

RABIES BULLETIN EUROPE

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Contents

	Page
1. Introduction	3
2. Summary of Rabies in Europe	3
3. Rabies in Individual Countries	4-8
4. Miscellaneous Articles	
4.1 Rabies Surveillance and Preventional Measures in Romania 1983-1992	9-10
4.2 Human Rabies-Guide for Post-exposure Treatment	11-13
5. Rabies Case Data Europe	
5.1 Table 1: 2. Quarter 1993	14
5.2 Table 2: 1. and 2. Quarter 1993	15
5.3 Table 3: Other Animal Species, 2. Quarter 1993	16
5.4 Tables : Individual Countries, 2. Quarter 1993	17-29
6. List of Contributors	30
7. Annexes	
Map of Rabies Cases in the European Part of Russia, 2. Quarter 1993	Annex 1
Map of Rabies Cases in Turkey, 2. Quarter 1993	Annex 2
Map of Rabies Cases in Europe, 2. Quarter 1993	Annex 3

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1. Introduction

This BULLETIN describes the reported rabies cases in Europe for the **Second Quarter 1993**, subsequently referred to as "*This Quarter*".

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

SECTION 3 (3.1-3.36) reflects the situation for individual countries. There are still some countries where the editors do not have regular supplies of data or the data arrived

too late to be considered for this edition.

In the Miscellaneous SECTION under 4.1 a summary article on rabies surveillance and control measures in Romania is presented covering the years 1983 to 1992. Under 4.2 a revised Guide for post-exposure treatment as recommended by the WHO Expert Committee on Rabies is summarized.

The rabies case data are tabulated for the **Second Quarter 1993** in SECTION 5.

SECTION 6 lists the official contributors to the BULLETIN.

The geographical distribution of rabies cases in Europe for the **Second Quarter 1993** is shown on maps of Russia, Turkey and Europe in the ANNEX.

2. Summary of Rabies in Europe

During "*This Quarter*", 1784 rabies cases were reported in Europe. Of these were 1241 in wild animals (69.6% of total) 541 in domestic animals and 2 in man.

Of the cases in wild animals 1070 were foxes, 58 raccoon dogs, 27 badgers, 16 stone martens, 24 pine martens, 3 polecats, 3 ferrets, 3 wolves, 22 roe deer, 1 red deer, 1 chamois, 1 black rat, 1 muskrat, 9 bats and 2 other wild animals. Of the 541 cases in domestic animals 214 were dogs (of which 67 were recorded in Turkey, a country with urban or dog-mediated rabies), 133 cats, 13 horses, 3 donkeys, 122 cattle, 20 sheep, 1 domesticated rabbit, 1 other domesticated herbivore and 34 other

domesticated animals (reindeer). These data are summarized in TABLES 1 and 3.

TABLE 2 summarizes the quarters 1 and 2 of 1993.

There has been a reduction of cases from 2720 (corrected figure - plus 334 cases Russian Federation, minus 8 cases error Germany) in the first quarter 1993 to 1784 during "*This Quarter*". It is the expected seasonal decrease in fox-mediated countries and it was experienced during "*This Quarter*" in all countries with a relatively high incidence. Italy had an increase of cases as the recently infected area near the Austrian border is expanding.

Turkey, a country with dog-mediated rabies, recorded

an increase of cases.

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

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

There were 9 bat rabies cases reported from Germany (4), the Netherlands (4) and Denmark (1). Because of the distinct features of bat rabies

the cases are marked in the map in the ANNEX in a different colour.

There were two human cases reported from the Russian Federation, one in the Vol-

gograd region and one in the Republic of Bashkortostan.

3. Rabies in Individual Countries

3.1 Albania ALB

No data.

3.2 Austria AUT

by Helmut Schnabl

Of 6912 samples examined for rabies during "*This Quarter*", 100 cases (1.4%) were diagnosed rabid. There has been a decrease of cases by 3 cases compared to the previous quarter.

Of the 100 cases 96 were in wild animals (85 foxes, 6 badgers, 2 stone martens, 3 roe deer) and 4 in domestic animals (2 bovines, 2 sheep).

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

Burgenland: 4 cases in the Bezirke Jennersdorf and Neusiedl/See.

Niederösterreich: 5 cases in the Bezirke Mödling and Scheibbs.

Tirol: 72 cases (72% of total) in the Bezirke Imst, Innsbruck-Land, Kufstein and Schwaz.

Vorarlberg: 19 cases in the Bezirke Bludenz, Bregenz and Dornbirn.

No cases were reported

during "*This Quarter*" in the Bundesländer Kärnten, Steiermark, Salzburg and Oberösterreich.

3.3 Belgium BEL

by L. Hallet

During "*This Quarter*", no case of rabies was diagnosed.

A new spring vaccination campaign to immunize foxes was organized from 13 to 27 April 1993. 132.200 vaccine baits were distributed from a helicopter covering an area of 8610 km².

3.4 Bulgaria BUL

No data.

3.5 Belarus BYE

No data.

3.6 Croatia CRO

by Mate Brstilo

During "*This Quarter*", 232 animals were examined for rabies. Although there was a decrease of examined animals compared to the previ-

ous quarter (424), the percentage of foxes remained the same.

Of the 232 examined animals 36 were diagnosed rabid (15.5%), 34 in foxes and 2 in dogs.

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

- there was no rabies on the Istra peninsula and in the coastal area;

- rabies cases were more concentrated in the central and the north-west parts of the country;

- there was no human case.

3.7 Czech Republic CZH

by Oldrich Matouch

During "*This Quarter*", 2496 animals were submitted for examination. 84 (3.4%) of these were positive for rabies compared to 119 (5.4%) in the previous quarter.

79 (94%) rabies cases were diagnosed in wild animals and 5 (6%) cases in domestic animals. Of the wild animals 75 cases were noticed in foxes, 3 in martens and 1 in a badger. Of the domestic animals 4

cases were in cats and 1 in a rabbit.

The highest incidence of rabies cases was registered in East Bohemia (53) where the oral vaccination has not been carried out. Repeatedly vaccinated West Bohemia was for the first time free of rabies during "This Quarter".

The oral vaccination of foxes with Lysvulpen (SAD Bern vaccine) was carried out in April 1993. 615,600 vaccine doses were distributed in 44 districts covering an area of 38,500 km². The results have been encouraging especially in the West and South Bohemia.

3.8 Denmark DEN

by Eric Stougaard

Only one bat rabies case was reported on the east coast of Jutland in Aarhus.

3.9 Germany, Federal Republic DEU

by Winfried W. Müller
and Thomas Müller

A total of 89 rabies cases was reported during "This Quarter". There was a reduction of cases compared to the previous quarter (207 - corrected figure see below) by 118 and compared to the second quarter 1992 (270) by 181 cases.

Foci with a concentration of cases were located in the border area of the federal states Nordrhein-Westfalen/Rheinland-Pfalz with 24 cases and in the Regierungsbezirk (department) Freiburg in the

south-west corner of the country with 26 cases. All other cases were scattered and five federal states were rabies free - the city states Hamburg and Bremen, the Saarland and Sachsen.

Four successive half-annual oral vaccination campaigns in the eastern federal states covering each time an area of about 108,000 km² have led to a very favourable rabies situation with only few isolated cases registered.

There were four bat rabies cases diagnosed in three federal states - Mecklenburg-Vorpommern, Niedersachsen and Berlin. The one case near the Baltic Sea was specified as *Eptesicus serotinus*.

Editors note: During the first quarter 1993 215 cases were reported for Germany. Due to an error in counting 8 cases twice the true figure amounts to 207.

3.10 Estonia EST

by M. Nautras

During "This Quarter", 32 rabies cases were registered in Estonia, 10 cases less than in the previous quarter. 18 cases were diagnosed in wild animals (14 foxes, 3 raccoon dogs, 1 ferret) and 14 in domestic animals (10 dogs, 2 cats, 2 cattle).

3.11 Finland FIN

by Bengt Westerling

The country remained rabies-free.

Surveillance:

During "This Quarter", 33 samples were investigated for rabies with negative results. Of these 22 derived from wild animals (10 foxes, 9 raccoon dogs, 2 badgers, 1 muskrat) and 11 from domestic animals (7 dogs, 4 cats).

3.12 France FRA

by Michel F.A. Aubert

66 rabies cases were registered during "This Quarter", 48 cases less than during the previous quarter. 50 cases were diagnosed in foxes (75.8% of total), 6 in other wild animals and 10 in domestic animals (1 dog, 5 cats, 2 cattle, 2 sheep).

The département (department) registering the greatest number of cases was Vosges with 26 cases. All other départements register less than 10 cases.

3.13 Greece GRE

by A. Katsaounis

The country remained rabies-free.

3.14 Hungary HUN

by Balint Kerekes

During "This Quarter", 170 rabies cases were registered in Hungary. Compared to the second quarter 1992 (107) there was an increase by 59%. In regard to the percentage of the animal distribution affected by the disease there was no change in the fox

(2/92 = 71.0%, 2/93 = 68.8%) and in the cat (2/92 = 13.1%, 2/93 = 12.9%). However, there was a change in the dog (2/92 = 8.4%, 2/93 = 13.5%).

3.15 Iceland ICE

The country remained rabies-free.

3.16 Ireland IRE

The country remained rabies-free.

3.17 Italy ITA

by Santino Prospero

During "*This Quarter*", 28 cases of rabies were diagnosed in Italy. Only one case was reported in a fox in the Friuli Venezia Giulia Region, in the community of Gorizia, which was previously infected. The epidemic which started in March 1993 along the border to Austria in the province of Bolzano spread to 4 communities involving 19 foxes, 4 badgers, 1 pine marten, 1 chamois, 1 roe deer and also 1 cat.

