

## 8.4 Uptake of other childhood and adolescent vaccines

### Vaccine uptake in Junior Infants during the 2012/2013 academic year

#### *Background*

Uptake of the DTaP-IPV\* and MMR vaccines in 4 to 5 year old schoolchildren was monitored across all Local Health Offices (LHOs) during the academic year 2012/2013 and the findings compared to those reported for the previous 2011/2012 season.

#### *HSE- versus GP-vaccine administered LHOs*

During both seasons, the administration of the DTaP-IPV vaccine was performed by GPs based in the following LHOs: Louth, Cavan/Monaghan, Meath, Dublin North Central, Galway, Mayo, Donegal and Sligo/Leitrim. These same LHOs, apart from Galway and Mayo, also had GPs administer the MMR vaccine to the same cohort of children. In all other LHOs, the administration of vaccines was performed by HSE public health personnel. Only the Dublin Mid Leinster and Southern regions were exclusively HSE-vaccine administered regions, unlike the Dublin North East and Western regions, which were a combination of HSE- and GP-vaccine administered regions.

#### *Target populations in the 2011/2012 and 2012/2013 academic years*

For the 2012/2013 academic year, the target population in HSE-vaccine administered LHOs was all children in Junior Infants on the school register on the 30<sup>th</sup> September 2012. For GP-vaccine administered LHOs, the target population was all children born between the 1<sup>st</sup> September 2006 and 31<sup>st</sup> August 2007.

In 2011/2012, the target population in HSE-vaccine administered LHOs was less well defined as Junior Infants on the school register during that academic year. Similarly, in GP-vaccine administered LHOs, the target population were simply children aged 4 to 5 years.

The different ways in which the target populations have been defined in the HSE- and GP-vaccinated administered LHOs has meant that a national uptake for either vaccine could not be calculated for the 2012/2013 or 2011/2012 academic years.

#### *Uptake of DTaP-IPV vaccine*

Between 2011/2012 and 2012/2013, the uptake of the DTaP-IPV vaccine in HSE-vaccine administered LHOs increased from 89.1% to 90.7% in Dublin Mid Leinster, from 83.5% to 87.1% in Dublin North East and from 82.0% to 90.4% in the Southern region, but fell from 92.1% to 89.7% in the Western region. Overall, DTaP-IPV uptake across all HSE-administered LHOs increased from 86.2% to 90.4%.

During the same period of time, DTaP-IPV uptake in GP-vaccine administered LHOs fell from 79.3% to 73.9% in Dublin North East and from 73.0% to 59.8% in the Western region. It should be noted that there was no uptake data reported by Louth, Cavan/Monaghan and Meath during 2011/2012 or by Mayo during 2012/2013. Overall, GP-administered DTaP-IPV uptake decreased from 73.8% to 67.6%.

#### *Uptake of MMR vaccine*

Between 2011/2012 and 2012/2013, the uptake of the MMR vaccine in HSE-vaccine administered LHOs increased from 89.1% to 90.6% in Dublin Mid Leinster, from 82.8% to 86.8% in Dublin North East, from 78.5% to 83.1% in the Southern region and from 81.6% to 92.3% in the Western region. Overall, HSE-administered MMR uptake increased from 83.7% to 89.1%.

In GP-vaccine administered LHOs, uptake fell from 79.3% to 73.2% in Dublin North East, but increased from 86.6% to 90.3% in the Western region. During 2011/2012, no MMR uptake data was available for Louth, Cavan/Monaghan and Meath. Overall, GP-administered MMR uptake decreased from 84.6% to 78.2%.

It is hoped that the limitation of GP-vaccine administered only LHOs to Donegal and Sligo/Leitrim in 2013/2014 will lead to further overall increases in uptake for both vaccines.

Details of the uptake of the two vaccines in the HSE- and GP-vaccinated LHOs during 2012/2013 are presented in Table 1 and in the maps in Figure 1.

