

**TICK-BORNE ENCEPHALITIS IN BORNHOLM**

During the past week the Department of Epidemiology has had many enquiries about tick-borne or Central European encephalitis (TBE) on the island of Bornholm. The disease is caused by a flavivirus that can be transmitted by woodland ticks. The aetiology, symptoms and geographical distribution of the disease were described in EPI-NEWS 33/99. Investigations in the late 1950's found TBE virus in Bornholm but not in the rest of Denmark. In Bornholm 1.4% of blood donors and 30% of forestry workers had antibodies indicating previous TBE infection. As no systematic search for TBE has since been undertaken in Bornholm, the current occurrence is unknown. Five cases were diagnosed in 1999, three of which were described in EPI-NEWS 33/99. New investigations are now being planned to elucidate the occurrence of TBE. The results of these will probably be available within about a year.

Risk of illness

There are no grounds for supposing that the occurrence of TBE in Bornholm has appreciably changed over the last many years. The vast majority of people infected with TBE virus develop no symptoms. Advancing age increases the risk of serious, chronic sequelae. The mortality in patients admitted to hospital is about 1%. A past TBE infection, whether clinical or subclinical, induces life-long immunity.

Prevention

The risk of tick bites can be reduced by using boots, long trousers and long-sleeved upper garments. After stays in areas where ticks are common, the skin should be inspected, especially in children, and a bath taken. This removes many ticks, which usually crawl around for some time before settling to bite. Clothes should also be inspected, including the seam-side; pale clothing makes it easier to spot the ticks. Ticks that have bitten fast are removed with the fingers or pincers.

Vaccination

There are no data giving current support for recommending vaccina-

tion before stays in Bornholm. Vaccination is, however, recommended for prolonged stationing in known endemic areas (see suggested vaccinations for foreign travel, EPI-NEWS 17-18/99). The vaccine is initially given three times in the course of the first year and then every third year. (K. Kristiansen, MOH, Bornholm County, P. Andersen, Dept. of Epidemiology)

INFLUENZA 1999/2000

During this season between 73 and 110 general practitioners participated in the weekly sentinel surveillance of influenza-like illness. Surveillance restarted in week 36/99. The regular reports indicated sporadic disease activity up to week 52, when activity peaked, representing 4.8% of the sentinel physicians' total consultations. Activity then remained greater than expected for the time of year, at 2.3-4.0% of consultations, until week 8, after which it again declined to sporadic levels. Reporting for this season ended in week 17. There has thus been no real influenza epidemic during this season. During the same period, the Influenza Laboratory examined a total of 231 secretion specimens for influenza virus, 181 of which had been sent in by sentinel physicians. From the latter specimens 42 influenza A (H3N2) viral strains were isolated. Six such strains and an H1N1 strain were isolated from the other specimens. All the H3N2 strains were typed as A/Sydney/5/97- or A/Moscow/10/99-like viruses. The H1N1 strain was typed as A/Johannesburg/82/96-like virus. The strains that were circulating in Denmark during the past season were thus, like those in neighbouring countries, closely related to the strains used in the 99/00 influenza vaccine. (P.C. Grauballe, Influenza Lab., S. Samuelsson, Dept. of Epidemiol.)

ENTEROVIRAL MENINGITIS

In March and April, the Department of Virology found enterovirus in 33 patients, considerably more than usual for the time of year. In 25 patients, enterovirus was demonstrated in cerebrospinal fluid, and 17 of these patients were stated to have clinical meningitis. The patients were distributed throughout the country.

It is noteworthy that 16 of the patients were adults; the median age was 27 years, ranging from 0 to 53 years. In comparison, enterovirus infection was only demonstrated in 3-6 patients during the same period of 1998 and 1999, all of these being small children. Enterovirus infections show a marked seasonal variation, most infections occurring during the summer and autumn. Illness is seen chiefly in children, but certain types of enterovirus appear at longer intervals and can thus give rise to outbreaks that also affect adults. The current outbreak is probably caused by echovirus 30, as this type of virus has so far been identified by isolation and typing from four patients.

Echovirus 30 is among the enteroviruses most frequently described as causing encephalitis/meningitis in both children and adults. The diagnosis of acute enterovirus infection is nowadays performed by PCR demonstration of virus in cerebrospinal fluid, nasopharyngeal secretions and serum. Typing, however, requires isolation of the virus in cell culture. Unfortunately, there is often too little virus in the above-mentioned specimens to permit isolation. In cases of suspected or confirmed enterovirus infection, it is therefore recommended to include a faecal specimen for virus isolation. Enteroviruses replicate in the intestine and are excreted in the faeces for 1-2 months. (B. Böttiger, D.S. Hansen, Dept. of Virology)

ANTHRAX IN NORWAY

The Norwegian State Public Health Institute has reported a bacteriologically confirmed, fatal case of anthrax in a Norwegian i.v. drug user. There may be a further case in another drug addict, which raises the possibility that contaminated heroin could be the source of infection. Pending results of further investigations, it is advisable to be especially alert to signs of the disease in i.v. drug users. This applies to soft tissue and skin infections associated with injection sites, or signs of systemic infection in drug addicts. Any further information will appear on Statens Serum Institut's website, under "News". (P. Andersen, T. Rønne, Dept. of Epidemiology)



Patients with laboratory-diagnosed RSV or rotavirus infections, 2000

February		March		April	
RSV	Rota	RSV	Rota	RSV	Rota
455	44	115	52	28	69

Reported from the following Clinical Microbiology Departments:
Aalborg Hospital (South), Aarhus Municipal Hospital, Herning Central Hospital,
Hvidovre Hospital, Odense University Hospital, Slagelse Central Hospital,
Viborg Hospital, and the Department of Virology, Statens Serum Institut.

(Dept. of Epidemiology)

ERRATUM / HEPATITIS A 1999

The incidence of West Zealand County in Table 2 in the annual report on hepatitis A was not correct, EPI-NEWS 18/00. Here is the corrected table.

Table 2. Notified cases of hepatitis A by county, with incidence per 100.000, 1999 1998 in ()

County	No.	Incidence	
		1999	(1998)
Cph. Municip.	15	3.1	(7.2)
Frb. Municip.	2	2.2	(2.2)
Cph. County	19	3.1	(4.3)
Frederiksborg	12	3.3	(1.1)
Roskilde	7	3.0	(0.9)
West Zealand	8	2.7	(1.0)
Storstrøm	0	-	(0.8)
Bornholm	1	2.2	-
Funen	4	0.8	(0.6)
South Jutland	3	1.2	(0.4)
Ribe	1	0.4	(0.9)
Vejle	2	0.6	(0.3)
Ringkøbing	6	2.2	(0.7)
Aarhus	6	0.9	-
Viborg	0	-	-
North Jutland	4	0.8	(0.2)
Total	90	1.7	(1.6)

(Dept. of Epidemiology)

