



ACUTE AND CHRONIC HEPATITIS C 2005

No. 7, 2006

Acute hepatitis C

During 2005, there were no notifications of persons with acute hepatitis C virus (HCV) infection.

Chronic hepatitis C

A total of 241 cases of chronic hepatitis C virus infection were notified in 2005, including 156 (65%) males and 85 (35%) females, [Table 1](#).

Table 1. Patients notified with chronic HCV infection in 2005, by age and sex

Age (yrs)	M	F	Total
0-14	1	0	1
15-19	0	0	0
20-24	4	1	5
25-29	14	7	21
30-34	29	10	39
35-39	23	12	35
40-44	33	20	53
45-49	24	16	40
50+	28	19	47
Total	156	85	241

The median age was 40 years for males (13-67 years) and 42 years for females (23-79 years). Distribution by county of residence is shown in [Table 2](#), which also shows incidence per 10⁵ for 2005 and 2004. A total of 197 (82%) of the notified patients were Danish-born, and 44 (18%) were immigrants. The majority of the notified immigrants were from countries with an intermediary (2.5-10%) or high (>10%) incidence of HCV infection in the population, [Figure 1](#).

Table 2. Patients notified with chronic HCV infection in 2005, and incidence per 10⁵ 2004-2005, by county

County	No. 2005		Per 10 ⁵ PA	
	M	F	2004	2005
Cph. Municip.	32	20	13.6	10.4
Frb. Municip.	4	4	6.5	8.7
Cph. County	8	3	3.7	1.8
Frederiksborg	10	11	7.2	5.6
Roskilde	7	3	6.3	4.2
West Zealand	4	6	2.6	3.3
Storstrøm	4	10	5.4	5.3
Bornholm	1	0	4.6	2.3
Funen	26	9	4.6	7.4
South Jutland	5	2	0.8	2.8
Ribe	2	1	3.6	1.3
Vejle	26	9	5.6	9.8
Ringkøbing	7	1	1.8	2.9
Aarhus	12	4	6.4	2.4
Viborg	1	0	5.1	0.4
North Jutland	5	1	2.4	1.2
Other/unkn.	2	1	-	-
Total	156	85	5.5	4.5

Table 3. Patients notified with chronic HCV infection in 2005, by mode of infection

Mode of infection	M	F	Total
IV drug use	122	52	174
Nosocomial	5	6	11
Tattooing/piercing	7	2	9
Heterosexual	2	6	8
Other known	-	1	1
Unknown	20	18	38
Total	156	85	241

Mode of transmission

Among persons with known mode of infection, 86% had been infected via IV drug use, 70% of whom were males, [Table 3](#).

There were eleven notified cases of nosocomial infection. Six had been infected in Denmark, five of whom were reported to have been infected by blood transfusions given before the introduction of screening of donor blood for HCV in 1991. One person notified with possible nosocomial infection after 1991 is currently under investigation. Five of the notified cases were immigrants who had been infected in connection with surgery or blood transfusions outside Denmark. Six persons were thought to have been infected via tattooing and three via piercing, one of these via home piercing.

Eight persons were notified as having been infected via sexual contact; seven of whom reported heterosexual contact with persons with known risk of hepatitis C.

One notified person had probably been infected while exposed to blood at a hospital.

Comments

Notification of chronic HCV infection is often subject to considerable delay relative to the time of the patient's diagnosis. Furthermore, under-reporting does occur.

The number of persons notified with chronic HCV infection in Denmark has remained at the same level every year since 2001. The distribution according to mode of transmission has also remained largely constant in this period, displaying the greatest frequency among current or former IV drug users.

2005 saw a minor increase in the number of notified cases of infection via tattooing or piercing. Hepatitis B and C may both be transferred via the tattooing and piercing methods used. The clinics performing these forms of body decoration are not subject to health authority inspection. For guidelines on hygiene and prevention of transmission via piercing, please visit www.ssi.dk/piercing.

