

## Immunisation uptake at 12 and 24 months of age, Quarter 3 2020

March 2020

### Summary

On Thursday, March 12<sup>th</sup> 2020, the government introduced measures as part of the national effort to interrupt the transmission of COVID-19. This report details immunisation uptake among children who were aged 12 or 24 months during this time.

#### Immunisation uptake rates in children 12 months of age in Quarter 3-2020

- National immunisation uptake rates (and changes compared to Quarter 2 2020) were
  - 92% for MenB<sub>2</sub> (↓0.2%)
  - 90% for Rota<sub>2</sub> (↑0.2%)
  - 89% 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>1</sub> and PCV<sub>2</sub> (↑0.2-0.4%)
    - Uptake rates are based on data from 31 LHOs in Q2 2020 and 30 LHOs in Q3 2020.
    - Uptake rates had declined in Quarter 1 and 2 2020 compared to Quarter 4 2019
- Some LHO uptake rates of note in Quarter 3 2020 are described on page 10 of this report
- LHO, CHO and national, data by quarter are available in tables and graphs on the HPSC website [here](#)

#### Immunisation uptake rates in children 24 months of age in Quarter 3-2020

- National uptake rates in Quarter 3 2020 (and changes compared to Quarter 2 2020) 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> (↑0.8%);
  - 93% for *MenB<sub>complete</sub>* (↑1.4%);
  - 92% for MMR<sub>1</sub> (↑1.0%);
  - 91% for *MenB<sub>3</sub>* (↑0.8%);
  - 90% for Rota<sub>2</sub> (↑0.5%);
  - 89% for Hib<sub>b</sub> (↓0.1%) and MenC<sub>b</sub> (↑0.2%);
  - 88% for PCV<sub>b</sub> (↑0.1%);
  - 86% for PCV<sub>3</sub> (unchanged),
  - 85% for *MenC<sub>2</sub>* (↓0.4%) and *Hib<sub>4</sub>* (↓0.5%)

*Uptake rates are rounded to zero decimal places*  
*MenB<sub>complete</sub> rates based on data from 20 LHOs in Q2 and Q3;*  
*Hib<sub>4</sub> rates based on data from 18 LHOs in Q2 and Q3;*  
*MenC<sub>2</sub> rates based on data from 18 LHOs in Q2 and Q3;*  
*Remainder based on data from 31 LHOs*
- MMR<sub>1</sub> was 92% an increase of 1% compared to Q1-2 2020 and Q1-Q3 2019, however, prior to Q1 2019 MMR<sub>1</sub> uptake was 92-93% since Q3 2011
- PCV<sub>3</sub> and PCV<sub>b</sub> were unchanged in Q3 2020 compared to the last two quarters but had both declined in Quarter 3 2018, Quarter 4 2018 and Quarter 1 2019 by a total of 5%; both are now 5% lower in Quarter 3 2020 compared to Quarter 2 2018.
- While uptake rates 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> were 95% uptake of the remaining vaccines in Quarter 1 2020 are lower. Doses of these remaining vaccines (except Rota<sub>2</sub>) are given at 12 and 13 months of age suggesting that parents are less likely to get the recommended vaccines for their children at this age.
- Some LHO uptake rates of note in Quarter 3 2020 are described on page 14 of this report
- LHO, CHO and national data by quarter are available in tables and graphs on the HPSC website [here](#)

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## Introduction

The national immunisation uptake statistics, based on available data, for Quarter 3 2020 are presented in this report. The Quarter 3 2020 immunisation uptake statistics relate to children at 12 (born between 01/07/2019 and 30/09/2019) and 24 (born between 01/07/2018 and 30/09/2018) months of age in Quarter 3-2020. These children were recommended the vaccines outlined in the right hand section of table 1.

The latest immunisation schedule was introduced for babies born on or after October 1<sup>st</sup> 2016. Changes to the schedule included the introduction of the Meningococcal group B and Rotavirus vaccines, a change in the recommended timing of the first MenC vaccine, a change in the recommended timing of the third PCV vaccine and introduction of a combined Hib/MenC vaccine at 13 months instead of the previous separate single doses of these vaccines. Changes to the schedule are outlined in Table 1. The Quarter 3 2020 12 month cohort are the twelfth 12 month cohort recommended this immunisation schedule and the Quarter 3 2020 24 month cohort are the eighth 24 month cohort recommended the new schedule.

Further vaccinations are recommended for older children and adults. Please see the HSE- National Immunisation Office website at [www.immunisation.ie](http://www.immunisation.ie) for current and detailed information on the Irish primary childhood immunisation schedule and also recommended vaccinations for older children and adults and guidelines for late entrants.

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.

For children at 12 months of age in Quarter 3 2020, 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 pneumococcal conjugate vaccine (PCV<sub>2</sub>), two doses of meningococcal serogroup B vaccine (MenB<sub>2</sub>), two doses of rotavirus vaccine (Rota<sub>2</sub>), one dose of meningococcal serogroup C conjugate vaccine (MenC<sub>1</sub>) and one dose of BCG vaccine are reported. The BCG vaccine stock in all areas expired at the end of April 2015. Please see <https://www.hse.ie/eng/health/immunisation/news/bcg17.html> for further information.

For children at 24 months of age in Quarter 3 2020, 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>), pneumococcal conjugate vaccine (PCV<sub>3</sub>)\*, meningococcal group B (MenB<sub>3</sub>)\*, two doses of vaccine against meningococcal group C (MenC<sub>2</sub>)\* and rotavirus (Rota<sub>2</sub>)\*, four doses of vaccines against *Haemophilus influenzae* type b (Hib<sub>4</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. MenB<sub>complete</sub> data was not flagged prior to Quarter 4 2018 with the Community Healthcare Organisations to be provided, and as a result some were not in a position to provide it. MenB<sub>complete</sub> are those given MenB<sub>3</sub> plus those given two doses with the first given on or after 10 months of age and the second dose two or more months later i.e. they are completely vaccinated against MenB.

\*For a more detailed description of the measures of vaccine coverage requested since Quarter 4 2018 please see Appendix 2.

**Table 1. Irish primary childhood immunisation schedules for children born from 01/07/2015**

| Age       | Children born 01/07/2015 to 30/09/2016 | Children born from 01/10/2016                |
|-----------|--|--|
| Birth     | BCG                                    | BCG  |
| 2 months  | DTaP/Hib/IPV/HepB (6 in 1) + PCV       | DTaP/Hib/IPV/HepB (6 in 1) + PCV+ MenB+ Rota |
| 4 months  | DTaP/Hib/IPV/HepB (6 in 1) + MenC      | DTaP/Hib/IPV/HepB (6 in 1) + MenB+ Rota      |
| 6 months  | DTaP/Hib/IPV/HepB (6 in 1) + PCV       | DTaP/Hib/IPV/HepB (6 in 1) + PCV+ MenC       |
| 12 months | MMR + PCV                              | MMR + MenB                                   |
| 13 months | MenC + Hib                             | Hib/MenC+ PCV                                |

Please see the HSE-National Immunisation Office (NIO) website at [www.immunisation.ie](http://www.immunisation.ie) for current and detailed information on the Irish primary childhood immunisation schedule, guidelines for late entrants, also recommended vaccinations for older children and adults.

The HSE-NIO website at <https://www.hse.ie/eng/health/immunisation/whoweare/vacchistory.html> shows the primary childhood immunisation programme schedules introduced since 1995 in Ireland and the school immunisation programme schedules since 2010 in Ireland.

|      |   |
|------|---|
| 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   |
| MenB | Meningococcal group B vaccine   |
| MenC | Meningococcal group C vaccine   |
| MMR  | Measles, Mumps and Rubella vaccine  |
| PCV  | Pneumococcal Conjugate Vaccine (13 valent vaccine recommended for babies born since 01/10/2010; and 7 valent vaccine prior to this) |
| Rota | Rotavirus oral vaccine  |

## Caveats to data

The percentages/rates are rounded to zero decimal places and presented and analysed by this rounded rate.

