



Uptake of other childhood and adolescent vaccines

Vaccine uptake (DTaP-IPV* and MMR[†]) in Junior Infants during the 2013/2014 academic year

Background

Uptake of the DTaP-IPV* and MMR[†] vaccines in 4-5 year old schoolchildren was monitored across all Local Health Offices (LHOs) during the academic year 2013/2014. The uptake data were compared to those reported for the previous 2012/2013 season, where possible.

HSE-school team versus GP-vaccine administered LHOs

In 29 out of the 31 LHOs across the country, the junior infant vaccination programme is delivered by HSE school teams who administer the vaccine to the children at school. In the remaining two LHOs, Donegal and Sligo/Leitrim, these vaccines are administered to children exclusively by GPs rather than by school teams. During 2013/2014 however, a combination of a School team/GP programme also existed in 13 HSE-administered LHOs with a percentage of children being given vaccines by a GP (tables 1 and 2). During 2014-2015 most of these areas moved towards a predominantly school based administration programme for junior infants.

Target populations

For the 2013/2014 academic year, the target population in HSE-vaccine administered LHOs was all children in Junior Infants on the school register on the 30th September 2013. For GP-vaccine administered LHOs, the target population was all children born between the 1st September 2007 and 31st August 2008.

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.

Furthermore, between the 2012/2013 and 2013/2014 seasons, the following six LHOs changed from being GP-administered areas to HSE-administered areas: Louth, Cavan/Monaghan, Meath and Dublin North Central, Galway and Mayo. This means that comparing uptake between seasons in the Dublin North East and Western regions is not possible as the criteria for defining the birth cohorts in both these regions have changed.

Uptake of DTaP-IPV vaccine

Between 2012/2013 and 2013/2014, the uptake of the DTaP-IPV vaccine in HSE-vaccine administered LHOs, but excluding Louth, Cavan/Monaghan, Meath, Galway, Mayo and Dublin North Central, increased from 90.4% to 91.9%. In 2013/2014, the average uptake among these LHOs was 90.3% with a range from 78.2% in Dublin West to 98.8% in Kildare/West Wicklow.

Table 1. Proportion of DTaP-IPV vaccine uptake in HSE-administered LHOs attributable to GPs

LHO	% DTaP-IPV Vaccine Uptake
Dublin West	2.7%
Louth	64.0%
Meath	47.0%
Cavan/Monaghan	58.0%
Carlow/Kilkenny	3.5%
Tipperary South	3.3%
Wexford	% not specified
Norhh Cork	56.0%
Cork North Lee	24.0%
Cork South Lee	10.50%
West Cork	10.80%
Kerry	34.60%
Roscommon	<1%

During the same period of time, DTaP-IPV vaccine uptake in exclusively GP-vaccine administered LHOs (Donegal; Sligo/Leitrim) rose from 90.6% to 92.2%.

Uptake of MMR vaccine

The uptake of the MMR vaccine between 2012/2013 and 2013/2014 in HSE-vaccine administered LHOs (excluding Louth, Cavan/Monaghan, Meath, Galway, Mayo and Dublin North Central), rose from 90.5% to 91.6%. In 2013/2014, the average uptake among these LHOs was 90.4% with a range from 72% in Galway to 99.7% in Carlow/Kilkenny.

Table 2. Proportion of MMR vaccine uptake in HSE-administered LHOs attributable to GPs

LHO	% MMR Vaccine Uptake
Dublin West	2.9%
Louth	64.0%
Meath	47.0%
Cavan/Monaghan	58.0%
Carlow/Kilkenny	3.5%
Tipperary South	3.2%
Wexford	% not specified
Norhh Cork	56.0%
Cork North Lee	24.0%
Cork South Lee	10.80%
West Cork	10.80%
Kerry	34.60%
Roscommon	<1%

MMR vaccine uptake in exclusively GP-vaccine administered LHOs also increased from 90.3% to 92.7% during the same time period.

MMR catch-up vaccination

Eighteen HSE-vaccine administered LHOs identified a number of children as needing a catch-up MMR dose one month later after been given their first dose. The total number of children identified was 127, of which 100 (78.7%) received a catch-up vaccine dose, ranging from no children in Dublin South, Dublin South East, Dublin West, Dublin North East and Louth to 29 children in Wicklow.

Details of the overall uptake of the two vaccines in the HSE- and GP-vaccinated LHOs during 2013/2014 are presented in Table 1 and in the maps in Figure 1.

