

Summary

Children 12 months of age in Quarter 3-2011

- **National** immunisation uptake rates were 91% for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ and 90% for MenC₂ and PCV₂. Compared to Q2-2011, national uptake rates in Q3-2011 for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and MenC₂ increased by 1% while PCV₂ was unchanged.
- The target uptake of $\geq 95\%$ was reached for all vaccines in one **HSE Area**, the HSE-Midland Area. This is the first time an Area has reached the target for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂ for children at 12 months.
- The target uptake rate of $\geq 95\%$ was reached in Laois/Offaly, Longford/Westmeath, Tipperary South and Roscommon **LHOs** for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂; in Sligo/Leitrim for D₃, P₃, T₃, Hib₃, Polio₃ and PCV₂ and in Wexford for PCV₂ and in ten LHOs for BCG.

Children 24 months of age in Quarter 3-2011

- In Quarter 3-2011, **national** uptake rates were 96% for D₃, P₃, T₃, and Polio₃, 95% for Hib₃ and HepB₃, 93% for MMR₁, 91% for PCV₃, 88% for Hib₆ and 85% for MenC₃.

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 3-2011 were children born between July 1st and September 30th 2009 and are therefore the fifth cohort recommended the new immunisation schedule.

The low uptake of MenC₃ and Hib booster and relatively low uptake of PCV₃, since the introduction of the new childhood schedule, 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.

- The target uptake of $\geq 95\%$ was reached for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ in seven **HSE Areas**, for Hib₆ in two HSE Areas and for MMR₁ in one HSE Area.
- The target uptake of $\geq 95\%$ was reached in 23 **LHOs** for D₃, P₃, T₃ and Polio₃, 22 LHOs for Hib₃, 21 LHOs for HepB₃, 8 for Hib₆, 7 for MMR₁, 2 for PCV₃ and 1 for MenC₃. Roscommon reached the target of $\geq 95\%$ for all vaccines.

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 3-2011.

The immunisation uptake rates presented in this report for children at 12 months of age in Quarter 3-2011 are children born between 01/07/2010 and 30/09/2010 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 3-2011 are children born between 01/07/2009 and 30/09/2009 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 3-2011 cohort of children at 24 months was therefore the fifth 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 3-2011 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 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 the immunisation guidelines for Ireland.

BCG	Bacille Calmette Guerin vaccine
DTaP	Diphtheria, Tetanus and acellular Pertussis vaccine
Hib	<i>Haemophilus influenzae</i> 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 Q3-2011 are presented by HSE Area in Table 2. National uptake rates were 91% for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ and 90% for MenC₂ and PCV₂. Among the HSE Areas the uptake rates for D₃, P₃, T₃, Hib₃ and Polio₃ ranged from 89% to 96%, HepB₃ ranged from 88% to 96%, MenC₂ ranged from 85% to 96% and PCV₂ uptake rates ranged from 84% to 96%. The HSE-Midland Area exceeded the target uptake rate for all vaccines in Quarter 3-2011; this is the first time a HSE Area has reached (and exceeded) the target of 95% for children at 12 months of age. Five HSE Areas had ≥90% uptake of these vaccines.

BCG uptake data were available for six of the eight HSE Areas in Quarter 3 2011, these areas cover approximately 53% of the national birth cohort. In Quarter 3 2011, BCG uptake data were provided for the first time by the HSE-Western Area where uptake was reported as 4%. Where data were available, national uptake was 79% for the BCG vaccination. In the previous quarter BCG uptake data were available for five of the HSE Areas (these areas cover approximately 44% of the birth cohort) and was 93%.

National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q3-2011. Compared to Q2-2011, national uptake rates in Q3-2011 for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃ and MenC₂ increased by 1% while PCV₂ was unchanged.

