

## Summary

### Children 12 months of age in Quarter 4-2012

- National immunisation uptake rates were 91% for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> and 90% for HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub>. Compared to Q3-2012, national uptake rates in Q4-2012 for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> were unchanged while HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> decreased by 1%.
- Among the HSE Areas, the uptake rates 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> ranged from 88% to 95% and MenC<sub>2</sub> and PCV<sub>2</sub> ranged from 87% to 95%. Two HSE Areas (Midland and North Western Areas) reached the target of ≥95% for all vaccines.
- Among the Local Health Offices, the target uptake rate of ≥95% was reached in Laois/Offaly, Longford/Westmeath, Sligo/Leitrim and Roscommon for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> and in Donegal for MenC<sub>2</sub>.

### Children 24 months of age in Quarter 4-2012

- National uptake rates were 96% 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>, 93% for MMR<sub>1</sub>, 92% for PCV<sub>3</sub>, 91% for Hib<sub>b</sub> and 87% for MenC<sub>3</sub>. Six of the eight HSE Areas were able to provide uptake data on MenC<sub>b</sub> (one dose of MenC at ≥12 months of age) and PCV<sub>b</sub> (one dose of PCV at ≥12 months of age) in Quarter 4 2012. These Areas cover approximately 80% of the national birth cohort. Where data were available, national uptake was 91% for MenC<sub>b</sub> and 94% for PCV<sub>b</sub>.

Compared to the previous quarter, national uptake rates in Quarter 4 2012 for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> increased by 1% and Hib<sub>b</sub>, MenC<sub>3</sub>, MenC<sub>b</sub> and PCV<sub>3</sub> increased by 2%.

- 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 of the eight HSE Areas, for Hib<sub>b</sub> and PCV<sub>b</sub> in two HSE Areas and for MMR<sub>1</sub> and MenC<sub>b</sub> in one HSE Area. The target uptake of ≥95% was not reached in any HSE Area for MenC<sub>3</sub> or PCV<sub>3</sub>.
- The target uptake of ≥95% was reached in 27 LHOs 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>, 9 for PCV<sub>b</sub>, 8 for Hib<sub>b</sub> and MMR<sub>1</sub>, 4 for MenC<sub>b</sub>, 2 for PCV<sub>3</sub> and one for MenC<sub>3</sub>.

## Introduction

Since September 1st 2008, the childhood immunisation schedule outlined in table 1 has been implemented for children born on or after 1<sup>st</sup> July 2008.

Compared to the previous schedule (table 1), the changes to the primary schedule for children born on or after 1<sup>st</sup> 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](http://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 4-2012.

The immunisation uptake rates presented in this report for children at 12 months of age in Quarter 4-2012 are children born between 01/10/2011 and 31/12/2011 and who have received 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.

The immunisation uptake rates presented in this report for children at 24 months of age in Quarter 4-2012 are children born between 01/10/2011 and 31/12/2011 and who have received 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>), one booster dose of vaccine against *Haemophilus influenzae* type b on or after 12 months of age (Hib<sub>b</sub>), one dose of vaccine against meningococcal group C (MenC<sub>b</sub>) on or after twelve months of age, one dose of vaccine against pneumococcal conjugate vaccine (PCV<sub>b</sub>) on or after twelve months of age and one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>). The Quarter 4-2012 cohort of children at 24 months was therefore the tenth 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 4-2012 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<sup>st</sup> 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](http://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 Q4-2012 are presented by HSE Area in table 2. National uptake rates were 91% for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> and 90% for HepB<sub>3</sub>, PCV<sub>2</sub> and MenC<sub>2</sub>. Among the HSE Areas, the uptake rates 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> ranged from 88% to 95% and MenC<sub>2</sub> and PCV<sub>2</sub> ranged from 87% to 95%. Two HSE Areas (Midland and North Western Areas) reached the target of ≥95% and six HSE Areas had ≥90% uptake of these vaccines.

BCG uptake data were available for six of the eight HSE Areas in Q4-2012; these areas cover approximately 52% of the national birth cohort. Where data were available, national uptake was 80% for the BCG vaccination. This is unchanged compared to the previous quarter.

### National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q4-2012. Compared to Q3-2012, national uptake rates in Q3-2012 for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> were unchanged while HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> decreased by 1%.

In Q4-2012, compared to the previous quarter, uptake rates in the: HSE-Eastern Area decreased by 2% for all vaccines; HSE-Midland Area increased by 4% for all vaccines except BCG which increased by 1%; HSE-Mid Western Area decreased by 1% for all vaccines except PCV<sub>2</sub> which decreased by 2%; HSE-North-Eastern Area decreased by 2% for all vaccines except MenC<sub>2</sub> and PCV<sub>2</sub> which decreased by 1%; HSE-North-Western Area increased by 3% except for BCG which increased by 1%; HSE-South Eastern Area were unchanged except HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> which decreased by 1%; HSE-Southern Area decreased by 2% for all vaccines except BCG which decreased by 1%; HSE-Western increased by 1% except HepB<sub>3</sub> which increased by 2%.

