

Summary

Children 12 months of age in Quarter 1-2010

- ❖ 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, the HSE Midland and Southern Areas were not in a position to provide D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ data and the HSE Midland, Mid Western and Southern Areas were not in a position to provide MenC₂ data. The available BCG cohort figure may be around one quarter of the national birth cohort, the D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ vaccine cohort figures available may be around 80% of the national birth cohort and the MenC₂ figures may be around 70% of the national birth cohort.

Based on the available data the **national** immunisation uptake rates were 96% for BCG, 89% for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ and 88% for MenC₂.

- Four of the six **HSE Areas**, where data were available, had ≥90% uptake of D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂, however, none of the HSE Areas reached the target uptake of ≥95%.
 - Eight of the nine **Local Health Offices (LHOs)** where BCG data were available had uptake of ≥95%. Of the 25 LHOs, where D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ data were available, two had ≥95% uptake of these vaccines. Of the 22 LHOs, where MenC₂ data were available, two had ≥95% uptake of MenC₂.
 - Of the 25 LHOs, 16 had ≥90% uptake of D₃, P₃, T₃, Polio₃ and PCV₂ and 15 had ≥90% uptake of Hib₃ and HepB₃. Of the 22 LHOs, 11 had ≥90% uptake of MenC₂. All nine LHOs, where BCG data were available, had ≥90% uptake.

Children 24 months of age in Quarter 1-2010

- ❖ The immunisation uptake figures for children at 24 months of age presented in this report are incomplete as the HSE Midland and Southern Areas were not in a position to provide data and the HSE Eastern Area Dublin North were not in a position to provide Hib₆ data. The available Hib₆ cohort figure may be around 80% of the national birth cohort, the remaining vaccine cohort figures available may be around 85% 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 and MenC₃, 90% for MMR₁ and 87% for Hib₆.

- All six **HSE Areas** reporting data had ≥92% uptake of D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃. The target uptake of 95% was reached/exceeded in the HSE-North Western Area for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ and in the HSE-North Eastern Area for MenC₃.

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

Five of the six HSE Areas reporting data had ≥90% uptake of MMR₁.
None of the HSE Areas reached the target uptake of ≥95% for MMR₁.

 - Of the 25 **Local Health Offices (LHOs)** reporting data:
 - 10 had ≥95% uptake of D₃, P₃, T₃ and Polio₃,
 - 8 had ≥95% uptake of Hib₃,
 - 4 had ≥95% uptake of MenC₃ and
 - 3 had ≥95% uptake of MMR₁.Of the 24 LHOs reporting Hib₆ data five had ≥95% uptake of Hib₆.
 - Of the 25 LHOs reporting data:
 - 24 had ≥90% uptake of D₃, P₃, T₃, Hib₃ and Polio₃,
 - 22 had ≥90% uptake of MenC₃ and
 - 14 had ≥90% uptake of MMR₁.Of the 24 LHOs reporting Hib₆ data 14 had ≥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 1-2010.

The immunisation uptake rates presented in this report for children at 12 months of age in Quarter 1-2010 are children born between 01/01/2009 and 31/03/2009 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 1-2010 are children born between 01/01/2008 and 31/03/2008 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 1-2010 are presented in this document, the uptake statistics are also presented by HSE Area and Local Health Office (LHO).

Uptake figures (%) presented here are 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: Immunisation uptake rates, where available, in children 12 months of age in Q1-2010 are presented by HSE Area in Table 1. 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, only five Areas were in a position to provide MenC₂ data and only six Areas were in a position to provide the remaining vaccine data (Table 1). The available BCG cohort figure may be around one quarter of the national birth cohort, the D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ vaccine cohort figures available may be around 80% of the national birth cohort and the MenC₂ figures may be around 70% of the national birth cohort. National uptake rates, based on the available data, were 96% for BCG and 89% for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂, and 88% for MenC₂.

