# **RABIES BULLETIN EUROPE**

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# 1. Introduction

This BULLETIN describes the reported rabies cases in Europe for the Second Quarter 1994, subsequently referred to as "This Quarter". In SECTION 2 a sum-

mary of the rabies situation in general is given.

SECTION 3 (3.1-3.36) reflects the situation for individual countries.

In the Miscellaneous SECTION (4) under 4.1 rabies control measures during the more recent years in Estonia, Latvia and Lithuania are described on. An article on the terms reinfection and residual foci is given in connection to rabies and oral vaccination of foxes against rabies under 4.2. And, under 4.3 the lethal infection caused by a cowpox-like virus in an immunosuppressed young man is reported.

The rabies case data are tabulated for the **Second Quarter 1994** in SECTION 5. The arrangement of countries follows practical considerations, not alphabetical ones.

SECTION 6 lists the official contributors to the BULLETIN.

The geographical distribution of rabies cases in Europe for the Second Quarter 1994 is shown on maps of Russia, Turkey and Europe in the ANNEX. One map of Russia shows the distribution of cases in the first quarter 1994 (as addendum).

## 2. Summary of Rabies in Europe

During "This Quarter", 1773 rabies cases were reported in Europe. Of these were 1246 in wild animals (70.3% of total), 526 in domestic animals and 1 in a human.

Of the cases in wild animals 1080 were foxes, 6 wolves, 1 lynx, 37 raccoon dogs, 37 badgers, 18 stone martens, 20 pine martens, 9 polecats, 1 large weasel, 29 roe deer, 1 fallow deer, 1 insectivorous bat, 1 beaver, 1 hamster, 1 black rat, 1 Norwegian rat and 2 hares. Of the cases in domestic animals 170 were dogs (of which 64 were recorded in Turkey, a country with urban or dog-mediated rabies), 140 cats (including 1 stray cat), 10 horses, 1 donkey, 1 pig, 129 bovines, 73 sheep, 1 goat and 1

camel. These data are summarized in TABLES 1 and 3.

TABLE 2 summarizesthe quarter 1 and 2 of 1994.

There has been a reduction of cases from 2534 (corrected figure for the 1st quarter 1994 - plus 5 cases Bulgaria, plus 1 case Moldova, plus 162 cases Russian Federation) in the previous quarter to 1773 during "This Quarter". It is the expected seasonal decrease in fox-mediated rabies countries and it was experienced during "This Quarter" in nearly all countries. The exceptions were Belgium, Italy, Latvia and Russia recording a slight increase of rabies cases due to more recently developed new foci.

Turkey noticed 5 more cases

compared to the previous quarter. However, it follows a different pattern as dog-mediated rabies country, where seasonal fluctuations are not that pronounced.

If the total figure for Europe of "*This Quarter*" is compared to the second quarter 1993 (1821 cases - corrected figure) no great difference can be noticed.

Rabies-free countries in Europe participating in the surveillance were: Finland, Greece, Iceland, Ireland, 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 Denmark, Luxem3.2

bourg, the Netherlands, and the Spanish territory of North Africa, but the last indigenously acquired case (in terrestrial animals or bats) was less than two years ago.

The status of the countries with data supplied irregularly can not be judged.

The one human rabies

case mentioned above occurred in the Russian Federation.

The one bat rabies case occurred in Germany.

### **3.** Rabies in Individual Countries

3.1	Albania	ALB
	No data.	
	-	

hv	Helmut	Schnabl
Uy	monnut	Sennaul

Austria

AUT

Of 6513 samples examined for rabies during "This Quarter", 50 cases (0.77%)were diagnosed rabid, 54 cases (51.9%) less than during the previous quarter (104). 45 cases occurred in wild animals (39 foxes, 3 badgers, 1 stonemarten, 1 polecat, 1 roe deer), 5 in domestic animals (3 cats, 2 bovines).

The distribution of cases by <u>Bundesländer</u> (federal provinces) and Bezirke (districts) was as follows:

<u>Burgenland:</u> 2 cases in the Bezirke Neusiedl/See and Oberwart.

<u>Niederösterreich:</u> 2 cases in the Bezirke Gmünd and Waidhofen/Thaya.

<u>Salzburg:</u> 2 cases in the Bezirk Zell/See.

Steiermark: 1 case in the Bezirk Radkersburg.

<u>Tirol:</u> 30 cases (60% of total) in the Bezirke Imst, Innsbruck,

Kitzbühel, Kufstein, Reutte and Schwaz. <u>Vorarlberg:</u> 13 cases in the Bezirke Bregenz and Dornbirn. The Bundesländer <u>Kärnten</u>, <u>Oberösterreich</u> and <u>Wien</u> recorded no cases.

3.3	Belgium	BEL
-----	---------	-----

#### by L. Hallet

During "This Quarter", 7 rabies cases in foxes were diagnosed in Belgium, all in the province of Luxembourg.

There were 3 cases at Florenville, 2 at the historical village of Muno (in April) and 1 at Chassepierre (in May). Two cases occurred at Meix-Devant-Virton (in May and June). One case each was diagnosed at Bertrix, the historical village of Orgeo (April) and at Bouillon, the historical village of Dohan (May).

A campaign to vaccinate foxes was carried out in April 1994. It covered an area of 2553 km<sup>2</sup>, and 42,600 vaccine baits were distributed by helicopter. The infected areas were treated with an increased number of vaccine baits per km<sup>2</sup>.

3.4	Bulgaria	BUL

by T. Alexandrov

#### First Quarter 1994

During the first quarter 1994, 5 rabies cases were diagnosed in Bulgaria.

The cases occurred in the following provinces: Lovetch (1 fox, 1 dog), Vidin (1 goat), Stara Zagora (1 cat) and Rousse (1 dog).

#### Second Quarter 1994

During "This Quarter", only 1 calf was diagnosed rabid in the province of Stara Zagora.

3.5	Belarus	BYE
	Data not yet re	ceived.
3.6	Croatia	CRO

by Mate Brstilo

During "This Quarter", 95 rabies cases were registered in Croatia in 31 municipalities. Of these 81 were in wild animals (85.3%) and 14 in domestic animals (14.7%). Of the cases in wild animals 75 were foxes (78.9% of total), 1 wolf, 2 badgers, 1 doe, 1 polecat, and 1 marten. Of the cases in domestic animals 10 were cats (10.5%), 1 dog, 1 bovine, 1 goat and 1 pig.

Rabies was most frequently registered in the following municipalities: Opatija (14 cases), Zagreb (7 cases), Koprivnica, Rijeka, Vrbovec (6 cases each), Crikvenica and Varaždin (5 cases each). The majority of rabies cases were concentrated in the western part of Croatia, along the borders to Slovenia and Hungary.

Compared to the first quarter 1994, rabies was more frequently registered in cats in regions bordering to Bosnia and Herzegovina.

All Adriatic islands as well as major parts of the coastal area of the country remained free of rabies.

#### 3.7 Czech Republic CZH

by Oldrich Matouch

During "This Quarter", 1770 samples (1519 wild animals and 251 domestic animals) were examined for rabies in the Czech Republic. 55 (3.1%) of these were diagnosed rabid. 52 cases were in wild animals (46 foxes, 2 badgers, 3 martens, 1 deer) and 3 cases in domestic animals (2 cats, 1 dog).

There were 29 rabies cases less than in the same period of 1993.

In East Bohemia and North Moravia cases were more concentrated. A single fox rabies case occurred in the district Beroun (Central Bohemia) that had been rabies free for more than 2 years. A spot vaccination of 15 km radius has been carried out immediately in the area.

There was no reported case of human rabies.

The oral vaccination of foxes using Lysvulpen (SAD Bern vaccine) was carried out in April 1994. 727,200 vaccine doses were distributed in 48 districts covering an area of 45,400 km<sup>2</sup>.

3.8	Denmark	DEN
	the second se	

by Eric Stougaard

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

3.9	Germany,	DEU
	<b>Federal Republic</b>	

by Winfried W. Müller and Thomas Müller

A total of 263 rabies cases was reported during "This Quarter", 116 cases less than during the previous quarter. The reduction is seasonal and was noticed in all infected areas. However, some isolated cases occurring after a relatively long period of freedom from rabies indicate, there were residual foci. The federal states mostly affected by the disease were Rheinland-Pfalz, Nordrhein-Westfalen and Saarland with 88, 64 and 43 rabies cases respectively.

Of the 263 cases 200 were foxes (76% of total), 19 other wild animals and 44 domestic animals (2 dogs, 10 cats, 16 bovines, 14 sheep, 1 horse and 1 donkey).