Dublin North Quarter 3 2020 uptake rates at 12 months were 51% 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>1</sub> and PCV<sub>2</sub>, 82% for MenB<sub>2</sub> and 81% for Rota<sub>2</sub> as Dublin North were behind in inputting going back to May 2020 (the Q3 2020 data were extracted from the local database December 2020); therefore the Dublin North figures were excluded from the national and CHO9 Quarter 3 2020 12 month uptake figures presented here.

National uptake rates in Quarter 3 2020 are compared to uptake rates in Quarter 2 2020, however, national uptake rates at 12 months in Quarter 3 2020 are based on data from 30 LHOs (Dublin North data excluded from the national and CHO9 figures as are behind in inputting data since May 2020) and 31 LHOs in Quarter 2 2020.

CHO4, CHO5 and, since Quarter 2 2019, the former HSE-NW (i.e. Donegal and Sligo/Leitrim) provide uptake on those at 12 and 24 months of age, while the remaining areas provided uptake in the relevant birth cohorts at the time the local report is run.

In Quarter 2 2019 CHO2 indicated their Community PAS system is unable to report on Hib<sub>b</sub> and MenC<sub>2</sub> at 24 months as required by HPSC and are not reporting Hib<sub>4</sub> and MenB<sub>complete</sub> at 24 months due to concerns over the accuracy of the denominator. Hib<sub>b</sub> was reported by CHO2 since Q1 2020 (but not in Q2-Q4 2019).

The former HSE-NW (i.e. Donegal and Sligo/Leitrim) and CHO3 data caveats are included in Appendix 3.

Extraction dates of data from the local databases was not reported for CHO3 and the former HSE-NE (i.e. Cavan/Monaghan/Louth/Meath).

Due to changes in the Irish primary childhood immunisation schedule (table 1) MenB<sub>3</sub> (and Rota<sub>2</sub>) for children at 24 months of age was first requested in Quarter 4 2018. MenB<sub>complete</sub> was also requested in Quarter 4 2018 but was not previously flagged with the CHOs to be provided and as a result not all were in a position to provide it. MenB<sub>complete</sub> data were reported for 25 LHOs in Quarter 1 2019 and 20 LHOs since then. In Quarter 2 2019-Quarter 3 2020 an additional 5 LHOs (former HSE-NE and HSE-NW) reported MenB<sub>complete</sub> data but as these included children who had received two doses at any age before 24 months they were excluded here from the national MenB<sub>complete</sub> data.

Hib<sub>4</sub> was requested in Quarter 4 2018 but not in previous quarters. Hib<sub>4</sub> was reported for 14 LHOs in Quarter 1 2019 and 18 LHOs since then.

For children born on or after October 1<sup>st</sup> 2016 (Quarter 4 2018 24 month cohort) the combined Hib/MenC vaccine was introduced and recommended at 13 months of age. Since Quarter 4 2018 not all areas are in a position to provide MenC<sub>2</sub> data as not all databases/reports were configured to count the combined Hib/MenC vaccine where it is the second dose of MenC. MenC<sub>2</sub> was reported for 18 LHOs since Quarter 3 2019, 14 LHOs in Quarter 2 2019, and for 10 LHOs in Quarter 1 2019.

## Uptake rates

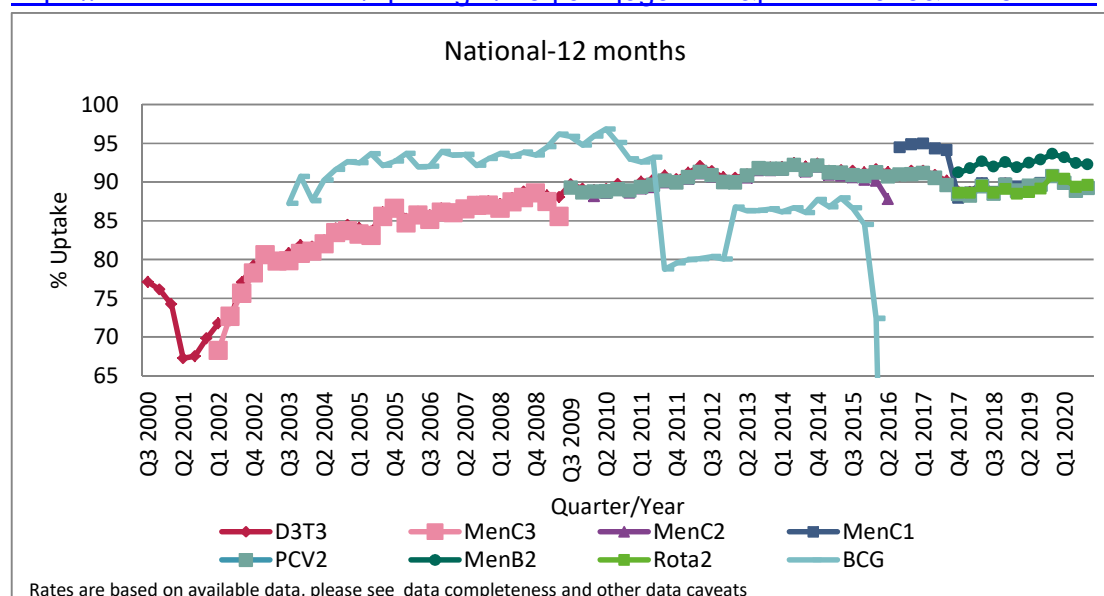
### Immunisation uptake rates at 12 months in Quarter 3 2020

#### National

- National immunisation uptake rates were (and changes compared to Quarter 2 2020)
  - 92% for MenB<sub>2</sub> (↓0.2%)
  - 90% for Rota<sub>2</sub> (↑0.2%)
  - 89% 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>1</sub> and PCV<sub>2</sub> (↑0.2-0.4%)
 Rates are based on data from 30 LHOs in Q3 2020 (Dublin North data excluded from the national and CHO9 figures as are behind in imputing data since May 2020) and 31 LHOs in Q2 2020
- Uptake rates in Q3 2020 are shown in table 2.
- Uptake rates at 12 months by quarter are shown in Figure 1.
  - Uptake rates had declined in Quarter 1 and 2 2020
- This is the twelfth 12 month cohort recommended the new immunisation schedule. The new immunisation schedule and changes in the schedule are shown in Table 1. The Q4 2017 12 month cohort were the first cohort recommended the new schedule. In Q4 2017, compared to Q2 2017, uptake rates at 12 months of age for MenC<sub>1</sub> had declined by 6%, PCV<sub>2</sub> declined by 3% and 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> rates declined by 2%.
- In Q3 2020, compared to Q2 2017, MenC<sub>1</sub> was 5% lower, and D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub> and PCV<sub>2</sub> were 2% lower
- MenC previously declined in Q3 2010 for those at 24 months of age (and there was low uptake of Hib<sub>b</sub>). These were the first cohort recommended hepatitis B and pneumococcal conjugate vaccines. In addition, there was a change in timing of the meningococcal serogroup C vaccines and *Haemophilus influenzae* type b booster vaccine for this cohort. The Q3 2010 report is [https://www.hpsc.ie/a-z/vaccinepreventable/vaccination/immunisationuptakestatistics/immunisationuptakestatisticsat12and24monthsofage/quarterlyreports/2010/File\\_12327\\_en.pdf](https://www.hpsc.ie/a-z/vaccinepreventable/vaccination/immunisationuptakestatistics/immunisationuptakestatisticsat12and24monthsofage/quarterlyreports/2010/File_12327_en.pdf).

The reasons for this decline and actions taken are described

<https://ndsc.newsweaver.ie/epiinsight/1i8qi6mq9g3?a=1&p=17742945&t=17517774>



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

X-axis ranges from 60-100%.

