

# Background

The national immunisation uptake statistics, based on available data, for Quarter 2 2015 are presented in this report. These immunisation uptake statistics relate to children at 12 (born between 01/04/2014 and 30/06/2014) and 24 (born between 01/04/2013 and 30/06/2013) months of age in Quarter 2-2015. 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 2 2015, immunisation uptake rates of three doses of vaccines against diphtheria  $(D_3)$ , pertussis  $(P_3)$ , tetanus  $(T_3)$ , *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 2 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 <a href="http://www.hse.ie/eng/health/immunisation/">http://www.hse.ie/eng/health/immunisation/</a> 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

DTaPDiphtheria, Tetanus and acellular Pertussis vaccineHepBHepatitis B vaccineHibHaemophilus influenzae type b vaccineIPVInactivated Polio Virus vaccineMenCMeningococcal group C vaccineMMRMeasles, Mumps and Rubella vaccinePCVPneumococcal Conjugate Vaccine

#### **Immunisation uptake among children at 12 months of age in Quarter 2-2015** National

ational

Immunisation uptake rates in children 12 months of age in Q2-2015 are presented by HSE Area in table 2.

National immunisation uptake rates were 92% for  $D_3$ ,  $T_3$ ,  $P_3$ , Hib<sub>3</sub> and Polio and 91% for HepB<sub>3</sub>, PCV<sub>2</sub> and MenC<sub>2</sub>.

BCG uptake data were available for 28 LHOs in Q2-2015; these areas cover approximately 90% of the national birth cohort. Where data were available, national uptake was 88% for the BCG vaccination.

• Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q2-2015. Compared to Q1-2015, national uptake rates in Q2-2015 for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> increased by 1% while HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> were unchanged.

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 90-95% and MenC<sub>2</sub> and PCV<sub>2</sub> ranged from 87% to 95%.
  - The HSE Midland Area reached the target of  $\geq$ 95% for all vaccines.

#### Local Health Office (LHO)

- The immunisation uptake rates by LHO are shown in appendix 1.
- $D_3$ , 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  $\geq$ 95% was reached in 8 LHOs for BCG, 4 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Polio<sub>3</sub> and PCV<sub>2</sub> and in 3 LHOs for Hib<sub>3</sub>, HepB<sub>3</sub> and MenC<sub>2</sub>.

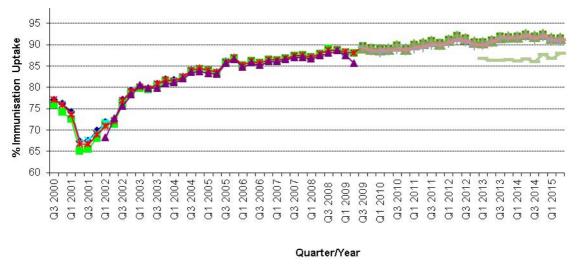
Table 2. Immunisation uptake (%) at 12 months in cohort born 01/04/2014-30/06/2014

HSE Area	No. in cohort*	BCG <sup>↑</sup>	$D_3T_3$	<b>P</b> <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>
Eastern	6193	93	90	90	90	90	90	89	90
Midland	1170	95	95	95	95	95	95	95	95
Mid Western	1208	93	92	92	92	92	92	92	92
North Eastern	1666	na	92	92	92	92	92	92	92
North Western	823	94	93	93	93	93	92	91	93
South Eastern	1779	95	93	93	93	93	93	92	92
Southern	2318	92	90	90	90	90	90	87	87
Western	1557	39	94	94	94	94	94	94	94
Ireland	16714	88	92	92	92	92	91	91	91

na = not available at this time

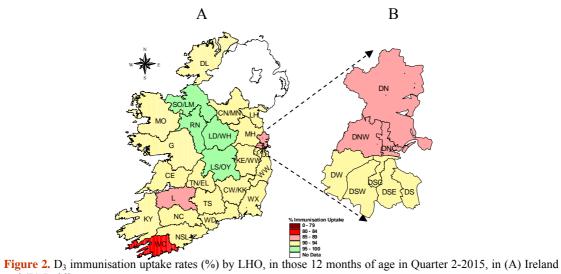
\* The denominator/number in cohort varied slightly according to vaccine. D3, T3 and P3 cohorts are shown here.

