



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



# 2006

## IMMUNISATION UPTAKE IN IRELAND

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## Acknowledgements

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### **Authorship:**

This report was written by Dr Sarah Gee, HPSC and edited by Dr Suzanne Cotter, HPSC.

### **Citation:**

Immunisation uptake in Ireland, 2006. Health Protection Surveillance Centre, October 2007.

### **Further information:**

The 2006 quarterly immunisation uptake reports and a complete listing of national and regional immunisation uptake statistics at 12 and 24 months are available on the HPSC website at <http://www.ndsc.ie/hpsc/A-Z/VaccinePreventable/Vaccination/ImmunisationUptakeStatistics/>

Vaccination uptake data for Europe are available on the WHO website at <http://data.euro.who.int/CISID/>

## Summary

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- Uptake of D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> at 12 months was 86%
  
- Uptake of MenC<sub>3</sub> at 12 months was 85%
  
- Uptake of D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> at 24 months was 91%
  
- Uptake of MenC<sub>3</sub> at 24 months was 90%
  
- Uptake of MMR<sub>1</sub> at 24 months was 86%

## Introduction

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Vaccination is a simple, safe and effective way of protecting people against harmful infectious diseases that can cause serious complications and sometimes death. In addition, vaccination helps reduce the possibility of passing on vaccine-preventable infections to others in the community. To effectively control vaccine-preventable diseases and prevent outbreaks it is recommended that at least 95% of children complete the childhood immunisation schedule.

The current Irish childhood immunisation schedule recommends that babies receive one dose of vaccine against tuberculosis (BCG vaccine) at birth or by one month of age and three doses of vaccines against diphtheria, pertussis, tetanus, *Haemophilus influenzae* type b, poliomyelitis and meningococcal group C given at two, four and six months of age. Between 12 and 15 months of age children should receive the first dose of the measles-mumps-rubella (MMR) vaccine and since September 2006 a booster dose of *Haemophilus influenzae* type b is also routinely offered at the same time as MMR. A booster dose of diphtheria, pertussis, tetanus and poliomyelitis is scheduled for children at four to five years of age, as is a second dose of MMR vaccine. A booster dose of tetanus and diphtheria should be given at 11 to 14 years of age.

Immunisation uptake statistics for 2006 are presented in this report. These statistics relate to children registered in the immunisation databases in the HSE Areas. The proportion of these children who completed the recommended immunisation schedule by 12 or 24 months of age in 2006 is reported.

