoczek

During the first quarter 1985, 258 rabies cases were reported in Poland, of which 228 cases (88.4% of total) were in wild animals. Rabies occured in 34 of 49 districts. 15 districts in the central and eastern region of the country have been free of rabies, among them the districts Lodz, Skierniewice, Sieradz and Piotrkow Trybunalski, which have been rabies-free for many years. The greatest frequency of cases can be noticed in the western part of Poland, in the districts of Poznan, Wroclaw, and Gorzow.

With reference to particular animal species there were 69% of all cases in foxes, 12% in roe deer, 8% in cats, 2% in dogs and 2% as well in racoon dogs.

Fox rabies was reported in 29 districts with the highest frequency in Poznan (26 cases), Wroclaw (17 cases) and Jelenia Gora (15 cases).

# 2.20 Rabies in Portugal (POR)

No case of rabies was reported during the first quarter 1985.

# 2.21 Rabies in Romania (ROM)

During the first quarter 1985, 22 rabies cases were reported in Romania, 14 of these in the western half of the country, 8 in the north-eastern part. Eleven cases each were registered in domestic and wild animals.

# 2.22 Rabies in Spain (SPA)

There was no case reported from the African part of Spain.

The mainland of Spain remained rabies-free.

## 2.23 Sweden (SWE)

The country remained rabies-free.

# 2.24 Rabies in Switzerland and Liechtenstein (SWI and LIE) by A.I. Wandeler

During the 1st quarter of 1985, the Swiss rabies centre received 1056 animals for examination. 59 (5,6%) of these were positive for rabies, compared to 93 (7.6% of 1221) in the previous quarter, and 274 (18% of 1506) in the 1st quarter of 1984. Seventeen cases were in domestic animals, 35 in foxes, and 7 in other wildlife. An additional 26 foxes and 2 roe deer were diagnosed histologically in canton Vaud. They bring the total of proven rabies cases to 87 (110 in the previous quarter).

The majority of the diagnosed rabies cases originated in the Jura area in northwestern and westermost Switzerland. Most of the Alpine area and of the Swiss Midlands have become free from rabies. There were still a few scattered cases in the northeastern part of the country.

Two persons were bitten by rabid cats, and one by a rabid stonemarten, during the 1st quarter of this year.

# 2.25 Rabies in Turkey (TUR)

During the first quarter 1985, a total of 334 cases of rabies were reported in Turkey. Of these were 329 (98.5%) in domestic animals (246 dogs, 17 cats, 38 cattle, 20 small ruminants, 2 horses, 4 donkeys, 2 other domesticated herbivores) and only 5 in wild animals (2 wolves, 3 house mice).

Generally, the distribution of cases resembles the one of the previous quarter.

# 2.26 Rabies in Yugoslavia (YUG)

351 cases of rabies were reported in Yugoslavia during the first quarter 1985. 2/3 of all cases (233) occured in Croatia. Generally, the geographic distribution as well as the breakdown of the different animal species involved in rabies remain as in the previous quarter.

There is only one case in a dog in Serbia. The location of the case makes it difficult to judge if it is in connection with the fox rabies of the north or with the urban rabies of the south.

# 2.27 Rabies in the Union of the Soviet Socialist Republics (USSR)

Data not received before going to press.

## 3. MISCELLANEOUS

# 3.1 Report on the Concertation Meeting on the Control of Rabies in Europe - Strasbourg, January 3-4, 1985

This meeting was held under the auspices of the World Health Organization (Geneva) and the Office International des Epizooties (Paris) with the participation of the European collaborating Centres of WHO and the assistance of other national and international organizations and foundations.

The object of the meeting was to enable representatives of government services of each of the European countries concerned with rabies to compare their respective epidemiological situations, the control measures taken and regulations enforced, and the results and future application of these.

It also aimed to unify these measures by an agreed adoption of the most efficient ones and to coordinate their implementation on a European level. And then to define, if necessary, how to maintain this coordination and to integrate it with the strategies already laid down by the EEC, EC, FAO, OIE and WHO.

The meeting was attended by government representatives and scientists of 12 European countries concerned with the control of wildlife rabies, i.e. the reservoir of rabies in the fox population.

Prior to the meeting the WHO Collaborating Centre of Nancy, France, had sent out a questionnaire to 18 countries with questions on communication of epidemiological data on rabies, practiced methods on diagnosis, used vaccines, practiced vaccine potency tests, control methods, like the destruction of vector species, rabies legislation in force, research activities, to name the most important. The report on the replies to the questionnaire became the basis for six working groups to further discuss conditions to harmonize measures by retaining the most efficient ones.

During the first day, the twelve participating European countries gave a report on the particular rabies situation in their countries. Following these presentations, papers were given on the role of the various wild and domestic animal species in the spread of fox rabies, on sanitary control techniques, vaccines and vaccination of wild and domestic animals and prevention of rabies in man.

The second day was assigned for the working groups. The six special committees prepared reports including recommendations on the following subjects:

- Strengthening of Rabies Surveillance
- Prevention of Rabies in Man
- Rabies Control Legislation
- Control of Rabies in Domestic Animals
- Control of Rabies in Wildlife
- National Programme Development and Coordination of Research

The following is a summary of the reports presented by the participating governments:

# Epidemiology

Endemic rabies is present in Belgium, Switzerland, France, Luxembourg, the Federal Republic of Germany, Poland, Czechoslovakia and parts of Yugoslavia. The current epizootic in Europe originated from Poland in 1939. Denmark, Italy and the Netherlands suffer from rabies cases coming across their borders, but the rabies situation in those countries is not considered to be endemic, though in Italy, much will depend upon the success of current control strategies. There is an unusual situation in the middle and southern part of Yugoslavia where canine and vulpine rabies coexist. Great Britain is still free of rabies, but has developed contingency plans to deal with domestic animal and wildlife rabies, should it be introduced.

All the speakers identified the fundamental role of the fox as the main vector and reservoir of rabies. The importance and role of domestic animals is dependent on local conditions; in Denmark, for example, there are very few cases of cat rabies. France and Netherlands have identified cases of rabies in domestic animals of exotic origin.

# Sanitary Prophylaxis - Control of Fox Populations

Many methods of fox control have been used in Europe. Most speakers agreed that the gassing of fox dens was effective, but this method is not well accepted by the public. Belgium, Italy, Luxembourg, Netherlands, the Federal Republic of Germany and Switzerland have abandoned this method, but Czechoslovakia and Yugoslavia still use it. In Denmark, although gassing has proved to be highly successful in three successive epizootics, oral vaccination of foxes would be preferred in any future action required.

The fox is the only target species controlled by those methods. In Poland, dogs were also controlled and in Yugoslavia, wolves, rodents, stray dogs and cats. The method most generally used at the present time to control fox is shooting, assisted in France by the use of chloropicrin to evict foxes from their dens.

Throughout Europe, control measures are mainly carried out by hunters and game-keepers, but in Denmark, specially hired people were engaged, as would also be the case in Great Britain, should it be necessary. Most countries still encourage fox control by offering bounties. Only Switzerland and Czechoslovakia have attempted to make accurate estimations of the population density of foxes before or after control operations were carried out. In France, the rabies front has become stationary; this has coincided with a strategy to control foxes in a deep zone (as much as 200 km) ahead of the advancing frontal zone. In Belgium, Luxembourg and Switzerland, control measures have successfully reduced the incidence of rabies in foxes. In Czechoslovakia, good control has been achieved locally. As mentioned earlier, Denmark has succeeded in eradicating the disease on three separate occasions during the period 1964 to 1982.

## Oral Vaccination of Foxes

Although the representatives of Belgium, Denmark and Luxembourg are considering the use of this method, only Switzerland, the Federal Republic of Germany and Italy are using it at present. However, in these

three countries, oral vaccination is still only experimental and is not official policy. Before starting these operations, detailed investigations were undertaken in the field and in the laboratory on suitable baits, uptake of vaccine-loaded baits by foxes, on the possible effects of the vaccine on non-target species and the effective vaccine dose for foxes.

First laboratory experiments were made in 1973. The efficiency of this method has therefore been considered over a number of years. The results of the present large-scale field experiments are very satisfactory and a dramatic reduction of the zoonosis has been achieved in several areas. The vaccine has been used strategically in areas where natural barriers to the spread of rabies occur. Consequently, the combination of natural barriers and an immune barrier has proved to be effective.

Field experiments in the Federal Republic of Germany began two years ago. The trials are very promising. During this period, over 300,000 doses of vaccine were distributed over an area of about 10,000 km<sup>2</sup>.

# Medical Prophylaxis - Domestic Animal Immunization

Most countries use inactivated virus vaccines, but some, in addition, also use modified live virus vaccines as in Belgium, the Netherlands, Italy, Switzerland, Czechoslovakia and Yugoslavia. Various substrates and methods of inactivation are used. Polyvalent vaccines are forbidden in Belgium, Czechoslovakia, Yugoslavia as well as in Great Britain. Most countries use adjuvanted vaccines. In some countries, such as Switzerland, Luxembourg, Czechoslovakia and Yugoslavia, it is obligatory to immunize dogs. This immunization is strongly recommended in other countries and is compulsory for certain types of dogs (e.g. working dogs). The first inoculation has to be given between 3 and 6 months of age; further booster inoculations are given according to the type of vaccine used.

The vaccination of cats is encouraged in most countries, but is difficult to implement.

The vaccination of cattle is also encouraged in countries suffering from endemic rabies, but it is considered to be unnecessary in countries where the disease is only sporadic.

## Other Measures

Most participants described other methods ancillary to the main methods of rabies control. These include, informing the public adequately, the control of movements of animals across frontiers (e.g. United Kingdom), restriction of the movements of the animals, quarantine regulations, etc. In Switzerland, there is a rigorous control of dogs by a dog tax and a method of indentification of dogs enables annual vaccination to be verified.

## Conclusion

All speakers expressed their satisfaction of the control measures taken in their respective countries, but most also agreed that present measures were inadequate to control foxes and fox rabies in all

circumstances. Oral vaccination of foxes offers hope of success of wildlife rabies control in the future.

During the past years, classical methods of wildlife rabies control through reduction of the fox population have been supplemented and locally replaced by ecological approaches, such as habitat control and oral immunization of foxes, though such measures are still in the stage of field research.

Meanwhile, despite vigilance in each country, human infection still occurs. Thanks to effective and safe vaccines, those in high rabies-risk occupation can be protected and those exposed to infection can be successfully treated. Consequently, there has been only one case of rabies in man in fox rabies endemic areas within the last three years.

The report on the Concertation Meeting can be asked for from WHO, 1211 Geneva 27, Switzerland and OIE, 12, Rue de Prony, 75017 Paris, France.

