

Background

The national immunisation uptake statistics, based on available data, for Quarter 3 2016 are presented in this report. These immunisation uptake statistics relate to children at 12 (born between 01/07/2015 and 30/09/2015) and 24 (born between 01/07/2014 and 30/09/2014) months of age in Quarter 3-2016. These children were recommended the vaccines outlined in table 1. The immunisation schedule changed in 2015 for children born on or after July 1st 2015 after the National Immunisation Advisory Committee (NIAC) recommended changing the meningococcal C (MenC) immunisation schedule in the primary childhood programme from three doses at 4, 6 and 13 months to two doses at 4 and 13 months because of evidence that a single dose of MenC vaccine provides protection for the first year of life. Please note the immunisation schedule changed in 2016 for children born on or after October 1st 2016. Please see the HSE-National Immunisation Office (NIO) website at <http://www.immunisation.ie> for current and detailed information on the Irish primary childhood immunisation schedule and also recommended vaccinations for older children and adults.

For children at 12 months of age in Quarter 3 2016, immunisation uptake rates of three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃), hepatitis B (HepB₃), one dose of meningococcal serogroup C conjugate vaccine (MenC₁), two doses of pneumococcal conjugate vaccine (PCV₂) and one dose of BCG vaccine are reported.

For children at 24 months of age in Quarter 3 2016, immunisation uptake rates of 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) and one dose of vaccine against measles, mumps and rubella (MMR₁) are reported. One dose of vaccine against *Haemophilus influenzae* type b (Hib_b), one dose of meningococcal group C vaccine (MenC_b) and one dose of pneumococcal conjugate vaccine (PCV_b) given on or after 12 months of age are also reported.

The uptake statistics are also presented in this report by Community Healthcare Organisation (CHO) and Local Health Office (LHO). While there are 32 LHOs the immunisation uptake data for North Lee and South Lee are reported as a combined figure. The uptake rates presented here were rounded to zero decimal place.

Table 1. Primary childhood immunisation schedule for children born between 01/07/2008 and 30/09/2016

Age	Children born 01/07/2008 to 30/06/2015	Children born 01/07/2015 to 30/09/2016
Birth	BCG	BCG
2 months	DTaP/Hib/IPV/HepB (6 in 1) + PCV	DTaP/Hib/IPV/HepB (6 in 1) + PCV
4 months	DTaP/Hib/IPV/HepB (6 in 1) + MenC	DTaP/Hib/IPV/HepB (6 in 1) + MenC
6 months	DTaP/Hib/IPV/HepB (6 in 1) + PCV + MenC	DTaP/Hib/IPV/HepB (6 in 1) + PCV
12 months	MMR + PCV	MMR + PCV
13 months	MenC + Hib	MenC + Hib

Please note the primary immunisation schedule changed in 2015 for children born on or after 01/07/2015 and changed in 2016 for children born on or after October 1st 2016. Please see the HSE-National Immunisation Office (NIO) website at <http://www.immunisation.ie> for current and detailed information on the Irish primary childhood immunisation schedule and also recommended vaccinations for older children and adults

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

Immunisation uptake among children at 12 months of age in Quarter 3-2016

National

- The immunisation schedule changed in 2015 for children born on or after July 1st 2015 after the NIAC recommended changing the meningococcal C (MenC) immunisation schedule in the primary childhood programme from three doses at 4, 6 and 13 months to two doses at 4 and 13 months because of evidence that a single dose of MenC vaccine provides protection for the first year of life. Hence MenC₁ is now measured at 12 months of age.
- Immunisation uptake rates in children 12 months of age in Q3-2016 are presented by Community Healthcare Organisation (CHO) in table 2. National immunisation uptake rates were 91% for D₃, T₃, P₃, Hib₃, Polio₃, HepB₃ and PCV₂ and 94% for MenC₁.
- At the time of writing of this report the HSE continues to experience on-going delays with the supply of BCG vaccine. This continues to be a Europe wide issue. The BCG vaccine stock in all areas expired at the end of April 2015 so BCG vaccination clinics in HSE Clinics and Maternity hospitals have been postponed until new stock arrives. There is only one licensed manufacturer of BCG vaccine in the EU. This vaccine manufacturer has informed the HSE that BCG vaccine will not be delivered into Ireland until further notice. The number of cases of TB has been steadily falling in Ireland. The number of cases of TB for the years 2014 and 2015 was at the lowest level since records began. Most European countries do not give BCG to all babies. The NIAC, an independent expert group on immunisation and the Health Information and Quality Authority (HIQA) have both recommended that BCG vaccine does not now need to be given routinely to all babies in Ireland. Please see <http://www.hse.ie/eng/health/immunisation/pubinfo/babychildimm/vaccprevdisease/tb/> for further information.
- Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q3-2016. Compared to Q2-2016, national uptake rates in Q3-2016 for D₃, T₃, P₃, Hib₃, Polio₃, HepB₃ and PCV₂ were unchanged (figure 1).