In Q3-2011, compared to the previous quarter, uptake rates in the: HSE-Eastern Area increased by 1-2% for all vaccines; HSE-Midland Area increased by 2% except for BCG which increased by 4%; HSE-Mid Western Area decreased for all vaccines by 1% except BCG which was unchanged; HSE-North-Eastern Area declined by 2%; in HSE-North-Western Area were unchanged except for BCG, Hib₃ and HepB₃ which declined by 1%; HSE-South Eastern Area increased by 3% for MenC₂, BCG by 1% while the remainder increased by 2%; HSE-Southern Area for HepB₃ and PCV₂ declined by 1%, BCG increased by 3% while uptake was unchanged for the remainder; HSE-Western area increased by 2% for MenC₂ and by 1% for the remainder.

LHO uptake

The immunisation uptake rates by LHO are shown in appendix 1. D₃, 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 81% to 97% with 14 reporting ≥90% uptake and 10 reporting uptake of ≥95%. BCG data were not available by LHO in the HSE-Western Area.

D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ uptake rates ranged from 82/83% (Kerry) to 97% in (Longford/Westmeath). MenC₂ uptake rates ranged from 80% (Kerry) to 97% (Longford/Westmeath). PCV₂ uptake rates ranged from 79% (Kerry) to 98% (Roscommon).

The target uptake rate of ≥95% was reached in Laois/Offaly, Longford/Westmeath, Tipperary South and Roscommon for D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂; in Sligo/Leitrim for D₃, P₃, T₃, Hib₃, Polio₃ and PCV₂ and PCV₂ in Wexford.

Twenty-two LHOs had ≥90% uptake of D₃, P₃, T₃, Hib₃, Polio₃, HepB₃, MenC₂ and PCV₂.

Table 2. Immunisation uptake (%) at 12 months in cohort born 01/07/2010–30/09/2010

HSE Area	No. in cohort*	BCG	D ₃	P ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₂	PCV ₂
Eastern	7067	na	90	90	90	90	90	89	89
Midland	1273	96	96	96	96	96	96	96	96
Mid Western	1542	97	92	92	92	92	92	92	92
North Eastern	2065	na	89	89	89	89	89	88	88
North Western	955	95	94	94	93	94	93	93	94
South Eastern	2013	97	93	93	93	93	93	93	93
Southern	2626	91	89	89	89	89	88	85	84
Western	1818	4	92	92	92	92	92	92	92
Ireland	19359†	79	91	91	91	91	91	90	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 10,262

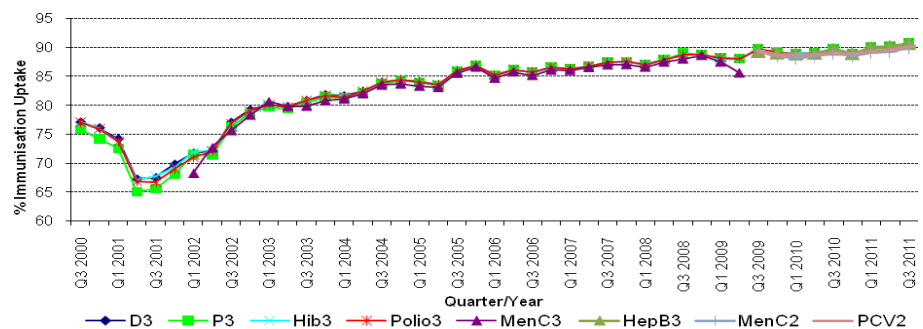


Figure 1. National quarterly immunisation uptake rates at 12 months

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. The Q4-2010 figures are incomplete as one HSE Area was unable to provide data.

