

## Summary

### Children 12 months of age in Quarter 2-2018

- National immunisation uptake rates, based on available data, were  
93% for MenB<sub>2</sub>,  
90% 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>, Rota<sub>2</sub> and MenC<sub>1</sub> and  
89% for PCV<sub>2</sub>.
- The national uptake rates increased by 1% in Quarter 2 compared to Quarter 1.
- MenC<sub>1</sub> at 12 months was 90% in Quarter 2 which is an improvement compared to 88% in Quarter 3 2017 and 89% in Quarter 1 2018 but is still 4-5% lower compared to Quarters 1-3 2017. This decline is a concern as it leaves children vulnerable to preventable meningococcal serogroup C infection.
- Among the Local Health Offices, the target uptake rate of 95% was reached in Longford/Westmeath and Dublin North Central 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>, PCV<sub>2</sub> and MenB<sub>2</sub>, Roscommon for PCV<sub>2</sub>, MenB<sub>2</sub> and Rota<sub>2</sub>, Mayo for MenB<sub>2</sub> and Rota<sub>2</sub> and in Clare, Tipperary NR/East Limerick, Tipperary South, Dublin South City, and Laois/Offaly for MenB<sub>2</sub>.
- There are improvements in a number of LHOs including:  
WW (CHO6) uptake increased by 4-5% for all vaccines in Quarter 2 2018 compared to Quarter 1 2018, reversing previous downward trend, but are 7-8% lower compared to Quarter 2 2017.  
DNW (CHO9) uptake rates increased by 5-6% (to 91-94%) compared to Quarter 1.  
DNC (CHO9) uptake rates in Quarter 2 increased by 8-12% to 93% for Rota<sub>2</sub> and 95% for PCV<sub>2</sub> and MenB<sub>2</sub> and 96% for the remainder.

### Children 24 months of age in Quarter 2-2018

- National uptake rates, based on available data, were  
94% 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 PCV<sub>b</sub>,  
92% for MMR<sub>1</sub>,  
91% for PCV<sub>3</sub>,  
90% for Hib<sub>b</sub>,  
88% for MenC<sub>b</sub> and  
86% for MenC<sub>2</sub>.
- Compared to the previous quarter the national MenC<sub>2</sub> uptake rate declined by 2% nationally to 86%; with declines in 16 LHOs ranging from 1% to 7%.  
  
MenC<sub>2</sub> was previously 86% in Quarter 3 2017 and was 88% in Quarter 4 2017 and Quarter 1 2018.  
  
MenC<sub>2</sub> uptake was below 80% in two LHOs in Quarter 2 2018.
- 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> declined by 1% to 94%.  
This is the first time since 2010 that D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> did not reach the target of 95% at 24 months.
- While 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> were 94% uptake of the remaining vaccines in Q2 2018 are lower. Doses of these remaining vaccines 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.

## Background

The national immunisation uptake statistics, based on available data, for Quarter 2 2018 are presented in this report. These immunisation uptake statistics relate to children at 12 (born between 01/04/2017 and 30/06/2017) and 24 (born between 01/04/2016 and 30/06/2016) months of age in Quarter 2-2018. These children were recommended the vaccines outlined in table 1. The immunisation schedule changed in 2016 for children born on or after October 1<sup>st</sup> 2016 after the National Immunisation Advisory Committee (NIAC) recommended meningococcal B (MenB) and rotavirus (Rota) vaccines (table 1). There is a change in timing of MenC with MenC now recommended at 6 months of age; in previous schedule MenC was recommended at 4 months (Table 1). A combined Hib/MenC dose and a PCV dose are now recommended at 13 months (Table 1).

For children at 12 months of age in Quarter 2 2018, 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.

For children at 24 months of age in Quarter 2 2018, 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>) and pneumococcal conjugate vaccine (PCV<sub>3</sub>), two doses of vaccine against meningococcal group C (MenC<sub>2</sub>) and one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>) are reported. One dose of vaccine against *Haemophilus influenzae* type b (Hib<sub>b</sub>), one dose of meningococcal group C vaccine (MenC<sub>b</sub>) and one dose of pneumococcal conjugate vaccine (PCV<sub>b</sub>) given on or after 12 months of age are also reported.

The uptake statistics are also presented in this report by Community Healthcare Organisation (CHO) and Local Health Office (LHO). While there are 32 LHOs the immunisation uptake data for North Lee and South Lee are reported as a combined figure. The uptake rates presented here were rounded to zero decimal place. Cavan/Monaghan, Louth and Meath accurate data were not available in Q2 2018 and are not included in any of the figures/data in this report.

**Table 1.** Primary childhood immunisation schedule for children born since 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 note the primary immunisation schedule changed in 2015 for children born on or after 01/07/2015 and changed in 2016 for children born on or after October 1<sup>st</sup> 2016. 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 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
MenB	Meningococcal group B vaccine
MenC	Meningococcal group C vaccine
MMR	Measles, Mumps and Rubella vaccine
PCV	Pneumococcal Conjugate Vaccine
Rota	Rotavirus oral vaccine

## Immunisation uptake among children at 12 months of age in Quarter 2-2018

### National

- National immunisation uptake rates were 93% for MenB<sub>2</sub> and 90% 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>, Rota<sub>2</sub> and MenC<sub>1</sub> and 89% for PCV<sub>2</sub> (table 2). All figures/data presented here do not include the Cavan/Monaghan, Meath and Louth data as accurate data were not available for these LHOs at the time of data extraction.
- Compared to the previous quarter and based on available data, the national uptake rate in Q2-2018 for all vaccines (except BCG) increased by 1% (figure 1).
- This is the third cohort recommended the new immunisation schedule. The new immunisation schedule and changes in the schedule are shown in Table 1. MenB and Rota vaccines are now recommended. There is a change in timing of MenC with MenC now recommended at 6 months of age; in previous schedule MenC was recommended at 4 months (Table 1). A combined Hib/MenC dose and a PCV dose are now recommended at 13 months (Table 1).
- While MenC<sub>1</sub> uptake increased by 2% compared to Q4 2017 it is 4-5% lower than Quarters 1-3 2017. MenC previously declined in Q3 2010 for those at 24 months of age (and there was low uptake of Hib<sub>6</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 [here](#). The reasons for this decline and actions taken are described [here](#).
- The BCG vaccine stock in all areas expired at the end of April 2015 so BCG vaccination clinics in HSE Clinics and Maternity hospitals have been postponed until new stock arrives. The licensed vaccine manufacturer has informed the HSE that BCG vaccine will not be delivered into Ireland until further notice and no alternative licensed supplier has been found. Please see <https://www.hse.ie/eng/health/immunisation/news/bcg17.html> for further information.

### Community Healthcare Organisation (CHO)

- Among the CHOs, the uptake rates for PCV<sub>2</sub> ranged from 85% to 93%, Rota<sub>2</sub> ranged from 85% to 92%, 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> and MenC<sub>1</sub> ranged from 88% to 93% and MenB<sub>2</sub> ranged from 89% to 95% (table 2). Note these comparisons include the CHO1 and CHO8 data which are incomplete.

### Local Health Office (LHO)

- The immunisation uptake rates by LHO are shown in appendix 1.
- D<sub>3</sub>, MenC<sub>1</sub>, PCV<sub>2</sub>, MenB<sub>2</sub> and Rota<sub>2</sub> immunisation uptake rates are mapped by LHO in figures 2-6.
- The immunisation uptake rates by Quarter and LHO are available [here](#) (tables) and [here](#) (graphs).