Community Healthcare Organisation (CHO)

- Among the CHOs, the uptake rates for D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃ ranged from 88% to 93%, PCV₂ ranged from 87% to 95%, and MenC₁ ranged from 93% to 96%.

Local Health Office (LHO)

- 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.
- The target uptake rate of ≥95% was reached in three LHOs for D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃, five for PCV₂ and in 17 LHOs for MenC₁.

Table 2. Immunisation uptake (%) at 12 months in cohort born 01/07/2015–30/09/2015

Community Healthcare Organisation/LHO*	No. in cohort [#]	BCG	D ₃ T ₃	P ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₁	PCV ₂
CHO1 (CN/MN, DL, SO/LM)	1426	0.9†	93	93	93	93	92	96	95
CHO2 (G, MO, RN)	1512	0	93	93	93	93	93	96	94
CHO3 (CE, L, TN)	1349	0.1	91	91	91	91	91	95	91
CHO4 (NC, NSL, WC, KY)	2499	0	90	90	90	90	90	94	87
CHO5 (CW/KK, TS, WD, WX)	1833	0.2	91	91	91	91	91	95	90
CHO6 (DS, DSE, WW)	1313	0	91	91	91	91	91	94	91
CHO7 (DSC, DSW, DW, KE)	2738	0	91	91	91	91	91	95	91
CHO8 (LS/OY, LD/WH, LH, MH)	2409	0†	92	92	92	92	92	94	95
CHO9 (DNW, DNC, DN)	2432	0	88	88	88	88	88	93	88
Ireland	17511†	0.1 †	91	91	91	91	91	94	91

na = not available at this time

*Shown in brackets are the LHOs in each CHO. Please see Appendix 3 to translate LHO codes. The geographical boundaries of the CHOs are shown at http://www.hse.ie/eng/services/publications/corporate/CHO_Chapter_1.pdf

[#] The denominator/number in cohort varied slightly according to vaccine. D₃T₃ cohorts are shown here.

†Number in cohort for BCG is 15,702. BCG data are unavailable for the former HSE North Eastern Area i.e. CN/MN, LH, MH; therefore CHO1 and CHO8 BCG data are incomplete. At the time of writing of this report the HSE continues to experience on-going delays with the supply of BCG vaccine. This continues to be a Europe wide issue. The BCG vaccine stock in all areas expired at the end of April 2015 so BCG vaccination clinics in HSE Clinics and Maternity hospitals have been postponed until new stock arrives. There is only one licensed manufacturer of BCG vaccine in the EU. This vaccine manufacturer has informed the HSE that BCG vaccine will not be delivered into Ireland until further notice. The number of cases of TB has been steadily falling in Ireland. The number of cases of TB for the years 2014 and 2015 was at the lowest level since records began. Most European countries do not give BCG to all babies. The NIAC, an independent expert group on immunisation and the Health Information and Quality Authority (HIQA) have both recommended that BCG vaccine does not now need to be given routinely to all babies in Ireland. Please see <http://www.hse.ie/eng/health/immunisation/pubinfo/babychildimm/vaccprevdisease/tb/> for further information.

Immunisation uptake among children at 12 months of age in Quarter 3-2016

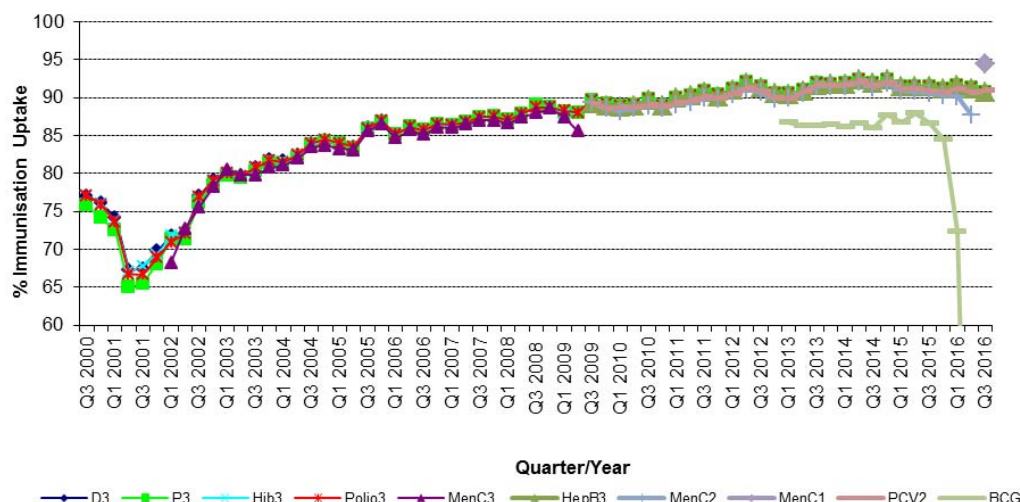


Figure 1. National quarterly immunisation uptake rates at 12 months

X-axis ranges from 60-100%.

