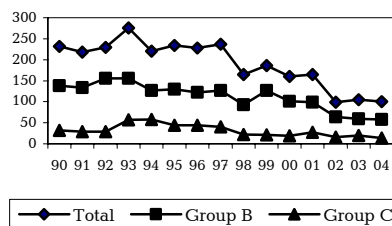


## MENINGOCOCCAL DISEASE 2004

No. 15, 2005

In 2004, there were 100 notified cases of meningococcal disease (MD), which is at the same level as in 2003, figure 1.

**Figure 1. Number of notified cases of meningococcal disease, 1990-2004**



In 36 (36%) cases, a reminder was sent for a written notification. Of the 100 patients, 23 had meningitis, 28 sepsis, and 49 both meningitis and sepsis as clinical manifestation. Distribution by county and incidence are shown in table 1.

**Table 1. Number of notified cases of meningococcal disease in 2004, distributed by county and incidence per 10<sup>5</sup>. Incidence in 2003 in ( )**

County	Antal	Incidens
Cph. Mun.	8	1,6 (1,4)
Frb. Mun.	0	-
Copenhagen	5	0,8 (2,3)
Frederiksborg	5	1,3 (1,1)
Roskilde	2	0,8 (0,4)
West Zealand	6	2,0 (1,3)
Storstrøm	6	2,3 (0,8)
Bornholm	2	4,6 -
Funen	12	2,5 (1,5)
South Jutland	3	1,2 (3,2)
Ribe	4	1,8 (1,8)
Vejle	9	2,5 (2,8)
Ringkøbing	7	2,5 (4,0)
Aarhus	12	1,8 (1,7)
Viborg	7	3,0 (3,4)
North Jutland	11	2,2 (2,8)
Other	1	-
<b>Total</b>	<b>100</b>	<b>1,9 (2,0)</b>

As previously, the incidence was highest in children < 2 years and in adolescents aged 14-17 years, table 2.

### Sequelae of the disease

A total of six patients died (6%), table 2. All had sepsis with or without meningitis as clinical manifestation. Four of these had meningococci of serogroup B, one group Y, and one had clinical meningococcal disease. For nine patients, information was provided about sequelae: two suffered hearing impairment, one had extremities amputated because of necrosis, four reactive arthritis, one dizziness and one strabismus in one eye.

### Diagnosis

In 79 (79%) patients, meningococci were detected by culture, and in one

**Table 2. Number of notified cases of meningococcal disease in 2004, distributed by age, serogroup B and C, M/F ratio, incidence per 10<sup>5</sup> and number deceased**

Age (year)	Gr. B	Gr. C	Total	M/F ratio	Incidence	Deceased
< 1	7	2	11	2,6	16,9	1
1-2	8	1	12	0,7	9,2	2
3-6	6	0	9	3,5	3,3	0
7-13	7	2	14	1,8	2,9	1
14-17	9	7	21	1,6	8,5	0
18-29	3	0	8	1,7	1,0	1
30-39	1	0	1	0,0	0,1	0
+ 40	17	2	24	0,8	0,9	1
<b>Total</b>	<b>58</b>	<b>14</b>	<b>100</b>	<b>1,5</b>	<b>1,9</b>	<b>6</b>

by counterimmunoelectrophoresis (CIE). The remaining 20 patients had clinical MD; 17 of these had positive meningococcal antibody titre (MAT), one had positive microscopy of spinal fluid, and in two cases, the diagnosis was clinical.

In 77 of the 79 culture-verified and one of the CIE-verified cases, serological grouping was performed in the Neisseria department at SSI: 58 serogroup B, 14 C, three Y, two W135, and one X. Neither of the two patients with meningococcal disease W135 had had overseas contact.

### Clustered cases

Three clusters were recorded, with a total of three secondary cases:  
- Two siblings admitted the same day, one group B and one positive MAT.  
- Two siblings admitted at an interval of one day, both group B.  
- Two children in the same day-care institution admitted at an interval of one day, both group B.  
(A. H. Christiansen, K. Mølbak, Department of Epidemiology)

### NOTIFICATION AND PROPHYLACTIC TREATMENT IN THE EVENT OF MENINGOCOCCAL DISEASE

The medical officer institutions (ELI) have observed that health personnel may be uncertain about the distribution of responsibility on initiation of prophylactic treatment of contacts in the event of a case of MD. The current rules are therefore laid out in more detail.

MD should be notified both by telephone and in writing. Notification by telephone should take place immediately in the event of proven or suspected MD to ELI in the county where the patient is resident. Outside of normal opening hours, two medical officers on call cover the eastern and western parts of Denmark, respectively, EPI-NEWS 23/2003.

Notification in writing should take place on form 1515 to ELI and the Department of Epidemiology, SSI.

### Prophylactic treatment of contacts

#### *The patient's household and similarly close contacts:*

All who have slept together with the patient within the last ten days or have an intimate kissing relationship with him or her are informed and offered prophylaxis, generally tablets of ciprofloxacin 500 mg (children 20 mg/kg body weight, but maximum 500 mg) as a one-off dose as quickly as possible after the clinical diagnosis has been made. The treating doctor should initiate this after consultation with ELI.

