## **EPI-NEWS**

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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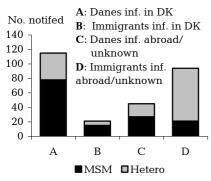
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#### **HIV 2007**

2007 saw a total of 307 notified cases of newly diagnosed HIV infection. A total of 153 (50%) were infected in Denmark and 119 (39%) abroad. In 35 cases (11%), the country of infection was unknown. Among the 176 Danish-born cases, 153 (87%) were men. Among the 130 immigrant cases, 70 (54%) were men. On one notification, the country of origin was missing. The median age for men was 40 years (range 5-75 years), and for women it was 35 years (range 5-61 years). A total of 276 (90%) were infected by sexual contact, including 142 men who have sex with men (MSM) and 134 heterosexuals, Figure 1. In 22 (7%) of the notifications, intravenous drug use (IDU) was stated as the mode of infection.

# Figure 1. Country of infection for sexually transferred cases, by MSM and heterosexuals, 2007



#### Danish males

Among 153 Danish men, 105 (69%) were MSM. A total of 36 were infected by sexual contact with a woman: In 23 cases from a known risk group and in 13 cases with no known risk group. Eleven were infected by IDU and in one case the mode of infection was unknown.

## Danish females

Among the 23 Danish women, 19 (83%) were infected through sexual contact with a man: In 11 cases from a known risk group and in eight cases with no known risk group. Four were infected by IDU.

## **Immigrant males**

Among the 70 male immigrant cases, 36 (51%) were MSM. A total of 28 were infected by sexual contact with a woman: In 25 cases from a known risk group and in three cases with no known risk group. Five were infected by IDU. An infant was infected at birth in Africa.

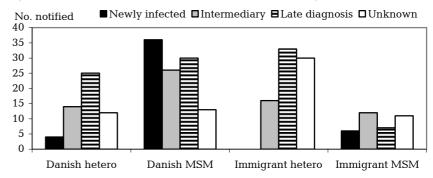
## **Immigrant females**

Among the 60 Danish women, 51

## **HIV AND AIDS 2007**

No. 44, 2008

Figure 2. Time of infection, by infection mode and origin 2007



(85%) were infected by sexual contact with a man: In 49 cases from a known risk group and in two cases with no known risk group. Two were infected by IDU. Two children were infected at birth in Africa and one child of African origin had been infected at birth in Denmark five years earlier. Three children aged 10-13 years were infected in Africa, but it could not be determined if infection was associated with birth or had occurred subsequently.

## Time of infection

In all, 228 (74%) of the notified cases had information on the presumed time of infection, CD4 cell counts, previous negative results, AIDS diagnosis, etc, which made it possible to group patients into newly infected (within the past six months): 48 (16%); late diagnosed (concurrent aids and/or CD4 cell count below 300): 106 (34%); and those who were neither newly infected nor late diagnosed: 74 (24%). In the remaining 79 (26%) cases, it was not possible to estimate the time of infection. Among Danish MSM, 34% were newly infected and 29% were late diagnosed, while 25% belonged to the middle group and 12% could not be categorised. Among Danish heterosexuals, 7% were newly infected, 45% late diagnosed, 25% belonged to the middle group and 22% could not be categorised. Immigrants were generally diagnosed later than Danes, Figure 2.

#### **AIDS 2007**

2007 saw a total of 45 notified AIDS cases, 29 (64%) men and 16 (36%) women. Among men, 16 (55%) were MSMs, 12 (41%) were infected via heterosexual contact, and one via intravenous drug use. Among women, 14 were infected heterosexually and two via IDU.

Twelve persons (27%) were immigrants. Of the 45 persons who were diagnosed with AIDS in 2007, 33

(75%) were diagnosed as HIV positive within the same year. In 2007, 20 persons previously notified with AIDS died.

#### Commentary

During the latest decade, no significant variation has been seen in the annual number of persons diagnosed with HIV in Denmark. The majority of notified Danes are MSM and most are infected in Denmark. The primary potential fpr prophylaxis is thus still in this group. More than a third of the Danish MSMs were infected within six months of being diagnosed. This shows that the infection is currently spreading and that the test-activity in the risk group is high. However, in nearly as many cases the diagnosis was made so late that the persons had AIDS symptoms and/or CD4 counts below the recommended treatment initiation level.

