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1. INTRODUCTION

This BULLETIN describes the reported rabies cases in Europe for the third quarter 1987. The situation in general appears under 2., and in individual countries under 2.1-2.26.

In the miscellaneous section under 3.1 the recent outbreak of bat-rabies in the Netherlands is elaborated. In the article under 3.2 a human rabies case from Thailand is described which developed despite a proper post-exposure regimen. In 3.3 a report on antibody response is given in connection with post-exposure vaccination of 22 people, of which half had undergone pre-exposure vaccination, the other half had not. Under 3.4 field trial areas of oral fox vaccination against rabies in Europe, 1978-1987, are described, supplemented by a map in the Annex.

The rabies case data are tabulated for the third quarter 1987 under 4.

The last section lists the official contributors to the BULLETIN.

The geographical distribution of cases in Europe in the third quarter 1987 is shown on the map of Europe and Turkey in the Annex.

2. RABIES IN EUROPE, 3RD QUARTER 1987

During the third quarter 1987, 3812 rabies cases were reported in Europe. These were 3156 cases in wild animals (82.8%) and 656 cases in domestic animals (17.2%). Of the cases in wild animals 2785 (73.1% of total) were foxes, 48 badgers, 106 other mustelids, 79 deer, 33 other terrestrial animals and 105 insectivorous bats. Of the 656 domestic animals 175 were dogs (of which 111 (63.4% of all dogs) were reported from Turkey, a country with dog-mediated rabies), 131 cats, 216 cattle, 11 horses and 120 small ruminants. These data are summarized in Table 1.

The figures in Table 2 show accumulated totals of the first to the third quarter 1987 for the European countries. Table 3 lists 'other animal species', less frequently involved in rabies.

Rabies-free countries in Europe participating in the surveillance were: Bulgaria, Finland, United Kingdom, Ireland, Iceland, Portugal and Sweden. There were no cases reported from Italy.

There were 105 bat-rabies cases. It is now apparent, the third quarter of a year represents the peak of rabies cases amongst bats. During the third quarter 1986 there were 110 cases. Further reports were from Denmark (32 cases), the Federal Republic of Germany (1) and the Netherlands (70). For the first time ever Spain reported 2 cases.

No human case was reported.

Individual country reports follow:

2.1 Rabies in Austria (AUT)
by E. Scharfen

During the third quarter 1987, 432 animal rabies cases were recorded, 24.2% less compared to the second quarter (570 cases), but 45.4% more than during the same period 1986 (297 cases). Of 412 rabid wild animals (95.4% of total) 357 (82.6%) were foxes, 25 (5.8%) badgers, 14 martens and 14 roe deer (3.2% each), 1 polecat and 1 hare. Of 20 rabid domestic animals (4.6% of total) 9 (2.1%) were cattle, 7 sheep (1.6%) and 4 cats (0.9%).

The epizootic occurred in the federal provinces Salzburg (except Salzburg-Stadt and surrounding area), Styria (except Mürzzuschlag, Hartberg, Fürstenfeld, Radkersburg), Carinthia (except Hermagor, Völkermarkt) and Burgenland (except Jennersdorf, Mattersburg, Neusiedl am See). In Lower Austria rabies was recorded to the north of the river Danube in Wein- and Waldviertel (the districts -Bezirke- of Mistelbach, Horn, Waidhofen an der Thaya, Gmünd), in Upper Austria in Mühlviertel (Freistadt, Urfahr-Umgebung) and in the south of the federal province in the district of Gmunden.

The federal provinces Tyrol (except Reutte), as well as Vorarlberg and Vienna were rabies-free.

2.2 Rabies in Belgium (BEL)
by I. Fontaine

During the prevailing quarter, rabies was confirmed in 55 animals in the provinces of Hainaut, Liège, Luxembourg and Namur. 13 cases occurred in domestic animals (3 cats, 8 cattle, 1 sheep and 1 goat) and 42 in wild animals (36 foxes, 5 mustelids and 1 roe deer).

There was an increase on rabies cases by 19% compared to the previous quarter and a decrease by 31% compared to the third quarter 1986. Accumulating the first three quarters of the year there was a decrease by 40% in comparison with 1986.

Except for one case in the province of Hainaut, to the north of the river Sambre, all other cases were situated to the east of the river Meuse.

Ten rabid foxes were registered in the area where two campaigns of oral fox vaccination were carried out compared to 77 rabid foxes in the adjacent area which is double the size. A third vaccination campaign was carried out in the above mentioned area on September 27, 1987. Furthermore, the vaccination zone is going to be enlarged to the border of the Netherlands in October 1987 (see as well 3.4 in this BULLETIN).

2.3 Bulgaria (BUL)

The country remained rabies-free.

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

In the third quarter of 1987, rabies was ascertained in 393 animals (CSR-335, SSR-58). Compared to the previous quarter, there was an expected seasonal decrease of rabies cases (namely 111 = 22%), while compared to the third quarter 1986 (327 cases) there was an increase of 66 cases (20.2%).

Rabies occurred most frequently in foxes (352 cases = 89.6% of total). Other wild animals affected were: 2 badgers, 11 martens, 3 roes and 1 raccoon dog. Regarding domestic animals, rabies was ascertained in 5 dogs, 17 cats, 1 bovine and 1 sheep. The domestic animals accounted for 6.1% of the total cases.

The highest number of cases was recorded again in Northern (155 cases) and Western Bohemia (67 cases). The district (okresy) Chomutov (Northern Bohemia) ranks first (43), followed by the districts C. Lípa and Louny (19 each), Litomerice (18), Liberec (17), etc.

At the present time, rabies has been recorded in Czechoslovakia in 427 foci involving 70 districts (CSR - 375 foci in 53 districts, SSR - 52 foci in 17 districts).

No case of rabies was recorded in man.

2.5 Rabies in Germany, Democratic Republic (DDR)

During the third quarter 1987, 449 cases of rabies were registered in the Democratic Republic of Germany, 75 cases more than during the previous quarter and 20 more than during the third quarter 1986.

Of the 449 cases 324 (72.2%) were in wild animals - 299 foxes, 2 raccoon dogs, 2 badgers, 14 stonemartens and 7 roe deer, and 125 (27.8%) in domestic animals - 19 dogs, 23 cats, 1 mink, 2 horses, 28 cattle, 51 sheep and 1 goat.

There was a concentration of cases in the Bezirk (department) Rostock in the north of the country and in the south-west in the Bezirke Erfurt, Gera and Suhl.

2.6 Bat-Rabies in Denmark (DEN)

During the third quarter 1987, there were 32 bat-rabies cases in Denmark, mainly in Jutland.

The country remained rabies-free in terrestrial animals.

2.7 Rabies in Germany, Federal Republic (DEU)

A total of 846 rabies cases were reported during the third quarter 1987, 10 cases less than during the previous quarter and 373 cases less than during the third quarter 1986 (-30.6%).

775 cases of the total (91.6%) were in wild animals: 699 foxes, 14 badgers, 31 stone martens, 1 pine marten, 1 polecat, 1 mouse weasel, 24 roe deer, 1 red deer, 2 fallow deer and 1 bat. Of 71 cases in domestic animals there were 6 dogs, 13 cats, 39 cattle, 2 horses, 10 sheep and 1 goat.

There was only one bat-rabies case in northern Germany compared to 12 during the same period last year.

Rabies in terrestrial animals was on the decrease as oral rabies vaccination of foxes continued (see as well under 3.4 in this BULLETIN). This was the third quarter with the lowest figure since reporting started in this BULLETIN (1977). Several areas have become rabies-free. All federal states except the city states Hamburg, Bremen and Berlin have programmes for the oral vaccination of foxes according to their financial resources.

In round table discussions responsible representatives for the field trial gather to compare experience, develop or correct strategies, but generally coordinate the programme for the entire Federal Republic of Germany. The last meeting of this kind was the 4th Round Table Discussion on 15/16 September 1987 in Friedrichshafen-Schnetzhausen at Lake Constance.

Concentration of rabies cases was registered in areas with no oral vaccination of foxes or where vaccination is in its initial state. The new areas where oral vaccination was carried out in 1987 are mentioned in the article under 3.4 in this BULLETIN.

2.8 Finland (FIN)

The country remained rabies-free.

2.9 Rabies in France (FRA) by J. Blancou

432 rabies cases were reported during the third quarter 1987, 46 cases less than during the previous quarter. 334 cases were registered in the fox (77.3% of total), 17 in other wild animals and 81 in domestic animals (8 dogs, 19 cats, 14 cattle, 36 small ruminants and 4 horses). The départements (departments) with the greatest number of cases were: Haute Saône (44 cases), Nièvre (39 cases), Doubs (37 cases) and Aube (35 cases).

2.10 Rabies in Greece (GRE) by A. Saravanos

During the 3rd quarter 1987, one rabies case was reported in a dog in Evros province (Didimoticho town), along the Evros river (bordering Turkey).

Six persons, mainly of the dog owner's family, were bitten by the dog and received anti-rabies post-exposure treatment.

2.11 United Kingdom (GBR)

The country remained rabies-free.

2.12 Rabies in Hungary (HUN)
by L. Koltai

During the third quarter 1987, 241 rabies cases were recorded in Hungary (240 during the third quarter 1986).

The Komitat (province) mostly affected was Pest with 40 cases (15 cases during the third quarter 1986). Further Komitats heavily infected were in Transdanubia: Fejer with 22 cases, Tolna with 20, Baranya and Somogy with 19 cases each. Rabies along the Austrian border decreased to 5 in Győr-Sopron and to 10 in Vas provinces.