At the time of writing of this report the HSE continues to experience on-going delays with the supply of BCG vaccine. This continues to be a Europe wide issue. The BCG vaccine stock in all areas expired at the end of April 2015 so BCG vaccination clinics in HSE Clinics and Maternity hospitals have been postponed until new stock arrives. There is only one licensed manufacturer of BCG vaccine in the EU. This vaccine manufacturer has informed the HSE that BCG vaccine will not be delivered into Ireland until further notice. The number of cases of TB has been steadily falling in Ireland. The number of cases of TB for the years 2014 and 2015 was at the lowest level since records began. Most European countries do not give BCG to all babies. The NIAC, an independent expert group on immunisation and the Health Information and Quality Authority (HIQA) have both recommended that BCG vaccine does not now need to be given routinely to all babies in Ireland. Please see <http://www.hse.ie/eng/health/immunisation/pubinfo/babychildimm/vaccprevdisease/tb/> for further information.

Since T_3 uptake is 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 one HSE Area was unable to provide data. BCG uptake data are only displayed in this graph from Q1 2013 as BCG uptake data were available for only five of the eight HSE-Areas (this includes data from the HSE-Southern Area which relates to Kerry data only) from Q3 2003 to Q2 2009 (except Q3 2004 when HSE-Southern Area data were not available), for three HSE-Areas in Q3 2009, for two HSE-Areas in Q4 2009, for three HSE-Areas in Q1 2010 and Q2 2010, for five HSE-Areas in Q4 2010, Q1 2011 and Q2 2011, for six HSE-Areas in Q3 2011 to Q4 2012 and for seven HSE Areas from Q1 2013. From Q3 2011 to Q3 2014 HSE Western Area BCG data was not available by LHO, uptake was provided for the HSE Western Area as a whole. In Q4 2014 BCG data was available for Galway and Roscommon- the BCG denominator for HSE Western Area in Q4 2014 was the sum of the Galway and Roscommon denominators. Since Q1 2015 BCG data was available for Galway, Mayo and Roscommon LHOs.

