

CHRONIC HEPATITIS B 2003

No. 44, 2004

In 2003, there were a total of 139 notified cases of chronic hepatitis B virus (HBV) infection, 69 (50%) males and 70 (50%) females. The median age for males was 32 years (range 1-67 years) and for females 29 years (2-69 years), [table 1](#).

Table 1. Notified cases of chronic HBV infection 2003, by age and sex

Age (yrs)	M	F	Total
0-9	7	7	14
10-19	7	6	13
20-29	16	25	41
30-39	18	18	36
40-49	10	9	19
50-59	7	4	11
60+	4	1	5
Total	69	70	139

Distribution by county of number of notified cases of chronic HBV infection is shown in [table 2](#).

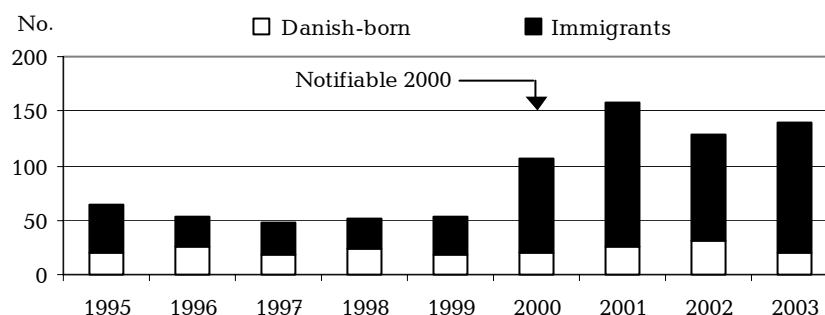
Table 2. Notified cases of chronic HBV infection 2003 and incidence per 10⁵ in 2002 and 2003, by county

County	No. 2003	Incidence per 10 ⁵ / year	
		2003	2002
Cph. Municip.	30	6.0	4.2
Frb. Municip.	2	2.2	4.4
Copenhagen	21	3.4	3.4
Frederiksborg	27	7.2	4.8
Roskilde	9	3.8	1.3
West Zealand	1	0.3	0.7
Storstrøm	1	0.4	1.9
Bornholm	4	9.1	4.5
Funen	9	1.9	1.9
South Jutland	1	0.4	0.8
Ribe	1	0.4	0.9
Vejle	6	1.7	0.6
Ringkøbing	10	3.6	3.6
Aarhus	11	1.7	2.8
Viborg	5	2.1	0.4
North Jutland	0	0	0.8
Unknown	1	-	-
Total	139	2.6	2.4

Origin

A total of 19 (14%) persons were Danish-born, and 120 (86%) were immigrants, [table 3](#). Among those born in Denmark, 14 (74%) were males and five (26%) females. A total of 17 (89%) of the Danish-born were infected in Denmark, in two cases country of infection was unknown. Among immigrants, 55 (46%) were males and 65 (54%) females, and only eight (7%) were infected in Denmark. In five cases (4%), country of infection was unknown. The remaining 107 (89%) persons were, with one single exception, infected in the country of origin.

Figure 1. Notified cases of chronic HBV infection 1995-2003, by origin



Country of origin were distributed as follows: A total of 25 (21%) persons were infected in Turkey, 18 (15%) in Somalia, 10 (8%) in Vietnam, eight (7%) in China, eight (7%) in Afghanistan, five (4%) in Iraq, three (3%) in South Korea, three (3%) in Thailand and three (3%) in the former Yugoslavia. The remaining 23 (19%) immigrants were distributed with 1 of 2 infected in their respective countries of origin. The Department of Epidemiology has been recording notifications of chronic HBV infection since 1995. When chronic HBV infection became notifiable in Denmark on 1 May 2000, the number of notifications increased among immigrants, but remained at the same level among those born in Denmark (18-32 persons annually), [figure 1](#).

Mode of transmission

For more than half of the notified cases, mode of transmission was unknown. IV drug abuse and heterosexual contact were the most common modes of transmission among those born in Denmark, whereas mother-to-child transmission was most commonly stated among immigrants, [table 3](#). No Danish-born persons were infected nosocomially, from mother to child or at work.

Table 3. Notified cases of chronic HBV infection 2003, by mode of transmission and origin

Mode of infection	Danish-born	Immigrants	Total
Mother/newborn	0	50	50
IV drug abuse	5	0	5
Heterosexually	4	1	5
Nosocomially	0	3	3
Homosexually	1	0	1
Unknown	9	66	75
Total	19	120	139

Comments

Danish-born persons still constitute a

small proportion of the notified cases of chronic HBV infection, and there does not seem to be any significant spread of HBV from chronic carriers to Danish-born persons. Most of the notified cases among immigrants come from high or intermediate endemic areas, and these persons are probably infected at birth in their home countries. Children infected perinatally usually have a subclinical course of a HBV infection, and the risk of developing chronic infection is subsequently higher than 90%. The risk of infection in newborn children of mothers with chronic HBV infection will be reduced to a few percent if they complete a vaccination series immediately after birth. The National Health Service covers consultation and vaccination. From 2005, general screening of all pregnant women for HBV, by which the most important prophylactic measures are ensured, is being introduced on a trial basis. Members of the same household and sexual partners of persons with chronic HBV infection should be investigated for HBV status and vaccinated if necessary. Individual reimbursement is available to these groups by application to the Danish Medicines Agency. (M. Howitz, S. Cowan, Department of Epidemiology)

