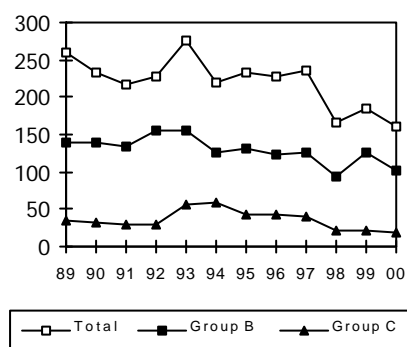


MENINGOCOCCAL DISEASE 2000

No. 18, 2001

In 2000 a total of 160 cases of meningococcal disease (MD) were notified. This represents a small decline from 1999, [Fig. 1](#), and remains at the same low level as the two preceding years. In 38% of cases a reminder was sent to obtain written notification.

Fig. 1. No. of notified cases of MD, 1989-2000



As shown in [Table 1](#), the incidence remained highest in 0-2-year-olds. The incidence in 14-17-year-olds fell slightly. Of the 160 patients, 37 had meningitis, 49 septicaemia and 74 both meningitis and septicaemia as clinical manifestations.

Table 1. Patients with MD in 2000 by age and sex, incidence per 100,000 and no. of deaths

Age	Total	M/F ratio	Incidence	Deaths
< 1	23	1,6	34,7	2
1-2	26	0,5	19,3	2
3-6	26	0,6	9,3	1
7-13	20	1,5	4,5	0
14-17	20	1,9	9,0	0
18-29	16	2,2	1,9	2
30-39	5	0,3	0,6	1
40+	24	0,3	0,9	7
Total	160	0,9	3,0	15

Consequences of the disease

A total of 15 patients (9%) died, [Table 1](#). Thirteen (87%) of these patients had septicaemia, with or without meningitis. The mortality was highest in the ≥ 40 -year age group (29%), contrasting with the <40-year age group in which 6% of patients died. One patient suffered hearing loss, one developed retinal detachment and another developed strabismus as a result of MD. Four patients had skin necroses, one suffered muscle necrosis and three patients developed reactive arthritis.

In addition, one patient developed a cerebral abscess, one reduced power in an upper limb and one difficulty in walking. All but two patients with sequelae had septicaemia with or without meningitis as clinical manifestation.

Diagnosis

Meningococci were demonstrated by culture in 121 cases (76%). In the remaining 39 cases the diagnosis was confirmed in 23 (14%) by a positive meningococcal antibody titre (MAT), in three (2%) by counter-immunoelectrophoresis, in four (3%) by microscopy, while nine (6%) were diagnosed clinically.

In 119 of the culture-confirmed cases, serogrouping was performed by the Neisseria Unit, as follows:

Serogroup A:	1	(<1%)
Serogroup B:	99	(83%)
Serogroup C:	18	(15%)
Serogroup W135:	1	(<1%)

MD due to serogroup A is very rare in Denmark. The sole patient in 2000 was a 4-year-old girl whose grandparents had been on a pilgrimage to Mecca.

Since 1990 there have been only three other cases, two in 1990 and one in 1996. The number of cases due to group C remains low.

Table 2. No. of patients with MD in 2000 by county, with incidence per 100,000. 1999 incidence in ()

County	No.	Incidence
Cph. Municip.	13	2,6 (2,4)
Frb. Municip.	1	1,1 (2,2)
Cph. County	21	3,4 (2,6)
Frederiksborg	9	2,5 (3,6)
Roskilde	5	2,2 (3,0)
West Zealand	10	3,4 (1,7)
Storstrøm	5	1,9 (2,7)
Bornholm	1	2,3 (2,2)
Funen	12	2,5 (3,6)
South Jutland	7	2,8 (4,3)
Ribe	8	3,6 (3,6)
Vejle	13	3,7 (2,6)
Ringkøbing	11	4,0 (3,7)
Aarhus	13	2,0 (2,7)
Viborg	7	3,0 (8,6)
North Jutland	22	4,5 (6,1)
Other	2	-
Whole country	160	3,0 (3,5)

County distribution

The incidence of MD was highest in North Jutland and Ringkøbing Counties, [Table 2](#). Viborg County showed a marked fall in incidence.

Case clusters

One co-primary and one secondary case was notified. In addition, one case proved to be the primary case of a case cluster at a college of further education where a further two cases occurred in 2001.