### LHO uptake

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.

Among the 15 LHOs reporting BCG data, BCG uptake ranged from 93% to 98% with 12 reporting uptake of ≥95%.

D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> uptake rates ranged from 77% (Dublin North West) to 99% (Roscommon).

The target uptake rate of ≥95% was reached in Laois/Offaly, Longford/Westmeath, Sligo/Leitrim and Roscommon for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> and in Donegal for MenC<sub>2</sub>.

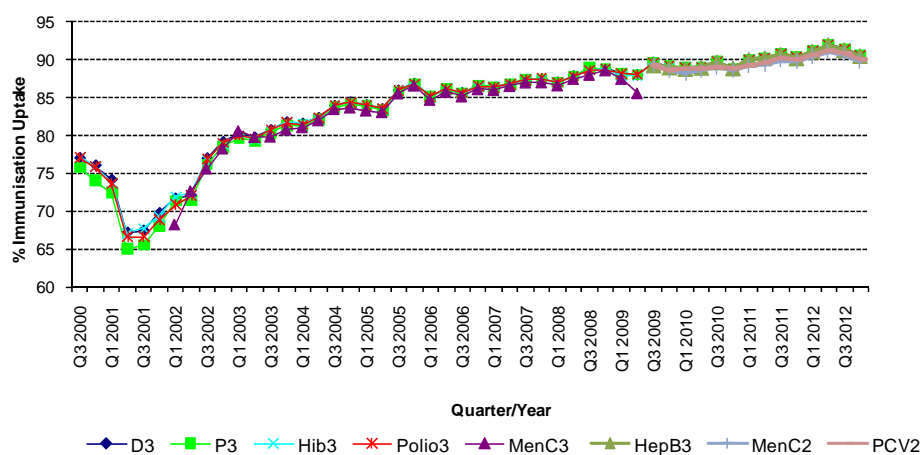
Nineteen LHOs had ≥90% uptake of D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub>.

**Table 2.** Immunisation uptake (%) at 12 months in cohort born 01/10/2011–31/12/2011

HSE Area	No. in cohort*	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	6976	na	88	88	88	88	88	88	88
Midland	1124	96	95	95	95	95	95	95	95
Mid Western	1446	97	93	93	93	93	93	92	92
North Eastern	1911	na	91	91	91	91	91	90	90
North Western	927	96	95	95	95	95	95	95	95
South Eastern	1850	96	93	93	93	93	92	92	92
Southern	2515	94	90	90	90	90	89	87	87
Western	1659	5	92	92	92	92	92	91	92
Ireland	18408	80	91	91	91	91	90	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 9,534

