

IMMUNISATION UPTAKE STATISTICS FOR IRELAND



A REPORT BY THE NATIONAL DISEASE SURVEILLANCE CENTRE

Quarter 4, 2001

May, 2002

Summary

MMR₁ uptake rates at 24 months continued to decline in Q4-2001. However, the decline was not as dramatic as that seen in the previous quarters. MMR₁ uptake rates fell by 1 %, from 70% in Q3-2001 to 69%. In Q4-2001 D₃, P₃, T₃, Hib₃ and Polio₃ uptake rates at 24 months were between 80 and 83%, which was similar to the previous quarter.

Immunisation uptake rates at 12 months in Quarter 4, 2001 increased by 1-3% when compared to the previous quarter, ranging from 70% for D₃ and T₃, to 69% for Hib₃ and Polio₃ and down to 68% for P₃.

In Ireland immunisation uptake levels fall far short of the 95% target, with uptake levels at 24 months declining even further in 2001 when compared with 2000. D₃, P₃, and Polio₃ uptake declined by 2% to 84%, T₃, and Hib₃ uptake declined by 1% to 81% and 84%, respectively, while MMR₁ uptake declined by 6% to 73%.

MenC uptake rates as of February 2002 improved by 2% to 73% in 1-4 year olds and by 2% to 77% in 15-18 year olds compared to when the previous reports were run in November 2001.

months were reported by the SEHB and the NWHB at 80%, while the lowest rates were in the ERHA at 60% (Table 1). Uptake at 12 months improved by 1-3% in Quarter 4 2001 compared with the previous two quarters (Figure 1).

Table 1. Immunisation uptake rates in children 12 months of age in Quarter 4, 2001

Health Board	No. in cohort	% Uptake at 12 months				
		Cohort born 01/10/2000 – 31/12/2000				
		D ₃	P ₃	T ₃	Hib ₃	Polio ₃
ERHA	5,369	60	59	60	60	59
MHB	851	72	71	72	72	71
MWHB	1,197	70	68	70	70	70
NEHB	1,328	79	78	79	79	78
NWHB	728	80	**	80	79	78
SEHB	1,561	80	79	80	80	80
SHB	1,948	76	74	76	75	75
WHB	1,188	71	70	71	66	70
Ireland	14,170	70	68	70	69	69

Introduction

The immunisation uptake statistics for children 12 months and 24 months of age in Quarter 4, 2001 who have received three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃) and one dose of vaccine against measles, mumps and rubella (MMR₁, uptake at 24 months only) are presented in this report. These statistics relate to uptake in the cohorts born between 01/10/2000 & 31/12/2000 and 01/10/1999 & 31/12/1999. Annual uptake statistics for 2001 are also presented in this report.

Uptake statistics on the Meningococcal Group C Conjugate (MenC) vaccine as of January 2002, in those targeted by Phase 1 of the MenC campaign (< 5 years and 15-18 years) are presented.

Results ~ Quarter 4, 2001

Immunisation uptake at 12 months in Quarter 4, 2001

Immunisation uptake rates in children 12 months of age in Quarter 4, 2001 are presented (Table 1). National uptake of D₃ and T₃ and at 12 months was 70%, Hib₃ and Polio₃ uptake was 69%, while P₃ uptake was 68% (this latter figure is based on data from seven health boards). The highest uptake rates at 12

