

# Vaccine Uptake in Children in Wales

## COVER Annual report 2015

Data for the year ending 31<sup>st</sup> March 2015



### Key points

- In 2014/15 uptake of all established routine immunisations in one year old children for Wales was over 95% for the seventh consecutive year. Twenty of the 22 Local Authority areas exceeded the 95% uptake target for the 5 in 1 immunisation in one year olds.
- Uptake of two doses of rotavirus vaccine was 83.6% at the first birthday representing uptake in the first cohort of children eligible for this new vaccine.
- Uptake of the first dose of MMR at 2 years remains above target at 95.8%.
- In 2014/15, 86.2% of children were up to date with recommended immunisations by their fourth birthday, an increase of 5.4% since 2011/12, although lower than last year overall, but increased in two Health Boards.
- Uptake of the second dose of MMR by 5 years of age increased to 93.1%, the highest ever annual uptake of MMR2 at five years of age, following a positive trend since 2006.
- Uptake of pre-school 4 in 1 booster in five year old children rose to 93.4%.
- Uptake of a complete three dose course of Human Papilloma Virus (HPV) vaccine in girls in the routine campaign (2013/14 School Year 8) was 83.5%, lower than in previous years.

### Findings

1. These results are for children living in Wales in June 2015 and reaching their first, second, fourth, fifth, 15<sup>th</sup> and 16<sup>th</sup> birthdays in the year ending March 31<sup>st</sup> 2015, and girls in School Year 8 in 2013/2014.
2. Annual uptake of the completed course of '5 in 1'<sup>1</sup> vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday decreased slightly to 96.6%. Uptake ranged by Health Board (HB) from 94.0% (Cardiff and Vale University HB) to 98.4% (Cwm Taf University HB) and by Local Authority (LA) from 93.4% (Cardiff) to 98.8% (Merthyr Tydfil). Twenty of the 22 LAs achieved the 95% target (Figures 1, 2, 4, 6 and Tables 2, 3).
3. Annual uptake of a completed one dose course of MenC<sup>2</sup> vaccine in children reaching their first birthday this year was 97.2% ranging by HB from 94.8% (Cardiff and Vale University HB) to 98.5% (Cwm Taf University HB) and by LA from 94.3% (Cardiff) to 99.2% (Blaenau Gwent) (Figures 1, 2 and Tables 2, 3).
4. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV<sup>3</sup>) in children at one year of age was 96.3%, ranging by HB from 93.1% (Cardiff and Vale University HB) to 98.2% (Cwm Taf University HB) and by LA from 92.5% (Cardiff) to 99.0% (Blaenau Gwent) (Figures 1, 2 and Table 3).
5. Uptake of two doses of rotavirus vaccine in children reaching their first birthday was 83.6%, ranging by HB from 78.6% (Cardiff & Vale University HB) to 89.4% (Cwm Taf University HB) and by LA from 77.1% (Cardiff) to 90.0% (Rhondda Cynon Taff) (Figure 2, Tables 2 and 3). This is the first group of children reported through the annual COVER scheme who would have been eligible to receive rotavirus vaccine. Quarterly COVER report data suggest that uptake will increase for the next annual COVER report.

<sup>1</sup> DTaP/IPV/Hib vaccine protects against diphtheria, tetanus, pertussis (Whooping Cough), polio and Hib infection.

<sup>2</sup> MenC vaccine protects against meningitis caused by meningococcus group C infection. Children reaching one year of age would have been offered one dose of MenC vaccine at 3 months of age.

<sup>3</sup> PCV protects against pneumococcal meningitis, bacteraemia, pneumonia and otitis media. Children reaching one year of age would have been offered one dose of PCV at 2 months of age and one dose at 4 months of age. Children reaching two years would have been offered their third and final PCV dose at 12-13 months of age.

<sup>4</sup> MMR protects against measles, mumps and rubella infections.

6. Uptake of one dose of MMR<sup>4</sup> by two years of age decreased this year to 95.8% from 96.5% last year. Uptake ranged by HB from 94.3% (Cardiff and Vale University HB) to 96.8% (Cwm Taf University HB) and by LA from 93.9% (Cardiff) to 98.0% (Anglesey). Five HBs achieved the target uptake of 95% for one dose of MMR by two years of age, and 19 out of 22 LAs exceeded the 95% target (Figures 1, 4 and 7 and Tables 2, 4).
7. Annual uptake of the final dose of Pneumococcal Conjugate Vaccine (PCVf<sup>3</sup>) by two years of age was 95.7%. Uptake by HB ranged from 93.7% (Cardiff and Vale University HB) to 97.1% (Cwm Taf University HB) and by LA from 93.1% (Cardiff) to 98.3% (Anglesey) (Tables 2, 4).
8. Annual uptake of the Hib/MenC<sup>5</sup> booster by two years of age was 95.0%, ranging by HB from 92.9% (Cardiff and Vale University HB) to 96.6% (Cwm Taf University HB) and by LA from 92.1% (Cardiff) to 97.6% (Anglesey) (Tables 2, 4).
9. Coverage of the Hib/MenC<sup>5</sup> booster in children by the time of their fourth birthday was 95.3% and ranged by HB from 93.1% (Cardiff and Vale University HB) to 96.8% (Betsi Cadwaladr University HB) (Figure 2, Tables 1 and 5).
10. This year, coverage of the '4 in 1' DTaP/IPV<sup>6</sup> pre-school booster in children by four years of age was 88.0%, this ranged by HB from 85.4% (Aneurin Bevan University HB) to 91.8% (Betsi Cadwaladr University HB) (Figure 3, Tables 1 and 5).
11. Coverage of a complete two dose course of MMR<sup>4</sup> vaccine in children by four years of age was 89.6%, this ranged by HB from 86.7% (Cardiff and Vale University HB) to 91.4% (Betsi Cadwaladr University HB) (Figure 3, Tables 1 and 5).
12. The proportion of children who were up to date with their Hib/MenC<sup>5</sup> booster, '4 in 1' DTaP/IPV<sup>6</sup> pre-school booster and MMR vaccines by four years of age was 86.2%, a 1.7% decrease from 87.9% in 2013/14. (Table 1, Figure 3). This ranged by HB from 83.2% (Aneurin Bevan University HB) to 90.4% (Betsi Cadwaladr University HB) and by LA from 81.0% (Newport) to 92.2% (Anglesey).
13. Annual uptake of two doses of MMR in children at five years of age was 93.1% this year, compared to 92.6% last year (Figures 1, 5, 8, Tables 2, 6), ranging by HB from 90.4% (Powys Teaching HB) to 94.4% (Betsi Cadwaladr University HB and Cwm Taf University HB). Coverage of one dose of MMR in children at five years of age was 97.0% and ranged by HB from 95.4% (Powys Teaching HB) to 98.2% (Cwm Taf University HB).
14. Uptake of the '4 in 1' DTaP/IPV<sup>6</sup> pre-school booster in children reaching their fifth birthday this year was 93.4%, compared to 93.2% in the previous year (Figures 5, 9, Tables 2, 6).
15. Coverage of all three doses of HPV vaccine in girls in the 2013/14 School Year 8 (reaching their 14<sup>th</sup> birthday between 01/09/14 and 31/08/15) was 83.5%, ranging by HB from 74.1% (Cardiff and Vale University HB) to 92.2% (Cwm Taf University HB) and by LA from 71.4% (Monmouthshire) to 92.3% (Rhondda Cynon Taf) (Table 7). This is the last group of girls to be offered a three dose course of HPV vaccination. Girls in the current School Year 8 group are scheduled to receive a two dose course of HPV vaccination, uptake in this group was recently reported in Public Health Wales [COVER Report 114](#).
16. Annual coverage of two doses of MMR in teenagers at 15 years of age was 90.1% (Table 8), ranging by HB from 87.1% (Powys Teaching HB) to 91.6% (Cwm Taf University HB) and by LA from 84.9% (Monmouthshire) to 93.9% (Wrexham). Coverage of one dose of MMR in 15 year olds was 95.3%, ranging by HB from 93.2% (Powys Teaching HB) to 96.7% (Cwm Taf University HB) and by LA from 90.9% (Monmouthshire) to 97.9% (Caerphilly). A breakdown by sex indicates that 90.8% of girls had received a full (two MMR doses) course of immunisation against rubella this year and coverage of only one dose was 95.6%.

<sup>5</sup> Hib/MenC vaccine protects against Hib and MenC infections and a routine dose should be offered at 12-13 months of age

<sup>6</sup> DTaP/IPV (and dTaP/IPV) vaccines boost protection against diphtheria, tetanus, pertussis and polio infection before school entry

17. National uptake of the Td/IPV<sup>7</sup> teenage booster in children reaching 15 years of age in the year ending 31<sup>st</sup> March 2015 was 79.6%, an increase of 2.0% from 77.6% in the previous year (Table 8). Uptake ranged by HB from 68.1% (Aneurin Bevan University HB) to 88.8% (Cwm Taf University HB) and by LA from 64.9% (Monmouthshire) to 89.6% (Merthyr Tydfil).
18. Annual coverage of two doses of MMR in teenagers at 16 years of age was 90.1% (Tables 2, 9), ranging by HB from 87.3% (Cardiff and Vale University HB) to 92.8% (Cwm Taf University HB) and by LA from 81.7% (Monmouthshire) to 93.9% (Wrexham). Annual coverage of one dose of MMR in 16 year olds was 95.3%, ranging by LA from 88.8% (Monmouthshire) to 98.1% (Blaenau Gwent). A breakdown by sex indicates that 90.6% of girls had received a full (two MMR doses) course of immunisation against rubella this year and coverage of only one dose was 95.6%.
19. National uptake of the Td/IPV<sup>7</sup> teenage booster in children reaching 16 years of age in the year ending 31<sup>st</sup> March 2015 was 82.0% (Tables 2 and 9).
20. The relationship between deprivation and uptake was examined. The percentage of children who were up to date with their routine vaccinations by four years of age is presented broken down by Health Board and the national quintile of deprivation of the Lower Super Output Area (LSOA) in which the children reside (Figure 9 and Table 10). National quintiles of deprivation were calculated according to the LSOA rankings contained in the Welsh Index of Multiple Deprivation (WIMD 2014). For the data presented here, quintile five represents the most deprived quintile of LSOA and quintile one represents the least deprived quintile of LSOA. Deprivation rankings contained in the WIMD are relative, not absolute values and they refer to an overall composite measure of factors related to deprivation for the LSOA as a whole, not the individual circumstances of residents within the LSOA. Nationally, the percentage of children up to date with their routine immunisations by four years of age ranged from 89.4% in the least deprived quintile of LSOA to 82.7% in the most deprived quintile of LSOA. The difference in uptake between the least deprived quintile and the most deprived quintile was 6.7%, an increase from 5.2% in 2013/14.
21. Uptake of hepatitis B immunisation, extracted from the Public Health Wales All Wales Neonatal Hepatitis B immunisation database, is presented in Table 11. The database was developed to assist the Public Health Wales Health Protection Team in the monitoring and follow up of hepatitis B immunisation of babies born to hepatitis B positive mothers and to provide a source for statistics on uptake of hepatitis B immunisation in this group. Uptake of three doses in children who were at risk of perinatal infection and reached their first birthday in the year ending 31<sup>st</sup> March 2015 was 98.3%. Uptake of four doses in children who were at risk of perinatal infection and reached their second birthday in the year ending 31<sup>st</sup> March 2015 was 95.1%. Uptake of four doses in children who were at risk of perinatal infection and reached their fifth birthday in the year ending 31<sup>st</sup> March 2015 was 96.4%.

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<sup>7</sup> Td/IPV boosts protection against diphtheria, tetanus and polio infection before entering adulthood

## Comment

Uptake in 2014/15 overall continues on the positive trend seen since 2006, reflecting significant effort in practices and Health Boards to maintain and improve uptake, especially in adolescent immunisation and MMR. However, there remain areas for further work, in particular ensuring children are fully up to date with routine immunisations by school entry, reflected in the Welsh Government target at 4 years of age, and also establishing new immunisation programmes. Recent changes and additions to the routine schedule of childhood immunisations in 2013-14 included introduction of a teenage booster for MenC<sup>1</sup> and adding rotavirus and influenza vaccinations to the infant schedule<sup>2,3</sup>. Although trends are positive over the last four years, slight falls were seen in the coverage of routine immunisations in children aged one and two years. Uptakes of all established immunisations remain above 95% in younger children up to two years of age.

This is the first annual report which contains rotavirus immunisation uptake figures for children aged one year, representing uptake in the first cohort of children who would have been scheduled to receive the vaccine introduced from 1<sup>st</sup> July 2013<sup>2</sup>. Of the children reaching their first birthday during April 2014 to March 2015, those children born at the start of the period would have been near the upper age limit for eligibility to receive the first dose of rotavirus vaccine and would have not had the same follow-up opportunity as children born in subsequent months. As a result, it is expected that uptake of rotavirus vaccine will rise.

The trend in the proportion of children who are up to date with their routine immunisations by four years of age has been positive overall since 2011/12. However this year it decreased to 86.2% from 87.9% last year. One Health Board and five LA's achieved above 90%. Of all the immunisations that are included in this composite measure, uptake of the '4 in 1' pre-school booster saw the largest decrease followed by the second dose of MMR vaccine, both scheduled at three years four months of age. The gap in immunisation coverage between four year olds residing in the most and least deprived areas increased slightly to 6.7% this year but remained lower than the 9% gap reported in 2012-13.