There was one bat rabies case near the northern coast in Niedersachsen.

3.10	Estonia	EST

#### by Matti Nautras

During "This Quarter", 28 rabies cases were registered in Estonia, 3 cases less than during the previous quarter. 23 cases were in wild animals (15 foxes, 6 raccoon dogs, 1 badger, 1 hare), and 5 in domestic animals (3 dogs, 2 cats). The cases were scattered throughout the country.

#### 3.11 Finland FIN

#### by Bengt Westerling

The country remained rabies-free.

#### Surveillance

A total of 32 animals were examined for rabies by immunofluorescence on brain tissue, all with negative results. The animals examined were: 23 foxes, 1 wolf, 1 lynx, 2 badgers, 3 dogs, 2 cats.

#### Ireland IRE 3.12 France FRA 3.16

by Michel F.A. Aubert

29 rabies cases were registered during "This Quarter", 13 less than during the previous quarter. 18 cases were diagnosed in foxes, 1 in a stone marten, 1 in a bovine and 9 in sheep. Only 7 départements (departments) were affected by the disease.

3.13	Greece	GRE
	by A. Katsaounis	

The country remained rabies-free.

by Balint Kerekes

A total of 133 rabies cases were registered in Hungary during "This Quarter", 112 cases less than during the previous quarter and 37 less than during the second quarter 1993.

There were cases in all Komitates (provinces) of the country. Nevertheless, in the area where oral vaccination of foxes was practiced, along the border with Austria, cases have drastically diminished.

3.15	Iceland	ICE

The country remained rabies-free.

The	country	remained
rabies-free.		

3.17	Italy	ITA
------	-------	-----

#### by Santino Prosperi

During "This Quarter", 14 cases of rabies were reported in Italy. Two foxes were diagnosed rabid in the province of Trieste and 11 foxes and 1 badger in the province of Bolzano in Valle Aurina and in the Brennero areas. Both epidemics show no tendency of extension at this point.

3.14	Hungary	HUN	3.18	Lithuania	LTU
	by Balint Kerekes		by K. I	ukauskas and A. D	ranseika

During "This Quarter", 11 rabies cases were diagnosed in 11 districts. The disease occurred in 5 dogs, 3 cats, 2 bovines and one fox.

During "This Quarter", more than 30 thousand dogs were vaccinated against rabies parenterally.

#### 3.19 Luxembourg LUX

#### by Joseph Kremer

The Grand Duchy of Luxembourg recorded no rabies case during "This Quarter". The last case was recorded in June 1993.

To maintain the state of being rabies-free a further oral vaccination campaign is being planned for 19 to 24 September 1994 covering the whole country. In that case 49,000 "Raboral" vaccine baits are going to be distributed by helicopter (approx. 19 vaccine baits per 1 km²).

During "This Quarter", 9 foxes and 2 badgers were examined for rabies, but reveiled negative results.

3.20	Latvia	LVA

#### by Z. Andersons, J. Rimeicans and A. Dedziņš

During "This Quarter", 78 rabies cases in animals were registered in 21 districts. There were 13 cases more than during the previous quarter. 62 were diagnosed in wild animals (79.5% of total) and 16 in domestic animals. Of the wild animals 44 cases were foxes, 9 raccoon dogs, 5 badgers, 2 polecats, 1 pine marten, 1 lynx. Of the domestic animals 9 were dogs, 5 cats, 2 bovines.

The most affected districts were Saldus with 14 cases and Cèsis with 10 cases.

3.21	Moldova	MLD
3.41	Williuova	WILD

by I.V. Groushko

#### First Quarter 1994

During the first quarter 1994, a total of 24 samples were examined for rabies (13 dogs, 3 cats, 3 cattle, 3 foxes, 2 wild boars), of which 1 fox (4.2%) was positive for rabies. The fox originated from the region of Kagul.

3.22	Netherlands	NET

by G. Visser

No case of rabies has been noticed in the Netherlands during "This Quarter". Surveillance

A total of 33 animals were examined for rabies during "This Quarter" (10 foxes, 1 dog, 1 polecat, 21 bats), but reveiled negative results.

3.23	Norway	NOR

by Gudbrand Bakken

The country remained rabies-free.

3.24	Poland	POL

#### by Bogdan Twarowski

A total of 399 rabies cases were registered in Poland during "This Quarter", 142 cases less than during the previous quarter and 173 cases less than during the second quarter 1993.

Cases were distributed throughout the country except for 4 voivodeships (provinces). However, in the area where oral vaccination of foxes was practiced, along the western border with Germany, cases have drastically diminished.

3.25	P	ortugal	POR
	The		remained

The country remained rabies-free.

3.26	Romania	ROM

by Gheorghe Stratulat

During "This Quarter", 8 cases of rabies were registered in Romania, 2 in foxes and 6 in domestic animals (3 dogs, 1 cat, 1 bovine, 1 horse). The cases were isolated and occurred throughout the country.

3.27	Ru	Russia	
	(European	part	only)

V.A.Vedernikov, B.L.Cherkasskiy P.N. Pitalev, S.A. Kolomycev P.K. Shumilov and A.E. Khairushkov

#### First Quarter 1994

During the first quarter 1994, 161 rabies cases in animals were reported from the European part of Russia. Of the total number of cases 129 were in domestic animals - 19 dogs, 12 cats, 69 bovines, 7 horses, 21 sheep, 1 pig and 32 in wild animals - 27 foxes, 1 raccoon dog, 4 wolves.

The most affected areas of the European part of Russia were the republic of Bashkortostan with 31 cases and the Orenburg region with 26 cases.

There was 1 human case in the Tula region.

Second Quarter 1994

During "This Quarter", 172 rabies cases in animals were reported from the European part of Russia. Of the total number of cases 150 were in domestic animals - 27 dogs, 8 cats, 63 bovines, 4 horses, 47 sheep, 1 camel and 22 in wild animals - 16 foxes, 3 wolves, 1 beaver, 1 stone marten, 1 hamster.

Most affected areas of the European part of Russia were the republic of Kalmykiya with 52 cases and the republic of Bashkortostan with 19 cases.

There was 1 human case in the republic of Tatarstan.

#### 3.28 Slovak Republic SVK

#### by Bohuslav Lovas and Jozef Sokol

A total of 151 rabies cases in animals was reported in the Slovak Republic during "This Quarter". Of these were 124 (82.1% of total) in wild animals (116 foxes, 3 roe deer, 1 pine marten, 1 polecat, 1 wolf, 1 black rat, 1 Norvegian rat) and 27 (17.9%) in domestic animals (18 dogs, 9 cats).

An oral vaccination campaign of foxes with 700,000 vaccine doses was carried out in April 1994. 300,000 vaccine baits "KAMARK" (SAD-Vnukovo strain) and 400,000 vaccine baits "LYSVULPEN" (SAD-Bern strain) were distributed in 37 districts covering an area of 47,000 km<sup>2</sup>, the total territory of the Slovak Republic.

# 3.29 Spain SPA

by Tomás Maté Maté

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

There were no cases reported from the Spanish territory of North Africa.

3.30	Slovenia	SVN

#### by Armin Tomašič

Of 524 animals examined for rabies during "This Quarter", 149 (28.4%) were diagnosed rabid, 122 less than during the previous quarter. Of the 149 cases 127 were foxes, 4 badgers, 7 stone martens, 7 roe deer, 1 dog, 2 cats, 1 horse.

The cases were more concentrated in the western half of the country.

3.31	Sweden	SWE

The country remained rabies-free.

	<b>A 1 1 1</b>	
3.32	Switzerland	SWI

#### by Urs Breitenmoser

During "This Quarter", the Swiss Rabies Centre examined a total of 590 animals, of which 7.5% (44) were positive for rabies. In the previous quarter 10.6% (100 out of 945) and in the second quarter of 1993, 5.2% (28 out of 539) had been recorded positive, respectively. The cases of rabies observed in this quarter involved 27 red foxes, 7 badgers, 1 stone marten, 2 cats, 1 dog, 1 horse, 2 bovines, and 3 sheep. As in the previous quarters, the cases recorded came from the larger vicinity of Basel, in the north of Switzerland and from the northwestern part of the Jura Mountains.

4 bats (1 Pipistrellus kuhli, 2 Pipistrellus pipistrellus, 1 Eptesicus serotinus) were examined during the reporting period. None was found to be positive for rabies.

No one was known to have been bitten by a rabid animal. The number of people treated for non-bite exposures is not recorded.

