

Laboratory confirmed cases

According to the laboratory notification system, gonorrhoea was diagnosed in 429 patients during 2005; 377 males and 52 females, [Table 1](#). This number of cases equals the 2004 level.

Table 1. Laboratory diagnosed gonorrhoea by gender, 2000-2005

	Total	M	F	MF ratio
2000	335	291	44	6,6
2001	309	259	50	5,2
2002	332	278	53	5,2
2003	258	227	31	7,3
2004	434	382	52	7,3
2005	429	377	52	7,3

* Gender unknown for one patient

A total of 55% of male cases and 50% of female cases were diagnosed in the municipalities of Copenhagen and Frederiksberg (63% and 54% in 2004). Eighteen men had also had gonorrhoea in 2004, ten in 2003 and three in both 2004 and 2003. Eighteen men each had two cases of gonorrhoea in 2005 and three each had three cases. The age range was 15-67 years for men and 16-56 years for women. There was one case of gonorrhoeal conjunctivitis in a female infant.

Pharyngeal and rectal gonorrhoea

According to information from the diagnostic laboratories, 41% of the patients had throat swabs performed, 10% were positive. Among men examined in general practice, the corresponding ratios were 11% and 19%, and for men examined at STI clinics 91% and 7%.

Rectal swabs were performed in 42% of patients, of which 24% were positive. For Copenhagen and Frederiksberg municipalities, the proportion was 62% and 23%, respectively, and for the rest of the country, 29% and 18%, respectively. Rectal swabs were performed less frequently by GPs than STI clinics, [Table 2](#).

Table 2. Rectal swabs taken among gonorrhoea patients in general practice and STI clinics, 2005

	M	F
<u>General practice</u>	231	24
swabs	12%	25%
positive	39%	17%
<u>STI clinics</u>	137	22
swabs	88%	82%
positive	19%	28%

Among men with gonorrhoea, 210 (56%) only had a urethral (U) swab, while 139 (27%) cases had both urethral, rectal (R) and pharyngeal (P) swabs. Among these, 14 (10%) were

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positive by R alone, and three by P alone. Consequently, 17 (12%) would not have been diagnosed with gonorrhoea if they had only been U swabbed. A total of 21 (15%) would not have been diagnosed with pharyngeal gonorrhoea. This condition requires more extensive treatment than U and R gonorrhoea. Nineteen women had swabs taken from the cervix (C), U, R as well as P. Six (32%) of these proved positive by C alone. Among the 51 females with urogenital gonorrhoea, only two had not been C swabbed. No cases were positive by R or P swabs alone.

Resistant gonococci

The frequency of penicillin resistant gonococci was 31% (35% in 2004); 14% were producing penicillinase (12% in 2004). The frequency of fluoroquinolone resistance reached 36% (39% in 2004), and a further 6% of the strains showed reduced sensitivity (8% in 2004). A total of 39% were resistant to or had reduced sensitivity to both penicillin and fluoroquinolones (44% in 2004). Three strains had reduced sensitivity to ceftriaxone. These strains were resistant to penicillin and two were also resistant to fluoroquinolone.

Notified cases

In 2005, there were 444 notified cases of gonorrhoea, 392 men (88%), 51 women (12%) and one infant female. The median age was 32 years (15-67) for men and 25 years (16-56) for women. A total of 69 (16%) were immigrants, including 50 men and 19 women. The proportion of immigrants equalled that of 2004. The distribution by county of residence is shown in [Table 3](#).

Table 3. Notified cases of gonorrhoea by county of residence, 2005

County	Total	%
Copenhagen Municipality	174	39
Frederiksberg Municipality	28	6
Copenhagen County	64	14
Frederiksberg	9	2
Roskilde	16	4
West Zealand	8	2
Storstrøm	9	2
Bornholm	3	1
Funen	18	4
South Jutland	7	2
Ribe	12	3
Vejle	10	2
Ringkøbing	4	1
Aarhus	42	9
Viborg	3	1
North Jutland	8	2
Other/unknown	29	7
Total	444	100

Of these notifications, 238 (54%) were forwarded by GPs, while 190 (43%) were reported by STI clinics.

In 408 cases, there were notifications as well as laboratory confirmation, in 36 cases only notifications, and in 21 cases only laboratory confirmation.

Transmission

Among men, 203 (52%) were infected via homosexual contact and 144 (37%) via heterosexual contact. For 45 men, this was not stated. The median age among those infected via homosexual contact was 31 years. A total of 173 (85%) of those infected via homosexual contact and 92 (64%) of those infected via heterosexual contact acquired the infection in Denmark. Among men infected heterosexually, 20 (14%) were infected in Thailand. Male infection contacts are shown in [Table 4](#).

