



A report by the Health Protection Surveillance Centre

## Summary

#### Children 12 months of age in Quarter 4-2009

The immunisation uptake figures for children at 12 months of age presented in this report are incomplete as only two HSE Areas were in a position to provide BCG data and only three Areas were in a position to provide the remaining vaccine data. The available BCG cohort figure may be around 16% of the birth cohort and the remaining vaccine cohort figures available may be around half the birth cohort. Based on the available data the national immunisation uptake rates were 88% for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> and 95% for BCG.

#### Children 24 months of age in Quarter 4-2009

The immunisation uptake figures for children at 24 months of age presented in this report are incomplete as only four HSE Areas were in a position to provide data. The available vaccine cohort figures may be around 65% of the birth cohort. Based on the available data the national immunisation uptake rates were 93% for  $D_3$ ,  $P_3$ ,  $T_3$ ,  $Hib_3$ ,  $Polio_3$  and  $MenC_3$ , 86% for  $Hib_b$  and 90% for  $MMR_1$ .

# Introduction

Since September 1st 2008 the new primary childhood immunisation schedule has been implemented (table 1).

The changes to the primary schedule for children born on or after 1<sup>st</sup> July 2008 include;

Introduction of a hepatitis B vaccine (as part of a 6 in 1 vaccine) given at 2, 4 and 6 months of age

Introduction of pneumococcal conjugate vaccine given at 2, 6 and 12 months of age

Change in timing of meningococcal serogroup C conjugate vaccination, now given at 4, 6 and 13 months of age

Change in timing of the Haemophilus influenzae type b vaccination, now given at 2, 4, 6 and 13 months of age.

Please see <u>www.immunisation.ie</u> for complete information on the Irish childhood immunisation schedule and changes to the schedule introduced in September 2008.

The immunisation uptake statistics presented in this report relate to children 12 and 24 months of age in Quarter 4-2009.

The immunisation uptake rates presented in this report for children at 12 months of age in Quarter 4-2009 are children born between 01/10/2008 and 31/12/2008 and who have received three doses of vaccines against diphtheria (D<sub>3</sub>), pertussis (P<sub>3</sub>), tetanus (T<sub>3</sub>), *Haemophilus influenzae* type b (Hib<sub>3</sub>), polio (Polio<sub>3</sub>), hepatitis B (HepB<sub>3</sub>), two doses of meningococcal serogroup C conjugate vaccine (MenC<sub>2</sub>), two doses of pneumococcal conjugate vaccine (PCV<sub>2</sub>) and one dose of BCG vaccine.

The immunisation uptake rates presented in this report for children at 24 months of age in Quarter 4-2009 are children born between 01/10/2007 and 31/12/2007 and who have received 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>) and meningococcal group C (MenC<sub>3</sub>), one booster dose of vaccine against *Haemophilus influenzae* type b given after 12 months of age (Hib<sub>b</sub>) and one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>).

The national immunisation uptake statistics, based on available data, for Quarter 4-2009 are presented in this document, the uptake statistics are also presented by HSE Area and Local Health Office (LHO).

Table 1. Change in Primary Childhood Immunisation Schedule									
Age	Children born before 01/07/2008	Children born on or after 01/07/2008							
Birth	BCG BCG								
2 months	DTaP/Hib/IPV + MenC	DTaP/Hib/IPV/HepB + PCV							
4 months	DTaP/Hib/IPV + MenC DTaP/Hib/IPV/HepB + MenC								
6 months	DTaP/Hib/IPV + MenC DTaP/Hib/IPV/HepB + PCV + MenC								
12 months	MMR + Hib MMR + PCV								
13 months	- MenC + Hib								
Please see <u>www.immunisation.ie</u> for complete information on the Irish childhood immunisation schedule and changes to th schedule introduced in September 2008.									
BCG;	Bacille Calmette Guerin vaccine								
DTaP	Diptheria, Tetanus and acellular Pertussis vaccine								
Hib	Haemophilus influenzae type b vaccine								
IPV	Inactivate Polio Virus vaccine								
HepB	Hepatitis B vaccine								
PCV	Pneumococcal Conjugate Vaccine								
MenC	Meningococcal group C vaccine								
MMR	Measles, Mumps and Rubella vaccine								

