# Immunisation uptake report for Ireland

Q2-2007

A report by the Health Protection Surveillance Centre

# **Summary**

In Quarter 2-2007 national immunisation uptake rates, in children 12 months of age, increased by 1% compared to Q1-2007. Uptake rates in Q2-2007 were 87% 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>.

National immunisation uptake rates 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>, in children 24 months of age, were unchanged when compared with the previous quarter (91%). The national immunisation uptake rate, in children 24 months of age, for the Hib booster was 73%.

In Q2-2007 the national immunisation uptake rate at 24 months for  $MMR_1$  was 86%, unchanged from Q1-2007.

#### Trends at 12 months

Figure 1 presents the national uptake rates at 12 months for each vaccine from Q3-2000 to Q2-2007. In Q2-2007 national uptake rates for  $D_3$ ,  $P_3$ ,  $T_3$ ,  $Hib_3$ ,  $Polio_3$  and  $MenC_3$  increased by 1% when compared to the previous quarter.

The HSE-North Eastern Area reported increases of 1-4% in uptake rates 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> in children 12 months of age, while the HSE-Eastern and South Eastern Areas reported increases of 1-2%, compared to Q1-2007. The HSE-North Western Area reported decreases of 1% in uptake rates for all vaccines (except BCG) at 12 months compared to the previous quarter.

### 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 2-2007 were 90% in England, 95% in Wales, 95% in Northern Ireland and 96% in Scotland.<sup>1</sup> Please see HPA report for caveats to data.<sup>1</sup>

#### Introduction

The immunisation uptake statistics presented in this report relate to children 12 and 24 months of age in Quarter 2-2007 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 after 12 months of age (Hib<sub>5</sub>: uptake at 24 months only), one dose of vaccine against measles, mumps and rubella (MMR<sub>1</sub>; 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 01/04/2006 & 30/06/2006 and 01/04/2005 & 30/06/2005.

# Immunisation uptake at 12 months

Immunisation uptake rates in children 12 months of age in Q2-2007 are presented (Table 1). National uptake rates 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 87%. In Q2-2007 the highest uptake rates for these vaccines at 12 months were in the HSE-North Western and Midland Areas (91-92%) while the lowest rates were in the HSE-Southern Area (83-84%). BCG uptake data were available for five of the eight HSE-Areas (data from HSE-Southern Area relates to Kerry CCA only). These areas cover only a third of the national birth cohort. Where data were available, national uptake was 94% for the BCG vaccination. This is an increase of one percent compared to Q1-2007 when BCG uptake was 93%.

Table 1. Immunisation uptake (%) at 12 months in cohort born 01/04/2006–30/06/2006

HSE Area	No. in cohort	BCG	$\mathbf{D}_3$	P <sub>3</sub>	<b>T</b> <sub>3</sub>	Hib <sub>3</sub>	Polio <sub>3</sub>	MenC <sub>3</sub>
Eastern	5807	na	86	86	86	86	86	86
Midland	1090	92	91	91	91	91	91	91
Mid Western	1364	97	88	88	88	88	88	88
North Eastern	1770	na	90	90	90	90	90	90
North Western	878	95	92	92	92	92	92	91
South Eastern	1834	92	85	85	85	85	85	85
Southern	2325	$93^{\dagger}$	84	84	84	84	84	83
Western	1525	na	87	87	87	87	87	86
Ireland	16593**	94	87	87	87	87	87	87

na = not available at this time

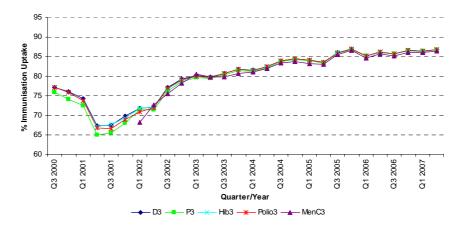


Figure 1. National quarterly immunisation uptake rates at 12 months

<sup>†</sup>HSE-Southern - part coverage of neonatal BCG (i.e. Kerry only)

<sup>\*\*</sup>Number in cohort for BCG vaccination = 5,589

## Immunisation uptake at 24 months

Immunisation uptake rates in children 24 months of age in Q2-2007 are presented (Table 2). National uptake rates were 91% for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub>. Uptake rates for these vaccines ranged from 88-89% in the HSE-Eastern and South Eastern Areas to 97% in the HSE-Midland Area (Table 2). The target uptake rate of 95% was reached for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub>, Polio<sub>3</sub> and MenC<sub>3</sub> in the HSE-Midland Area and for  $D_3$ ,  $P_3$ ,  $T_3$ , Hib<sub>3</sub> and Polio<sub>3</sub> in the HSE-North Western Area. MMR<sub>1</sub> uptake was 86% nationally, ranging from 83% in the HSE-Eastern Area to 94% in the HSE-Midland Area (Table 2). Q2-2007 is the second quarter where uptake statistics for the Hib booster (Hib<sub>b</sub>) are available and the first quarter where the Hib<sub>b</sub> uptake statistics are available for all eight HSE Areas. National uptake of Hib<sub>b</sub> was 73% in Q2-2007.

#### Trends at 24 months

Figure 2 presents the national uptake rates at 24 months for each vaccine from Q1-1999 to Q2-2007. In Q2-2007, national uptake rates 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 unchanged compared to Q1-2007.