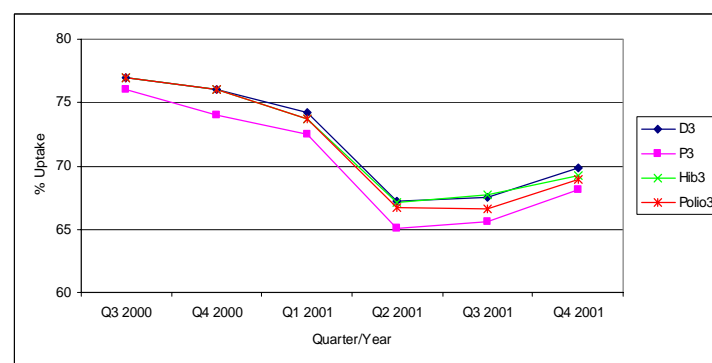


Figure 1. Quarterly immunisation uptake rates at 12 months in Ireland

Immunisation uptake at 24 months in Quarter 4, 2001

Immunisation uptake rates in children 24 months of age in Quarter 4, 2001 are presented (Table 2). National uptake rates were 83% for D₃, T₃ and Polio₃, 82% for Hib₃ and 80% for P₃. Uptake for these vaccines ranged from 76-78% in ERHA up to 93-94% in NEHB (Table 2). MMR₁ uptake was 69%, this ranged from 60% in ERHA to 82% in SEHB (Table 2). The target 95% rate at 24 months was not reached at either national or health board level for any of the vaccines.

Table 2. Immunisation uptake rates in children 24 months of age in Quarter 4, 2001

Health Board	No. in cohort	% Uptake at 24 months					
		Cohort born 01/10/1999 – 31/12/1999					
		D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
ERHA	5,399	78	76	78	78	78	60
MHB	870	81	77	81	81	81	70
MWHB	1,222	83	80	83	82	82	70
NEHB	1,257	93	93	93	93	94	80
NWHB	747	88	**	88	87	88	75
SEHB	1,555	87	84	87	87	87	82
SHB	1,961	84	81	84	83	84	74
WHB	1,192	83	81	83	82	82	68
Ireland	14,203	83	80	83	82	83	69

** P₃ uptake could not be accurately calculated as DTaP/DT uptake was reported as a combined value

In Q4-2001, D₃, T₃ and Polio₃ uptake rates at 24 months remained largely unchanged from the previous quarter, whereas P₃, Hib₃ and MMR₁ dropped by approximately 1% (Figure 2 and Table 3). However, the fall in uptake at 12 months of all antigens observed during 2001 (Figure 1) will not be seen in the 24-month uptake data until Quarter 2, 2002 data is analysed later this year. Although MMR₁ uptake declined in this quarter, the decline was not as dramatic as that seen in previous quarters (Figure 2 and Table 3).

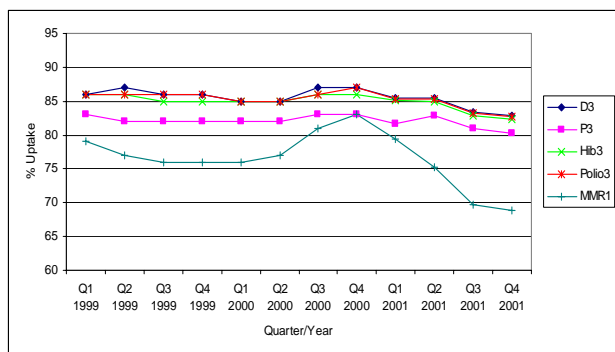


Figure 2. Quarterly immunisation uptake rates at 24 months in Ireland

Table 3. Quarterly national immunisation uptake rates (%) at 24 months

	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
Q1 1999	86	83	86	86	86	79
Q2 1999	87	82	87	86	86	77
Q3 1999	86	82	86	85	86	76
Q4 1999	86	82	86	85	86	76
Q1 2000	85	82	85	85	85	76
Q2 2000	85	82	85	85	85	77
Q3 2000	87	83	87	86	86	81
Q4 2000	87	83	87	86	87	83
Q1 2001	86	82	86	85	85	79
Q2 2001	86	83	86	85	85	75
Q3 2001	83	81	83	83	83	70
Q4 2001	83	80	83	82	83	69

Note: NWHB provided DTaP/DT uptake as combined value. Therefore, since not possible to accurately determine P₃ uptake for this health board, it was excluded from P₃ analysis

MMR₁ uptake by Health Board

In Q4-2001 MMR₁ uptake at 24 months declined by 5-6% in SEHB and WHB, by 2% in NWHB, by 1% in MWHB compared to the previous quarter. In this quarter MMR₁ uptake rates

remained unchanged in SHB, whereas they increased in ERHA (1%), MHB (2%) and NEHB (4%) (Figure 3).