Table 4. Infection contacts among men with gonorrhoea, 2005

Infection contact	Homo-	Hetero-	Not
	sexual	sexual	stated
	No. (%)	No. (%)	No. (%)
Steady partner	32 (16)	30 (21)	3 (7)
Casual partner	143 (70)	87 (60)	8 (18)
Prostitute	0 (0)	17 (12)	1 (2)
Not stated	28 (14)	10 (7)	33 (73)
Total	203 (100)	144 (100)	45 (100)

Among women, 22 (43%) were infected by steady partners and 23 (45%) by casual sexual contacts. The infection mode was unstated for six women. One infant was infected perinatally. A total of 40 (78%) women were infected in Denmark. HIV status was stated on 281 (63%) of the notifications. A total of 31 cases occurred among HIV-positive patients, all men. Among these gonorrhoea cases, 30 were infected homosexually, 22 of them by casual partners, while one was infected by heterosexual contact.

Comments

The 2005 gonorrhoea incidence remained at the 2004 level. Nearly 90% of cases were men, among whom 52% were infected by homosexual contact. This proportion fell within the range observed over the previous 10 years (35%-61%). As approx. 40% of the gonococci strains are not fully sensitive to oral antibiotics, culture and susceptibility testing are essential. To reduce the risk of overlooking gonorrhoea, swabs should be taken from urethra, throat and rectum in both genders, and from the cervix in females.

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Individually notifiable diseases

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

Table 1	Week 12 2006	Cum. 2006 ¹⁾	Cum. 2005 ¹⁾
AIDS	2	11	19
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	6	2
Diphtheria	0	0	0
Foodborne diseases	8	93	73
of these, infected abroad	3	23	14
Gonorrhoea	9	107	141
Haemorrhagic fever	0	0	0
Hepatitis A	0	3	27
of these, infected abroad	0	0	7
Hepatitis B (acute)	1	5	14
Hepatitis B (chronic)	2	133	37
Hepatitis C (acute)	0	1	1
Hepatitis C (chronic)	7	203	70
HIV	7	52	80
Legionella pneumonia	1	16	16
of these, infected abroad	0	2	2
Leprosy	0	0	0
Leptospirosis	0	3	5
Measles	1	9	0
Meningococcal disease	0	17	23
of these, group B	0	11	15
of these, group C	0	1	2
of these, unspec. + other	0	5	6
Mumps	0	8	2
Neuroborreliosis	1	14	15
Ornithosis	1	5	4
Pertussis (children < 2 years)	1	18	59
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	0
Listeria monocytogenes	0	2	1
Streptococcus pneumoniae	0	13	39
Other aethiology	0	1	2
Unknown aethiology	1	4	3
Under registration	4	24	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	18	27
of these, infected abroad	0	16	25
Syphilis	1	18	24
Tetanus	0	0	2
Tuberculosis	9	89	94
Typhoid/paratyphoid fever	0	8	6
of these, infected abroad	0	8	5
Typhus exanthematicus	0	0	0
VTEC/HUS	4	27	32
of these, infected abroad	1	9	17

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 12 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Bordetella pertussis (all ages)	9	71	190
Gonococci	7	97	106
of these, females	2	22	17
of these, males	5	75	89
Listeria monocytogenes	0	6	8
Mycoplasma pneumoniae			
Resp. specimens ³⁾	7	191	516
Serum specimens ⁴⁾	5	142	370
Streptococci ⁵⁾			
Group A streptococci	0	36	38
Group B streptococci	0	24	11
Group C streptococci	0	6	5
Group G streptococci	0	28	33
S. pneumoniae	29	341	358
Table 3	Week 10 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Pathogenic int. bacteria ⁶⁾			
Campylobacter	29	329	422
S. Enteritidis	7	57	65
S. Typhimurium	3	56	70
Other zoon. salmonella	7	92	93
Yersinia enterocolitica	3	32	42
Verocytotoxin-producing E. coli	2	18	21
Enteropathogenic E. coli	2	42	44
Enterotoxigenic E. coli	3	39	39

²⁾ Cumulative number 2006 and in corresponding period 2005

³⁾ Resp. specimens with positive PCR

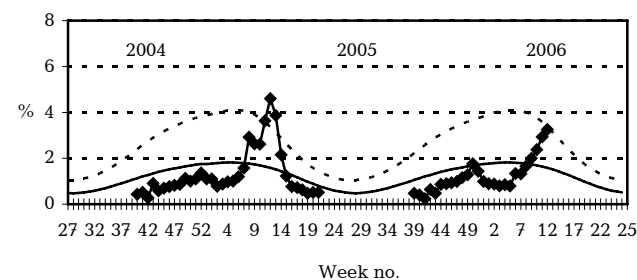
⁴⁾ Serum specimens with pos. complement fixation test

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 — 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

29 March 2006