EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

Editor: Susanne Samuelsson Dept. of Epidemiology Statens Serum Institut • 5 Artillerivej • DK 2300 Copenhagen S

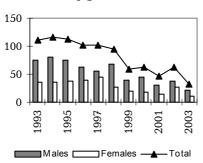
Tel.: +45 3268 3268 • Fax: +45 3268 3874 www.ssi.dk • epinews@ssi.dk • ISSN: 1396-4798



In 2003, the Department of Epidemiology received a total of 33 notifications of patients diagnosed with acute hepatitis B virus infection (HBV). This is the lowest figure since 1980, fig. 1.

The incidence for the whole country was 0.6 per 10⁵ in 2003, table 1.

Fig. 1. No. of notified patients with acute HBV, by gender, 1993-2003



Twenty-two (67%) of the notified cases were males, 11 (33%) females. The median age was 31 years (3-51 years) for males and 25 years (14-66 years) for females. As in previous years, most patients (58%) were in the age group 20-39 years, table 2.

Table 1. No. of notified patients with acute HBV in 2003, and incidence per 10⁵ 2002-2003, by county

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	No. I		Incidence	
County	2003	2003	2002	
Cph. Municip.	3	0.6	2.4	
Frb. Municip.	1	1.1	2.2	
Cph. County	3	0.5	0.6	
Frederiksborg	2	0.5	1.1	
Roskilde	0	0.0	0.9	
West Zealand	2	0.7	0.3	
Storstrøm	1	0.4	1.2	
Bornholm	0	0.0	2.3	
Funen	7	1.5	2.8	
South Jutland	0	0.0	8.0	
Ribe	3	1.3	1.8	
Vejle	2	0.6	2.8	
Ringkøbing	0	0.0	0.4	
Aarhus	5	8.0	0.6	
Viborg	0	0.0	0.0	
North Jutland	2	0.4	0.0	
Unknown	2	-	-	
Total	33	0.6	1.2	

A total of 27 (82%) of the notified patients were Danish-born, and six (18%) were immigrants. Two of these came from Afghanistan, one from Iraq, one from Turkey, one from the former Yugoslavia and one from the United States.

Transmission

For 12 (36%) patients, the mode of transmission was unknown. A total of 10 (30%) were infected through

ACUTE HEPATITIS B 2003

Table 2. No. of notified patients with acute HBV, by age and gender, 2003

Age (yrs)	M	F	Total
0-9	1	0	1
10-19	2	4	6
20-29	6	3	9
30-39	9	1	10
40-49	3	1	4
50-59	1	1	2
60+	0	1	1
Total	22	11	33

heterosexual contact, including six by sexual contact with a person with known risk of HBV. Two (6%) were infected through homosexual contact, seven (21%) were infected through IV drug use, and two (6%) were thought to have been infected through close social contact. These were two siblings from an immigrant family in which several family members have chronic HBV. Notification was made of a total of three children under the age of 15: the siblings mentioned and one child who was thought to have been infected through heterosexual contact. Of the 27 Danish-born patients, 20 (74%) were infected in Denmark, one was infected in Turkey, one in Israel, two in Thailand and one in the Philippines. In two cases, the country of infection was unknown. Among the six immigrants, one was infected at the country of origin and three were infected in Denmark. In two cases, the country of infection was unknown.

Comments

The number of notified patients with acute HBV has been declining since 1980 and was the lowest to date in 2003. There is a significant level of under-reporting; notification is made of approx. half of the number of cases that are registered in the National Hospital Discharge Register. Not all patients with acute HBV are admitted. so the level of under-reporting is presumed to be more than 50%. Since there has been much focus on hepatitis B in recent years, including via the clinical database DANHEP, the level of under-reporting is probably not greater than previously. Thus, the falling number of notifications presumably reflects a real decline in the incidence of acute HBV in Denmark. Facilities for free vaccination for members of risk groups have presumably contributed to this decline. Like the rest of Scandinavia, Denmark belongs to what is known as the low-endemic areas for HBV, defined by prevalence in the population of under 0.1%. On the basis of an increasing occurrence

