

# IMMUNISATION UPTAKE STATISTICS FOR IRELAND



A REPORT BY THE NATIONAL DISEASE SURVEILLANCE CENTRE

Quarter 4-2002

July, 2003

## Summary

In Quarter 4-2002, national uptake rates for vaccines at 12 months increased by 2% in all cases when compared with the previous quarter with the exception of P<sub>3</sub> uptake which increased by 3% to 79%. Uptake rates for D<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> were 79% while the uptake rate for MenC<sub>3</sub> was 78%.

At 24 months, national uptake rates for all vaccines increased by 2% in Quarter 4-2002 when compared with the previous quarter. National uptake of MMR<sub>1</sub> increased by 2% to 75% in Quarter 4-2002. Uptake rates for both Hib<sub>3</sub> and Polio<sub>3</sub> were 84% while uptake rates for both D<sub>3</sub> and T<sub>3</sub> were 85%. The national uptake rate for P<sub>3</sub> at 24 months was 83%.

4 of the 6 vaccines in comparison with Quarter 3-2002. In the MWHB, uptake for Hib<sub>3</sub> decreased by 1% while uptake for MenC<sub>3</sub> decreased by 2%. In the NWHB, P<sub>3</sub> uptake increased by 2% while MenC<sub>3</sub> uptake decreased by 1%. The WHB reported decreases in vaccine uptake of 1-3% in all cases.

In addition, the MHB reported the greatest increases in uptake rates at 12 months for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> (6% in all cases) as well as for MenC<sub>3</sub> (7%).

Vaccination coverage statistics for children 12 months of age in Quarter 4-2002 were 94-95% in Northern Ireland<sup>1</sup> and 91% for the United Kingdom as a whole<sup>2</sup>.

## Introduction

The immunisation uptake statistics for children 12 and 24 months of age in Quarter 4-2002 and who have received three doses of vaccines against diphtheria (D<sub>3</sub>), pertussis (P<sub>3</sub>), tetanus (T<sub>3</sub>), *Haemophilus influenzae* type b (Hib<sub>3</sub>), polio (Polio<sub>3</sub>), Meningococcal group C (MenC<sub>3</sub>; uptake at 12 months only) and one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>; uptake at 24 months only) are presented in this report. These statistics relate to uptake in the cohorts born between 01/10/2001 & 31/12/2001 and 01/10/2000 & 31/12/2000.

## Results

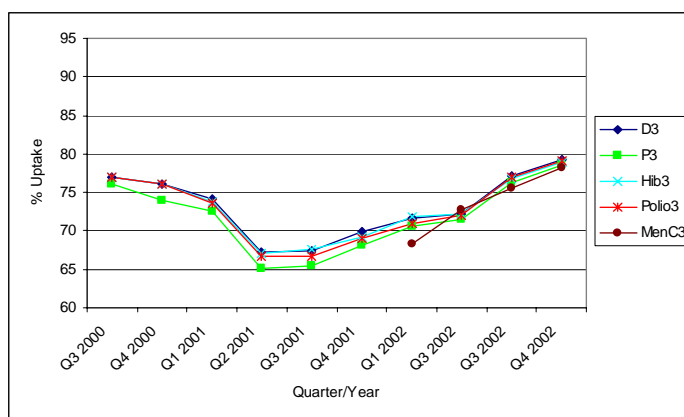
### Immunisation uptake at 12 months in Quarter 4-2002

Immunisation uptake rates in children 12 months of age in Quarter 4-2002 are presented (Table 1). National uptake rates for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> at 12 months were 79% and 78% for and MenC<sub>3</sub>. The highest uptake rates at 12 months were reported by the NWHB at 86-87%, while the lowest rates were reported in the WHB at 71-72% (Table 1).

National uptake of all vaccines at 12 months of age increased by 2-3% when compared with the previous quarter. Four of the eight health boards reported increases in uptake rates for all vaccines; ERHA (4-5%), MHB (6-7%) NEHB (1-3%) and SHB (1%) [Appendix 1]. Uptake rates increased by 1% in all but two cases in the SEHB: both Polio<sub>3</sub> and MenC<sub>3</sub> remained unchanged when compared with the previous quarter. In both the MWHB and the NWHB, uptake rates were unchanged for

**Table 1.** Immunisation uptake rates in children 12 months of age in Quarter 4-2002

% Uptake at 12 months Cohort born 01/10/2001 – 31/12/2001							
Health Board	No. in cohort	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>
ERHA	5,351	75	75	75	75	75	74
MHB	918	85	84	85	85	85	84
MWHB	1,159	86	85	86	85	86	85
NEHB	1,525	82	82	82	81	82	81
NWHB	799	87	86	87	87	87	86
SEHB	1,609	84	83	84	84	83	83
SHB	2,007	79	78	79	79	79	78
WHB	1,294	72	72	72	72	72	71
Ireland	14,662	79	79	79	79	79	78



