

## Background

The national immunisation uptake statistics, based on available data, for Quarter 4 2015 are presented in this report. These immunisation uptake statistics relate to children at 12 (born between 01/10/2014 and 31/12/2014) and 24 (born between 01/10/2013 and 31/12/2013) months of age in Quarter 4-2015. These children were recommended the vaccines outlined in table 1. Please note the immunisation schedule changed in 2015 for children born on or after July 1<sup>st</sup> 2015. Please see the HSE-National Immunisation Office (NIO) website at <http://www.hse.ie/eng/health/immunisation/> 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 4 2015, immunisation uptake rates of three doses of vaccines against diphtheria (D<sub>3</sub>), pertussis (P<sub>3</sub>), tetanus (T<sub>3</sub>), *Haemophilus influenzae* type b (Hib<sub>3</sub>), polio (Polio<sub>3</sub>), hepatitis B (HepB<sub>3</sub>), two doses of meningococcal serogroup C conjugate vaccine (MenC<sub>2</sub>), two doses of pneumococcal conjugate vaccine (PCV<sub>2</sub>) and one dose of BCG vaccine are reported.

For children at 24 months of age in Quarter 4 2015, immunisation uptake rates of three doses of vaccines against diphtheria (D<sub>3</sub>), pertussis (P<sub>3</sub>), tetanus (T<sub>3</sub>), *Haemophilus influenzae* type b (Hib<sub>3</sub>), polio (Polio<sub>3</sub>), hepatitis B (HepB<sub>3</sub>), meningococcal group C (MenC<sub>3</sub>) and pneumococcal conjugate vaccine (PCV<sub>3</sub>) and one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>) are reported. One dose of vaccine against *Haemophilus influenzae* type b (Hib<sub>b</sub>), one dose of meningococcal group C vaccine (MenC<sub>b</sub>) and one dose of pneumococcal conjugate vaccine (PCV<sub>b</sub>) given on or after 12 months of age are also reported.

The uptake statistics are also presented in this report by HSE Area 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 30/06/2015

Age	Vaccines
Birth	BCG
2 months	DTaP/Hib/IPV/HepB (6 in 1) + PCV
4 months	DTaP/Hib/IPV/HepB (6 in 1) + MenC
6 months	DTaP/Hib/IPV/HepB (6 in 1) + PCV + MenC
12 months	MMR + PCV
13 months	MenC + Hib

Please note the primary immunisation schedule changed in 2015 for children born on or after 01/07/2015. Please see the HSE-National Immunisation Office (NIO) website at <http://www.hse.ie/eng/health/immunisation/> 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 4-2015

### National

- Immunisation uptake rates in children 12 months of age in Q4-2015 are presented by HSE Area in table 2. National immunisation uptake rates were 91% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub> and PCV<sub>2</sub> and 90% for MenC<sub>2</sub>. BCG uptake data were available for 28 LHOs in Q4-2015; these areas cover approximately 90% of the national birth cohort. Where data were available, national uptake was 84% for the BCG vaccination.
- Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q4-2015. Compared to Q3-2015, national uptake rates in Q4-2015 for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub> and PCV<sub>2</sub> were unchanged, MenC<sub>2</sub> decreased by 1% and BCG decreased by 3%.

### HSE Area

- Among the HSE Areas, the uptake rates for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> ranged from 90 to 96%, MenC<sub>2</sub> ranged from 87% to 95% and PCV<sub>2</sub> ranged from 87% to 96%. The HSE Western Area reached the target of ≥95% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, PCV<sub>2</sub> and MenC<sub>2</sub>.

### Local Health Office (LHO)

- The immunisation uptake rates by LHO are shown in appendix 1.
- D<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> immunisation uptake rates are mapped by LHO in figures 2-4.
- The target uptake rate of ≥95% was reached in 5 LHOs for BCG and PCV<sub>2</sub>, 4 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> and in 3 LHOs for MenC<sub>2</sub>.