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of HBV on a global scale, WHO has recommended that hepatitis B vaccine be included in the national childhood vaccination programmes. The National Board of Health has recently published an HTA report that sheds light on advantages and disadvantages of introducing hepatitis B vaccination into the Danish childhood vaccination programme. HBV in Denmark is chiefly spread through sexual contact or IV drug use. Also, there is limited horizontal transmission. Thus, since 1995 there has been a total of 13 notified cases of acute or chronic HBV among children under the age of 15 (including eight Danish children), infected in Denmark by close social contact with a family member or with a child in institutional/private child care. However, in large parts of the world, perinatal transmission is still by far the most common mode of transmission, giving rise to chronic infection in approx. 90% of cases. Mother-to-child transmission in connection with birth still occurs, although seldom, in Denmark, despite guidelines for examination of pregnant women and recommendations on immunoprophylaxis for neonates. Perinatally infected children usually have a subclinical course of disease. It will thus not be possible to detect any change in the number of infected neonates in the number of notifications of acute HBV, but it will later on be reflected in the number of notifications of chronic HBV.

(S. Cowan, Dept. of Epidemiology)

NEW EU CENTRE FOR DISEASE PREVENTION AND CONTROL

In July 2003, the European Commission presented a proposal for the establishment of a European Centre for Disease Prevention and Control (ECDC), EPI-NEWS 10/03. In December 2003, the EU Council of Ministers decided that the centre should be placed in Sweden, and the Swedish government has now stated that it will be in Stockholm. The main tasks for the ECDC will include epidemiological surveillance of infectious diseases, including a warning system and the development of contingency plans in the event of new health emergencies. The centre will be operational in 2005 and is expected to employ approx. 100 people after 3-5 years of operation. After three years, the centre will be evaluated with view to the possibility of including other public health aspects.

(S. Glismann, Dept. of Epidemiology) 10 March 2004

Streptococci isolated from blood and CSF from infected patients

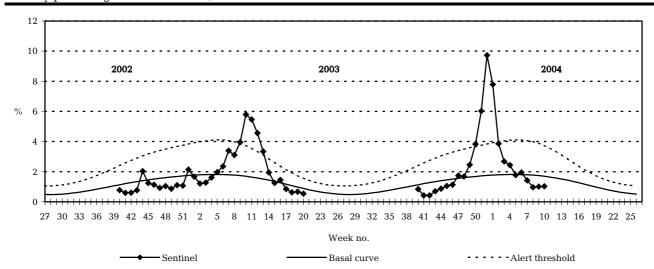
4th quarter of 2003 compared with the corresponding period in 2002 and 2001

4th quarter		4th quarter 2003					
2001	2002	Total	60+ yrs	2-59 yrs	< 2 yrs		
64	93	88	51	29	8	S. pneumoniae	October
4	5	4	4	0	0	Gr. A strep.	
0	2	2	2	0	0	Gr. C strep.	
6	13	5	4	1	0	Gr. G strep.	
51	103	98	61	30	7	S. pneumoniae	November
8	9	7	6	1	0	Gr. A strep.	
3	0	1	1	0	0	Gr. C strep.	
7	5	9	8	1	0	Gr. G strep.	
133	159	163	102	53	8	S. pneumoniae	December
9	21	11	5	6	0	Gr. A strep.	
1	0	0	0	0	0	Gr. C strep.	
10	11	6	3	3	0	Gr. G strep.	
248	355	349	214	112	23	S. pneumoniae	4th quarter
21	35	22	15	7	0	Gr. A strep.	
4	2	3	3	0	0	Gr. C strep.	
23	29	20	15	5	0	Gr. G strep.	
	35 2	22	214 15 3	112 7 0	0	Gr. G strep. S. pneumoniae Gr. A strep. Gr. C strep.	4th quarter

(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