

Summary

On Thursday, March 12th 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 2-2020

- National immunisation uptake rates (and changes compared to Quarter 1 2020) were
 - 92% for MenB₂ (↓1%)
 - 89% for D₃, T₃, P₃, Hib₃, Polio₃, HepB₃, MenC₁ and PCV₂ (↓1%)
 - Rates had also declined in Quarter 1 2020 compared to Quarter 4 2019
 - Some LHO declines of note in Quarter 2 2020 are described on page 9 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 2-2020

- National uptake rates in Quarter 2 2020 (and changes compared to Quarter 1 2020) were
 - 94% for D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃ (unchanged);
 - 91% for MMR₁ and *MenB_{complete}* (unchanged);
 - 90% for Hib_b (↑1%), *MenB₃* and Rota₂ (unchanged);
 - 89% for MenC_b (unchanged);
 - 88% for PCV_b (unchanged);
 - 86% for PCV₃ (unchanged), *MenC₂* (unchanged) and Hib₄ (↑8%)
 - MenB_{complete} rates based on data from 20 LHOs in Q1 and Q2;*
 - Hib₄ rates based on data from 18 LHOs in Q1 and Q2;*
 - MenC₂ rates based on data from 18 LHOs in Q1 and Q2;*
 - Remainder based on data from 31 LHOs.*
- MMR₁ was 91% similar to Q1 2020, and Q1-Q3 2019, however, prior to Q1 2019 MMR₁ uptake was higher (at 92-93%) since Q3 2011
- PCV₃ and PCV_b 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 2 2020 compared to Quarter 2 2018.
- While uptake rates of D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃ were 94% uptake of the remaining vaccines in Quarter 1 2020 are lower. Doses of these remaining vaccines (except Rota₂) 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.
- Hib₄ was 86%, an improvement compared to Quarter 1 2020 when uptake had declined to 77%. Hib₄ figures are based on data from 18 LHOs only.
- Some LHO declines/improvements of note in Quarter 2 2020 are described on page 13 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 2 2020 are presented in this report. The Quarter 2 2020 immunisation uptake statistics relate to children at 12 (born between 01/04/2019 and 30/06/2019) and 24 (born between 01/04/2018 and 30/06/2018) months of age in Quarter 2-2020. 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 1st 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 2 2020 12 month cohort are the eleventh 12 month cohort recommended this immunisation schedule and the Quarter 2 2020 24 month cohort are the seventh 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 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 2 2020, immunisation uptake rates of three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃), hepatitis B (HepB₃), two doses of pneumococcal conjugate vaccine (PCV₂), two doses of meningococcal serogroup B vaccine (MenB₂), two doses of rotavirus vaccine (Rota₂), one dose of meningococcal serogroup C conjugate vaccine (MenC₁) 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 2 2020, immunisation uptake rates of three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃), hepatitis B (HepB₃), pneumococcal conjugate vaccine (PCV₃)*, meningococcal group B (MenB₃)*, two doses of vaccine against meningococcal group C (MenC₂)* and rotavirus (Rota₂)*, four doses of vaccines against *Haemophilus influenzae* type b (Hib₄)* and one dose of vaccine against measles, mumps

and rubella (MMR₁) are reported. One dose of vaccine against *Haemophilus influenzae* type b (Hib_b), one dose of meningococcal group C vaccine (MenC_b) and one dose of pneumococcal conjugate vaccine (PCV_b) given on or after 12 months of age are also reported. MenB_{complete} 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_{complete} are those given MenB₃ 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 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.

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_b and MenC₂ at 24 months as required by HPSC and are not reporting Hib₄ and MenB_{complete} at 24 months due to concerns over the accuracy of the denominator. Hib_b 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. Due to COVID-19 being a priority Q2 2020 CHO5/CHO6/7/9 and former HSE-NW data was extracted approx. 12 weeks and 10 weeks, respectively, after quarter end. Extraction date for the former HSE-M (Laois/Offaly, Longford/Westmeath) and former HSE-NE (i.e. Cavan/Monaghan/Louth/Meath) was not reported.