#### 3.33 Turkey TUR

by A. Nizamettin Güvener

During "This Quarter", 77 animal rabies cases were recorded in Turkey. All cases were in domestic animals (64 dogs, 2 cats, 10 bovines, 1 horse).

The province (II) mostly affected was Istanbul with 28 cases. All other infected provinces recorded less than 7 cases.

3.34	Ukraine	UKR
5.54	UKIAME	UNN

No data.

#### 3.35 United Kingdom UNK

by P.J. Thomas

The country remained rabies-free.

#### Surveillance

#### 1st and 2nd quarter 1994

Reports of suspect rabies outside quarantine were investigated on 13 occasions during the period, involving 7 dogs, 1 cat and 3 foxes, 1 squirrel and 1 imported cow. Biting, scratching or licking of humans was reported in 2 of these incidents. Veterinary staff resolved 2 incidents at the initial clinical investigation, one after 15 days isolation in a guarantine unit and the remaining 10 following examination of material submitted to the Central Veterinary Laboratory, Weybridge.

28 dogs, 31 cats died whilst in quarantine and in every case material was submitted to the Central Veterinary Laboratory, Weybridge, with negative results in all cases.

42 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
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#### by Dušan Jakovljević

8 rabies cases were reported during "This Quarter" from Yugoslavia, 1 in Montenegro (1 fox), 4 in Serbia (3 foxes, 1 dog) and 3 in Vojvodina (1 fox, 1 dog, 1 cat).

# 4. MISCELLANEOUS ARTICLES

#### 4.1 Rabies Control in Baltic countries

Following suggestions made during several WHO consultations and meetings,<sup>1</sup> the WHO Regional Office for Europe and the WHO Veterinary Public Health Unit have fostered rabies control and prevention in Baltic countries. A WHO Workshop on Prevention and Control of Rabies in Baltic Countries was organized in Tallinn, Estonia, on 14 and 15 February 1994.<sup>2</sup>

The main purpose of the workshop was to assess the rabies situation and to evaluate current approaches and techniques as well as future demands for rabies prevention and control in humans and animals in Estonia, Latvia and Lithuania.

Rabies has been endemic in Estonia, Latvia and Lithuania for many years. Six persons have died in the last 10 years. In addition, each year 130-190 persons per 100 000 population seek medical assistance after contact with rabiessuspect animals. This causes considerable public spending. The number of consultations has increased in the 3 countries over the last 5 years (Estonia by 20%, Latvia by 46%, Lithuania by 150%).

In all Baltic countries rabies treatment is conducted with a primary cell culture vaccine (multiple doses are administered over a month subcutaneously in the ab-

dominal region). Adverse effects are not uncommon.

A stock of donated modern cell culture vaccines will run out shortly. The annual demand for modern rabies vaccines for humans in Estonia, Latvia and Lithuania is estimated to be around 3,300, 27,500 and 25,400, respectively.

The rabies toll in the animal sector is substantial. Foxes and raccoon dogs are the main terrestrial reservoirs. Even though the number of stray dogs has apparently increased over the last decade, rabies has not spilled over to dogs.

The participants recommended that an internationallysupported 5-year programme ultimately leading to the selfreliance of Baltic countries as regards biologicals for rabies control be developed and implemented.

This programme should include:

- supply of modern cell culture vaccines for humans to meet urgent needs;
- training and education of specialists in vaccine production, rabies treatment and diagnosis;
  - oral immunization of wildlife against rabies.

<sup>1</sup>[WHO Consultation on Vaccine Modernization in Baltic Countries, October 1992, Riga, Latvia (report EUR/ICP/EPI 030/A); WHO/Mérieux Foundation/OIE Seminar on Management and International Cooperation in Veterinary Programmes, June 1993, Annecy, France; WHO Consultation on Zoonoses Control in Eastern European Countries, December 1993,Berlin, Germany

(report WHO/CDS/VPH/93.127).]

<sup>2</sup>[Report of the WHO Workshop on Prevention and Control of Rabies in Baltic Countries, Tallinn, Estonia, 14-15 February

(WHO/CDS/VPH/94.133).]

(Taken from Weekly Epidemiological Record, WHO Geneva, <u>69</u>, 267-268, 1994)

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#### 4.2 REINFECTIONS and RESIDUAL FOCI in Connection to Rabies and Oral Vaccination of Foxes against Rabies

by W.W. Müller WHO Collaborating Centre for Rabies Surveillance and Research, Tübingen/Germany

At times we need definitions which may help us for certain purposes. There exists for a long time a WHO proposal in use to define the freedom of rabies in a country. It says: a country is rabies-free if no case of indigenously acquired rabies has been confirmed in humans or any animal species (terrestrial or bat) at any time during the previous two years. Conversely, an area can be considered to be rabies-infected if an indigenously acquired rabies infection has been confirmed in human or any animal at any time during the previous two years.

The following remarks refer to the characteristics of the two terms reinfection and residual focus in the circumstances of countries in becoming rabies-free or maintaining the status of being rabies-free and note the implication in connection with the use of oral vaccination of foxes against rabies.

It is easy to refer to a country as being **reinfected** considering the above mentioned WHO definition on rabies-free. Especially, when the country bordering is infected and the first cases occur in areas of the state border. FIGURE 1 (page 11) shows the experience being made in the rabies infected part of Belgium. After oral vaccination was effective, periods of no rabies and reinfected areas alternated. Of course, to declare the area as being reinfected one needs to know where the isolated cases occurred (see previous issues of this BULLETIN).

Reinfected areas can quickly establish widespread or fierce outbreaks. To prevent such a situation or reduce the chances of the development of fierce outbreaks a cordon vaccination is recommended (see this BULLETIN 3/93, page 17). Our example in FIGURE 1 shows that such a cordon vaccination was practiced (see arrows).

The example in FIG-URE 2 shows an experience in the federal state of Brandenburg in Germany, an area similar in size to the formerly infected part of Belgium, which can be guessed from the number of rabies cases. Not indicated in FIGURE 2 are the biannual oral vaccination campaigns which were carried out. As much as the two figures and the circumstances resemble each other, the difference lies in the last case diagnosed in Brandenburg in June 1994.

This case was inves-

tigated and it was found that the last case in the closer vicinity was registered 2 years ago. In the meantime 224 foxes were examined for rabies in the area but revealed negative results. Further examination of 337 foxes after the rabies case were negative as well.

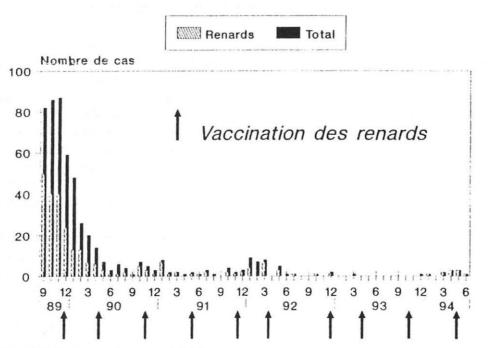
Considering the previous case distribution in the vicinity of the present case (see previous issues of this BUL-LETIN) we must call it a **residual focus** in the true sense.

And what are the implications of this residual focus in connection to a strategy on oral vaccination of foxes against rabies? It clearly implies that the vaccination after the last case in an area needs to be repeated for at least another 2 years to reach the goal of eradicating the disease.

\*\*\*\*\*

#### **FIGURE 1**

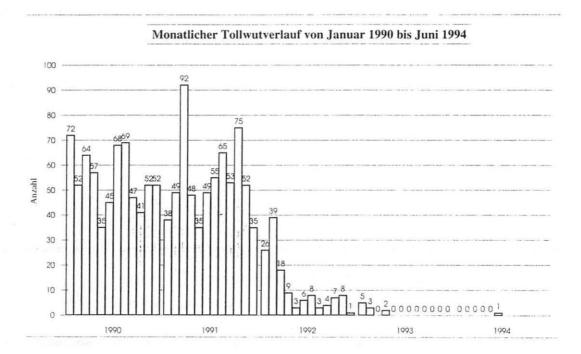
# **RAGE-EVOLUTION MENSUELLE**



Source: Ministry of Agriculture and Forestry of Belgium

#### **FIGURE 2**

#### Land Brandenburg



Source: WHO Collaborating Centre, Tübingen

#### 4.3 Lethal Infection Caused by a Cowpox-like Virus in an Immunosuppressed Young Man

Recent discussions have taken place in Germany and neighbouring countries on a possible human death due to infection by a vaccinia virusrabies glycoprotein (VRG) recombinant vaccine used in France for oral immunization of foxes against rabies. The information below aims at clarifying that this poxvirus case in a human being was unequivocally due to a cowpoxvirus, clearly differentiated from vaccinia, variola and monkeypox viruses:

In 1990-1991, an 18year-old man (Lüdenscheid, Germany) was reported to have been infected with an orthopoxvirus which was transmitted by a cat. Transmission from the cat to this young man was confirmed by serological

methods and antigen differentiation. The patient had not been vaccinated against smallpox and was undergoing intensive immunosuppressant therapy for severe endogenous eczema combined with allergic bronchial asthma. A cyclic poxvirus disease developed with a generalized, partly confluent poxvirus exanthema disseminated over the body. The clinical symptoms were similar to a "variola pustulosa haemorrhagica". The young man died of a lung embolism in the course of intensive medical therapy.

