

Summary

Children 12 months of age in Quarter 2-2010

- ❖ The immunisation uptake figures for children at 12 months of age presented in this report are incomplete as the HSE Eastern, Midlands, North Eastern, Southern and Western Areas were not in position to provide BCG data and the HSE Midland and Southern Areas were not in a position to provide D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ data. The available BCG cohort figure may be around one quarter of the national birth cohort and the remaining vaccine cohort figures available may be around 80% of the national birth cohort (these are estimates only).

Based on the available data the **national** immunisation uptake rates were 97% for BCG and 89% for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂.

- Three of the six **HSE Areas**, where data were available, had $\geq 90\%$ uptake of D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂, however, none of the HSE Areas reached the target uptake of $\geq 95\%$.
 - All nine **Local Health Offices** (LHOs) where BCG data were available had uptake of $\geq 95\%$. Of the 25 LHOs, where D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ data were available, one had $\geq 95\%$ uptake of these vaccines.
 - Of the 25 LHOs reporting data:
 - 15 had $\geq 90\%$ uptake of D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃,
 - 14 had $\geq 90\%$ uptake of PCV₂ and
 - 12 had $\geq 90\%$ uptake of MenC₂.

Children 24 months of age in Quarter 2-2010

- ❖ The immunisation uptake figures for children at 24 months of age presented in this report are incomplete as the HSE Midland Area was not in a position to provide data. The available vaccine cohort figures available may be around 94% (estimate only) of the national birth cohort.

Based on the available data the **national** immunisation uptake rates were 94% for D₃, P₃, T₃ and Polio₃, 93% for Hib₃, 91% for MenC₃, 90% for MMR₁ and 87% for Hib₆. A decline in MenC₃ in this quarter and low Hib₆ and MMR₁ uptake is of concern.

- All seven **HSE Areas** reporting data had $\geq 92\%$ uptake of D₃, P₃, T₃, Hib₃ and Polio₃.

The target uptake of 95% was reached/exceeded in the:
HSE-Mid Western Area for D₃, P₃, T₃, Hib₃ and Polio₃,
HSE-North Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ and
HSE-North Western Area for D₃, P₃, T₃ and Polio₃.

Four of the seven HSE Areas reporting data had $\geq 90\%$ uptake of Hib₆.
The target uptake rate of 95% was reached in the HSE-South Eastern Area for Hib₆.

Five of the seven HSE Areas reporting data had $\geq 91\%$ uptake of MMR₁.
None of the HSE Areas reached the target uptake of $\geq 95\%$ for MMR₁.

- Of the 29 **Local Health Offices** (LHOs) reporting data:
 - 13 had $\geq 95\%$ uptake of D₃, P₃, T₃ and Polio₃,
 - 10 had $\geq 95\%$ uptake of Hib₃,
 - 3 had $\geq 95\%$ uptake of MenC₃,
 - 3 had $\geq 95\%$ uptake of Hib₆ and
 - 1 had $\geq 95\%$ uptake of MMR₁.
- Of the 29 LHOs reporting data:
 - 27 had $\geq 90\%$ uptake of D₃, P₃, T₃, Hib₃ and Polio₃,
 - 20 had $\geq 90\%$ uptake of MenC₃,
 - 20 had $\geq 90\%$ uptake of MMR₁ and
 - 12 had $\geq 90\%$ uptake of Hib₆.

Introduction

Since September 1st 2008 the new primary childhood immunisation schedule has been implemented (table 1).

The changes to the primary schedule for children born on or after 1st July 2008 include;
 Introduction of a hepatitis B vaccine (as part of a 6 in 1 vaccine) given at 2, 4 and 6 months of age
 Introduction of pneumococcal conjugate vaccine given at 2, 6 and 12 months of age
 Change in timing of meningococcal serogroup C conjugate vaccination, now given at 4, 6 and 13 months of age
 Change in timing of the *Haemophilus influenzae* type b vaccination, now given at 2, 4, 6 and 13 months of age.

Please see www.immunisation.ie for complete information on the Irish childhood immunisation schedule and changes to the schedule introduced in September 2008.

The immunisation uptake statistics presented in this report relate to children 12 and 24 months of age in Quarter 2-2010.

