



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



## Immunisation uptake at 12 and 24 months of age

### Summary

Among children at 12 months of age in 2015 uptake of:

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> and PCV<sub>2</sub> was 91%

Among children at 24 months of age in 2015 uptake of:

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 95%

MMR<sub>1</sub> was 93%

PCV<sub>3</sub> was 92%

Hib<sub>b</sub> was 91%

MenC<sub>3</sub> was 88%

### Introduction

In 2015, the HSE Areas provided HPSC with quarterly immunisation uptake data for their Area and for each of the Local Health Offices (LHOs) in their Area. HPSC collated these data and quarterly reports were produced which are available on the HPSC website. The annual immunisation uptake rates presented here represent the collation of the 2015 quarterly data. The proportion of children who completed the recommended primary childhood immunisation schedule by 12 months (born between 01/01/2014 and 31/12/2014) and 24 months (born between 01/01/2013 and 31/12/2013) of age in 2015 are reported.

Children who were 12 and 24 months of age in 2015 were recommended one dose of vaccine against tuberculosis (BCG vaccine) at birth or by one month of age; three doses of vaccines against diphtheria (D<sub>3</sub>), tetanus (T<sub>3</sub>), pertussis (P<sub>3</sub>), *Haemophilus influenzae* type b (Hib<sub>3</sub>), polio (Polio<sub>3</sub>) and Hepatitis B (HepB<sub>3</sub>) with one dose of each recommended at two, four and six months of age; three doses of pneumococcal conjugate vaccine (PCV<sub>3</sub>) recommended at two, six and 12 months of age and three doses of meningococcal group C (MenC<sub>3</sub>) vaccine recommended at four, six and 13 months of age (table 1). Also at 12 months of age a dose of MMR (MMR<sub>1</sub>) was recommended and at 13 months a dose of Hib (Hib<sub>b</sub>) was recommended (table 1). A new primary childhood immunisation schedule was introduced in 2015 for babies born on or after July 1<sup>st</sup> 2015. Further vaccinations are recommended for older children and adults. Please see the HSE-National Immunisation Office 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.

In children at 12 months of age in 2015 (born between 01/01/2014 and 31/12/2014) uptake of 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> and two doses of PCV (PCV<sub>2</sub>) and MenC (MenC<sub>2</sub>) were measured. In children at 24 months of age in 2015 (born between 01/01/2013 and 31/12/2013) uptake of D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>3</sub>, PCV<sub>3</sub>, MMR<sub>1</sub>, Hib<sub>b</sub>, one dose of vaccine against meningococcal group C (MenC<sub>b</sub>) on or after twelve months of age and one dose of vaccine against pneumococcal conjugate vaccine (PCV<sub>b</sub>) on or after twelve months of age were measured.

The immunisation uptake rates are reported here by HSE Area and LHO. The uptake rates presented here were rounded to zero decimal place. While there are 32 LHOs the immunisation uptake rates for the LHOs of North Lee and South Lee are reported as a combined figure.

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 website at <http://www.hse.ie/eng/health/immunisation/> for current and detailed information on the Irish primary childhood immunisation schedule and also recommended vaccinations for older children and adults

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

### Caveats to data

BCG uptake data at 12 months of age has been incomplete since BCG reporting to HPSC began in Quarter 3 2003. This has occurred due to differences in implementation of a neonatal BCG programme across the HSE Areas as well as difficulties in providing these data to the HPSC where the programme was implemented. Prior to the establishment of the HSE each former health board determined their own BCG vaccination policy and some health boards (Western and parts of the Southern Health Boards) stopped routine neonatal BCG vaccination but provided BCG vaccination for adolescents or high risk groups. The neonatal programme has now been routinely implemented for all neonates in most, but not all, HSE Areas. Additionally more complete data on neonatal BCG vaccination is now available. However, in the HSE NE, where a neonatal programme is implemented, data is not currently available for reporting. In the HSE W the neonatal programme is not routinely or comprehensively implemented in all LHOs. Therefore, data provided for the HSE W reflects BCG vaccination data for just a small proportion of all babies born in this Area. Galway and Roscommon BCG LHO data became available for reporting for the first time in Quarter 4 2014. Mayo LHO BCG data was not available for reporting purposes prior to 2015. The numbers vaccinated with BCG in Mayo were not included in the HSE W BCG figures prior to 2015. National data for 2015 are presented in this report and compared to 2014 data. The available national BCG cohort data may be around 90% of the national birth cohort in 2015 and 89% in 2014 (these figures are estimates only).

