

Immunisation uptake report for Ireland



)4-2008

A report by the Health Protection Surveillance Centre

Summary

In children 12 months of age in Quarter 4-2008

- ❖ The national immunisation uptake rates were 89% for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃. When compared to the previous quarter, uptake of D₃, P₃, T₃, Hib₃ and Polio₃ were unchanged.
 - > The highest uptake rates for all these vaccines were in the **HSE** North Western (93-94%) and Midland Areas (93%).
 - The immunisation uptake target rate of 95% was reached or exceeded in the Local Health Offices of: Clare, Limerick, Sligo/Leitrim, Tipperary NR/East Limerick and Waterford for BCG Dublin South East, Longford/Westmeath and Roscommon for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃.

In children 24 months of age in Quarter 4-2008

The **national** immunisation uptake rates were 94% for D₃, P₃, T₃ and Polio₃, 93% for Hib₃ and MenC₃ and 86% for Hib_b. When compared to the previous quarter, uptake of D₃, P₃, T₃ and Polio₃ increased by 1% while Hib₃ was unchanged.

The national immunisation uptake rate for MMR₁ was 90%, an increase of 1% when compared to the previous two quarters. This is the highest uptake of MMR₁ reported since collation of these quarterly statistics commenced in Quarter 1 1999.

The target uptake rate of 95% was reached or exceeded in the HSE-Midland Area for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ (97%) and in the HSE-North Western Area for D₃, P₃, T₃, Hib₃ and Polio₃ (95-96%).
All eight HSE Areas had uptake of ≥91% for D₃ P₃, T₃, Hib₃, Polio₃ and MenC₃.

The highest uptake rate for MMR₁ was in the HSE-Midland Area (93%).

The immunisation uptake target rate of 95% was reached or exceeded in the Local Health Offices of: Roscommon for all vaccines i.e. D₃, P₃, T₃, Hib₃, Hib_b, Polio₃, MenC₃ and MMR₁ Cavan/Monaghan, Dublin South, Dublin South East, Dublin South West, Laois/Offaly, Longford/Westmeath and North/South Lee for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ Donegal and Mayo for D₃, P₃, T₃, Hib₃ and Polio₃ Wexford for D₃, P₃, T₃, Hib_b and Polio₃ Sligo/Leitrim for D₃, P₃, T₃ and Polio₃ Louth for MenC₃ Tipperary NR/East Limerick for MMR₁

Introduction

The immunisation uptake statistics presented in this report relate to children 12 and 24 months of age in Quarter 4-2008 and who have received three doses of vaccines against diphtheria (D₃), pertussis (P₃), tetanus (T₃), *Haemophilus influenzae* type b (Hib₃), polio (Polio₃) and meningococcal group C (MenC₃), one booster dose of vaccine against *Haemophilus influenzae* type b after 12 months of age (Hib_b; uptake at 24 months only), one dose of vaccine against measles, mumps and rubella (MMR₁; uptake at 24 months only) and one dose of BCG vaccine (BCG: uptake at 12 months only). These statistics therefore relate to uptake in the cohorts born between 01/10/2007 & 31/12/2007 and 01/10/2006 & 31/12/2006.

The national immunisation uptake statistics for Quarter 4-2008 are presented in this document, the uptake statistics are also presented by HSE Area and Local Health Office (LHO).

Immunisation uptake at 12 months

National and HSE Area uptake

Immunisation uptake rates in children 12 months of age in Q4-2008 are presented by HSE Area in Table 1. National uptake rates were 89% for D_3 , P_3 , T_3 , Hib_3 , $Polio_3$ and $MenC_3$. The highest uptake rates for these vaccines at 12 months were in the HSE- North Western (93-94%) and Midland (93%) Areas while the lowest rates were in the HSE-Eastern and Southern Areas (87%).

BCG uptake data were available for five of the eight HSE-Areas (data from HSE-Southern Area relates to Kerry only). These areas cover approximately a third of the national birth cohort. Where data were available, national uptake was 93% for the BCG vaccination. This is a decrease of 1% compared to Q3-2008 when BCG uptake was 94%.

National & HSE Area trends

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q4-2008. In Q4-2008 national uptake rates for D₃, P₃, T₃, Hib₃ and Polio₃ were unchanged when compared to the previous quarter. Uptake of MenC₃ increased by 1%, however, as MenC₃ uptake data were not available for two HSE Areas in Q3-2008 the national Q3-2008 figure is incomplete.