## Immunisation uptake at 12 months

#### National and HSE Area uptake

Plesae note: The immunisation uptake figures for children at 12 months of age presented in this report are incomplete as only two HSE Areas were in a position to provide BCG data and only three Areas were in a position to provide the remaining vaccine data. The available BCG cohort figures may be around 16% of the birth cohort and the remaining vaccine cohort figures available may be around half the birth cohort. Immunisation uptake rates, where available, in children 12 months of age in Q4-2009 are presented by HSE Area in Table 1. National uptake rates, based on the available data, were 95% for BCG and 88% for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub>.

#### National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q4-2009. Compared to Q3-2009, national uptake rates in Q4-2009 for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub> and Polio<sub>3</sub> decreased by 2% and HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> decreased by 1%. Due to incompleteness of data in both Q3 and Q4 these decreases may not be genuine.

Compared to the previous quarter, uptake rates in the HSE-Eastern Area for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and HepB<sub>3</sub> decreased by 1% while Hib<sub>3</sub> uptake decreased by 2%. Compared to the previous quarter, uptake rates in the HSE-North Western Area for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> decreased by 1%, uptake rates for Hib<sub>3</sub> and HepB<sub>3</sub> decreased by 2% and the uptake rate for BCG was unchanged. In the HSE-South Eastern Area uptake rates for all vaccines were unchanged in Q4 2009 compared to Q3 2009.

#### LHO uptake

The immunisation uptake rates by LHO are shown in appendix 1.

All six LHOs reporting BCG data had  $\geq$ 90% uptake with uptake of  $\geq$ 95% in four of these LHOs.

The immunisation uptake target rate of 95% was not reached for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub> in any of the 16 LHOs reporting data.

Of the 16 LHOs reporting data five had  $\geq$ 90% uptake of D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, HepB<sub>3</sub>, MenC<sub>2</sub> and PCV<sub>2</sub>. D<sub>3</sub> immunisation uptake rates are mapped by LHO in figure 2.

#### Internationally

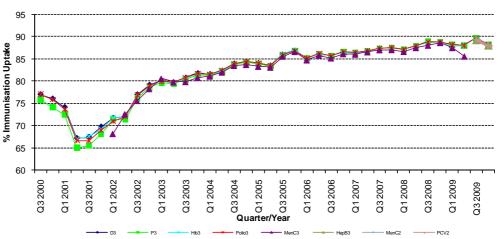
Vaccination coverage statistics for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> for children 12 months of age in Quarter 4-2009 were 93.5% in England, 95.6% in Wales, 97.4% in Northern Ireland and 97.6% in Scotland.<sup>1</sup> MenC<sub>2</sub> uptake was 92.8% in England, 95.3% in Wales, 97.3% in Northern Ireland and 97.3% in Scotland.<sup>1</sup> PCV<sub>2</sub> uptake was 93.2% in England, 95.6% in Wales, 97.3% in Northern Ireland and 97.5% in Scotland.<sup>1</sup> Please see HPA report for caveats to data.<sup>1</sup> 
 Table 1. Immunisation uptake (%) at 12 months in cohort born 01/10/2008–31/12/2008

HSE Area	No. in cohort*	BCG	<b>D</b> <sub>3</sub>	<b>P</b> <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>
Eastern	6798	na	88	88	88	87	88	87	87	87
Midland	na	na	na	na	na	na	na	na	na	na
Mid Western	na	na	na	na	na	na	na	na	na	na
North Eastern	na	na	na	na	na	na	na	na	na	na
North Western	976	95	90	90	90	90	90	89	89	90
South Eastern	2042	95	90	90	90	90	90	90	90	90
Southern	na	na	na	na	na	na	na	na	na	na
Western	na	na	na	na	na	na	na	na	na	na
Ireland	9816†	95	88	88	88	88	88	88	88	88

na = not available at this time

\*As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here. \*Number in cohort for BCG is 3,018.

Please note the national figures are all incomplete.