Foxes participated in the rabies epizootic with 82.6%. As a rare incidence there was a case in a wild boar in the Komitat Somogy.

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 third quarter 1987, no case of rabies was diagnosed in Italy.

Nevertheless, surveillance in wild animals of the Alpine regions previously infected continues to minimize the risk of reinfection.

2.16 Rabies in Luxembourg (LUX)
by R. Frisch

There were only four rabies cases diagnosed during the third quarter 1987, as many as during the previous quarter. Three cases were registered during July and one case in August. All four cases occurred in the eastern part of the country close to the German/Luxembourg state border.

In comparison with the third quarter 1986 there was a reduction of rabies cases from 47 to 4.

2.17 Bat-rabies in the Netherlands (NET)
by J.H.M. Nieuwenhuijs

During the third quarter 1987, 70 cases of bat-rabies were registered in the Netherlands (see as well the report under 3.1 in this BULLETIN). All the rabid bats were Eptesicus serotinus.

Apart from bat-rabies, the country remained rabies-free in terrestrial animals.

2.18 Rabies in Norway (NOR)

During the third quarter 1987, one case of rabies has been reported in a reindeer in Svalbard. The last case occurred here during the first quarter 1981.

The mainland of Norway remained rabies-free.

2.19 Rabies in Poland (POL)

by J. Kolacz

A total of 496 cases of rabies was reported during the third quarter 1987. These are 151 cases more than during the previous quarter (an increase of 43.8%) and 190 cases more than during the third quarter in 1986 (an increase of 62.1%).

85.1% of the total cases were registered in wild animals, mainly in the fox (73.4% of the total). Others were farm animals (8.9%), racoon dogs (4.0%), roe-deer (3.4%), dogs (3.2%), cats (2.8%), martens (1.8%).

Only eight provinces (there are a total of 49) were rabies-free during the said period.

2.20 Rabies in Portugal (POR)

The country remained rabies-free.

2.21 Rabies in Romania (ROM)

There were 13 rabies cases reported in Romania during the third quarter 1987, 3 less than during the previous quarter and one more than during the third quarter 1986. There were only 2 cases in wild animals and 11 in domestic animals (2 dogs, 4 cats, and 5 cattle).

The rabies cases were scattered throughout the northern half of the country.

2.22 Bat-Rabies in Spain (SPA)

During the third quarter 1987, 2 cases of bat rabies were registered in Spain. One case occurred in Valencia and the other in Granada.

Regarding the first case a child, twelve years old, was bitten in the back by a bat on the 18th August 1987. Unfortunately, the bat was not kept for subsequent identification. The laboratory examination of the animal brain, carried out by the Health Institute of Valencia and Carlos III Institute revealed a rabies infection. This was later confirmed by the WHO Collaborating Centre for Rabies Surveillance and Research, Tübingen, and,

at the same time a characterisation of the isolate was carried out using a panel of monoclonal antibodies. The virus related to the Duvenhage serotype first isolated in South Africa.

The second case occurred on the 21st September of 1987 while 2 children were playing with a bat, and one of them was bitten in a finger. This bat was not kept for identification either. The laboratory examination, carried out on the bat by the Reference Center of Málaga was rabies positive by immuno-fluorescence and biological assay.

Both children received post-exposure treatment immediately.

Bat rabies has never been described in Spain previously.

In order to get more information on the prevalence of rabies in bats, epidemiological research is being carried out.

2.23 Sweden (SWE)

The country remained rabies-free.

2.24 Rabies in Switzerland (SWI) by A.I. Wandeler

During the third quarter of 1987, the Swiss Rabies Diagnostic Center received 442 animals for examination. 24 (5.5%) of these were positive for rabies compared to 26 (6% of 441) in the previous quarter and 33 (6% of 583) in the third quarter of 1986. 21 were observed in foxes, 1 in a marten, 1 in a roe deer, and 1 in cattle.

Two positive foxes were registered in the canton Valais close to the national border. All other rabid animals originated from nonvaccinated areas in the Jura mountains and from canton Geneva. The favourable evolution of the epizootic in Switzerland allowed to discontinue fox vaccination campaigns in Eastern and Central Switzerland. But a vaccination belt is maintained in the Jura mountains along the western border.

None of the recorded rabid animals injured any people during the third quarter of 1987. The number of persons treated for non-bite exposures is not known.

2.25 Rabies in Turkey (TUR)

During the third quarter 1987, 199 rabies cases were reported from Turkey. Only 3 of these cases were in wild animals, 196 (98.5% of total) were in domestic animals. Of the cases in domestic animals 111 were in dogs (55.8% of total), 14 in cats, 63 in cattle, 3 in horses, 4 in sheep and 1 in a donkey.

Concentration of cases was reported from the provinces Samsun and Bohn with 26 and 22 cases respectively. All other provinces reported 1 to 11 cases.

In comparison with the previous quarter (242 cases) there was a decrease by 43 cases.

2.26 Rabies in Yugoslavia (YUG)

122 animal cases of rabies were reported in Yugoslavia during the third quarter 1987. Of these were 118 foxes and two other wild animals, one cat and one bovine.

As in the previous quarter, there was a concentration of cases in Slovenia (79) and in the bordering Croatia. Cases in Wojwodina and in the bordering Croatia and in Bosnia and Hercegovina were more scattered. The southern parts of Yugoslavia were rabies-free.

3. MISCELLANEOUS

3.1 Bat-rabies in the Netherlands

by J.H.M. Nieuwenhuijs

The first case of bat-rabies in the Netherlands occurred on 30 May 1987 and was found in the province of Friesland. Meanwhile more than 1000 bats have been examined and 7-8% of them were found to be positive for rabies. (Editors note: in comparison with Denmark, there were in the beginning when bat rabies was diagnosed in 1985/86 approx. 28% of the sample size positive while during this year (1987), there were only approx. 14% positive).

The bat-rabies cases were distributed throughout the northern and central parts of the country. There were no cases in the south.

Most of the rabid bats were found in Eptesicus serotinus (see Table 1). During the second quarter 1987, there were 2 cases in Myotis dasycneme. The greatest sample of the total examined derived from Pipistrellus pipistrellus (38.6% in the Table). Nevertheless, none of them were found rabid.

In Table 1 the number of investigated and rabies positive bats from 30 May to 22 September 1987 are summarized by species. Figure 1 (page 10) gives a review of the number of rabies positive bats per week, again during the above mentioned period.

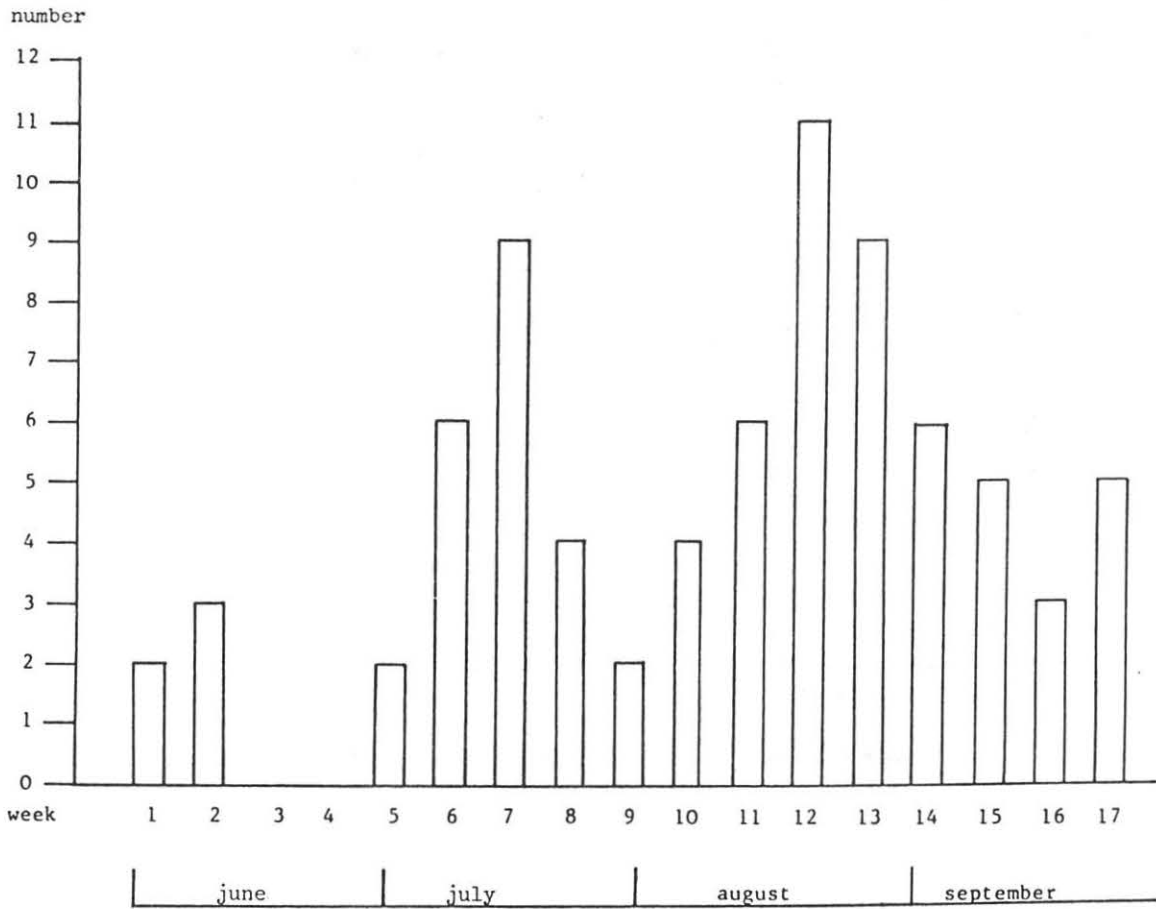
Apart from bat-rabies, the Netherlands remained rabies-free in terrestrial animals.