†Number in cohort for BCG is 15,063



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

Since T<sub>3</sub> uptake is identical to D<sub>2</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. The Q1-2010 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. The Q1-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q1-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q1-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q3-2009 figures are incomplete as two HSE Areas were unable to provide data. The Q3-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q3-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q3-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q3-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q3-2010 figures are incomplete as two HSE Areas in Q3 2003 to Q2 2009 (except Q3 2004 when HSE-Southern Area data were not available for only five of the eight HSE-Areas in Q3 2009, for two HSE-Areas in Q3 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 Q3 2014 met Secur



and (B) Dublin. Please see Appendix 3 to translate LHO codes.

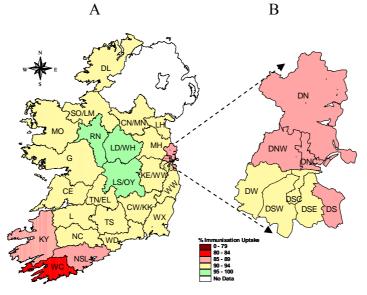


Figure 3. MenC<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

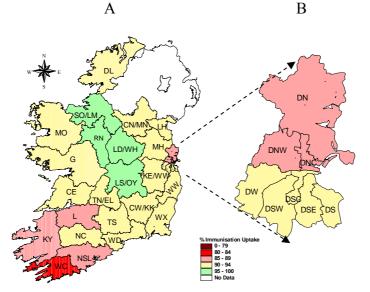


Figure 4. PCV<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

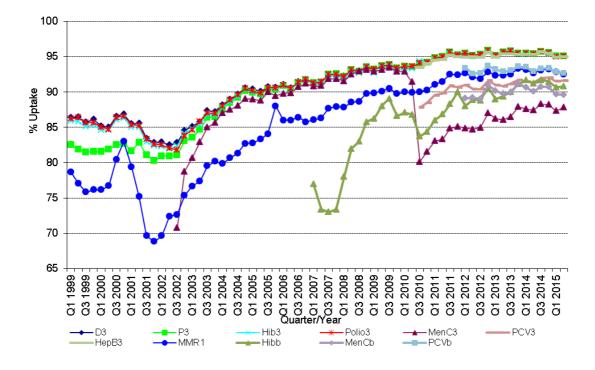
### **Immunisation uptake among children 24 months of age in Quarter 2-2015** National

- National uptake rates were 95% 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>, 92% for PCV<sub>3</sub>, 91% for Hib<sub>b</sub> and 88% for MenC<sub>3</sub> (table 3). Compared to the previous quarter, national uptake rates in Q2-2015 increased by one per cent for MenC<sub>3</sub> and were unchanged for the remainder (figure 5).
- In total, seven of the eight HSE Areas were able to provide uptake data on  $MenC_b$  and  $PCV_b$  in Q2-2015. These Areas cover approximately 91% of the national birth cohort. Where data were available, national uptake was 90% for  $MenC_b$  and 93% for  $PCV_b$ . Compared to the previous quarter  $MenC_b$  and  $PCV_b$  uptake were unchanged (figure 5).
- Figure 5 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q2-2015. 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 six HSE Areas, for Hib<sub>b</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> in two HSE Areas, for MenC<sub>3</sub> and PCV<sub>b</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 Q2-2015 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 20 LHOs for HepB<sub>3</sub>, 19 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 8 for MMR<sub>1</sub> and PCV<sub>b</sub>, 7 for Hib<sub>b</sub>, 6 for PCV<sub>3</sub>, in two for MenC<sub>3</sub> and one for MenC<sub>b</sub>.

