

VACCINATION REACTIONS 1998, PART I

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In 1998 the Department of Epidemiology was notified of 136 vaccination reactions. Table 1 shows the notifications for different vaccinations and the associated hospital admissions.

Table 1. Notified vaccination reactions 1998, hospital admissions in ()

Vaccine	1998
Pertussis	3 (2)
DiTePol +/- Hib	5 (2)
DiTeKiPol +/- Hib	33 (8)
Hib	2 (1)
OPV	7 (2)
DiTe	17 (1)
MMR	69 (40)
Total	136 (56)

Since 1 January 1997 there have been no changes to the childhood vaccination programme. The Danish Health Service records account for the following numbers of vaccinations in 1998: 195,008 DiTeKiPol, 190,637 Hib, 191,597 OPV, 57,850 DiTe and 112,520 MMR.

As in previous years, each individual case has been assessed to consider how far the vaccination could have caused the reaction. Any causal connection has been rated as probable, possible, less probable, unlikely or unknown/impossible to assess.

Table 2 shows the notified reactions, and the text describes the serious reactions, uncomplicated febrile convulsions excepted. Reactions following MMR vaccination will be described in a future issue of EPI-NEWS.

PERTUSSIS VACCINATION

Three cases were notified in 1998 after the children had been vaccinated for the second time with whole-cell pertussis vaccine in 1995. Two of the children were notified as having convulsions respectively 40 days and eight months after the vaccination. The latter child had subsequent convulsions, both related and unrelated to vaccinations. Both children have been diagnosed as having epilepsy. The third child was notified as having left-sided spasms a few days after vaccination. This child has since been diagnosed as having a neurological disorder that is often accompanied by attack phenomena. In these three cases with chronic conditions the causal connection with vaccination is assessed as unlikely. In children with a low threshold for convulsions vaccination may trigger an attack, especially after the whole-

Table 2. Notified reactions after the following vaccinations: Pertussis, DiTePol +/- Hib, DiTeKiPol +/- Hib, Hib, OPV and DiTe revaccination, 1998. No. with probable or possible causal connection in ()

Reactions	Per-tussis	DiTePol +/- Hib	DiTeKiPol +/- Hib	Hib	OPV	DiTe
Febrile convulsions			2 (2)	1 (0)	1 (0)	
Other attack phenomena	3 (0)	1 (0)	2 (1)		1 (0)	
Persistent crying/irritability			1 (1)			
General affectation			1 (1)			
Fever		2 (2)	10 (10)		1 (0)	1 (1)
Urticaria/allergy			3 (2)		1 (1)	2 (2)
Other rash			6 (5)		3 (3)	1 (1)
Local reaction			4 (4)	1 (1)		13 (13)
Granuloma		2 (2)				
Other			4 (1)			
Total	3 (0)	5 (4)	33 (27)	2 (1)	7 (4)	17 (17)

cell vaccine that was formerly used.

DITEPOL +/- HIB VACCINATION

Two children developed granulomas after the vaccination, which was regarded as the probable cause, EPI-NEWS 16/99. One child was admitted to hospital with convulsions 11 days after DiTePol + Hib vaccination. The child also had vomiting and loose motions. CT of the brain showed changes compatible with encephalitis. During the aftermath the child has been treated for epilepsy. The clinical features have been judged to be most probably due to viral encephalitis and the connection with vaccination is regarded as less probable.

DITEKIPOL +/- HIB VACCINATION

Two cases of neurological reactions were notified: one child became unwell with hypotonia two hours after the third DiTeKiPol + Hib vaccination. The case is regarded as vaccination-related and was possibly a so-called hypotonic, hyporesponsive episode (HHE). The diagnosis of HHE has, however, not hitherto been used in the surveillance database, as it has not been unambiguously defined. HHE occurs within 48 hours, may last from one minute to 48 hours, and the symptoms are limpness, pallor and absence. HHE occurs most frequently after the first vaccination. The other child developed attack phenomena with flexion of the head and arms three weeks after the first DiTeKiPol vaccination, and has subsequently been diagnosed as having characteristic infantile spasms. A causal connection be-

tween the vaccination and infantile spasms is assessed as unlikely. Two days after the third DiTeKiPol + Hib vaccination one child had a minor febrile convulsion and six days later very prolonged convulsions. The child has subsequently been diagnosed as having a metabolic disorder and now shows psychomotor retardation. A connection between vaccination and febrile convulsions is possible, while any connection with the metabolic disorder and psychomotor retardation is unlikely. Among other reactions there was a probable connection with vaccination in one case in which the child developed an abscess at the injection site.

OPV

The day after OPV 2, one child developed muscle pains, headache and fever, and would not stand up. These symptoms disappeared, but two days later the child was admitted to hospital with urticaria. A connection with vaccination is considered possible. One child was admitted to hospital with convulsions six days after OPV 2. CT revealed a cerebral cyst and a causal connection with vaccination is regarded as unlikely.

DITE REVACCINATION

A 5-year-old child was admitted to hospital with universal urticaria and lethargy within one day of DiTe revaccination. The child was treated with antihistamine to good effect. A connection with vaccination is considered probable.

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Streptococci isolated from blood and CSF from infected patients

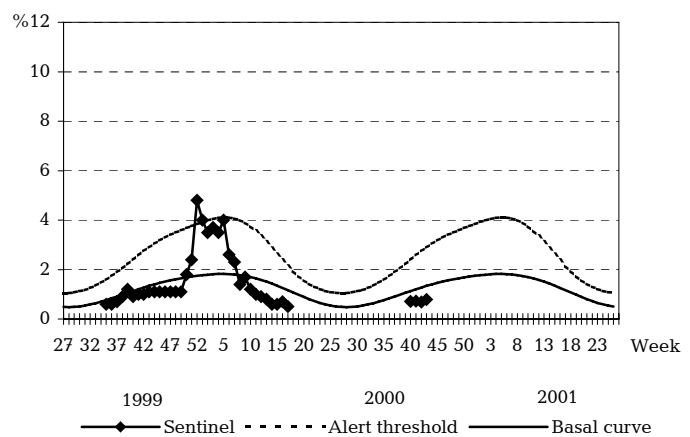
3rd quarter of 2000 compared with the same period of the two previous years

		3rd quarter 2000				3rd quarter	
		< 2 yrs	2-59 yrs	60 yrs +	Total	1999	1998
July	S. pneumoniae	2	21	19	42	34	35
	Group A strep.	-	2	4	6	5	8
	Group C strep.	-	1	1	2	2	1
	Group G strep.	-	-	4	4	7	7
August	S. pneumoniae	3	17	18	38	22	28
	Group A strep.	-	-	5	5	8	15
	Group C strep.	-	1	1	2	3	1
	Group G strep.	-	1	5	6	11	5
September	S. pneumoniae	6	17	25	48	38	64
	Group A strep.	-	3	1	4	3	5
	Group C strep.	-	1	2	3	3	1
	Group G strep.	-	4	8	12	7	7
October	S. pneumoniae	11	55	62	128	94	127
	Group A strep.	-	5	10	15	16	28
	Group C strep.	-	3	4	7	8	3
	Group G strep.	-	5	17	22	25	19

(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

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