Internationally

Vaccination coverage statistics for D₃, P₃, T₃, Hib₃ and Polio₃ for children 12 months of age in Quarter 3-2011 were 94.4% in England, 96.5% in Wales, 97.4% in Northern Ireland and 97.4% in Scotland.¹ MenC₂ uptake was 93.9% in England, 96.4% in Wales, 97.4% in Northern Ireland and 97.1% in Scotland.¹ PCV₂ uptake was 94.1% in England, 96.1% in Wales, 97.5% in Northern Ireland and 97.7% in Scotland.¹ Please see HPA report for caveats to data.¹

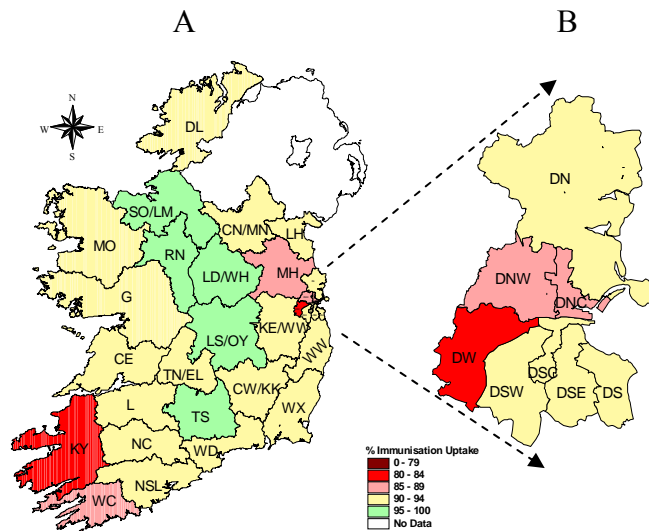


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

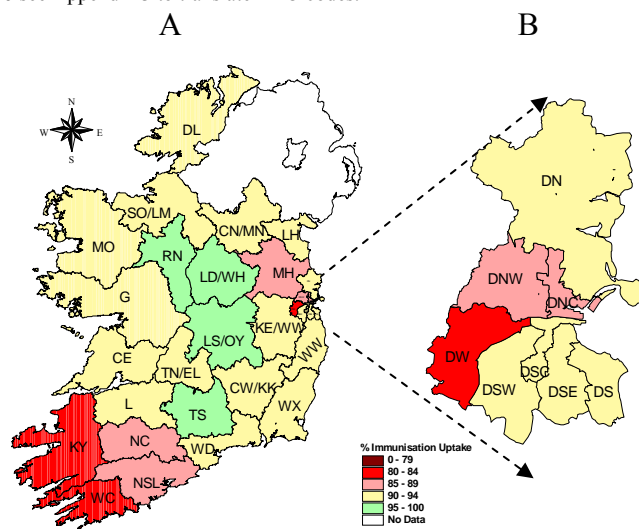


Figure 3. MenC₂ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

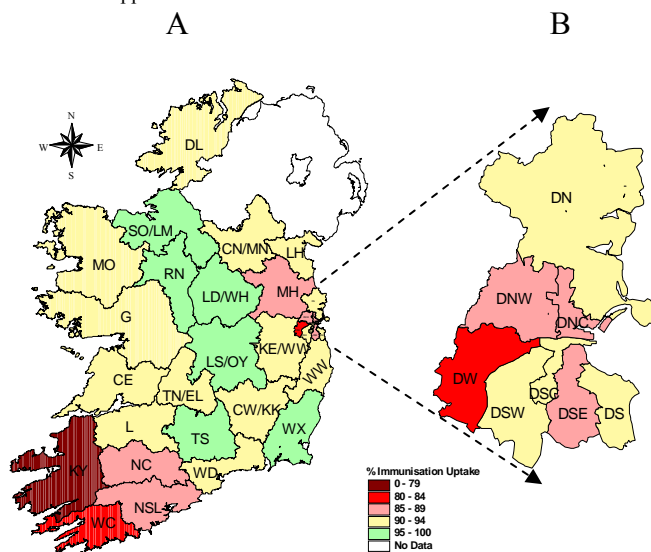


Figure 4. PCV₂ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

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 3-2011 were children born between 1st July and 30th September 2009 and are therefore the fifth 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 Q3-2011 are presented (Table 3). National uptake rates were 96% for D₃, P₃, T₃, and Polio₃, 95% for Hib₃ and HepB₃, 93% for MMR₁, 91% for PCV₃, 88% for Hib_b and 85% for MenC₃. Among the HSE Areas the uptake of D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ ranged from 94-98%, MMR₁ ranged from 91-97%, PCV₃ ranged from 89-94%, Hib_b ranged from 83-98% and MenC₃ ranged from 82-90%. The target uptake of ≥95% was reached for D₃, P₃, T₃ Hib₃, Polio₃ and HepB₃ in seven HSE Areas, for Hib_b in two HSE Areas and for MMR₁ in one HSE Area.

