



ACUTE AND CHRONIC HEPATITIS C 2006

No. 9, 2007

ACUTE HEPATITIS C

In 2006, six persons were notified with acute hepatitis C virus (HCV) infection, including five males, four of whom were of non-Danish origin. Five were infected by IV drug use and in one case the mode of infection was unknown. The median age was 37 years (range 21-47 years).

CHRONIC HEPATITIS C

In 2006, a total of 284 cases of chronic HCV infection were notified, including 173 (61%) males and 111 (39%) females, [Table 1](#).

Table 1. Patients notified with chronic HCV infection in 2006, by age and sex

Age (yrs)	M	F	Total
0-19	1	0	1
20-24	3	5	8
25-29	16	9	25
30-34	22	12	34
35-39	18	16	34
40-44	35	15	50
45-49	29	27	56
50-54	32	16	48
55 +	17	11	28
Total	173	111	284

The median age was 43 years for males (range: 3-73 years), and 42 years for females (range 20-76 years). One child, who had been adopted from abroad was notified. Distribution by county of residence and incidence per 10⁵ for 2005 and 2006 is shown in [Table 2](#).

Table 2. Patients notified with chronic HCV infection in 2006 and incidence per 10⁵ in 2006 and 2005, by county

County	No. 2006		Per 10 ⁵ PA	
	M	F	2006	2005
Cph. Municip.	35	28	12.6	14.7
Frb. Municip.	2	1	3.3	8.8
Cph. County	14	17	5.0	3.6
Frederiksborg	12	6	4.8	6.4
Roskilde	10	5	6.2	4.6
West Zealand	11	5	5.2	3.3
Storstroem	9	6	5.7	5.7
Bornholm	-	-	-	4.7
Funen	22	14	7.5	7.8
South Jutland	1	1	0.8	3.2
Ribe	5	1	2.7	2.2
Vejle	35	14	13.6	13.1
Ringkoebing	2	5	3.6	3.6
Aarhus	7	3	1.5	2.7
Viborg	4	-	1.7	1.3
North Jutland	1	4	1.0	1.6
Other/not st.	3	1	-	-
Total	173	111	5.2	5.6

Nationality

A total of 237 (83%) of the notified patients were born in Denmark. Among these, 143 (60%) were males and 94 (40%) females. The distribution by sex among the 47 immigrants was: 30 (64%) males and 17 (36%) females.

A total of 20 (43%) of the immigrants were from European countries while the remaining 27 were from 15 other countries.

Mode of transmission

Among persons with known mode of infection, 85% were infected via IV drug use, 62% of whom were males, [Table 3](#).

Table 3. Patients notified with chronic HCV infection in 2006, by mode of infection

Mode of infection	M	F	Total
IV drug use	132	81	213
Nosocomial	8	10	18
Tattooing/piercing	4	2	6
Heterosexual	4	4	8
Homosexual	3	0	3
Mother/newborn	1	1	2
Needle stick injury	1	0	1
Unknown	20	13	33
Total	173	111	284

A total of 18 cases of nosocomial infection were notified, five of which were Danish-born and infected in connection with blood transfusions in Denmark prior to the 1991 introduction of HCV screening of donor blood. Another six Danish-born cases were infected abroad in connection with blood transfusions or non-sterile injection. Seven immigrants were infected in their home countries in connection with blood transfusions, non-sterile injections or dental visits. Six persons were thought to have been infected via tattooing or piercing. In eleven cases, sexual contact was stated as mode of infection, including three via homosexual contact and eight via heterosexual contact with a person with known risk of hepatitis C. In 33 (12%) cases, the mode of infection was unknown. One reception centre resident was thought to have been infected in connection with a needle stick injury.

Among the Danish-born cases, 195 (82%) were infected via IV drug use. Among immigrants, 18 (38%) were infected via IV drug use.

Commentary

In 2006, no cases of acute or chronic work-related HCV infection were notified.

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

The number of notified persons with chronic HCV infection has increased slightly. This is attributed to the improved reporting of patients attending ambulatory HCV infection controls. The hepatitis C treatment options have improved; therefore, it is essential that patients be referred to a specialist department.

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

ORNITHOSIS 2006

Ornithosis (parrot fever, psittacosis) is caused by *Chlamydia psittaci* (*C. psittaci*).

2006 saw seven notified ornithosis cases, five males and two females. The patients were aged between 33 and 70 years. Six patients were admitted to hospital in connection with the infection. In all seven cases, the diagnosis was confirmed by detection of *C. psittaci* DNA in airway secretions and/or by serological tests. For further information on ornithosis diagnostics, please see EPI-NEWS 10/06.

A possible source of infection was reported for five patients, all of whom had private flocks of birds including parrots, pigeons or other birds or who had come into contact with birds in other contexts.