National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q1-2010. Compared to Q4-2009, national uptake rates in Q1-2010 for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ were unchanged while MenC₂ decreased by 1%. Due to incompleteness of data in both Q4 2009 and Q1 2010 these comparisons may not be valid. In Q4 2009 only five HSE Areas were in a position to provide data [two HSE Areas provided data since the Q4 2009 report was produced] and in Q1 2010 only five Areas were in a position to provide MenC₂ data and only six Areas were in a position to provide the remaining vaccine data.

In Q1 2010, compared to the previous quarter, uptake rates: in the HSE-Eastern Area for D₃, P₃, T₃ and Polio₃ decreased by 2% and Hib₃, HepB₃, MenC₂ and PCV₂ uptake decreased by 1%; in the HSE-North Eastern Area for all vaccines increased by 1%; in the HSE-North Western Area for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ increased by 3% while the uptake rate for BCG was unchanged; in the HSE-South Eastern Area for all vaccines were unchanged; in the HSE-Western Area for D₃, P₃, T₃, Hib₃, Polio₃, MenC₂ and decreased by 1% while HepB₃ decreased by 2%.

Table 1. Immunisation uptake (%) at 12 months in cohort born 01/01/2009–31/03/2009

HSE Area	No. in cohort*	BCG	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₂	PCV ₂
Eastern	6501	na	86	86	86	86	86	86	86	86
Midland	na	na	na	na	na	na	na	na	na	na
Mid Western	1519	97	92	92	92	92	92	92	na	92
North Eastern	1954	na	94	94	94	94	94	94	92	92
North Western	934	95	93	93	93	93	93	92	92	93
South Eastern	2006	95	90	90	90	90	90	90	90	90
Southern	na	na	na	na	na	na	na	na	na	na
Western	1683	na	88	88	88	88	88	87	87	88
Ireland	14,597†	96	89	89	89	89	89	89	88	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 4,435 and MenC₂ is 13,073.

Please note the national figures are all incomplete.

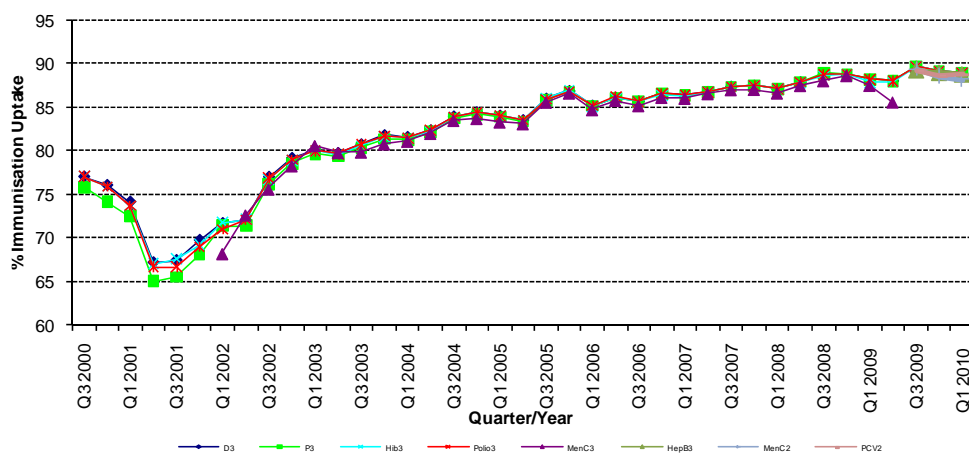


Figure 1. National quarterly immunisation uptake rates at 12 months

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.

LHO uptake

The immunisation uptake rates by LHO are shown in appendix 1. Twenty-five LHOs reported D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂ data, 22 LHOs reported MenC₂ data and nine LHOs reported BCG data.

