

Vaccine Uptake in Children in Wales

COVER Annual report 2016

Data for the year ending 31st March 2016



Key points

- In 2015/16 uptake of all established routine immunisations in one year old children for Wales was over 95% for the eighth consecutive year. All 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 93% at the first birthday representing uptake in the second cohort of children eligible for this new vaccine.
- Uptake of the first dose of MMR at 2 years remains above target at 95%.
- In 2015/16, 85% of children were up to date with recommended immunisations by their fourth birthday a decreased compared to the previous two years.
- Uptake of the second dose of MMR by 5 years of age was 92% compared to 93% in 2014/15, this reflects the declining trend seen over the previous five quarters.
- Uptake of pre-school 4 in 1 booster in five year old children was 92%.
- Uptake of one dose of Human Papilloma Virus (HPV) vaccine in girls turning 14 years of age during the 2015/16 School Year 9 was 90%. Uptake of two doses is currently 67%. This represents the first school year group to be offered the two dose schedule.

Findings

1. These results are for children living in Wales in March 2016 and reaching their first, second, fourth, fifth, 15th and 16th birthdays between 01/04/2015 and 31/03/2016. Current uptake of HPV vaccination¹ in girls in the 2015/16 School Year 9 (reaching their 14th birthday between 01/09/2015 and 31/08/2016) and uptake of MenC containing vaccine in children in the 2015/16 School Year 10 (reaching their 15th birthday between 01/09/2015 and 31/08/2016) is also presented.²
2. Annual uptake of the completed course of '5 in 1'³ vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday remained stable at 96.6%. Uptake ranged by Health Board (HB) from 95.5% (Cardiff and Vale University HB) to 98.2% (Cwm Taf University HB) and by Local Authority (LA) from 95.0% (Newport) to 98.7% (Merthyr Tydfil). All 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 MenC⁴ vaccine in children reaching their first birthday this year was 97.4% ranging by HB from 96.2% (Cardiff and Vale University HB) to 98.7% (Cwm Taf University HB) and by LA from 95.8% (Cardiff) to 98.8% (Blaenau Gwent and Merthyr Tydfil) (Figures 1, 2 and Tables 2, 3).
4. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV⁵) in children at one year of age was 96.4%, ranging by HB from 95.0% (Cardiff and Vale University HB) to 98.2% (Cwm Taf University HB) and by LA from 94.7% (Cardiff) to 98.7% (Merthyr Tydfil) (Figures 1, 2 and Table 3).

¹ HPV vaccination protects girls against cervical cancer associated with HPV types 16 and 18.

² Dose of Men C containing vaccine, the majority of which will be meningococcal serogroup C conjugate (MenC) vaccine, a small number of teenagers are recorded as having received MenACWY vaccine.

³ DTaP/IPV/Hib vaccine protects against diphtheria, tetanus, pertussis (Whooping Cough), polio and Hib infection.

⁴ 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.

⁵ 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.

5. Uptake of two doses of rotavirus vaccine in children reaching their first birthday was 93.4% compared to 83.6% in the previous year. Uptake ranged by HB from 91.3% (Powys Teaching HB) to 97.2% (Cwm Taf University HB) and by LA from 90.1% (Monmouthshire) to 98.0% (Merthyr Tydfil) (Figure 2, Tables 2 and 3). This is the second group of children reported through the annual COVER scheme who would have been eligible to receive rotavirus vaccine.
6. Uptake of one dose of MMR⁶ by two years of age remained stable this year at 95.3% compared to 95.8% in the previous year. Uptake ranged by HB from 93.6% (Hywel Dda University HB) to 97.0% (Cwm Taf University HB) and by LA from 92.4% (Ceredigion) to 97.6% (Merthyr Tydfil). Four HBs achieved the target uptake of 95% for one dose of MMR by two years of age, and 13 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) by two years of age was 95.6%. Uptake by HB ranged from 94.0% (Cardiff and Vale University HB) to 97.3% (Cwm Taf University HB) and by LA from 93.3% (Ceredigion) to 97.7% (Blaenau Gwent) (Tables 2, 4).
8. Annual uptake of the Hib/MenC⁷ booster by two years of age was 94.7%, ranging by HB from 92.3% (Cardiff and Vale University HB) to 97.0% (Cwm Taf University HB) and by LA from 91.5% (Cardiff) to 97.6% (Merthyr Tydfil) (Tables 2, 4).
9. Coverage of the Hib/MenC booster in children by the time of their fourth birthday was 94.1% and ranged by HB from 91.3% (Powys Teaching HB) to 96.4% (Cwm Taf University HB) (Figure 2, Tables 1 and 5).
10. This year, coverage of the '4 in 1' DTaP/IPV⁸ pre-school booster in children by four years of age was 88.2%, this ranged by HB from 82.5% (Aneurin Bevan University HB) to 92.1% (Betsi Cadwaladr University HB) (Figure 3, Tables 1 and 5).
11. Coverage of a complete two dose course of MMR vaccine in children by four years of age was 87.7%, this ranged by HB from 83.4% (Aneurin Bevan University HB) to 90.7% (Abertawe Bro Morgannwg University HB) (Figure 3, Tables 1 and 5).
12. The proportion of children who were up to date with their Hib/MenC booster, '4 in 1' DTaP/IPV pre-school booster and MMR vaccines by four years of age was 85.3%, a 0.9% decrease from 86.2% in 2014/15. (Figure 3, Tables 1 and 5). This ranged by HB from 80.0% (Aneurin Bevan University HB) to 89.5% (Cwm Taf University HB) and by LA from 74.4% (Newport) to 91.7% (Anglesey).
13. Annual uptake of two doses of MMR in children at five years of age was 91.6% this year, compared to 93.1% last year (Figures 1, 5, 8, Tables 2, 6), ranging by HB from 89.4% (Cardiff and Vale University HB) to 93.5% (Betsi Cadwaladr University HB). Coverage of one dose of MMR in children at five years of age was 96.8% and ranged by HB from 94.9% (Powys Teaching HB) to 98.0% (Cwm Taf University HB).
14. Uptake of the '4 in 1' DTaP/IPV pre-school booster in children reaching their fifth birthday this year was 92.1%, compared to 93.4% in the previous year (Figures 5, 9, Tables 2, 6).
15. Coverage of one dose of HPV vaccine in girls in the 2014/15 School Year 8 (reaching their 14th birthday between 01/09/15 and 31/08/16) was 89.6%, ranging by HB from 83.7% (Powys Teaching HB) to 95.0% (Cwm Taf University HB) and by LA from 81.7% (Monmouthshire) to 95.6% (Rhondda Cynon Taf) (Table 7). Coverage of two doses of HPV vaccine in girls in the 2014/15 School Year 8 is currently 66.6%. This is the first group of girls to be offered the two dose course of HPV vaccination [4]. Vaccination sessions for the

⁶ MMR protects against measles, mumps and rubella infections.

⁷ Hib/MenC vaccine protects against Hib and MenC infections and a routine dose should be offered at 12-13 months of age

⁸ DTaP/IPV (and dTaP/IPV) vaccines boost protection against diphtheria, tetanus, pertussis and polio infection before school entry

second dose of HPV vaccine in this group may not have been completed across all areas and will be expected to continue to increase until the end of the current school year.

16. Annual coverage of two doses of MMR in teenagers at 15 years of age was 88.5% (Table 8), ranging by HB from 83.5% (Powys Teaching HB) to 90.3% (Cwm Taf University HB) and by LA from 82.7% (Monmouthshire) to 93.8% (Caerphilly). Coverage of one dose of MMR in 15 year olds was 93.8%, ranging by HB from 89.7% (Powys Teaching HB) to 96.2% (Cwm Taf University HB) and by LA from 88.9% (Monmouthshire) to 97.3% (Caerphilly). A breakdown by sex indicates that 88.9% of girls had received a full (two MMR doses) course of immunisation against rubella this year and coverage of only one dose was 93.9%.
17. National uptake of the Td/IPV⁹ teenage booster in children reaching 15 years of age in the year ending 31st March 2016 was 82.7%, an increase of 3.1% from 79.6% in the previous year (Table 8). Uptake ranged by HB from 75.8% (Cardiff and Vale University HB) to 91.4% (Cwm Taf University HB) and by LA from 74.0% (Cardiff) to 92.0% (Merthyr Tydfil).
18. Annual coverage of two doses of MMR in teenagers at 16 years of age was 89.4% (Tables 2, 9), ranging by HB from 86.0% (Powys Teaching HB) to 91.3% (Cwm Taf University HB) and by LA from 84.4% (Monmouthshire) to 93.6% (Wrexham). Annual coverage of one dose of MMR in 16 year olds was 94.4%, ranging by LA from 90.1% (Monmouthshire) to 97.8% (Torfaen and Caerphilly). A breakdown by sex indicates that 90.2% of girls had received a full (two MMR doses) course of immunisation against rubella this year and coverage of only one dose was 94.8%.
19. National uptake of the Td/IPV teenage booster in children reaching 16 years of age in the year ending 31st March 2016 was 82.9% (Tables 2 and 9).
20. The teenage MenC booster was introduced at the start of the 2014/15 school year. Local arrangements for the delivery of this vaccine vary, with some Health Boards routinely offering it to 13-14 year olds and some to 14-15 year olds [1]. The majority of children reaching their 15th birthday between 01/09/15 and 31/08/16 (2015/16 School Year 9) would have received the single antigen teenage MenC booster, however a small number are recorded as having received the MenACWY vaccine. Uptake of MenC containing vaccine in this school year group is currently 82.1% (Table 10).
21. 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 10 and Table 11). 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 89.1% in the least deprived quintile of LSOA to 81.9% in the most deprived quintile of LSOA. The difference in uptake between the least deprived quintile and the most deprived quintile was 7.2%, an increase from 6.7% in 2014/15 and 5.2% in 2013/14 (Figure 11).
22. Uptake of hepatitis B immunisation, extracted from the Public Health Wales All Wales Neonatal Hepatitis B immunisation database, is presented in Table 12. 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

⁹ Td/IPV boosts protection against diphtheria, tetanus and polio infection before entering adulthood.

of three doses in children who were at risk of perinatal infection and reached their first birthday in the year ending 31st March 2016 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 31st March 2016 was 88.1%. Uptake of four doses in children who were at risk of perinatal infection and reached their fifth birthday in the year ending 31st March 2016 was 95.0%.

Comment

During 2015/16 uptake of all established immunisations remain above 95% in children aged one year of age. However, there has been a decrease in uptake of some routine immunisations in older children, following a positive trend seen from 2006 to 2014/15.

This report contains rotavirus immunisation uptake figures for the second annual cohort of children reaching their first birthday, who would have been scheduled to receive the vaccine introduced from 1st July 2013 [2]. As expected, uptake of rotavirus vaccine has increased compared to the first year of vaccine introduction and is now approaching 95%.