Table 1:

Review of investigated and positive bats during the period
May 30 - September 22, 1987

Species	Number investigated	Rabies positive
<u>Eptesicus serotinus</u>	341 (32.6%)	71
<u>Pipistrellus pipistrellus</u>	404 (38.6%)	0
<u>Pipistrellus nathusi</u>	33	0
<u>Pipistrellus spec.</u>	118 (11.3%)	0
<u>Nyctalus noctula</u>	11	0
<u>Nyctalus leisleri</u>	2	0
<u>Plecotus auritus</u>	34	0
<u>Plecotus spec.</u>	2	0
<u>Myotis dasycneme</u>	65 (6.2%)	2
<u>Myotis daubentoni</u>	34	0
<u>Myotis mystacinus/brandti</u>	1	0
Not determined	2	0
Total	1047	73

Fig. 1. Rabies positive bats per week during the period June the 1st - September the 27th 1987.



3.2 Human rabies despite treatment with rabies immune globulin and human diploid cell rabies vaccine - Thailand

In the previous issue of this BULLETIN a report of a fatal rabies encephalitis despite appropriate post-exposure prophylaxis was given. The case occurred in South Africa. The following is the second laboratory-confirmed case of rabies reported to have occurred despite administration of human diploid cell vaccine (HDCV) and human rabies immune globulin (HRIG) within 24 hours of exposure.

The case report

On March 6, 1987, a rabid dog severely bit a ten-year-old Thai boy on the left calf and forehead and on the right eyelid through to the bulbar conjunctiva. The wounds were immediately flushed with saline alone and sutured at a local hospital. Tetanus toxoid and suckling mouse rabies vaccine were given intramuscularly (i.m.). The following day, 21 hours after exposure, the patient received 1 ml human diploid cell rabies vaccine (HDCV) i.m. in the gluteal area and 20 IU/kg of human rabies immune globuline (HRIG) i.m. in the opposite gluteal area. Subsequent 1 ml injections of HDCV were given i.m. in the gluteal area on days 2, 6, and 13. Twenty-one days after exposure, the patient developed fever, headache,

lethargy, vomiting, and progressive paralysis of all extremities. The patient died 15 days later, 36 days after exposure. His brain tissue was positive for rabies virus by direct fluorescent antibody.

(Reported by: P. Lumbiganon, MD, V Bunyahotra, MD, C Pairojkul, MD, Khon Kaen University, Khon Kaen; Thailand Ministry of Public Health, Bangkok, Thailand. Viral and Rickettsial Zoonoses Br., Div. of Viral Diseases, Center for Infectious Diseases, CDC).

gegenüber
Schindler
ausgewertet *individuelle*
med. Anamnese *infolge*
schwierig

The editors presenting the above report elaborate on several possible explanations for the observed failure of HDCV and HRIG to protect against rabies in this case and the one in South Africa (see as well BULLETIN 2/87 pp. 10 and 11). Again, in the above case vaccine was administered in the gluteal area. An experience with the administration of hepatitis B vaccine has led to the opinion that antibody response can be reduced by this route as the injection of the vaccine into subcutaneous fat may interfere with the immunogenicity. - Different from the case in South Africa was the wound management. Flushing the wound with saline only might not have been effective as a first aid support.

aber
fallen
vollständig *vollständig* *Moschcow* *erwähnen*
erwähnen

In spite of not knowing the exact reasons of the two mentioned rabies cases, the following suggestions should be adhered to:

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wounds inflicted by animals suspected or confirmed to be rabid should be immediately and thoroughly cleaned with soap and water;

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if anatomically possible, up to half of the HRIG dose should be infiltrated, around the wound and the rest given i.m. in the gluteal area or lateral thigh;

for postexposure prophylaxis, adults and children should always receive HDCV i.m. in the deltoid;

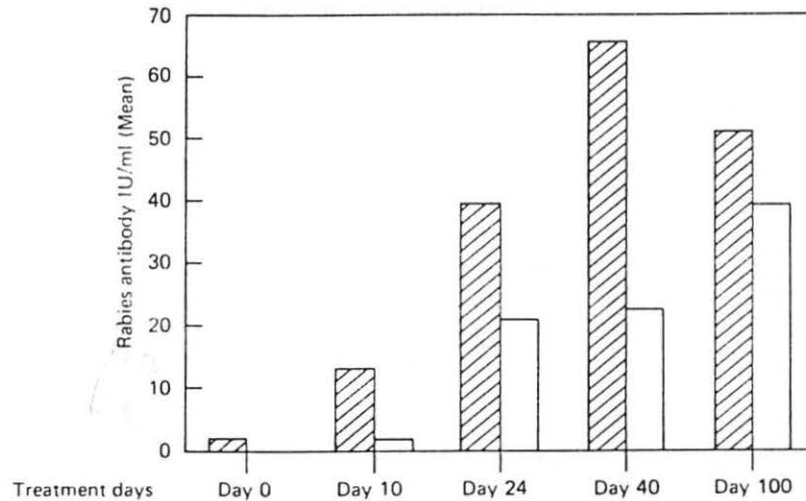
infants can be given the vaccine in the anterolateral upper thigh.

(Taken from: Morbidity and Mortality Weekly Report, Vol. 36, No. 46, pp. 759-765, 1987. Published by Centers for Disease Control, Atlanta, GA 30333, U.S.A.)

3.3 Value of pre-exposure rabies human diploid cell vaccine for individuals living in areas hyperendemic for rabies

In a letter to VACCINE a group of authors report the results of rabies antibody response of 22 people at the US Naval Research Unit in Cairo, Egypt. The people were vaccinated after being exposed to a rabid dog. Of the 22 people, 11 individuals had received pre-exposure vaccination from 3-18 months before exposure (four with duck embryo vaccine and seven with human diploid cell vaccine -HDCV-) and 11 had not.

In 83 serum samples antibody titres were measured by the in vivo serum neutralization assay in mice at days 0, 10, 24, 40 and 100 during postexposure treatment. These titres are shown in Figure 1.



11 Pre-exposure vaccination					
Number tested	10	4	11	8	9
Rabies antibody, mean (Range)	1.0 (0.1-3.1)	13.5 (4.7-24.8)	39.2 (6.2-99.2)	66.3 (10.8-99.2)	51.6 (16.1-99.2)
11 No pre exposure vaccination					
Number tested	7	2	10	11	9
Rabies antibody, mean (Range)	0	0.5 (0.4-0.6)	20.6 (1.6-49.6)	20.8 (5.0-49.6)	37.6 (12.7-95.3)

Figure 1 Serum neutralization rabies antibody titres (IU ml⁻¹) for 22 individuals receiving postexposure human diploid cell rabies vaccine. ▨ Pre-exposure vaccination; □ no pre-exposure vaccination

Individuals with pre-exposure vaccination demonstrated antibody titres before treatment had begun; their titres rose rapidly and on day 24 the mean SN titre was 39.2 IU ml⁻¹. Individuals without pre-exposure vaccination did not have antibody titres before treatment and their titres rose more slowly, with a mean SN titre of 20.6 IU ml⁻¹ at day 24.

These data provide further assurance that pre-exposure vaccination with HDCV provides significant antibody titres which rapidly rise with postexposure treatment.

In connection to the subject 9 references are quoted.

(Taken from: VACCINE, Vol. 5, page 260, December 1987, "Value of pre-exposure rabies human diploid cell vaccine for individuals living in areas hyperendemic for rabies" by Miachel E. Kilpatrick, Boulos A.M. Botros, Thomas J. Bucci and Stella A. Ross, US Naval Medical Research Unit No. 3, Cairo, Egypt).

3.4 Field trial areas of oral fox vaccination against rabies in Europe

During a WHO Workshop on Oral Immunization of Wildlife against Rabies in Europe (INTORAL) in 1986 it was recommended that an exchange of information on the current field trials may be offered through this BULLETIN to all interested parties. A first description of the areas under oral immunization of wildlife appeared in issue 3/86 summarizing all areas at least once vaccinated from 1978 to 1986. There are seven countries at present participating in field trials: Switzerland (SWI), Federal Republic of Germany (DEU), Italy (ITA), Austria (AUT), Luxembourg (LUX), Belgium (BEL) and France (FRA). Coordinating their activities is called for, especially along borders to protect a whole country or large parts of it against reinvasion once the area has become rabies-free through vaccination.

In this issue there will be a short description of the vaccination area (V.A.) of the seven participating European countries and remarks on the epizootiological development (E.D.). Like in the 3/86 issue the report will be supplemented by a map in the Annex. The area once or several times vaccinated from 1978 to 1986 is shown dotted, the newly vaccinated area in 1987 is shown hatched.

Switzerland (SWI)

V.A. - Nearly the whole country is covered except for parts of the Jura mountains. There is one part in Canton Aargau which did not need to be vaccinated, as well as large areas above altitudes of 2000 meters (not shown in the map).

