



A report by the Health Protection Surveillance Centre

Summary

Children 12 months of age in Quarter 2-2011

- ♦ National immunisation uptake rates were 90% for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, PCV₂ and 89% for MenC₂.
 - Among the HSE Areas the uptake rates for: D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ ranged from 88% to 94% and MenC₂ and PCV₂ uptake rates ranged from 85% to 94%.
 - Among the Local Health Offices (LHOs): D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ uptake rates ranged from 81% to 95%, MenC₂ uptake rates ranged from 80% to 96% and PCV₂ uptake rates from 76% to 97%.
 - The target uptake rate of ≥95% was reached in Longford/Westmeath, Sligo/Leitrim and Roscommon for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂; in Longford/Westmeath and Roscommon for MenC₂; in Clare, Limerick, Tipperary N/East, Limerick, Donegal, Sligo/Leitrim, Carlow/Kilkenny, Waterford and Wexford for BCG.

Children 24 months of age in Quarter 2-2011

Since September 1st 2008 the new childhood immunisation schedule has been implemented for children born on or after July 1st 2008 (table 1). Under the new immunisation schedule children are also recommended hepatitis B and pneumococcal conjugate vaccines. In addition, there is a change in timing of the meningococcal serogroup C vaccines and *Haemophilus influenzae* type b booster vaccine. Children that were 24 months of age in Quarter 2-2011 were children born between April 1st and June 30th 2009 and are therefore the fourth cohort recommended the new immunisation schedule. (Children that were 24 months of age in Quarter 3-2010 were children born between July 1st and September 30th 2008 and were therefore the first cohort recommended the new immunisation schedule.)

In Quarter 2-2011, **national** uptake rates were 95% for D_3 , P_3 , T_3 , Hib₃, Polio₃ and HepB₃, 91% for MMR₁, 90% for PCV₃, 87% for Hib_b and 83% for MenC₃.

The uptake of the MenC₃ is still only 3% higher than the 80% recorded in Quarter 3-2010. The low uptake of the Hib booster and relatively low uptake of three doses of pneumococcal conjugate vaccine also remains a source of considerable concern. These data indicate that more children are not receiving their meningococcal serogroup C, pneumococcal and *Haemophilus influenzae* type b vaccinations in comparison to other recommended vaccinations. Meningococcal serogroup C, pneumococcal and *Haemophilus influenzae* type b infections are all serious, potentially fatal illnesses. These illnesses can be prevented by vaccination, but children need to receive all their recommended doses of vaccines, at the recommended ages, to provide the best possible protection.

- > Among the HSE Areas the uptake rates for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ ranged from 94-97%, MMR₁ ranged from 90-95%, PCV₃ ranged from 88-93%, Hib_b ranged from 81-95% and MenC₃ ranged from 81-89%. The target uptake of ≥95% was reached for D₃, P₃, T₃ Hib₃, Polio₃ and HepB₃ in six HSE Areas, for MMR₁ in two HSE Areas and for Hib_b in one HSE Area.
 - Among the LHOs, uptake of D₃, T₃, P₃, Hib₃ and Polio₃ ranged from 87-98%, HepB₃ ranged from 86-97%, MMR₁ ranged from 81-98%, PCV₃ ranged from 78-99%, MenC₃ ranged from 70-97% and Hib_b ranged from 70-97%.
 The target uptake of ≥95% was reached in 21 LHOs for D₃, P₃, T₃, Hib₃ 20 LHOs for Polio₃, 18 LHOs for HepB₃, 5 for MMR₁, 4 for Hib_b 2 for PCV₃ and 1 for MenC₃.

Introduction

Since September 1st 2008 the new childhood immunisation schedule has been implemented for children born on or after 1st July 2008 (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 booster vaccination, now given at 13 months of age.

Please see www.immunisation.ie for complete information on the Irish childhood immunisation schedule.

The immunisation uptake statistics presented in this report relate to children 12 and 24 months of age in Quarter 2-2011.

