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Prophylaxis after exposure

In the year 2000 a total of 73 persons were given prophylactic treatment for rabies after being bitten by animals. 48 of these were treated with human rabies immunoglobulin in addition to vaccination. 57 persons were treated after exposure abroad. 23 of these had been to Thailand, where 12 were bitten by dogs, nine by monkeys and one each by a cat and a hare. Thailand was the country in which most Danes were exposed, followed by Turkey, where four persons were bitten by dogs, four by cats and one by a horse, [Table 1](#).

Table 1. No. of persons given rabies prophylaxis after exposure, by geographical region, 2000

Region	No.
Denmark	16
Rest of Europe	17
Asia	31
South America	8
Africa	1
Total	73

Dog bites remained the commonest type of exposure abroad. Bat bites were the commonest type of exposure in Denmark and led to a total of 11 persons being treated, [Table 2](#).

Table 2. No. of persons given rabies prophylaxis, by type of exposure, 2000

Type	Denmark	Abroad
Dog	1	34
Bat	11	-
Monkey	-	13
Cat	3	6
Other	1	4
Total	16	57

Treatment of those bitten by other animals in Denmark was later withdrawn. One bat was found to be negative on testing for rabies virus and treatment was also stopped in this case. A bat that had bitten three people was suspected to be positive on testing for rabies virus. The other seven bats were not caught. Animals suspected of having rabies must be examined by a veterinary surgeon and should, if possible, be sent for examination at the Danish Veterinary Institute for Viral Research. Bat bites will usually be the only type of exposure in Denmark giving rise to prophylactic treatment, EPI-NEWS 35/99.

(A. H. Christiansen, Department of Epidemiology)

RABIES 2000

Examination of animals

Classical sylvatic rabies virus (lyssavirus genotype 1) causes fatal infections in man, but has not been detected in mammals in Denmark since 1982. The fox is the commonest host animal in western Europe, where the nearest focus of infection is found in the fox population more than 400 km south of the Danish border. However, rabies is endemic in Greenland, occurring in arctic foxes with sporadic spread to the husky population and other mammals such as sheep and reindeer, [Table 3](#).

Table 3. Animal examinations for rabies carried out in Denmark, 2000

Type	Denmark	Greenland
	No./+ve	No./+ve
Fox	7/0	24/14
Dog	3/0	19/0
Cat	6/0	1/0
Cattle	1/0	-
Sheep	3/0	-
Horse	1/0	-
Reindeer	-	1/0
Rat	2/0	-
Bat	38/2 *	0/0
Bat (in zoo)	3/0	0/0
Total	64/2 *	45/14

* European Bat Lyssavirus (EBL)

Scandinavia is free from sylvatic rabies, and according to the WHO, only sporadic infections are found in most West European countries, e.g. in a few South German mountainous forest areas, [Table 4](#).

Table 4. No. of rabies cases in mammals from selected European regions, October-December 2000

Region	Total	Distribution (%)			
		a*	b*	c*	d*
Germany	49	73	11	2	14
Baltic St.	414	32	31	14	23
Poland	910	72	10	8	10
Czech Rep.	66	83	5	6	6
Slovakia	80	70	1	24	5
Hungary	133	76	0	17	7
Balkans	708	84	3	11	2
Turkey	43	7	0	79	14

a*) fox/badger/marten/raccoon dog

b*) other quarry

c*) dog/cat

d*) farm animal

In contrast, several East European and Middle Eastern countries have recorded numerous outbreaks in which stray- and raccon dogs act as potential carriers of infection, apart from foxes. Two subtypes of rabies

virus (lyssavirus genotypes 5 and 6), also called European bat lyssavirus (EBL) are found in bats. EBL is only rarely transmitted to mammals, including man, in whom it may occasionally give rise to fatal infection. However, experimental inoculations after positive findings of the virus in sheep indicate that it is not particularly pathogenic in this species in Denmark, EPI-NEWS 13/00. In contrast to classical rabies, the number of EBL-infected bats seems to be highest in north-western Europe, including Denmark, Germany and Holland. Infections are rarer in other European countries, [Table 5](#).

Table 5. No. of EBL* infections detected in bats in Europe, 1977-2000

Region	No.
Norway/Sweden	0
England	1
Denmark	207
Germany	122
Holland	242
France	11
Switzerland	3
Spain	17
Poland	18

* European Bat Lyssavirus (EBL)

In Denmark the number of positive laboratory findings in bats vary with time as an expression of the periodic recrudescence of the infection over a cycle of about 10 years, [Table 6](#).

Table 6. No. of bats examined in Denmark with percentage of positive findings of EBL*, 1985-2000

Year	No. examined	EBL* positive (%)
1985-86	1057	19
1987-96	93	5
1997	31	35
1998	45	22
1999	88	10
2000	38	5

* European Bat Lyssavirus (EBL)

The number of bats found positive for rabies virus is currently in decline and has reached a low level which will probably remain so for some years to come. Transmission of the infection to humans is therefore also fairly unlikely. (L. Rønsholt, Danish Veterinary Institute for Viral Research)

Patients with laboratory-diagnosed chlamydia and gonorrhoea, by sex and county

1 st and 2nd quarters, 2001, compared to the same period of 2000

County	Chlamydia, 1st quarter				Gonorrhoea, 1st quarter			
	2001			2000	2001			2000
	M	F	Total		M	F	Total	
Cph. & Frb. Municip.	248	502	750	567	26	4	30	61
Copenhagen	80	229	309	330	3	3	6	14
Frederiksborg	44	153	197	173	4	-	4	9
Roskilde	24	89	113	112	2	1	3	5
West Zealand	58	148	206	176	1	-	1	1
Storstrøm	29	94	123	125	2	1	3	2
Bornholm	1	21	22	19	-	-	-	1
Funen	103	233	336	316	5	2	7	2
South Jutland	30	110	140	153	1	1	2	-
Ribe	44	105	149	132	-	-	-	-
Vejle	66	166	232	203	4	1	5	1
Ringkøbing	51	161	213 ^{*)}	190	2	-	2	1
Aarhus	99	381	481 ^{*)}	587	5	1	6	6
Viborg	25	95	120	130	1	1	2	2
North Jutland	132	301	433	377	3	-	3	3
Denmark	1034	2788	3824	3590	59	15	74	108

^{*)} Sex not stated in some cases

County	Chlamydia, 2nd quarter				Gonorrhoea, 2nd quarter			
	2001			2000	2001			2000
	M	F	Total		M	F	Total	
Cph. & Frb. Municip.	231	437	669 ^{*)}	636	30	4	34	50
Copenhagen	102	242	344	330	5	2	7	10
Frederiksborg	58	124	182	178	3	-	3	3
Roskilde	23	89	112	98	1	-	1	3
West Zealand	39	125	164	184	1	-	1	-
Storstrøm	29	95	124	134	1	-	1	2
Bornholm	2	10	12	19	-	-	-	-
Funen	87	198	285	240	4	-	4	2
South Jutland	45	123	168	133	2	-	2	-
Ribe	34	91	125	124	-	-	-	3
Vejle	47	139	186	204	-	2	2	1
Ringkøbing	54	115	169	173	-	-	-	1
Aarhus	92	301	395 ^{*)}	490	7	-	7	11
Viborg	31	59	90	102	-	-	-	-
North Jutland	93	215	308	363	3	1	4	-
Denmark	967	2363	3333	3408	57	9	66	86

^{*)} Sex not stated in some cases