Due to changes in the Irish primary childhood immunisation schedule (table 1) MenB₃ (and Rota₂) for children at 24 months of age was first requested in Quarter 4 2018. MenB_{complete} 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_{complete} data were reported for 25 LHOs in Quarter 1 2019 and 20 LHOs since then. In Quarter 2 2019-Quarter 2 2020 an additional 5 LHOs (former HSE-NE and HSE-NW) reported MenB_{complete} 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_{complete} data.

Hib₄ was requested in Quarter 4 2018 but not in previous quarters. Hib₄ was reported for 14 LHOs in Quarter 1 2019 and 18 LHOs since then.

For children born on or after October 1st 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 MenC₂ data as not all databases/reports were configured to count the combined Hib/MenC vaccine where it is the second dose of MenC. MenC₂ 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 Q2 2020

National

- National immunisation uptake rates were (and changes compared to Quarter 1 2020)
 - 92% for MenB₂ (↓1%)
 - 89% for D₃, T₃, P₃, Hib₃, Polio₃, HepB₃, MenC₁ and PCV₂ (↓1%)
- Uptake rates in Q2 2020 are shown in table 2.
- Uptake rates at 12 months by quarter are shown in Figure 1.
 - Uptake rates had also declined in Quarter 1 2020
- This is the eleventh 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 MenC₁ had declined by 6%, PCV₂ declined by 3% and D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃ rates declined by 2%.
- In Q2 2020, compared to Q2 2017, MenC₁ was 5% lower, and D₃, T₃, P₃, Hib₃, Polio₃, HepB₃ and PCV₂ were 2% lower
- MenC previously declined in Q3 2010 for those at 24 months of age (and there was low uptake of Hib_b). 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.

The reasons for this decline and actions taken are described

<https://ndsc.newsweaver.ie/epiinsight/1i8qj6mq9g3?a=1&p=17742945&t=17517774>

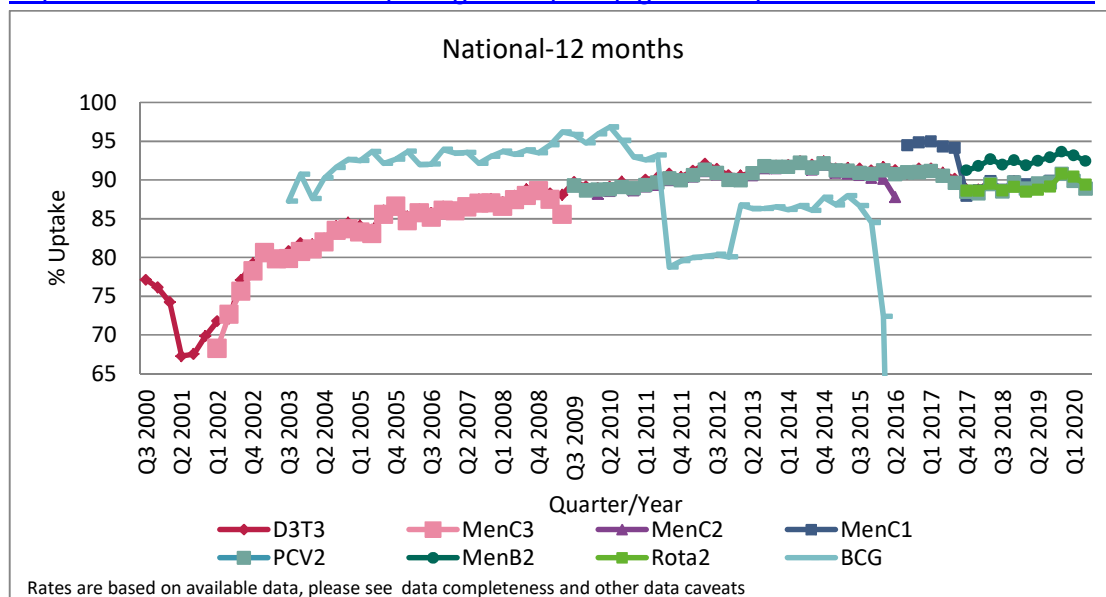


Figure 1. National quarterly immunisation uptake rates at 12 months

X-axis ranges from 60-100%.

