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NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

Editor: Susanne Samuelsson
Dept. of Epidemiology
Statens Serum Institut • 5 Artillerivej • DK 2300 Copenhagen S
Tel.: +45 3268 3268 • Fax: +45 3268 3874
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RABIES PROPHYLAXIS

In Denmark, being bitten by a bat is usually the only indication for prophylactic treatment against rabies. If, after being bitten by other animals, there is reason to suspect that the animal has rabies, it should be examined by a veterinary. The veterinary will, if necessary, arrange further investigation.
In other parts of the world, rabies is more widespread. Transmission occurs through the penetrating bite of an animal infected with rabies, or on rare occasions through direct contact between infected saliva and mucous membranes or wounds.

Prophylaxis before exposure

Prophylaxis against rabies before exposure consists of primary vaccination on day 0, 7 and 28, i.e. a total of three doses.
Revaccination
To ensure continuous protection, the first revaccination is recommended after one year, and subsequently every five years.
For people with risk of occupational exposure to rabies, other regimes may be implemented, for example with measurement of antibodies.

Prophylaxis after exposure

The prophylactic treatment after possible exposure to rabies consists of injection of human rabies immunoglobulin (HRIG) and vaccination against rabies.
Human rabies immunoglobulin
HRIG is given at the same time as the first vaccination. In cases where HRIG is not given together with the first vaccination, HRIG should be given if less than eight days have passed since the first vaccination. Dose is 20 IU/kg body weight.
If possible, HRIG is infiltrated in and around the wound. The remaining amount is given intramuscularly. HRIG and vaccine are given on either side of the body.
Rabies vaccination
The vaccination is usually given on day 0, 3, 7, 14 and 28, i.e. a total of five doses. If the possible source of infection is **a bat,** a sixth dose is given on day 90.
Previously vaccinated
Persons who have received primary vaccination (three doses, on day 0, 7, 28) within the previous five years, are to be vaccinated on day 0 and 3, i.e. a total of two doses.
In the case of persons who have received primary vaccination more than five years ago, it is recommended that a blood sample be taken to measure rabies antibodies just before vaccination day 0 and 3. Further vaccination depends on the result of the antibody investigation.
Persons who have not received full primary vaccination are considered unvaccinated. Prophylactic treatment after possible exposure is discussed with the Department of Epidemiology, where HRIG and vaccine may be requisitioned at the expense of the National Health Service.
(A. H. Christiansen, S. Samuelsson, Department of Epidemiology,
J. Ivkovic, Medical Department)

PROPHYLAXIS AFTER EXPOSURE 2003

In 2003, a total of 66 people were given prophylactic treatment against rabies after being bitten by animals, table 1. Thirteen people were possibly exposed in Denmark, five in the rest of Europe, 44 in Asia, three in South America and one in Africa. A total of 35 people were treated with human rabies immunoglobulin as well as vaccination. Ten people were given prophylactic treatment because of bat bites in Denmark, table 1. Two people were bitten by raccoons, and one by a sheep. The three animals were all investigated for rabies virus. None had rabies, and the prophylactic treatment was subsequently discontinued. A total of 33 people were treated after possible exposure in Thailand. Of these, 15 were bitten by monkeys, and 14 by dogs.

Table 1. Number of persons given prophylactic treatment, by possible exposure to rabies, 2003

Species	Denmark	Abroad
Dog	0	28
Bat	10	1
Monkey	0	17
Cat	0	5
Sheep	1	0
Other	2	1
Unknown	0	1
Total	13	53

Comments

About 80% of the persons given prophylactic treatment were possibly exposed to rabies abroad, particularly in Thailand.
When giving advice before foreign travel, it is thus important to mention the risk of rabies through contact with animals.
(A. H. Christiansen, Department of Epidemiology)

RABIES IN ANIMALS 2003

Classic sylvatic rabies virus (lyssa virus type 1) does not exist in Denmark, nor has it been reported close to Danish borders for several years. This virus is endemic in Greenland, where Arctic foxes frequently transmit the infection to sled dogs and other mammals, table 2. Classic sylvatic rabies virus occurs sporadically in most Western European countries, where oral vaccination programmes of wild animals are implemented. The infection is found in southern Germany and is widespread in Eastern European countries, including the Baltic countries, and in the Middle East and Asia.