In Q4-2008, D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ uptake rates, in children 12 months of age, increased by 2% in the HSE-North Western Area and by 1-2% in the HSE-North Eastern and South Eastern Areas when compared to the previous quarter.

LHO uptake

The immunisation uptake target rate of 95% was reached or exceeded in the Local Health Offices (LHOs) of Clare, Limerick, Sligo/Leitrim, Tipperary NR/East Limerick and Waterford for BCG.

The immunisation uptake target rate of 95% was reached or exceeded for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ in the LHOs of Dublin South East (95-96%), Longford/Westmeath (95%) and Roscommon (97-98%).

D₃ immunisation uptake rates are mapped by LHO in figure 2. Immunisation uptake rates for BCG, D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃, in children 12 months of age in Q4-2008, are presented by LHO in Appendix 1.

Internationally

Vaccination coverage statistics for D_3 , P_3 ,

Table 1. Immunisation uptake (%) at 12 months in cohort born 01/10/2007–31/12/2007

HSE Area	No. in cohort*	BCG	\mathbf{D}_3	P ₃	T ₃	Hib ₃	Polio ₃	MenC ₃
Eastern	6707	na	87	87	87	87	87	87
Midland	1271	90	93	93	93	93	93	93
Mid Western	1424	97	91	91	91	91	91	91
North Eastern	1971	na	90	90	90	90	90	89
North Western	939	94	94	94	94	94	94	93
South Eastern	2010	94	90	89	90	89	89	89
Southern	2549	88^{\dagger}	87	87	87	87	87	87
Western	1718	na	89	89	89	89	89	89
Ireland	18589 [‡]	93	89	89	89	89	89	89

na = not available at this time

¹ Number in cohort for BCG vaccination = 6,159

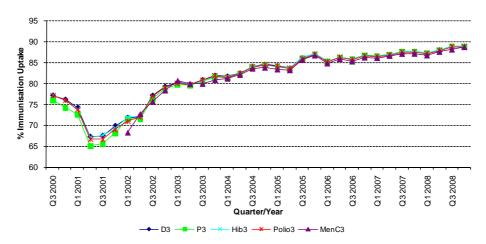


Figure 1. National quarterly immunisation uptake rates at 12 months Since T_3 uptake identical to D_3 uptake only D_3 uptake figures presented The Q3 2008 Men C_3 uptake figure is based on data from six of the eight HSE Areas

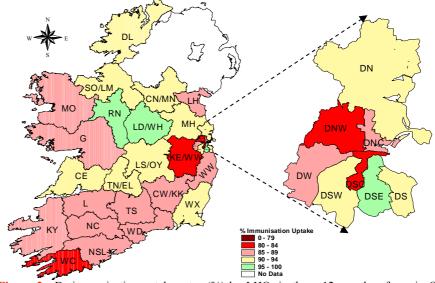


Figure 2. D₃ immunisation uptake rates (%) by LHO, in those 12 months of age in Quarter 4 2008, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

^{*}As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here.

[†] HSE-Southern - part coverage of neonatal BCG (i.e. Kerry only)

Immunisation uptake at 24 months

National and HSE Area uptake

Immunisation uptake rates in children 24 months of age in Q4-2008 are presented (Table 2). National uptake rates were 94% for D_3 , P_3 , T_3 and $Polio_3$, 93% for Hib_3 and $MenC_3$ and 86% for Hib_b . The target uptake rate of 95% was reached or exceeded in the HSE-Midland Area for D_3 , P_3 , T_3 , Hib_3 , $Polio_3$ and $MenC_3$ (97%) and in the HSE-North Western Area for D_3 , P_3 , T_3 , Hib_3 and $Polio_3$ (95-96%). MMR_1 uptake was 90% nationally (Table 2), this is the highest uptake of MMR_1 reported since collation of these quarterly statistics commenced in Q1-1999. The highest uptake rate of MMR_1 was in the HSE-Midland Area (93%) while the lowest rate was in the HSE-Eastern Area (88%).

Trends-D₃, P₃, T₃, Hib₃, Polio₃ & MenC₃

Figure 3 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q4-2008. National uptake rates for D_3 , P_3 , T_3 and Polio $_3$ increased by 1% in Q4-2008 compared to the previous quarter while Hib $_3$ was unchanged. In Q4-2008 national uptake rates for MenC $_3$ were unchanged and Hib $_b$ increased by 3% compared to the previous quarter, however, as MenC $_3$ and Hib $_b$ uptake data were only available for six and seven HSE Areas respectively in Q3-2008 the national MenC $_3$ and Hib $_b$ Q3-2008 figures are incomplete.