**Figure 1.** Quarterly immunisation uptake rates at 12 months in Ireland (Note: scale ranges from 60-95% uptake)

### Immunisation uptake at 24 months in Quarter 4- 2002

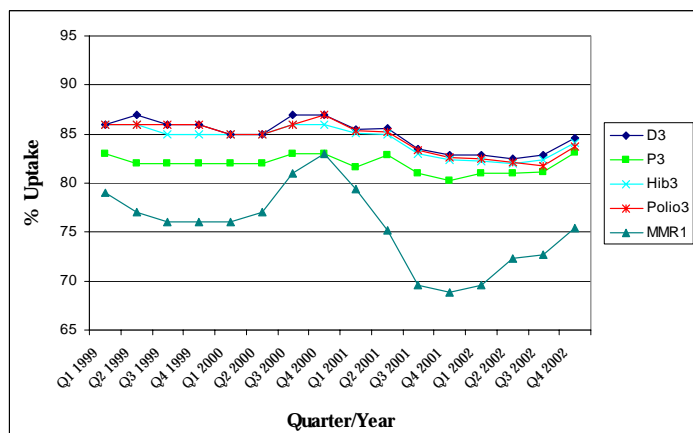
Immunisation uptake rates in children 24 months of age in Quarter 4-2002 are presented (Table 2). National uptake rates were 84% for Hib<sub>3</sub> and Polio<sub>3</sub>, 85% for D<sub>3</sub> and T<sub>3</sub> and 83% for P<sub>3</sub>. Uptake rates for these vaccines ranged from 79-81% in the ERHA up to 91-94% in the NWHB (Table 2). MMR<sub>1</sub> uptake was 75% nationally, ranging from 68% in the ERHA to 82% in the SEHB (Table 2). The target rate of 95% uptake at 24 months was not reached at either national or health board level for any vaccine.

**Table 2.** Immunisation uptake rates in children 24 months of age in Quarter 4- 2002

% Uptake at 24 months								
Cohort born 01/10/2000 – 31/12/2000								
Health Board	No. in cohort	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>	MenC <sub>3</sub>
ERHA	5,354	81	80	81	81	79	68	72
MHB	847	87	86	87	87	87	79	84
MWHB	1,163	87	85	87	86	87	81	87
NEHB	1,368	89	88	89	89	89	79	84
NWHB	723	94	91	94	92	93	79	89
SEHB	1,594	89	87	89	89	89	82	85
SHB	1,957	84	83	84	84	84	80	81
WHB	1,243	81	80	81	81	81	75	75
ROI	14,249	85	83	85	84	84	75	79

In Q4-2002, national uptake rates for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> at 24 months increased by 2% when compared with the previous quarter (Figure 2 and Table 3). The largest increases in uptake of for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, and MMR<sub>1</sub> at 24 months were reported in the MHB (4-6%) while increases of 4% were reported in both the MHB and SEHB for Polio<sub>3</sub>. Three health boards reported increases in uptake for all of these vaccines in Q4-2002; ERHA (3-4% increases), MHB (4-6%), NWHB and SEHB (3-4%).

Data on MenC<sub>3</sub> uptake in children 24 months of age are presented for the first time in Table 2. Previously, these data were not presented as the number of doses required to complete the MenC schedule varied between one and three doses for children born before the introduction of the MenC program at the beginning of Q4-2000. The cohort of children born between 01/10/2000 and 31/12/2000 all required three doses of MenC vaccine as they were born after the introduction of the MenC programme. The highest uptake for MenC<sub>3</sub> in Q4-2002 was reported by the NWHB (89%) while the lowest uptake rates were recorded in the ERHA (72%).



**Figure 2.** Quarterly immunisation uptake rates at 24 months in Ireland (Note: scale ranges from 65-95% uptake)

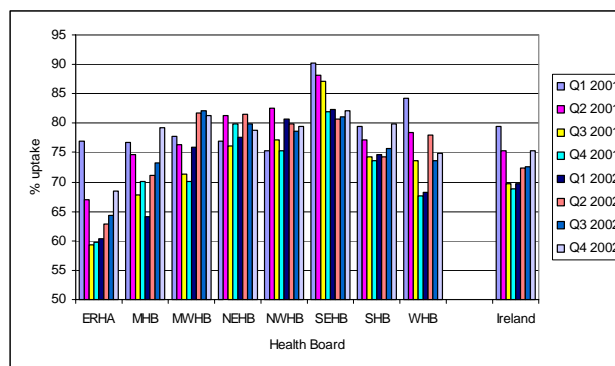
**Table 3.** Quarterly national immunisation uptake rates (%) at 24 months

	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	83	81	83	82	83	70
Q2 2002	83	81	83	82	82	72
Q3 2002	83	81	83	82	82	73
Q4 2002	85	83	85	84	84	75

Note: Prior to Q3-2002, NWHB provided DTaP/DT uptake as combined value, since not possible to accurately determine P<sub>3</sub> uptake for this health board, it was excluded from overall P<sub>3</sub> analysis

### MMR<sub>1</sub> uptake by Health Board

In Q4-2002, national MMR<sub>1</sub> uptake rates at 24 months increased by 2% to 75% when compared with the previous quarter. MMR<sub>1</sub> uptake rates increased in 5 of the 8 health boards; ERHA (+4%), MHB (+6%), SEHB (+1%), SHB (+4%) and WHB (+1%). Uptake rates for MMR<sub>1</sub> decreased slightly in MWHB (-1%) and NEHB (-1%) while uptake remained unchanged in NWHB (Figure 3). Although a further slight recovery in the national MMR<sub>1</sub> uptake rate was observed in this quarter, it is still 8% below the uptake rate reported in Q4-2000 and 20% below the national target.