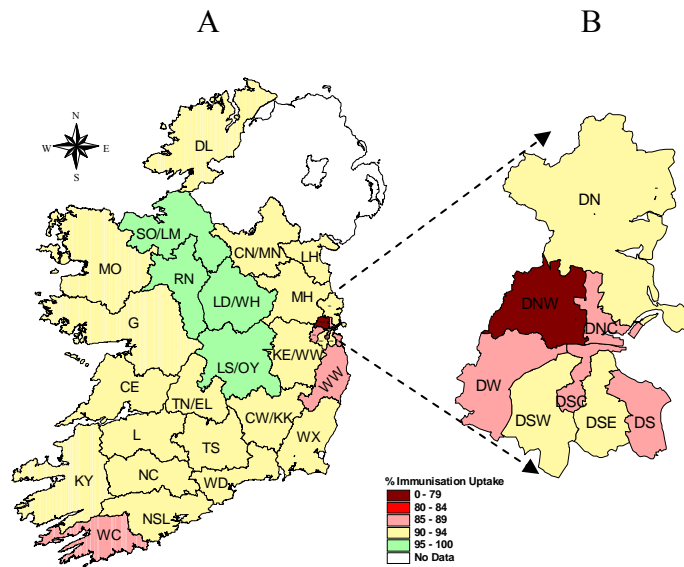


**Figure 1.** National quarterly immunisation uptake rates at 12 months

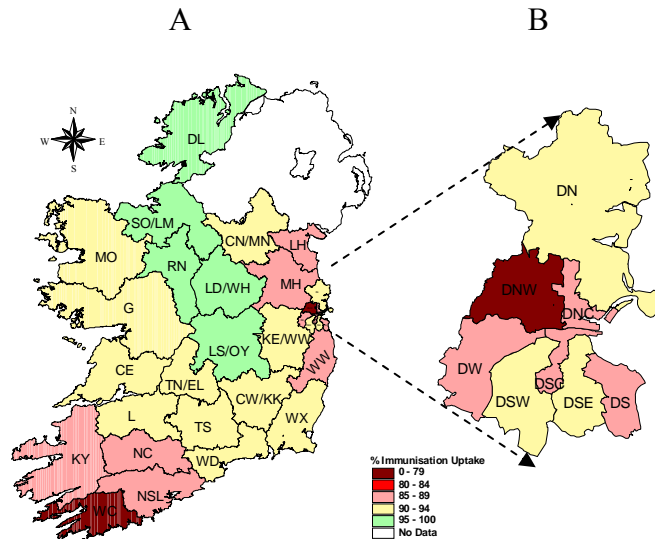
Since T<sub>3</sub> uptake identical to D<sub>3</sub> uptake only D<sub>3</sub> uptake figures presented. The Q3-2008 MenC<sub>3</sub> uptake figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</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.

### Internationally

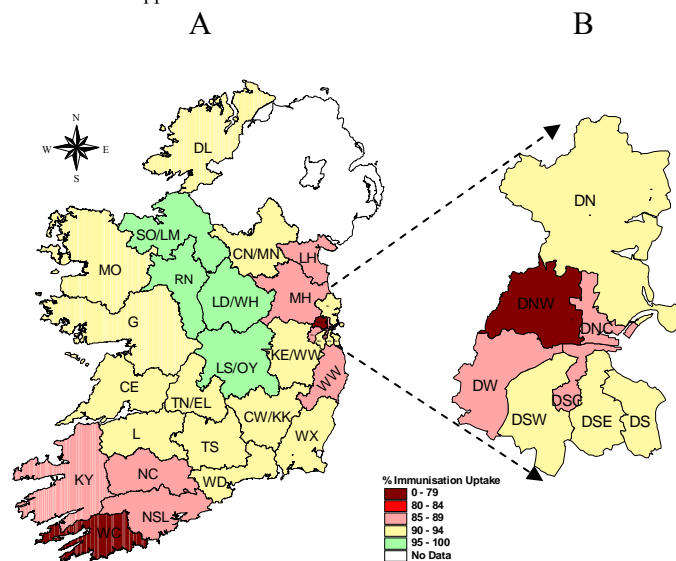
Vaccination coverage statistics for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> for children 12 months of age in Quarter 4-2012 were 94.7% in England, 96.5% in Wales, 97.4% in Northern Ireland and 97.4% in Scotland.<sup>1</sup> MenC<sub>2</sub> uptake was 94.0% in England, 96.2% in Wales, 97.3% in Northern Ireland and 97.6% in Scotland.<sup>1</sup> PCV<sub>2</sub> uptake was 94.5% in England, 96.1% in Wales, 97.4% in Northern Ireland and 97.7% in Scotland.<sup>1</sup>



**Figure 2.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 4-2012, 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 4-2012, 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 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

# Immunisation uptake at 24 months

## National and HSE Area uptake

Immunisation uptake rates in children 24 months of age in Q4-2012 are presented (Table 3). National uptake rates were 96% 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>, 93% for MMR<sub>1</sub>, 92% for PCV<sub>3</sub>, 91% for Hib<sub>b</sub> and 87% for MenC<sub>3</sub>. Among the HSE Areas the uptake of 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> ranged from 94-98%, MMR<sub>1</sub> ranged from 91-97%, PCV<sub>3</sub> ranged from 90-94%, Hib<sub>b</sub> ranged from 86-98% and MenC<sub>3</sub> ranged from 83-92%. 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 of the eight HSE Areas, for Hib<sub>b</sub> in two HSE Areas and for MMR<sub>1</sub> in one HSE Area. Six of the eight HSE Areas were able to provide uptake data on MenC<sub>b</sub> (one dose of MenC at ≥12 months of age) and PCV<sub>b</sub> (one dose of PCV at ≥12 months of age) in Quarter 4 2012. These Areas cover approximately 80% of the national birth cohort. Where data were available, national uptake was 91% for MenC<sub>b</sub> and 94% for PCV<sub>b</sub>. The target uptake of ≥95% was reached for PCV<sub>b</sub> in two HSE Areas and for one HSE Area for MenC<sub>b</sub>.

## Trends

Figure 5 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q4-2012. Compared to the previous quarter, national uptake rates in Q4 increased by 2% for Hib<sub>b</sub>, MenC<sub>3</sub>, MenC<sub>b</sub> and PCV<sub>3</sub> and by 1% for the remaining vaccines.