\* DTaP-IPV = Diphtheria, Tetanus, acellular Pertussis and Polio vaccine

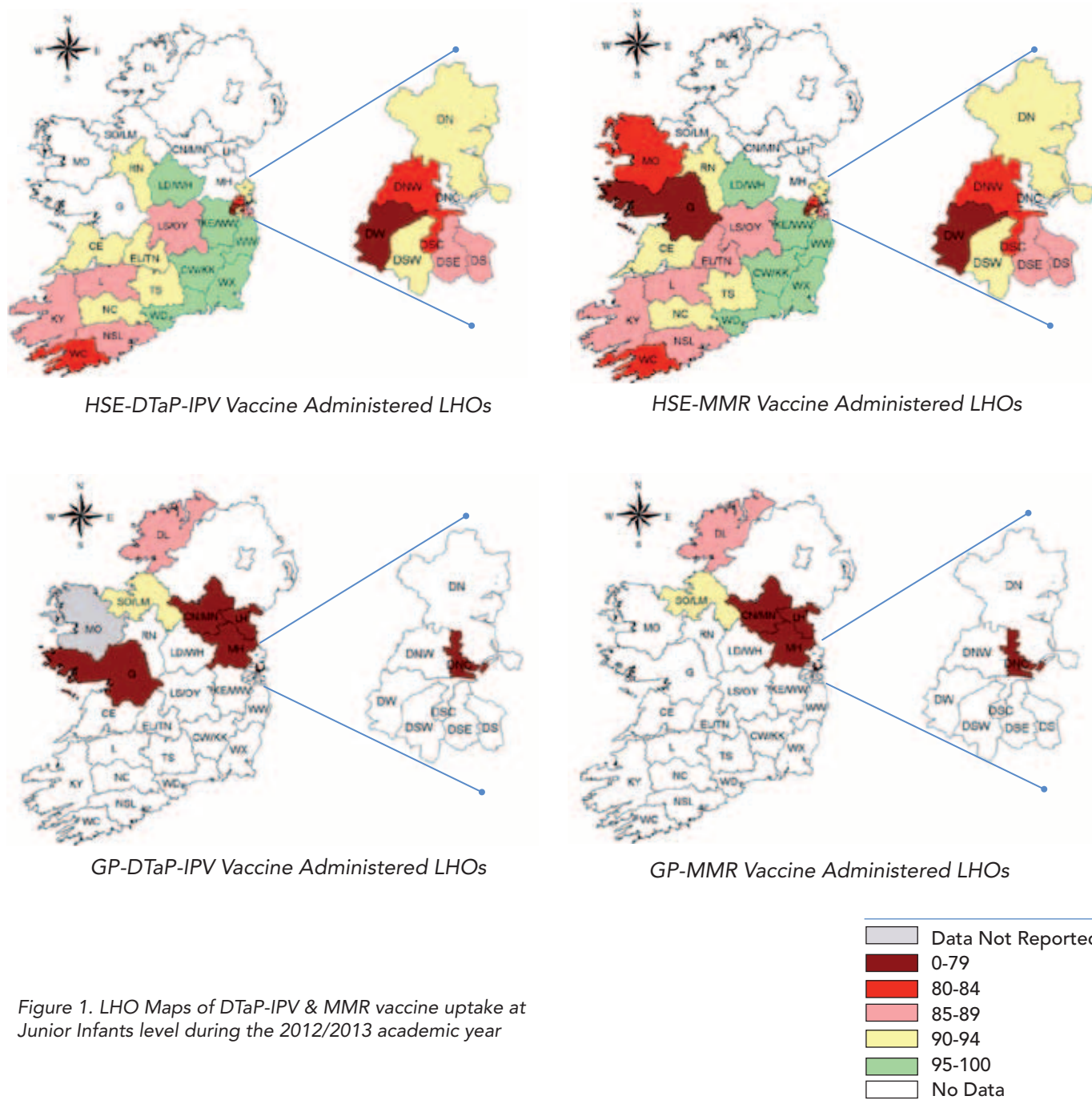


Figure 1. LHO Maps of DTaP-IPV & MMR vaccine uptake at Junior Infants level during the 2012/2013 academic year