In Q4-2008 uptake rates for D₃, P₃, T₃, Hib₃, Polio₃ and MenC₃ increased in the HSE Midland (by 1%), North Eastern (by 1-2%), South Eastern (by 1%) and Southern (by 1-2%) Areas, compared to the previous quarter.

LHO uptake

D₃, P₃, T₃, Hib₃, Polio₃ & MenC₃

The immunisation uptake target rate of 95% was reached or exceeded for D_3 , P_3 , T_3 , Hib₃, Hib_b, Polio₃ and MenC₃ in Roscommon and for D_3 , P_3 , T_3 , Hib₃, Polio₃ and MenC₃ in Cavan/Monaghan, Dublin South, Dublin South East, Dublin South West, Laois/Offaly, Longford/Westmeath and North/South Lee. The immunisation uptake target rate of 95% was reached or exceeded for D_3 , P_3 , T_3 , Hib₃ and Polio₃ in Donegal and Mayo, for D_3 , P_3 , T_3 , Hib_b and Polio₃ in Wexford, for D_3 , P_3 , T_3 and Polio₃ in Sligo/Leitrim and Louth for MenC₃.

 D_3 and Hib_b immunisation uptake rates are mapped by LHO in figures 4 and 5. Immunisation uptake rates for D_3 , P_3 , T_3 , Hib_3 , Hib_b , $Polio_3$ and $MenC_3$, in children 24 months of age in Q4-2008, are presented by LHO in Appendix 2.

MMR₁ Trends

In Q4-2008, the national MMR_1 uptake rate at 24 months was 90%, an increase of 1% compared to the previous two quarters.

When compared to Q3-2008 the MMR₁ uptake rate was unchanged in the HSE-Eastern Area and increased by 1-2% in the remaining HSE Areas.

MMR₁ LHO uptake

The immunisation uptake target rate of 95% was reached in Tipperary NR/East Limerick and Roscommon (Figure 6). MMR_1 uptake rates are presented by LHO in Appendix 2.

Table 2. *Immunisation uptake* (%) at 24 months in cohort born 01/10/2006 – 31/12/2006

HSE Area	No. in Cohort*	\mathbf{D}_3	P ₃	T ₃	Hib ₃	Hib _b	Polio ₃	MenC ₃	MMR ₁
Eastern	5980	93	93	93	92	80	93	92	88
Midland	1151	97	97	97	97	93	97	97	93
Mid Western	1377	93	93	93	93	89	93	93	90
North Eastern	1761	94	94	94	94	91	94	94	91
North Western	868	96	96	96	95	92	96	93	92
South Eastern	1819	92	92	92	92	90	92	91	89
Southern	2430	94	94	94	94	87	94	94	90
Western	1525	94	94	94	94	85	94	94	90
Ireland	16911†	94	94	94	93	86	94	93	90

^{*} As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here. † Number in cohort for Hibb vaccination = 16,892.

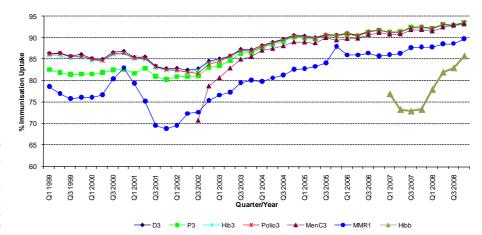


Figure 3. National quarterly immunisation uptake rates at 24 months

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♭ figures are based on data from seven of the eight HSE Areas. In Q1-2008 the HSE-SE changed their Hib♭ data extraction method compared to previous quarters; in Q1-2008 the uptake of Hib♭ 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.

Internationally

In Q4-2008, vaccination coverage statistics at 24 months for D_3 , P_3 , T_3 , Hib_3 and $Polio_3$ were 93.6% in England, 96.8% in Wales, 98.3% in Northern Ireland and 98.1% in Scotland. Infant MenC uptake was 91.9% in England, 95.1% in Wales, 96.4% in Northern Ireland and 96.0% in Scotland. MMR_1 uptake was 84.5% in England, 88.4% in Wales, 91.8% in Northern Ireland and 92.6% in Scotland. Please see HPA report for caveats to data.

Conclusions

In Q4-2008, the national MMR $_1$ uptake was 5% below the target rate of 95%. The uptake rate for Hib $_b$ was 9% below the target rate. Uptake rates for all other vaccines at 24 months were 1-2% below the target rates.