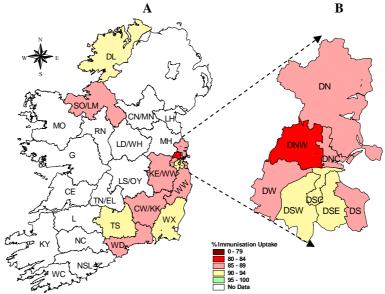
#### Figure 1. National quarterly immunisation uptake rates at 12 months

Since  $T_3$  uptake identical to  $D_3$  uptake only  $D_3$  uptake figures presented

The Q3 2008  $MenC_3$  uptake figure is based on data from six of the eight HSE Areas

The Q1-2009 HSE-Eastern Area  $D_3$ ,  $P_3$ ,  $T_3$ ,  $Polio_3$  and  $MMR_1$  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  $MenC_2$  data and one additional area was unable to provide  $PCV_2$  data.

The Q4 2009 figures are incomplete as five HSE Areas were unable to provide data.



**Figure 2.**  $D_3$  immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 4 2009, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO abbreviations.

## Immunisation uptake at 24 months

#### National and HSE Area uptake

The immunisation uptake figures for children at 24 months of age presented in this report are incomplete as only four HSE Areas were in a position to provide data. The available vaccine cohort figures may be around 65% of the birth cohort. Immunisation uptake rates, where available, in children 24 months of age in Q4-2009 are presented (Table 2). National uptake rates, based on available data, were 93% for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub>. All four HSE Areas had  $\geq$ 91% uptake of  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub>. The target uptake of 95% was reached/exceeded in the HSE-Midland and North Western Areas for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub>. Hib<sub>b</sub> uptake was 86% nationally (based on available data) with  $\geq$ 90% uptake of Hib<sub>b</sub> in two of the four HSE Areas (table 2). MMR<sub>1</sub> uptake was 90% nationally (based on available data) with uptake of  $\geq$ 91% in three HSE Areas (table 2). Table 2. Immunisation uptake (%) at 24 months in achort horn 01/(0/2007 - 21/12/2007)

#### Trends

Figure 3 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q4-2009. In Q4-2009, compared to the previous quarter, national uptake rates for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub> and Polio<sub>3</sub> decreased by 1%, MenC<sub>3</sub> was unchanged, Hib<sub>b</sub> decreased by 3% and MMR<sub>1</sub> decreased by 1%. **Due to incompleteness of data in Q4-2009 this comparison may be invalid.** 

In Q4 2009 in the HSE-Eastern Area, compared to the previous quarter, D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub> uptake was unchanged, Hib<sub>3</sub> decreased by 1%, Hib<sub>b</sub> decreased by 2% and MMR1 decreased by 1%. In the HSE-Midland Area, compared to the previous quarter, uptake rates for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, MenC<sub>3</sub> and MMR<sub>1</sub> increased by 2% and Hib<sub>b</sub> uptake increased by 1%. In the HSE-North Western Area, compared to the previous quarter, uptake rates for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> increased by 2%, Hib<sub>b</sub> uptake increased by 1% and MenC<sub>3</sub> and MMR<sub>1</sub> uptake increased by 3%. In the HSE-South Eastern Area, compared to the previous quarter, uptake rates for D<sub>3</sub>, T<sub>3</sub> and MMR<sub>1</sub> increased by 1%, P<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub> were unchanged, Hibb decreased by 4% and MMR<sub>1</sub> increased by 1%.

#### LHO uptake

Immunisation uptake rates for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Hib<sub>5</sub>, Polio<sub>3</sub>, MenC<sub>3</sub> and MMR<sub>1</sub> in children 24 months of age in Q4-2009 are presented by LHO in Appendix 2.

The immunisation uptake target rate of 95% was reached or exceeded in the Local Health Offices (LHOs) of: Longford/Westmeath for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub>, MenC<sub>3</sub> and MMR<sub>1</sub>; Donegal, Dublin South, Dublin South East, Laois/Offaly and Wexford for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub> and Sligo/Leitrim for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>.

Of the 18 LHOs reporting data; seven had  $\geq$ 95% uptake of D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>; six had  $\geq$ 95% uptake of MenC<sub>3</sub>, and one had  $\geq$ 95% uptake of MMR<sub>1</sub>.