E.D. - Vaccination started in the Canton Valais, enclosed within the Alps, in 1978.

After getting the larger valleys of the Alps and later the lowlands in the north of Switzerland rabies free, only small areas of the Jura mountains remain infected.

Here are annual figures on rabies cases highlighting the development:

1977	1979	1981	1983
1041	1370	1413	1064
1984	1985	1986	1987 (only 3 quarters)
928	412	198	74

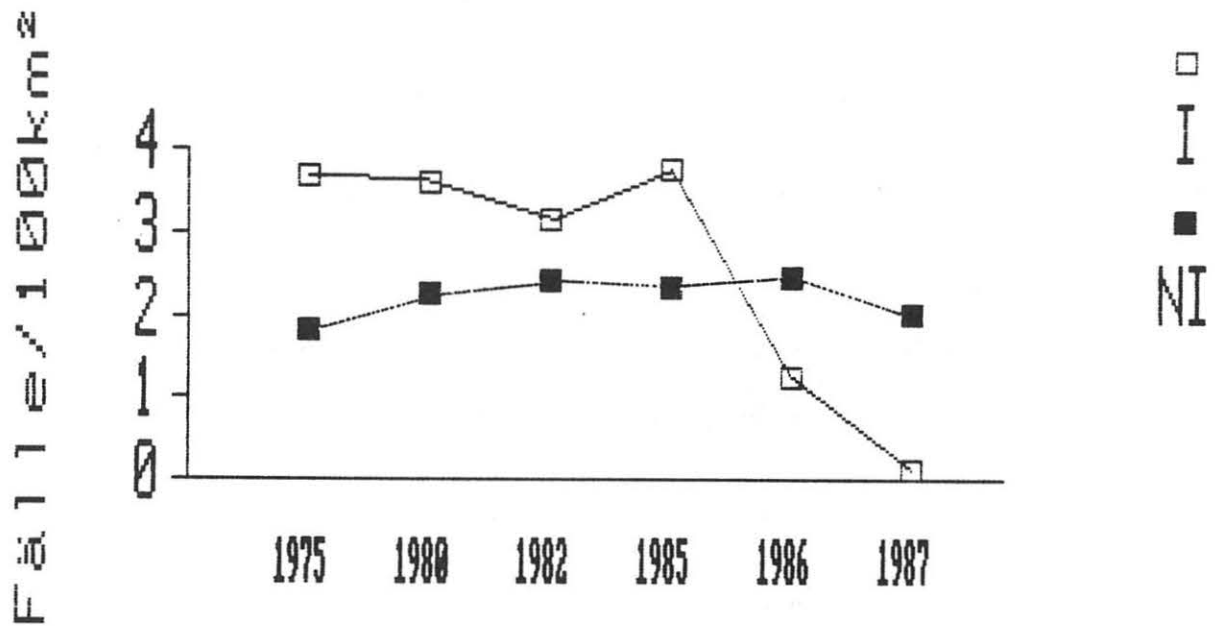
Federal Republic of Germany (DEU)

V.A. - Within 5 years an area of 153 285 km² has been under oral vaccination in the Federal Republic of Germany. This is 61.7% of the whole country. 8 Federal Provinces participate in the trial, and make up plans every year for continuation according to financial resources, considering epidemiological development, natural barriers, experience gained, etc.

E.D. - The following computer graph demonstrates the general trend of the vaccination by comparing rabies case densities from selected areas (I) where at present oral vaccination has been stopped or will be shortly

with all other areas (NI) of the Federal Republic of Germany where vaccination has not yet been carried out. It has to be mentioned that vaccination started in 1983 and the areas under I include the begin of vaccination up to 1985. It can be seen that in the beginning vaccinated areas were chosen for the trial with a higher density of cases. There was little change on density of cases in areas not yet vaccinated.

Tollwutdichten DEU, 1975-1987



I=73178km² NI=175432km²

Legend:

- Y-axis - rabies cases per 100 km² in one year (in 1987 in 9 months only)
- I - selected areas where, at present, oral vaccination has been stopped or is shortly to be stopped (total 73 178 km²)
- NI - all other areas where oral vaccination has not been practiced (total 175 432 km²)
- 1987 - figure for 3 quarters only

Italy (ITA)

V.A. - The trial was started in Brescia province with the Camonica Valley; it was extended into the Subbia Valley and Alto Garda and into adjacent areas in Bolzano and Trento provinces.

E.D. - The trial started in 1985. After three vaccination campaigns there were no more rabies cases registered. The last case occurred in July 1986.

Austria (AUT)

V.A. - In 1986 the entire federal province of Vorarlberg was vaccinated. In 1987 the Bezirk (district) Reutte of the federal province of Tyrol and two vaccination belts encircling the epizootic in Styria were added.

E.D. - In Vorarlberg the epizootic had just passed the peak, a fortunate time to start a vaccination campaign. The last case was recorded in November 1986.

Here are annual figures for Vorarlberg highlighting the development:

1983	1984	1985	1986	1987
9	92	234	57	0

Luxembourg (LUX)

V.A. - The whole country of the Grand Duchy of Luxembourg has been vaccinated.

E.D. - Vaccination started in 1986 and a first effect may be seen from the following figures:

1983	1984	1985	1986	1987 3 quarters only
106	64	67	137	19

Belgium (BEL)

V.A. - Belgium started a vaccination belt adjacent to Luxembourg in 1986. The vaccination zone was enlarged to the border of the Netherlands and along the border of the Federal Republic of Germany in October 1987.

E.D. - Cases in the vaccination zone were reduced compared to the infected area adjacent to it.

France (FRA)

V.A. - There are two vaccination zones in France, approx. 1200 km² adjacent to Luxembourg and approx. 125 km² adjacent to a Swiss vaccination area in the département du Doubs. The latter area and some extended square kilometers for the area started in 1986 have been added in 1987.

E.D. - It is too early for an epidemiological picture. Furthermore, these areas are rather small and prone to give false results because foxes from the areas not vaccinated invade the vaccinated ones.

TABLE 1

EUR		EUROPE		3/87		RABIES CASES							1. 7.87 - 30. 9.87			
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
AUT	AUSTRIA	-	4	9	-	7	-	20	357	25	15	14	1	412		432
BEL	BELGIUM	-	3	8	-	2	-	13	36	-	5	1	-	42		55
BUL	BULGARIA	*						0						0		0
CZE	CZECHOSLOVAKIA	5	17	1	-	1	-	24	352	2	11	3	1	369		393
DDR	GERMAN DEM. REPUBLIC	19	23	28	2	52	1	125	299	2	14	7	2	324		449
DEN	DENMARK							0	-	-	-	-	32	32		32
DEU	FED.REP. OF GERMANY	6	13	39	2	11	-	71	699	14	34	27	1	775		846
FIN	FINLAND	*						0						0		0
FRA	FRANCE	8	19	14	4	36	-	81	334	2	11	3	1	351		432
GBR	UNITED KINGDOM	*						0						0		0
GRE	GREECE	1	-	-	-	-	-	1						0		1
HUN	HUNGARY	7	19	10	-	-	1	37	199	-	1	3	1	204		241
IRE	IRELAND	*						0						0		0
ISL	ICELAND	*						0						0		0
ITA	ITALY	*						0						0		0
LUX	LUXEMBOURG							0	4	-	-	-	-	4		4
NET	NETHERLANDS							0	-	-	-	-	70	70		70
NOR	NORWAY							0	-	-	-	1	-	1		1
POL	POLAND	16	14	37	-	7	-	74	364	3	14	19	22	422		496
POR	PORTUGAL	*						0						0		0
ROM	ROMANIA	2	4	5	-	-	-	11	1	-	-	-	1	2		13
SPA	SPAIN							0	-	-	-	-	2	2		2
SWE	SWEDEN	*						0						0		0
SWI	SWITZERLAND + LIECHT	-	-	1	-	-	-	1	21	-	1	1	-	23		24
TUR	TURKEY	111	14	63	3	4	1	196	1	-	-	1	1	3		199
YUG	YUGOSLAVIA	-	1	1	-	-	-	2	118	-	-	1	1	120		122
TOTAL		175	131	216	11	120	3	656	2785	48	106	81	136	3156	0	3812
PER CENT		4.6	3.4	5.7	0.3	3.1	0.1	17.2	73.1	1.3	2.8	2.1	3.6	82.8	0.0	100.0

* NO CASES.

