



PNEUMOCOCCAL VACCINATION/REVACCINATION

No. 46, 2002

Recommendations for persons over 65 years of age

Since 1997, a significant number of persons over the age of 65 have been vaccinated with a 23-valent pneumococcal polysaccharide vaccine. The incidence of invasive pneumococcal disease, meningitis and septicaemia is highest in persons over 65 years of age, Fig 1, among whom there are approximately 600 cases a year. The mortality rate is 20-30%. Pneumococcal vaccination prevents approximately 70% of invasive disease among the elderly. There is no documented evidence that pneumococcal vaccination prevents pneumococcal pneumonia among the elderly.

Until now, it has been recommended that persons over 65 years of age receive only one vaccination with the 23-valent vaccine, as revaccination of persons with high antibody levels following the initial pneumococcal vaccination may give rise to very marked and painful local reactions. Studies suggest that, over the course of 5-10 years, elderly patients lose some of the protection achieved through vaccination, therefore necessitating revaccination. However, there is significant individual variation in the duration of protection.

Medical risk groups

Pneumococcal vaccination may be of benefit to persons belonging to the following medical risk groups due to their high risk of acquiring invasive disease and pneumonia:

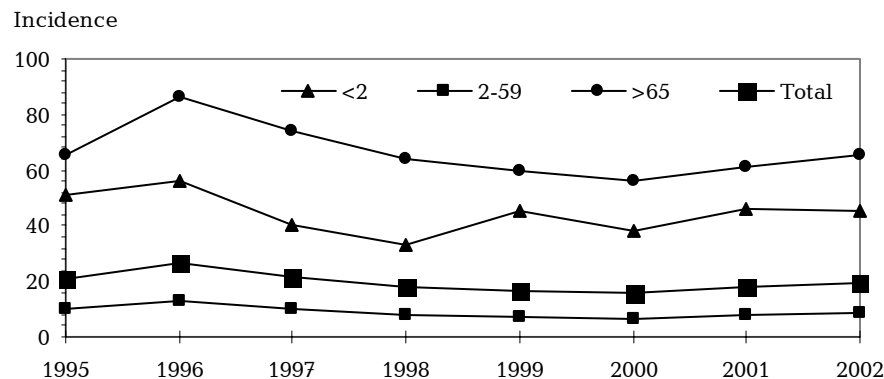
- splenectomised persons
- patients receiving treatment for, or are being monitored for chronic cardiac, pulmonary, hepatic or renal disease, or diabetes mellitus
- persons with leakage of cerebrospinal fluid.
- persons with immunodeficiency, due to, for example, HIV-infection, Hodgkin's or other lymphomas.

The polysaccharide vaccine is not immunogenic in children under 2 years of age, and should therefore not be given to this group. Pneumococcal vaccination of children under 2 years of age is discussed in EPI-NEWS 11/01.

Primary vaccination

Since severe local reactions seldom occur after a primary pneumococcal vaccination, this should not be preceded by measurement of antibody levels. This applies even if the person has had repeated pneumococcal infections with resulting production

Fig. 1. Age-specific incidence per 10⁵ of patients with *S. pneumonia* isolated from blood and spinal fluid, 1995-2002



of antibodies. The pneumococcal vaccine can be given at the same time as influenza vaccination, but with separate injections and in separate sites.

Revaccination

It is still recommended that all splenectomised persons, irrespective of age, have their antibody levels measured five years after primary vaccination, with a view to revaccination. Ten years after the primary vaccination, the risk of severe local reactions on revaccination is considered to be small and equal to the risk on primary vaccination. In general, revaccination can therefore be conducted ten years after primary vaccination without prior measurement of antibodies. For persons with a special risk/immunodeficiency, the physician must assess whether revaccination should be conducted earlier. If this is the case, measurement of antibodies should be performed five years after the primary vaccination.

In all cases, including persons with immunodeficiency, there should be an interval of at least 1-2 years between primary vaccination and revaccination, even if low antibody levels are detected. If the patient is in a good general condition, is not receiving treatment and has not responded to repeated pneumococcal vaccination, no added benefit will usually be achieved by further revaccination.

Persons with uncertain vaccination status should have antibody levels measured prior to vaccination. A blood sample is sent to the Streptococcus Unit, SSI for such a test. Advice on revaccination is issued along with the result of the test.

(H. B. Konradsen, ALMOS, S. Samuelsson, Dept. of Epidemiol.)

