

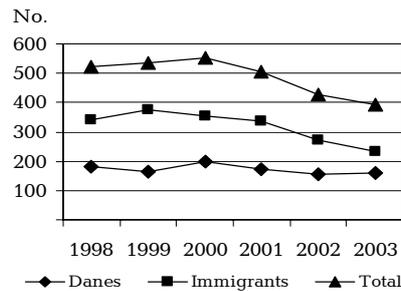


TUBERCULOSIS 2003, PART I

No. 47, 2004

In 2003, there was a total of 391 notified cases of tuberculosis (TB) in Denmark. The decline in incidence that has been seen since 2001, EPI-NEWS 48/02, continued in 2003, figure 1.

Figure 1. Notified cases of TB 1998-2003, by origin



The overall incidence was 7.3 per 10^5 , compared with 7.8 per 10^5 in 2002, EPI-NEWS 44/03. M/F-ratio was 2.4 for Danes and 1.4 for immigrants. Median age was 46 years (0-87 years) for Danes and 32 years (0-78 years) for immigrants. Among immigrants, an excess of males has replaced the excess of females that has so far been observed. There were 158 cases among Danes and 233 cases among immigrants, a reduction of 9% and 31%, respectively, relative to the average number for the preceding five years, table 1. Among immigrants, patients from Somalia constituted 20%, Europe 11%, Greenland 10%, Pakistan 4% and Turkey 4%. There was a total of 24 (6%) notified cases with relapse, 11 Danes and 13 immigrants. A total of 11 patients, six Danes and five immigrants, had concurrent HIV infection and thus AIDS. The relapse rate and the proportion of patients with concurrent HIV infection were at the same level as in previous years.

TB localisation

TB localisation by origin appears in table 2. A total of 286 patients (73%) had pulmonary TB, of these, 19 had concurrent extrapulmonary TB. A total of 105 (27%) patients had extrapulmonary TB only. Among Danes, the proportion of patients with extrapulmonary TB only was increasing relative to 2002, table 2. The most common extrapulmonary manifestations were in lymph nodes, bone and pleura. Among Danes, these constituted 32%, 24% and 20% of extrapulmonary TB, respectively, and among immigrants 63%, 10% and 14%, respectively. A total of four notified cases had cerebral TB, one Dane and three immigrants.

Table 1. Notified cases of TB in Danes and immigrants. Number and incidence per 10^5 in 2003, and average number for 1998-2002, by county

County	Danes		Immigrants		Total		Incidence/ 10^5 , 2003		
	2003	98-02	2003	98-02	2003	98-02	Da-nes	Immi-grants	Total
	Cph. Municip.	35	47	61	94	96	141	8.5	66.6
Frb. Municip.	2	3	7	7	9	10	2.5	60.4	9.8
Cph. County	32	21	31	48	63	69	5.9	42.1	10.2
Frederiksborg	9	6	5	15	14	21	2.6	16.9	3.8
Roskilde	1	4	8	7	9	11	0.5	50.0	3.8
West Zealand	4	5	11	9	15	14	1.4	64.3	5.0
Storstrøm	18	13	4	10	22	23	7.2	31.4	8.4
Bornholm	0	1	0	1	0	2	0.0	0.0	0.0
Funen	11	12	18	30	29	42	2.5	56.6	6.1
South Jutland	2	5	2	3	4	8	0.8	11.5	1.6
Ribe	4	4	6	5	10	9	1.9	48.6	4.5
Vejle	10	5	8	15	18	20	3.0	37.9	5.1
Ringkøbing	3	8	13	9	16	17	1.1	94.8	5.8
Aarhus	12	17	26	46	38	63	2.0	54.0	5.9
Viborg	5	5	5	10	10	15	2.2	55.6	4.3
North Jutland	8	16	23	24	31	40	1.7	99.3	6.3
Other/unkn.	2	1	5	3	7	4	-	-	-
Total	158	173	233	336	391	509	3.2	54.1	7.3

Table 2. Notified cases of TB in Danes and immigrants, by TB localisation, 2003 and 2002

TB localisation	Danes				Immigrants			
	2003		2002		2003		2002	
	Total	%	Total	%	Total	%	Total	%
All pulmonary	136	86	140	90	150	64	172	63
Only pulmonary	133	84	134	86	134	58	144	53
Pulm. and extrapulm.	3	2	6	4	16	7	28	10
Only extrapulm.	22	15	15	10	83	36	100	37
All extrapulm.	25	16	21	14	99	42	128	47
Total	158	100	155	100	233	100	272	100

Two patients, one Dane and one immigrant, had miliary TB.

Occupational infection

For a total of five patients, all Danes, information was provided about possible infection in the workplace. After the result of DNA subtyping, occupational infection was probable in three and possible in two cases. Two patients belonged to a cluster with only one other patient. One of these had been infected by a patient while working as a nurse seven years earlier. For the other patient, non-occupational contact with the source of infection could not be excluded. The third patient had been infected while working in a reception centre eight years earlier. The last two were both part of larger clusters, and other possible sources of infection could thus not be excluded.