# 3.2 Rabies in Canada - 1984

by D.J. Gregory

(Agriculture Canada, Food Production and Inspection Branch, Ottawa, Ontario).

Rabies continued to decline in Canada during 1984, but new peaks occurred in some areas of the province of Ontario supporting the "wave" pattern theory of rabies outbreaks. The fox again became the predominant wildlife reservoir of rabies in Canada, closely followed by the striped skunk. Rabies was diagnosed in a priest, but the disease was contacted by a dog bite received in the Dominican Republic. Monoclonal antibody determination on a positively rabid horse (in British Columbia) indicated a profile similar to the strains of bat rabies.

## Submission

Specimen submissions to the three federal laboratories carrying out rabies diagnosis were 11,761 down from the 1983 total of 13,117 submissions. Only 89 or 0.0075% of specimens submitted were unfit for diagnostic purposes.

## Positive Diagnoses

Domestic and wildlife specimens for 1984 positive for rabies are summarized in the table. Approximately 15% or 1:676 submissions proved to be positive for rabies. The following are points of interest:

- 1. The positive diagnosis of rabies in an otter.
- 2. The positive diagnosis of rabies in a priest.
- 3. The small percent of rabies in raccoons compared to the situation in the same species in the Eastern United States.
- 4. The large number of bat submissions 713 in Ontario, 206 in Alberta and 131 in British Columbia.

- 5. The number of positive foxes to skunks 712:549 in 1984 compared to 757:852 in 1983.
- 6. Positive diagnoses for the bovine exceeded that of the combined cat and dog total (149:127).
- 7. Cat diagnoses exceeded those of dogs (69:58).
- 8. Diagnosis by mouse inoculation following a negative FA test and human contact accounted for 9 of 1,695 positive diagnoses for rabies in domestic livestock and wildlife.

# Monoclonal Antibody Determinations

Using a panel of anti-nucleocapsid monoclonal antibodies (supplied by Drs. T. Wiktor, Wistar Institute, Philadelphia and J. Smith, C.D.C. Lawrenceville) isolates from rabid animals from various geographical areas in Canada can be grouped into two major antigenic groups according to geographic origin.

- The first group is found in the southern portion of the provinces of Manitoba, Saskatchewan and Alberta and has the same antigenic profile as that represented by isolates from skunks from the Central USA.
- 2. The second major group comprises isolates from Ontario, Quebec and the Northwest Territories. Within each group are some slight variants. Bat isolates appear to be grouped according to genus and geographical area. An isolate from a horse in British Columbia had the same profile as bats recovered from British Columbia, Alberta, Saskatchewan and Ontario.

| LOCATION         |     |     | I     | OMEST | TIC AN | IHALS |      |       |      |        |      |       |        | WILD  | ANIHA | LS  |        |         |        | 34    |     |       |
|------------------|-----|-----|-------|-------|--------|-------|------|-------|------|--------|------|-------|--------|-------|-------|-----|--------|---------|--------|-------|-----|-------|
| 1                | 900 | CRT | HORSE | P16   | CATTLE | SHEEP | GORT | TOTPL | FOX  | COYOTE | HOLF | OTTER | RACOON | SKUNK | DEER  | BAT | NARMOT | MUSKRAT | RABBIT | TOTAL | MAN | TOTA  |
| ALBERTA          | 1   | -   | -     | -     | -      | -     | -    | 1     | -    | -      | -    | -     | -      | -     | -     | 6   | -      | -       | 1-     | 6     | 1-1 | 7     |
| BRITISH COLUMBIA | -   | -   | 1     | -     | -      | -     | -    | 1     | -    | -      | -    | -     | -      | -     | -     | 6   | -      | -       | -      | 6     | -   | 7     |
| MANITOBA         | 3   | -   | 1     | -     | -      | -     | -    | 4     | -    | -      | -    | -     | 1      | 19    | -     | -   | -      | -       | -      | 20    | -   | 24    |
| NEW BRUNSWICK    | -   | -   | -     | -     | -      | -     | -    | 0     | -    | -      | -    | -     | -      | -     | -     | 1   | -      | -       | -      | 1     | -   | 1     |
| ONTARIO          | 43  | 59  | 6     | 21    | 139    | 15    | 14   | 297   | 689  | 5      | 2    | 1     | 12     | 322   | 1     | 51  | 3      | -       | 1      | 1087  | -   | 1384  |
| QUEBEC           | 9   | 3   | -     | -     | 1      |       | -    | 13    | 17   | 1      | -    |       | -      | 18    | -     | 2   | -      | -       | -      | 38    | 1   | 52    |
| SASKATCHEWAN     | 2   | 7   | 1     | -     | 9      | -     | -    | 19    | -    | -      | 1-   | -     | -      | 162   | -     | 3   | -      | 1       | -      | 166   | -   | 185   |
| YUKON            | 2   | -   | -     | -     | -      | -     | -    | 2     | 6    | -      | 1    | -     | -      | 28    | :=    | -   | g = 1  | -       | -      | 35    | -   | 37    |
| TOTAL            | 60  | 69  | 9     | 21    | 149    | 15    | 14   | 337   | 712  | 6      | 3    | 1     | 13     | 549   | 1     | 69  | 3      | 1       | 1      | 1359  | 1   | 1697  |
| PER CENT         | 3.5 | 4.1 | 0.5   | 1.2   | 8.8    | 0.9   | 0.8  | 19.9  | 42.0 | 0.4    | 0.2  | 0.1   | 0.8    | 32.4  | 0.1   | 4.1 | 0.2    | 0.1     | 0.1    | 80.1  | 0.1 | 100.0 |

# Quarantines

During 1984, 1,268 premises were placed under quarantine involving 18,959 animals. The breakdown by province is given below:

| Province         | Premises | # of Animals |
|------------------|----------|--------------|
| Quebec           | 38       | 400          |
| Ontario          | 1,138    | 17,695       |
| Manitoba         | 22       | 322          |
| Saskatchewan     | 53       | 524          |
| Alberta          | 15       | 15           |
| British Columbia | 2        | 3            |
| Others           | 0        | 0            |

As a result of human contact with many of these quarantined animals, 2,027 humans received human diploid rabies vaccine treatment during 1984.

## Mass Immunization

Government sponsored vaccination clinics and were held in Gray and Bruce counties of Ontario in 1984. A total of 17,392 pets were vaccinated at these clinics. Additionally, 3,498 dogs were vaccinated by members of the Royal Canadian Mounted Police in the Yukon and Northwest Territories and some 900 dogs were vaccinated by members of the Kativik Regional Government of Northern Quebec.

## Compensation

Indemnity paid out to the provinces under the Rabies Indemnification Program amounted to \$69,180.00 in 1984.

| Ontario  | \$68 | 3,220.00 | for | 297 | animals |
|----------|------|----------|-----|-----|---------|
| Manitoba | \$   | 120.00   |     | 1   | animal  |
| Quebec   | \$   | 840.00   |     | 3   | animals |

# Future Directions of the Rabies Control Programm in Canada

- 1. Monoclonal antibody profiling will continue to look at rabies isolates across Canada.
- 2. It is hoped that a tissue culture/FA test will replace the mouse inoculation test in the near future.
- 3. Agriculture Canada hopes to replace its present rabies location system with the Universal Transverse Mercator Code System. This will fit in with the planned implementation of the Lab Sample Control System for laboratory specimens in the near future.
- 4. Agriculture Canada continues to support research into vaccination of wildlife by the Ontario Ministry of Natural Resources. A trial drop of baits plus tetracycline marker was successful in the fall of 1984. A drop with baits incorporating vaccine is planned for 1985.

TABLE 1

| EUR EUROPE  | 1/85          |              |              | F      | RABI          | ES (        | CASE                      | S              |         |                 |             |             | 1. 1.                    | 85 - 31 | . 3.85                     |
|---|---------------|--------------|--------------|--------|---------------|-------------|---------------------------|----------------|---------|-----------------|-------------|-------------|--------------------------|---------|----------------------------|
| LOCATION  |               | D O M        | EST:         | I C A  | NIM           | ALS         |                           |                | WII     | D A             | NIM         | A L S       |                          | HUMAN   | TOTAL                      |
| CODE NAME   | DOG           | CAT          | CATTLE       | HORSE  | SHEEP<br>GOAT | OTHERS      | TOTAL                     | FOX            | BADGER  | OTHER<br>MUSTEL | DEER        | OTHERS      | TOTAL                    | CASES   | TUTHE                      |
| AUT AUSTRIA BEL BELGIUM BUL BULGARIA * CZE CZECHOSLOVAKIA **                | 2<br>1        | 8<br>5       | 2<br>20      | -      | -<br>5        | -           | 12<br>31<br>0             | 341<br>57      | 11      | 10<br>3         | 10<br>1     | 1 -         | 373<br>62<br>0           |         | 385<br>93<br>0             |
| DDR GERMAN DEM. REPUBLIC<br>DEN DENMARK *                                   | 14            | 15           | 7            | 2      | 12            | 1           | 51<br>0                   | 272            | -       | 9               | 16          | -           | 297<br>0                 |         | 348<br>0                   |
| DEU FED.REP, OF GERMANY<br>FIN FINLAND *<br>FRA FRANCE                      | 27            | 77<br>16     | 89<br>20     | 7      | 24<br>32      | 1 1         | 227<br>0<br>87            | 1249<br>476    | 31<br>5 | 45<br>-         | 86          | 10          | 1414<br>0<br>492         |         | 1641<br>0<br>579           |
| GBR UNITED KINGDOM * GRE GREECE * HUN HUNGARY IRE IRELAND *                 | 12            | 11           | 8            | -      | 3             | 1           | 0<br>0<br>35<br>0         | 317            | -       | -               | 9           | _           | 0<br>0<br>326<br>0       |         | 0<br>0<br>361<br>0         |
| ISL ICELAND * ITA ITALY LUX LUXEMBOURG NET NETHERLANDS                      | _             | -            | 1            | _      | -             | -           | 0<br>0<br>1<br>0          | 45<br>4<br>7   | 1 -     | 2 -             | 1<br>-<br>- | -           | 0<br>49<br>4<br>7        |         | 0<br>49<br>5<br>7          |
| NOR NORWAY * POL POLAND POR PORTUGAL * ROM ROMANIA                          | 6             | 21           | 3            | _<br>1 | -             | -           | 0<br>30<br>0<br>11        | 178            | 1       | 5 -             | 32<br>-     | 12          | 0<br>228<br>0<br>11      |         | 0<br>258<br>0<br>22        |
| SPA SPAIN * SWE SWEDEN * SWI SWITZERLAND + LIECHT TUR TURKEY YUG YUGOSLAVIA | 2<br>246<br>9 | 9<br>17<br>8 | 5<br>38<br>2 | 1 2 -  | -<br>20<br>5  | -<br>6<br>1 | 0<br>0<br>17<br>329<br>25 | 61<br>-<br>322 | 4 - 2   | 1 -             | 4<br>-<br>1 | -<br>5<br>1 | 0<br>0<br>70<br>5<br>326 |         | 0<br>0<br>87<br>334<br>351 |
| TOTAL   | 333           | 190          | 199          | 22     | 101           | 11          | 856                       | 3338           | 57      | 75              | 161         | 33          | 3664                     | 0       | 4520                       |
| PER CENT  | 7.4           | 4.2          | 4.4          | 0.5    | 2.2           | 0.2         | 18.9                      | 73.8           | 1.3     | 1,7             | 3.6         | 0.7         | 81.1                     | 0.0     | 100.0                      |

<sup>\*</sup> NO CASES, \*\* NO DATA.