## Materials and Methods

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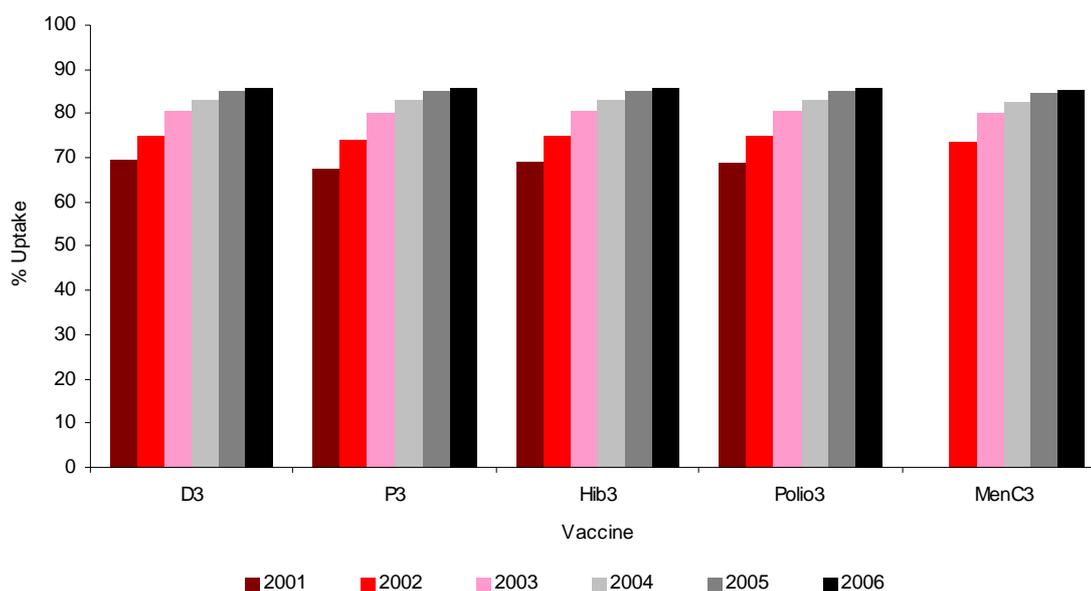
Each HSE Area maintains a childhood immunisation register. In 2006, each HSE Area provided HPSC with immunisation uptake data on a quarterly basis. These uptake data related to all children on the HSE Area databases who reached their first or second birthday (uptake at 12 and 24 months, respectively) in that quarter and who had received three doses of vaccine against diphtheria (D<sub>3</sub>), pertussis (P<sub>3</sub>), tetanus (T<sub>3</sub>), *H. influenzae* type b (Hib<sub>3</sub>), poliomyelitis (Polio<sub>3</sub>) and meningococcal group C (MenC<sub>3</sub>) and one dose of BCG vaccine (uptake at 12 months only) and one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>; uptake at 24 months only). Data on the number of children eligible for immunisation in each cohort, the number immunised and the percentage immunised were provided.

HPSC collated and analysed these data in Microsoft Excel and quarterly reports were produced which are available on the HPSC website.<sup>1</sup> Annual immunisation uptake rates presented in this report were calculated by collating the quarterly data provided by the HSE Areas. These statistics, therefore, relate to children who were 12 and 24 months of age in 2006 i.e. birth cohorts born between 01/01/2005 & 31/12/2005 and 01/01/2004 & 31/12/2004 and who completed the immunisation schedule outlined above.

## Results

### *Immunisation uptake rates at 12 months*

In 2006, national immunisation uptake rates at 12 months were 86% for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>. This was an improvement of one percent when compared to 2005 (figure 1). MenC<sub>3</sub> uptake in 2006 was 85%, unchanged from 2005.



**Figure 1.** Annual immunisation uptake rates at 12 months in Ireland, 2001-2006

*T<sub>3</sub> uptake identical to D<sub>3</sub> uptake, therefore T<sub>3</sub> uptake not presented in this chart*

In 2006, uptake of 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> ranged from 82% in the HSE-Eastern Area to 91-92% in the HSE-Midland and North Western Areas (table 1). Seven of the eight HSE Areas had uptake rates of greater than 85% (table 1).

**Table 1. Immunisation uptake rates in children 12 months of age in 2006**

HSE Area	No. in cohort	% Uptake at 12 months						
		Cohort born between 01/01/2005 – 31/12/2005						
		D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
HSE-Eastern	22,447	82	82	82	82	82	82	na*
HSE-Midland	3,816	92	92	92	92	92	92	94
HSE-Mid-Western	5,220	89	89	89	89	89	89	93
HSE-North Eastern	6,477	89	89	89	89	89	86	na*
HSE-North Western	3,276	92	92	92	91	92	91	92
HSE-South Eastern	6,933	86	86	86	86	86	86	94
HSE-Southern†	8,725	87	87	87	87	87	86	88‡
HSE-Western	5,824	88	88	88	88	88	87	na*
<b>Ireland</b>	<b>62,718§</b>	<b>86</b>	<b>86</b>	<b>86</b>	<b>86</b>	<b>86</b>	<b>85</b>	<b>93</b>

\* Data not available at this time

† As the denominator/number in cohort varied according to vaccine, most commonly used number is presented here. The number in cohort eligible for BCG vaccine was 1,789