HSE Area	No. in	$D_{3}/T_{3}/$	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>	<b>PCV</b> <sub>b</sub>	MMR <sub>1</sub>
	Cohort*	<b>P</b> <sub>3</sub>									
Eastern	6365	94	94	94	94	88	86	88	90	92	91
Midland	1028	98	98	98	98	98	92	94	95	97	96
Mid-Western	1315	94	94	94	94	91	89	91	90	92	92
North Eastern	1774	96	96	96	96	91	88	91	92	94	93
North Western	840	97	97	96	97	91	86	91	90	94	93
South Eastern	1779	96	96	96	96	94	89	91	93	94	94
Southern	2381	95	95	95	95	90	87	88	91	92	92
Western	1432	97	97	97	97	95	95	na	97	na	95
Ireland	16914	95	95	95	95	91	88	90	92	93	93

 Table 3. Immunisation uptake (%) at 24 months in cohort born 01/04/2013–30/06/2013

\* As the denominator/number in cohort varied slightly according to vaccine D3, T3 and P3 cohorts are shown here



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

**Determine 19**. *Nutrition and quartering immunication in place Pares* at 24 months. **Notes**: The Q4-2005 MMR (figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR, 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 MeC<sub>3</sub> figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area Hib<sub>b</sub> uptake figures exclude uptake figures born on the 31/03/2007. The Q3-2009 HSE-Eastern Area Hib<sub>b</sub> uptake figures exclude uptake figures from Dublin North. The Q4-2009 HiBE-Eastern Area Hib<sub>b</sub> uptake figures are based on data from six of the eight HSE Areas. The Q1-2009 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North. The Q4-2009 HiBE-Eastern Area Hib<sub>b</sub> uptake figures are based on data from six of the eight HSE Areas. The Q1-2009 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North. The Q4-2009 Hib<sub>b</sub> areas are based on data from six of the eight HSE Areas. The Q4-2001 and Q4-2010 figures are based on data from seven of the eight HSE Areas. The MenC<sub>b</sub> and PCV<sub>b</sub>

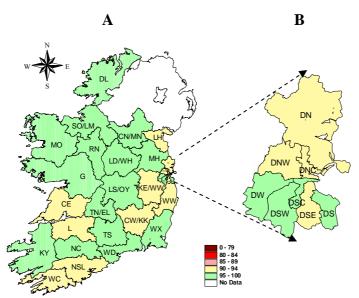
### Conclusions

In Quarter 2-2015, 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 at 24 months in Q2-2015 increased by one per cent for MenC<sub>3</sub> and were unchanged for the remainder.

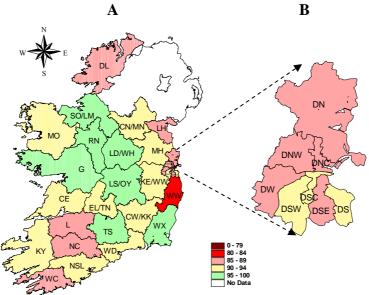
 $MenC_b$  and to a lesser extent  $Hib_b$  uptake are lower than the uptake of the other recommended vaccines both of which should be given at 13 months of age suggesting that parents are less likely to get the necessary vaccines for their children at this age.

#### Acknowledgements

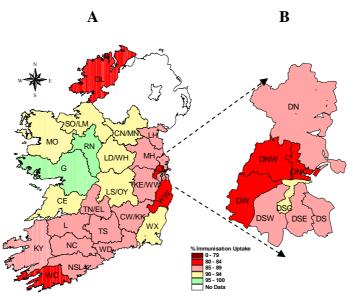
HPSC would like to thank the HSE Areas for providing data and special thanks to the Immunisation Co-ordinators, Specialists in Public Health Medicine, Surveillance Scientists and Systems Analysts for their assistance.