The immunisation uptake rates presented in this report for children at 12 months of age in Quarter 2-2010 are children born between 01/04/2009 and 30/06/2009 and who have received three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃), hepatitis B (HepB₃), two doses of meningococcal serogroup C conjugate vaccine (MenC₂), two doses of pneumococcal conjugate vaccine (PCV₂) and one dose of BCG vaccine.

The immunisation uptake rates presented in this report for children at 24 months of age in Quarter 2-2010 are children born between 01/04/2008 and 30/06/2008 and who have received three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃) and meningococcal group C (MenC₃), one booster dose of vaccine against *Haemophilus influenzae* type b given after 12 months of age (Hib_b) and one dose of vaccine against measles, mumps and rubella (MMR₁).

The national immunisation uptake statistics, based on available data, for Quarter 2-2010 are presented in this document, the uptake statistics are also presented by HSE Area and Local Health Office (LHO).

The uptake rates presented here were rounded to zero decimal place.

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 + MenC	DTaP/Hib/IPV/HepB + PCV
4 months	DTaP/Hib/IPV + MenC	DTaP/Hib/IPV/HepB + MenC
6 months	DTaP/Hib/IPV + MenC	DTaP/Hib/IPV/HepB + 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 and changes to the schedule introduced in September 2008.

BCG;	Bacille Calmette Guerin vaccine
DTaP	Diphtheria, Tetanus and acellular Pertussis vaccine
Hib	<i>Haemophilus influenzae</i> type b vaccine
IPV	Inactivate Polio Virus vaccine
HepB	Hepatitis B vaccine
PCV	Pneumococcal Conjugate Vaccine
MenC	Meningococcal group C vaccine
MMR	Measles, Mumps and Rubella vaccine

Immunisation uptake at 12 months

National and HSE Area uptake

Please note: The immunisation uptake figures for children at 12 months of age presented in this report are incomplete as only three HSE Areas were in a position to provide BCG data and only six Areas were in a position to provide the remaining vaccine data (Table 1). Immunisation uptake rates, where available, in children 12 months of age in Q2-2010 are presented by HSE Area in Table 1. The available BCG cohort figure may be around one quarter of the national birth cohort and the remaining vaccine cohort figures available may be around 80% of the national birth cohort (these are estimates only). National uptake rates, based on the available data, were 97% for BCG and 89% for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂.

National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q2-2010. Compared to Q1-2010, national uptake rates in Q2-2010 for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ were unchanged while MenC₂ and BCG increased by 1%. Due to incompleteness of data (in Q1 and Q2 only three HSE Areas were in a position to provide BCG data and only six Areas were in a position to provide D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂; MenC₂ was provided by five Areas in Q1 and six Areas in Q2) in both Q1 2010 and Q2 2010 these comparisons may not be valid.

In Q2 2010, compared to the previous quarter, uptake rates: in the HSE-Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ increased by 1%; in the HSE-Mid Western Area for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ were unchanged while BCG increased by 2%; in the HSE-North Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ decreased by 2%; in the HSE-North Western Area for D₃, P₃, T₃, Hib₃, Polio₃ and PCV₂ were unchanged while HepB₃, MenC₂ and BCG increased by 1%; in the HSE-South Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ decreased by 1% while BCG increased by 1%; in the HSE-Western Area for D₃, P₃, T₃, Hib₃ and Polio₃ decreased by 1% while HepB₃, MenC₂ and PCV₂ were unchanged.

LHO uptake

The immunisation uptake rates by LHO are shown in appendix 1. Twenty-five LHOs reported D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ data and nine LHOs reported BCG data.

All nine LHOs reporting BCG data had ≥95% uptake. D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ uptake rates ranged from 74% to 97% among LHOs with the target rate of 95% reached and exceeded for these vaccines in one (Roscommon) LHO. Of the 25 LHOs reporting data, 15 had ≥90% uptake of D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃, 14 had ≥90% uptake of PCV₂ and 12 had ≥90% uptake of MenC₂. D₃ immunisation uptake rates are mapped by LHO in figure 2.

