# **Background**

The national immunisation uptake statistics, based on available data, for Quarter 1 2016 are presented in this report. These immunisation uptake statistics relate to children at 12 (born between 01/01/2015 and 31/03/2015) and 24 (born between 01/01/2014 and 31/03/2014) months of age in Quarter 1-2016. 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 <a href="http://www.immunisation.ie">http://www.immunisation.ie</a> 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 1 2016, 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 1 2016, 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 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 30/06/2015

| 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.immunisation.ie">http://www.immunisation.ie</a> for current and detailed information on the Irish primary childhood immunisation schedule and also recommended vaccinations for older children and adults

Tel: +353 1 876 5300

Fax: +353 1 856 1299

BCG Bacille Calmette Guerin vaccine

DTaP Diphtheria, Tetanus and acellular Pertussis vaccine

HepB Hepatitis B vaccine

Hib Haemophilus influenzae 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 1-2016

- Immunisation uptake rates in children 12 months of age in Q1-2016 are presented by Community Healthcare Organisation (CHO) in table 2.
  - National immunisation uptake rates were 92% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio and HepB<sub>3</sub>, 91% for PCV<sub>2</sub> and 90% for MenC<sub>2</sub>.
  - BCG uptake data were available for 28 LHOs in Q1-2016; these areas cover approximately 90% of the national birth cohort. Where data were available, national uptake was 72% for the BCG vaccination.
- Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q1-2016. Compared to Q4-2015, national uptake rates in Q1-2016 for D3, T3, P3, Hib3, Polio3 and HepB3 increased by 1%, MenC<sub>2</sub> and PCV<sub>2</sub> were unchanged and BCG decreased by 12% (figure 1). The BCG vaccine stock in Ireland expired at the end of April 2015, please see http://www.hse.ie/eng/health/immunisation/pubinfo/babychildimm/vaccprevdisease/tb/ for further information.

#### Community Healthcare Organisation (CHO)

Among the CHOs, 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 89 to 94%, PCV<sub>2</sub> ranged from 87% to 95% and MenC<sub>2</sub> ranged from 86% to 94%.

#### 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 6 LHOs for PCV<sub>2</sub>, 5 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>, in 3 LHOs for MenC<sub>2</sub> and in one LHO for BCG.

Table 2. Immunisation uptake (%) at 12 months in cohort born 01/01/2015–31/03/2015

| Community Healthcare        | No. in cohort# | BCG         | $D_3T_3$ | $\mathbf{P}_3$ | Hib <sub>3</sub> | Polio <sub>3</sub> | HepB <sub>3</sub> | MenC <sub>2</sub> | PCV <sub>2</sub> |
|-----------------------------|----------------|-------------|----------|----------------|------------------|--------------------|-------------------|-------------------|------------------|
| Organisation/LHO*           |                |             |          |                |                  |                    |                   |                   |                  |
| CHO1 (CN/MN, DL, SO/LM)     | 1263           | 92†         | 94       | 94             | 94               | 94                 | 94                | 93                | 94               |
| <b>CHO2</b> (G, MO, RN)     | 1399           | 28          | 94       | 94             | 94               | 94                 | 94                | 94                | 94               |
| <b>CHO3</b> (CE, L, TN)     | 1379           | 90          | 90       | 90             | 90               | 90                 | 90                | 89                | 90               |
| CHO4 (NC, NSL, WC, KY)      | 2318           | 84          | 90       | 90             | 90               | 90                 | 90                | 86                | 87               |
| CHO5 (CW/KK, TS, WD, WX)    | 1617           | 88          | 92       | 92             | 92               | 92                 | 92                | 91                | 91               |
| CHO6 (DS, DSE, WW)          | 1218           | 68          | 91       | 91             | 91               | 91                 | 91                | 89                | 90               |
| CHO7 (DSC, DSW, DW, KE)     | 2509           | 66          | 93       | 93             | 93               | 93                 | 93                | 91                | 93               |
| CHO8 (LS/OY, LD/WH, LH, MH) | 2211           | 89†         | 94       | 94             | 94               | 94                 | 94                | 94                | 95               |
| CHO9 (DNW, DNC, DN)         | 2247           | 61          | 89       | 89             | 89               | 89                 | 89                | 87                | 88               |
| Ireland                     | 16161†         | <b>72</b> † | 92       | 92             | 92               | 92                 | 92                | 90                | 91               |

na = not available at this time

<sup>†</sup>Number in cohort for BCG is 14,484. 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.