The Q3-2008 MenC₁ uptake figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D₃, T₃, Polio₃ and MMR₁ 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 MenC₂ data and one additional area was unable to provide PCV₂ 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 MenC₂ 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.

Table 2. Immunisation uptake (%) at 12 months of age in Quarter 2 2020, cohort born 01/04/2019-30/06/2020, by LHO and CHO in Ireland

Community Healthcare Organisation (CHO)	Local Health Office/CHO	Number in cohort for		Immunisation Uptake (%)									
		BCG	D ₃ T ₃	BCG	DT ₃	P ₃	Hib ₃	Polio ₃	HepB ₃	MenB ₂	MenC ₁	PCV ₂	Rota ₂
CHO1	Cavan/Monaghan	0	414	0	83	83	83	83	83	93	83	83	87
	Donegal	483	483	0	85	85	85	85	85	91	85	85	81
	Sligo/Leitrim	301	301	0	93	93	93	93	93	95	92	93	90
	CHO1 Total	784	1198	0	86	86	86	86	86	92	86	86	85
CHO2	Galway	763	763	0	95	95	95	95	95	96	95	95	94
	Mayo	379	379	0	92	92	92	92	92	96	92	92	94
	Roscommon	206	206	0	96	96	96	96	96	97	96	96	97
	CHO2 Total	1348	1348	0	94	94	94	94	94	96	94	94	95
CHO3	Clare	362	362	0	93	93	93	93	93	96	93	93	93
	Limerick	382	382	0	90	90	90	90	90	92	89	90	88
	Tipperary NR/EL	336	336	0	93	93	93	93	93	96	93	93	93
	CHO3 Total	1080	1080	0	92	92	92	92	92	94	92	92	91
CHO4	North Cork	299	299	0	88	88	88	88	88	92	88	88	90
	North South Lee	1200	1200	0	89	89	89	89	89	91	90	89	90
	West Cork	171	171	0	78	78	78	78	78	83	77	78	81
	CHO4 Total	2044	2044	0	88	88	88	88	88	91	89	88	89
CHO5	Carlow/Kilkenny	365	365	0.0	87	87	87	87	87	91	86	86	84
	South Tipperary	249	249	0.4	91	91	91	91	91	94	91	91	91
	Waterford	353	353	0.0	89	89	89	89	89	92	90	88	88
	CHO5 Total	1415	1415	0.2	90	90	90	90	90	93	90	90	88
CHO6	Dublin South	408	408	0	93	93	93	93	93	95	93	93	92
	Dublin South East	396	396	0	92	92	92	92	92	94	91	92	93
	Wicklow	401	401	0	85	85	85	85	85	87	85	85	84
	CHO6 Total	1205	1205	0	90	90	90	90	90	92	90	90	89
CHO7	Dublin South City	382	382	0	91	91	91	91	91	92	90	91	91
	Dublin South West	518	518	0	88	88	88	88	88	92	88	88	90
	Dublin West	646	646	0	85	85	85	85	85	88	85	85	86
	CHO7 Total	2383	2383	0	89	89	89	89	89	92	89	89	89
CHO8	Laos/Offaly	510	510	0	95	95	95	95	95	95	95	95	91
	Longford/Westmeath	425	425	0	97	97	97	97	97	97	97	96	94
	Louth	0	415	0	87	87	87	87	87	93	87	87	90
	CHO8 Total	935	2030	0	91	91	91	91	91	94	91	91	90
CHO9	Dublin North West	707	707	0	85	85	85	85	85	90	85	85	87
	Dublin North Central	422	422	0	86	86	86	86	86	91	86	85	90
	Dublin North	839	839	0	79	79	79	79	79	88	79	79	86
	CHO9 Total	1968	1968	0	83	83	83	83	83	90	83	82	87
Ireland				13162	14671	0.02	89	89	89	89	89	89	89