The immunisation uptake rates presented in this report for children at 12 months of age in Quarter 2-2011 are children born between 01/04/2010 and 30/06/2010 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 2-2011 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), meningococcal group C (MenC₃) and pneumococcal conjugate vaccine (PCV₃), 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 Quarter 2-2011 cohort of children at 24 months was therefore the fourth cohort recommended the new immunisation schedule. (Children that were 24 months of age in Quarter 3-2010 were children born between July 1st and September 30th 2008 and were therefore the first cohort recommended the new immunisation schedule.)

The national immunisation uptake statistics, based on available data, for Quarter 2-2011 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.

While there are 32 LHOs the immunisation uptake data for North Lee and South Lee are combined in this report.

Table 1. Change in Primary Childhood Immunisation Schedule (introduced on September 1 st 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 the									
Immunisation guide	lelines for Ireland. Bacille Calmette Guerin vaccine									
DTaP	Diptheria, Tetanus and acellular Pertussis vaccine									
Hib	Haemophilus influenzae type b vaccine									
HepB	Hepatitis B vaccine									
IPV	Inactivate Polio Virus vaccine									
MMR	Measles, Mumps and Rubella vaccine									
MenC	Meningococcal group C vaccine									
PCV	Pneumococcal Conjugate Vaccine									

Immunisation uptake at 12 months

National and HSE Area uptake

Immunisation uptake rates in children 12 months of age in Q2-2011 are presented by HSE Area in Table 2. National uptake rates were 90% for D_3 , P_3 , T_3 , Hib₃, Polio₃, HepB₃ and PCV₂ and 89% for MenC₂. The uptake rates for D_3 , P_3 , T_3 , Hib₃, Polio₃ and HepB₃ ranged from 88% in HSE-East to 94% in HSE-Midlands and HSE-North-West while the uptake rates for MenC₂ and PCV₂ uptake rates ranged from 85% in HSE-South to 94% in HSE-Midlands and HSE-North-West. Six HSE Areas had \geq 90% uptake of these vaccines. BCG uptake data were available for five of the eight HSE Areas. These areas cover over 40% of the national birth cohort. Where data were available, national uptake was 93% for the BCG vaccination.

National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q2-2011. Compared to Q1-2011, national uptake rates in Q2-2011 for D_3 , P_3 , T_3 , Hib₃, Polio₃, HepB₃ and MenC2 were unchanged while PCV₂ increased by 1%.

In Q2-2011, compared to the previous quarter: in HSE-East uptake rates decreased for all vaccines by 1%; in HSE-Midlands uptake rates increased by 1% except for BCG which decreased by 2%; in HSE-Mid West uptake rates increased for all vaccines by 2% except PCV₂ and BCG which increased by 1%; in HSE-North-East uptake rates were unchanged; in HSE-North-West no changes were recorded except for BCG which increased by 1%; in HSE-South East uptake rates were unchanged except for Hib₃ and Polio₃ which increased by 1%; in HSE-South uptake rates increased by 2% for all vaccines except BCG which increased by 1%; in HSE-West uptake rates for all vaccines increased by 1% except MenC₂ which was unchanged.

LHO uptake

The immunisation uptake rates by LHO are shown in appendix 1. D_3 , MenC₂ and PCV₂ immunisation uptake rates are mapped by LHO in figures 2-4.

Among the 15 LHOs reporting BCG data, BCG uptake ranged from 76% to 98% with 13 reporting \geq 90% uptake and eight reporting uptake of \geq 95%.

 D_3 , P_3 , T_3 , Hib₃, Polio₃ and HepB₃ uptake rates ranged from 81% (Dublin West and Dublin North West) to 95% (Longford/Westmeath, Sligo/Leitrim and Roscommon). MenC₂ uptake rates ranged from 80% (Dublin North West, West Cork) to 96% (Roscommon). PCV₂ uptake rates ranged from 76% (West Cork) to 97% (Roscommon).

The target uptake rate of \geq 95% was reached in Longford/Westmeath, Sligo/Leitrim and Roscommon for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and PCV₂. The target was reached for MenC₃ in Longford/Westmeath and Roscommon.