In April oral vaccination of foxes was carried out in the Region Friuli Venezia Giulia as in autumn 1992 (1600 km² in the provinces of Trieste, Udine, Gorizia).

In May oral vaccination of foxes was started in the province of Bolzano using 4,360 vaccine baits and cover-

ing an area of 400 km² of 8 communities along the state border.

3.18 Lithuania LTU

by Algis Dranseika

During "*This Quarter*", 23 rabies cases were diagnosed in the country in 12 districts. Of the total 6 were cattle, 7 dogs, 5 cats, 3 raccoon dogs and 2 pine martens.

The district mostly affected by the disease was Panevezio with 5 cases. All other districts recorded 1 to 3 cases.

During "*This Quarter*", more than 45,000 dogs were vaccinated against rabies.

There was no rabies case in man registered.

3.19 Luxembourg LUX

by Joseph Kremer

During "*This Quarter*", 12 samples were examined for rabies (11 foxes, 1 hind). The 1 hind from the centre of the country (Mersch) was diagnosed rabid.

The favourable rabies situation can no doubt be connected to the 12 oral vaccination campaigns since 1986 each time covering the entire country. Again, for 1993 two vaccination campaigns were planned. One was carried out in April and the second one is intended during the week 20-25 September 1993.

3.20 Latvia LVA

by Z. Andersons, J. Rimeicans and A. Dedzins

During "*This Quarter*", 31 rabies cases were registered in 14 districts, 6 cases more than during the previous quarter (25). There were no rabies cases reported in 12 districts.

Of the 31 cases 17 were in wild animals (54.8% of total) and 14 in domestic animals. Of the wild animals 10 were foxes, 6 raccoon dogs and 1 badger and of the domestic animals 8 were dogs, 4 cats, 1 bovine and 1 horse.

There was no human rabies case reported in the country.

3.21 Moldova MLD

No data.

3.22 Netherlands NET

by J.H.M. Nieuwenhuijs

During "*This Quarter*", 4 bats were diagnosed rabid. Three were determined as *Eptesicus serotinus* and one as *Myotis dasycneme*.

Surveillance: A total of 227 animals were investigated for rabies during "*This Quarter*" - 135 adult foxes, 28 young foxes, 2 dogs, 4 cats, 1 deer, 1 ferret, 17 badgers, 1 squirrel and 38 bats. Of the bats one

was of a *Rousettus aegyptiacus* colony of the Blijdorp Zoo in Rotterdam.

3.23 Norway NOR

by Gudbrand Bakken

The mainland of Norway remained rabies-free.

No case of rabies has been reported in Svalbard during "*This Quarter*".

3.24 Poland POL

by Jozef Maleszewski

A total of 572 rabies cases in animals was reported in Poland during "*This Quarter*", 230 cases less than during the previous quarter (802) and 205 more than during the second quarter 1992 (367).

Of the total 474 cases were in wild animals (386 foxes, 44 raccoon dogs, 1 wolf, 3 badgers, 20 pine martens, 3 polecats, 2 ferrets, 13 roe deer, 1 black rat, 1 muskrat) and 98 in domestic animals (40 dogs, 37 cats, 19 cattle, 1 horse, 1 other domesticated herbivore).

The case distribution was more concentrated in the western half of the country.

3.25 Portugal POR

The country remained rabies-free.

3.26 Romania ROM

by Gheorghe Stratulat

During "*This Quarter*", 26 rabies cases were reported in Romania, 4 cases more than during the previous quarter. There were 13 cases in domestic animals (2 dogs, 7 cats, 2 cattle, 2 sheep) and 13 in wild animals (10 foxes, 1 roe deer, 2 other wild animals). The cases occurred scattered throughout the country.

3.27 Russia RUS (European part only)

by V.A.Vedernikov, B.L.Cherkasskiy, S.A.Chernichenko, A.G. Knop, V.A. Kibasov and P.K. Shumilov

During "*This Quarter*", 206 rabies cases in animals were reported from the European Part of Russia. Of the total number of cases 181 were in domestic animals -42 dogs, 14 cats, 70 cattle, 9 horses, 11 sheep, 30 reindeers, 4 camels and 1 donkey.

Of 25 wild animals rabies was diagnosed in 21 foxes, 2 wolves and 2 raccoon dogs.

Most affected by the disease were the Republic of Bashkortostan with 45 cases, followed by the Arkhangelsk Region with 30 cases in reindeer (Malosemjelskaya Tundra).

There were 2 human cases, one in the Volgograd region and one in the Republic of Bashkortostan.

3.28 Slovak Republic SVK

by Bohuslav Lovas

During "*This Quarter*", the total of rabies cases confirmed in the Slovak Republic amounted to 99. Of these 78 cases were in wild animals and 21 in domestic animals. Of the wild animals the disease was registered in 76 foxes, 2 other Mustelides and of the domestic animals in 6 dogs and 15 cats.

There was no case of human rabies reported.

A campaign of oral vaccination of foxes against rabies was carried out in May 1993. 78,000 of vaccine baits were distributed in West Slovakia covering an area of 6,000 km².

3.29 Spain SPA

by T. Maté Maté

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

There were 2 dog cases, one in Ceuta and one in Melilla in the Spanish territory of North Africa.

3.30 Slovenia SVN

by Armin Tomašič

During "*This Quarter*", 88 rabies cases were noticed in Slovenia, 8 more than during the previous quarter. 84

cases occurred in wild animals (77 foxes, 4 badgers, 2 stone martens, 1 roe deer) and 4 in domestic animals (2 dogs, 2 cats).

Most of the cases originated from the western half of the country.

3.31 Sweden SWE

The country remained rabies-free.

3.32 Switzerland SWI

by Urs Breitenmoser

During "*This Quarter*", the Swiss Rabies Centre examined a total of 537 animals, of which 5.2% (28) were positive for rabies. In the previous quarter, 1.8% (13 out of 691) and in the second quarter of 1992, 9.3% (42 out of 454) had been recorded positive, respectively. The cases of rabies observed in this quarter involved 25 red foxes, 2 badgers, and 1 horse. As in the previous quarters, all cases recorded came from the larger vicinity of Basel, in the north of Switzerland.

Nine bats (1 *Myotis mystacinus*, 1 *Myotis daubentoni*, 1 *Nyctalus leisleri*, 5 *Pipistrellus pipistrellus*, 1 sp.) were examined during the reporting period. All of them proved to be negative for rabies.

No bite exposures of people to animals positive for rabies occurred. The number of

people treated for non-bite exposures is not recorded.

3.33 Turkey TUR

by Hakki Özdek

During "*This Quarter*", 84 rabies cases in animals were reported in Turkey, 28 more than during the previous quarter. Only one animal affected by the disease was a wild animal, a badger, 83 were domestic animals - 67 dogs, 5 cats, 7 cattle, 1 horse, 2 donkeys and 1 sheep.

The provinces (Il) mostly affected were Istanbul and Bola with 11 and 10 cases respectively. All other infected provinces reported between 1 and 7 cases.

3.34 Ukraine UKR

No data.

3.35 United Kingdom UNK

by P.J. Thomas

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

Surveillance

1st and 2nd Quarters 1993:

Reports of suspect rabies outside quarantine were investigated on 9 occasions during the period, involving 6 dogs, 1 cat, 1 fox and 1 ferret. Biting, scratching or licking of humans was reported in 6

cases. Veterinary staff resolved 2 incidents at the initial clinical investigation but in 7 cases it was necessary to submit material to the Central Veterinary Laboratory, Weybridge for examination, in each case with negative results.

60 dogs and cats died whilst in quarantine and in every case material was submitted to the Central Veterinary Laboratory, with negative results.

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

No cases of human rabies occurred during the period.

3.36 Yugoslavia YUG

by Dušan Jakovljević

A total of 12 rabies cases were reported during "*This Quarter*", 10 in Vojvodina and 2 in Serbia. 5 cases occurred in foxes, one in a dog and 6 in cats.

4. MISCELLANEOUS ARTICLES

4.1 Rabies Surveillance and Preventional Measures in Romania 1983-1992

by Nicoletta Andreescu, Cantacuzino Institute, Bucharest
and by Stefan Nicolae, Central Veterinary Laboratory for Diagnosis, Bucharest

A national surveillance programme for major zoonoses was developed in Romania in 1960 following the National Symposia on Zoonoses in 1956 and 1958 jointly organized by the Society of Medical Sciences, the Ministry of Health and the Ministry of Agriculture and Food Industry. Specialists of the latter institutions formulated the scientific, technical and organizational parameters of the programme which was revised periodically, last in April 1993.

The data of the zoonoses surveillance are regularly published in statistical reports issued by the Ministry of Health, the Institute of Hygiene and Public Health and the Ministry of Agriculture and Food Industry.

The Rabies Surveillance

A total of 38 cases in man and 676 cases in animals were registered from 1983 to 1992 in Romania. These data are summarized in FIGURES 1 and 2.

In nearly all of the 38 human rabies cases the source of infection could be noticed: 21 times the fox, 8 times the cat, 4 times the dog, twice the

wolf, once the polecat and twice the source of infection was unknown. It can be seen from FIGURE 1 that domestic animals were recorded rabid more than the wild animals. The majority of sources of infection though for the humans were wild animals.

Rabies occurred throughout the country.

The routine diagnosis of rabies is carried out in Veterinary Investigation Centres. The methods used are: the direct fluorescent antibody test, the histopathological diagnosis and the mouse inoculation test.