Trends

Figure 5 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q3-2011. In Q3-2011, compared to the previous quarter, national uptake rates were for MenC₃ and MMR₁ increased by 2%, D₃, P₃, T₃, Hib_b, Polio₃ and PCV₃ increased by 1% while Hib₃ and HepB₃ were unchanged.

Hib_b uptake rates in Q3-2011, compared to the previous quarter: increased by 4% in the HSE-Midland Area, 3% in HSE-Southern Area, 2% in HSE-Western Area, 1% in HSE-Eastern, Mid Western and South Eastern Areas; was unchanged in the HSE-North Eastern Area and; decreased by 1% in the HSE-North Western Area.

MenC₃ uptake rates in Q3-2011, compared to the previous quarter: increased by 3% in the HSE-South Eastern and Western Areas, increased by 2% in the HSE-Mid Western and Southern Areas, increased by 1% in the HSE-Eastern and Midland Areas, was unchanged in the HSE-North Eastern Area, and decreased by 1% in the HSE-North Western Area.

LHO uptake

Immunisation uptake rates in children 24 months of age in Q3-2011 are presented by LHO in Appendix 2. D₃, Hib_b, MenC₃, PCV₃ and MMR₁ immunisation uptake rates are mapped by LHO in figures 6-10.

Among the LHOs, uptake of D₃, T₃, P₃ and Polio₃ ranged from 89-99%, HepB₃ ranged from 88-99%, Hib₃ ranged from 87-99%, MMR₁ ranged from 86-97%, PCV₃ ranged from 83-98%, MenC₃ ranged from 77-96% and Hib_b ranged from 77-99%.

The target uptake of ≥95% was reached in 23 LHOs for D₃, P₃, T₃ and Polio₃, 22 LHOs for Hib₃, 21 LHOs for HepB₃, 8 for Hib_b, 7 for MMR₁, 2 for PCV₃ and 1 for MenC₃.

Of the LHOs, 30 had ≥90% uptake of D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃, 26 had ≥90% uptake of MMR₁, 20 had ≥90% uptake of PCV₃, 12 had ≥90% uptake of Hib_b and four had ≥90% uptake of MenC₃.

Table 3. Immunisation uptake (%) at 24 months in cohort born 01/07/2009–30/09/2009

HSE Area	No. in Cohort	D ₃ /T ₃ /P ₃ /Polio ₃	Hib ₃	Hib _b	HepB ₃	MenC ₃	PCV ₃	MMR ₁
Eastern	7067	94	94	86	94	82	89	91
Midland	1301	98	98	98	98	90	94	97
Mid Western	1514	96	96	90	96	87	92	94
North Eastern	2054	95	95	88	95	85	91	92
North Western	1064	97	97	92	96	86	90	94
South Eastern	2062	97	97	96	96	88	93	94
Southern	2676	97	96	84	95	85	92	94
Western	1795	95	95	83	95	84	91	91
Ireland	19533	96	95	88	95	85	91	93