Internationally

Vaccination coverage statistics for D₃, P₃, T₃, Hib₃ and Polio₃ for children 12 months of age in Quarter 2-2010 were 93.5% in England, 95.7% in Wales, 97.3% in Northern Ireland and 97.0% in Scotland.¹ MenC₂ uptake was 92.9% in England, 95.4% in Wales, 97.3% in Northern Ireland and 96.8% in Scotland.¹ PCV₂ uptake was 93.0% in England, 95.5% in Wales, 97.3% in Northern Ireland and 97.1% in Scotland.¹ Please see HPA report for caveats to data.¹

Table 1. Immunisation uptake (%) at 12 months in cohort born 01/04/2009–30/06/2009

HSE Area	No. in cohort*	BCG	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₂	PCV ₂
Eastern	6804	na	87	87	87	87	87	87	87	87
Midland	na	na	na	na	na	na	na	na	na	na
Mid Western	1533	99	92	92	92	92	92	92	92	92
North Eastern	1977	na	92	92	92	92	92	92	90	90
North Western	1003	96	93	93	93	93	93	93	93	93
South Eastern	2039	96	89	89	89	89	89	89	89	89
Southern	na	na	na	na	na	na	na	na	na	na
Western	1716	na	87	87	87	87	87	87	87	88
Ireland	15,072†	97	89	89	89	89	89	89	89	89

na = not available at this time

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

†Number in cohort for BCG is 4,574.

Please note the national figures are all incomplete.

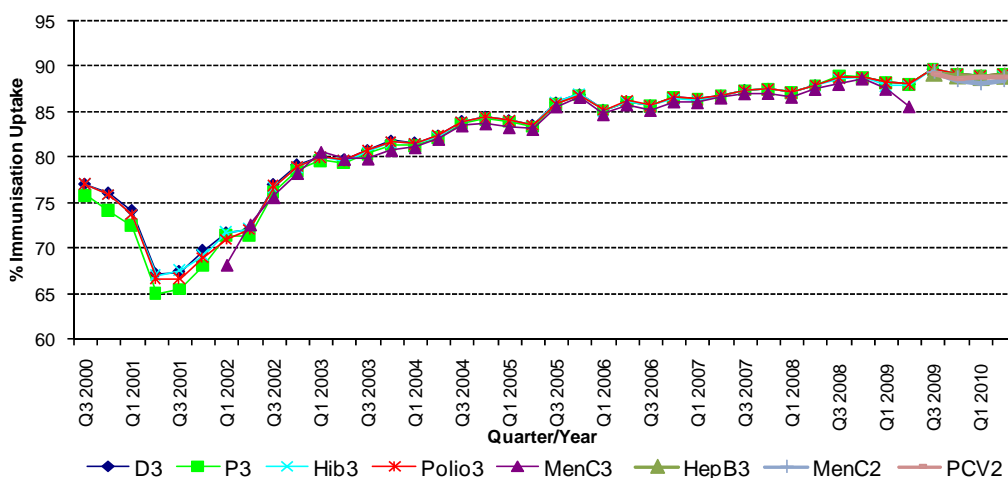


Figure 1. National quarterly immunisation uptake rates at 12 months

Since T₃ uptake identical to D₃ uptake only D₃ uptake figures presented. The Q3 2008 MenC₃ uptake figure is based on data from six of the eight HSE Areas. The Q1 2009 HSE-Eastern Area D₃, P₃, T₃, Polio₃ and MMR₁ uptake figures exclude those born on the 31/03/2007. The Q3 2009 figures are incomplete as two HSE Areas were unable to provide data, two additional areas were unable to provide MenC₂ data and one additional area was unable to provide PCV₂ data. The Q4 2009 figures are incomplete as three HSE Areas were unable to provide data. The Q1 2010 figures are incomplete as two HSE Areas were unable to provide data and three were unable to provide MenC₂ data. The Q2 2010 figures are incomplete as two HSE Areas were unable to provide data.

