# 8.1 Immunisation Uptake

## **Summary**

Among children 12 months of age in 2012 uptake of:  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$ ,  $HepB_3$ ,  $MenC_2$  and  $PCV_2$  was

Among children 24 months of age in 2012 uptake of:  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$  reached the target of 95%

MMR<sub>1</sub> was 92% PCV<sub>3</sub> was 91% Hib<sub>b</sub> was 89% MenC<sub>3</sub> was 85%

 $\mathrm{MenC_3}$  and  $\mathrm{Hib_b}$  uptake are considerably lower than the uptake of the other recommended vaccines. The childhood immunisation schedule is shown in table 1. Five GP visits are required to ensure children receive all their recommended doses of vaccine.

In 2012, the HSE Areas provided HPSC with quarterly immunisation uptake data for their Area and for each of the Local Health Offices (LHOs) in their Area. HPSC collated these data and quarterly reports were produced which are available on the HPSC website. The annual immunisation uptake rates presented here represent the collation of the 2012 quarterly data. The proportion of children who completed the recommended childhood immunisation schedule by 12 months (born between 01/01/2011 and 31/12/2011) and 24 months (born between 01/01/2010 and 31/12/2010) of age in 2012 are reported.

Since September 1st 2008 the new primary childhood immunisation schedule has been implemented for children born on or after July 1<sup>st</sup> 2008 (table 1). These children should receive one dose of vaccine against tuberculosis (BCG vaccine) at birth or by one month of age; three doses of vaccines against diphtheria (D<sub>3</sub>), tetanus (T<sub>3</sub>), pertussis (P<sub>3</sub>), *Haemophilus influenzae* type b (Hib<sub>3</sub>), polio (Polio<sub>3</sub>) and Hepatitis B (HepB<sub>3</sub>) with one dose of each given at two, four and six months of age; three doses of pneumococcal conjugate vaccine (PCV<sub>3</sub>)

given at two, six and 12 months of age and three doses of meningococcal group C (MenC<sub>3</sub>) vaccine given at four, six and 13 months of age. Also at 12 months of age a dose of MMR (MMR<sub>1</sub>) is recommended and at 13 months a dose of Hib (Hib<sub>b</sub>) is recommended. Further vaccinations are recommended for older children and adults; please see www.immunisation.ie for complete information on the Irish immunisation schedule.

In children who reached 12 months of age in 2012 (born between 01/01/2011 and 31/12/2011) uptake of BCG,  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$ ,  $HepB_3$  and two doses of PCV (PCV<sub>2</sub>) and MenC (MenC<sub>2</sub>) were measured. In children who reached 24 months of age in 2012 (born between 01/01/2010 and 31/12/2010) uptake of  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$ ,  $HepB_3$ ,  $MenC_3$ ,  $PCV_3$ ,  $MMR_1$ ,  $Hib_b$ , one dose of vaccine against meningococcal group C (MenC<sub>b</sub>) on or after twelve months of age and one dose of vaccine against pneumococcal conjugate vaccine (PCV<sub>b</sub>) on or after twelve months of age were measured.

The immunisation uptake rates are reported here by HSE Area and LHO. While there are 32 LHOs the immunisation uptake rates for the LHOs of North Lee and South Lee are reported as a combined figure.

#### Caveats to data

Not all HSE Areas were able to provide data during 2011 and 2012. BCG uptake data were available for the HSE-M, HSE-MW, HSE-NW, HSE-SE and HSE-S Areas in Quarters 1-4 2011 and the HSE-W in Quarters 3-4 2011. In Quarters 3 and 4 2011 the HSE-W reported BCG uptake data (4%), for children at 12 months of age for the first time, resulting in a low national uptake rate (85%) compared to previous years. This is not a true decline as uptake rates are based on available data and the HSE-W BCG data were not available previously. Traditionally BCG was given at age 10 - 12 years in the HSE-W. BCG uptake data were available for the HSE-M, HSE-MW, HSE-NW, HSE-SE, HSE-S and HSE-W Areas in Quarters 1-4 2012. The available national BCG cohort data may be around 48% of the national birth cohort in

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2011 and 52% of the national birth cohort in 2012 (these figures are estimates only). HSE-W BCG data were not available by LHO.