The haemorrhagic character of the poxvirus pustules, with central necrosis (pox navel), was reproduced in rabbit skin and on chorioallantoid membranes. The infection was unequivocally caused by a cowpoxvirus. The virus isolated from the patient could be identified and differentiated from variola, vaccinia and monkeypox virus by an antigen-capture ELISA based on several distinct monoclonal antibodies as well as by restriction enzyme analysis and genome mapping.

Worldwide, this is the only example where a human cowpoxvirus infection has had such a dramatic course with a lethal end. Contrary to this case, all other known cases of cowpox-like infections have shown a benign course, and lesions have healed within a few weeks.

(Taken from Weekly Epidemiological Record, WHO Geneva, <u>69</u>, 299, 1994)

# Rabies Case Data from Europe are tabulated on the following pages of Section 5

	В		

EUR EUROPE	2/94			1	RABI	ES (	CASE	S					1. 4.	94 - 30	. 6.94
LOCATION		DOM	EST		NIM	ALS			WI		NIM	ALS		HUMAN	
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
ALB ALBANIA **							0						0	1	0
AUT AUSTRIA	-	3	2	-	-	-	5	39	3	2	1		45		50
BEL BELGIUM							0	7		-	-	-	7		7
BUL BULGARIA	-	-	1	-	- 1	-	1						0		1 1
BYE BELARUS **							0			1 1			o		0
CRO CROATIA	1	10	1	-	1	1	14	75	2	2	1	1	81	1	95
CZH CZECH REPUBLIC	1	2	-	-		-	з	46	2	3	1		52	1	55
DEN DENMARK *	-						ō		-	-			0		0
DEU FED.REP. OF GERMANY	2	10	16	1	14	1	44	200	9	3	6	1	219		263
EST ESTONIA	3	2	-	=			5	15	1		-	7	23	1	28
FIN FINLAND *							ō		-			· ·	0		0
FRA FRANCE	-	-	1	-	9	-	10	18	- 1	1	-	-	19		29
GRE GREECE *			-				0	10		-			0		0
HUN HUNGARY	11	27	10	-	-	-	48	63		1	1	-	85		133
ICE ICELAND *							0	05		-	-	-	0		133
IRE IRELAND *						1	ŏ						0		0
ITA ITALY							ő	13	1	-		-			
LTU LITHUANIA	5	3	2	-	-	-	10	1	1 1	1 2 1		1 -	14		14
LUX LUXEMBOURG *	5	5	-		-		0		-	-	-		1		11
LVA LATVIA	9	5	2	-	-	-	16	44	5	3	-	10			0
MLD MOLDOVA **		5	-	-	-	-	10			3	-	10	62		78
NET NETHERLANDS *							ő			1 1			0	1	0
NOR NORWAY *							S 1						0		0
POL POLAND	22	53	18		-	-	0		3				0		0
POR PORTUGAL *	~~	- 53	10	1	-	-	94	246	3	22	10	24	305		399
ROM ROMANIA	з	1					0						0		0
RUS RUSSIAN FEDERATION	27	8	1 63	1	47	-	6	2	-	-	-	-	2		8
SPA SPAIN *	2/		03	4	4/	1	150	16	-	1	-	5	22	1	173
SVK SLOVAK REPUBLIC	18	9	_				0	440			-		0		0
SVN SLOVAN HEPOBLIC	1000		-	-	1 -	1 7	27	116	1 7	2	3	3	124	1	151
SWE SWEDEN *	1	1	-	1	-	1	4	127	4	7	7	-	145		149
SWI SWITZERLAND + LIECHT		~					0		-				0		0
TUR TURKEY	1	2	2	1	3	-	9	27	7	1	-	-	35		44
	64	2	10	1		-	77		1				0	1	77
							0						0		0
UNK UNITED KINGDOM * YUG YUGOSLAVIA	_						0						0		0
TUG TUGUSLAVIA	2	1	-	-	-	-	З	5	-	-	-	-	5		8
TOTAL	170	139	129	10	74	4	526	1080	37	48	30	51	1246	1	1773
PER CENT	9.6	7.8	7.3	0.6	4.2	0.2	29.7	60.9	2.1	2.7	1.7	2.9	70.3	0.1	100.0

\* NO CASES \*\* NO DATA

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TABLE 2

EUR EUROPE	1-2/	94		I	AABI	ES (	ASE	S					1. 1.	94 - 30	.06.94
LOCATION		DOM	EST	C A	NIM	ALS			WIL	DA	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TUTAL
ALB ALBANIA **							0						0		0
UT AUSTRIA	-	7	6	1	-		14	118	13	2	5	2	140		154
EL BELGIUM							0	10	-	-	-	-	10	1	10
BUL BULGARIA	2	1	1	-	1	-	5	1	-	-	-	-	1		6
YE BELARUS ##							0						0		0
RO CROATIA	7	14	3	-	5	1	30	247	2	з	2	2	256		286
ZH CZECH REPUBLIC	5	4	-	-	-	-	9	129	2	7	3	- 1	141		150
EN DENMARK *							0						0		0
EU FED.REP. OF GERMANY	4	15	26	4	35	1	85	515	20	9	11	2	557		642
ST ESTONIA	9	6	-	-	1	-	16	30	1	1	-	11	43		59
IN FINLAND *	03101				1.517		0						0		0
RA FRANCE	-	1	4	-	9	-	14	55		2	-	- 1	57		71
RE GREECE #							0						0		0
UN HUNGARY	26	48	21	-	1	-	96	278		2	2	- 1	282		378
CE ICELAND *							0						0		0
RE IRELAND *							0						0	1	0
TA ITALY							0	20	2	2	-	- 1	24		24
TU LITHUANIA	8	6	3	-	-	-	17	9	-	-	-	-	9		26
UX LUXEMBOURG *							0						l õ	1	0
VA LATVIA	22	11	3	-	-		36	78	5	3	-	21	107		143
ILD MOLDOVA 1)			-				0	1	-	-	-		1		1
ET NETHERLANDS #							ō	-					ō		l ô
OR NORWAY *							o						0		l õ
OL POLAND	51	94	34	з	-	-	182	627	3	38	28	62	758	1	940
OR PORTUGAL #				-			0		-			1	0		0
OM ROMANIA	5	2	4	1	-	-	12	8	-	-	_		8	1	20
US RUSSIAN FEDERATION	46	20	132	11	68	2	279	43	_	1	-	10	54	2	335
PA SPAIN *						-	0			-		1	0	-	0
WK SLOVAK REPUBLIC	35	17	2	-	1	_	55	253	_	5	з	5	266		321
IVN SLOVENIA	2	5	3	1		1	12	374	10	9	15	-	408		420
WE SWEDEN *	-	Ū		-		-	0	5/4	1.0	5	10		408		420
WI SWITZERLAND + LIECHT	1	з	3	1	7	-	15	110	15	2	2	_	129		144
UR TURKEY	129	2	15	1	2	-	149	110	1.0	-	2		129		144
KR UKRAINE **	100	-	10		-		149	· · · · ·				1.	0		149
INK UNITED KINGDOM					1.1.2		0			1.12			0		0
UG YUGOSLAVIA	5	5	. 2	-	1	-	13	15	-	-	-	-	15		-
		3	2		1		13	10		-	-	-	10		28
OTAL	357	261	262	23	131	5	1039	2921	73	86	71	115	3266	2	4307
ER CENT	8.3	6.1	6.1	0.5	3.0	0.1	24.1	67.8	1.7	2.0	1.6	2.7	75.8	0.0	100.0