As uptake of MenC<sub>3</sub> was low since Q3 2010 and as those over 12 months and less than 12 years of age need only one dose of MenC and those aged 12-23 months need only one dose of PCV, data on MenC<sub>b</sub> (one dose of MenC on or after first birthday and before second birthday) and PCV<sub>b</sub> (one dose of PCV on or after first birthday and before second birthday) were requested in 2012 for the first time. The MenC<sub>b</sub> and PCV<sub>b</sub> data were available for only six of the eight HSE Areas from Quarter 1 2012 to Quarter 4 2014 and for seven HSE Areas since Quarter 1 2015. The available national cohort data may be around 91% of the national birth cohort in 2015 and 81% in 2014 (these figures are estimates only).

### Immunisation uptake rates at 12 months

Ninety-one per cent of children, at 12 months of age in 2015, received 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> and PCV<sub>2</sub> (table 2). Compared with 2014, the uptake rates for these vaccines decreased by one per cent in 2015.

The available 2015 BCG cohort data may be around 90% (estimate only) of the national birth cohort; based on these data BCG uptake was 86% (table 2). In 2014, BCG cohort data may be around 89% (estimate only) of the national birth cohort; based on these data BCG uptake in 2014 was 87%.

Among the HSE Areas, uptake rates for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> ranged from 90% to 95% and MenC<sub>2</sub> and PCV<sub>2</sub> ranged from 87% to 95% (table 2). The target uptake of  $\geq 95\%$  was reached in the HSE M and HSE W for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> (table 2). The target uptake of  $\geq 95\%$  was reached in the HSE M and HSE SE for BCG (table 2).

Among the LHOs, 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 86% to 97% and MenC<sub>2</sub> and PCV<sub>2</sub> ranged from 83% to 97% (table 2). The target uptake of  $\geq 95\%$  was reached in Longford/Westmeath, Galway, Mayo and Roscommon for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> and in Sligo/Leitrim for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub> and PCV<sub>2</sub> with the highest uptake (97%) of these vaccines in Roscommon (table 2). The target uptake of  $\geq 95\%$  was reached for BCG in six LHOs reporting data (table 2).

Table 2. Immunisation uptake (%) at 12 months of age in 2015 (i.e. cohort born 01/01/2014-31/12/2014) by LHO and HSE Area

