EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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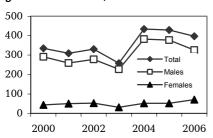
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Laboratory confirmed cases

According to the laboratory notification system, gonorrhoea was diagnosed in 397 patients during 2006; 326 males and 71 females, Figure 1.

Figure 1. Laboratory confirmed gonorrhoea cases, 2000-2006



A total of 47% of male cases and 44% of female cases were diagnosed in the municipalities of Copenhagen and Frederiksberg (55% and 50% respectively, in 2005). Among males, 42 had also had gonorrhoea during 2003-2005 and 13 had had the disease several times during 2006. Three females had also had gonorrhoea during 2003-2005 and one had gonorrhoea twice during 2006. In one male patient, gonococci were detected in a perianal abscess and in two females in synovial fluid of the knee and in pus from the pouch of Douglas, respectively.

Swabs from various anatomical sites

According to information from the diagnostic laboratories, 39% of gonorrhoea patients had pharyngeal swabs performed, of which 12% were positive. Rectal swabs, <u>Table 1</u>, were performed in 39% of gonorrhoea patients and 21% of those tests were positive.

Resistant gonococci

The frequency of penicillin (PEN) resistant gonococci was 46% (31% in 2005); 22% were penicillinaseproducing (14% in 2005). The frequency of fluoroquinolone (FQ) resistance was 45% (36% in 2005), and a further 7% of the strains had reduced sensitivity (6% in 2005). A total of 52% were resistant to or had reduced sensitivity to both PEN and FQs (39% in 2005). Five strains had reduced sensitivity to ceftriaxone, four of which were also PEN and FQ resistant. These four cases were treated with ceftriaxone 250 mg i.m. Follow-up swabs were available in two cases, both tested negative.

Notified cases

A total of 414 gonorrhoea cases were

GONORRHOEA 2006

Table 1. Rectal swabs taken among gonorrhoea patients in general practice and STI clinics, 2006

	M	F
General practice		
Number of cases	217	47
hereof rectal swabs	13%	19%
hereof positives	32%	33%
STI clinics		
Number of cases	101	18
hereof rectal swabs	95%	94%
hereof positives	16%	24%

notified in 2006, including 341 (82%) males and 73 (18%) females. The median age was 32 years for males (range 15-69 years) and 25 years for females (range 16-67 years). A total of 57 (14%) of the cases were immigrants, including 44 males and 13 females. The distribution by county of residence is shown in <u>Table 2</u>.

Table 2. Notified gonorrhoea cases by county, number of cases and incidence per 10⁵, 2006

		Inci-
County	Total	dence
Cph. Municipality	116	23.1
Frb. Municipality	25	27.2
Copenhagen	64	10.3
Frederiksborg	16	4.2
Roskilde	18	7.5
West Zealand	11	3.6
Storstroem	7	2.7
Bornholm	2	4.6
Funen	11	2.3
South Jutland	8	3.2
Ribe	13	5.8
Vejle	20	5.5
Ringkoebing	14	5.1
Aarhus	50	7.6
Viborg	14	6.0
North Jutland	10	2.0
Other/unknown	15	-
Total	414	7.6

A total of 255 (62%) of the notifications were from GPs, while 147 (36%) were from STI clinics. A total of 387 cases were reported by the clinical reporting system as well as the laboratory notification system, 27 cases only by the former, and 10 cases only by the latter.

Mode of transmission

Among males, 147 (43%) were infected via homosexual contact and 151 (44%) via heterosexual contact. In 43 cases, the mode of transmission was not stated.

The median age among those infected via homosexual contact was

No. 17, 2007

32, the same as for all males. A total of 127 (86%) of those infected via homosexual contact and 87 (58%) of those infected via heterosexual contact had acquired the infection in Denmark. Among males infected via heterosexual contact, 24 (16%) were infected in Thailand. Male infection contacts and modes of transmission are shown in Table 3.

Table 3. Infection contacts and modes of transmission among males with gonorrhoea, 2006

	Homo- Hetero-		Not			
Infection	sexual		sexual		stated	
contact	No.	(%)	No.	(%)	No.	(%)
Steady						
partner	31	(21)	27	(18)	2	(5)
Casual						
partner	93	(63)	84	(56)	10	(23)
Prostitute	0	(0)	19	(12)	0	(0)
Other	0	(0)	3	(2)	0	(0)
Not st.	23	(16)	18	(12)	31	(72)
Total	147	(100)	151	(100)	43	(100)

Among females, 36 (49%) were infected by a steady partner and 26 (36%) by a casual partner. In six cases, the mode of transmission was not stated. A total of 66 (90%) females had been infected in Denmark, one had been infected abroad, and in six cases the infection country was not stated.

HIV status was stated on 258 (62%) of notifications. A total of 30 gonor-rhoea cases occurred among HIV positive patients, 29 males and one female. Among the HIV positive males, 28 gonorrhoea cases were homosexually transmitted, including 17 by a casual partner, while one case of heterosexual infection occurred. Three males and five females were infected while acting in porn movies.

