



## Laboratory confirmed cases

2007 saw a total of 101 syphilis cases compared with 75 cases in 2006 and 127 in 2005. One case was congenital, the others acquired (duration < 2 years), [Table 1](#).

**Table 1. Laboratory diagnosed syphilis cases by sex, 2007**

Diagnosis	M	F
Newly acquired	84	3
Acquired, late stage	11	2
Congenital	0	1
Total	95	6

## Acquired syphilis

The majority (78%) was  $\geq 30$  years old, [Table 2](#), and most cases were detected in the Copenhagen Municipality.

**Table 2. Laboratory diagnosed acquired cases by age and sex, 2007**

Age	Newly acquired		Late stage	
	M	F	M	F
15-19	2	0	0	0
20-24	6	1	2	1
25-29	8	1	0	0
30-39	22	0	2	1
40-49	30	0	7	0
50+	16	1	0	0
Total	84	3	11	2

## Congenital syphilis

An immigrant female gave birth in 31<sup>st</sup> gestational week to a stillborn child. She had not been screened for syphilis during the initial part of her pregnancy and syphilis was only suspected at birth, at which point she had the following counts: WR 10, RPR 128, AFG 14, AFM: 8 and FTA-ABS: K: 4+, IgG: 1+, IgM: 4+. Treponemae were found in the placenta. Further investigation of the foetus was not permitted.

## Notified cases

2007 saw a total of 89 notified cases of syphilis. The Syphilis laboratory has reported that nine of these were late stage cases which are non-contagious and therefore not notifiable. Consequently, 80 cases of newly acquired syphilis were notified, 75 (94%) males and five (6%) females. In three cases, the diagnosis was made without the participation of the SSI laboratory. Accordingly, 91% of the laboratory diagnosed cases were notified, compared with 96% in 2006.

Among males, 61 (81%) were Danish-born and 14 (19%) immigrants. The median age for males was 40 years (range 18-70). Among males, 66 (88%) were infected via homosexual contact and eight (11%) via heterosexual contact. For one male,

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the mode of infection was not stated. Among males infected via homosexual contact, 52 (79%) were infected in Denmark and fourteen (14%) in other countries. In five cases (7%), the country of infection was unknown.

Among males infected via heterosexual contact, three were infected in Denmark and four in other countries. For one male, the country of infection was not stated.

The females counted two Danish-born females and three immigrants. The median age was 27 years (range 20-53). Two were infected in Denmark, two abroad, and in one case the country of infection was not stated.

Among the females, three were infected by a steady partner, one by a casual partner, and in one case the source of infection was not stated. The majority of males were infected by a casual partner, [Table 3](#).

**Table 3. Infection contacts among males with syphilis, 2007**

Infect. contact	Homo-sexual		Hetero-seksuel		Not stat.
	No.	(%)	No.	(%)	
Steady ptn.	13	(20)	3	(38)	0
Casual ptn.	40	(60)	5	(62)	0
Not stated	13	(20)	0	(00)	1
Total	66	(100)	8	(100)	1

HIV status was stated in 75 (94%) of notifications, including 63 (95%) of the notifications from homosexually infected males. A total of 31 syphilis cases occurred among HIV positives, all homosexually infected males. Among these, 25 were infected in Denmark and six abroad. Of the five notifications in which HIV status was not stated, three were from STI clinics and two from GPs.

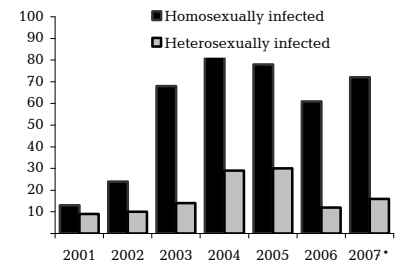
Eight cases of newly acquired syphilis had previously had syphilis at least once before in the 2003-2006 period. Seven of these were HIV positives, including three who had tested HIV negative at a previous syphilis diagnosis.

As for the laboratory notified cases, the majority of notifications were made by STI clinics, [Table 4](#).

**Table 4. Acquired syphilis cases by place of diagnosis, 2007**

Reported by	Lab. diagn. cases		Notified cases	
	No.	(%)	No.	(%)
GP	20	(20)	14	(18)
STI clinic	62	(61)	37	(46)
Other	19	(19)	29	(36)
Total	101	(100)	80	(100)

**Figure 1. Acquired syphilis notified in 2001-2007, by mode of infection**



\* Newly acquired as well as late stage cases have been included to facilitate comparison with previous years when late stage cases could not be separated.

The second most frequent place of diagnosis was infectious disease departments with 24 (30%) of notifications.