TABLE 2

| EUR EUROPE               | 1/89   | 5      |         |                  | R A B |      | C A S         |             |              |           |                |         | 1                | . 1.85 | - 31. | 3.85  |
|--------------------------|--------|--------|---------|------------------|-------|------|---------------|-------------|--------------|-----------|----------------|---------|------------------|--------|-------|-------|
| LOCATION                 | 0.     | THER D | OMESTIC | ANIMALS          | 5     |      |               |             | 0            | THER WILI | ANIMA          | ALS     |                  |        |       | TOTAL |
| CODE NAME                | DONKEY | PIG    |         | DOMEST<br>RABBIT |       | WOLF | RACOON<br>DOG | WILD<br>CAT | WILD<br>BOAR |           | HOUSE<br>MOUSE | MUSKRAT | OTH.SM<br>RODENT |        | OTHER |       |
| AUT AUSTRIA              | -      | -      | -       | -                |       | -    | -             | -           | -            | 1         | -              | -       | -                | -      | -     | 1     |
| DDR GERMAN DEM. REPUBLIC | -      | -      | -       | 1                | -     | -    | -             | -           | -            | -         | -              | -       | -                | -      | -     | 1     |
| DEU FED.REP. OF GERMANY  | -      | 1      | -       | -                | -     | )-   | -             | 1           | 2            | -         | -              | -       | -                | -      | -     | 4     |
| FRA FRANCE               | -      |        | -       | -                | 1     | -    | -             | -           | -            | -         | -              | -       | -                | -      | 10    | 11    |
| HUN HUNGARY              | -      | 1      |         | -                | -     | -    | -             | -           | -            | -         | -              | -       | -                | , -    | -     | 1     |
| POL POLAND               | -      | -      | -       | -                | -     | -    | 6             | -           | -            | -         | -              | 1       | 1                | 4      | -     | 12    |
| ROM ROMANIA              | -      | -      | -       | -                | -     | -    | -             | -           |              | -         | -              | -       | -                | -      | 1     | 1     |
| TUR TURKEY               | 4      | -      | 2       | -                | -     | 2    | -             | -           | -            | -         | 3              | -       | -                | -      | -     | 11    |
| YUG YUGOSLAVIA           | -      | 3-2    | -       | -                | 1     | -    | -             | -           | -            | -         | -              | -       | -                | -      | 1     | 2     |
| TOTAL                    | 4      | 2      | 2       | 1                | 2     | 2    | 6             | 1           | 2            | 1         | 3              | 1       | 1                | 4      | 12    | 44    |
| PER CENT                 | 9.1    | 4.5    | 4.5     | 2.3              | 4.5   | 4.5  | 13.6          | 2.3         | 4.5          | 2.3       | 6.8            | 2.3     | 2.3              | 9.1    | 27.3  | 100.0 |

| LOCATION  |        | мод | EST    | C A   | NIM           | A L S  |       |      | WI     | L D A           | иім   | ALS    |       | HUMAN | TOTAL |
|---|--------|-----|--------|-------|---------------|--------|-------|------|--------|-----------------|-------|--------|-------|-------|-------|
| CODE NAME   | DOG    | CAT | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX  | BADGER | OTHER<br>MUSTEL | DEER  | OTHERS | TOTAL | CASES | TOTAL |
| 108 OBERPULLENDORF  |        |     |        |       |               |        | 0     | 3    | _      | _               | -     | _      | 3     |       | 3     |
| 201 KLAGENFURT-STADT  |        |     |        |       | i             |        | 0     | 3    | -      | -               | -     | _      | 3     |       | 3     |
| 204 KLAGENFURT-LAND   |        | 1   |        |       |               |        | 0     | 1    | _      | _               | _     | _      | 1     |       | 1     |
| 205 SANKT VEIT AN DER GL                                      | 1      | 1   | 1      | _     | _             | _      | 3     | 17   | 1      | 1               | _     | _      | 19    |       | 22    |
| 206 SPITTAL AN DER DRAU                                       |        | _   | _      |       |               |        | 0     | 1    | _      |                 | _     | _      | 1     |       | 1     |
| 207 VILLACH-LAND  | _      | 1   | _      | _     | _             | _      | 1     | _    |        | _               | 1     | _      | î     |       | 2     |
| 208 VOELKERMARKT  | _      | 2   | _      | _     | _             | _      | 2     | 21   | 1      | 2               | 1 1   | _      | 24    |       | 26    |
| 209 WOLFSBERG   | Proces | *   |        |       |               |        | ō     | 5    | 1      | _               | _     | _      | 5     | 1     | 5     |
| 210 FELDKIRCHEN   |        |     |        |       |               |        | 0     | 4    | =      | -               |       |        | 4     | 1     | 4     |
|   |        |     |        |       |               |        |       | 4    | 1 7    | _               | _     |        |       |       | 1     |
| 301 KREMS AN DER DONAU-S                                      |        |     |        |       | l             |        | 0     | -    | 1      |                 | _     | _      | 1     |       | 5     |
| 308 GAENSERNDORF  |        |     |        |       |               |        | 0     | 5    | -      | _               | 1,000 | _      | 5     | 1     |       |
| 309 GMUEND  |        |     |        |       |               |        | 0     | 7    | _      | _               | =     | -      | 7     |       | 7     |
| 310 HOLLABRUNN  |        |     |        |       |               |        | 0     | 3    | -      | -               | -     | -      | 3     | l     | 3     |
| 311 HORN  |        |     |        |       |               |        | 0     | 4    | -      | -               | _     | -      | 4     |       | 4     |
| 312 KORNEUBURG  |        |     |        |       |               |        | 0     | 1    | -      | _               | -     | -      | 1     |       | 1     |
| 313 KREMS AN DER DONAU-L                                      | -      | 1   | -      | -     | -             | -      | 1     | 29   | 1      | 1               |       | _      | 31    |       | 32    |
| 315 MELK  |        |     |        |       |               |        | 0     | 7    | 1      | _               | _     | _      | 8     | 1     | 8     |
| 316 MISTELBACH  |        |     |        |       |               |        | 0     | 45   | -      | -               | 1     | -      | 46    | 1     | 46    |
| 321 TULLN   |        |     |        |       |               |        | 0     | 2    | -      |                 | 1 2   | _      | 2     |       | 2     |
| 322 WAIDHOFEN AN DER THA                                      |        |     |        |       |               |        | o     | 1    | -      | _               | _     | -      | 1     |       | 1     |
| 325 ZWETTL  |        |     |        |       |               |        | ő     | 20   | _      | _               | 1     | _      | 21    | 1     | 21    |
| 406 FREISTADT   |        |     |        |       |               |        | ő     | 8    | 1      | 2               | 1     | _      | 12    | 1     | 12    |
| 411 PERG  |        |     |        |       |               |        | ő     | 6    | 1 -    | 1               |       | _      | 7     |       | 7     |
| 413 ROHRBACH  |        |     |        |       |               | 1      | 0     | 3    | _      | 1 -             | 1     | _      | 4     |       | 4     |
| [1] 그리는 "하는 사람들이 아니다 마음 사람들이 되었다" 전 사용이 하는 사람들이 있다면 보다 보다 보다. |        |     |        |       |               |        |       | د ا  | _      | _               | 1     | _      | 0     |       | 1     |
| 416 URFAHR-LAND   | -      | 1   | _      | _     | _             | _      | 1     | 70   |        |                 |       | _      | 40    |       | 40    |
| 504 SANKT JOHANN IM PONG                                      |        | -   |        |       |               |        | 0     | 38   | 2      |                 | _     |        | 0.563 | 1     | 61.00 |
| 505 TAMSWEG   |        |     |        |       |               |        | 0     | 6    | _      | 1               | _     | _      | 7     |       | 7     |
| 506 ZELL AM SEE   |        |     |        |       |               |        | 0     | 21   | -      | -               | 1     | -      | 22    | 1     | 22    |
| 603 DEUTSCHLANDSBERG  |        |     |        |       |               |        | 0     | 3    | _      | _               | -     | -      | 3     | 1     | 3     |
| 606 GRAZ-LAND   |        |     |        |       |               |        | 0     | 5    | 1      | _               | -     | -      | 6     | 1     | 6     |
| 608 JUDENBURG   |        | _   |        |       |               |        | 0     | 14   | -      | 1               | 1     | -      | 16    | 1     | 16    |
| 609 KNITTELFELD   |        |     |        |       |               | 100    | 0     | 1    | 2.—1   | 1-              | -     | -      | 1     | 1     | 1     |
| 612 LIEZEN  |        |     |        |       | -             |        | 0     | 1    | -      | -               | -     | _      | 1     | 1     | 1     |
| 614 MURAU   | - 1    |     |        |       |               |        | 0     | 5    |        | -               | -     | -      | 5     |       | 5     |
| 616 VOITSBERG   |        |     |        |       |               |        | 0     | 3    | 1      | _               | -     | -      | 3     |       | 3     |
| 617 WEIZ  |        |     |        |       |               |        | 0     | 1    | _      | _               | -     | _      | 1     | 1     | 1     |
| 703 INNSBRUCK-LAND  |        |     |        |       |               |        | 0     | 1    | -      | _               | _     | _      | 1     |       | 1     |
| 705 KUFSTEIN  |        |     |        | 1     |               |        | 0     | 1    | _      | _               | -     | _      | 1     | 1     | 1     |
| 708 REUTTE  |        |     |        |       |               |        | Ö     | 1    | 0.00   | _               | 2     | _      | 3     |       | 3     |
| 709 SCHWAZ  |        |     |        |       |               |        | ŏ     | 3    | -      | -               | _     | _      | 3.    |       | 3     |
| 801 BLUDENZ   | 1      | 2   | 1      |       | _             | _      | 4     | 15   | 1      | 1               | _     | 1      | 18    |       | 22    |
| 802 BREGENZ   | •      | -   |        |       |               |        | 0     | 15   | 1 -    | _               | 1     | _      | 16    |       | 16    |
| 803 DORNBIRN  |        |     |        |       |               |        | 0     | 2    |        | _               | _     | _      | 2     |       | 2     |
| 804 FELDKIRCH   |        |     |        | 1     |               |        | 0     | 9    | 1      | _               |       | _      | 10    |       | 10    |
|   |        |     |        |       |               |        | 0     | 7    | 1      | _               |       |        | 10    |       |       |
| TOTAL   | 2      | 8   | 2      | 0     | 0             | 0      | 12    | 341  | 11     | 10              | 10    | 1      | 373   | 0     | 385   |
| PER CENT  | 0.5    | 2.1 | 0.5    | 0.0   | 0.0           | 0.0    | 3.1   | 88.6 | 2.9    | 2.6             | 2.6   | 0.3    | 96.9  | 0.0   | 100.0 |

