



Laboratory confirmed cases

2008 saw a total of 153 cases of acquired syphilis (101 in 2007, the majority of which were newly acquired cases, [Table 1](#)). No congenital cases were detected.

Table 1. Laboratory confirmed syphilis cases, by age, sex and stage, 2008

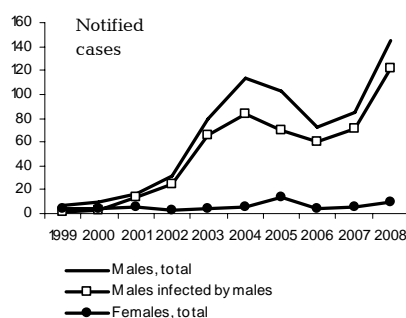
Age	Newly acq		Late stage	
	M	F	M	F
15-19	2	0	0	0
20-24	3	1	0	0
25-29	11	0	1	1
30-39	35	1	6	6
40-49	39	2	6	1
50+	35	1	2	0
Total	125	5	15	8

Notified cases

Notifiability for syphilis comprises "newly acquired syphilis" (syphilis *aquisita recens*), i.e. cases in which infection is estimated to have occurred within two years prior to the date of diagnosis.

In 2008 no cases of congenital syphilis were notified. A total of 154 cases of newly acquired syphilis were notified (91 in 2007), [Figure 1](#).

Figure 1. Notified newly acquired syphilis cases, by sex and source of infection, 1999-2008



[Table 2](#) shows the distribution by country area.

145 (94%) of the notified cases were males and 9 (6%) were females. Among the 145 males, 126 (87%) were born in Denmark, 13 (9%) were immigrants, four were tourists and in two cases the country of origin was not stated. The median age for males was 41 years (range 18-74). Among the females, three were Danish-born, four were immigrants, one was a tourist and in one case the country of origin was not stated. The median age for females was 35 years (range 22-49).

Mode of transmission

A total of 122 males (84%) were infected by males (MSM), 17 (12%) by

SYPHILIS 2008

Table 2. Notified, newly acquired syphilis cases and incidence per 10⁵ by country area, 2008

Area	No.	Incidence
		pr. 10 ⁵
Copenhagen City	88	13.4
Copenhagen subs	14	2.8
Northern Zealand	6	1.4
Bornholm	0	0
Eastern Zealand	0	0
W & S Zealand	5	0.9
Funen	1	0.2
Southern Jutland	2	0.3
Western Jutland	6	1.4
Eastern Jutland	10	1.2
Northern Jutland	6	1.0
Other/unknown	16	-
Total	154	2.8

females and in six cases the sex of the infection source was not stated. Among MSM, 91 (75%) of the 122 were infected in Denmark and 18 (15%) abroad, while the country of infection was not stated in 13 cases. Among heterosexually infected males, six were infected in Denmark, six abroad and in five cases the country of infection was not stated. Among females, the country of infection was known in five cases of whom four were infected in Denmark.

HIV and syphilis

HIV status was known for 135 males, including 70 (52%) HIV positives, and for six females who were all HIV negatives. For the remaining ten males and three females, HIV status was not stated.

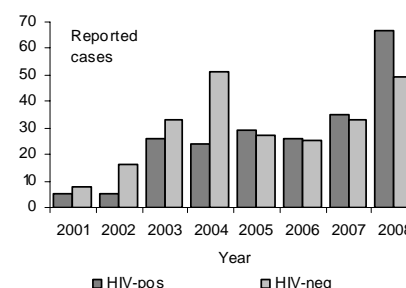
Among MSM, 58% of the cases for whom HIV-status was stated were HIV-positives. Among heterosexually infected males, the corresponding share was 7%. The share of HIV infected cases among the homosexually infected males has shown an increasing trend in later years, [Figure 2](#).

Cases of reinfection

The current database of notified syphilis cases covers cases from 1994 onwards. Since 2002, cases of reinfection among persons who have previously been notified with newly acquired syphilis have been recorded. All cases of reinfection occurred in males.

In 2006, 10% of the notified males had one or more previous syphilis cases; in 2007 this figure reached 14% and in 2008 12%. In the period 1994-2008, a total of 51 males were notified with reinfection. Among

Figure 2. HIV positives and HIV negatives among MSM with known HIV status, 2001-2008



these, 43 were infected by males, one was infected by a female and in seven cases the source of infection was not stated. Among the 51, who had been infected several times, 27 were HIV-positives when initially diagnosed with syphilis, and 10 were HIV-negative both at their first and subsequent notifications. Seven cases were HIV-negatives at the time of their first notification, but tested positive subsequently. In seven cases the HIV status was not stated.