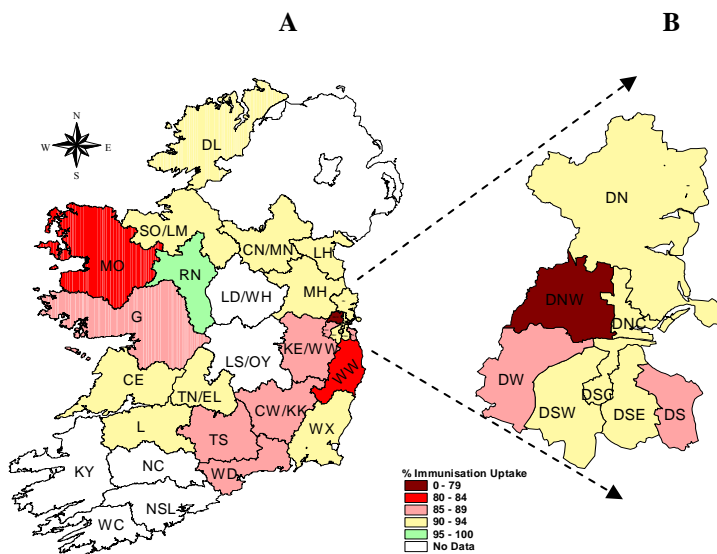


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO abbreviations.

Immunisation uptake at 24 months

National and HSE Area uptake

Immunisation uptake rates, where available, in children 24 months of age in Q2-2010 are presented (Table 2). The immunisation uptake figures for children at 24 months of age presented in this report are incomplete as the HSE Midland Area were unable to provide data. The available vaccine cohort figures available may be around 94% (estimate only) of the national birth cohort. National uptake rates, based on available data, were 94% for D₃, P₃, T₃ and Polio₃, 93% for Hib₃ and 91% for MenC₃. All seven HSE Areas reporting data had ≥92% uptake of D₃, P₃, T₃, Hib₃ and Polio₃. The target uptake of 95% was reached/exceeded in the HSE-Mid Western Area for D₃, P₃, T₃, Hib₃ and Polio₃, in the HSE-North Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ and in the HSE-North Western Area for D₃, P₃, T₃ and Polio₃. Hib_b uptake was 87% nationally (based on available data) with ≥90% uptake of Hib_b in four of the seven HSE Areas (table 2); the target uptake of 95% was reached in the HSE-South Eastern Area for Hib_b. MMR₁ uptake was 90% nationally (based on available data) with uptake of ≥90% in five HSE Areas (table 2); however, none of the seven Areas reporting data reached the target of 95%.

Trends

Figure 3 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q2-2010. In Q2-2010, compared to the previous quarter, national uptake rates for D₃, P₃, T₃, Hib₃, Polio₃, Hib_b and MMR₁ were unchanged while MenC₃ decreased by 2%. Due to incompleteness of data in both Q1 2010 and Q2 2010 these comparisons may not be valid. Only six HSE Areas were in a position to provide data in Q1 2010 and only seven HSE Areas were in a position to provide data in Q2 2010.

In Q2 2010, compared to the previous quarter, uptake rates: in the HSE-Eastern Area for D₃, P₃, T₃, Hib₃ and Polio₃ were unchanged, Hib_b increased by 2%, MenC₃ decreased by 3% and MMR₁ increased by 1%; in the HSE-Mid Western Area for D₃, P₃, T₃, Hib₃ and Polio₃ increased by 2%, MenC₃ increased by 1%, Hib_b decreased by 1% and MMR₁ was unchanged; in the HSE-North Eastern Area for D₃, P₃, T₃, Hib₃ and Polio₃ increased by 1%, Hib_b decreased by 1% and MenC₃ and MMR₁ were unchanged; in the HSE-North Western Area D₃, P₃, T₃, Hib₃ and MMR₁ decreased by 2%, Hib_b decreased by 3%, Polio₃ decreased by 1% and MenC₃ decreased by 4%; in the HSE-South Eastern Area for all vaccines were unchanged; in the HSE-Western Area D₃, P₃, T₃, Hib₃ and Polio₃ decreased by 1%, MenC₃ and MMR₁ decreased by 2% and Hib_b decreased by 3%.

LHO uptake

Immunisation uptake rates for D₃, P₃, T₃, Hib₃, Hib_b, Polio₃, MenC₃ and MMR₁ in children 24 months of age in Q2-2010 are presented by LHO in Appendix 2.

Among the 29 LHOs reporting data, uptake of: D₃, T₃, P₃ and Polio₃ ranged from 88-99%; Hib₃ ranged from 88-98%, MenC₃ ranged from 84-98%, MMR₁ ranged from 80-96% and Hib_b ranged from 77-96%.