The Q3-2008 MenC<sub>1</sub> uptake 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; uptake figures exclude those born on the 31/03/2007. The Q3-2009 figures are incomplete as two HSE Areas were unable to provide data, two additional areas were unable to provide MenC<sub>2</sub> data and one additional area was unable to provide PCV<sub>2</sub> data. The Q4-2009 figures are incomplete as three HSE Areas were unable to provide data. The Q1-2010 figures are incomplete as two HSE Areas were unable to provide data and three were unable to provide MenC<sub>2</sub> data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as one HSE Area was unable to provide data. BCG uptake data are only displayed in this graph from Q1 2013 as BCG uptake data were available for only five of the eight HSE-Areas (this includes data from the HSE-Southern Area which relates to Kerry data only) from Q3 2003 to Q2 2009 (except Q3 2004 when HSE-Southern Area data were not available), for three HSE-Areas in Q3 2009, for two HSE-Areas in Q4 2009, for three HSE-Areas in Q1 2010 and Q2 2010, for five HSE-Areas in Q4 2010, Q1 2011 and Q2 2011, for six HSE-Areas in Q3 2011 to Q4 2012 and for seven HSE Areas from Q1 2013. From Q3 2011 to Q3 2014 HSE Western Area BCG data was not available by LHO, uptake was provided for the HSE Western Area as a whole. In Q4 2014 BCG data was available for Galway and Roscommon- the BCG denominator for HSE Western Area in Q4 2014 was the sum of the Galway and Roscommon denominators. Since Q1 2015 BCG data was available for Galway, Mayo and Roscommon LHOs. See page 2 regarding BCG vaccine stock in Ireland since April 2015. Q1-Q4 2018 CN/MN, LH and MH data were not available at the time of data extraction for the report. Due to COVID-19 taking priority Q4 2019 and Q1 2020 Donegal/Sligo/Leitrim data were extracted approx. 14-15 weeks after quarter end and Q2 2020 CHO5 data were extracted approx. 12 weeks after quarter end.. See also Caveats to Data section of this report. Q3 2020 data do not include Dublin North data.



**Table 2. Immunisation uptake (%) at 12 months of age in Quarter 3 2020, cohort born 01/07/2019-30/09/2020, by LHO and CHO in Ireland**

| Community Healthcare Organisation (CHO) | Local Health Office/CHO | Immunisation Uptake (%)  |  |             |                 |                |                  |                    |                   |                   |                   |                  |                   |
|---|-------------------------|--------------------------|--|-------------|-----------------|----------------|------------------|--------------------|-------------------|-------------------|-------------------|------------------|-------------------|
|   |                         | Number in cohort for BCG | Number in cohort for D <sub>3</sub> T <sub>3</sub> | BCG         | DT <sub>3</sub> | P <sub>3</sub> | Hib <sub>3</sub> | Polio <sub>3</sub> | HepB <sub>3</sub> | MenB <sub>2</sub> | MenC <sub>1</sub> | PCV <sub>2</sub> | Rota <sub>2</sub> |
| CHO1                                    | Cavan/Monaghan          | na                       | 436  | 0           | 89              | 89             | 89               | 89                 | 89                | 93                | 89                | 89               | 89                |
|   | Donegal                 | 531                      | 531  | 0           | 84              | 84             | 84               | 84                 | 84                | 90                | 83                | 84               | 82                |
|   | Sliigo/Leitrim          | 290                      | 290  | 0           | 92              | 92             | 92               | 92                 | 92                | 94                | 91                | 92               | 92                |
|   | <b>CHO1 Total</b>       | <b>821</b>               | <b>1257</b>  | <b>0</b>    | <b>88</b>       | <b>88</b>      | <b>88</b>        | <b>88</b>          | <b>88</b>         | <b>92</b>         | <b>87</b>         | <b>88</b>        | <b>87</b>         |
| CHO2                                    | Galway                  | 855                      | 855  | 0           | 92              | 92             | 92               | 92                 | 92                | 95                | 92                | 92               | 94                |
|   | Mayo                    | 375                      | 375  | 0           | 94              | 94             | 94               | 94                 | 94                | 97                | 94                | 94               | 96                |
|   | Roscommon               | 236                      | 236  | 0           | 96              | 96             | 96               | 96                 | 96                | 96                | 96                | 96               | 95                |
|   | <b>CHO2 Total</b>       | <b>1466</b>              | <b>1466</b>  | <b>0</b>    | <b>93</b>       | <b>93</b>      | <b>93</b>        | <b>93</b>          | <b>93</b>         | <b>95</b>         | <b>93</b>         | <b>93</b>        | <b>94</b>         |
| CHO3                                    | Clare                   | 346                      | 346  | 0           | 92              | 92             | 92               | 92                 | 92                | 93                | 91                | 92               | 91                |
|   | Limerick                | 494                      | 494  | 0           | 89              | 89             | 89               | 89                 | 89                | 93                | 89                | 90               | 90                |
|   | Tipperary NR/EL         | 374                      | 374  | 0           | 92              | 92             | 92               | 92                 | 92                | 94                | 92                | 92               | 91                |
|   | <b>CHO3 Total</b>       | <b>1214</b>              | <b>1214</b>  | <b>0</b>    | <b>91</b>       | <b>91</b>      | <b>91</b>        | <b>91</b>          | <b>91</b>         | <b>93</b>         | <b>90</b>         | <b>91</b>        | <b>91</b>         |
| CHO4                                    | North Cork              | 326                      | 326  | 0           | 90              | 90             | 90               | 90                 | 90                | 92                | 89                | 91               | 92                |
|   | North South Lee         | 1249                     | 1249   | 0           | 90              | 90             | 90               | 90                 | 90                | 93                | 90                | 90               | 90                |
|   | West Cork               | 167                      | 167  | 0           | 80              | 80             | 80               | 80                 | 80                | 82                | 79                | 80               | 77                |
|   | Kerry                   | 418                      | 418  | 0           | 90              | 90             | 90               | 90                 | 90                | 89                | 91                | 89               | 88                |
|   | <b>CHO4 Total</b>       | <b>2160</b>              | <b>2160</b>  | <b>0</b>    | <b>89</b>       | <b>89</b>      | <b>89</b>        | <b>89</b>          | <b>89</b>         | <b>91</b>         | <b>89</b>         | <b>89</b>        | <b>88</b>         |
| CHO5                                    | Carlow/Kilkenny         | 446                      | 446  | 0.2         | 91              | 91             | 91               | 91                 | 91                | 93                | 91                | 90               | 89                |
|   | South Tipperary         | 305                      | 305  | 0.3         | 92              | 92             | 92               | 92                 | 92                | 94                | 92                | 91               | 90                |
|   | Waterford               | 391                      | 391  | 0.0         | 88              | 88             | 88               | 88                 | 88                | 93                | 89                | 87               | 88                |
|   | Wexford                 | 477                      | 477  | 0.2         | 92              | 92             | 92               | 92                 | 92                | 94                | 91                | 92               | 91                |
|   | <b>CHO5 Total</b>       | <b>1619</b>              | <b>1619</b>  | <b>0.2</b>  | <b>91</b>       | <b>91</b>      | <b>91</b>        | <b>91</b>          | <b>91</b>         | <b>93</b>         | <b>91</b>         | <b>90</b>        | <b>90</b>         |
| CHO6                                    | Dublin South            | 384                      | 384  | 0           | 89              | 89             | 89               | 89                 | 89                | 92                | 89                | 89               | 90                |
|   | Dublin South East       | 359                      | 359  | 0           | 91              | 91             | 91               | 91                 | 91                | 92                | 91                | 91               | 92                |
|   | Wicklow                 | 471                      | 471  | 0           | 82              | 82             | 82               | 82                 | 82                | 85                | 82                | 82               | 82                |
|   | <b>CHO6 Total</b>       | <b>1214</b>              | <b>1214</b>  | <b>0</b>    | <b>87</b>       | <b>87</b>      | <b>87</b>        | <b>87</b>          | <b>87</b>         | <b>89</b>         | <b>87</b>         | <b>87</b>        | <b>87</b>         |
| CHO7                                    | Dublin South City       | 399                      | 399  | 0           | 93              | 93             | 93               | 93                 | 93                | 96                | 92                | 93               | 93                |
|   | Dublin South West       | 599                      | 599  | 0           | 88              | 88             | 88               | 88                 | 88                | 93                | 89                | 88               | 91                |
|   | Dublin West             | 576                      | 576  | 0           | 87              | 87             | 87               | 87                 | 87                | 90                | 87                | 87               | 87                |
|   | Kildare/West            | 878                      | 878  | 0           | 92              | 92             | 92               | 92                 | 92                | 94                | 92                | 92               | 92                |
|   | <b>CHO7 Total</b>       | <b>2452</b>              | <b>2452</b>  | <b>0</b>    | <b>90</b>       | <b>90</b>      | <b>90</b>        | <b>90</b>          | <b>90</b>         | <b>93</b>         | <b>90</b>         | <b>90</b>        | <b>91</b>         |
| CHO8                                    | Laois/Offaly            | 543                      | 543  | 0           | 96              | 96             | 96               | 96                 | 96                | 96                | 96                | 96               | 95                |
|   | Longford/Westmeath      | 467                      | 467  | 0           | 96              | 96             | 96               | 96                 | 96                | 96                | 96                | 96               | 95                |
|   | Louth                   | na                       | 453  | 0           | 87              | 87             | 87               | 87                 | 87                | 89                | 87                | 87               | 85                |
|   | Meath                   | na                       | 770  | 0           | 83              | 83             | 83               | 83                 | 83                | 90                | 83                | 83               | 87                |
|   | <b>CHO8 Total</b>       | <b>1010</b>              | <b>2233</b>  | <b>0</b>    | <b>90</b>       | <b>90</b>      | <b>90</b>        | <b>90</b>          | <b>90</b>         | <b>92</b>         | <b>90</b>         | <b>90</b>        | <b>90</b>         |
| CHO9                                    | Dublin North West       | 811                      | 811  | 0           | 86              | 86             | 86               | 86                 | 86                | 90                | 87                | 86               | 87                |
|   | Dublin North Central    | 454                      | 454  | 0           | 78              | 78             | 78               | 78                 | 78                | 88                | 78                | 77               | 86                |
|   | Dublin North            | 900                      | 900  | 0           | 51              | 51             | 51               | 51                 | 51                | 82                | 51                | 51               | 81                |
|   | <b>CHO9 Total</b>       | <b>1265</b>              | <b>1265</b>  | <b>0</b>    | <b>83</b>       | <b>83</b>      | <b>83</b>        | <b>83</b>          | <b>83</b>         | <b>89</b>         | <b>83</b>         | <b>83</b>        | <b>87</b>         |
| <b>Ireland</b>                          |                         | <b>13221</b>             | <b>14880</b>                                       | <b>0.02</b> | <b>89</b>       | <b>89</b>      | <b>89</b>        | <b>89</b>          | <b>89</b>         | <b>92</b>         | <b>89</b>         | <b>89</b>        | <b>90</b>         |