As uptake of  $\mathrm{MenC}_3$  and  $\mathrm{Hib}_b$  were low since Q3 2010 and as those over 12 months need only one dose of MenC and those aged 12-23 months need only one dose of PCV, data on  $\mathrm{MenC}_b$  (one dose of MenC on or after twelve months of age) and  $\mathrm{PCV}_b$  (one dose of PCV on or after twelve months of age) was requested in 2012 for the first time. Six HSE Areas (HSE-E, M, MW, NW, SE and S) were able to provide data representing approximately 81% (estimate only) of the national birth cohort.

### Immunisation uptake rates at 12 months

National immunisation uptake rates, in children 12 months of age in 2012, were 91% for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$ ,  $HepB_3$ ,  $MenC_2$  and  $PCV_2$  and 80% (based on available data) for BCG (table 2). Compared with 2011, the uptake rates for  $D_3$ ,  $P_3$ ,  $T_3$ ,  $Hib_3$ ,  $Polio_3$ ,  $HepB_3$ ,  $MenC_2$  and  $PCV_2$  increased by one percent in 2012.

In Quarters 3 and 4 2011 the HSE-W reported BCG uptake data (4%) for the first time, resulting in an apparent decline in reported national uptake in 2011 (85%). The HSE-W BCG uptake in 2012 (Quarters 1-4) was 5%. National uptake of BCG was 80% in 2012. This is not a true decline in 2012 as national uptake rates are based on available data and the HSE-W BCG data were not available previously for all four quarters.

Among the HSE Areas, uptake rates for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$  ranged from 90% to 94% and  $MenC_2$  and  $PCV_2$  ranged from 88% to 94% (table 2). Among the LHOs, uptake rates for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and

HepB $_3$  ranged from 83% to 97%, PCV $_2$  ranged from 82% to 98% and MenC $_2$  ranged from 82% to 97% (table 3). The target uptake of 95% was reached or exceeded in Longford/Westmeath and Roscommon for D $_3$ , T $_3$ , P $_3$ , Hib $_3$ , Polio $_3$ , HepB $_3$ , MenC $_2$  and PCV $_2$ , in Sligo/Leitrim for D $_3$ , T $_3$ , P $_3$ , Hib $_3$ , Polio $_3$  and HepB $_3$  and in Tipperary NR/East Limerick for MenC $_2$  (table 3). The target uptake of 95% was reached or exceeded for BCG in 12 LHOs reporting data (table 3).

#### Immunisation uptake rates at 24 months

National annual immunisation uptake rates, in children 24 months of age in 2012, reached the target of 95% for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$  and were 92% for  $MMR_1$ , 91% for  $PCV_3$ , 89% for  $Hib_b$  and 85% for  $MenC_3$  (table 2). Compared with 2011, the uptake rates for  $Hib_b$ ,  $MenC_3$  and  $PCV_3$  increased by one percent while  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$  were unchanged (figure 1). This is the second year national annual uptake rates reached the target of 95% for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$ .

Six of the eight HSE Areas were able to provide uptake data on  $MenC_b$  (one dose of MenC at  $\geq 12$  months of age) and  $PCV_b$  (one dose of PCV at  $\geq 12$  months of age) in 2012. These Areas cover approximately 81% of the national birth cohort. Where data were available, national uptake was 90% for  $MenC_b$  and 93% for  $PCV_b$ .