There are two national rabies reference laboratories in the country: one that cares more about the human aspects of the disease - the Cantacuzino Institute, and one that cares more about the animal aspects of the disease - the Central Veterinary Laboratory for Diagnosis. Both laboratories are located in Bucharest.

Preventional Measures

The most important preventional measures are the vaccination of man and dogs.

In the Cantacuzino Institute, Bucharest, a vaccine for humans is produced. It is a

beta-propiolactone inactivated vaccine prepared from virulent nervous tissue of suckling mice. It is used for pre- and post-exposure vaccination.

The Pasteur Institute of Bucharest produces a vaccine for dogs. It is a live vaccine deriving from virulent nervous sheep tissue absorbed to aluminium gel.

Another essential preventional measure is the education of the public on the course of the rabies disease and its possibilities of control.

(Figure 1 and Figure 2 see next page)

FIGURE 1

Number of Rabies Cases (Ordinate)
1983 - 1992 in Romania

- ▲ in domestic animals
- in wild animals
- in man

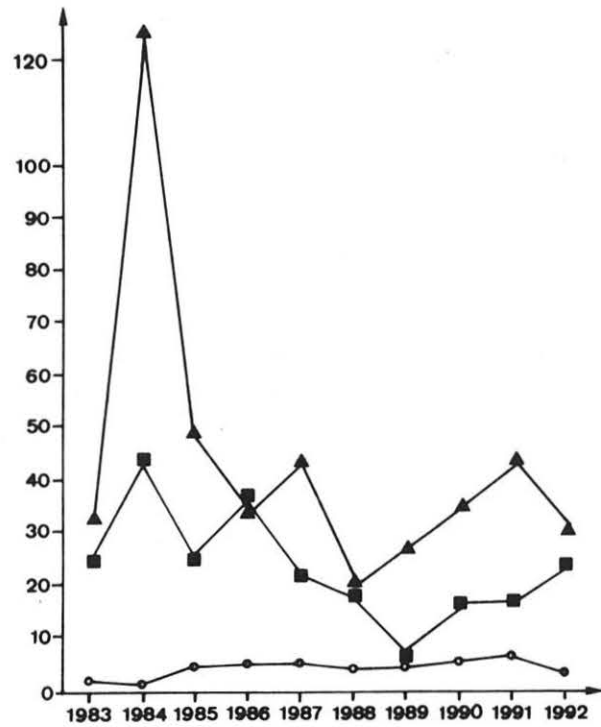
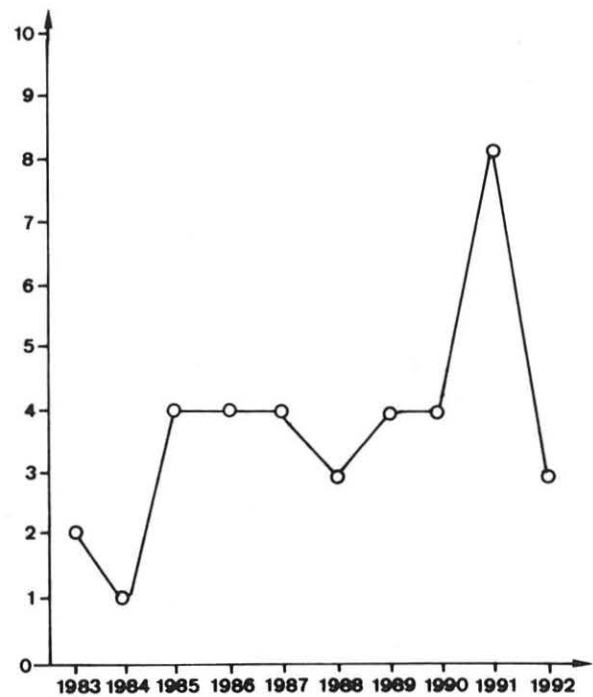


FIGURE 2

Human Rabies Cases (Ordinate)
1983 - 1992 in Romania



4.2 Human rabies - a guide for post-exposure treatment

WHO has been publishing a guide for post-exposure treatment for many years in reports written by an international group of experts on rabies. The guide of the eighth report of the WHO Expert Committee (WHO Technical Report Series 824, WHO, Geneva 1992) differs in some aspects from the seventh report (1984). Therefore, the new text is presented here in its entirety.

The recommendations given here are intended as a general guide. It is recognized that, in certain situations, modifications of the procedures laid down may be warranted. Such situations include exposure of infants or mentally disabled persons and other circumstances where a reliable history cannot be obtained, particularly in areas where rabies is enzootic, even though the animal is considered to be healthy at the time of exposure. Such cases may be treated as category II or III (see section 2).

As indicated in section 2, post-exposure treatment, which consists of local treatment of the wound, followed by vaccine therapy (with or without rabies immunoglobulin) should be initiated immediately with contacts of categories II and III. Treatment may be discontinued if the animal

involved (dog or cat) remains healthy throughout an observation period of 10 days; or if the animal is killed humanely and found to be negative for rabies by laboratory examination. Any biting animal suspected of being rabid should be immediately killed humanely and tissues examined using appropriate laboratory technique(s). Modification of the recommended procedures would be indicated in a rabies-free area where animal bites are encountered. In areas where canine or wildlife rabies is epizootic, adequate laboratory and field experience indicating that there is no infection in the species involved may justify local health authorities in not recommending specific anti-rabies treatment.

Practice varies concerning the volume of vaccine per dose, the number of doses recommended in a given situation and the route of administration.

Tissue-culture or purified duck-embryo vaccines of potency at least 2.5 IU per dose should be applied according to the following schedules:

Intramuscular schedules: One dose of the vaccine should be administered on days 0, 3, 7, 14 and 30. All intramuscular injections must be given into the deltoid or, in small children, into the anterolateral area of the thigh muscle. Vaccine should never be administered in

the gluteal region.

In the abbreviated multisite schedule, the 2-1-1 regimen, one dose is given in the right arm and one dose in the left arm at day 0, and one dose applied in the deltoid muscle on days 7 and 21. The 2-1-1 schedule induces an early antibody response and may be particularly effective when post-exposure treatment does not include administration of rabies immunoglobulin.

Intradermal schedule: One dose (0.1 ml) should be given at each of two sites, either the forearm or the upper arm, on days 0, 3 and 7, and one dose at one site on days 30 and 90. This regimen considerably lowers the cost of vaccination against rabies, as the total volume of vaccine required is less than that required for intramuscular regimens. Separate syringes and needles must be used for each dose. Intradermal injections should only be administered by staff who have been trained in this technique. Vaccine vials should be stored between 4°C and 8°C after reconstitution and the total contents should be used as soon as possible.

For brain-tissue vaccines, national authorities should recommend a schedule of immunization that has been shown to induce an adequate level of protection.

Combined immunoglobulin-vaccine treatment is

considered by the Committee as the best specific systemic treatment available for the post-exposure prophylaxis of rabies in humans, although experience indicates that vaccine alone is sufficient for minor exposures (category II). Immunoglobulin should be given in a single dose of 20 IU per kg of body

weight for human anti-rabies immunoglobulin, and 40 IU per kg of body weight for heterologous (equine) immunoglobulin; the first dose of vaccine should be inoculated at the same time as the immunoglobulin, but in a different part of the body. Sensitivity to heterologous immunoglobulin must

be determined before it is administered. The physician should be prepared to deal with anaphylactic shock reactions.

Treatment should be started as early as possible after exposure, but in no case should it be denied to exposed persons whatever time interval has elapsed.

1. Local treatment of wounds involving possible exposure to rabies-recommended in all exposures

First-aid treatment

Since elimination of rabies virus at the site of infection by chemical or physical means is the most effective mechanism of protection (see section 7.3 of the main report), immediate washing and flushing with soap and water, detergent or water alone are imperative (this procedure is recommended for all bite wounds, including those unrelated to possible exposure to rabies). Then apply either ethanol (700 ml/l) or tincture or aqueous solution of iodine.

Treatment by, or under direction of, a physician

Treat as described above and then:

- apply anti-rabies immunoglobulin by careful instillation in the depth of the wound and by infiltration around the wound;
- postpone suturing of the wound; if suturing is necessary, ensure that immunoglobulin has been applied locally as described above;

- where indicated, begin anti-tetanus treatment and administer antimicrobials and drugs to control infections other than rabies.

2. Guide for post-exposure treatment

Category	Type of contact with a suspect or confirmed rabid domestic or wild ^a animal, or animal unavailable for observation	Recommended treatment
I	Touching or feeding of animals Licks on intact skin	None, if reliable case history is available
II	Nibbling of uncovered skin Minor scratches or abrasions without bleeding Licks on broken skin	Administer vaccine immediately. ^b Stop treatment if animal remains healthy throughout an observation period ^c of 10 days or if animal is killed humanely and found to be negative for rabies by appropriate laboratory techniques
III	Single or multiple transdermal bites or scratches Contamination of mucous membrane with saliva (i.e. licks)	Administer rabies immunoglobulin and vaccine immediately. ^b Stop treatment if animal remains healthy throughout an observation period ^c of 10 days or if animal is killed humanely and found to be negative for rabies by appropriate laboratory techniques

^a Exposure to rodents, rabbits and hares seldom, if ever, requires specific anti-rabies treatment.

^b If an apparently healthy dog or cat in or from a low-risk area is placed under observation, the situation may warrant delaying initiation of treatment.

^c This observation period applies only to dogs and cats. Except in the case of threatened or endangered species, other domestic and wild animals suspected as rabid should be killed humanely and their tissues examined using appropriate laboratory techniques.