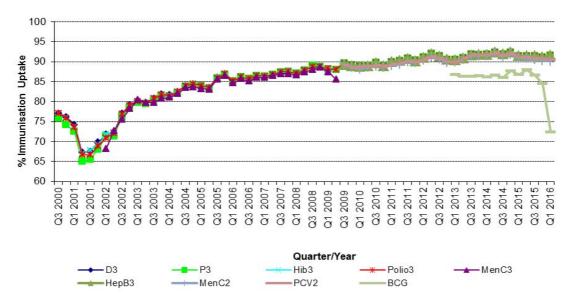
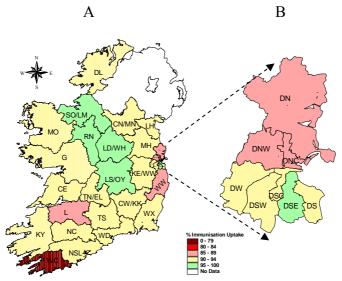


Figure 1. National quarterly immunisation uptake rates at 12 months

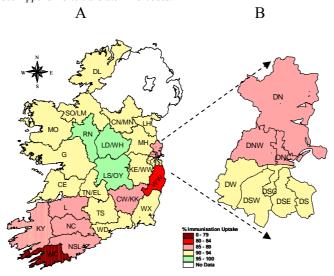
Since  $T_1$  uptake is identical to  $D_3$  uptake only  $D_3$  uptake figures presented. The Q3-2008 Men $C_3$  uptake figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area  $D_3$ ,  $P_3$ ,  $T_3$ , Polio $_3$  and MMR, uptake figures exclude those born on the 31/03/2007. The Q3-2009 figures are incomplete as two HSE Areas were unable to provide data, two additional areas were unable to provide Men $C_2$  data and one additional area uptace figures actuale mose born on the 3102207. If gures are incomplete as two IEEE Areas were unable to provide data. The QV-2009 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas were unable to provide data. The QV-2010 figures are incomplete as two HSE Areas was unable to provide data. BCG uptake data are unane to provide a menci, attait, in e.g. - 2019 ignres are incompiete as well as the meaning of provide attains to provide admit and 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 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 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 through the su http://www.hse.ie/eng/health/immunisation/pubinfo/babychildimm/vaccprevdisease/tb/ for further information.

<sup>\*</sup>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

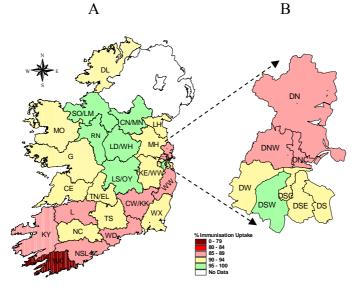
The denominator/number in cohort varied slightly according to vaccine. D<sub>3</sub>T<sub>3</sub> cohorts are shown here.



**Figure 2.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 1-2016, 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 1-2016, 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 1-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

# Immunisation uptake among children 24 months of age in Quarter 1-2016

- 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>, 91% for Hib<sub>b</sub> and PCV<sub>3</sub> and 87% for MenC<sub>3</sub> (table 3). Compared to the previous quarter, national uptake rates in Q1-2016 decreased by 2% for MenC<sub>3</sub> and PCV<sub>3</sub> decreased 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> and Hib<sub>b</sub> and were unchanged for MMR<sub>1</sub> (figure 5).
- In total, eight of the nine CHOs were able to provide uptake data on MenC<sub>b</sub> and PCV<sub>b</sub> in Q1-2016. These Areas cover approximately 91% of the national birth cohort. Where data were available, national uptake was 89% for MenC<sub>b</sub> and 93% for PCV<sub>b</sub>. Compared to the previous quarter MenC<sub>b</sub> uptake decreased by 2% 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 Q1-2016.