| HSE Area           | Local Health Office/<br>HSE Area | Number in<br>cohort for<br>BCG | Number in<br>cohort for D <sub>3</sub> ,<br>T <sub>3</sub> & P <sub>3</sub> * | Immunisation Uptake (%) |                |                  |                   |                   |                  |
|--------------------|----------------------------------|--------------------------------|---|-------------------------|----------------|------------------|-------------------|-------------------|------------------|
|                    |                                  |                                |   | BCG                     | D <sub>3</sub> | Hib <sub>3</sub> | HepB <sub>3</sub> | MenC <sub>2</sub> | PCV <sub>2</sub> |
| HSE E              | Dublin South                     | 1684                           | 1684  | 86                      | 91             | 91               | 91                | 90                | 92               |
|                    | Dublin South East                | 1748                           | 1748  | 86                      | 93             | 93               | 93                | 92                | 93               |
|                    | Dublin South City                | 1732                           | 1732  | 93                      | 92             | 92               | 92                | 91                | 92               |
|                    | Dublin South West                | 2504                           | 2504  | 97                      | 92             | 92               | 92                | 91                | 92               |
|                    | Dublin West                      | 2678                           | 2678  | 86                      | 90             | 90               | 90                | 90                | 90               |
|                    | Dublin North West                | 3649                           | 3649  | 92                      | 89             | 89               | 89                | 89                | 89               |
|                    | Dublin North Central             | 1916                           | 1916  | 91                      | 86             | 86               | 86                | 86                | 86               |
|                    | Dublin North                     | 4084                           | 4084  | 92                      | 88             | 88               | 88                | 88                | 88               |
|                    | Kildare/West Wicklow             | 3821                           | 3821  | 94                      | 91             | 91               | 91                | 91                | 91               |
|                    | Wicklow                          | 1753                           | 1753  | 92                      | 91             | 91               | 91                | 90                | 91               |
| <b>HSE E Total</b> | <b>25569</b>                     | <b>25569</b>                   | <b>91</b>   | <b>90</b>               | <b>90</b>      | <b>90</b>        | <b>90</b>         | <b>90</b>         | <b>90</b>        |
| HSE M              | Laois/Offaly                     | 2550                           | 2550  | 95                      | 94             | 94               | 94                | 94                | 94               |
|                    | Longford/Westmeath               | 1959                           | 1959  | 94                      | 95             | 95               | 95                | 95                | 95               |
|                    | <b>HSE M Total</b>               | <b>4509</b>                    | <b>4509</b>   | <b>95</b>               | <b>95</b>      | <b>95</b>        | <b>95</b>         | <b>95</b>         | <b>95</b>        |
| HSE MW             | Clare                            | 1475                           | 1472  | 93                      | 93             | 93               | 93                | 92                | 93               |
|                    | Limerick                         | 1689                           | 1892  | 96                      | 88             | 88               | 88                | 88                | 88               |
|                    | Tipperary NR/East Limerick       | 1807                           | 1762  | 93                      | 92             | 92               | 92                | 92                | 92               |
|                    | <b>HSE MW Total</b>              | <b>4971</b>                    | <b>5126</b>   | <b>94</b>               | <b>91</b>      | <b>91</b>        | <b>91</b>         | <b>91</b>         | <b>91</b>        |
| HSE NE             | Cavan/Monaghan                   | na                             | 1876  | na                      | 93             | 93               | 93                | 94                | 94               |
|                    | Louth                            | na                             | 1810  | na                      | 91             | 91               | 91                | 91                | 92               |
|                    | Meath                            | na                             | 3169  | na                      | 91             | 91               | 91                | 91                | 91               |
|                    | <b>HSE NE Total</b>              | <b>na</b>                      | <b>6855</b>   | <b>na</b>               | <b>91</b>      | <b>91</b>        | <b>91</b>         | <b>92</b>         | <b>92</b>        |
| HSE NW             | Donegal                          | 1964                           | 1964  | 94                      | 92             | 92               | 91                | 91                | 92               |
|                    | Sligo/Leitrim                    | 1272                           | 1272  | 95                      | 96             | 95               | 95                | 94                | 96               |
|                    | <b>HSE NW Total</b>              | <b>3236</b>                    | <b>3236</b>   | <b>94</b>               | <b>94</b>      | <b>94</b>        | <b>93</b>         | <b>92</b>         | <b>94</b>        |
| HSE SE             | Carlow/Kilkenny                  | 1991                           | 1991  | 95                      | 90             | 90               | 90                | 89                | 89               |
|                    | South Tipperary                  | 1228                           | 1228  | 97                      | 94             | 94               | 94                | 93                | 94               |
|                    | Waterford                        | 1807                           | 1807  | 94                      | 92             | 92               | 92                | 91                | 91               |
|                    | Wexford                          | 2098                           | 2098  | 94                      | 93             | 93               | 93                | 92                | 93               |
|                    | <b>HSE SE Total</b>              | <b>7124</b>                    | <b>7124</b>   | <b>95</b>               | <b>92</b>      | <b>92</b>        | <b>92</b>         | <b>91</b>         | <b>91</b>        |
| HSE S              | North Cork                       | 1349                           | 1327  | 92                      | 89             | 89               | 89                | 87                | 87               |
|                    | North South Lee                  | 5720                           | 5647  | 92                      | 90             | 90               | 90                | 87                | 87               |
|                    | West Cork                        | 681                            | 674   | 91                      | 87             | 87               | 87                | 83                | 83               |
|                    | Kerry                            | 1788                           | 1772  | 90                      | 91             | 91               | 91                | 87                | 87               |
|                    | <b>HSE S Total</b>               | <b>9538</b>                    | <b>9420</b>   | <b>92</b>               | <b>90</b>      | <b>90</b>        | <b>90</b>         | <b>87</b>         | <b>87</b>        |
| HSE W              | Galway                           | 3588                           | 3588  | 10                      | 95             | 95               | 95                | 95                | 95               |
|                    | Mayo                             | 1642                           | 1642  | 68                      | 95             | 95               | 95                | 95                | 95               |
|                    | Roscommon                        | 855                            | 855   | 53                      | 97             | 97               | 97                | 97                | 97               |
|                    | <b>HSE W Total</b>               | <b>6085</b>                    | <b>6085</b>   | <b>32</b>               | <b>95</b>      | <b>95</b>        | <b>95</b>         | <b>95</b>         | <b>95</b>        |
| <b>Ireland</b>     |                                  | <b>61032</b>                   | <b>67924</b>  | <b>86</b>               | <b>91</b>      | <b>91</b>        | <b>91</b>         | <b>91</b>         | <b>91</b>        |

na=not available

\* As the denominator/number in cohort varied slightly according to vaccine the D<sub>3</sub>, T<sub>3</sub> and P<sub>3</sub> cohorts are shown hereSince T<sub>3</sub>, P<sub>3</sub> and Polio<sub>3</sub> uptake identical to D<sub>3</sub> uptake only D<sub>3</sub> uptake figures are presented

Please note while North Lee and South Lee are two separate Local Health Offices their combined immunisation uptake data are reported here

### **Immunisation uptake rates at 24 months**

National annual immunisation uptake rates, in children at 24 months of age in 2015, 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). This is the fifth year national annual uptake rates reached the target of ≥95% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub>. Compared with 2014, 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 Hib<sub>b</sub> decreased by one percent while HepB<sub>3</sub>, MenC<sub>3</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> were unchanged (figure 1).