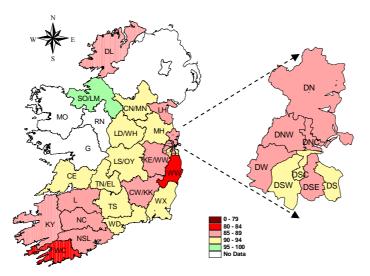
**Figure 6.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



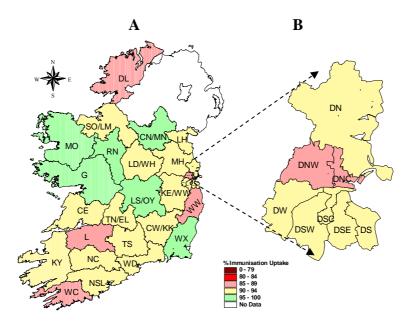
**Figure 7.** Hib<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



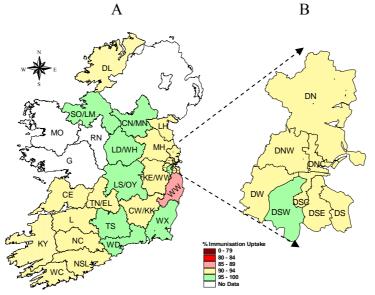
**Figure 8.** MenC<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



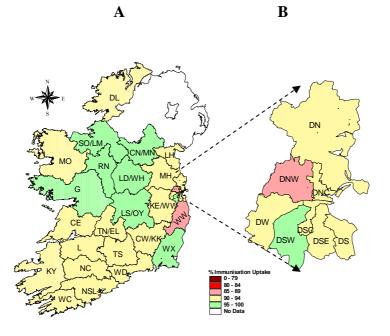
**Figure 9.** MenC<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 10.** PCV<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2015, 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 2-2015, 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 2-2015, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