(Taken from: WHO Expert Committee on Rabies, Technical Report Series 824, pages 53-55, WHO, Geneva, 1992)

TABLE 1

EUR		EUROPE		2/93		RABIES CASES										1. 4.93 - 30. 6.93	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
ALB	ALBANIA	**	-	-	2	-	2	-	0	85	6	2	3	-	0	0	0
AUT	AUSTRIA	*	-	-	-	-	-	4	0	6	-	-	-	0	0	0	100
BEL	BELGIUM	**	-	-	-	-	-	0	-	-	-	-	-	0	0	0	0
BUL	BULGARIA	**	-	-	-	-	-	0	-	-	-	-	-	0	0	0	0
BYE	BELARUS	**	-	-	-	-	-	0	-	-	-	-	-	0	0	0	0
CRO	CROATIA		2	-	-	-	-	2	34	-	-	-	-	34	-	-	36
CZH	CZECH REPUBLIC		-	4	-	-	-	5	75	1	3	-	-	79	-	-	84
DEN	DENMARK		-	-	-	-	-	0	-	-	-	-	1	1	-	-	1
DEU	FED. REP. OF GERMANY		1	4	4	-	2	11	65	4	3	2	4	78	-	-	89
EST	ESTONIA		10	2	2	-	-	14	14	-	1	-	3	18	-	-	32
FIN	FINLAND	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
FRA	FRANCE		1	5	2	-	2	10	50	1	5	-	-	56	-	-	66
GRE	GREECE	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
HUN	HUNGARY		23	22	7	-	-	52	117	-	-	1	-	118	-	-	170
ICE	ICELAND	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
IRE	IRELAND	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
ITA	ITALY		-	1	-	-	-	1	20	4	1	1	1	27	-	-	28
LTU	LITHUANIA		7	5	6	-	-	18	-	-	2	-	3	5	-	-	23
LUX	LUXEMBOURG		-	-	-	-	-	0	-	-	-	1	-	1	-	-	1
LVA	LATVIA		8	4	1	1	-	14	10	1	-	-	6	17	-	-	31
MLD	MOLDOVA	**	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
NET	NETHERLANDS		-	-	-	-	-	0	-	-	-	-	4	4	-	-	4
NOR	NORWAY	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
POL	POLAND		40	37	19	1	-	98	386	3	25	13	47	474	-	-	572
POR	PORTUGAL	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
ROM	ROMANIA		2	7	2	-	2	13	10	-	-	1	2	13	-	-	26
RUS	RUSSIAN FEDERATION		42	14	70	9	11	181	21	-	-	-	4	25	2	-	208
SPA	SPAIN	1)	2	-	-	-	-	2	-	-	-	-	-	0	-	-	2
SVK	SLOVAK REPUBLIC		6	15	-	-	-	21	76	-	2	-	-	78	-	-	99
SVN	SLOVENIA		2	2	-	-	-	4	77	4	2	1	-	84	-	-	88
SWE	SWEDEN	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
SWI	SWITZERLAND + LIECHT		-	-	-	1	-	1	25	2	-	-	-	27	-	-	28
TUR	TURKEY		67	5	7	1	1	83	-	1	-	-	-	1	-	-	84
UKR	UKRAINE	**	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
UNK	UNITED KINGDOM	*	-	-	-	-	-	0	-	-	-	-	-	0	-	-	0
YUG	YUGOSLAVIA		1	6	-	-	-	7	5	-	-	-	-	5	-	-	12
TOTAL			214	133	122	13	20	39	541	1070	27	46	23	75	1241	2	1784
PER CENT			12.0	7.5	6.8	0.7	1.1	2.2	30.3	60.0	1.5	2.6	1.3	4.2	69.6	0.1	100.0

* NO CASES ** NO DATA 1) NORTH AFRICA

TABLE 2

EUR		EUROPE		1-2/93		RABIES CASES							1. 1.93 - 30.06.93				
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL		
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL	
ALB	ALBANIA							0						0	0		
AUT	AUSTRIA	-	-	3	-	3	-	6	178	11	3	5	-	197	203		
BEL	BELGIUM							0	-	1	-	-	-	1	1		
BUL	BULGARIA	1)	-	1	-	1	-	2	1	-	-	-	-	1	3		
BYE	BELARUS	1)	-	-	-	-	10	10	-	-	-	-	16	16	26		
CRO	CROATIA		9	3	-	-	-	12	143	-	-	-	-	143	155		
CZH	CZECH REPUBLIC		1	6	-	1	-	9	180	1	9	3	1	194	203		
DEN	DENMARK							0	-	-	-	-	1	1	1		
DEU	FED. REP. OF GERMANY		3	15	17	3	8	47	211	13	6	15	4	249	296		
EST	ESTONIA		15	4	4	-	-	23	37	-	1	-	13	51	74		
FIN	FINLAND	*						0						0	0		
FRA	FRANCE		4	9	8	-	7	28	136	5	10	-	1	152	180		
GRE	GREECE	*						0						0	0		
HUN	HUNGARY		56	50	22	-	3	132	494	-	1	3	1	499	631		
ICE	ICELAND	*						0						0	0		
IRE	IRELAND	*						0						0	0		
ITA	ITALY		-	1	-	-	-	1	26	4	1	1	1	33	34		
LTU	LITHUANIA		15	9	12	-	-	36	6	-	2	-	6	14	50		
LUX	LUXEMBOURG							0	-	-	-	1	-	1	1		
LVA	LATVIA		15	7	3	1	-	26	19	1	-	-	10	30	56		
MLD	MOLDOVA	1)	-	1	-	-	-	1	2	-	-	-	-	2	3		
NET	NETHERLANDS							0	-	-	-	-	5	5	5		
NOR	NORWAY	*						0						0	0		
POL	POLAND		75	82	39	3	-	201	985	4	39	38	107	1173	1374		
POR	PORTUGAL	*						0						0	0		
ROM	ROMANIA		4	11	5	-	2	22	21	-	-	1	4	26	48		
RUS	RUSSIAN FEDERATION		90	35	184	26	70	466	79	-	-	-	10	89	542		
SPA	SPAIN	2)	5	-	-	-	-	5						0	5		
SVK	SLOVAK REPUBLIC		10	21	-	-	-	31	177	2	2	-	-	181	212		
SVN	SLOVENIA		4	6	-	-	-	10	149	4	2	3	-	158	168		
SWE	SWEDEN	*						0						0	0		
SWI	SWITZERLAND + LIECHT		-	1	1	1	-	3	32	6	-	-	-	38	41		
TUR	TURKEY		109	10	13	1	2	139	-	1	-	-	-	1	140		
UKR	UKRAINE	**						0						0	0		
UNK	UNITED KINGDOM	*						0						0	0		
YUG	YUGOSLAVIA		3	11	1	-	-	15	37	-	-	-	-	37	52		
TOTAL			418	282	313	36	96	65	1210	2913	53	76	70	180	3292	2	4504
PER CENT			9.3	6.3	6.9	0.8	2.1	1.4	26.9	64.7	1.2	1.7	1.6	4.0	73.1	0.0	100.0

* NO CASES ** NO DATA 1) NO DATA FOR 2ND QUARTER 2) NORTH AFRICA

2nd Quarter: April - June 1993

page 15

TABLE 3

EUR		EUROPE		2/93		RABIES CASES 'OTHER ANIMAL SPECIES'						1. 4.93 - 30. 6.93	
LOCATION		OTHER DOMESTIC ANIMALS				OTHER WILD ANIMALS						TOTAL	
CODE	NAME	DONKEY	OTH. DOM. HERBIVO	DOMESTIC. RABBIT	OTHERS	WOLF	RACCOON DOG	CHAMOIS	INSECTIV. BATS	BLACK RAT	MUSKRAT		OTHERS
CZH	CZECH REPUBLIC	-	-	1	-	-	-	-	-	-	-	-	1
DEN	DENMARK	-	-	-	-	-	-	-	1	-	-	-	1
DEU	FED. REP. OF GERMANY	-	-	-	-	-	-	-	4	-	-	-	4
EST	ESTONIA	-	-	-	-	-	3	-	-	-	-	-	3
ITA	ITALY	-	-	-	-	-	-	1	-	-	-	-	1
LTU	LITHUANIA	-	-	-	-	-	3	-	-	-	-	-	3
LVA	LATVIA	-	-	-	-	-	6	-	-	-	-	-	6
NET	NETHERLANDS	-	-	-	-	-	-	-	4	-	-	-	4
POL	POLAND	-	1	-	-	1	44	-	-	1	1	-	48
ROM	ROMANIA	-	-	-	-	-	-	-	-	-	-	2	2
RUS	RUSSIAN FEDERATION	1	-	-	34	2	2	-	-	-	-	-	39
TUR	TURKEY	2	-	-	-	-	-	-	-	-	-	-	2
TOTAL		3	1	1	34	3	58	1	9	1	1	2	114
PER CENT		2.6	0.9	0.9	29.8	2.6	50.9	0.9	7.9	0.9	0.9	1.8	100.0