#### Community Healthcare Organisations (CHOs)

• 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 CHOs, for Hib<sub>b</sub> in two, for MenC<sub>3</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> in one and in none for MenC<sub>b</sub> and PCV<sub>b</sub> (table 3).

#### Local Health Office (LHO)

- Immunisation uptake rates in children 24 months of age in Q1-2016 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 D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 19 for HepB<sub>3</sub>, 9 for Hib<sub>b</sub>, 8 for MMR<sub>1</sub>, 7 for PCV<sub>b</sub>, 5 for PCV<sub>3</sub>, 3 for MenC<sub>b</sub> and 2 for MenC<sub>3</sub>.

Table 3. Immunisation uptake (%) at 24 months in cohort born 01/01/2014–31/03/2014

| Community Healthcare<br>Organisation/LHO | No. in<br>Cohort* | D <sub>3</sub> /T <sub>3</sub> /<br>P <sub>3</sub> /<br>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> |
|--|-------------------|--|------------------|--------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|
| CHO1 (CN/MN, DL, SO/LM)                  | 1268              | 97   | 92               | 97                 | 96                | 87                | 90                | 90               | 94               | 93               |
| CHO2 (G, MO, RN)                         | 1496              | 97   | 95               | 97                 | 97                | 95                | na                | 97               | na               | 95               |
| <b>CHO3</b> (CE, L, TN)                  | 1275              | 96   | 92               | 96                 | 96                | 88                | 91                | 92               | 94               | 93               |
| CHO4 (NC, NSL, WC, KY)                   | 2232              | 96   | 91               | 96                 | 96                | 88                | 90                | 92               | 93               | 94               |
| CHO5 (CW/KK,TS,WD,WX)                    | 1669              | 95   | 95               | 95                 | 95                | 87                | 92                | 92               | 94               | 93               |
| CHO6 (DS, DSE, WW)                       | 1270              | 94   | 88               | 94                 | 94                | 85                | 88                | 92               | 94               | 93               |
| CHO7 (DSC, DSW, DW, KE)                  | 2568              | 95   | 89               | 95                 | 95                | 86                | 89                | 90               | 92               | 92               |
| CHO8 (LS/OY, LD/WH, LH, MH)              | 2257              | 96   | 93               | 96                 | 96                | 87                | 90                | 91               | 93               | 94               |
| CHO9 (DNW, DNC, DN)                      | 2352              | 92   | 86               | 92                 | 92                | 84                | 86                | 88               | 90               | 89               |
| Ireland                                  | 16387             | 95   | 91               | 95                 | 95                | 87                | 89                | 91               | 93               | 93               |