### Changes in uptake in Q2 2018 compared to the previous quarter (unless stated otherwise)

- Among 28 LHOs i.e. excluding the CN/MN, LH and MH LHOs for Q1-2 2018 and Q3-Q4 2017:
  - D<sub>3</sub> uptake (figure 2) was >=90% in 17 LHOs in Q2 2018 compared to 11 of the LHOs in Q1 2018, 14 of the LHOs in Q4 2017 and 18 of the LHOs in Q3 2017.
  - MenC<sub>1</sub> uptake (figure 3) was >=90% in 17 of LHOs in Q2 2018 compared to 13 of the LHOs in Q1 2018, 15 of the LHOs in Q4 2017 and 27 of the LHOs in Q3 2017.
  - PCV<sub>2</sub> uptake (figure 4) was >=90% in 16 of the LHOs in Q2 2018 compared to 10 of the LHOs in Q1 2018, 13 of the LHOs in Q4 2018 and 16 of the LHOs in Q3 2017.
  - MenB<sub>2</sub> uptake (figure 5) was >=90% in 26 LHOs in Q2 2018 compared to 18 LHOs in Q1 2018 and 22 in Q4 2017.
  - Rota<sub>2</sub> uptake (figure 6) was >=90% in 16 LHOs in Q2 2018 compared to 10 LHOs in Q1 2018 and 11 in Q4 2017.
- Changes in uptake by LHO in Q2 2018 compared to Q1 2018 (except BCG):
  - CHO1
    - CN/MN data were not available for Q2 2018
    - Donegal uptake of all vaccines increased by 1-3% compared to Q1 except for MenB<sub>2</sub> which declined by 1%. Donegal uptake of all vaccines had declined by 4-6% in Q1 compared to Q4 2017. In Q2 2018 uptake of Rota<sub>2</sub> was 82% compared to 86% for HepB<sub>3</sub> and 87% for the rest of the vaccines.
    - SO/LM Rota<sub>2</sub> uptake increased by 3% while remaining vaccines declined by 1-2%. In Q2 2018 uptake of Rota<sub>2</sub> was 91%, MenC<sub>1</sub> was 92% and 93% for the rest of the vaccines.
  - CHO2
    - G uptake declined by 3-4%.
    - MO uptake declined by 1-2% except MenC<sub>1</sub> and MenB<sub>2</sub> which were unchanged.
    - RN uptake declined by 1-4% for all vaccines except Rota<sub>2</sub> which was unchanged.
  - CHO3
    - CE uptake increased by 2-3% for all vaccines except MenC<sub>1</sub>, MenB<sub>2</sub> and Rota<sub>2</sub>. MenC<sub>1</sub> and Rota<sub>2</sub> at 91% were 2-4% lower compared to the remaining vaccines.
    - L uptake increased by 2% except Rota<sub>2</sub> which was unchanged. L Rota<sub>2</sub> uptake was 88% compared to 94% for MenB<sub>2</sub> and 90% for the remainder.
    - EL/TN uptake decreased by 1-2% except for PCV<sub>2</sub> which was unchanged and MenB<sub>2</sub> which increased by 2%. In Q2 2018 Rota<sub>2</sub> uptake was 87% compared to 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>.
  - CHO4
    - NC uptake declined by 1-2% except for MenB<sub>2</sub> and Rota<sub>2</sub> which declined by 5%. PCV<sub>2</sub> and Rota<sub>2</sub> were 2% lower compared to D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>.
    - NSL vaccine uptakes decreased by 2-4%.

- PCV<sub>2</sub> is 2% lower compared to D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>.
    - WC uptake increased by 1-5% in Q2 compared to Q1.
    - KY uptake increased by 1-2% .
    - PCV<sub>2</sub> and Rota<sub>2</sub> are 4% lower compared to D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>.
  - CHO5
    - CW/KK MenC<sub>1</sub> declined by 1%, MenB<sub>2</sub> increased by 1%, Rota<sub>2</sub> increased by 2% while the remainder were unchanged.
    - TS uptake increased by 1% for all vaccines except MenB<sub>2</sub> which was unchanged.
    - WD uptake increased by 1-4% except MenC<sub>1</sub> which declined by 1%.
    - WX uptake increased by 1-3% except MenB<sub>2</sub> which was unchanged.
  - CHO6
    - DS uptake rates increased by 1% or were unchanged.
    - DSE uptake rates increased by 3-5%.
    - WW uptake increased by 4-5% for all vaccines in Q2 2018 compared to Q1 2018, reversing previous downward trend, but are 7-8% lower compared to Q2 2017.
  - CHO7
    - DSC uptake increased by 3-6% for all vaccines.
    - DSW uptake increased by 2-3% for all vaccines except Rota<sub>2</sub> was unchanged.
    - DW uptake increased by 1-3% for all vaccines. However, uptake is still 10% lower for MenC<sub>1</sub> and 3% 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>/PCV<sub>2</sub> compared to Q2 2017.
    - KE/WW uptake increased by 2-3% for all vaccines.
  - CHO8
    - LS/OY uptake decreased by 1-2% for all vaccines.
    - LD/WH uptake increased by 1-2% (to 95-96%) except Rota<sub>2</sub> which decreased by 1% (to 91%).
    - Q2 2018 data for Louth and Meath (and CN/MN) were not available.
  - CHO9
    - DNW uptake increased by 5-6% (to 91-94%).
    - DNC uptake increased by 8-12% to 93% for Rota<sub>2</sub> and 95% for PCV<sub>2</sub> and MenB<sub>2</sub> and 96% for the remainder.
    - DN uptake increased by 1-3% except PCV<sub>2</sub> and Rota<sub>2</sub> were unchanged.

**Table 2.** Immunisation uptake (%) at 12 months in cohort born 01/04/2017–30/06/2017

Community Healthcare Organisation/LHO*	No. in cohort <sup>#</sup>	BCG <sup>†</sup>	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>	PCV <sub>2</sub>	MenB <sub>2</sub>	Rota <sub>2</sub>
CHO1 (CN/MN <sup>§</sup> , DL, SO/LM)	772	0.0†	89	89	89	89	89	85
CHO2 (G, MO, RN)	1387	0.0	91	91	92	92	94	92
CHO3 (CE, L, TN)	1236	0.0	91	91	90	91	95	89
CHO4 (NC, NSL, WC, KY)	2167	0.0	88	88	88	85	92	88
CHO5 (CW/KK, TS, WD, WX)	1576	0.4	90	90	90	89	93	90
CHO6 (DS, DSE, WW)	1214	0.0	89	89	89	89	91	89
CHO7 (DSC, DSW, DW, KE)	2342	0.0	90	90	90	90	92	91
CHO8 (LS/OY, LD/WH, LH <sup>§</sup> , MH <sup>§</sup> )	1029	0.0†	93	93	93	93	95	91
CHO9 (DNW, DNC, DN)	2063	0.0	90	90	90	89	92	90
<b>Ireland</b>	<b>13786†</b>	<b>0.05†</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>89</b>	<b>93</b>	<b>90</b>

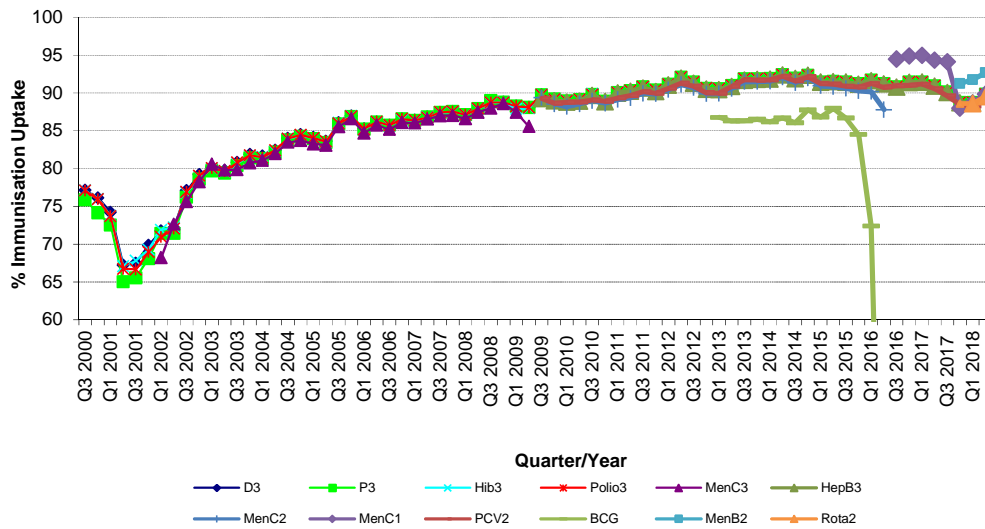
na = not available at this time

\*Shown in brackets are the LHOs in each CHO. Please see Appendix 3 to translate LHO codes. The geographical boundaries of the CHOs are shown at [http://www.hse.ie/eng/services/publications/corporate/CHO\\_Chapter\\_1.pdf](http://www.hse.ie/eng/services/publications/corporate/CHO_Chapter_1.pdf)

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

<sup>†</sup>Number in cohort for BCG is 13,786. BCG data are unavailable for the former HSE North Eastern Area i.e. CN/MN, LH, MH; therefore CHO1 and CHO8 BCG data are incomplete. At the time of writing of this report the HSE continues to experience on-going delays with the supply of BCG vaccine. This continues to be a Europe wide issue. See point 5 on previous page regarding BCG vaccine stock in Ireland.

