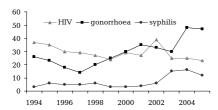
SEXUALLY TRANSMITTED DISEASES ACQUIRED ABROAD 1994-2005 No. 19, 2006

Travelling abroad plays a role in the incidence of sexually transmitted diseases in Denmark. In the period 1994-2005, a total of 6,164 persons were notified with HIV, gonorrhoea or syphilis. Among these, 3,649 were infected in Denmark, 975 were immigrants, the majority of whom are presumed to have been infected prior to their arrival in Denmark, 783 were Danes infected abroad, and for 757 the country of origin and/or infection was unknown. This text exclusively describes infected patients of Danish origin.

Danes infected abroad comprised 708 (90%) men and 75 (10%) women. The period saw notification of 350 HIV cases, 349 gonorrhoea cases and 84 syphilis cases acquired abroad. The development during the period 1994-2005 is outlined in Figure 1.

Figure 1. Danish patients notified with HIV, gonorrhoea or syphilis acquired abroad, 1994-2005



For sexually transmitted diseases the share of patients infected abroad varies with disease, gender and sexual orientation, <u>Table 1</u>.

Table 1. HIV, gonorrhoea and syphilis, % infected abroad, 1994-2005

	Hetero					
	MSM*		men		Women	
	Number (%)					
HIV	78	(7)	212	(44)	41	(19)
Gonorrhoea	58	(7)	270	(34)	21	(8)
Syphilis	42	(18)	36	(44)	6	(19)

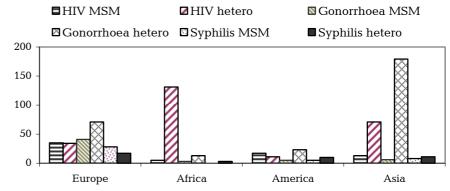
^{*}Men who have sex with men

Country of infection

Asia was the primary continent of infection for Danes with 292 cases (37%), Figure 2. According to notifications, a total of 230 cases (29%) were infected in Europe, 164 (21%) in Africa, 73 (9%) in America, and for 24 (3%) the country of infection was not stated.

The period saw notification of 178 cases of sexually transmitted diseases acquired in Thailand, corresponding to 23% of all notified travel-related cases. The second most frequent country of infection was the USA with 34 cases (4%). All of the remaining 92 countries of infection saw less

Figure 2. Danish patients notified with HIV, gonorrhoea or syphilis acquired abroad, by continent and sexual orientation, 1994-2005



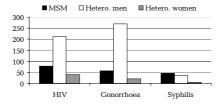
than 30 notifications per country. Among the patients infected in Thailand, 158 (89%) were men infected by heterosexual contact, among whom 102 were infected with gonorrhoea, 51 with HIV, and five with syphilis. Among the patients infected in the USA, 21 (62%) were men infected by homosexual contact, among whom 14 were infected with HIV, four with gonorrhoea and three with syphilis.

Mode of infection

A total of 331 of the HIV cases acquired abroad were notified as sexually transmitted, while the remaining 19 cases were transmitted by intravenous drug use (four cases), by transfusion (two cases), and the mode of infection was unknown in 13 cases.

<u>Figure 3</u> shows gender and sexual orientation for sexually transmitted HIV, gonorrhoea and syphilis.

Figure 3. Danish notifications of HIV, gonorrhoea and syphilis acquired abroad, by gender and sexual preference, 1994-2005



Among the sexually transmitted HIV cases, 136 (41%) were infected in Africa, 131 of these by heterosexual contact, <u>Figure 2.</u>

Hepatitis B

The period saw 35 acute and 12 chronic hepatitis B cases probably transmitted by sexual contact abroad. Among the notified cases, 33 were men (70%) and 14 were women (30%). Six of the men were infected by homosexual contact. Thailand was

also the most frequent country of infection for hepatitis B with 13 cases, followed by Turkey with six cases. The other cases were distributed between countries of Europe, America, Africa and Asia. The annual incidence did not rise above eight cases.