Please see Appendix 3 to translate LHO codes

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

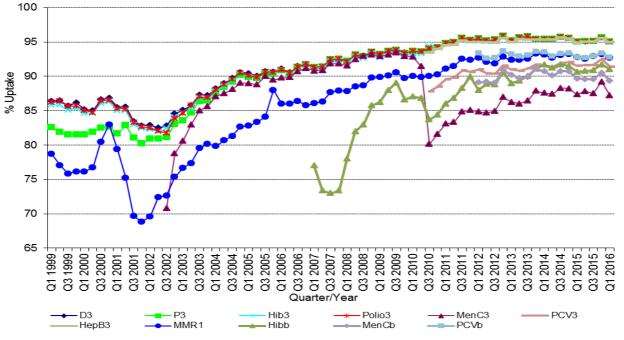


Figure 5. National quarterly immunisation uptake rates at 24 months

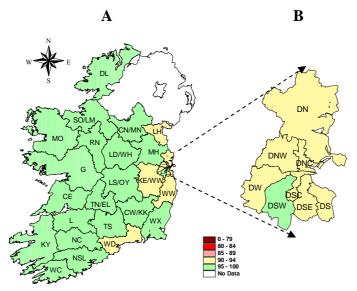
Notes: The Q4-2005 MMR, figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR, figure includes the HSE-Eastern Area figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib, figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed 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>, 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 seven of the eight HSE Areas. The Q4-2009 Hib<sub>b</sub> figures also exclude uptake figures are based on data from seven of the eight HSE Areas. The Q1-2010 figures also exclude uptake 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**

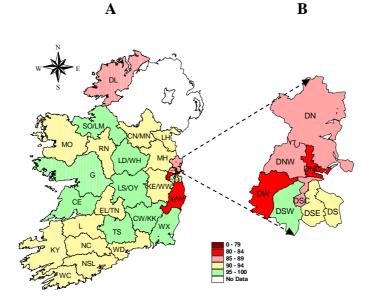
In Quarter 1-2016, national uptake rates at 24 months for  $D_3$ ,  $T_3$ ,  $P_3$ ,  $Hib_3$ ,  $Polio_3$  and  $HepB_3$  reached the target of  $\geq 95\%$ . Compared to the previous quarter, national uptake rates in Q1-2016 decreased by 2% for  $MenC_3$  and  $PCV_3$ , decreased by 1% for  $D_3$ ,  $T_3$ ,  $T_$ 

# Acknowledgements

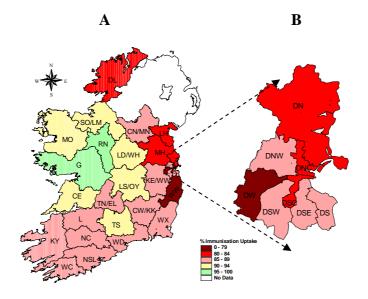
HPSC would like to thank all those involved in childhood immunisation including the General Practitioners, Practice Nurses, HSE Areas, Public Health Nurses, Immunisation Co-ordinators, Specialists in Public Health Medicine, Surveillance Scientists and Systems Analysts for their assistance.



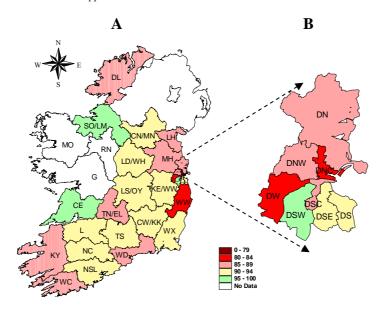
**Figure 6.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



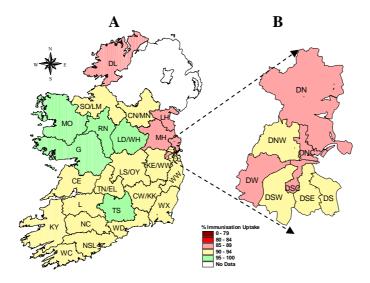
**Figure 7.** Hib<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 8.** MenC<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1-2016, 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 1-2016, 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 1-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

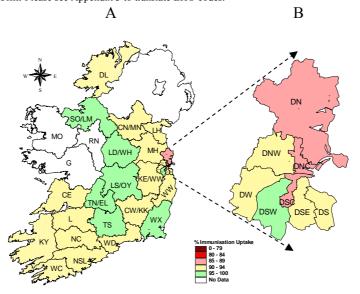
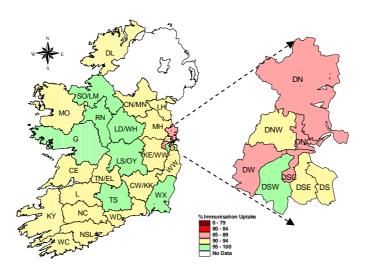


Figure 11.  $PCV_b$  immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1-2016, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