| _ |   | _ |
|---|---|---|
| ۰ | • | _ |
|   | _ | _ |
|   |   |   |
|   |   |   |

| LOCATION   |                  | DOM         | EST              | I C A | NIM              | ALS    |                        |                          | WI          | LD A            | и и м            | ALS    |                          |                | LESSES AVAILABLE |
|--|------------------|-------------|------------------|-------|------------------|--------|------------------------|--------------------------|-------------|-----------------|------------------|--------|--------------------------|----------------|------------------|
| CODE NAME  | DOG              | CAT         | CATTLE           | HORSE | SHEEP<br>GOAT    | OTHERS | TOTAL                  | FOX                      | BADGER      | OTHER<br>MUSTEL | DEER             | OTHERS | TOTAL                    | HUMAN<br>CASES | TOTAL            |
| BEL BELGIUM  |                  |             |                  |       |                  |        |                        |                          |             |                 |                  |        |                          |                |                  |
| HH HAINHAUT<br>LG LIEGE<br>LI LIMBURG<br>LX LUXEMBOURG<br>NA NAMUR                               | -<br>-<br>-<br>1 | 2<br>1<br>2 | 5<br>1<br>5<br>9 | -     | -<br>-<br>2<br>3 | -      | 0<br>7<br>2<br>9<br>13 | 1<br>21<br>1<br>22<br>12 | -<br>1<br>- | -<br>1<br>1     | 1<br>-<br>-<br>- | -      | 1<br>22<br>3<br>23<br>13 | ,              | 2<br>3<br>2      |
| TOTAL  | 1                | 5           | 20               | 0     | 5                | 0      | 31                     | 57                       | 1           | 3               | 1                | 0      | 62                       | 0              | 9                |
| PER CENT   | 1.1              | 5.4         | 21.5             | 0.0   | 5.4              | 0.0    | 33.3                   | 61.3                     | 1.1         | 3.2             | 1.1              | 0.0    | 66.7                     | 0.0            | 100.             |
| LUX LUXEMBOU<br>00 LUXEMBOURG-VILLE<br>06 CLERVAUX<br>08 REDANGE<br>12 GREVENMACHER<br>13 REMICH | R G              | _           | 1                | _     | _                | _      | 0<br>0<br>0<br>0<br>0  | 1 1 1 1                  | =           | -               |                  | =      | 1<br>1<br>1<br>1<br>0    |                |                  |
| TOTAL  | 0                | 0           | 1                | 0     | 0                | 0      | 1                      | 4                        | . 0         | 0               | 0                | 0      | 4                        | 0              |                  |
| PER CENT   | 0.0              | 0.0         | 20.0             | 0.0   | 0.0              | 0.0    | 20.0                   | 80.0                     | 0.0         | 0.0             | 0.0              | 0.0    | 80.0                     | 0.0            | 100.             |

3

of Miles

1 prifus!

| LOCATION               |     | אסת | EST    | C A   | NIM           | ALS    |       |          | WI     | L D A           | NIM  | ALS    |          |       |          |
|------------------------|-----|-----|--------|-------|---------------|--------|-------|----------|--------|-----------------|------|--------|----------|-------|----------|
| CODE NAME              | DOG | CAT | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX      | BADGER | OTHER<br>MUSTEL | DEER | OTHERS | TOTAL    | HUMAN | TOTAL    |
| 01 HAUPTSTADT BERLIN   |     |     |        |       |               |        | 0     |          |        |                 |      |        | 0        |       | 1 0      |
| 02 COTTBUS             | 1   | -   | -      | -     | -             | -      | 1     | 4        | -      |                 | -    | -      | 4        | 1     | :        |
| 03 DRESDEN             | -   | 2   | -      |       | -             | -      | 2     | 13       | -      | 1               | -    | -      | 14       | 1     | 16       |
| 04 ERFURT              | -   | 3   | -      | -     | 1             | -      | 4     | 41       | -      | -               | 1    | -      | 42       |       | 46       |
| 05 FRANKFURT/ODER      |     |     |        |       |               |        | 0     | 7        | -      | -               | -    | -      | 7        |       | 7        |
| 06 GERA                | - 1 | -   | _      | -     | 3             | -      | 3     | 13       | -      | -               | -    | -      | 13       | 1     | 16       |
| 07 HALLE               | -   | -   | -      | 1     | 1             | -      | 2     | 30       | -      | 1               | 1    | -      | 32       | 1     | 34       |
| 08 KARL-MARX-STADT     | -   | 3   | 3      | -     | 3             | -      | 9     | 13       | -      | 2               | 1    | -      | 16       |       | 25       |
| 09 LEIPZIG             | 2   | -   | -      | -     | 2             | -      | 4     | 13       | -      | 1               | 2    | -      | 16       | 1     | 20       |
| 10 MAGDEBURG           | 5   | 1   | 3      | 1     | -             | -      | 10    | 28       | -      | 2               | 2    | -      | 32       | l     | 42       |
| 11 NEUBRANDENBURG      | 1   | 2   | -      | -     | 1             | -      | 4     | 33       | -      | - 1             | 3    | -      | 36       |       | 40       |
| 12 POTSDAM             | 1   | 2   | _      | -     | -             | _      | 3     | 16       | _      | 2               | 3    | -      | 21       |       | 24       |
| 13 ROSTOCK             | 1 1 | 1   |        | -     | 1             | _      | 3     | 13       | -      | -               | 2    | -      | 15       | 1     | 18       |
| 14 SCHWERIN<br>15 SUHL | 2   | 1   | 1      | , — i | -             | _      | 2     | 20<br>28 | -      | - 1             | -    | _      | 20<br>29 | I     | 24<br>31 |

1. 1.85 - 31. 3.85

DEU FEDERAL REPUBLIC OF GERMANY

RABIES CASES

| LOCATION               |     | DOM | EST    | I C A | NIM           | ALS    |       |      | WI     | D A             | NIM  | ALS    |       | HUMAN | TOTAL |
|------------------------|-----|-----|--------|-------|---------------|--------|-------|------|--------|-----------------|------|--------|-------|-------|-------|
| CODE NAME              | pog | CAT | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX  | BADGER | OTHER<br>MUSTEL | DEER | OTHERS | TOTAL | CASES | TUTAL |
| 010 SCHLESWIG-HOLSTEIN |     |     |        |       |               |        | 0     | -    | -      | 1               | -    | -      | 1     |       | 1     |
| 020 HAMBURG            | 1   | 1   |        |       |               | 1      | 0     |      | 1      |                 |      |        | 0     | 1     | 0     |
| 031 BRAUNSCHWEIG       | -   | 2   | -      |       | -             | -      | 2     | 31   | 1      | -               | 1    | -      | 33    | 1     | 35    |
| 032 HANNOVER           | -   | -   | 1      | -     | -             | 1      | 2     | 58   | 1      | 2               | 5    | -      | 66    | 1     | 68    |
| 033 LUENEBURG          | -   | -   | 1      | 1     | -             | -      | 2     | 25   | -      | 2               | 2    | -      | 29    | 1     | 31    |
| 034 WESER-EMS          |     | 1   |        |       | 1             | 1      | 0     | 2    | -      | -               | -    | 1-0    | 2     | 1     | 2     |
| 040 BREMEN             |     | 1   |        |       | 1             |        | 0     |      |        |                 |      |        | 0     | 1     | 0     |
| 051 DUESSELDORF        |     | l   |        |       |               |        | 0     | 10   | -      | -               | -    | -      | 10    | 1     | 10    |
| 053 KOELN              | -   | 1-1 | 4      | 1     | -             | 1-1    | 5     | 32   | 1      | -               | 1    | 1      | 35    | 1     | 40    |
| 055 MUENSTER           |     | 1   |        |       | 1             | 1      | 0     |      |        |                 |      |        | 0     | 1     | 0     |
| 057 DETMOLD            | -   | 1   | 1      | -     | 2             | -      | 4     | 45   | 1      | -               | 3    | -      | 49    | }     | 53    |
| 059 ARNSBERG           | 2   | 1   | 5      | 1     | 9             | -      | 18    | 128  | 3      | 4               | 8    | 1      | 144   | 1     | 162   |
| 061 DARMSTADT          | 3   | 3   | 3      | 2     | _             | -      | 11    | 60   | 1      | 3               | 6    | 2-1    | 70    | 1     | 81    |
| 062 KASSEL             | 4   | 38  | 31     | _     | 2             | -      | 75    | 145  | 1      | 9               | 19   | -      | 174   | 1     | 249   |
| 071 KOBLENZ            | -   | 3   | 2      | 1     | 1             | -      | 7     | 32   | -      | 4               | 4    | -      | 40    | 1     | 47    |
| 072 TRIER              | 1   | 1   | 9      | _     | 2             | -      | 13    | 20   | 1      | 1               | 4    | -      | 26    | 1     | 39    |
| 073 RHEINHESSEN-PFALZ  | 2   | 5   | 3      | 1     | 1             | -      | 12    | 61   | -      | 1               | 6    | -      | 68    | 1     | 80    |
| 081 STUTTGART          | 1   | 2   | -      | -     | _             | _      | 3     | 42   | 4      | 1               | 4    | -      | 51    | 1     | 54    |
| 082 KARLSRUHE          | 2   | - 2 | -      | 1     | -             | -      | 5     | 38   | -      | 2               | 3    | -      | 43    | 1     | 48    |
| 083 FREIBURG           | 1   | _   | 3      | _     | 4             | -      | 8     | 82   | - 3    | 2               | 4    | -      | 91    | 1     | 99    |
| 084 TUEBINGEN          | 2   | 4   | 7      | _     | -             | _      | 13    | 95   | 5      | 2               | 4    | -      | 106   | 1     | 119   |
| 091 OBERBAYERN         | 1   | - 2 | 11     | 1_    | 3             | -      | 17    | 62   | 3      | 4               | 1    | -      | 70    |       | 87    |
| 092 NIEDERBAYERN       | 2   | 6   | 1      | -     | _             | _      | 9     | 61   | 5      | 3               | 3    | 1      | 73    |       | 82    |
| 093 OBERPFALZ          | 3   | 1   | _      | -     |               |        | 4     | 54   | 1      | -               | 1    | _      | 56    |       | 60    |
| 094 OBERFRANKEN        | 1   | 2   | -      | -     | -             | _      | 3     | 59   | -      | 1               | 2    | -      | 62    |       | 65    |
| 095 MITTELFRANKEN      | -   | _   |        |       |               |        | 0     | 8    | -      | -               | _    | -      | 8     |       | 8     |
| 096 UNTERFRANKEN       | 1   | 1   | 4      | -     | -             | -      | 6     | 39   | -      | 1               | 3    | -      | 43    |       | 49    |
| 097 SCHWABEN           | 1   | 1   | 3      | 1     | -             | _      | 6     | 56   |        | 2               | 2    | -      | 60    |       | 66    |
| 100 SAARLAND           |     |     |        |       |               |        | 0     | 4    | -      | -               | -    | -      | 4     |       | 4     |
| 110 BERLIN (WEST)      | -   | 2   | -      | -     | -             | -      | 2     |      |        |                 |      |        | 0     |       | 2     |
| TOTAL                  | 27  | 77  | 89     | 9     | 24            | 1      | 227   | 1249 | 31     | 45              | 86   | 3      | 1414  | 0     | 1641  |
| PER CENT               | 1.6 | 4.7 | 5.4    | 0.5   | 1.5           | 0.1    | 13.8  | 76.1 | 1.9    | 2.7             | 5.2  | 0.2    | 86.2  | 0.0   | 100.0 |