The proportion of children who are up to date with their routine immunisations by four years of age has decreased, although regional uptake varies greatly, with three LAs achieving above 90%. Of all the immunisations that are included in this composite measure, uptake of the second dose of MMR saw the largest decrease followed by the Hib/MenC booster. Uptake of the '4 in 1' preschool booster remained stable. The gap in immunisation coverage between four year olds residing in the most and least deprived areas increased for the second year in a row, but remained lower than the 9% gap reported in 2012/13.

Uptake of two doses of MMR in 5 year olds has decreased by 1.5% this year compared to last year. This reflects the declining trend in two doses of MMR in this age group seen over the previous five quarters.

Uptake of the teenage booster against diphtheria, tetanus and polio increased further again this year, with a 3% increase compared to last year in 15 year olds. Uptake of one dose of MMR in 15 and 16 year olds was below the 95% target this year, and less than 90% of teenagers received the second dose of MMR. It is important that children in this age group are vaccinated before they leave school to attend college and later university.

This report provides uptake figures for the first routine group of girls to be offered a two dose course of HPV vaccination following recent change in the HPV vaccination programme in September 2014 [3]. Uptake of one dose of HPV was 90%, uptake of two doses will increase as further school immunisation sessions are reported on.

During the 2015/16 financial year the single antigen meningococcal group C vaccine was replaced with meningococcal ACWY vaccine in teenagers (with a phased catch-up campaign) there was also the addition of routine vaccination against meningococcal group B disease [4, 5]. Preliminary data for the uptake of MenACWY vaccine in children turning 16 years of age in the 2015/16 school year is 62%. Preliminary data for uptake of one dose of meningococcal group B vaccine in infants turning 6 months of age between 1st January 2016 and 31st March 2016 is 97%, uptake of two doses in this age group is 91%. Uptake figures for both of these vaccination programmes will be reported in future quarterly and annual COVER reports.

- [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 (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>
- [4] Welsh Government (2015) Introduction of MenB Immunisation for Infants, Welsh Health Circular. WHC(2015)040. <http://gov.wales/docs/dhss/publications/150727whc040en.pdf>
- [5] Welsh Government (2015) Meningococcal ACWY conjugate vaccination (MenACWY) - Revision, Welsh Health Circular. WHC(2015)037. <http://gov.wales/docs/dhss/publications/150724whc037en.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 2016. Data are for children reaching 1 year of age each quarter for diphtheria, pertussis, Hib, MenC¹⁰ 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).

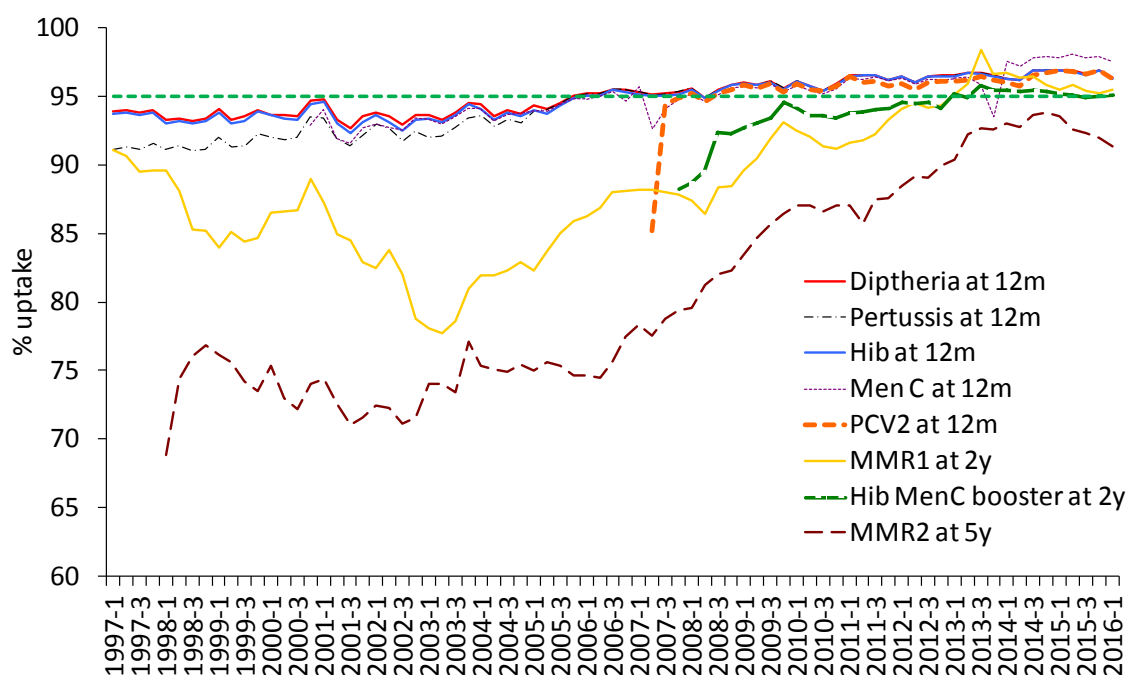


Figure 2. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

All Wales Summary - COVER 2015/16

5 in 1 primary by age 1y (3 doses)	96.6%
MenC primary by age 1y (1 dose)	97.4%
Rotavirus primary by age 1yr (2 doses)	93.4%
PCV primary by age 1y (2 doses)	96.4%
MMR by age 2y (1st dose)	95.3%
PCV by age 2y (final (3rd) dose)	95.6%
Hib/MenC booster by age 2y	94.7%
MMR by age 5y (2nd dose)	91.6%
4 in 1 pre-school booster by age 5y	92.1%
MMR coverage (1 dose) by age 16y	94.4%
MMR coverage (2 doses) by age 16y	89.4%
3 in 1 Teenage booster by age 16y	82.9%

¹⁰ 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 4th birthday between 01/04/15 and 31/03/16 and are up to date with all scheduled vaccines¹¹ by Health Board.



Table 1. Percentage uptake of resident children reaching their 4th birthday and are up to date with all scheduled vaccines¹¹ by Health Board, annual 2012/13 to annual 2015/16.

Area	Up to date in schedule			
	2012/13	2013/14	2014/15	2015/16
Abertawe Bro Morgannwg UHB	82.6	87.4	84.9	86.5
Aneurin Bevan UHB	80.9	86.6	83.2	80.0
Betsi Cadwaladr UHB	85.1	89.9	90.4	89.2
Cardiff and Vale UHB	79.2	85.6	83.8	82.7
Cwm Taf UHB	85.0	90.8	89.4	89.5
Hywel Dda UHB	80.8	88.5	85.5	85.3
Powys Teaching HB	84.7	87.0	87.7	84.9
Wales	82.4	87.9	86.2	85.3

¹¹ 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 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

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) (%)		PCV† (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) (%)			
Abertawe Bro Morgannwg University LHB	1486	1439	96.8	1456	98.0	1409	94.8	1546	1493	96.6	1491	96.4	1479	95.7	1732	1514	87.4	1639	1505	91.8	1472	89.8	1544	1481	95.9	1420	92.0	1244	80.6	
Bridgend LA	1509	1470	97.4	1489	98.7	1440	95.4	1476	1390	94.2	1401	94.9	1394	94.4	1573	1343	85.4	1612	1509	93.6	1469	91.1	1390	1338	96.3	1249	89.9	1182	85.0	
Neath Port Talbot LA	2523	2451	97.1	2474	98.1	2383	94.5	2525	2391	94.7	2392	94.7	2364	93.6	2766	2393	86.5	2703	2492	92.2	2477	91.6	2548	2413	94.7	2272	89.2	2228	87.4	
Swansea LA	5518	5360	97.1	5419	98.2	5232	94.8	5547	5274	95.1	5284	95.3	5237	94.4	6071	5250	86.5	5954	5506	92.5	5418	91.0	5482	5232	95.4	4941	90.1	4654	84.9	
Health Board Total																														
Aneurin Bevan University LHB	743	729	98.1	734	98.8	672	90.4	783	759	96.9	765	97.7	762	97.3	749	639	85.3	766	701	91.5	710	92.7	779	753	96.7	714	91.7	655	84.1	
Blaenau Gwent LA	2039	1989	97.5	2011	98.6	1944	95.3	2034	1969	96.8	1978	97.2	1969	96.8	2081	1692	81.3	2189	2032	92.8	1995	91.1	1992	1948	97.8	1855	93.1	1645	82.6	
Caerphilly LA	767	735	95.8	736	96.0	691	90.1	810	761	94.0	767	94.7	766	94.6	895	739	82.6	919	818	89.0	836	91.0	1072	966	90.1	905	84.4	800	74.6	
Monmouthshire LA	1981	1881	95.0	1906	96.2	1818	91.8	1933	1827	94.5	1825	94.4	1799	93.1	1952	1452	74.4	2062	1838	89.1	1833	88.9	1863	1760	94.5	1632	87.6	1471	79.0	
Newport LA	952	925	97.2	932	97.9	885	93.0	1094	1056	96.5	1059	96.8	1057	96.6	1105	906	82.0	1120	1032	92.1	1036	92.5	1020	998	97.8	951	93.2	848	83.1	
Torfaen LA	6482	6259	96.6	6319	97.5	6010	92.7	6654	6372	95.8	6394	96.1	6353	95.5	6782	5428	80.0	7056	6421	91.0	6410	90.8	6726	6425	95.5	6057	90.1	5419	80.6	
Health Board Total																														
Betsi Cadwaladr University LHB	731	706	96.6	714	97.7	683	93.4	742	718	96.8	722	97.3	720	97.0	799	733	91.7	801	759	94.8	765	95.5	701	666	95.0	644	91.9	567	80.9	
Anglesey LA	1090	1046	96.0	1071	98.3	1020	93.6	1054	1006	95.4	1005	95.4	1000	94.9	1160	1020	87.9	1156	1074	92.9	1092	94.5	1259	1166	92.6	1110	88.2	1098	87.2	
Conwy LA	1045	1003	96.0	1024	98.0	961	92.0	1047	997	95.2	999	95.4	987	94.3	1048	902	86.1	1091	1017	93.2	1032	94.6	1111	1013	91.2	939	84.5	924	83.2	
Denbighshire LA	1551	1493	96.3	1503	96.9	1438	92.7	1605	1556	96.9	1555	96.9	1544	96.2	1716	1565	91.2	1744	1636	93.8	1671	95.8	1631	1553	95.2	1492	91.5	1427	87.5	
Flintshire LA	1128	1091	96.7	1088	96.5	1043	92.5	1183	1141	96.4	1141	96.4	1139	96.3	1341	1191	88.8	1233	1145	92.9	1163	94.3	1233	1165	94.5	1128	91.5	1072	86.9	
Gwynedd LA	1556	1514	97.3	1523	97.9	1450	93.2	1607	1562	97.2	1566	97.4	1549	96.4	1647	1466	89.0	1668	1563	93.7	1603	96.1	1427	1375	96.4	1335	93.6	1185	83.0	
Wrexham LA	7101	6853	96.5	6923	97.5	6595	92.9	7238	6980	96.4	6988	96.5	6939	95.9	7711	6877	89.2	7693	7194	93.5	7326	95.2	7362	6938	94.2	6648	90.3	6273	85.2	
Health Board Total																														
Cardiff and Vale University LHB	4519	4304	95.2	4331	95.8	4106	90.9	4433	4155	93.7	4144	93.5	4055	91.5	4568	3730	81.7	4564	4040	88.5	4106	90.0	3605	3321	92.1	3122	86.6	2758	76.5	
Cardiff LA	1343	1297	96.6	1309	97.5	1272	94.7	1380	1320	95.7	1322	95.8	1311	95.0	1565	1344	85.9	1459	1343	92.0	1362	93.4	1514	1411	93.2	1346	88.9	1242	82.0	
Vale of Glamorgan LA	5862	5601	95.5	5640	96.2	5378	91.7	5813	5475	94.2	5466	94.0	5366	92.3	6133	5074	82.7	6023	5383	89.4	5468	90.8	5119	4732	92.4	4468	87.3	4000	78.1	
Health Board Total																														
Cwm Taf University LHB	753	743	98.7	744	98.8	738	98.0	661	645	97.6	645	97.6	645	97.6	754	683	90.6	704	659	93.6	664	94.3	663	632	95.3	592	89.3	606	91.4	
Merthyr Tydfil LA	2611	2561	98.1	2575	98.6	2532	97.0	2722	2638	96.9	2648	97.3	2638	96.9	2784	2484	89.2	2782	2577	92.6	2600	93.5	2470	2386	96.6	2269	91.9	2254	91.3	
Rhondda Cynon Taff LA	3364	3304	98.2	3319	98.7	3270	97.2	3383	3283	97.0	3293	97.3	3283	97.0	3538	3167	89.5	3486	3236	92.8	3264	93.6	3133	3018	96.3	2861	91.3	2860	91.3	
Health Board Total																														
Hywel Dda University LHB	1799	1740	96.7	1765	98.1	1716	95.4	1876	1763	94.0	1772	94.5	1758	93.7	2018	1724	85.4	1979	1807	91.3	1788	90.3	1619	1506	93.0	1417	87.5	1329	82.1	
Cardiff and Vale LA	625	602	96.3	600	96.0	571	91.4	654	604	92.4	610	93.3	608	93.0	634	563	88.8	699	642	91.8	656	93.8	628	594	94.6	561	89.3	553	88.1	
Ceredigion LA	1218	1158	95.1	1172	96.2	1124	92.3	1173	1098	93.6	1104	94.1	1098	93.6	1311	1094	83.4	1319	1160	87.9	1185	89.8	1241	1156	93.2	1092	88.0	975	78.6	
Pembrokeshire LA	3642	3500	96.1	3537	97.1	3411	93.7	3703	3465	93.6	3486	94.1	3464	93.5	3963	3381	85.3	3997	3609	90.3	3629	90.8	3488	3256	93.3	3070	88.0	2857	81.9	
Health Board Total																														
Powys Teaching LHB	1083	1040	96.0	1049	96.9	989	91.3	1170	1100	94.0	1108	94.7	1103	94.3	1241	1053	84.9	1254	1132	90.3	1153	91.9	1390	1280	92.1	1196	86.0	1070	77.0	
Unknown	33	31	93.9	32	97.0	31	93.9	92	87	94.6	88	95.7	88	95.7	79	67	84.8	69	62	89.9	63	91.3	178	160	89.9	153	86.0	132	74.2	
Wales Total	33085	31950	96.6	32238	97.4	30916	93.4	33600	32036	95.3	32107	95.6	31833	94.7	35518	30297	85.3	35532	32543	91.6	32731	92.1	32878	31041	94.4	29394	89.4	27265	82.9	

