



In 2009, a total of 326 syphilis cases were notified, including 43 cases of late-stage syphilis which is not notifiable, EPI-NEWS 23/09.

In all, 283 cases had been acquired within the past two years and were therefore notifiable; one person was notified twice. A total of 252 cases were detected by serology at the SSI and notified, including 24 cases which were also PCR-positive. Seven cases were notified but detected exclusively by PCR, and 24 cases were detected by serology at the SSI, but not notified by the physician who had ordered the serological test. No cases of congenital syphilis were notified.

A total of 202 cases occurred among males, 22 among females, and in one case sex and age were not stated,

Table 1.

Table 1. Syphilis diagnosed in 2009 by age, sex and stage

	Newly acquired		Late-stage	
	F	M	F	M
15-19	0	8	0	0
20-24	1	30	0	2
25-29	3	40	1	2
30-39	6	84	4	11
40-49	4	76	1	5
50+	2	28	0	17
Total	16	266	6	37

The median age was 37 years for both genders (range: 17-82 years for males, 21-69 years for females).

Notified cases

Among the 259 cases, 247 (95%) were males and 12 females.

Among the males, 215 were Danish-born, 28 were immigrants, three were tourists, and in one case the country of origin was not stated. Among the females, seven were Danish-born, four were immigrants and one was a tourist.

The number of notified cases of newly acquired syphilis has thus been increasing since 2008, Figure 1.

Figure 1. Notified syphilis cases, by sex, 1999-2009

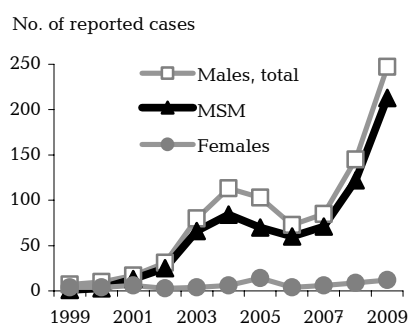


Table 2 shows the distribution by area.

Table 2. Cases notified with newly acquired syphilis and incidence per 10⁵, by region, 2009

Area	No.	Incidence
Copenhagen City	162	21.9
Copenhagen subs.	23	4.5
North Zealand	5	1.1
Bornholm	0	0
East Zealand	6	2.6
W & S Zealand	18	3.1
Funen	3	0.6
South Jutland	8	1.1
West Jutland	3	0.7
East Jutland	25	3.0
North Jutland	3	0.5
Unknown	3	-
Total	259	4.7

Transmission

Nine females were infected in Denmark and for three, the country of infection was not stated.

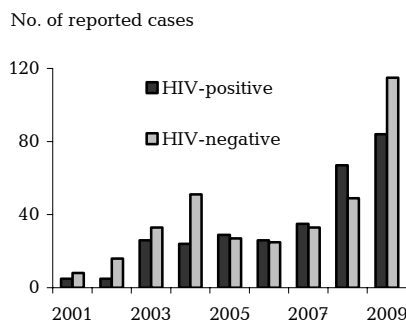
Among the males, 213 (86%) were MSMs (males who have sex with males), among whom 187 (88%) were infected in Denmark, six abroad, and in 20 cases, the country of infection was not stated. Thirty (30%) were heterosexually infected, among whom 18 (60%) were infected in Denmark, four abroad, and in eight cases, the country of infection was not stated. In four cases, the mode of infection was not stated.

Syphilis and HIV

Information on HIV-status was available in 236 cases, among whom 88 (37%) were HIV-positives; all were males, except for one female who had previously been a male.

Among the HIV-positive males, three were notified as having been infected with syphilis by females, the rest by MSMs. Among the MSMs for whom HIV-status was stated, the majority were HIV-negatives as opposed to the results collected in

Figure 2. HIV status among MSMs notified with syphilis, 2001-2009



the four previous years, Figure 2.

A total of 36 MSMs and two heterosexually infected males had previously been notified with syphilis, 32 of whom were HIV-positives.

Twenty-five of those who had been notified repeatedly had more than one previous notification, including 21 HIV-infected. Among the repeatedly notified HIV-positive MSMs, five (20%) had been notified as HIV-negatives in connection with a previous syphilis case.

Commentary

The increase in the number of syphilis cases among MSMs continues. 2010 has already seen nearly as many notifications as were recorded in all of 2009.