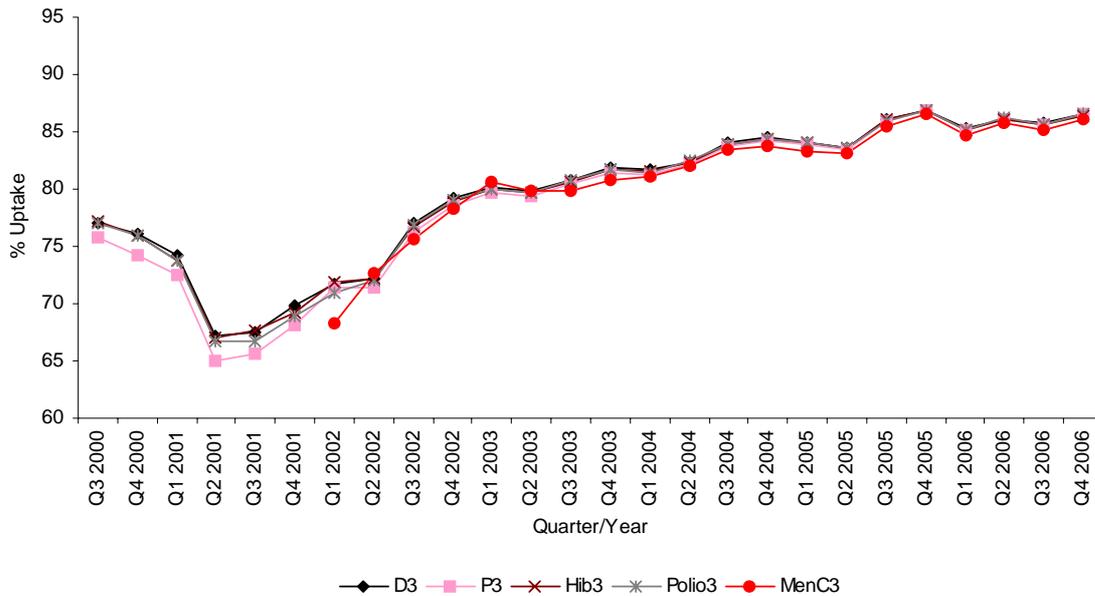
‡ HSE-Southern: part coverage of neonatal BCG, Kerry only

§ Number in cohort eligible for BCG vaccine was 20,918

Compared with 2005 the uptake rates 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> in the HSE-Eastern, Midland, Mid-Western, North Western, Southern and Western Areas increased by one to two percent in 2006 (Appendix 1). Uptake rates for these vaccines, in 2006, decreased by one to three percent in the HSE-North Eastern Area and by one percent in the HSE-South Eastern Area compared to 2005 (Appendix 1).

National quarterly immunisation uptake rates of 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> varied between 85 and 87% during 2006 (figure 2).

Five of the eight HSE Areas, in 2006, were in a position to provide BCG figures (representing a third of the national birth cohort), and uptake was 93%, unchanged from 2005. BCG uptake ranged from 88% in the HSE-Southern Area (Kerry only) to 94% in the HSE-Midland and South Eastern Areas (table 1).