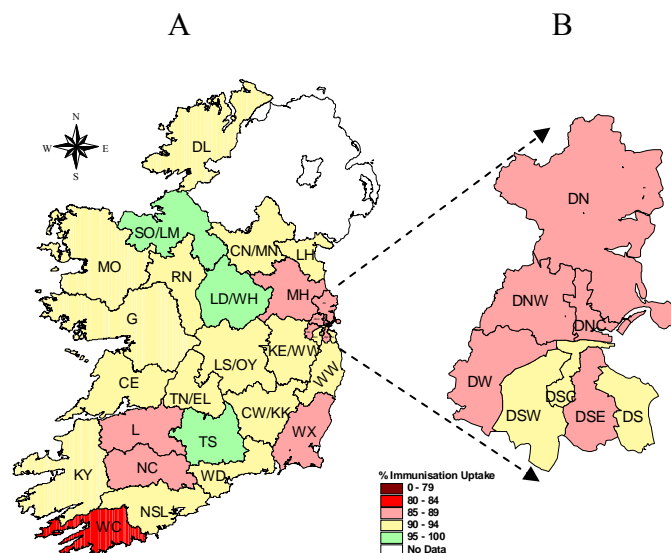


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

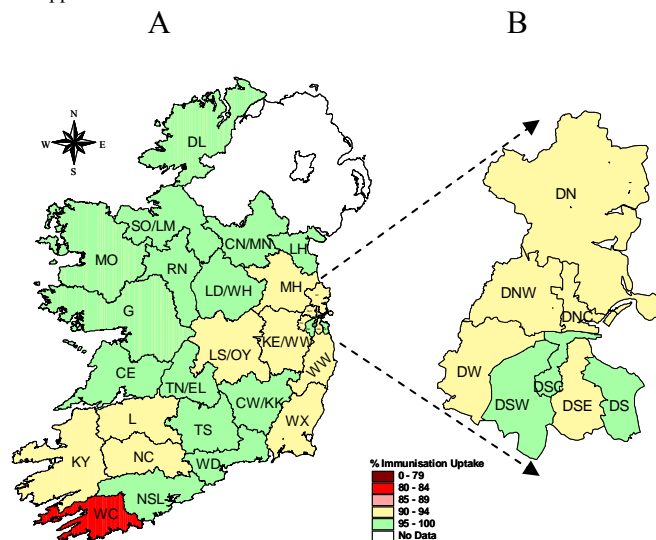


Figure 3. MenC₁ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

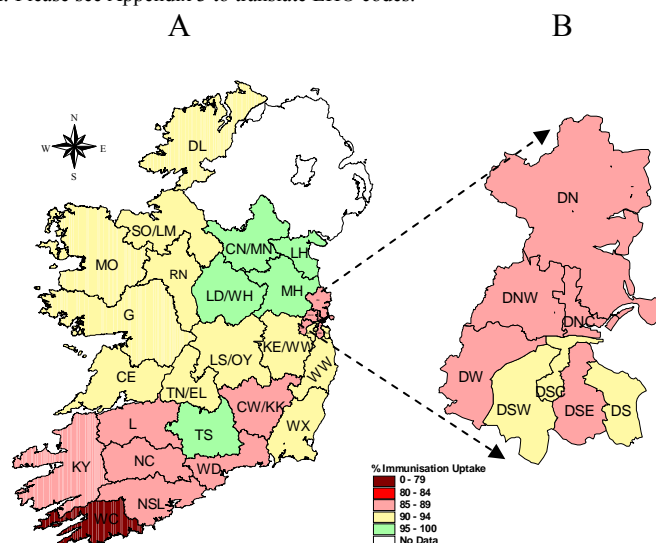


Figure 4. PCV₂ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Immunisation uptake among children 24 months of age in Quarter 3-2016

National

- National uptake rates were 95% for D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃, 92% for MMR₁, 91% for Hib_b and PCV₃ and 87% for MenC₃ (table 3). Compared to the previous quarter, national uptake rates in Q3-2016 were unchanged for these vaccines (figure 5).
- In total, eight of the nine CHOs were able to provide uptake data on MenC_b and PCV_b in Q3-2016. These Areas cover approximately 91% of the national birth cohort. Where data were available, national uptake was 89% for MenC_b and 92% for PCV_b. Compared to the previous quarter uptake was unchanged (figure 5).
- Figure 5 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q3-2016.

Community Healthcare Organisations (CHOs)

- The target uptake of ≥95% was reached for D₃, P₃, T₃, Hib₃, Polio₃ and HepB₃ in seven CHOs, for Hib_b, PCV₃ and MMR₁ in one and in none for Hib_b, MenC₃, MenC_b and PCV_b (table 3).

Local Health Office (LHO)

- Immunisation uptake rates in children 24 months of age in Q3-2016 are presented by LHO in Appendix 2.
- D₃, Hib_b, MenC₃, MenC_b, PCV₃, PCV_b and MMR₁ immunisation uptake rates are mapped by LHO in figures 6-12.
- The target uptake of ≥95% was reached in 23 LHOs for D₃, T₃, P₃, Hib₃ and Polio₃, 21 for HepB₃, 8 for Hib_b, 7 for MMR₁, 6 for PCV_b, 3 for PCV₃ and MenC_b and 2 for MenC₃.

Table 3. Immunisation uptake (%) at 24 months in cohort born 01/07/2014–30/09/2014

Community Healthcare Organisation/LHO	No. in Cohort*	D ₃ /T ₃ /P ₃ /Polio ₃	Hib ₃	Hib _b	HepB ₃	MenC ₃	MenC _b	PCV ₃	PCV _b	MMR ₁
CHO1 (CN/MN, DL, SO/LM)	1308	96	96	92	95	86	92	89	94	92
CHO2 (G, MO, RN)	1545	98	98	95	98	94	na	97	na	95
CHO3 (CE, L, TN)	1351	94	94	91	94	87	90	90	92	93
CHO4 (NC, NSL, WC, KY)	2504	96	96	89	96	86	87	90	92	93
CHO5 (CW/KK, TS, WD, WX)	1943	96	96	94	96	89	92	92	94	94
CHO6 (DS, DSE, WW)	1304	95	95	90	95	87	90	91	92	92
CHO7 (DSC, DSW, DW, KE)	2748	95	95	91	95	88	90	91	93	93
CHO8 (LS/OY, LD/WH, LH, MH)	2493	96	96	91	96	86	88	91	92	92
CHO9 (DNW, DNC, DN)	2434	92	92	85	92	82	85	88	90	89
Ireland	17630	95	95	91	95	87	89	91	92	92

Please see Appendix 3 to translate LHO codes

na = not available

* As the denominator/number in cohort varied slightly according to vaccine D₃T₃ cohorts are shown here