Early treatment initiation not only improves the individual HIV infectee's prognosis, it also assists in stopping the infection from spreading as sufficiently treated patients are less infectious. It must be presumed, however, that a considerable proportion of transmissions stems from MSM who are themselves newly infected and therefore very infectious. The pink HIV/AIDS 2007 annual report is enclosed.

(A.H. Christiansen, S. Cowan, Department of Epidemiology)

### HIV IS ONLY TRANSFERRED THROUGH SEX AND BLOOD

In weeks 44 and 45, the Danish National Board of Health runs an addsbased campaign to inform the public that there is no risk of becoming infected with HIV in everydaysituations. It is stressed that HIV is only transferred through sex and blood and that, consequently, HIV infectees may hold any position. (Danish National Board of Health)

## Individually notifiable diseases

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

Table 1	Week 43	Cum.	Cum.
	2008	2008 1)	2007 1)
AIDS	1	32	44
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	1	0
Creutzfeldt-Jakob	0	3	9
Diphtheria	0	0	0
Food-borne diseases	20	715	545
of these, infected abroad	1	119	104
Gonorrhoea	11	319	301
Haemorrhagic fever	0	0	0
Hepatitis A	0	39	20
of these, infected abroad	0	21	10
Hepatitis B (acute)	0	20	24
Hepatitis B (chronic)	2	147	280
Hepatitis C (acute)	0	6	6
Hepatitis C (chronic)	2	370	522
HIV	0	195	251
Legionella pneumonia	3	105	96
of these, infected abroad	0	37	26
Leprosy	0	0	0
Leptospirosis	0	3	12
Measles	0	10	2
Meningococcal disease	0	45	62
of these, group B	0	18	34
of these, group C	0	15	18
of these, unspec. + other	0	12	10
Mumps	0	24	6
Neuroborreliosis	3	50	83
Ornithosis	0	2	8
Pertussis (children < 2 years)	2	84	69
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	2	2
Listeria monocytogenes	0	1	10
Streptococcus pneumoniae	0	72	88
Other aethiology	0	18	11
Unknown aethiology	0	17	14
Under registration	4	12	_
Rabies	0	0	0
Rubella (congenital)	0	2	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	67	197
of these, infected abroad	0	54	42
Syphilis	4	110	81
Tetanus	0	1	2
Tuberculosis	10	325	332
1 ubercurosis	1	29	17
	+ '		
Typhoid/paratyphoid fever	1	23	16
Typhoid/paratyphoid fever of these, infected abroad		23	16 2
Typhoid/paratyphoid fever	1		

Cumulative number 2008 and in corresponding period 2007

## Selected laboratory diagnosed infections

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

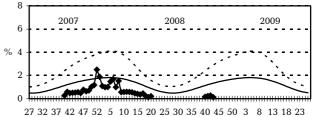
Table 2	Week 43	Cum.	Cum.
	2008	2008 2)	2007 2)
Bordetella pertussis			
(all ages)	3	159	174
Gonococci	9	302	295
of these, females	3	64	46
of these, males	6	238	249
Listeria monocytogenes	1	41	49
Mycoplasma pneumoniae			
Resp. specimens <sup>3)</sup>	0	68	304
Serum specimens 4)	2	68	359
Streptococci 5)			
Group A streptococci	5	120	95
Group B streptococci	8	107	81
Group C streptococci	3	18	19
Group G streptococci	7	109	103
S. pneumoniae	15	757	846
Table 3	Week 41	Cum.	Cum.
	2008	2008 2)	2007 2)
MRSA	42	579	490
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	72	2745	3363
S. Enteritidis	18	536	466
S. Typhimurium	43	1670	281
Other zoon. salmonella	26	842	609
Yersinia enterocolitica	10	265	219
Verocytotoxin-			
producing E. coli	2	122	134
Enteropathogenic E. coli	8	207	151
Enterotoxigenic E. coli	6	328	248

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

—Sentinel —

## Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2007/2008/2009



Week no.

Sentinel:

Influenza consultations (as percentage of total consultations)

Basal curve - - - - Alert threshold

Expected frequency of consultations Basal curve:

under non-epidemic conditions

Alert threshold: Possible incipient epidemic

 $<sup>^{3)}</sup>$  Resp. specimens with positive PCR

<sup>&</sup>lt;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