Since September 1st 2008 the new primary childhood immunisation schedule has been implemented for children born on or after July 1st 2008 (table 1); children who were 24 months of age in Quarter 3 2010 were born between July 1st and September 31st 2008 and were the first children recommended the new immunisation schedule. Under the new immunisation

Table 1. Change in primary childhood immunisation schedule (introduced on September 1st 2008)

Age	Children born before 01/07/2008	Children born on or after 01/07/2008
Birth	BCG	BCG
2 months	DTaP/Hib/IPV (5 in 1) + MenC	DTaP/Hib/IPV/HepB (6 in 1) + PCV
4 months	DTaP/Hib/IPV (5 in 1) + MenC	DTaP/Hib/IPV/HepB (6 in 1) + MenC
6 months	DTaP/Hib/IPV (5 in 1) + MenC	DTaP/Hib/IPV/HepB (6 in 1) + PCV + MenC
12 months	MMR + Hib	MMR + PCV
13 months	-	MenC + Hib

Please see www.immunisation.ie for complete information on the Irish childhood immunisation schedule including vaccinations for older children and adults

BCG Bacille Calmette Guerin vaccine

DTaP Diphtheria, Tetanus and acellular Pertussis vaccine

HepB Hepatitis B vaccine

Hib Haemophilus influenzae type b vaccine
IPV Inactivated Polio Virus vaccine
MenC Meningococcal group C vaccine
MMR Measles, Mumps and Rubella vaccine
PCV Pneumococcal Conjugate Vaccine

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Table 2. Annual immunisation uptake rates (based on available data) by HSE Area for children 12 and 24 months of age in 2012

	% Uptake at 12 months Cohort born 01/01/2011 - 31/12/2011					% Uptake at 24 months Cohort born 01/01/2010 - 31/12/2010									
	D <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>	ВCG	D <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>₅</sub>	HepB <sub>3</sub>	MenC <sub>3</sub>	MenC <sub>b</sub>	PCV <sub>3</sub>	PCV <sub>b</sub>	MMR <sub>1</sub>	
HSE-E	90	90	90	90	na	95	95	88	95	84	87	90	92	92	
HSE-M	94	94	94	94	96	97	97	97	97	91	95	94	95	96	
HSE-MW	94	94	94	94	97	95	95	90	95	86	90	91	93	93	
HSE-NE	91	91	90	90	na	95	95	86	94	84	na	91	na	91	
HSE-NW	94	94	94	94	96	97	96	92	96	87	93	91	95	93	
HSE-SE	93	93	92	93	96	97	96	95	96	89	93	93	95	94	
HSE-S	91	90	88	88	94	96	95	85	95	86	89	91	93	93	
HSE-W	91	91	90	91	5	95	95	89	95	82	na	90	na	90	
Ireland	91	91	91	91	80	95	95	89	95	85	90	91	93	92	

na=not available

Where  $T_3$ ,  $P_3$  and Hib $_3$  uptake identical to  $D_3$  uptake only  $D_3$  uptake figures presented Polio $_3$  uptake identical to  $D_3$  except HSE-SE Polio $_3$  uptake at 24 months was 96%

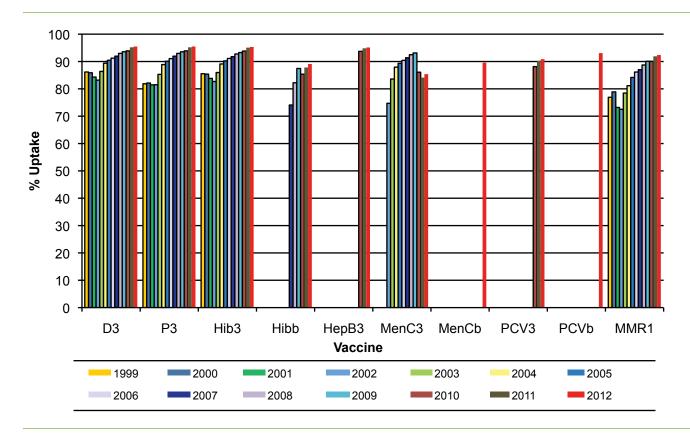


Figure 1. National annual immunisation uptake rates (based on available data) at 24 months, 1999-2012

Since T<sub>2</sub> and Polio<sub>2</sub> uptake identical to D<sub>2</sub> uptake only D<sub>2</sub> uptake figures presented.