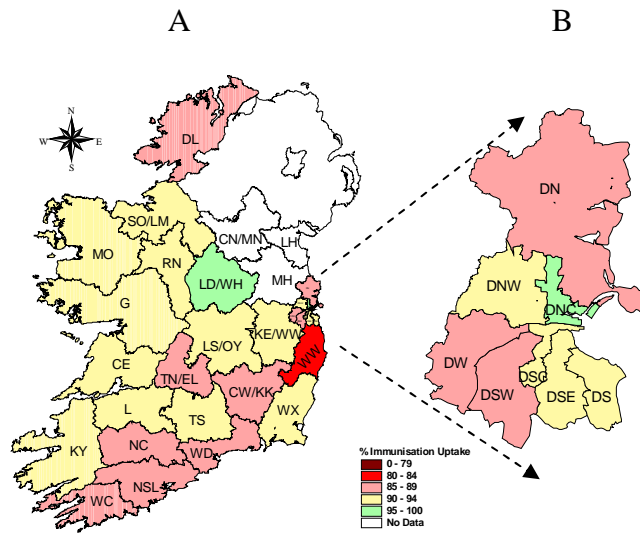
<sup>§</sup>Cavan/Monaghan, Louth and Meath accurate data for all vaccines were not available in Q2 2018 and so are not included in this report.



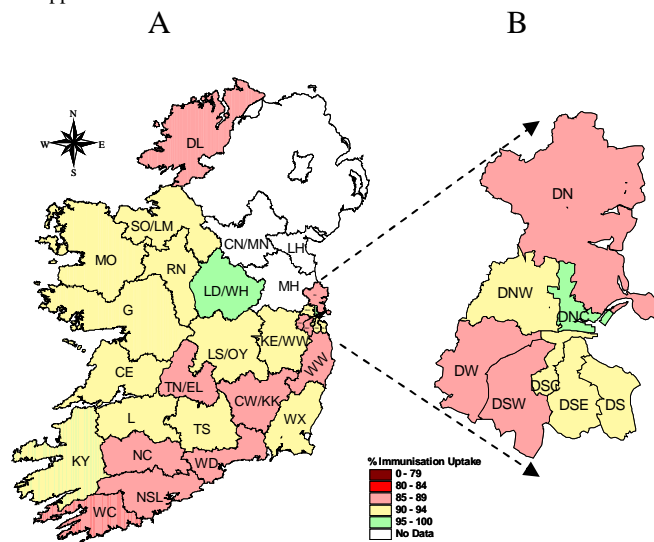
**Figure 1.** National quarterly immunisation uptake rates at 12 months

X-axis ranges from 60-100%.

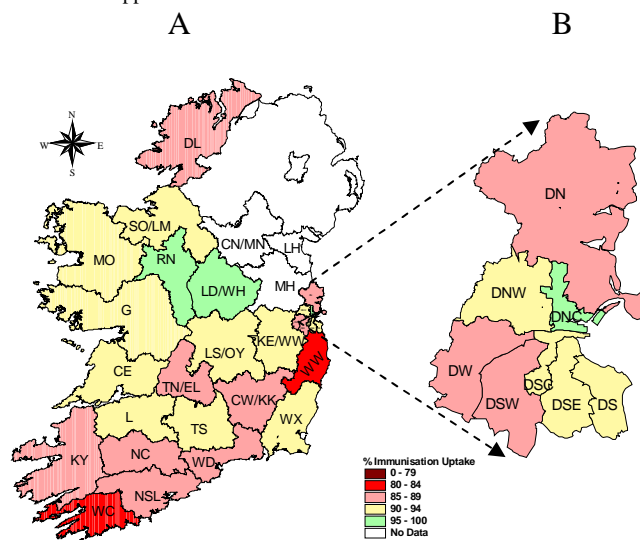
Since T<sub>3</sub> uptake is identical to D<sub>3</sub> uptake only D<sub>3</sub> uptake figures presented. The Q3-2008 MenC<sub>3</sub> uptake figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> uptake figures exclude those born on the 31/03/2007. The Q3-2009 figures are incomplete as two HSE Areas were unable to provide data, two additional areas were unable to provide MenC<sub>2</sub> data and one additional area was unable to provide PCV<sub>2</sub> data. The Q4-2009 figures are incomplete as three HSE Areas were unable to provide data. The Q1-2010 figures are incomplete as two HSE Areas were unable to provide data and three were unable to provide MenC<sub>2</sub> data. The Q2-2010 figures are incomplete as two HSE Areas were unable to provide data. The Q4-2010 figures are incomplete as one HSE Area was unable to provide data. 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 and Q2 2018 CN/MN, LH and MH data were not available.



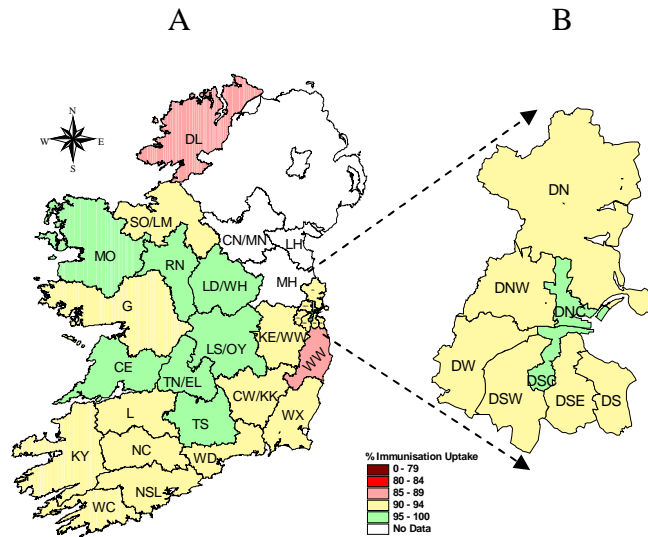
**Figure 2.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



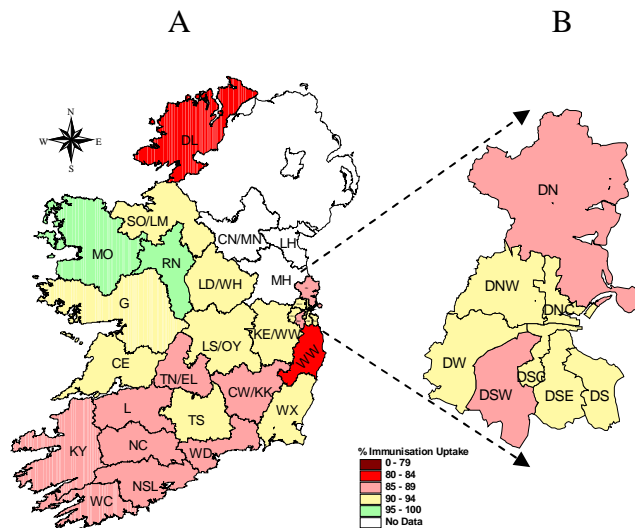
**Figure 3.** MenC<sub>1</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 4.** PCV<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 5.** MenB<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 6.** Rota<sub>2</sub> immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Immunisation uptake among children 24 months of age in Quarter 2-2018

### National

- National uptake rates were 94% 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 PCV<sub>b</sub>, 92% for MMR<sub>1</sub>, 91% for PCV<sub>3</sub>, 90% for Hib<sub>b</sub>, 88% for MenC<sub>b</sub> and 86% for MenC<sub>2</sub> (table 3).  
All the figures/data described here for Q2 2018 do not include the Cavan/Monaghan, Meath and Louth data as accurate data were not available for these LHOs.
- Compared to the previous quarter national uptake rates in Q2-2018 for MenC<sub>2</sub> declined by 2%, 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> declined by 1%, Hib<sub>b</sub>, MenC<sub>b</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> was unchanged and PCV<sub>b</sub> increased by 1% (figure 7). These comparisons are based on available data.
- Figure 7 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q2-2018.
- This is the first time since 2010 that D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> did not reach the target of 95% at 24 months.