## Commentary

After the outbreak among homosexual males, which began in 2003, EPI-NEWS 16/04, the number of notified syphilis cases decreased in 2006. In 2007, the number rose once again, [Figure 1](#). In the first nine months of 2008, a total of 72 notifications concerning syphilis diagnoses made in 2008 have been received. Thus, the level does not seem to be decreasing. Homosexual males still account for the majority of the cases and a considerable proportion of this group (50%) is also infected with HIV. Consequently, syphilis still seems to serve as an indicator of unsafe sex among HIV positive homosexual males.

Persons who have syphilis are at increased risk of infection with HIV when exposed to HIV. Furthermore, syphilis increases the risk that HIV infected persons may infect others with HIV. Consequently, there is a prophylaxis potential in HIV-testing the group of patients diagnosed with syphilis, and also in testing HIV patients with casual partners regularly for other STDs, including syphilis. Congenital syphilis remains a rare diagnosis in Denmark. In 1998 general screening of pregnant females was replaced by screening of pregnant females belonging to risk groups, including immigrants from countries with a high syphilis occurrence. The success rate for this screening is unknown. Congenital syphilis is not always symptomatic, and it is therefore not known how frequently unacknowledged congenital syphilis occurs in Denmark. (N. Axelsen, Dept. of Clinical Biochemistry, L. Finne, G. St-Martin, S. Cowan, Dept. of Epidemiology)

## Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2008 figures are preliminary)

Table 1	Week 40 2008	Cum. 2008 <sup>1)</sup>	Cum. 2007 <sup>1)</sup>
AIDS	0	28	43
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	1	0
Creutzfeldt-Jakob	0	2	6
Diphtheria	0	0	0
Food-borne diseases	23	654	503
of these, infected abroad	3	109	98
Gonorrhoea	6	300	281
Haemorrhagic fever	0	0	0
Hepatitis A	1	36	19
of these, infected abroad	1	19	9
Hepatitis B (acute)	0	19	22
Hepatitis B (chronic)	0	142	263
Hepatitis C (acute)	0	6	5
Hepatitis C (chronic)	7	358	488
HIV	0	181	231
Legionella pneumonia	2	96	84
of these, infected abroad	0	31	22
Leprosy	0	0	0
Leptospirosis	0	2	11
Measles	0	10	2
Meningococcal disease	0	41	57
of these, group B	0	17	32
of these, group C	0	12	18
of these, unspec. + other	0	12	7
Mumps	0	22	6
Neuroborreliosis	4	44	73
Ornithosis	0	2	7
Pertussis (children < 2 years)	1	82	61
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	2	2
Listeria monocytogenes	0	1	9
Streptococcus pneumoniae	0	68	83
Other aethiology	0	17	12
Unknown aethiology	0	16	12
Under registration	2	9	-
Rabies	0	0	0
Rubella (congenital)	0	2	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	63	177
of these, infected abroad	0	51	34
Syphilis	9	104	75
Tetanus	0	1	2
Tuberculosis	0	304	303
Typhoid/paratyphoid fever	0	27	17
of these, infected abroad	0	21	16
Typhus exanthematicus	0	0	2
VTEC/HUS	1	115	122
of these, infected abroad	0	37	39

<sup>1)</sup> Cumulative number 2008 and in corresponding period 2007

## Selected laboratory diagnosed infections

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

Table 2	Week 40 2008	Cum. 2008 <sup>2)</sup>	Cum. 2007 <sup>2)</sup>
Bordetella pertussis (all ages)	1	151	157
Gonococci	2	279	275
of these, females	0	57	42
of these, males	2	222	233
Listeria monocytogenes	3	40	41
Mycoplasma pneumoniae			
Resp. specimens <sup>3)</sup>	3	64	284
Serum specimens <sup>4)</sup>	0	65	341
Streptococci <sup>5)</sup>			
Group A streptococci	3	115	89
Group B streptococci	6	99	74
Group C streptococci	1	15	17
Group G streptococci	2	102	95
S. pneumoniae	18	717	789
Table 3	Week 38 2008	Cum. 2008 <sup>2)</sup>	Cum. 2007 <sup>2)</sup>
MRSA	18	510	449
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	16	2218	3066
S. Enteritidis	27	469	411
S. Typhimurium	74	1550	257
Other zoon. salmonella	22	762	571
Yersinia enterocolitica	1	210	209
Verocytotoxin- producing E. coli	5	116	126
Enteropathogenic E. coli	16	175	141
Enterotoxigenic E. coli	9	268	225

<sup>2)</sup> Cumulative number 2008 and in corresponding period 2007

<sup>3)</sup> Resp. specimens with positive PCR

<sup>4)</sup> Serum specimens with pos. complement fixation test

<sup>5)</sup> Isolated in blood or spinal fluid

<sup>6)</sup> See also [www.germ.dk](http://www.germ.dk)