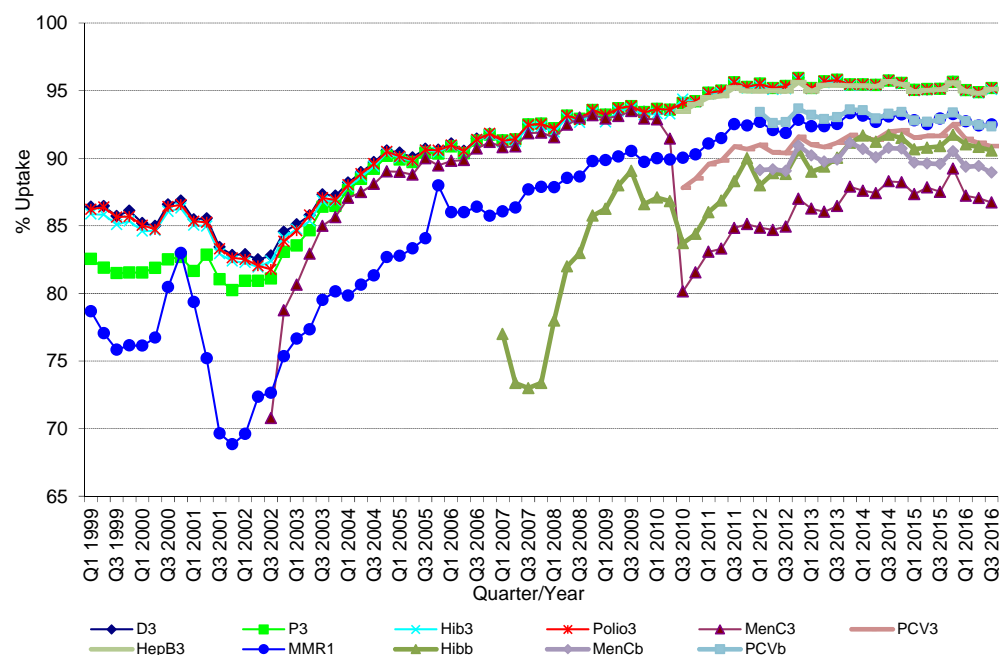


Figure 5. National quarterly immunisation uptake rates at 24 months

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. MenC_b and PCV_b data are only available for 6 of the 8 HSE Areas from Q1 2012 to Q4 2014 and for 7 HSE Areas since Q1 2015

Conclusions

In Quarter 3-2016, national uptake rates at 24 months for D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃ reached the target of $\geq 95\%$. Uptake of the remaining vaccines are lower; doses of these remaining vaccines are given at 12 and 13 months of age suggesting that parents are less likely to get the necessary vaccines for their children at this age.

Acknowledgements

HPSC would like to thank all those involved in childhood immunisation including the General Practitioners, Practice Nurses, HSE Areas, Public Health Nurses, Immunisation Co-ordinators, Specialists in Public Health Medicine, Surveillance Scientists and Systems Analysts for their assistance.