### Community Healthcare Organisations (CHOs)

- The target uptake of 95% was reached for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> in six CHOs, in five for HepB<sub>3</sub>, in one for Hib<sub>b</sub> and PCV<sub>3</sub> and in none for the remainder (table 3).

### Local Health Office (LHO)

- Immunisation uptake rates in children 24 months of age in Q2-2018 are presented by LHO in Appendix 2.
- D<sub>3</sub>, Hib<sub>b</sub>, MenC<sub>2</sub>, MenC<sub>b</sub>, PCV<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> immunisation uptake rates are mapped by LHO in figures 8-14.
- In Q2 2018 the target uptake of 95% was reached in 16 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 14 for HepB<sub>3</sub>, 8 for PCV<sub>b</sub>, 5 for MMR<sub>1</sub>, 3 for PCV<sub>3</sub>, 2 for Hib<sub>b</sub>, 1 for MenC<sub>2</sub> and none for MenC<sub>b</sub>.  
In comparison in Q1 2018 the target uptake of 95% was reached in 17 LHOs for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>, 16 for HepB<sub>3</sub>, 10 for MMR<sub>1</sub>, 8 for PCV<sub>b</sub>, 4 for Hib<sub>b</sub> and PCV<sub>3</sub>, 1 for MenC<sub>b</sub> and none for MenC<sub>2</sub>.
- The immunisation uptake rates by Quarter and LHO are available [here](#) (tables) and [here](#) (graphs)
- Changes in uptake by LHO in Q2 2018 compared to Q1 2018:
  - MenC<sub>2</sub> declined in 16 LHOs by 1-7%, was unchanged in 4 LHOs and increased by 1-5% in 8 LHOs.
  - Hib<sub>b</sub> declined in 14 LHOs by 1-3%, were unchanged in one, and increased by 1-4% in 13 LHOs.
  - MenC<sub>b</sub> declined in 15 LHOs by 1-4%, were unchanged in one and increased by 1-4% in 12 LHOs.
  - PCV<sub>3</sub> declined in 14 LHOs by 1-5%, were unchanged in five, and increased by 1-6% in 9 LHOs.
  - D<sub>3</sub> uptake declined in 13 LHOs by 1-5%, were unchanged in four and increased by 1-3% in 11 LHOs.
  - MMR<sub>1</sub> declined in 12 LHOs by 1-5%, were unchanged in 6 LHOs and increased by 1-8% in 10 LHOs.
  - PCV<sub>b</sub> declined in 7 LHOs by 1-4%, were unchanged in 10 LHOs, and increased by 1-7% in 11 LHOs.
  - CHO1
    - Q2 2018 CN/MN (and Louth and Meath) data were not available.
    - Donegal MenC<sub>2</sub> declined by 6%, MenC<sub>b</sub> declined by 3%, PCV<sub>b</sub> declined by 2%, Hib<sub>b</sub>, HepB<sub>3</sub>, PCV<sub>3</sub> and MMR<sub>1</sub> declined by 1% while the remainder were unchanged.  
D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub> all reached the target of >=95%.  
Uptake rates ranged from 79% (for MenC<sub>2</sub>) to 95% (for D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>).
    - SO/LM MenC<sub>2</sub> declined by 6%, PCV<sub>3</sub> declined by 5%, MenC<sub>b</sub> declined by 4%, Hib<sub>b</sub> and PCV<sub>b</sub> declined by 3%, MMR<sub>1</sub> declined by 2% while the remainder were unchanged.  
D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> all reached the target of >=95%.  
Uptake rates ranged from 85% (for PCV<sub>3</sub>) to 97% (for D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>).
  - CHO2
    - G uptake declined by 1-3%.  
D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>3</sub> were all >= target of 95%.  
Uptake rates ranged from 88% (for MenC<sub>b</sub>) to 96% for (PCV<sub>3</sub>).
    - Mayo uptake declined by 1-2% except for Hib<sub>b</sub> and MenC<sub>2</sub> increased by 1%, MenC<sub>b</sub> increased by 2% while MMR<sub>1</sub> was unchanged.  
D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>3</sub>/PCV<sub>b</sub> were all >= target of 95%.  
Uptake rates ranged from 89% (for MenC<sub>b</sub>) to 96% for (PCV<sub>3</sub>).
    - RN uptake increased by 1-4%.  
D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/MenC<sub>2</sub>/PCV<sub>3</sub>/PCV<sub>b</sub>/MMR<sub>1</sub> were all >= target of 95%.  
Uptake rates ranged from 94% (for Hib<sub>b</sub> and MenC<sub>b</sub>) to 99% (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>/PCV<sub>3</sub>/MMR<sub>1</sub>).
  - CHO3
    - CE MenC<sub>2</sub> uptake declined by 7%, PCV<sub>b</sub> uptake increased by 2% while the remainder declined by 1-2%.  
D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub> were all >= target of 95%.  
Uptake rates ranged from 82% (for MenC<sub>2</sub>) to 95% (for D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>).
    - Limerick D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> uptake declined by 5% while the remaining vaccines increased by 1-7%.  
No vaccine reached the target of 95% in this quarter.  
Uptake rates ranged from 82% (for MenC<sub>2</sub>) to 92% (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>/PCV<sub>b</sub>/MMR<sub>1</sub>).



- TN/ELMenC<sub>2</sub> and PCV<sub>3</sub> uptake declined by 5%, D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/MMR<sub>1</sub> declined by 3%, Hib<sub>b</sub> declined by 1%, MenC<sub>b</sub> which was unchanged and PCV<sub>b</sub> increased by 3%.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 84% (for MenC<sub>2</sub>) to 94% (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>/PCV<sub>b</sub>/MMR<sub>1</sub>).

#### ○ CHO4

- NC D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> uptake rates increased by 2%, increased by 1% for MMR<sub>1</sub>, were unchanged for PCV<sub>3</sub> and PCV<sub>b</sub>, declined by 3% for MenC<sub>2</sub>, declined by 2% for Hib<sub>b</sub> and declined by 1% for MenC<sub>b</sub>.

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>b</sub>/MMR<sub>1</sub> were all ≥ target of 95%.

Uptake rates ranged from 91% (for MenC<sub>2</sub>) to 98% (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>).

- NSL uptake declined by 1-2% except MenC<sub>2</sub> and PCV<sub>b</sub> which was unchanged.

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> were all ≥ target of 95%.

Uptake rates ranged from 87% (for MenC<sub>b</sub>) to 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>).

- WC uptake increased by 2-8%.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 88% (for MenC<sub>b</sub>) to 94% (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>).

- KY uptake declined by 1-3% except Hib<sub>b</sub> which improved by 1% and MenC<sub>2</sub> was unchanged.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 85% (for MenC<sub>b</sub>) to 93% (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>).

#### ○ CHO5

- CW/KK D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/MenC<sub>b</sub> increased by 1%, Hib<sub>b</sub> and PCV<sub>3</sub> declined by 1%, MenC<sub>2</sub> declined by 2%, while HepB<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> were unchanged.

No vaccine reached the target of 95% in this quarter.