0.0 100.0

1.7

85.0

| LOCATION                       |     | D O M | EST    | I C A | NIM           | ALS    |       |     | WII    | _ D A           | NIM           | ALS    |       | J     |                   |
|--------------------------------|-----|-------|--------|-------|---------------|--------|-------|-----|--------|-----------------|---------------|--------|-------|-------|-------------------|
| CODE NAME                      | DOG | CAT   | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX | BADGER | OTHER<br>MUSTEL | DEER          | OTHERS | TOTAL | CASES | TOTAL             |
| 01 AIN                         | -   | -     | 1      | _     | -             | _      | 1     | 28  | 1      | -               | -             | -      | 29    |       | 30                |
| 02 AISNE                       | 1   | 2     | _      |       | -             | -      | 3     | 19  | -      | -               | -             | 1      | 20    | 1     | 23                |
| 08 ARDENNES                    | -   | -     | 2      | -     | 3             | -      | 5     | 4   | -      | -               |               | -      | 4     | 1     | 9                 |
| 10 AUBE                        | -   | -     | _      | _     | -             | 1.     | 1     | 21  | -      | -               | -             | - 1    | 21    | 1     | 22<br>28          |
| 21 COTE D'OR                   | -   | -     | 4      | 1     | 7             | -      | 11    | 17  | -      | -               | -             | -      | 17    | 1     |                   |
| 25 DOUBS                       | -   | 1     | 2      | _     | -             | _      | 3     | 43  | _      | -               | -             | -      | 43    | 1     | 46                |
| 38 ISERE                       | -   | -     | -      | -     | 1             | -      | 1     |     |        |                 |               | 1      | 0     | 1     | 1                 |
| 39 JURA                        | -   | 1     | -      | 1     | 1             | -      | 3     | 33  | -      | -               | -             | -      | 33    | 1     | 36                |
| 51 MARNE                       | -   | -     | -      | 1     | 1             | -      | 2     | 15  | -      | -               | 1             | _      | 16    | 1     | 18                |
| 52 MARNE (HAUTE)               | _   | 3.7   | 1      | _     | -             | _      | 1     | 14  | -      | -               | -             | 1      | 15    | 1     | 16                |
| 54 MEURTHE-ET-MOSELLE          | 1   | 1     |        | 1-0   | -             | _      | 2     | 39  | 1      | -               | 3 <del></del> | 2      | 42    | 1     | 44                |
| 55 MEUSE                       | -   | 1     | 2      | -     | 1             | -      | 4     | 18  | -      | -               | -             | _      | 18    | 1     | 22<br>30          |
| 57 MOSELLE                     | 1   | 2     | 3      | 1     | 6             | -      | 13    | 17  | -      | -               | _             | -      | 17    | 1     |                   |
| 58 NIEVRE                      | _   | -     | -      | -     | 1             | -      | 1     |     | 1      |                 |               |        | 0     | 1     | 1                 |
| 60 DISE                        | 3   | -     | 2-2    | 1-0   | 1             | -      | 4     | 40  | -      | -               | -             | 1      | 41    | 1     | 45                |
| 67 RHIN (BAS)                  | 1   |       |        |       |               | 1      | 0     | 7   | -      | -               | -             | 1      | - 8   | 1     | 8<br>28           |
| 68 RHIN (HAUT)                 | 2   | 1     | 2      | 1     |               | _      | 6     | 19  | 3      | _               |               | -      | 22    | 1     | 28                |
| 70 SADNE (HAUTE)               | -   | -     | I -    | -     | 1             | -      | 1     | 5   | -      | -               | -             | _      | 5     | 1     | 6                 |
| 71 SAONE-ET-LOIRE<br>73 SAVOIE | -   | 1     | -      | -     | -             |        | 0     | 1   | _      | _               | _             | 1      | 1 2   |       | 6<br>2<br>2<br>10 |
| 74 SAVOIE (HAUTE)              | 1   |       | 1      |       |               | 1      | ő     | 10  |        | _               | 9 <u></u> 2   | 1 -    | 10    | 1     | 10                |
| 77 SEINE-ET-MARNE              | -   | 1     | _      | _     | 2             | _      | 3     | 19  | _      | _               | _             | 1      | 20    | 1     | 23                |
| 88 VOSGES                      | 2   | 2     | 2      | 1     | 6             |        | 13    | 43  | _      | _               | _             | 1 1    | 44    | 1     | 23<br>57          |
| 00 403023                      | 1 - | 1 -   | 1 -    | 1     | 1 0           |        | 13    | 73  |        |                 | X==2          | 1 :    | , ,   | 1     | 1 %               |

82.2

0.9

0.0

0.2

3 2 3

95 VAL D'OISE

90 TERR.DE BELFORT

93 SEINE SAINT DENIS

89 YONNE

TOTAL

PER CENT

3.5

1.2

5.5

| <del></del>             |                  |      |        |       | RABI          | E S    | CASE  | S            |        |                 |      |        | 1. 1.     | 85 - 31 | . 3.85   |
|-------------------------|------------------|------|--------|-------|---------------|--------|-------|--------------|--------|-----------------|------|--------|-----------|---------|----------|
| LOCATION                |                  | мод  | EST    | I C A | NIM           | ALS    |       | WILD ANIMALS |        |                 |      |        |           | HUMAN   | TOTAL    |
| CODE NAME               | DOG              | CAT  | CATTLE | HORSE | SHEÆP<br>GOAT | OTHERS | TOTAL | FOX          | BADGER | OTHER<br>MUSTEL | DEER | OTHERS | TOTAL     | CASES   | TOTAL    |
| HUN HUNGARY             |                  |      |        |       |               |        |       |              |        |                 |      |        |           |         |          |
| 01 BUDAPEST             |                  |      |        |       |               |        | 0     | <b>8</b>     | -      | -               | -    | -      | 8         |         | 8        |
| 02 BARANYA              | -                | 2    | :-3    | -     | 2             | -      | 4     | 16           | -      | -               | 1    | -      | 17        | 1       | 21       |
| 03 BACS-KISKUN          | 1                | 2-0  | 2      | -     | -             | -      | 3     | 12           | -      | -               | -    | -      | 12        |         | 15       |
| 04 BEKES                | 3                | 2    | 1      | _     | -             | 1      | 7     | 22           | -      | -               | -    | -      | 22        | 1       | 29       |
| 05 BORSOD-ABAUJ-ZEMPLEN | -                | 1    | -      | -     | -             | _      | 1     | 9            | -      | -               |      |        | 9         | 1       | 10       |
| 06 CSONGRAD             |                  |      |        |       | 1             | 1      | 0     | 6            | _      | -               |      | - 1    | _6        | 1       | 6        |
| 07 FEJER                | 2                | 1    | 3      | _     | -             | -      | 6     | 35           | -      | -               | 1    |        | 36        | 1       | 42       |
| 08 GYDER-SOPRON         |                  | _    | _      |       |               |        | 0     | 12           | -      | -               | _    | - 1    | 12        | 1       | 12       |
| 09 HAJDU-BIHAR          | 2                | 2    | 2      | -     | -             | -      | 6     | 18           | _      | _               | _    | -      | 18        | 1       | 24       |
| 10 HEVES                |                  |      |        |       | 1             |        | 0     | 5            | _      | _               | _    | _      | 5         | 1       | 5<br>17  |
| 11 KOMAROM              | 1                | -    | -      | -     | -             | -      | 1     | 16           | -      | -               | _    |        | 16<br>9   | 1       | 9        |
| 12 NOGRAD               |                  |      |        |       |               | 100    | 0     | 9            | -      | -               | _    |        | 200       | 1       | 101.0    |
| 13 PEST                 | =                | 1    | -      | -     | -             | -      | 1     | 5            | -      | -               | _    |        | 5         | 1       | 6        |
| 14 SOMOGY               | 1                | -    | -      | -     | 1             | -      | 2     | 16           | -      | _               | 4    |        | 20        |         | 22<br>30 |
| 15 SZABOLCS-SZATMAR     | 1                | 1    | -      | _     | -             | -      | 2     | 28           | -      | -               | -    |        | 28        |         | 6        |
| 16 SZOLNOK              | 1                | 1    | -      | _     | -             | _      | 2     | 4            | -      | -               | -    | -      | 4         |         | 21       |
| 17 TOLNA                |                  |      | 1      |       |               |        | 0     | 19<br>29     | _      | -               | 2    | _      | 21<br>30  | 1       | 30       |
| 18 VAS                  |                  |      |        |       | l             | 1      | 57.8  | 7,250        | _      | _               | _    | _      | 17        |         | 17       |
| 19 VESZPREM             |                  |      |        |       | 1             |        | 0     | 17           | _      | _               | _    |        | 1,000,000 | 1       | 31       |
| 20 ZALA                 |                  |      |        |       |               |        | 0     | 31           |        |                 |      |        | 31        |         | -        |
| TOTAL                   | 12               | 11   | 8      | 0     | 3             | 1      | 35    | 317          | 0      | 0               | 9    | 0      | 326       | 0       | 361      |
| PER CENT                | 3.3              | 3.0  | 2.2    | 0.0   | 0.8           | 0.3    | 9.7   | 87.8         | 0.0    | 0.0             | 2.5  | 0.0    | 90.3      | 0.0     | 100.0    |
| ROM ROMANIA             |                  |      |        |       |               |        |       |              |        |                 |      |        |           |         |          |
| 01 ALBA                 | 1                | -    | -      | -     | -             | -      | 1     | -            | -      | -               | -    | 1      | 1         |         | 2        |
| 02 ARAD                 | 3-1              | 1    | -      | -     | -             | -      | 1     | 1            | 1      |                 | -    | -      | 2         |         | 3        |
| 04 BACAU                |                  |      |        |       |               |        | 0     | 1            |        |                 | -    | -      | 1         | inga.   | 1        |
| 11 CARAS-SEVERIN        | 1                | -    | -      | -     | -             | -      | 1     |              |        |                 |      |        | 0         |         | 1        |
| 20 GORJ                 | _                | -    | 1      | -     | -             | -      | 1     |              |        |                 |      |        | 0         |         | 1        |
| 22 HUNEDOARA            |                  |      |        |       |               |        | 0     | 1            | -      | -               | _    | -      | 1         |         | 1        |
| 24 IASI                 | 1                | -    | 3      | 1     | -             | -      | 5     | 1            | -      |                 |      | -      | 1         |         | 6        |
| 32 SALAJ                | -                | 1    | -      | -     | -             | -      | 1     | 5            | -      | -               | _    | -      | 5         |         | 6        |
| 34 SUCEAVA              | ( <del>-</del> ) | 1    |        | -     | -             | -      | 1     |              |        |                 |      |        | 0         |         | 1-       |
| TOTAL                   | 3                | 3    | 4      | 1     | 0             | 0      | 11    | 9            | 1      | 0               | 0    | 1      | 11        | 0       | 22       |
| PER CENT                | 13.6             | 13.6 | 18.2   | 4.5   | 0.0           | 0.0    | 50.0  | 40.9         | 4.5    | 0.0             | 0.0  | 4.5    | 50.0      | 0.0     | 100.0    |

