

Laboratory-diagnosed cases

In 2002, gonorrhoea was diagnosed in 332 patients: 278 males, 53 females and one person whose gender was not stated, [table 1](#). This represents an increase of 7% relative to 2001. A total of 50% of cases among males were diagnosed in Copenhagen and Frederiksberg.

Table 1. Patients with laboratory-diagnosed gonorrhoea by gender, 1997-2002

	Total	M	F	M/F ratio
1997	189	154	35	4.4
1998	211	187	24	7.8
1999	334	291	43	6.8
2000	335	291	44	6.6
2001	309	259	50	5.2
2002	332	278	53	5.2

Gonorrhoea in the larynx and rectum

Among males with gonorrhoea, 20% were swabbed in the larynx, and of these 9% were positive. Among females, these proportions were 17% and 11%, respectively. Among males, 22% were swabbed in the rectum, and of these 31% were positive; for the municipalities of Copenhagen and Frederiksberg, these proportions were 40% and 31%, and for the rest of the country 3% and 25%, respectively.

Resistant gonococci

Frequency of penicillin-resistant gonococci was 19%, decreasing evenly from 40% in 1999; 13% were penicillinase-producing. The frequency of fluoroquinolone resistance increased to 20% after a decrease from 27% in 1999 to 11% in 2001. A total of 10% were both penicillin- and fluoroquinolone-resistant. All strains were ceftriaxone-sensitive.

Treatment

If treatment is commenced before the resistance pattern is available, a choice may be made between oral fluoroquinolone and intramuscular ceftriaxone, both in a single dose. In the event of verified uncomplicated penicillin-sensitive urogenital gonorrhoea, pivampicillin may be used in combination with probenecid, both orally in a single dose.

Follow-up culture

A follow-up culture should be performed as soon as possible from all patients treated with antibiotics other than ceftriaxone, though no earlier than three days after the course of treatment is completed. This also applies for symptom-free patients.

GONORRHOEA 2002

Table 2. Notified cases of homosexual and heterosexual males with gonorrhoea by country of infection, 2002. In () number of infected males as a percentage

Country of infection	Homosexuals			Heterosexuals			Total		
	2002	2002	2001	2002	2002	2001	2002	2002	2001
Denmark	70	(37)	(42)	63	(33)	(10)	137	(72)	(58)
Rest of Europe	7	(4)	(7)	11	(6)	(5)	18	(9)	(12)
Thailand	-	(-)	(-)	8	(4)	(11)	10	(5)	(12)
Rest of Asia	-	(-)	(1)	7	(4)	(4)	7	(4)	(5)
Africa	-	(-)	(1)	-	(-)	(1)	-	(-)	(2)
American continent	1	(1)	(1)	4	(2)	(-)	5	(3)	(1)
Greenland	-	(-)	(-)	-	(-)	(1)	-	(-)	(1)
Not stated	5	(3)	(4)	6	(3)	(5)	13	(7)	(9)
Total	83	(44)	(55)	99	(52)	(36)	190	(100)	(100)

Notified cases

In 2002, there were 227 notified cases of gonorrhoea, 190 (84%) males and 37 (16%) females. This is an increase of 75% compared with 2001. The number of notified cases represents 68% of the diagnosed cases (42% in 2001). The median age was 32 years for males (range: 18-72 years) and 27 years for females (range: 14-62 years). A total of 37 were immigrants (16%): 29 males and eight females. A total of 111 patients (49%) were from Greater Copenhagen, 24 (11%) from Funen County, 14 (6%) from Aarhus and 14 (6%) from Frederiksberg County. A total of 40% of the notifications came from general practitioners, while 55% came from STD clinics. Most of the patients (63%) were investigated on their own initiative, 27% on the doctor's initiative, and 6% were found by contact tracing. For 134 (59%) patients it was stated that contact tracing would be carried out.

Transmission

Among males, 99 (52%) were infected through heterosexual contact and 83 (44%) through homosexual contact. For eight males, this information was not available. Most of both heterosexual and homosexual males were infected in Denmark, [table 2](#). Compared with 2001, both the number and proportion of heterosexual males increased. A total of 59 of these stated a casual contact as the source of infection, 15 a regular partner and ten a prostitute. Among homosexual males, 69 (83%) were infected by a casual contact. Among homosexual males, 76% were investigated at an STD clinic, while 54% of the heterosexuals were investigated by a general practitioner, and 40% at an STD clinic. Of the 37 females with gonorrhoea for whom notification was made, 84% were infected in Denmark. A total of 14 (38%) females were infected by a

regular partner, and 12 through casual contact. Two females were prostitutes, of these one was found by contact tracing. A total of 22 (59%) females took the initiative to be investigated, eight were found by contact tracing, and seven on the initiative of a doctor. HIV status was stated for 64% of the notified cases. A total of 17 males, 15 heterosexuals and two homosexuals, were HIV-positive; in seven of these cases, contact tracing would not be performed. Fourteen of the HIV-positive heterosexuals were infected with gonorrhoea by a casual partner. The available data suggest that 29 of the patients had suffered from gonorrhoea several times since 1994. However, this is somewhat uncertain, as notification of gonorrhoea is anonymous.

