



HEPATITIS A 2003

No. 38, 2004

In 2003, there were a total of 70 notified cases of acute hepatitis A, 40 females and 30 males. The number of cases was unchanged relative to 2002, after the exclusion of patients who were part of an outbreak in Holstebro (21 cases in 2002 and four in 2003), EPI-NEWS 36/03.

Distribution

Most of the patients, 67%, were under the age of 20, and as before, the proportion was highest in the age group under 10 years (43%). A total of 36 out of 47 patients under the age of 20 were immigrants (77%). Only one out of 19 patients over the age of 30 was an immigrant (5%). Distribution by age group is shown in [table 1](#).

Table 1. Notified cases of hepatitis A among Danish-born and immigrants by age, and incidence per 10⁵, 2003

Age (yrs)	Danish-born	Immigrants	Total	Incidence
0-9	7	23	30	4.4
10-19	4	13	17	2.7
20-29	1	3	4	0.6
30-39	7	1	8	1.0
40-49	2	0	2	0.3
50-59	5	0	5	0.7
60+	4	0	4	0.4
Total	30	40	70	1.3

Disregarding the cases that were part of the outbreak in Holstebro, most notifications were made in August and September: 10 and 14, respectively. Of these cases, 22 (92%) were immigrants, all under the age of 25, [fig. 1](#).

The incidence was highest in the Greater Copenhagen area and in South Jutland, [table 2](#).

A total of 28 (40%) patients had been admitted to hospital in connection with the hepatitis A infection. A similar hospitalisation rate was observed among children and young people under 20 years of age.

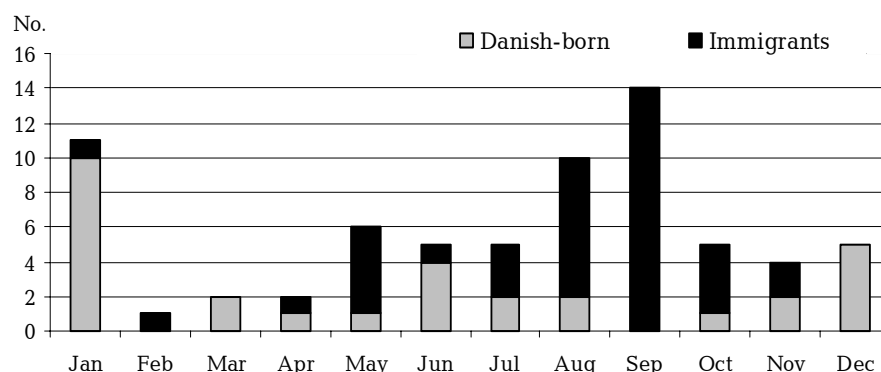
Outbreaks

Two major outbreaks were recorded, one in Holstebro in August 2002-January 2003 involving a total of 25 cases, and one related to a day-care institution in Sønderborg in May-June involving a total of seven cases. Here, three of the children were siblings infected while staying with family abroad.

Mode of transmission

Of 30 cases infected in Denmark, 26

Fig. 1. Notified cases of hepatitis A among Danish-born persons and immigrants per month, 2003



were Danes. Known sources of infection were: Child in institution (5), household member (3), other family (2), other personal contact (2), foodstuff (1), other known (1). In 16 cases, the source of infection was unknown. In two cases, information concerning possible occupational infection was provided: A nurse working in an endoscopy unit and a football player where a team mate had hepatitis A. Of the 40 (57%) persons who acquired the infection abroad, 36 were immigrants. Half of these were infected while staying with family. In addition to Denmark, 13 nations were recorded as country of infection, including 14 cases from Pakistan and six from Iraq.

Table 2. Notified cases of hepatitis A by county, and incidence per 10⁵, 2003 and (2002)

County	No.	Incidence	
		2003	(2002)
Cph. Municip.	27	5.4	(2.4)
Frb. Municip.	1	1.1	(0.0)
Copenhagen	13	2.1	(1.8)
Frederiksborg	1	0.3	(1.9)
Roskilde	1	0.4	(0.0)
West Zealand	1	0.3	(0.3)
Storstrøm	1	0.4	(0.4)
Bornholm	0	0.0	(0.0)
Funen	4	0.8	(1.3)
South Jutland	8	3.2	(0.4)
Ribe	1	0.4	(0.0)
Vejle	2	0.6	(0.9)
Ringkøbing	4	1.5	(8.0)
Aarhus	3	0.5	(2.8)
Viborg	1	0.4	(0.4)
North Jutland	2	0.4	(0.2)
Total	70	1.3	(1.6)

Prophylaxis

In 15 notifications, it was stated that immunoprophylaxis was not given;

55 notifications were submitted without this information.