Nineteen LHOs had \geq 90% uptake of D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂.

HSE Area	No. in cohort*	BCG	D ₃	P ₃	T ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₂	PCV ₂
Eastern	6851	na	88	88	88	88	88	88	88	88
Midland	1267	92	94	94	94	94	94	94	94	94
Mid Western	1453	97	93	93	93	93	93	93	93	93
North Eastern	2022	na	91	91	91	91	91	91	90	90
North Western	1016	96	94	94	94	94	94	94	93	94
South Eastern	1985	96	91	91	91	91	91	91	90	91
Southern	2512	88	89	89	89	89	89	89	85	85
Western	1665	na	91	91	91	91	91	91	90	91
Ireland	18771†	93	90	90	90	90	90	90	89	90

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 8,252

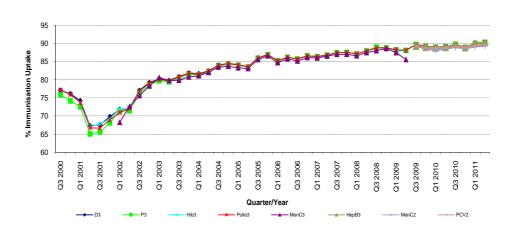


Figure 1. National quarterly immunisation uptake rates at 12 months

Since T_3 uptake identical to D_3 uptake only D_3 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 D_3 , P_3 , T_3 , 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. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as one HSE Areas were unable to provide data.

Internationally

Vaccination coverage statistics for D_3 , P_3 , T_3 , Hib₃ and Polio₃ for children 12 months of age in Quarter 2-2011 were 94.1% in England, 96.5% in Wales, 97.3% in Northern Ireland and 97.3% in Scotland.¹ MenC₂ uptake was 93.7% in England, 96.2% in Wales, 97.2% in Northern Ireland and 96.9% in Scotland.¹ PCV₂ uptake was 93.9% in England, 96.0% in Wales, 97.3% in Northern Ireland and 97.4% in Scotland.¹ Please see HPA report for caveats to data.¹

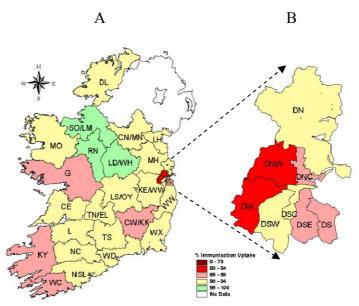


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

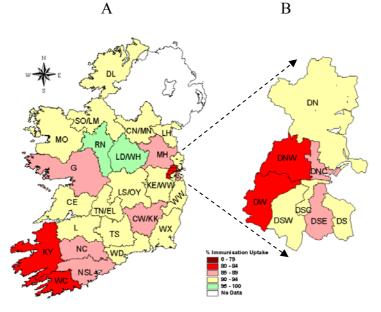


Figure 3. MenC₂ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

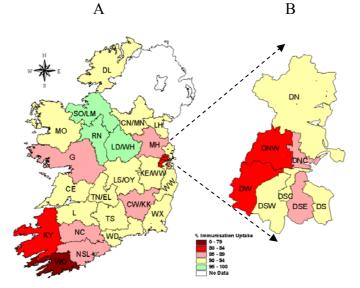


Figure 4. PCV_2 immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Immunisation uptake at 24 months

National and HSE Area uptake

Since September 1st 2008 the new childhood immunisation schedule has been implemented for children born on or after 1st July 2008 (table 1). Children 24 months of age in Quarter 2-2011 were children born between 1st April and 30th June 2009 and are therefore the fourth cohort recommended the new immunisation schedule. (Children 24 months of age in Quarter 3-2010 were children born between 1st July and 30th September 2008 and were therefore the first cohort recommended the new immunisation schedule.) Immunisation uptake rates in children 24 months of age in Q2-2011 are presented (Table 3). National uptake rates were 95% for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃, 91% for MMR₁, 90% for PCV₃, 87% for Hib_b and 83% for MenC₃. Among the HSE Areas the uptake of D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ ranged from 94-97%, MMR₁ ranged from 90-95%, PCV₃ ranged from 83-93%, Hib_b ranged from 81-95% and MenC₃ ranged from 81-95%. The target uptake of \geq 95% was reached for D₃, P₃, T₃ Hib₃ in six HSE Areas, for MMR₁ in two HSE Areas and for Hib_b in one HSE Area.