Seven of the eight HSE Areas were able to provide uptake data on MenC<sub>b</sub> (one dose of MenC on or after first birthday and before second birthday) and PCV<sub>b</sub> (one dose of PCV on or after first birthday and before second birthday) in 2015. The available data may be around 91% (estimate only) of the national birth cohort. Where data were available, national uptake was 90% for MenC<sub>b</sub> and 93% for PCV<sub>b</sub> at 24 months of age (table 3).

Among the HSE Areas 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 94% to 98%, MMR<sub>1</sub> ranged from 91% to 96%, PCV<sub>3</sub> ranged from 90% to 97%, Hib<sub>b</sub> ranged from 88% to 97% and MenC<sub>3</sub> ranged from 86% to 94% and (table 3). Among the seven Areas in a position to provide data PCV<sub>b</sub> uptake ranged from 92% to 96% and MenC<sub>b</sub> uptake ranged from 88% to 93% (table 3).

The target uptake of ≥95% was reached in six HSE Areas during 2015 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 two HSE Areas for Hib<sub>b</sub> and MMR<sub>1</sub>, in one for PCV<sub>3</sub> and PCV<sub>b</sub> and in none for MenC<sub>3</sub> and MenC<sub>b</sub> (table 3).

D<sub>3</sub>, Hib<sub>b</sub>, MenC<sub>3</sub> and MMR<sub>1</sub> uptake rates are mapped by LHO in figure 2. Among the LHOs the uptake rates ranged from 92% to 98% 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>, 89% to 97% for MMR<sub>1</sub>, 89% to 96% for PCV<sub>b</sub>, 87% to 98% for PCV<sub>3</sub>, 84% to 97% for Hib<sub>b</sub>, 83% to 97% for MenC<sub>b</sub> and 80% to 96% for MenC<sub>3</sub> (table 3).

The target uptake of ≥95% was reached in 21 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 20 for HepB<sub>3</sub>, in nine LHOs for MMR<sub>1</sub>, in seven for Hib<sub>b</sub> and PCV<sub>b</sub>, in five LHOs for PCV<sub>3</sub>, in two LHOs for MenC<sub>3</sub> and in one LHO for MenC<sub>b</sub> (table 3). Galway and Roscommon were the only LHOs to reach the target of ≥95% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, Hib<sub>b</sub>, MenC<sub>3</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> for children at 24 months (table 3).

Table 3. Immunisation uptake (%) at 24 months of age in 2015 (i.e. cohort born 01/01/2013-31/12/2013) by LHO and HSE Area