Of the 29 LHOs reporting data: 13 had ≥95% uptake of D₃, P₃, T₃ and Polio₃, 10 had ≥95% uptake of Hib₃, three had ≥95% uptake of MenC₃, three had ≥95% uptake of Hib_b and one had ≥95% uptake of MMR₁.

Of the 29 LHOs reporting data; 27 had ≥90% uptake of D₃, P₃, T₃, Hib₃ and Polio₃; 20 had ≥90% uptake of MenC₃; 20 had ≥90% uptake of MMR₁ and 12 had ≥90% uptake of Hib_b.

Table 2. Immunisation uptake (%) at 24 months in cohort born 01/04/2008 – 30/06/2008

HSE Area	No. in Cohort*	D ₃	P ₃	T ₃	Hib ₃	Hib _b	Polio ₃	MenC ₃	MMR ₁
Eastern	6587	93	93	93	92	82	93	89	88
Midland	na	na	na	na	na	na	na	na	na
Mid Western	1502	95	95	95	95	90	95	93	91
North Eastern	2035	95	95	95	95	92	95	95	93
North Western	1009	95	95	95	94	91	96	92	91
South Eastern	2151	94	94	94	94	95	94	93	93
Southern	2608	93	93	93	93	87	93	93	91
Western	1809	93	93	93	93	83	93	92	88
Ireland	17701	94	94	94	93	87	94	91	90

* As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here. Number in cohort for Hib_b vaccination = 17,697. **Please note the national figures are all incomplete.**

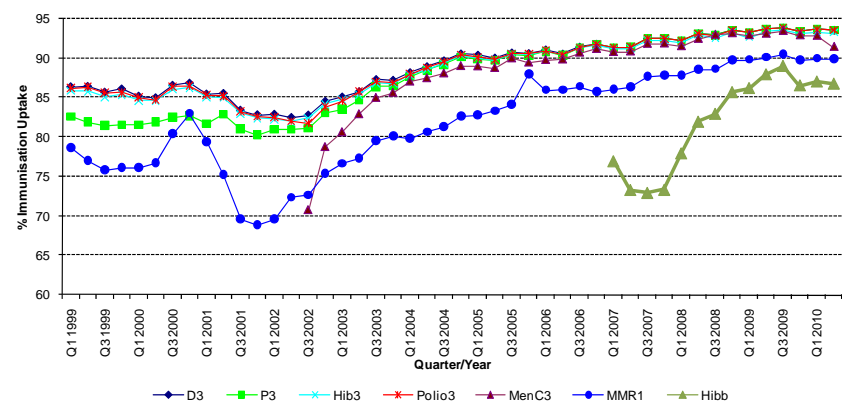


Figure 3. National quarterly immunisation uptake rates at 24 months

Notes: The Q4-2005 MMR₁ figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR₁ figure includes the HSE-Eastern Area figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib_b figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed their Hib_b data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib_b in the HSE-SE was 83% compared to 53% in Q4-2007. The Q3-2008 MenC₃ figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D₃, P₃, T₃, Polio₃ and MMR₁ uptake figures exclude those born on the 31/03/2007. The Q2-2009 HSE-Eastern Area Hib_b 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_b figures also exclude uptake figures from Dublin North. The Q1-2010 figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures also exclude uptake figures from Dublin North. The Q2-2010 figures are based on data from seven of the eight HSE Areas.

Internationally

In Q2-2010, vaccination coverage statistics at 24 months for D₃, P₃, T₃, Hib₃ and Polio₃ were 95.5% in England, 97.4% in Wales, 99.0% in Northern Ireland and 98.6% in Scotland.¹ MenC₂ uptake was 94.6% in England, 96.2% in Wales, 97.4% in Northern Ireland and 96.5% in Scotland.¹ Hib/MenC booster was 90.9% in England, 93.6% in Wales, 95.7% in Northern Ireland and 93.9% in Scotland.¹ MMR₁ uptake was 88.3% in England, 92.1% in Wales, 92.4% in Northern Ireland and 93.4% in Scotland.¹ Please see HPA report for caveats to data.¹

Conclusions

National uptake rates for D₃, P₃, T₃ and Polio₃ (based on available data) at 24 months were 1% below the target rates, Hib₃ was 2% below the target rate, MenC₃ was 4% below the target rate, MMR₁ was 5% below the target rate and Hib_b was 8% below the target rate. A decline in MenC₃ in this quarter, the decline in Hib_b since Q3 2009 and low uptake of MMR₁ is cause for concern.