Comments

In 2002, an increase of 7% was seen for culture-confirmed gonorrhoea, and 75% in the number of notified cases, particularly of heterosexual males. In 2002, reminders were issued that gonorrhoea is notifiable. This may explain the increased notification, which has been observed mainly among general practitioners. This presumably also explains the change in distribution between heterosexual and homosexual males. Among heterosexuals, females are more often infected by their partner than males, who are most often infected by casual contacts. (S.V. Hjorth, S. Hoffmann, DBMP, G.H. Kock-Hansen, E. Smith, Department of Epidemiology)

ELSE SMITH IS LEAVING

I am leaving my job as head of the department at the end of 2003 as I have taken on a new job. I would like to thank everybody I have worked with in the course of almost 15 years.

(E. Smith, Dept. of Epidemiology)

17 December 2003

Patients with laboratory-diagnosed gonorrhoea, by sex and county

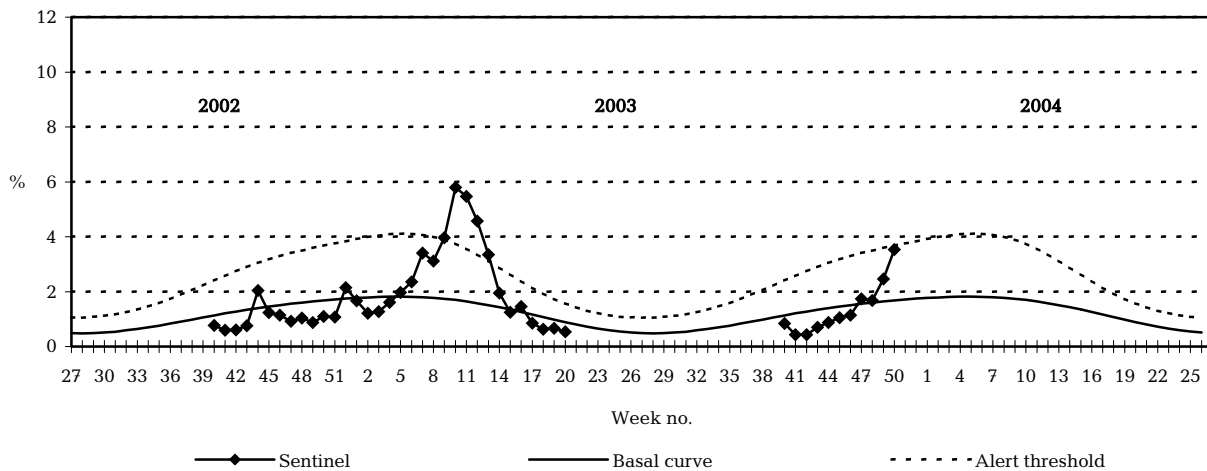
3rd quarter of 2003 compared with the corresponding period of 2002

County	3rd quarter 2003			3rd quarter 2002		
	M	F	Total	M	F	Total
Cph. & Frb. Municipalities	28	2	30	34	9	43
Copenhagen County	5	-	5	9	1	10
Frederiksborg	3	-	3	3	-	3
Roskilde	2	-	2	4	-	4
West Zealand	1	2	3	2	-	2
Storstrøm	3	-	3	2	-	2
Bornholm	-	-	-	-	-	-
Funen	2	-	2	7	1	8
South Jutland	-	-	-	2	-	2
Ribe	-	-	-	3	-	3
Vejle	2	1	3	3	1	4
Ringkøbing	-	1	1	2	-	2
Aarhus	6	1	7	4	-	4
Viborg	-	-	-	1	-	1
North Jutland	-	-	-	3	1	4
Total	52	7	59	79	13	92

(DBMP)

Sentinel surveillance of influenza activity

Weekly percentage of consultations, 2002/2003/2004



- Sentinel:** Influenza consultations as percentage of total consultations
Basal curve: Expected frequency of influenza consultations under non-epidemic conditions
Alert threshold: Possible incipient epidemic

(Dept. of Epidemiology)

Secretion specimens received from the sentinel surveillance

Week no.	2003											2004																	
	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. received	0	5	6	12	9	10	23	1																					
Influenza A						6	7																						
A/H3				3	1																								
A/H1																													
Influenza B																													

(Depts. of Epidemiology & Virology)