Vaccination with two doses of vaccine, with a recommended interval of 6-12 months, provides protection that will last for 20 years. The vaccine can be used for children over the age of 1 year. Furthermore, several studies have shown that booster vaccination given up to six years after the first vaccination provides protection equivalent to the recommended programme.

Comments

For the last three years, more than half of the hepatitis A cases, as well as four out of five cases among children and young people under the age of 20, were diagnosed among immigrants. As in previous years, more cases are recorded among the children of immigrants in late summer as a result of stays in the country of origin. Vaccination or passive immunisation is still relevant for children of immigrants before visits to the country of origin, as well as for all other non-immune persons before travel to countries with a great risk of hepatitis A virus infection, EPI-NEWS 21/22a+b/2004.

Current incidence of hepatitis A

In 2004 as of 15 September, a total of 159 notifications of hepatitis A have been received, including 118 among males aged over 18. The increase is primarily due to an outbreak among men who have sex with men, EPI-NEWS 18/04. It is recommended that men who have sex with men and who are not in a monogamous relationship be vaccinated against hepatitis A.

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Individually notifiable diseases

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

Figures for 2004 are preliminary.

Table 1	Week 37 2004	Cum. 2004 ¹⁾	Cum. 2003 ¹⁾
AIDS	0	32	20
Anthrax	0	0	0
Botulism	0	0	1
Cholera	0	1	0
Creutzfeldt-Jakob	0	7	5
Diphtheria	0	0	0
Food-borne diseases	18	416	384
of these, infected abroad	2	63	80
Gonorrhoea	2	235	102
Haemorrhagic fever	0	0	0
Hepatitis A	4	156	53
of these, infected abroad	2	46	23
Hepatitis B (acute)	1	27	36
Hepatitis B (chronic)	0	109	134
Hepatitis C (acute)	0	0	6
Hepatitis C (chronic)	5	188	188
HIV	7	215	165
Legionella pneumonia	4	64	57
of these, infected abroad	0	17	15
Leprosy	0	0	0
Leptospirosis	0	1	2
Measles	0	0	0
Meningococcal disease	0	61	81
of these, group B	0	38	45
of these, group C	0	7	18
of these, unspec. + other	0	16	18
Mumps	0	2	2
Neuroborreliosis	5	56	26
Ornithosis	1	5	6
Pertussis (children < 2 years)	10	140	84
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	2
Listeria monocytogenes	0	1	1
Streptococcus pneumoniae	0	71	79
Other aethiology	0	5	2
Unknown aethiology	0	11	11
Under registration	2	16	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	2	52	70
of these, infected abroad	2	39	59
Syphilis	2	102	40
Tetanus	0	0	0
Tuberculosis	5	328	303
Typhoid/paratyphoid fever	2	14	20
of these, infected abroad	0	10	13
Typhus	0	0	0
VTEC/HUS	5	101	80
of these, infected abroad	0	17	17

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 37 2004	Cum. 2004 ²⁾	Cum. 2003 ²⁾
Bordetella pertussis (all ages)	28	652	381
Gonococci	11	266	177
of these, females	1	35	24
of these, males	10	231	153
Listeria monocytogenes	1	29	21
Mycoplasma pneumoniae			
Resp. specimens ³⁾	3	116	129
Serum specimens ⁴⁾	7	261	366
Pathogenic int. bacteria ⁵⁾			
Campylobacter	119	2582	2443
S. Enteritidis	9	357	521
S. Typhimurium	26	339	333
Other zoon. salmonella	19	347	357
Yersinia enterocolitica	1	151	173
Streptococci ⁶⁾			
Group A streptococci	1	95	115
Group C streptococci	1	17	15
Group G streptococci	3	79	89
S. pneumoniae	9	897	844

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