R A B I E S C A S E S

1. 4.93 - 30. 6.93

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
AUT A U S T R I A															
105 JENNERSDORF							0	1	-	-	-	-	1		1
107 NEUSIEDL AM SEE							0	3	-	-	-	-	3		3
317 MOEDLING							0	4	-	-	-	-	4		4
320 SCHEIBBS							0	1	-	-	-	-	1		1
702 IMST							0	-	-	1	-	-	1		1
703 INNSBRUCK-LAND							0	11	2	-	1	-	14		14
705 KUFSTEIN							0	1	-	-	-	-	1		1
709 SCHWAZ	-	-	-	-	2	-	2	50	1	1	2	-	54		56
801 BLUDENZ	-	-	1	-	-	-	1	3	-	-	-	-	3		4
802 BREGENZ	-	-	1	-	-	-	1	10	3	-	-	-	13		14
803 DORNBIRN							0	1	-	-	-	-	1		1
TOTAL	0	0	2	0	2	0	4	85	6	2	3	0	96	0	100
PER CENT	0.0	0.0	2.0	0.0	2.0	0.0	4.0	85.0	6.0	2.0	3.0	0.0	96.0	0.0	100.0
CRO C R O A T I A															
011 CAKOVEC							0	3	-	-	-	-	3		3
020 DUGA RESA	1	-	-	-	-	-	1	3	-	-	-	-	3		4
023 DAKOVO							0	1	-	-	-	-	1		1
031 IMOTSKI							0	1	-	-	-	-	1		1
034 JASTREBARSKO							0	2	-	-	-	-	2		2
036 KARLOVAC							0	2	-	-	-	-	2		2
040 KOPRIVNICA							0	2	-	-	-	-	2		2
046 KUTINA							0	1	-	-	-	-	1		1
052 NASICE							0	1	-	-	-	-	1		1
059 OPATIJA							0	1	-	-	-	-	1		1
061 OSIJEK	1	-	-	-	-	-	1	2	-	-	-	-	2		3
079 SLAVONSKI BROD							0	2	-	-	-	-	2		2
083 SIBENIK							0	1	-	-	-	-	1		1
102 GRAD ZAGREB							0	12	-	-	-	-	12		12
TOTAL	2	0	0	0	0	0	2	34	0	0	0	0	34	0	36
PER CENT	5.6	0.0	0.0	0.0	0.0	0.0	5.6	94.4	0.0	0.0	0.0	0.0	94.4	0.0	100.0

2nd Quarter: April - June 1993

page 17

R A B I E S C A S E S																1. 4.93 - 30. 6.93	
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	
CZH C Z E C H R E P U B L I C																	
	00 DISTRICT OF PRAGUE							0						0	0		
	01 CENTRAL BOHEMIA							0	1	-	-	-	-	1	1		
	02 SOUTH BOHEMIA							0	3	1	1	-	-	5	5		
	03 WEST BOHEMIA							0						0	0		
	04 NORTH BOHEMIA							0	6	-	1	-	-	7	7		
	05 EAST BOHEMIA	-	3	-	-	-	1	4	48	-	1	-	-	49	53		
	06 SOUTH MORAVIA							0	13	-	-	-	-	13	13		
	07 NORTH MORAVIA	-	1	-	-	-	-	1	4	-	-	-	-	4	5		
	TOTAL	0	4	0	0	0	1	5	75	1	3	0	0	79	84		
	PER CENT	0.0	4.8	0.0	0.0	0.0	1.2	6.0	89.3	1.2	3.6	0.0	0.0	94.0	100.0		
DEN D E N M A R K																	
	070 ARHUS							0	-	-	-	-	1	1	1		
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	1	1	1		

R A B I E S C A S E S															1. 4.93 - 30. 6.93	
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
DEU FEDERAL REPUBLIC OF GERMANY																
01	SCHLESWIG-HOLSTEIN							0						0	0	
02	HAMBURG							0						0	0	
03	NIEDERSACHSEN	-	-	1	-	-	-	1	3	-	-	-	1	4	5	
04	BREMEN							0						0	0	
05	NORDRHEIN-WESTFALEN	-	2	-	-	-	-	2	5	1	-	-	-	6	8	
06	HESSEN							0	1	-	-	-	-	1	1	
07	RHEINLAND-PFALZ	-	-	-	-	2	-	2	14	-	-	-	-	14	16	
08	BADEN-WUERTTEMBERG	-	1	1	-	-	-	2	24	3	2	-	-	29	31	
09	BAYERN	-	-	1	-	-	-	1	12	-	1	2	-	15	16	
10	SAARLAND							0						0	0	
11	Berlin	-	1	-	-	-	-	1	-	-	-	-	2	2	3	
12	Brandenburg	1	-	-	-	-	-	1	1	-	-	-	-	1	2	
13	Mecklenb.-Vorpommern							0	1	-	-	-	1	2	2	
14	Sachsen							0						0	0	
15	Sachsen-Anhalt							0	3	-	-	-	-	3	3	
16	Thueringen	-	-	1	-	-	-	1	1	-	-	-	-	1	2	
TOTAL		1	4	4	0	2	0	11	65	4	3	2	4	78	0	89
PER CENT		1.1	4.5	4.5	0.0	2.2	0.0	12.4	73.0	4.5	3.4	2.2	4.5	87.6	0.0	100.0
EST E S T O N I A																
01	Harjumaa	1	-	-	-	-	-	1	3	-	-	-	-	3	4	
04	Jogevamaa	1	1	-	-	-	-	2						0	2	
05	Jaervamaa	1	-	-	-	-	-	1	1	-	-	-	-	1	2	
07	Laeane-Virumaa	-	-	1	-	-	-	1	1	-	-	-	-	1	2	
09	Paernumaa							0	1	-	-	-	-	1	1	
10	Raplamaa	1	-	-	-	-	-	1	1	-	-	-	-	1	2	
12	Tartumaa	2	-	-	-	-	-	2	3	-	1	-	1	5	7	
13	Valgamaa	-	1	-	-	-	-	1	2	-	-	-	-	2	3	
14	Viljandimaa	1	-	-	-	-	-	1	1	-	-	-	-	1	2	
15	Vorumaa	3	-	1	-	-	-	4	1	-	-	-	2	3	7	
TOTAL		10	2	2	0	0	0	14	14	0	1	0	3	18	0	32
PER CENT		31.3	6.3	6.3	0.0	0.0	0.0	43.8	43.8	0.0	3.1	0.0	9.4	56.3	0.0	100.0

RABIES CASES																1. 4.93 - 30. 6.93	
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	
FRA FRANCE																	
08	ARDENNES							0	-	-	1	-	-	1		1	
10	AUBE	-	1	-	-	-	-	1						0		1	
21	COTE D'OR							0	-	-	1	-	-	1		1	
25	DOUBS							0	4	1	-	-	-	5		5	
51	MARNE							0	1	-	-	-	-	1		1	
52	MARNE (HAUTE)							0	3	-	-	-	-	3		3	
54	MEURTHE ET MOSELLE							0	4	-	-	-	-	4		4	
55	MEUSE							0	9	-	-	-	-	9		9	
68	RHIN (HAUT)							0	6	-	1	-	-	7		7	
70	SAONE (HAUTE)	-	-	1	-	2	-	3	4	-	1	-	-	5		8	
88	VOSGES	1	4	1	-	-	-	6	19	-	1	-	-	20		26	
TOTAL		1	5	2	0	2	0	10	50	1	5	0	0	56	0	66	
PER CENT		1.5	7.6	3.0	0.0	3.0	0.0	15.2	75.8	1.5	7.6	0.0	0.0	84.8	0.0	100.0	
ITA ITALY																	
34	TRIESTE E GORIZIA							0	1	-	-	-	-	1		1	
39	BOLZANO	-	1	-	-	-	-	1	19	4	1	1	1	26		27	
TOTAL		0	1	0	0	0	0	1	20	4	1	1	1	27	0	28	
PER CENT		0.0	3.6	0.0	0.0	0.0	0.0	3.6	71.4	14.3	3.6	3.6	3.6	96.4	0.0	100.0	
LTU LITHUANIA																	
41	Viniaus	2	-	1	-	-	-	3						0		3	
45	Ignalinos	-	1	-	-	-	-	1						0		1	
54	Kelmes							0	-	-	1	-	1	2		2	
55	Klaipėdos	-	1	-	-	-	-	1						0		1	
56	Kretingos	-	-	1	-	-	-	1						0		1	
65	Pakruojo	1	1	-	-	-	-	2						0		2	
66	Panevezio	-	1	3	-	-	-	4	-	-	-	-	1	1		5	
67	Pasvalio							0	-	-	1	-	1	2		2	
81	Ukmerges	2	-	-	-	-	-	2						0		2	
82	Utenos	-	-	1	-	-	-	1						0		1	
85	Salcininku	1	-	-	-	-	-	1						0		1	
94	Jurbarko	1	1	-	-	-	-	2						0		2	
TOTAL		7	5	6	0	0	0	18	0	0	2	0	3	5	0	23	
PER CENT		30.4	21.7	26.1	0.0	0.0	0.0	78.3	0.0	0.0	8.7	0.0	13.0	21.7	0.0	100.0	