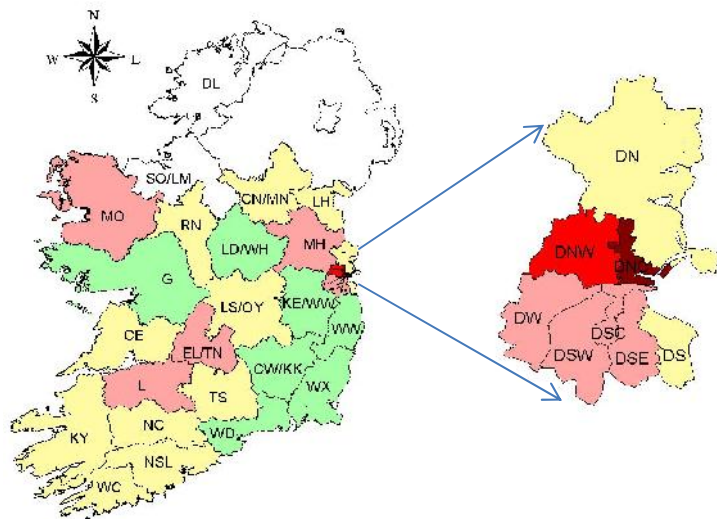
* DTaP-IPV = Diphtheria, Tetanus, acellular Pertussis and Polio vaccine

†MMR = Measles, Mumps and Rubella vaccine

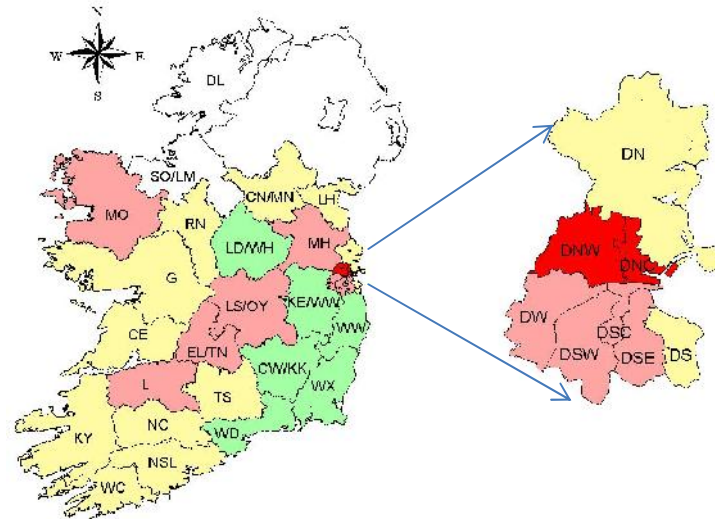
Table 3. Overall uptake of the DTaP-IPV and MMR vaccines in Junior Infants during the 2013/2014 academic year

