



## GONORRHOEA 2001

No. 50, 2002

### Laboratory-diagnosed cases

In 2001, gonorrhoea was diagnosed in 309 patients, 259 men and 50 women, [table 1](#). This represents a decline in incidence relative to 2000. The M:F ratio was 5.2. A total of 47% of cases of gonorrhoea among men were diagnosed in the Municipalities of Copenhagen and Frederiksberg, as against 51% in 2000.

**Table 1. Patients with laboratory-diagnosed gonorrhoea by gender, 1997-2001**

	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

### Pharyngeal and rectal gonorrhoea

Among men with gonorrhoea, 18% had pharyngeal swabs taken, 17% of which were positive. For women, the figures were 12% and 0%, respectively. A rectal swab was taken from 21% of men with gonorrhoea, 37% of whom were positive. In the Municipalities of Copenhagen and Frederiksberg, these proportions were 38% and 28%, respectively, and for the rest of the country 5% and 100%.

### Resistant gonococci

The frequency of penicillin-resistant gonococci was 26% (34% in 2000), including 16% which were penicillinase-producing. The frequency of fluoroquinolone resistance fell from 15% in 2000 to 11% in 2001. Resistance to both penicillin and fluoroquinolone was encountered in 8% of strains (7% in 2000).

### Repeat culture

Ideally, all patients should have a follow-up culture performed after treatment, however, at least three days after completion. This also applies to patients who have become asymptomatic.

### Notified cases

In 2001, 130 cases of gonorrhoea were notified, 107 men (82%) and 23 women (18%). The number of women increased slightly compared with previous years. A total of 107 patients were Danish by birth (82%), and 19 were immigrants (15%). In four cases, country of origin was not stated. Seven immigrants came from Europe, including four from Turkey, five from Asia, two from Greenland, and one from Africa.

The median age was 31 years for men (range: 18-58) and 23 years for women (range:16-46).

**Table 2. Number of notified cases of gonorrhoea by mode of transmission, gender and country of infection, 2001**

	Homo-sexual		Hetero-sexual		Unknown/Not stated	Total		Total (%)
	M	F	M	F	M	M	F	
Denmark	45	11	17	-	6	62	17	79 (61)
Thailand	-	12	1	-	1	13	1	14 (11)
Rest of Europe	7	5	1	-	-	12	1	13 (10)
Rest of Asia	1	4	-	-	-	5	-	5 (4)
Africa	1	1	1	-	-	2	1	3 (2)
United States	1	-	-	-	-	1	-	1 (1)
Greenland	-	1	1	-	-	1	1	2 (2)
Not stated	4	5	2	-	1	11	2	13 (10)
Total	59	39	23	-	9	107	23	130 (100)

Seventy-two patients were residents of Greater Copenhagen (55%). The number of notified cases represents 42% of laboratory-diagnosed cases. Thirty-four percent of notifications came from general practitioners, while 65% came from sexually transmitted diseases clinics. More than half of the latter came from the clinic at Bispebjerg Hospital. Most patients (67%) were investigated on their own initiative, while 25% were investigated on the doctor's initiative. Seven percent were discovered through contact tracing. In 60 cases (46%), it was stated that contact tracing was to be carried out.

### Transmission

Fifty-nine men were infected by other men (55%) and 39 were heterosexually infected (36%), [table 2](#). Casual sexual contact was implicated in 52 men (49%). Among heterosexually infected men, nine were infected by a sex worker (23%), and six acquired the infection in Thailand. A total of 45 homosexually infected (76%) and 11 heterosexually infected men (28%) acquired the infection in Denmark. Ten (17%) of those infected by homosexual contact acquired the infection abroad. Among the heterosexually infected men, 23 (59%) acquired the infection abroad, including 12 in Thailand. Of these, 11 were Danish by birth. All 23 women were infected by heterosexual contact. Four women were immigrants. A total of 17 women were infected in Denmark (74%), including all four female immigrants. Casual sexual contact was implicated in 59 infected persons (45%), while 31 cases were infected by a steady partner (24%). The figures were 49% and 18% among men, respectively, and 30% and 52% among women. Infection through casual sexual contact was implicated in 12 heterosexual men (31%), and 38 homosexual men (64%).

Five persons were HIV-positive, four homosexual and one heterosexual man. Three of the homosexuals were infected by casual sexual contact. All five were infected with gonorrhoea in Denmark. In 30 cases (23%), HIV status was unstated.