HUN HUNGARY		RABIES CASES											1. 4.93 - 30. 6.93			
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
01	BUDAPEST	5	1	1	-	-	-	0	2	-	-	-	-	2	2	
02	BARANYA	3	2	-	-	-	-	7	8	-	-	-	-	8	15	
03	BACS-KISKUN	3	2	-	-	-	-	5	4	-	-	-	-	4	9	
04	BEKES	1	2	2	-	-	-	0	6	-	-	-	-	6	6	
05	BORSOD-ABAUJ-ZEMPLEN	2	1	-	-	-	-	5	13	-	-	-	-	13	18	
06	CSONGRAD	2	1	-	-	-	-	3	9	-	-	-	-	9	12	
07	FEJER	2	1	-	-	-	-	3	8	-	-	-	-	8	11	
08	GYOER-SOPRON	-	1	-	-	-	-	1	1	-	-	-	-	1	2	
09	HAJDU-BIHAR	-	3	-	-	-	-	3	3	-	-	-	-	3	6	
10	HEVES	-	1	-	-	-	-	1	3	-	-	-	-	3	4	
11	KOMAROM	1	-	1	-	-	-	0	5	-	-	-	-	5	5	
12	NOGRAD	2	-	-	-	-	-	2	5	-	-	-	-	5	7	
13	PEST	2	-	-	-	-	-	2	10	-	-	-	-	10	12	
14	SOMOgy	3	5	2	-	-	-	10	4	-	-	1	-	5	15	
15	SZABOLCS-SZATMAR	2	2	-	-	-	-	4	3	-	-	-	-	3	7	
16	SZOLNOK	-	-	1	-	-	-	1	-	-	-	-	-	0	1	
17	TOLNA	2	2	-	-	-	-	4	11	-	-	-	-	11	15	
18	VAS	-	-	-	-	-	-	0	4	-	-	-	-	4	4	
19	VESZPREM	-	1	-	-	-	-	1	9	-	-	-	-	9	10	
20	ZALA	-	-	-	-	-	-	0	9	-	-	-	-	9	9	
TOTAL		23	22	7	0	0	0	52	117	0	0	1	0	118	0	170
PER CENT		13.5	12.9	4.1	0.0	0.0	0.0	30.6	68.8	0.0	0.0	0.6	0.0	69.4	0.0	100.0

2nd Quarter: April - June 1993

page 21

RABIES CASES																1. 4.93 - 30. 6.93	
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	
LUX L U X E M B O U R G																	
05 MERSCH							0	-	-	-	1	-	1		1		
TOTAL		0	0	0	0	0	0	0	0	0	1	0	1	0	1		
LVA L A T V I A																	
01 Aizkraukle							0	1	-	-	-	-	1		1		
02 Aluksne							0	2	-	-	-	-	2		2		
03 Balvi		1	-	-	-	-	1						0		1		
04 Bauska		1	-	-	-	-	1						0		1		
05 Cesis							0	2	-	-	-	1	3		3		
08 Gulbene							0	-	-	-	-	1	1		1		
09 Jekabpils		-	-	1	1	-	2						0		2		
13 Liepaja		1	2	-	-	-	3						0		3		
16 Madona							0	-	-	-	-	1	1		1		
17 Ogre		1	1	-	-	-	2	1	1	-	-	-	2		4		
19 Rezekne		1	-	-	-	-	1						0		1		
21 Saldus		3	1	-	-	-	4	1	-	-	-	1	2		6		
23 Tukums							0	1	-	-	-	-	1		1		
26 Ventspils							0	2	-	-	-	2	4		4		
TOTAL		8	4	1	1	0	14	10	1	0	0	6	17	0	31		
PER CENT		25.8	12.9	3.2	3.2	0.0	45.2	32.3	3.2	0.0	0.0	19.4	54.8	0.0	100.0		

RABIES CASES															1. 4.93 - 30. 6.93	
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
NET NETHERLANDS																
01	DRENTHE							0	-	-	-	-	1	1		1
03	GELDERLAND							0	-	-	-	-	1	1		1
10	ZUID-HOLLAND							0	-	-	-	-	2	2		2
TOTAL		0	0	0	0	0	0	0	0	0	0	0	4	4	0	4
PER CENT		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	100.0
ROM ROMANIA																
01	ALBA							0	-	-	-	-	1	1		1
04	BACAU							0	2	-	-	-	-	2		2
06	BISTRITA-NASAUD	-	-	1	-	-	-	1	1	-	-	-	-	1		2
10	BUZAU	-	-	1	-	-	-	1	1	-	-	-	-	0		1
11	CARAS-SEVERIN	1	-	-	-	-	-	1	-	-	-	-	-	0		1
14	CONSTANTA	-	-	-	-	2	-	2	-	-	-	-	-	0		2
17	DOLJ							0	1	-	-	-	-	1		1
20	GORJ							0	3	-	-	-	-	3		3
21	HARGHITA	-	3	-	-	-	-	3	-	-	-	-	-	0		3
24	IASI	-	3	-	-	-	-	3	-	-	-	-	-	0		3
26	MEHEDINTI							0	1	-	-	-	-	1		1
28	NEAMT							0	-	-	-	1	-	1		1
29	OLT							0	-	-	-	-	1	1		1
32	SALAJ							0	2	-	-	-	-	2		2
35	TELEORMAN	-	1	-	-	-	-	1	-	-	-	-	-	0		1
39	VILCEA	1	-	-	-	-	-	1	-	-	-	-	-	0		1
TOTAL		2	7	2	0	2	0	13	10	0	0	1	2	13	0	26
PER CENT		7.7	26.9	7.7	0.0	7.7	0.0	50.0	38.5	0.0	0.0	3.8	7.7	50.0	0.0	100.0

2nd Quarter: April - June 1993

page 23

POL		P O L A N D											R A B I E S C A S E S				1. 4.93 - 30. 6.93	
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		
01	WARSZAWA							0	4	-	-	-	-	4	4			
05	BIALYSTOK	-	-	4	-	-	-	4	16	-	1	-	2	19	23			
07	BIELSKO-BIALA							0	2	-	1	-	-	3	3			
09	BYDGOSZCZ	2	1	-	-	-	-	3	10	1	1	-	5	17	20			
11	CHELM							0	3	-	-	-	-	3	3			
13	CIECHANOW	-	-	1	-	-	-	1	5	-	-	-	-	5	6			
15	CZESTOCHOWA	1	2	-	-	-	-	3	1	-	-	-	-	1	4			
17	ELBLAG	1	-	2	-	-	-	3	5	1	-	-	4	10	13			
19	GDANSK	-	2	2	-	-	-	4	33	-	-	-	2	35	39			
21	GORZOW	2	3	-	-	-	-	5	28	-	2	4	1	35	40			
23	JELENIA GORA	-	1	-	-	-	-	1	10	-	-	-	-	10	11			
25	KALISZ							0	2	-	-	-	-	2	2			
27	KATOWICE	1	-	-	-	-	-	1	2	-	-	-	-	2	3			
29	KIELCE	2	1	-	-	-	-	3	2	-	-	-	-	2	5			
31	KONIN	-	2	-	-	-	-	2	4	-	-	-	-	4	6			
33	KOSZALIN	3	5	2	-	-	-	10	25	-	3	1	7	36	46			
35	KRAKOW							0	1	-	1	-	-	2	2			
37	KROSNO	1	1	1	1	-	-	4	6	-	1	-	-	7	11			
39	LEGNICA	-	1	-	-	-	-	1	9	-	-	-	-	9	10			
41	LESZNO							0	6	-	1	-	-	7	7			
43	LUBLIN							0	1	-	-	-	-	1	1			
45	LOMZA	1	1	2	-	-	-	4	14	-	1	-	1	16	20			
47	LODZ							0	2	-	-	-	-	2	2			
49	NOWY SACZ	2	2	-	-	-	1	5	2	-	1	-	-	3	8			
51	OLSZTYN	3	1	3	-	-	-	7	16	-	-	-	6	22	29			
53	OPOLE	2	-	-	-	-	-	2	8	-	1	-	-	9	11			

POL CONTINUED

LOCATION CODE NAME		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL	
		DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL
55	OSTROLEKA	1	-	-	-	-	-	1	4	-	-	-	-	4	5	
57	PILA	-	-	1	-	-	-	1	8	-	-	-	2	10	11	
59	PIOTRKOW TRYB	-	-	-	-	-	-	0	3	-	-	-	-	3	3	
61	PLOCK	1	1	-	-	-	-	2	17	-	-	-	-	17	19	
63	POZNAN	1	1	-	-	-	-	2	13	-	1	2	-	16	18	
65	PRZEMYSL	4	-	-	-	-	-	4	7	-	-	-	-	7	11	
69	RZESZOW	2	3	-	-	-	-	5	1	-	-	-	-	1	6	
71	SIEDLCE	1	-	-	-	-	-	1	2	-	-	-	1	3	4	
73	SIERADZ	-	1	-	-	-	-	1	2	-	-	-	-	2	3	
75	SKIERNIEWICE	-	-	-	-	-	-	0	2	-	-	-	-	2	2	
77	SLUPSK	-	1	-	-	-	-	1	12	-	1	3	-	16	17	
79	SUWALKI	-	-	1	-	-	-	1	4	-	-	-	5	9	10	
81	SZCZECIN	1	1	-	-	-	-	2	43	1	-	2	6	52	54	
83	TARNOBRZEG	2	2	-	-	-	-	4	2	-	1	-	1	4	8	
85	TARNOW	-	-	-	-	-	-	0	1	-	-	-	-	1	1	
87	TORUN	-	1	-	-	-	-	1	-	-	2	-	2	4	5	
89	WALBRZYCH	1	1	-	-	-	-	2	16	-	2	-	-	18	20	
91	WLOCLAWEK	-	-	-	-	-	-	0	3	-	-	-	1	4	4	
93	WROCLAW	1	1	-	-	-	-	2	11	-	2	-	-	13	15	
95	ZAMOSC	-	-	-	-	-	-	0	1	-	-	-	1	2	2	
97	ZIELONA GORA	4	1	-	-	-	-	5	17	-	2	1	-	20	25	
TOTAL		40	37	19	1	0	1	98	386	3	25	13	47	474	0	572
PER CENT		7.0	6.5	3.3	0.2	0.0	0.2	17.1	67.5	0.5	4.4	2.3	8.2	82.9	0.0	100.0

