



2004 saw a total of 43 notified cases of acute hepatitis B virus infection (HBV), representing the same level as the average for the previous four years. Distribution by county is presented in [table 1](#).

**Table 1. Notified cases of acute HBV in 2004 and incidence per 10<sup>5</sup> in 2004 and 2003, by county**

County	Number	Incidence	
	2004	2004	2003
Cph. Municip.	8	1.6	0.6
Frb. Municip.	2	2.2	2.2
Copenhagen	7	1.1	0.6
Frederiksborg	5	1.3	0.5
Roskilde	1	0.4	-
West Zealand	1	0.3	0.7
Storstrøm	2	0.8	0.8
Bornholm	0	-	-
Funen	1	0.2	1.7
South Jutland	1	0.4	-
Ribe	2	0.9	1.3
Vejle	5	1.4	0.6
Ringkøbing	1	0.4	-
Aarhus	6	0.9	0.8
Viborg	0	-	-
North Jutland	0	-	0.4
Unknown	1	-	-
<b>Total</b>	<b>43</b>	<b>0.8</b>	<b>0.7</b>

Twenty-nine (67%) of the notified cases were males and 14 (33%) females. The median age was 32 years (9-66); 38 years (9-66) for males and 24 years (18-59) for females. Distribution by age group is presented in [table 2](#).

**Table 2. Notified cases of acute HBV in 2004, by age and sex**

Age (years)	M	F	Total
0-9	1	0	1
10-19	0	3	3
20-29	8	6	14
30-39	10	3	13
40-49	3	1	4
50-59	4	1	5
60+	3	0	3
<b>Total</b>	<b>29</b>	<b>14</b>	<b>43</b>

A total of 33 (77%) were Danish by birth, and 10 (23%) were immigrants. Of these, three were from eastern Europe, three from Lebanon, one from Sierra Leone, one from the United States, one from Turkey and one from China.

#### Mode of transmission and country of infection

For 14 patients (33%), the mode of transmission was unknown. Nine (20%) were infected via IV drug abuse. Sixteen (37%) were infected via sexual contact, five via homosexual contact, six via heterosexual contact with a person belonging to a

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known risk group, and four via heterosexual contact with a person without known risk. Two were infected via tattooing or piercing, and two cases were infected at work. One was a member of hospital staff who had been infected via a needlestick accident. The other was a sanitation worker with unknown mode of transmission. One immigrant child was infected through close social contact during a visit to the country of origin. Among Danes, 24 (73%) were infected in Denmark, three in Turkey, one in France, one in Bulgaria, one in Thailand, and in three cases, the country of infection was unknown. Among immigrants, four were infected while visiting their respective home countries, one was infected in a refugee camp in Sweden, and five were infected in Denmark.

#### Comments

The number of notified cases of acute HBV infection has remained at the same level since 1999. In Denmark, acute hepatitis B is still primarily a disease which is transmitted sexually or via IV drug abuse. However, the number reflects the fact that a certain spread is still taking place, despite recommendations about vaccination of risk groups. (K. Qureshi, Dept. of Epidemiology)

## TULARAEMIA ACQUIRED IN DENMARK

Tularaemia is a zoonosis caused by the bacterium *Francisella tularensis*. In contrast to Norway and Sweden, where tularaemia is endemic, Denmark has not hitherto been considered to be a risk area. In 2003, a well-documented case of tularaemia acquired after a tick bite on the island of Fur was described, EPI-NEWS 38/03. Below, a further two cases, acquired in Bornholm and in North Jutland, respectively, are described.

#### Case history 1

In July 2004, a 53-year old man was bitten by a tick on the back of the right tibia. A small wound and erythema appeared at the site of the bite. On suspicion of Lyme borreliosis, the patient was initially treated with penicillin V. In the following two weeks, the wound grew, and lymphadenopathy with abscess formation appeared. The patient was not initially unwell, but became increasingly fatigued and febrile, with pronounced tenderness in the right groin. After six weeks with unchan-

ged symptoms and a long course of treatment with multi-antibiotic therapy, the patient was admitted and had the abscess drained. Subsequent treatment with IV cefuroxime was without certain effect. Despite repeated swabs and biopsy, a bacteriological diagnosis could not be made. After prolonged illness and invalidity, the patient gradually recovered. In February 2005, the patient's own GP induced investigation for antibodies to *F. tularensis* (titre 200). The patient was at this point well, and received no further treatment.

