

MMR VACCINATION AND MEASLES 2002

No. 25, 2003

MMR vaccination 2002

According to Health Service data, 128,291 children received the MMR vaccine in 2002. Coverage increased in all counties, and at a national level the average increase was nine and five percentage points for MMR 1 and 2, respectively, [table 1](#). The same method of calculation has been used in previous years, EPI-NEWS 23/00. Coverage greater than 100% occurs when children are vaccinated, who at the time of vaccination are younger or older than the recommended age, [Fig 1](#). A measles outbreak in the County of North Jutland and the Municipality of Copenhagen in January-February 2002 is assumed to have contributed to the high level of coverage, EPI-NEWS 5/02. Thus, coverage of MMR 1 was clearly highest in the first quarter. However, coverage in all counties was also higher for the rest of the year in comparison with the average for the previous five years. The fact that coverage has increased for both MMR 1 and 2 indicates good acceptance of the vaccine.

Measles 2002

A total of 32 cases of measles were notified, 20 males and 12 females, [table 2](#). Of these, 23 cases were related to the measles outbreak in the County of North Jutland and the Municipality of Copenhagen, EPI-NEWS 18/02. The remaining nine cases occurred in the period from May to August; three in the municipalities of Copenhagen and Frederiksberg, three in Copenhagen County and one case in each of the counties of Frederiksberg, Vejle and Aarhus. Five of these cases were adults aged 20-35 years, one was a child of 12, and three were children ≤ 16 months.

Table 2. Number of notified cases of measles by age, gender, vaccination status and admission status, 2002

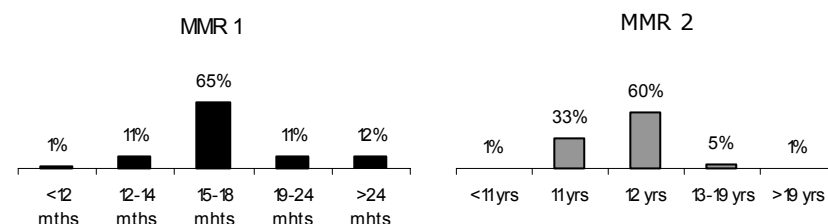
Age (yrs)	M	F	+	-	Admitted
			MMR	MMR	
<2	8	6	-	14	12
2-5	2	1	-	3	3
6-10	6	2	2	5	5
11-13	1	1	1	1	1
14-19	-	-	-	-	-
20-35	3	2	-	4	4
Total	20	12	3	27	25

A total of 23 children were not MMR-vaccinated. Of these, eight were children <15 months. Three children were vaccinated, and for one child, vaccination status was un-

Table 1. Coverage of MMR 1 and 2 vaccination 2001 and 2002, by county. Change in percentage points relative to 2001 in ()

County	MMR 1			MMR 2		
	2002		2001	2002		2001
	No.	%	%	No.	%	%
Cph. Municip.	6,893	93 (+5)	88	3,165	86 (+5)	81
Frb. Municip.	1,310	93 (+5)	88	502	83 (+3)	80
Copenhagen	7,713	104 (+7)	97	6,835	87 (+2)	85
Frederiksberg	4,768	105 (+9)	96	4,582	91 (+8)	83
Roskilde	3,102	108 (+11)	97	2,949	96 (+11)	85
West Zealand	3,567	105 (+8)	97	3,534	93 (+8)	85
Storstrøm	2,616	100 (+5)	95	2,860	90 (+3)	87
Bornholm	427	108 (+9)	99	547	101 (+11)	90
Funen	5,565	102 (+11)	91	5,493	92 (+4)	88
South Jutland	2,946	102 (+6)	96	3,320	94 (+5)	89
Ribe	2,831	103 (+12)	91	2,924	92 (+2)	90
Vejle	4,545	102 (+5)	97	4,237	93 (+4)	89
Ringkøbing	3,621	102 (+9)	93	3,439	93 (+2)	91
Aarhus	8,433	101 (+7)	94	7,348	92 (+3)	89
Viborg	2,874	104 (+9)	95	2,983	91 (+6)	85
North Jutland	6,378	112 (+12)	90	5,984	94 (+3)	91
Total	67,589	102 (+8)	94	60,702	92 (+5)	87