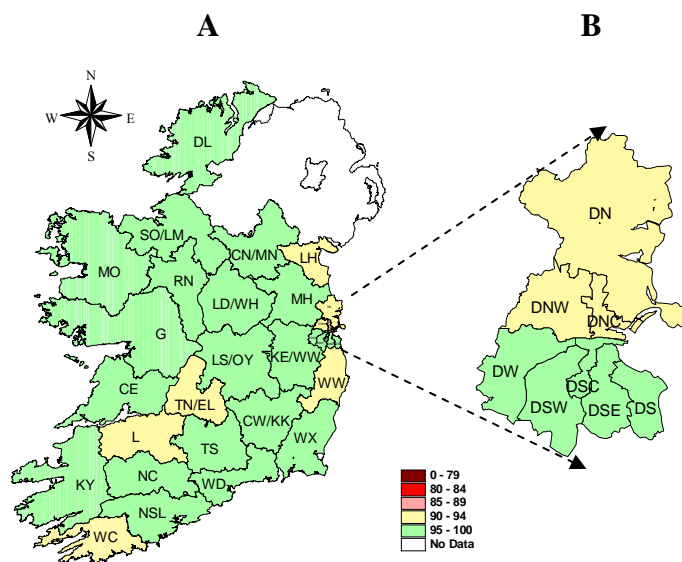


Figure 6. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

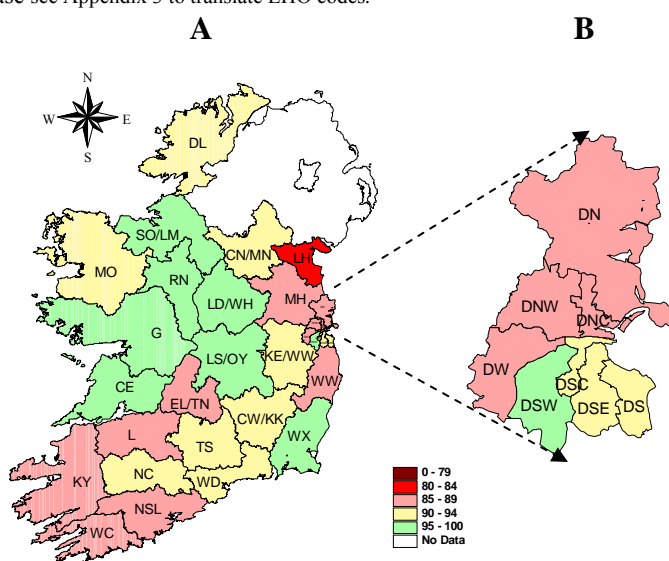


Figure 7. Hib₆ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

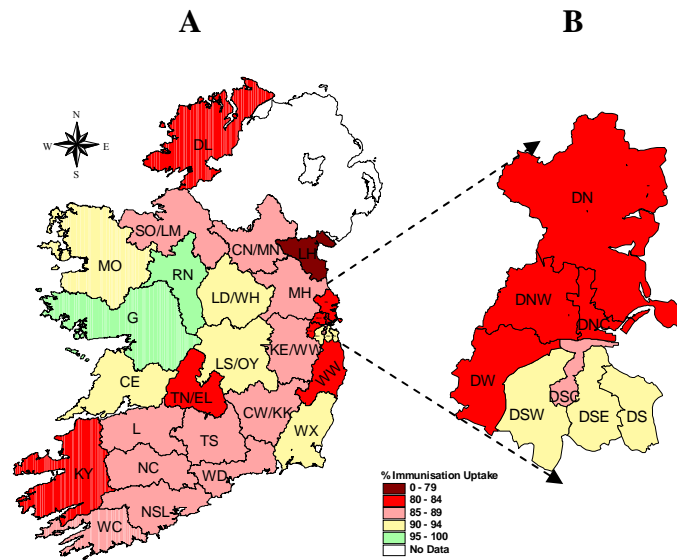


Figure 8. MenC₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

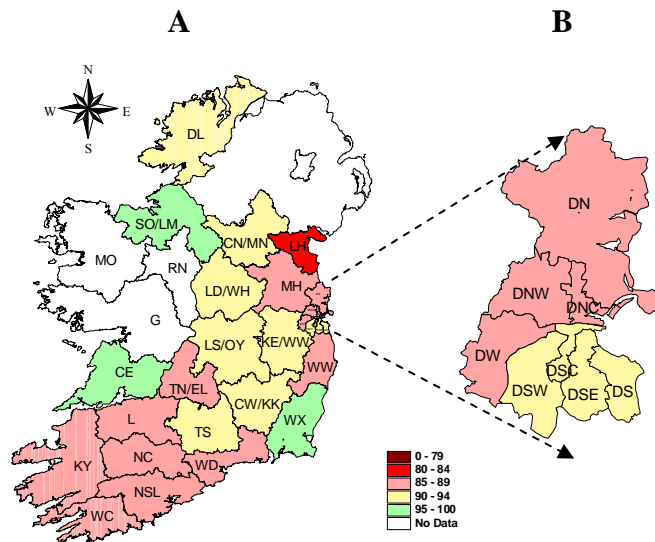


Figure 9. MenC_b immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

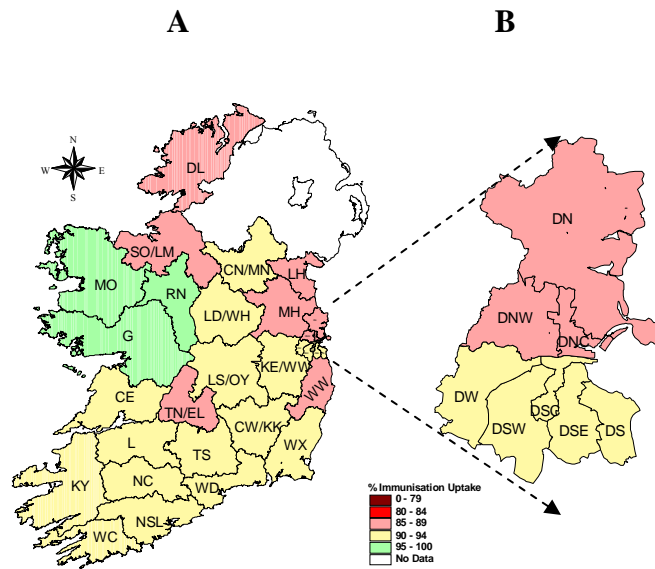


Figure 10. PCV₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

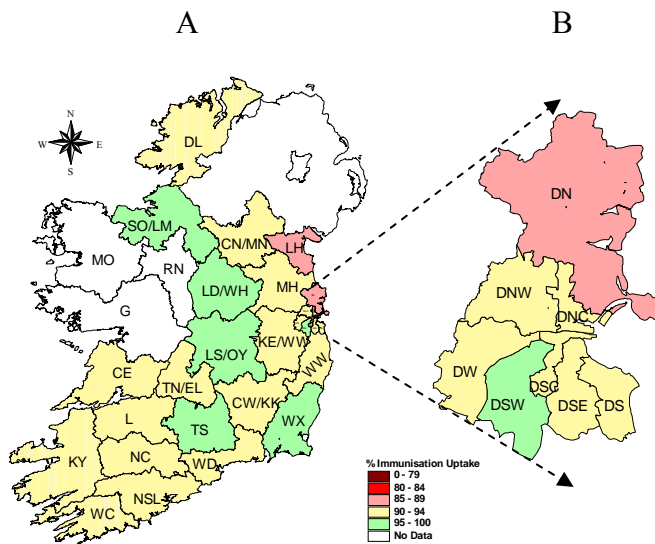


Figure 11. PCV_b immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

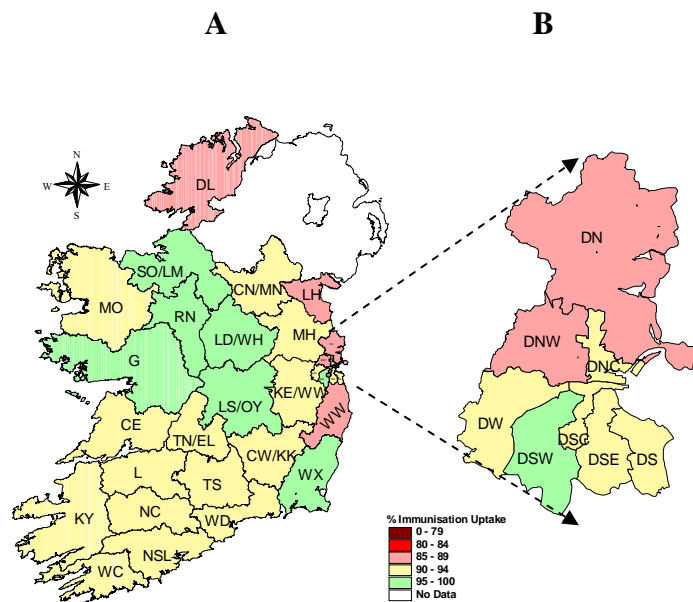


Figure 12. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Appendix 1

Immunisation uptake (%) at 12 months of age in cohort born 01/07/2015-30/09/2015											
Community Healthcare Organisation (CHO)	LHO/CHO	No. in cohort for BCG*	No. in cohort for D ₃ T ₃ #	Immunisation Uptake (%)							
				BCG*	D ₃ T ₃	P ₃	Hib ₃	Polio ₃	HepB ₃	MenC ₁	PCV ₂
CHO1	Cavan/Monaghan	na	538	na	91	91	91	91	91	96	98
	Donegal	549	549	0.5	93	93	93	93	92	96	93
	Sligo/Leitrim	339	339	1.5	95	95	95	95	95	96	94
	CHO1 Total*	888	1426	0.9	93	93	93	93	92	96	95
CHO2	Galway	898	898	0.0	93	93	93	93	93	95	93
	Mayo	420	420	0.0	94	94	94	94	94	96	94
	Roscommon	194	194	0.0	93	93	93	93	93	96	94
	CHO2 Total	1512	1512	0.0	93	93	93	93	93	96	94
CHO3	Clare	415	406	0.0	92	92	92	92	92	96	92
	Limerick	445	499	0.0	88	88	88	88	88	94	88