Comments

From 1994 to 2005, the average annual number of HIV, gonorrhoea or syphilis cases acquired abroad was 65, while the corresponding average of sexually transmitted hepatitis B cases was four. The vast majority of cases were men. In Asia, heterosexually transmitted gonorrhoea and to a lesser degree HIV was predominant, while the majority of the cases acquired in Africa were heterosexually transmitted HIV cases. For all three diseases homosexual infection was more frequent in Europe and the USA. Notifications do not include information on the duration or purpose of the stay abroad. Consequently, the proportion of sexually transmitted diseases acquired by Danes stationed abroad relative to the number of tourists infected in connection with shorter stays remains unknown. HIV, gonorrhoea and syphilis infection as well as sexually transmitted hepatitis B are prevented by correct use of condoms. Therefore, condoms should form part of any traveller's medical kit when sexual contact with local or casual partners cannot be excluded beforehand. Hepatitis B infection is prevented by vaccination, for instance in combination with hepatitis A vaccination. However, as HIV, gonorrhoea and syphilis vaccines are not available, vaccination is no substitute for using a condom.

(S. Cowan, Dept. of Epidemiology) 10 May 2006

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2006 figures are preliminary)

1 31, (3	1	2.	,
Table 1	Week 18 2006	Cum. 2006 ¹⁾	Cum. 2005 1)
AIDS	0	14	28
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	6	2
Diphtheria	0	0	0
Foodborne diseases	5	117	101
of these, infected abroad	1	30	18
Gonorrhoea	9	150	205
Haemorrhagic fever	0	0	0
Hepatitis A	0	5	35
of these, infected abroad	0	1	9
Hepatitis B (acute)	0	9	19
Hepatitis B (chronic)	8	162	51
Hepatitis C (acute)	0	5	1
Hepatitis C (chronic)	14	262	105
HIV	3	73	111
Legionella pneumonia	3	26	22
of these, infected abroad	0	3	3
Leprosy	0	0	0
Leptospirosis	0	3	9
Measles	2	18	1
Meningococcal disease	0	25	44
of these, group B	0	15	26
of these, group C	0	2	7
of these, unspec. + other	0	8	11
Mumps	0	8	3
Neuroborreliosis	0	15	16
Ornithosis	0	6	7
Pertussis (children < 2 years)	1	22	73
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	0
Listeria monocytogenes	0	3	1
Streptococcus pneumoniae	1	27	56
Other aethiology	0	1	4
Unknown aethiology	0	5	9
Under registration	6	25	_
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	22	34
of these, infected abroad	1	20	31
Syphilis	3	28	38
Tetanus	0	0	2
Tuberculosis	1	138	150
Typhoid/paratyphoid fever	0	11	11
of these, infected abroad	0	11	10
Typhus exanthematicus	0	0	0
VTEC/HUS	3	40	54
of these, infected abroad	0	10	23
" Cumulative number 2006 and in			

¹⁾ Cumulative number 2006 and in corresponding period 2005

Selected laboratory diagnosed infections

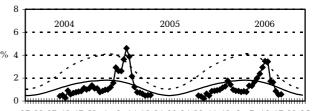
Number of specimens, isolates, and/or notifications received in SSI laboratories

Table 2	Week 18 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Bordetella pertussis			
(all ages)	3	93	235
Gonococci	8	152	152
of these, females	1	29	23
of these, males	7	123	129
Listeria monocytogenes	1	11	10
Mycoplasma pneumoniae			
Resp. specimens ³⁾	2	209	561
Serum specimens 4)	11	184	442
Streptococci 5)			
Group A streptococci	9	70	55
Group B streptococci	0	36	20
Group C streptococci	0	7	8
Group G streptococci	1	44	46
S. pneumoniae	23	491	534
Table 3	Week 16 2006	Cum. 2006 ²⁾	Cum. 2005 ²⁾
Pathogenic int. bacteria 6)			
Campylobacter	27	479	610
S. Enteritidis	4	88	110
S. Typhimurium	5	78	98
Other zoon. salmonella	2	133	143
Yersinia enterocolitica	0	48	68
Verocytotoxin-			
producing E. coli	1	36	40
Enteropathogenic E. coli	3	63	65
Enterotoxigenic E. coli	4	59	70

²⁾ Cumulative number 2006 and in corresponding period 2005

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2004/2005/2006



27 32 37 42 47 52 4 9 14 19 24 29 34 39 44 49 2 7 12 17 22 25 Week no.

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

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