* 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

	95% and higher
	90% to less than 95%
	below 90%

Figure 4. (a) Uptake of 5 in 1 vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/04/15 and 31/03/16. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/04/15 and 31/03/16.

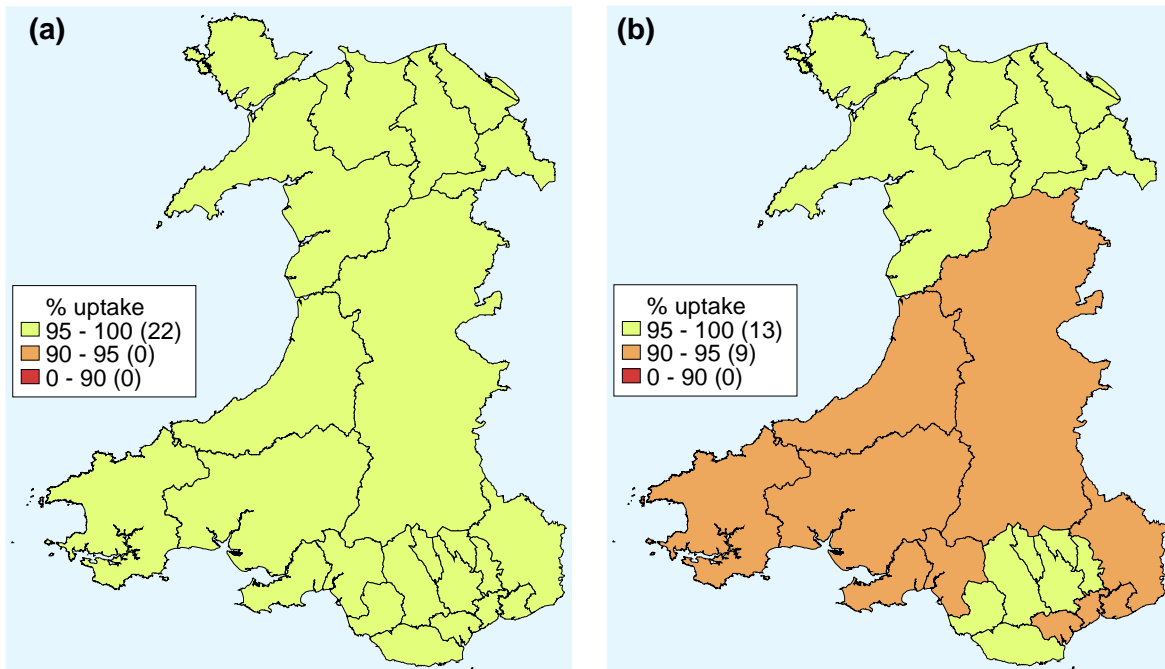


Figure 5. (a) Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/15 and 31/03/16. **(b)** Uptake of 4 in 1 vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/15 and 31/03/16.

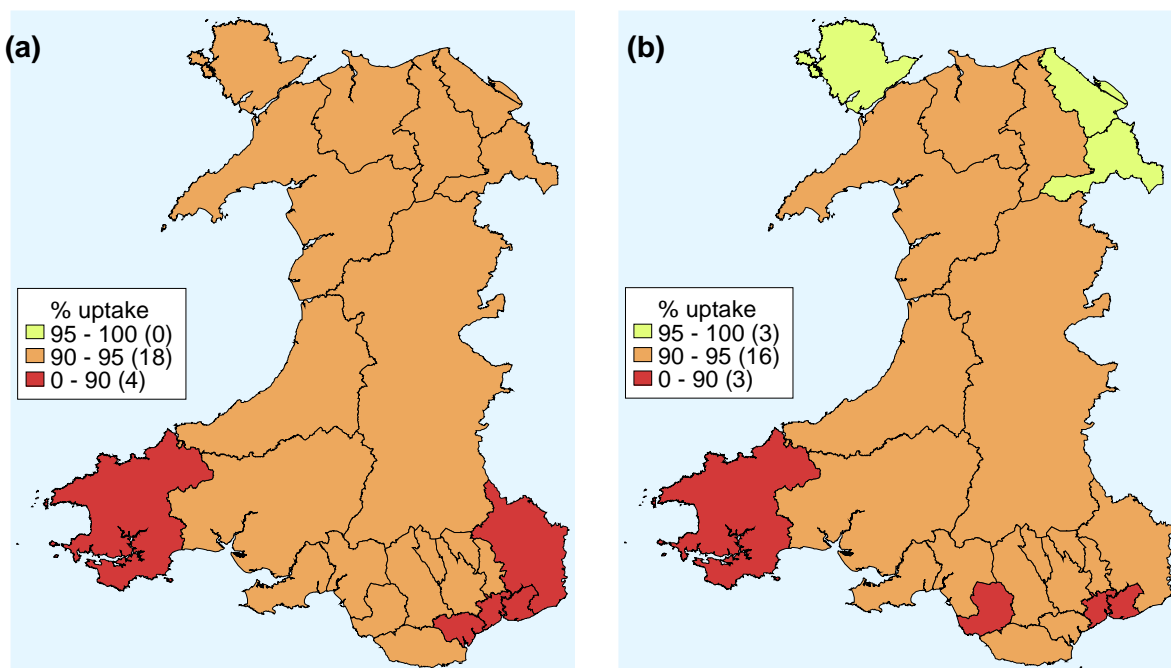


Figure 6. Annual uptake of 5 in 1 vaccine by 1 year of age (2012 – 2016 financial years, ranked by uptake in 2015/16).

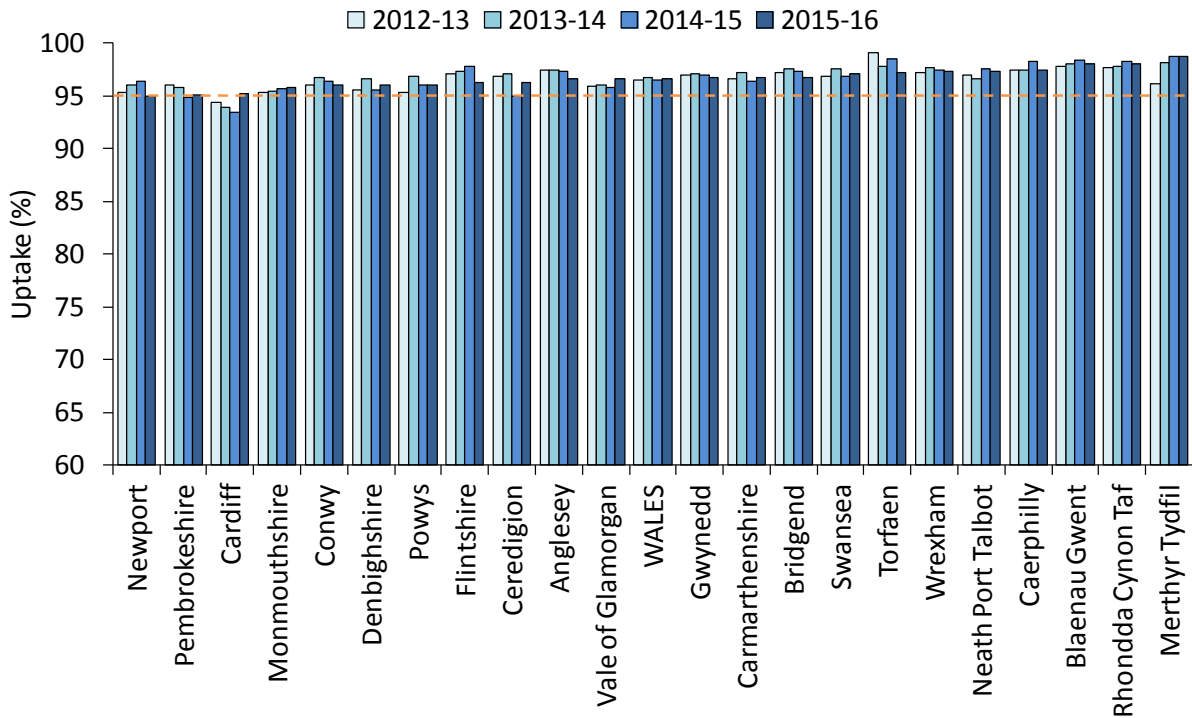


Figure 7. Annual uptake of 1 dose of MMR by 2 years of age (2012 – 2016 financial years, ranked by uptake in 2015/16).