	Tipperary NR/East Limerick	455	444	0.2	92	92	92	92	92	96	92
	CHO3 Total	1315	1349	0.1	91	91	91	91	91	95	91
CHO4	North Cork	395	390	0.0	87	87	87	87	87	93	85
	North South Lee	1500	1482	0.0	91	91	91	91	91	95	88
	West Cork	178	178	0.0	80	80	80	80	80	84	77
	Kerry	451	449	0.0	91	91	91	91	91	93	86
	CHO4 Total	2524	2499	0.0	90	90	90	90	90	94	87
CHO5	Carlow/Kilkenny	454	454	0.4	90	90	90	90	90	95	89
	South Tipperary	338	338	0.6	95	95	95	95	95	98	95
	Waterford	476	476	0.0	91	91	91	91	91	95	89
	Wexford	565	565	0.0	89	89	89	89	89	93	90
	CHO5 Total	1833	1833	0.2	91	91	91	91	91	95	90
CHO6	Dublin South	409	409	0.0	93	93	93	93	93	97	93
	Dublin South East	437	437	0.0	89	89	89	89	89	94	89
	Wicklow	467	467	0.0	90	90	90	90	90	93	90
	CHO6 Total	1313	1313	0.0	91	91	91	91	91	94	91
CHO7	Dublin South City	450	450	0.0	94	94	94	94	94	95	94
	Dublin South West	671	671	0.0	90	90	90	90	90	96	91
	Dublin West	656	656	0.0	88	88	88	88	88	94	89
	Kildare/West Wicklow	961	961	0.0	92	92	92	92	92	94	92
	CHO7 Total	2738	2738	0.0	91	91	91	91	91	95	91
CHO8	Laois/Offaly	640	640	0.0	94	94	94	94	94	94	94
	Longford/Westmeath	507	507	0.0	96	96	96	96	96	96	96
	Louth	na	468	na	90	90	90	90	90	95	97
	Meath	na	794	na	89	89	89	89	89	93	95
	CHO8 Total*	1147	2409	0.0	92	92	92	92	92	94	95
CHO9	Dublin North West	918	918	0.0	88	88	88	88	88	92	87
	Dublin North Central	502	502	0.0	88	88	88	88	88	92	89
	Dublin North	1012	1012	0.0	88	88	88	88	88	93	87
	CHO9 Total	2432	2432	0.0	88	88	88	88	88	93	88
Ireland *		15702	17511	0.1	91	91	91	91	91	94	91