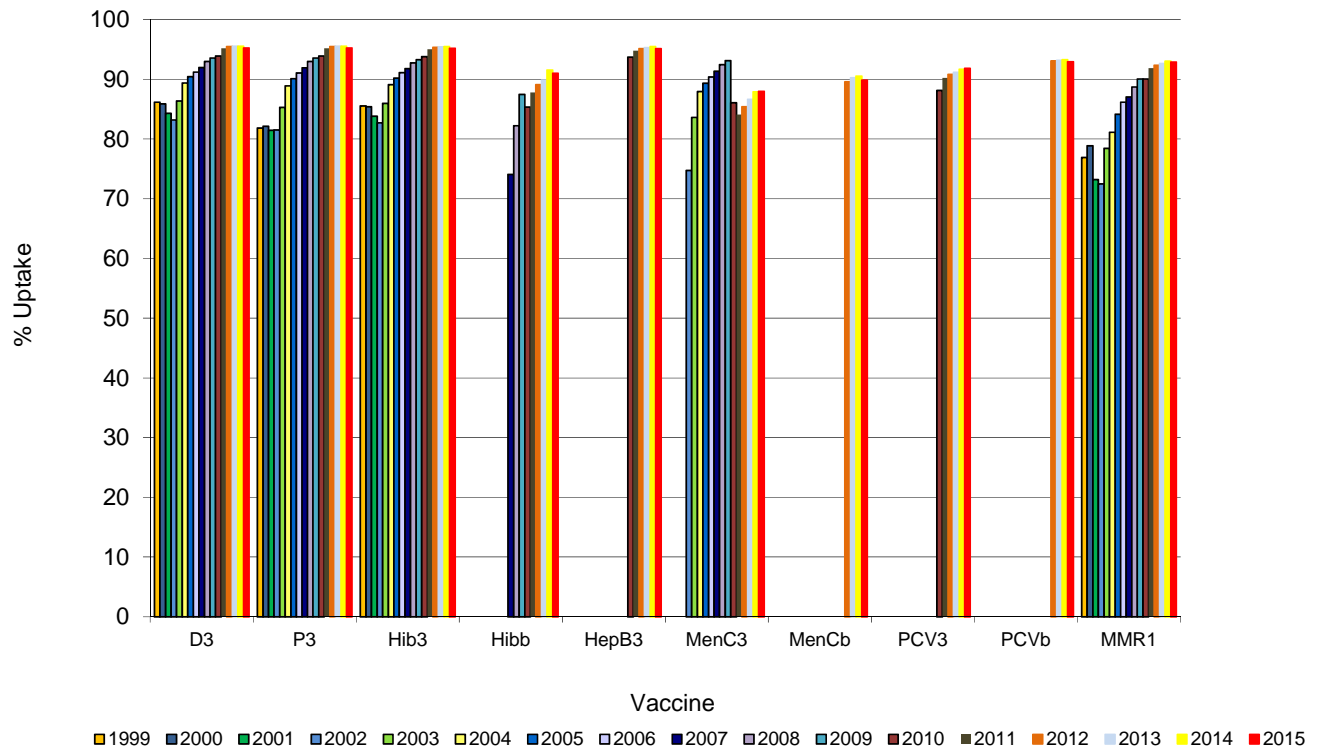
| HSE Area           | Local Health Office/HSE Area | Number in cohort for D <sub>3</sub> , T <sub>3</sub> & P <sub>3</sub> * | Immunisation Uptake (%) |                |                  |                  |                   |                   |                   |                  |                  |                  |
|--------------------|------------------------------|---|-------------------------|----------------|------------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|
|                    |                              |   | D <sub>3</sub>          | P <sub>3</sub> | Hib <sub>3</sub> | Hib <sub>6</sub> | HepB <sub>3</sub> | MenC <sub>3</sub> | MenC <sub>6</sub> | PCV <sub>3</sub> | PCV <sub>6</sub> | MMR <sub>1</sub> |
| HSE E              | Dublin South                 | 1731  | 95                      | 95             | 95               | 92               | 95                | 90                | 92                | 93               | 94               | 94               |
|                    | Dublin South East            | 1635  | 95                      | 95             | 95               | 90               | 95                | 88                | 90                | 91               | 93               | 92               |
|                    | Dublin South City            | 1726  | 95                      | 95             | 95               | 90               | 95                | 89                | 90                | 91               | 92               | 92               |
|                    | Dublin South West            | 2438  | 97                      | 97             | 97               | 93               | 97                | 89                | 92                | 93               | 95               | 95               |
|                    | Dublin West                  | 2725  | 95                      | 95             | 95               | 87               | 95                | 83                | 86                | 89               | 91               | 91               |
|                    | Dublin North West            | 3717  | 93                      | 93             | 93               | 86               | 93                | 83                | 86                | 88               | 90               | 90               |
|                    | Dublin North Central         | 1892  | 92                      | 92             | 92               | 84               | 92                | 81                | 83                | 87               | 89               | 89               |
|                    | Dublin North                 | 4202  | 93                      | 93             | 93               | 89               | 93                | 86                | 89                | 90               | 91               | 91               |
|                    | Kildare/West Wicklow         | 3860  | 94                      | 94             | 94               | 90               | 94                | 88                | 90                | 92               | 93               | 93               |
|                    | Wicklow                      | 1790  | 94                      | 94             | 94               | 84               | 94                | 80                | 84                | 89               | 91               | 90               |
| <b>HSE E Total</b> | <b>25716</b>                 | <b>94</b>   | <b>94</b>               | <b>94</b>      | <b>88</b>        | <b>94</b>        | <b>86</b>         | <b>88</b>         | <b>90</b>         | <b>92</b>        | <b>92</b>        |                  |
| HSE M              | Laos/Offaly                  | 2452  | 97                      | 97             | 97               | 97               | 97                | 91                | 93                | 94               | 96               | 96               |
|                    | Longford/Westmeath           | 1937  | 97                      | 97             | 97               | 97               | 97                | 92                | 94                | 95               | 96               | 96               |
|                    | <b>HSE M Total</b>           | <b>4389</b>   | <b>97</b>               | <b>97</b>      | <b>97</b>        | <b>97</b>        | <b>97</b>         | <b>91</b>         | <b>93</b>         | <b>94</b>        | <b>96</b>        | <b>96</b>        |
| HSE MW             | Clare                        | 1561  | 94                      | 94             | 93               | 92               | 93                | 90                | 93                | 91               | 92               | 92               |
|                    | Limerick                     | 1842  | 93                      | 93             | 93               | 88               | 93                | 85                | 87                | 89               | 90               | 90               |
|                    | Tipperary NR/East Limerick   | 1850  | 95                      | 95             | 95               | 89               | 95                | 86                | 90                | 90               | 93               | 92               |
|                    | <b>HSE MW Total</b>          | <b>5253</b>   | <b>94</b>               | <b>94</b>      | <b>94</b>        | <b>90</b>        | <b>94</b>         | <b>87</b>         | <b>90</b>         | <b>90</b>        | <b>92</b>        | <b>91</b>        |
| HSE NE             | Cavan/Monaghan               | 2028  | 97                      | 97             | 97               | 93               | 97                | 92                | 93                | 95               | 96               | 95               |