All nine LHOs reporting BCG data had ≥90% uptake with uptake of ≥95% in eight of these LHOs. The immunisation uptake target rate of 95% was reached for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ in two of the LHOs reporting data. Of the LHOs reporting data, 16 had ≥90% uptake of D₃, P₃, T₃, Polio₃ and PCV₂ and 15 had ≥90% uptake of Hib₃ and HepB₃ and 11 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 1-2010 were 93.7% in England, 96.1% in Wales, 97.7% in Northern Ireland and 97.2% in Scotland.¹ MenC₂ uptake was 93.0% in England, 95.8% in Wales, 97.6% in Northern Ireland and 97.1% in Scotland.¹ PCV₂ uptake was 93.1% in England, 95.9% in Wales, 97.8% in Northern Ireland and 97.3% in Scotland.¹ Please see HPA report for caveats to data.

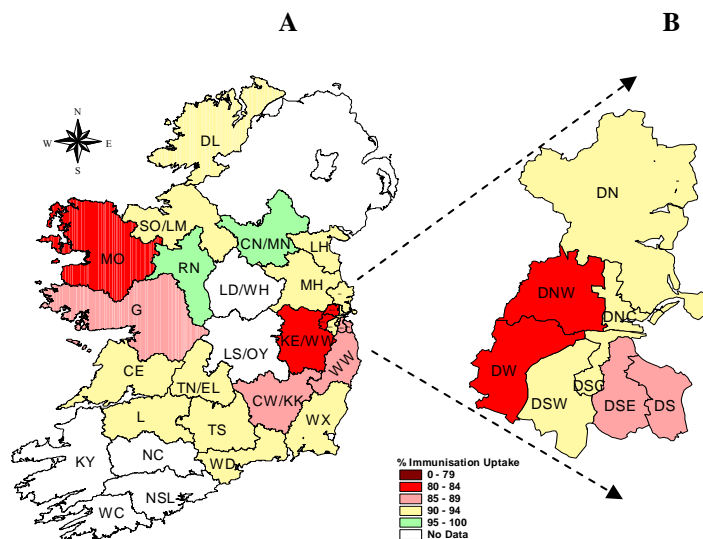


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 1 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO abbreviations.

Immunisation uptake at 24 months

National and HSE Area uptake

Immunisation uptake rates, where available, in children 24 months of age in Q1-2010 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 and Southern Areas were not in a position to provide data and the HSE Eastern Area Dublin North were not in a position to provide Hib_b data. The available Hib_b cohort figure may be around 80% of the national birth cohort, the remaining vaccine cohort figures available may be around 85% of the national birth cohort. National uptake rates, based on available data, were 94% for D₃, P₃, T₃ and Polio₃ and 93% for Hib₃ and MenC₃. All six HSE Areas reporting data had ≥92% uptake of D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃. The target uptake of 95% was reached/exceeded in the HSE-North Western Area for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ and in the HSE-North Eastern Area for MenC₃. Hib_b uptake was 87% nationally (based on available data) with ≥90% uptake of Hib_b in four of the six 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 six 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 Q1-2010. In Q1-2010, compared to the previous quarter, national uptake rates for D₃, P₃, T₃ and Polio₃ increased by 1% while Hib₃, MenC₃, Hib_b and MMR₁ were unchanged. Due to incompleteness of data in both Q4 2009 and Q1 2010 these comparisons may not be valid. Only seven HSE Areas were in a position to provide data in Q4 2009 [three HSE Areas provided data since the Q4 2009 reported was produced] and only six HSE Areas were in a position to provide data in Q1 2010.

In Q1 2010, compared to the previous quarter, uptake rates: in the HSE-Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ uptake were unchanged, Hib_b decreased by 3% and MMR₁ decreased by 1%; in the HSE-North Eastern Area for D₃, P₃, T₃, Hib₃, Polio₃, MenC₃ and MMR₁ decreased by 1% and Hib_b increased by 1%; in the HSE North Western Area were unchanged with the exceptions of Hib₃ which decreased by 1% and Hib_b which increased by 1%; in the HSE-South Eastern Area for D₃, and T₃ increased by 1%, P₃, Hib₃, Polio₃, MenC₃ and MMR₁ increased by 2% and Hib_b increased by 7%; in the HSE-Western Area D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ increased by 1% and MMR₁ increased by 2%.