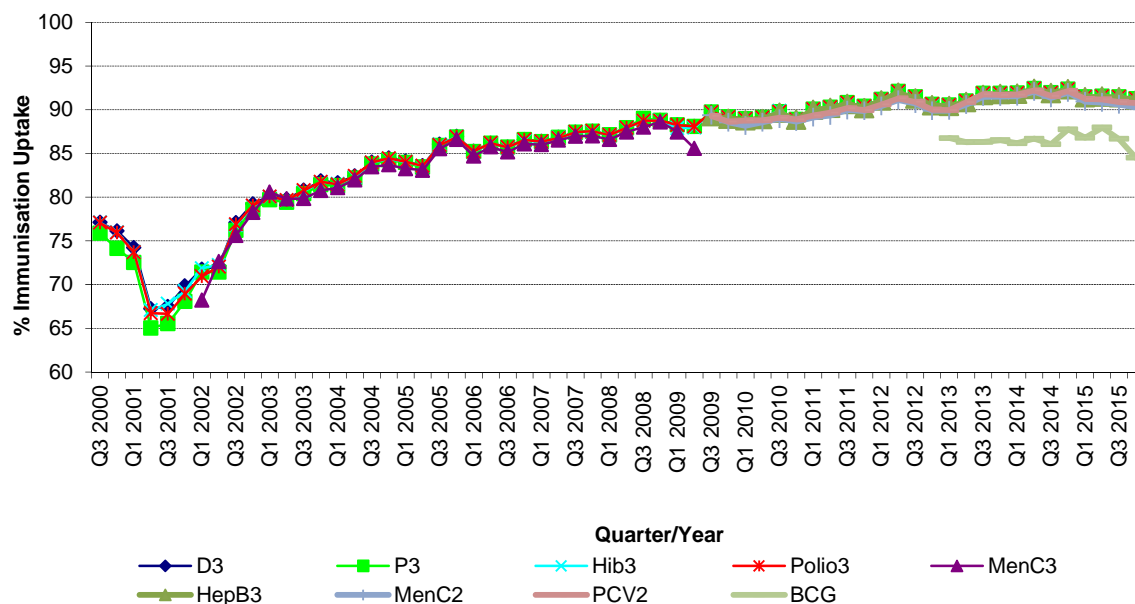
**Table 2.** Immunisation uptake (%) at 12 months in cohort born 01/10/2014–31/12/2014

HSE Area	No. in cohort*	BCG <sup>†</sup>	D <sub>3</sub> T <sub>3</sub>	P <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>
Eastern	6530	89	90	90	90	90	90	90	90
Midland	1122	94	93	93	93	93	93	93	93
Mid Western	1303	93	90	90	90	90	90	90	90
North Eastern	1703	na	90	90	90	90	90	90	91
North Western	805	92	94	94	93	94	92	91	93
South Eastern	1777	95	91	91	91	91	91	91	91
Southern	2351	91	91	91	91	91	91	87	87
Western	1492	23	96	96	96	96	96	95	96
Ireland	17083	84	91	91	91	91	91	90	91

na = not available at this time

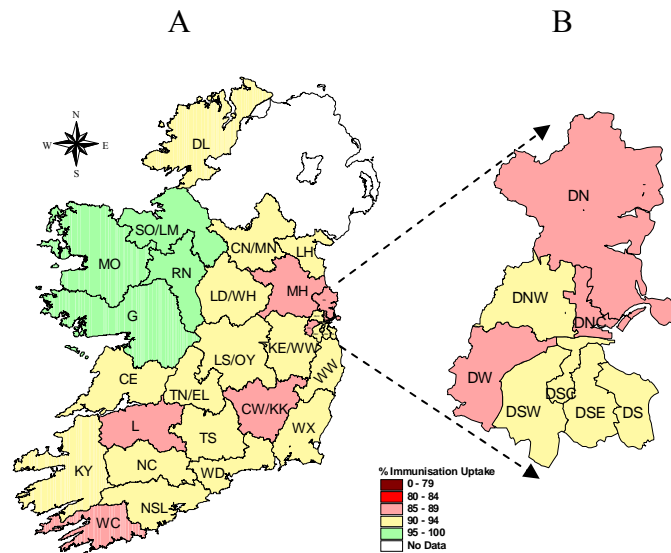
\* The denominator/number in cohort varied slightly according to vaccine. D<sub>3</sub>, T<sub>3</sub> and P<sub>3</sub> cohorts are shown here.