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. D₃T₃ 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

Local Health Office (LHO)

- The immunisation uptake rates by LHO are shown in Table 2.
- D₃ and MenC₁ 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 Q2 2020 are described below.

Rates are for Q2 2020 compared to Q1 2020, unless otherwise stated:

- Cavan/Monaghan D₃/T₃/P₃/Hib₃/Polio₃/HepB₃, MenC₁ and PCV₂ declined by 4-11% and at 83% are the lowest for the first time since LHO data were first collated nationally in 2007
- Mayo PCV₂ declined by 6% to 92% (previously 92% in Q4 2017) and MenC₁ by 3% to 92% (the lowest since it was first collated in Q4 2016), the remaining vaccines declined by 1-3% but had similar rates in Q1/Q2 2019
- Carlow/Kilkenny rates declined by 2-6% to 84-91% and are the lowest since Q4 2018
- Waterford uptake rates declined by 2-4% but had similar rates in 2019
- Wicklow rates declined by 1-4% but are mostly higher compared to 2019
- Louth rates declined by 2-4% but are similar to Q1 2019
- Meath rates declined by 2-3% to 86-91% and are one of the lowest quarterly rates compared to most quarters since LHO data first collated nationally in 2007
- Dublin North West uptake rates declined by 4-7% with uptake rates ranging from 85-90%, some of these uptake rates (D₃/T₃/P₃/Hib₃/Polio₃/HepB₃, MenC₁) are similar to Q4 2017
- Dublin North Central D₃/T₃/P₃/Hib₃/Polio₃/HepB₃, MenC₁ and PCV₂ uptake rates declined by 3% but there were similar rates in 2019
- Dublin North D₃/T₃/P₃/Hib₃/Polio₃/HepB₃, MenC₁ and Rota₂ uptake rates declined by approx 2-3% and at 79% D₃/T₃/P₃/Hib₃/Polio₃/HepB₃ is the lowest since D₃/T₃/P₃/Hib₃/Polio₃ first collated nationally in 2007 and PCV₂ is the lowest since it was first collated in 2009
- Among the Local Health Offices, the target uptake rate of ≥95% was reached in Q2 2020 in Roscommon for all vaccines and in Laois/Offaly Longford/Westmeath and Galway for all vaccines except Rota₂
- TipperaryNorth/East Limerick uptake rates improved by 3-5% to 93-96% and are the highest since Q4 2017
- Kerry uptake rates improved by 1-4% to 91-92% with Rota₂ and PCV₂, are the highest since they were first collected