### Tdap vaccine uptake during the 2012/2013 academic year

The National Immunisation Advisory Committee recommends vaccination with tetanus and low-dose diphtheria and acellular pertussis (Tdap) vaccine at 11-14 years of age. Tdap vaccine uptake in the academic year 2012/2013, provided through the school immunisation programme for those in first year of second level schools and their equivalents in non-second level schools (i.e. special school, home schooled and out of school), and recorded on a national immunisation IT system are presented in table 2. The vaccinations are provided by vaccination teams from the Local Health Offices (LHOs) who go into schools in their areas to vaccinate. Data on vaccination is inputted into the national immunisation IT system at a local level. Delays in data inputting may impact on the accuracy of uptake data extracted from the system. Please see

the HSE National Immunisation Office (NIO) website at [www.immunisation.ie](http://www.immunisation.ie) for detailed and current information on the school vaccination programme.

The data presented here are the result of collaboration between NIO, School Immunisation Teams, Immunisation Coordinators, Immunisation System Administrators, Immunisation administrative staff and HPSC.

The figures presented in this summary are based on data recorded on the national immunisation system on the 24<sup>th</sup> September 2014. These figures are provisional and subject to change due to ongoing updating of data on the database.

Table 1. Uptake of the DTaP-IPV and MMR vaccines in Junior Infants during the 2012/2013 academic year