# Appendix 1

Eastern Dubli Dubli Dubli Dubli Dubli Midland HSEI Midland Lagi HSEI Midland HSEI North Cava North Cava HSEI North Cava HSEI	nerick perary NR/East Limerick E-MW Total	No. in cohort for BCG 400 388 414 616 614 892 471 1008 943 447 6193 647 513 1170 335 409 448 1192	No. in cohort           for D <sub>3</sub> , T <sub>3 &amp;</sub> P <sub>3</sub> *           400           388           414           616           614           892           471           1008           943           447           6193           657           513           1170           335           443           430	BCG 94 94 93 96 93 93 91 92 93 95 95 95 95 95	D <sub>3</sub> T <sub>3</sub> 92 91 91 90 92 88 85 88 85 88 91 91 91 91 91 90 95 95	Imm P <sub>3</sub> 92 91 91 90 92 88 85 89 91 91 91 90 95 96 95 95	Hib3           92           91           92           93           94           95           96           95           96           95	Polio <sub>3</sub> 92 91 91 91 90 92 88 85 88 91 91 91 90 90 95 95	HepB <sub>3</sub> 92           91           92           93           94           95           96	MenC <sub>2</sub> 89 91 90 90 92 88 85 88 85 89 91 90 89 89 91 90 89 95 96	PCV2 92 91 90 93 89 85 89 91 90 90 90
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Eastern Dubli Dubli Dubli Dubli Kilda Wick HSE-I Widland Laois Usetern Tippe HSE-I North Cava HSE-I North Lout HSE-I North Sigo	blin South City blin South West blin West blin North West blin North Central blin North Central blin North dare/West Wicklow E-E Total bis/Offaly ngford/Westmeath E-M Total nerick perary NR/East Limerick E-MW Total	414 616 614 892 471 1008 943 447 <b>6193</b> 657 513 <b>1170</b> 335 409 448	414 616 614 892 471 1008 943 447 <b>6193</b> 657 513 1170 335 443	93 96 93 91 92 93 96 90 93 93 95 95 95 95	91 90 92 88 85 89 91 91 90 90 95 96 95	91 90 92 88 85 89 91 91 91 90 90 95 96	91 90 92 88 85 89 91 91 90 90 95 96	91 90 92 88 85 89 91 91 90 90 95 96	91 90 92 88 85 89 91 91 91 <b>90</b> 95	90 90 92 88 85 89 91 90 <b>89</b> 90 <b>89</b>	91 90 93 89 85 89 91 90 90 90
Eastern Dubli Dubli Dubli Dubli Kilda Wick HSE-I Widland Long HSE-I Mid Long HSE-I HSE-I Long HSE-I	blin South West blin North West blin North West blin North Central blin North Central blin North dare/West Wicklow cklow E-E Total bis/Offaly ngford/Westmeath E-M Total are nerick perary NR/East Limerick E-MW Total	616 614 892 471 1008 943 447 <b>6193</b> 657 513 <b>1170</b> 335 409 448	616 614 892 471 1008 943 447 6193 657 513 1170 335 443	96 93 91 92 93 96 90 <b>93</b> 95 95 95 95 92 95	90 92 88 85 89 91 91 91 90 90 95 96 95	90 92 88 85 91 91 91 <b>90</b> 95 96	90 92 88 85 91 91 91 <b>90</b> 95 96	90 92 88 85 91 91 91 95 96	90 92 88 85 89 91 91 <b>90</b> 95	90 92 88 85 89 91 90 <b>89</b> 90 89	90 93 89 85 89 91 90 90 90
Eastern Dubli Dubli Dubli Kilda Wick HSE-I Midland Long HSE-I Midland Lime Vestern Tippo HSE-I North Cava Loutt HSE-I North Done North Done	blin West blin North West blin North Central blin North dare/West Wicklow cklow EE Total bis/Offaly ngford/Westmeath E-M Total are nerick perary NR/East Limerick E-MW Total	614 892 471 1008 943 447 6193 657 513 1170 335 409 448	614 892 471 1008 943 447 6193 657 513 1170 335 443	93 91 92 93 96 90 <b>93</b> 95 95 <b>95</b> 92 95	92 88 85 89 91 91 90 90 95 96 95 96	92 88 85 91 91 <b>90</b> 95 96	92 88 85 91 91 91 <b>90</b> 95 96	92 88 85 91 91 <b>90</b> 95 96	92 88 85 89 91 91 <b>90</b> 95	92 88 85 89 91 90 <b>89</b> 89	93 89 85 89 91 90 90 90