Further information

A complete listing of national and regional immunisation uptake statistics at 12 and 24 months for each HSE Area is also available at <http://www.hpsc.ie>.

Acknowledgements

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

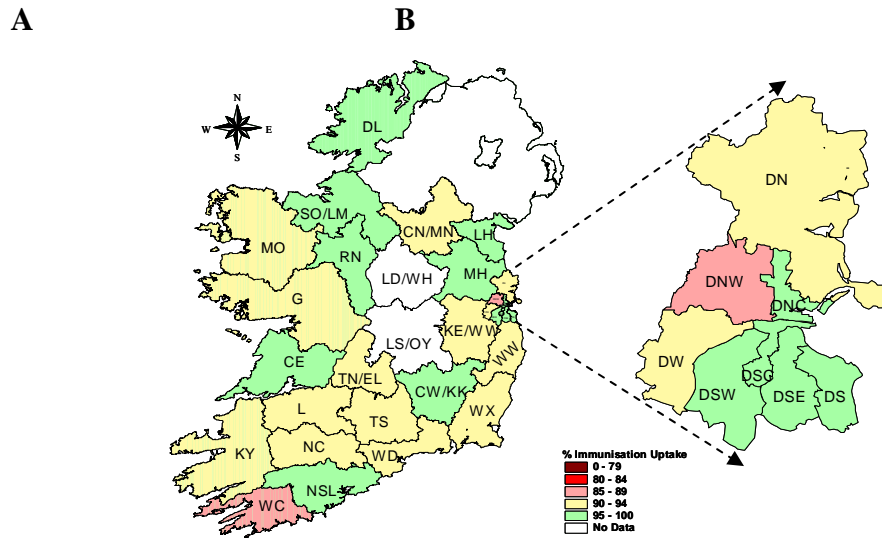


Figure 4. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

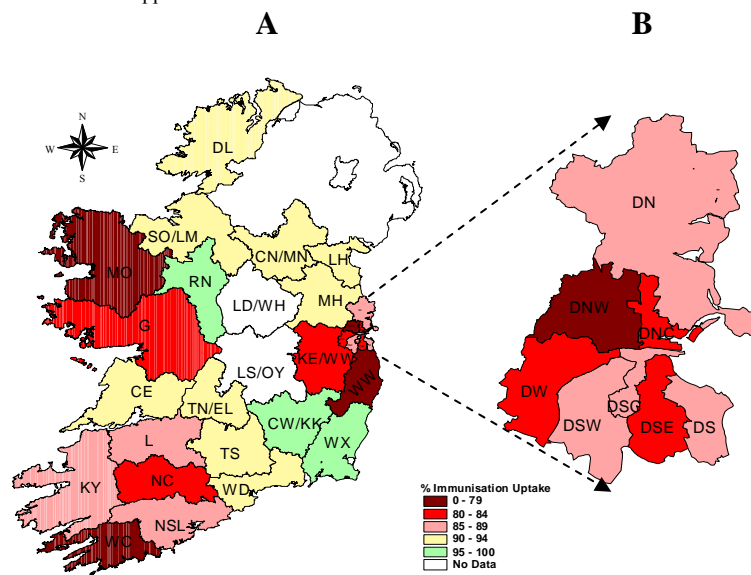


Figure 5. Hib₆ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

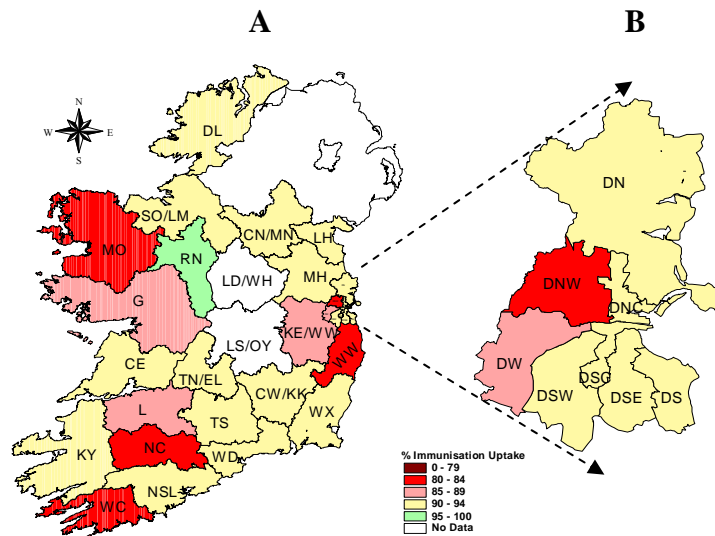


Figure 6. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Appendix 1

Immunisation Uptake at 12 Months in Cohort Born 01/04/2009-30/06/2009													
HSE Area	LHO/HSE Area	No. in cohort for BCG	No. in cohort for other vaccines†	Immunisation Uptake (%) *									
				BCG	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₂	PCV ₂	
Eastern	Dublin South	na	414	na	88	88	88	88	88	88	87	86	87
	Dublin South East	na	381	na	92	92	92	92	92	92	92	91	92
	Dublin South City	na	419	na	94	94	94	94	94	94	93	94	93
	Dublin South West	na	707	na	93	93	93	93	93	93	93	93	93
	Dublin West	na	753	na	88	88	88	88	88	88	88	88	88
	Dublin North West	na	985	na	74	74	74	74	74	74	74	74	74
	Dublin North Central	na	424	na	90	90	90	90	90	90	90	89	90
	Dublin North	na	1132	na	91	91	91	91	91	91	90	90	91
	Kildare/West Wicklow	na	1052	na	89	89	89	89	89	89	89	89	88
Wicklow	na	537	na	83	83	83	83	83	83	83	83	83	
HSE-E Total	na	6804	na	87	87	87	87	87	87	87	87	87	87
Midland	Laos/Offaly	na	na	na	na	na	na	na	na	na	na	na	na
	Longford/Westmeath	na	na	na	na	na	na	na	na	na	na	na	na