HSE Region & LHO	HSE-Vaccine Administered School Immunisations Programme for Junior Infants 2012/2013					GP-Vaccine Administered Programme for Junior Infants 2012-2013					
	Cohort	Number children who have received 1 dose DTaP-IPV vaccine	%	Cohort	Number children who have received 1 dose MMR vaccine	%	Cohort	Number children who have received 1 dose DTaP-IPV vaccine	%	Cohort	Number children who have received 1 dose MMR vaccine
<b>Dublin Mid Leinster</b>											
Dublin South	1,915	1,690	88.3%	1,915	1,683	87.9%	HSE	HSE	HSE	HSE	HSE
Dublin South East	1,466	1,271	86.7%	1,466	1,271	86.7%	HSE	HSE	HSE	HSE	HSE
Wicklow	1,967	1,872	95.2%	1,967	1,870	95.1%	HSE	HSE	HSE	HSE	HSE
Dublin South City	1,423	1,185	83.3%	1,423	1,178	82.8%	HSE	HSE	HSE	HSE	HSE
Dublin South West	2,407	2,187	90.9%	2,407	2,188	90.9%	HSE	HSE	HSE	HSE	HSE
Dublin West	2,731	2,136	78.2%	2,731	2,131	78.0%	HSE	HSE	HSE	HSE	HSE
Kildare/W Wicklow	4,284	4,233	98.8%	4,284	4,223	98.6%	HSE	HSE	HSE	HSE	HSE
Laois/Offaly	2,742	2,424	88.4%	2,742	2,445	89.2%	HSE	HSE	HSE	HSE	HSE
Longford/Westmeath	2,116	2,089	98.7%	2,116	2,085	98.5%	HSE	HSE	HSE	HSE	HSE
Totals	21,051	19,087	90.7%	21,051	19,074	90.6%	0	0	0.0%	0	0.0%
<b>Dublin North East</b>											
Louth	GP	GP	GP	GP	GP	GP	2,099	1,523	72.6%	2,099	1,521
Cavan/Monaghan	GP	GP	GP	GP	GP	GP	2,157	1,710	79.3%	2,157	1,709
Meath	GP	GP	GP	GP	GP	GP	3,481	2,480	71.2%	3,481	2,427
Dublin Nth West	3,275	2,695	82.3%	3,275	2,688	82.1%	HSE	HSE	HSE	HSE	HSE
Dublin Nth Central	GP	GP	GP	GP	GP	GP	1,385	1,024	73.9%	1,385	1,024
Dublin North	4,183	3,804	90.9%	4,183	3,785	90.5%	HSE	HSE	HSE	HSE	HSE
Totals	7,458	6,499	87.1%	7,458	6,473	86.8%	9,122	6,737	73.9%	9,122	6,681
<b>West</b>											
Limerick	2,015	1,760	87.3%	2,015	1,754	87.0%	HSE	HSE	HSE	HSE	HSE
Clare	1,894	1,717	90.7%	1,894	1,714	90.5%	HSE	HSE	HSE	HSE	HSE
Tipperary North	2,079	1,877	90.3%	2,079	1,867	89.8%	HSE	HSE	HSE	HSE	HSE
Galway	GP	GP	GP	3,640	2,620	72.0%	3,640	1,019	28.0%	HSE	HSE
Mayo	GP	GP	GP	1,881	1,530	81.3%	N/A	N/A	N/A	HSE	HSE
Roscommon	929	849	91.4%	929	850	91.5%	HSE	HSE	HSE	HSE	HSE
Donegal	GP	GP	GP	GP	GP	GP	2,305	2,054	89.1%	2,305	2,046
Sligo/Leitrim	GP	GP	GP	GP	GP	GP	1,456	1,353	92.9%	1,456	1,352
Totals	6,917	6,203	89.7%	12,438	10,335	83.1%	7,401	4,426	59.8%	3,761	3,398
<b>South</b>											
North Lee/South Lee	5,845	5,103	87.3%	5,845	5,103	87.3%	HSE	HSE	HSE	HSE	HSE
North Cork	1,527	1,390	91.0%	1,527	1,388	90.9%	HSE	HSE	HSE	HSE	HSE
West Cork	767	623	81.2%	767	623	81.2%	HSE	HSE	HSE	HSE	HSE
Kerry	2,184	1,961	89.8%	2,184	1,961	89.8%	HSE	HSE	HSE	HSE	HSE
South Tipperary	1,358	1,275	93.9%	1,353	1,275	94.2%	HSE	HSE	HSE	HSE	HSE
Carlow/Kilkenny	1,981	1,905	96.2%	1,979	1,973	99.7%	HSE	HSE	HSE	HSE	HSE
Waterford	2,041	2,011	98.5%	2,052	2,032	99.0%	HSE	HSE	HSE	HSE	HSE
Wexford	2,427	2,367	97.5%	2,403	2,367	98.5%	HSE	HSE	HSE	HSE	HSE
Totals	18,130	16,635	91.8%	18,110	16,722	92.3%	0	0	0.0%	0	0.0%
Overall Total	53,556	48,424	90.4%	59,057	52,604	89.1%	16,523	11,163	67.6%	12,883	10,079

GP=Vaccine administered by GPs in these areas; HSE=Vaccine administered by HSE public health personnel in these areas; N/A=Data Not Available; Target population HSE-vaccine administered areas: All children in Junior Infants on the school register on 30/09/2012 for the 2012/2013 academic year; Target population in GP-vaccine administered areas: All children born between 01/09/2006 and 31/08/2007

Table 2. Tdap uptake data in the academic year 2012/2013 (provisional data)

