

HEPATITIS A OUTBREAK AMONG MSM IN GREATER COPENHAGEN No. 52, 2004

Since January 2004, an outbreak of hepatitis A has been recorded among men who have sex with men (MSM). Early on in the course of the outbreak, the Department of Epidemiology was informed about three patients with hepatitis A in Scania, Sweden. The patients were probably infected in gay saunas in Copenhagen.

Apart from ordinary precautions in the event of a hepatitis A outbreak, such as increased hygiene and immunoprophylaxis for close contacts of patients, it was recommended that MSM who are not living in a monogamous relationship be vaccinated, EPI-NEWS 18/04.

Further information for the MSM was provided in the national campaign, "Time for a Check-up", carried out by STOP AIDS and the Danish National Association for Gays and Lesbians. As the outbreak continued during summer, [fig. 1](#), the Department of Epidemiology carried out a case-control study in cooperation with STOP AIDS. The objective was to determine risk factors to direct preventive initiatives to stop the outbreak.

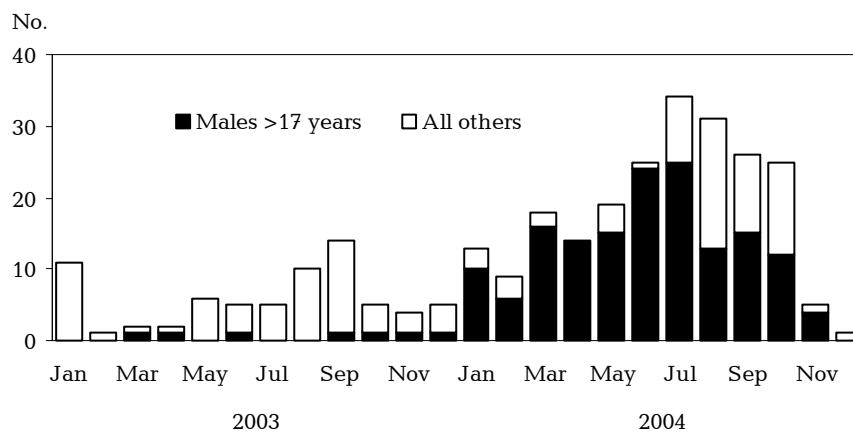
Notified cases

In the period 1 January-20 December 2004, there was a total of 153 notified cases of hepatitis A among males over the age of 17, [table 1](#). Of these, 102 were from Greater Copenhagen, and at least 65 of these were MSM. Among cases from Greater Copenhagen over the age of 17, the median age was 41 (range 19-73).

Table 1. Hepatitis A cases and incidence among males >17 years, by county (as of 20 December 2004)

	Total no.	Incidence per 10 ⁵
Cph. Municip.	64	31.6
Frb. Municip.	12	33.9
Copenhagen	26	11.4
Frederiksborg	10	7.3
Roskilde	7	7.9
West Zealand	9	7.8
Storstrøm	4	3.9
Bornholm	1	5.9
Funen	4	2.2
South Jutland	2	2.1
Ribe	3	3.5
Vejle	3	2.2
Ringkøbing	3	2.9
Aarhus	3	1.2
Viborg	1	1.1
North Jutland	1	0.5
Total	153	7.4

Fig. 1. Notified hepatitis A cases in Denmark, 2003-2004 (as of 20 Dec 2004)



The case-control study

MSM residents in Greater Copenhagen diagnosed with hepatitis A in the period 1 June – Mid August were invited to participate in the study as cases. Controls were selected from MSM participating in the Copenhagen Pride Festival on 14 August 2004. For all controls, oral fluid samples were collected for serological investigation, and only persons immunologically susceptible to hepatitis A and resident in Greater Copenhagen were included.

By the use of self-administered anonymous questionnaires, data was collected for a six weeks period, about a series of risk factors covering the maximum incubation time for hepatitis A. The questionnaire had been prepared partially on the basis of qualitative interviews with early patients in the outbreak. The study, including 18 cases and 64 controls, showed that sex in Copenhagen gay saunas, OR 4.2 (95% CI 1.5-11.5), and sex with casual partners, OR 5.6 (95% CI 1.2-26.9) was associated with an increased risk of hepatitis A infection. Four out of 14 cases stated to be HIV-positive, as against two out of 42 controls ($p=0.02$). Among the 64 controls, 53 (83%) were willing to be vaccinated against hepatitis A; however, of these, only 14 (26%) were willing to pay for the vaccination. Four months after the first recommendation of vaccination of persons in the MSM environment, 11 out of 36 controls stating that they had sexual contact with casual partners, stated that they had been advised to be vaccinated; five via MSM campaigns, four via STI clinics and two by their general practitioners.

