

Rabies investigations in animals

Classical sylvatic rabies virus (lyssavirus genotype 1) has not been identified in mammals in Denmark since 1982. In Western Europe, the fox is the most common host for this infection. The nearest focus of infection is situated more than 400 km from the southern Danish border. Classical rabies occurs endemically in Greenland, where Arctic foxes sporadically spread the infection to populations of sledge dogs and other mammals, [table 1](#).

Table 1. Rabies investigations of animals, performed in Denmark, 2002

Species	Denmark No./pos.	Greenland No./pos.
Fox	2/0	33/21
Dog	2/0	14/0
Cat	4/0	1/0
Cattle	2/0	-
Rat	1/0	-
Mole	1/0	-
Polecat	1/0	-
Badger	1/0	-
Human	1/0	-
<u>Bat-rabies:</u>		
Bat-	43/2 *	-
Sheep	3/1 *	-
Total	61/3 *	48/21

* European Bat Lyssavirus (EBLV)

In addition, classical rabies occurs sporadically in most Western European countries, such as in a few southern German mountainous forest areas. In several Eastern European countries and in the Middle East, numerous outbreaks are recorded, where stray dogs and possibly raccoon dogs, in addition to foxes, play an important role as carriers. In bats, two subtypes of rabies virus are found, lyssavirus genotype 5 and 6, also known as European bat lyssavirus (EBLV). Infection in bats can, in rare cases, be transferred to other mammals, including humans, with a fatal course. EBLV is sporadically recorded in martens and sheep. Recently, the occurrence in sheep has been confirmed in a sheep in western Jutland with central nervous symptoms in the spring of 2002, EPI-NEWS 16/02. EBLV was demonstrated in the brain without simultaneous detection of any other agent. Experimental cultures with EBLV in sheep suggest that the virus is not particularly malignant in sheep. In 2003, Denmark's National Veterinary Institute is commencing a new project with the objective of uncovering possible reservoirs for EBLV and to

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shed light on the pathogenesis of EBLV infection in sheep. As opposed to classical rabies, the number of EBLV-infected bats seems to be greatest in North-West Europe, including Denmark, Germany and Holland. Positive laboratory findings in bats in Denmark vary over time between 0 and 50 per cent, expressing the infection's periodic upsurge in a cycle of approximately 10 years. New research has revealed that bats can survive an infection with EBLV with establishment of a latent/persistent infection. Consequently, there is a possibility that such an infection be reactivated in apparently healthy bats. The number of acute EBLV infections in bats has remained at a fairly low level in the last three years. In Denmark, the risk of transmission of EBLV to humans must thus be considered to be very low at the moment.

(K. Tjørnehøj, L. S. Christensen, Danish Veterinary Institute)

Prophylaxis after exposure

In 2002, 89 persons were given prophylactic treatment against rabies after being bitten by animals. Twenty people were possibly exposed in Denmark, 16 in the rest of Europe, 51 in Asia and two in Africa. In addition to vaccination, 55 persons were treated with rabies immunoglobulin. Fourteen persons were given prophylactic treatment after being bitten by bats in Denmark, [table 2](#).

Table 2. Number of persons given prophylactic treatment, by possible exposure to rabies, 2002

Species	Denmark	Abroad
Dog	0	36
Bat	14	1
Monkey	0	21
Cat	0	10
Sheep	4	0
Other	2	1
Total	20	69

Four persons were exposed to rabies by an infected sheep, EPI-NEWS 16/02. A total of 39 persons were treated after dog, monkey or cat bites in Thailand. Seven persons were given treatment after possible exposure in Turkey. In four cases, it was possible to discontinue prophylactic treatment, as it was possible to ascertain that the animal did not have rabies. On consultation before foreign travel, it is important to mention the risk of rabies on contact with animals. In Denmark, bat bites constitute the only direct indication for the initiation of prophylactic treat-

ment against rabies, EPI-NEWS 35/99. If, after other animal bites, there is justified suspicion that the animal has rabies, the animal should be examined by a vet. The vet will arrange further investigation if necessary.

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

OPV CESSATION AT THE END OF AUGUST 2003

As part of the global elimination of polio, a plan to phase out the live attenuated oral polio vaccine (OPV) from the childhood vaccination programme was commenced on 1 July 2001, EPI-NEWS 23/01. The phasing-out is nearing its conclusion, as the last children under the old scheme are now due to have the third and final dose of OPV. In principal, these are children who reach the age of 4 years no later than 30 June 2003. It is therefore advisable that these children be vaccinated as soon as possible. The SSI has a limited store of OPV vaccine, with a shelf life until the end of August 2003. Children who have not been vaccinated on time, for example because of illness, can thus still be vaccinated in July and August. After this, OPV vaccine must not be used. Remaining stocks should be destroyed by incineration, delivered to the chemist or, where appropriate, returned to SSI. The reason for this is that live attenuated poliovirus can theoretically revert to wild poliovirus if it circulates unchecked in the environment. Infants who are due to travel to countries where polio still occurs endemically (India, Pakistan, Afghanistan, Nigeria, Niger, Somalia and Egypt) can be vaccinated with DTaP-IPV/Hib from the age of 6 weeks, EPI-NEWS 8/00. At least two vaccinations should be given, with an interval of at least four weeks before departure. From 1 July 2004, an IPV booster dose at the age of 5 years is to be introduced. This vaccine will probably be combined with revaccination against diphtheria, tetanus and pertussis in the form of a DTaP-IPV revaccination.