In Q4-2012, compared to the previous quarter, uptake rates in the: HSE-Eastern Area increased by 4% for MenC<sub>3</sub>, 3% for Hib<sub>b</sub> and MenC<sub>b</sub> and 2% for PCV<sub>3</sub> and MMR<sub>1</sub> and 1% for the remainder of vaccines; HSE-Midland Area increased by 4% for PCV<sub>b</sub> and MMR<sub>1</sub>, by 2% for MenC<sub>b</sub>, by 1% for PCV<sub>3</sub> and by 3% for the remainder; HSE-Mid Western Area increased by 4% for Hib<sub>b</sub> and MenC<sub>3</sub>, increased by 3% for MenC<sub>b</sub>, by 1% for PCV<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> and was unchanged for the remainder; HSE-North-Eastern Area decreased by 1% for all vaccines except for PCV<sub>3</sub> which increased by 1% and Hib<sub>b</sub> and MMR<sub>1</sub> which were unchanged; HSE-North-Western Area decreased by 1% for all vaccines except PCV<sub>3</sub> and MMR<sub>1</sub> which increased by 1% and MenC<sub>3</sub> which was unchanged; HSE-South Eastern Area decreased by 1% except for Hib<sub>b</sub> and MenC<sub>b</sub> which increased by 1% and MenC<sub>3</sub> and PCV<sub>b</sub> which were unchanged; HSE-Southern Area which increased by 1% for most vaccines except MenC<sub>b</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> which were unchanged; HSE-Western were unchanged except PCV<sub>3</sub> which increased by 3% and MMR<sub>1</sub> which increased by 2%.

## LHO uptake

Immunisation uptake rates in children 24 months of age in Q4-2012 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.

Among the LHOs, uptake of D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Polio<sub>3</sub> and Hib<sub>3</sub> ranged from 91-99%, HepB<sub>3</sub> ranged from 89-98%, MMR<sub>1</sub> ranged from 88-98%, PCV<sub>b</sub> ranged from 88-99%, PCV<sub>3</sub> ranged from 85-99%, MenC<sub>b</sub> ranged from 79-96%, MenC<sub>3</sub> ranged from 78-97% and Hib<sub>b</sub> ranged from 77-98%.

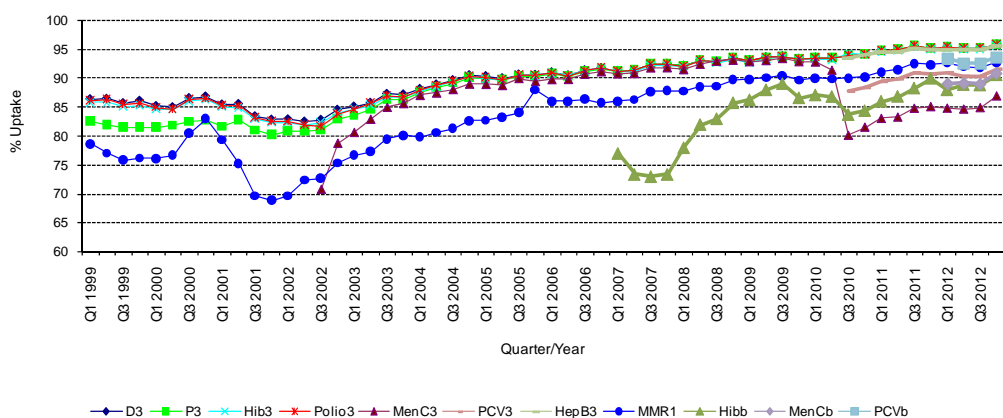
The target uptake of ≥95% was reached in 27 LHOs for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub>, 9 for PCV<sub>b</sub>, 8 for Hib<sub>b</sub> and MMR<sub>1</sub>, 4 for MenC<sub>b</sub>, 2 for PCV<sub>3</sub> and in one for MenC<sub>3</sub>.

All thirty-one LHOs had ≥90% uptake of D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 30 had ≥90% uptake of HepB<sub>3</sub>, 28 had ≥90% uptake of MMR<sub>1</sub>, 25 had ≥90% of PCV<sub>3</sub>, 23 had ≥90% uptake of PCV<sub>b</sub>, 19 had ≥90% of Hib<sub>b</sub> and MenC<sub>b</sub> and ten had ≥90% uptake of MenC<sub>3</sub>.