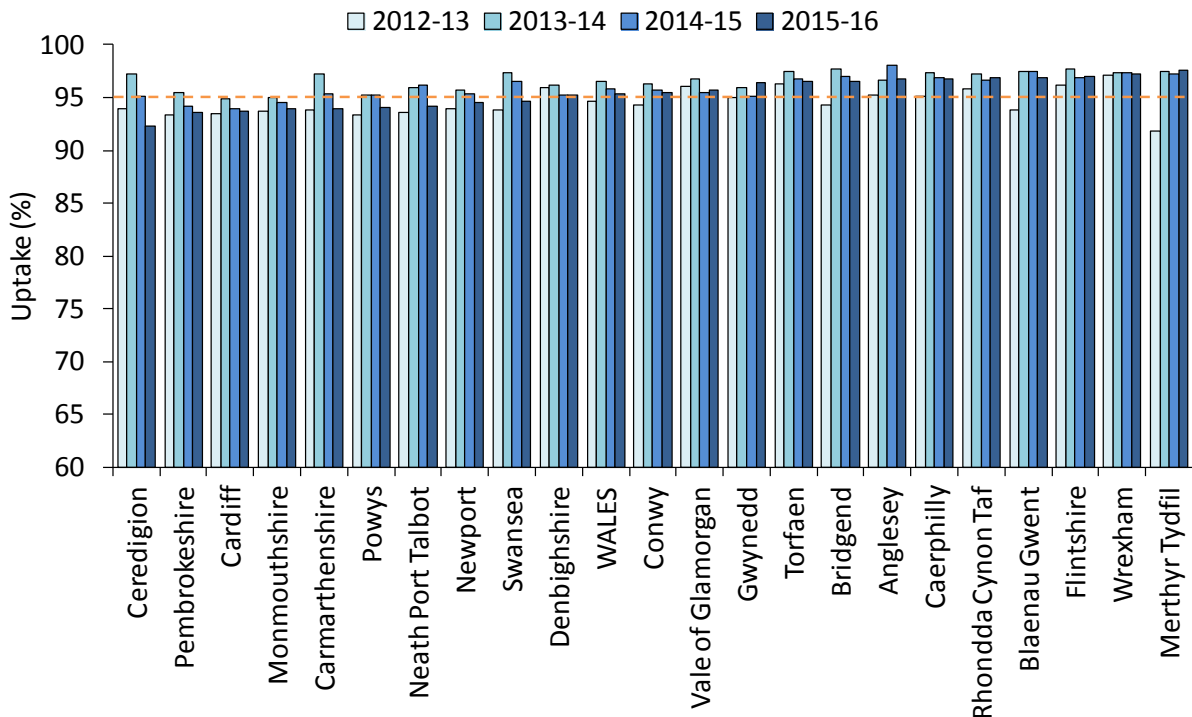


Figure 8. Annual uptake of 2 doses of MMR by 5 years of age (2012 – 2016 financial years, ranked by uptake in 2015/16).

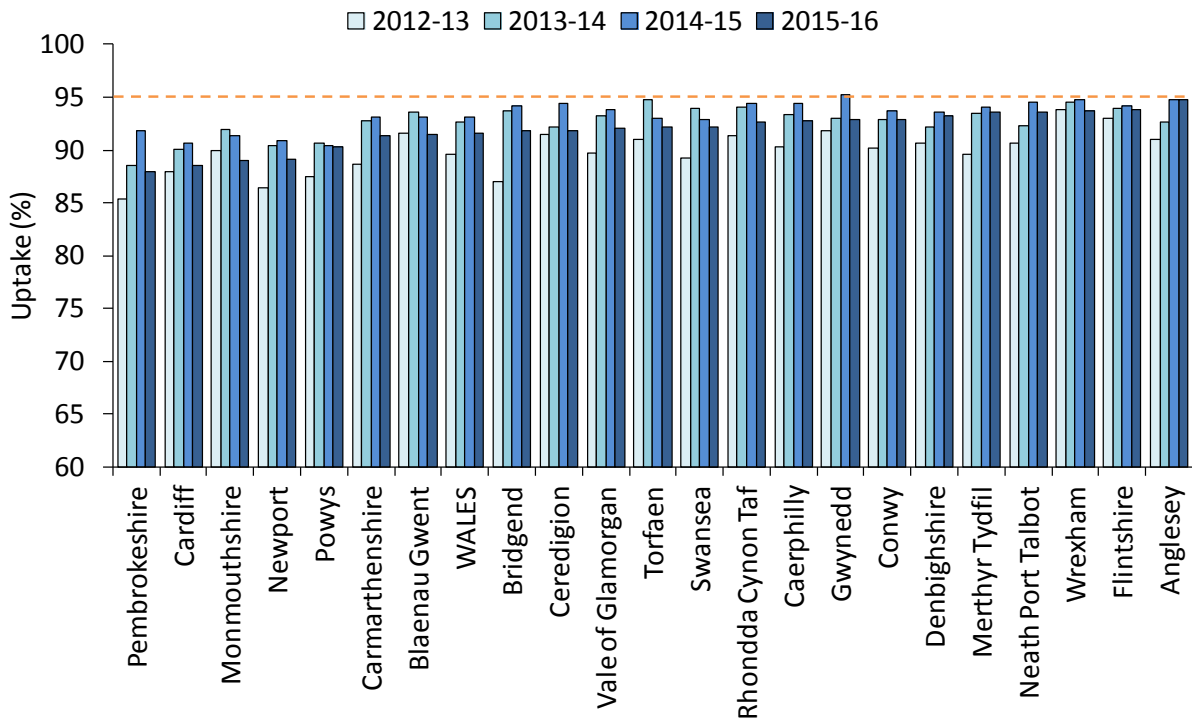


Figure 9. Annual uptake of the '4 in 1' pre-school booster by 5 years of age (2012 – 2016 financial years, ranked by uptake in 2015/16).

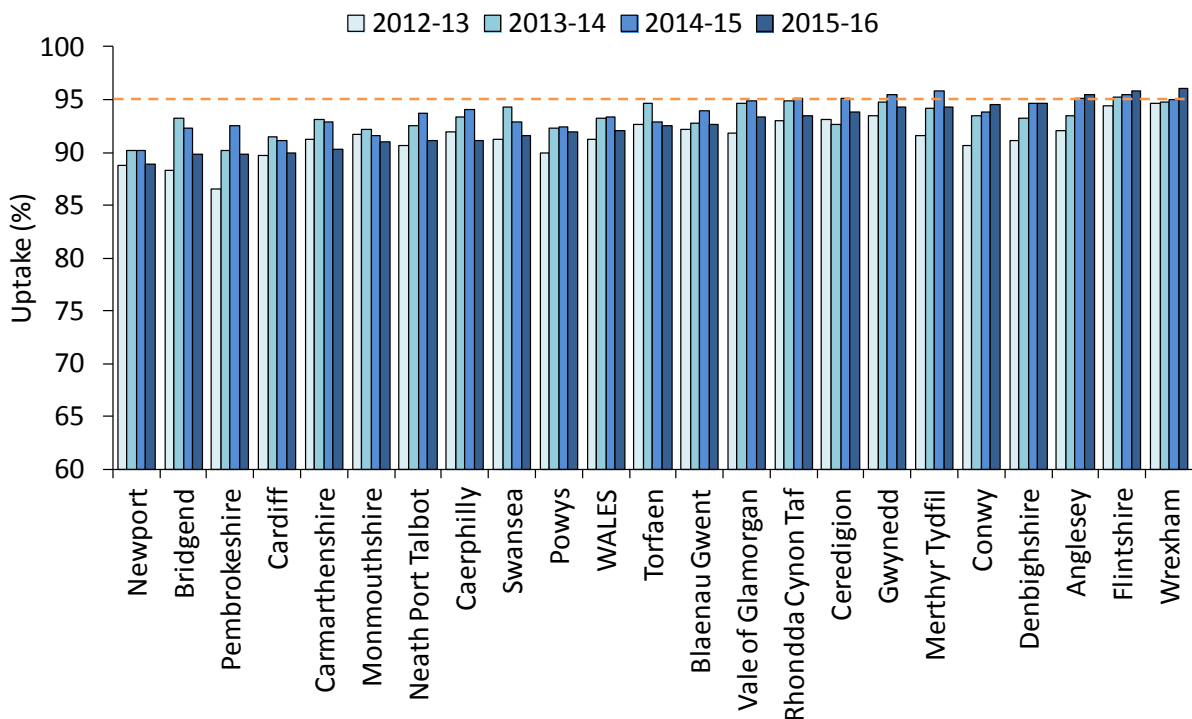


Figure 10. Percentage of children who are up to date with routine immunisations¹² by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