**Figure 3.** Quarterly MMR<sub>1</sub> uptake rates at 24 months by health board in 2001 and 2002 (Note: scale ranges from 50-95% uptake).

In Quarter 4-2002 vaccination coverage statistics at 24 months for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub> were 96-97% in Northern Ireland<sup>1</sup> and 93-94% for the United Kingdom as a whole.<sup>2</sup> MMR<sub>1</sub> uptake was 88% in Northern Ireland<sup>1</sup> and 81% in the UK.<sup>2</sup>

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

## References

1. Vaccination coverage statistics for children in Northern Ireland. Available over the WWW at: <http://www.cdscni.org.uk/surveillance/Coveragestats/default.asp>
2. COVER programme: October to December 2002. CDR Weekly 2003: 13(13). Available at: <http://www.phls.org.uk>

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

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

Uptake at 12 months ~ ERHA					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	63	63	63	63	61
Q2 2002	63	63	63	64	63
Q3 2002	71	70	71	70	70
Q4 2002	75	75	75	75	75

Uptake at 12 months ~ MHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	64	62	64	64	63
Q2 2002	69	67	69	69	67
Q3 2002	79	78	79	79	79
Q4 2002	85	84	85	85	85

Uptake at 12 months ~ MWHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	78	76	78	77	77
Q2 2002	81	80	81	80	81
Q3 2002	86	85	86	86	86
Q4 2002	86	85	86	85	86

Uptake at 12 months ~ NEHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	84	82	84	83	84
Q2 2002	76	76	76	76	78
Q3 2002	80	80	80	80	81
Q4 2002	82	82	82	81	82

\* Unable to provide data for this quarter

Uptake at 12 months ~ NWHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	81	81	81	81	81
Q2 2002	84	84	84	82	84
Q3 2002	87	84	87	87	87
Q4 2002	87	86	87	87	87

Uptake at 12 months ~ SEHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	81	80	81	81	81
Q2 2002	80	80	80	80	80
Q3 2002	83	82	83	83	83
Q4 2002	84	83	84	84	83

Uptake at 12 months ~ SHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	77	76	77	77	77
Q2 2002	76	75	76	75	76
Q3 2002	78	77	78	78	78
Q4 2002	79	78	79	79	79

Uptake at 12 months ~ WHB					
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>
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
Q1 2002	68	67	68	*	68
Q2 2002	76	75	76	76	76
Q3 2002	75	74	75	75	75
Q4 2002	72	72	72	72	72

\* Unable to provide data for this quarter

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

## Appendix 2 Quarterly Immunisation Uptake Rates at 24 months by Health Board

Uptake at 24 months ~ ERHA						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	78	76	78	77	77	60
Q2 2002	78	76	78	77	77	63
Q3 2002	78	77	78	77	76	64
Q4 2002	81	80	81	81	79	68

Uptake at 24 months ~ MHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	78	75	78	78	78	64
Q2 2002	75	73	75	73	75	71
Q3 2002	83	80	83	82	83	73
Q4 2002	87	86	87	87	84	79

Uptake at 24 months ~ MWHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	86	83	86	85	86	76
Q2 2002	85	83	85	85	85	82
Q3 2002	88	85	88	87	87	82
Q4 2002	87	85	87	86	87	81

Uptake at 24 months ~ NEHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	91	90	91	90	90	78
Q2 2002	92	92	92	91	91	82
Q3 2002	91	90	91	91	90	80

Uptake at 24 months ~ NWHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	89	89	89	88	89	81
Q2 2002	92	92	92	91	91	80
Q3 2002	93	88	93	91	91	79
Q4 2002	94	91	94	92	93	79

Uptake at 24 months ~ SEHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	89	86	89	88	88	82
Q2 2002	87	85	87	86	87	81
Q3 2002	86	84	86	85	85	81
Q4 2002	89	87	89	89	89	82

Uptake at 24 months ~ SHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	85	82	85	84	84	75
Q2 2002	83	81	83	82	83	74
Q3 2002	84	82	84	83	83	76
Q4 2002	84	83	84	84	84	80

Uptake at 24 months ~ WHB						
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MMR <sub>1</sub>
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
Q1 2002	84	81	84	83	83	68
Q2 2002	84	81	84	84	83	78
Q3 2002	82	81	82	82	81	74