**Table 3.** Immunisation uptake (%) at 24 months in cohort born 01/10/2010–31/12/2010

HSE Area	No. in Cohort*	D <sub>3</sub> /T <sub>3</sub> /P <sub>3</sub> /Polio <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>b</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	7017	95	95	90	95	87	90	91	93	93
Midland	1238	98	98	98	98	92	95	94	97	97
Mid Western	1508	96	96	93	96	89	92	92	94	93
North Eastern	2038	94	94	86	94	83	na	91	na	91
North Western	935	96	96	92	95	86	93	90	94	93
South Eastern	2030	96	96	95	96	90	94	93	95	94
Southern	2643	97	96	86	95	87	89	92	93	93
Western	1721	96	96	92	96	83	na	92	na	92
<b>Ireland</b>	<b>19130</b>	<b>96</b>	<b>96</b>	<b>91</b>	<b>96</b>	<b>87</b>	<b>91</b>	<b>92</b>	<b>94</b>	<b>93</b>

\* 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 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.

## Internationally

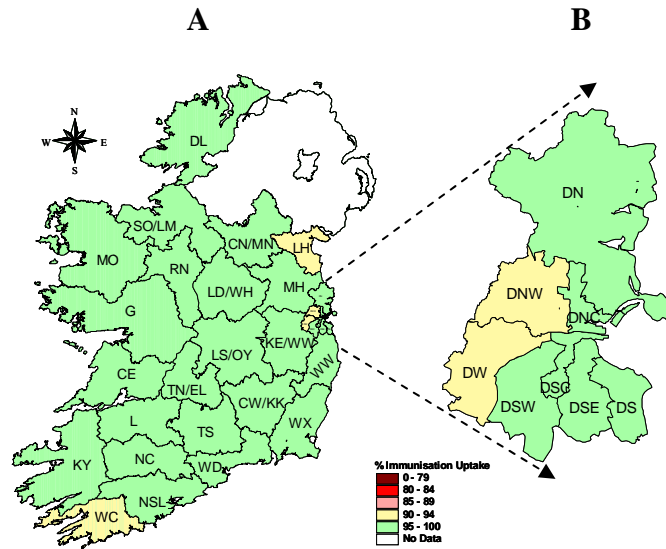
In Q4-2012, vaccination coverage statistics at 24 months for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> were 96.4% in England, 97.7% in Wales, 98.7% in Northern Ireland and 98.3% in Scotland.<sup>1</sup> MenC<sub>2</sub> uptake was 95.6% in England, 96.8% in Wales, 97.2% in Northern Ireland and 96.5% in Scotland.<sup>1</sup> PCV booster was 92.8% in England, 94.9% in Wales, 96.4% in Northern Ireland and 95.7% in Scotland. Hib/MenC booster was 92.8% in England, 94.1% in Wales, 96.5% in Northern Ireland and 96.0% in Scotland.<sup>1</sup> MMR<sub>1</sub> uptake was 92.4% in England, 94.3% in Wales, 95.9% in Northern Ireland and 95.4% in Scotland.<sup>1</sup> Please see HPA report for caveats.<sup>1</sup>

## Conclusions

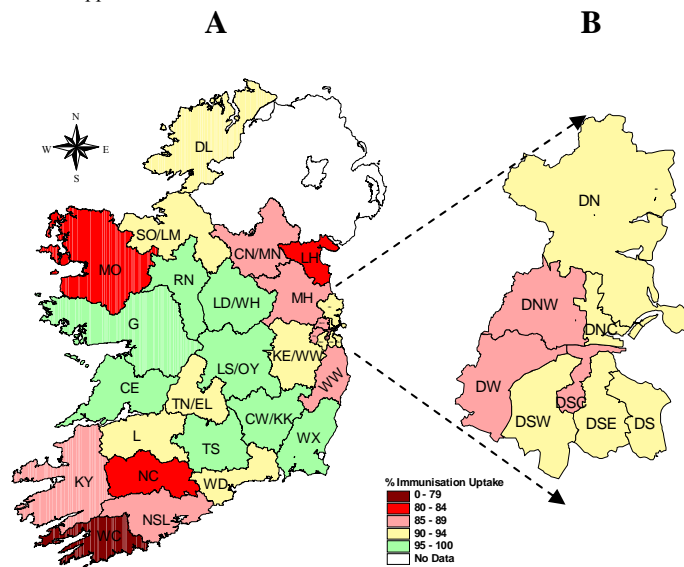
In Quarter 4-2012, national uptake rates at 24 months for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> exceeded the target of ≥95%. Since the introduction of the new childhood schedule in September 2008 MenC<sub>3</sub> and Hib<sub>b</sub> uptake 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 at this age.