	HSE-M Total	na	na	na	na	na	na	na	na	na	na	na	na
Mid Western	Clare	479	492	98	92	92	92	92	92	92	92	92	93
	Limerick	566	531	100	92	92	92	92	92	92	92	92	91
	Tipperary NR/East Limerick	487	510	97	91	91	91	91	91	91	91	91	91
	HSE-MW Total	1532	1533	99	92	92	92	92	92	92	92	92	92
North Eastern	Cavan/Monaghan	na	520	na	94	94	94	94	94	94	93	92	92
	Louth	na	539	na	92	92	92	92	92	92	92	89	89
	Meath	na	918	na	91	91	91	91	91	91	91	89	90
	HSE-NE Total	na	1977	na	92	92	92	92	92	92	92	90	90
North Western	Donegal	621	621	95	94	94	94	94	94	93	93	93	93
	Sligo/Leitrim	382	382	98	92	92	92	92	92	92	91	92	92
	HSE-NW Total	1003	1003	96	93	93	93	93	93	93	93	93	93
South Eastern	Carlow/Kilkenny	545	545	97	87	87	87	87	87	87	87	88	87
	South Tipperary	386	386	95	88	88	88	88	88	88	88	88	88
	Waterford	514	514	96	89	89	89	89	89	89	89	89	89
	Wexford	594	594	95	92	92	92	92	92	92	92	91	92
	HSE-SE Total	2039	2039	96	89	89	89	89	89	89	89	89	89
Southern	North Cork	na	na	na	na	na	na	na	na	na	na	na	na
	North South Lee	na	na	na	na	na	na	na	na	na	na	na	na
	West Cork	na	na	na	na	na	na	na	na	na	na	na	na
	Kerry	na	na	na	na	na	na	na	na	na	na	na	na
	HSE-S Total	na	na	na	na	na	na	na	na	na	na	na	na
Western	Galway	na	1003	na	87	87	87	87	87	87	87	88	88
	Mayo	na	478	na	82	82	82	82	82	82	82	81	83
	Roscommon	na	235	na	97	97	97	97	97	97	97	97	97
	HSE-W Total	na	1716	na	87	87	87	87	87	87	87	87	88
Ireland *	4574	15072	97	89	89	89	89	89	89	89	89	89	

na=not available

*National data are incomplete as BCG data were only available for three HSE Areas and the remaining vaccine data were only available for six HSE Areas.