A B



**Figure 12.** MMR<sub>1</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 1-2016, 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 01/01/2015-31/03/2015  Immunisation Uptake (%) |                              |   |                 |                               |                 |                  |                    |                          |                   |                  |
|--|---|------------------------------|---|-----------------|-------------------------------|-----------------|------------------|--------------------|--------------------------|-------------------|------------------|
| Community<br>Healthcare<br>Organisation<br>(CHO) | LHO/CHO   | No. in<br>cohort<br>for BCG* | No. in cohort for D <sub>3</sub> T <sub>3</sub> # | BCG*            | D <sub>3</sub> T <sub>3</sub> | P <sub>3</sub>  | Hib <sub>3</sub> | Polio <sub>3</sub> | (%)<br>HepB <sub>3</sub> | MenC <sub>2</sub> | PCV <sub>2</sub> |
|  | Cavan/Monaghan  | na                           | 414   | na              | 93                            | 93              | 93               | 93                 | 93                       | 94                | 95               |
| CHO1   | Donegal   | 510                          | 510   | 91              | 93                            | 93              | 93               | 93                 | 92                       | 91                | 93               |
| CHOT   | Sligo/Leitrim   | 339                          | 339   | 93              | 96                            | 96              | 96               | 96                 | 96                       | 94                | 96               |
|  | CHO1 Total*   | 849                          | 1263  | 92              | 94                            | 94              | 94               | 94                 | 94                       | 93                | 94               |
|  | Galway  | 840                          | 840   | 6               | 94                            | 94              | 94               | 94                 | 94                       | 93                | 94               |
|  | Mayo  | 357                          | 357   | 87              | 94                            | 94              | 94               | 94                 | 94                       | 94                | 94               |
| CHO2   | Roscommon   | 202                          | 202   | 12              | 97                            | 97              | 97               | 97                 | 97                       | 96                | 97               |
|  | CHO2 Total  | 1399                         | 1399  | 28              | 94                            | 94              | 94               | 94                 | 94                       | 94                | 94               |
|  |   |                              |   |                 |                               |                 |                  |                    |                          |                   |                  |
|  | Clare   | 396                          | 407   | 90              | 91                            | 91              | 91               | 91                 | 91                       | 90                | 91               |
| CHO3   | Limerick  | 393                          | 465   | 91              | 89                            | 89              | 89               | 89                 | 89                       | 87                | 89               |
| 01100  | Tipperary NR/East Limerick  | 481                          | 507   | 90              | 90                            | 90              | 90               | 90                 | 90                       | 90                | 90               |
|  | CHO3 Total  | 1270                         | 1379  | 90              | 90                            | 90              | 90               | 90                 | 90                       | 89                | 90               |
|  | North Cork  | 352                          | 350   | 88              | 92                            | 92              | 92               | 92                 | 92                       | 89                | 90               |
|  | North South Lee   | 1362                         | 1346  | 84              | 91                            | 91              | 91               | 91                 | 91                       | 87                | 88               |
| CHO4   | West Cork   | 190                          | 190   | 78              | 79                            | 79              | 79               | 79                 | 79                       | 76                | 78               |
|  | Kerry   | 435                          | 432   | 83              | 90                            | 90              | 90               | 90                 | 90                       | 85                | 85               |
|  | CHO4 Total  | 2339                         | 2318  | 84              | 90                            | 90              | 90               | 90                 | 90                       | 86                | 87               |
|  |   |                              |   |                 |                               |                 |                  |                    |                          |                   |                  |
| CHO5   | Carlow/Kilkenny   | 464                          | 464   | 83              | 90                            | 90              | 90               | 90                 | 90                       | 88                | 89               |
|  | South Tipperary   | 291                          | 291   | 93              | 93                            | 93              | 93               | 93                 | 93                       | 93                | 93               |