All eighteen LHOs reporting data had  $\geq 90\%$ uptake of D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub>. Of the 18 LHOs; 15 had  $\geq 90\%$  uptake of MenC<sub>3</sub>; 12 had  $\geq 90\%$  uptake of MMR<sub>1</sub> and five had  $\geq 90\%$  uptake of Hib<sub>b</sub>. Table 2. Immunisation uptake (%) at 24 months in cohort born 01/10/2007 – 31/12/2007

HSE Area	No. in	<b>D</b> <sub>3</sub>	<b>P</b> <sub>3</sub>	<b>T</b> <sub>3</sub>	Hib <sub>3</sub>	Hib <sub>b</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
	Cohort*								
Eastern	5923	93	93	93	92	83	93	92	88
Midland	1286	97	97	97	97	92	97	97	93
Mid Western	na	na	na	na	na	na	na	na	na
North Eastern	na	na	na	na	na	na	na	na	na
North Western	942	97	97	97	97	93	97	96	93
South Eastern	2024	93	92	93	92	88	92	91	91
Southern	na	na	na	na	na	na	na	na	na
Western	na	na	na	na	na	na	na	na	na
Ireland	10175	93	93	93	93	86	93	93	90
* As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented									

\* As the denominator/number in cohort varied slightly accordinate. Please note the national figures are all incomplete.

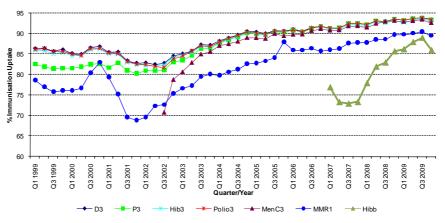


Figure 3. National quarterly immunisation uptake rates at 24 months

**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 MmC<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 also exclude uptake figures are based on data from only four of the eight HSE Areas. The Q4-2009 Hib<sub>b</sub> figures also exclude uptake figures from Dublin North.

#### Internationally

In Q4-2009, vaccination coverage statistics at 24 months for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub> and Polio<sub>3</sub> were 95.3% in England, 97.5% in Wales, 98.6% in Northern Ireland and 98.3% in Scotland.<sup>1</sup> Infant MenC uptake was 94.2% in England, 96.4% in Wales, 97.0% in Northern Ireland and 96.5% in Scotland.<sup>1</sup> Hib/MenC booster was 89.8% in England, 94.5% in Wales, 94.8% in Northern Ireland and 94.2% in Scotland.<sup>1</sup> MMR<sub>1</sub> uptake was 87.7% in England, 93.1% in Wales, 92.1% in Northern Ireland and 94.2% in Scotland.<sup>1</sup> Please see HPA report for caveats to data.<sup>1</sup>

### Conclusions

In Q4-2009, the uptake rates at 24 months for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub> were  $\geq$ 91% in all four HSE Areas reporting data and MMR<sub>1</sub> uptake was  $\geq$ 91% in three HSE Areas. Two of the four HSE Areas reached the target uptake of  $\geq$ 95% for D<sub>3</sub>, P<sub>3</sub>, T<sub>3</sub>, Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub>.

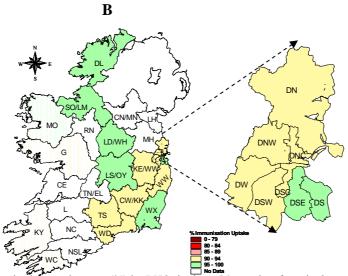
### **Further information**

A complete listing of national and regional immunisation uptake statistics at 12 and 24 months for each HSE Area is also available at <u>http://www.hpsc.ie</u>.