Trends in uptake of routine immunisations in older children continue to be very positive. Uptake of one dose of MMR in 15 and 16 year olds exceeded 95% with over 90% of teenagers receiving the second dose of MMR. These figures represent the highest ever reported annual national coverage of MMR in teenagers. Uptake of the teenage booster against diphtheria, tetanus and polio increased further this year, particularly in 15 year olds which showed an 8% increase compared to last year. All Health Boards delivering the teenage booster in schools now offer the vaccines in academic Year 9. Some Health Boards previously offered teenage vaccines in practices or at a later age, but based on evidence of improved uptake have moved to a Year 9 school based service. Only one Health Board now offers a GP based service to teenagers.

This report contains the last routine group of girls to be offered a three dose course of HPV vaccination given the recent change in the HPV vaccination programme in September 2014 from a three dose to a two dose course schedule<sup>4</sup>. Uptake of two doses of HPV was 87.8% with uptake of three doses at 83.4% in girls reaching their 14<sup>th</sup> birthday (2013/14 School Year 8).

[1] Welsh Government (2013) Important changes to the schedule for Meningococcal Serogroup C Conjugate vaccine, CMO letter (2013)10. Available from: <http://gov.wales/docs/phhs/publications/130524changesen.pdf>

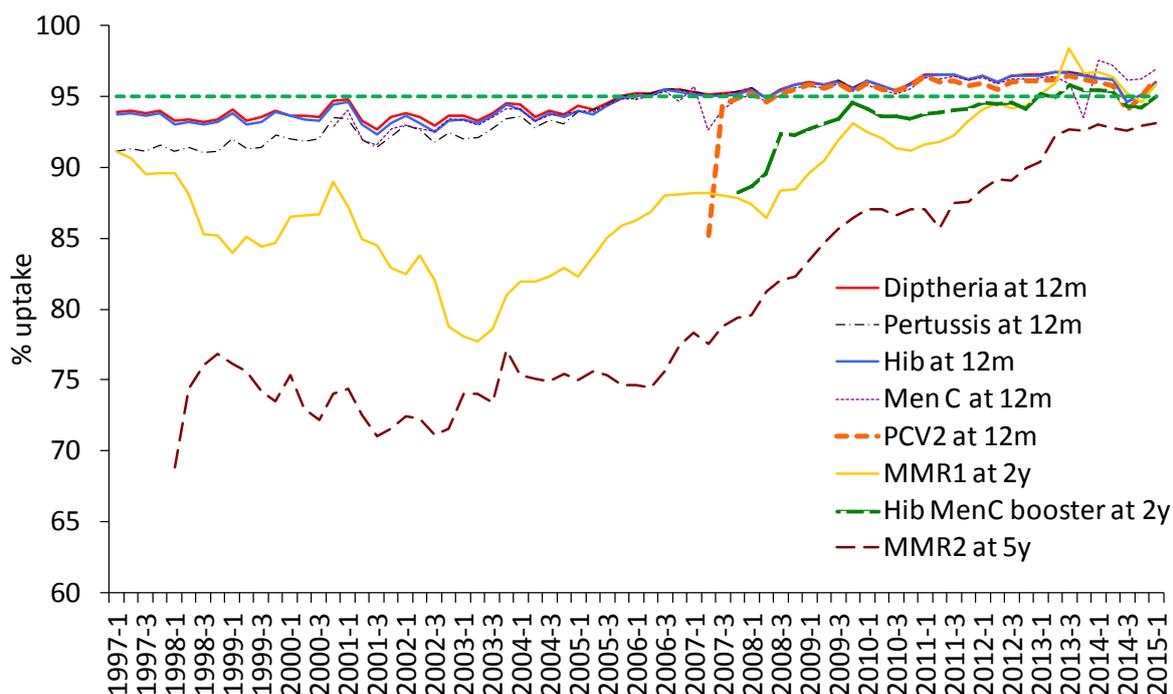
[2] Welsh Government (2013) Important changes to the National Immunisation Programme in 2013-14 and introduction of rotavirus vaccination for babies at 2 and 3 months of age, CMO letter (2013)09. Available from: <http://wales.gov.uk/docs/phhs/publications/130524rotavirusen.pdf>

[3] Welsh Government (2013) 2013-13 Seasonal Flu Vaccination Programme, CMO letter (2013)6. Available from: <http://gov.wales/docs/phhs/publications/130816fluen.pdf>

[4] Welsh Government (2014) Changes to the Human Papillomavirus (HPV) vaccination programme from September 2014, CMO letter (2014)13. Available from: <http://gov.wales/docs/phhs/publications/140707vaccinationen.pdf>

**Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.** Data for this report was provided by NHS Wales Informatics Service from the National Community Child Health Database (NCCHD). The data was sourced from Community Child Health databases maintained by local Child Health Office staff in Trusts throughout Wales based on regular returns from doctors and nurses who immunise or advise on immunisation. Uptake data presented throughout are for LHB resident population, not for LHB GP practice populations. The maps, graphs and Table 1 are best viewed in colour.

**Figure 1.** Percentage uptake of childhood immunisations in Wales, quarter 1 1997 to quarter 1 2015. Data are for children reaching 1 year of age each quarter for diphtheria, pertussis, Hib, MenC<sup>8</sup> and pneumococcal conjugate vaccine, children reaching 2 years of age for MMR1 (first dose) and the Hib MenC booster, and 5 years of age for MMR2 (second dose).



**Figure 2.** Summary of uptake rates for selected immunisations<sup>8</sup> in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

### All Wales Summary - COVER 2014/15

5 in 1 primary by age 1y (3 doses)	96.6%
MenC primary by age 1y (1 dose)	97.2%
Rotavirus primary by age 1yr (2 doses)	83.6%
PCV primary by age 1y (2 doses)	96.3%
MMR by age 2y (1st dose)	95.8%
PCV by age 2y (final (3rd) dose)	95.7%
Hib/MenC booster by age 2y	95.0%
MMR by age 5y (2nd dose)	93.1%
4 in 1 pre-school booster by age 5y	93.4%
MMR coverage (1 dose) by age 16y	95.3%
MMR coverage (2 doses) by age 16y	90.1%
3 in 1 Teenage booster by age 16y	82.0%

<sup>8</sup> MenC uptake for children reaching one year of age is based on a completed one dose course of MenC vaccination due to the MenC programme change from a two dose to a one dose primary course in June 2013.

**Figure 3.** Percentage uptake of resident children reaching their 4<sup>th</sup> birthday between 01/04/14 and 31/03/15 and are up to date with all scheduled vaccines<sup>9</sup> by Health Board.



**Table 1.** Percentage uptake of resident children reaching their 4<sup>th</sup> birthday between 01/04/14 and 31/03/15 and are up to date with all scheduled vaccines<sup>9</sup> by Health Board, annual 2011/12 to annual 2014/15.

Area	Up to date in schedule			
	2011/12	2012/13	2013/14	2014/15
Abertawe Bro Morgannwg UHB	80.7	82.6	87.4	84.9
Aneurin Bevan UHB	80.9	80.9	86.6	83.2
Betsi Cadwaladr UHB	83.3	85.1	89.9	90.4
Cardiff and Vale UHB	78.0	79.2	85.6	83.8
Cwm Taf UHB	83.1	85.0	90.8	89.4
Hywel Dda UHB	78.4	80.8	88.5	85.5
Powys Teaching HB	81.4	84.7	87.0	87.7
<b>Wales</b>	<b>80.8</b>	<b>82.4</b>	<b>87.9</b>	<b>86.2</b>

<sup>9</sup> Completed 4 in 1 pre-school booster, the Hib/MenC booster and second MMR dose by four years of age. The calculation method for proportions of children up to date with routine immunisation by four years of age was revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age.

**Table 2.** Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 4th, 5th and 16th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Area	Age 1 year					Age 2 years					Age 4 years			Age 5 years				Age 16 years											
	Resident children (n)	5 in 1* (n) (%)		MenC** (n) (%)		Rotavirus (n) (%)		Resident children (n)	MMR1 (n) (%)		PCVf† (n) (%)		Hib/MenC booster (n) (%)	Resident children (n)	Up to date in schedule*** (n) (%)		Resident children (n)	MMR2 (n) (%)		4 in 1† (n) (%)		Resident children (n)	MMR1 (n) (%)		MMR2 (n) (%)		3 in 1 Teenage booster**** (n) (%)		
<b>Abertawe Bro Morgannwg University LHB</b>	1532	1492	97.4	1504	98.2	1340	87.5	1600	1552	97.0	1544	96.5	1536	96.0	1631	1372	84.1	1623	1528	94.1	1498	92.3	1586	1529	96.4	1469	92.6	1240	78.2
Bridgend LA	1462	1426	97.5	1441	98.6	1229	84.1	1498	1440	96.1	1420	94.8	1413	94.3	1617	1400	86.6	1562	1477	94.6	1464	93.7	1572	1539	97.9	1460	92.9	1338	85.1
Neath Port Talbot LA	2501	2422	96.8	2440	97.6	2111	84.4	2587	2496	96.5	2487	96.1	2465	95.3	2685	2265	84.4	2654	2466	92.9	2464	92.8	2461	2366	96.1	2194	89.2	2098	85.2
Swansea LA	5495	5340	97.2	5385	98.0	4680	85.2	5685	5488	96.5	5451	95.9	5414	95.2	5933	5037	84.9	5839	5471	93.7	5426	92.9	5619	5434	96.7	5123	91.2	4676	83.2
<b>Health Board Total</b>																													
<b>Aneurin Bevan University LHB</b>	799	786	98.4	793	99.2	658	82.4	790	770	97.5	770	97.5	767	97.1	775	644	83.1	782	728	93.1	735	94.0	776	761	98.1	722	93.0	626	80.7
Blaenau Gwent LA	2013	1978	98.3	1992	99.0	1761	87.5	2085	2020	96.9	2022	97.0	2010	96.4	2175	1841	84.6	2160	2040	94.4	2033	94.1	2084	2024	97.1	1919	92.1	1705	81.8
Caerphilly LA	768	735	95.7	738	96.1	632	82.3	866	819	94.6	819	94.6	817	94.3	886	766	86.5	901	823	91.3	825	91.6	1081	960	88.8	883	81.7	842	77.9
Monmouthshire LA	1898	1830	96.4	1852	97.6	1568	82.6	1931	1841	95.3	1840	95.3	1808	93.6	2010	1629	81.0	2002	1820	90.9	1806	90.2	1937	1824	94.2	1709	88.2	1480	76.4
Newport LA	1061	1045	98.5	1048	98.8	903	85.1	1122	1086	96.8	1083	96.5	1080	96.3	1108	908	81.9	1088	1012	93.0	1011	92.9	1116	1084	97.1	1037	92.9	915	82.0
Torfaen LA	6539	6374	97.5	6423	98.2	5522	84.4	6794	6536	96.2	6534	96.2	6482	95.4	6954	5788	83.2	6933	6423	92.6	6410	92.5	6994	6653	95.1	6270	89.6	5568	79.6
<b>Health Board Total</b>																													
<b>Betsi Cadwaladr University LHB</b>	739	719	97.3	730	98.8	616	83.4	805	789	98.0	791	98.3	786	97.6	803	740	92.2	781	740	94.8	743	95.1	745	720	96.6	693	93.0	637	85.5
Anglesey LA	1057	1019	96.4	1034	97.8	894	84.6	1141	1092	95.7	1093	95.8	1084	95.0	1142	1007	88.2	1170	1096	93.7	1098	93.8	1197	1145	95.7	1104	92.2	1054	88.1
Conwy LA	1041	995	95.6	1010	97.0	825	79.3	1035	986	95.3	990	95.7	984	95.1	1091	962	88.2	1068	1000	93.6	1011	94.7	1148	1103	96.1	1026	89.4	974	84.8
Denbighshire LA	1593	1559	97.9	1558	97.8	1336	83.9	1658	1606	96.9	1599	96.4	1591	96.0	1715	1560	91.0	1780	1676	94.2	1700	95.5	1743	1690	97.0	1612	92.5	1501	86.1
Flintshire LA	1181	1145	97.0	1132	95.9	969	82.0	1298	1235	95.1	1234	95.1	1235	95.1	1223	1118	91.4	1270	1210	95.3	1213	95.5	1265	1212	95.8	1173	92.7	1093	86.4
Gwynedd LA	1607	1567	97.5	1578	98.2	1339	83.3	1660	1616	97.3	1616	97.3	1597	96.2	1675	1524	91.0	1669	1582	94.8	1585	95.0	1418	1376	97.0	1331	93.9	1185	83.6
Wrexham LA	7218	7004	97.0	7042	97.6	5979	82.8	7597	7324	96.4	7323	96.4	7277	95.8	7649	6911	90.4	7738	7304	94.4	7350	95.0	7516	7246	96.4	6939	92.3	6444	85.7
<b>Health Board Total</b>																													
<b>Cardiff and Vale University LHB</b>	4530	4232	93.4	4273	94.3	3493	77.1	4563	4285	93.9	4248	93.1	4201	92.1	4588	3783	82.5	4509	4087	90.6	4111	91.2	3732	3473	93.1	3224	86.4	2853	76.4
Cardiff LA	1340	1284	95.8	1293	96.5	1118	83.4	1409	1346	95.5	1349	95.7	1347	95.6	1448	1275	88.1	1566	1470	93.9	1486	94.9	1492	1402	94.0	1337	89.6	1240	83.1
Vale of Glamorgan LA	5870	5516	94.0	5566	94.8	4611	78.6	5972	5631	94.3	5597	93.7	5548	92.9	6036	5058	83.8	6075	5557	91.5	5597	92.1	5224	4875	93.3	4561	87.3	4093	78.3
<b>Health Board Total</b>																													
<b>Cwm Taf University LHB</b>	670	662	98.8	663	99.0	584	87.2	720	700	97.2	704	97.8	700	97.2	702	622	88.6	671	631	94.0	643	95.8	670	646	96.4	617	92.1	601	89.7
Merthyr Tydfil LA	2698	2653	98.3	2656	98.4	2428	90.0	2727	2636	96.7	2643	96.9	2631	96.5	2796	2505	89.6	2757	2604	94.5	2623	95.1	2568	2509	97.7	2388	93.0	2281	88.8
Rhondda Cynon Taif LA	3368	3315	98.4	3319	98.5	3012	89.4	3447	3336	96.8	3347	97.1	3331	96.6	3498	3127	89.4	3428	3235	94.4	3266	95.3	3238	3155	97.4	3005	92.8	2882	89.0
<b>Health Board Total</b>																													
<b>Hywel Dda University LHB</b>	1850	1784	96.4	1801	97.4	1585	85.7	1892	1805	95.4	1795	94.9	1786	94.4	2003	1685	84.1	1907	1776	93.1	1771	92.9	1684	1598	94.9	1512	89.8	1393	82.7
Carmarthenshire LA	642	610	95.0	610	95.0	513	79.9	695	661	95.1	669	96.3	669	96.3	717	647	90.2	661	624	94.4	629	95.2	684	648	94.7	612	89.5	588	86.0
Ceredigion LA	1180	1119	94.8	1141	96.7	990	83.9	1273	1199	94.2	1204	94.6	1189	93.4	1333	1135	85.1	1306	1200	91.9	1208	92.5	1399	1296	92.6	1213	86.7	1060	75.8
Pembrokeshire LA	3672	3513	95.7	3552	96.7	3088	84.1	3860	3665	94.9	3668	95.0	3644	94.4	4053	3467	85.5	3874	3600	92.9	3608	93.1	3767	3542	94.0	3337	88.6	3041	80.7
<b>Health Board Total</b>																													
<b>Powys Teaching LHB</b>	1150	1104	96.0	1106	96.2	952	82.8	1219	1161	95.2	1163	95.4	1161	95.2	1255	1101	87.7	1273	1151	90.4	1176	92.4	1495	1386	92.7	1312	87.8	1096	73.3
Unknown	99	98	99.0	97	98.0	79	79.8	103	96	93.2	97	94.2	96	93.2	77	72	93.5	102	92	90.2	93	91.2	185	150	81.1	135	73.0	122	65.9
<b>Wales Total</b>	<b>33411</b>	<b>32266</b>	<b>96.6</b>	<b>32490</b>	<b>97.2</b>	<b>27923</b>	<b>83.6</b>	<b>34677</b>	<b>33237</b>	<b>95.8</b>	<b>33180</b>	<b>95.7</b>	<b>32953</b>	<b>95.0</b>	<b>35455</b>	<b>30561</b>	<b>86.2</b>	<b>35262</b>	<b>32833</b>	<b>93.1</b>	<b>32926</b>	<b>93.4</b>	<b>34038</b>	<b>32441</b>	<b>95.3</b>	<b>30682</b>	<b>90.1</b>	<b>27922</b>	<b>82.0</b>