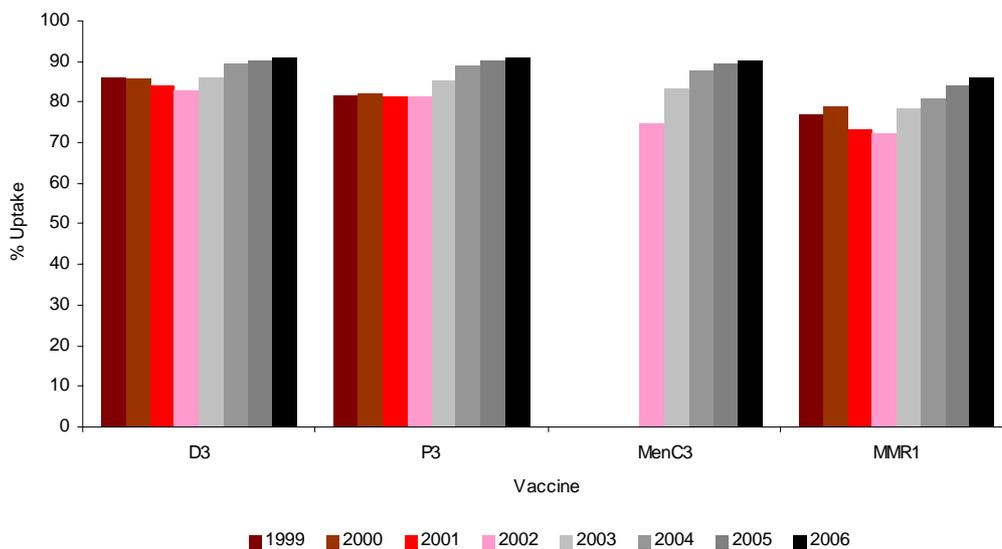
**Figure 2.** Quarterly immunisation uptake rates at 12 months in Ireland, Q3 2000-Q4 2006

Note scale ranges from 60-95%

$T_3$  uptake identical to  $D_3$  uptake, therefore  $T_3$  uptake not presented in this chart

### Immunisation uptake rates at 24 months

In 2006, national immunisation uptake rates at 24 months were 91% for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib $_3$  and Polio $_3$  and 90% for MenC $_3$ . Compared with 2005, uptake of these vaccines improved by one percent (figure 3).



**Figure 3.** Annual immunisation uptake rates at 24 months in Ireland, 1999-2006.

Since  $T_3$ , Hib $_3$  and Polio $_3$  uptake identical/almost identical to  $D_3$  uptake, only  $D_3$  uptake figures presented.

In 2006, uptake of 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> ranged from 88% in the HSE-Eastern Area to 96-97% in the HSE-Midland Area (table 2). Seven of the eight HSE Areas had 90% or greater uptake for all these vaccines (table 2). The target uptake of 95% was reached 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> in the HSE-Midland Area and for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> in the HSE-North Western Area during 2006.

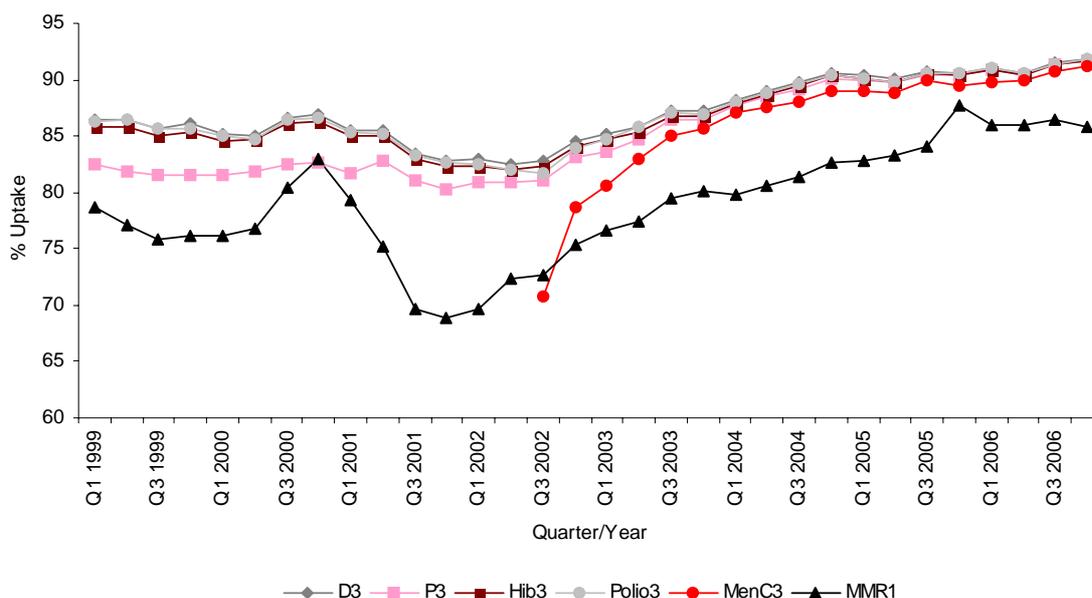
**Table 2.** Immunisation uptake rates in children 24 months of age in 2006