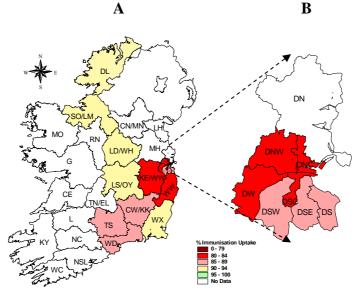
### Acknowledgements

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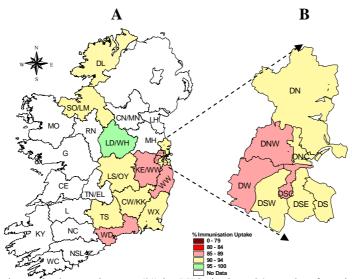
**References 1.** COVER programme: October to December 2009. Health Protection Report 2010: 4 (12). Available at: <u>http://www.hpa.org.uk/hpr/infections/immunisation.htm#091012</u> (accessed 26/03/2010)



**Figure 4.** D<sub>3</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4 2009, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 5.** Hib<sub>b</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4 2009, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.



**Figure 6.** MMR<sub>1</sub> immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4 2009, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

## Appendix 1

	Appendix 1											
	Immunisation Uptake at 12 Months in Cohort Born 01/10/2008-31/12/2008											
			No. in		_		Immuni	sation Up	take (%) *			
		No. in	NO. IN cohort for									
HSE		cohort	other									
Area	LHO/HSE Area	for BCG	vaccines†	BCG	D <sub>3</sub>	P3	T <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	HepB <sub>3</sub>	MenC <sub>2</sub>	PCV <sub>2</sub>
	Dublin South	na	404	na	89	89	89	89	89	89	90	89
	Dublin South East	na	370	na	91	91	91	91	91	91	91	90
1	Dublin South City	na	469	na	90	90	90	90	90	89	89	89
1	Dublin South West	na	670	na	92	92	92	91	92	91	91	92
1	Dublin West	na	696	na	86	86	86	86	86	86	86	85
Eastern‡	Dublin North West	na	948	na	83	83	83	83	83	82	82	82
	Dublin North Central	na	448	na	89	89	89	89	89	88	88	88
1	Dublin North	na	1106	na	89	89	89	89	89	88	88	89
1	Kildare/West Wicklow	na	1117	na	87	87	87	87	87	87	86	86
1	Wicklow	na	570	na	87	87	87	87	87	86	87	87
	HSE-E Total	na	6798	na	88	88	88	87	88	87	87	87
	Laois/Offaly	na	na	na	na	na	na	na	na	na	na	na
	Longford/Westmeath	na	na	na	na	na	na	na	na	na	na	na
	HSE-M Total	na	na	na	na	na	na	na	na	na	na	na
	Clare	na	na	na	na	na	na	na	na	na	na	na
Mid	Limerick	na	na	na	na	na	na	na	na	na	na	na
Western	Tipperary NR/East Limerick	na	na	na	na	na	na	na	na	na	na	na
	HSE-MW Total	na	na	na	na	na	na	na	na	na	na	na
	0											
North Eastern	Cavan/Monaghan	na	na	na	na	na	na	na	na	na	na	na
	Louth	na	na	na	na	na	na	na	na	na	na	na
	Meath HSE-NE Total	na na	na na	na na	na na	na na	na na	na na	na na	na na	na na	na na
,	HOL-INE TOTAL	na	na	na	na	na	na	na	na	na	na	na
	Donegal	601	601	94	91	91	91	91	91	91	91	91
North	Sligo/Leitrim	375	375	94	87	87	87	87	87	86	87	87
Western	HSE-NW Total	976	976	95 95	90	90	90	90	90	89	89	90
		0/0	010						~~~			
	Carlow/Kilkenny	547	547	95	88	88	88	88	88	89	88	88
	South Tipperary	364	364	95	93	93	93	93	93	93	93	93
South	Waterford	557	557	92	88	88	88	88	88	88	88	88
Eastern	Wexford	574	574	97	92	92	92	92	92	91	92	92
1	HSE-SE Total	2042	2042	95	90	90	90	90	90	90	90	90
1												
1	North Cork	na	na	na	na	na	na	na	na	na	na	na
Southern	North South Lee	na	na	na	na	na	na	na	na	na	na	na
	West Cork	na	na	na	na	na	na	na	na	na	na	na
	Kerry	na	na	na	na	na	na	na	na	na	na	na
	HSE-S Total	na	na	na	na	na	na	na	na	na	na	na
	Galway	na	na	na	na	na	na	na	na	na	na	na
Western	Мауо	na	na	na	na	na	na	na	na	na	na	na
	Roscommon	na	na	na	na	na	na	na	na	na	na	na
	HSE-W Total	na	na	na	na	na	na	na	na	na	na	na
	Ireland *	3018	9816	95	88	88	88	88	88	88	88	88

na=not available
The national data are incomplete as only two Areas were able to provide BCG data and only three were able to provide data for the remainder of the vaccines.
As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here.
Please note w hile North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here.