\* Uptake of pertussis used as proxy

\*\* MenC uptake for children reaching one year of age this quarter is based on a completed one dose primary course of MenC vaccination. This is due to the MenC programme change in June 2013 from a two dose MenC primary course given at 3 months and 4 months of age to a one dose primary course at 3 months of age.

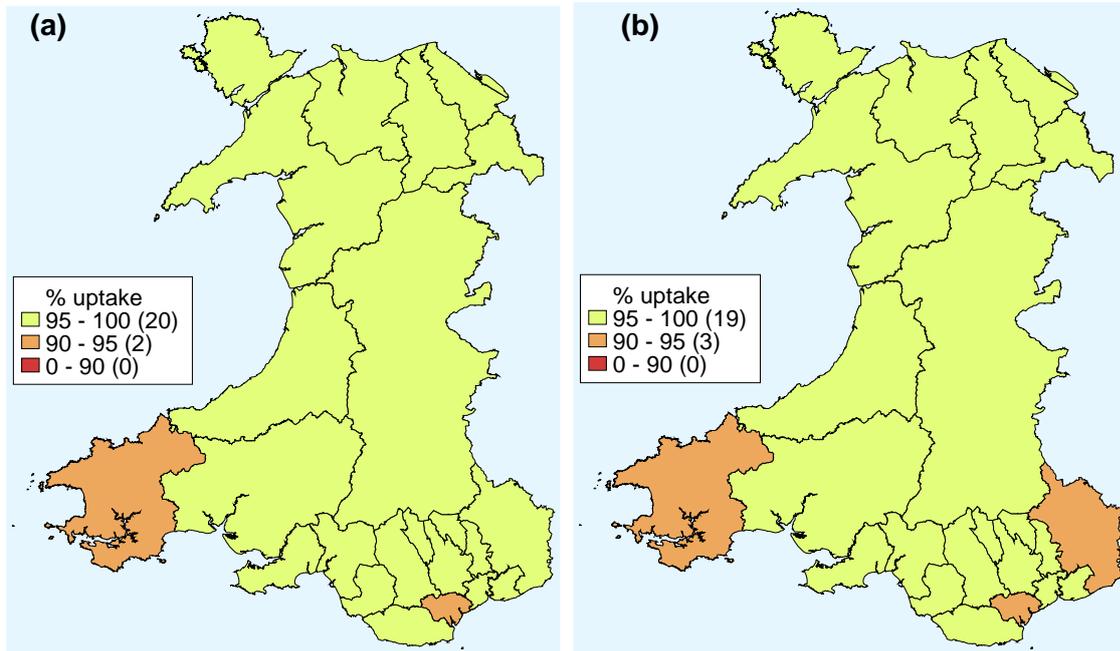
\*\*\* Completed 4 in 1 preschool booster, the Hib/MenC booster and second MMR dose by four years of age

\*\*\*\* Uptake of diphtheria (reinforcing booster dose) used as proxy

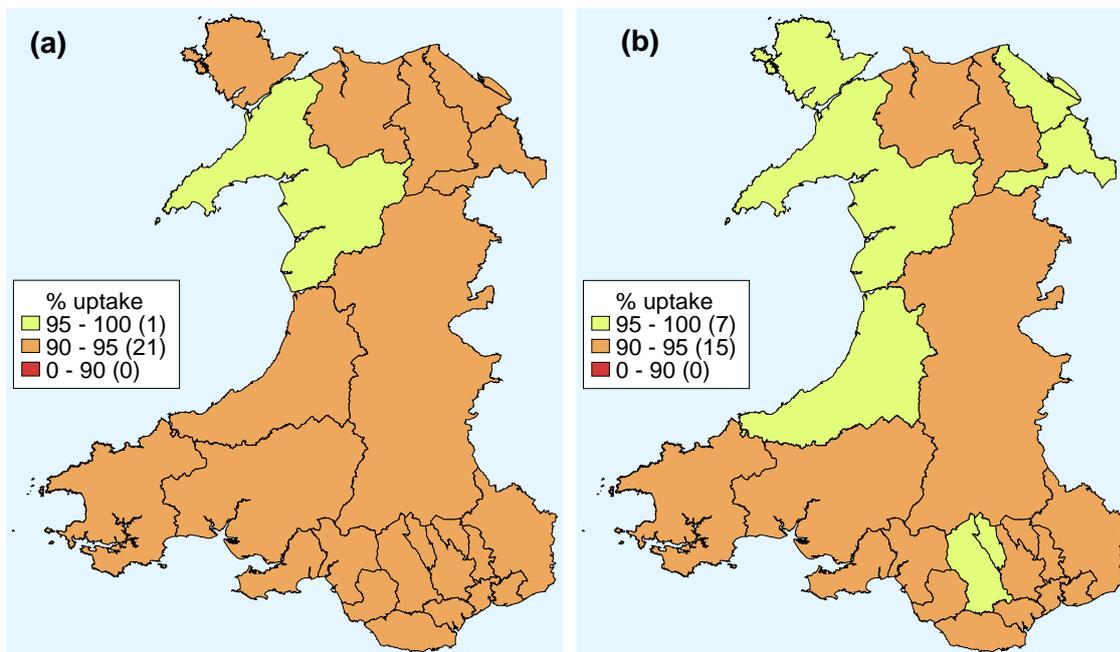
† Children receiving the final dose of PCV



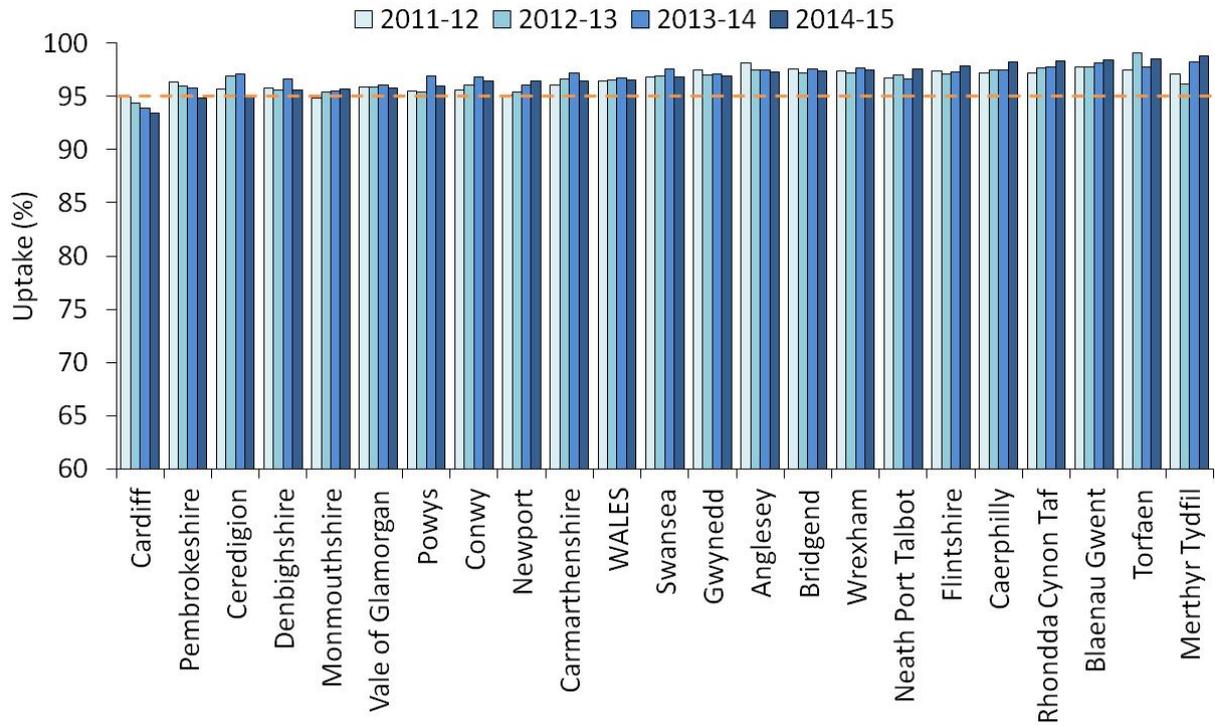
**Figure 4. (a)** Uptake of 5 in 1 vaccine in Welsh Local Authority areas in children reaching their 1<sup>st</sup> birthday between 01/04/14 and 31/03/15. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2<sup>nd</sup> birthday between 01/04/14 and 31/03/15.