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

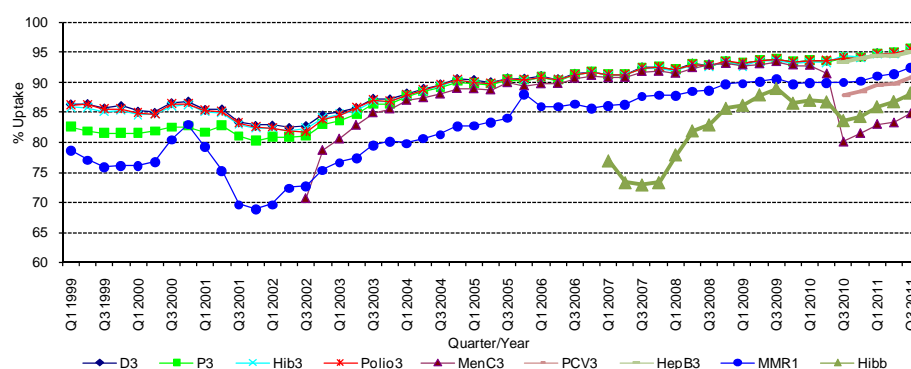


Figure 5. National quarterly immunisation uptake rates at 24 months

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 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 and Q4-2010 figures are based on data from seven of the eight HSE Areas.

Internationally

In Q3-2011, vaccination coverage statistics at 24 months for D₃, P₃, T₃, Hib₃ and Polio₃ were 96.0% in England, 97.4% in Wales, 98.5% in Northern Ireland and 98.0% in Scotland.¹ MenC₂ uptake was 95.0% in England, 96.0% in Wales, 96.8% in Northern Ireland and 96.2% in Scotland.¹ PCV booster was 91.0% in England, 93.1% in Wales, 93.5% in Northern Ireland and 94.4% in Scotland. Hib/MenC booster was 92.2% in England, 94.0% in Wales, 95.4% in Northern Ireland and 95.7% in Scotland.¹ MMR₁ uptake was 90.7% in England, 92.2% in Wales, 92.8% in Northern Ireland and 94.0% in Scotland.¹ Please see HPA report for caveats to data.¹

Conclusions

In Quarter 3-2011, national uptake rates at 24 months for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ reached the target of ≥95%. In Quarter 3-2011, compared to the previous quarter, MMR₁ uptake increased by two percent to 93%. The low uptake of MenC₃ (85%) and Hib booster (88%) and the relatively low uptake of PCV₃ (91%) remain a source of considerable concern. 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

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References 1. Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): July to September 2011 Health Protection Report 2011: 4 (Number 50). Available at: <http://www.hpa.org.uk/hpr/archives/2011/hpr5011.pdf> (accessed 02/02/2011)