† Number in cohort for BCG is 15,373

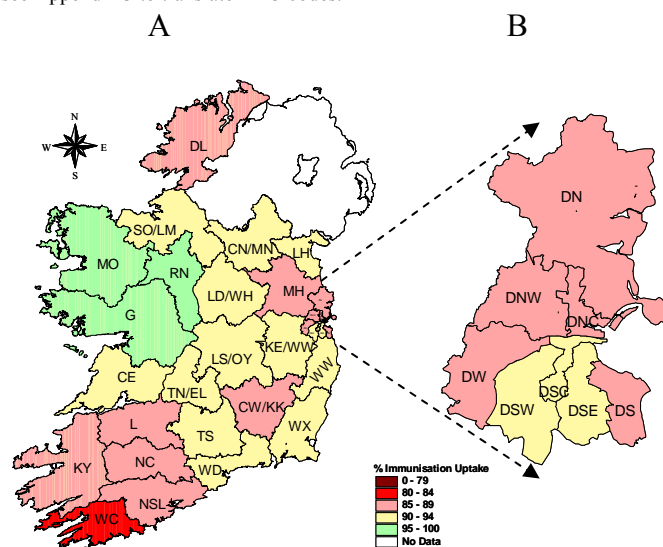


**Figure 1.** National quarterly immunisation uptake rates at 12 months

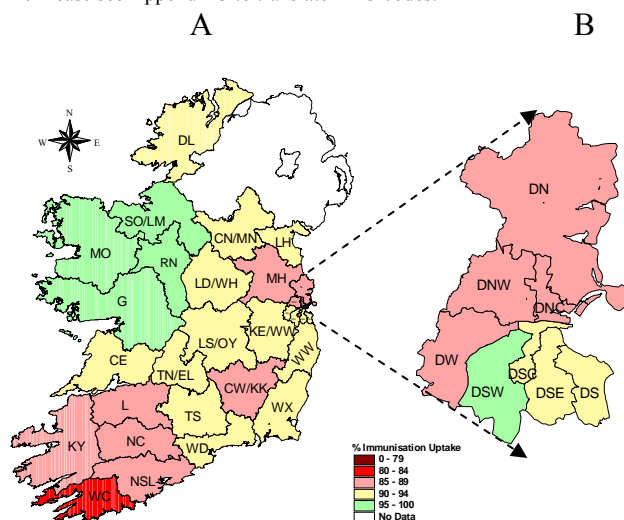
Since T<sub>3</sub> uptake is identical to D<sub>3</sub> uptake only D<sub>3</sub> uptake figures presented. The Q3-2008 MenC<sub>3</sub> uptake figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> 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 MenC<sub>2</sub> data and one additional area was unable to provide PCV<sub>2</sub> 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 MenC<sub>2</sub> 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.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 3.** MenC<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 4.** PCV<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Immunisation uptake among children 24 months of age in Quarter 4-2015

### National

- National uptake rates were 96% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub>, 93% for MMR<sub>1</sub> and PCV<sub>3</sub>, 92% for Hib<sub>b</sub> and 89% for MenC<sub>3</sub> (table 3). Compared to the previous quarter, national uptake rates in Q4-2015 increased by 1% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>3</sub>, PCV<sub>3</sub> and Hib<sub>b</sub> and were unchanged for MMR<sub>1</sub> (figure 5).
- In total, seven of the eight HSE Areas were able to provide uptake data on MenC<sub>b</sub> and PCV<sub>b</sub> in Q4-2015. These Areas cover approximately 91% of the national birth cohort. Where data were available, national uptake was 91% for MenC<sub>b</sub> and 93% for PCV<sub>b</sub>. Compared to the previous quarter MenC<sub>b</sub> uptake increased by 1% and PCV<sub>b</sub> uptake was unchanged (figure 5).
- Figure 5 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q4-2015.

### HSE Area

- The target uptake of ≥95% was reached for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> in seven HSE Areas, for Hib<sub>b</sub>, PCV<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> in two HSE Areas, for MenC<sub>3</sub> in one and in none for MenC<sub>b</sub> (table 3).