(A.H. Christiansen, S. Cowan, Department of Epidemiology)

ERROR ON GONORRHOEA AND SYPHILIS NOTIFICATION FORMS

At the turn of the year, a few changes were introduced to the notification form for gonorrhoea and syphilis, form 1510-2, EPI-NEWS 51/06. Unfortunately, a line is missing on the form at the point where country of origin is stated for immigrants, tourists, etc. New correct forms are currently being printed.

Physicians may order the new forms at Dafolo, phone: +45 9620 6666.

Until the new forms are delivered, physicians are requested to state the country of origin when notifying persons of non-Danish origin. The Department of Epidemiology regrets any inconvenience caused by the replacement of the forms.

(S. Cowan, Department of Epidemiology)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2007 figures are preliminary)

Table 1	Week 8 2007	Cum. 2007 ¹⁾	Cum. 2006 ¹⁾
AIDS	1	8	8
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	7	3
Diphtheria	0	0	0
Food-borne diseases	10	99	67
of these, infected abroad	2	11	16
Gonorrhoea	10	65	59
Haemorrhagic fever	0	0	0
Hepatitis A	0	8	3
of these, infected abroad	0	2	0
Hepatitis B (acute)	0	4	4
Hepatitis B (chronic)	4	38	43
Hepatitis C (acute)	0	1	1
Hepatitis C (chronic)	2	58	35
HIV	3	41	30
Legionella pneumonia	3	16	12
of these, infected abroad	0	1	2
Leprosy	0	0	0
Leptospirosis	0	4	3
Measles	0	0	3
Meningococcal disease	0	4	17
of these, group B	0	0	11
of these, group C	0	2	1
of these, unspec. + other	0	1	5
Mumps	1	3	7
Neuroborreliosis	2	18	11
Ornithosis	1	2	4
Pertussis (children < 2 years)	2	17	14
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	0	1
Listeria monocytogenes	0	1	3
Streptococcus pneumoniae	0	11	16
Other aethiology	0	1	1
Unknown aethiology	0	0	5
Under registration	3	14	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	8	17
of these, infected abroad	0	4	15
Syphilis	1	15	14
Tetanus	0	0	0
Tuberculosis	4	58	55
Typhoid/paratyphoid fever	0	1	7
of these, infected abroad	0	1	7
Typhus exanthematicus	0	0	0
VTEC/HUS	0	16	20
of these, infected abroad	0	6	7

¹⁾ Cumulative number 2007 and in corresponding period 2006

Selected laboratory diagnosed infections

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

Table 2	Week 8 2007	Cum. 2007 ²⁾	Cum. 2006 ²⁾
Bordetella pertussis (all ages)	4	25	43
Gonococci	4	58	56
of these, females	0	9	10
of these, males	4	49	46
Listeria monocytogenes	0	12	4
Mycoplasma pneumoniae			
Resp. specimens ³⁾	13	169	153
Serum specimens ⁴⁾	18	144	109
Streptococci ⁵⁾			
Group A streptococci	2	25	20
Group B streptococci	0	12	18
Group C streptococci	0	1	6
Group G streptococci	3	22	20
S. pneumoniae	36	212	237
Table 3	Week 7 2007	Cum. 2007 ²⁾	Cum. 2006 ²⁾
Pathogenic int. bacteria ⁶⁾			
Campylobacter	36	278	212
S. Enteritidis	4	24	33
S. Typhimurium	1	19	32
Other zoon. salmonella	12	62	58
Yersinia enterocolitica	5	25	19
Verocytotoxin-producing E. coli	3	14	9
Enteropathogenic E. coli	5	34	29
Enterotoxigenic E. coli	3	18	20

²⁾ Cumulative number 2006 and in corresponding period 2005

³⁾ Resp. specimens with positive PCR

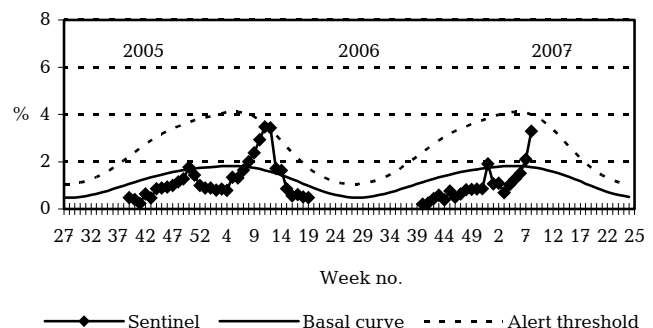
⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2005/2006/2007



Sentinel: Influenza consultations (as percentage of total consultations)

Basal curve: Expected frequency of consultations under non-epidemic conditions

Alert threshold: Possible incipient epidemic