Trends

Figure 5 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q2-2011. In Q2-2011, compared to the previous quarter, national uptake rates were unchanged for D_3 , P_3 , T_3 , Hib₃, Polio₃, MenC₃, PCV₃ and MMR₁, but Hib_b and HepB₃ increased by 1%.

 ${\rm Hib}_{\rm b}$ uptake rates in Q2-2011, compared to the previous quarter: increased by 1% in HSE-South and HSE-North-West; increased by 2% in HSE-South-East; increased by 3% in HSE-Midlands; increased by 4% in HSE-West; declined by 1% in HSE-Mid-West; decreased by 2% in HSE-North-East; and unchanged in HSE-East.

HepB₃ uptake rates in Q2-2011, compared to the previous quarter: increased by 1% in HSE-East, HSE-South-East, HSE-South and HSE-West; decreased by 1% in HSE-Mid-West and HSE-North-West; and unchanged in HSE-Midlands and HSE-North-East.

LHO uptake

Immunisation uptake rates in children 24 months of age in Q2-2011 are presented by LHO in Appendix 2. D_3 , Hib_b , $MenC_3$, PCV_3 and MMR_1 immunisation uptake rates are mapped by LHO in figures 6-10.

Among the LHOs, uptake of D₃, T₃, P₃, Hib₃, and Polio₃ ranged from 87-99%, HepB₃ ranged from 86-97%, MMR₁ ranged from 81-98%, PCV₃ ranged from 78-99%, MenC₃ ranged from 71-97% and Hib_b ranged from 70-97%.

The target uptake of \geq 95% was reached in 21 LHOs for D₃, P₃, T₃ and Hib₃ 20 LHOs for Polio₃, 18 LHOs for HepB₃, 5 for MMR₁, 4 for Hib_b, 2 for PCV₃ and 1 for MenC₃.

Of the LHOs, 30 had \geq 90% uptake of D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃, 24 had \geq 90% uptake of MMR₁, 19 had \geq 90% uptake of PCV₃, 13 had \geq 90% uptake of Hib_b and two had \geq 90% uptake of MenC₃.

Table 3. Immunisation uptake (%) at 24 months in cohort born 01/04/2009-30/06/2009

HSE Area	No. in Cohort	D ₃ /T ₃ /P ₃ /Polio ₃	Hib ₃	Hib _b	MenC ₃	HepB ₃	PCV ₃	MMR ₁
Eastern	6786	94	94	85	81	94	88	90
Midland	1251	97	97	94	89	97	93	95
Mid Western	1520	95	95	89	85	95	91	92
North Eastern	1975	96	96	88	85	96	92	93
North Western	991	96	96	93	87	95	91	95
South Eastern	2062	95	95	95	85	95	90	92
Southern	2703	97	96	81	83	95	91	92
Western	1679	94	94	81	81	94	89	90
Ireland	18967	95	95	87	83	95	90	91

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

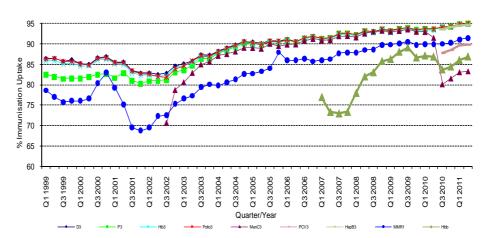


Figure 5. *National quarterly immunisation uptake rates at 24 months*

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 MenC₅ 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 are based on data from seven of the eight HSE Areas. The Q4-2009 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2009 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2009 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2009 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib_b figures areas.