|  |                       |                          |                            | 1     | RABI          | E S              | CASE                                      | S                                |                            |                       |                  |             | 1. 1.                                      | 85 - 31 | . 3.85   |
|--|-----------------------|--------------------------|----------------------------|-------|---------------|------------------|---|----------------------------------|----------------------------|-----------------------|------------------|-------------|--|---------|--|
| LOCATION   |                       | D O M                    | EST                        | I C A | NIM           | ALS              |   |                                  | WI                         | L D A                 | NIM              | ALS         |  | нимам   | TOTAL  |
| CODE NAME  | DOG                   | CAT                      | CATTLE                     | HORSE | SHEEP<br>GOAT | OTHERS           | TOTAL                                     | FOX                              | BADGER                     | OTHER<br>MUSTEL       | DEER             | OTHERS      | TOTAL                                      | CASES   | TOTAL  |
| ITA ITALY  |                       |                          |                            |       |               |                  |   |                                  |                            |                       |                  |             |  |         |  |
| 22 COMO<br>23 SONDRIO<br>24 BERGAMO<br>38 TRENTO<br>39 BOLZANO   |                       |                          |                            |       |               |                  | 0<br>0<br>0<br>0                          | 1<br>1<br>3<br>38<br>2           | -<br>-<br>1<br>-           | -<br>1<br>-<br>1<br>- | -<br>-<br>1<br>- | -           | 1<br>2<br>3<br>41<br>2                     |         | 1<br>2<br>3<br>41<br>2                           |
| TOTAL  | 0                     | 0                        | 0                          | 0     | 0             | 0                | 0   | 45                               | 1                          | 2                     | 1                | 0           | 49   | 0       | 49   |
| PER CENT   | 0.0                   | 0.0                      | 0.0                        | 0.0   | 0.0           | 0.0              | 0.0                                       | 91.8                             | 2.0                        | 4.1                   | 2.0              | 0.0         | 100.0                                      | 0.0     | 100.0  |
| SWI SWITZERLAND AND  05 BASEL-LAND 06 BERN 07 FRIBOURG 08 GENEVE 12 NEUCHATEL 15 SCHAFFHAUSEN 17 SOLOTHURN 18 ST.GALLEN 20 THURGAU 22 VAUD | LIECHTE               | ENSTEIN  1 1 1 1 1 1 1 3 | -<br>-<br>-<br>1<br>1<br>1 | -     | -             | -                | 1<br>1<br>1<br>0<br>1<br>0<br>2<br>2<br>5 | 17<br>1<br>-<br>6<br>4<br>3<br>2 | -<br>-<br>2<br>-<br>1<br>1 | 1<br>-<br>-<br>-<br>- | 2                | -           | 0<br>19<br>2<br>2<br>6<br>5<br>4<br>2<br>0 |         | 1<br>20<br>3<br>2<br>7<br>5<br>4<br>4<br>2<br>33 |
| 26 JURA  | 1                     | -                        | 2                          | 1     | _             | =                | 4   | 26<br>2                          | -                          | -                     | 2 -              | _           | 20   |         | 6  |
| TOTAL  | 2                     | 9                        | 5                          | 1     | 0             | 0                | 17  | 61                               | 4                          | 1                     | 4                | 0           | 70   | 0       | 87   |
| PER CENT   | 2.3                   | 10.3                     | 5.7                        | 1.1   | 0.0           | 0.0              | 19.5                                      | 70.1                             | 4.6                        | 1.1                   | 4.6              | 0.0         | 80.5                                       | 0.0     | 100.0  |
| YUG YUGOSLAV   | IA                    |                          |                            |       |               |                  |   |                                  |                            |                       |                  |             |  |         |  |
| I SR BOSNA I HERCEGOVI<br>III SR HRVATSKA<br>V SR SLOVENIJA<br>VI SR SRBIJA<br>VII SAP VOJVODINA   | -<br>5<br>1<br>1<br>2 | -<br>1<br>4<br>-<br>3    | 1<br>1<br>-<br>-           |       | 5<br>-<br>-   | 1<br>-<br>-<br>- | 1<br>13<br>5<br>1<br>5                    | 10<br>217<br>61<br>34            | 1<br>1                     | 1 1                   | 1<br>-<br>-      | 1<br>-<br>- | 10<br>220<br>62<br>0<br>34                 |         | 11<br>233<br>67<br>1<br>39                       |
| TOTAL  | 9                     | 8                        | 2                          | 0     | 5             | 1                | 25  | 322                              | 2                          | 0                     | 1                | 1           | 326  | 0       | 351  |
| PER CENT   | 2.6                   | 2.3                      | 0.6                        | 0.0   | 1.4           | 0.3              | 7.1                                       | 91.7                             | 0.6                        | 0.0                   | 0.3              | 0.3         | 92.9                                       | 0.0     | 100.0  |

1. 1.85 - 31. 3.85

| TUR | Т | U | R | K | E | Y |
|-----|---|---|---|---|---|---|
| 1   |   |   |   |   |   |   |

RABIES CASES

| LOCATION        |     | D O M | EST    | I C A | NIN           | ALS    |       |     | WI     | LD A            | NIM  | ALS    |       | HUMAN | TOTAL |
|-----------------|-----|-------|--------|-------|---------------|--------|-------|-----|--------|-----------------|------|--------|-------|-------|-------|
| CODE NAME       | DOG | CAT   | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX | BADGER | OTHER<br>MUSTEL | DEER | OTHERS | TOTAL | CASES | TOTAL |
| 001 ADANA       | 17  | -     | 2      | _     | _             | 1      | 20    |     |        |                 |      |        | 0     |       | 20    |
| 002 ADIYAMAN    | 1   | -     | -      | -     | -             | -      | 1     |     | 1      | 1               | 1    | 1      | 0     | 1     | 1     |
| 003 AFYON       | 9   | -     | -      | -     | 1             | 1      | 11    | l l |        | 1               | 1    | 1      | 0     | 1     | 11    |
| 004 AGRI        | 2   | -     | -      | -     | -             | -      | 2     |     |        |                 | 1    | 1      | 0     | 1     | 2     |
| 005 AMASYA      | 2   | -     |        | - a   | -             | 1      | 3     |     |        |                 |      | 1      | 0     | 1     | 3     |
| 006 ANKARA      | 6   | 2     | -      | -     | -             | _      | 8     |     |        |                 |      |        | 0     | 1     | 8     |
| 007 ANTALYA     | 11  | 1     | 1      | -     | 1             | -      | 14    | -   | -      | -               | -    | 1      | 1     | 1     | 15    |
| 009 AYDIN       | 4   | -     | -      | 1-1   | -             | -      | 4     |     |        |                 |      | 1      | 0     | 1     | 4     |
| 010 BALIKESIR   | 6   | -     | 1      | -     | -             | 1      | 8     |     |        |                 |      | 1      | 0     | 1     | 8     |
| 011 BILECIK     | 5   | -     | _      | -     | 6             | -      | 11    |     |        |                 | 1    |        | 0     | 1     | 11    |
| 014 BOLU        | 3   | -     | 2      | _     | 2             | -      | 7     |     |        |                 |      |        | 0     |       | 7     |
| 015 BURDUR      | 2   | -     | -      |       | -             | -      | 2     | 1   |        |                 |      |        | 0     | 1     | 2     |
| 016 BURSA       | 7   | -     | 1-1    | -     | 1             | _      | 8     | 1   |        |                 |      |        | 0     | 1     | 8     |
| 018 CANKIRI     | -   | 1     | -      | -     | -             | -      | 1     | 1   |        |                 |      | 1      | 0     | 1     | 1     |
| 019 CORUM       | 3   | -     | -      | -     | -             | -      | 3     |     |        |                 |      |        | 0     |       | 3     |
| 020 DENIZLI     | 8   | -     | 2      | -     | -             | 1      | 11    | -   | -      | -               | -    | 1      | 1     | 1     | 12    |
| 021 DIYARBAKIR  | -   | -     | 1      | -     | -             | -      | 1     |     |        |                 |      |        | 0     | 1     | 1     |
| 022 EDIRNE      | 1   | -     | -      | -     | -             | -      | 1     | 1   |        |                 |      |        | 0     | 1     | 1     |
| 023 ELAZIG      | 2   | -     | -      |       | -             | -      | 2     | 1   | 1      |                 |      |        | 0     |       | 2     |
| 024 ERZINCAN    | 1   | _     | -      | _     | -             | -      | 1     |     |        |                 |      | 1      | 0     | 1     | 1     |
| 025 ERZURUM     | 3   | 1     | 1      | _     | -             | -      | 5     | 1   |        | 1               | 1    |        | 0     |       | 5     |
| 026 ESKISEHIR   | 5   | -     | -      | -     | -             | -      | 5     |     |        |                 |      |        | 0     | 1     | 5     |
| 027 GAZIANTEP   | 8   | -     | 1      | -     | -             | -      | 9     | -   | -      | -               | -    | 1      | 1     | 1     | 10    |
| 028 GIRESUN     | 2   | -     | 2      | -     | -             | -      | 4     | -   | 1-0    | -               | -    | 1      | 1     | 1     | 5     |
| 029 GUEMUESHANE | 2   | -     | _      | -     | -             | -      | 2     |     |        | 1               |      | 1      | 0     | 1     | 2     |
| 031 HATAY       | 7   | 1     | -      | -     | -             | -      | 8     |     |        |                 |      | 1      | 0     |       | 8     |
| 032 ISPARTA     | -   | -     | 2      | -     | -             | -      | 2     |     |        |                 |      | 1      | 0     | 1     | 2     |
| 033 ICEL        | 6   | 1     | 2      | -     | 1             | -      | 10    |     |        |                 |      | 1      | 0     | 1     | 10    |