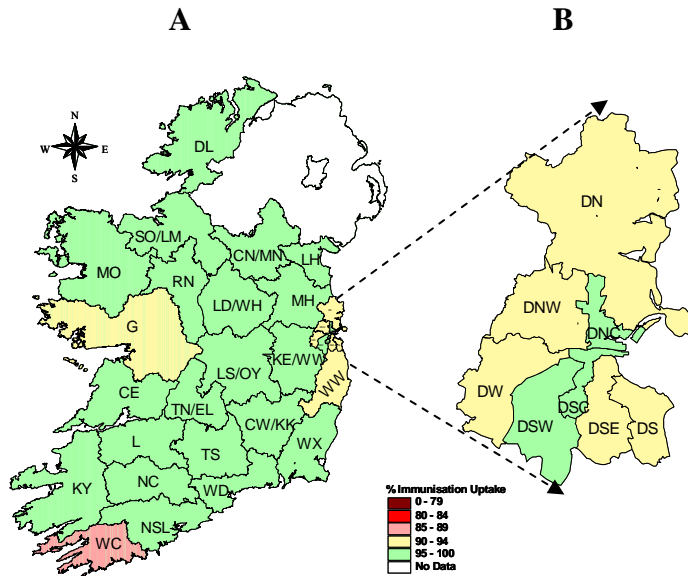


Figure 6. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

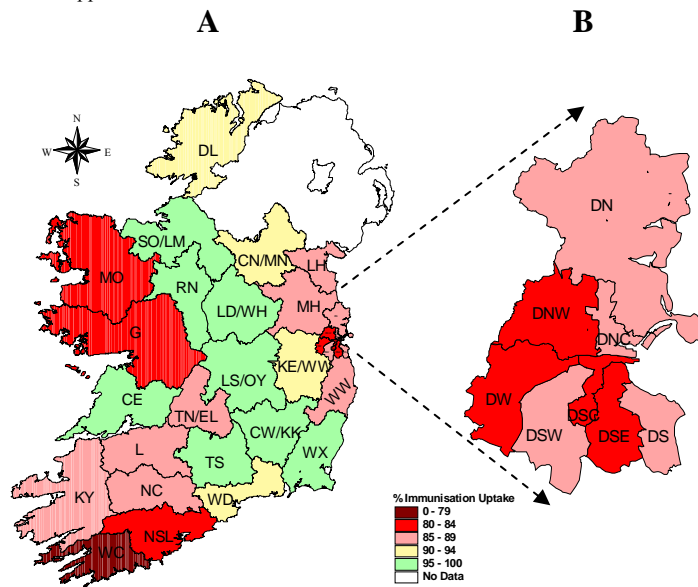


Figure 7. Hib₆ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

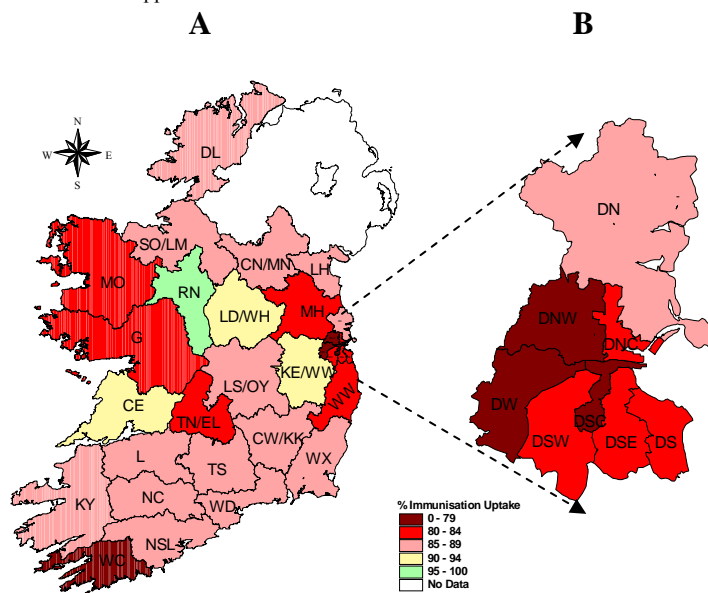


Figure 8. MenC₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

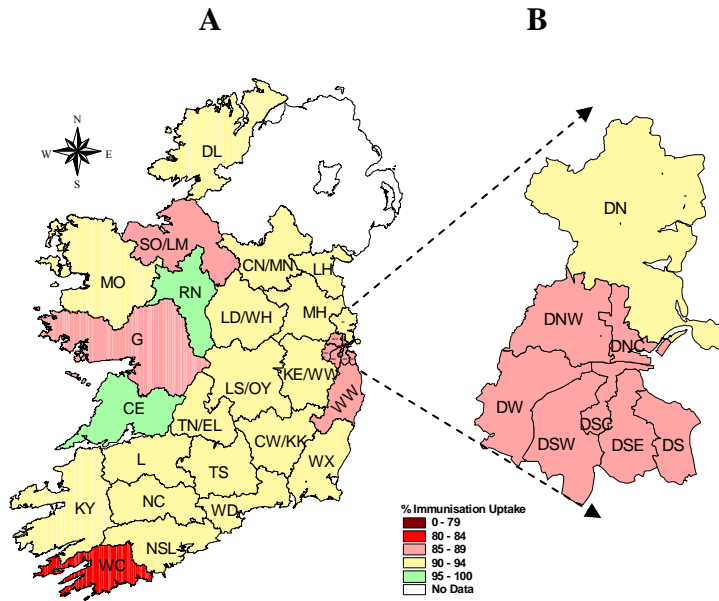


Figure 9. PCV₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

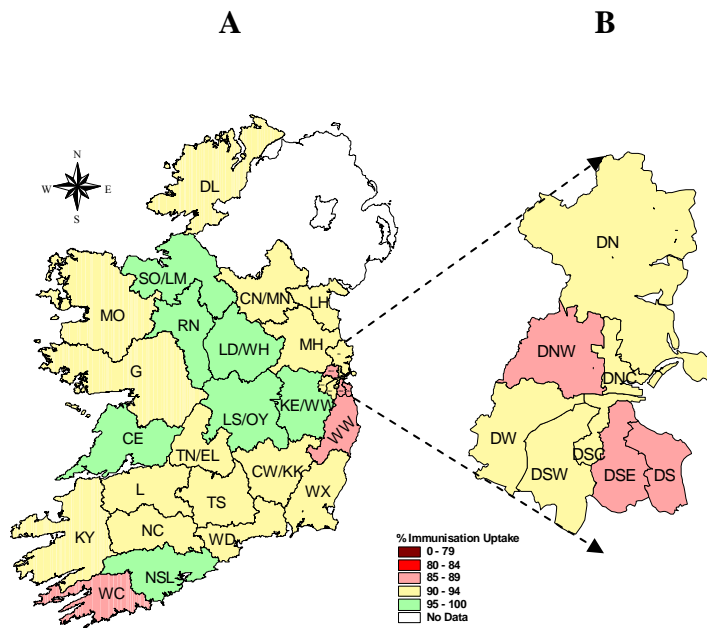


Figure 10. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2011, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Appendix 1

Immunisation Uptake at 12 Months in Cohort Born 01/07/2010-30/09/2010											
HSE Area	LHO/HSE Area	No. in cohort for BCG	No. in cohort for other vaccines*	Immunisation Uptake (%)							
				BCG	D ₃ T ₃	P ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₂	PCV ₂
Eastern	Dublin South	na	436	na	92	92	92	92	92	92	92
	Dublin South East	na	440	na	90	90	90	90	90	90	89
	Dublin South City	na	459	na	94	94	94	94	94	92	94
	Dublin South West	na	657	na	91	91	91	91	91	90	92
	Dublin West	na	785	na	84	84	84	84	84	84	84
	Dublin North West	na	1033	na	85	85	85	85	85	85	85
	Dublin North Central	na	476	na	89	89	89	89	89	88	88
	Dublin North	na	1103	na	93	93	93	93	93	92	93
	Kildare/West Wicklow	na	1115	na	91	91	91	91	91	90	90
Wicklow	na	563	na	90	90	90	90	90	90	91	