## Acknowledgements

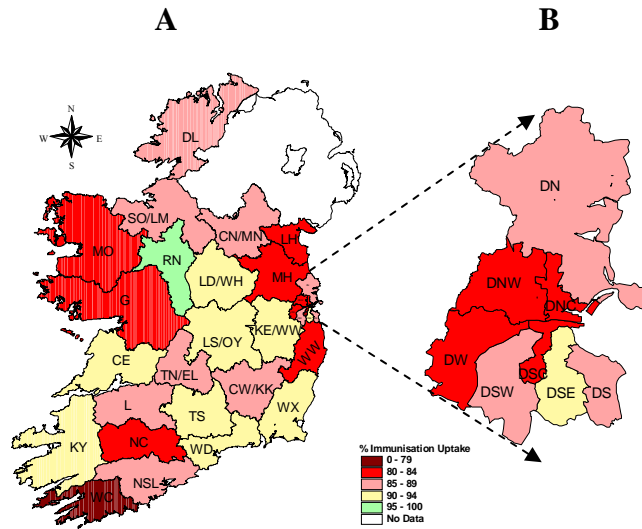
HPSC would like to thank the HSE Areas for providing data and special thanks to the Specialists in Public Health Medicine, Immunisation Co-ordinators, Surveillance Scientists and Systems Analysts for their assistance.



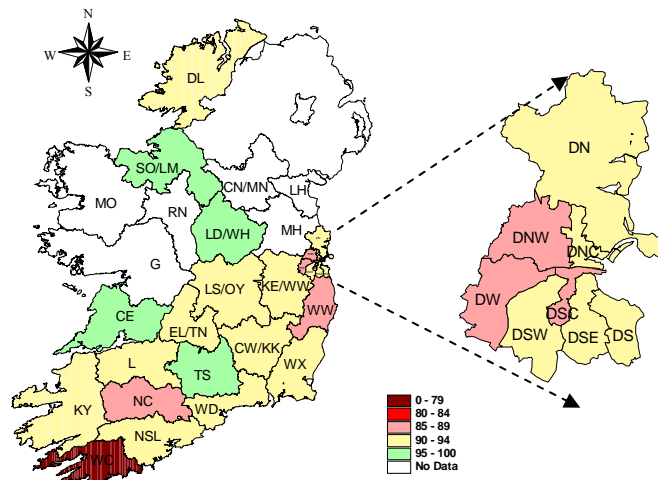
**Figure 6.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



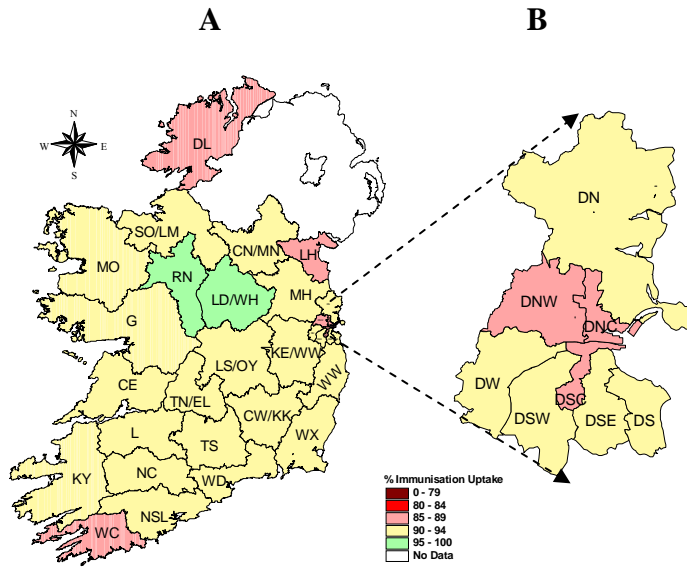
**Figure 7.** Hib<sub>6</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



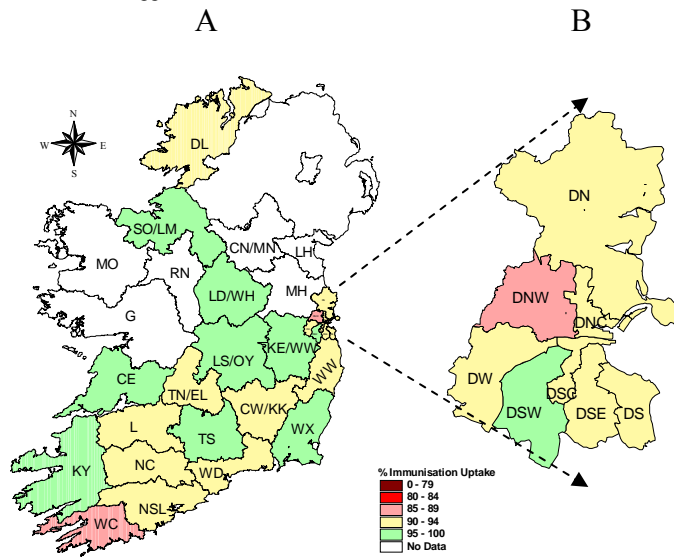
**Figure 8.** MenC<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 9.** MenC<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