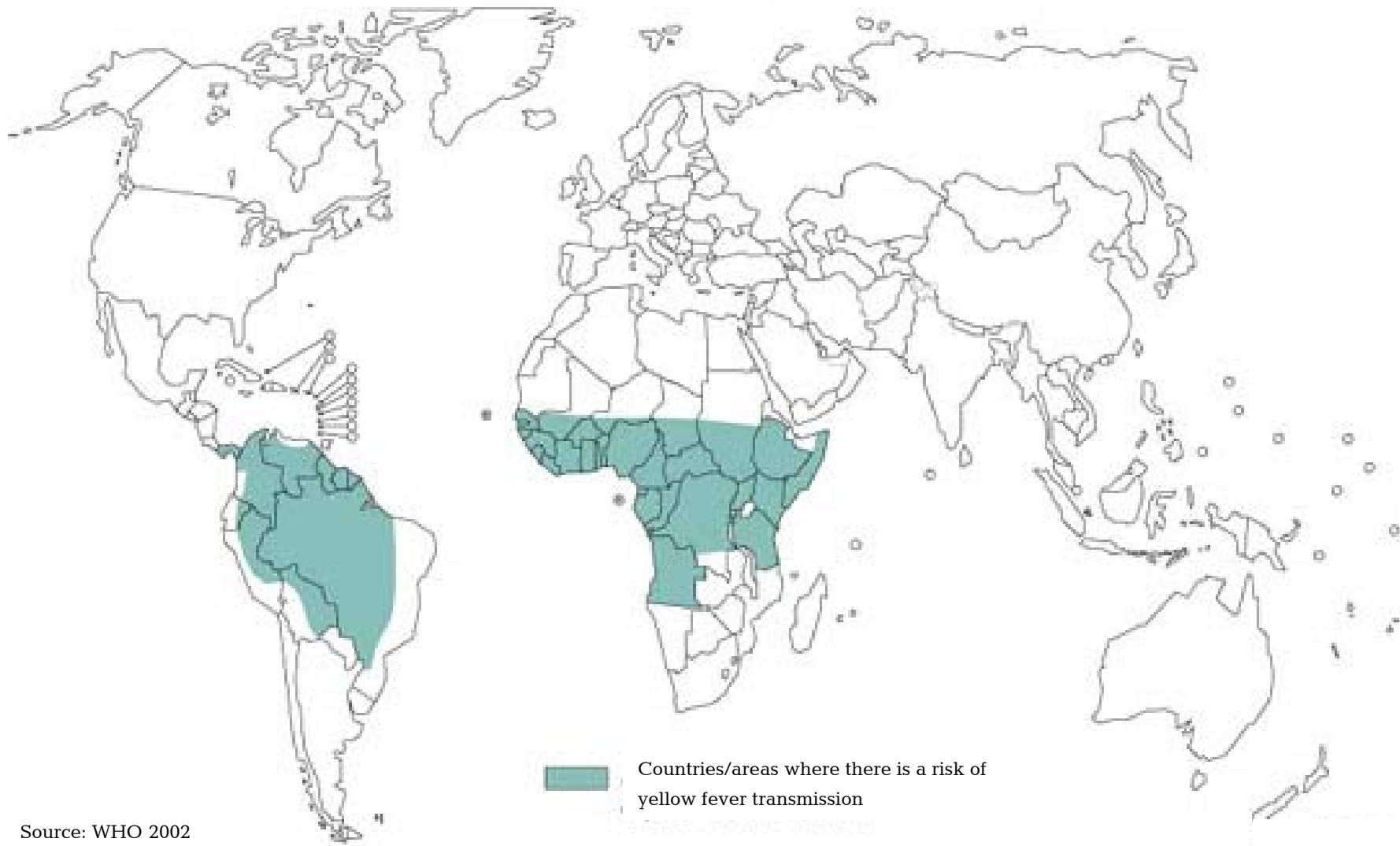
(P. Andersen, Dept. of Epidemiology)

ERRATUM, EPI-NEWS 22a+b 2003

Recommendations for Bhutan, Malaysia (incl. Sarawak) and UAE were erroneously typed. The corrected version may be downloaded from www.ssi.dk/EPI-NEWS.

YELLOW FEVER MAP: BACK PAGE

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Source: WHO 2002