#### Case history 2

A 24-year old man was bitten on the left lower arm during an attempt to aid a savaged hare in June 2005. Because of pronounced erythema at the site of the bite, the doctor on call prescribed penicillin V. The following week, the patient developed a wound with central necrosis at the site of the bite, as well as regional lymphadenopathy and muscle pains. Swab culture showed no growth, and treatment was changed to dicloxacillin. The wound healed, but muscle pains developed, radiating to the right arm, with impaired movement in the right shoulder. The pain receded in the course of the following month. At the same time, a loss of power in the shoulder occurred, which was interpreted as paresis of the serratus anterior muscle. In August 2005, a titre of 1600 of antibodies to *F. tularensis* was measured, and relevant treatment with doxycycline was commenced.

#### Comments

The two case histories, as well as a further case in September 2005 from Bornholm verified on serology and PCR, illustrate that tularaemia can be a severe disease. However, the Scandinavian type normally gives much milder symptoms than the North American type. The cases show that tularaemia can be acquired in different places in Denmark, and the diagnosis should thus be considered in the event of a wound and lymphadenopathy, muscle pains and unexplained febrile illness after a tick bite or after contact with rodents and other wild animals. The incidence of *F. tularensis* among animals in the wilds in Denmark is unknown.

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## Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2005 figures are preliminary)

Table 1	Week 39 2005	Cum. 2005 <sup>1)</sup>	Cum. 2004 <sup>1)</sup>
AIDS	0	45	34
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	1
Creutzfeldt-Jakob	0	2	7
Diphtheria	0	0	0
Food-borne diseases	17	407	481
of these, infected abroad	4	101	78
Gonorrhoea	8	388	260
Haemorrhagic fever	0	0	0
Hepatitis A	3	51	175
of these, infected abroad	3	17	49
Hepatitis B (acute)	0	29	32
Hepatitis B (chronic)	3	104	103
Hepatitis C (acute)	0	1	2
Hepatitis C (chronic)	4	246	238
HIV	3	219	228
Legionella pneumonia	5	82	76
of these, infected abroad	3	28	22
Leprosy	0	0	0
Leptospirosis	0	9	2
Measles	0	2	0
Meningococcal disease	0	70	74
of these, group B	0	35	41
of these, group C	0	18	10
of these, unspec. + other	0	17	23
Mumps	1	7	1
Neuroborreliosis	6	62	91
Ornithosis	0	17	5
Pertussis (children < 2 years)	1	122	165
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	3
Listeria monocytogenes	0	1	1
Streptococcus pneumoniae	0	85	80
Other aethiology	0	12	6
Unknown aethiology	0	11	12
Under registration	4	19	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	4	83	59
of these, infected abroad	2	65	48
Syphilis	6	103	106
Tetanus	0	2	0
Tuberculosis	17	344	323
Typhoid/paratyphoid fever	0	29	20
of these, infected abroad	0	27	18
Typhus exanthematicus	0	0	0
VTEC/HUS	1	123	114
of these, infected abroad	0	43	21

<sup>1)</sup> Cumulative number 2005 and in corresponding period 2004

## Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received in SSI laboratories

Table 2	Week 39 2005	Cum. 2005 <sup>2)</sup>	Cum. 2004 <sup>2)</sup>
Bordetella pertussis (all ages)	6	398	714
Gonococci	12	344	285
of these, females	2	36	36
of these, males	10	308	249
Listeria monocytogenes	1	29	29
Mycoplasma pneumoniae			
Resp. specimens <sup>3)</sup>	17	721	144
Serum specimens <sup>4)</sup>	11	596	284
Streptococci <sup>5)</sup>			
Group A streptococci	1	88	97
Group B streptococci	1	57	60
Group C streptococci	0	19	17
Group G streptococci	2	94	82
S. pneumoniae	17	854	924
Table 3	Week 37 2005	Cum. 2005 <sup>2)</sup>	Cum. 2004 <sup>2)</sup>
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	111	2,684	2,723
S. Enteritidis	14	466	372
S. Typhimurium	9	399	359
Other zoon. salmonella	14	432	362
Yersinia enterocolitica	8	170	162

<sup>2)</sup> Cumulative number 2005 and in corresponding period 2004

<sup>3)</sup> Resp. specimens with positive PCR

<sup>4)</sup> Serum specimens with pos. complement fixation test

<sup>5)</sup> Isolated in blood or spinal fluid

<sup>6)</sup> See also [www.germ.dk](http://www.germ.dk)

## Increase in Mycoplasma pneumoniae cases

In the weeks 38-39, there were a significant increase in test positive for Mycoplasma pneumoniae by PCR. A total of 40 test have been confirmed, corresponding to 15% of the total number of tests in the two mentioned weeks. In the weeks 34-37, there was only an average of 6.8% positive tests. Last year saw a coincident, corresponding increase, EPI-NEWS 42/43/2004. The increase in autumn last year developed to a nationwide epidemic, EPI-NEWS 51/04. For further information on symptoms and treatment, see EPI-NEWS 42/43/2004. (S.A. Uldum, DBMP)