Uptake in Sligo/Leitrim was reported as being down as the immunisation staff were drafted in to help with the pandemic vaccination clinics and are now behind with the childhood immunisation data entry. Uptake may be dow n in other areas for this reason also.

## **Appendix 2**

HIBCH INSALUT OF LAR AT 24 MOUNTS IN CONTR	Appendix 2 Immunisation Uptake at 24 Months in Cohort Born 01/10/2007-31/12/2007											
No. in cohort for other         No. in cohort for         No. in cohort for other         No. in cohort for ot												
HSE Area         LHO/HSE Area         No. in bib, cohort for vacinest				No. in	Immunisation Uptake (%)*							
HSE AreaLHO/HSE AreaCohor for Hib, vacines†DaDaPaTaHibaPolio, Pol			No. in	-								
HSE AreaHibb VacinestDaPaTaHibbHibbPolio PolioBublin South386386386969696968596Dublin South East38338338998												
Dublin South         Dask	HSE Area	LHO/HSE Area	Hib		D <sub>3</sub>	P <sub>3</sub>	T <sub>3</sub>	Hib <sub>3</sub>	Hibb	Polio <sub>3</sub>	MenC <sub>3</sub>	MMR <sub>1</sub>
Dublin South City         418         418         92         92         91         81         92           Dublin South West         653         653         94         94         94         94         87         94           Dublin North West         731         731         92         92         92         92         92         82         92           Dublin North West         930         930         91         91         90         82         91           Dublin North Central         433         433         433         93 <t< td=""><td></td><td></td><td></td><td></td><td>96</td><td></td><td>96</td><td>96</td><td>85</td><td>96</td><td>96</td><td>90</td></t<>					96		96	96	85	96	96	90
Dublin South City         418         418         92         92         91         81         92           Easternt         Dublin South West         663         663         94         94         94         94         97         94           Dublin North West         731         731         92         92         92         92         92         82         92           Dublin North West         930         930         91         94         94         93         84         94           Dublin North Central         433         433         433         93		Dublin South East	383	383	98	98	98	98	87	98	97	92
Dublin South West         653         653         94         94         94         94         97         94           Dublin West         731         731         731         92         92         92         92         82         92           Dublin North West         930         930         91         91         91         90         82         91           Dublin North Central         433         433         94         94         93         84         94           Bitle         Form         93         93         93         93         93         93         93         93         93         93         93         93         93         92         81         93           BitSE-Total †         5610         6671         93         93         92         83         93         92         83         93         93         92         93			418	418		92	92		81		89	86
Eastern†         Dublin North West         930         930         91         91         91         91         90         82         91           Dublin North Central         433         433         94         94         93         9			653	653	94	94	94	94	87	94	92	93
Dublin North Central         433         433         94         94         94         93         84         94           Dublin North         na         1061         93         94         93         94         94         94         94         94         93         94         93         94         95         95         95         95         95         90         95         93		Dublin West	731	731	92	92	92	92	82	92	91	86
Dublin North         na         1061         93         92         81         93           Wicklow         524         524         524         93         93         93         92         83         93         93         92         83         93           Midland         Laois/Offaly         682         695         95         95         95         95         90         94         99           Midland         Laois/Offaly         682         695         97         97         97         97         92         97           Midwestern         Tipperary NR/East Limerick         na         n	Eastern†	Dublin North West	930	930	91	91	91	90	82	91	90	85
Kildare/West Wicklow         1152         1152         90         90         90         82         90           Wicklow         524         524         93         93         93         92         81         93           MisEE Total †         5610         6671         93         93         92         83         93           Midland         Laois/Offaly         682         685         95         95         95         90         94         99           HSE-M Total         1262         1286         97         97         97         92         97           Mid western         Clare         na		Dublin North Central	433	433	94	94	94	93	84	94	92	90