na=not available

*BCG data were unavailable for Cavan/Monaghan, Louth and Meath

At the time of writing of this report the HSE continues to experience on-going delays with the supply of BCG vaccine. This continues to be a Europe wide issue. The BCG vaccine stock in all areas expired at the end of April 2015 so BCG vaccination clinics in HSE Clinics and Maternity hospitals have been postponed until new stock arrives. There is only one licensed manufacturer of BCG vaccine in the EU. This vaccine manufacturer has informed the HSE that BCG vaccine will not be delivered into Ireland until further notice. The number of cases of TB has been steadily falling in Ireland. The number of cases of TB for the years 2014 and 2015 was at the lowest level since records began. Most European countries do not give BCG to all babies. The NIAC, an independent expert group on immunisation and the Health Information and Quality Authority (HIQA) have both recommended that BCG vaccine does not now need to be given routinely to all babies in Ireland. Please see <http://www.hse.ie/eng/health/immunisation/pubinfo/babychildimm/vaccprevdisease/tb/> for further information.

#The denominator/number in cohort varied slightly according to vaccine. D₃T₃ cohort shown 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 01/07/2014-30/09/2014													
Community Healthcare Organisation (CHO)	LHO/CHO	No. in cohort for D ₃ T ₃ [*]	Immunisation Uptake (%)										
			D ₃ T ₃	P ₃	Hib ₃	Hib _b	Polio ₃	HepB ₃	MenC ₃	MenC _b	PCV ₃	PCV _b	MMR ₁
CHO1	Cavan/Monaghan	502	97	97	97	91	97	97	88	91	92	94	94
	Donegal	484	95	95	95	91	95	94	83	90	86	91	88
	Sligo/Leitrim	322	97	97	96	96	97	97	86	96	89	96	95
	CHO1 Total	1308	96	96	96	92	96	95	86	92	89	94	92
CHO2	Galway	896	97	97	97	96	97	97	95	na	96	na	95
	Mayo	425	98	98	98	92	98	98	92	na	98	na	94
	Roscommon	224	99	99	99	96	99	99	96	na	97	na	96
	CHO2 Total	1545	98	98	98	95	98	98	94	na	97	na	95
CHO3	Clare	425	95	95	95	95	95	95	91	95	92	94	94
	Limerick	441	94	94	94	89	94	94	86	89	90	91	93
	Tipperary NR/East Limerick	485	93	93	93	88	93	93	83	88	89	92	91
	CHO3 Total	1351	94	94	94	91	94	94	87	90	90	92	93
CHO4	North Cork	339	98	98	98	91	98	98	88	89	92	93	93
	North South Lee	1505	96	96	96	89	96	96	86	88	90	92	93
	West Cork	180	92	92	92	89	92	92	85	87	90	91	93
	Kerry	480	95	95	95	87	95	95	84	86	90	91	92
	CHO4 Total	2504	96	96	96	89	96	96	86	87	90	92	93
CHO5	Carlow/Kilkenny	568	95	95	95	94	95	95	89	91	93	94	94
	South Tipperary	335	97	97	97	94	96	97	87	91	93	95	94
	Waterford	506	95	95	95	92	95	94	87	89	90	92	92
	Wexford	534	97	97	97	96	97	97	91	95	94	96	95
	CHO5 Total	1943	96	96	96	94	96	96	89	92	92	94	94
CHO6	Dublin South	442	95	95	95	93	95	95	90	93	92	94	94
	Dublin South East	421	95	95	95	93	95	95	90	91	91	93	93
	Wicklow	441	93	93	93	85	93	93	82	85	88	90	89
	CHO6 Total	1304	95	95	95	90	95	95	87	90	91	92	92
CHO7	Dublin South City	438	96	96	96	92	96	96	89	92	92	93	93
	Dublin South West	595	97	97	97	95	97	97	90	94	92	96	95
	Dublin West	720	95	95	95	87	95	95	83	86	91	92	92
	Kildare/West Wicklow	995	95	95	95	91	95	95	89	91	92	93	93
	CHO7 Total	2748	95	95	95	91	95	95	88	90	91	93	93
CHO8	Laois/Offaly	633	97	97	97	97	97	97	90	92	94	96	96
	Longford/Westmeath	520	98	98	98	98	98	98	90	93	93	95	96
	Louth	493	94	94	94	84	94	94	79	82	87	88	88
	Meath	847	95	95	95	87	95	95	85	85	89	90	90
	CHO8 Total	2493	96	96	96	91	96	96	86	88	91	92	92
CHO9	Dublin North West	929	93	93	93	85	93	93	82	85	88	90	89
	Dublin North Central	482	93	93	93	85	93	93	82	85	87	90	90
	Dublin North	1023	91	91	91	85	91	91	82	85	87	89	89
	CHO9 Total	2434	92	92	92	85	92	92	82	85	88	90	89
Ireland		17630	95	95	95	91	95	95	87	89	91	92	92

na=not available

*The denominator/number in cohort varied slightly according to vaccine. D₃T₃ cohorts shown 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