HSE-Vaccine Administered School Immunisations Programme for Junior Infants 2013/2014							GP-Vaccine Administered Programme for Junior Infants 2013/2014					
HSE Region & LHO	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	%
Dublin Mid Leinster												
Dublin South	1,884	1,744	92.6%	1,884	1,725	91.6%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin South East	1,596	1,405	88.0%	1,596	1,401	87.8%	HSE	HSE	HSE	HSE	HSE	HSE
Wicklow	2,054	1,963	95.6%	2,054	1,956	95.2%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin South City	1,562	1,374	88.0%	1,562	1,388	88.9%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin South West	2,129	1,902	89.3%	2,129	1,896	89.1%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin West	2,798	2,475	88.5%	2,798	2,479	88.6%	HSE	HSE	HSE	HSE	HSE	HSE
Kildare/W Wicklow	4,229	4,051	95.8%	4,229	4,037	95.5%	HSE	HSE	HSE	HSE	HSE	HSE
Laois/Offaly	2,918	2,655	91.0%	2,918	2,609	89.4%	HSE	HSE	HSE	HSE	HSE	HSE
Longford/Westmeath	2,119	2,070	97.7%	2,119	2,070	97.7%	HSE	HSE	HSE	HSE	HSE	HSE
Totals	21,289	19,639	92.2%	21,289	19,561	91.9%	0	0	0.0%	0	0	0.0%
Dublin North East												
Louth	2,288	2,127	93.0%	2,288	2,130	93.1%	HSE	HSE	HSE	HSE	HSE	HSE
Cavan/Monaghan	2,195	1,980	90.2%	2,195	1,980	90.2%	HSE	HSE	HSE	HSE	HSE	HSE
Meath	3,607	3,215	89.1%	3,607	3,213	89.1%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin Nth West	3,416	2,807	82.2%	3,416	2,807	82.2%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin Nth Central	1,518	1,175	77.4%	1,518	1,219	80.3%	HSE	HSE	HSE	HSE	HSE	HSE
Dublin North	4,333	3,940	90.9%	4,333	3,944	91.0%	HSE	HSE	HSE	HSE	HSE	HSE
Totals	17,357	15,244	87.8%	17,357	15,293	88.1%	0	0	0.0%	0	0	0.0%
West												
Limerick	2,362	2,060	87.2%	2,362	2,055	87.0%	HSE	HSE	HSE	HSE	HSE	HSE
Clare	1,638	1,508	92.1%	1,638	1,505	91.9%	HSE	HSE	HSE	HSE	HSE	HSE
Tipperary North	1,727	1,533	88.8%	1,727	1,538	89.1%	HSE	HSE	HSE	HSE	HSE	HSE
Galway	4,138	3,962	95.7%	4,138	3,919	94.7%	HSE	HSE	HSE	HSE	HSE	HSE
Mayo	1,826	1,604	87.8%	1,826	1,630	89.3%	HSE	HSE	HSE	HSE	HSE	HSE
Roscommon	950	896	94.3%	950	887	93.4%	HSE	HSE	HSE	HSE	HSE	HSE
Donegal	GP	GP	GP	GP	GP	GP	1,449	1,334	92.1%	1,449	1,333	92.0%
Sligo/Leitrim	GP	GP	GP	GP	GP	GP	2,550	2,352	92.2%	2,550	2,375	93.1%
Totals	12,641	11,563	91.5%	12,641	11,534	91.2%	3,999	3,686	92.2%	3,999	3,708	92.7%
South												
North Lee/South Lee	5,891	5,484	93.1%	5,891	5,487	93.1%	HSE	HSE	HSE	HSE	HSE	HSE
North Cork	1,491	1,387	93.0%	1,491	1,385	92.9%	HSE	HSE	HSE	HSE	HSE	HSE
West Cork	776	709	91.4%	776	709	91.4%	HSE	HSE	HSE	HSE	HSE	HSE
Kerry	1,998	1,847	92.4%	1,998	1,847	92.4%	HSE	HSE	HSE	HSE	HSE	HSE
South Tipperary	1,373	1,265	92.1%	1,373	1,273	92.7%	HSE	HSE	HSE	HSE	HSE	HSE
Carlow/Kilkenny	2,057	1,964	95.5%	2,057	1,958	95.2%	HSE	HSE	HSE	HSE	HSE	HSE
Waterford	1,850	1,808	97.7%	1,850	1,774	95.9%	HSE	HSE	HSE	HSE	HSE	HSE
Wexford	2,535	2,474	97.6%	2,535	2,422	95.5%	HSE	HSE	HSE	HSE	HSE	HSE
Totals	17,971	16,938	94.3%	17,971	16,855	93.8%	0	0	0.0%	0	0	0.0%
National Totals	69,258	63,384	91.5%	69,258	63,243	91.3%	3,999	3,686	92.2%	3,999	3,708	92.7%

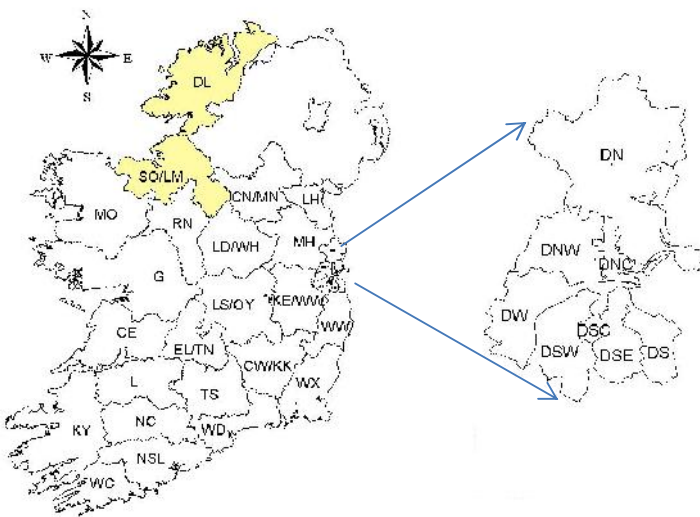
GP=Vaccine administered by GPs in these areas; HSE=Vaccine administered by HSE public health personnel in these areas; Target population HSE-vaccine administered areas: All children in Junior Infants on the school register on 30/09/2013 for the 2013/2014 academic year; Target population in GP-vaccine administered areas: All children born between 01/09/2007 and 31/08/2008



