



ACUTE AND CHRONIC HEPATITIS C 2007

No. 8, 2008

This is the first annual report on an individually notifiable disease published after the introduction of the new regions on 1 January 2007. Statistics Denmark has divided the five regions into 11 areas, [Figure 1](#) and [Table 2](#). The population of the areas will be used for incidence calculation in the future.

ACUTE HEPATITIS C

During 2007, seven persons were notified with acute hepatitis C virus (HCV) infection. All were males of Danish origin and all had been infected in Denmark. Three were infected by IV drug use, one by unsafe sex with a prostitute, one homosexually and one was notified with infection by blood transfusion in connection with a fight. One patient with a chronic kidney disease was probably infected nosocomially. The median age was 37 years (range 18-78 years).

CHRONIC HEPATITIS C

In 2007, 281 cases of chronic HCV infection were notified, including 178 (63%) males and 103 (37%) females, [Table 1](#).

Table 1. Patients notified with chronic HCV infection, by age and sex, 2007

Age (yrs)	M	F	Total
0-14	1	0	1
15-24	9	5	14
25-29	12	4	16
30-34	12	11	23
35-39	23	18	41
40-44	40	14	54
45-49	27	13	40
50-54	29	20	49
55 +	25	18	43
Total	178	103	281

Distribution by area and incidence per 10⁵ is presented in [Table 2](#).

Mode of transmission

A total of 232 (83%) of the notified patients were born in Denmark. The remaining 49 notified persons were immigrants from 33 countries. Among persons with known mode of infection, [Table 3](#), 83% were infected via IV drug use, 65% of whom were males.

A total of 23 cases were notified with nosocomial infection, including 13 infected in Denmark. Eleven of these were notified as infected via blood transfusion prior to the introduction of HCV screening of donor blood in 1991.

Table 2. Patients notified with chronic HCV infection in 2007; sex and incidence per 10⁵ by region and area

Region & area	M	F	Total	Per 10 ⁵
Capital				
CPH. City	52	33	85	13.1
CPH suburbs	12	5	17	3.4
North. Zealand	7	5	12	2.7
Bornholm	2	2	4	9.3
Zealand				
West &				
South. Zealand	28	19	47	8.0
East. Zealand	12	12	24	10.4
North. Jutland				
North. Jutland	4	1	5	0.9
Central Jutland				
West. Jutland				
West. Jutland	4	4	8	1.9
East. Jutland	10	6	16	2.0
South. DK				
Funen				
Funen	19	9	28	5.8
South. Jutland	21	6	27	3.8
Other/not st.				
Other/not st.	7	1	8	-
Total	178	103	281	5.2

One person was probably infected nosocomially in 1992; another person with a considerable transfusion need was infected after 2002. One person of Danish and nine persons of foreign origin were infected via treatment provided by health care systems abroad. Eleven persons were infected either homosexually or by heterosexual contact with a person with known risk of hepatitis C.

Table 3. Patients notified with chronic HCV infection, by mode of infection, 2007

Mode of infection	M	F	Total
IV drug use	133	72	205
Nosocomial	11	12	23
Heterosexual	3	5	8
Homosexual	3	0	3
Mother/newborn	3	1	4
Tattooing/piercing	3	0	3
Needle stick inj.	0	1	1
Unknown	22	12	34
Total	178	103	281

One hospital employee is thought to have been infected via an occupational cutting accident.

Commentary

2006 and 2007 saw a greater number of chronic hepatitis C notifications than previously. The rise is probably due to increased notification of patients attending out-patient examinations for chronic HCV infection, rather than to an increase in infections.

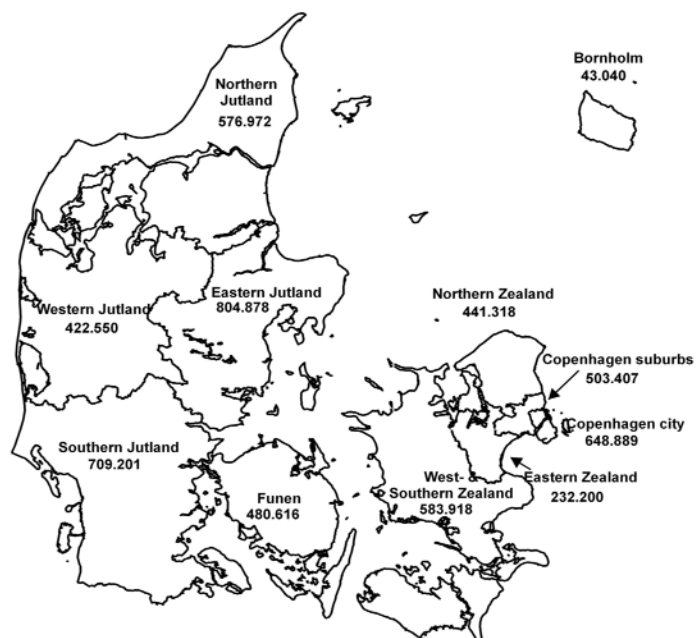
In Denmark, HCV infection most frequently occurs among current or former IV drug users.