\* NO CASES \*\*NO DATA 1) NO DATA FOR 2 ND QUARTER

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1. 4.94 - 30. 6.94

				-OTH	ER ANI	MAL SPEC	ES.								
LOCATION	ОТ	HER D	OMESTIC AN	IMALS		OTHER WILD ANIMALS									
CODE NAME	DONKEY	PIG	OTH.DOM. HEABIVOR.	CAT LIVI. WILD	WOLF	RACCOON DOG	LYNX	INSECTIV. BAT	BEAVER	HAMSTER		NORVEG. RAT	HARE	TOTAL	
CRO CROATIA	-	1	-	-	1	-	-	-	-	-	-	-	-	5	
DEU FED.REP. OF GERMANY	1	-	-	-	-	-	-	1	-	-	-	-	-	2	
EST ESTONIA	-	-	-	-	-	6	-	-	-	-	-	-	1	7	
LVA LATVIA	-	-	-	-	-	9	1	-	-	-	-	-	-	10	
POL POLAND	-	-	-	-	1	22	-	-	-	-	-	-	1	24	
RUS RUSSIAN FEDERATION	-	-	1	-	з	-	-	-	1	1	-	-	-	6	
SVK SLOVAK REPUBLIC	-	-	-	-	1	-	-	-	-	-	1	1	-	з	
SVN SLOVENIA	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
TOTAL	1	1	1	1	6	37	1	1	1	1	1	1	2	55	
PER CENT	1.8	1.8	1.8	1.8	10.9	67.3	1.8	1.8	1.8	1.8	1.8	1.8	3.6	100.0	

RABIES CASES

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				1	RABI	ES	CASE	S					1. 4.	94 - 30	. 6.94
LOCATION	DOMESTIC ANIMALS WILD ANIMALS									ALS					
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN CASES	TOTAL
AUT AUSTRIA															
107 NEUSIEDL AM SEE 109 OBERWART 309 GMUEND 322 WAIDHOFEN AN DER THA 506 ZELL AM SEE 615 RADKERSBURG	-	1	-	-	-	-	0 1 0 0 0 0	1		-	-		1 0 1 1 2 1		11112
702 IMST 703 INNSBRUCK-LAND 704 KITZBUEHEL 705 KUFSTEIN 708 REUTTE 709 SCHWAZ 802 BREGENZ 803 DORNBIRN	-	- 1 1	1	-	-	-	01000120	72156571					72156783		7 3 1 5 6 10 3
TOTAL	0	3	2	0	0	0	5	39	з	2	1	0	45	0	50
PER CENT	0.0	6.0	4.0	0.0	0.0	0.0	10.0	78.0	6.0	4.0	2.0	0.0	90.0	0.0	100.0
СZН стесн ве	PUBI	. I C													
01 CENTRAL BOHEMIA 03 WEST BOHEMIA 04 North Bohemia 05 EAST BOHEMIA 06 South Moravia	-	2	-	-	-	-	0 0 2 0 0	2 1 12 23 1	2				2 1 13 26 1		1 15 26
07 NORTH MORAVIA	1	-	-	-	-	-	1	7	-	2	=	-	9		10
TOTAL	1	2	0	0	0	0	з	46	2	з	1	0	52	0	55
PER CENT	1.8	3.6	0.0	0.0	0.0	0.0	5.5	83.6	3.6	5.5	1.8	0.0	94.5	0.0	100.0

				1	RABI	ES	CASE	S					1. 4.	94 - 30	. 6.94
LOCATION		<b>D O M</b>	EST	IC A	NIM	ALS			WI	DA	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TUTAL
BEL BELGIUM															
LX LUXEMBOURG							0	7	-	-	-	-	7		7
TOTAL	0	0	0	0	0	0	0	7	0	0	0	0	7	0	7
PER CENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0
03 NIEDERSACHSEN 04 BREMEN 05 NORDRHEIN-WESTFALEN 06 HESSEN 07 RHEINLAND-PFALZ 08 BADEN-WUERTTEMBERG 09 BAYERN 10 SAARLAND 11 Berlin 12 Brandenburg 13 MecklenbVorpommern 14 Sachsen	1 1 1 1	3 - 1 1	1 11 1 3		2 10 1 1 -	1 - - -	0 0 7 0 2 5 2 2 5 0 0 0 0 0	1 52 10 55 14 29 37 1 1	- 2 - 3 2 2	1 2		1	0 2 0 57 11 16 31 37 1 0 0		0 2 0 54 11 88 18 33 43 1 1 0 0
15 Sachsen-Anhalt 16 Thueringen	-	1	-	=	=	=	1						0	- *	1
TOTAL	2	10	16	1	14	1	44	200	9	з	6	1	219	0	263
PER CENT	0.8	3.8	6.1	0.4	5.3	0.4	16.7	76.0	3.4	1.1	2.3	0.4	83.3	0.0	100.0

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					RABI	ES	CASE	S					1. 4.	94 - 30	. 6.94
LOCATION	DOMESTIC ANIMALS								WII		TOTAL				
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	IUTAL
BUL BULGARIA															
22 STARA ZAGORA	-	-	1	-	-	-	1						0		1
ROM ROMANIA			7												
01 ALBA 04 Bacau 18 galati	5	1 -	=	=	=	=	1 2 0	1	_	_	-	-	001		1 2
20 GORJ 31 SATU-MARE 35 TELEORMAN	1	-	- 1 -	-	=	=	1 1	1	-	-	-	-	001		1
TOTAL	Э	1	1	1	0	0	6	2	0	0	0	0	2	0	8
PER CENT	37.5	12.5	12.5	12.5	0.0	0.0	75.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	100.0
SVK BLOVAK R	EPUE	BLIC													
10 DISTRICT OF BRATISLAV 11 WEST SLOVAKIA 12 CENTRAL SLOVAKIA	1	- 4	-	=		· _	0 1 7	1 23 43	=	-	Ξ		1 23 43		1 24 50
13 EAST SLOVAKIA	14	5	-	-	-	-	19	49	-	5	3	3	57		76
TOTAL	18	9	0	0	0	0	27	116	0	2	3	3	124	0	151
PER CENT	11.9	6.0	0.0	0.0	0.0	0.0	17.9	76.8	0.0	1.3	2.0	2.0	82.1	0.0	100.0

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#### RABIES CASES

1. 4.94 - 30. 6.94

LOCATION		DOM	EST	IC A	NIM	ALS			WII	D A	NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	TOTAL
004 BJELOVAR							0	2	-	-	-	-	2		2
007 BUZET							o	1	- 1	-	-	-	1	1	1 1
009 CRIKVENICA							o	5	-		-	-	5		5
011 CAKOVEC							o	3	-	-	-	-	3	1	3
018 DRNIS		2	-	-	-	-	2						0		2
34 JASTREBARSKO	-	1	-	_		-	1	2		_	_	-	2	1	3
036 KARLOVAC		-				2.57	ō	1	1	-	-	-	2		2
40 KOPRIVNICA	1	-	-	_		-	1	5	-	-	-	-	5		6
043 KRAPINA	1 -						ō	5	-	-	-	-	2	1	2
046 KUTINA							ŏ	2	-	-	-	-	2	1	2
047 LABIN							o	1	-	_	-	-	1	1	1
54 NOVI MAROF	-	_	-	-	1	-	1	-	-	-		-	ō		1
57 OGULIN	-	_	_	_	-	-	ò			-			3		
58 OMIS	-	1	-	-	-	-		3	_		-	-			3
059 OPATIJA	-	1 1	1 -		-		1	13	-	-		-	1		
D62 OTOCAC					1		0		-	1	-	-	14	1	14
063 OZALJ						1		2		-	-	-	2		2
066 PAZIN							0	1	-	-	-	-	1		1
					- I		0	2	-	-	-	-	5		2
068 PODRAVSKA SLATINA	-	1	-	-	-	-	1						0	1	1
070 PREGRADA							0	1	-	-	-	-	1	1	1 1
073 RIJEKA	-	1	-	-		-	1	3	-	-	1	1 1	5		6
075 SENJ							0	1	-	-	-		1		1
076 SINJ							0	З	-	-	-	-	3	1	3
077 SISAK							0	3	-	-	-	-	З	1	3
D81 SOLIN	-	2	1		-	-	3	1	-	-	-	-	1		4
085 TROGIR							0	1	-	-	-	-	1		1
087 VARAZDIN							0	5	-	-	-		5	1	5
089 VIROVITICA							0	-	-	1	-	-	1		1 1
D92 VRBOVEC		1	-	-	-	-	1	5		-	-	-	5		6
101 ZUPANJA	-	-	-	-	-	1	1	1	-	-	-	- 1	1		2
102 GRAD ZAGREB	-	1	-	-	-	-	1	5	1	-	-	-	6		7
TOTAL	1	10	1	0	1	1	14	75	2	2	1	1	81	0	95
PER CENT	1.1	10.5	1.1	0.0	1.1	1.1	14.7	78.9	2.1	2.1	1.1	1.1	85.3	0.0	100.0