Table 2. Rabies investigations in animals performed in Denmark, 2003

	Denmark	Greenland
Species	No. / pos.	No. / pos.
Fox		14/9
Dog	1/0	14/1
Cat	3/0	
Hare	1/0	
Mink	1/0	
Raccoon	2/0	
Sheep		2/1
Bat rabies:		
Bat	32/3 *	
Sheep	4/0	
Total	44/3 *	30/11

* European Bat Lyssavirus (EBLV)

A related virus, European bat lyssavirus (EBLV) or bat rabies virus, is widely found in bats in Denmark, Germany, Poland and the Netherlands. Occasional deaths in humans having been in close contact with bats have been reported from Scotland, Russia and Finland. The infection has also been found in sheep in Denmark, and in cats and martens from other parts of Europe, EPI-NEWS 16/02.
In 2003, two raccoons were investigated after having bitten humans, table 2. One of them had escaped from a zoo; the origin of the other was unknown. Number of submitted and proportion of infected bats have varied over the years. The three positive bats in 2003 were detected in July-August and came from various parts of Jutland. The risk of infection for humans is considered to be low. As EBLV occurs in bats, an awareness of the risk of infection should still be maintained.
(L. S. Christensen, G. Olsen, Danish Inst. for Food and Vet. Research)

Patients with laboratory-diagnosed chlamydia, by county and gender

4th quarter of 2003 compared with the corresponding period in 2002

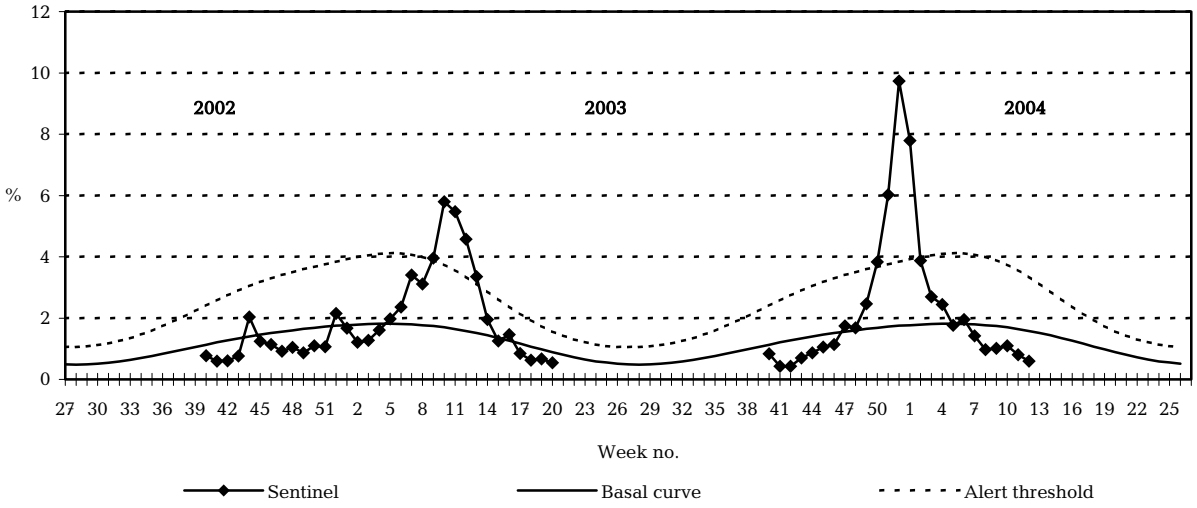
	4th quarter 2003			4th quarter 2002		
County	M	F	Total	M	F	Total
Cph. & Frb. Municipalities	392	648	1043 *	264	413	679 *
Copenhagen	193	315	509 *	112	254	366
Frederiksborg	58	155	213	62	154	217 *
Roskilde	55	116	171	55	86	141
West Zealand	66	156	222	60	103	163
Storstrøm	42	104	146	35	81	117 *
Bornholm	4	23	27	4	14	18
Funen	126	289	415	110	228	338
South Jutland	56	175	231	53	109	162
Ribe	68	152	220	50	110	160
Vejle	83	217	300	71	165	237 *
Ringkøbing	70	124	194	64	115	179
Aarhus	213	369	582	204	389	594 *
Viborg	67	119	186	38	105	145 *
North Jutland	134	305	439	127	286	414 *
Total	1627	3267	4898 *	1309	2612	3930 *

* In an unidentified number of persons, gender was unknown

(DBMP)

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2002/2003/2004



Sentinel: Influenza consultations as percentage of total consultations

Basal curve: Expected frequency of influenza consultations under non-epidemic conditions

Alert threshold: Possible incipient epidemic

(Dept. of Epidemiology)