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 http://www.hpsc.ie.

Acknowledgements

HPSC would like to thank the HSE Areas for providing data and special thanks to the Specialists in Public Health Medicine, Immunisation Co-ordinators, Surveillance Scientists and Systems Analysts for their assistance.

References

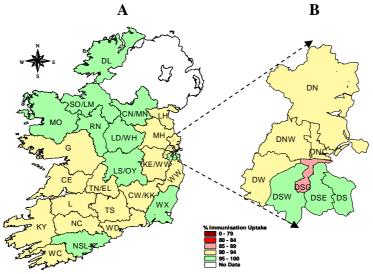


Figure 4. D₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4 2008, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

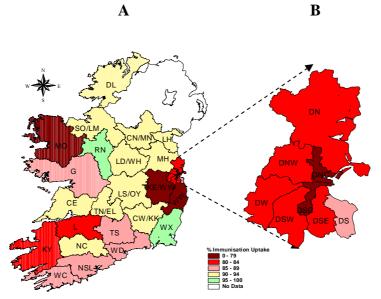


Figure 5. Hib_b immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4 2008, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

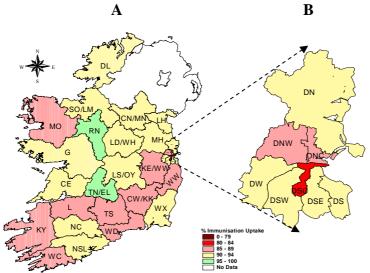


Figure 6. MMR₁ immunisation uptake rates (%) by LHO, in those 24 months of age in Quarter 4 2008, in (A) Ireland and (B) Dublin. Please see Appendix 3 to translate LHO codes.

Appendix 1

11	Immunisa	ation Uptak	e at 12 Mo	nths in Co	hort Borr	01/10/20	07-31/12/2	007		
				Immunisation Uptake (%)						
			No. in							
		No. in	cohort for							
HSE Area	LHO/HSE Area	cohort for BCG	other vaccines*	BCG [†]	D_3	P ₃	T ₃	Hib ₃	Polio ₃	MenC ₃
HOL AICA	Dublin South	na	381	na	93	93	93	93	93	93
	Dublin South East	na	392	na	95	95	95	96	95	95
	Dublin South City	na	450	na	80	80	80	80	80	80
	Dublin South West	na	656	na	91	91	91	91	91	89
	Dublin West	na	733	na	85	85	85	85	85	84
Eastern	Dublin North West	na	942	na	84	84	84	84	84	84
	Dublin North Central	na	457	na	88	88	88	88	88	88
	Dublin North	na	1043	na	90	90	90	90	90	90
	Kildare/West Wicklow	na	1126	na	82	82	82	82	82	82
	Wicklow	na	527	na	87	87	87	88	87	88
	HSE-E Total	na	6707	na	87	87	87	87	87	87
	Laois/Offaly	687	687	91	92	92	92	92	92	92
Midland		584	584	89	95	95	95	95	95	95
	HSE-M Total	1271	1271	90	93	93	93	93	93	93
	Clare	419	439	99	91	91	91	91	91	92
Mid	Limerick	511	494	98	89	89	89	89	89	90
Western	Tipperary NR/East Limerick	461	491	95	92	92	92	92	92	92
	HSE-MW Total	1391	1424	97	91	91	91	91	91	91
	Cavan/Monaghan	na	514	na	92	92	92	92	92	91
North	Louth	na	545	na	88	88	88	88	88	88
Eastern	Meath	na	912	na	91	91	91	91	91	90
	HSE-NE Total	na	1971	na	90	90	90	90	90	89
North	Donegal	597	597	92	93	93	93	93	93	93
Western	Sligo/Leitrim HSE-NW Total	939	342 939	96 94	94 94	94 94	94 94	94 94	94 94	92 93
		939	939	94	94	94	94	94	94	93
	Carlow/Kilkenny	500	500	94	89	89	89	89	89	88
South	South Tipperary	372	372	94	89	89	89	89	89	88
Eastern	Waterford	540	540	96	89	88	89	88	88	88
Lastern	Wexford	598	598	93	91	91	91	91	91	90
	HSE-SE Total	2010	2010	94	90	89	90	89	89	89
	North Carl	200	250	no	96	96	86	86	86	86
	North Cork North South Lee	na na	358 1443	na na	86 89	86 89	89	89	89	88
Southern		na	196	na	81	81	81	81	81	81
	Kerry	548	552	88	86	86	86	86	86	88
	HSE-S Total ‡	548	2549	88	87	87	87	87	87	87
	Galway	na	997	na	87	87	87	87	87	87
Western	Mayo	na	471	na	88	88	88	88	88	88
	Roscommon	na	250	na	98	98	98	97	98	97
	HSE-W Total	na	1718	na	89	89	89	89	89	89
	Ireland †	6159	18589	93	89	89	89	89	89	89
	il ciallu	0100	10003	90	03	09	09	03	09	03

na=not available

Page 5 of 5 April, 2009

 $^{^{\}star}$ As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here.