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	No. and the second second														
LOCATION		DOM	EST	IC A	NIM	ALS			WI		NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	10120
EST ESTONIA															
01 Harjumaa							0	1	-	-	-	-	1		1
03 Ida-Virumaa							0	1	-	-	-	1	2		2
05 Jaervamaa	1	1	-	-	-	-	2	-					0		1
07 Laeaene-Virumaa	1	1	-	-	-	-	2	2	1 -	_	-	2	52		
08 Polvamaa 10 Raplamaa							ő	1 3	1 2	2		1	3		3
11 Saaremaa							ŏ	5	-	-	-	1	6		i
12 Tartumaa	1	-	-	-	-	-	1	1	-	-	-	1	2		
13 Valgamaa	-						ō	-	-	-	-	1	1		
15 Vorumaa							0	1	-	-	-	-	1		1
TOTAL	3	2	0	0	0	0	5	15	1	0	0	7	23	0	26
PER CENT	10.7	7.1	0.0	0.0	0.0	0.0	17.9	53.6	3.6	0.0	0.0	25.0	82.1	0.0	100.0
LTU LITHUAN:	1		Ι.	1	I	1		I	1	1	l	ſ		I	1
	-	-	1	-	-	-	1						0		
													0		
43 Zarasu	-	1	-	-		-	1		-		-				
43 Zarasu 46 Jonavos	-						0	1	-	-	-	-	1		
43 Zarasu 46 Jonavos 53 Kedainiu		-	-	-	=	-	0	1	-	-	-	-	0		
43 Zarasu 46 Jonavos 53 Kedainiu 66 Panevezio	-		-		-	-	011	1	-	-	-	-			
43 Zarasu 46 Jonavos 53 Kedainiu 66 Panevezio 67 Pasvalio	- 1 -	- 1	-	=	=	=	0	1	-	-	-	-	00		
43 Zarasu 46 Jonavos 53 Kedainiu 66 Panevezio 67 Pasvalio 69 Prienu		- 1 1	=	=	=	Ξ	011	1	-	-	-	-	00000		
43 Zarasu 46 Jonavos 53 Kedainiu 66 Panevezio 67 Pasvalio 69 Prienu 81 Ukmerges 88 Silutes		- 1 1	=	=	Ē	Ē	011111111111111111111111111111111111111	1	-	-	-	-	000000000000000000000000000000000000000		
43 Zarasu 46 Jonavos 53 Kedainiu 66 Panevezio 67 Pasvalio 69 Prienu 81 Ukmerges 88 Silutes 91 Siauliu		- 1 - - -					011111111111111111111111111111111111111	1	-	-	-	-	000000000000000000000000000000000000000		
43 Zarasu 46 Jonavos 53 Kedainiu 66 Panevezio 67 Pasvalio 69 Prienu 81 Ukmerges 88 Silutes 91 Sisuliu		- 1 - -					011111111111111111111111111111111111111	1	-	-	-	-	000000000000000000000000000000000000000		
53 Kedainiu 66 Panevezio 67 Pasvalio		- 1 - - -					011111111111111111111111111111111111111	1	-	-	-	0	000000000000000000000000000000000000000	0	

				,	RABI	ES	CASE	S					1. 4.	94 - 30	. 6.94
LOCATION		DOM	EST		NIM	ALS			WI	DA	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
FRA FRANCE															
08 ARDENNES 25 Doubs 52 Marne (Haute)	-	-	-	-	5	-	200	2 4 1	=	1	=	=	251		4 5 1
54 MEURTHE ET MOSELLE 68 RHIN (HAUT) 70 SAONE (HAUTE)	-	-	1	-	5	-	6 0 0	4	Ξ	=	-	=	4		10 1 1
88 VOSGES	-	-	-	-	2	-	2	5	-	-	-	-	5		7
TOTAL	0	0	1	0	9	0	10	18	0	1	0	0	19	0	29
PER CENT	0.0	0.0	3.4	0.0	31.0	0.0	34.5	62.1	0.0	3.4	0.0	0.0	65.5	0.0	100.0
ITA ITALY	I	I	I	I	1	1	1	1	1	Ĩ	I	I		1	1
34 TRIESTE E GORIZIA 39 BOLZANO							00	2 11	-	=	=	=	2 12		2 12
TOTAL	0	0	0	0	0	0	0	13	1	0	0	0	14	0	14
PER CENT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.9	7.1	0.0	0.0	0.0	100.0	0.0	100.0
SWI SWITZERLAND AND	LIECHT	ENSTEIN				2)									
01 AARGAU 05 BASEL-LAND 06 BERN	1	-	1	-	1	-	030	7 9 4	1 2 2	1	=	=	7 12 6	- 2	7 15 6
17 SOLOTHURN 26 JURA	=	2	-	-	1 1	=	3	2 5	3	-	=	=	5		8
TOTAL	1	2	2	1	3	0	9	27	7	1	0	0	35	0	44
PER CENT	2.3	4.5	4.5	2.3	6.8	0.0	20.5	61.4	15.9	2.3	0.0	0.0	79.5	0.0	100.0

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LOCATION		DOM	EST	IC A	NIM	ALS			WII	D A	NIM	ALS			
CODE NAME					SHEEP		TOTAL			OTHER			TOTAL	CASES	TOTAL
HUN HUNGARY	DOG	CAT	CATTLE	HUNSE	GOAT	OTHERS		FOX	BADGER	HUSTEL	DEER	OTHERS	I		
end K and the King K in	$  x   \leq  x $	(1 - 1)		I I	I.	1			1	( ) I		1		r -	1 -
01 BUDAPEST							0	3	-	-	-	-	3		3
2 BARANYA	4	3	1	-	-	-	8	5	-			-	5		13
03 BACS-KISKUN	-	-	1	-	-	-	1	3	-	1	-	-	4		5
04 BEKES	7	1	-	-	-	-	1	5	-	-		-	5		6
05 BORSOD-ABAUJ-ZEMPLEN	1	4	1			-	6	8	-	-	-	-	8		14
06 CSONGRAD		1				-	1	2		-	-	-	2		3
07 FEJER							0	5	-	-	-	-	5	1	5
08 GYOER-SOPRON	-	2	-	-	-		2	1		-	-	-	1		3
09 HAJDU-BIHAR	-	1		-	-	-	1	5	-	-	-	-	5		6
10 HEVES						1	0	8	-	-	-		8	1	8
11 KOMAROM	-	2	-		-	-	2	4	-	-	-		4		6
12 NOGRAD	-	1	2		- 1	-	3	1	-	-	-	-	1		4
13 PEST	з	2	1				6	9	-	-	-	-	9	1	15
14 SOMOGY	-	5	-			-	5	10	-	-	-	-	10		15
15 SZABOLCS-SZATMAR	-	4	1	-	-	-	5	2		-	-		2		7
16 SZOLNOK	1	-	2			-	3	2	-	-	-	-	2	1	5
17 TOLNA	2	-	-	-	-	-	2	5	-	-	-	-	5		7
18 VAS	-	-	1	-	-	-	1	1	-	-	-	-	1		2
19 VESZPREM							0	2	-	-	-	-	2	1	2
20 ZALA	-	1	-	-	-	-	1	2	-	-	1	-	З		4
TOTAL	11	27	10	0	0	0	48	83	0	1	1	0	85	0	133
PER CENT	8.3	20.3	7.5	0.0	0.0	0.0	36.1	62.4	0.0	0.8	0.8	0.0	63.9	0.0	100.0
TOTAL PER CENT YUG YUGOSLAV	8.3														
20 SR CRNA GORA							0	1	- 1	-	-	- 1	1		.
60 SR SRBIJA	1	-	-	- 1	-	-	1	3	-		-	-	3	1.1.1.1.1	
51 SAP VOJVODINA	ī	1		-	-	-	2	1	- 1	-	-	-	1		3
TOTAL	2	1	0	0	0	0	3	5	0	0	0	0	5	0	8
PER CENT	25.0	12.5	0.0	0.0	0.0	0.0	37.5	62.5	0.0	0.0	0.0	0.0	62.5	0.0	100.0