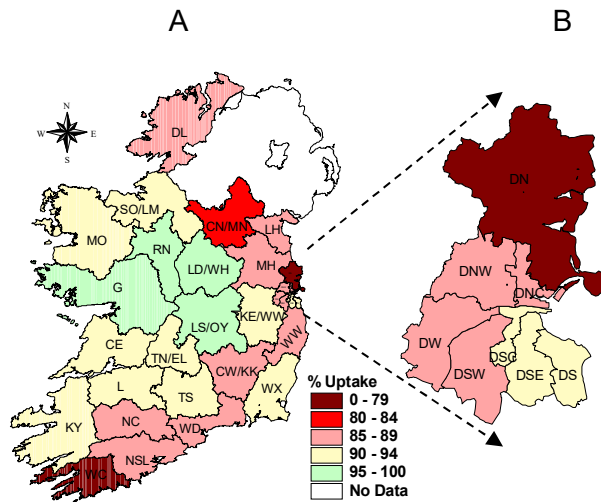


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

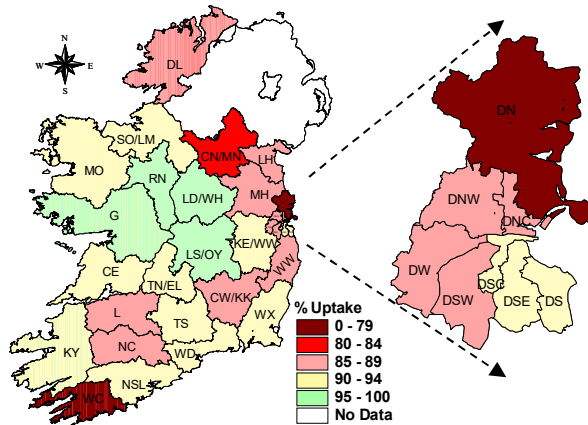


Figure 3. MenC₁ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 2-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Immunisation uptake among children 24 months of age in Quarter 2-2020

National

- National uptake rates in Q2 2020 (and changes compared to Q1-2020) were (table 3 and figure 4):

- 94% for D₃, T₃, P₃, Hib₃, Polio₃ and HepB₃ (unchanged);
- 91% for MMR₁ and *MenBcomplete* (unchanged);
- 90% for Hib_b (↑1%), *MenB₃* and Rota₂ (unchanged);
- 89% for MenC_b (unchanged);
- 88% for PCV_b (unchanged);
- 86% for PCV₃ (unchanged), *MenC₂* (unchanged) and Hib₄ (↑8%)

MenBcomplete rates based on data from 20 LHOs in Q1 and Q2;
 Hib₄ rates based on data from 18 LHOs in Q1 and Q2;
 MenC₂ rates based on data from 18 LHOs in Q1 and Q2;
 Remainder based on data from 31 LHOs.

- Figure 4 presents the national uptake rates at 24 months from Q1-1999 to Q2-2020