P, uptake could not be calculated accurately during 1999-2001 as DTaP/DT uptake was reported as a combined value for the HSE-NE during 1999, Quarters 3 and 4 2000 and Quarter 1 2001 and the HSE-NW in 2000 and 2001. The 2002 MenC<sub>3</sub> figure is based on uptake rates for Quarter 3 and Quarter 4 2002 only. The 2005 MMR, uptake figure is incomplete as the HSE-E was unable to provide MMR data for Quarter-4 2005, due to technical problems with extraction of MMR, data from the HSE-E database. The 2006 MMR, figure includes the Quarter-1 2006 HSE-E figure, which is an estimate only due to technical problems with extraction of MMR, data from the HSE-E database. The 2007 national Hib, figure is incomplete, as the HSE-W data for Quarter 1 2007 and the HSE-NW data for Quarter 3 2007 were not available. The 2007 national Hib, figure also includes the HSE-SE data which are an underestimate due to data extraction methods. The 2008 Hib, figure is incomplete as the  $\overset{\circ}{\text{HSE-SE}}$  data for Q2 2008 and the HSE-MW data for Quarter 3 2008 were not available. The 2008 national  $\text{MenC}_3$  figure is incomplete as the HSE-E and HSE-MW MenC, data for Quarter 3 2008 were not available. The 2009 data are incomplete as the following were unavailable: the Quarter 1 2009 HSE-E D<sub>2</sub>, T

, P

, and Polio

, data for those born on the 31/03/2007; the Quarter 2 2009 HSE-E Dublin North Hib

, uptake data and; the Quarter 4 2009 HSĒ-MW ďata, HSE-Ē Dublin North Hib, data and HSE-SE Hib, data for those given a Hib dose as part of the five in one or six in one vaccine after 12 months of age. The 2010 data are incomplete as the following were unavailable: the Quarter 1 2010 HSE-M and HSE-S data and the HSE-E Dublin North Hib, data; the Quarter 2 2010 HSE-M data and; the Quarter 4 2010 HSE-NE data. As a new childhood immunisation schedule was introduced in 2008, for those born on or after July 1st 2008, the 2010 HepB<sub>3</sub> and PCV<sub>3</sub> data at 24 months are for those born between July 1st and December 31st 2008 (i.e. Quarters 3 and 4  $20\overline{10}$  data) only. The MenC<sub>b</sub> and PCV<sub>b</sub> data were available for only six of the eight HSE Areas.

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Table 3. Immunisation uptake (%) at 12 months of age in 2012 (i.e. cohort born 01/01/2011-31/12/2011) by LHO and HSE Area