Fig. 1. Age on MMR 1 and 2 vaccination; distribution in percent, 2002



certain. Four adults were not vaccinated, and in one case, vaccination status was unknown. A total of 25 patients had been admitted because of measles. None developed sequelae. The four adult patients who were admitted were all generally unwell and had classic symptoms of measles, with high fever, rash and cough. The index patient in the outbreak mentioned was infected with measles virus during a holiday in the Philippines, EPI-NEWS 5/02. A further three patients were also infected abroad; one during an aeroplane trip from Asia and two while staying in Italy and Spain, respectively. The remaining six patients were all resident in the Greater Copenhagen area, however, their sources of infection could not be identified. One patient spread the measles virus to Norway, where an adult with impaired immune defences was infected.

Comments

The low incidence of measles in Denmark and the increased coverage of vaccination indicate that po-

pulation immunity is now at a level where the measles virus cannot circulate freely. Thus, it has been 10 months since the last notification of a case of measles in Denmark. In other respects, the situation in Denmark corresponds to that in the other Scandinavian countries. However, there is still a risk of infection during trips abroad, and the outbreak in North Jutland demonstrated that transmission to unvaccinated children in Denmark can occur within a short space of time. For this reason, MMR vaccination should also be recommended to unvaccinated persons before foreign travel. For adult travellers who do not think they have had measles, one MMR vaccination is recommended.

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SUMMER HOLIDAYS

Unless special circumstances arise, EPI-NEWS will not be published until week 32. The Department of Epidemiology wishes everybody a good summer.

18 June 2003

Patients with laboratory-diagnosed chlamydia, by sex and county

1st quarter of 2003 compared with the corresponding period in 2002

County	1st quarter 2003			1st quarter 2002		
	M	F	Total	M	F	Total
Cph. & Frb. Municipalities	301	671	973 *	250	480	730
Copenhagen	151	281	432	112	253	366 *
Frederiksborg	79	145	224	59	113	172
Roskilde	40	103	143	31	100	131
West Zealand	36	97	133	66	129	195
Storstrøm	36	103	139	30	94	125 *
Bornholm	3	24	27	2	18	20
Funen	117	278	395	85	221	306
South Jutland	46	131	178 *	39	133	173 *
Ribe	45	101	146	51	96	147
Vejle	77	167	244	69	176	246 *
Ringkøbing	50	156	206	49	124	174 *
Aarhus	170	358	529 *	203	349	553
Viborg	53	108	162 *	49	109	158
North Jutland	142	292	434	121	277	399 *
Total	1346	3015	4365	1216	2672	3895

* In one person gender was unknown

Patients with laboratory-diagnosed gonorrhoea, by sex and county

1st quarter of 2003 compared with the corresponding period in 2002

County	1st quarter 2003			1st quarter 2002		
	M	F	Total	M	F	Total
Cph. & Frb. Municipalities	22	5	27	40	8	48
Copenhagen	5	1	6	3	-	3
Frederiksborg	4	-	4	2	1	3
Roskilde	3	-	3	-	-	-
West Zealand	3	1	4	2	-	2
Storstrøm	1	-	1	1	-	1
Bornholm	-	-	-	1	1	2
Funen	5	1	6	1	-	1
South Jutland	2	-	2	3	1	4
Ribe	1	-	1	1	-	1
Vejle	1	-	1	2	-	2
Ringkøbing	3	-	3	-	-	-
Aarhus	7	1	8	7	-	7
Viborg	-	-	-	1	-	1
North Jutland	1	-	1	1	1	2
Total	58	9	67	65	12	77

Patients with laboratory-diagnosed pertussis

1st quarter of 2003 compared with the corresponding period in 2002

	2003				2002			
	January	February	March	Total	January	February	March	Total
< 2 years	24	16	8	48	39	16	21	76
2-17 years	96	39	20	155	109	95	80	284
≥ 18 years	19	11	2	32	20	21	13	54
Total	139	66	30	235	168	132	114	414