TB in children

There was a total of 32 notified cases

of TB in children < 15 years, including 12 children (38%) < 5 years. Twenty-seven children had immigrated or had been born in Denmark to immigrant parents, and five were Danish. All Danes and 12 immigrant children, including eight of Somali origin, were infected in Denmark. Nine children from Somalia, one from Kenya and one from Sri Lanka were infected in their country of origin. For four children, country of infection was unknown. For a total of 18 (56%) children, known source of infection was stated on the notification form. A total of 27 children, five Danes and 22 immigrants, had pulmonary TB, of these, four immigrant children had concurrent extrapulmonary manifestations, cerebral, glandular, bone or pleural TB, respectively. Four children had microscopy positive pulmonary TB. Comments will follow in part II. (C. Kjelsø, P. Andersen, Department of Epidemiology)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, Statens Serum Institut.

Figures for 2004 are preliminary.

Table 1	Week 46 2004	Cum. 2004 ¹⁾	Cum. 2003 ¹⁾
AIDS	1	38	32
Anthrax	0	0	0
Botulism	0	0	1
Cholera	0	1	0
Creutzfeldt-Jakob	0	7	7
Diphtheria	0	0	0
Food-borne diseases	10	555	499
of these, infected abroad	5	96	110
Gonorrhoea	10	302	144
Haemorrhagic fever	0	0	0
Hepatitis A	6	209	71
of these, infected abroad	2	63	37
Hepatitis B (acute)	3	37	39
Hepatitis B (chronic)	4	131	178
Hepatitis C (acute)	0	1	7
Hepatitis C (chronic)	0	229	301
HIV	8	279	226
Legionella pneumonia	1	91	79
of these, infected abroad	0	26	25
Leprosy	0	0	0
Leptospirosis	1	8	3
Measles	0	0	0
Meningococcal disease	0	74	91
of these, group B	0	41	48
of these, group C	0	11	20
of these, unspec. + other	0	22	23
Mumps	0	2	3
Neuroborreliosis	2	90	65
Ornithosis	1	6	13
Pertussis (children < 2 years)	8	204	104
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	3	4
Listeria monocytogenes	0	1	1
Streptococcus pneumoniae	0	78	96
Other aethiology	0	6	4
Unknown aethiology	1	12	13
Under registration	5	21	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	5	78	90
of these, infected abroad	3	65	73
Syphilis	3	113	61
Tetanus	0	0	0
Tuberculosis	3	397	361
Typhoid/paratyphoid fever	0	21	27
of these, infected abroad	0	19	21
Typhus	0	0	0
VTEC/HUS	1	132	107
of these, infected abroad	0	26	28

¹⁾ Cumulative number of cases notified in 2004 and in the corresponding period of 2003

Selected laboratory-diagnosed infections

Number of specimens, isolates, and/or notifications received at Statens Serum Institut.

Table 2	Week 46 2004	Cum. 2004 ²⁾	Cum. 2003 ²⁾
Bordetella pertussis (all ages)	31	901	450
Gonococci	9	365	222
of these, females	1	45	27
of these, males	8	320	195
Listeria monocytogenes	3	34	25
Mycoplasma pneumoniae			
Resp. specimens ³⁾	67	390	172
Serum specimens ⁴⁾	41	407	458
Pathogenic int. bacteria ⁵⁾			
Campylobacter	60	3422	3201
S. Enteritidis	13	489	689
S. Typhimurium	4	414	410
Other zoon. salmonella	8	466	445
Yersinia enterocolitica	4	202	216
Streptococci ⁶⁾			
Group A streptococci	1	107	130
Group C streptococci	0	20	20
Group G streptococci	1	94	107
S. pneumoniae	22	1058	1026

²⁾ Cumulative number in 2004 and in the corresponding period of 2003

³⁾ Resp. specimens with positive PCR

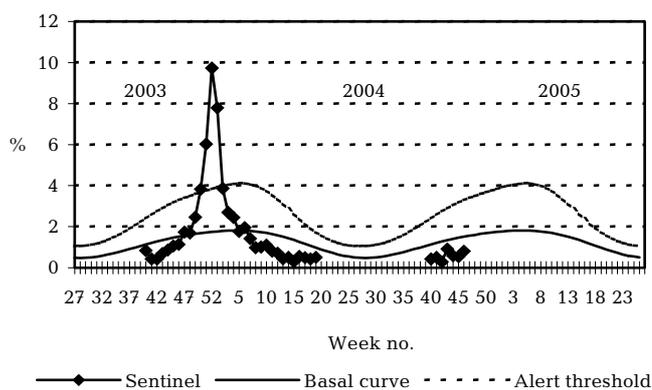
⁴⁾ Serum specimens with pos. complement fixation test, MPT

⁵⁾ See also www.germ.dk

⁶⁾ Isolated in blood or spinal fluid

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2003/2004/2005



Sentinel: Influenza consultations (as percentage of total consultations)

Basal curve: Expected frequency of consultations under non-epidemic conditions

Alert threshold: Possible incipient epidemic