|  | Waterford   | 414                          | 414   | 89              | 92                            | 92              | 92               | 92                 | 92                       | 91                | 89               |
|  | Wexford   | 448<br><b>1617</b>           | 448<br><b>1617</b>                                | 90<br><b>88</b> | 94<br><b>92</b>               | 94<br><b>92</b> | 94<br><b>92</b>  | 94<br><b>92</b>    | 94<br><b>92</b>          | 93<br><b>91</b>   | 94<br><b>91</b>  |
|  | CHO5 Total  | 1617                         | 1617  | 88              | 92                            | 92              | 92               | 92                 | 92                       | 91                | 91               |
|  | Dublin South  | 428                          | 428   | 71              | 92                            | 92              | 92               | 92                 | 92                       | 90                | 92               |
| CHO6   | Dublin South East   | 371                          | 371   | 67              | 95                            | 95              | 95               | 95                 | 95                       | 93                | 94               |
| CHO  | Wicklow   | 419                          | 419   | 67              | 86                            | 86              | 86               | 86                 | 86                       | 84                | 86               |
|  | CHO6 Total  | 1218                         | 1218  | 68              | 91                            | 91              | 91               | 91                 | 91                       | 89                | 90               |
|  | Dublin South City   | 397                          | 397   | 73              | 91                            | 91              | 91               | 91                 | 91                       | 90                | 91               |
|  | Dublin South West   | 590                          | 590   | 90              | 94                            | 94              | 94               | 94                 | 94                       | 94                | 95               |
| CHO7   | Dublin West   | 601                          | 601   | 26              | 91                            | 91              | 91               | 91                 | 91                       | 90                | 91               |
|  | Kildare/West Wicklow  | 921                          | 921   | 74              | 93                            | 93              | 93               | 93                 | 93                       | 92                | 93               |
|  | CHO7 Total  | 2509                         | 2509  | 66              | 93                            | 93              | 93               | 93                 | 93                       | 91                | 93               |
|  |   |                              |   |                 |                               |                 |                  |                    |                          |                   |                  |
|  | Laois/Offaly  | 587                          | 587   | 95              | 95                            | 95              | 95               | 95                 | 95                       | 95                | 95               |
|  | Longford/Westmeath  | 449                          | 449   | 80              | 98                            | 98              | 98               | 98                 | 98                       | 98                | 98               |
| CHO8   | Louth   | na                           | 454   | na              | 93                            | 93              | 93               | 93                 | 93                       | 92                | 94               |
|  | Meath   | na                           | 721   | na              | 90                            | 90              | 90               | 90                 | 90                       | 91                | 92               |
|  | CHO8 Total*   | 1036                         | 2211  | 89              | 94                            | 94              | 94               | 94                 | 94                       | 94                | 95               |
|  | Dublin North West   | 840                          | 840   | 83              | 89                            | 89              | 89               | 89                 | 89                       | 86                | 89               |
|  | Dublin North Central  | 461                          | 461   | 83              | 89                            | 89              | 89               | 89                 | 89                       | 86                | 88               |
| CHO9   | Dublin North  | 946                          | 946   | 32              | 89                            | 89              | 89               | 89                 | 89                       | 87                | 88               |
|  | CHO9 Total  | 2247                         | 2247  | 61              | 89                            | 89              | 89               | 89                 | 89                       | 87                | 88               |
|  |   |                              |   |                 |                               |                 |                  |                    |                          |                   |                  |
|  | Ireland *   | 14484                        | 16161   | 72              | 92                            | 92              | 92               | 92                 | 92                       | 90                | 91               |