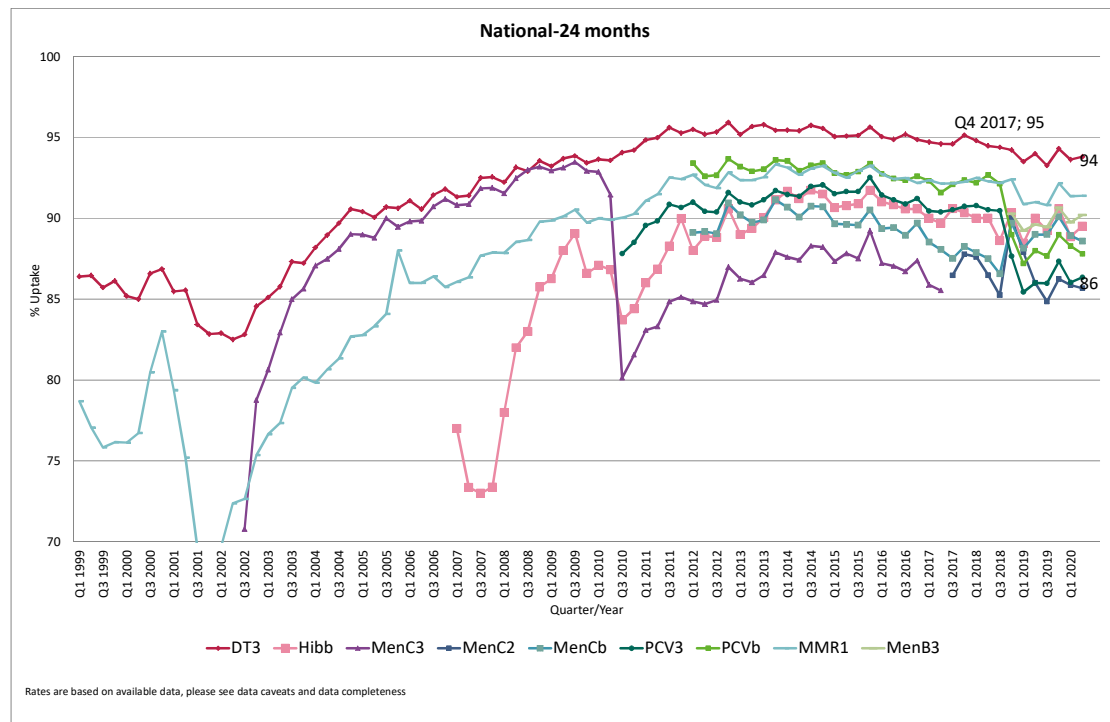


Figure 4. National quarterly immunisation uptake rates at 24 months

Notes: The Q4-2005 MMR₁ figure is based on data from seven of the eight HSE-Areas. The Q1-2006 MMR₁ figure includes the HSE-Eastern Area figure that is an estimate only. The Q1-2007, Q3-2007, Q2-2008 and Q3-2008 Hib_b figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed their Hib_b data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib_b in the HSE-SE was 83% compared to 53% in Q4-2007. The Q3-2008 MenC₃ figure is based on data from six of the eight HSE Areas. The Q1-2009 HSE-Eastern Area D₃, P₃, T₃, Polio₃ and MMR₁ uptake figures exclude those born on the 31/03/2007. The Q2-2009 HSE-Eastern Area Hib_b 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_b 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_b 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. MenC₂ and PCV₃ data were only available for 6 of the 8 HSE Areas from Q1 2012 to Q4 2014. MenC₂ and PCV₃ data were only available for 8 CHOs from Q1 2015-Q1 2017 but are available for all since Q2 2017. Q2 2017 CHO3 Hib_b figures were unavailable. CN/MN, LH and MH Q1, Q2 & Q3 2018 data were unavailable. For children born on or after 1st October 2016 (Quarter 4 2018 24 month cohort) the combined Hib/MenC vaccine is recommended at 13 months. For children born prior to the 1st October 2016 individual Hib and MenC vaccines were recommended. However, some children in these cohorts (born prior to the 1st 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 MenC₂ uptake statistics **except** in CHO4 and it was not counted in the MenC₂ and Hib_b uptake statistics in CHO2/3/6/7/8/9. In Q3 2018 the combined Hib/MenC booster was not counted in the MenC₂ uptake statistics in CHO3/6/7/9 and it was not counted in the MenC₂/Hib_b statistics in CHO6/7/9. MenC₂ 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 2 2020, cohort born 01/04/2018-30/06/2018, by LHO and CHO in Ireland