The hepatitis C treatment options have improved, and it is thus essential that patients be referred to a specialist department.

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

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Figure 1. The 11 regions and population as per 1 January 2007



Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2008 figures are preliminary)

Table 1	Week 7 2008	Cum. 2008 ¹⁾	Cum. 2007 ¹⁾
AIDS	2	7	7
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	4	2
Diphtheria	0	0	0
Food-borne diseases	6	32	93
of these, infected abroad	0	4	11
Gonorrhoea	13	41	57
Haemorrhagic fever	0	0	0
Hepatitis A	2	10	8
of these, infected abroad	1	3	3
Hepatitis B (acute)	0	1	4
Hepatitis B (chronic)	6	25	34
Hepatitis C (acute)	0	1	1
Hepatitis C (chronic)	11	39	56
HIV	1	26	37
Legionella pneumonia	2	17	13
of these, infected abroad	1	9	2
Leprosy	0	0	0
Leptospirosis	0	0	4
Measles	0	2	0
Meningococcal disease	1	9	6
of these, group B	1	3	1
of these, group C	0	1	4
of these, unspec. + other	0	5	1
Mumps	2	3	1
Neuroborreliosis	1	11	16
Ornithosis	0	1	0
Pertussis (children < 2 years)	1	11	15
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	0	0
Listeria monocytogenes	0	0	5
Streptococcus pneumoniae	0	14	14
Other aethiology	0	8	2
Unknown aethiology	0	4	0
Under registration	1	9	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	9	7
of these, infected abroad	0	7	4
Syphilis	6	19	13
Tetanus	0	0	0
Tuberculosis	7	45	48
Typhoid/paratyphoid fever	0	4	1
of these, infected abroad	0	4	1
Typhus exanthematicus	0	0	0
VTEC/HUS	4	17	16
of these, infected abroad	0	1	6

¹⁾ Cumulative number 2008 and in corresponding period 2007

Selected laboratory diagnosed infections

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

Table 2	Week 7 2008	Cum. 2008 ²⁾	Cum. 2007 ²⁾
Bordetella pertussis (all ages)	5	18	21
Gonococci	7	46	54
of these, females	2	7	9
of these, males	5	39	45
Listeria monocytogenes	0	1	12
Mycoplasma pneumoniae			
Resp. specimens ³⁾	1	26	156
Serum specimens ⁴⁾	3	22	126
Streptococci ⁵⁾			
Group A streptococci	3	22	23
Group B streptococci	3	18	12
Group C streptococci	0	3	1
Group G streptococci	2	21	19
S. pneumoniae	21	211	176
Table 3	Week 5 2008	Cum. 2008 ²⁾	Cum. 2007 ²⁾
MRSA	8	48	-
Pathogenic int. bacteria ⁶⁾			
Campylobacter	28	125	241
S. Enteritidis	1	22	20
S. Typhimurium	9	31	17
Other zoon. salmonella	10	64	50
Yersinia enterocolitica	1	19	21
Verocytotoxin- producing E. coli	2	8	12
Enteropathogenic E. coli	0	6	27
Enterotoxigenic E. coli	6	25	15

²⁾ Cumulative number 2008 and in corresponding period 2007

³⁾ Resp. specimens with positive PCR

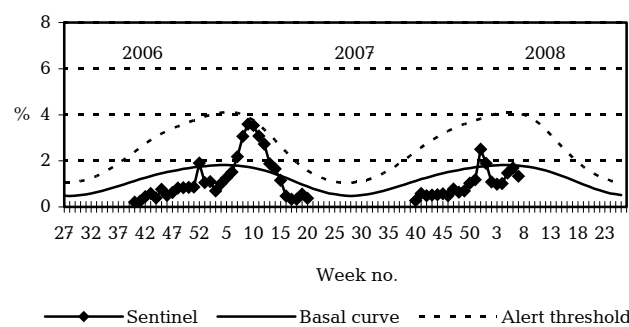
⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2006/2007/2008



◆ 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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