Internationally

In Q2-2011, vaccination coverage statistics at 24 months for D₃, P₃, T₃, Hib₃ and Polio₃ were 96.1% in England, 97.5% in Wales, 98.4% in Northern Ireland and 98.1% in Scotland.¹ MenC₂ uptake was 95.1% in England, 96.0% in Wales, 96.9% in Northern Ireland and 96.2% in Scotland.¹ PCV booster was 90.8% in England, 92.8% in Wales, 93.1% in Northern Ireland and 93.9% in Scotland. Hib/MenC booster was 92.2% in England, 93.8% in Wales, 95.3% in Northern Ireland and 95.0% in Scotland.¹ MMR₁ uptake was 90.3% in England, 91.8% in Wales, 92.7% in Northern Ireland and 93.5% in Scotland.¹ Please see HPA report for caveats to data.¹

Conclusions

In Quarter 2-2011, national uptake rates for D_3 , P_3 , T_3 , Hib₃ and Polio₃ have remained at 95% since reaching this level for the first time in Quarter 1-2011. The uptake of the MenC₃ is still only 3% above the 80% recorded in Quarter 3-2010. The low uptake of the Hib booster and meningococcal c vaccines and the relatively low uptake of the pneumococcal conjugate vaccine also remains a source of considerable concern. However, the uptake of the HepB₃ has shown some improvement since Quarter1-2011. Overall, however, these data indicate that more children are not receiving their meningococcal serogroup C, pneumococcal and *Haemophilus influenzae* type b vaccinations in comparison to other recommended vaccinations. Meningococcal serogroup C, pneumococcal and *Haemophilus influenzae* type b infections are all serious and potentially fatal illnesses. These illnesses can be prevented by vaccination, but children need to receive all their recommended doses of vaccines, at the recommended ages, to provide the best possible protection.

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.

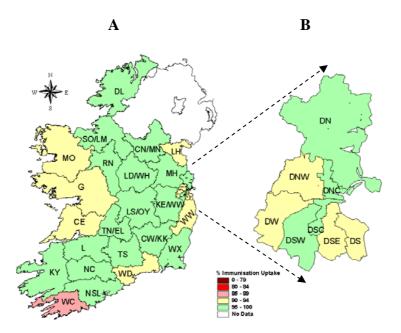


Figure 6. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

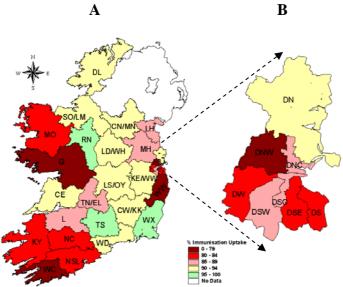


Figure 7. Hib_b immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

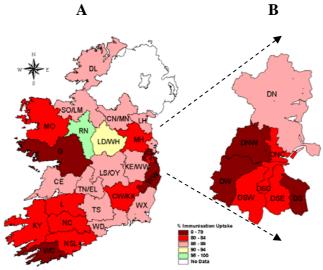


Figure 8. MenC₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

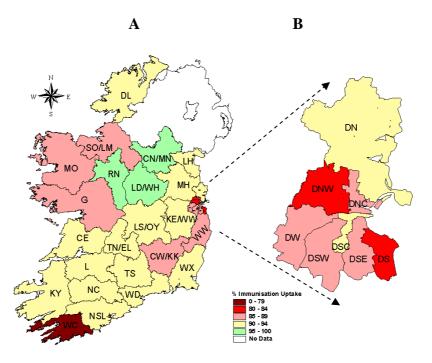


Figure 9. PCV₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

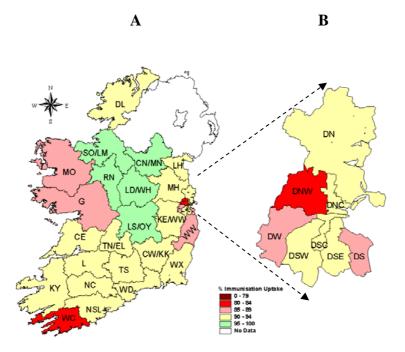


Figure 10. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

References 1. Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): April–June 2011 Health Protection Report 2011: 5 (Number 38). Available at: http://www.hpa.org.uk/hpr/archives/2011/hpr3811.pdf (accessed 13/10/2011)