[†] BCG uptake data were available for five of the eight HSE-Areas only (data from HSE-Southern Area relates to Kerry only). ‡ HSE-Southern Area - part coverage of neonatal BCG (i.e. Kerry only)

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

Appendix 2

	Immui	nisation L	Jptake at 2	24 Month	s in Coho	rt Born 0	1/10/2006	31/12/200)6		
			Immunisation Uptake (%)								
		No. in	No. in cohort for								
		cohort for									
HSE Area	LHO/HSE Area	Hib _h	vaccines*	D_3	P ₃	T ₃	Hib ₃	Hib	Polio ₃	MenC ₃	MMR₁
	Dublin South	362	362	97	97	97	97	86	97	96	94
	Dublin South East	309	309	96	96	96	96	81	96	97	91
	Dublin South City	365	365	86	86	86	86	70	86	86	81
	Dublin South West	578	578	96	96	96	95	82	96	95	94
	Dublin West	690	690	94	94	94	94	82	94	93	90
	Dublin North West	875	875	91	91	91	91	80	91	91	85
	Dublin North Central	336	336	92	92	92	91	78	92	90	88
	Dublin North	926	926	94	94	94	93	82	94	94	92
	Kildare/West Wicklow	1049	1049	90	90	90	90	79	90	90	86
	Wicklow	490	490	94	94	94	94	75	94	94	86
	HSE-E Total	5980	5980	93	93	93	92	80	93	92	88
	Laois/Offaly	629	637	96	96	96	96	92	96	96	94
Midland	Longford/Westmeath	506	514	97	97	97	97	93	97	97	93
	HSE-M Total	1135	1151	97	97	97	97	93	97	97	93
			1		ĺ						
	Clare	409	409	94	94	94	94	91	94	94	91
Mid Western	Limerick	512	512	91	91	91	91	84	91	92	86
	Tipperary NR/East Limerick	456	456	94	94	94	94	93	94	94	95
	HSE-MW Total	1377	1377	93	93	93	93	89	93	93	90
			1		ĺ						
	Cavan/Monaghan	478	478	95	95	95	95	92	96	96	93
North	Louth	516	516	94	94	94	94	90	94	95	91
Eastern	Meath	767	767	92	92	92	92	90	92	93	90
	HSE-NE Total	1761	1761	94	94	94	94	91	94	94	91
North	Donegal	526	526	96	96	96	96	93	96	94	91
Western	Sligo/Leitrim	342	342	95	95	95	94	92	96	91	93
western	HSE-NW Total	868	868	96	96	96	95	92	96	93	92
	Carlow/Kilkenny	496	496	92	92	92	91	91	92	90	89
South	South Tipperary	311	311	90	90	90	89	86	90	89	87
Eastern	Waterford	466	466	91	91	91	91	85	91	89	87
Eastern	Wexford	546	546	95	95	95	94	95	95	94	90
	HSE-SE Total	1819	1819	92	92	92	92	90	92	91	89
	North Cork	348	338	94	94	94	94	90	94	93	93
	North South Lee	1352	1371	95	95	95	95	88	95	95	91
Southern	West Cork	197	195	91	91	91	91	85	91	90	87
	Kerry	530	526	92	92	92	92	83	92	92	87
	HSE-S Total	2427	2430	94	94	94	94	87	94	94	90
	Galway	905	905	93	93	93	93	86	93	94	90
Western	Mayo	400	400	95	95	95	95	77	95	94	88
	Roscommon	220	220	98	98	98	96	97	98	99	95
	HSE-W Total	1525	1525	94	94	94	94	85	94	94	90
	Ireland	16892	16911	94	94	94	93	86	94	93	90

na=not available

April, 2009

^{*}As the denominator/number in cohort varied slightly according to vaccine, most commonly used number is presented here.

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) Codes (used in the 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