EPI-NEWS NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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BACTERIAL MENINGITIS 1996-1999, PART I

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In the 4-year period 1996-99 the Department of Epidemiology received 1202 notifications of bacterial meningitis. Fig. 1 shows the annual figures for 1990-99 classified by aetiological agent. In 1996-99 meningococcal meningitis comprised 49% of the notified cases of bacterial meningitis, Table 1. Pneumococcal meningitis made up 36% of notified cases; twice the number for the preceding period 1993-1995. The proportion of cases due to Haemophilus influenzae meningitis was 1%. This is so far the lowest level recorded since vaccination against H. influenzae was introduced into the childhood vaccination programme in mid-1993, EPI-NEWS 41/96. Meningitis due to other known bacteria comprised 78 cases (6%), Table 1.

Table 1. Annual no. of notified cases of bacterial meningitis by aetiological agent, 1996-99

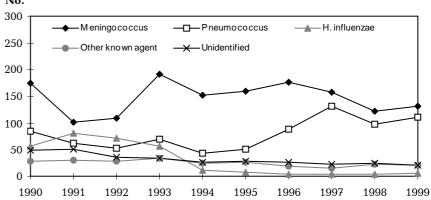
logical agent, 1990-99							
Agent	96	97	98	99			
Meningococcus	176	158	122	131			
Pneumococcus	89	131	97	110			
H. influenzae	4	3	3	6			
Listeria	8	4	6	6			
E. coli	1	1	0	1			
S. aureus	5	3	9	3			
S. haemolyticus	3	5	6	7			
Other	2	2	2	4			
Unidentified	26	22	25	21			
Total	314	329	270	289			

The aetiology was unknown in 94 cases (8%); of these, 24% had been given antibiotics before the cerebrospinal fluid was cultured. Table 2 shows the age and sex distribution of bacterial meningitis, with

age-related average annual incidence and mortality. The incidence of

No. 300 - M eningo co ccus -----Pneumococcus → H. influenzae 250 Other known agent Unidentified

Fig. 1. No. of notified cases of bacterial meningitis, 1990-99, by aetiological



bacterial meningitis was high in children below the age of five years and highest during the first year of life, while the mortality was higher in adults and especially high in adults over 60 years of age.

The individual aetiological groups of bacterial meningitis will be described in more details in a future issue of EPI-NEWS. This will include an account of the age distribution and vaccination status of the notified cases of H. influenzae meningitis. (D. Wandall, S. Samuelsson, Dept. of Epidemiology)

THE DANISH CHILDHOOD VAC-**CINATION PROGRAMME: NEW LEAFLET AND BOOK**

The National Board of Health has recently (end of November 2000) issued both a leaflet and a book about the Danish childhood vaccination programme. These meet parents' demands for more information about the action of the vaccines and possible side effects.

Both the leaflet and the book can be read on the National Board of Health's home page: www.sst.dk. (A. M. Plesner, National Board of Health)

Td REVACCINATION AND IM-**MUNITY**

The new National Board of Health publications on the childhood vaccination programme have led to inquiries to the Department of Epidemiology about the duration of protection after Td revaccination. Protection was previously stated to last 20 years, while it is now stated to last "at least 10 years". The statement about 20 years' protection was based on serological studies on the decline of tetanus antibodies after the vaccines that were formerly used. In 1997 the strength of the diphtheria component of the vaccine for revaccination was reduced because of vaccination reactions, EPI-NEWS 12/97 and 44/97. The statement "at least 10 years" applies to the duration of immunity to both diphtheria and tetanus, and to the duration of immunity irrespective of whether the vaccine is given five years or more after a primary vaccination, EPI-NEWS 7/99.

Studies have been planned to elucidate whether revaccination at the age of five years induces immunity for 20 years to both diphtheria and tetanus. Until these results are available, the statement "for at least 10 years" applies.

(A. H. Christiansen, T. Rønne, Dept. of Epidemiology)

Table 2. Total no. of notified cases of bacterial meningitis 1996-99, with average annual incidence per 105, M/F ratio and no. of deaths, by age

		Incidence	Deaths		
Age	No.	per 10 ⁵ per year	M/F ratio	No.	(%)
0 years	105	39,4	1,1	3	(2,8)
1-5 years	223	16,2	1,4	11	(4,9)
6-10 years	72	5,6	1,5	1	(1,4)
11-15 years	105	9,5	1,4	3	(2,9)
16-20 years	94	7,5	2,0	10	(10,6)
21-30 years	65	2,1	1,2	5	(7,7)
31-40 years	67	2,1	1,2	11	(16,4)
41-50 years	79	2,6	1,1	12	(15,2)
51-60 years	111	4,2	0,9	18	(16,2)
61-70 years	117	6,4	0,8	30	(25,6)
71+ years	164	7,7	0,5	63	(38,4)
Total	1202	5,7	1,1	167	(13,9)

6 December 2000

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Vejle

Viborg

Denmark

Ringkøbing Aarhus

North Jutland

_		2000		1999
County	M	F	Total	Total
Kbh. + Frb. Municip.	48	4	52	58
Copenhagen	3	-	3	13
Frederiksborg	5	1	6	4
Roskilde	2	-	2	3
West Zealand	1	-	1	4
Storstrøm	-	-	-	2
Bornholm	1	-	1	-
Funen	-	2	2	4
South Jutland	1	-	1	
Ribe	1	-	1	2

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Gonorrhoea, 3rd quarter

(Dept. of Respiratory Infections, Meningitis and STIs)

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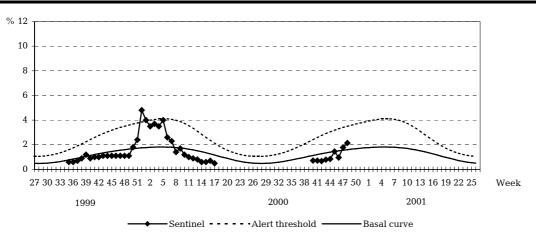
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Sentinel surveillance of influenza activity

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