| 1 | - | 3 |
|---|---|---|
|   |   |   |
| L | ۸ | ú |

| LOCATION           |      | D O M | EST    | I C A | NIM           | ALS    |       | WILD ANIMALS |        |                 |      |        |       |                | TOTAL |
|--------------------|------|-------|--------|-------|---------------|--------|-------|--------------|--------|-----------------|------|--------|-------|----------------|-------|
| CODE NAME          | DOG  | CAT   | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX          | BADGER | OTHER<br>MUSTEL | DEER | OTHERS | TOTAL | HUMAN<br>CASES | TOTAL |
| 034 ISTANBUL       | 11   | 1     | 1      | _     | 1-1           | _      | 13    |              |        |                 |      |        | 0     |                | 13    |
| 035 IZMIR          | 16   | 1     | 1      | -     | 1             | -      | 19    |              |        |                 |      | 1      | 0     |                | 19    |
| 036 KARS           | 1    |       | _      | _     | -             | _      | 1     |              |        |                 |      |        | 0     |                | 1     |
| 037 KASTAMONU      | 1    | -     | 2      | -     | 1             | _      | 4     |              |        |                 |      |        | 0     |                | 4     |
| 038 KAYSERI        | 3    | -     | 2      | -     | :-            | -      | 5     |              |        | 1               |      |        | 0     |                | 5     |
| 041 KOCAELI        | 4    | =     | 1      | -     | 1-1           | -      | 5     |              |        | 1               |      |        | 0     |                | 5     |
| 042 KONYA          | 7    | 2     | 2      | _     | 1             | -      | 12    |              |        |                 |      |        | 0     |                | 12    |
| 043 KUETAHYA       | 5    | 1     | _      | -     | 2-0           | 1-1    | 6     |              |        |                 |      |        | 0     |                | 6     |
| 044 MALATYA        | 2    | _     | -      | _     | -             | -      | 2     |              | 1      |                 |      |        | 0     |                | 2     |
| 045 MANISA         | 12   | 1     | _      | _     | 1             | 1      | 15    |              | 1      |                 |      |        | 0     | 1              | 15    |
| 046 KAHRAMAN MARAS | 4    | -     | -      | 1     | 1             | _      | 5     |              | 1      |                 |      | 1      | 0     |                | 5     |
| 047 MARDIN         |      |       | 1      | I     |               |        | 0     | -            | -      | -               | -    | 1      | 1     | 1              | 1     |
| 048 MUGLA          | 1    | -     | 1      | -     | -             | -      | 2     |              |        |                 |      |        | 0     |                | 2     |
| 050 NEVSEHIR       | -    | 1     | -      | -     | 1             | 1-1    | 2     |              |        |                 |      |        | 0     |                | 2     |
| 054 SAKARYA        | 12   | 1     | 2      | 1     | _             | -      | 16    |              |        |                 |      | 1      | 0     |                | 16    |
| 055 SAMSUN         | 13   | 2     | 1      | 1     | -             | -      | 17    |              |        |                 |      |        | 0     |                | 17    |
| 057 SINOP          | 8    | _     | 1      | -     | 1             | -      | 10    |              |        |                 |      |        | 0     |                | 10    |
| 058 SIVAS          | 5    | -     | -      | -     | -             | -      | 5     |              |        |                 |      |        | 0     | 1              | 5     |
| 060 TOKAT          | 2    | -     | 2      | -     | -             | _      | 4     |              |        |                 |      |        | 0     | 1              | 4     |
| 061 TRABZON        | 4    | -     | -      | -     | -             | -      | 4     |              |        |                 |      |        | 0     |                | 4     |
| 063 URFA           | 1    | -     | -      |       | -             | -      | 1     |              | 1      |                 |      |        | 0     |                | 1     |
| 064 USAK           | 2    | -     | -      | 1-0   | -             | -      | 2     |              |        |                 |      |        | 0     |                | 2     |
| 066 YOZGAT         | 2    | -     | 1      | -     | -             | _      | 3     |              |        |                 |      |        | 0     |                | 3     |
| 067 ZONGULDAK      | 7    |       | 4      | -     | 1             | -      | 12    |              |        |                 |      |        | 0     |                | 12    |
| TOTAL              | 246  | 17    | 38     | 2     | 20            | 6      | 329   | 0            | 0      | 0               | 0    | 5      | 5     | 0              | 334   |
| PER CENT           | 73.7 | 5.1   | 11.4   | 0.6   | 6.0           | 1.8    | 98.5  | 0.0          | 0.0    | 0.0             | 0.0  | 1.5    | 1.5   | 0.0            | 100.0 |

-( )

| LOCATION                  |     | DOM  | EST:   | I C A | NIM           | ALS    |       | WILD ANIMALS |        |                 |      |        |       |                | TOTAL |
|---------------------------|-----|------|--------|-------|---------------|--------|-------|--------------|--------|-----------------|------|--------|-------|----------------|-------|
| CODE NAME                 | DOG | CAT  | CATTLE | HORSE | SHEEP<br>GOAT | OTHERS | TOTAL | FOX          | BADGER | OTHER<br>MUSTEL | DEER | OTHERS | TOTAL | HUMAN<br>CASES | TOTAL |
| 03 BIALA PODLASKA         | -   | 2    | -      | -     | _             | -      | 2     |              |        |                 |      |        | 0     |                | 2     |
| 05 BIALYSTOK              |     |      |        |       |               |        | 0     | 2            | -      | -               | -    | 2      | 4     |                | 4     |
| 07 BIELSKO-BIALA          | -   | -    | 1      | -     | -             | -      | 1     | -            | -      | -               | -    | 1      | 1     |                | 2     |
| 09 BYDGOSZCZ              | -   | 1    | -      |       | -             | -      | 1     | 6            | -      | 1               | -    | 1      | 8     |                | 9     |
| 11 CHELM                  | -   | 1    | -      | -     | -             | -      | 1     | 1            | -      | -               | -    | 1 7    | 1     |                | 2     |
| 13 CIECHANOW              |     |      |        |       |               |        | 0     | -            | -      | _               | _    | 1      | 1     |                | 3     |
| 15 CZESTOCHOWA            | - 2 | 1000 | 2000   |       |               |        | 0     | 3            | -      | _               |      | _      | 3     |                | 5     |
| 17 ELBLAG                 | 1   | -    | _      | _     | _             | -      | 1     | 3            | 1      | _               | 1 3  | 2      | 9     |                | 11    |
| 19 GDANSK<br>21 GORZOW    |     | 2    | -      | -     | _             | _      | 2     | 12           | _      | 1               | 2    |        | 15    |                | 16    |
| 23 JELENIA GORA           | 1   | -    | _      | -     |               | _      | 0     | 15           | _      |                 |      |        | 15    |                | 15    |
| 25 KALISZ                 |     |      |        |       |               |        | ő     | 13           | _      | _               | _    |        | 1     |                | 1     |
| 29 KIELCE                 | _   | 1    | _      |       | _             | _      | 1     |              |        |                 |      |        | 0     |                | Î     |
| 31 KONIN                  |     | •    |        |       |               |        | ō     | 3            | -      | -               | -    | _      | 3     |                | 3     |
| 33 KOSZALIN               |     |      |        |       |               |        | 0     | 10           | -      | -               | 3    | -      | 13    |                | 13    |
| 37 KROSNO                 |     |      |        |       |               |        | 0     | 3            | -      | -               | 1    | -      | 4     |                | 4     |
| 39 LEGNICA                | -   | 1    | -      | -     | -             | -      | 1     | 3            | -      | -               | -    | -      | 3     |                | 4     |
| 41 LESZNO                 |     | ***  |        |       |               |        | 0     | 3            | -      | -               | -    | -      | 3     |                | 3     |
| 43 LUBLIN                 | -   | 2    | -      | -     |               | -      | 2     | 2            | -      | 1               | -    | -      | 3     |                | 5     |
| 49 NOWY SACZ              | 1   | -    | 1      | -     | -             | -      | 2     | 10           | -      | -               | -    | -      | 10    |                | 12    |
| 51 OLSZTYN                |     | -    |        |       |               |        | 0     | 1            | -      | -               | -    | -      | 1     |                | 1     |
| 53 OPOLE                  |     |      |        |       |               | 1      | 0     | 6            | -      | -               | -    | -      | 6     |                | 6     |
| 57 PILA                   | -   | 2    | -      | -     | -             | -      | 2     | 4            | -      |                 | 2    | _      | 6     |                | 8     |
| 63 FOZNAN                 | 1   | 3    | -      | -     | -             | -      | 4     | 26           | -      | 1               | 5    | 2      | 34    |                | 38    |
| 77 SLUPSK                 | 1   | -    | -      | 2000  | -             | -      | 1     | 9            | -      | -               | 5    | _      | 14    |                | 15    |
| 79 SUWALKI                | _   |      |        | _     | _             |        | 0     | 1<br>8       | _      |                 | 2 2  | 3      | 13    | 1              | 14    |
| 81 SZCZECIN               | _   | 1    |        | _     | _             | -      | 0     | 2            | _      | _               |      | 3      | 2     |                | 2     |
| 83 TARNOBRZEG<br>87 TORUN | _   | 2    | 1      |       | _             | _      | 3     | 2            | _      | _               | 1    | _      | 3     |                | 1 6   |
| 89 WALBRZYCH              | -   | - 4  | 1      |       |               |        | 0     | 8            | _      | -               | 1    | _      | 9     | 1              | 9     |
| 91 WLOCLAWEK              | _   | 1    | 2_0    | _     | _             | _      | 1     | 2            | _      | -               |      | _      | 2     |                | 3     |
| 93 WROCLAW                | _   | 2    | -      | -     | _             | -      | 2     | 17           | -      | -               | 3    | -      | 20    |                | 22    |
| 97 ZIELONA GORA           | 1   | =    | 7-0    | -     | -             | -      | 1     | 12           | -      | 1               | 1    | ,      | 14    | _              | 15    |
|                           | 6   | 21   | 3      | 0     | 0             | 0      | 30    | 178          | 1      | 5               | 32   | 12     | 228   | 0              | 258   |
| TOTAL                     | 0   | ~ 1  |        |       |               |        |       |              |        |                 |      |        |       |                |       |

# 2.4 Rabies in Czechoslovakia (CZE)\* by M. Capka and J. Neumann

As anticipated, the rabies occurrence in the first quarter 1985 was markedly reduced in comparison with the same quarter in 1984. The total number of cases amounted to 574, resulting in a reduction of 28.4% compared to the last year. Of these 510 cases (88.9%) occurred in the CSR and 64 (11.1%) in the SSR.