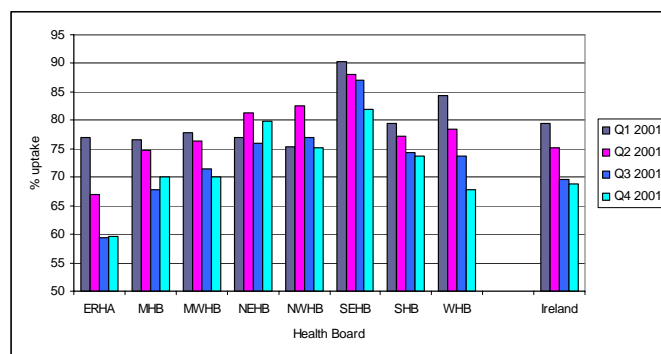


Figure 3. Quarterly MMR₁ uptake rates at 24 months by health board in 2001

Detailed quarterly immunisation uptake statistics at 12 and 24 months for each health board are presented in Appendix 1 & 2 of this report.

Results ~ Annual 2001

Immunisation uptake rates at 12 months in 2001

Overall, immunisation uptake at 12 months in 2001 (i.e. for the cohort born between 01/01/2000 & 31/12/2000) was 70% for D₃ and T₃, 69% for Hib₃ and Polio₃, and 68% for P₃.

Uptake rates at 12 months in 2001 by health board are presented in Table 4. Rates ranged from 60-61% in ERHA to 82-83% in SEHB. As the collation of national uptake data at 12 months did not commence until Q3-2000, it is not possible to compare 2001 uptake rates with previous years.

Table 4. Immunisation uptake rates in children 12 months of age in 2001

Health Board	No. in cohort	% Uptake at 12 months				
		Cohort born 01/01/2000 – 31/12/2000				
		D ₃	P ₃	T ₃	Hib ₃	Polio ₃
ERHA	21,534	61	60	61	61	60
MHB	3,445	67	65	67	68	67
MWHB	4,959	70	68	70	69	69
NEHB	4,113	77	**	77	78	77
NWHB	2,907	79	**	79	79	78
SEHB	6,122	83	82	83	83	83
SHB	7,920	73	71	73	73	72
WHB	4,826	75	73	75	73	74
Ireland	55,826	70	68	70	69	69

** P₃ uptake could not be accurately calculated as DTaP/DT uptake was reported as a combined value

Immunisation uptake at 24 months in 2001

Immunisation uptake rates at 24 months in 2001 (i.e. for the cohort born between 01/01/1999 & 31/12/1999) was 84% for D₃, T₃, Hib₃ and Polio₃, 81% for P₃ and 73% for MMR₁. Uptake rates at 24 months in 2001 by health board are presented in Table 5. Rates for D₃, T₃, P₃, Hib₃ and Polio₃ ranged from 78-80% in ERHA to 92% in NEHB, while MMR₁ uptake rates ranged from 66% in ERHA to 87% in SEHB.

Table 5. Immunisation uptake rates in children 24 months of age in 2001

Health Board	No. in cohort	% Uptake at 24 months Cohort born 01/01/1999 – 31/12/1999					
		D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
ERHA	21,276	80	78	80	80	80	66
MHB	3,447	82	78	82	81	82	72
MWHB	5,086	83	81	83	82	83	74
NEHB	5,175	92	**	92	92	92	79
NWHB	3,084	89	**	89	88	89	78
SEHB	6,204	89	86	89	89	89	87
SHB	7,893	85	82	85	84	85	76
WHB	4,793	87	85	87	87	87	76
Ireland	56,958	84	81	84	84	84	73

** P₃ uptake could not be accurately calculated as DTaP/DT uptake was reported as a combined value

In 2001 immunisation uptake rates at 24 months declined for all antigens when compared with previous years (Figure 4). D₃, T₃ and Polio₃ uptake declined by 2% to 84%. P₃ and Hib₃ uptake declined by 1% to 81% and 84%, respectively. The most dramatic decrease was seen with MMR₁ uptake dropping by an alarming 6% to 73%.