E. COLI O157 OUTBREAK IN SCANIA

An outbreak of E.coli O157 that commenced in late September 2002, has till the day of reporting, involved 30 patients, of whom 11 have developed haemolytic-uraemic syndrome (HUS). Most of the patients live in the Kristianstad area. An investigation has associated the infection with a local type of smoked sausage, however, other sources cannot be excluded. The outbreak was documented in the Swedish EPI-aktuellt 44/02, www.smittskyddsinstitutet.se.

Patients with gastroenteritis or symptoms of HUS and who have been in Scania or have eaten beef or veal purchased in Sweden should be tested for E. coli O157.

(K. Mølbak, Dept. of G I Infections)

THIOMERSAL IN VACCINES

Several reports on thiomersal in influenza vaccines have appeared in the press. Thiomersal is an organic mercury-containing compound, used as a preservative or found as a residue from the manufacturing process in some inactivated vaccines.

Thiomersal has not been used in vaccines in the Danish childhood vaccination programme since 1992.

Although mercury has been found to be neurotoxic during the development of the central nervous system, there is insufficient evidence to suggest that thiomersal in the doses used in vaccination programmes gives rise to neurotoxic injuries. Nevertheless, it is recommended that the thiomersal-free influenza vaccine be used for children, EPI-NEWS 39/02.

(S. Samuelsson, Department of Epidemiology)

Streptococci isolated from blood and CSF from infected patients

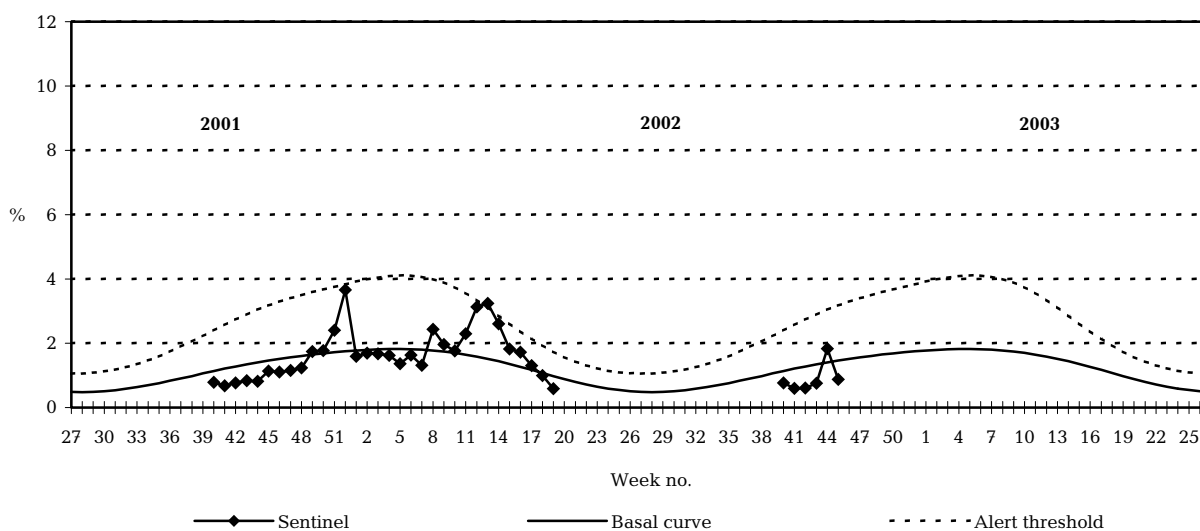
3rd quarter of 2002 compared with 3rd quarters of 2000 and 2001, respectively

		3rd quarter 2002				3rd quarter	
		< 2 yrs	2-59 yrs	60+ yrs	Total	2000	2001
July	S. pneumoniae	1	11	20	32	42	43
	Gr. A strep.	0	6	6	12	6	13
	Gr. C strep.	0	0	1	1	2	3
	Gr. G strep.	0	3	6	9	4	10
August	S. pneumoniae	1	14	10	25	38	28
	Gr. A strep.	0	3	5	8	5	5
	Gr. C strep.	0	2	2	4	2	1
	Gr. G strep.	0	4	2	6	6	10
September	S. pneumoniae	7	13	28	48	48	49
	Gr. A strep.	0	4	4	8	4	2
	Gr. C strep.	0	0	1	1	3	0
	Gr. G strep.	0	2	9	11	12	15
3rd quarter	S. pneumoniae	9	38	58	105	128	120
	Gr. A strep.	0	13	15	28	15	20
	Gr. C strep.	0	2	4	6	7	4
	Gr. G strep.	0	9	17	26	22	35

(Dept. of Respiratory Infections, Meningitis and STIs)

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

(Dept. of Epidemiology)