LHO uptake

Immunisation uptake rates for D₃, P₃, T₃, Hib₃, Hib_b, Polio₃, MenC₃ and MMR₁ in children 24 months of age in Q1-2010 are presented by LHO in Appendix 2.

Of the 25 LHOs reporting data; 10 had ≥95% uptake of D₃, P₃, T₃ and Polio₃; eight had ≥95% uptake of Hib₃, four had ≥95% uptake of MenC₃ and three had ≥95% uptake of MMR₁. Of the 24 LHOs reporting Hib_b data five had uptake of ≥95%.

Of the 25 LHOs reporting data; 24 had ≥90% uptake of D₃, P₃, T₃, Hib₃ and Polio₃; 22 had ≥90% uptake of MenC₃ and 14 had ≥90% uptake of MMR₁. Of the 24 LHOs reporting Hib_b data 14 had uptake of ≥90%.

D₃, Hib_b and MMR₁ immunisation uptake rates are mapped by LHO in figures 4-6.

Table 2. Immunisation uptake (%) at 24 months in cohort born 01/01/2008 – 31/03/2008

HSE Area	No. in Cohort*	D ₃	P ₃	T ₃	Hib ₃	Hib _b	Polio ₃	MenC ₃	MMR ₁
Eastern	6280	93	93	93	92	80	93	92	87
Midland	na	na	na	na	na	na	na	na	na
Mid Western	1496	93	93	93	93	91	93	92	91
North Eastern	1953	94	94	94	94	93	94	95	93
North Western	968	97	97	97	96	94	97	96	93
South Eastern	2024	94	94	94	94	95	94	93	93
Southern	na	na	na	na	na	na	na	na	na
Western	1762	94	94	94	94	86	94	94	90
Ireland	14483	94	94	94	93	87	94	93	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 = 13,456. **Please note the national figures are all incomplete.**

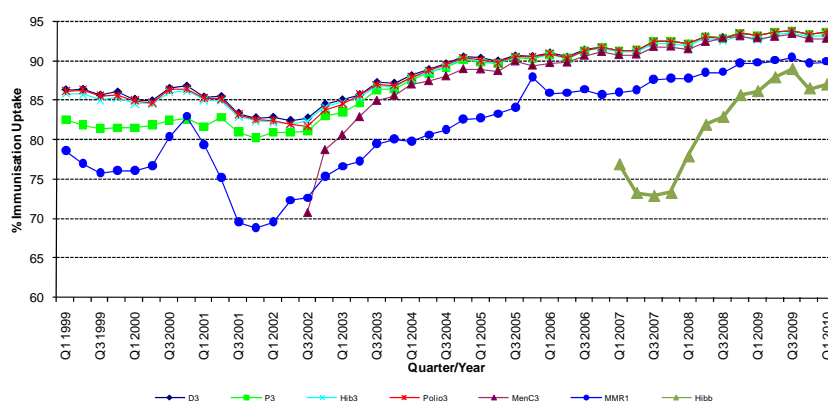


Figure 3. National quarterly immunisation uptake rates at 24 months

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.

Internationally

In Q1-2010, vaccination coverage statistics at 24 months for D₃, P₃, T₃, Hib₃ and Polio₃ were 95.6% in England, 97.4% in Wales, 98.8% in Northern Ireland and 98.3% in Scotland.¹ MenC₂ uptake was 94.6% in England, 96.4% in Wales, 97.2% in Northern Ireland and 96.7% in Scotland.¹ Hib/MenC booster was 90.0% in England, 94.1% in Wales, 95.7% in Northern Ireland and 93.9% in Scotland.¹ MMR₁ uptake was 88.3% in England, 92.5% in Wales, 92.8% in Northern Ireland and 93.5% in Scotland.¹ Please see HPA report for caveats to data.¹

Conclusions

In Q1-2010, the national Hib_b and MMR₁ uptake rates (based on available data) were 8% and 5%, respectively, below the target uptake rates of 95%. National uptake rates (based on available data) for all other vaccines at 24 months were 1-2% below the target rates.