Wicklow         524         524         93         93         93         92         81         93           HSE-Total †         5610         6671         93         93         93         92         83         93           Midland         Laois/Offaly         682         695         95         95         95         90         95           Midland         Longford/Westmeath         580         591         99         99         99         99         94         99           Mid Western         Itae         1262         1286         97         97         97         92         97           Mid Western         Clare         na         n		Dublin North	na	1061	93	93	93	93	na	93	93	90
HSE-E Total †5610667193939393928393MidlandLaois/Offaly682695959595959095Laois/Offaly68269595959595909595HSE-M Total1262128697979797979297Mid westernCarenan		Kildare/West Wicklow	1152	1152	90	90	90	90	82	90	89	86
Laois/Offaly         682         695         95         95         95         90         95           Midland         Longford/Westmeath         580         591         99         99         99         99         99         99         99         99         97         97         97         97         92         97           Mid Western         Clare         na         na <t< td=""><td></td><td>Wicklow</td><td>524</td><td>524</td><td>93</td><td>93</td><td>93</td><td>92</td><td>81</td><td>93</td><td>92</td><td>85</td></t<>		Wicklow	524	524	93	93	93	92	81	93	92	85
Midland         Longford/Westmeath         580         591         99         99         99         99         94         99           HSE-M Total         1262         1286         97         97         97         97         92         97           Mid Western         Clare         na         <		HSE-E Total †	5610	6671	93	93	93	92	83	93	92	88
MidlandLongford/Westmeath58059199999999999499HSE-M Total12621286979797979297Mid WesternClarena <td></td>												
HSE-M Total         1262         1286         97         97         97         97         92         97           Mid Western         Clare         na         na <td< td=""><td></td><td>Laois/Offaly</td><td>682</td><td>695</td><td>95</td><td>95</td><td>95</td><td>95</td><td>90</td><td>95</td><td>95</td><td>92</td></td<>		Laois/Offaly	682	695	95	95	95	95	90	95	95	92
HSE-M Total         1262         1286         97         97         97         97         92         97           Mid Western         Clare         na         na <td< td=""><td>Midland</td><td>Longford/Westmeath</td><td>580</td><td>591</td><td>99</td><td>99</td><td>99</td><td>99</td><td>94</td><td>99</td><td>99</td><td>95</td></td<>	Midland	Longford/Westmeath	580	591	99	99	99	99	94	99	99	95
Limerick         na         <		HSE-M Total	1262	1286	97	97	97	97	92	97	97	93
Limerick         na         <												
Mild western         Tipperary NR/East Limerick HSE-MW Total         na		Clare	na	na	na	na	na	na	na	na	na	na
Tipperary NR/East Limerick         na         na <th< td=""><td></td><td>Limerick</td><td>na</td><td>na</td><td>na</td><td>na</td><td>na</td><td>na</td><td>na</td><td>na</td><td>na</td><td>na</td></th<>		Limerick	na	na	na	na	na	na	na	na	na	na
North Eastern         Cavan/Monaghan         na	vild western	Tipperary NR/East Limerick	na	na	na	na	na	na	na	na	na	na
North Eastern         Louth         na		HSE-MW Total	na	na	na	na	na	na	na	na	na	na
North Eastern         Louth         na											1	
Eastern         Meath         na		Cavan/Monaghan	na	na	na	na	na	na	na	na	na	na
HSE-NE Total         na		Louth	na	na	na	na	na	na	na	na	na	na
North Western         Donegal         598         598         98         98         98         97         94         98           Sigo/Leitrim         344         344         344         97         97         97         96         92         97           HSE-NW Total         942         942         97         97         97         97         93         97           South Eastern         South Tipperary         506         506         90         90         90         87         90           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           Morth Cork         na         na<		Meath	na	na	na	na	na	na	na	na	na	na
North Western         Sligo/Leitrim         344         344         97         97         97         96         92         97           HSE-NW Total         942         942         97         97         97         97         97         93         97           South Eastern         Carlow/Kilkenny         506         506         90         90         90         90         87         90           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na		HSE-NE Total	na	na	na	na	na	na	na	na	na	na