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

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

The BCG vaccine stock in all areas expired at the end of April 2015. Please see <https://www.hse.ie/eng/health/immunisation/news/bcg17.html> for further information.

na=not available

Rates are rounded to zero decimal places

Please also see Caveats to Data section of this report

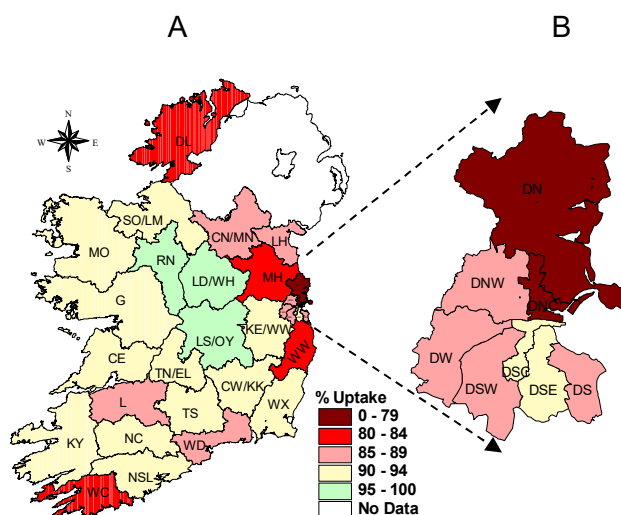
Dublin North are behind in data inputting going back to May 2020 (Q3 2020 data extracted December 2020); data included here but excluded from the Q3 2020 CHO9 and national figures and are excluded from the immunisation database (as it calculates the CHO9 and national uptake rates from all available data)

### Local Health Office (LHO)

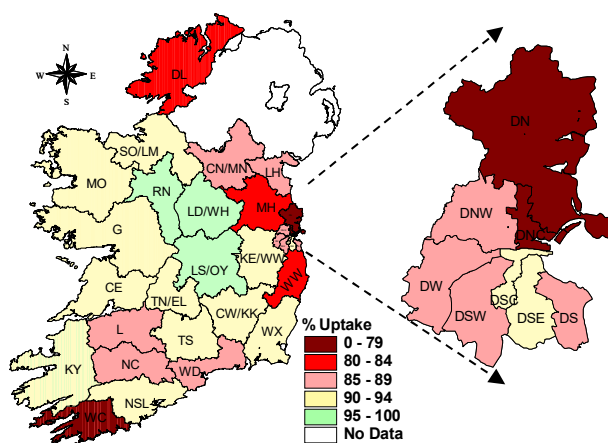
- The immunisation uptake rates by LHO are shown in Table 2.
- D<sub>3</sub> and MenC<sub>1</sub> immunisation uptake rates are mapped by LHO in figure 2 and 3.
- The immunisation uptake rates by Quarter and LHO are available in tables and graphs at <https://www.hpsc.ie/a-z/vaccinepreventable/vaccination/immunisationuptakestatistics/immunisationuptakestatisticsat12and24monthsofage/>
- Uptake rates among only some of the LHOs in Q3 2020 are described below.

Rates are for Q3 2020 compared to Q2 2020, unless otherwise stated:

- Dublin North uptake rates ranged from 51-82% as Dublin North are behind in imputing data since May 2020
- Dublin North Central rates declined by 4-8% and ranged from 77-88%, it is unclear if this is a true decline or if it is also a data entry issue
- Uptake rates in Donegal ranged from 82-90%
- Uptake rates in West Cork ranged from 77-82%
- Dubin South uptake rates declined by 2-4% and ranged from 89-92%
- Wicklow uptake rates declined by 2-3% and ranged from 82-85%
- Meath uptake rates declined by 1-3% and ranged from 83-90%
- Among the Local Health Offices, the target uptake rate of ≥95% was reached in Q3 2020 in Roscommon, Laois/Offaly and Longford/Westmeath for all vaccines



**Figure 2.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 3.** MenC<sub>1</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 3-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

# Immunisation uptake among children 24 months of age in Quarter 3-2020

## National

- National uptake rates in Q3 2020 (and changes compared to Q2-2020) were (table 3 and figure 4):

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> (↑0.8%);

93% for *MenB<sub>complete</sub>* (↑1.4%);

92% for MMR<sub>1</sub> (↑1.0%);

91% for *MenB<sub>3</sub>* (↑0.8%);

90% for Rota<sub>2</sub> (↑0.5%);

89% for Hib<sub>b</sub> (↓0.1%) and MenC<sub>b</sub> (↑0.2%);

88% for PCV<sub>b</sub> (↑0.1%);

86% for PCV<sub>3</sub> (unchanged),

85% for *MenC<sub>2</sub>* (↓0.4%) and *Hib<sub>4</sub>* (↓0.5%)