Community Healthcare Organisation (CHO)	Local Health Office/CHO	No. in cohort for DT ₃	Immunisation Uptake (%)											
			DT ₃	HepB ₃	Hib ₄	Hib ₆	MenB ₃	MenB complete	MenC ₂	MenC ₆	PCV ₃	PCV ₆	Rota ₂	MMR ₁
CHO1	Cavan/Monaghan	486	96	96	83	87	92	na	83	87	83	83	90	92
	Donegal	475	92	92	75	80	85	na	75	80	75	80	83	85
	Sligo/Leitrim	282	93	93	84	89	90	na	84	88	89	89	86	91
	CHO1 Total	1243	94	94	80	85	89	na	80	85	81	83	86	89
CHO2	Galway	793	94	94	na	91	93	na	na	89	96	88	95	94
	Mayo	336	94	94	na	90	93	na	na	88	95	92	96	91
	Roscommon	184	96	96	na	96	96	na	na	92	97	97	95	96
	CHO2 Total	1313	95	95	na	92	93	na	na	89	96	91	95	93
CHO3	Clare	376	97	97	91	95	94	na	91	95	91	94	92	94
	Limerick	457	95	95	88	93	93	na	88	92	88	92	89	93
	Tipperary NR/ELimerick	380	94	94	89	93	93	na	89	92	88	92	91	93
	CHO3 Total	1213	95	95	89	93	93	na	89	93	89	93	91	93
CHO4	North Cork	300	95	95	88	93	91	91	88	91	88	91	90	93
	North South Lee	1236	96	96	89	92	93	95	88	91	88	91	90	93
	West Cork	141	91	91	83	87	87	89	82	86	83	86	81	89
	Kerry	408	93	93	83	90	90	91	84	88	82	88	86	91
	CHO4 Total	2085	95	95	87	92	92	93	87	90	87	90	88	92
CHO5	Carlow/Kilkenny	426	96	95	86	90	93	94	87	90	88	90	87	94
	South Tipperary	272	94	94	85	89	90	90	86	89	86	89	90	93
	Waterford	398	89	89	80	85	89	90	81	85	84	86	88	91
	Wexford	440	94	93	85	90	90	92	86	90	87	90	87	93
	CHO5 Total	1536	93	93	84	89	91	92	85	89	86	88	88	93
CHO6	Dublin South	392	95	95	na	90	89	90	na	90	87	88	92	91
	Dublin South East	355	94	94	na	94	92	93	na	93	91	92	93	94
	Wicklow	434	88	88	na	85	85	86	na	85	82	84	85	86
	CHO6 Total	1181	92	92	na	90	88	89	na	89	86	88	90	90
CHO7	Dublin South City	355	94	94	na	90	90	90	na	90	87	89	93	92
	Dublin South West	528	91	91	na	91	86	90	na	86	82	85	88	87
	Dublin West	524	99	99	na	92	95	96	na	92	86	89	95	96
	Kildare/West Wicklow	843	93	93	na	91	91	92	na	90	88	89	90	93
	CHO7 Total	2250	94	94	na	91	91	92	na	90	86	88	91	92
CHO8	Laois/Offaly	586	97	97	92	96	94	97	91	96	92	95	92	96
	Longford/Westmeath	470	96	96	92	94	92	95	89	94	94	94	92	95
	Louth	390	95	95	81	85	87	na	81	84	83	82	91	88
	Meath	679	93	93	83	87	88	na	83	87	82	82	90	89
CHO8 Total	2125	95	95	87	91	90	96	86	90	88	88	91	92	
CHO9	Dublin North West	740	92	92	na	87	89	90	na	87	84	86	88	90
	Dublin North Central	387	91	91	na	84	84	87	na	83	79	82	89	87
	Dublin North	934	90	90	na	82	84	85	na	81	79	80	87	86
	CHO9 Total	2061	91	91	na	84	86	87	na	84	81	83	88	88
Ireland		15007	94	94	86	90	90	91	86	89	86	88	90	91

As the denominator/number in cohort varied slightly according to vaccine the DT₃ cohort is shown here

Since P₃, Hib₃ and Polio₃ uptake very similar to DT₃ uptake only DT₃ 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

Hib₄ 'national' uptake rate is based on data from 18 LHOs only

MenB_{complete} 'national' rate is based on data from 20 LHOs.

MenC₂ 'national' uptake is based on data from 18 LHOs only. Lack of complete MenC₂ 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 Q2-2020 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 Q2 2020' available [here](#)
- Uptake rates among only some of the LHOs in Q2 2020 are described below
Rates are for Q2 2020 and compared to Q1 2020, unless otherwise stated:
 - Uptake rates for all vaccines, except MenC_b, in Roscommon were \geq the target rate of 95%
 - Dublin South West rates declined, except Hib_b and MenBc_{complete}, with MMR₁ declining by 3% to 87% and with a number of vaccines having one of their lowest uptakes since data first collated at a national level by LHO in 2007.
 - Dublin West rates improved by 7-13% with rates ranging from 86% (for PCV₃) to 99% (for D₃/T₃/P₃/Hib₃/Polio₃/HepB₃)
 - Uptake rates of all vaccines in the LHOs of CHO9 declined, with the exception of Hib_b uptake in Dublin North Central; with uptake rates in Dublin North Central declining by 3-9% and MenC_b/PCV₃/PCV_b in Dublin North declining by 4-5%.