Appendix 1

	Immunisation Uptake at 12 Months in Cohort Born 01/04/2010-30/06/2010											
			No. in Immunisation Uptake (%)									
		No. in	cohort for									
HSE		cohort	other									
Area	LHO/HSE Area	for BCG	vaccines	BCG	D_3	P ₃	T ₃	Hib₃	Polio ₃	HepB ₃	MenC ₂	
71100	Dublin South	na	434	na	89	89	89	89	89	89	90	90
	Dublin South East	na	416	na	89	89	89	89	89	89	89	89
	Dublin South City	na	494	na	93	93	93	93	93	93	93	94
	Dublin South West	na	684	na	92	92	92	92	92	92	91	92
	Dublin West	na	724	na	81	81	81	81	81	81	81	81
Eastern	Dublin North West	na	986	na	81	81	81	81	81	81	80	80
	Dublin North Central	na	445	na	89	89	89	89	89	89	88	88
	Dublin North	na	1048	na	92	92	92	92	92	92	91	92
	Kildare/West Wicklow	na	1092	na	91	91	91	91	91	91	90	91
	Wicklow	na	528	na	90	90	90	90	90	90	90	90
	HSE-E Total	na	6851	na	88	88	88	88	88	88	88	88
	Laois/Offaly	719	719	94	94	94	94	94	94	94	94	94
Midland	Longford/Westmeath	548	548	94 91	94	94	94 95	94	94 95	94	94	94
Witutatiu	HSE-M Total	1267	1267	91 92	93	93 94	93 94	93 94	93 94	93 94	93 94	93 94
		1207	120/	32	34	34	34	34	34	34	34	34
	Clara	424	431	98	94	94	94	94	94	94	94	94
Mid	Clare Limerick	424 520	431 508	98 98	94	94	94	94 91	94	94	94	94 91
		520 495	508		91	91	91	91	91	91	91	91
western	Tipperary NR/East Limerick HSE-MW Total	495 1439	1453	95 97	94 93	94 93	94 93	94 93	94 93	94 93	-	94 93
	HSE-MW TOTAL	1439	1453	9/	93	93	93	93	93	93	93	93
	Cavan/Monaghan	na	555	na	92	92	92	92	92	92	90	90
North	Louth	na	525	na	92	92	92	92	92	92	91	90
Eastern	Meath	na	942	na	90	90	90	90	90	90	89	89
	HSE-NE Total	na	2022	na	91	91	91	91	91	91	90	90
-												
North	Donegal	617	617	95	94	94	94	94	94	93	93	94
Western	Sligo/Leitrim	399	399	97	95	95	95	95	95	95	94	95
	HSE-NW Total	1016	1016	96	94	94	94	94	94	94	93	94
	Carlow/Kilkenny	536	536	95	88	88	88	88	88	88	87	89
South	South Tipperary	372	372	94	92	92	92	92	92	92	92	92
Eastern	Waterford	515	515	96	92	92	92	92	92	92	92	90
	Wexford	562	562	98	92	92	92	92	92	92	91	92
	HSE-SE Total	1985	1985	96	91	91	91	91	91	91	90	91
	North Cork	381	372	76	90	90	90	90	90	89	87	87
	North South Lee	1487	1470	91	90	90	90	90	90	90	87	86
Southern	West Cork	192	195	89	85	85	85	85	85	85	80	76
	Kerry	485	475	90	87	87	87	87	87	87	82	84
	HSE-S Total	2545	2512	88	89	89	89	89	89	89	85	85
	Galway	na	1033	na	89	89	89	89	89	89	89	89
Wester	Мауо	na	395	na	91	91	91	91	91	91	91	92
Western	Roscommon	na	237	na	95	95	95	95	95	95	96	97
	HSE-W Total	na	1665	na	91	91	91	91	91	91	90	91
									•			
	Ireland	8252	18771	93	90	90	90	90	90	90	89	90
ne and 2222 10171 33 30 30 30 30 30 30 30 30 30												

na=not available * As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here. Please note w hile North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here.