na=not available

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

<sup>\*</sup>BCG data were unavailable for Cavan/Monaghan, Louth and Meath, therefore, the BCG CHO1, CHO8 and national data are incomplete.

 $<sup>\</sup>hbox{\it \#The denominator/number in cohort varied slighly according to vaccine. } D_3T_3 \hbox{\it cohort show} \hbox{\it n here}.$ 

# Appendix 2

| Appenar  | Appendix 2               |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|--|--------------------------|-----------------------------------|----------|----------------|------------------|------------------|--------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|
| Immunisation uptake (%) at 24 months of age in cohort born 01/01/2014-31/03/2014 |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  |                          | Immunisation Uptake (%)           |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
| Community  |                          |                                   |          |                |                  |                  |                    |                   | (.,               |                   |                  |                  |                  |
| Healthcare   |                          | No. in                            |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
| Organisation   |                          | cohort                            |          | _              |                  |                  |                    |                   |                   |                   |                  |                  |                  |
| (CHO)  | LHO/CHO                  | for D <sub>3</sub> T <sub>3</sub> | $D_3T_3$ | 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> |
|  | Cavan/Monaghan           | 454                               | 97       | 97             | 97               | 93               | 97                 | 97                | 89                | 91                | 91               | 93               | 94               |
| CHO1   | Donegal                  | 503                               | 96       | 96             | 96               | 89               | 96                 | 94                | 84                | 89                | 88               | 92               | 90               |
| 0.101  | Sligo/Leitrim            | 311                               | 98       | 98             | 98               | 96               | 98                 | 98                | 90                | 96                | 93               | 97               | 96               |
|  | CHO1 Total               | 1268                              | 97       | 97             | 97               | 92               | 97                 | 96                | 87                | 90                | 90               | 94               | 93               |
|  |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | Galway                   | 911                               | 97       | 97             | 97               | 96               | 97                 | 97                | 95                | na                | 97               | na               | 96               |
| CHO2   | Mayo                     | 380                               | 97       | 97             | 97               | 93               | 97                 | 97                | 93                | na                | 98               | na               | 94               |
| CHOZ   | Roscommon                | 205                               | 97       | 97             | 97               | 94               | 97                 | 97                | 95                | na                | 97               | na               | 95               |
|  | CHO2 Total               | 1496                              | 97       | 97             | 97               | 95               | 97                 | 97                | 95                | na                | 97               | na               | 95               |
|  |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | Clare                    | 372                               | 98       | 98             | 98               | 95               | 98                 | 98                | 91                | 95                | 92               | 94               | 94               |
| СНОЗ   | Limerick                 | 495                               | 95       | 95             | 95               | 91               | 95                 | 95                | 87                | 90                | 91               | 93               | 92               |
| СПОЗ   | Tipperary NR/East Limeri | 408                               | 95       | 95             | 95               | 90               | 95                 | 95                | 87                | 89                | 93               | 95               | 93               |
|  | CHO3 Total               | 1275                              | 96       | 96             | 96               | 92               | 96                 | 96                | 88                | 91                | 92               | 94               | 93               |
|  |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | North Cork               | 312                               | 96       | 96             | 96               | 90               | 96                 | 96                | 87                | 90                | 92               | 92               | 94               |
|  | North South Lee          | 1336                              | 96       | 96             | 95               | 91               | 96                 | 96                | 89                | 90                | 93               | 94               | 94               |
| CHO4   | West Cork                | 164                               | 96       | 96             | 96               | 90               | 96                 | 96                | 85                | 88                | 90               | 91               | 93               |
|  | Kerry                    | 420                               | 96       | 96             | 96               | 92               | 96                 | 96                | 89                | 88                | 92               | 93               | 93               |
|  | CHO4 Total               | 2232                              | 96       | 96             | 96               | 91               | 96                 | 96                | 88                | 90                | 92               | 93               | 94               |
|  |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | Carlow/Kilkenny          | 450                               | 96       | 96             | 96               | 96               | 96                 | 96                | 85                | 91                | 91               | 94               | 92               |
|  | South Tipperary          | 272                               | 97       | 97             | 97               | 98               | 97                 | 97                | 91                | 94                | 95               | 96               | 96               |
| CHO5   | Waterford                | 425                               | 91       | 91             | 91               | 91               | 91                 | 91                | 86                | 88                | 90               | 91               | 90               |