INFLUENZA VACCINE WORKS

In response to the Danish media coverage of the influenza vaccine in recent weeks, the Danish National Board of Health stresses that influenza vaccination of risk groups is recommended, as it reduces the risk of hospital admission, severe pulmonary infections and death as a result of influenza.

(Danish National Board of Health)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, Statens Serum Institut.

Figures for 2004 are preliminary.

Table 1	Week 43 2004	Cum. 2004 ¹⁾	Cum. 2003 ¹⁾
AIDS	2	36	29
Anthrax	0	0	0
Botulism	0	0	1
Cholera	0	1	0
Creutzfeldt-Jakob	0	7	5
Diphtheria	0	0	0
Food-borne diseases	14	515	474
of these, infected abroad	0	81	104
Gonorrhoea	12	277	131
Haemorrhagic fever	0	0	0
Hepatitis A	5	187	67
of these, infected abroad	2	58	35
Hepatitis B (acute)	2	32	39
Hepatitis B (chronic)	1	120	161
Hepatitis C (acute)	0	0	7
Hepatitis C (chronic)	4	217	253
HIV	8	265	207
Legionella pneumonia	5	86	75
of these, infected abroad	0	23	23
Leprosy	0	0	0
Leptospirosis	1	6	2
Measles	0	0	0
Meningococcal disease	0	66	89
of these, group B	0	39	48
of these, group C	0	10	20
of these, unspec. + other	0	17	21
Mumps	0	2	3
Neuroborreliosis	5	82	57
Ornithosis	0	5	12
Pertussis (children < 2 years)	5	184	95
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	4
Listeria monocytogenes	0	1	1
Streptococcus pneumoniae	0	75	88
Other aethiology	0	5	3
Unknown aethiology	0	11	12
Under registration	0	23	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	2	65	85
of these, infected abroad	0	52	69
Syphilis	1	109	48
Tetanus	0	0	0
Tuberculosis	10	380	341
Typhoid/paratyphoid fever	1	21	28
of these, infected abroad	0	17	21
Typhus	0	0	0
VTEC/HUS	1	123	95
of these, infected abroad	0	22	26

¹⁾ Cumulative number of cases notified in 2004 and in the corresponding period of 2003

Selected laboratory-diagnosed infections

Number of specimens, isolates, and/or notifications received at Statens Serum Institut.

Table 2	Week 43 2004	Cum. 2004 ²⁾	Cum. 2003 ²⁾
Bordetella pertussis			
(all ages)	15	806	414
Gonococci	19	336	207
of these, females	2	43	25
of these, males	17	293	182
Listeria monocytogenes	0	29	21
Mycoplasma pneumoniae			
Resp. specimens ³⁾	12	235	158
Serum specimens ⁴⁾	11	316	418
Pathogenic int. bacteria ⁵⁾			
Campylobacter	73	3260	3015
S. Enteritidis	12	450	639
S. Typhimurium	3	399	383
Other zoon. salmonella	10	439	428
Yersinia enterocolitica	8	194	200
Streptococci ⁶⁾			
Group A streptococci	3	103	122
Group C streptococci	1	19	18
Group G streptococci	5	91	103
S. pneumoniae	18	995	967

²⁾ Cumulative number in 2004 and in the corresponding period of 2003

³⁾ Resp. specimens with positive PCR

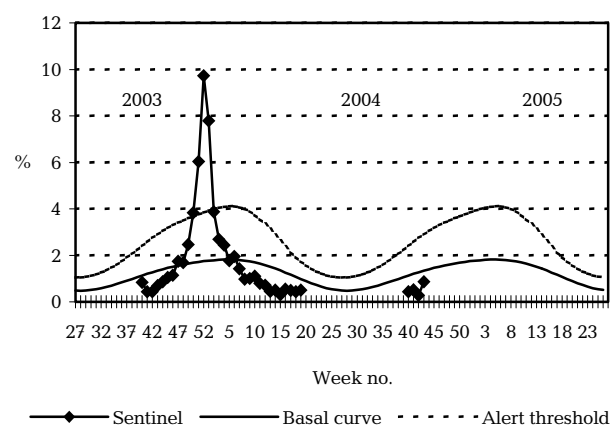
⁴⁾ Serum specimens with pos. complement fixation test, MPT

⁵⁾ See also www.germ.dk

⁶⁾ Isolated in blood or spinal fluid

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2003/2004/2005



Sentinel: Influenza consultations (as percentage of total consultations)

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

Alert threshold: Possible incipient epidemic