2nd Quarter: April - June 1993

page 25

RUS		RUSSIAN FEDERATION						R A B I E S C A S E S						1. 4. 93 - 30. 6. 93	
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		
01	Arkhangelsk Region	-	-	-	-	-	30	30	-	-	-	-	-	0	30
08	Pskov Region	4	1	-	-	-	-	5	4	-	-	-	3	7	12
09	Bryansk Region	1	-	-	-	-	-	1	-	-	-	-	0	1	
12	Tver Region	1	-	3	-	-	-	4	1	-	-	-	1	5	
15	Moscow Region	1	-	-	-	5	-	6	4	-	-	-	4	10	
16	Oryol Region	-	1	1	1	1	-	4	-	-	-	-	0	4	
18	Smolensk Region	-	-	-	-	-	-	0	-	-	-	1	1	1	
19	Tula Region	1	-	-	-	-	-	1	-	-	-	-	0	1	
26	Belgorod Region	5	1	4	1	-	-	11	-	-	-	-	0	11	
27	Voronezh Region	-	-	6	-	-	-	6	-	-	-	-	0	6	
28	Kursk Region	-	1	-	-	-	-	1	-	-	-	-	0	1	
31	Astrakhan Region	1	1	9	3	3	5	22	-	-	-	-	0	22	
32	Volgograd Region	-	-	6	-	-	-	6	-	-	-	-	0	6	
33	Samara Region	2	-	2	-	1	-	5	2	-	-	-	2	7	
34	Penza Region	2	-	1	-	-	-	3	-	-	-	-	0	3	
35	Saratov Region	-	-	1	-	-	-	1	1	-	-	-	1	2	
36	Ulyanovsk Region	1	3	1	-	-	-	5	-	-	-	-	0	5	
38	Republic of Tatarstan	2	-	3	1	-	-	6	4	-	-	-	4	10	
39	Krasnodar Territory	-	-	1	-	-	-	1	-	-	-	-	0	1	
40	Stavropol Territory	-	-	1	-	-	-	1	-	-	-	-	0	1	
41	Rostov Region	1	1	-	-	-	-	2	-	-	-	-	0	2	
42	Orenburg Region	3	3	1	-	-	-	7	-	-	-	-	0	7	
43	Perm Region	11	-	1	-	-	-	12	1	-	-	-	1	13	
44	Republic of Bashkorto	6	2	29	3	1	-	41	4	-	-	-	4	46	
TOTAL		42	14	70	9	11	35	181	21	0	0	0	4	25	208
PER CENT		20.2	6.7	33.7	4.3	5.3	16.8	87.0	10.1	0.0	0.0	0.0	1.9	12.0	100.0

R A B I E S C A S E S															1. 4.93 - 30. 6.93	
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
SPA S P A I N																
51	CEUTA (NORTH AFRICA)	1	-	-	-	-	-	1						0		1
52	MELILLA (NORTH AFRICA)	1	-	-	-	-	-	1						0		1
TOTAL		2	0	0	0	0	0	2	0	0	0	0	0	0	0	2
SVK S L O V A K R E P U B L I C																
10	DISTRICT OF BRATISLAV	-	1	-	-	-	-	1	2	-	-	-	-	2		3
11	WEST SLOVAKIA	3	6	-	-	-	-	9	18	-	1	-	-	19		28
12	CENTRAL SLOVAKIA	2	3	-	-	-	-	5	27	-	1	-	-	28		33
13	EAST SLOVAKIA	1	5	-	-	-	-	6	29	-	-	-	-	29		35
TOTAL		6	15	0	0	0	0	21	76	0	2	0	0	78	0	99
PER CENT		6.1	15.2	0.0	0.0	0.0	0.0	21.2	76.8	0.0	2.0	0.0	0.0	78.8	0.0	100.0
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																
01	AARGAU							0	3	-	-	-	-	3		3
04	BASEL-STADT							0	15	-	-	-	-	15		15
05	BASEL-LAND	-	-	-	1	-	-	1	7	1	-	-	-	8		9
17	SOLOTHURN							0	-	1	-	-	-	1		1
TOTAL		0	0	0	1	0	0	1	25	2	0	0	0	27	0	28
PER CENT		0.0	0.0	0.0	3.6	0.0	0.0	3.6	89.3	7.1	0.0	0.0	0.0	96.4	0.0	100.0
YUG Y U G O S L A V I A																
60	SR SRBIJA							0	2	-	-	-	-	2		2
61	SAP VOJVODINA	1	6	-	-	-	-	7	3	-	-	-	-	3		10
TOTAL		1	6	0	0	0	0	7	5	0	0	0	0	5	0	12
PER CENT		8.3	50.0	0.0	0.0	0.0	0.0	58.3	41.7	0.0	0.0	0.0	0.0	41.7	0.0	100.0

2nd Quarter: April - June 1993

page 27

SVN		SLOVENIA											RABIES CASES				1. 4.93 - 30. 6.93	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL			
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL		
01	AJDOVSCINA							0	3	-	-	-	-	3		3		
02	BREZICE							0	1	-	-	-	-	1		1		
11	IDRIJA	1	-	-	-	-	-	1	5	-	-	-	-	5		6		
12	ILIRSKA BISTRICA							0	4	-	-	-	-	4		4		
16	KOCEVJE							0	2	-	-	-	-	2		2		
18	KRANJ							0	2	1	-	-	-	3		3		
22	LENDAVA							0	2	-	-	-	-	2		2		
28	LJUBLJANA VIC RUDNIK	-	1	-	-	-	-	1	12	-	1	-	-	13		14		
30	LOGATEC							0	1	-	-	-	-	1		1		
36	MURSKA SOBOTA							0	1	-	-	-	-	1		1		
37	NOVA GORICA							0	1	-	-	-	-	1		1		
41	POSTOJNA							0	3	-	-	1	-	4		4		
42	PTUJ							0	1	-	-	-	-	1		1		
44	RADOVLJICA	-	1	-	-	-	-	1	9	-	-	-	-	9		10		
48	SEZANA							0	2	-	-	-	-	2		2		
53	SKOFJA LOKA							0	14	1	1	-	-	16		16		
55	TOLMIN							0	9	1	-	-	-	10		10		
60	VRHNIKA							0	2	1	-	-	-	3		3		
64	MARIBOR	1	-	-	-	-	-	1	3	-	-	-	-	3		4		
TOTAL		2	2	0	0	0	0	4	77	4	2	1	0	84	0	88		
PER CENT		2.3	2.3	0.0	0.0	0.0	0.0	4.5	87.5	4.5	2.3	1.1	0.0	95.5	0.0	100.0		

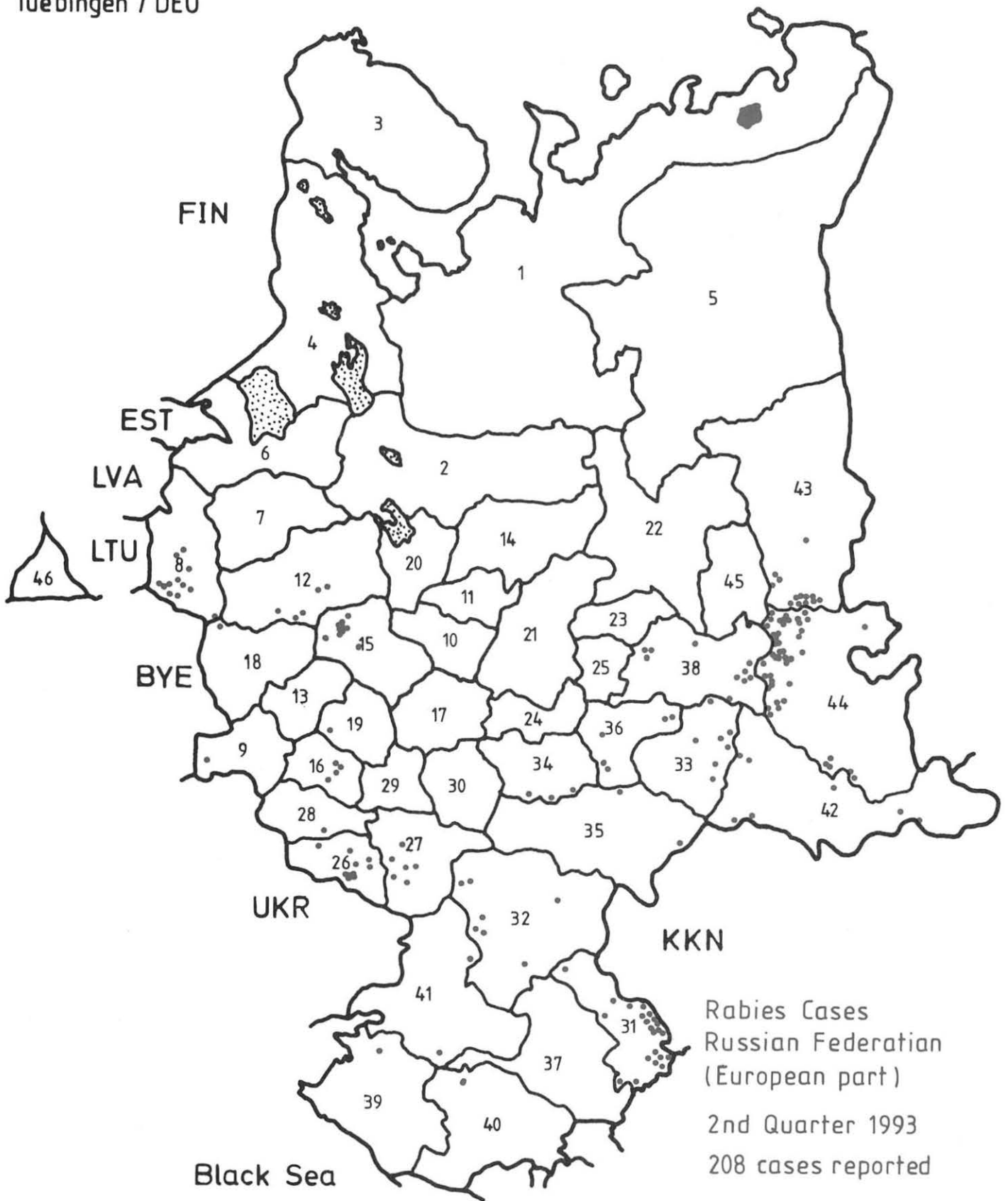
TUR		TURKEY											RABIES CASES					1. 4.93 - 30. 6.93	
LOCATION		DOMESTIC ANIMALS						WILD ANIMALS						HUMAN CASES	TOTAL				
CODE	NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS			TOTAL			
01	ADANA	1	-	-	-	-	-	1						0		1			
03	AFYON	1	-	-	-	-	-	1						0		1			
06	ANKARA	2	-	-	-	-	-	2						0		2			
09	AYDIN	1	-	-	-	-	-	1						0		1			
10	BALIKESIR	2	-	-	-	-	-	2						0		2			
14	BOLU	8	-	2	-	-	-	10						0		10			
16	BURSA	1	-	-	-	-	-	1						0		1			
17	CANAKKALE	1	-	-	-	-	-	1						0		1			
19	CORUM	2	-	-	-	-	-	2						0		2			
21	DIYARBAKIR	1	-	-	1	-	2	4						0		4			
22	EDIRNE	1	-	-	-	-	-	1						0		1			
25	ERZURUM	3	-	1	-	-	-	4						0		4			
27	GAZIANTEP	1	-	-	-	-	-	1						0		1			
28	GIRESUN	1	-	-	-	-	-	1						0		1			
31	HATAY	1	-	-	-	-	-	1						0		1			
32	ISPARTA	-	-	1	-	-	-	1	-	1	-	-	-	1		2			
33	ICEL	-	-	1	-	-	-	1						0		1			
34	ISTANBUL	10	-	1	-	-	-	11						0		11			
35	IZMIR	1	-	-	-	-	-	1						0		1			
38	KAYSERI	1	-	-	-	-	-	1						0		1			
41	KOCAELI	5	-	-	-	-	-	5						0		5			
42	KONYA	1	-	-	-	-	-	1						0		1			
43	KUETAHYA	-	1	-	-	-	-	1						0		1			
45	MANISA	2	-	-	-	-	-	2						0		2			
46	KAHRAMANMARAS	3	-	-	-	-	-	3						0		3			
52	ORDU	-	-	1	-	-	-	1						0		1			
54	SAKARYA	6	1	-	-	-	-	7						0		7			
55	SAMSUN	4	1	-	-	1	-	6						0		6			
57	SINOP	2	1	-	-	-	-	3						0		3			
60	TOKAT	4	1	-	-	-	-	5						0		5			
66	YOZGAT	1	-	-	-	-	-	1						0		1			
TOTAL		67	5	7	1	1	2	83	0	1	0	0	0	1	0	84			
PER CENT		79.8	6.0	8.3	1.2	1.2	2.4	98.8	0.0	1.2	0.0	0.0	0.0	1.2	0.0	100.0			