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.

References 1. COVER programme: January to March 2010. Health Protection Report 2010: 4 (25). Available at: <http://www.hpa.org.uk/hpr/archives/2010/hpr2510.pdf> (accessed 28/07/2010)

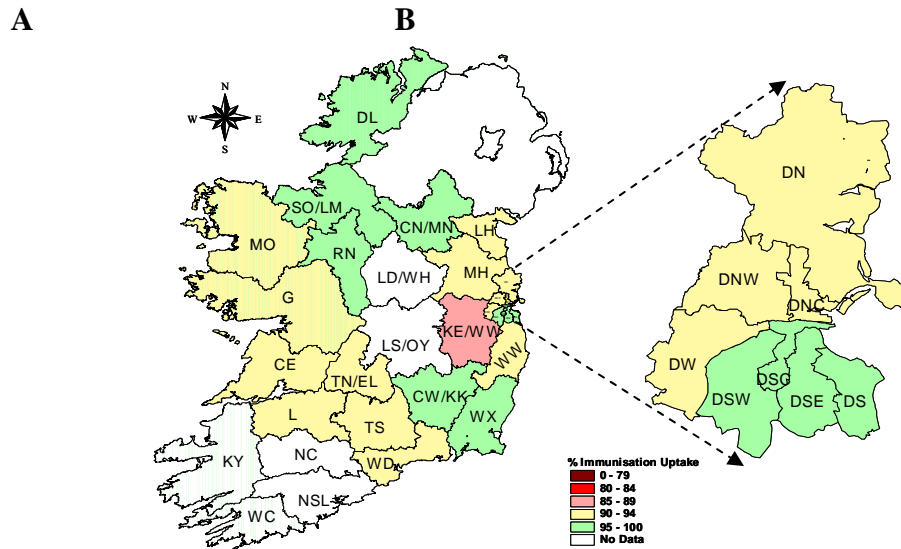


Figure 4. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

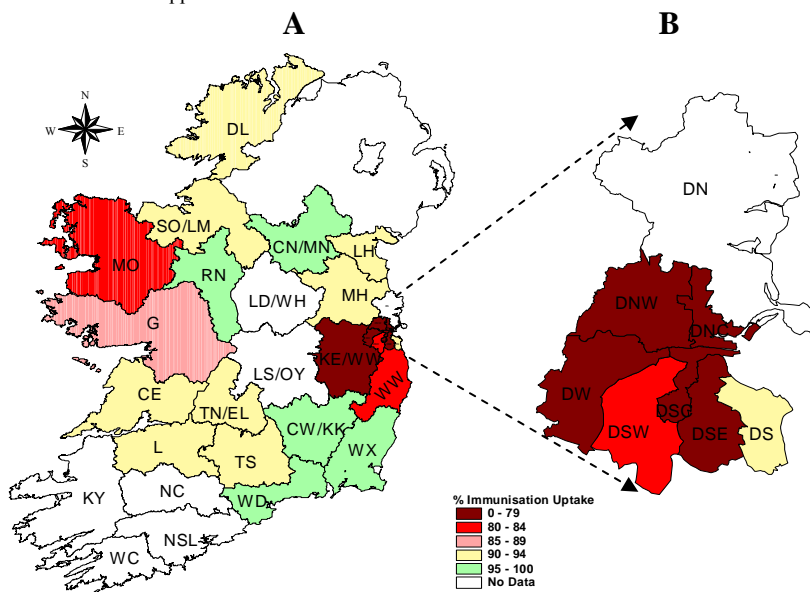


Figure 5. Hib₆ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

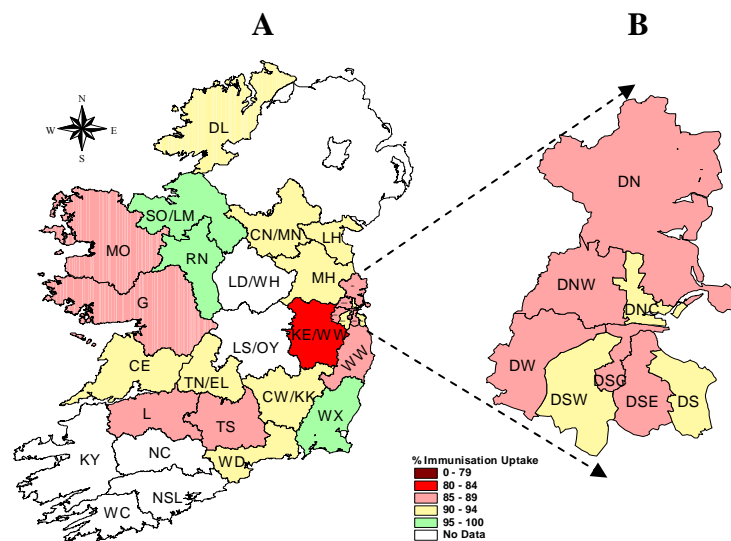


Figure 6. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1 2010, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Appendix 1

Immunisation Uptake at 12 Months in Cohort Born 01/01/2009-31/03/2009												
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	403	na	87	87	87	87	87	86	87	87
	Dublin South East	na	358	na	88	88	88	88	88	87	88	87
	Dublin South City	na	427	na	90	90	90	90	90	90	90	90
	Dublin South West	na	644	na	90	90	90	89	90	89	89	90
	Dublin West	na	676	na	83	83	83	83	83	83	83	83
	Dublin North West	na	921	na	80	80	80	80	80	80	80	80
	Dublin North Central	na	418	na	91	91	91	91	91	91	90	90
	Dublin North	na	1084	na	90	90	90	90	90	90	90	90
	Kildare/West Wicklow	na	1054	na	83	83	83	83	83	83	83	83
	Wicklow	na	516	na	87	87	87	87	87	87	87	87
	HSE-E Total	na	6501	na	86	86	86	86	86	86	86	86
Midland	Laois/Offaly	na	na	na	na	na	na	na	na	na	na	na
	Longford/Westmeath	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
