



INFECTIOUS DISEASES IN GREENLAND, PART II

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Sexually transmitted diseases are a major problem in Greenland. The incidence of chlamydia and gonorrhoea is about 15 times and 200-300 times respectively, greater than in Denmark.

Chlamydia

Since chlamydia became notifiable in 1995 there was an increase in the incidence up to 2000, [table 1](#). Chlamydia occurs most commonly in the 15-24 year age group, but cases of infection occur all the way up to 80 years. In the 15-19-year age group, the M:F ratio is 2:1, while the M:F ratio approaches 1 for older age groups.

Chlamydia is a significant cause of ectopic pregnancy and secondary sterility. Testing is therefore highly recommended. In most health districts, all STD patients, women undergoing gynaecological examination and pregnant women are tested. In the event of a positive test result, contact tracing is carried out. The real incidence of chlamydia is unknown due to several factors: about half of infected females and one-third of males are asymptomatic; an unknown number of people are tested repeatedly; and it is primarily women in the fertile age group who are tested.

Gonorrhoea and syphilis

The incidence of gonorrhoea declined substantially in the period 1975-1995, [table 1](#). In subsequent years, the incidence has again risen, reaching 19 per 1,000 in the 15-59 year age group in 2001. For both sexes, gonorrhoea is most common in the 15-24 year age group, but the incidence is also high among people over the age of 30.

The incidence of syphilis was high in the period 1975-79, [table 1](#). In 1999-2001, only one case per annum was notified. However, it is impossible to state whether this is an indication of a generally low incidence or whether a new reservoir of infection is accumulating.

HIV/AIDS

In 1995, 1997 and 1998, clusters of new HIV cases were notified almost exclusively from Nuuk and Sisimiut, [table 2](#). Transmission was predominantly heterosexual in a socially vulnerable population, often with heavy alcohol consumption. At the end of 2001 a total of 113 cases of HIV were notified. The average age was 45 years: 44 years for males and 45 years

Table 1. No. of notified cases and incidence per 1,000 in the 15-59-year age group for chlamydia, gonorrhoea and syphilis in Greenland, 1975-2001

Year	Chlamydia		Gonorrhoea		Syphilis	
	No.	Incidence	No.	Incidence	No.	Incidence
1975	-	-	12,160	429	434	15
1980	-	-	8,201	255	253	8
1985	-	-	8,048	218	247	7
1990	-	-	2,488	67	168	5
1995	1,100	30	286	8	6	0.2
1996	1,648	45	471	13	1	0
1997	1,834	50	611	17	3	0.1
1998	1,825	50	568	16	4	0.1
1999	1,913	53	633	17	1	0
2000	2,094	58	515	14	1	0
2001	1,942	53	707	19	1	0

Table 2. No. of notifications of cases of HIV by sex and number of persons who have developed AIDS and/or died in Greenland, 1985-2001

Year	HIV-pos	Males	Females	Children	AIDS	Children	Deaths, total
1985-89	15	12	3	0	3	0	1
1990-94	33	18	15	2	13	1	6
1995-99	52	31	21	0	18	0	20
2000	7	4	3	0	2	0	5
2001	6	4	2	0	4	0	4
Total	113	69	44	2	40	1	36

for females. In 1996, notification of HIV was made anonymous. It is therefore no longer possible to accurately determine the person, time and residence of those infected with HIV including the progression from HIV to AIDS and HIV-related mortality.

The HIV/AIDS situation is still serious. Even though the spread of infection may seem small and limited to a risk population, there is a significant risk of wider spread particularly to the younger portion of the population. Abortion and chlamydia statistics indicate that there is still a significant level of unsafe sex in this group.

Hepatitis

Hepatitis B has long been recognised as a problem in Greenland. Previous population studies indicate that both hepatitis B and C are under-reported. The most recent study, dating from 1994, included 503 people from Sisimiut and Ilulissat, with an average age of 35 years. The study showed that 42% had signs of previous hepatitis B virus (HBV) infection. The prevalence of HBsAg was 7%, making the area moderately to highly endemic. The prevalence was 13% in 1966-71 and 12% in 1985. A total of 6% of HBsAg-positive cases were also HBeAg-positive, and 49% were HBV-DNA-positive, signifying active virus replication.