TABLE 2

EUR		EUROPE		1-3/87		RABIES CASES							1. 1.87 - 30. 9.87			
LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
AUT	AUSTRIA	2	6	13	1	10	-	32	1247	89	42	51	2	1431		1463
BEL	BELGIUM	3	15	22	1	10	1	52	90	3	7	2	-	102		154
BUL	BULGARIA	*						0						0		0
CZE	CZECHOSLOVAKIA	22	50	1	-	3	-	76	1241	4	24	13	4	1286		1362
DDR	GERMAN DEM. REPUBLIC	77	72	43	6	76	1	275	904	15	49	36	5	1009		1284
DEN	DENMARK							0	-	-	-	-	44	44		44
DEU	FED. REP. OF GERMANY	27	66	110	15	55	1	274	2321	62	99	136	8	2626		2900
FIN	FINLAND	*						0						0		0
FRA	FRANCE	29	61	61	8	89	-	248	1259	11	31	16	5	1322		1570
GBR	UNITED KINGDOM							0						0	1	1
GRE	GREECE	1	-	-	-	-	-	1						0		1
HUN	HUNGARY	38	54	36	-	3	6	137	929	1	4	13	1	948		1085
IRE	IRELAND	*						0						0		0
ISL	ICELAND	*						0						0		0
ITA	ITALY	*						0						0		0
LUX	LUXEMBOURG	-	1	3	-	1	-	5	14	-	-	-	-	14		19
NET	NETHERLANDS							0	-	-	-	-	77	77		77
NOR	NORWAY							0	-	-	-	1	-	1		1
POL	POLAND	42	43	50	1	11	6	153	843	13	40	47	62	1005		1158
POR	PORTUGAL	*						0						0		0
ROM	ROMANIA	5	6	6	1	5	-	23	17	-	-	-	1	18		41
SPA	SPAIN							0	-	-	-	-	2	2		2
SWE	SWEDEN	*						0						0		0
SWI	SWITZERLAND + LIECHT	1	1	2	1	1	-	6	64	1	2	1	-	68		74
TUR	TURKEY	548	71	126	7	12	8	772	2	-	-	1	20	23		795
YUG	YUGOSLAVIA	8	8	1	-	1	-	18	349	-	-	2	3	354		372
TOTAL		803	454	474	41	277	23	2072	9280	199	298	319	234	10330	1	12403
PER CENT		6.5	3.7	3.8	0.3	2.2	0.2	16.7	74.8	1.6	2.4	2.6	1.9	83.3	0.0	100.0

* NO CASES.

TABLE 3

EUR		EUROPE		3/87		RABIES CASES 'OTHER ANIMAL SPECIES'					1. 7.87 - 30. 9.87	
LOCATION		OTHER DOMESTIC ANIMALS			OTHER WILD ANIMALS						TOTAL	
CODE	NAME	OTH. DOM. CARNIVO.	DONKEY	PIG	RACCOON DOG	WILD BOAR	HEDGEHOG	INSECTIV. BAT	HOUSE MOUSE	HARE		OTHER
AUT	AUSTRIA	-	-	-	-	-	-	-	-	1	-	1
CZE	CZECHOSLOVAKIA	-	-	-	1	-	-	-	-	-	-	1
DDR	GERMAN DEM. REPUBLIC	1	-	-	2	-	-	-	-	-	-	3
DEN	DENMARK	-	-	-	-	-	-	32	-	-	-	32
DEU	FED. REP. OF GERMANY	-	-	-	-	-	-	1	-	-	-	1
FRA	FRANCE	-	-	-	-	-	-	-	-	1	-	1
HUN	HUNGARY	-	-	1	-	1	-	-	-	-	-	2
NET	NETHERLANDS	-	-	-	-	-	-	70	-	-	-	70
POL	POLAND	-	-	-	20	-	2	-	-	-	-	22
ROM	ROMANIA	-	-	-	-	-	-	-	-	-	1	1
SPA	SPAIN	-	-	-	-	-	-	2	-	-	-	2
TUR	TURKEY	-	1	-	-	-	-	-	1	-	-	2
YUG	YUGOSLAVIA	-	-	-	-	-	-	-	-	-	1	1
TOTAL		1	1	1	23	1	2	105	1	2	2	139
PER CENT		0.7	0.7	0.7	16.5	0.7	1.4	75.5	0.7	1.4	1.4	100.0

AUT

A U S T R I A

R A B I E S C A S E S

1. 7.87 - 30. 9.87

LOCATION		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
103	EISENSTADT-LAND							0	2	-	-	-	-	2		2
104	GUESSING							0	35	-	-	-	-	35		35
107	NEUSIEDL AM SEE							0	-	-	-	1	-	1		1
108	OBERPULLENDORF							0	2	-	-	-	-	2		2
109	OBERWART							0	8	-	-	-	-	8		8
201	KLAGENFURT-STADT	-	1	-	-	-	-	1	8	-	-	-	-	8		9
204	KLAGENFURT-LAND							0	6	-	-	-	-	6		6
205	SANKT VEIT AN DER GL	-	-	4	-	1	-	5	37	1	1	1	-	40		45
206	SPITTAL AN DER DRAU	-	-	1	-	-	-	1	7	1	-	-	-	8		9
207	VILLACH-LAND							0	10	1	-	-	-	11		11
209	WOLFSBERG							0	2	-	-	-	-	2		2
210	FELDKIRCHEN	-	-	-	-	1	-	1	17	3	1	-	-	21		22
309	GMUEND	-	1	-	-	-	-	1						0		1
311	HORN							0	1	-	-	-	-	1		1
316	MISTELBACH							0	1	-	-	-	-	1		1
322	WAIDHOFEN AN DER THA							0	4	-	-	-	1	5		5
325	ZWETTL							0	1	-	-	-	-	1		1
406	FREISTADT							0	8	-	1	-	-	9		9
407	GMUNDEN	-	-	2	-	-	-	2	17	1	2	1	-	21		23
411	PERG							0	1	-	-	-	-	1		1
416	URFAHR-LAND							0	2	-	-	-	-	2		2
417	VOECKLABRUCK							0	1	-	-	-	-	1		1
502	HALLEIN							0	3	-	2	-	-	5		5
504	SANKT JOHANN IM PONG							0	-	1	-	-	-	1		1
505	TAMSWEG	-	-	-	-	2	-	2	13	-	-	-	-	13		15
506	ZELL AM SEE	-	-	1	-	-	-	1	17	2	-	1	-	20		21
601	GRAZ-STADT							0	3	-	-	-	-	3		3
602	BRUCK AN DER MUR							0	4	1	-	-	-	5		5
603	DEUTSCHLANDSBERG							0	6	-	-	-	-	6		6
604	FELDBACH							0	1	-	-	-	-	1		1
606	GRAZ-LAND	-	-	-	-	3	-	3	38	5	2	-	-	45		48
608	JUDENBURG							0	9	-	-	-	-	9		9
609	KNITTELFELD							0	4	2	-	1	-	7		7
610	LEIBNITZ							0	4	-	-	-	-	4		4
611	LEOBEN	-	2	1	-	-	-	3	26	2	-	5	-	33		36
612	LIEZEN							0	29	4	5	3	-	41		41
614	MURAU							0	12	1	-	-	-	13		13
616	VOITSBERG							0	8	-	-	1	-	9		9
617	WEIZ							0	-	-	1	-	-	1		1
708	REUTTE							0	10	-	-	-	-	10		10
TOTAL		0	4	9	0	7	0	20	357	25	15	14	1	412	0	432
PER CENT		0.0	0.9	2.1	0.0	1.6	0.0	4.6	82.6	5.8	3.5	3.2	0.2	95.4	0.0	100.0

RABIES CASES

1. 7.87 - 30. 9.87

LOCATION CODE NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
BEL BELGIUM															
HH HAINHAUT							0	-	-	1	-	-	1		1
LG LIEGE	-	1	3	-	-	-	4	17	-	4	1	-	22		26
LX LUXEMBOURG	-	2	3	-	1	-	6	16	-	-	-	-	16		22
NA NAMUR	-	-	2	-	1	-	3	3	-	-	-	-	3		6
TOTAL	0	3	8	0	2	0	13	36	0	5	1	0	42	0	55
PER CENT	0.0	5.5	14.5	0.0	3.6	0.0	23.6	65.5	0.0	9.1	1.8	0.0	76.4	0.0	100.0
DEN DENMARK															
035 STORSTROM							0	-	-	-	-	1	1		1
050 SONDERJYLLAND							0	-	-	-	-	7	7		7
055 RIBE							0	-	-	-	-	14	14		14
060 VEJLE							0	-	-	-	-	4	4		4
065 RINGKOBING							0	-	-	-	-	1	1		1
070 ARHUS							0	-	-	-	-	5	5		5
TOTAL	0	0	0	0	0	0	0	0	0	0	0	32	32	0	32
LUX LUXEMBOURG															
11 ECHTERNACH							0	4	-	-	-	-	4		4
NET NETHERLANDS															
01 DRENTHE							0	-	-	-	-	5	5		5
02 FRIESLAND							0	-	-	-	-	35	35		35
03 GELDERLAND							0	-	-	-	-	1	1		1
04 GRONINGEN							0	-	-	-	-	5	5		5
07 NOORD-HOLLAND							0	-	-	-	-	7	7		7
08 OVERIJSEL							0	-	-	-	-	11	11		11
09 UTRECHT							0	-	-	-	-	1	1		1
10 ZUID-HOLLAND							0	-	-	-	-	4	4		4
12 FLEVOLAND							0	-	-	-	-	1	1		1
TOTAL	0	0	0	0	0	0	0	0	0	0	0	70	70	0	70
NOR NORWAY															
99 ISLAND OF SVALBARD							0	-	-	-	1	-	1		1