|  | Wexford                  | 522                               | 97       | 97             | 97               | 96               | 97                 | 97                | 89                | 94                | 93               | 96               | 95               |
|  | CHO5 Total               | 1669                              | 95       | 95             | 95               | 95               | 95                 | 95                | 87                | 92                | 92               | 94               | 93               |
|  |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | Dublin South             | 416                               | 94       | 94             | 94               | 91               | 94                 | 94                | 89                | 92                | 93               | 94               | 94               |
|  | Dublin South East        | 427                               | 93       | 93             | 93               | 91               | 93                 | 93                | 89                | 91                | 93               | 94               | 94               |
| CHO6   | Wicklow                  | 427                               | 94       | 94             | 94               | 83               | 94                 | 94                | 78                | 81                | 90               | 93               | 91               |
|  | CHO6 Total               | 1270                              | 94       | 94             | 94               | 88               | 94                 | 94                | 85                | 88                | 92               | 94               | 93               |
|  |                          |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | Dublin South City        | 395                               | 94       | 94             | 94               | 86               | 94                 | 94                | 83                | 85                | 87               | 89               | 88               |
|  | Dublin South West        | 619                               | 98       | 98             | 98               | 95               | 98                 | 98                | 89                | 95                | 93               | 96               | 97               |
| CHO7   | Dublin West              | 627                               | 94       | 94             | 94               | 82               | 94                 | 94                | 79                | 82                | 88               | 90               | 88               |
|  | Kildare/West Wicklow     | 927                               | 94       | 94             | 94               | 91               | 94                 | 94                | 89                | 91                | 91               | 93               | 93               |
|  | CHO7 Total               | 2568                              | 95       | 95             | 95               | 89               | 95                 | 95                | 86                | 89                | 90               | 92               | 92               |
|  | 0.101 10                 |                                   |          |                |                  |                  |                    |                   |                   |                   |                  |                  |                  |
|  | Laois/Offaly             | 590                               | 98       | 98             | 98               | 98               | 98                 | 98                | 90                | 93                | 93               | 96               | 96               |
| ĺ  | Longford/Westmeath       | 463                               | 96       | 96             | 96               | 96               | 96                 | 96                | 92                | 94                | 95               | 95               | 96               |
| CHO8   | Louth                    | 429                               | 94       | 94             | 94               | 90               | 94                 | 94                | 83                | 87                | 87               | 90               | 90               |
|  | Meath                    | 775                               | 95       | 95             | 95               | 90               | 95                 | 95                | 84                | 87                | 89               | 91               | 93               |
|  | CHO8 Total               | 2257                              | 96       | 96             | 96               | 93               | 96                 | 96                | 87                | 90                | 91               | 93               | 94               |
|  | 550 Total                | 2201                              | - 00     | - 00           | 50               | 33               | 30                 | 30                | J,                | 30                | V.               | 33               | 37               |
|  | Dublin North West        | 848                               | 94       | 94             | 94               | 88               | 94                 | 94                | 85                | 88                | 90               | 92               | 91               |
|  | Dublin North Central     | 463                               | 91       | 91             | 91               | 83               | 91                 | 91                | 81                | 83                | 87               | 89               | 88               |
| CHO9   | Dublin North             | 1041                              | 91       | 91             | 91               | 85               | 91                 | 91                | 83                | 85                | 88               | 89               | 89               |
|  | CHO9 Total               | 2352                              | 91       | 91             | 91               | 86               | 91                 | 92                | 84                | 86                | 88               | 90               | 89               |
|  | Onos Iolai               | 2332                              | 32       | 32             | 32               | 00               | 32                 | 32                | U+                | 00                | 00               | 30               | 1 09             |
|  | Iroland                  | 46007                             | 05       | 05             | 05               | n4               | _ cr               | l er              | 07                | 00                | 04               |                  | l 00             |
|  | Ireland                  | 16387                             | 95       | 95             | 95               | 91               | 95                 | 95                | 87                | 89                | 91               | 93               | 93               |

na=not available
\*The denominator/number in cohort varied slighly according to vaccine. D<sub>3</sub>T<sub>3</sub> 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                        |

<sup>\*</sup>Please note while North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here