|                    | Louth                        | 1966  | 94                      | 94             | 94               | 90               | 94                | 89                | 90                | 92               | 93               | 92               |
|                    | Meath                        | 3348  | 96                      | 96             | 96               | 91               | 96                | 91                | 91                | 94               | 94               | 93               |
|                    | <b>HSE NE Total</b>          | <b>7342</b>   | <b>96</b>               | <b>96</b>      | <b>96</b>        | <b>91</b>        | <b>96</b>         | <b>90</b>         | <b>91</b>         | <b>93</b>        | <b>94</b>        | <b>93</b>        |
| HSE NW             | Donegal                      | 2093  | 96                      | 96             | 96               | 89               | 94                | 84                | 89                | 89               | 93               | 91               |
|                    | Sligo/Leitrim                | 1381  | 97                      | 97             | 97               | 96               | 97                | 89                | 97                | 91               | 96               | 96               |
|                    | <b>HSE NW Total</b>          | <b>3474</b>   | <b>96</b>               | <b>97</b>      | <b>96</b>        | <b>92</b>        | <b>95</b>         | <b>86</b>         | <b>92</b>         | <b>90</b>        | <b>94</b>        | <b>93</b>        |
| HSE SE             | Carlow/Kilkenny              | 1978  | 95                      | 95             | 95               | 94               | 95                | 88                | 92                | 92               | 94               | 94               |
|                    | South Tipperary              | 1339  | 97                      | 97             | 97               | 96               | 97                | 89                | 93                | 94               | 96               | 95               |
|                    | Waterford                    | 1890  | 94                      | 94             | 94               | 91               | 94                | 87                | 89                | 92               | 93               | 92               |
|                    | Wexford                      | 2088  | 97                      | 97             | 97               | 96               | 96                | 91                | 93                | 94               | 95               | 95               |
|                    | <b>HSE SE Total</b>          | <b>7295</b>   | <b>96</b>               | <b>96</b>      | <b>96</b>        | <b>94</b>        | <b>96</b>         | <b>89</b>         | <b>92</b>         | <b>93</b>        | <b>94</b>        | <b>94</b>        |
| HSE S              | North Cork                   | 1464  | 96                      | 96             | 96               | 92               | 97                | 88                | 90                | 92               | 93               | 94               |
|                    | North South Lee              | 5765  | 95                      | 95             | 95               | 91               | 95                | 88                | 89                | 92               | 93               | 93               |
|                    | West Cork                    | 746   | 93                      | 93             | 93               | 87               | 93                | 83                | 85                | 89               | 90               | 91               |
|                    | Kerry                        | 1794  | 96                      | 96             | 96               | 91               | 96                | 87                | 89                | 91               | 93               | 93               |
|                    | <b>HSE S Total</b>           | <b>9769</b>   | <b>95</b>               | <b>95</b>      | <b>95</b>        | <b>91</b>        | <b>96</b>         | <b>87</b>         | <b>89</b>         | <b>91</b>        | <b>93</b>        | <b>93</b>        |
| HSE W              | Galway                       | 3648  | 98                      | 98             | 98               | 95               | 98                | 95                | na                | 97               | na               | 96               |
|                    | Mayo                         | 1665  | 98                      | 98             | 98               | 91               | 98                | 92                | na                | 98               | na               | 94               |
|                    | Roscommon                    | 905   | 98                      | 98             | 98               | 96               | 98                | 96                | na                | 98               | na               | 97               |
|                    | <b>HSE W Total</b>           | <b>6218</b>   | <b>98</b>               | <b>98</b>      | <b>98</b>        | <b>95</b>        | <b>98</b>         | <b>94</b>         | <b>na</b>         | <b>97</b>        | <b>na</b>        | <b>95</b>        |
| <b>Ireland</b>     | <b>69456</b>                 | <b>95</b>   | <b>95</b>               | <b>95</b>      | <b>91</b>        | <b>95</b>        | <b>88</b>         | <b>90</b>         | <b>92</b>         | <b>93</b>        | <b>93</b>        |                  |