HSE-E Total	na	7067	na	90	90	90	90	90	90	89	89
Midland	Laois/Offaly	740	740	96	96	96	96	96	96	96	96
	Longford/Westmeath	533	533	94	97	97	97	97	97	97	97
	HSE-M Total	1273	1273	96	96	96	96	96	96	96	96
Mid Western	Clare	430	441	98	92	92	92	92	92	92	92
	Limerick	551	535	97	91	91	91	91	91	91	91
	Tipperary NR/East Limerick	551	566	97	92	92	92	92	92	92	92
	HSE-MW Total	1532	1542	97	92	92	92	92	92	92	92
North Eastern	Cavan/Monaghan	na	582	na	92	92	92	92	92	92	92
	Louth	na	544	na	90	90	90	90	90	90	90
	Meath	na	939	na	87	87	87	87	87	85	85
	HSE-NE Total	na	2065	na	89	89	89	89	89	88	88
North Western	Donegal	592	592	95	93	93	93	93	92	92	93
	Sligo/Leitrim	363	363	96	95	95	95	95	94	94	96
	HSE-NW Total	955	955	95	94	94	93	94	93	93	94
South Eastern	Carlow/Kilkenny	550	550	97	90	90	90	90	90	91	91
	South Tipperary	354	354	96	95	95	95	95	95	95	95
	Waterford	530	530	97	93	93	93	93	93	93	93
	Wexford	579	579	97	94	94	94	94	94	93	95
	HSE-SE Total	2013	2013	97	93	93	93	93	93	93	93
Southern	North Cork	407	401	81	90	90	90	90	89	86	86
	North South Lee	1563	1539	93	90	90	90	90	90	87	86
	West Cork	197	194	93	89	89	89	89	89	82	82
	Kerry	504	492	94	83	83	82	83	82	80	79
	HSE-S Total	2671	2626	91	89	89	89	89	89	88	85
Western	Galway	na	1096	na	91	91	91	91	91	90	91
	Mayo	na	477	na	93	93	93	93	93	92	93
	Roscommon	na	245	na	96	96	96	96	96	95	98
	HSE-W Total	1818	1818	4	92	92	92	92	92	92	92
Ireland	10262	19359	79	91	91	91	91	91	90	90	