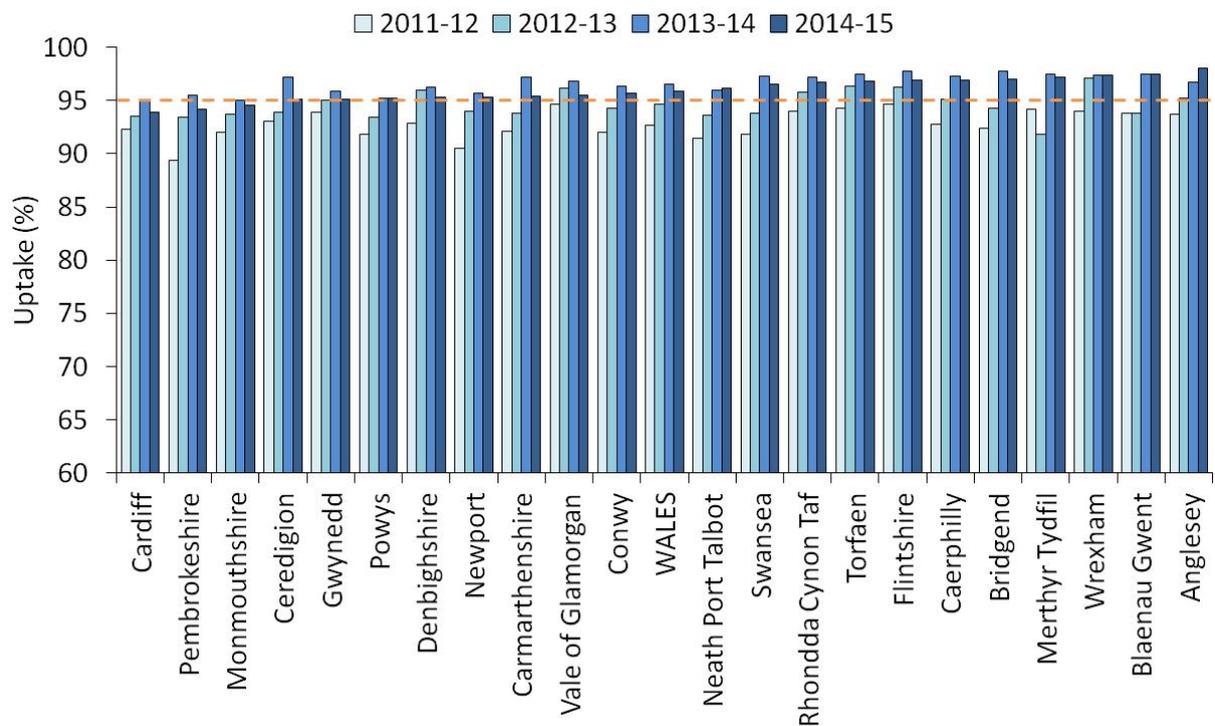
**Figure 5. (a)** Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5<sup>th</sup> birthday between 01/04/14 and 31/03/15. **(b)** Uptake of 4 in 1 vaccine in Welsh Local Authority areas in children reaching their 5<sup>th</sup> birthday between 01/04/14 and 31/03/15.



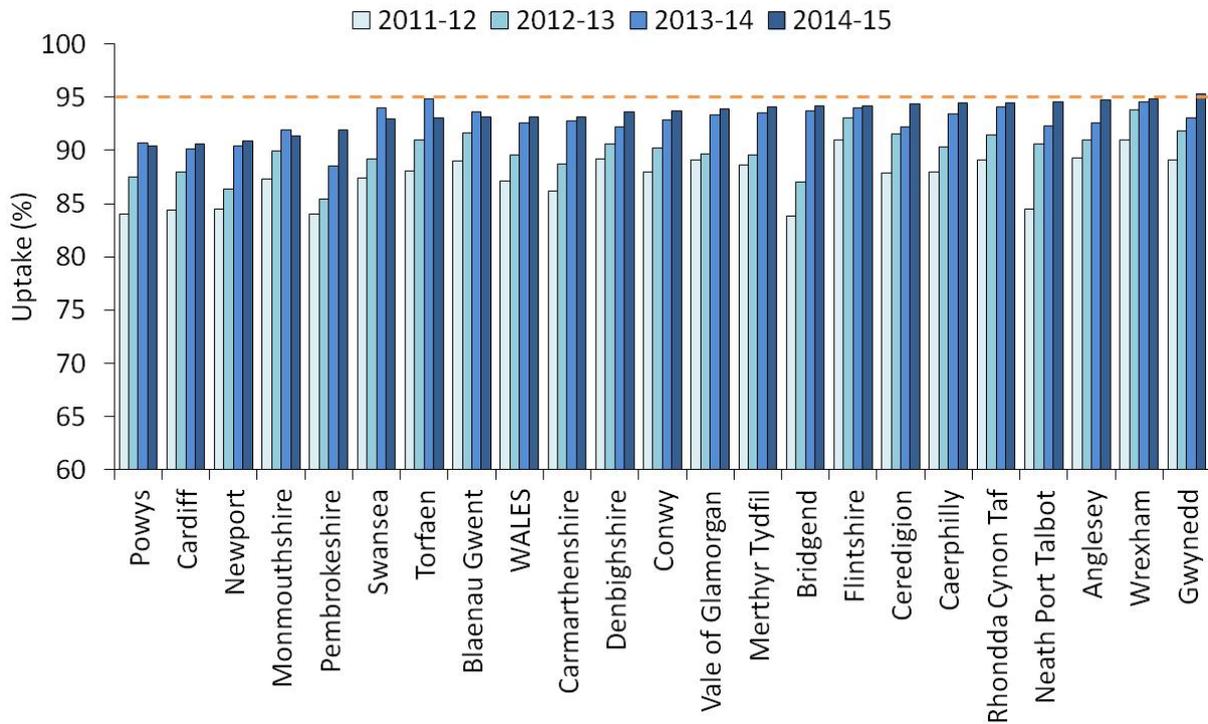
**Figure 6.** Annual uptake of 5 in 1 vaccine by 1 year of age (2011 – 2015 financial years, ranked by uptake in 2014-2015).



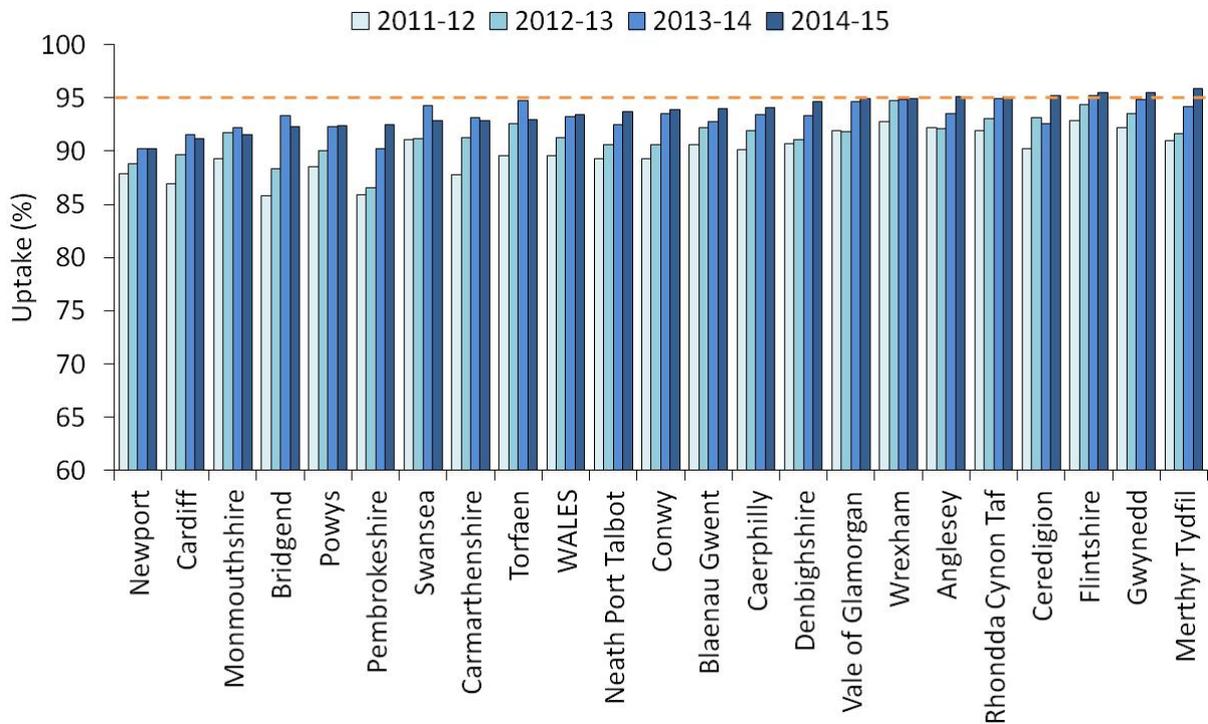
**Figure 7.** Annual uptake of 1 dose of MMR by 2 years of age (2011 – 2015 financial years, ranked by uptake in 2014-2015).



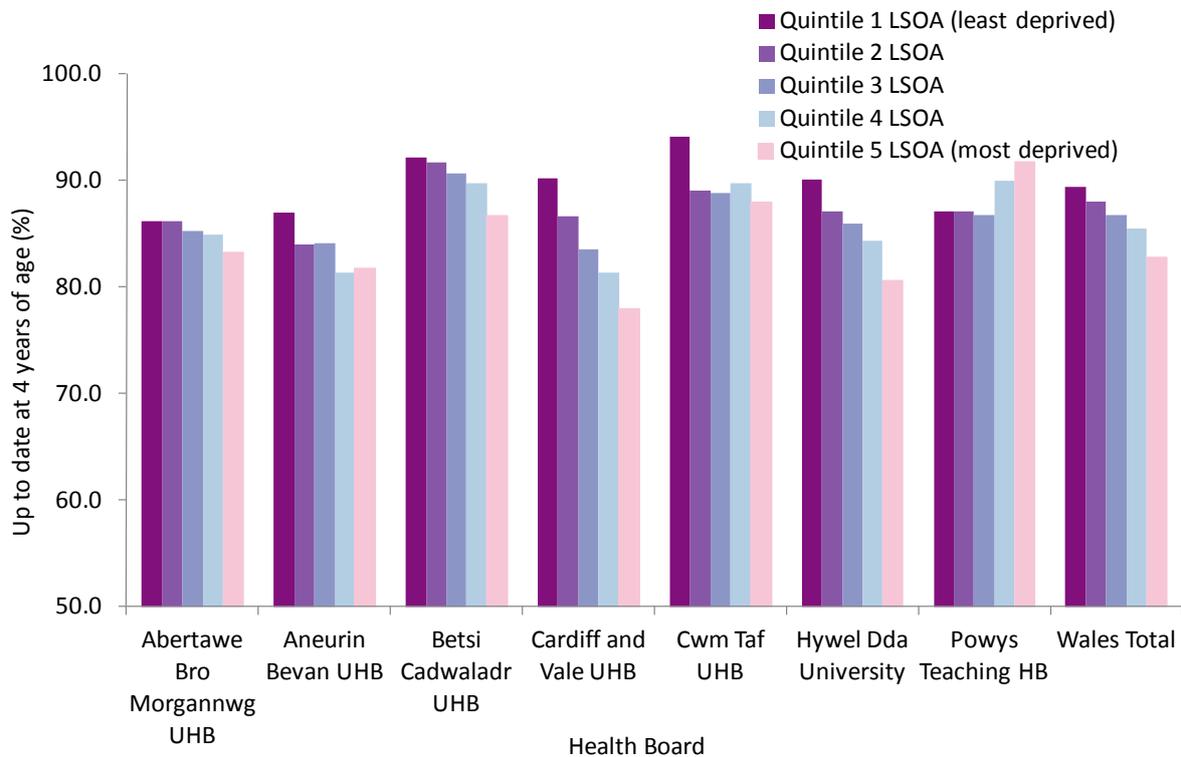
**Figure 8.** Annual uptake of 2 doses of MMR by 5 years of age (2011 – 2015 financial years, ranked by uptake in 2014-2015).



**Figure 9.** Annual uptake of the '4 in 1' pre-school booster by 5 years of age (2011 – 2015 financial years, ranked by uptake in 2014-2015).



**Figure 10.** Percentages of children who are up to date with routine immunisations<sup>10</sup> by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.



<sup>10</sup> Completed 4 in 1 preschool booster, the Hib/ MenC booster and second MMR dose by four years of age. The calculation method for proportions of children up to date with routine immunisation by four years of age was revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age.