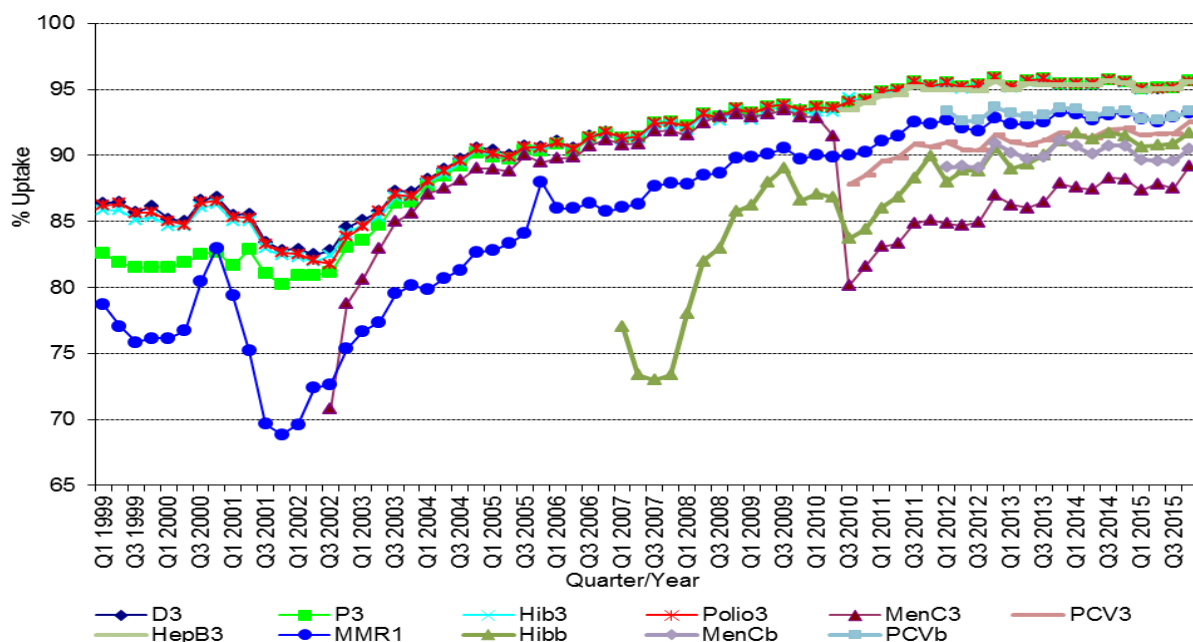
### Local Health Office (LHO)

- Immunisation uptake rates in children 24 months of age in Q4-2015 are presented by LHO in Appendix 2.
- D<sub>3</sub>, Hib<sub>b</sub>, MenC<sub>3</sub>, MenC<sub>b</sub>, PCV<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> immunisation uptake rates are mapped by LHO in figures 6-12.
- The target uptake of ≥95% was reached in 25 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 24 for HepB<sub>3</sub>, 12 for MMR<sub>1</sub>, 11 for PCV<sub>b</sub>, 8 for PCV<sub>3</sub> and Hib<sub>b</sub>, 5 for MenC<sub>3</sub> and two for MenC<sub>b</sub>.

**Table 3.** Immunisation uptake (%) at 24 months in cohort born 01/10/2013–31/12/2013

HSE Area	No. in Cohort*	D <sub>3</sub> /T <sub>3</sub>	P <sub>3</sub>	Hib <sub>3</sub>	HepB <sub>3</sub>	Polio <sub>3</sub>	Hib <sub>b</sub>	MenC <sub>3</sub>	MenC <sub>b</sub>	PCV <sub>3</sub>	PCV <sub>b</sub>	MMR <sub>1</sub>
Eastern	6511	95	95	95	95	95	90	87	90	91	93	92
Midland	1160	97	97	97	97	97	97	91	93	94	96	96
Mid-Western	1237	94	94	94	94	94	89	86	89	89	91	91
North Eastern	1825	96	96	96	96	96	92	97	93	98	95	94
North Western	862	96	96	96	96	96	94	88	93	90	94	93
South Eastern	1854	96	96	96	96	96	94	88	91	93	94	94
Southern	2461	96	96	96	96	96	91	88	89	92	93	94
Western	1566	98	98	98	98	98	95	94	na	97	na	96
<b>Ireland</b>	<b>17476</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>92</b>	<b>89</b>	<b>91</b>	<b>93</b>	<b>93</b>	<b>93</b>

\* As the denominator/number in cohort varied slightly according to vaccine D<sub>3</sub>, T<sub>3</sub> and P<sub>3</sub> cohorts are shown here



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

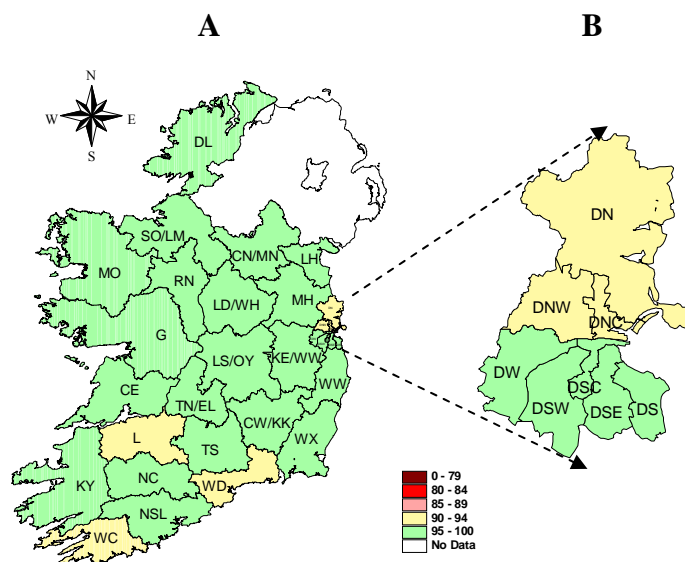
**Notes:** The Q4-2005 MMR<sub>1</sub> figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR<sub>1</sub> figure includes the HSE-Eastern Area figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib<sub>b</sub> figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed their Hib<sub>b</sub> data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib<sub>b</sub> in the HSE-SE was 83% compared to 53% in Q4-2007. The Q3-2008 MenC<sub>3</sub> figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> uptake figures exclude those born on the 31/03/2007. The Q2-2009 HSE-Eastern Area Hib<sub>b</sub> 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<sub>b</sub> 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<sub>b</sub> 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<sub>b</sub> and PCV<sub>b</sub> 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

