EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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ACUTE AND CHRONIC HEPATITIS C 2008

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ACUTE HEPATITIS C

During 2008, seven persons were notified with acute hepatitis C virus (HCV) infection; four males and three females. The median age was 32 years (range 24-38 years).
Three were infected via sexual contact by HCV positive partners, one was infected by IV drug use, and in one case the mode of infection was unknown.

CHRONIC HEPATITIS C

In 2008, a total of 221 cases of chronic HCV infection were notified, including 153 (69%) males, Table 1.

Table 1. Notified cases diagnosed with chronic HCV infection, by age and gender, 2008

Age (yrs)	M	F	Total
0-14	0	0	0
15-24	4	1	5
25-29	13	9	22
30-34	27	4	31
35-39	22	8	30
40-44	27	11	38
45-49	15	11	26
50-54	27	12	39
55 +	18	12	30
Total	153	68	221

The median age was 42 years for males (range: 21-68 years), and 45 years for females (range 23-83 years).
Distribution by region and area and incidence per 10^5 for 2008 (2007-figures included for comparison) are shown in Table 2.

Table 2. Notified persons diagnosed with chronic HCV infection in 2007 and 2008; and incidence per 10^5 by area

Region &	Number		Incidence	
area	2007	2008	2007	2008
Capital				
CPH. City	35	30	5.4	4.6
CPH suburbs	124	66	24.6	13.1
North. Zealand	21	11	4.7	2.5
Bornholm	8	5	18.5	11.6
Zealand				
West & South. Zealand	10	8	1.7	1.4
East. Zealand	51	12	22.0	5.2
North. Jutland				
North. Jutland	40	40	6.9	6.9
Centr. Jutland				
West. Jutland	5	2	1.2	0.5
East. Jutland	22	18	2.7	2.2
South. DK				
Funen	12	6	2.5	1.2
South. Jutland	20	19	2.8	2.7
Other/not st.	24	4	-	-
Total	372	221	6.8	4.0

Transmission

A total of 167 (76%) of the notified patients were Danish-born. The 54 immigrants were from 29 different countries.
Among persons with known mode of infection, 84% were infected via IV drug use, 75% of whom were males, Table 3.

Table 3. Notified cases diagnosed with chronic HCV infection, by gender and mode of infection, 2008

Mode of infection	M	F	Total
IV drug use	115	39	154
Nosocomial	12	8	20
Heterosexual	2	2	4
Mother/newborn	2	1	3
Tatooing/piercing	2	0	2
Needle stick inj.	0	1	1
Unknown	20	17	37
Total	153	68	221

Thirteen persons were infected in Denmark by blood products prior to the introduction of HCV screening of donor blood in 1991. Seven persons were infected nosocomially abroad.

Commentary

In Denmark, hepatitis C infection is primarily acquired via IV drug use. HCV infection is often notified several years after infection, consequently, annual reports do not necessarily reflect newly infected cases. It is essential to refer hepatitis C patients to a specialist department as treatment options have improved.
(K.M. Harder, S. Cowan, Dept. of Epidemiology)

ORNITHOSIS 2008

Ornithosis (psittacosis, parrot fever) is caused by infection with the zoonotic bacterium Chlamydophila psittaci from birds. For clinical information and modes of infection, please see EPI-NEWS 5/08.
In 2008 six persons, including two females and four males aged 14-60 years, were notified with ornithosis. Three of the notified persons were admitted to hospital, including two with severe pneumonia. Five of the notified cases had known massive exposure to birds: Four had been exposed to birds which were diagnosed with the infection, and three had been exposed in connection with an outbreak among the employees of a pet shop.
Further investigation among the employees of the shop detected four cases of infection (three notified) among the ten employees. Three persons had been heavily exposed through close contact with diseased birds and feeding of birds and/or cleaning of their cages. Subsequently, several sick pet birds were found in the shop of which one was diagnosed with C. psittaci. Except for one bird, which was treated in accordance with the veterinary guidelines, all the remaining birds were culled.

Diagnostics

In 2008 two cases were detected by PCR of secretions from the lower respiratory passages. In both cases the samples were taken a few days after admission. The remaining cases were detected serologically; see EPI-NEWS 10/06. Three cases were detected by a combination of a positive Chlamydia complement-binding test (≥ power score 6, CKT) and positive IgM titre (≥1:128) in microimmunofluorescence test for C. psittaci. One case was diagnosed by positive IgM titre to C. psittaci and one by positive CKT; this last patient formed part of the pet shop outbreak and had not been notified. Expectorates for PCR were taken from the three notified cases of the pet shop outbreak, but the samples were collected 20-25 days after symptom onset and all tested negative.