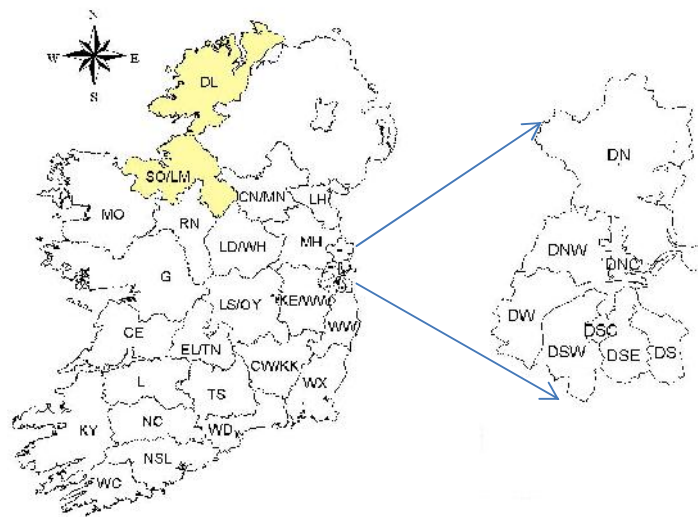
HSE-DTaP-IPV Vaccine Administered LHOs



HSE-MMR Vaccine Administered LHO



GP-DTaP-IPV Vaccine Administered LHOs



GP-MMR Vaccine Administered LHOs

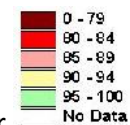


Figure 1. LHO Maps of DTaP-IPV & MMR percentage vaccine uptake at Junior Infants level during the 2013/2014 academic year

Tdap vaccine uptake during the 2013/2014 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 2013/2014, 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 the School Immunisation System (SIS) 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 SIS database at a local level. Please see the HSE National Immunisation Office (NIO) website at <http://www.hse.ie/eng/health/immunisation> 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 SIS database on the 20th April 2015. These figures are subject to change due to on-going updating of data on the database.

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. There was a MMR catch-up campaign during the 2012/2013 and 2013/2014 academic years. 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 <http://www.hse.ie/eng/health/immunisation/> 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.

Acknowledgements

Many thanks to all HSE staff, Department of Education and Skills staff, staff in all educational settings, GPs, parents and children/students, who implemented, participated in and supported all these vaccination programmes.

Table 4. Tdap uptake data in the academic year 2013/2014 (data extracted 20/04/2015)

HSE Region	Local Health Office/HSE Region	2013/2014				
		First year in second level and equivalent in special schools, home schooled and out of school			Outside cohort	
		Denominator	Numbers vaccinated with Tdap:	% Vaccinated with Tdap:	Denominator	Numbers vaccinated with Tdap:
Dublin Mid Leinster	Dublin South	2010	1642	81.7%	N/A	12
	Dublin South East	1157	883	76.3%	N/A	3
	Dublin South City	1466	1180	80.5%	N/A	6
	Dublin South West	1762	1362	77.3%	N/A	10
	Dublin West	2110	1574	74.6%	N/A	9
	Kildare/West Wicklow	3589	2991	83.3%	N/A	8
	Wicklow	1420	1212	85.4%	N/A	3
	Laois/Offaly	2197	1850	84.2%	N/A	20
	Longford/Westmeath	2090	1937	92.7%	N/A	4
	Total Dublin Mid Leinster	17801	14631	82.2%	N/A	75
Dublin North East	Dublin North	3048	2462	80.8%	N/A	8
	Dublin North Central	1518	1063	70.0%	N/A	2
	Dublin North West	2476	2299	92.9%	N/A	0
	Cavan/Monaghan	1756	1319	75.1%	N/A	0
	Louth	2050	1631	79.6%	N/A	0
	Meath	2571	2206	85.8%	N/A	498
	Total Dublin North East	13419	10980	81.8%	N/A	508
South	North Cork	1181	955	80.9%	N/A	2
	North Lee - Cork	2466	2089	84.7%	N/A	5
	South Lee - Cork	2444	2092	85.6%	N/A	2
	West Cork	741	643	86.8%	N/A	0
	Kerry	1856	1587	85.5%	N/A	0
	Carlow/Kilkenny	1997	1845	92.4%	N/A	16
	South Tipperary	1147	1032	90.0%	N/A	3
	Waterford	1720	1625	94.5%	N/A	5
	Wexford	1976	1767	89.4%	N/A	83
	Total South	15528	13635	87.8%	N/A	116
West	Donegal	2264	2057	90.9%	N/A	5
	Sligo/Leitrim	1251	1142	91.3%	N/A	1
	Galway	3089	2537	82.1%	N/A	43
	Mayo	1759	1453	82.6%	N/A	0
	Roscommon	-	-	-	N/A	-
	Clare	1418	1209	85.3%	N/A	17
	Limerick	2185	1511	69.2%	N/A	3
	Tipperary NR/	1867	1578	84.5%	N/A	16
	Total West	13833	11487	80.5%	N/A	85
Homeschooled		0	3	0	N/A	0
Total of LHOs and home schooled		60581	50736	83.7%	N/A	784
Out of School		N/A	0	N/A	N/A	2
Total of LHOs and home schooled and out of school		N/A	50736	N/A	N/A	786

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

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

Roscommon Tdap data were excluded as this LHO reported incomplete data entry at the time of data extraction and that a larger number were vaccinated than were recorded on the database; therefore their numbers are excluded here from the total denominator and calculation of percentage uptake figures.