**Table 3.** Vaccine uptake in children reaching their 1st birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC*	Rotavirus	PCV2**	HibMenCb
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)				
<b><u>Abertawe Bro Morgannwg University HB</u></b>											
Bridgend LA	1532	1492 97.4	1492 97.4	1492 97.4	1490 97.3	1489 97.2	6 0.4	1504 98.2	1340 87.5	1488 97.1	3 0.2
Neath Port Talbot LA	1462	1426 97.5	1426 97.5	1426 97.5	1426 97.5	1426 97.5	8 0.5	1441 98.6	1229 84.1	1425 97.5	2 0.1
Swansea LA	2501	2422 96.8	2422 96.8	2422 96.8	2420 96.8	2419 96.7	7 0.3	2440 97.6	2111 84.4	2421 96.8	5 0.2
<b>Health Board Total</b>	<b>5495</b>	<b>5340 97.2</b>	<b>5340 97.2</b>	<b>5340 97.2</b>	<b>5336 97.1</b>	<b>5334 97.1</b>	<b>21 0.4</b>	<b>5385 98.0</b>	<b>4680 85.2</b>	<b>5334 97.1</b>	<b>10 0.2</b>
<b><u>Aneurin Bevan University HB</u></b>											
Blaenau Gwent LA	799	786 98.4	786 98.4	786 98.4	786 98.4	786 98.4	7 0.9	793 99.2	658 82.4	791 99.0	7 0.9
Caerphilly LA	2013	1978 98.3	1978 98.3	1978 98.3	1978 98.3	1978 98.3	2 0.1	1992 99.0	1761 87.5	1977 98.2	2 0.1
Monmouthshire LA	768	735 95.7	735 95.7	735 95.7	735 95.7	735 95.7	4 0.5	738 96.1	632 82.3	736 95.8	1 0.1
Newport LA	1898	1830 96.4	1830 96.4	1830 96.4	1830 96.4	1829 96.4	4 0.2	1852 97.6	1568 82.6	1818 95.8	1 0.1
Torfaen LA	1061	1045 98.5	1045 98.5	1045 98.5	1045 98.5	1045 98.5	0 0.0	1048 98.8	903 85.1	1045 98.5	0 0.0
<b>Health Board Total</b>	<b>6539</b>	<b>6374 97.5</b>	<b>6374 97.5</b>	<b>6374 97.5</b>	<b>6374 97.5</b>	<b>6373 97.5</b>	<b>17 0.3</b>	<b>6423 98.2</b>	<b>5522 84.4</b>	<b>6367 97.4</b>	<b>11 0.2</b>
<b><u>Betsi Cadwaladr University HB</u></b>											
Anglesey LA	739	719 97.3	719 97.3	719 97.3	719 97.3	719 97.3	5 0.7	730 98.8	616 83.4	721 97.6	5 0.7
Conwy LA	1057	1019 96.4	1019 96.4	1019 96.4	1019 96.4	1019 96.4	5 0.5	1034 97.8	894 84.6	1017 96.2	5 0.5
Denbighshire LA	1041	995 95.6	995 95.6	995 95.6	995 95.6	995 95.6	15 1.4	1010 97.0	825 79.3	994 95.5	13 1.2
Flintshire LA	1593	1559 97.9	1559 97.9	1559 97.9	1557 97.7	1555 97.6	8 0.5	1558 97.8	1336 83.9	1552 97.4	6 0.4
Gwynedd LA	1181	1145 97.0	1145 97.0	1145 97.0	1146 97.0	1145 97.0	14 1.2	1132 95.9	969 82.0	1140 96.5	12 1.0
Wrexham LA	1607	1567 97.5	1567 97.5	1567 97.5	1564 97.3	1566 97.4	5 0.3	1578 98.2	1339 83.3	1562 97.2	3 0.2
<b>Health Board Total</b>	<b>7218</b>	<b>7004 97.0</b>	<b>7004 97.0</b>	<b>7004 97.0</b>	<b>7000 97.0</b>	<b>6999 97.0</b>	<b>52 0.7</b>	<b>7042 97.6</b>	<b>5979 82.8</b>	<b>6986 96.8</b>	<b>44 0.6</b>
<b><u>Cardiff and Vale University HB</u></b>											
Cardiff LA	4530	4234 93.5	4233 93.4	4232 93.4	4233 93.4	4232 93.4	23 0.5	4273 94.3	3493 77.1	4192 92.5	27 0.6
Vale of Glamorgan LA	1340	1284 95.8	1284 95.8	1284 95.8	1284 95.8	1284 95.8	7 0.5	1293 96.5	1118 83.4	1274 95.1	5 0.4
<b>Health Board Total</b>	<b>5870</b>	<b>5518 94.0</b>	<b>5517 94.0</b>	<b>5516 94.0</b>	<b>5517 94.0</b>	<b>5516 94.0</b>	<b>30 0.5</b>	<b>5566 94.8</b>	<b>4611 78.6</b>	<b>5466 93.1</b>	<b>32 0.5</b>
<b><u>Cwm Taf University HB</u></b>											
Merthyr Tydfil LA	670	662 98.8	662 98.8	662 98.8	662 98.8	662 98.8	0 0.0	663 99.0	584 87.2	659 98.4	0 0.0
Rhondda Cynon Taf LA	2698	2653 98.3	2653 98.3	2653 98.3	2651 98.3	2650 98.2	3 0.1	2656 98.4	2428 90.0	2648 98.1	3 0.1
<b>Health Board Total</b>	<b>3368</b>	<b>3315 98.4</b>	<b>3315 98.4</b>	<b>3315 98.4</b>	<b>3313 98.4</b>	<b>3312 98.3</b>	<b>3 0.1</b>	<b>3319 98.5</b>	<b>3012 89.4</b>	<b>3307 98.2</b>	<b>3 0.1</b>
<b><u>Hywel Dda University HB</u></b>											
Carmarthenshire LA	1850	1784 96.4	1784 96.4	1784 96.4	1784 96.4	1784 96.4	10 0.5	1801 97.4	1585 85.7	1777 96.1	10 0.5
Ceredigion LA	642	610 95.0	610 95.0	610 95.0	608 94.7	610 95.0	4 0.6	610 95.0	513 79.9	607 94.5	2 0.3
Pembrokeshire LA	1180	1119 94.8	1119 94.8	1119 94.8	1119 94.8	1119 94.8	4 0.3	1141 96.7	990 83.9	1119 94.8	4 0.3
<b>Health Board Total</b>	<b>3672</b>	<b>3513 95.7</b>	<b>3513 95.7</b>	<b>3513 95.7</b>	<b>3511 95.6</b>	<b>3513 95.7</b>	<b>18 0.5</b>	<b>3552 96.7</b>	<b>3088 84.1</b>	<b>3503 95.4</b>	<b>16 0.4</b>
<b><u>Powys Teaching HB</u></b>											
Unknown	99	98 99.0	98 99.0	98 99.0	98 99.0	98 99.0	0 0.0	97 98.0	79 79.8	97 98.0	0 0.0
<b>Wales Total</b>	<b>33411</b>	<b>32266 96.6</b>	<b>32265 96.6</b>	<b>32264 96.6</b>	<b>32253 96.5</b>	<b>32249 96.5</b>	<b>147 0.4</b>	<b>32490 97.2</b>	<b>27923 83.6</b>	<b>32163 96.3</b>	<b>121 0.4</b>

\* MenC uptake for children reaching one year of age this quarter is based on a completed one dose primary course of MenC vaccination. This is due to the MenC programme change in June 2013 from a two dose MenC primary course given at 3 months and 4 months of age to a one dose primary course at 3 months of age.

\*\* Full primary 2 dose course of pneumococcal conjugate vaccine

**Table 4.** Vaccine uptake in children reaching their 2nd birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC*	PCV2**	PCVf***	HibMenCb
	(n)	(n) (%)									
<b><u>Abertawe Bro Morgannwg University LHB</u></b>											
Bridgend LA	1600	1577 98.6	1576 98.5	1577 98.6	1576 98.5	1575 98.4	1552 97.0	1578 98.6	1560 97.5	1544 96.5	1536 96.0
Neath Port Talbot LA	1498	1471 98.2	1471 98.2	1471 98.2	1471 98.2	1471 98.2	1440 96.1	1480 98.8	1452 96.9	1420 94.8	1413 94.3
Swansea LA	2587	2539 98.1	2539 98.1	2539 98.1	2535 98.0	2536 98.0	2496 96.5	2520 97.4	2505 96.8	2487 96.1	2465 95.3
<b>Health Board Total</b>	<b>5685</b>	<b>5587 98.3</b>	<b>5586 98.3</b>	<b>5587 98.3</b>	<b>5582 98.3</b>	<b>5582 98.2</b>	<b>5488 96.5</b>	<b>5578 98.1</b>	<b>5517 97.0</b>	<b>5451 95.9</b>	<b>5414 95.2</b>
<b><u>Aneurin Bevan University LHB</u></b>											
Blaenau Gwent LA	790	781 98.9	781 98.9	781 98.9	781 98.9	781 98.9	770 97.5	782 99.0	773 97.8	770 97.5	767 97.1
Caerphilly LA	2085	2051 98.4	2051 98.4	2051 98.4	2049 98.3	2049 98.3	2020 96.9	2047 98.2	2035 97.6	2022 97.0	2010 96.4
Monmouthshire LA	866	833 96.2	833 96.2	833 96.2	833 96.2	833 96.2	819 94.6	827 95.5	822 94.9	819 94.6	817 94.3
Newport LA	1931	1891 97.9	1891 97.9	1891 97.9	1892 98.0	1891 97.9	1841 95.3	1854 96.0	1851 95.9	1840 95.3	1808 93.6
Torfaen LA	1122	1104 98.4	1104 98.4	1104 98.4	1103 98.3	1103 98.3	1086 96.8	1104 98.4	1099 98.0	1083 96.5	1080 96.3
<b>Health Board Total</b>	<b>6794</b>	<b>6660 98.0</b>	<b>6660 98.0</b>	<b>6660 98.0</b>	<b>6658 98.0</b>	<b>6657 98.0</b>	<b>6536 96.2</b>	<b>6614 97.4</b>	<b>6580 96.9</b>	<b>6534 96.2</b>	<b>6482 95.4</b>
<b><u>Betsi Cadwaladr University LHB</u></b>											
Anglesey LA	805	798 99.1	798 99.1	798 99.1	798 99.1	797 99.0	789 98.0	796 98.9	790 98.1	791 98.3	786 97.6
Conwy LA	1141	1125 98.6	1125 98.6	1125 98.6	1125 98.6	1125 98.6	1092 95.7	1125 98.6	1108 97.1	1093 95.8	1084 95.0
Denbighshire LA	1035	1014 98.0	1014 98.0	1014 98.0	1013 97.9	1014 98.0	986 95.3	1018 98.4	1003 96.9	990 95.7	984 95.1
Flintshire LA	1658	1626 98.1	1626 98.1	1625 98.0	1624 97.9	1624 97.9	1606 96.9	1626 98.1	1607 96.9	1599 96.4	1591 96.0
Gwynedd LA	1298	1263 97.3	1263 97.3	1263 97.3	1262 97.2	1262 97.2	1235 95.1	1231 94.8	1250 96.3	1234 95.1	1235 95.1
Wrexham LA	1660	1643 99.0	1643 99.0	1643 99.0	1643 99.0	1643 99.0	1616 97.3	1640 98.8	1626 98.0	1616 97.3	1597 96.2
<b>Health Board Total</b>	<b>7597</b>	<b>7469 98.3</b>	<b>7469 98.3</b>	<b>7468 98.3</b>	<b>7465 98.3</b>	<b>7465 98.3</b>	<b>7324 96.4</b>	<b>7436 97.9</b>	<b>7384 97.2</b>	<b>7323 96.4</b>	<b>7277 95.8</b>
<b><u>Cardiff and Vale University LHB</u></b>											
Cardiff LA	4563	4372 95.8	4372 95.8	4371 95.8	4369 95.7	4359 95.5	4285 93.9	4304 94.3	4220 92.5	4248 93.1	4201 92.1
Vale of Glamorgan LA	1409	1370 97.2	1370 97.2	1370 97.2	1369 97.2	1369 97.2	1346 95.5	1367 97.0	1357 96.3	1349 95.7	1347 95.6
<b>Health Board Total</b>	<b>5972</b>	<b>5742 96.1</b>	<b>5742 96.1</b>	<b>5741 96.1</b>	<b>5738 96.1</b>	<b>5728 95.9</b>	<b>5631 94.3</b>	<b>5671 95.0</b>	<b>5577 93.4</b>	<b>5597 93.7</b>	<b>5548 92.9</b>
<b><u>Cwm Taf University LHB</u></b>											
Merthyr Tydfil LA	720	714 99.2	714 99.2	714 99.2	713 99.0	714 99.2	700 97.2	710 98.6	703 97.6	704 97.8	700 97.2
Rhondda Cynon Taf LA	2727	2696 98.9	2696 98.9	2696 98.9	2696 98.9	2696 98.9	2636 96.7	2691 98.7	2666 97.8	2643 96.9	2631 96.5
<b>Health Board Total</b>	<b>3447</b>	<b>3410 98.9</b>	<b>3410 98.9</b>	<b>3410 98.9</b>	<b>3409 98.9</b>	<b>3410 98.9</b>	<b>3336 96.8</b>	<b>3401 98.7</b>	<b>3369 97.7</b>	<b>3347 97.1</b>	<b>3331 96.6</b>
<b><u>Hywel Dda University LHB</u></b>											
Carmarthenshire LA	1892	1847 97.6	1847 97.6	1847 97.6	1846 97.6	1847 97.6	1805 95.4	1845 97.5	1825 96.5	1795 94.9	1786 94.4
Ceredigion LA	695	679 97.7	679 97.7	679 97.7	677 97.4	676 97.3	661 95.1	675 97.1	672 96.7	669 96.3	669 96.3
Pembrokeshire LA	1273	1237 97.2	1237 97.2	1237 97.2	1237 97.2	1236 97.1	1199 94.2	1234 96.9	1210 95.1	1204 94.6	1189 93.4
<b>Health Board Total</b>	<b>3860</b>	<b>3763 97.5</b>	<b>3763 97.5</b>	<b>3763 97.5</b>	<b>3760 97.4</b>	<b>3759 97.4</b>	<b>3665 94.9</b>	<b>3754 97.3</b>	<b>3707 96.0</b>	<b>3668 95.0</b>	<b>3644 94.4</b>
<b><u>Powys Teaching LHB</u></b>	<b>1219</b>	<b>1187 97.4</b>	<b>1161 95.2</b>	<b>1161 95.2</b>	<b>1174 96.3</b>	<b>1163 95.4</b>	<b>1161 95.2</b>				
Unknown	103	98 95.1	98 95.1	98 95.1	98 95.1	97 94.2	96 93.2	98 95.1	93 90.3	97 94.2	96 93.2
<b>Wales Total</b>	<b>34677</b>	<b>33916 97.8</b>	<b>33915 97.8</b>	<b>33914 97.8</b>	<b>33897 97.8</b>	<b>33885 97.7</b>	<b>33237 95.8</b>	<b>33713 97.2</b>	<b>33401 96.3</b>	<b>33180 95.7</b>	<b>32953 95.0</b>