North Western         Sligo/Leitrim         344         344         97         97         97         96         92         97           HSE-NW Total         942         942         97         97         97         97         97         93         97           South Eastern         Carlow/Kilkenny         506         506         90         90         90         90         87         90           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na												
Western         Sligo/Leitrim         344         344         97         97         97         96         92         97           HSE-NW Total         942         942         97         97         97         97         97         93         97           South         Eastern         Carlow/Kilkenny         506         506         90         90         90         87         90           South Tipperary         375         375         93         93         93         92         89         93           Wexford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na         na <td>Newth</td> <td>Donegal</td> <td>598</td> <td>598</td> <td>98</td> <td>98</td> <td>98</td> <td>97</td> <td>94</td> <td>98</td> <td>97</td> <td>94</td>	Newth	Donegal	598	598	98	98	98	97	94	98	97	94
HSE-NW Total         942         942         97         97         97         97         97         93         97           South Eastern         Carlow/Kilkenny         506         506         90         90         90         87         90           South Eastern         South Tipperary         375         375         93         93         92         89         93           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         88         92           North Cork         na		Sligo/Leitrim	344	344	97	97	97	96	92	97	94	92
South Eastern         South Tipperary         375         375         93         93         92         89         93           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na         na<	western	HSE-NW Total	942	942	97	97	97	97	93	97	96	93
South Eastern         South Tipperary         375         375         93         93         92         89         93           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na         na<								l i				
South Eastern         South Tipperary         375         375         93         93         92         89         93           Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na         na<		Carlow/Kilkenny	506	506	90	90	90	90	87	90	89	91
South Eastern         Waterford         553         553         92         91         92         91         86         91           Wexford         590         590         96         96         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na         <	Cauth		375	375	93	93	93	92	89	93	91	93
Wextord         590         590         96         96         96         96         95         90         95           HSE-SE Total         2024         2024         93         92         93         92         88         92           North Cork         na			553	553	92	91	92	91	86	91	90	88
North CorknanananananananananaNorth South LeenananananananananananaWest CorknananananananananananaKerrynananananananananana	Eastern	Wexford	590	590	96	96	96	95	90	95	95	92
North South LeenananananananaSouthernWest CorknanananananananaKerrynananananananananana		HSE-SE Total	2024	2024	93	92	93	92	88	92	91	91
North South LeenananananananaSouthernWest CorknanananananananaKerrynananananananananana												
Southern         West Cork         na		North Cork	na	na	na	na	na	na	na	na	na	na
Southern         West Cork         na	Southern	North South Lee	na	na	na	na	na	na	na	na	na	na
· · · · · · · · · · · · · · · · · · ·			na	na	na	na	na	na	na	na	na	na
HSE-S Total na na na na na na na na		Kerry	na	na	na	na	na	na	na	na	na	na
		HSE-S Total	na	na	na	na	na	na	na	na	na	na
Galway na na na na na na na na		Galway	na	na	na	na	na	na	na	na	na	na
Mayo na na na na na na na na	Western		na	na	na	na	na	na	na	na	na	na
Western Roscommon na na na na na na na na			na	na	na	na	na	na	na	na	na	na
HSE-W Total na na na na na na na na na		HSE-W Total	na	na	na	na	na	na	na	na	na	na
Ireland* 9838 10923 93 93 93 93 86 93		Ireland*	9838	10923	93	93	93	93	86	93	93	90

na≕not available \*National figures are incomplete as only four Areas were able to provide data and Dublin North were unable to provide Hib<sub>o</sub> data.

tAs the denominator/number in cohort varied slightly according to vaccine, most commonly used number is reported here. Please note while North Lee and South Lee are two separate LHOs their combined immunisation uptake data are reported here.

Uptake in Silgo/Leitrim was reported as being down as the immunisation staff were drafted in to help with the pandemic vaccination clinics and are now behind with the childhood immunisation data entry.

Uptake may be dow n in other areas for this reason also.

## 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

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