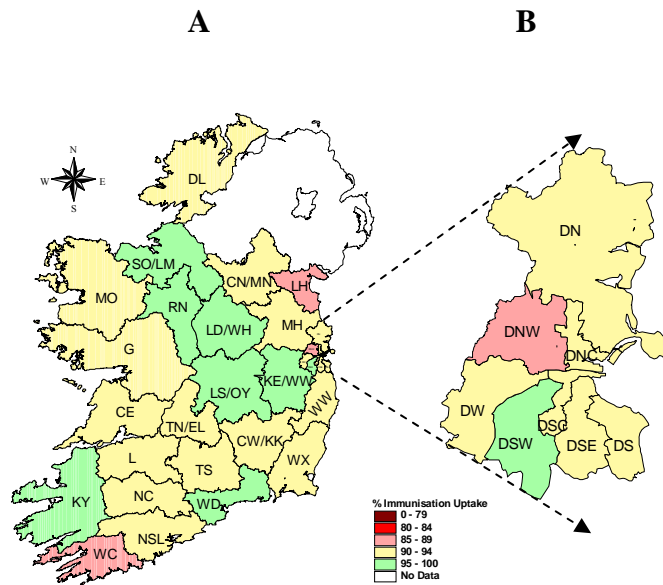


**Figure 10.** PCV<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 11.** PCV<sub>6</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4-2012, 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 4-2012, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Appendix 1

Immunisation Uptake at 12 Months in Cohort Born 01/10/2011-31/12/2011											
HSE Area	LHO/HSE Area	No. in cohort for BCG	No. in cohort for other vaccines*	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	na	439	na	89	89	89	89	89	89	90
	Dublin South East	na	439	na	90	90	90	90	90	90	91
	Dublin South City	na	482	na	88	88	88	88	88	88	88
	Dublin South West	na	717	na	94	94	94	94	94	93	94
	Dublin West	na	781	na	88	88	88	88	88	88	88
	Dublin North West	na	1003	na	77	77	77	77	77	77	77
	Dublin North Central	na	531	na	85	85	85	85	85	85	85
	Dublin North	na	1125	na	91	91	91	91	91	90	91
	Kildare/West Wicklow	na	979	na	92	92	92	92	92	92	92
	Wicklow	na	480	na	89	89	89	89	89	88	89
<b>HSE-E Total</b>	<b>na</b>	<b>6976</b>	<b>na</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	
Midland	Laois/Offaly	642	642	96	95	95	95	95	95	95	95
	Longford/Westmeath	482	482	96	96	96	96	96	96	96	96
	<b>HSE-M Total</b>	<b>1124</b>	<b>1124</b>	<b>96</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>
Mid Western	Clare	434	444	97	93	93	93	93	93	93	93
	Limerick	499	508	98	92	92	92	92	92	91	91
	Tipperary NR/East Limerick	490	494	98	93	93	93	93	93	93	93
	<b>HSE-MW Total</b>	<b>1423</b>	<b>1446</b>	<b>97</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>92</b>	<b>92</b>
North Eastern	Cavan/Monaghan	na	497	na	94	94	94	94	94	93	93
	Louth	na	468	na	91	91	91	91	91	89	89
	Meath	na	946	na	90	90	90	90	90	89	89
	<b>HSE-NE Total</b>	<b>na</b>	<b>1911</b>	<b>na</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>90</b>	<b>90</b>
North Western	Donegal	556	556	96	94	94	94	94	94	95	94
	Sligo/Leitrim	371	371	96	97	97	97	97	97	95	96
	<b>HSE-NW Total</b>	<b>927</b>	<b>927</b>	<b>96</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>
South Eastern	Carlow/Kilkenny	520	520	97	91	91	91	91	91	91	91
	South Tipperary	313	313	97	93	93	93	93	93	93	93
	Waterford	481	481	94	93	93	93	93	93	93	92
	Wexford	536	536	97	93	93	93	93	93	93	93
	<b>HSE-SE Total</b>	<b>1850</b>	<b>1850</b>	<b>96</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>92</b>	<b>92</b>
Southern	North Cork	375	367	93	90	90	90	90	90	89	89
	North South Lee	1493	1469	95	90	90	89	90	89	86	87
	West Cork	190	193	96	85	85	85	85	85	78	78
	Kerry	493	486	93	92	92	92	92	91	89	88
	<b>HSE-S Total</b>	<b>2551</b>	<b>2515</b>	<b>94</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>89</b>	<b>87</b>	<b>87</b>
Western	Galway	na	999	na	90	90	90	91	90	90	90
	Mayo	na	439	na	92	92	92	92	92	91	92
	Roscommon	na	221	na	99	99	99	99	99	99	99
	<b>HSE-W Total</b>	<b>1659</b>	<b>1659</b>	<b>5</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>91</b>	<b>92</b>
<b>Ireland</b>	<b>9534</b>	<b>18408</b>	<b>80</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>90</b>	<b>90</b>	<b>90</b>	

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 tw o separate LHOs their combined immunisation uptake data are reported here.