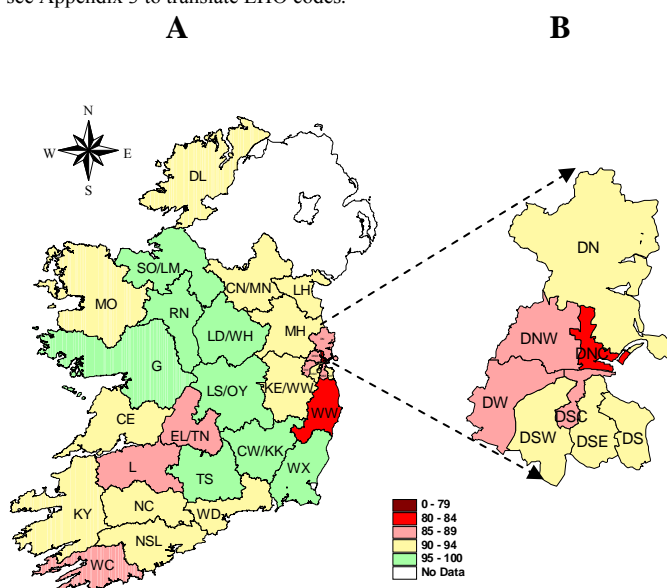
In Quarter 4-2015, national uptake rates at 24 months for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> reached the target of  $\geq 95\%$ . Compared to the previous quarter, national uptake rates in Q4-2015 increased by 1% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>3</sub>, PCV<sub>3</sub> and Hib<sub>6</sub> and were unchanged for MMR<sub>1</sub>. MenC<sub>6</sub> and to a lesser extent Hib<sub>6</sub> uptake are lower than the uptake of the other recommended vaccines both of which should be given at 13 months of age suggesting that parents are less likely to get the necessary vaccines for their children at this age.

## Acknowledgements

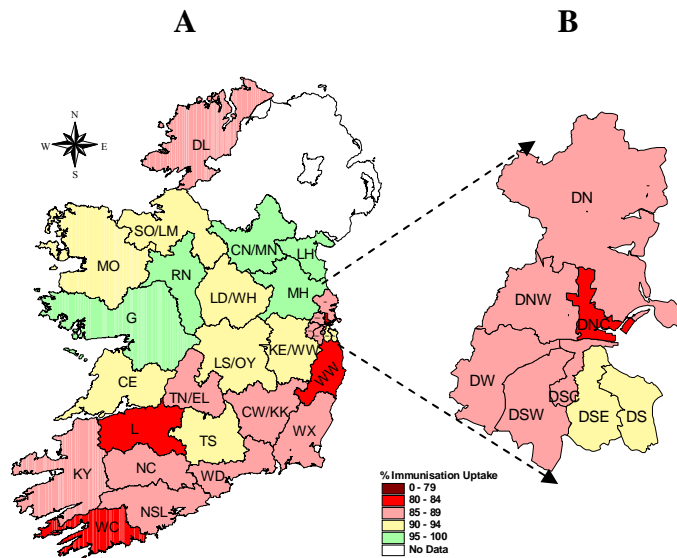
HPSC would like to thank all those involved in childhood immunisation including the General Practitioners, Practice Nurses, HSE Areas, Public Health Nurses, Immunisation Co-ordinators, Specialists in Public Health Medicine, Surveillance Scientists and Systems Analysts for their assistance.