LVA LATVIA

#### RABIES CASES

1. 4.94 - 30. 6.94

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LOCATION		DOM	EST	IC A	NIM	ALS			WI	LDA	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
01 Aizkraukle	1	1	-	-	-	-	2	1	-	-	-	-	1		3
02 Alukane							0	1			-	-	1		1
05 Cesis					1		0	8	-	- 1	-	2	10		10
06 Daugavpils	-	1 1	-	- 1	- 1	-	1						0	1	1
07 Dobele							0	1			-	1	2		5
08 Gulbene			}		1		0	1		-	-	1	2	1	2
09 Jekabpils					1		0	1	-	-	-	-	1		1
12 Kuldiga							0	1		-	-		1		1
13 Liepaja	-	1	-	-	- 1	-	1	4	1		-	1	6		7
14 Limbazi							0	2			-	-	2		5
15 Ludza	1		-	-	- 1	-	1						0		1
16 Madona							0	1		-	-	-	1		1
17 Ogre		[			1		0	2	2		-	-	4		4
18 Preili					1		0	1			-		1		1 1
19 Rezekne	1	-				-	1						0		1
20 Riga	1	-	-	-		-	1	7	-	-	-	1	8		9
21 Saldus	3	1 1	2	-		-	6	2	1 1	3	-	2	8		14
22 Talsi	1	1 1	-	-	-	-	2	з	-	-	-	1	4		6
23 Tukums							0	4	1		-	1	6		6
24 Valka					1		0	1	-	-	-	-	1		1 1
25 Valmiera	1	-	-	-	-	-	1	3	-	-	-	-	3		4
TOTAL	9	5	2	0	0	0	16	44	5	з	0	10	62	0	78
PER CENT	11.5	6.4	2.6	0.0	0.0	0.0	20.5	56.4	6.4	3.8	0.0	12.8	79.5	0.0	100.0

LOCATION		DOM	EST	IC A	NIM	ALS			WII	D A	NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	TOTAL
01 WARSZAWA	1	4	1	-	-	-	6	3	-	2	-	-	5		11
05 BIALYSTOK	1	-	5	-	-	-	3	9		-	-	1	10		13
07 BIELSKO-BIALA		1	-	-	-	-	1	6	-	3		-	9		10
D9 BYDGOSZCZ	1	1	1	-	-	-	з	6	-	1	1	-	8		11
11 CHELM	1		-	-	-	-	1						0		1
15 CZESTOCHOWA							0	2	-	-	-	-	2		2
17 ELBLAG	-	3	-	-	-	-	з	5	-	-	-	2	7		10
19 GDANSK	3	8	5	-	-	-	13	27	-	2	1	3	33		46
21 GORZOW	-		1	-	-	-	1	1	-	-	-	-	1		2
23 JELENIA GORA							0	1	-	-	-	-	1		1 1
25 KALISZ							0	з	-	-	-	-	3		
27 KATOWICE	-	2	-	-	-	-	2	2	-	1	-	-	з		5
29 KIELCE							0	з		1	-	-	4		
31 KONIN	-	1			-	-	1	2		-	-	-	2		3
33 KOSZALIN	-	3	1		-	-	4	6	1	-	2	2	11		15
37 KROSNO							0	12	-	2	1	1	16		16
39 LEGNICA							0	4	-	-	-		4		
41 LESZNO	1	2	-	-	-	-	3	9	-	1	-	-	10		13
43 LUBLIN							0	1	-		-	-	1		
45 LOMZA	-	1	-	-	-	-	1	1	-	_	-	-	1		
47 LODZ	-	3	- 1	-	-	-	3	6		-	-	-	6		
49 NOWY SACZ							0	2		-	-	-	2		
51 OLSZTYN	2	1	1	-		-	4	5	-	-	-	1	6		1 10
53 OPOLE	3	3	1	-	-	-	7	18	1	-	1	1	21		28
57 PILA	-		-				ó	8		2	-	1 2	10		10
59 PIOTRKOW TRYB	2	-	-	-		-	2	2	-	-	-	-	2		
51 PLOCK		1	-	-	-	-	1	2	-	1	-	-	3		
53 POZNAN	-	1	-	-	-	-	1	8	-	1	-	-	9		10
5 PRZEMYSL							ō	2	-	2	-	-	4		
57 RADOM	1 1	· · · · · · · · ·	1	-	-	-	1	1	-	1	-	_	2		
59 RZESZOW			-				ō	6	-		_	_	6	1.12.1	6
1 SIEDLCE	1	-	-		-	. –	1	-	1	-	-	_	1		
73 SIERADZ	-						ō	2		-	_	-	2		
75 SKIERNIEWICE							o	1	-	-	-	_	1		
77 SLUPSK	1	4	1	-	-	_	6	13	-	-	2	-	15		21
79 SUWALKI	2	1	4	1	-	_	8	13			-	9	22		30
B1 SZCZECIN	-	-	-	•	277	177	0	13	_		-	1	3		30
3 TARNOBRZEG	-	4	-	-	-	-	4	10	-	1		1	12		16
35 TARNOW	1	-	1	_	_	-	2	10	-	1	2	1	3		10
TORUN	1 1	4		_	-	-	5	10	-	1	-	1	11		16
B9 WALBRZYCH	2	2	4		-	_	4	10	1 2	1	-		11		
1 WLOCLAWEK		2	-	-	-	-	0	5					5		6
B3 WROCLAW	-	з	-	-	-	-	3	21	-		-		21		5
5 ZAMOSC		J		-	_	_	0	4	2		-	1	5		24
TOTAL	22	53	18	1	0	0	94	246	3	55	10	24	305	0	39
		55	10	-			34	640	3	22	10	24	305	0	39

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RUS RUSSIAN FEDERATI	ON				RABI	ES	CASE	s					1. 4.	94 - 30	. 6.94
LOCATION		DOM	EST	IC A	NIM	ALS			WI		NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	TOTAL
08 Pakov Region	1	-	1	-	-	-	2	4	-	-	-	2	6		8
12 Twer Region	2	-	-	-	-	-	2	1			-	1 1	2	1	4
15 Moscow Region	2	-	5	-	- 1	-	7	2		-	-	-	2	1	9
16 Oryol Region	1	-	1	-	- 1	- 1	2		1				0		2
18 Smolensk Region							0	2	-	-	-	-	2		2
19 Tula Region	-	1	-	-	-	-	1						0	1	1
26 Belgorod Region	1	-	-	-	- 1	-	1						0	1	1
27 Voronezh Region	1	1	4	-	- 1	-	6	1	-	-	-	-	1		7
28 Kursk Region					1		0	1	-	1	-	-	2		2
29 Lipetsk Region							0	1	-	-	-	-	1		1
31 Astrakhan Region	1	-	7	1	2	1	12	-	- 1	-	-	2	2		14
32 Volgograd Region	1	-	2	- 1	- 1		3						0	1	3
33 Samara Region	3	-	2	-	- 1	-	5						0	1	5
34 Penza Region	-	-	2	-	- 1	-	2						0		2
35 Saratov Region	1	1	1	-		-	3						0		3
36 Ulyanovsk Region	-	-	2	-	- 1	-	2						0		2
37 Republic of Kalmykiya	1	1	6	-	44	-	52						0		52
38 Republic of Tatarstan							0						0	1	1
40 Stavropol Territory	5	-	13	1	1	-	17		1				0		17
41 Rostov Region	1	1	4	-		-	6						0		6
42 Orenburg Region	5	3	2	-	- 1	-	10	1	- 1	-	-	-	1		11
44 Republic of Bashkorto	4	-	11	1	-	-	16	3	-		-	-	3		19
46 Kaliningrad Region	-	-	-	1	-	-	1						0		1
TOTAL	27	8	63	4	47	1	150	16	0	1	0	5	55	1	173
PER CENT	15.6	4.6	36.4	2.3	27.2	0.6	86.7	9.2	0.0	0.6	0.0	2.9	12.7	0.6	100.0