CZE

CZECHOSLOVAKIA

RABIES CASES

1. 7.87 - 30. 9.87

LOCATION CODE NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
00 DISTRICT OF PRAGUE							0						0		0
01 CENTRAL BOHEMIA							0	12	-	-	1	-	13		13
02 SOUTH BOHEMIA	-	1	-	-	-	-	1	43	-	-	1	-	44		45
03 WEST BOHEMIA	1	1	-	-	-	-	2	64	-	1	-	-	65		67
04 NORTH BOHEMIA	1	3	-	-	-	-	4	141	2	6	1	1	151		155
05 EAST BOHEMIA	2	-	-	-	1	-	3	25	-	-	-	-	25		28
06 SOUTH MORAVIA	-	1	1	-	-	-	2	20	-	-	-	-	20		22
07 NORTH MORAVIA							0	4	-	1	-	-	5		5
0 CSR	4	6	1	-	1	-	12	309	2	8	3	1	323		335
10 DISTRICT OF BRATISLAV							0						0		0
11 WEST SLOVAKIA	1	7	-	-	-	-	8	21	-	1	-	-	22		30
12 CENTRAL SLOVAKIA							0	12	-	1	-	-	13		13
13 EAST SLOVAKIA	-	4	-	-	-	-	4	10	-	1	-	-	11		15
1 SSR	1	11	-	-	-	-	12	43	-	3	-	-	46		58
TOTAL	5	17	1	0	1	0	24	352	2	11	3	1	369	0	393
PER CENT	1.3	4.3	0.3	0.0	0.3	0.0	6.1	89.6	0.5	2.8	0.8	0.3	93.9	0.0	100.0

DDR

GERMAN DEMOCRATIC REPUBLIC

R A B I E S C A S E S

1. 7.87 - 30. 9.87

LOCATION		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
01	HAUPTSTADT BERLIN	-	-	-	-	-	-	0	-	-	-	-	-	0	-	0
02	COTTBUS	-	3	-	-	1	-	4	23	-	-	1	-	24	-	28
03	DRESDEN	-	-	-	-	25	-	25	14	-	-	-	-	14	-	39
04	ERFURT	1	5	2	-	1	-	9	40	1	2	1	-	44	-	53
05	FRANKFURT/ODER	-	1	1	-	-	-	2	25	-	3	1	-	29	-	31
06	GERA	2	3	5	-	11	-	21	32	-	1	-	-	33	-	54
07	HALLE	3	3	-	-	3	-	9	17	-	1	1	-	19	-	28
08	KARL-MARX-STADT	3	-	5	-	8	-	16	8	-	1	1	-	10	-	26
09	LEIPZIG	-	-	-	-	-	-	0	-	-	-	-	-	0	-	0
10	MAGDEBURG	1	-	-	1	-	-	2	32	-	-	-	-	32	-	34
11	NEUBRANDENBURG	3	-	-	-	1	-	4	25	-	1	-	1	27	-	31
12	POTSDAM	-	2	-	-	-	-	2	5	-	-	-	-	5	-	7
13	ROSTOCK	1	2	10	1	-	-	14	41	1	1	-	-	43	-	57
14	SCHWERIN	3	4	4	-	-	1	12	14	-	4	1	1	20	-	32
15	SUHL	2	-	1	-	2	-	5	23	-	-	1	-	24	-	29
TOTAL		19	23	28	2	52	1	125	299	2	14	7	2	324	0	449
PER CENT		4.2	5.1	6.2	0.4	11.6	0.2	27.8	66.6	0.4	3.1	1.6	0.4	72.2	0.0	100.0

DEU

FEDERAL REPUBLIC OF GERMANY

R A B I E S C A S E S

1. 7.87 - 30. 9.87

LOCATION		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
010	SCHLESWIG-HOLSTEIN							0						0		0
020	HAMBURG							0						0		0
031	BRAUNSCHWEIG	-	-	2	-	-	-	2	10	-	-	-	1	11		13
032	HANNOVER	1	1	1	-	-	-	3	6	-	-	-	-	6		9
033	LUENEBURG							0	-	-	-	1	-	1		1
034	WESER-EMS	-	-	-	-	1	-	1						0		1
040	BREMEN							0						0		0
051	DUESSELDORF							0						0		0
053	KOELN							0	16	-	1	-	-	17		17
055	MUENSTER							0						0		0
057	DETMOLD	1	-	6	1	-	-	8	40	1	2	1	-	44		52
059	ARNSBERG	-	-	-	-	2	-	2	12	-	-	2	-	14		16
061	DARMSTADT	1	-	11	-	4	-	16	53	1	5	3	-	62		78
062	KASSEL	1	2	5	-	1	-	9	88	3	2	5	-	98		107
071	KOBLENZ	-	-	1	-	-	-	1	38	-	3	1	-	42		43
072	TRIEB	1	1	6	-	-	-	8	32	-	1	2	-	35		43
073	RHEINHESSEN-PFALZ	-	-	-	-	1	-	1	19	-	1	-	-	20		21
081	STUTTGART	-	1	-	-	-	-	1	46	1	3	-	-	50		51
082	KARLSRUHE	1	-	2	-	1	-	4	30	1	2	4	-	37		41
083	FREIBURG							0	56	-	-	2	-	58		58
084	TUEBINGEN	-	1	-	1	-	-	2	33	-	1	1	-	35		37
091	OBERBAYERN	-	2	-	-	-	-	2	16	-	1	-	-	17		19
092	NIEDERBAYERN							0	13	-	-	-	-	13		13
093	OBERPFALZ							0	79	2	6	2	-	89		89
094	OBERFRANKEN	-	1	-	-	-	-	1	33	1	2	1	-	37		38
095	MITTELFRANKEN							0	18	-	-	-	-	18		18
096	UNTERFRANKEN	-	2	5	-	1	-	8	41	4	4	2	-	51		59
097	SCHWABEN	-	1	-	-	-	-	1	13	-	-	-	-	13		14
100	SAARLAND	-	1	-	-	-	-	1	7	-	-	-	-	7		8
110	BERLIN (WEST)							0						0		0
TOTAL		6	13	39	2	11	0	71	699	14	34	27	1	775	0	846
PER CENT		0.7	1.5	4.6	0.2	1.3	0.0	8.4	82.6	1.7	4.0	3.2	0.1	91.6	0.0	100.0

FRA

FRANCE

RABIES CASES

1. 7.87 - 30. 9.87

LOCATION CODE NAME	DOMESTIC ANIMALS							WILD ANIMALS						HUMAN CASES	TOTAL
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL		
02 AISNE	-	2	-	-	-	-	2	4	-	-	-	-	4		6
08 ARDENNES	-	1	1	-	2	-	4	8	-	-	-	-	8		12
10 AUBE	1	-	-	-	1	-	2	33	-	-	-	-	33		35
21 COTE D'OR	-	1	1	-	4	-	6	22	-	-	-	-	22		28
25 DOUBS	1	1	-	-	3	-	5	30	-	2	-	-	32		37
39 JURA	-	-	-	-	1	-	1	21	-	-	-	1	22		22
51 MARNE	-	-	-	-	1	-	1	2	-	-	-	-	2		3
52 MARNE (HAUTE)	-	1	-	1	3	-	5	17	-	2	-	-	19		24
54 MEURTHE ET MOSELLE	1	2	6	-	1	-	10	15	-	-	2	-	17		27
55 MEUSE	1	3	3	-	-	-	7	14	-	-	-	-	14		21
57 MOSELLE	-	-	1	-	-	-	1	15	-	-	-	-	15		16
58 NIEVRE	-	-	1	1	16	-	18	21	-	-	-	-	21		39
60 OISE	1	-	-	-	-	-	1	4	-	1	-	-	5		6
67 RHIN (BAS)	1	-	-	1	1	-	3	19	1	-	-	-	20		23
68 RHIN (HAUT)	-	-	-	-	-	-	0	21	1	-	-	-	22		22
70 SAONE (HAUTE)	-	2	1	-	2	-	5	37	-	1	1	-	39		44
71 SAONE ET LOIRE	-	-	-	-	-	-	0	1	-	-	-	-	1		1
74 SAVOIE (HAUTE)	-	-	-	-	-	-	0	1	-	-	-	-	1		1
77 SEINE ET MARNE	-	-	-	-	-	-	0	2	-	-	-	-	2		2
80 SOMME	-	-	-	-	-	-	0	5	-	-	-	-	5		5
88 VOSGES	2	4	-	-	1	-	7	16	-	4	-	-	20		27
89 YONNE	-	1	-	1	1	-	3	22	-	-	-	-	22		25
90 TERR.DE BELFORT	-	-	-	-	-	-	0	4	-	1	-	-	5		5
94 VAL DE MARNE	-	1	-	-	-	-	1	-	-	-	-	-	0		1
TOTAL	8	19	14	4	36	0	81	334	2	11	3	1	351	0	432
PER CENT	1.9	4.4	3.2	0.9	8.3	0.0	18.7	77.3	0.5	2.5	0.7	0.2	81.2	0.0	100.0

R A B I E S C A S E S

1. 7.87 - 30. 9.87

LOCATION CODE NAME	D O M E S T I C A N I M A L S							W I L D A N I M A L S					HUMAN CASES	TOTAL	
	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
GRE G R E E C E															
10 EVROS	1	-	-	-	-	-	1						0		1
ROM R O M A N I A															
01 ALBA	1	-	-	-	-	-	1						0		1
02 ARAD	-	1	1	-	-	-	2						0		2
06 BISTRITA-NASAUD	-	1	-	-	-	-	1						0		1
07 BOTOSANI	-	-	2	-	-	-	2						0		2
13 CLUJ	-	-	1	-	-	-	1	-	-	-	-	1	1		2
15 COVASNA	-	-	1	-	-	-	1						0		1
21 HARGHITA	1	2	-	-	-	-	3						0		3
33 SIBIU							0	1	-	-	-	-	1		1
TOTAL	2	4	5	0	0	0	11	1	0	0	0	1	2	0	13
PER CENT	15.4	30.8	38.5	0.0	0.0	0.0	84.6	7.7	0.0	0.0	0.0	7.7	15.4	0.0	100.0
SPA S P A I N															
18 GRANADA							0	-	-	-	-	1	1		1
46 VALENCIA							0	-	-	-	-	1	1		1
TOTAL	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
SWI S W I T Z E R L A N D A N D L I E C H T E N S T E I N															
08 GENEVE							0	5	-	-	-	-	5		5
22 VAUD							0	5	-	1	1	-	7		7
23 VALAIS							0	2	-	-	-	-	2		2
26 JURA	-	-	1	-	-	-	1	9	-	-	-	-	9		10
TOTAL	0	0	1	0	0	0	1	21	0	1	1	0	23	0	24
PER CENT	0.0	0.0	4.2	0.0	0.0	0.0	4.2	87.5	0.0	4.2	4.2	0.0	95.8	0.0	100.0