- Two siblings were taken ill within the same day. Both had group C MD.
- Two children at the same kindergarten were taken ill at an interval of one day. Both cases were group C MD.

(S. Samuelsson, Dept. of Epidemiol.)

MENINGOCOCCAL DISEASE IN PILGRIMS TO MECCA

As in 2000, EPI-NEWS 16/17-00, there are again this year reports of a new outbreak of MD due to serogroup W135 type 2a subtype P1.2.5 among pilgrims to Mecca or their close contacts. About 2 million pilgrims from around 140 countries take part in this annual gathering. In 2000 about 400 cases were reported from all over the world, but none from Denmark.

Within the last month two Danish cases due to group W135 have been notified. The first patient was a 3-year-old child with MD due to the above mentioned type and subtype. Two close relatives had returned from Mecca five days before the child was taken ill. The other patient was a 14-year-old child without known contact with persons who had been to Mecca this year. Other European countries are still reporting new cases, in particular the UK, where up to now at least 36 cases have been recorded, including seven deaths. About 2/3 of the cases have occurred in contacts. (S. Samuelsson, Dept. of Epidemiol.)

NEW APPOINTMENTS

Steffen Glismann has been appointed Staff Specialist Grade and Marianne Nielsen has been appointed Registrar at the Department of Epidemiology, both from 1 May 2000.

Streptococci isolated from blood and CSF from infected patients

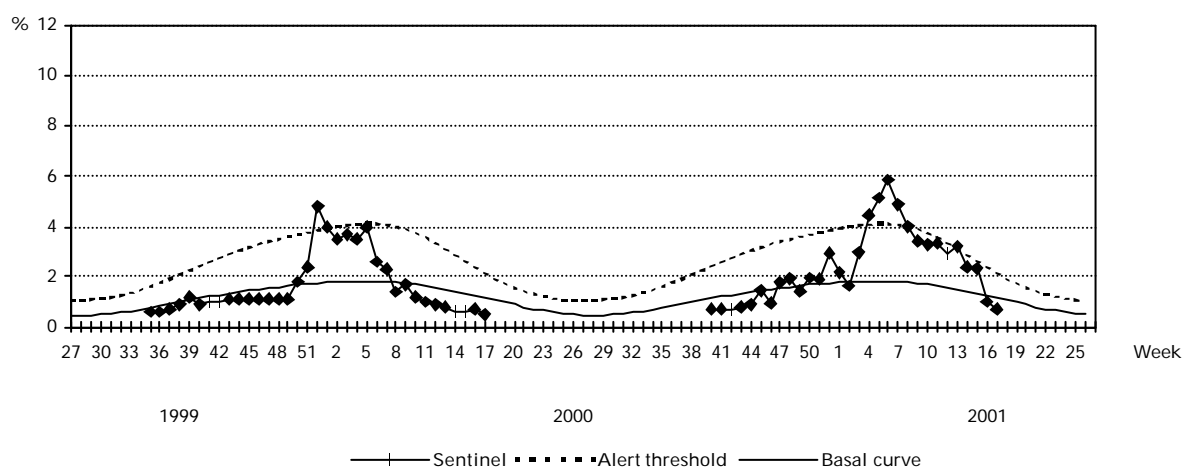
1st quarter of 2001 compared with the same period of the two previous years

		1st quarter 2001				1st quarter	
		< 2 yrs	2-59 yrs	60 yrs +	Total	1999	2000
January	S. pneumoniae	4	31	61	96	125	114
	Gr. A strep.	3	2	3	8	12	20
	Gr. C strep.	-	-	1	1	1	1
	Gr. G strep.	-	1	6	7	5	9
February	S. pneumoniae	3	39	68	110	142	92
	Gr. A strep.	1	9	3	13	8	18
	Gr. C strep.	-	-	1	1	1	2
	Gr. G strep.	-	1	4	5	4	4
March	S. pneumoniae	9	58	79	146	157	121
	Gr. A strep.	-	2	3	5	8	17
	Gr. C strep.	-	-	1	1	-	3
	Gr. G strep.	-	5	4	9	7	8
1st quarter	S. pneumoniae	16	128	208	352	424	327
	Gr. A strep.	4	13	9	26	28	55
	Gr. C strep.	-	-	3	3	2	6
	Gr. G strep.	-	7	14	21	16	21

(Streptococcus Unit)

Sentinel surveillance of influenza activity

Weekly percentage of consultations, 1999/2000/2001



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

(Dept. of Epidemiology)