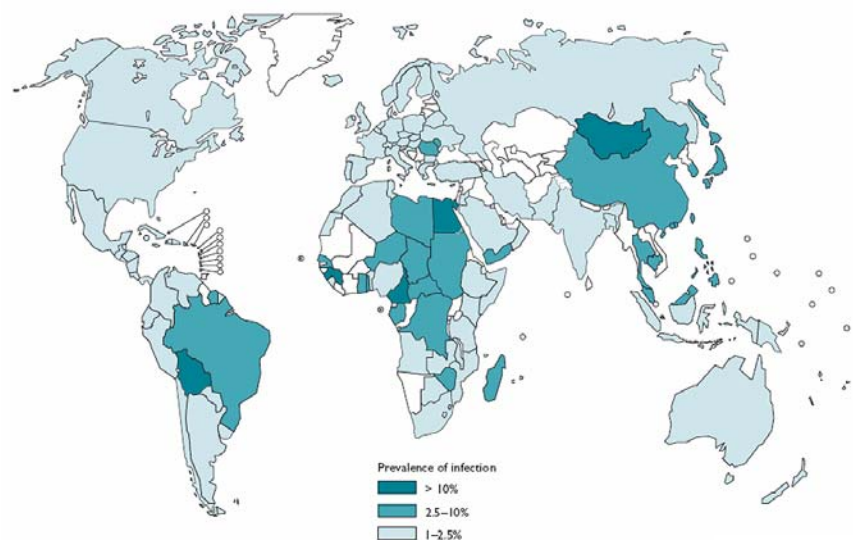
In developing countries, the use of unscreened blood or blood products and unsterilised devices for injection is the most frequent mode of HCV infection. Traditional body decoration and circumcision are other known risk factors.

Treatment options for hepatitis C have improved and it is therefore essential to refer anti-HCV and/or HCV-RNA-positive persons to a specialist department.

(K. Qureshi, S. Cowan, Department of Epidemiology).

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Figure 1: Worldwide prevalence of HCV infection, 2003



Source: WHO

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2006 figures are preliminary)

Table 1	Week 6 2006	Cum. 2006 ¹⁾	Cum. 2005 ¹⁾
AIDS	0	6	14
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	3	0
Diphtheria	0	0	0
Foodborne diseases	6	48	39
of these, infected abroad	2	10	8
Gonorrhoea	5	49	113
Haemorrhagic fever	0	0	0
Hepatitis A	0	2	16
of these, infected abroad	0	0	2
Hepatitis B (acute)	0	3	9
Hepatitis B (chronic)	5	25	18
Hepatitis C (acute)	0	0	1
Hepatitis C (chronic)	2	23	42
HIV	7	23	41
Legionella pneumonia	0	12	10
of these, infected abroad	0	1	2
Leprosy	0	0	0
Leptospirosis	0	3	5
Measles	0	0	0
Meningococcal disease	0	4	15
of these, group B	0	3	10
of these, group C	0	0	2
of these, unspec. + other	0	1	3
Mumps	0	4	1
Neuroborreliosis	1	9	11
Ornithosis	0	3	2
Pertussis (children < 2 years)	0	10	41
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	0
Listeria monocytogenes	0	0	0
Streptococcus pneumoniae	0	2	21
Other aethiology	0	0	0
Unknown aethiology	1	2	2
Under registration	8	26	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	2	13	17
of these, infected abroad	2	11	16
Syphilis	1	12	13
Tetanus	0	0	2
Tuberculosis	10	45	46
Typhoid/paratyphoid fever	1	6	3
of these, infected abroad	1	6	3
Typhus exanthematicus	0	0	0
VTEC/HUS	2	12	16
of these, infected abroad	1	4	9

¹⁾ Cumulative number 2006 and in corresponding period 2005

Selected laboratory diagnosed infections

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

Table 2	Week 6 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Bordetella pertussis (all ages)	5	36	116
Gonococci	4	41	55
of these, females	1	8	7
of these, males	3	33	48
Listeria monocytogenes	0	4	4
Mycoplasma pneumoniae			
Resp. specimens ³⁾	13	118	393
Serum specimens ⁴⁾	13	82	233
Streptococci ⁵⁾			
Group A streptococci	4	15	19
Group B streptococci	1	12	3
Group C streptococci	0	5	3
Group G streptococci	0	14	18
S. pneumoniae	18	183	176
Table 3	Week 4 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Pathogenic int. bacteria ⁶⁾			
Campylobacter	30	131	197
S. Enteritidis	4	13	22
S. Typhimurium	1	27	36
Other zoon. salmonella	6	37	27
Yersinia enterocolitica	2	13	20
Verocytotoxin-producing E. coli	0	7	9
Enteropathogenic E. coli	3	17	21
Enterotoxigenic E. coli	2	14	11

²⁾ Cumulative number 2006 and in corresponding period 2005

³⁾ Resp. specimens with positive PCR

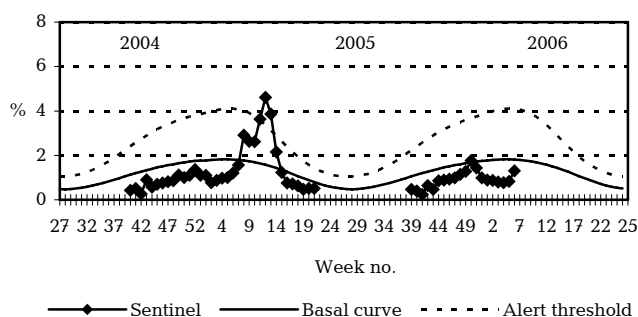
⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2004/2005/2006



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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