In Q2-2007 the HSE-Eastern Area uptake rates for  $D_3$ ,  $P_3$ ,  $T_3$ ,  $Hib_3$ ,  $Polio_3$  and  $MenC_3$  increased by 1% compared to Q1-2007 while the uptake rates in the HSE-Midland and South Eastern Areas decreased by 1% compared to the previous quarter.

## Hib booster uptake

Following the national Hib campaign from November 2005 to May 2006, among children less than four years, a Hib booster was introduced into the childhood immunisation schedule in September 2006. All children reaching 12 months of age are now offered the Hib booster at the same time as MMR vaccine to give extra protection against Hib infection.

Q2-2007 is the second quarter where uptake statistics for the Hib booster (Hib<sub>b</sub>) are available and the first quarter where the Hib<sub>b</sub> uptake statistics are available for all eight HSE Areas. These figures relate to children who received a dose of Hib after 12 months of age. (Data were requested on children who had received the recommended four doses of Hib vaccine, however, most areas could only provide data on children who had received a Hib booster after 12 months of age.)

In Q2-2007 national uptake of Hib<sub>b</sub> was 73%, ranging from 62% in the HSE-South Eastern Area to 87% in the HSE-Midland and North Eastern Areas. Data were available for seven of the eight HSE-Areas in Q1-2007, covering approximately 91% of the birth cohort. Where data were available the national uptake rate for Hib<sub>b</sub> was 77% in Q1-2007. (Please note this figure is revised compared to the figure of 76% previously published in the Q1-2007 report, as one HSE Area provided amended Q1-2007 Hib<sub>b</sub> figures).

## MMR<sub>1</sub> uptake

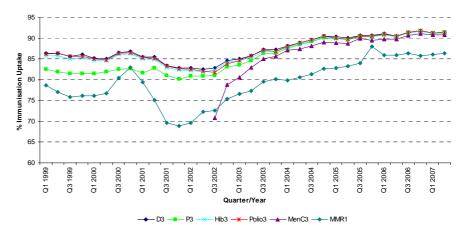
In Q2-2007, the national  $MMR_1$  uptake rate at 24 months was 86%, unchanged from the previous quarter.

Compared to Q1-2007 the  $MMR_1$  uptake rate increased by 1% in the HSE-Eastern and North Western Areas but decreased by 1% in the HSE-Midland Area. The  $MMR_1$  uptake rate was unchanged in the remaining HSE Areas compated to the previous quarter.

**Table 2.** Immunisation uptake (%) at 24 months in cohort born 01/04/2005 – 30/06/2005

HSE Area	No. in cohort	$\mathbf{D}_3$	P <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>
Eastern	5577	89	89	89	89	68	89	88	83
Midland	977	97	97	97	97	87	97	97	94
Mid Western	1327	91	91	91	91	82	91	91	89
North Eastern	1586	92	92	92	92	87	92	92	90
North Western	842	97	97	97	95	86	97	93	92
South Eastern	1726	89	89	89	89	62	89	88	85
Southern	2083	94	94	94	94	72	94	93	87
Western	1478	93	93	93	92	72	94	93	85
Ireland	15596 §	91	91	91	91	73	91	91	86

\* Please note the Hib<sub>b</sub> immunisation uptake rate reported relates to children in this birth cohort who received one dose of Hib after 12 months of age, as this was the format most HSE-Areas could extract the data. The HSE-E and HSE-W rates are probably underestimates as only the number of children who had received four doses of Hib (Hib<sub>4</sub>) were included in the calculation, as requested. §Number in cohort for Hib<sub>b</sub> vaccination = 15,749



**Figure 2.** *National quarterly immunisation uptake rates at 24 months* **Please note** The Q4-2005 MMR<sub>1</sub> figure is based on data from seven of the eight HSE-Areas as the HSE-Eastern Area were unable to provide MMR<sub>1</sub> uptake data. The Q1-2006 figure includes the HSE-Eastern Area MMR<sub>1</sub> figure which is an estimate only

## Internationally

In Q2-2007, vaccination coverage statistics at 24 months for  $D_3$ ,  $P_3$ ,  $T_3$ ,  $Hib_3$ ,  $Polio_3$  and  $MenC_3$  were 93% in England, 96-97% in Wales, 98% in Northern Ireland and 97-98% in Scotland.  $^1$  MMR $_1$  uptake was 85% in England, 88% in Wales and 92% in Northern Ireland and Scotland.  $^1$  Please see HPA report for caveats to data.  $^1$ 

## Conclusions

In Q2-2007, the national MMR $_1$  uptake was 86%; this is 9% below the national target rate of 95%. The uptake rate for Hib $_b$  was 22% below the target rate. Uptake rates for all other vaccines at 24 months were 4% below the national target rates.

#### Further information

The Q2-2007 immunisation uptake statistics by Local Health Office (LHO) are also presented in a separate summary document, available at <a href="http://www.hpsc.ie">http://www.hpsc.ie</a>. A complete listing of national and regional immunisation uptake statistics at 12 and 24 months for each HSE Area is also available at <a href="http://www.hpsc.ie">http://www.hpsc.ie</a>.

## Acknowledgements

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#### References

1. COVER programme: April to June 2007. Health Protection Report 2007: 1(39). Available at: http://www.hpa.org.uk/hpr