## Appendix 2

Immunisation uptake (%) at 24 months of age in cohort born 01/10/2010-31/12/2010													
HSE Area	LHO/HSE Area	No. in cohort*	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	436	95	95	95	91	95	95	89	90	90	91	92
	Dublin South East	452	95	95	95	93	95	95	92	93	93	94	94
	Dublin South City	436	97	97	97	87	97	97	84	87	89	92	92
	Dublin South West	660	99	99	99	93	99	98	89	92	93	96	95
	Dublin West	729	94	94	94	89	94	94	84	89	91	94	93
	Dublin North West	1050	93	93	93	85	93	93	82	85	87	88	88
	Dublin North Central	469	96	96	96	90	96	96	84	90	88	93	92
	Dublin North	1115	95	95	95	90	95	95	88	90	92	93	93
	Kildare/West Wicklow	1143	97	97	97	94	97	97	90	93	93	96	95
	Wicklow	527	95	95	95	86	95	95	83	86	91	93	92
<b>HSE-E Total</b>		<b>7017</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>93</b>
Midland	Laois/Offaly	690	98	98	98	98	98	98	91	94	93	96	96
	Longford/Westmeath	548	98	98	98	98	98	98	94	95	96	99	97
	<b>HSE-M Total</b>	<b>1238</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>92</b>	<b>95</b>	<b>94</b>	<b>97</b>	<b>97</b>
Mid Western	Clare	437	96	96	96	96	96	96	92	96	94	95	94
	Limerick	513	95	95	95	93	95	95	89	92	92	93	92
	Tipperary NR/East Limeric	558	96	96	96	91	96	96	87	90	91	94	92
	<b>HSE-MW Total</b>	<b>1508</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>93</b>	<b>96</b>	<b>96</b>	<b>89</b>	<b>92</b>	<b>92</b>	<b>94</b>	<b>93</b>
North Eastern	Cavan/Monaghan	547	96	96	96	88	96	96	86	na	93	na	93
	Louth	546	92	92	92	83	92	92	80	na	88	na	88
	Meath	945	95	95	95	86	95	95	83	na	91	na	92
	<b>HSE-NE Total</b>	<b>2038</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>86</b>	<b>94</b>	<b>94</b>	<b>83</b>	<b>na</b>	<b>91</b>	<b>na</b>	<b>91</b>
North Western	Donegal	601	96	96	96	91	96	95	86	92	89	94	91
	Sligo/Leitrim	334	96	96	95	94	96	95	87	96	91	95	96
	<b>HSE-NW Total</b>	<b>935</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>92</b>	<b>96</b>	<b>95</b>	<b>86</b>	<b>93</b>	<b>90</b>	<b>94</b>	<b>93</b>
South Eastern	Carlow/Kilkenny	578	97	97	97	95	97	97	89	93	92	94	93
	South Tipperary	340	97	97	97	97	97	97	91	96	94	96	94
	Waterford	540	96	96	95	93	96	96	91	93	94	94	95
	Wexford	572	96	96	96	97	96	96	91	94	92	95	93
	<b>HSE-SE Total</b>	<b>2030</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>95</b>	<b>96</b>	<b>96</b>	<b>90</b>	<b>94</b>	<b>93</b>	<b>95</b>	<b>94</b>
Southern	North Cork	420	98	98	97	84	98	96	84	87	90	92	92
	North South Lee	1521	97	97	96	87	97	95	88	90	93	93	94
	West Cork	213	91	91	91	77	91	89	78	79	85	88	88
	Kerry	489	98	98	98	88	98	96	90	90	94	96	95
	<b>HSE-S Total</b>	<b>2643</b>	<b>97</b>	<b>97</b>	<b>96</b>	<b>86</b>	<b>97</b>	<b>95</b>	<b>87</b>	<b>89</b>	<b>92</b>	<b>93</b>	<b>93</b>
Western	Galway	1004	95	95	95	95	95	95	80	na	90	na	91
	Mayo	462	97	97	97	84	97	97	83	na	91	na	91
	Roscommon	255	99	99	98	98	99	98	97	na	99	na	98
	<b>HSE-W Total</b>	<b>1721</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>92</b>	<b>96</b>	<b>96</b>	<b>83</b>	<b>na</b>	<b>92</b>	<b>na</b>	<b>92</b>
<b>Ireland</b>		<b>19130</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>91</b>	<b>96</b>	<b>96</b>	<b>87</b>	<b>91</b>	<b>92</b>	<b>94</b>	<b>93</b>

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