		Number in	Number in	Immunisation Uptake (%)					
HSE Area	HSE Area   Local Health Office/HSE Area		cohort for D <sub>3</sub> , T <sub>3</sub> & P <sub>3</sub> †	ВCG	D <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>	
	Dublin South	na	1738	na	92	92	92	92	
	Dublin South East	na	1792	na	90	90	89	90	
	Dublin South City	na	1808	na	93	93	92	93	
	Dublin South West	na	2789	na	93	93	92	93	
	Dublin West	na	2906	na	91	90	90	90	
HSE-E	Dublin North West	na	4065	na	83	83	83	82	
	Dublin North Central	na	1891	na	89	89	89	89	
	Dublin North	na	4406	na	91	91	91	91	
	Kildare/West Wicklow	na	4185	na	92	92	92	92	
	Wicklow	na	1885	na	90	90	89	90	
	HSE-E Total	na	27465	na	90	90	90	90	
	Laois/Offaly	2676	2676	96	94	94	94	94	
HSE-M	Longford/Westmeath	1966	1966	95	95	95	95	95	
	HSE-M Total	4642	4642	96	94	94	94	94	
	Clare	1729	1752	97	94	94	93	94	
HSE-MW	Limerick	2058	2071	98	93	93	93	93	
H2E-IVIVV	Tipperary NR/East Limerick	1967	1974	97	94	94	95	94	
	HSE-MW Total	5754	5797	97	94	94	94	94	
	Cavan/Monaghan	na	2253	na	93	93	91	91	
HSE-NE	Louth	na	2003	na	90	89	88	88	
II3L-INL	Meath	na	3719	na	91	91	90	90	
	HSE-NE Total	na	7975	na	91	91	90	90	
	Donegal	2296	2296	95	94	93	94	94	
HSE-NW	Sligo/Leitrim	1394	1394	97	95	95	94	94	
	HSE-NW Total	3690	3690	96	94	94	94	94	
	Carlow/Kilkenny	2105	2105	97	91	91	91	92	
	South Tipperary	1399	1399	98	94	94	94	94	
HSE-SE	Waterford	1985	1985	95	93	92	92	92	
	Wexford	2261	2261	96	93	93	92	93	
	HSE-SE Total	7750	7750	96	93	93	92	93	
	North Cork	1525	1494	93	90	90	88	88	
	North South Lee	6114	5992	95	92	91	89	89	
HSE-S	West Cork	768	765	94	85	85	82	82	
	Kerry	2063	2037	93	91	90	88	87	
	HSE-S Total	10470	10288	94	91	90	88	88	
	Galway	na	4014	na	89	89	89	90	
HSE-W	Мауо	na	1773	na	90	90	89	90	
1136-44	Roscommon	na	913	na	97	97	97	98	
	HSE-W Total	6701*	6700	5	91	91	90	91	
Ireland		39007	74307	80	91	91	91	91	

na=not available

Please note while North Lee and South Lee are two separate Local Health Offices their combined immunisation uptake data are reported here.

schedule children are now recommended HepB vaccine and PCV. In addition, there is a change in timing of the MenC and Hib<sub>b</sub> vaccines (table 1). The changes to the schedule mean that three injections (6 in 1, PCV and MenC vaccines) are now recommended at six months of age and two GP visits are required on or after 12 months; the first dose of MMR and the third dose of PCV should be given at 12 months of age and at 13 months of age the third dose of MenC vaccine and Hib<sub>b</sub> should be given (table 1). MenC<sub>3</sub> uptake was 93% in Quarter 1 2010 but declined to 80% in Quarter 3 2010

and was 82% in Quarter 4 2010 (figure 2). During 2011 and 2012,  $MenC_3$  increased from 83% in Quarters 1 and 2 2011 to 87% in Quarter 4 2012.  $Hib_b$  was 87% in Quarters 1 and 2 2010 but declined to 84% in Quarters 3 and 4 2010 (figure 2). During 2011 and 2012  $Hib_b$  uptake increased from 86% in Quarter 1 2011 to 91% in Quarter 4 2012. There was also low uptake of  $PCV_3$  in 2010 (combined Quarters 3 and 4 data was 88%). During 2011 and 2012,  $PCV_3$  increased from 90% during Quarters 1 and 2 2011 to 92% during Quarter 4 2012.

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<sup>\*</sup> HSE-W BCG data were not available by LHO.

<sup>†</sup>As the denominator/number in cohort varied slightly according to vaccine. The most commonly used number is reported here. Since  $T_3$ ,  $P_3$ , Polio<sub>3</sub> and Hib<sub>3</sub> uptake identical to  $D_3$  uptake only  $D_3$  uptake figures are presented

Table 4. Immunisation uptake (%) at 24 months of age in 2012 (i.e. cohort born 01/01/2010-31/12/2010) by LHO and HSE Area