Uptake rates range from 83% (for MenC<sub>2</sub>) to 94% (for D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>).

- TS MenC<sub>2</sub> declined by 4%, MenC<sub>b</sub> declined by 1%, Hib<sub>b</sub>, HepB<sub>3</sub>, PCV<sub>3</sub>, PCV<sub>b</sub> and MMR<sub>1</sub> were unchanged and D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub> increased by 1% to 99%.

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>b</sub>/MMR<sub>1</sub> were all ≥ target of 95%.

Uptake rates ranged from 86% (for MenC<sub>2</sub>) to 99% (for D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>).

- WD MenC<sub>2</sub> uptake declined by 3%, MenC<sub>b</sub> uptake declined by 2%,

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>/PCV<sub>3</sub> uptake declined by 1%, PCV<sub>b</sub> was unchanged and MMR<sub>1</sub> increased by 1%.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 83% (for MenC<sub>2</sub>) to 93% (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>/MMR<sub>1</sub>).

- WX uptake increased by 2-4%

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>b</sub> were all ≥ target of 95%.

Uptake rates ranged from 88% (for MenC<sub>2</sub>) to 96% (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>).

#### ○ CHO6

- DS uptake of all vaccines increased by 1-5% except MenC<sub>2</sub> which was unchanged.

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> were all ≥ target of 95%.

Uptake rates ranged from 83% (for MenC<sub>2</sub>) to 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>).

- DSE MenC<sub>2</sub> uptake decreased by 3%, Hib<sub>b</sub>/MenC<sub>b</sub>/MMR<sub>1</sub> uptake decreased by 2%,

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> by 1% while PCV<sub>3</sub> and PCV<sub>b</sub> which were unchanged.

No vaccine reached the target of 95% in this quarter.

- WW uptake of all vaccines decreased by 2-5% with uptake rates ranging from 73% (for MenC<sub>2</sub>) to 83% (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>).

#### ○ CHO7

- DSC uptake rates increased by 2-6%.

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub> all reached the target of ≥ 95%.

Uptake rates ranged from 88% (for MenC<sub>2</sub> and MenC<sub>b</sub>) to 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>).

- DSW Hib<sub>b</sub> and MenC<sub>b</sub> uptake increased by 2%, PCV<sub>b</sub> increased by 1%, PCV<sub>3</sub> decreased by 1% while the remainder were unchanged.

D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>b</sub>/MMR<sub>1</sub> reached the target of ≥ 95%.

Uptake rates ranged from 90% (for MenC<sub>2</sub>) to 96% (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>).

- DW uptake rates increased by 1-2% except for PCV<sub>3</sub> which declined by 2% and were unchanged for PCV<sub>b</sub> and MMR<sub>1</sub>.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 83% (for MenC<sub>2</sub>/MenC<sub>b</sub>) to 93% for (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>).

- KE MenC<sub>2</sub> declined by 3%, Hib<sub>b</sub> and MenC<sub>b</sub> uptake declined by 2% while the remainder were unchanged.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 87% (for MenC<sub>2</sub>) to 94% (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>).

#### ○ CHO8

- LS/OY MenC<sub>2</sub> uptake declined by 4%, MenC<sub>b</sub> and PCV<sub>3</sub> uptake declined by 3% while the rest declined by 2%.

No vaccine reached the target of 95% in this quarter.

Uptake rates ranged from 88% (for MenC<sub>2</sub>) to 94% (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>).

- LD/WH uptake increased by 1% for D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>3</sub>, were unchanged for PCV<sub>b</sub> and declined by 1% for MenC<sub>2</sub>, MenC<sub>b</sub> and MMR<sub>1</sub>. Uptake rates ranged from 92% (for MenC<sub>2</sub>/MenC<sub>b</sub>) to 96% (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>). 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> reached the target of >=95%.
- Q2 2018 accurate data for Louth and Meath (and CN/MN) were not available.
- CHO9
  - DNW uptake increased by 2-4% for all vaccines. D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>b</sub>/MMR<sub>1</sub> reached the target of >=95%. Uptake rates ranged from 93% (for MenC<sub>2</sub>/MenC<sub>b</sub>) to 98% 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>.
  - DNC uptake rates for all vaccines declined by 2-3% except for PCV<sub>3</sub> and PCV<sub>b</sub> which were unchanged. Uptake rates ranged from 91% (for MenC<sub>2</sub> and MenC<sub>b</sub>) to 96% 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>. D<sub>3</sub>/T<sub>3</sub>/P<sub>3</sub>/Hib<sub>3</sub>/Polio<sub>3</sub>/HepB<sub>3</sub>/PCV<sub>b</sub> reached the target of >=95%.
  - DN uptake declined by 2% 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>, increased by 1% for Hib<sub>b</sub> and PCV<sub>3</sub>, increased by 2% for PCV<sub>b</sub> and MMR<sub>1</sub> and increased by 3% for MenC<sub>2</sub> and MenC<sub>b</sub>. Uptake rates ranged from 83% (for MenC<sub>2</sub> and MenC<sub>b</sub>) to 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>. No vaccine reached the target of 95% in this quarter.

**Table 3.** Immunisation uptake (%) at 24 months in cohort born 01/04/2016–30/06/2016

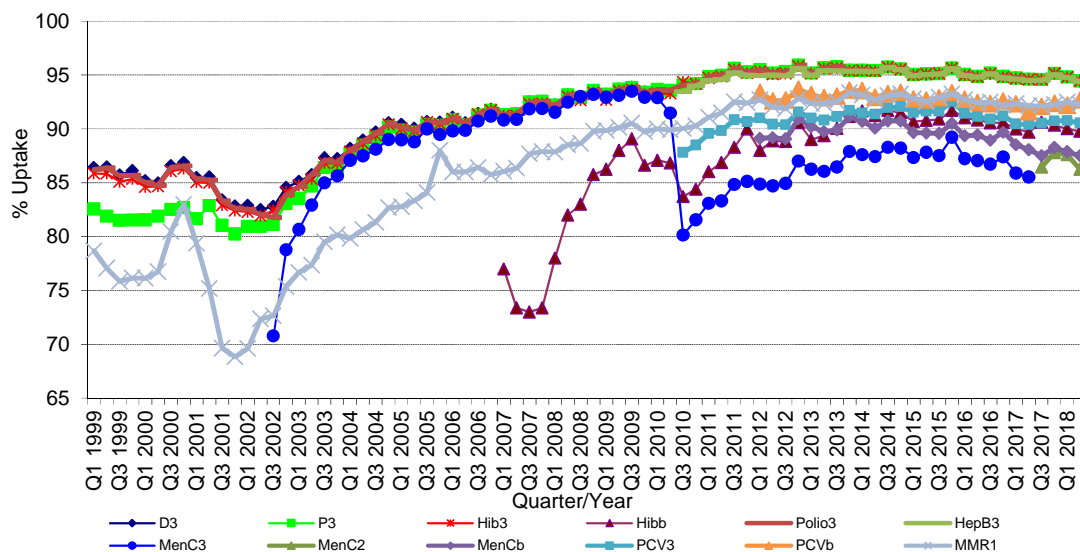
Community Healthcare Organisation/LHO	No. in Cohort*	D <sub>3</sub> /T <sub>3</sub> /P <sub>3</sub> /Polio <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>b</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	MenC <sub>b</sub>	PCV <sub>3</sub>	PCV <sub>b</sub>	MMR <sub>1</sub>
CHO1(CN/MN <sup>5</sup> , DL, SO/LM)	791	96	95	90	94	82	87	85	91	91
CHO2 (G, MO, RN)	1428	96	96	92	96	91	89	97	94	94
CHO3 (CE, L, TN)	1273	94	94	90	93	83	88	90	93	92
CHO4 (NC, NSL, WC, KY)	2216	95	95	92	95	88	87	90	93	92
CHO5 (CW/KK, TS, WD, WX)	1656	95	95	90	95	85	88	91	94	94
CHO6 (DS, DSE, WW)	1323	90	90	83	90	80	81	87	88	88
CHO7 (DSC, DSW, DW, KE)	2492	95	95	89	95	87	88	90	93	92
CHO8 (LS/OY, LD/WH, LH <sup>5</sup> , MH <sup>5</sup> )	1015	95	95	95	95	90	91	91	94	94
CHO9 (DNW, DNC, DN)	2124	94	94	90	94	88	88	91	93	93
<b>Ireland</b>	<b>14318</b>	<b>94</b>	<b>94</b>	<b>90</b>	<b>94</b>	<b>86</b>	<b>88</b>	<b>91</b>	<b>93</b>	<b>92</b>

Please see Appendix 3 to translate LHO codes

na = not available

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

<sup>5</sup>Cavan/Monaghan, Louth and Meath data were not available in Quarter 2 2018.