\* Reflects uptake of the completed two dose primary course in this age group (before June 2013 changes)

\*\* Full primary 2 dose course of pneumococcal conjugate vaccine

\*\*\* Final (booster) dose of pneumococcal conjugate vaccine

**Table 5.** Vaccine uptake in children reaching their 4th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Area	Resident Children	4 in 1 Preschool booster*	HibMenCb	MMR dose 2	Up to date in schedule***
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
<b>Abertawe Bro Morgannwg University LHB</b>					
Bridgend LA	1631	1396 85.6	1569 96.2	1462 89.6	1372 84.1
Neath Port Talbot LA	1617	1424 88.1	1571 97.2	1501 92.8	1400 86.6
Swansea LA	2685	2316 86.3	2551 95.0	2449 91.2	2265 84.4
<b>Health Board Total</b>	<b>5933</b>	<b>5136 86.6</b>	<b>5691 95.9</b>	<b>5412 91.2</b>	<b>5037 84.9</b>
<b>Aneurin Bevan University LHB</b>					
Blaenau Gwent LA	775	658 84.9	741 95.6	667 86.1	644 83.1
Caerphilly LA	2175	1871 86.0	2107 96.9	1956 89.9	1841 84.6
Monmouthshire LA	886	787 88.8	831 93.8	787 88.8	766 86.5
Newport LA	2010	1699 84.5	1856 92.3	1748 87.0	1629 81.0
Torfaen LA	1108	925 83.5	1075 97.0	958 86.5	908 81.9
<b>Health Board Total</b>	<b>6954</b>	<b>5940 85.4</b>	<b>6610 95.1</b>	<b>6116 87.9</b>	<b>5788 83.2</b>
<b>Betsi Cadwaladr University LHB</b>					
Anglesey LA	803	748 93.2	786 97.9	742 92.4	740 92.2
Conwy LA	1142	1018 89.1	1108 97.0	1017 89.1	1007 88.2
Denbighshire LA	1091	972 89.1	1056 96.8	975 89.4	962 88.2
Flintshire LA	1715	1592 92.8	1666 97.1	1582 92.2	1560 91.0
Gwynedd LA	1223	1136 92.9	1178 96.3	1128 92.2	1118 91.4
Wrexham LA	1675	1555 92.8	1610 96.1	1549 92.5	1524 91.0
<b>Health Board Total</b>	<b>7649</b>	<b>7021 91.8</b>	<b>7404 96.8</b>	<b>6993 91.4</b>	<b>6911 90.4</b>
<b>Cardiff and Vale University LHB</b>					
Cardiff LA	4588	3926 85.6	4229 92.2	3931 85.7	3783 82.5
Vale of Glamorgan LA	1448	1298 89.6	1389 95.9	1304 90.1	1275 88.1
<b>Health Board Total</b>	<b>6036</b>	<b>5224 86.5</b>	<b>5618 93.1</b>	<b>5235 86.7</b>	<b>5058 83.8</b>
<b>Cwm Taf University LHB</b>					
Merthyr Tydfil LA	702	653 93.0	658 93.7	651 92.7	622 88.6
Rhondda Cynon Taff LA	2796	2551 91.2	2710 96.9	2543 91.0	2505 89.6
<b>Health Board Total</b>	<b>3498</b>	<b>3204 91.6</b>	<b>3368 96.3</b>	<b>3194 91.3</b>	<b>3127 89.4</b>
<b>Hywel Dda University LHB</b>					
Carmarthenshire LA	2003	1736 86.7	1892 94.5	1793 89.5	1685 84.1
Ceredigion LA	717	667 93.0	678 94.6	656 91.5	647 90.2
Pembrokeshire LA	1333	1161 87.1	1267 95.0	1156 86.7	1135 85.1
<b>Health Board Total</b>	<b>4053</b>	<b>3564 87.9</b>	<b>3837 94.7</b>	<b>3605 88.9</b>	<b>3467 85.5</b>
<b>Powys Teaching Health Board</b>	<b>1255</b>	<b>1124 89.6</b>	<b>1180 94.0</b>	<b>1135 90.4</b>	<b>1101 87.7</b>
Unknown	77	72 93.5	76 98.7	74 96.1	72 93.5
<b>Wales Total</b>	<b>35455</b>	<b>31213 88.0</b>	<b>33784 95.3</b>	<b>31764 89.6</b>	<b>30561 86.2</b>

\* Uptake of acellular pertussis used as proxy

\*\* Completed 4 in 1 preschool booster, the Hib/MenC booster and second MMR dose by four years of age. The calculation method for proportions of children up to date with routine immunisation by four years of age was revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age.

**Table 6.** Vaccine uptake in children reaching their 5th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC*	PCVf**	HibMenCb	MMR1	MMR2	D4	T4	aP	Po4
	(n)	(n) (%)													
<b>Abertawe Bro Morgannwg University LHB</b>															
Bridgend LA	1623	1595 98.3	1595 98.3	1595 98.3	1594 98.2	1594 98.2	1566 96.5	1531 94.3	1554 95.7	1596 98.3	1528 94.1	1498 92.3	1498 92.3	1498 92.3	1498 92.3
Neath Port Talbot LA	1562	1538 98.5	1538 98.5	1538 98.5	1538 98.5	1538 98.5	1499 96.0	1469 94.0	1496 95.8	1530 98.0	1477 94.6	1464 93.7	1464 93.7	1464 93.7	1464 93.7
Swansea LA	2654	2568 96.8	2568 96.8	2568 96.8	2566 96.7	2564 96.6	2488 93.7	2456 92.5	2496 94.0	2559 96.4	2466 92.9	2464 92.8	2464 92.8	2464 92.8	2462 92.8
<b>Health Board Total</b>	<b>5839</b>	<b>5701 97.6</b>	<b>5701 97.6</b>	<b>5701 97.6</b>	<b>5698 97.6</b>	<b>5696 97.6</b>	<b>5553 95.1</b>	<b>5456 93.4</b>	<b>5546 95.0</b>	<b>5685 97.4</b>	<b>5471 93.7</b>	<b>5426 92.9</b>	<b>5426 92.9</b>	<b>5426 92.9</b>	<b>5424 92.9</b>
<b>Aneurin Bevan University LHB</b>															
Blaenau Gwent LA	782	771 98.6	771 98.6	771 98.6	770 98.5	770 98.5	761 97.3	741 94.8	744 95.1	765 97.8	728 93.1	735 94.0	735 94.0	735 94.0	735 94.0
Caerphilly LA	2160	2126 98.4	2126 98.4	2126 98.4	2126 98.4	2125 98.4	2105 97.5	2043 94.6	2060 95.4	2117 98.0	2040 94.4	2033 94.1	2033 94.1	2033 94.1	2033 94.1
Monmouthshire LA	901	847 94.0	847 94.0	847 94.0	847 94.0	846 93.9	818 90.8	818 90.8	822 91.2	857 95.1	823 91.3	825 91.6	825 91.6	825 91.6	825 91.6
Newport LA	2002	1918 95.8	1918 95.8	1918 95.8	1913 95.6	1911 95.5	1839 91.9	1803 90.1	1832 91.5	1919 95.9	1820 90.9	1806 90.2	1806 90.2	1806 90.2	1803 90.1
Torfaen LA	1088	1069 98.3	1069 98.3	1069 98.3	1069 98.3	1069 98.3	1052 96.7	1033 94.9	1041 95.7	1058 97.2	1012 93.0	1011 92.9	1011 92.9	1011 92.9	1011 92.9
<b>Health Board Total</b>	<b>6933</b>	<b>6731 97.1</b>	<b>6731 97.1</b>	<b>6731 97.1</b>	<b>6725 97.0</b>	<b>6721 96.9</b>	<b>6575 94.8</b>	<b>6438 92.9</b>	<b>6499 93.7</b>	<b>6716 96.9</b>	<b>6423 92.6</b>	<b>6410 92.5</b>	<b>6410 92.5</b>	<b>6410 92.5</b>	<b>6407 92.4</b>
<b>Betsi Cadwaladr University LHB</b>															
Anglesey LA	781	764 97.8	764 97.8	764 97.8	764 97.8	762 97.6	740 94.8	726 93.0	745 95.4	764 97.8	740 94.8	743 95.1	743 95.1	743 95.1	743 95.1
Conwy LA	1170	1144 97.8	1144 97.8	1144 97.8	1143 97.7	1143 97.7	1114 95.2	1092 93.3	1109 94.8	1137 97.2	1096 93.7	1098 93.8	1098 93.8	1098 93.8	1098 93.8
Denbighshire LA	1068	1037 97.1	1037 97.1	1037 97.1	1037 97.1	1037 97.1	1020 95.5	997 93.4	1019 95.4	1034 96.8	1000 93.6	1011 94.7	1011 94.7	1011 94.7	1011 94.7
Flintshire LA	1780	1741 97.8	1740 97.8	1741 97.8	1738 97.6	1740 97.8	1705 95.8	1681 94.4	1697 95.3	1731 97.2	1676 94.2	1700 95.5	1700 95.5	1700 95.5	1700 95.5
Gwynedd LA	1270	1232 97.0	1232 97.0	1232 97.0	1232 97.0	1231 96.9	1188 93.5	1186 93.4	1200 94.5	1233 97.1	1210 95.3	1213 95.5	1213 95.5	1213 95.5	1213 95.5
Wrexham LA	1669	1634 97.9	1634 97.9	1634 97.9	1631 97.7	1631 97.7	1588 95.1	1571 94.1	1588 95.1	1629 97.6	1582 94.8	1585 95.0	1585 95.0	1585 95.0	1585 95.0
<b>Health Board Total</b>	<b>7738</b>	<b>7552 97.6</b>	<b>7551 97.6</b>	<b>7552 97.6</b>	<b>7545 97.5</b>	<b>7544 97.5</b>	<b>7355 95.1</b>	<b>7253 93.7</b>	<b>7358 95.1</b>	<b>7528 97.3</b>	<b>7304 94.4</b>	<b>7350 95.0</b>	<b>7350 95.0</b>	<b>7350 95.0</b>	<b>7350 95.0</b>
<b>Cardiff and Vale University LHB</b>															
Cardiff LA	4509	4347 96.4	4347 96.4	4346 96.4	4336 96.2	4318 95.8	4089 90.7	4061 90.1	4085 90.6	4337 96.2	4087 90.6	4111 91.2	4111 91.2	4111 91.2	4111 91.2
Vale of Glamorgan LA	1566	1538 98.2	1538 98.2	1538 98.2	1538 98.2	1538 98.2	1502 95.9	1493 95.3	1487 95.0	1532 97.8	1470 93.9	1486 94.9	1486 94.9	1486 94.9	1486 94.9
<b>Health Board Total</b>	<b>6075</b>	<b>5885 96.9</b>	<b>5885 96.9</b>	<b>5884 96.9</b>	<b>5874 96.7</b>	<b>5856 96.4</b>	<b>5591 92.0</b>	<b>5554 91.4</b>	<b>5572 91.7</b>	<b>5869 96.6</b>	<b>5557 91.5</b>	<b>5597 92.1</b>	<b>5597 92.1</b>	<b>5597 92.1</b>	<b>5597 92.1</b>
<b>Cwm Taf University LHB</b>															
Merthyr Tydfil LA	671	659 98.2	659 98.2	659 98.2	658 98.1	657 97.9	653 97.3	636 94.8	648 96.6	660 98.4	631 94.0	643 95.8	643 95.8	643 95.8	643 95.8
Rhondda Cynon Taff LA	2757	2717 98.5	2717 98.5	2717 98.5	2716 98.5	2715 98.5	2673 97.0	2640 95.8	2656 96.3	2707 98.2	2604 94.5	2624 95.2	2624 95.2	2623 95.1	2623 95.1
<b>Health Board Total</b>	<b>3428</b>	<b>3376 98.5</b>	<b>3376 98.5</b>	<b>3376 98.5</b>	<b>3374 98.4</b>	<b>3372 98.4</b>	<b>3326 97.0</b>	<b>3276 95.6</b>	<b>3304 96.4</b>	<b>3367 98.2</b>	<b>3235 94.4</b>	<b>3267 95.3</b>	<b>3267 95.3</b>	<b>3266 95.3</b>	<b>3266 95.3</b>
<b>Hywel Dda University LHB</b>															
Cardiff LA	1907	1841 96.5	1841 96.5	1841 96.5	1836 96.3	1836 96.3	1796 94.2	1762 92.4	1779 93.3	1849 97.0	1776 93.1	1771 92.9	1771 92.9	1771 92.9	1771 92.9
Ceredigion LA	661	636 96.2	636 96.2	636 96.2	636 96.2	635 96.1	619 93.6	618 93.5	625 94.6	631 95.5	624 94.4	630 95.3	629 95.2	629 95.2	627 94.9
Pembrokeshire LA	1306	1260 96.5	1260 96.5	1260 96.5	1259 96.4	1258 96.3	1227 94.0	1188 91.0	1232 94.3	1258 96.3	1200 91.9	1208 92.5	1208 92.5	1208 92.5	1208 92.5
<b>Health Board Total</b>	<b>3874</b>	<b>3737 96.5</b>	<b>3737 96.5</b>	<b>3737 96.5</b>	<b>3731 96.3</b>	<b>3729 96.3</b>	<b>3642 94.0</b>	<b>3568 92.1</b>	<b>3636 93.9</b>	<b>3738 96.5</b>	<b>3600 92.9</b>	<b>3609 93.2</b>	<b>3608 93.1</b>	<b>3608 93.1</b>	<b>3606 93.1</b>
<b>Powys Teaching LHB</b>	<b>1273</b>	<b>1216 95.5</b>	<b>1216 95.5</b>	<b>1216 95.5</b>	<b>1211 95.1</b>	<b>1209 95.0</b>	<b>1167 91.7</b>	<b>1165 91.5</b>	<b>1171 92.0</b>	<b>1214 95.4</b>	<b>1151 90.4</b>	<b>1176 92.4</b>	<b>1176 92.4</b>	<b>1176 92.4</b>	<b>1176 92.4</b>
Unknown	102	97 95.1	97 95.1	97 95.1	97 95.1	97 95.1	92 90.2	90 88.2	94 92.2	96 94.1	92 90.2	93 91.2	93 91.2	93 91.2	93 91.2
<b>Wales Total</b>	<b>35262</b>	<b>34295 97.3</b>	<b>34294 97.3</b>	<b>34294 97.3</b>	<b>34255 97.1</b>	<b>34224 97.1</b>	<b>33301 94.4</b>	<b>32800 93.0</b>	<b>33180 94.1</b>	<b>34213 97.0</b>	<b>32833 93.1</b>	<b>32928 93.4</b>	<b>32927 93.4</b>	<b>32926 93.4</b>	<b>32919 93.4</b>

