# **EPI·NEWS**

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

Editor: Susanne Samuelsson Dept. of Epidemiology Statene Serum Jestitut e 5 Artillerivei e DK 2300 Copenhag

Statens Serum Institut • 5 Artillerivej • DK 2300 Copenhagen S

Prophylaxis after exposure

In 2001, a total of 67 persons were given prophylactic treatment against rabies after being bitten by animals. Eleven people were possibly exposed in Denmark, 17 in the rest of Europe, 28 in Asia, eight in South America and three in Africa. In addition to vaccination, 37 people were treated with rabies immunoglobulin. Bites from bats in Denmark led to treatment being initiated in eight cases, table1.

#### Table 1. No. of persons given prophylaxis, by possible rabies exposure, 2001

Туре	Denmark	Abroad
Dog	0	33
Bat	8	0
Monkey	0	18
Cat	0	2
Others	3	3
Total	11	56

None of the eight bats was examined for rabies virus. Two persons received prophylactic treatment after being bitten by marten and squirrel, respectively. Treatment was later withdrawn, as both animals on examination were found to be negative for rabies virus.

Eighteen persons were bitten by dogs or monkeys in Thailand, which is still the country where most people were exposed to possible rabies infection. In Turkey, nine people were bitten by either monkey, dog, cat or wild boar. Dog bites abroad was still the exposure that most often led to prophylactic treatment.

Among animal bites in Denmark, bites from bats are the only immediate indication for initiation of prophylactic treatment for rabies, EPI-NEWS 35/99. If, after other animal bites, there should be reason to suspect that the animal has rabies, the animal should be examined by a veterinary sourgeon. If necessary, the veterinary surgeon will arrange further examination.

(A. H. Christiansen, Dept. of Epid.)

#### **Examination of animals**

Classical sylvatic rabies virus (lyssavirus genotype 1), has not been diagnosed in mammals in Denmark since 1982. In contrast, rabies is endemic in Greenland, where polar foxes sporadically spread the infection to populations of sledge dogs and other mammals, e.g. sheep and reindeer, <u>table 2</u>. RABIES 2001

## Table 2. Animal rabies examinationperformed in Denmark, 2001

	Denmark	Greenland			
Туре	No./pos No./pos				
Fox	2/0	17/13			
Dog	3/0	8/0			
Cat	4/0	1/0			
Sheep	1/0	-			
Squirrel	1/0	-			
Marten	1/0	-			
Mink	1/0	-			
Bat	20/2 *	-			
Bat (in zoo)	184/0	-			
Total	217/2 *	26/13			

\* European Bat Lyssavirus (EBL)

In Western Europe, the fox is the commonest host for this infection, which only appears sporadically in most of these countries, e.g. in a few mountainous forest areas in southern Germany. In several Eastern European countries and in the Middle East, however, numerous outbreaks are registered, where stray dogs and possibly raccoon dogs, apart from foxes, play the most important role as potential carriers.

Two sub-types of rabies virus (lyssavirus genotype 5 & 6), also known as European bat lyssavirus (EBL), are seen in bats. In rare cases, the infection can be transferred to mammals, including humans, in whom the virus sometimes causes fatal infection. EBL has been registered in animals including martens and sheep, but experimental cultures in the latter suggest that the virus is not particularly pathogenic in sheep, 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 the Netherlands, and lower in the other European countries. In Denmark, laboratory findings in bats vary over time, as a consequence of the infection's periodic increase over a cycle of approx. 10 years, EPI-NEWS 40/01.

Recent studies have revealed that bats can survive an infection with EBL and that this leaves genetic virus material behind in most of the reconvalescents. Thus, it is possible that this kind of latent infection can be reactivated in apparently healthy bats as a result of immunosuppression in association with a possible stress situation. The number of active rabies virus infections in bats have been at a fairly low level for the last

Tel.: +45 3268 3268 • Fax: +45 3268 3874 www.ssi.dk • serum@ssi.dk • ISSN: 1396-4796

> three years. The risk of transfer of EBL to humans must therefore be considered to be very small in Denmark at the moment.