*Uptake rates are rounded to zero decimal places*

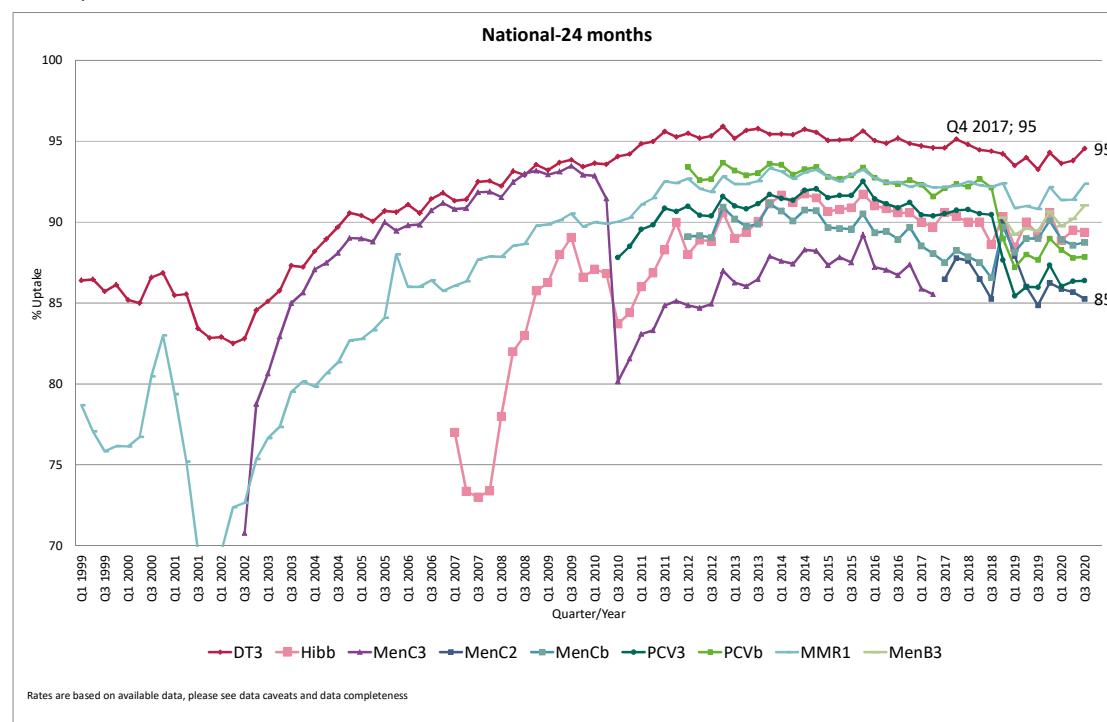
*MenB<sub>complete</sub> rates based on data from 20 LHOs in Q2 and Q3;*

*Hib<sub>4</sub> rates based on data from 18 LHOs in Q2 and Q3;*

*MenC<sub>2</sub> rates based on data from 18 LHOs in Q2 and Q3;*

*Remainder based on data from 31 LHOs*

- Figure 4 presents the national uptake rates at 24 months from Q1-1999 to Q3-2020



**Figure 4. National quarterly immunisation uptake rates at 24 months**

**Notes:** The Q4-2005 MMR<sub>1</sub> figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR<sub>1</sub> figure includes the HSE-Eastern Area figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib<sub>b</sub> figures are based on data from seven of the eight HSE-Areas. In Q1-2008 the HSE-SE changed their Hib<sub>b</sub> data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib<sub>b</sub> in the HSE-SE was 83% compared to 53% in Q4-2007. The Q3-2008 MenC<sub>3</sub> figure is based on data from six of the eight HSE-Areas. The Q1-2009 HSE-Eastern Area D<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> uptake figures exclude those born on the 31/03/2007. The Q2-2009 HSE-Eastern Area Hib<sub>b</sub> uptake figures exclude uptake figures from Dublin North. The Q4-2009 figures are based on data from seven of the eight HSE-Areas. The Q4-2009 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North. The Q1-2010 figures are based on data from six of the eight HSE-Areas. The Q1-2010 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North. The Q2-2010 and Q4-2010 figures are based on data from seven of the eight HSE-Areas. MenC<sub>2</sub> and PCV<sub>b</sub> data were only available for 6 of the 8 HSE Areas from Q1 2012 to Q4 2014. MenC<sub>2</sub> and PCV<sub>b</sub> data were only available for 8 CHOs from Q1 2015-Q1 2017 but are available for all since Q2 2017. Q2 2017 CHO3 Hib<sub>b</sub> figures were unavailable. CN/MN, LH and MH Q1, Q2 & Q3 2018 data were unavailable. For children born on or after 1<sup>st</sup> October 2016 (Quarter 4 2018 24 month cohort) the combined Hib/MenC vaccine is recommended at 13 months. For children born prior to the 1<sup>st</sup> October 2016 individual Hib and MenC vaccines were recommended. However, some children in these cohorts (born prior to the 1<sup>st</sup> October 2016) were given the combined Hib/MenC vaccine but the databases/reports were not always configured to include the combined Hib/MenC vaccine in the uptake statistics. Prior to Q3 2018 the combined Hib/MenC booster was not counted in the MenC<sub>2</sub> uptake statistics **except** in CHO4 and it was not counted in the MenC<sub>2</sub> and Hib<sub>b</sub> uptake statistics in CHO2/3/6/7/8/9. In Q3 2018 the combined Hib/MenC booster was not counted in the MenC<sub>2</sub> uptake statistics in CHO3/6/7/9 and it was not counted in the MenC<sub>2</sub>/Hib<sub>b</sub> statistics in CHO6/7/9. MenC<sub>2</sub> uptake was available for only 7 LHOs in Q4 2018 and 10 in Q1 2019. Please see the Caveats to Data section of the quarterly reports for caveats to data from Q2 2019.

**Table 3. Immunisation uptake (%) at 24 months of age in Quarter 3 2020, cohort born 01/07/2018-30/09/2018, by LHO and CHO in Ireland**