	Local Health Office/ HSE Area	Number in				Immunisation Uptake (%)						
HSE Area		cohort for $D_3$ , $T_3 \& P_3 *$	D <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>b</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>3</sub>	MenC <sub>b</sub>	PCV <sub>3</sub>	PCV <sub>b</sub>	MMR <sub>1</sub>
	Dublin South	1739	94	94	90	94	94	87	90	90	92	91
	Dublin South East	1706	93	93	89	93	93	86	88	90	91	91
	Dublin South City	1802	96	96	86	96	96	82	86	89	91	91
	Dublin South West	2665	96	96	90	96	96	84	89	90	94	94
	Dublin West	2937	92	92	80	92	92	75	79	87	90	89
HSE-E	Dublin North West	4054	93	93	83	93	93	81	83	87	89	88
	Dublin North Central	1737	96	96	90	96	96	85	90	88	92	92
	Dublin North	4481	95	95	91	95	95	88	91	92	93	93
	Kildare/West Wicklow	4400	96	96	94	96	96	90	93	93	95	94
	Wicklow	2122	94	94	83	94	94	79	83	89	91	90
	HSE-E Total	27643	95	95	88	95	95	84	87	90	92	92
	Laois/Offaly	2764	97	97	97	97	97	91	95	93	95	96
HSE-M	Longford/Westmeath	2107	97	97	97	97	97	92	95	94	96	96
	HSE-M Total	4871	97	97	97	97	97	91	95	94	95	96
	Clare	1716	95	95	93	95	95	89	93	92	94	94
	Limerick	2041	94	94	89	94	94	85	89	90	92	91
HSE-MW	Tipperary NR/East Limerick	2090	96	96	89	96	96	85	88	92	94	93
	HSE-MW Total	5847	95	95	90	95	95	86	90	91	93	93
	Cavan/Monaghan	2037	96	96	88	96	94	85	na	92	na	92
	Louth	1958	94	94	84	94	94	82	na	89	na	90
HSE-NE	Meath	3404	95	95	87	95	95	84	na	91	na	91
	HSE-NE Total	7399	95	95	86	95	94	84	na	91	na	91
HSE-NW	Donegal	2360	97	97	92	97	96	87	93	91	95	93
	Sligo/Leitrim	1428	96	96	93	96	96	86	93	90	95	95
	HSE-NW Total	3788	97	96	92	97	96	87	93	91	95	93
	Carlow/Kilkenny	2144	96	96	94	96	96	87	93	92	94	94
	South Tipperary	1389	97	97	95	97	97	89	94	94	95	95
HSE-SE	Waterford	2081	96	96	94	96	96	89	92	93	94	94
	Wexford	2245	97	97	97	97	96	90	95	93	96	95
	HSE-SE Total	7859	97	96	95	96	96	89	93	93	95	94
	North Cork	1589	97	96	84	97	94	85	87	90	91	92
	North South Lee	5998	97	96	86	97	95	87	90	93	94	94
HSE-S	West Cork	768	89	88	75	89	89	76	80	83	86	86
	Kerry	1906	97	97	86	97	96	88	91	92	94	94
	HSE-S Total	10261	96	95	85	96	95	86	89	91	93	93
	Galway	4147	94	94	91	94	94	79	na	89	na	89
	Mayo	1800	96	96	82	96	96	82	na	91	na	91
HSE-W	Roscommon	946	98	98	96	98	98	95	na	98	na	96
	HSE-W Total	6893	95	95	89	95	95	82	na	90	na	90
Ireland		74561	95	95	89	95	95	85	90	91	93	92

<sup>\*</sup>As the denominator/number in cohort varied slightly according to vaccine. The most commonly used number is reported here. Since  $T_3$  and  $P_3$  uptake identical to  $D_3$  uptake only  $D_3$  uptake figures are presented Please note while North Lee and South Lee are two separate Local Health Offices their combined immunisation uptake data are reported here.