Commentary

The serologically diagnosed cases had all at some point in the course of the disease had a higher IgG titre to C. pneumoniae than both IgM and IgG titers to C. psittaci. The most reliable and specific diagnostic method for Ornithosis is therefore PCR. It is essential that samples are taken early in the course of the disease and that the sample material is from the lower respiratory passages.
(C. Kjelsø, K. Widgren, Department of Epidemiology, S. Uldum, DBMP)

MMR VACCINATION - PRIORIX®

The Danish Medicines Agency has received reports of adverse events for the novel MMR vaccine Priorix®, as solvent has been administered without prior addition of the active powder.
The Priorix®-vaccine consists of powder and solvent which should be mixed and shaken before injection.
For more information, please see the Danish Medicine Agency's website: www.lmst.dk (Danish language).
(Department of Epidemiology)

18 February 2009

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2009 figures are preliminary)

Table 1	Week 45 2008	Cum. 2009 [1]	Cum. 2008 [1]
AIDS	0	4	8
Cholera	0	0	0
Creutzfeldt-Jakob	0	0	13
Food-borne diseases	5	50	34
of these, infected abroad	0	6	9
Gonorrhoea	17	75	38
Hepatitis A	0	4	10
of these, infected abroad	0	2	3
Hepatitis B (acute)	0	2	1
Hepatitis B (chronic)	0	5	25
Hepatitis C (acute)	0	3	1
Hepatitis C (chronic)	2	37	40
HIV	0	30	27
Legionella pneumonia	1	17	17
of these, infected abroad	0	2	10
Leptospirosis	0	0	1
Measles	2	6	2
Meningococcal disease	0	8	13
of these, group B	0	5	4
of these, group C	0	1	2
of these, unspec. + other	0	2	7
Mumps	0	0	3
Neuroborreliosis	0	2	11
Ornithosis	0	0	1
Pertussis (children < 2 years)	1	7	11
Purulent meningitis			
Haemophilus influenzae	0	2	0
Listeria monocytogenes	0	1	0
Streptococcus pneumoniae	0	9	16
Other aethiology	1	1	8
Unknown aethiology	0	1	7
Under registration	10	18	-
Rubella (during pregnancy)	0	0	0
Rubella (congenital)	0	0	0
Shigellosis	2	15	9
of these, infected abroad	0	8	7
Syphilis	8	30	19
Tetanus	0	0	0
Tuberculosis	9	49	43
Typhoid/paratyphoid fever	0	3	4
of these, infected abroad	0	0	4
VTEC/HUS	3	13	18
of these, infected abroad	0	1	5

Table 1, comments

In 2009, none of the following have been reported: Anthrax, botulism, cholera, diphtheria, haemorrhagic ffever, leprosy, plague, polio, rabies, typhus exanthematicus

1) Cumulative no. 2009 and corresponding period 2008

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received at Statens Serum Institut

Table 2	Week 7 2009	Cum. 2009 [2]	Cum. 2008 [2]
Bordetella pertussis			
(all ages)	2	17	18
Gonococci	7	57	46
of these, females	1	12	7
of these, males	6	45	39
Listeria monocytogenes	2	11	1
Mycoplasma pneumoniae			
Resp. specimens *3)*	0	17	26
Serum specimens *4)*	2	20	22
Streptococci *5)*			
Group A streptococci	1	34	22
Group B streptococci	2	14	18
Group C streptococci	0	5	3
Group G streptococci	4	20	21
S. pneumoniae	38	254	211

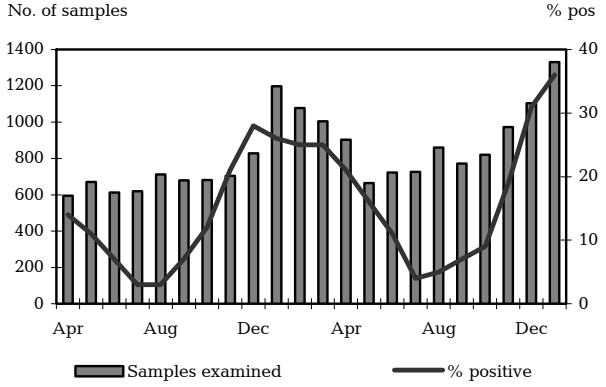
Table 3	Week 5 2009	Cum. 2009 [2]	Cum. 2008 [2]
MRSA	11	87	48
Pathogenic int. bacteria [6]			
Campylobacter	19	127	137
S. Enteritidis	1	24	24
S. Typhimurium	21	117	33
Other zoon. salmonella	7	58	71
Yersinia enterocolitica	3	15	23
Verocytotoxin-prod. E.coli	4	7	8
Enteropathogenic E. coli	4	13	6
Enterotoxigenic E. coli	1	12	25

Tables 2 & 3, comments

2) Cumulative no. 2009 and corresponding period 2008
3) Respiratory 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

Norovirus 2007-2008

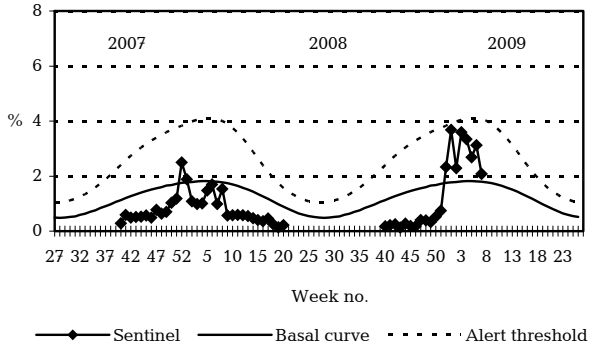
Examined samples and percent positive, Dec 07- Dec 08



Samples from clinical microbiology departments at Odense University Hospital, Copenhagen University Hospital, and the Department of Virology, SSI

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2007/2008/2009



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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