Mid Western	Clare	461	468	98	93	93	93	93	93	93	na	92
	Limerick	512	531	98	93	93	93	93	93	93	na	92
	Tipperary NR/East Limerick	522	520	97	91	91	91	91	91	90	na	91
	HSE-MW Total	1495	1519	97	92	92	92	92	92	92	na	92
North Eastern	Cavan/Monaghan	na	544	na	96	96	96	96	96	96	95	95
	Louth	na	529	na	92	92	92	92	92	92	90	90
	Meath	na	881	na	94	94	94	94	94	94	92	92
	HSE-NE Total	na	1954	na	94	94	94	94	94	94	92	92
North Western	Donegal	606	606	95	93	93	93	93	93	92	93	93
	Sligo/Leitrim	328	328	94	91	91	91	91	91	90	90	91
	HSE-NW Total	934	934	95	93	93	93	93	93	92	92	93
South Eastern	Carlow/Kilkenny	480	480	95	89	89	89	89	89	89	89	89
	South Tipperary	365	365	96	90	90	90	90	90	90	89	90
	Waterford	520	520	95	90	90	90	90	90	90	90	91
	Wexford	641	641	95	91	91	91	91	91	91	91	91
	HSE-SE Total	2006	2006	95	90	90	90	90	90	90	90	90
Southern	North Cork	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
	West Cork	na	na	na	na	na	na	na	na	na	na	na
	Kerry	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
Western	Galway	na	1031	na	89	89	89	89	89	88	88	89
	Mayo	na	437	na	81	81	81	81	81	81	81	82
	Roscommon	na	215	na	97	97	97	97	97	95	96	97
	HSE-W Total	na	1683	na	88	88	88	88	88	87	87	88
Ireland *		4435	14597	96	89	89	89	89	89	89	88	89

na=not available

*Data are incomplete as the HSE-Midland and Southern Areas were unable to provide data and the HSE-Mid Western Area were unable to provide MenC₂ data