R A B I E S C A S E S

1. 7.87 - 30. 9.87

LOCATION CODE NAME		D O M E S T I C A N I M A L S						W I L D A N I M A L S						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
HUN H U N G A R Y																
01	BUDAPEST						0	3	-	-	-	-	3		3	
02	BARANYA	1	1	1	-	-	3	15	-	-	1	-	16		19	
03	BACS-KISKUN	-	3	-	-	-	4	13	-	-	-	-	13		17	
04	BEKES	1	1	-	-	-	2	3	-	-	-	-	3		5	
05	BORSOD-ABAUJ-ZEMPLEN	-	1	-	-	-	1	10	-	-	-	-	10		11	
06	CSONGRAD	1	2	-	-	-	3	6	-	-	-	-	6		9	
07	FEJER	1	1	3	-	-	5	17	-	-	-	-	17		22	
08	GYOER-SOPRON						0	5	-	-	-	-	5		5	
09	HAJDU-BIHAR	1	-	-	-	-	1	4	-	-	-	-	4		5	
10	HEVES	-	-	1	-	-	1	3	-	-	-	-	3		4	
11	KOMAROM	1	1	-	-	-	2	5	-	-	-	-	5		7	
12	NOGRAD						0	9	-	-	-	-	9		9	
13	PEST	-	-	1	-	-	1	38	-	1	-	-	39		40	
14	SOMOgy	-	2	2	-	-	4	13	-	-	1	1	15		19	
15	SZABOLCS-SZATMAR						0	7	-	-	-	-	7		7	
16	SZOLNOK	-	3	1	-	-	4	10	-	-	-	-	10		14	
17	TOLNA	-	4	-	-	-	4	15	-	-	1	-	16		20	
18	VAS	1	-	-	-	-	1	9	-	-	-	-	9		10	
19	VESZPREM	-	-	1	-	-	1	9	-	-	-	-	9		10	
20	ZALA						0	5	-	-	-	-	5		5	
TOTAL		7	19	10	0	0	1	37	199	0	1	3	1	204	0	241
PER CENT		2.9	7.9	4.1	0.0	0.0	0.4	15.4	82.6	0.0	0.4	1.2	0.4	84.6	0.0	100.0
YUG Y U G O S L A V I A																
10	SR BOSNA I HERCEGOVIN						0	2	-	-	-	-	2		2	
30	SR HRVATSKA						0	29	-	-	-	-	29		29	
50	SR SLOVENIJA						0	74	-	-	1	1	76		76	
61	SAP VOJVODINA	-	1	1	-	-	2	13	-	-	-	-	13		15	
TOTAL		0	1	1	0	0	0	2	118	0	0	1	1	120	0	122
PER CENT		0.0	0.8	0.8	0.0	0.0	0.0	1.6	96.7	0.0	0.0	0.8	0.8	98.4	0.0	100.0

POL POLAND

RABIES CASES

1. 7.87 - 30. 9.87

LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS		
01	WARSZAWA						0	3	-	-	-	1	4		4
05	BIALYSTOK						0	2	-	-	-	4	6		6
07	BIELSKO-BIALA	-	2	1	-	-	3	5	-	2	1	-	8		11
09	BYDGOSZCZ	1	-	2	-	-	3	8	1	-	-	1	10		13
11	CHELM						0	1	-	-	-	1	2		2
13	CIECHANOW	-	2	-	-	-	2	11	-	-	-	-	11		13
15	CZESTOCHOWA	-	-	1	-	-	1	4	-	1	1	-	6		7
17	ELBLAG	-	-	2	-	-	2						0		2
19	GDANSK	1	-	8	-	3	12	23	1	-	-	3	27		39
21	GORZOW	1	-	-	-	-	1	11	-	-	-	-	11		12
23	JELENIA GORA	-	-	5	-	1	6	50	-	-	-	-	50		56
25	KALISZ	1	-	1	-	-	2	7	-	-	-	-	7		9
27	KATOWICE	2	1	-	-	2	5	20	-	5	-	-	25		30
29	KIELCE	-	1	-	-	-	1	6	-	-	-	-	6		7
31	KONIN						0	-	-	2	-	-	2		2
33	KOSZALIN	3	1	-	-	-	4	14	-	1	7	1	23		27
37	KROSNO	-	-	1	-	-	1	2	-	-	-	-	2		3
39	LEGNICA	-	1	-	-	-	1	7	-	-	-	-	7		8
41	LESZNO						0	11	-	-	-	-	11		11
43	LUBLIN	1	-	-	-	-	1	2	-	-	-	-	2		3
45	LOMZA						0	1	-	-	-	-	1		1
49	NOWY SACZ						0	1	-	1	-	-	2		2
51	OLSZTYN	2	2	3	-	-	7	10	-	-	-	2	12		19
53	OPOLE						0	3	-	-	-	1	4		4
55	OSTROLEKA	-	-	2	-	-	2	6	-	-	-	-	6		8
57	PILA						0	12	-	-	4	-	16		16
61	PLOCK	-	1	-	-	-	1	3	-	-	-	-	3		4
63	POZNAN	-	-	1	-	-	1	41	-	1	-	-	42		43
65	PRZEMYSL	-	1	1	-	-	2	2	-	-	-	-	2		4
67	RADOM						0	4	-	-	-	-	4		4
69	RZESZOW	1	-	-	-	-	1						0		1
71	SIEDLCE						0	-	-	-	2	-	2		2
75	SKIERNIEWICE						0	-	-	1	-	-	1		1
77	SLUPSK	-	-	2	-	-	2	15	1	-	2	2	20		22
79	SUWALKI	-	-	2	-	-	2	4	-	-	-	4	8		10
81	SZCZECIN	1	-	1	-	-	2	6	-	-	1	2	9		11
87	TORUN	-	-	3	-	-	3						0		3
89	WALBRZYCH	-	1	-	-	1	2	22	-	-	-	-	22		24
91	WLOCLAWEK	1	-	-	-	-	1						0		1
93	WROCLAW	1	1	-	-	-	2	18	-	-	1	-	19		21
97	ZIELONA GORA	-	-	1	-	-	1	29	-	-	-	-	29		30
TOTAL		16	14	37	0	7	74	364	3	14	19	22	422	0	496
PER CENT		3.2	2.8	7.5	0.0	1.4	14.9	73.4	0.6	2.8	3.8	4.4	65.1	0.0	100.0

TUR

TURKEY

RABIES CASES

1. 7.87 - 30. 9.87

LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS		
001	ADANA	-	-	1	-	-	-	1						0	1
003	AFYON	5	-	1	-	-	-	6						0	6
005	AMASYA	-	-	1	-	-	-	1						0	1
006	ANKARA	1	2	-	-	-	-	3	-	-	-	-	1	1	4
007	ANTALYA	-	-	1	-	-	-	1						0	1
009	AYDIN	3	-	-	-	-	-	3						0	3
010	BALIKESIR	2	-	1	-	-	-	3						0	3
014	BOLU	7	-	15	-	-	-	22						0	22
016	BURSA	3	-	-	-	1	1	5						0	5
019	CORUM	5	-	-	-	-	-	5						0	5
020	DENIZLI	-	1	-	-	-	-	1						0	1
022	EDIRNE	2	-	2	-	-	-	4						0	4
025	ERZURUM							0	-	-	-	1	-	1	1
027	GAZIANTEP	-	1	-	-	-	-	1						0	1
028	GIRESUN	1	-	2	-	-	-	3						0	3
032	ISPARTA	-	-	1	-	-	-	1						0	1
033	ICEL	2	-	-	-	-	-	2						0	2
034	ISTANBUL	5	1	-	-	1	-	7	1	-	-	-	-	1	8
035	IZMIR	4	3	1	-	-	-	8						0	8
036	KARS	-	1	-	-	-	-	1						0	1
037	KASTAMONU	3	-	3	1	1	-	8						0	8
038	KAYSERI	1	-	4	-	-	-	5						0	5
041	KOCAELI	2	1	-	-	-	-	3						0	3
042	KONYA	4	-	-	1	-	-	5						0	5
043	KUETAHYA	7	-	4	-	-	-	11						0	11
045	MANISA	2	2	-	-	-	-	4						0	4
046	KAHRAMAN MARAS	1	-	1	-	-	-	2						0	2
047	MARDIN	1	-	-	-	-	-	1						0	1
050	NEVSEHIR	2	-	-	-	-	-	2						0	2
051	NIGDE	1	-	-	-	-	-	1						0	1
052	ORDU	7	-	3	-	-	-	10						0	10
053	RIZE	-	1	-	-	-	-	1						0	1
054	SAKARYA	6	-	1	-	-	-	7						0	7
055	SAMSUN	15	-	10	-	1	-	26						0	26
057	SINOP	2	1	5	-	-	-	8						0	8
061	TRABZON	5	-	-	-	-	-	5						0	5
063	URFA	4	-	3	-	-	-	7						0	7
064	USAK	2	-	3	-	-	-	5						0	5
066	YOZGAT	5	-	-	1	-	-	6						0	6
067	ZONGULDAK	1	-	-	-	-	-	1						0	1
TOTAL		111	14	63	3	4	1	196	1	0	0	1	1	3	199
PER CENT		55.8	7.0	31.7	1.5	2.0	0.5	98.5	0.5	0.0	0.0	0.5	0.5	1.5	100.0