| Community Healthcare Organisation (CHO) | Local Health Office/CHO | No. in cohort for DT <sub>3</sub> | Immunisation Uptake (%) |                   |                  |                  |                   |               |                   |                   |                  |                  |                   |                  |
|---|-------------------------|-----------------------------------|-------------------------|-------------------|------------------|------------------|-------------------|---------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|
|   |                         |                                   | DT <sub>3</sub>         | HepB <sub>3</sub> | Hib <sub>4</sub> | Hib <sub>b</sub> | MenB <sub>3</sub> | MenB complete | MenC <sub>2</sub> | MenC <sub>b</sub> | PCV <sub>3</sub> | PCV <sub>b</sub> | Rota <sub>2</sub> | MMR <sub>1</sub> |
| CHO1                                    | Cavan/Monaghan          | 491                               | 93                      | 93                | 84               | 88               | 90                | na            | 84                | 87                | 83               | 83               | 87                | 91               |
|   | Donegal                 | 530                               | 90                      | 90                | 75               | 82               | 83                | na            | 75                | 81                | 75               | 81               | 79                | 83               |
|   | Sligo/Leitrim           | 333                               | 94                      | 93                | 86               | 90               | 90                | na            | 86                | 90                | 90               | 90               | 88                | 92               |
|   | <b>CHO1 Total</b>       | <b>1354</b>                       | <b>92</b>               | <b>92</b>         | <b>81</b>        | <b>86</b>        | <b>87</b>         | <b>na</b>     | <b>81</b>         | <b>85</b>         | <b>82</b>        | <b>84</b>        | <b>84</b>         | <b>88</b>        |
| CHO2                                    | Galway                  | 844                               | 96                      | 96                | na               | 93               | 94                | na            | na                | 92                | 96               | 90               | 95                | 95               |
|   | Mayo                    | 385                               | 96                      | 96                | na               | 91               | 94                | na            | na                | 88                | 96               | 95               | 95                | 95               |
|   | Roscommon               | 230                               | 97                      | 97                | na               | 94               | 98                | na            | na                | 91                | 99               | 98               | 94                | 94               |
|   | <b>CHO2 Total</b>       | <b>1459</b>                       | <b>96</b>               | <b>96</b>         | <b>na</b>        | <b>93</b>        | <b>95</b>         | <b>na</b>     | <b>na</b>         | <b>91</b>         | <b>97</b>        | <b>93</b>        | <b>95</b>         | <b>95</b>        |
| CHO3                                    | Clare                   | 312                               | 93                      | 93                | 86               | 91               | 91                | na            | 86                | 90                | 86               | 91               | 87                | 91               |
|   | Limerick                | 432                               | 95                      | 95                | 90               | 93               | 93                | na            | 90                | 93                | 89               | 90               | 91                | 94               |
|   | Tipperary NR/ELimerick  | 447                               | 93                      | 93                | 87               | 91               | 92                | na            | 87                | 90                | 87               | 90               | 89                | 93               |
|   | <b>CHO3 Total</b>       | <b>1191</b>                       | <b>94</b>               | <b>94</b>         | <b>88</b>        | <b>92</b>        | <b>92</b>         | <b>na</b>     | <b>88</b>         | <b>91</b>         | <b>87</b>        | <b>90</b>        | <b>89</b>         | <b>93</b>        |
| CHO4                                    | North Cork              | 313                               | 97                      | 97                | 87               | 90               | 94                | 95            | 86                | 89                | 86               | 89               | 92                | 95               |
|   | North South Lee         | 1312                              | 96                      | 96                | 88               | 92               | 92                | 94            | 87                | 91                | 88               | 90               | 92                | 93               |
|   | West Cork               | 153                               | 89                      | 89                | 80               | 87               | 85                | 86            | 81                | 85                | 80               | 84               | 76                | 88               |
|   | Kerry                   | 421                               | 94                      | 94                | 80               | 85               | 88                | 89            | 80                | 84                | 80               | 83               | 88                | 90               |
|   | <b>CHO4 Total</b>       | <b>2199</b>                       | <b>95</b>               | <b>95</b>         | <b>86</b>        | <b>90</b>        | <b>91</b>         | <b>93</b>     | <b>85</b>         | <b>89</b>         | <b>86</b>        | <b>88</b>        | <b>90</b>         | <b>93</b>        |
| CHO5                                    | Carlow/Kilkenny         | 458                               | 94                      | 94                | 83               | 88               | 90                | 91            | 84                | 90                | 84               | 87               | 88                | 92               |
|   | South Tipperary         | 326                               | 98                      | 98                | 92               | 96               | 95                | 97            | 91                | 96                | 94               | 96               | 92                | 96               |
|   | Waterford               | 464                               | 92                      | 92                | 81               | 87               | 91                | 93            | 83                | 86                | 85               | 87               | 86                | 93               |
|   | Wexford                 | 445                               | 95                      | 95                | 86               | 91               | 92                | 93            | 86                | 91                | 87               | 90               | 90                | 92               |
|   | <b>CHO5 Total</b>       | <b>1693</b>                       | <b>94</b>               | <b>94</b>         | <b>85</b>        | <b>90</b>        | <b>92</b>         | <b>93</b>     | <b>85</b>         | <b>90</b>         | <b>87</b>        | <b>89</b>        | <b>88</b>         | <b>93</b>        |
| CHO6                                    | Dublin South            | 415                               | 96                      | 96                | na               | 93               | 93                | 94            | na                | 93                | 90               | 91               | 93                | 94               |
|   | Dublin South East       | 400                               | 96                      | 96                | na               | 94               | 93                | 94            | na                | 94                | 92               | 93               | 95                | 95               |
|   | Wicklow                 | 420                               | 85                      | 85                | na               | 79               | 80                | 81            | na                | 79                | 75               | 75               | 80                | 82               |
|   | <b>CHO6 Total</b>       | <b>1235</b>                       | <b>93</b>               | <b>93</b>         | <b>na</b>        | <b>89</b>        | <b>88</b>         | <b>89</b>     | <b>na</b>         | <b>89</b>         | <b>86</b>        | <b>86</b>        | <b>89</b>         | <b>90</b>        |
| CHO7                                    | Dublin South City       | 358                               | 97                      | 97                | na               | 92               | 95                | 97            | na                | 92                | 89               | 90               | 94                | 96               |
|   | Dublin South West       | 535                               | 96                      | 96                | na               | 86               | 91                | 93            | na                | 85                | 82               | 84               | 91                | 93               |
|   | Dublin West             | 523                               | 98                      | 98                | na               | 92               | 95                | 97            | na                | 92                | 88               | 89               | 94                | 98               |
|   | Kildare/West Wicklow    | 826                               | 98                      | 98                | na               | 95               | 95                | 96            | na                | 94                | 91               | 93               | 93                | 97               |
|   | <b>CHO7 Total</b>       | <b>2242</b>                       | <b>97</b>               | <b>97</b>         | <b>na</b>        | <b>92</b>        | <b>94</b>         | <b>96</b>     | <b>na</b>         | <b>91</b>         | <b>88</b>        | <b>90</b>        | <b>93</b>         | <b>96</b>        |
| CHO8                                    | Laois/Offaly            | 530                               | 96                      | 96                | 91               | 95               | 94                | 96            | 91                | 94                | 91               | 94               | 91                | 96               |
|   | Longford/Westmeath      | 432                               | 98                      | 98                | 94               | 97               | 96                | 99            | 94                | 96                | 94               | 96               | 92                | 97               |
|   | Louth                   | 439                               | 91                      | 91                | 80               | 83               | 85                | na            | 80                | 83                | 80               | 79               | 87                | 87               |
|   | Meath                   | 755                               | 94                      | 94                | 83               | 86               | 90                | na            | 83                | 86                | 83               | 83               | 90                | 91               |
|   | <b>CHO8 Total</b>       | <b>2156</b>                       | <b>95</b>               | <b>95</b>         | <b>87</b>        | <b>90</b>        | <b>91</b>         | <b>97</b>     | <b>86</b>         | <b>89</b>         | <b>87</b>        | <b>88</b>        | <b>90</b>         | <b>92</b>        |
| CHO9                                    | Dublin North West       | 847                               | 93                      | 93                | na               | 86               | 88                | 89            | na                | 86                | 83               | 85               | 91                | 90               |
|   | Dublin North Central    | 425                               | 92                      | 92                | na               | 84               | 86                | 87            | na                | 82                | 76               | 81               | 88                | 88               |
|   | Dublin North            | 939                               | 93                      | 93                | na               | 83               | 89                | 90            | na                | 83                | 82               | 83               | 91                | 90               |
|   | <b>CHO9 Total</b>       | <b>2211</b>                       | <b>93</b>               | <b>93</b>         | <b>na</b>        | <b>85</b>        | <b>88</b>         | <b>89</b>     | <b>na</b>         | <b>84</b>         | <b>81</b>        | <b>84</b>        | <b>90</b>         | <b>90</b>        |
| <b>Ireland</b>                          |                         | <b>15740</b>                      | <b>95</b>               | <b>95</b>         | <b>85</b>        | <b>89</b>        | <b>91</b>         | <b>93</b>     | <b>85</b>         | <b>89</b>         | <b>86</b>        | <b>88</b>        | <b>90</b>         | <b>92</b>        |

As the denominator/number in cohort varied slightly according to vaccine the DT<sub>3</sub> cohort is shown here

Since P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> uptake very similar to DT<sub>3</sub> uptake only DT<sub>3</sub> uptake figures are presented

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

Rates are rounded to zero decimal places

na=not available

Hib<sub>4</sub> 'national' uptake rate is based on data from 18 LHOs only

MenB<sub>complete</sub> 'national' rate is based on data from 20 LHOs.