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

Since T<sub>3</sub> uptake identical to D<sub>3</sub> uptake only D<sub>3</sub> uptake figures are presented

Since Polio<sub>3</sub> uptake identical to Hib<sub>3</sub> uptake only Hib<sub>3</sub> uptake figures are presented

Please note while North Lee and South Lee are two separate Local Health Offices their combined immunisation uptake data are reported here



**Figure 1. National annual immunisation uptake rates (based on available data) at 24 months, 1999-2015**

Since  $T_3$  and  $Polio_3$  uptake identical to  $D_3$  uptake only  $D_3$  uptake figures presented.

$P_3$  uptake could not be calculated accurately during 1999-2001 as DTaP/DT uptake was reported as a combined value for the HSE NE during 1999, Quarters 3 and 4 2000 and Quarter 1 2001 and the HSE NW in 2000 and 2001. The 2002  $MenC_3$  figure is based on uptake rates for Quarter 3 and Quarter 4 2002 only. The 2005  $MMR_1$  uptake figure is incomplete as the HSE E was unable to provide MMR data for Quarter 4 2005, due to technical problems. The 2006  $MMR_1$  figure includes the Quarter-1 2006 HSE E figure, which is an estimate only due to technical problems. The 2007 national  $Hib_b$  figure is incomplete, as the HSE W data for Quarter 1 2007 and the HSE NW data for Quarter 3 2007 were not available. The 2007 national  $Hib_b$  figure also includes the HSE SE data which are an underestimate due to data extraction methods. The 2008 national  $Hib_b$  figure is incomplete as the HSE SE data for Q2 2008 and the HSE MW data for Quarter 3 2008 were not available. The 2008 national  $MenC_3$  figure is incomplete as the HSE E and HSE MW  $MenC_3$  data for Quarter 3 2008 were not available. The 2009 data are incomplete as the following were unavailable: the Quarter 1 2009 HSE E  $D_3$ ,  $T_3$ ,  $P_3$  and  $Polio_3$  data for those born on the 31/03/2007; the Quarter 2 2009 HSE E Dublin North  $Hib_b$  uptake data and; the Quarter 4 2009 HSE MW data, HSE E Dublin North  $Hib_b$  data and HSE SE  $Hib_b$  data for those given a Hib dose as part of the five in one or six in one vaccine after 12 months of age. The 2010 data are incomplete as the following were unavailable: the Quarter 1 2010 HSE M and HSE S data and the HSE E Dublin North  $Hib_b$  data; the Quarter 2 2010 HSE M data and; the Quarter 4 2010 HSE NE data. As a new childhood immunisation schedule was introduced in 2008, for those born on or after July 1st 2008, the 2010  $HepB_3$  and  $PCV_3$  data at 24 months are for those born between July 1st and December 31st 2008 (i.e. Quarters 3 and 4 2010 data) only. The  $MenCb$  and  $PCV_b$  data were available for only six of the eight HSE Areas from Q1 2012 to Q4 2014 and for seven HSE Areas since Q1 2015.