#### *Other contacts:*

On the basis of a concrete assessment, ELI decides which contacts besides the household should be informed and where appropriate offered prophylactic treatment. ELI secures information with view to possible later follow-up.

#### *Health personnel:*

Health personnel who have cared for the patient do not have an increased risk, and prophylactic treatment is therefore not usually recommended for these.

#### *Information:*

ELI is responsible for informing day-care institutions/schools, doctors on call in the area and other relevant working partners. The Danish Board of Health has prepared an information booklet about MD that is available on [www.eli.dk](http://www.eli.dk)

#### *Vaccination:*

When grouping of the meningococcal bacterium is available, the medical officer will decide whether to offer vaccination.

(B. Møller, Medical officer institution for Copenhagen Municipality and Frederiksberg Municipality)

### HEPATITIS A OUTBREAK OVER

Since December 2004, there have been no notified cases of hepatitis A among men who have sex with men. The outbreak discussed in EPI-NEWS 52/04 is therefore considered to be over.  
(M. Howitz, Department of Epidemiology)

## Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2005 figures are preliminary)

Table 1	Week 14 2005	Cum. 2005 <sup>1)</sup>	Cum. 2004 <sup>1)</sup>
AIDS	1	20	7
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	2	4
Diphtheria	0	0	0
Food-borne diseases	3	80	90
of these, infected abroad	0	17	14
Gonorrhoea	13	169	80
Haemorrhagic fever	0	0	0
Hepatitis A	3	32	28
of these, infected abroad	1	8	6
Hepatitis B (acute)	0	15	6
Hepatitis B (chronic)	3	44	44
Hepatitis C (acute)	0	1	1
Hepatitis C (chronic)	9	82	111
HIV	7	99	78
Legionella pneumonia	1	17	18
of these, infected abroad	0	2	2
Leprosy	0	0	0
Leptospirosis	2	7	1
Measles	0	0	0
Meningococcal disease	1	19	36
of these, group B	1	14	22
of these, group C	0	1	5
of these, unspec. + other	0	4	9
Mumps	0	3	0
Neuroborreliosis	0	15	50
Ornithosis	0	6	2
Pertussis (children < 2 years)	4	67	55
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	0	0
Listeria monocytogenes	0	0	1
Streptococcus pneumoniae	0	31	36
Other aethiology	0	0	3
Unknown aethiology	0	1	4
Under registration	3	32	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	27	22
of these, infected abroad	0	24	18
Syphilis	5	32	52
Tetanus	0	2	0
Tuberculosis	11	114	98
Typhoid/paratyphoid fever	2	11	6
of these, infected abroad	0	8	4
Typhus	0	0	0
VTEC/HUS	2	36	37
of these, infected abroad	1	16	5

<sup>1)</sup> Cumulative number 2005 and in corresponding period 2004

## Selected laboratory diagnosed infections

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

Table 2	Week 14 2005	Cum. 2005 <sup>2)</sup>	Cum. 2004 <sup>2)</sup>
Bordetella pertussis (all ages)	9	206	207
Gonococci	14	122	81
of these, females	1	18	12
of these, males	13	104	69
Listeria monocytogenes	0	8	9
Mycoplasma pneumoniae			
Resp. specimens <sup>3)</sup>	8	537	49
Serum specimens <sup>4)</sup>	12	393	111
Streptococci <sup>5)</sup>			
Group A streptococci	1	44	42
Group B streptococci	1	15	17
Group C streptococci	0	5	6
Group G streptococci	2	38	28
S. pneumoniae	36	445	505
Table 3	Week 12 2005	Cum. 2005 <sup>2)</sup>	Cum. 2004 <sup>2)</sup>
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	9	449	516
S. Enteritidis	4	80	69
S. Typhimurium	5	74	73
Other zoon. salmonella	7	109	97
Yersinia enterocolitica	1	46	36

<sup>2)</sup> Cumulative number 2005 and in corresponding period 2004

<sup>3)</sup> Resp. specimens with positive PCR

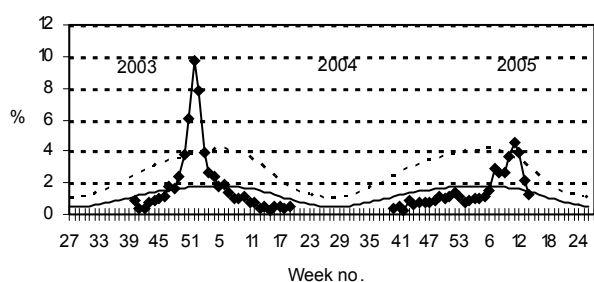
<sup>4)</sup> Serum specimens with pos. complement fixation test, MPT

<sup>5)</sup> Isolated in blood or spinal fluid

<sup>6)</sup> See also [www.germ.dk](http://www.germ.dk)

## Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2003/2004/2005



◆ Sentinel — Basal curve - - - - Alert threshold

Sentinel: Influenza consultations  
(as percentage of total consultations)

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

Alert threshold: Possible incipient epidemic