Comments

Gay saunas have previously been associated with outbreaks of both

hepatitis A and conventional sexually transmitted infections. The saunas are open all year round, and the biggest Copenhagen sauna has 700-1,000 visitors a week. Gay saunas are popular among both Danish MSM and visitors from abroad.

The increased risk of infection is presumably related to the possibility of having several partners within a short period of time.

Even though the epidemic is receding, there is still a risk of a new wave of transmission. To prevent further spread, it is still important to provide information about prevention through vaccination, especially for MSM visiting saunas and other places with frequent change of sexual partners.

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OUTBREAK OF SALMONELLA FROM RUCOLA LETTUCE

Up to and including November 2004, at least 20 Norwegians and 13 Swedes have been infected with Salmonella serotype Thompson. The source of infection is probably rucola lettuce imported from Italy. Bacteriological investigations of rucola conducted in several countries, including Denmark, have subsequently shown several different Salmonella types in rucola. It has not yet been established whether Danes have been infected. On suspicion of food-borne infection, a notification should be forwarded. On submission of specimens, the suspected source of infection should be stated on the form.

(Department of Epidemiology)

22 December 2004

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (figures for 2004 are preliminary)

Table 1	Week 51 2004	Cum. 2004 ¹⁾	Cum. 2003 ¹⁾
AIDS	4	46	39
Anthrax	0	0	0
Botulism	0	0	1
Cholera	0	1	0
Creutzfeldt-Jakob	0	8	8
Diphtheria	0	0	0
Food-borne diseases	9	605	544
of these, infected abroad	1	109	117
Gonorrhoea	11	339	169
Haemorrhagic fever	0	0	0
Hepatitis A	2	225	75
of these, infected abroad	0	65	40
Hepatitis B (acute)	2	41	43
Hepatitis B (chronic)	6	150	214
Hepatitis C (acute)	0	3	7
Hepatitis C (chronic)	6	262	371
HIV	10	322	257
Legionella pneumonia	2	103	89
of these, infected abroad	0	30	27
Leprosy	0	0	0
Leptospirosis	2	15	4
Measles	0	0	0
Meningococcal disease	0	81	100
of these, group B	0	46	53
of these, group C	0	11	21
of these, unspec. + other	0	24	26
Mumps	0	6	3
Neuroborreliosis	2	98	76
Ornithosis	0	6	14
Pertussis (children < 2 years)	11	228	114
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	4
Listeria monocytogenes	0	1	2
Streptococcus pneumoniae	0	80	106
Other aethiology	0	8	5
Unknown aethiology	0	15	13
Under registration	8	36	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	5	96	95
of these, infected abroad	3	78	78
Syphilis	0	117	69
Tetanus	0	0	0
Tuberculosis	4	424	401
Typhoid/paratyphoid fever	1	23	30
of these, infected abroad	1	21	24
VTEC/HUS	3	148	119
of these, infected abroad	0	33	29

¹⁾ Cumulative number 2004 and in corresponding period 2003

Selected laboratory-diagnosed infections

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

Table 2	Week 51 2004	Cum. 2004 ²⁾	Cum. 2003 ²⁾
Bordetella pertussis (all ages)	29	1060	541
Gonococci	10	416	259
of these, females	0	49	31
of these, males	10	367	228
Listeria monocytogenes	0	39	29
Mycoplasma pneumoniae			
Resp. specimens ³⁾	50	680	198
Serum specimens ⁴⁾	39	570	502
Pathogenic int. bacteria ⁵⁾			
Campylobacter	35	3638	3495
S. Enteritidis	13	542	725
S. Typhimurium	10	458	436
Other zoon. salmonella	12	518	499
Yersinia enterocolitica	1	217	236
Streptococci ⁶⁾			
Group A streptococci	0	111	140
Group C streptococci	0	22	20
Group G streptococci	0	100	114
S. pneumoniae	27	1210	1159

²⁾ Cumulative number 2004 and corresponding period 2003

³⁾ Resp. specimens with positive PCR

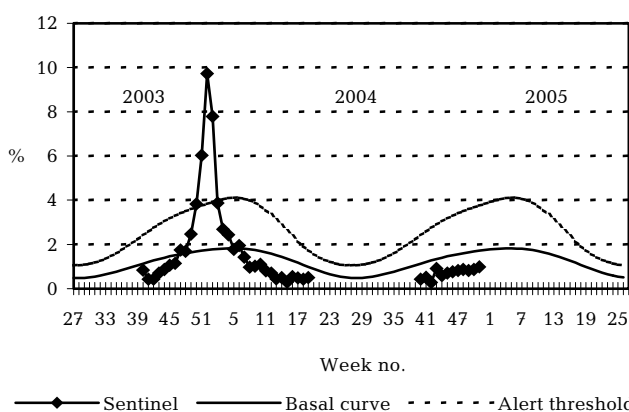
⁴⁾ Serum specimens with pos. complement fixation test, MPT

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

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