Eastern Dubli Dubli Dubli Kilda Wick HSE-I Midland Long HSE-I Mid Long HSE-I HSE-I	blin North West blin North Central blin North dare/West Wicklow cklow E-E Total bis/Offaly ngford/Westmeath E-M Total are nerick perary NR/East Limerick E-MW Total	892 471 1008 943 447 <b>6193</b> 657 513 1170 335 409 448	892 471 1008 943 447 <b>6193</b> 657 513 <b>1170</b> 335 443	91 92 93 96 90 <b>93</b> 95 95 95 95 92 95	88 85 89 91 91 <b>90</b> 95 96 <b>95</b> 96 <b>95</b>	88 85 89 91 91 <b>90</b> 95 96	88 85 89 91 91 <b>90</b> 95 96	88 85 89 91 91 <b>90</b> 95 96	88 85 89 91 91 <b>91</b> <b>90</b> 95	88 85 89 91 90 <b>89</b> 95	89 85 89 91 90 <b>90</b> <b>90</b>
Midland Laois Midland Laois Western Tippe HSEI North Cava Lout HSEI North Meat HSEI	blin North Central blin North dare/West Wicklow cklow E-E Total bis/Offaly ngford/Westmeath E-M Total are nerick perary NR/East Limerick E-MW Total	471 1008 943 447 <b>6193</b> 657 513 <b>1170</b> 335 409 448	471 1008 943 447 <b>6193</b> 657 513 1170 335 443	92 93 96 90 <b>93</b> 95 95 95 95 92 95	85 89 91 91 <b>90</b> 95 96 <b>95</b> 96	85 89 91 91 <b>90</b> 95 96	85 89 91 91 <b>90</b> 95 96	85 89 91 91 <b>90</b> 95 96	85 89 91 91 <b>90</b> 95	85 89 91 90 <b>89</b> 95	85 89 91 90 <b>90</b> 95
Midland Laois Vidland Laois Vidland HSEI Mid Laois Long HSEI Clare Lime Lime Lime HSEI Care Lime HSEI North Cava Meat HSEI	blin North dare/West Wicklow cklow E-E Total bis/Offaly ngford/Westmeath E-M Total are nerick perary NR/East Limerick E-MW Total	1008 943 447 6193 657 513 1170 335 409 448	1008 943 447 <b>6193</b> 657 513 <b>1170</b> 335 443	93 96 90 <b>93</b> 95 95 95 95 92 95	89 91 91 <b>90</b> 95 96 <b>95</b>	89 91 91 <b>90</b> 95 96	89 91 91 <b>90</b> 95 96	89 91 91 <b>90</b> 95 96	89 91 91 <b>90</b> 95	89 91 90 <b>89</b> 95	89 91 90 <b>90</b> 95
Kilda Wick HSE-I Midland Laois Long HSE-I Mid Lime Nestern Tippo HSE-I Louis HSE-I HSE-I HSE-I Louis HSE-I H	dare/West Wicklow cklow E-E Total Dis/Offaly ngford/Westmeath E-M Total rre nerick perary NR/East Limerick E-MW Total	943 447 6193 657 513 1170 335 409 448	943 447 6193 657 513 1170 335 443	96 90 <b>93</b> 95 95 <b>95</b> 92 92 95	91 91 <b>90</b> 95 96 <b>95</b>	91 91 <b>90</b> 95 96	91 91 <b>90</b> 95 96	91 91 <b>90</b> 95 96	91 91 <b>90</b> 95	91 90 <b>89</b> 95	91 90 <b>90</b> 95
Midland Laois Laois Long HSEI Mid Lime HSEI Mid Lime HSEI North Cava HSEI North Done North Done	cklow E-E Total Dis/Offaly Ingford/Westmeath E-M Total Irre Inerick Iperary NR/East Limerick E-MW Total	447 6193 657 513 1170 335 409 448	447 6193 657 513 1170 335 443	90 93 95 95 95 95 92 92 95	91 90 95 96 95	91 90 95 96	91 90 95 96	91 90 95 96	91 <b>90</b> 95	90 <b>89</b> 95	90 90 95
Nidland Laois Laois Long HSE-I Mid Lime Western Tippo HSE-I Lime Kestern Tippo HSE-I Louis HSE-I HSE-I Louis HSE-I	E-E Total bis/Offaly ngford/Westmeath E-M Total nerick perary NR/East Limerick E-MW Total	6193 657 513 1170 335 409 448	6193 657 513 1170 335 443	93 95 95 95 95 92 92 95	90 95 96 95	<b>90</b> 95 96	<b>90</b> 95 96	<b>90</b> 95 96	<b>90</b> 95	<b>89</b> 95	<b>90</b> 95