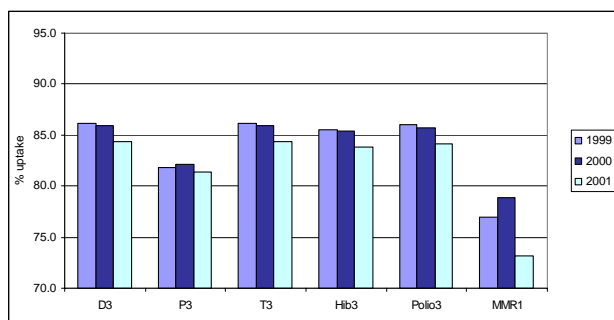


Figure 4. Annual immunisation uptake rates at 24 months

Results ~ MenC Uptake

MenC uptake rates in 1-4 year olds

MenC uptake rates in those aged 1-4 year of age in 2000 are presented in Table 6 (i.e. birth cohort born between 1996 and 1999). These statistics are based on reports run by health boards in February 2002. Overall, MenC uptake was 72% in this age group, improving by just 1% from 71% when the reports were last run in November 2001.

Table 6. MenC uptake rates (%) in children 1-4 years of age in 2000 (Cohort born 1996-1999)

Health Board	Age [Year Cohort Born in]				
	1 yr [1999]	2 yrs [1998]	3 yrs [1997]	4 yrs [1996]	Total*
ERHA	67	62	61	67	64
MHB	70	68	66	65	67
MWHB	81	80	80	75	79
NEHB	80	79	79	73	78
NWHB	86	83	83	86	84
SEHB	81	82	81	74	79
SHB	79	77	76	74	76
WHB	76	76	75	75	76
Ireland	74	72	71	71	72

* Cohort born in the years 1996-1999, i.e. aged 1-4 years when MenC campaign commenced

MenC uptake rates in 15-18 year olds

Health boards provided MenC uptake rates as of February 2002 on the 15-18 year old cohort targeted by Phase 1 of the campaign. The data provided were based on school and college registers (Table 7a) and/or on birth cohort (Table 7b).

The MenC uptake rates based on school and college registers refers to those immunised by the health board teams and will not take into account those immunised by GPs. The uptake by birth cohort includes those immunised by both the health board teams and the GPs, where immunisation returns have been made to the health boards.

MenC uptake for 15-18 year olds in schools is 82% and tends to be much lower in third level institutions (Table 7a). Overall, MenC uptake in 15-18 year olds by birth cohort is 77%, but as seen in previous reports tends to decrease with increasing age ranging from 82% in 15 year olds down to 55% in 18 year olds (Table 7b).

Table 7a. MenC uptake rates (%) in adolescents aged 15-18 years in 2000 based on school and college registers [Reports run by health boards in February 2002]

Health Board	School	College
ERHA	79	57
MHB	77	38
MWHB	77	NA
NEHB	88	88
NWHB	NA	NA
SEHB	93	69
SHB	NA	NA
WHB	NA	NA
Ireland	82	57

NA, data not available in this format

Table 7b. MenC uptake rates (%) in adolescents aged 15-18 years in 2000 based birth cohort [Reports run by health boards in February 2002]

	Age [Year Cohort Born in]				
	15 yrs [1985]	16 yrs [1984]	17 yrs [1983]	18 yrs [1982]	Total
ERHA	NA	NA	NA	NA	NA
MHB	NA	NA	NA	NA	NA
MWHB	92	86	81	59	79
NEHB	NA	NA	NA	NA	NA
NWHB	92	87	75	55	77
SEHB	**	**	**	**	89
SHB	86	85	76	49	73
WHB	73	73	67	59	68
Ireland	85	82	74	55	77

NA, data currently not available in this format

** Total figure for 15 –18 year olds provided

NDSC would like to thank the health board for providing data and special thanks to the Specialists in Public Health Medicine, Immunisation Co-ordinators and Systems Analysts for their assistance.