In 2001, notification of gonorrhoea was made on two occasions for four Danish homosexual men aged 23-29 years, three of whom have also been notified in 2002. All four had negative follow-up cultures between notifications. None were known to be HIV-positive.

### Comments

The incidence of gonorrhoea in Denmark is still low and declining gently. However, the number of women cases has risen slightly. Half of the women were infected by a steady partner. Many of the Danish men infected by heterosexual contact were infected in Thailand. It appears that an increasing number of homosexual men have repeated infections.

A greater proportion of men with gonorrhoea had pharyngeal and rectal swabs taken. The proportion of positive findings for pharyngeal swabs decreased, while that for rectal swabs increased. The proportion of those undergoing rectal swabbing showed great geographic variation. The use of pharyngeal and rectal swabs is encouraged, since gonorrhoea affecting these areas is often asymptomatic and thus constitutes an important reservoir of infection. The frequency of fluoroquinolone-resistant gonococci is still declining. As the notification rate is still unsatisfactory, this year an attempt to secure better coverage of the clinical reports has therefore been established.

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## Patients with laboratory-diagnosed gonorrhoea, by sex and county

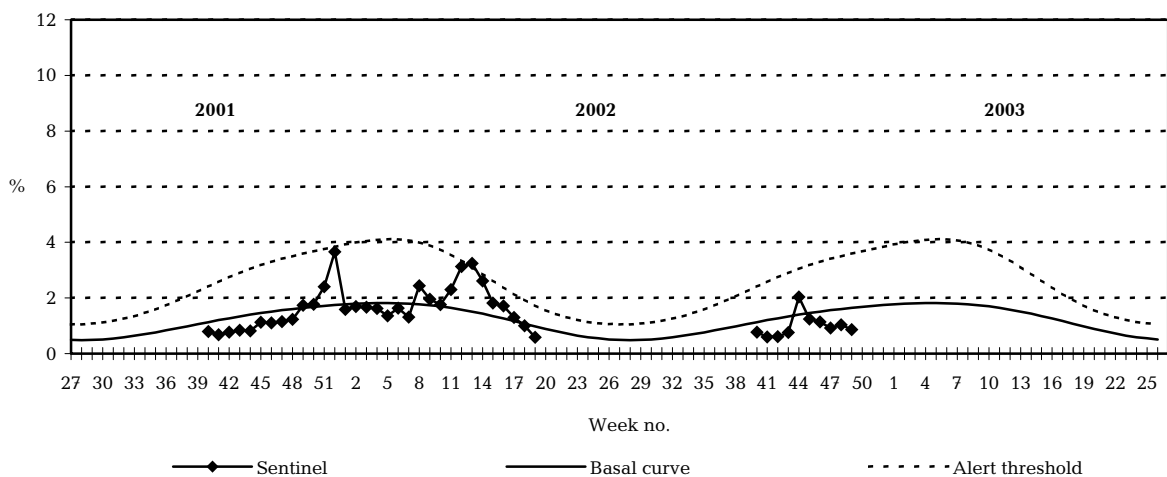
3rd quarter of 2002 compared with the corresponding period in 2001

County	3rd quarter 2002			3rd quarter 2001		
	M	F	Total	M	F	Total
Cph. & Frb. Municipalities	34	9	43	39	6	45
Copenhagen	9	1	10	2	1	3
Frederiksborg	3	-	3	5	1	6
Roskilde	4	-	4	3	-	3
West Zealand	2	-	2	3	-	3
Storstrøm	2	-	2	1	1	2
Bornholm	-	-	-	1	-	1
Funen	7	1	8	1	-	1
South Jutland	2	-	2	1	1	2
Ribe	3	-	3	4	-	4
Vejle	3	1	4	7	-	7
Ringkøbing	2	-	2	2	-	2
Aarhus	4	-	4	10	-	10
Viborg	1	-	1	-	-	-
North Jutland	3	1	4	5	1	6
<b>Total</b>	<b>79</b>	<b>13</b>	<b>92</b>	<b>84</b>	<b>11</b>	<b>95</b>

(Dept. of Respiratory Infections, Meningitis and STIs)

## Sentinel surveillance of influenza activity

Weekly percentage of consultations, 2001/2002/2003



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

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