**Figure 7.** National quarterly immunisation uptake rates at 24 months

**Notes:** The Q4-2005 MMR<sub>1</sub> figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR<sub>1</sub> figure includes the HSE-Eastern Area figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib<sub>b</sub> figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed their Hib<sub>b</sub> data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib<sub>b</sub> in the HSE-SE was 83% compared to 53% in Q4-2007. The Q3-2008 MenC<sub>3</sub> figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MMR<sub>1</sub> uptake figures exclude those born on the 31/03/2007. The Q2-2009 HSE-Eastern Area Hib<sub>b</sub> uptake figures exclude uptake figures from Dublin North. The Q4-2009 figures are based on data from seven of the eight HSE Areas. The Q4-2009 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North. The Q1-2010 figures are based on data from six of the eight HSE Areas. The Q1-2010 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North. The Q2-2010 and Q4-2010 figures are based on data from seven of the eight HSE Areas. MenC<sub>3</sub> and PCV<sub>3</sub> data were only available for 6 of the 8 HSE Areas from Q1 2012 to Q4 2014. MenC<sub>3</sub> and PCV<sub>3</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 and Q2 2018 data were unavailable.

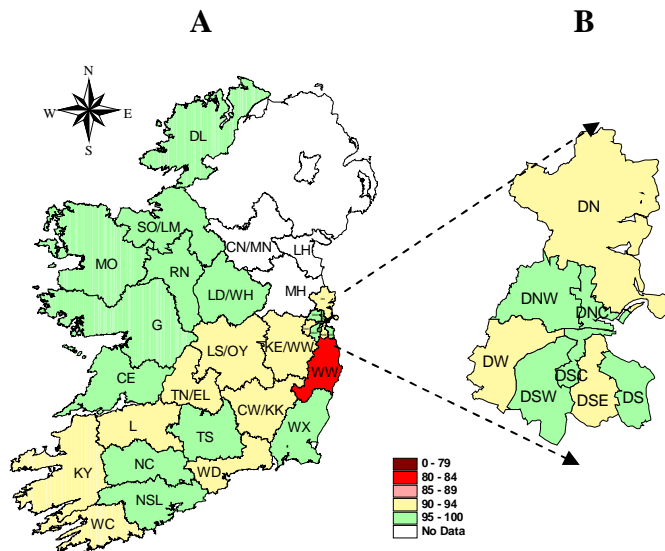
## Conclusions

The national uptake rate in Q2-2018 for MenC<sub>1</sub> at 12 months was 90% which is an improvement compared to 88% in Q4-2017 but is still 4-5% lower compared to Quarters 1-3 2017. This decline is a concern as it leaves children vulnerable to preventable meningococcal serogroup C infection. Meningococcal group B (MenB) and rotavirus (Rota) vaccine were introduced into the schedule for children born on or after 1<sup>st</sup> October 2016 and so were measured for the first time in the previous quarter, Q4 2017, among children at 12 months of age. In Q2 2018 national immunisation uptake rates were 93% for MenB<sub>2</sub> and 90% for Rota<sub>2</sub> compared to 90% 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 MenC<sub>1</sub> and 89% for PCV<sub>2</sub>.

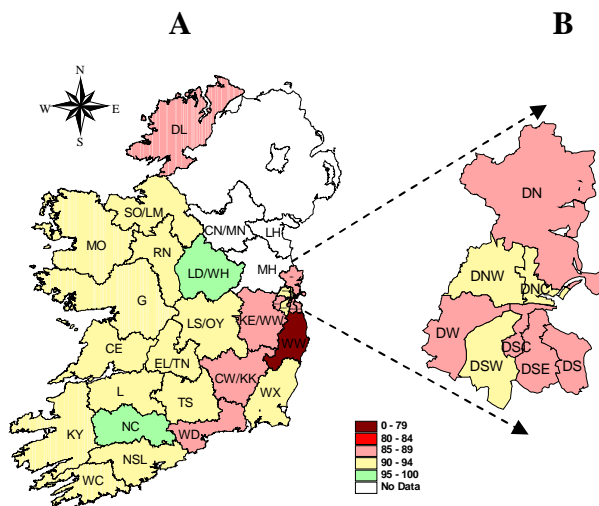
In Q2-2018, national uptake rates at 24 months for D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> declined by 1% to 94%. This is the first time since 2010 that D<sub>3</sub>, T<sub>3</sub>, P<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> did not reach the target of 95%. Uptake of the remaining vaccines in Q2 2018 are lower; doses of these remaining vaccines are given at 12 and 13 months of age suggesting that parents are less likely to get the necessary vaccines for their children at this age. MenC<sub>2</sub> was 86% in Q2; MenC<sub>2</sub> was previously 86% in Quarter 3 2017 and was 88% in Quarter 4 2017 and Quarter 1 2018.

## Acknowledgements

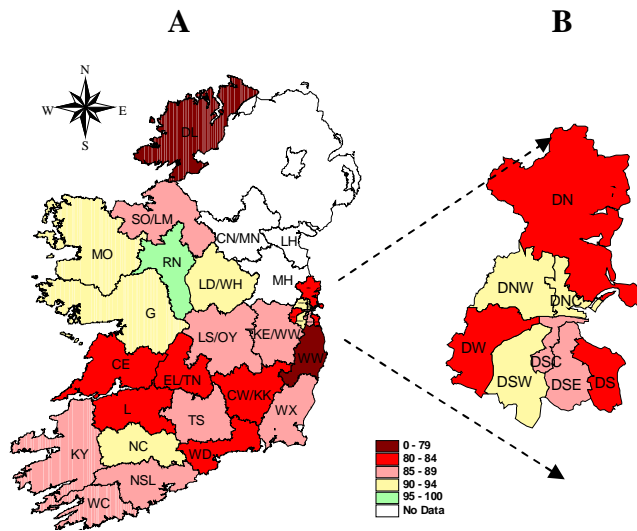
HPSC would like to thank all those involved in childhood immunisation including the General Practitioners, Practice Nurses, HSE Areas, Public Health Nurses, Immunisation Co-ordinators, Specialists in Public Health Medicine, Surveillance Scientists and Systems Analysts for their assistance.