† 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 01/01/2008-31/03/2008												
HSE Area	LHO/HSE Area	No. in cohort for Hib _b	No. in cohort for other vaccine [†]	Immunisation Uptake (%) [*]								
				D ₃	P ₃	T ₃	Hib ₃	Hib _b	Polio ₃	MenC ₃	MMR ₁	
Eastern†	Dublin South	385	385	95	95	95	94	93	95	92	92	
	Dublin South East	340	340	97	97	97	96	77	97	94	89	
	Dublin South City	395	395	95	95	95	95	76	95	93	88	
	Dublin South West	625	625	96	96	96	95	84	96	94	93	
	Dublin West	648	648	91	91	91	91	79	91	89	85	
	Dublin North West	923	923	92	92	92	92	76	92	91	85	
	Dublin North Central	347	347	93	93	93	92	76	93	91	90	
	Dublin North	na	1027	94	94	94	93	na	94	93	89	
	Kildare/West Wicklow	1098	1098	88	88	88	88	78	88	89	83	
	Wicklow	492	492	93	93	93	93	83	93	93	88	
HSE-E Total	5253	6280	93	93	93	92	80	93	92	87		
Midland	Laois/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	464	464	93	93	93	93	91	93	93	93	
	Limerick	508	508	92	92	92	92	91	92	89	89	
	Tipperary NR/East Limerick	524	524	94	94	94	94	91	94	93	92	
	HSE-MW Total	1496	1496	93	93	93	93	91	93	92	91	
North Eastern	Cavan/Monaghan	576	576	96	96	96	96	95	96	96	94	
	Louth	522	522	94	94	94	94	94	94	95	94	
	Meath	855	855	94	94	94	93	92	94	94	91	
	HSE-NE Total	1953	1953	94	94	94	94	93	94	95	93	
North Western	Donegal	611	611	97	97	97	96	93	97	96	92	
	Sligo/Leitrim	357	357	97	97	97	95	94	97	94	95	
	HSE-NW Total	968	968	97	97	97	96	94	97	96	93	
South Eastern	Carlow/Kilkenny	526	526	96	96	96	96	96	96	94	94	
	South Tipperary	345	345	92	92	92	92	91	92	92	89	
	Waterford	535	535	94	94	94	93	95	94	92	93	
	Wexford	618	618	95	95	95	94	97	95	94	95	
	HSE-SE Total	2024	2024	94	94	94	94	95	94	93	93	
Southern	North Cork	na	na	na	na	na	na	na	na	na	na	
	North South Lee	na	na	na	na	na	na	na	na	na	na	
	West Cork	na	na	na	na	na	na	na	na	na	na	
	Kerry	na	na	na	na	na	na	na	na	na	na	
	HSE-S Total	na	na	na	na	na	na	na	na	na	na	
Western	Galway	1028	1028	92	92	92	92	86	92	93	89	
	Mayo	475	475	94	94	94	93	80	94	93	87	
	Roscommon	259	259	100	100	100	98	97	100	99	97	
	HSE-W Total	1762	1762	94	94	94	94	86	94	94	90	
Ireland*	13456	14483	94	94	94	93	87	94	93	90		

na=not available

*The data are incomplete as the HSE-Midland and Southern Areas were unable to provide data and HSE-Eastern Area Dublin North were unable to provide Hib_b 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