Comment

The 2006 gonorrhoea occurrence was slightly lower than that of 2005, but the number of female cases rose. The increased occurrence was found among Danish females aged 20-29 years who had been infected in Denmark. However, the majority of cases were males (82%), of whom nearly half were infected homosexually. Rectal gonorrhoea and especially pharyngeal gonorrhoea is usually asymptomatic. Undiagnosed cases may constitute a reservoir. After sending out repeated reminders, the rate of notification increased to 97%. (S. Hoffmann, DBMP, A. Mazick, S. Cowan, Dept. of Epidemiology) 25 April 2007

Individually notifiable diseases

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

Epidemiology, SSI (2007 figures are preliminary)				
Table 1	Week 16 2007	Cum. 2007 ¹⁾	Cum. 2006 1)	
AIDS	4	14	14	
Anthrax	0	0	0	
Botulism	0	0	0	
Cholera	0	0	0	
Creutzfeldt-Jakob	0	3	4	
Diphtheria	0	0	0	
Food-borne diseases	4	151	108	
of these, infected abroad	0	25	28	
Gonorrhoea	3	110	131	
Haemorrhagic fever	0	0	0	
Hepatitis A	0	10	4	
of these, infected abroad	0	4	1	
Hepatitis B (acute)	0	7	9	
Hepatitis B (chronic)	2	77	153	
Hepatitis C (acute)	0	2	3	
Hepatitis C (chronic)	3	89	243	
HIV	5	89	66	
Legionella pneumonia	1	30	21	
of these, infected abroad	0	3	4	
Leprosy	0	0	0	
Leptospirosis	0	4	3	
Measles	0	1	14	
Meningococcal disease	1	11	31	
of these, group B	1	4	16	
of these, group C	0	5	6	
of these, unspec. + other	0	2	9	
Mumps	0	4	8	
Neuroborreliosis	0	25	12	
Ornithosis	0	1	6	
Pertussis (children < 2 years)	2	28	21	
Plague	0	0	0	
Polio	0	0	0	
Purulent meningitis	0	0	0	
Haemophilus influenzae	0	1	1	
•	0	4	$\begin{array}{c c} & 1 \\ & 4 \end{array}$	
Listeria monocytogenes	0	22	28	
Streptococcus pneumoniae	_			
Other aethiology	0 0	3	1	
Unknown aethiology	_	1	8	
Under registration	4	46	-	
Rabies	0	0	0	
Rubella (congenital)	0	0	0	
Rubella (during pregnancy)	0	0	0	
Shigellosis	0	14	21	
of these, infected abroad	0	7	19	
Syphilis	0	28	22	
Tetanus	0	0	0	
Tuberculosis	16	117	109	
Typhoid/paratyphoid fever	0	2	11	
of these, infected abroad	0	2	11	
Typhus exanthematicus	0	1	0	
VTEC/HUS	2	49	37	
of these, infected abroad Tumulative number 2007 and in	0	13	10	

Cumulative number 2007 and in corresponding period 2006

Selected laboratory diagnosed infections

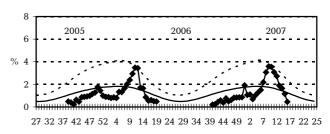
Number of specimens, isolates, and/or notifications received in SSI laboratories

received in SSI laboratories					
Table 2	Week 16 2007	Cum. 2007 ²⁾	Cum. 2006 ²⁾		
Bordetella pertussis					
(all ages)	0	45	86		
Gonococci	10	105	132		
of these, females	2	15	28		
of these, males	8	90	104		
Listeria monocytogenes	1	17	9		
Mycoplasma pneumoniae					
Resp. specimens ³⁾	4	219	202		
Serum specimens 4)	6	236	169		
Streptococci 5)					
Group A streptococci	8	51	54		
Group B streptococci	6	31	33		
Group C streptococci	0	7	7		
Group G streptococci	6	40	40		
S. pneumoniae	24	454	439		
Table 3	Week 14 2007	Cum. 2007 ²⁾	Cum. 2006 ²⁾		
Pathogenic int. bacteria ⁶⁾					
Campylobacter	17	597	454		
S. Enteritidis	1 1	70	80		
S. Typhimurium	4	78	68		
Other zoon. salmonella	8	145	126		
Yersinia enterocolitica	2	80	49		
Verocytotoxin-					
producing E. coli	1	54	32		
Enteropathogenic E. coli	2	40	57		
Enterotoxigenic E. coli	3	37	51		

²⁾ Cumulative number 2007 and in corresponding period 2006

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2005/2006/2007



Week no.

Sentinel ──Basal curve -----Alert threshold

Sentinel: Influenza consultations

(as percentage of total consultations)

Basal curve: Expected frequency of consultations

under non-epidemic conditions

Alert threshold: Possible incipient epidemic

 $^{^{\}it 3)}$ 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