\* Refers to full completed courses of MenC (before the 2006 schedule change)

\*\* Final (booster) dose of pneumococcal conjugate vaccine

**Table 7.** HPV Vaccine uptake in girls reaching their 14th birthday between 01/09/2014 and 31/08/2015 and resident on 31/03/2015 (School Year 8 during 2013-14).

Area	Resident girls	HPV 1 dose		HPV 2 doses		HPV 3 doses	
		(n)	(%)	(n)	(%)	(n)	(%)
<b><u>Abertawe Bro Morgannwg University LHB</u></b>							
Bridgend LA	815	744	91.3	730	89.6	680	83.4
Neath Port Talbot LA	663	619	93.4	595	89.7	545	82.2
Swansea LA	1244	1134	91.2	1103	88.7	1039	83.5
<b>Health Board Total</b>	<b>2722</b>	<b>2497</b>	<b>91.7</b>	<b>2428</b>	<b>89.2</b>	<b>2264</b>	<b>83.2</b>
<b><u>Aneurin Bevan University LHB</u></b>							
Blaenau Gwent LA	344	332	96.5	321	93.3	301	87.5
Caerphilly LA	907	851	93.8	831	91.6	803	88.5
Monmouthshire LA	469	359	76.5	350	74.6	335	71.4
Newport LA	832	710	85.3	681	81.9	648	77.9
Torfaen LA	511	476	93.2	460	90.0	434	84.9
<b>Health Board Total</b>	<b>3063</b>	<b>2728</b>	<b>89.1</b>	<b>2643</b>	<b>86.3</b>	<b>2521</b>	<b>82.3</b>
<b><u>Betsi Cadwaladr University LHB</u></b>							
Anglesey LA	355	318	89.6	313	88.2	287	80.8
Conwy LA	606	539	88.9	536	88.4	523	86.3
Denbighshire LA	516	461	89.3	461	89.3	450	87.2
Flintshire LA	805	730	90.7	725	90.1	702	87.2
Gwynedd LA	591	529	89.5	525	88.8	517	87.5
Wrexham LA	682	619	90.8	610	89.4	601	88.1
<b>Health Board Total</b>	<b>3555</b>	<b>3196</b>	<b>89.9</b>	<b>3170</b>	<b>89.2</b>	<b>3080</b>	<b>86.6</b>
<b><u>Cardiff and Vale University LHB</u></b>							
Cardiff LA	1707	1469	86.1	1419	83.1	1244	72.9
Vale of Glamorgan LA	633	574	90.7	560	88.5	491	77.6
<b>Health Board Total</b>	<b>2340</b>	<b>2043</b>	<b>87.3</b>	<b>1979</b>	<b>84.6</b>	<b>1735</b>	<b>74.1</b>
<b><u>Cwm Taf University LHB</u></b>							
Merthyr Tydfil LA	279	259	92.8	257	92.1	256	91.8
Rhondda Cynon Taff LA	1152	1094	95.0	1085	94.2	1063	92.3
<b>Health Board Total</b>	<b>1431</b>	<b>1353</b>	<b>94.5</b>	<b>1342</b>	<b>93.8</b>	<b>1319</b>	<b>92.2</b>
<b><u>Hywel Dda University LHB</u></b>							
Carmarthenshire LA	827	767	92.7	760	91.9	751	90.8
Ceredigion LA	280	256	91.4	254	90.7	252	90.0
Pembrokeshire LA	541	468	86.5	463	85.6	446	82.4
<b>Health Board Total</b>	<b>1648</b>	<b>1491</b>	<b>90.5</b>	<b>1477</b>	<b>89.6</b>	<b>1449</b>	<b>87.9</b>
<b><u>Powys Teaching LHB</u></b>	<b>602</b>	<b>491</b>	<b>81.6</b>	<b>483</b>	<b>80.2</b>	<b>466</b>	<b>77.4</b>
Unknown	87	66	75.9	66	75.9	63	72.4
<b>Wales Total</b>	<b>15448</b>	<b>13865</b>	<b>89.8</b>	<b>13588</b>	<b>88.0</b>	<b>12897</b>	<b>83.5</b>

**Table 8.** Vaccine uptake in children reaching their 15th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster*		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
<b>Abertawe Bro Morgannwg University LHB</b>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
Bridgend LA	1549	1495	96.5	1437	92.8	1250	80.7	751	727	96.8	701	93.3	798	768	96.2	736	92.2			
Neath Port Talbot LA	1382	1337	96.7	1249	90.4	1182	85.5	644	623	96.7	588	91.3	738	714	96.7	661	89.6			
Swansea LA	2538	2412	95.0	2270	89.4	2222	87.5	1219	1165	95.6	1096	89.9	1319	1247	94.5	1174	89.0			
<b>Health Board Total</b>	<b>5469</b>	<b>5244</b>	<b>95.9</b>	<b>4956</b>	<b>90.6</b>	<b>4654</b>	<b>85.1</b>	<b>2614</b>	<b>2515</b>	<b>96.2</b>	<b>2385</b>	<b>91.2</b>	<b>2855</b>	<b>2729</b>	<b>95.6</b>	<b>2571</b>	<b>90.1</b>			
<b>Aneurin Bevan University LHB</b>																				
Blaenau Gwent LA	778	752	96.7	713	91.6	557	71.6	383	370	96.6	351	91.6	395	382	96.7	362	91.6			
Caerphilly LA	1993	1952	97.9	1857	93.2	1359	68.2	955	930	97.4	889	93.1	1038	1022	98.5	968	93.3			
Monmouthshire LA	1063	966	90.9	903	84.9	690	64.9	531	489	92.1	469	88.3	531	477	89.8	434	81.7			
Newport LA	1874	1777	94.8	1649	88.0	1289	68.8	891	850	95.4	793	89.0	983	927	94.3	856	87.1			
Torfaen LA	1017	994	97.7	946	93.0	688	67.6	503	494	98.2	469	93.2	513	500	97.5	477	93.0			
<b>Health Board Total</b>	<b>6725</b>	<b>6441</b>	<b>95.8</b>	<b>6068</b>	<b>90.2</b>	<b>4583</b>	<b>68.1</b>	<b>3263</b>	<b>3133</b>	<b>96.0</b>	<b>2971</b>	<b>91.1</b>	<b>3460</b>	<b>3308</b>	<b>95.6</b>	<b>3097</b>	<b>89.5</b>			
<b>Betsi Cadwaladr University LHB</b>																				
Anglesey LA	713	676	94.8	652	91.4	558	78.3	368	349	94.8	342	92.9	345	327	94.8	310	89.9			
Conwy LA	1236	1164	94.2	1100	89.0	1069	86.5	599	566	94.5	534	89.1	636	597	93.9	566	89.0			
Denbighshire LA	1075	1009	93.9	933	86.8	901	83.8	510	487	95.5	461	90.4	565	522	92.4	472	83.5			
Flintshire LA	1642	1577	96.0	1508	91.8	1393	84.8	796	770	96.7	736	92.5	846	807	95.4	772	91.3			
Gwynedd LA	1255	1192	95.0	1146	91.3	1047	83.4	610	579	94.9	559	91.6	645	613	95.0	587	91.0			
Wrexham LA	1428	1387	97.1	1341	93.9	1158	81.1	711	693	97.5	672	94.5	717	694	96.8	669	93.3			
<b>Health Board Total</b>	<b>7349</b>	<b>7005</b>	<b>95.3</b>	<b>6680</b>	<b>90.9</b>	<b>6126</b>	<b>83.4</b>	<b>3594</b>	<b>3444</b>	<b>95.8</b>	<b>3304</b>	<b>91.9</b>	<b>3754</b>	<b>3560</b>	<b>94.8</b>	<b>3376</b>	<b>89.9</b>			
<b>Cardiff and Vale University LHB</b>																				
Cardiff LA	3565	3348	93.9	3142	88.1	2706	75.9	1811	1708	94.3	1604	88.6	1754	1640	93.5	1538	87.7			
Vale of Glamorgan LA	1472	1419	96.4	1355	92.1	1221	82.9	717	692	96.5	661	92.2	754	727	96.4	694	92.0			
<b>Health Board Total</b>	<b>5037</b>	<b>4767</b>	<b>94.6</b>	<b>4497</b>	<b>89.3</b>	<b>3927</b>	<b>78.0</b>	<b>2528</b>	<b>2400</b>	<b>94.9</b>	<b>2265</b>	<b>89.6</b>	<b>2508</b>	<b>2367</b>	<b>94.4</b>	<b>2232</b>	<b>89.0</b>			
<b>Cwm Taf University LHB</b>																				
Merthyr Tydfil LA	666	637	95.6	597	89.6	597	89.6	313	299	95.5	280	89.5	353	338	95.8	317	89.8			
Rhondda Cynon Taff LA	2481	2405	96.9	2285	92.1	2197	88.6	1224	1193	97.5	1138	93.0	1257	1212	96.4	1147	91.2			
<b>Health Board Total</b>	<b>3147</b>	<b>3042</b>	<b>96.7</b>	<b>2882</b>	<b>91.6</b>	<b>2794</b>	<b>88.8</b>	<b>1537</b>	<b>1492</b>	<b>97.1</b>	<b>1418</b>	<b>92.3</b>	<b>1610</b>	<b>1550</b>	<b>96.3</b>	<b>1464</b>	<b>90.9</b>			
<b>Hywel Dda University LHB</b>																				
Carmarthenshire LA	1590	1509	94.9	1419	89.2	1318	82.9	753	724	96.1	685	91.0	837	785	93.8	734	87.7			
Ceredigion LA	632	600	94.9	568	89.9	560	88.6	307	293	95.4	281	91.5	325	307	94.5	287	88.3			
Pembrokeshire LA	1268	1192	94.0	1123	88.6	992	78.2	620	572	92.3	539	86.9	648	620	95.7	584	90.1			
<b>Health Board Total</b>	<b>3490</b>	<b>3301</b>	<b>94.6</b>	<b>3110</b>	<b>89.1</b>	<b>2870</b>	<b>82.2</b>	<b>1680</b>	<b>1589</b>	<b>94.6</b>	<b>1505</b>	<b>89.6</b>	<b>1810</b>	<b>1712</b>	<b>94.6</b>	<b>1605</b>	<b>88.7</b>			
<b>Powys Teaching LHB</b>	<b>1386</b>	<b>1292</b>	<b>93.2</b>	<b>1207</b>	<b>87.1</b>	<b>1034</b>	<b>74.6</b>	<b>663</b>	<b>618</b>	<b>93.2</b>	<b>574</b>	<b>86.6</b>	<b>722</b>	<b>674</b>	<b>93.4</b>	<b>633</b>	<b>87.7</b>			
Unknown	186	166	89.2	157	84.4	125	67.2	75	69	92.0	64	85.3	110	97	88.2	93	84.5			
<b>Wales Total</b>	<b>32789</b>	<b>31258</b>	<b>95.3</b>	<b>29557</b>	<b>90.1</b>	<b>26113</b>	<b>79.6</b>	<b>15954</b>	<b>15260</b>	<b>95.6</b>	<b>14486</b>	<b>90.8</b>	<b>16829</b>	<b>15997</b>	<b>95.1</b>	<b>15071</b>	<b>89.6</b>			

\* Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy)

**Table 9.** Vaccine uptake in children reaching their 16th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster*		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)		
<b>Abertawe Bro Morgannwg University LHB</b>																				
Bridgend LA	1586	1529	96.4	1469	92.6	1240	78.2		770	747	97.0	719	93.4	815	782	96.0	750	92.0		
Neath Port Talbot LA	1572	1539	97.9	1460	92.9	1338	85.1		784	763	97.3	721	92.0	788	776	98.5	739	93.8		
Swansea LA	2461	2366	96.1	2194	89.2	2098	85.2		1167	1122	96.1	1039	89.0	1294	1244	96.1	1155	89.3		
<b>Health Board Total</b>	<b>5619</b>	<b>5434</b>	<b>96.7</b>	<b>5123</b>	<b>91.2</b>	<b>4676</b>	<b>83.2</b>		<b>2721</b>	<b>2632</b>	<b>96.7</b>	<b>2479</b>	<b>91.1</b>	<b>2897</b>	<b>2802</b>	<b>96.7</b>	<b>2644</b>	<b>91.3</b>		
<b>Aneurin Bevan University LHB</b>																				
Blaenau Gwent LA	776	761	98.1	722	93.0	626	80.7		383	380	99.2	357	93.2	393	381	96.9	365	92.9		
Caerphilly LA	2084	2024	97.1	1919	92.1	1705	81.8		1043	1016	97.4	969	92.9	1041	1008	96.8	950	91.3		
Monmouthshire LA	1081	960	88.8	883	81.7	842	77.9		506	457	90.3	425	84.0	575	503	87.5	458	79.7		
Newport LA	1937	1824	94.2	1709	88.2	1480	76.4		960	912	95.0	855	89.1	976	912	93.4	854	87.5		
Torfaen LA	1116	1084	97.1	1037	92.9	915	82.0		549	537	97.8	508	92.5	567	547	96.5	529	93.3		
<b>Health Board Total</b>	<b>6994</b>	<b>6653</b>	<b>95.1</b>	<b>6270</b>	<b>89.6</b>	<b>5568</b>	<b>79.6</b>		<b>3441</b>	<b>3302</b>	<b>96.0</b>	<b>3114</b>	<b>90.5</b>	<b>3552</b>	<b>3351</b>	<b>94.3</b>	<b>3156</b>	<b>88.9</b>		
<b>Betsi Cadwaladr University LHB</b>																				
Anglesey LA	745	720	96.6	693	93.0	637	85.5		342	334	97.7	319	93.3	403	386	95.8	374	92.8		
Conwy LA	1197	1145	95.7	1104	92.2	1054	88.1		601	587	97.7	571	95.0	594	557	93.8	533	89.7		
Denbighshire LA	1148	1103	96.1	1026	89.4	974	84.8		577	548	95.0	507	87.9	571	555	97.2	519	90.9		
Flintshire LA	1743	1690	97.0	1612	92.5	1501	86.1		839	816	97.3	781	93.1	904	874	96.7	831	91.9		
Gwynedd LA	1265	1212	95.8	1173	92.7	1093	86.4		633	609	96.2	592	93.5	631	602	95.4	580	91.9		
Wrexham LA	1418	1376	97.0	1331	93.9	1185	83.6		659	634	96.2	615	93.3	759	742	97.8	716	94.3		
<b>Health Board Total</b>	<b>7516</b>	<b>7246</b>	<b>96.4</b>	<b>6939</b>	<b>92.3</b>	<b>6444</b>	<b>85.7</b>		<b>3651</b>	<b>3528</b>	<b>96.6</b>	<b>3385</b>	<b>92.7</b>	<b>3862</b>	<b>3716</b>	<b>96.2</b>	<b>3553</b>	<b>92.0</b>		
<b>Cardiff and Vale University LHB</b>																				
Cardiff LA	3732	3473	93.1	3224	86.4	2853	76.4		1787	1669	93.4	1556	87.1	1944	1803	92.7	1668	85.8		
Vale of Glamorgan LA	1492	1402	94.0	1337	89.6	1240	83.1		730	682	93.4	650	89.0	762	720	94.5	687	90.2		
<b>Health Board Total</b>	<b>5224</b>	<b>4875</b>	<b>93.3</b>	<b>4561</b>	<b>87.3</b>	<b>4093</b>	<b>78.3</b>		<b>2517</b>	<b>2351</b>	<b>93.4</b>	<b>2206</b>	<b>87.6</b>	<b>2706</b>	<b>2523</b>	<b>93.2</b>	<b>2355</b>	<b>87.0</b>		
<b>Cwm Taf University LHB</b>																				
Merthyr Tydfil LA	670	646	96.4	617	92.1	601	89.7		324	311	96.0	297	91.7	346	335	96.8	320	92.5		
Rhondda Cynon Taff LA	2568	2509	97.7	2388	93.0	2281	88.8		1241	1211	97.6	1152	92.8	1327	1298	97.8	1236	93.1		
<b>Health Board Total</b>	<b>3238</b>	<b>3155</b>	<b>97.4</b>	<b>3005</b>	<b>92.8</b>	<b>2882</b>	<b>89.0</b>		<b>1565</b>	<b>1522</b>	<b>97.3</b>	<b>1449</b>	<b>92.6</b>	<b>1673</b>	<b>1633</b>	<b>97.6</b>	<b>1556</b>	<b>93.0</b>		
<b>Hywel Dda University LHB</b>																				
Cardiff LA	1684	1598	94.9	1512	89.8	1393	82.7		822	785	95.5	748	91.0	862	813	94.3	764	88.6		
Ceredigion LA	684	648	94.7	612	89.5	588	86.0		332	316	95.2	303	91.3	352	332	94.3	309	87.8		
Pembrokeshire LA	1399	1296	92.6	1213	86.7	1060	75.8		673	628	93.3	589	87.5	726	668	92.0	624	86.0		
<b>Health Board Total</b>	<b>3767</b>	<b>3542</b>	<b>94.0</b>	<b>3337</b>	<b>88.6</b>	<b>3041</b>	<b>80.7</b>		<b>1827</b>	<b>1729</b>	<b>94.6</b>	<b>1640</b>	<b>89.8</b>	<b>1940</b>	<b>1813</b>	<b>93.5</b>	<b>1697</b>	<b>87.5</b>		
<b>Powys Teaching LHB</b>																				
Unknown	1495	1386	92.7	1312	87.8	1096	73.3		724	678	93.6	643	88.8	771	708	91.8	669	86.8		
Unknown	185	150	81.1	135	73.0	122	65.9		80	61	76.3	53	66.3	105	89	84.8	82	78.1		
<b>Wales Total</b>	<b>34038</b>	<b>32441</b>	<b>95.3</b>	<b>30682</b>	<b>90.1</b>	<b>27922</b>	<b>82.0</b>		<b>16526</b>	<b>15803</b>	<b>95.6</b>	<b>14969</b>	<b>90.6</b>	<b>17506</b>	<b>16635</b>	<b>95.0</b>	<b>15712</b>	<b>89.8</b>		

\* Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy).

**Table 10.** Percentages of children who are up to date with routine immunisations\* by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Health Board	Lower Super Output Areas in Deprivation Quintile 1			Lower Super Output Areas in Deprivation Quintile 2			Lower Super Output Areas in Deprivation Quintile 3			Lower Super Output Areas in Deprivation Quintile 4			Lower Super Output Areas in Deprivation Quintile 5		
	Resident children	Up to date by 4y		Resident children	Up to date by 4y		Resident children	Up to date by 4y		Resident children	Up to date by 4y		Resident children	Up to date by 4y	
	(n)	(n)	(%)												
Abertawe Bro Morgannwg	1161	1001	86.2	686	591	86.2	999	852	85.3	1262	1072	84.9	1824	1518	83.2
Aneurin Bevan	1039	904	87.0	852	716	84.0	1277	1074	84.1	1595	1297	81.3	2189	1790	81.8
Betsi Cadwalladr	1304	1202	92.2	1799	1650	91.7	1728	1567	90.7	1545	1386	89.7	1272	1103	86.7
Cardiff and Vale	1684	1519	90.2	770	667	86.6	654	546	83.5	898	731	81.4	2025	1578	77.9
Cwm Taf	322	303	94.1	339	302	89.1	472	419	88.8	1155	1036	89.7	1210	1064	87.9
Hywel Dda	211	190	90.0	1060	923	87.1	1462	1257	86.0	869	733	84.3	448	361	80.6
Powys Teaching	139	121	87.1	550	479	87.1	341	296	86.8	160	144	90.0	61	56	91.8
<b>Wales Total</b>	<b>5860</b>	<b>5240</b>	<b>89.4</b>	<b>6056</b>	<b>5328</b>	<b>88.0</b>	<b>6933</b>	<b>6011</b>	<b>86.7</b>	<b>7484</b>	<b>6399</b>	<b>85.5</b>	<b>9029</b>	<b>7470</b>	<b>82.7</b>

\* Completed 4 in 1 preschool booster, the Hib/MenC booster and second MMR dose by four years of age. The calculation method for proportions of children up to date with routine immunisation by four years of age was revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age.

**Table 11.** Uptake of hepatitis B immunisation in children born to hepatitis B positive mothers reaching their 1<sup>st</sup>, 2<sup>nd</sup> and 5<sup>th</sup> birthdays during 01/04/2014 and 31/03/2015 and resident on 31/03/2015.

Area	1yr					2yrs						5yrs					
	Resident children	Babies at risk of perinatal infection	1 dose (%)	2 doses (%)	3 doses (%)	Resident children	Babies at risk of perinatal infection	1 dose (%)	2 doses (%)	3 doses (%)	4 doses (%)	Resident children	Babies at risk of perinatal infection	1 dose (%)	2 dose (%)	3 doses (%)	4 doses (%)
	(n)	(n)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)
<b>Abertawe Bro Morgannwg UHB</b>	5495	7	100.0	100.0	100.0	5685	4	100.0	100.0	100.0	100.0	5839	10	100.0	100.0	100.0	100.0
<b>Aneurin Bevan UHB</b>	6539	13	100.0	100.0	100.0	6794	8	100.0	100.0	100.0	100.0	6933	9	100.0	100.0	100.0	88.9
<b>Betsi Cadwaladr UHB</b>	7218	8	100.0	100.0	100.0	7597	8	100.0	100.0	100.0	100.0	7738	9	100.0	100.0	100.0	100.0
<b>Cardiff and Vale UHB</b>	5870	28	100.0	100.0	100.0	5972	19	100.0	100.0	100.0	89.5	6075	22	100.0	100.0	100.0	95.5
<b>Cwm Taf UHB</b>	3368	0	0.0	0.0	0.0	3447	0	0.0	0.0	0.0	0.0	3428	1	100.0	100.0	100.0	100.0
<b>Hywel Dda UHB</b>	3672	2	100.0	100.0	100.0	3860	1	100.0	100.0	100.0	100.0	3874	3	100.0	100.0	100.0	100.0
<b>Powys Teaching HB</b>	1150	0	0.0	0.0	0.0	1219	1	100.0	100.0	100.0	100.0	1273	1	100.0	100.0	100.0	100.0
<b>Unknown</b>	99	2	50.0	50.0	50.0	103	0	0.0	0.0	0.0	0.0	102	0	0.0	0.0	0.0	0.0
<b>Wales Total</b>	<b>33411</b>	<b>60</b>	<b>98.3</b>	<b>98.3</b>	<b>98.3</b>	<b>34677</b>	<b>41</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>95.1</b>	<b>35262</b>	<b>55</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>96.4</b>

Data reflects immunisations given and recorded on the Public Health Wales All Wales Neonatal Hepatitis B database of babies born to hepatitis B positive mothers.

## Links

Welsh Health Circular (2005) 081 – MMR immunisation catch-up:

[http://www.wales.nhs.uk/documents/WHC\\_2005\\_081.pdf](http://www.wales.nhs.uk/documents/WHC_2005_081.pdf)

Public Health Wales Vaccination and Immunisation intranet site HPV pages:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgId=474&pid=21297>

Link to guidance on follow up of children who have missed scheduled MMR doses (WHC (2005)81):

[http://www.wales.nhs.uk/documents/WHC\\_2005\\_081.pdf](http://www.wales.nhs.uk/documents/WHC_2005_081.pdf)

Public Health Wales Vaccination and Immunisation intranet (NHS Wales only):

<http://howis.wales.nhs.uk/sites3/home.cfm?orgid=474>

Public Health Wales Health Protection internet:

<http://www.wales.nhs.uk/sites3/home.cfm?orgid=457>

## Report Team

Report prepared by Public Health Wales Vaccine Preventable Disease Programme (VPDP) and Communicable Disease Surveillance Centre (CDSC), in collaboration with NHS Wales Informatics Service Community Applications Team.

Simon Cottrell	Public Health Wales VPDP/ CDSC
Hannah Evans	Public Health Wales VPDP
Richard Lewis	Public Health Wales VPDP
Richard Roberts	Public Health Wales VPDP

Comment and queries relating to this report should be addressed to Public Health Wales VPDP:

**Tel:** 02920 402474

**Email:** [surveillance.requests@wales.nhs.uk](mailto:surveillance.requests@wales.nhs.uk)

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