Appendix 1. Quarterly Immunisation Uptake Rate at 12 months by Health Board

Uptake at 12 months ~ ERHA					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	75	73	75	75	75
Q4 2000	73	72	73	73	73
Q1 2001	69	67	69	69	69
Q2 2001	53	52	53	53	53
Q3 2001	61	60	61	60	59
Q4 2001	60	59	60	60	59

Uptake at 12 months ~ MHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	70	67	70	71	71
Q4 2000	72	69	72	72	72
Q1 2001	71	68	71	71	71
Q2 2001	66	65	66	66	66
Q3 2001	61	59	61	62	60
Q4 2001	72	71	72	72	71

Uptake at 12 months ~ MWHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	74	72	74	74	74
Q4 2000	72	71	72	72	72
Q1 2001	77	74	77	74	74
Q2 2001	69	67	69	69	69
Q3 2001	64	62	64	64	63
Q4 2001	70	68	70	70	70

Uptake at 12 months ~ NEHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	*	*	*	*	*
Q4 2000	*	*	*	*	*
Q1 2001	*	*	*	*	*
Q2 2001	79	78	79	78	78
Q3 2001	74	73	74	76	75
Q4 2001	79	78	79	79	78

* Unable to provide data for this quarter

Uptake at 12 months ~ NWHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	69	**	69	69	69
Q4 2000	74	**	74	74	74
Q1 2001	71	**	71	71	71
Q2 2001	83	**	83	83	82
Q3 2001	82	**	82	82	80
Q4 2001	80	**	80	79	78

Uptake at 12 months ~ SEHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	90	87	90	90	90
Q4 2000	86	83	86	86	86
Q1 2001	87	84	87	87	86
Q2 2001	84	82	84	84	84
Q3 2001	83	81	83	83	82
Q4 2001	80	79	80	80	80

Uptake at 12 months ~ SHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	*	*	*	*	*
Q4 2000	78	76	78	78	78
Q1 2001	76	74	76	76	75
Q2 2001	73	70	73	72	72
Q3 2001	68	66	68	69	67
Q4 2001	76	74	76	75	75

Uptake at 12 months ~ WHB					
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃
Q3 2000	85	83	85	85	85
Q4 2000	79	77	79	79	79
Q1 2001	80	78	80	80	80
Q2 2001	77	74	77	77	76
Q3 2001	73	71	73	71	72
Q4 2001	71	70	71	66	70

* Unable to provide data for this quarter

** Uptake cannot be accurately calculated as DTaP/DT provided as combined value

Appendix 2 Quarterly Immunisation Uptake Rate at 24 months by Health Board

Uptake at 24 months ~ ERHA						
	D₃	P₃	T₃	Hib₃	Polio₃	MMR₁
Q1 1999	86	82	86	85	85	78
Q2 1999	85	81	85	84	85	77
Q3 1999	85	81	85	84	85	76
Q4 1999	84	80	84	84	84	76
Q1 2000	84	81	84	84	84	75
Q2 2000	84	81	84	84	84	74
Q3 2000	85	82	85	84	85	81
Q4 2000	85	82	85	84	84	81
Q1 2001	82	80	82	81	82	77
Q2 2001	82	80	82	82	82	67
Q3 2001	79	77	79	78	79	59
Q4 2001	78	76	78	78	78	60

Uptake at 24 months ~ MHB						
	D₃	P₃	T₃	Hib₃	Polio₃	MMR₁
Q1 1999	83	77	83	82	82	72
Q2 1999	85	80	85	83	84	72
Q3 1999	81	77	81	80	81	68
Q4 1999	81	77	81	80	81	69
Q1 2000	83	78	83	83	84	73
Q2 2000	80	76	80	80	80	73
Q3 2000	81	77	81	80	80	75
Q4 2000	83	79	83	83	83	80
Q1 2001	82	77	82	81	81	77
Q2 2001	83	80	83	83	83	75
Q3 2001	81	79	81	81	81	68
Q4 2001	81	77	81	81	81	70

