

NOTIFIED IMPORTED INFECTIONS 2000-2001

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Travel activity and immigration bring with them the importation of infectious diseases. The type of diseases and the number of those affected by them will naturally depend on factors such as travel destination and duration.

About one million Danes travel abroad on package holidays every year. According to Statistics Denmark, almost 8% of the Danish population are immigrants or come from an immigrant background. There are more than 50,000 immigrants every year. Most (37-38,000), come from Europe, the United States, Canada, Australia or New Zealand. The remaining 15-17,000 currently come primarily from Africa, Iraq, Pakistan, China or Thailand.

In 2000 and 2001, approximately 3,200 and 3,400 cases of infectious disease respectively were notified to the Department of Epidemiology. In addition, 205 and 152 cases of malaria respectively were notified to the parasitology laboratory.

For the infections mentioned in [table 1](#), it was stated that 2,232 (35%) cases were acquired abroad and 3,902 (61%) in Denmark.

In 249 (4%) cases the country of infection was not stated. Detailed data on individual infections can be found in the annual reports.

Chronic infections

Chronic infections in immigrants are

usually acquired in the country of origin before entering Denmark. This applies particularly to tuberculosis (TB), chronic hepatitis B virus (HBV) infection and HIV/AIDS.

Very few Danish-born persons were infected with TB or chronic HBV infection abroad. Most immigrants with chronic HBV are probably infected perinatally.

Among people infected with HIV/AIDS abroad, immigrants made up 65-80%, and more than half of these were female. Those born in Denmark were predominantly men.

Acute infections

Acute infections are often acquired after leaving Denmark. These include typhoid fever, paratyphoid, shigella, hepatitis A, food-borne disease, Legionella pneumonia, gonorrhoea and malaria.

A clear majority of people notified with typhoid fever, paratyphoid and hepatitis A (predominantly children and young people) were immigrants who had been visiting their country of origin. Of cases notified with Shigella, 85% were Danes who had been travelling abroad.

The number of cases with imported food-borne illness was probably far greater than that shown in [table 1](#), as the disease is only notifiable on suspicion concerning a specific food-stuff.

Travel-related Legionella pneumonia occurred almost exclusively among Danes on holiday. Approximately one-third were infected in the context of outbreaks.

About 75% of people infected with gonorrhoea abroad were Danish-born, and 90% of these were male. Immigrants infected with gonorrhoea abroad were all male.

In addition to the notifiable infections, just under 60 persons per annum were given prophylactic treatment against rabies after possible exposure abroad, particularly in Thailand and Turkey.

Comments

Imported infections were seldom the cause of secondary infection. However, it has been possible to relate several local outbreaks of hepatitis A to primary infection abroad.

Vaccination or passive immunisation of the children of immigrants is still relevant before visits to countries endemic for hepatitis A virus.

As the usual childhood infectious diseases become more uncommon in Denmark, infection abroad will play an increasingly greater role.

Vaccination ought therefore, to be an integral part of travel-related diseases prevention programme.

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Table 1. Notified imported infections 2000-2001

	Infected abroad		Total notified		%		Commonest country of infection
	2000	2001	2000	2001	2000	2001	
Shigella	122	107	154	149	79	72	Egypt, India, Nepal, Turkey
Typhoid fever	21	12	22	17	95	71	Pakistan
Paratyphoid fever	8	7	9	17	89	41	Pakistan
VTEC	6	20	48	93	13	22	Europe
Food-borne disease	164	131	771	894	21	15	Europe, Thailand
TB	315	223	548	511	57	44	Somalia, Pakistan
Legionella pneumonia	17	25	92	103	18	24	Turkey, Italy
Leptospirosis	2	0	7	4	29	0	Spain, Columbia
HIV	99	101	259	313	38	32	Africa, Thailand
AIDS	27	22	58	72	47	31	Thailand
Gonorrhoea	42	39	154	130	27	30	Thailand
Syphilis	7	6	13	23	54	26	Europe
Hepatitis A	41	44	81	63	51	70	Pakistan, Turkey, Morocco
B - acute	4	7	63	46	6	15	Asia
B - chronic	80	112	106	152	75	74	Somalia, Turkey, Vietnam
C - acute	2	0	15	8	13	0	Asia
C - chronic	19	22	263	242	7	9	Pakistan, Somalia
Measles	3	4	14	11	21	36	Europe
Mumps	2	2	19	4	11	50	Asia
Pertussis in children <2 years	3	1	166	196	2	1	Europe
Malaria	205	152	205	152	100	100	Africa, Asia
Neuroborreliosis	2	4	63	53	3	8	Europe
Total	1191	1041	3130	3253	38	32	

Patients with laboratory-diagnosed RSV and rotavirus infections

4th quarter of 2002 compared with 4th quarter of 2001

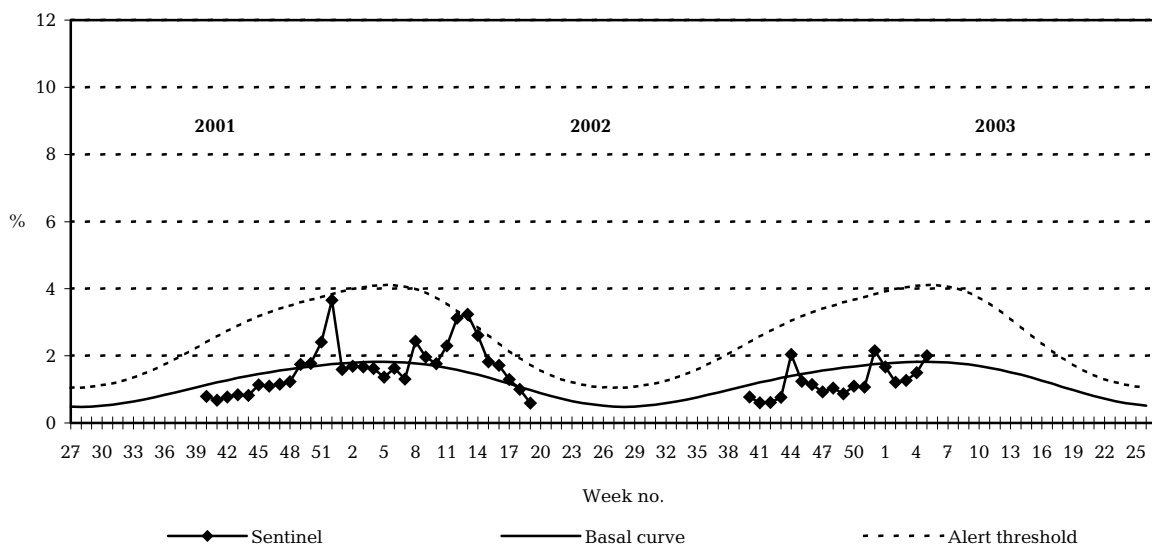
	RSV		Rotavirus	
	2002	2001	2002	2001
October	4	3	11	5
November	29	36	21	1
December	201	136	21	12
Total	234	175	53	18

Reported from the following Clinical Microbiology departments:

Aalborg Hospital (South), Aarhus Municipal Hospital, Herning Central Hospital, Hvidovre Hospital, Odense University Hospital, Slagelse Central Hospital, Viborg Hospital, Dept. of Virology, SSI.

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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