MenC<sub>2</sub> 'national' uptake is based on data from 18 LHOs only. Lack of complete MenC<sub>2</sub> data is a reporting issue associated with the second dose of MenC now given at 13 months as part of the combined Hib/MenC vaccine and CHO reports not including this vaccine in MenC uptake rates

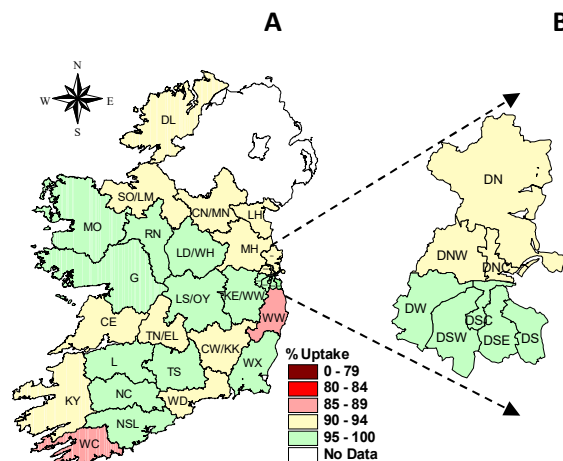
Please also see Caveats to Data section of this report

### Local Health Office (LHO)

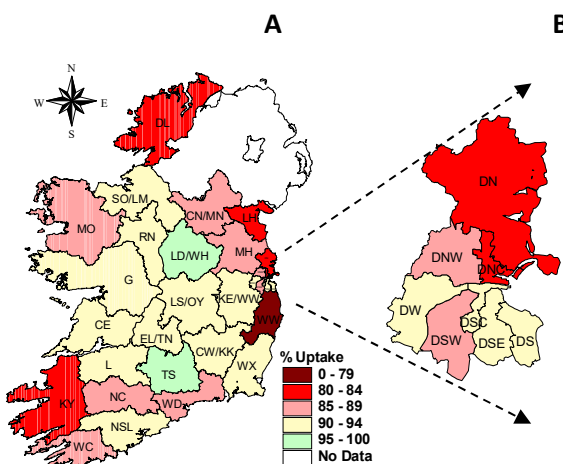
- Immunisation uptake rates in children 24 months of age in Q3-2020 are presented by LHO in Table 3.
- Immunisation uptake rates of some vaccines/measures of coverage are mapped by LHO in figures 5 -7.
- Quarterly LHO data are tabulated and graphed in the document 'Quarterly 24 months LHO Tables & Graphs- Data up to Q3 2020' available [here](#)
- Uptake rates among only some of the LHOs in Q3 2020 are described below

Rates are for Q3 2020 and compared to Q2 2020, unless otherwise stated:

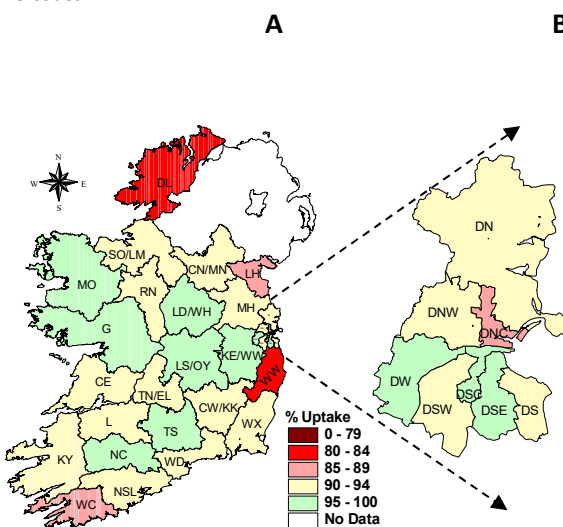
- West Cork uptake rates mostly declined by 1-5% and ranged from 76% to 89%.
- Kerry uptake Hib<sub>4</sub>/Hib<sub>b</sub>/MenB<sub>3</sub>/MenB<sub>complete</sub>/MenC<sub>2</sub>/MenC<sub>b</sub>/PCV<sub>3</sub>/PCV<sub>b</sub>/MMR<sub>1</sub> uptake rates declined by approximately 1-5%.  
Hib<sub>4</sub>/MenC<sub>2</sub>/MenC<sub>b</sub>/PCV<sub>3</sub>/PCV<sub>b</sub> uptake rates were their lowest since they were first collected with uptake rates of Hib<sub>4</sub>/MenC<sub>2</sub>/MenC<sub>b</sub>/PCV<sub>3</sub>/PCV<sub>b</sub> ranging from 80-84%.
- Tipperary South uptake rates improved by approximately 2-8% with rates ranging from 91-98%
- Dublin South City uptake rates ranged from 1-5% and ranged from 89-97%
- Dublin South West DT<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/MenB<sub>3</sub>/MenB<sub>complete</sub>/Rota<sub>2</sub>/MMR<sub>1</sub> uptake rates improved by 3-6.5%, while Hib<sub>b</sub> declined by 5%
- Kildare uptake rates improved by approximately 3-5% with uptake rates ranging from 91-98%
- Dublin North uptake rates improved by 2-5% with uptake rates ranging from 82-93%



**Figure 5.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 6.** MenC<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 7.** MMR<sub>1</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 3-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Further information available on HPSC website

On the HPSC website under *Topics A-Z* and under the heading *immunisation uptake statistics* further data are available. Included on the website are the LHO, CHO and national data:

by quarter

<https://www.hpsc.ie/a-z/vaccinepreventable/vaccination/immunisationuptakestatistics/immunisationuptakestatisticsat12and24monthsofage/>

by year

<https://www.hpsc.ie/a-z/vaccinepreventable/vaccination/immunisationuptakestatistics/immunisationuptakestatisticsat12and24monthsofage/annualreports/>

## Acknowledgements

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

## Report prepared by:

Sarah Gee and Suzanne Cotter, HPSC



**Appendix 1. 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                        |

\*While North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here

**Appendix 2. Measures of vaccine coverage requested since Quarter 4 2018**

|  |
|--|
| <b>Vaccine</b>   |
| <b>24 months</b>   |
| D3, T3, P3, Hib3, Polio3, HepB3, -three doses of each of the vaccines D, T, P, Hib, Polio, HepB, before their 2nd birthday;  |
| Hib4-four doses of Hib with the first three doses given before 1st birthday and the 4th dose given on or after first birthday and before 2nd birthday. A dose of Hib includes Hib given as part of 5:1, 6:1, stand alone Hib, combined Hib/MenC vaccine etc; |
| Hibb- one dose of Hib (any dose of Hib e.g. as part of 5:1, 6:1, stand alone Hib, combined Hib/MenC vaccine etc) on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday;                                     |
| MenB3-three doses of MenB with the first two doses given before 1st birthday and the 3rd dose given on or after first birthday and before 2nd birthday;  |
| MenB2-two doses of MenB on or after 10 months of age and before 2nd birthday with doses 2 months apart;  |
| MenBcomplete-MenB3 and MenB2 i.e. children who are completely vaccinated with MenB. MenB3 and MenB2 are defined above.   |
| MenC2-two doses of MenC with the first dose given before 1st birthday and the 2nd dose given on or after first birthday and before 2nd birthday. A dose of MenC is a MenC dose given as part of the combined Hib/MenC vaccine or as a single MenC vaccine;   |
| MenCb- one dose of MenC on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday. A dose of MenC is a MenC dose given as part of the combined Hib/MenC vaccine or as a single MenC vaccine;                    |
| PCV3-three doses of PCV with the first two doses given before 1st birthday and the 3rd dose given on or after first birthday and before 2nd birthday;  |
| PCVb- one dose of PCV on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday;  |
| Rota2- two doses of Rota before 8 months and 0 days;   |
| MMR1- one dose of MMR on or after 1st birthday and before 2nd birthday (i.e. excludes MMR given before 1st birthday);  |
| * No. eligible children = No. children born + No. moved in - (No. deceased + No. moved out)  |
| Number of eligible children is the number of eligible children reaching their 2nd birthday during the quarter specified.   |
| ** % immunised = (No. immunised /No. eligible children) x 100  |
| <b>12 MONTHS</b>   |
| BCG- one dose of BCG at birth;   |
| D3, T3, P3, Hib3, Polio3, HepB3-three doses of D, T, P, Hib, Polio, HepB, respectively, before their first birthday;   |
| MenB2- two doses of MenB before their first birthday;  |
| MenC1 - one dose of MenC before their first birthday;  |
| PCV2- two doses of PCV before their first birthday;  |
| Rota2- two doses of Rota before 8 months and 0 days.   |
| * No. eligible children = No. children born + No. moved in - (No. deceased + No. moved out)  |
| Number of eligible children is the number of eligible children reaching their 1st birthday during the quarter specified.   |
| ** % immunised = (No. immunised /No. eligible children) x 100  |