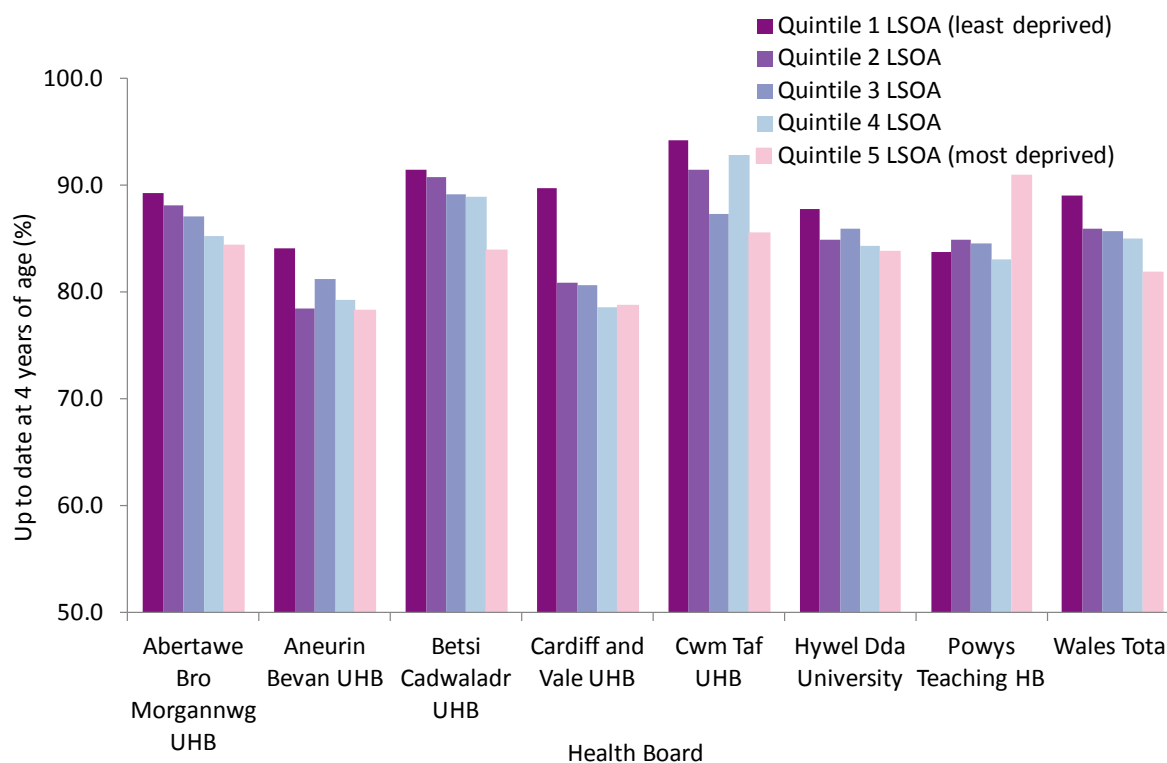
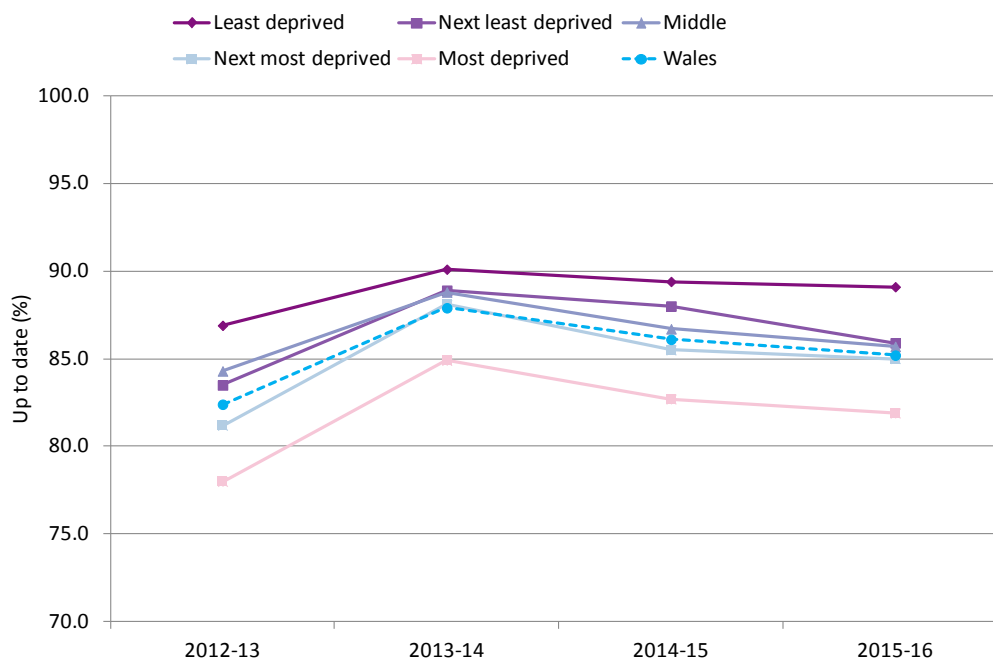


Figure 11. Percentage of children who are up to date with routine immunisations by four years of age during 2012-2016 financial years, by quintile of deprivation of the Lower Super Output Area in which they reside.



¹² 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 3. Vaccine uptake in children reaching their 1st birthday between 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC*	Rotavirus	PCV2**	HibMenCb
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University HB											
Bridgend LA	1486	1439 96.8	1439 96.8	1439 96.8	1439 96.8	1439 96.8	3 0.2	1456 98.0	1409 94.8	1438 96.8	3 0.2
Neath Port Talbot LA	1509	1470 97.4	1470 97.4	1470 97.4	1470 97.4	1469 97.3	4 0.3	1489 98.7	1440 95.4	1468 97.3	5 0.3
Swansea LA	2523	2451 97.1	2451 97.1	2451 97.1	2450 97.1	2450 97.1	13 0.5	2474 98.1	2383 94.5	2446 96.9	12 0.5
Health Board Total	5518	5360 97.1	5360 97.1	5360 97.1	5359 97.1	5358 97.1	20 0.4	5419 98.2	5232 94.8	5352 97.0	20 0.4
Aneurin Bevan University HB											
Blaenau Gwent LA	743	729 98.1	729 98.1	729 98.1	729 98.1	729 98.1	0 0.0	734 98.8	672 90.4	731 98.4	0 0.0
Caerphilly LA	2039	1989 97.5	1989 97.5	1989 97.5	1989 97.5	1989 97.5	11 0.5	2011 98.6	1944 95.3	1989 97.5	11 0.5
Monmouthshire LA	767	735 95.8	735 95.8	735 95.8	734 95.7	735 95.8	3 0.4	736 96.0	691 90.1	734 95.7	0 0.0
Newport LA	1981	1881 95.0	1881 95.0	1881 95.0	1881 95.0	1878 94.8	3 0.2	1906 96.2	1818 91.8	1877 94.8	2 0.1
Torfaen LA	952	925 97.2	925 97.2	925 97.2	925 97.2	925 97.2	0 0.0	932 97.9	885 93.0	922 96.8	0 0.0
Health Board Total	6482	6259 96.6	6259 96.6	6259 96.6	6258 96.5	6256 96.5	17 0.3	6319 97.5	6010 92.7	6253 96.5	13 0.2
Betsi Cadwaladr University HB											
Anglesey LA	731	706 96.6	706 96.6	706 96.6	706 96.6	706 96.6	2 0.3	714 97.7	683 93.4	707 96.7	3 0.4
Conwy LA	1090	1046 96.0	1046 96.0	1046 96.0	1046 96.0	1046 96.0	13 1.2	1071 98.3	1020 93.6	1046 96.0	10 0.9
Denbighshire LA	1045	1003 96.0	1003 96.0	1003 96.0	1003 96.0	1003 96.0	7 0.7	1024 98.0	961 92.0	1001 95.8	6 0.6
Flintshire LA	1551	1493 96.3	1493 96.3	1493 96.3	1493 96.3	1493 96.3	12 0.8	1503 96.9	1438 92.7	1491 96.1	15 1.0
Gwynedd LA	1128	1092 96.8	1092 96.8	1091 96.7	1091 96.7	1091 96.7	8 0.7	1088 96.5	1043 92.5	1087 96.4	10 0.9
Wrexham LA	1556	1514 97.3	1514 97.3	1514 97.3	1512 97.2	1513 97.2	8 0.5	1523 97.9	1450 93.2	1512 97.2	9 0.6
Health Board Total	7101	6854 96.5	6854 96.5	6853 96.5	6851 96.5	6852 96.5	50 0.7	6923 97.5	6595 92.9	6844 96.4	53 0.7
Cardiff and Vale University HB											
Cardiff LA	4519	4305 95.3	4305 95.3	4304 95.2	4304 95.2	4297 95.1	20 0.4	4331 95.8	4106 90.9	4278 94.7	17 0.4
Vale of Glamorgan LA	1343	1297 96.6	1297 96.6	1297 96.6	1297 96.6	1296 96.5	7 0.5	1309 97.5	1272 94.7	1293 96.3	6 0.4
Health Board Total	5862	5602 95.6	5602 95.6	5601 95.5	5601 95.5	5593 95.4	27 0.5	5640 96.2	5378 91.7	5571 95.0	23 0.4
Cwm Taf University HB											
Merthyr Tydfil LA	753	743 98.7	743 98.7	743 98.7	743 98.7	743 98.7	6 0.8	744 98.8	738 98.0	743 98.7	5 0.7
Rhondda Cynon Taf LA	2611	2561 98.1	2561 98.1	2561 98.1	2560 98.0	2556 97.9	6 0.2	2575 98.6	2532 97.0	2562 98.1	4 0.2
Health Board Total	3364	3304 98.2	3304 98.2	3304 98.2	3303 98.2	3299 98.1	12 0.4	3319 98.7	3270 97.2	3305 98.2	9 0.3
Hywel Dda University HB											
Carmarthenshire LA	1799	1740 96.7	1740 96.7	1740 96.7	1739 96.7	1741 96.8	8 0.4	1765 98.1	1716 95.4	1734 96.4	8 0.4
Ceredigion LA	625	602 96.3	602 96.3	602 96.3	601 96.2	601 96.2	2 0.3	600 96.0	571 91.4	602 96.3	2 0.3
Pembrokeshire LA	1218	1158 95.1	1158 95.1	1158 95.1	1158 95.1	1158 95.1	5 0.4	1172 96.2	1124 92.3	1158 95.1	3 0.2
Health Board Total	3642	3500 96.1	3500 96.1	3500 96.1	3498 96.0	3500 96.1	15 0.4	3537 97.1	3411 93.7	3494 95.9	13 0.4
Powys Teaching HB	1083	1040 96.0	1040 96.0	1040 96.0	1040 96.0	1039 95.9	8 0.7	1049 96.9	989 91.3	1042 96.2	6 0.6
Unknown	33	31 93.9	31 93.9	31 93.9	31 93.9	31 93.9	0 0.0	32 97.0	31 93.9	31 93.9	0 0.0
Wales Total	33085	31950 96.6	31950 96.6	31948 96.6	31941 96.5	31928 96.5	149 0.5	32238 97.4	30916 93.4	31892 96.4	137 0.4