HSE Area	No. in cohort	% Uptake at 24 months						
		Cohort born between 01/01/2004 – 31/12/2004						
		D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
HSE-Eastern	22,773	88	88	88	88	88	88	82*
HSE-Midland†	3,979	97	97	97	96	97	97	94
HSE-Mid-Western	5,114	91	91	91	91	91	91	88
HSE-North Eastern	6,379	93	93	93	93	93	92	89
HSE-North Western†	3,212	95	95	95	95	95	93	91
HSE-South Eastern	7,022	91	91	91	91	91	90	87
HSE-Southern†	8,596	93	93	93	93	93	93	88
HSE-Western	5,774	93	92	93	93	93	90	86
<b>Ireland</b>	<b>62,849</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>90</b>	<b>86*</b>

\*Includes the HSE-Eastern MMR<sub>1</sub> Q1-2006 uptake figure, which is an estimate only (due to technical problems with extracting MMR<sub>1</sub> data from the HSE-Eastern Area database)

† As the denominator/number in cohort varied according to vaccine, most commonly used number is presented here

National quarterly uptake rates for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> varied between 90% and 92% during 2006 with the highest quarterly uptake rate (92%) at 24 months since the collation of these data commenced in 1999 reported in Quarter-4 2006 (figure 4).



**Figure 4.** Quarterly immunisation uptake rates at 24 months in Ireland

Note scale ranges from 60-100%

$T_3$  uptake identical to  $D_3$  uptake, therefore  $T_3$  uptake not presented in this chart

The Q4 2005  $MMR_1$  figure is based on data from seven of the eight HSE-Areas as the HSE-Eastern Area were unable to provide  $MMR_1$  uptake data in Q4 2005 (due to technical problems with extracting  $MMR_1$  data from the HSE-Eastern Area database)

The Q1 2006  $MMR_1$  figure includes the HSE-Eastern  $MMR_1$  uptake figure, which is an estimate only (due to technical problems with extracting  $MMR_1$  data from the HSE-Eastern Area database)

During 2006  $MMR_1$  uptake was 86% nationally (this figure includes the Quarter-1 2006 HSE-Eastern Area figure which is an estimate only due to technical problems with extraction of  $MMR_1$  data from the HSE-Eastern Area database).

Compared to 2005,  $MMR_1$  uptake in 2006 increased by between one and four percent in all of the HSE Areas, except the HSE-North Eastern Area.  $MMR_1$  uptake was unchanged in the HSE-North Eastern Area in 2006 compared to 2005 (Appendix 1). In 2006, uptake of  $MMR_1$  ranged from 82% in the HSE-Eastern Area to 94% in the HSE-Midland Area (table 2). None of the HSE Areas achieved the target uptake of 95% for  $MMR_1$  for the whole of 2006; however, in Quarter-1 2006  $MMR_1$  uptake was 95% in the HSE-Midland Area.

## Discussion

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Childhood vaccinations have made a major contribution to reducing the incidence of infectious disease in Ireland and in eradicating diseases such as polio and smallpox. Monitoring immunisation uptake is necessary to identify under vaccinated populations and to evaluate the effectiveness of efforts to increase uptake. Uptake of 95% is recommended to control and prevent outbreaks of disease such as measles.

National immunisation uptake rates 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> at 24 months increased by one percent in 2006 compared to 2005. The 2006 uptake figures at 24 months (90-91%) are the highest annual figures reported since collation of these data commenced in 1999. The target uptake rate of 95% was not reached nationally at 24 months during 2006; however, it was achieved during 2006 in the HSE-Midland Area 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> and in the HSE-North Western Area for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>.