HSE Region	Local Health Office/HSE Region	2012/2013				
		First year in second level and equivalent in special schools, home schooled and out of school (Routine cohort)			Outside cohort	
		Denominator	Numbers vaccinated with Tdap:	% Vaccinated with Tdap:	Denominator	Numbers vaccinated with Tdap:
Dublin Mid Leinster	Dublin South	1947	1455	74.7%	N/A	2
	Dublin South East	1164	889	76.4%	N/A	9
	Dublin South City	1432	1159	80.9%	N/A	6
	Dublin South West	1707	1355	79.4%	N/A	487
	Dublin West	1935	1344	69.5%	N/A	38
	Kildare/West Wicklow	3377	2825	83.7%	N/A	20
	Wicklow	1483	1187	80.0%	N/A	4
	Laois/Offaly	-	-	-	N/A	-
	Longford/Westmeath	-	-	-	N/A	-
	<b>Total Dublin Mid Leinster</b>	<b>13045</b>	<b>10214</b>	<b>78.3%</b>	<b>N/A</b>	<b>566</b>
Dublin North East	Dublin North	2943	2542	86.4%	N/A	8
	Dublin North Central	1479	1008	68.2%	N/A	1
	Dublin North West	2402	1727	71.9%	N/A	0
	Cavan/Monaghan	1805	1149	63.7%	N/A	1
	Louth	2036	1398	68.7%	N/A	5
	Meath	2340	742	31.7%	N/A	1665
	<b>Total Dublin North East</b>	<b>13005</b>	<b>8566</b>	<b>65.9%</b>	<b>N/A</b>	<b>1680</b>
South	North Cork	1208	991	82.0%	N/A	2
	North Lee - Cork	2472	2147	86.9%	N/A	4
	South Lee - Cork	2250	1973	87.7%	N/A	3
	West Cork	728	606	83.2%	N/A	0
	Kerry	1908	1650	86.5%	N/A	0
	Carlow/Kilkenny	1927	1800	93.4%	N/A	111
	South Tipperary	1148	1045	91.0%	N/A	8
	Waterford	1622	1592	98.2%	N/A	7
	Wexford	2165	1944	89.8%	N/A	20
	<b>Total South</b>	<b>15428</b>	<b>13748</b>	<b>89.1%</b>	<b>N/A</b>	<b>155</b>
West	Donegal	2289	2025	88.5%	N/A	1
	Sligo/Leitrim	1229	1175	95.6%	N/A	3
	Galway	2946	2212	75.1%	N/A	1
	Mayo	1742	1260	72.3%	N/A	132
	Roscommon	-	-	-	N/A	-
	Clare	1451	1281	88.3%	N/A	3
	Limerick	1887	1420	75.3%	N/A	96
	Tipperary NR/East Limerick	1908	1677	87.9%	N/A	6
	<b>Total West</b>	<b>13452</b>	<b>11050</b>	<b>82.1%</b>	<b>N/A</b>	<b>242</b>
<b>Homeschooled</b>		0	1	0	N/A	1
<b>Total of LHOs and home schooled</b>		<b>54930</b>	<b>43579</b>	<b>79.3%</b>	<b>N/A</b>	<b>2644</b>
<b>Out of School</b>		N/A	1	N/A	N/A	0
<b>Total of LHOs and home schooled and out of school</b>		<b>N/A</b>	<b>43580</b>	<b>N/A</b>	<b>N/A</b>	<b>2644</b>

Outside cohort refers to those who were vaccinated but who were outside the routine cohort for vaccination

Please note at the time of running this report Tdap vaccinations in Laois/Offaly, Longford/Westmeath and Roscommon were not recorded on the national database therefore their denominator numbers (i.e. numbers eligible for vaccination) are excluded here from the total denominator and calculation of percentage uptake figures.

Local health office (LHO) refers to the LHO of the school. Therefore, in reports the LHOs of homeschooled and out of school children do not appear

N/A-Not applicable

### **MMR vaccine catch-up campaign**

In Ireland the first dose of MMR vaccine is recommended for children at 12 months of age. A second dose of MMR is recommended at four to five years of age. A MMR catch-up campaign started in October 2012 and continued during 2013. During the MMR catch up campaign the HSE offered a dose of MMR vaccine to second level students and primary school children who had not completed (or were not sure they had) their two dose MMR vaccination schedule. In Ireland this campaign was in response to measles and mumps outbreaks among those who had not received their recommended two MMR vaccine doses. It is also part of the World Health Organization campaign to eliminate measles and congenital rubella. Please see the NIO website at [www.immunisation.ie](http://www.immunisation.ie) for detailed and current information on the school vaccination programme.

MMR catch-up data entry was not complete at the time of writing this report and therefore MMR catch-up uptake data are not reported on here.

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