Uptake at 24 months ~ MWHB						
	D₃	P₃	T₃	Hib₃	Polio₃	MMR₁
Q1 1999	82	79	82	81	82	74
Q2 1999	81	79	81	80	81	72
Q3 1999	79	77	79	79	79	73
Q4 1999	80	78	80	80	80	72
Q1 2000	76	73	76	76	76	70
Q2 2000	80	77	80	80	80	75
Q3 2000	83	80	83	82	83	78
Q4 2000	83	80	83	83	82	83
Q1 2001	82	80	82	81	82	78
Q2 2001	86	84	86	84	84	76
Q3 2001	82	80	82	81	82	71
Q4 2001	83	80	83	82	82	70

Uptake at 24 months ~ NEHB						
	D₃	P₃	T₃	Hib₃	Polio₃	MMR₁
Q1 1999	84	**	84	84	84	80
Q2 1999	94	**	94	94	94	78
Q3 1999	95	**	95	95	95	78
Q4 1999	94	**	94	94	94	78
Q1 2000	91	**	91	91	91	81
Q2 2000	89	**	89	89	89	78
Q3 2000	95	**	95	95	95	79
Q4 2000	97	**	97	97	97	82
Q1 2001	94	**	94	94	94	77
Q2 2001	91	90	91	91	90	81
Q3 2001	89	88	89	89	89	76
Q4 2001	93	93	93	93	94	80

Uptake at 24 months ~ NWHB						
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
Q1 1999	87	**	87	86	87	76
Q2 1999	87	**	87	87	87	75
Q3 1999	86	**	86	86	86	74
Q4 1999	88	**	88	88	88	73
Q1 2000	86	**	86	86	86	74
Q2 2000	82	**	82	82	82	72
Q3 2000	83	**	83	83	83	72
Q4 2000	85	**	85	84	84	77
Q1 2001	85	**	85	85	85	75
Q2 2001	91	**	91	91	91	83
Q3 2001	90	**	90	90	90	77
Q4 2001	88	**	88	87	88	75

Uptake at 24 months ~ SEHB						
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
Q1 1999	92	87	92	92	92	90
Q2 1999	90	84	90	89	89	86
Q3 1999	88	85	88	87	88	85
Q4 1999	87	83	87	87	86	85
Q1 2000	89	85	89	88	88	86
Q2 2000	89	85	89	89	89	89
Q3 2000	91	87	91	90	91	92
Q4 2000	90	85	90	90	90	92
Q1 2001	91	87	91	91	91	90
Q2 2001	89	85	89	88	89	88
Q3 2001	90	88	90	90	90	87
Q4 2001	87	84	87	87	87	82

Uptake at 24 months ~ SHB						
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
Q1 1999	87	83	87	87	87	75
Q2 1999	86	81	86	86	86	72
Q3 1999	84	81	84	83	84	70
Q4 1999	86	81	86	85	86	73
Q1 2000	84	80	84	83	84	72
Q2 2000	84	80	84	83	84	76
Q3 2000	86	82	86	85	85	77
Q4 2000	87	83	87	86	86	82
Q1 2001	86	83	86	86	86	80
Q2 2001	85	82	85	85	85	77
Q3 2001	84	82	84	84	84	74
Q4 2001	84	81	84	83	84	74

Uptake at 24 months ~ WHB						
	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	MMR ₁
Q1 1999	92	89	92	92	92	86
Q2 1999	90	87	90	89	90	83
Q3 1999	91	87	91	90	90	81
Q4 1999	95	90	95	90	90	80
Q1 2000	92	87	92	91	92	82
Q2 2000	91	87	91	90	91	82
Q3 2000	92	87	92	91	91	84
Q4 2000	91	87	91	90	91	85
Q1 2001	91	88	91	90	91	84
Q2 2001	87	85	87	87	87	78
Q3 2001	87	85	87	86	87	74
Q4 2001	83	81	83	82	82	68