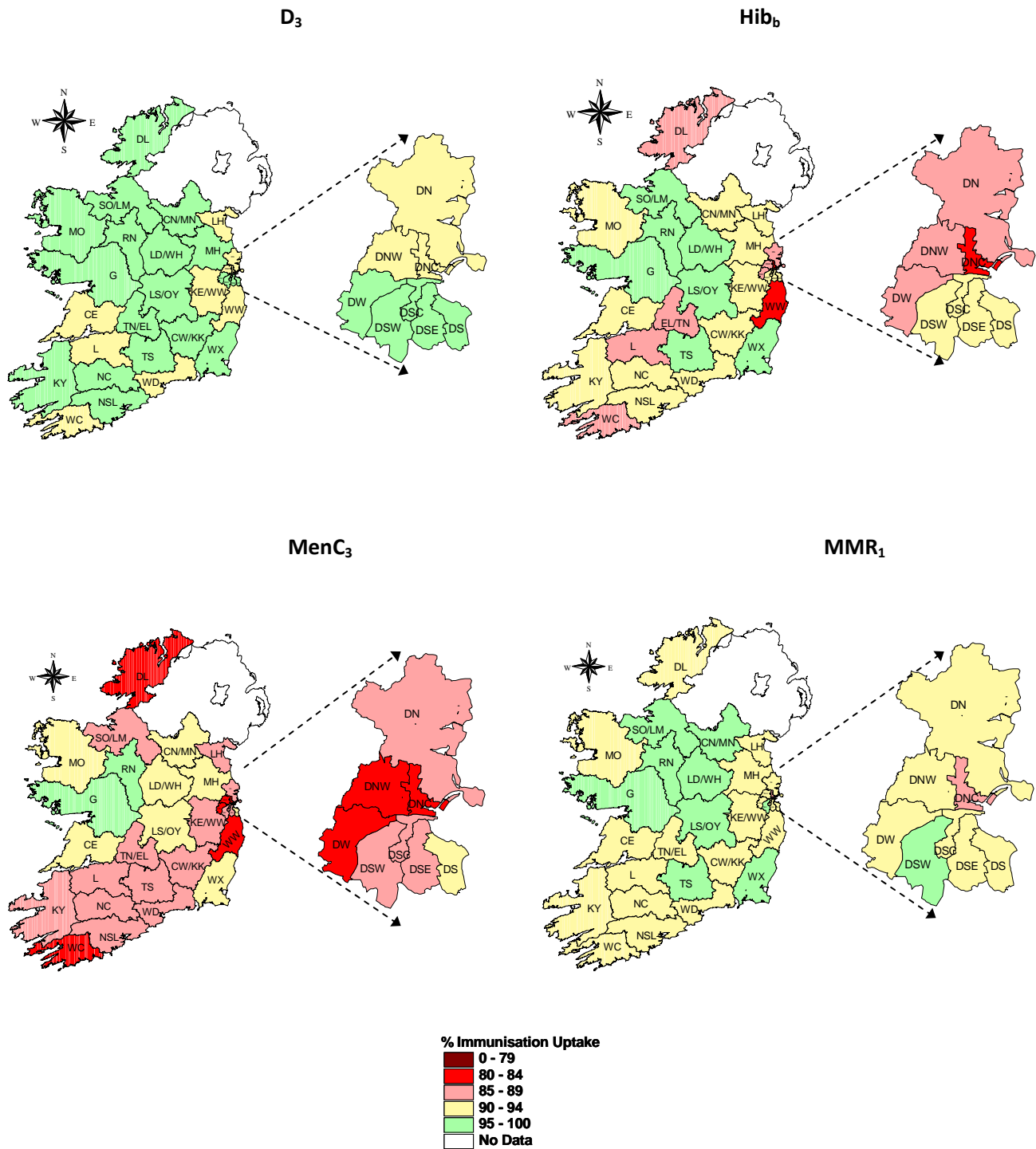


Figure 2.  $D_3$ , Hib<sub>6</sub>, MenC<sub>3</sub> and MMR<sub>1</sub> immunisation uptake rates (%) in those 24 months of age in 2015 by Local Health Office (LHO)

LHOs in Dublin are highlighted separately for ease of viewing

North Lee and South Lee are separate LHOs, however, their combined (labelled NSL on the map) immunisation uptake rate is reported here  
Please see table 4 to translate LHO abbreviations



### Conclusion

National immunisation uptake rates, in children at 12 months of age in 2015, were 91% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub>. Based on available data uptake of BCG was 86%. The HSE M and HSE W reached the target uptake rate of ≥95% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> among children at 12 months of age. Among the LHOs, Roscommon had the highest uptake (97%) of 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> and PCV<sub>2</sub> at 12 months of age.

In 2015, national uptake rates at 24 months for MenC<sub>3</sub> (88%), Hib<sub>b</sub> (91%), PCV<sub>3</sub> (92%) and MMR<sub>1</sub> (93%) were lower than the target uptake of ≥95%. In 2015, national uptake rates at 24 months of age 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 rate of ≥95%. This is the fifth year national annual uptake rates reached the target of ≥95% for these vaccines. Based on available data uptake of MenC<sub>b</sub> was 90% and uptake of PCV<sub>3</sub> was 93%. The target uptake of ≥95% was reached in six HSE Areas during 2015 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 two HSE Areas for Hib<sub>b</sub> and MMR<sub>1</sub>, in one for PCV<sub>3</sub> and PCV<sub>b</sub> and in none for MenC<sub>3</sub> and MenC<sub>b</sub> (table 3). Galway and Roscommon were the only LHOs to reach the target of ≥95% for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, Hib<sub>b</sub>, MenC<sub>3</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> for children at 24 months of age.

### Quarterly Reports

The immunisation reports for Quarters 1 to 4 2015 are available on the HPSC website in *Topics A-Z* under the heading *vaccination*.

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Table 4. Local Health Office (LHO) abbreviations used in this chapter

| Local Health Office Abbreviations | Local Health Office            |
|-----------------------------------|--------------------------------|
| 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