Sexual transmission is the primary means of transmission of HBV, and parenteral infection is almost unknown. In this respect, Greenland is distinct from other highly endemic areas, where perinatal and horizontal infection in childhood are the most important means of transmission. All pregnant women have been screened for HBsAg in the last 10 years, and children of positive mothers are vaccinated. The introduction of hepatitis B vaccination into the childhood vaccination programme is being considered. Hepatitis B vaccination among Inuit in Alaska, including vaccination of neonates, reduced the incidence of acute HBV from 215 to 14 per 10⁵ in the course of four years.

A total of 0.8% of those investigated had IgG antibodies to hepatitis C. Natural immunity to hepatitis A was high, with 54% having antibodies. The incidence was lowest, 8%, among those under the age of 20, while all of those over 60 years had antibodies. Large epidemics of hepatitis A formerly occurred in the Arctic at intervals of 10-20 years, in Greenland most recently in 1970-74.

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Patients with laboratory-diagnosed pertussis

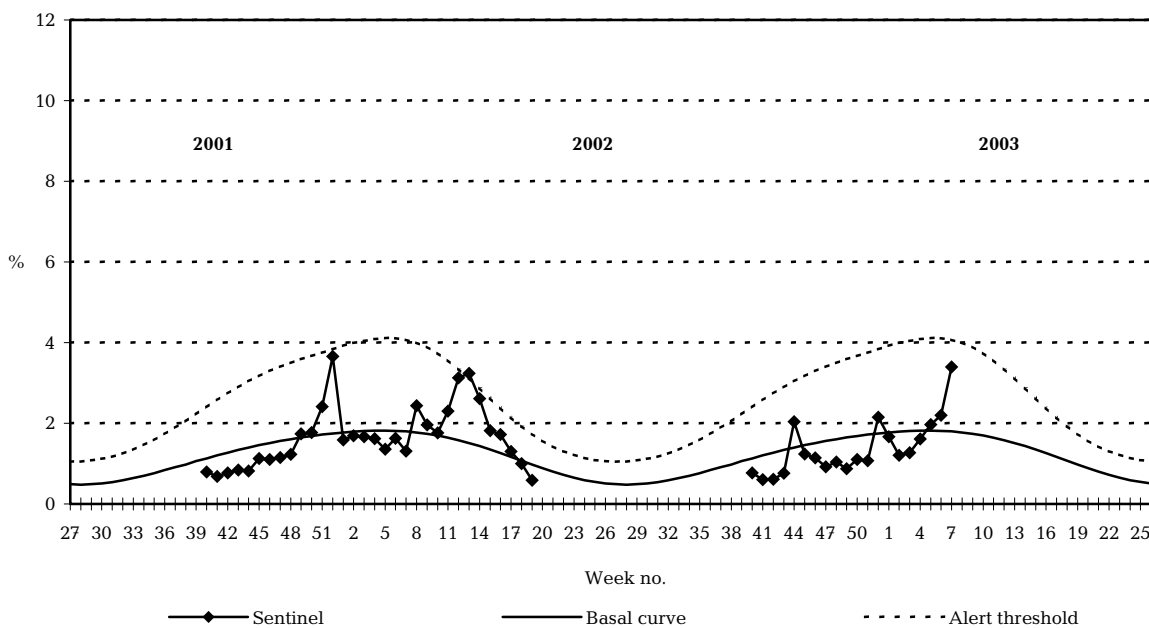
4th quarter of 2002

	October	November	December	Total
< 2 years	28	46	21	95
2-17 years	86	145	117	348
≥ 18 years	26	43	21	90
Total	140	234	159	533

(Dept. of Respiratory Infections, Meningitis and STIs)

Sentinel surveillance of influenza activity

Weekly percentage of consultations, 2001/2002/2003



- Sentinel:** Influenza consultations as percentage of total consultations
Basal curve: Expected frequency of influenza consultations under non-epidemic conditions
Alert threshold: Possible incipient epidemic

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