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LOCATION		ром	EST	IC A	NIM	ALS			WI		NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	TOTAL
01 AJDOVSCINA	-	1	-	-	-	-	1	1	-	-	-	-	1		2
2 BREZICE							0	7	-	-	-	-	7		1 7
4 CERKNICA							0	6	-	3	-	-	9		5
B GORNJA RADGONA							0	2		-	-	-	2		
11 IDRIJA							0	Э	1	-	-	- 1	4		
12 ILIRSKA BISTRICA					1		0	8	-	-	-	-	8		1
4 JESENICE							0	7	1	-	-	-	8		
5 KAMNIK							0	1	- 1	-	-	-	1		
6 KOCEVJE							0	9	-		-	-	9		
7 KOPER	i						0	2	- 1	-	-	-	2		
8 KRANJ							0	12	1	1	-	-	14		1 1
9 KRSKO							0	1		-	-	- 1	1		
1 LENART							0	4	- 1	-	-	-	4		
7 LJUBLJANA SISKA							0	4	- 1	-	-		4		
8 LJUBLJANA VIC RUDNIK					1		0	17	-		1		18		1
O LOGATEC							0	2	-	-	-	-	2		
5 MOZIRJE							0	1	-	-	-	-	1		
6 MURSKA SOBOTA							0	3	-		-		3		
7 NOVA GORICA	-		-	1	- 1	-	1	1	-	-	-		1		
B NOVO MESTO							0	1	-	-	-	-	1		3
9 ORMOZ		1					0	1	-	-	-	-	1		
1 POSTOJNA							0	1	-		-	- 1	1		
44 RADOVLJICA	1	-	-	- 1	-		1	з	-		3	-	6		
6 RIBNICA							0	Э	-	-		- 1	3		
8 SEZANA	-	-	-	-	-	1	1	8	1	1	2	-	12		1
3 SKOFJA LOKA							0	13	-	2	1		16		1
4 SMARJE PRI JELSAH							0	1		-	-	-	1		
55 TOLMIN							0	1	-	-	-	-	1		
50 VRHNIKA						- · ·	0	4	-	-	-	-	4		
TOTAL	1	1	0	1	0	1	4	127	4	7	7	0	145	0	14
A Decision of the Local State of the State o		1.200	1.00							1.00					

LOCATION		DOM	EST	IC A	NIM	ALS			WII	D A	NIM	ALS			
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN	TOTAL
01 ADANA	4	-	1	-	-	-	5						0		5
03 AFYON	1	-	-		-	-	1		1				0	1	1 1
09 AYDIN	2		-		-	-	2						0		2
10 BALIKESIR	4	-	2	-	-	- 1	6						0	1	6
14 BOLU	2	-	-	- 1	-	-	2		1				0	1	2
16 BURSA	1	-	- 1	- 1	-	-	1						0		1 1
20 DENIZLI	1	-	-	-	- 1	-	1						0		1 1
21 DIYARBAKIR	-	-	1	1 1	-	-	2						0		2
23 ELAZIG	1	-	-		-	-	1						0		1
27 GAZIANTEP	2	-	- 1		-	-	2						0	1	2
32 ISPARTA	3	-	-	-		-	3						0		3
34 ISTANBUL	26	-	2	- 1		- 1	28		1				ō		28
35 IZMIR	5	1	-	- 1	-	-	6						ō		6
41 KOCAELI	2	2	-	-	-	-	2						o		2
43 KUETAHYA	-	1	-		-	-	1		1				0		1 1
45 MANISA	1	-	1	- 1	-		2		1			1 1	0		2
46 KAHRAMANMARAS	1	-		- 1		-	1						o		1 1
47 MARDIN	1	-	1	-	-	-	2						0		2
52 ORDU	1	-		- 1	-	-	1						o	1	1 1
53 RIZE	1	-	-		-	-	1						ō		1
54 SAKARYA	3	-	1 1		-	-	4						ō		4
55 SAMSUN	1	-	-		-	-	1						ō		1
57 SINOP	1	-	-	-	-	-	1						ō		1
63 SANLIURFA	-	-	1	-	-	-	1						o		1
TOTAL	64	2	10	1	0	0	77	0	0	0	0	0	0	0	77
PER CENT	83.1	2.6	13.0	1.3	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0		100.0

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Addendum 1st Quarter 1994

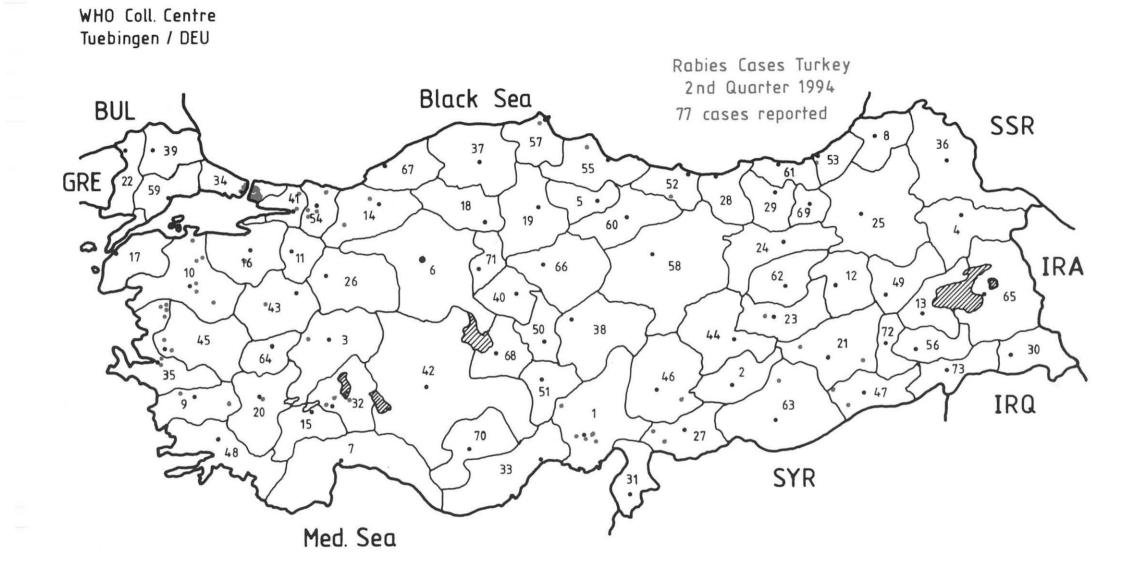
					RABI	20 (	CASE	3		91/94				94 - 31	. 3.34
LOCATION		о о м	EST	IC A	NIM	ALS			WIL	- D A	NIM	ALS			TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	HUMAN CASES	TUTAL
BUL BULGARIA	N N														
04 VIDIN	-	-	-	-	1	-	1						0	1	1
17 ROUSSE	1 1 -	-	-	=	=	-	1 1	1	-	-	-	-	1 0 0		1 2 1 1 1
11 LOVETCH 17 ROUSSE 22 STARA ZAGORA TOTAL	1	-	-	-	=	=	1	1	-	-	-	-	1	0	

#### Addendum 1st Quarter 1994

LOCATION		DOM	EST	IC A	NIM	ALS			WIU	D A	NIM	ALS		HUMAN	TOTAL
CODE NAME	DOG	CAT	CATTLE	HORSE	SHEEP GOAT	OTHERS	TOTAL	FOX	BADGER	OTHER MUSTEL	DEER	OTHERS	TOTAL	CASES	
08 Pskov Region	-	-	-	1	-	-	1	-	-	-	-	3	3		4
09 Bryansk Region	1	-	-	-	-	-	1						0		1
12 Twer Region							0	з		-	-	-	3		3
13 Kaluga Region	1	-	-	-	- 1	-	1	1	-	-	-	-	1	1	2
15 Moscow Region							0	2	-	-	-	-	2	1	2 2 2 3
16 Oryol Region	1	1	1	-	- 1	-	Э						0	1	3
19 Tula Region						1	0	2	-	-	-	-	2	1	3
21 Nizhniy Novgorod Regi	1	1	-	-	-	- 1	2						0	1	1 2
26 Belgorod Region	-	1	-	-	-	-	1						0	1	1 1
27 Voronezh Region	2	-	3	-		-	5		0				0		5
31 Astrakhan Region	-	1	6	-	3	-	10	1	-	-	-	1	2	1	12
32 Volgograd Region	-	-	2	-	-	1	3						0		3
33 Samara Region	-	-	3	- 1		-	з	8			-	-	8		11
34 Penza Region	-	1	2	-	-	-	3	1	-	-	-	-	1		4
35 Saratov Region	-	2	1	- 1	1 1	-	4	1	-	-	-	-	1	1	5
36 Ulyanovsk Region	-	2	-	- 1	-	-	2						0	1	2
37 Republic of Kalmykiya		-	1	- 1	14	-	15						0		15
38 Republic of Tatarstan	1	-	5	-	-	-	6	4			-	-	4		10
40 Stavropol Territory	з	-	2	1	1	-	7						0	1	1 7
41 Rostov Region	2	-	5		-	-	7					1 1	0	1	1 7
42 Orenburg Region	4	з	13	3	1 1	-	24	2	-		-		2	1	20
44 Republic of Bashkorto	Э	-	24	2	1 1	-	30		-	-	-	1	1	1	3:
46 Kaliningrad Region	-	-	1	-	-	-	1	5	-	-	-	-	2		3
TOTAL	19	12	69	7	21	1	129	27	0	0	0	5	32	1	16
PER CENT	11.7	7.4	42.6	4.3	13.0	0.6	79.6	16.7	0.0	0.0	0.0	3.1	19.8	0.6	100.

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