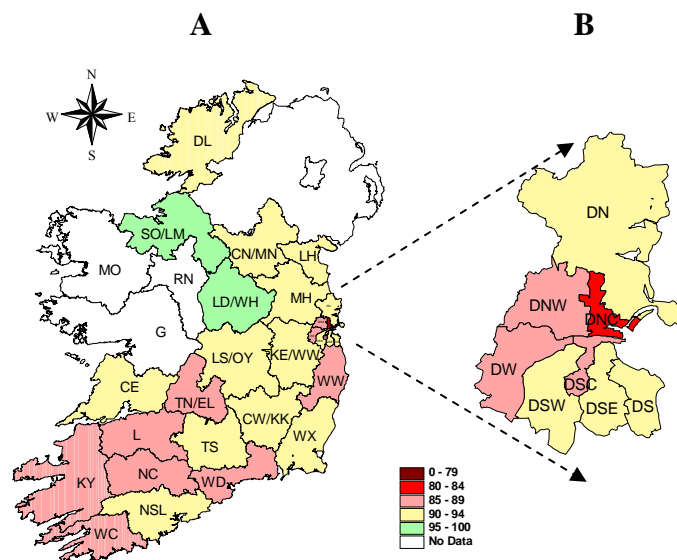
**Figure 6.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



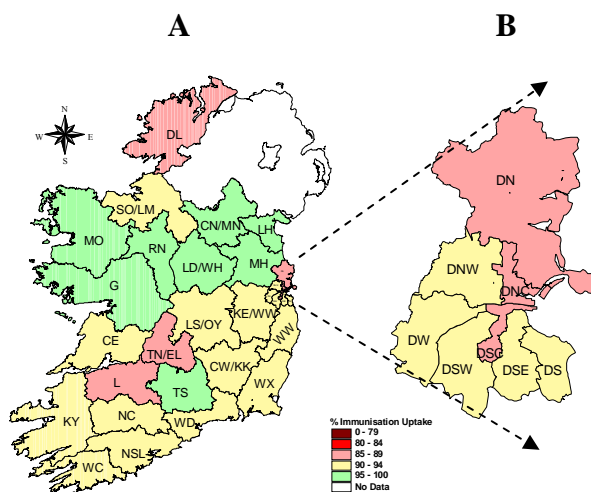
**Figure 7.** Hib<sub>6</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



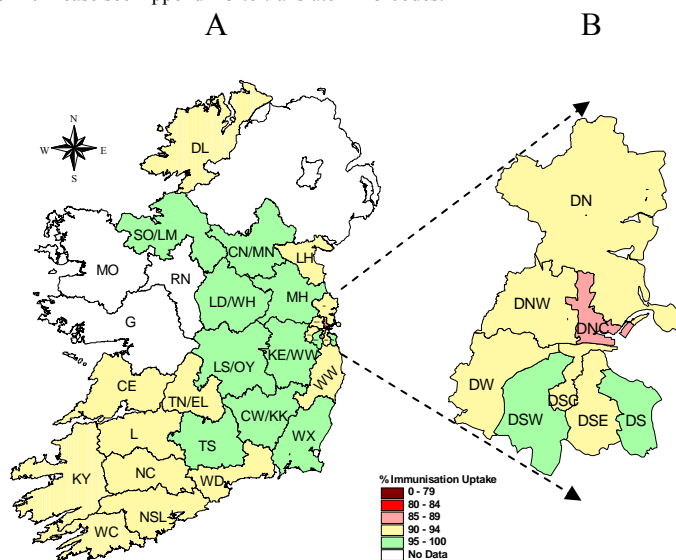
**Figure 8.** MenC<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



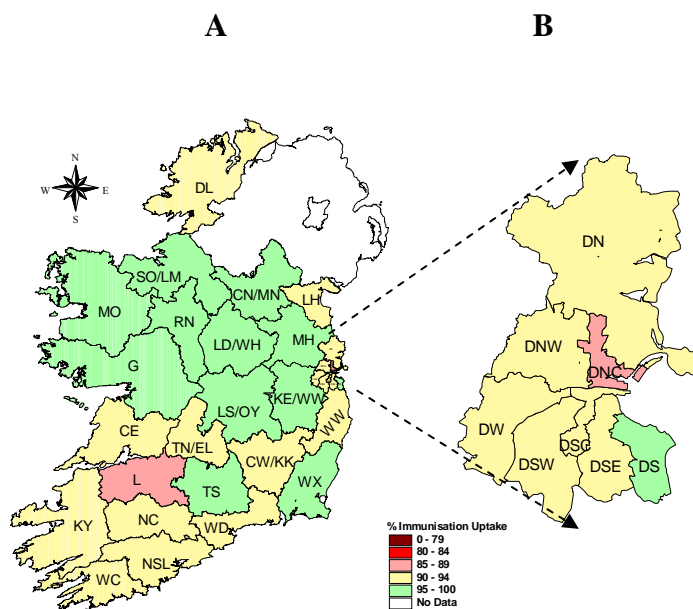
**Figure 9.** MenC<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 10.** PCV<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 11.** PCV<sub>6</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 12.** MMR<sub>1</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Appendix 1