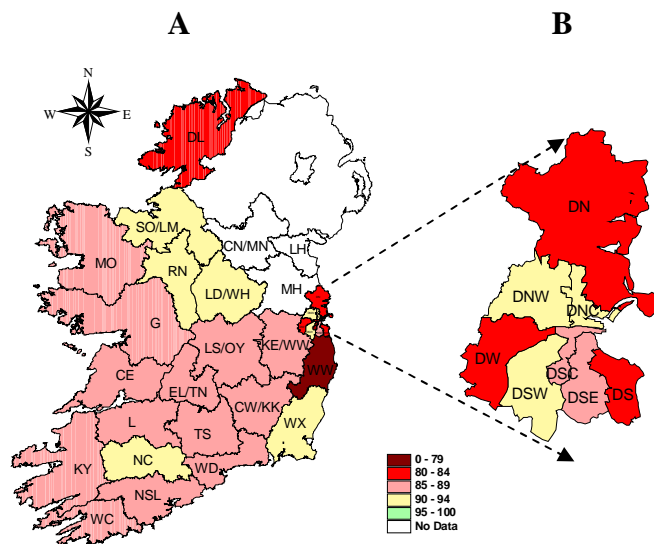
**Figure 8.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



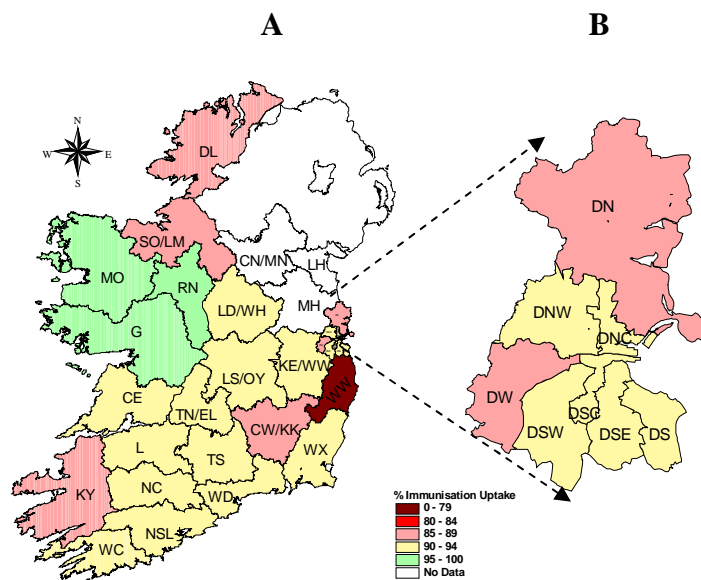
**Figure 9.** Hib<sub>6</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



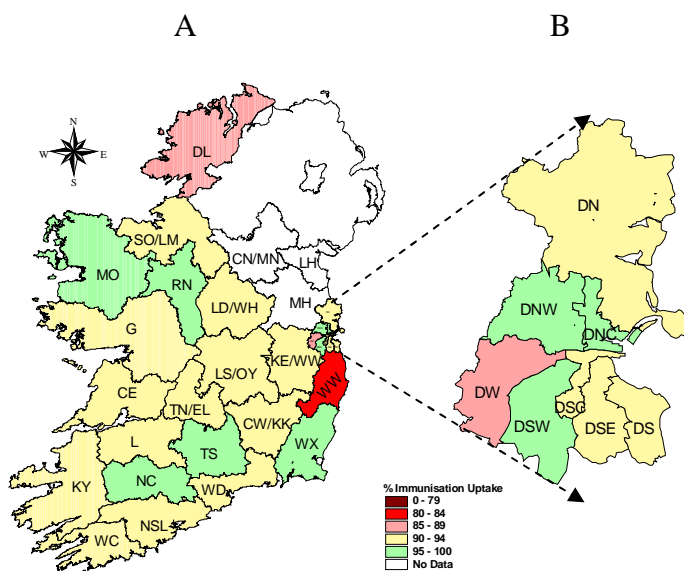
**Figure 10.** MenC<sub>2</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



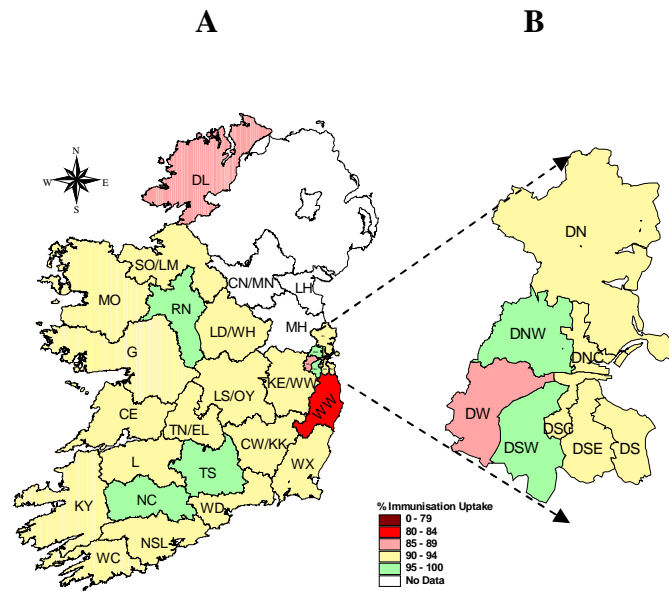
**Figure 11.** MenC<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 12.** PCV<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 13.** PCV<sub>6</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 14.** MMR<sub>1</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2018, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Appendix 1

Immunisation uptake (%) at 12 months of age in cohort born 01/04/2017-30/06/2017													
Community Healthcare Organisation (CHO)	LHO/CHO	No. in cohort for BCG*	No. in cohort for D <sub>3</sub> T <sub>3</sub> #	Immunisation Uptake (%)									
				BCG*	D <sub>3</sub> T <sub>3</sub>	P <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>1</sub>	PCV <sub>2</sub>	MenB <sub>2</sub>	Rota <sub>2</sub>
CHO1	Cavan/Monaghan <sup>§</sup>	na	na	na	na	na	na	na	na	na	na	na	na
	Donegal	468	468	0	87	87	87	87	86	87	87	87	82
	Sligo/Leitrim	304	304	0	93	93	93	93	93	92	93	93	91
	<b>CHO1 Total*</b>	<b>772</b>	<b>772</b>	<b>0</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>85</b>
CHO2	Galway	818	818	0	90	90	90	90	90	90	90	93	90
	Mayo	384	384	0	92	92	92	92	92	94	93	96	95
	Roscommon	185	185	0	94	94	94	94	94	92	95	95	95
	<b>CHO2 Total</b>	<b>1387</b>	<b>1387</b>	<b>0</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>92</b>	<b>92</b>	<b>94</b>	<b>92</b>
CHO3	Clare	369	369	0	94	94	94	94	93	91	93	95	91
	Limerick	441	441	0	90	90	90	90	90	90	90	94	88
	Tipperary NR/East Limerick	426	426	0	89	89	89	89	89	88	89	95	87
	<b>CHO3 Total</b>	<b>1236</b>	<b>1236</b>	<b>0</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>90</b>	<b>91</b>	<b>95</b>	<b>89</b>
CHO4	North Cork	308	308	0	87	87	87	87	87	87	85	90	85
	North South Lee	1273	1273	0	87	87	87	87	87	87	85	93	89
	West Cork	176	176	0	85	85	85	85	85	86	84	90	85
	Kerry	410	410	0	91	91	91	91	91	91	87	92	87
<b>CHO4 Total</b>	<b>2167</b>	<b>2167</b>	<b>0</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>88</b>	<b>85</b>	<b>92</b>	<b>88</b>	
CHO5	Carlow/Kilkenny	392	392	0.00	86	86	86	86	86	87	86	93	88
	South Tipperary	314	314	0.64	92	92	92	92	92	92	92	96	93
	Waterford	396	396	0.25	89	89	89	89	89	88	88	91	88
	Wexford	474	474	0.84	92	92	92	92	92	92	91	93	91
<b>CHO5 Total</b>	<b>1576</b>	<b>1576</b>	<b>0.44</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>89</b>	<b>93</b>	<b>90</b>	
CHO6	Dublin South	412	412	0	90	90	90	90	90	90	91	92	90
	Dublin South East	375	375	0	93	93	93	93	93	93	92	94	93
	Wicklow	427	427	0	84	84	84	84	84	85	84	86	84
	<b>CHO6 Total</b>	<b>1214</b>	<b>1214</b>	<b>0</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>	<b>91</b>	<b>89</b>
CHO7	Dublin South City	386	386	0	92	92	92	92	92	93	92	95	94
	Dublin South West	557	557	0	88	88	88	88	88	87	88	91	88
	Dublin West	553	553	0	87	87	87	87	87	86	87	90	90
	Kildare/West Wicklow	846	846	0	92	92	92	92	92	92	92	94	92
<b>CHO7 Total</b>	<b>2342</b>	<b>2342</b>	<b>0</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>92</b>	<b>91</b>	
CHO8	Laos/Offaly	563	563	0	92	92	92	92	92	92	92	95	91
	Longford/Westmeath	466	466	0	95	95	95	95	95	95	95	96	91
	Louth <sup>§</sup>	na	na	na	na	na	na	na	na	na	na	na	na
	Meath <sup>§</sup>	na	na	na	na	na	na	na	na	na	na	na	na
<b>CHO8 Total*</b>	<b>1029</b>	<b>1029</b>	<b>0</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>95</b>	<b>91</b>	
CHO9	Dublin North West	717	717	0	92	92	92	92	92	92	92	94	91
	Dublin North Central	398	398	0	96	96	96	96	96	96	95	95	93
	Dublin North	948	948	0	86	86	86	86	86	86	85	90	87
	<b>CHO9 Total</b>	<b>2063</b>	<b>2063</b>	<b>0</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>89</b>	<b>92</b>	<b>90</b>
<b>Ireland *</b>	<b>13786</b>	<b>13786</b>	<b>0.05</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>89</b>	<b>93</b>	<b>90</b>