Syphilis is now seen among MSMs who are, or believe they are, HIV-negative. This can be deduced from the number of notified cases, as the number of HIV-positive MSMs notified with syphilis rose by 25% relative to 2008, while the increase among HIV-negative MSMs was 135%.

Syphilis is a marker of unprotected sex, and therefore also a marker of risk of HIV-infection.

HIV-infection from newly infected persons who have yet to be diagnosed with HIV constitutes a risk, as HIV is most infectious during its initial stage.

Patients who are tested for syphilis, should be tested for HIV simultaneously, EPI-NEWS 46-09.

(G. St-Martin, S. Cowan, Department of Epidemiology, S. Hoffmann, J.S. Jensen, Department for Microbiological Surveillance and Research)

PCR DIAGNOSTICS USED FOR GENITAL ULCERS

The SSI has developed a PCR for detection of *Treponema pallidum* and certain other relevant bacteria in suspected chancres and other genital ulcers. Patients in these early stages often have not developed detectable antibodies and some patients will remain seronegative if treatment is initiated early. The same sample can also be tested for LGV, chancroid and herpes virus. In 2009 a total of 31 syphilis cases were diagnosed using this method, which will become available as a routine test shortly. (J.S. Jensen, Department for Microbiological Surveillance & Research)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2010 figures are preliminary)

Table 1	Week 34 2010	Cum. 2010 ¹⁾	Cum. 2009 ¹⁾
AIDS	1	32	27
Anthrax	0	0	0
Botulism	0	1	0
Cholera	0	0	0
Creutzfeldt-Jakob	1	11	6
Diphtheria	0	0	0
Food-borne diseases	12	252	361
of these, infected abroad	3	62	66
Gonorrhoea	5	310	384
Haemorrhagic fever	0	0	0
Hepatitis A	2	34	16
of these, infected abroad	1	16	9
Hepatitis B (acute)	0	18	20
Hepatitis B (chronic)	1	134	118
Hepatitis C (acute)	0	2	4
Hepatitis C (chronic)	3	271	204
HIV	5	171	167
Legionella pneumonia	9	82	82
of these, infected abroad	1	14	14
Leprosy	0	0	0
Leptospirosis	0	2	0
Measles	0	4	9
Meningococcal disease	3	45	55
of these, group B	0	21	30
of these, group C	0	15	20
of these, unspec. + other	3	9	5
Mumps	0	25	10
Neuroborreliosis	2	21	18
Ornithosis	1	10	9
Pertussis (children < 2 years)	2	60	77
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	5
Listeria monocytogenes	0	5	4
Streptococcus pneumoniae	0	54	63
Other aethiology	0	14	9
Unknown aethiology	0	16	15
Under registration	0	4	0
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	3	59	69
of these, infected abroad	2	44	54
Syphilis	4	272	172
Tetanus	0	0	0
Tuberculosis	5	260	240
Typhoid/paratyphoid fever	1	24	15
of these, infected abroad	1	22	13
Typhus exanthematicus	0	0	0
VTEC/HUS	3	99	88
of these, infected abroad	2	25	20

¹⁾ Cumulative number 2010 and in corresponding period 2009

Selected laboratory diagnosed infections

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

Table 2	Week 34 2010	Cum. 2010 ³⁾	Cum. 2009 ³⁾
Bordetella pertussis (all ages)	5	132	148
Gonococci	3	266	294
of these, females	1	68	82
of these, males	2	198	212
Listeria monocytogenes	1	32	50
Mycoplasma pneumoniae			
Resp. specimens ³⁾	5	91	43
Serum specimens ⁴⁾	9	128	75
Streptococci ⁵⁾			
Group A streptococci	0	118	109
Group B streptococci	4	76	76
Group C streptococci	1	43	25
Group G streptococci	6	120	110
S. pneumoniae	7	687	746
Table 3	Week 32 2010	Cum. 2010 ²⁾	Cum. 2009 ²⁾
MRSA	11	519	447
Pathogenic int. bacteria ⁶⁾			
Campylobacter	150	2140	1815
S. Enteritidis	22	206	364
S. Typhimurium	15	382	576
Other zoon. salmonella	17	417	424
Yersinia enterocolitica	2	134	150
Verocytotoxin- producing E. coli	6	114	83
Enteropathogenic E. coli	7	109	112
Enterotoxigenic E. coli	18	266	179

²⁾ Cumulative number 2010 and in corresponding period 2009

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

The sentinel surveillance ended in week 20, 2010