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

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

Appendix 2

Immunisation Uptake at 24 Months in Cohort Born 01/04/2008-30/06/2008												
HSE Area	LHO/HSE Area	No. in cohort for Hib ₆	No. in cohort for other vaccinees†	Immunisation Uptake (%)*								
				D ₃	P ₃	T ₃	Hib ₃	Hib ₆	Polio ₃	MenC ₃	MMR ₁	
Eastern	Dublin South	411	411	97	97	97	97	85	97	94	90	
	Dublin South East	342	342	96	96	96	96	80	96	86	92	
	Dublin South City	385	385	97	97	97	96	86	97	92	92	
	Dublin South West	691	691	96	96	96	96	88	96	93	94	
	Dublin West	679	679	91	91	91	91	80	91	88	85	
	Dublin North West	974	974	89	89	89	88	78	89	84	82	
	Dublin North Central	405	405	95	95	95	94	84	95	89	90	
	Dublin North	1116	1116	93	93	93	93	85	93	91	90	
	Kildare/West Wicklow	1090	1090	90	90	90	90	80	90	88	86	
	Wicklow	494	494	92	92	92	91	79	92	89	84	
HSE-E Total	6587	6587	93	93	93	92	82	93	89	88		
Midland	Laos/Offaly	na	na	na	na	na	na	na	na	na	na	
	Longford/Westmeath	na	na	na	na	na	na	na	na	na	na	
	HSE-M Total	na	na	na	na	na	na	na	na	na	na	
Mid Western	Clare	453	453	96	96	96	96	91	96	94	94	
	Limerick	542	542	94	94	94	94	88	94	91	89	
	Tipperary NR/East Limerick	507	507	94	94	94	94	91	94	93	92	
	HSE-MW Total	1502	1502	95	95	95	95	90	95	93	91	
North Eastern	Cavan/Monaghan	572	572	94	94	94	93	92	94	94	92	
	Louth	575	575	96	96	96	95	92	96	95	93	
	Meath	888	888	96	96	96	95	92	96	95	93	
	HSE-NE Total	2035	2035	95	95	95	95	92	95	95	93	
North Western	Donegal	648	648	95	95	95	94	90	95	92	90	
	Sligo/Leitrim	361	361	96	96	96	94	94	96	92	94	
	HSE-NW Total	1009	1009	95	95	95	94	91	96	92	91	
South Eastern	Carlow/Kilkenny	547	547	95	95	95	95	95	95	94	94	
	South Tipperary	373	373	94	94	94	93	93	94	92	94	
	Waterford	577	577	93	93	93	93	94	93	92	93	
	Wexford	654	654	94	94	94	94	96	94	93	92	
	HSE-SE Total	2151	2151	94	94	94	94	95	94	93	93	
Southern	North Cork	392	394	91	91	91	91	82	91	89	83	
	North South Lee	1473	1477	95	95	95	95	89	95	94	94	
	West Cork	221	226	88	88	88	88	78	88	87	80	
	Kerry	518	511	93	93	93	93	86	93	92	91	
	HSE-S Total	2604	2608	93	93	93	93	87	93	93	91	
Western	Galway	1095	1095	92	92	92	92	83	92	91	87	
	Mayo	475	475	91	91	91	91	77	91	89	84	
	Roscommon	239	239	99	99	99	98	96	99	98	96	
	HSE-W Total	1809	1809	93	93	93	93	83	93	92	88	
Ireland*	15093	15093	94	94	94	93	87	94	91	90		

na=not available

*The national data are incomplete as the HSE-Midland Area were unable to provide data.

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

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

Appendix 3

Local Health Office (LHO) Abbreviations (used in maps in this report)	Local Health Office (LHO)
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
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

*Please note while North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here