In the HSE-Midland Area the target uptake rate of 95% was reached for MMR<sub>1</sub> during Quarter-1 2006. MMR<sub>1</sub> uptake was also 95% in the HSE-Midland Area in Quarter 4 2005.<sup>2</sup> These are the only times any HSE Area has reached the target uptake of 95% for MMR<sub>1</sub> since the collation of these statistics commenced in 1999. National uptake of MMR<sub>1</sub> was 86% in 2006.

Further improvements in uptake are necessary so that the 95% target rate is achieved nationally in Ireland for all vaccines in order to prevent outbreaks of these vaccine preventable diseases. In 2006, annual national uptake rates 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 four to five percent below the target rate while MMR<sub>1</sub> was nine percent below the target rate.

### ***Internationally***

The United Kingdom achieved 94-95% vaccine coverage in the year April 2005 until March 2006 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> in those 24 months of age while the coverage of MMR<sub>1</sub> was 85%.<sup>3</sup>

## References

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1. HPSC. Quarterly immunisation uptake reports. Available at <http://www.hpsc.ie>
2. HPSC. Immunisation Uptake in Ireland, 2005. HPSC Annual Report 2005, p.84-87. Available at <http://www.hpsc.ie>
3. HPA. Annual COVER report 2005/2006. Summary of trends in vaccination coverage in the UK. Available at [http://www.hpa.org.uk/infections/topics\\_az/cover/ANNCOVER\\_2006.pdf](http://www.hpa.org.uk/infections/topics_az/cover/ANNCOVER_2006.pdf)

# Appendix 1

## Annual immunisation uptake at 12 months by HSE Area

Uptake at 12 months - HSE-Eastern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001	61	60	61	61	60		
2002	68	68	68	68	68	68	
2003	77	77	77	77	77	78	
2004	79	79	79	79	79	78	na
2005	81	81	81	81	81	80	na
2006	82	82	82	82	82	82	na

Uptake at 12 months - HSE-North Western Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001	79	*	79	79	78		
2002	85	84	85	84	85	81	
2003	89	87	89	88	88	86	
2004	89	89	89	89	89	88	91
2005	90	90	90	90	90	89	90
2006	92	92	92	91	92	91	92

Uptake at 12 months - HSE-Midland Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001	67	65	67	68	67		
2002	74	73	74	74	74	73	
2003	86	85	86	86	86	85	
2004	90	90	90	90	90	90	84
2005	91	91	91	91	91	91	89
2006	92	92	92	92	92	92	94

Uptake at 12 months - HSE-South Eastern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001	83	82	83	83	83		
2002	82	81	82	82	82	81	
2003	85	85	85	85	85	84	
2004	86	86	86	86	86	86	96
2005	87	87	87	87	87	87	97
2006	86	86	86	86	86	86	94

Uptake at 12 months - HSE-Mid Western Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001	70	68	70	69	69		
2002	83	81	83	82	82	82	
2003	83	82	83	83	83	82	
2004	86	86	86	86	86	86	89
2005	87	87	87	87	87	87	93
2006	89	89	89	89	89	89	93

Uptake at 12 months - HSE-Southern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG †
2001	73	71	73	73	72		
2002	78	76	78	77	77	76	
2003	83	82	83	82	83	82	
2004	83	83	83	83	83	83	86 §
2005	85	85	85	85	85	85	90
2006	87	87	87	87	87	86	88

Uptake at 12 months - HSE-North Eastern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001 ‡	77	76	77	78	77		
2002	80	80	80	80	81	78	
2003	81	81	81	81	81	81	
2004	86	86	86	86	86	86	na
2005	90	90	90	90	90	89	na
2006	89	89	89	89	89	86	na