* 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 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC*	PCV2**	PCV1***	HibMenCb
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University LHB											
Bridgend LA	1546	1509 97.6	1509 97.6	1509 97.6	1507 97.5	1506 97.4	1493 96.6	1505 97.3	1491 96.4	1491 96.4	1479 95.7
Neath Port Talbot LA	1476	1440 97.6	1440 97.6	1440 97.6	1440 97.6	1440 97.6	1390 94.2	1443 97.8	1427 96.7	1401 94.9	1394 94.4
Swansea LA	2525	2444 96.8	2444 96.8	2443 96.8	2441 96.7	2440 96.6	2391 94.7	2407 95.3	2395 94.9	2392 94.7	2364 93.6
Health Board Total	5547	5393 97.2	5393 97.2	5392 97.2	5388 97.1	5386 97.1	5274 95.1	5355 96.5	5313 95.8	5284 95.3	5237 94.4
Aneurin Bevan University LHB											
Blaenau Gwent LA	783	772 98.6	772 98.6	772 98.6	772 98.6	772 98.6	759 96.9	772 98.6	770 98.3	765 97.7	762 97.3
Caerphilly LA	2034	2006 98.6	2006 98.6	2006 98.6	2006 98.6	2006 98.6	1969 96.8	2003 98.5	1990 97.8	1978 97.2	1969 96.8
Monmouthshire LA	810	772 95.3	772 95.3	772 95.3	772 95.3	772 95.3	761 94.0	762 94.1	767 94.7	767 94.7	766 94.6
Newport LA	1933	1869 96.7	1869 96.7	1869 96.7	1868 96.6	1868 96.6	1827 94.5	1851 95.8	1824 94.4	1825 94.4	1799 93.1
Torfaen LA	1094	1072 98.0	1072 98.0	1072 98.0	1072 98.0	1072 98.0	1056 96.5	1069 97.7	1064 97.3	1059 96.8	1057 96.6
Health Board Total	6654	6491 97.6	6491 97.6	6491 97.6	6490 97.5	6490 97.5	6372 95.8	6457 97.0	6415 96.4	6394 96.1	6353 95.5
Betsi Cadwaladr University LHB											
Anglesey LA	742	726 97.8	726 97.8	726 97.8	726 97.8	726 97.8	718 96.8	727 98.0	723 97.4	722 97.3	720 97.0
Conwy LA	1054	1027 97.4	1027 97.4	1027 97.4	1027 97.4	1027 97.4	1006 95.4	1028 97.5	1010 95.8	1005 95.4	1000 94.9
Denbighshire LA	1047	1013 96.8	1013 96.8	1013 96.8	1012 96.7	1012 96.7	997 95.2	1015 96.9	990 94.6	999 95.4	987 94.3
Flintshire LA	1605	1565 97.5	1565 97.5	1565 97.5	1564 97.4	1561 97.3	1556 96.9	1540 96.0	1541 96.0	1555 96.9	1544 96.2
Gwynedd LA	1183	1140 96.4	1140 96.4	1140 96.4	1141 96.4	1140 96.4	1141 96.4	1121 94.8	1122 94.8	1141 96.4	1139 96.3
Wrexham LA	1607	1579 98.3	1579 98.3	1579 98.3	1575 98.0	1578 98.2	1562 97.2	1561 97.1	1553 96.6	1566 97.4	1549 96.4
Health Board Total	7238	7050 97.4	7050 97.4	7050 97.4	7045 97.3	7044 97.3	6980 96.4	6992 96.6	6939 95.9	6988 96.5	6939 95.9
Cardiff and Vale University LHB											
Cardiff LA	4433	4234 95.5	4233 95.5	4233 95.5	4233 95.5	4231 95.4	4155 93.7	4139 93.4	4061 91.6	4144 93.5	4055 91.5
Vale of Glamorgan LA	1380	1330 96.4	1330 96.4	1330 96.4	1329 96.3	1329 96.3	1320 95.7	1324 95.9	1301 94.3	1322 95.8	1311 95.0
Health Board Total	5813	5564 95.7	5563 95.7	5563 95.7	5562 95.7	5560 95.6	5475 94.2	5463 94.0	5362 92.2	5466 94.0	5366 92.3
Cwm Taf University LHB											
Merthyr Tydfil LA	661	652 98.6	652 98.6	652 98.6	652 98.6	652 98.6	645 97.6	650 98.3	647 97.9	645 97.6	645 97.6
Rhondda Cynon Taf LA	2722	2682 98.5	2682 98.5	2682 98.5	2682 98.5	2680 98.5	2638 96.9	2667 98.0	2663 97.8	2648 97.3	2638 96.9
Health Board Total	3383	3334 98.6	3334 98.6	3334 98.6	3334 98.6	3332 98.5	3283 97.0	3317 98.0	3310 97.8	3293 97.3	3283 97.0
Hywel Dda University LHB											
Carmarthenshire LA	1876	1811 96.5	1811 96.5	1811 96.5	1810 96.5	1810 96.5	1763 94.0	1801 96.0	1779 94.8	1772 94.5	1758 93.7
Ceredigion LA	654	627 95.9	627 95.9	627 95.9	623 95.3	627 95.9	604 92.4	614 93.9	615 94.0	610 93.3	608 93.0
Pembrokeshire LA	1173	1125 95.9	1125 95.9	1125 95.9	1125 95.9	1125 95.9	1098 93.6	1127 96.1	1110 94.6	1104 94.1	1098 93.6
Health Board Total	3703	3563 96.2	3563 96.2	3563 96.2	3558 96.1	3562 96.2	3465 93.6	3542 95.7	3504 94.6	3486 94.1	3464 93.5
Powys Teaching LHB	1170	1123 96.0	1123 96.0	1123 96.0	1123 96.0	1123 96.0	1100 94.0	1117 95.5	1112 95.0	1108 94.7	1103 94.3
Unknown	92	89 96.7	89 96.7	89 96.7	89 96.7	89 96.7	87 94.6	86 93.5	87 94.6	88 95.7	88 95.7
Wales Total	33600	32607 97.0	32606 97.0	32605 97.0	32589 97.0	32586 97.0	32036 95.3	32329 96.2	32042 95.4	32107 95.6	31833 94.7

* 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 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

Area	Resident Children	4 in 1 Preschool booster*	HibMenCb	MMR dose 2	Up to date in schedule**
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University LHB					
Bridgend LA	1732	1543 89.1	1656 95.6	1586 91.6	1514 87.4
Neath Port Talbot LA	1573	1386 88.1	1489 94.7	1407 89.4	1343 85.4
Swansea LA	2766	2448 88.5	2633 95.2	2513 90.9	2393 86.5
Health Board Total	6071	5377 88.6	5778 95.2	5506 90.7	5250 86.5
Aneurin Bevan University LHB					
Blaenau Gwent LA	749	649 86.6	720 96.1	650 86.8	639 85.3
Caerphilly LA	2081	1724 82.8	2002 96.2	1773 85.2	1692 81.3
Monmouthshire LA	895	769 85.9	816 91.2	753 84.1	739 82.6
Newport LA	1952	1526 78.2	1792 91.8	1543 79.0	1452 74.4
Torfaen LA	1105	926 83.8	1066 96.5	935 84.6	906 82.0
Health Board Total	6782	5594 82.5	6396 94.3	5654 83.4	5428 80.0
Betsi Cadwaladr University LHB					
Anglesey LA	799	760 95.1	765 95.7	738 92.4	733 91.7
Conwy LA	1160	1043 89.9	1103 95.1	1022 88.1	1020 87.9
Denbighshire LA	1048	930 88.7	989 94.4	916 87.4	902 86.1
Flintshire LA	1716	1621 94.5	1639 95.5	1581 92.1	1565 91.2
Gwynedd LA	1341	1234 92.0	1265 94.3	1204 89.8	1191 88.8
Wrexham LA	1647	1510 91.7	1566 95.1	1486 90.2	1466 89.0
Health Board Total	7711	7098 92.1	7327 95.0	6947 90.1	6877 89.2
Cardiff and Vale University LHB					
Cardiff LA	4568	3921 85.8	4142 90.7	3854 84.4	3730 81.7
Vale of Glamorgan LA	1565	1385 88.5	1480 94.6	1364 87.2	1344 85.9
Health Board Total	6133	5306 86.5	5622 91.7	5218 85.1	5074 82.7
Cwm Taf University LHB					
Merthyr Tydfil LA	754	700 92.8	727 96.4	689 91.4	683 90.6
Rhondda Cynon Taff LA	2784	2539 91.2	2684 96.4	2515 90.3	2484 89.2
Health Board Total	3538	3239 91.5	3411 96.4	3204 90.6	3167 89.5
Hywel Dda University LHB					
Carmarthenshire LA	2018	1780 88.2	1900 94.2	1781 88.3	1724 85.4
Ceredigion LA	634	584 92.1	583 92.0	573 90.4	563 88.8
Pembrokeshire LA	1311	1142 87.1	1213 92.5	1119 85.4	1094 83.4
Health Board Total	3963	3506 88.5	3696 93.3	3473 87.6	3381 85.3
Powys Teaching Health Board	1241	1127 90.8	1133 91.3	1085 87.4	1053 84.9
Unknown	79	69 87.3	70 88.6	67 84.8	67 84.8
Wales Total	35518	31316 88.2	33433 94.1	31154 87.7	30297 85.3