### Appendix 3. Data caveats reported by Donegal/Sligo-Leitrim and CHO3

#### Donegal/Sligo-Leitrim:

| Vaccine  | HSE-NW's ability to report on this                    |
|--|---|
| <b>24 months</b>   |   |
| D3, T3, P3, Hib3, Polio3, HepB3 -three doses of each of the vaccines D, T, P, Hib, Polio, HepB, before their 2nd birthday;   | yes as of 2nd quarter 2019                            |
| Hib4-four doses of Hib with the first three doses given before 1st birthday and the 4th dose given on or after first birthday and before 2nd birthday. A dose of Hib includes Hib given as part of 5:1, 6:1, stand alone Hib, combined Hib/MenC vaccine etc; | no as two dates involved - would need a manual report |
| Hibb- one dose of Hib (any dose of Hib e.g. as part of 5:1, 6:1, stand alone Hib, combined Hib/MenC vaccine etc) on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday;                                     | yes as of 2nd quarter 2019                            |
| MenB3-three doses of MenB with the first two doses given before 1st birthday and the 3rd dose given on or after first birthday and before 2nd birthday;  | no as two dates involved - would need a manual report |
| MenB2-two doses of MenB on or after 10 months of age and before 2nd birthday with doses 2 months apart;  | no as two dates involved - would need a manual report |
| MenBcomplete-MenB3 and MenB2 i.e. children who are completely vaccinated with MenB. MenB3 and MenB2 are defined above.   | yes as of 2nd quarter 2019                            |
| MenC2-two doses of MenC with the first dose given before 1st birthday and the 2nd dose given on or after first birthday and before 2nd birthday. A dose of MenC is a MenC dose given as part of the combined Hib/MenC vaccine or as a single MenC vaccine;   | no as two dates involved - would need a manual report |
| MenCb- one dose of MenC on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday. A dose of MenC is a MenC dose given as part of the combined Hib/MenC vaccine or as a single MenC vaccine;                    | yes as of 2nd quarter 2019                            |
| PCV3-three doses of PCV with the first two doses given before 1st birthday and the 3rd dose given on or after first birthday and before 2nd birthday;  | no as two dates involved - would need a manual report |
| PCVb- one dose of PCV on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday;  | yes as of 2nd quarter 2019                            |
| Rota2- two doses of Rota before 8 months and 0 days;   | yes as of 2nd quarter 2019                            |
| MMR1- one dose of MMR on or after 1st birthday and before 2nd birthday (i.e. excludes MMR given before 1st birthday);  | yes as of 2nd quarter 2019                            |
| * No. eligible children = No. children born + No. moved in - (No. deceased + No. moved out)  | Yes   |
| Number of eligible children is the number of eligible children reaching their 2nd birthday during the quarter specified.   | Yes   |
| ** % immunised = (No. immunised /No. eligible children) x 100  | Yes   |
| <b>12 MONTHS</b>   |   |
| BCG- one dose of BCG at birth;   |   |
| D3, T3, P3, Hib3, Polio3, HepB3-three doses of D, T, P, Hib, Polio, HepB, respectively, before their first birthday;   | yes as off quarter 2 2019                             |
| MenB2- two doses of MenB before their first birthday;  | yes as off quarter 2 2019                             |
| MenC1 - one dose of MenC before their first birthday;  | yes as off quarter 2 2019                             |
| PCV2- two doses of PCV before their first birthday;  | yes as off quarter 2 2019                             |
| Rota2- two doses of Rota before 8 months and 0 days.   | yes as off quarter 2 2019                             |
| * No. eligible children = No. children born + No. moved in - (No. deceased + No. moved out)  | Yes   |
| Number of eligible children is the number of eligible children reaching their 1st birthday during the quarter specified.   | Yes   |
| ** % immunised = (No. immunised /No. eligible children) x 100  | Yes   |

#### CHO3 (24months):

|   |   |
|---|---|
| D3, T3, P3, Hib3, Polio3, HepB3 -three doses of each of the vaccines D, T, P, Hib, Polio, HepB, before their 2nd birthday;  | Available   |
| Hib4-four doses of Hib with the first three doses given before 1st birthday and the 4th dose given on or after first birthday and before 2nd birthday. A dose of Hib includes Hib given as part of 5:1, 6:1, stand alone Hib, combined Hib/MenC vaccine etc;  | *Can add Hib Booster + Hib/MenC. However it isn't possible to tell that the first 3 doses were given before a year  |
| Hibb- one dose of Hib (any dose of Hib e.g. as part of 5:1, 6:1, stand alone Hib, combined Hib/MenC vaccine etc) on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday;  | * Not available from report. Hib booster + Hib/MenC + 5-in-1 / 6-in-1 > 1yr + Hib vac > 1yr, however a child who gets two of these is counted twice – an overestimate |
| MenB3-three doses of MenB with the first two doses given before 1st birthday and the 3rd dose given on or after first birthday and before 2nd birthday;   | * Can give a figure from report – no. given a 3 <sup>rd</sup> dose of MenB, can't say that 2 doses were given < 1 year and 1 dose > 1 year                            |
| MenB2-two doses of MenB on or after 10 months of age and before 2nd birthday with doses 2 months apart;   | *Not available from report  |
| MenBcomplete-MenB3 and MenB2 i.e. children who are completely vaccinated with MenB. MenB3 and MenB2 are defined above.<br>Reporting of MenB2 and MenBcomplete figures in template above:<br>If MenB3 and MenB2 are entered above the excel sheet will automatically calculate MenBcomplete.<br>If MenBcomplete is available and not MenB2 then type MenBcomplete into the MenBcomplete row and leave MenB2 row blank.<br>If MenB2 and MenBcomplete are both unavailable then leave the MenBcomplete row blank | Will be calculated from MenB3 + MenB2, so as we can't give MenB2 it will be the same as MenB3   |
| MenC2-two doses of MenC with the first dose given before 1st birthday and the 2nd dose given on or after first birthday and before 2nd birthday. A dose of MenC is a MenC dose given as part of the combined Hib/MenC vaccine or as a single MenC vaccine;  | *Not available from report. Hib/ MenC recorded. Cannot tell if they have already had a dose of MenC and that it was before 1 <sup>st</sup> birthday                   |
| MenCb- one dose of MenC on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday. A dose of MenC is a MenC dose given as part of the combined Hib/MenC vaccine or as a single MenC vaccine;   | *Not available from report. MenC1 > 1 yr + MenC2 > 1 yr + MenC3 > 1 yr + Hib/MenC. However a child who gets any two is counted twice i.e. an overestimate             |
| PCV3-three doses of PCV with the first two doses given before 1st birthday and the 3rd dose given on or after first birthday and before 2nd birthday;   | * Can give a figure - the number given a 3 <sup>rd</sup> dose of PCV, can't say that 2 doses were given < 1 year and 1 dose > 1 year                                  |
| PCVb- one dose of PCV on or after 1st birthday (irrespective of the number of doses before that age) and before 2nd birthday;   | *Not available from report. PCV1 > 1 yr + PCV2 > 1yr + PCV3 > 1 yr, however a child who gets a 2 doses > 1 yr is counted twice i.e. an overestimate                   |
| Rota2- two doses of Rota before 8 months and 0 days;  | Available   |
| MMR1- one dose of MMR on or after 1st birthday and before 2nd birthday (i.e. excludes MMR given before 1st birthday);   | Available   |