Immunisation Uptake at 12 Months in Cohort Born 01/10/2014-31/12/2014											
HSE Area	LHO/HSE Area	No. in cohort for BCG	No. in cohort for D <sub>3</sub> , T <sub>3</sub> & P <sub>3</sub> *	Immunisation Uptake (%)							
				BCG	D <sub>3</sub> T <sub>3</sub>	P <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>
Eastern	Dublin South	430	430	90	90	90	90	90	90	89	90
	Dublin South East	471	471	90	94	94	94	94	94	93	94
	Dublin South City	415	415	93	91	91	91	91	91	91	91
	Dublin South West	636	636	98	94	94	94	94	94	93	95
	Dublin West	717	717	72	87	87	87	87	87	86	87
	Dublin North West	929	929	91	90	90	90	90	90	89	89
	Dublin North Central	469	469	90	87	87	87	87	87	86	87
	Dublin North	1057	1057	87	87	87	87	87	87	87	87
	Kildare/West Wicklow	964	964	93	92	92	92	92	92	92	92
	Wicklow	442	442	92	94	94	94	94	94	93	94
	<b>HSE-E Total</b>	<b>6530</b>	<b>6530</b>	<b>89</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>
Midland	Laois/Offaly	654	654	95	93	93	93	93	93	93	93
	Longford/Westmeath	468	468	92	94	94	94	94	94	94	94
	<b>HSE-M Total</b>	<b>1122</b>	<b>1122</b>	<b>94</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>
Mid Western	Clare	363	360	93	93	93	93	93	93	93	93
	Limerick	438	495	95	86	86	86	86	86	85	86
	Tipperary NR/East Limerick	465	448	92	92	92	92	92	92	92	92
	<b>HSE-MW Total</b>	<b>1266</b>	<b>1303</b>	<b>93</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>
North Eastern	Cavan/Monaghan	na	514	na	93	93	93	93	93	93	93
	Louth	na	434	na	90	90	90	90	90	91	92
	Meath	na	755	na	87	87	87	87	87	88	89
	<b>HSE-NE Total</b>	<b>na</b>	<b>1703</b>	<b>na</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>91</b>
North Western	Donegal	482	482	92	92	92	92	92	90	89	91
	Sligo/Leitrim	323	323	92	96	96	95	96	95	93	96
	<b>HSE-NW Total</b>	<b>805</b>	<b>805</b>	<b>92</b>	<b>94</b>	<b>94</b>	<b>93</b>	<b>94</b>	<b>92</b>	<b>91</b>	<b>93</b>
South Eastern	Carlow/Kilkenny	504	504	95	88	88	88	88	88	88	88
	South Tipperary	308	308	96	94	94	94	94	94	93	94
	Waterford	431	431	94	91	91	92	91	91	90	90
	Wexford	534	534	93	93	93	93	93	93	93	93
	<b>HSE-SE Total</b>	<b>1777</b>	<b>1777</b>	<b>95</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>
Southern	North Cork	360	355	91	90	90	90	90	90	88	88
	North South Lee	1406	1383	92	91	91	90	91	91	87	87
	West Cork	168	170	89	88	88	88	88	88	82	82
	Kerry	447	443	89	93	93	93	93	93	88	87
	<b>HSE-S Total</b>	<b>2381</b>	<b>2351</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>87</b>	<b>87</b>
Western	Galway	866	866	9	95	95	95	95	95	95	95
	Mayo	418	418	36	96	96	96	96	96	95	96
	Roscommon	208	208	56	99	99	99	99	99	99	99
	<b>HSE-W Total</b>	<b>1492</b>	<b>1492</b>	<b>23</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>95</b>	<b>96</b>
<b>Ireland</b>		<b>15373</b>	<b>17083</b>	<b>84</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>90</b>	<b>91</b>