* 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 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC*	PCVf**	HibMenCb	MMR1	MMR2	D4	T4	aP	Po4
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University LHB	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Bridgend LA	1639	1590 97.0	1590 97.0	1590 97.0	1589 96.9	1588 96.9	1564 95.4	1544 94.2	1562 95.3	1586 96.8	1505 91.8	1472 89.8	1472 89.8	1472 89.8	1472 89.8
Neath Port Talbot LA	1612	1576 97.8	1576 97.8	1576 97.8	1576 97.8	1577 97.8	1559 96.7	1531 95.0	1552 96.3	1580 98.0	1509 93.6	1469 91.1	1469 91.1	1469 91.1	1469 91.1
Swansea LA	2703	2595 96.0	2595 96.0	2595 96.0	2594 96.0	2587 95.7	2528 93.5	2502 92.6	2537 93.9	2606 96.4	2492 92.2	2477 91.6	2477 91.6	2477 91.6	2474 91.5
Health Board Total	5954	5761 96.8	5761 96.8	5761 96.8	5759 96.7	5752 96.6	5651 94.9	5577 93.7	5651 94.9	5772 96.9	5506 92.5	5418 91.0	5418 91.0	5418 91.0	5415 90.9
Aneurin Bevan University LHB															
Blaenau Gwent LA	766	744 97.1	744 97.1	744 97.1	744 97.1	744 97.1	740 96.6	718 93.7	731 95.4	745 97.3	701 91.5	710 92.7	710 92.7	710 92.7	710 92.7
Caerphilly LA	2189	2150 98.2	2150 98.2	2150 98.2	2149 98.2	2149 98.2	2128 97.2	2094 95.7	2104 96.1	2153 98.4	2032 92.8	1996 91.2	1996 91.2	1995 91.1	1995 91.1
Monmouthshire LA	919	851 92.6	851 92.6	851 92.6	851 92.6	849 92.4	835 90.9	835 90.9	834 90.8	861 93.7	818 89.0	836 91.0	836 91.0	836 91.0	836 91.0
Newport LA	2062	1961 95.1	1961 95.1	1961 95.1	1958 95.0	1956 94.9	1888 91.6	1885 91.4	1867 90.5	1967 95.4	1838 89.1	1833 88.9	1833 88.9	1833 88.9	1831 88.8
Torfaen LA	1120	1093 97.6	1093 97.6	1093 97.6	1092 97.5	1092 97.5	1069 95.4	1074 95.9	1068 95.4	1097 97.9	1032 92.1	1036 92.5	1036 92.5	1036 92.5	1036 92.5
Health Board Total	7056	6799 96.4	6799 96.4	6799 96.4	6794 96.3	6790 96.2	6660 94.4	6606 93.6	6604 93.6	6823 96.7	6421 91.0	6411 90.9	6411 90.9	6410 90.8	6408 90.8
Betsi Cadwaladr University LHB															
Anglesey LA	801	778 97.1	778 97.1	778 97.1	778 97.1	778 97.1	771 96.3	762 95.1	771 96.3	780 97.4	759 94.8	765 95.5	765 95.5	765 95.5	764 95.4
Conwy LA	1156	1123 97.1	1123 97.1	1123 97.1	1122 97.1	1122 97.1	1102 95.3	1092 94.5	1101 95.2	1135 98.2	1074 92.9	1092 94.5	1092 94.5	1092 94.5	1092 94.5
Denbighshire LA	1091	1053 96.5	1053 96.5	1053 96.5	1053 96.5	1050 96.2	1035 94.9	1043 95.6	1042 95.5	1064 97.5	1017 93.2	1033 94.7	1033 94.7	1032 94.6	1033 94.7
Flintshire LA	1744	1688 96.8	1688 96.8	1687 96.7	1686 96.7	1683 96.5	1652 94.7	1642 94.2	1657 95.0	1695 97.2	1636 93.8	1671 95.8	1671 95.8	1671 95.8	1669 95.7
Gwynedd LA	1233	1184 96.0	1184 96.0	1184 96.0	1184 96.0	1180 95.7	1148 93.1	1150 93.3	1166 94.6	1192 96.7	1145 92.9	1163 94.3	1163 94.3	1163 94.3	1163 94.3
Wrexham LA	1668	1620 97.1	1620 97.1	1620 97.1	1615 96.8	1617 96.9	1585 95.0	1590 95.3	1580 94.7	1639 98.3	1563 93.7	1603 96.1	1603 96.1	1603 96.1	1603 96.1
Health Board Total	7693	7446 96.8	7446 96.8	7445 96.8	7438 96.7	7430 96.6	7293 94.8	7279 94.6	7317 95.1	7505 97.6	7194 93.5	7327 95.2	7327 95.2	7326 95.2	7324 95.2
Cardiff and Vale University LHB															
Cardiff LA	4564	4319 94.6	4319 94.6	4315 94.5	4317 94.6	4291 94.0	4116 90.2	4107 90.0	4127 90.4	4372 95.8	4040 88.5	4107 90.0	4107 90.0	4106 90.0	4108 90.0
Vale of Glamorgan LA	1459	1406 96.4	1406 96.4	1405 96.3	1406 96.4	1405 96.3	1381 94.7	1374 94.2	1377 94.4	1417 97.1	1343 92.0	1363 93.4	1363 93.4	1362 93.4	1363 93.4
Health Board Total	6023	5725 95.1	5725 95.1	5720 95.0	5723 95.0	5696 94.6	5497 91.3	5481 91.0	5504 91.4	5789 96.1	5383 89.4	5470 90.8	5470 90.8	5468 90.8	5471 90.8
Cwm Taf University LHB															
Merthyr Tydfil LA	704	681 96.7	681 96.7	681 96.7	679 96.4	678 96.3	668 94.9	649 92.2	651 92.5	682 96.9	659 93.6	664 94.3	664 94.3	664 94.3	663 94.2
Rhondda Cynon Taff LA	2782	2730 98.1	2730 98.1	2730 98.1	2730 98.1	2729 98.1	2697 96.9	2684 96.5	2673 96.1	2734 98.3	2577 92.6	2600 93.5	2600 93.5	2600 93.5	2600 93.5
Health Board Total	3486	3411 97.8	3411 97.8	3411 97.8	3409 97.8	3407 97.7	3365 96.5	3333 95.6	3324 95.4	3416 98.0	3236 92.8	3264 93.6	3264 93.6	3264 93.6	3263 93.6
Hwyl Dda University LHB															
Cardiff LA	1979	1909 96.5	1909 96.5	1909 96.5	1907 96.4	1905 96.3	1874 94.7	1846 93.3	1848 93.4	1924 97.2	1807 91.3	1788 90.3	1788 90.3	1788 90.3	1787 90.3
Ceredigion LA	699	665 95.1	665 95.1	665 95.1	665 95.1	665 95.1	648 92.7	650 93.0	653 93.4	660 94.4	642 91.8	656 93.8	656 93.8	656 93.8	656 93.8
Pembrokeshire LA	1319	1253 95.0	1253 95.0	1253 95.0	1253 95.0	1252 94.9	1226 92.9	1211 91.8	1224 92.8	1259 95.5	1160 87.9	1185 89.8	1185 89.8	1185 89.8	1185 89.8
Health Board Total	3997	3827 95.7	3827 95.7	3827 95.7	3825 95.7	3822 95.6	3748 93.8	3707 92.7	3725 93.2	3843 96.1	3609 90.3	3629 90.8	3629 90.8	3629 90.8	3628 90.8
Powys Teaching LHB	1254	1181 94.2	1181 94.2	1181 94.2	1179 94.0	1179 94.0	1149 91.6	1149 91.6	1150 91.7	1190 94.9	1132 90.3	1153 91.9	1153 91.9	1153 91.9	1153 91.9
Unknown	69	63 91.3	63 91.3	63 91.3	63 91.3	63 91.3	63 91.3	63 91.3	63 91.3	65 94.2	62 89.9	63 91.3	63 91.3	63 91.3	62 89.9
Wales Total	35532	34213 96.3	34213 96.3	34207 96.3	34190 96.2	34139 96.1	33426 94.1	33195 93.4	33338 93.8	34403 96.8	32543 91.6	32735 92.1	32735 92.1	32731 92.1	32724 92.1

* 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 01/09/2015 and 31/08/2016 and resident on 31/03/2016 (School Year 9 during 2015-16).

Area	Resident girls	HPV 1 dose		HPV 2 doses	
		(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University LHB</u>					
Bridgend LA	717	665	92.7	591	82.4
Neath Port Talbot LA	670	618	92.2	378	56.4
Swansea LA	1191	1099	92.3	475	39.9
Health Board Total	2578	2382	92.4	1444	56.0
<u>Aneurin Bevan University LHB</u>					
Blaenau Gwent LA	340	322	94.7	279	82.1
Caerphilly LA	878	823	93.7	712	81.1
Monmouthshire LA	469	383	81.7	344	73.3
Newport LA	898	769	85.6	683	76.1
Torfaen LA	488	446	91.4	381	78.1
Health Board Total	3073	2743	89.3	2399	78.1
<u>Betsi Cadwaladr University LHB</u>					
Anglesey LA	353	312	88.4	26	7.4
Conwy LA	529	471	89.0	352	66.5
Denbighshire LA	460	401	87.2	254	55.2
Flintshire LA	781	707	90.5	349	44.7
Gwynedd LA	547	486	88.8	319	58.3
Wrexham LA	604	512	84.8	247	40.9
Health Board Total	3274	2889	88.2	1547	47.3
<u>Cardiff and Vale University LHB</u>					
Cardiff LA	1660	1409	84.9	906	54.6
Vale of Glamorgan LA	627	574	91.5	453	72.2
Health Board Total	2287	1983	86.7	1359	59.4
<u>Cwm Taf University LHB</u>					
Merthyr Tydfil LA	277	257	92.8	252	91.0
Rhondda Cynon Taff LA	1125	1075	95.6	1004	89.2
Health Board Total	1402	1332	95.0	1256	89.6
<u>Hywel Dda University LHB</u>					
Carmarthenshire LA	858	794	92.5	761	88.7
Ceredigion LA	295	258	87.5	253	85.8
Pembrokeshire LA	518	448	86.5	430	83.0
Health Board Total	1671	1500	89.8	1444	86.4
<u>Powys Teaching LHB</u>	596	499	83.7	461	77.3
Unknown	53	47	88.7	32	60.4
Wales Total	14934	13375	89.6	9942	66.6

Table 8. Vaccine uptake in children reaching their 15th birthday between 01/04/2015 and 31/03/2016 and resident on 31/03/2016 (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)	(%)	(n)	(%)	
Abertawe Bro Morgannwg University LHB																				
Bridgend LA	1546	1487	96.2	1391	90.0	1371	88.7	785	752	95.8	704	89.7	761	735	96.6	687	90.3			
Neath Port Talbot LA	1449	1374	94.8	1263	87.2	1249	86.2	664	640	96.4	600	90.4	785	734	93.5	663	84.5			
Swansea LA	2440	2254	92.4	2088	85.6	2134	87.5	1188	1094	92.1	1022	86.0	1252	1160	92.7	1066	85.1			
Health Board Total	5435	5115	94.1	4742	87.2	4754	87.5	2637	2486	94.3	2326	88.2	2798	2629	94.0	2416	86.3			
Aneurin Bevan University LHB																				
Blaenau Gwent LA	679	648	95.4	622	91.6	577	85.0	332	313	94.3	301	90.7	347	335	96.5	321	92.5			
Caerphilly LA	1960	1908	97.3	1839	93.8	1629	83.1	893	867	97.1	829	92.8	1067	1041	97.6	1010	94.7			
Monmouthshire LA	1040	925	88.9	860	82.7	790	76.0	498	454	91.2	433	86.9	542	471	86.9	427	78.8			
Newport LA	1851	1716	92.7	1604	86.7	1474	79.6	886	815	92.0	762	86.0	962	899	93.5	840	87.3			
Torfaen LA	999	961	96.2	921	92.2	845	84.6	462	443	95.9	419	90.7	537	518	96.5	502	93.5			
Health Board Total	6529	6158	94.3	5846	89.5	5315	81.4	3071	2892	94.2	2744	89.4	3455	3264	94.5	3100	89.7			
Betsi Cadwaladr University LHB																				
Anglesey LA	706	671	95.0	648	91.8	555	78.6	326	312	95.7	301	92.3	380	359	94.5	347	91.3			
Conwy LA	1208	1118	92.5	1060	87.7	979	81.0	603	559	92.7	528	87.6	605	559	92.4	532	87.9			
Denbighshire LA	1055	987	93.6	928	88.0	864	81.9	497	462	93.0	434	87.3	557	525	94.3	494	88.7			
Flintshire LA	1575	1492	94.7	1429	90.7	1317	83.6	774	737	95.2	712	92.0	801	755	94.3	717	89.5			
Gwynedd LA	1240	1178	95.0	1142	92.1	1038	83.7	595	567	95.3	548	92.1	645	611	94.7	594	92.1			
Wrexham LA	1462	1381	94.5	1327	90.8	1202	82.2	712	678	95.2	645	90.6	750	703	93.7	682	90.9			
Health Board Total	7246	6827	94.2	6534	90.2	5955	82.2	3507	3315	94.5	3168	90.3	3738	3512	94.0	3366	90.0			
Cardiff and Vale University LHB																				
Cardiff LA	3668	3379	92.1	3154	86.0	2715	74.0	1749	1611	92.1	1509	86.3	1919	1768	92.1	1645	85.7			
Vale of Glamorgan LA	1362	1286	94.4	1222	89.7	1097	80.5	677	640	94.5	613	90.5	685	646	94.3	609	88.9			
Health Board Total	5030	4665	92.7	4376	87.0	3812	75.8	2426	2251	92.8	2122	87.5	2604	2414	92.7	2254	86.6			
Cwm Taf University LHB																				
Merthyr Tydfil LA	613	592	96.6	554	90.4	564	92.0	293	282	96.2	266	90.8	320	310	96.9	288	90.0			
Rhondda Cynon Taff LA	2397	2303	96.1	2163	90.2	2186	91.2	1167	1125	96.4	1066	91.3	1229	1178	95.9	1097	89.3			
Health Board Total	3010	2895	96.2	2717	90.3	2750	91.4	1460	1407	96.4	1332	91.2	1549	1488	96.1	1385	89.4			
Hywel Dda University LHB																				
Cardiff and Vale LA	1616	1494	92.5	1417	87.7	1375	85.1	756	701	92.7	671	88.8	860	793	92.2	746	86.7			
Ceredigion LA	627	588	93.8	567	90.4	550	87.7	302	285	94.4	280	92.7	325	303	93.2	287	88.3			
Pembrokeshire LA	1221	1128	92.4	1063	87.1	940	77.0	570	530	93.0	492	86.3	651	598	91.9	571	87.7			
Health Board Total	3464	3210	92.7	3047	88.0	2865	82.7	1628	1516	93.1	1443	88.6	1836	1694	92.3	1604	87.4			
Powys Teaching LHB																				
Unknown	1351	1212	89.7	1128	83.5	1059	78.4	648	579	89.4	536	82.7	703	633	90.0	592	84.2			
Wales Total	163	147	90.2	137	84.0	127	77.9	84	75	89.3	73	86.9	79	72	91.1	64	81.0			
Wales Total	32228	30229	93.8	28527	88.5	26637	82.7	15461	14521	93.9	13744	88.9	16762	15706	93.7	14781	88.2			