na=not available

* 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 of age in cohort born 01/07/2009-30/09/2009											
HSE Area	LHO/HSE Area	No. in cohort*	Immunisation Uptake (%)								
			D ₃ T ₃	P ₃	Hib ₃	Hib _b	Polio ₃	HepB ₃	MenC ₃	PCV ₃	MMR ₁
Eastern	Dublin South	443	93	93	93	85	93	92	80	88	89
	Dublin South East	389	93	93	93	83	93	93	82	87	88
	Dublin South City	460	96	96	96	81	96	96	77	87	91
	Dublin South West	709	95	95	95	88	95	94	83	89	94
	Dublin West	783	93	93	93	84	93	93	77	87	90
	Dublin North West	1058	93	93	93	82	93	92	79	86	86
	Dublin North Central	458	95	95	95	85	95	95	80	87	90
	Dublin North	1158	94	94	94	89	94	94	86	91	92
	Kildare/West Wicklow	1098	97	97	97	94	97	97	90	94	96
	Wicklow	511	92	92	92	85	92	92	81	88	89
HSE-E Total	7067	94	94	94	86	94	94	82	89	91	
Midland	Laos/Offaly	743	97	97	97	97	97	97	89	94	97
	Longford/Westmeath	558	99	99	99	99	99	99	92	94	97
	HSE-M Total	1301	98	98	98	98	98	98	90	94	97
Mid Western	Clare	498	97	97	97	95	97	97	92	95	95
	Limerick	508	95	95	95	89	95	95	87	92	93
	Tipperary NR/East Limerick	508	97	97	97	87	97	97	83	91	94
	HSE-MW Total	1514	96	96	96	90	96	96	87	92	94
North Eastern	Cavan/Monaghan	564	96	96	96	92	96	96	87	92	94
	Louth	548	95	95	95	88	95	95	85	91	92
	Meath	942	95	95	95	86	95	95	83	91	91
	HSE-NE Total	2054	95	95	95	88	95	95	85	91	92
North Western	Donegal	683	98	98	97	90	98	97	87	91	94
	Sligo/Leitrim	381	97	97	96	95	97	96	85	88	95
	HSE-NW Total	1064	97	97	97	92	97	96	86	90	94
South Eastern	Carlow/Kilkenny	528	96	96	96	97	96	95	87	91	94
	South Tipperary	402	98	98	98	99	98	98	89	94	94
	Waterford	549	96	96	96	94	96	96	88	93	94
	Wexford	583	98	98	97	97	98	98	88	93	94
	HSE-SE Total	2062	97	97	97	96	97	96	88	93	94
Southern	North Cork	388	95	95	94	86	95	94	86	92	91
	North South Lee	1533	98	98	98	83	98	96	85	94	96
	West Cork	230	89	89	87	77	89	88	78	83	88
	Kerry	525	98	98	97	86	98	96	89	93	94
	HSE-S Total	2676	97	97	96	84	97	95	85	92	94
Western	Galway	1054	94	94	94	81	94	94	81	89	90
	Mayo	468	96	96	96	82	96	96	82	90	90
	Roscommon	273	98	98	98	97	98	98	96	98	97
	HSE-W Total	1795	95	95	95	83	95	95	84	91	91
Ireland	19533	96	96	95	88	96	95	85	91	93	

na=not available

*As the denominator/number in cohort varied slightly according to vaccine. The 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