na=not available

\* The denominator/number in cohort varied slightly according to vaccine. D3, T3 and P3 cohorts are 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 01/10/2013-31/12/2013													
HSE Area	LHO/HSE Area	No. in cohort for D <sub>3</sub> & T <sub>3</sub> & P <sub>3</sub>	Immunisation Uptake (%)										
			D <sub>3</sub> T <sub>3</sub>	P <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>b</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>3</sub>	MenC <sub>b</sub>	PCV <sub>3</sub>	PCV <sub>b</sub>	MMR <sub>1</sub>
Eastern	Dublin South	446	97	97	97	94	97	97	91	94	94	95	95
	Dublin South East	419	95	95	95	92	95	95	91	92	93	93	94
	Dublin South City	448	95	95	95	89	95	95	86	88	89	92	91
	Dublin South West	642	97	97	97	92	97	97	88	91	92	95	94
	Dublin West	685	96	96	96	89	96	96	85	88	90	93	93
	Dublin North West	938	94	94	94	88	94	94	86	88	90	91	90
	Dublin North Central	472	90	90	90	83	90	90	81	83	87	88	88
	Dublin North	1064	93	93	93	90	93	93	87	90	89	92	90
	Kildare/West Wicklow	926	96	96	96	94	96	96	92	94	94	95	95
	Wicklow	471	95	95	95	84	95	95	81	85	90	93	92
	<b>HSE-E Total</b>	<b>6511</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>90</b>	<b>95</b>	<b>95</b>	<b>87</b>	<b>90</b>	<b>91</b>	<b>93</b>	<b>92</b>
Midland	Laos/Offaly	644	96	96	96	96	96	96	90	92	93	95	95
	Longford/Westmeath	516	98	98	98	98	98	98	93	95	96	97	98
	<b>HSE-M Total</b>	<b>1160</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>97</b>	<b>91</b>	<b>93</b>	<b>94</b>	<b>96</b>	<b>96</b>
Mid Western	Clare	353	95	95	95	94	95	95	91	94	92	93	94
	Limerick	461	92	92	92	87	92	92	84	87	89	90	89
	Tipperary NR/East Limerick	423	95	95	95	88	95	95	85	88	88	92	91
	<b>HSE-MW Total</b>	<b>1237</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>89</b>	<b>94</b>	<b>94</b>	<b>86</b>	<b>89</b>	<b>89</b>	<b>91</b>	<b>91</b>
North Eastern	Cavan/Monaghan	530	97	97	97	94	97	97	98	94	99	96	95
	Louth	482	95	95	95	91	95	95	96	93	96	93	93
	Meath	813	97	97	97	92	97	97	97	92	98	95	95
	<b>HSE-NE Total</b>	<b>1825</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>92</b>	<b>96</b>	<b>96</b>	<b>97</b>	<b>93</b>	<b>98</b>	<b>95</b>	<b>94</b>
North Western	Donegal	527	96	96	95	92	95	94	86	91	89	93	90
	Sligo/Leitrim	335	98	98	98	97	97	98	91	97	93	97	97
	<b>HSE-NW Total</b>	<b>862</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>94</b>	<b>96</b>	<b>96</b>	<b>88</b>	<b>93</b>	<b>90</b>	<b>94</b>	<b>93</b>
South Eastern	Carlow/Kilkenny	501	96	96	96	95	96	96	89	92	93	95	94
	South Tipperary	328	96	96	96	95	96	96	90	92	95	96	95
	Waterford	505	94	94	94	92	94	94	87	88	92	92	91
	Wexford	520	97	97	97	96	97	97	89	93	93	95	95
	<b>HSE-SE Total</b>	<b>1854</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>94</b>	<b>96</b>	<b>96</b>	<b>88</b>	<b>91</b>	<b>93</b>	<b>94</b>	<b>94</b>
Southern	North Cork	384	97	97	97	91	97	97	88	89	92	92	94
	North South Lee	1438	96	96	96	91	96	96	88	90	92	93	94
	West Cork	181	94	94	94	89	94	94	84	86	90	91	92
	Kerry	458	97	97	97	90	97	97	86	88	90	92	92
	<b>HSE-S Total</b>	<b>2461</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>91</b>	<b>96</b>	<b>96</b>	<b>88</b>	<b>89</b>	<b>92</b>	<b>93</b>	<b>94</b>
Western	Galway	936	98	98	98	96	98	98	95	na	96	na	96
	Mayo	414	97	97	97	91	97	97	91	na	97	na	95
	Roscommon	216	100	100	100	97	100	100	98	na	99	na	97
	<b>HSE-W Total</b>	<b>1566</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>95</b>	<b>98</b>	<b>98</b>	<b>94</b>	<b>na</b>	<b>97</b>	<b>na</b>	<b>96</b>
<b>Ireland</b>		<b>17476</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>92</b>	<b>96</b>	<b>96</b>	<b>89</b>	<b>91</b>	<b>93</b>	<b>93</b>	<b>93</b>

na=not available

\*The denominator/number in cohort varied slightly according to vaccine. D<sub>3</sub>, T<sub>3</sub> and P<sub>3</sub> cohorts show n 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

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