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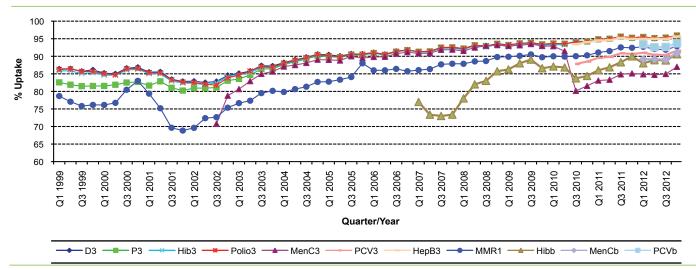


Figure 2. National quarterly immunisation uptake rates at 24 months

Note scale ranges from 60-100%

 $P_3$  uptake could not be calculated accurately during 1999-2001 as DTaP/DT uptake was reported as a combined value for the HSE-NE during 1999, Quarters 3 and 4 2000 and Quarter 1 2001 and the HSE-NW in 2000 and 2001. The Q4-2005 MMR<sub>1</sub> figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR<sub>1</sub> figure includes the HSE-E figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib<sub>b</sub> figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed their Hib<sub>b</sub> data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib<sub>b</sub> in the HSE-SE was 83% compared to 53% in Q4-2007. The Q3-2008 MenC<sub>3</sub> figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-E D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> uptake figures exclude those born on the 31/03/2007. The Q2-2009 HSE-E Hib<sub>b</sub> uptake figures exclude uptake figures from Dublin North. The Q4-2009 figures are based on data from seven of the eight HSE Areas. The Q4-2009 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North and HSE-SE Hib<sub>b</sub> data for those given a Hib dose as part of the five in one or six in one vaccine after 12 months of age. The Q1-2010 figures are based on data from six of the eight HSE Areas. MenCb and PCVb figures are based on data form six of the eight HSE Areas.

Uptake rates among the HSE Areas, for children at 24 months of age in 2012, for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$  and  $Polio_3$  ranged from 95% to 97%,  $HepB_3$  ranged from 94% to 97%,  $MMR_1$  ranged from 90% to 96%,  $PCV_3$  ranged from 90% to 94%,  $Hib_b$  ranged from 85-97% and  $MenC_3$  ranged from 82% to 91% (table 2). Among the six Areas in a position to provide data  $MenC_b$  uptake ranged from 87% to 95% and  $PCV_b$  uptake ranged from 92% to 95%. The target uptake of 95% was reached or exceeded in all HSE Areas for the first time during 2012 for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$  and  $Polio_3$  and in seven Areas for  $HepB_3$ . In addition, the target uptake of 95% was reached or exceeded in the HSE-M for  $Hib_b$ ,  $MenC_b$ ,  $PCV_b$  and  $MMR_1$ , in the HSE-NW for  $PCV_b$  and in the HSE-SE for  $Hib_b$  and  $PCV_b$  (table 2).

 $D_3$ ,  $Hib_b$ ,  $MenC_3$  and  $MMR_1$  uptake rates are mapped by LHO in figure 3. Among the LHOs the uptake rates ranged from 89% to 98% for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Polio_3$  and  $HepB_3$ , 88% to 98% for  $Hib_3$ , 86% to 96% for  $PCV_b$  and  $MMR_1$ , 83% to 98% for  $PCV_3$ , 79% to 95% for  $MenC_b$ , 75% to 97% for  $Hib_b$  and 75% to 95% for  $MenC_3$  (table 4). The target uptake of 95% was reached or exceeded in 22 LHOs for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$  and  $Polio_3$ , in 20 LHOs for  $HepB_3$ , in seven LHOs for  $PCV_b$ , in six LHOs for  $PCV_b$  and in one LHO for  $PCV_3$  and  $PCV_3$  (table 4). Roscommon was the only LHO to reach and exceed the target of 95% for  $PCV_3$ ,  $PCV_3$ ,  $PCV_3$ 

and MMR<sub>1</sub> at 24 months.