Uptake at 12 months - HSE-Western Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	BCG
2001	75	73	75	73	74		
2002	73	72	73	74	73	70	
2003	76	76	76	76	76	73	
2004	81	81	81	81	81	79	na
2005	87	87	87	87	87	85	na
2006	88	88	88	88	88	87	na

na=not available

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

‡ HSE-North Eastern data not available for Quarter 1 2001

† HSE-Southern: part coverage of neonatal BCG, Kerry only

§ HSE-Southern data not available for Quarter 3 2004

|| HSE-Western Hib<sub>3</sub> data not available for Quarter 1 2002

## Annual immunisation uptake at 24 months by HSE Area

Uptake at 24 months - HSE-Eastern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	85	81	85	84	85		77
2000	85	82	85	84	84		77
2001	80	78	80	80	80		66
2002	78	77	78	78	77		64
2003	83	83	83	83	83	80	74
2004	86	86	86	86	86	84	76
2005	88	87	88	87	87	86	78 *
2006	88	88	88	88	88	88	82 *

Uptake at 24 months - HSE-North Western Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	87	83	87	87	87		75
2000	84	†	84	83	84		74
2001	89	†	89	88	89		78
2002	92	90	92	91	91		80
2003	94	92	94	92	94	91	83
2004	95	95	95	94	95	93	87
2005	94	93	94	93	94	92	89
2006	95	95	95	95	95	93	91

Uptake at 24 months - HSE-Midland Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	82	78	82	81	82		70
2000	82	78	82	81	82		75
2001	82	78	82	81	82		72
2002	81	79	81	80	81		72
2003	91	89	91	92	92	91	88
2004	94	93	94	94	94	94	91
2005	96	96	96	96	96	96	93
2006	97	97	97	96	97	97	94

Uptake at 24 months - HSE-South Eastern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	89	85	89	89	89		87
2000	90	85	90	89	89		90
2001	89	86	89	89	89		87
2002	88	85	88	87	87		82
2003	88	87	88	88	88	86	83
2004	92	91	92	91	91	90	87
2005	91	91	91	91	91	90	86
2006	91	91	91	91	91	90	87

Uptake at 24 months - HSE-Mid Western Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	81	78	81	80	80		73
2000	81	78	81	80	80		77
2001	83	81	83	82	83		74
2002	86	84	86	86	86		80
2003	87	85	87	86	87	84	80
2004	89	88	89	89	89	88	84
2005	90	90	90	90	90	90	86
2006	91	91	91	91	91	91	88

Uptake at 24 months - HSE-Southern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	86	82	86	85	86		73
2000	85	81	85	84	85		77
2001	85	82	85	84	85		76
2002	84	82	84	83	83		76
2003	85	84	85	85	85	84	80
2004	89	89	89	89	89	88	83
2005	91	91	91	91	91	90	85
2006	93	93	93	93	93	93	88

Uptake at 24 months - HSE-North Eastern Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	92	†	92	92	92		78
2000	93	90 ‡	93	93	93		80
2001	92	90 ‡	92	92	92		79
2002	91	90	91	90	90		79
2003	91	91	91	91	93	88	81
2004	93	93	93	93	93	92	83
2005	93	92	93	93	93	92	89
2006	93	93	93	93	93	92	89

Uptake at 24 months - HSE-Western Area							
	D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
1999	92	88	92	90	91		82
2000	91	87	91	91	91		83
2001	87	85	87	87	87		76
2002	83	81	83	82	82		74
2003	85	84	85	85	84	81	74
2004	90	89	90	90	90	87	78
2005	92	91	92	92	92	89	83
2006	93	92	93	93	93	90	86

\* HSE-Eastern Area were unable to provide MMR<sub>1</sub> uptake data in Quarter 4 2005 and the Quarter 1 2006 MMR<sub>1</sub>; figure is an estimate only due to technical problems with extraction of MMR<sub>1</sub> data from the HSE-Eastern Area database.

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

‡ HSE-North Eastern Area P<sub>3</sub> uptake cannot be accurately calculated as DTaP/DT provided as combined value in Quarter 3 & Quarter 4 2000 and Quarter 1 2001