Appendix 2

		e (%) at 24 months of age in 2011 (i.e. cohort born 01/04/2009-30/06/2009) No. in Immunisation Uptake (%)										
HSE Area	LHO/HSE Area	cohort*	D ₃ T ₃	P ₃	Hib ₃	Hibb	Polio ₃	HepB ₃	MenC ₃	PCV ₃	MMR ₁	
ISE Alea	Dublin South	426	93	93	93	81	93	92	78	84	86	
	Dublin South East	377	93	93	93	84	93	93	81	89	91	
	Dublin South City	415	97	97	97	87	97	96	84	92	94	
	Dublin South West	700	95	95	95	87	95	95	81	88	91	
	Dublin West	754	92	92	92	81	92	92	75	85	88	
Eastern	Dublin North West	990	91	91	91	79	91	91	75	83	84	
Lastern	Dublin North Central	426	95	95	95	88	95	95	83	87	91	
	Dublin North	1125	95	95	95	90	95	94	87	91	92	
	Kildare/West Wicklow	1039	97	97	97	91	97	97	87	92	94	
	Wicklow	534	93	93	93	78	93	92	75	85	86	
	HSE-E Total	6786	93 94	94	93 94	85	93 94	94	81	88	90	
		0/00	34	34	34		34	34	01	00		
	Laois/Offaly	738	96	96	96	94	96	96	88	92	95	
Midland	Longford/Westmeath	513	97	97	97	93	97	97	90	95	95	
	HSE-M Total	1251	97	97	97	94	97	97	89	93	95	
	Clare	499	94	94	94	93	94	94	89	92	93	
Mid	Limerick	521	95	95	95	85	95	95	82	91	92	
Western	Tipperary NR/East Limerick	500	95	95	95	89	95	95	85	91	93	
	HSE-MW Total	1520	95	95	95	89	95	95	85	91	92	
North Eastern	Cavan/Monaghan	518	97	97	97	91	97	97	88	94	95	
	Louth	545	94	94	94	89	94	94	85	91	92	
	Meath	912	96	96	96	87	96	96	84	92	92	
	HSE-NE Total	1975	96	96	96	88	96	96	85	92	93	
North	Donegal	611	97	97	97	92	97	95	87	92	94	
	Sligo/Leitrim	380	95	95	95	95	95	95	86	89	96	
Western	HSE-NW Total	991	<u>96</u>	96	96	93	96	95	87	<u>91</u>	95	
		331	90	30	30	33	30	30	01	31	33	
	Carlow/Kilkenny	554	95	95	95	93	95	95	82	88	92	
	South Tipperary	390	95	95	95	97	95	94	85	90	92	
South	Waterford	516	94	94	94	94	94	94	86	90	92	
Eastern	Wexford	602	96	96	95	96	96	95	88	92	94	
	HSE-SE Total	2062	95	95	95	95	95	95	85	90	92	
	North Cork	411	96	96	96	84	96	96	83	90	91	
	North South Lee	1527	98	98	97	82	98	96	84	93	94	
Southern	West Cork	192	87	87	87	70	87	86	71	78	81	
	Kerry	573	97	97	97	81	97	95	82	90	90	
	HSE-S Total	2703	97	97	96	81	97	95	83	91	92	
	•	000	0.2							07		
	Galway	986	93	93	93	77	93	93	77	87	88	
Western	Мауо	459	94	94	94	80	94	94	80	88	89	
western	Roscommon	234	98	98	98	97	98	98	97	99	98	
	HSE-W Total	1679	94	94	94	81	94	94	81	89	90	
	Ireland	18967	95	95	95	87	95	95	83	90	91	
	able	10001										

Please note w hile 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

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