Midland Long HSE-I Mid Long HSE-I Lime Western Tippo HSE-I North Louth Meat HSE-I North North North Done Sigo	ois/Offaly ngford/Westmeath E-M Total ner nerick nperary NR/East Limerick E-MW Total	657 513 <b>1170</b> 335 409 448	657 513 <b>1170</b> 335 443	95 95 <b>95</b> 92 92 95	95 96 <b>95</b>	95 96	95 96	95 96	95	<b>89</b> 95	95
Midland Long HSE-I Mid Lime Western Tippo HSE-I North Louth Eastern Meat North SE-I North Sigo	ngford/Westmeath E-M Total ner nerick perary NR/East Limerick E-MW Total	513 <b>1170</b> 335 409 448	513 1170 335 443	95 <b>95</b> 92 95	96 <b>95</b>	96	96	96		-	
Viidland Long HSE-I Mid Lime Western Tippo HSE-I North Louth Eastern Meat North SE-I North Sigo	ngford/Westmeath E-M Total ner nerick perary NR/East Limerick E-MW Total	513 <b>1170</b> 335 409 448	513 1170 335 443	95 <b>95</b> 92 95	96 <b>95</b>	96	96	96		-	
Viidland Long HSE-I Mid Lime Western Tippo HSE-I North Louth Eastern Meat North SE-I North Sigo	ngford/Westmeath E-M Total ner nerick perary NR/East Limerick E-MW Total	513 <b>1170</b> 335 409 448	513 1170 335 443	95 <b>95</b> 92 95	96 <b>95</b>	96	96	96		-	
Mid Lime Western Tippo HSE-I North Louth Eastern Meat North North North SE-I	E-M Total nerick nperary NR/East Limerick E-MW Total	<b>1170</b> 335 409 448	<b>1170</b> 335 443	<b>95</b> 92 95	95					30	
Mid Lime Western Tippe HSEI North Loutt Eastern Meat HSEI	nre nerick perary NR/East Limerick E-MW Total	335 409 448	335 443	92 95			~		95	95	95
Mid Lime Western Tippo HSEI North Lout HSEI North Done North Sigo	nerick perary NR/East Limerick E-MW Total	409 448	443	95	92						
Mid Lime Western Tippo HSEI North Lout HSEI North Done North Sigo	nerick perary NR/East Limerick E-MW Total	409 448	443	95	52	92	92	92	92	92	93
Western Tippo HSEI North Lout Eastern HSEI North Done Silgo	perary NR/East Limerick E-MW Total	448			89	89	89	89	89	90	89
North Lout HSEI	E-MW Total		450	92	94	94	94	94	94	94 94	94
North Louth Eastern Meat HSE-I		1192	1208	92 93	94 92	94 92	94 92	94 92	94 92	94 92	94 92
North Louth Eastern Meat HSE-I North Done Mestern Sligo			1200	30	92	92	92	92	92	92	92
North Louth Eastern Meat HSE-I North Done Mestern Sligo			440		04	04	04	04	04		04
Eastern Meat HSE-I North Done Mestern Sligo	van/Monaghan	na	413	na	94	94	94	94	94	94	94
North Sligo		na	460	na	93	93	93	93	93	93	93
North Sligo		na	793	na	91	91	91	91	91	91	91
North Western Sligo	E-NE Total	na	1666	na	92	92	92	92	92	92	92
North Western Sligo		1			-	-	-		ĩ		
Nestern Sligo		498	498	93	92	92	92	92	91	90	92
LICE	go/Leitrim	325	325	95	95	95	94	95	94	93	96
	E-NW Total	823	823	94	93	93	93	93	92	91	93
	rlow/Kilkenny	485	485	94	92	92	92	92	92	91	91
South South	uth Tipperary	314	314	97	94	94	94	94	94	93	94
Eastorn Wate	terford	457	457	96	93	93	93	93	93	92	92
Wexf	exford	523	523	94	93	93	93	93	92	92	93
HSE-	E-SE Total	1779	1779	95	93	93	93	93	93	92	92
North	rth Cork	327	325	92	91	91	91	91	91	90	90
North	rth South Lee	1424	1399	93	90	90	90	90	90	88	88
Southern West	est Cork	163	161	91	83	83	83	83	83	80	80
Kerry		435	433	90	92	92	92	92	92	88	88
-	E-S Total	2349	2318	92	90	90	90	90	90	87	87
								-		<b>،</b> ا	
Galw	lway	907	907	12	94	94	94	94	94	94	94
Mayo		424	424	90	94	94	94	94	94	94	94
vvestern <u> </u>	scommon	226	226	54	96	96	96	96	96	96	96
	E-W Total	1557	1557	39	94	90 94	90 94	90 94	90 94	90 94	90 94
		1307	1357	- 39	<u> </u>	J 34	<b>.</b> 94	<b>34</b>	J74		- 34
				88	92	92	92	92	91		