(L. Rønsholt, Danish Vet. Institute)

#### **EPI-NEWS SUBSCRIPTION**

EPI-NEWS and EPI-NYT (the Danish version) are published in both a printed and an on-line version. EPI-NYT is delivered to our printers at 13.00 on Wednesday, sent by second-class post on Friday, and reaches the recipient 1-5 days later. The electronic version will in future be sent to those who have requested this, on Thursday at the latest, where EPI-NYT will also be avaiable on the Institute's website: www.ssi.dk/Public Health. Here, the individual issues can be downloaded as pdf files. On the same page there is also a free-text search function. We therefore encourage everybody who wishes to receive this rapid electronic supplement to the printed edition, to subscribe on the website. EPI-NEWS follows the same procedure as EPI-NYT but with one week's delay due to the translation into English. If the printed edition is no longer desired, it can be cancelled by e-mail: mha@ssi.dk or by tel.: +45 3268 3764. Furthermore, from 1 May it will be possible to cancel the subscription on the website.

(S. Samuelsson, Dept. of Epidemiol.)

#### WORLD TB DAY 2002

On 24 March, as in previous years, World TB Day will be held, this year with the theme: "Stop TB, fight poverty". On a global scale, tuberculosis still contributes significantly to both the total morbidity and mortality, and TB is an important cause of poverty. The world-wide objectives of WHO and the UN are, by the year 2005 at the latest, to diagnose 70% and cure 85% of all new cases of infectious TB, and to halve the mortality of TB by the year 2010 at the latest. The objectives will be reached through a continued reinforcement of the DOTS strategy, through increased awareness of the disease's economic significance at the political level and by ensuring that TB patients have better access to treatment. (P. Andersen, Dept. of Epidemiology)

EPI-NEWS will not appear in week 13 unless special circumstances arise. HAPPY EASTER.



No. 12, 2002

## Patients with positive cultures of pathogenic intestinal bacteria, January-February 2002

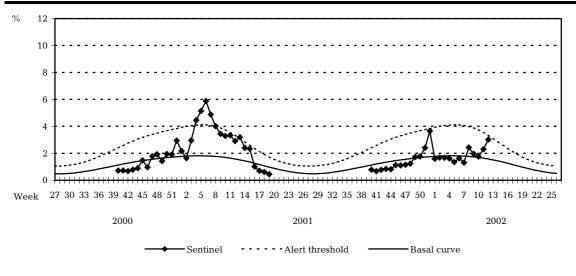
	Campy	lobacter	Yersinia ent.		S. typhimurium		S. enteritidis		Other zoon. Salmonella spp.	
County	Jan	Feb	Jan	Feb	Jan	Feb	Jan	Feb	Jan	Feb
Copenhagen Municip.	20	26	1	-	3	2	6	5	6	8
Frederiksberg Municip.	-	4	-	-	-	-	1	-	-	-
Copenhagen	30	15 *	2	3 *	-	- *	5	3*	<sup>6</sup> 8	7*
Frederiksborg	18	11	4	1	3			1		3
Roskilde	7	9	2	-	-	-	3	2	1	3
West Zealand	6	5	1	1	1	-	1	1	-	-
Storstrøm	7	10	-	1		1	3	-	2	3
Bornholm	-	1	-	-	-	-	1	-	1	-
Funen	16	18	2	2	2	1	6	4	3	4
South Jutland	12	11	-	-	1	1	3	2	1	1
Ribe	14	7	1	2	1	1	3	4	1	-
Vejle	16	13	1	1	1	1	2	5	3	-
Ringkøbing	9	4	1	1	1	-		4	4	2
Aarhus	24	19	3	1	4	-	7	3	5	6
Viborg	10	5	-	1	2	1	-	1	3	2
North Jutland	8	12	1	-	3	1	3	5	3	3
DK Jan/Feb 2002	197	170	19	14	22	9	44	40	41	42
DK Jan/Feb 2001	213	172	19	8	35	17	59	51	43	48

\* Figures for Copenhagen County comprise only part of the diagnosed cases

(Dept. of Gastrointestinal Infections)

### Sentinel surveillance of influenza activity

Weekly percentage of consultations, 2000/2001/2002



# Sentinel:InfluBasal curve:ExpenseAlert threshold:Poss

Influenza consultations as % of total consultations Expected frequency of influenza consultations under non-epidemic conditions Possible incipient epidemic