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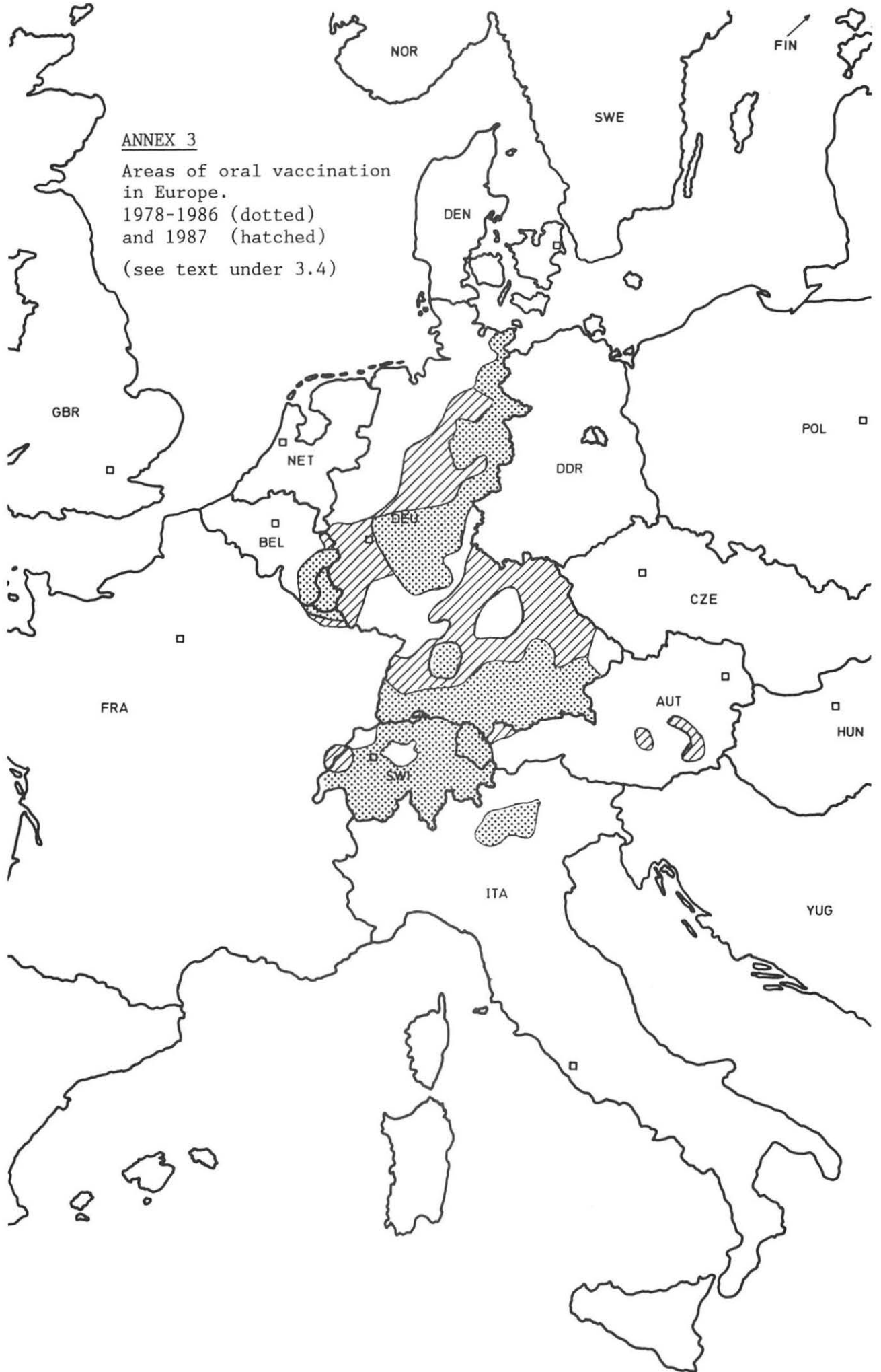
WHO Coll. Centre
Tuebingen / DEU

Rabies Cases Turkey
3rd Quarter 1987
199 cases reported



ANNEX 3

Areas of oral vaccination
in Europe.
1978-1986 (dotted)
and 1987 (hatched)
(see text under 3.4)



ISL
(rabies free)

NOR
(1)
(on Island of Svalbard)

FIN
(0)

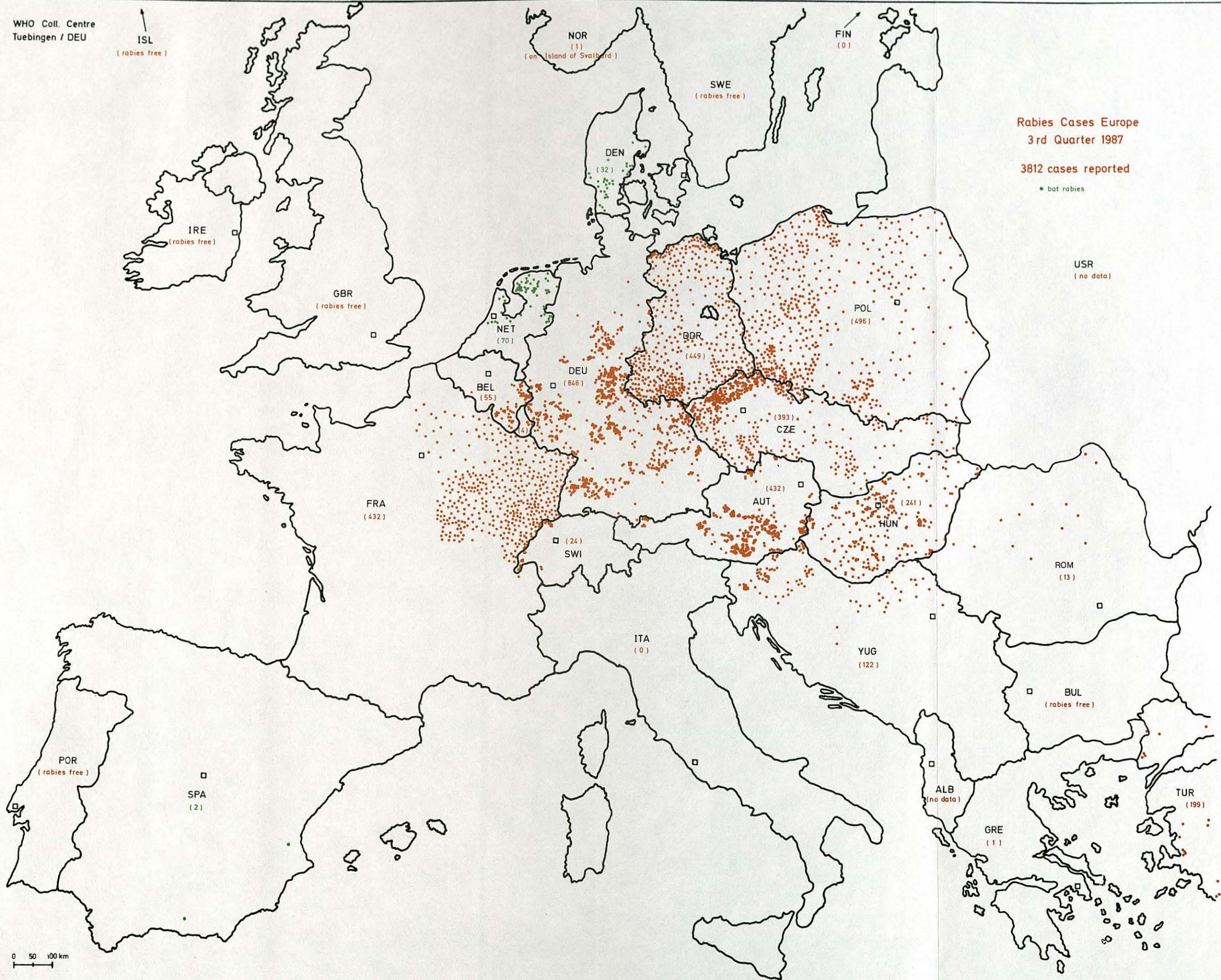
SWE
(rabies free)

Rabies Cases Europe
3rd Quarter 1987

3812 cases reported

• bat rabies

USR
(no data)



0 50 100 km

IRE
(rabies free)

GBR
(rabies free)

DEN
(32)

NET
(70)

DEU
(846)

BEL
(55)

DDR
(449)

POL
(496)

CZE
(393)

FRA
(432)

AUT
(432)

HUN
(241)

SWI
(24)

ROM
(13)

ITA
(0)

YUG
(122)

BUL
(rabies free)

POR
(rabies free)

SPA
(2)

ALB
(no data)

GRE
(1)

TUR
(199)