\* The denominator/number in cohort varied slightly according to vaccine. D3, T3 and P3 cohorts are shown here.

Rease note while North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here.

# Appendix 2

		No. in					Immu	nisation Upt	ake (%)				
		cohort for $D_3 \& T_3 \& P_3^{\dagger}$	D <sub>3</sub> T <sub>3</sub>	P <sub>3</sub>	Hib₃	Hib <sub>b</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC₃	MenCh	PCV₃	PCV <sub>b</sub>	MMR
HSE Area	LHO/HSE Area Dublin South	F3 432	95	95	95	91	95	95	89	92	92	93	93
	Dublin South East	390	93	95 94	95	88	95 94	95	86	92 87	92	93	93
	Dublin South City	447	95	95	95	93	95	95	91	93	92	92	93
	Dublin South West	577	97	97	97	92	97	97	89	92	93	95	95
	Dublin West	703	96	96	96	88	96	96	84	87	90	92	91
Eastern	Dublin North West	964	92	92	92	85	92	92	82	85	88	91	89
	Dublin North Central	460	93	93	93	86	93	93	83	85	88	90	91
	Dublin North	1046	93	93	93	88	93	93	86	88	90	91	91
	Kildare/West Wicklow	929	94	94	94	90	94	94	87	89	92	93	92
	Wicklow	417	92	92	92	83	92	92	81	83	86	88	88
	HSE-E Total	6365	94	94	94	88	94	94	86	88	90	92	91
													<u> </u>
	Laois/Offaly	571	97	97	97	97	97	97	92	94	96	97	96
Midland	Longford/Westmeath	457	98	98	98	98	98	98	92	93	94	96	97
	HSE-M Total	1028	98	98	98	98	98	98	92	94	95	97	96
					•								
	Clare	410	93	93	93	92	93	93	90	92	91	91	92
	Limerick	455	94	94	94	89	94	94	88	89	89	90	91
id Western	Tipperary NR/East Limerick	450	95	95	95	91	95	95	89	94	91	93	92
	HSE-MW Total	1315	94	94	94	91	94	94	89	91	90	92	92
	Cavan/Monaghan	475	97	97	97	94	97	97	91	94	95	97	96
North	Louth	487	94	94	94	89	94	94	86	89	91	92	92
Eastern	Meath	812	96	96	96	91	96	96	88	91	91	93	93
	HSE-NE Total	1774	96	96	96	91	96	96	88	91	92	94	93
North	Donegal	493	96	97	96	87	96	95	81	87	88	92	90
Western	Sligo/Leitrim	347	97	98	97	97	97	97	92	97	92	97	96
meachi	HSE-NW Total	840	97	97	97	91	97	96	86	91	90	94	93
							-					-	
	Carlow/Kilkenny	484	94	94	94	91	94	94	87	89	90	92	92
South	South Tipperary	345	98	98	98	96	98	98	88	92	94	95	94
Eastern	Waterford	472	95	95	95	92	95	95	87	90	94	95	94
	Wexford	478	97	97	97	95	97	97	93	94	95	96	96
	HSE-SE Total	1779	96	96	96	94	96	96	89	91	93	94	94
									07				
	North Cork	333	96	96	96	89	96	96	87	88	90	92	92
0	North South Lee	1407	94	94	94	90	94	95	88	89	91	91	92
Southern	West Cork	195	93	93	93	86	93	93	81	84	89	91	90
	Kerry	446	96 55	96 0E	96 05	91	96 05	96 05	87	89	91	93	92
	HSE-S Total	2381	95	95	95	90	95	95	87	88	91	92	92
	Columy	841	00	98	00	~	98	00	~	00	07	ro	
	Galway	-	98		98	96		98	96	na	97	na	95
Western	Mayo	368 223	96 98	96 98	96 98	90 97	96 98	96 98	90 97	na	98	na	91 97
	Roscommon HSE-W Total	1432	98 97	98 97	98 97	97 95	98 97	98 97	97 95	na	98 <b>97</b>	na na	97 95
		1452	91	91	97	30	97	97	30	na	91	na	30

na=not available

\*The denominator/number in cohort varied slighly according to vaccine.  $\mathrm{D}_{\!_3},\mathrm{T}_{\!_3}$  and  $\mathrm{P}_{\!_3}$  cohorts shown here.

Rease 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