The wild animals accounted for 541 cases (94.3% of total). They were diagnosed in 517 foxes, one badger, 9 martens, 12 roe deer and 2 wild cats. The 33 cases in domestic animals were in 16 dogs, 16 cats and 1 bovine.

Concentration of cases were found in South Moravia, North and West Bohemia.

At present, 1142 rabies foci were recorded involving 89 districts.

<sup>\*</sup> Printing of the BULLETIN was in an advanced state when the figures for Czechoslovakia arrived. They are included in the total number of cases for Europe in the map. The summary tables for Europe (Table 1 and 2) and the text for Europe (2.) do not contain these figures.

1. 1.85 - 31. 3.85

# CZE CZECHOSLOVAKIA

RABIES CASES

| LOCATION   |                  | DOM                   | EST:        | I C A  | NIM           | ALS    |                  |  | WII    | L D A                      | NIM                             | ALS              |  | HUMAN<br>CASES |  |
|--|------------------|-----------------------|-------------|--------|---------------|--------|------------------|--|--------|----------------------------|---------------------------------|------------------|--|----------------|--|
| CODE NAME  | DOG              | CAT                   | CATTLE      | HORSE  | SHEEP<br>GOAT | OTHERS | TOTAL            | FOX  | BADGER | OTHER<br>MUSTEL            | DEER                            | OTHERS           | TOTAL                                  |                | TOTAL                                  |
| 00 DISTRICT OF PRAGUE 01 CENTRAL BOHEMIA 02 SOUTH BOHEMIA 03 WEST BOHEMIA 04 NORTH BOHEMIA 05 EAST BOHEMIA 06 SOUTH MORAVIA 07 NORTH MORAVIA | 2<br>1<br>3<br>1 | 2<br>1<br>5<br>2<br>1 | -<br>1<br>- | 111 11 |               | 111111 | 0 0 4 2 9 0 5 2  | 2<br>16<br>45<br>89<br>83<br>16<br>166<br>49 | 1      | -<br>1<br>4<br>2<br>-<br>2 | -<br>3<br>-<br>3<br>1<br>4<br>1 |                  | 2<br>16<br>49<br>93<br>89<br>17<br>172 |                | 2<br>16<br>53<br>95<br>98<br>17<br>177 |
| 0 CSR  | 10               | 11                    | 1           | -      | -             | -      | 22               | 466  | 1      | 9.                         | 12                              | 11 -             | 488                                    |                | 510                                    |
| 10 DISTRICT OF BRATISLAV<br>11 WEST SLOVAKIA<br>12 CENTRAL SLOVAKIA<br>13 EAST SLOVAKIA  | 1<br>1<br>4      | 3<br>-<br>2           | -           | 111    | -             |        | 0<br>4<br>1<br>6 | 1<br>17<br>9<br>24                           | 1 1 1  |                            | 1111                            | -<br>-<br>2<br>- | 1<br>17<br>11<br>24                    |                | 1<br>21<br>12<br>30                    |
| 1 SSR  | 6                | 5                     | (+)         | :=:    | -             | -      | 11               | 51   | -      | -                          | -                               | 2                | 53                                     |                | 64                                     |
| TOTAL  | 16               | 16                    | 1           | 0      | 0             | 0      | 33               | 517  | 1      | 9                          | 12                              | 2                | 541                                    | 0              | 574                                    |
| PER CENT   | 2.8              | 2.8                   | 0.2         | 0.0    | 0.0           | 0.0    | 5.7              | 90.1   | 0.2    | 1.6                        | 2.1                             | 0.3              | 94.3                                   | 0.0            | 100.0                                  |

## LIST OF CONTRIBUTORS

## AUT AUSTRIA

Dr. W. K rocza Director Dr. E. Scharfen Bundesanstalt für Tierseuchenbekämpfung Robert-Koch-Gasse 17 A-2340 Mödling /Austria

#### BEL BELGIUM

Dr. R. D e p i e r r e u x Ministère de l'Agriculture -Inspection Vétérinaire-18, Bd. de Berlaimont B-1000 Bruxelles /Belgium

### BUL BULGARIA

Dr. N. T. B e l e v Directeur Général des Services Vétérinaires Ministry of Agriculture Sofia /Bulgaria

## CZE CZECHOSLOVAKIA

Dr. M. Capka
Chief Veterinary Officer
Dr. J. Neumann
Federal Ministry of Agriculture and Food
11006 Praha-Tesnov /CSR

## DDR GERMAN DEMOCRATIC REPUBLIC

Dr. K.-H. L e b e n t r a u Ministerrat der Deutschen Demokratischen Republik Min. f. Gesundheitswesen Hauptabt. Internationale Beziehungen /Abt. Nichtsozialistische Staaten / WHO Rathausstr. 3 DDR 102 Berlin

## DEN DENMARK

Dr. E. S t o u g a a r d Chief Vet. Officer Veterinaerdirektoratet Frederiksgade 21 DK-1265 Copenhagen /Denmark Dr. S. M ø l l g a a r d Senior Veterinary Officer Solsortevej 3B DK-8210 Aarhus /Denmark Dr. J. M u e l l e r State Veterinary Serum Lab. Bülowsvej 27 DK-1870 Copenhagen /Denmark

### FIN FINLAND

Dr. R. B e r g e r Chief of Animal Health Division Ministry of Agriculture and Forestry, Veterinary Department Helsinki /Finland

# FRA FRANCE

Dr. J. Blancou Directeur Centre d'Etudes sur la Rage de Nancy B.P. No. 9 Malzeville /France

## GBR UNITED KINGDOM

Dr. W.H.G. R e e s Chief Veterinary Officer Ministry of Agriculture, Fisheries & Food -Animal Health Division-Tolworth Surbiton/Surrey

### GRE GREECE

Dr. V. H ant zis
Director of Zooanthrop. Div.
Dr. E. Tsaglas
Veterinary Officer
Dep. of Echinococcosis-Rab.
Veterinary Services
Ministry of Agriculture
Hellenic Republic
2, Acharnon Street
Athens (102) / Greece

# HUN HUNGARY

Dr. A. Glózik
Director of Veterinary Services
Dr. Laszlo Koltai
Ministry of Agriculture
Kossuth L. tér 9-11
Budapest V. /Hungary

## ISL ICELAND

Dr. Páll A. Pálsson Chief Veterinary Officer Postbox 110 Reykjavik /Iceland

## IRE IRELAND

Dr. P. J. O'C on nor Deputy Director Veterinary Serv. Dr. P. J. Rogan Veterinary Liaison Officer Department of Agriculture Agriculture House Dublin 2 /Ireland

### ITA ITALY

Dr. A. Mantovani Laboratorio di Parassitologia Istituo Superiore di Sanità Viale Regina Elena, 299 I-00161 Roma

Dr. S. Prosperi Istituto di Malatti Infettive Univ. degli Studi di Bologna Via S. Giacomo 9/2 I-40126 Bologna /Italy

## LUX LUXEMBOURG

Dr. R. Frisch Directeur de l'Inspect.Gèn.Vét. Ministère de l'Agriculture 89, Rue d'Anvers B.P. 1403 Luxembourg

### NET NETHERLANDS

Dr. C.J. V e r m e u l e n Staatsoezicht op de Volksgezondheid Veterinaire Hoofdinspectie v.d. Volksgezondheid Postbus 439 2260 AK Leidschendam /Netherl.

### NOR NORWAY

Dr. Olav Sandvik Director of Vet. Services

Dr. H.O. B a c h - G a n s m o Deputy Dir. of Vet. Services Det Kongelige Landbruksdepartm. Akersgate 42/Postboks 8007 Dep. Oslo 1 /Norway

## POL POLAND

Dr. Andrzej B a d y o c z e k Head of Animal Health Division -Veterinary Department-Ministry of Agriculture ul. Wspolna 00-930 Warszawa /Poland

Dr. Danuta S e r o k o w a Head of Anthropozoonoses Lab. National Institute of Hygiene ul. Chocimska 24 00-791 Warszawa / Poland

## POR PORTUGAL

Dr. C.A.M. de Andrade Fontes Direccao-Geral da Pecuaria Rua Vitor Cordon, 4 1294 Lisboa / Codex / Portugal

## ROM ROMANIA

Dr. Valer T e u s d e a Directeur de la Direction Sanitaire Vétérinaire Ministère de l'Agriculture B-dul Republicii 24 Bucuresti 3 /Romania

## SPA SPAIN

Dr. M.A. Diaz Yubero Subdirector General de Sanidad Animal Ministerio de Agricultura Madrid /Espagne

## SWE SWEDEN

Dr. B. Henrics on Head of Department Lantbruksstyrelsen National Board of Agriculture Veterinary and Animal Production Department Vallgatan 6 S-551 83 Jönköping /Sweden

## SWI SWITZERLAND

Dr. A.I. Wandeler Vet. Bacteriological Institute University of Berne Länggass Str. 122 CH-3001 Berne /Switzerland

## TUR TURKEY

Dr. Hasan Ertan General Director of Vet. Serv. Dr. F. Yücel Director, Zoonoses Department Tarim ve Orman Bakanligi, Ministry of Agriculture Ankara /Turkey

# USR UNION OF SOVIET SOCIALIST REPUBLICS

Prof. B. C h e r k a s s k i y Chief of Zoonoses Laboratory Acad. V. P o k r o v s k i y Head of Central Institute Central Institute of Epidemiology Ministry of Public Health Moscow /USSR

## YUG YUGOSLAVIA

Dr. M. Radovanovic
Adviser, Veterinary Department
Federal Committee for Agriculture
Belgrad / Yugoslavia
Dr. Milos Petrović
Institut Pasteur
Hajduk Veljkova 1
21000 Novi Sad / Yugoslavia