na=not available

\*BCG data were unavailable for Cavan/Monaghan, Louth and Meath

• The BCG vaccine stock in all areas expired at the end of April 2015 so BCG vaccination clinics in HSE Clinics and Maternity hospitals have been postponed until new stock arrives. The licensed vaccine manufacturer has informed the HSE that BCG vaccine will not be delivered into Ireland until further notice and no alternative licensed supplier has been found. Please see [https://www.hse.ie/eng/health/immunisation/new\\_s/bcg17.html](https://www.hse.ie/eng/health/immunisation/new_s/bcg17.html) for further information.

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

§Q2 2018 Cavan/Monaghan, Louth and Meath data were not available

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



## Appendix 2

Immunisation uptake (%) at 24 months of age in cohort born 01/04/2016-30/06/2016													
Community Healthcare Organisation (CHO)	LHO/CHO	No. in cohort for D <sub>3</sub> T <sub>3</sub> *	Immunisation Uptake (%)										
			D <sub>3</sub> T <sub>3</sub>	P <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>b</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	MenC <sub>b</sub>	PCV <sub>3</sub>	PCV <sub>b</sub>	MMR <sub>1</sub>
CHO1	Cavan/Monaghan <sup>§</sup>	na	na	na	na	na	na	na	na	na	na	na	na
	Donegal	502	95	95	95	88	95	93	79	84	85	89	89
	Sligo/Leitrim	289	97	97	97	93	97	96	86	92	85	93	94
	<b>CHO1 Total</b>	<b>791</b>	<b>96</b>	<b>96</b>	<b>95</b>	<b>90</b>	<b>96</b>	<b>94</b>	<b>82</b>	<b>87</b>	<b>85</b>	<b>91</b>	<b>91</b>
CHO2	Galway	857	95	95	95	91	95	95	90	88	96	93	94
	Mayo	373	95	95	95	94	95	95	92	89	96	95	92
	Roscommon	198	99	99	99	94	99	99	96	94	99	98	99
	<b>CHO2 Total</b>	<b>1428</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>92</b>	<b>96</b>	<b>96</b>	<b>91</b>	<b>89</b>	<b>97</b>	<b>94</b>	<b>94</b>
CHO3	Clare	381	95	95	95	90	95	94	82	87	91	93	92
	Limerick	459	92	92	92	90	92	92	82	87	90	92	92
	Tipperary NR/East Limeri	433	94	94	94	92	94	94	84	89	90	94	94
	<b>CHO3 Total</b>	<b>1273</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>90</b>	<b>94</b>	<b>93</b>	<b>83</b>	<b>88</b>	<b>90</b>	<b>93</b>	<b>92</b>
CHO4	North Cork	291	98	98	98	95	98	98	91	92	93	95	96
	North South Lee	1324	95	95	95	91	95	95	88	87	90	94	92
	West Cork	170	94	94	94	93	94	94	89	88	90	93	94
	Kerry	431	93	93	93	91	93	93	86	85	89	91	90
	<b>CHO4 Total</b>	<b>2216</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>92</b>	<b>95</b>	<b>95</b>	<b>88</b>	<b>87</b>	<b>90</b>	<b>93</b>	<b>92</b>
CHO5	Carlow/Kilkenny	458	94	94	94	88	94	93	83	87	89	91	92
	South Tipperary	294	99	99	99	93	99	98	86	89	94	97	96
	Waterford	418	93	93	93	88	93	93	83	85	90	92	93
	Wexford	486	96	96	96	91	96	96	88	90	93	95	94
	<b>CHO5 Total</b>	<b>1656</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>90</b>	<b>95</b>	<b>95</b>	<b>85</b>	<b>88</b>	<b>91</b>	<b>94</b>	<b>94</b>
CHO6	Dublin South	433	95	95	95	86	95	95	83	84	92	94	92
	Dublin South East	443	93	93	93	86	93	93	85	86	90	91	90
	Wicklow	447	83	83	83	75	83	83	73	74	78	81	80
	<b>CHO6 Total</b>	<b>1323</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>83</b>	<b>90</b>	<b>90</b>	<b>80</b>	<b>81</b>	<b>87</b>	<b>88</b>	<b>88</b>
CHO7	Dublin South City	398	95	95	95	89	95	95	88	88	92	93	93
	Dublin South West	589	96	96	96	94	96	96	90	93	91	95	95
	Dublin West	595	93	93	93	86	93	93	83	83	85	89	88
	Kildare/West Wicklow	910	94	94	94	89	94	94	87	88	91	93	93
	<b>CHO7 Total</b>	<b>2492</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>89</b>	<b>95</b>	<b>95</b>	<b>87</b>	<b>88</b>	<b>90</b>	<b>93</b>	<b>92</b>
CHO8	Laos/Offaly	535	94	94	94	94	94	94	88	89	90	93	93
	Longford/Westmeath	480	96	96	96	96	96	96	92	92	93	94	94
	Louth <sup>§</sup>	na	na	na	na	na	na	na	na	na	na	na	na
	Meath <sup>§</sup>	na	na	na	na	na	na	na	na	na	na	na	na
	<b>CHO8 Total</b>	<b>1015</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>90</b>	<b>91</b>	<b>91</b>	<b>94</b>	<b>94</b>
CHO9	Dublin North West	737	98	98	98	94	98	98	93	93	94	96	96
	Dublin North Central	424	96	96	96	92	96	96	91	91	93	95	94
	Dublin North	963	91	91	91	85	91	91	83	83	88	90	90
	<b>CHO9 Total</b>	<b>2124</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>90</b>	<b>94</b>	<b>94</b>	<b>88</b>	<b>88</b>	<b>91</b>	<b>93</b>	<b>93</b>
<b>Ireland</b>	<b>14318</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>90</b>	<b>94</b>	<b>94</b>	<b>86</b>	<b>88</b>	<b>91</b>	<b>93</b>	<b>92</b>	

na=not available

\*The denominator/number in cohort varied slightly according to vaccine. D<sub>3</sub>T<sub>3</sub> cohorts show n here.

§Q2 2018 CNMN (CHO1), LH (CHO8) and MH (CHO8) data were not available.

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

### Appendix 3

Local Health Office (LHO) Abbreviations (used in maps in this report)	Local Health Office (LHO)
CE	Clare
CN/MN	Cavan/Monaghan
CW/KK	Carlow/Kilkenny
DL	Donegal
DN	Dublin North
DNC	Dublin North Central
DNW	Dublin North West
DS	Dublin South
DSC	Dublin South City
DSE	Dublin South East
DSW	Dublin South West
DW	Dublin West
G	Galway
KE/WW	Kildare/West Wicklow
KY	Kerry
L	Limerick
LD/WD	Longford/Westmeath
LH	Louth
LS/OY	Laois/Offaly
MH	Meath
MO	Mayo
NC	North Cork
NSL*	North South Lee*
RN	Roscommon
SO/LM	Sligo/Leitrim
TN/EL	Tipperary North /East Limerick
TS	South Tipperary
WC	West Cork
WD	Waterford
WX	Wexford
WW	Wicklow

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