Commentary

The number of notified syphilis cases increased from 1999 to 2004, [Figure 1](#), partly because the share of those diagnosed who were also notified rose from 34% to 75%, and partly because of an outbreak among MSM in 2003, EPI-NEWS 15-16/04. Since 2006, another increase has been observed and the trend seems to continue in 2009. The increase occurs among MSM alone. More than half of the notified MSM were HIV-positives; a share which has never been higher than now.

Several of the HIV-positive MSM who were notified with syphilis were HIV-negatives at previous notifications. This shows that syphilis infection is transferred from HIV-positive males to HIV-negatives who are infected with syphilis as well as HIV. This trend is alarming and clearly indicates the importance of using protective measures for new and changing sexual partners, particularly among MSM, EPI-NEWS 41/08. The majority of the notified were older than 30 years. This is different from gonorrhoea for which a trend towards younger and heterosexually infected cases has been observed in later years.

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Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2009 figures are preliminary)

Table 1	Week 22 2009	Cum. 2009 ¹⁾	Cum. 2008 ¹⁾
AIDS	2	13	14
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob			
Diphtheria	0	0	0
Food-borne diseases	12	167	158
of these, infected abroad	0	27	31
Gonorrhoea	9	230	140
Haemorrhagic fever	0	0	0
Hepatitis A	1	11	18
of these, infected abroad	0	6	9
Hepatitis B (acute)			7
Hepatitis B (chronic)			73
Hepatitis C (acute)			4
Hepatitis C (chronic)			142
HIV	0	86	106
Legionella pneumonia	4	52	43
of these, infected abroad	0	6	15
Leprosy	0	0	0
Leptospirosis	0	0	2
Measles	0	9	6
Meningococcal disease	0	31	33
of these, group B	0	16	16
of these, group C	0	11	7
of these, unspec. + other	0	4	10
Mumps	0	8	18
Neuroborreliosis	0	4	20
Ornithosis	0	2	1
Pertussis (children < 2 years)	5	51	47
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	2
Listeria monocytogenes	0	2	1
Streptococcus pneumoniae	0	37	53
Other aethiology	0	7	15
Unknown aethiology	0	5	14
Under registration	6	31	-
Rabies	0	0	0
Rubella (congenital)	0	0	1
Rubella (during pregnancy)	0	0	0
Shigellosis	1	43	32
of these, infected abroad	0	31	27
Syphilis	3	114	37
Tetanus	0	0	0
Tuberculosis	6	166	167
Typhoid/paratyphoid fever	0	8	14
of these, infected abroad	0	5	12
Typhus exanthematicus	0	0	0
VTEC/HUS	1	44	54
of these, infected abroad	0	9	18

¹⁾ Cumulative number 2009 and in corresponding period 2008

Selected laboratory diagnosed infections

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

Table 2	Week 22 2009	Cum. 2009 ²⁾	Cum. 2008 ²⁾
Bordetella pertussis (all ages)	8	76	60
Gonococci	9	182	160
of these, females	2	40	31
of these, males	7	142	129
Listeria monocytogenes	1	32	19
Mycoplasma pneumoniae			
Resp. specimens ³⁾	1	30	44
Serum specimens ⁴⁾	1	62	52
Streptococci ⁵⁾			
Group A streptococci	5	86	78
Group B streptococci	3	50	56
Group C streptococci	0	14	6
Group G streptococci	7	74	55
S. pneumoniae	31	631	549
Table 3	Week 20 2009	Cum. 2009 ²⁾	Cum. 2008 ²⁾
MRSA	11	258	211
Pathogenic int. bacteria ⁶⁾			
Campylobacter	62	681	672
S. Enteritidis	11	115	104
S. Typhimurium	21	355	323
Other zoon. salmonella	10	261	319
Yersinia enterocolitica	9	99	124
Verocytotoxin-producing E. coli	3	46	46
Enteropathogenic E. coli	6	58	30
Enterotoxigenic E. coli	1	93	112

²⁾ Cumulative number 2009 and in corresponding period 2008

³⁾ Resp. specimens with positive PCR

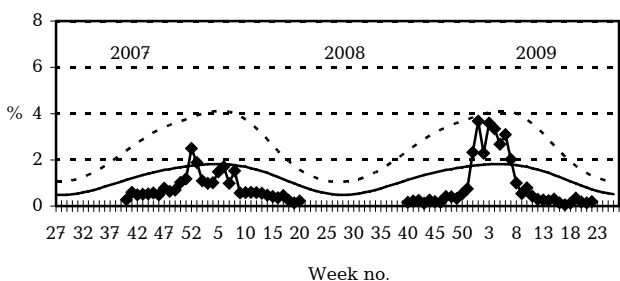
⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2007/2008/2009



◆ 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