There was a large decline in  $\mathrm{MenC_3}$  and a decline in  $\mathrm{Hib_b}$  uptake at 24 months in Quarters 3 and 4 2010 i.e. children who were born between July 1st and December 31st 2008 and were the first recommended the new immunisation schedule. There was a change in timing of the MenC and  $\mathrm{Hib_b}$  vaccines under the new immunisation schedule (table 1). The uptake of  $\mathrm{MenC_3}$  (85%) and  $\mathrm{Hib_b}$  (89%) in 2012 were still considerably lower than the uptake of the other recommended vaccines. In addition, to low uptake of  $\mathrm{MenC_3}$  and  $\mathrm{Hib_b}$ ,  $\mathrm{MMR_1}$  (92%) and  $\mathrm{PCV_3}$  (90%) uptake in 2012 are lower than the target uptake of 95%.

In contrast in 2012, annual national uptake rates at 24 months for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$  reached the target rate of 95%. This is the second year national annual uptake rates reached the target of 95% for these vaccines. All eight HSE Areas reached or exceeded the target uptake of 95% for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$  and  $Polio_3$  at 24 months during 2012. Roscommon reached or exceeded the target of 95% for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$ ,  $HepB_3$ ,  $MenC_3$ ,  $PCV_3$ ,  $Hib_b$  and  $MMR_1$  uptake at 24 months of age.

The immunisation reports for Quarters 1 to 4 2012 are available on the HPSC website in *Topics A-Z* under the heading *vaccination*.

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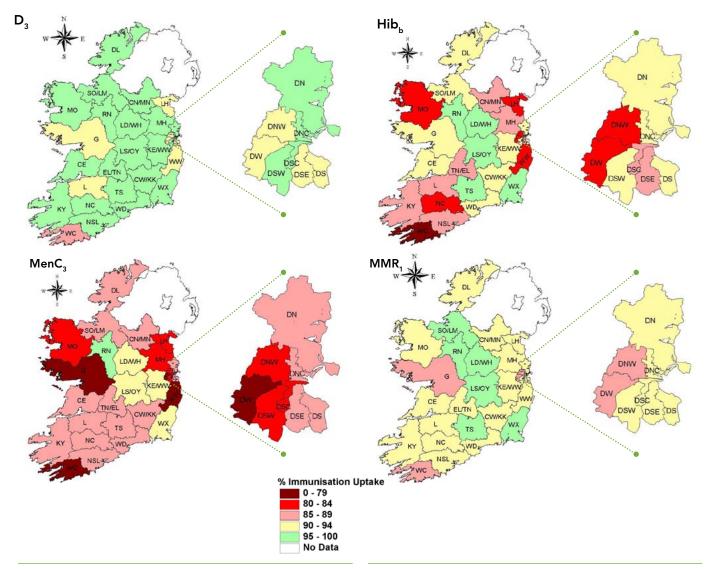


Figure 3.  $D_3$ ,  $Hib_b$ ,  $MenC_3$  and  $MMR_1$  immunisation uptake rates (%) in those 24 months of age in 2012 by Local Health Office (LHO)

LHOs in Dublin are highlighted separately for ease of viewing

North Lee and South Lee are separate LHOs, however, their combined (labelled NSL on the map) immunisation uptake rate is reported here Please see table 5 to translate LHO abbreviations

Table 5. Local Health Office (LHO) abbreviations used in this chapter

Local Health Office Abbreviations	Local Health Office
CE	Clare
CN/MN	Cavan/Monaghan
CW/KK	Carlow/Kilkenny
DL	Donegal
DN	Dublin North
DNC	Dublin North Central
DNW	Dublin North West
DS	Dublin South
DSC	Dublin South City
DSE	Dublin South East
DSW	Dublin South West
DW	Dublin West
G	Galway
KE/WW	Kildare/West Wicklow
KY	Kerry
L	Limerick
LD/WD	Longford/Westmeath

Local Health Office Abbreviations	Local Health Office
LH	Louth
LS/OY	Laois/Offaly
MH	Meath
MO	Mayo
NC	North Cork
NSL*	North South Lee*
RN	Roscommon
SO/LM	Sligo/Leitrim
TN/EL	Tipperary North /East Limerick
TS	South Tipperary
WC	West Cork
WD	Waterford
WX	Wexford
WW	Wicklow

<sup>\*</sup>Please note while North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported

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