2nd Quarter: April - June 1993

page 29

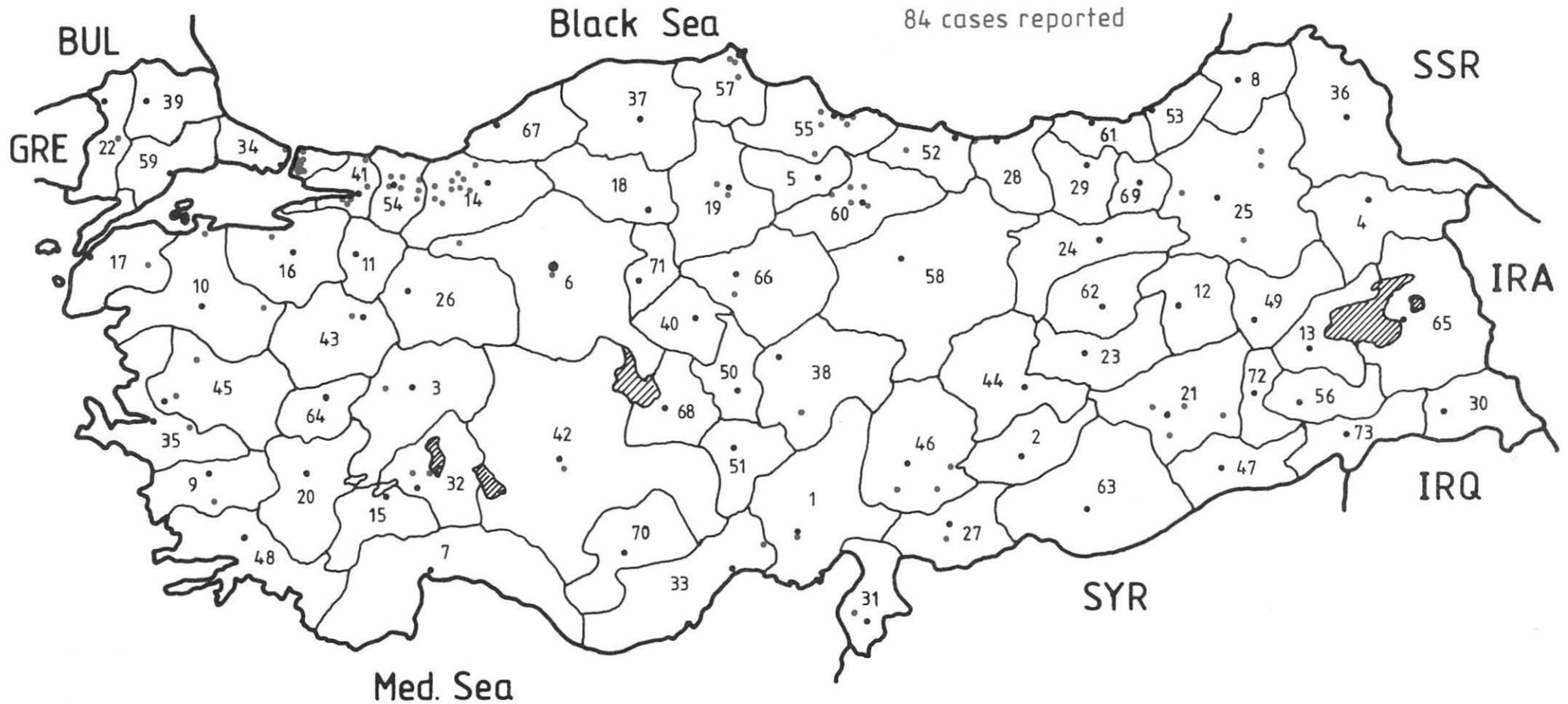
6. List of Contributors

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Dr. N.T. Belev Ministère de l'Agriculture		Dr. Attila Nagy Dr. Bálint Kerekes Ministry of Agriculture		Dr. Jan Kolasz Ministry of Agriculture Dr. Danuta Serokova National Institute of Hygiene		Switzerland	SWI
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Dr. S. Juzbašić Ministry of Agriculture, Forestry and Water Management		Dr. Brynjolfur Sandholt Chief Veterinary Officer		Dr.C.A.M.de Andrade Fontes Direccao-Geral da Pecuaria			
Dr. M. Brstilo State Veterinary Service		Ireland	IRE	Romania	ROM	Turkey	TUR
Dr. Ž. Čač Croatian Veterinary Institute		Dr. J.A. Costelloe Dr. I. O'Boyle Department of Agriculture		Dr. Horatiu Olaru Ministère de l'Agriculture		Dr. Hakki Özdek Ministry of Agriculture, Forestry and Rural Affairs	
Czech Republic	CZH	Italy	ITA	Russian Federation	RUS		
Dr. O. Matouch National Rabies Laboratory State Veterinary Institute		Dr. S. Prosperi Istituto di Malatti Infettive Univ. degli Studi di Bologna		(European part only) Prof. G.F. Koromyslov WHO Coll. Centre on Prev. and Control of Zoonoses The Kovalenko All-Union Institute of Experimental Veterinary Medicine, Moscow			
Denmark	DEN	Latvia	LVA			United Kingdom	UNK
Dr. E. Stougaard Veterinaerdirektoratet		Prof. J. Rimeicans State Veterinary Department Dr. Z. Andersons Latvian State Scientific Research Institute				Dr. K.C. Meldrum Dr. P.J. Thomas Ministry of Agriculture, Fisheries and Food	
Estonia	EST	Lithuania	LTU			Yugoslavia	YUG
Dr. M. Nautras Ministry of Agriculture		Dr. A. Dranseika State Veterinary Service		Prof. B.L. Cherkasskiy WHO Collaborating Centre on Zoonoses Central Research Institute of Epidemiology, Ministry of Public Health, Moscow		Dr. M. Radovanovic Dr. D. Jakovljevic Fed. Committee Agriculture	
Finland	FIN	Luxembourg	LUX			Dr. Milos Petrovic Pasteur Institute, Novi Sad	
Dr. R. Berger Dr. Saara Reinius Ministry of Agriculture and Forestry		Dr. J. Kremer Ministère de l'Agriculture					



WHO Coll. Centre
Tuebingen / DEU

Rabies Cases Turkey
2nd Quarter 1993
84 cases reported



ICE
(rabies free)

Rabies Cases Europe
2nd Quarter 1993

1784 cases reported
9 bat rabies cases included



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