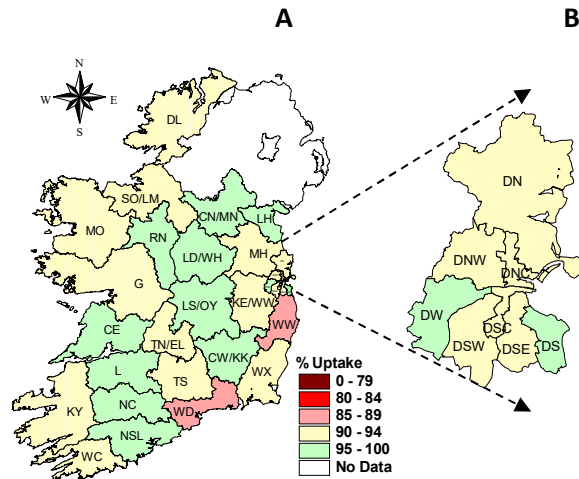


Figure 5. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

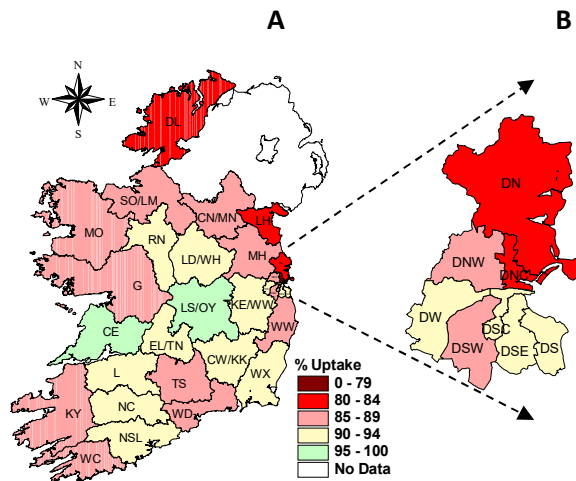


Figure 6. MenC_b immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

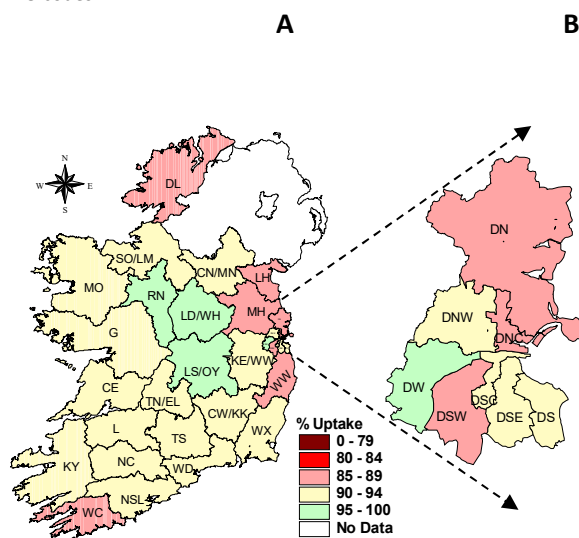


Figure 7. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 2-2020, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

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/>

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Report prepared by:

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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

Vaccine
24 months
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
12 MONTHS
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
24 months	
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
12 MONTHS	
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 rd 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. Reporting of MenB2 and MenBcomplete figures in template above: If MenB3 and MenB2 are entered above the excel sheet will automatically calculate MenBcomplete. If MenBcomplete is available and not MenB2 then type MenBcomplete into the MenBcomplete row and leave MenB2 row blank. 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 st 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 rd 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