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

Table 9. Vaccine uptake in children reaching their 16th birthday between 01/04/2015 and 31/03/2016 and resident on 31/03/2016 (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)
<u>Abertawe Bro Morgannwg University LHB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
Bridgend LA	1544	1481	95.9	1420	92.0	1244	80.6	743	714	96.1	687	92.5	801	767	95.8	733	91.5	
Neath Port Talbot LA	1390	1338	96.3	1249	89.9	1182	85.0	654	632	96.6	595	91.0	736	706	95.9	654	88.9	
Swansea LA	2548	2413	94.7	2272	89.2	2228	87.4	1219	1161	95.2	1093	89.7	1329	1252	94.2	1179	88.7	
Health Board Total	5482	5232	95.4	4941	90.1	4654	84.9	2616	2507	95.8	2375	90.8	2866	2725	95.1	2566	89.5	
<u>Aneurin Bevan University LHB</u>																		
Blaenau Gwent LA	779	753	96.7	714	91.7	655	84.1	382	369	96.6	350	91.6	397	384	96.7	364	91.7	
Caerphilly LA	1992	1948	97.8	1855	93.1	1645	82.6	955	929	97.3	888	93.0	1037	1019	98.3	967	93.2	
Monmouthshire LA	1072	966	90.1	905	84.4	800	74.6	537	490	91.2	472	87.9	534	476	89.1	433	81.1	
Newport LA	1863	1760	94.5	1632	87.6	1471	79.0	888	845	95.2	788	88.7	975	915	93.8	844	86.6	
Torfaen LA	1020	998	97.8	951	93.2	848	83.1	507	498	98.2	474	93.5	512	500	97.7	477	93.2	
Health Board Total	6726	6425	95.5	6057	90.1	5419	80.6	3269	3131	95.8	2972	90.9	3455	3294	95.3	3085	89.3	
<u>Betsi Cadwaladr University LHB</u>																		
Anglesey LA	701	666	95.0	644	91.9	567	80.9	364	344	94.5	337	92.6	337	322	95.5	307	91.1	
Conwy LA	1259	1166	92.6	1110	88.2	1098	87.2	600	561	93.5	533	88.8	658	604	91.8	577	87.7	
Denbighshire LA	1111	1013	91.2	939	84.5	924	83.2	523	489	93.5	465	88.9	588	524	89.1	474	80.6	
Flintshire LA	1631	1553	95.2	1492	91.5	1427	87.5	790	754	95.4	725	91.8	841	799	95.0	767	91.2	
Gwynedd LA	1233	1165	94.5	1128	91.5	1072	86.9	598	565	94.5	547	91.5	635	600	94.5	581	91.5	
Wrexham LA	1427	1375	96.4	1335	93.6	1185	83.0	715	688	96.2	673	94.1	712	687	96.5	662	93.0	
Health Board Total	7362	6938	94.2	6648	90.3	6273	85.2	3590	3401	94.7	3280	91.4	3771	3536	93.8	3368	89.3	
<u>Cardiff and Vale University LHB</u>																		
Cardiff LA	3605	3321	92.1	3122	86.6	2758	76.5	1820	1693	93.0	1594	87.6	1785	1628	91.2	1528	85.6	
Vale of Glamorgan LA	1514	1411	93.2	1346	88.9	1242	82.0	737	686	93.1	656	89.0	776	725	93.4	690	88.9	
Health Board Total	5119	4732	92.4	4468	87.3	4000	78.1	2557	2379	93.0	2250	88.0	2561	2353	91.9	2218	86.6	
<u>Cwm Taf University LHB</u>																		
Merthyr Tydfil LA	663	632	95.3	592	89.3	606	91.4	312	298	95.5	279	89.4	351	334	95.2	313	89.2	
Rhondda Cynon Taff LA	2470	2386	96.6	2269	91.9	2254	91.3	1216	1183	97.3	1130	92.9	1254	1203	95.9	1139	90.8	
Health Board Total	3133	3018	96.3	2861	91.3	2860	91.3	1528	1481	96.9	1409	92.2	1605	1537	95.8	1452	90.5	
<u>Hywel Dda University LHB</u>																		
Carmarthenshire LA	1619	1506	93.0	1417	87.5	1329	82.1	772	726	94.0	686	88.9	847	780	92.1	731	86.3	
Ceredigion LA	628	594	94.6	561	89.3	553	88.1	301	287	95.3	274	91.0	327	307	93.9	287	87.8	
Pembrokeshire LA	1241	1156	93.2	1092	88.0	975	78.6	604	552	91.4	523	86.6	637	604	94.8	569	89.3	
Health Board Total	3488	3256	93.3	3070	88.0	2857	81.9	1677	1565	93.3	1483	88.4	1811	1691	93.4	1587	87.6	
<u>Powys Teaching LHB</u>	1390	1280	92.1	1196	86.0	1070	77.0	661	609	92.1	568	85.9	728	671	92.2	628	86.3	
Unknown	178	160	89.9	153	86.0	132	74.2	73	67	91.8	63	86.3	104	93	89.4	90	86.5	
Wales Total	32878	31041	94.4	29394	89.4	27265	82.9	15971	15140	94.8	14400	90.2	16901	15900	94.1	14994	88.7	

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

Table 10. MenC vaccine uptake in children reaching their 15th (School Year 10 during 2015-16) birthdays between 01/09/2015 and 31/08/2016 and resident on 31/03/2016.

Area	Resident children		MenC*
	(n)	(n)	
Abertawe Bro Morgannwg University LHB	(n)	(n)	(%)
Bridgend LA	1546	1378	89.1
Neath Port Talbot LA	1449	1248	86.1
Swansea LA	2440	2097	85.9
Health Board Total	5435	4723	86.9
Aneurin Bevan University LHB			
Blaenau Gwent LA	679	573	84.4
Caerphilly LA	1960	1637	83.5
Monmouthshire LA	1040	781	75.1
Newport LA	1851	1460	78.9
Torfaen LA	999	840	84.1
Health Board Total	6529	5291	81.0
Betsi Cadwaladr University LHB			
Anglesey LA	706	546	77.3
Conwy LA	1208	977	80.9
Denbighshire LA	1055	866	82.1
Flintshire LA	1575	1306	82.9
Gwynedd LA	1240	1031	83.1
Wrexham LA	1462	1174	80.3
Health Board Total	7246	5900	81.4
Cardiff and Vale University LHB			
Cardiff LA	3668	2677	73.0
Vale of Glamorgan LA	1362	1084	79.6
Health Board Total	5030	3761	74.8
Cwm Taf University LHB			
Merthyr Tydfil LA	613	573	93.5
Rhondda Cynon Taff LA	2397	2213	92.3
Health Board Total	3010	2786	92.6
Hywel Dda University LHB			
Carmarthenshire LA	1616	1363	84.3
Ceredigion LA	627	553	88.2
Pembrokeshire LA	1221	921	75.4
Health Board Total	3464	2837	81.9
Powys Teaching LHB	1351	1042	77.1
Unknown	163	128	78.5
Wales Total	32228	26468	82.1

* Dose of Men C containing vaccine, the majority of which will be meningococcal serogroup C conjugate (MenC) vaccine, a small number of teenagers are recorded as having received MenACWY vaccine.

Table 11. 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 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

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)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Abertawe Bro Morgannwg	1210	1080	89.3	685	604	88.2	980	853	87.0	1298	1107	85.3	1897	1601	84.4
Aneurin Bevan	1010	850	84.2	898	705	78.5	1232	1001	81.3	1567	1242	79.3	2072	1623	78.3
Betsi Cadwalladr	1316	1203	91.4	1877	1703	90.7	1827	1630	89.2	1469	1307	89.0	1222	1026	84.0
Cardiff and Vale	1877	1684	89.7	763	617	80.9	619	499	80.6	832	654	78.6	2042	1608	78.7
Cwm Taf	309	291	94.2	292	267	91.4	506	442	87.4	1165	1081	92.8	1266	1083	85.5
Hywel Dda	245	215	87.8	1020	866	84.9	1378	1185	86.0	862	727	84.3	458	384	83.8
Powys Teaching	117	98	83.8	582	494	84.9	317	268	84.5	148	123	83.1	77	70	90.9
Wales Total	6084	5421	89.1	6117	5256	85.9	6859	5878	85.7	7341	6241	85.0	9034	7395	81.9

* 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 12. Uptake of hepatitis B immunisation in children born to hepatitis B positive mothers reaching their 1st, 2nd and 5th birthdays during 01/04/2015 and 31/03/2016 and resident on 31/03/2016.

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)	(%)	(%)	(%)	(%)
Abertawe Bro Morgannwg UHB	5518	10	100.0	100.0	100.0	5547	8	100.0	100.0	100.0	87.5	5954	8	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	6482	6	100.0	100.0	100.0	6654	12	100.0	100.0	100.0	83.3	7056	11	100.0	100.0	100.0	90.9
Betsi Cadwaladr UHB	7101	15	100.0	100.0	100.0	7238	8	100.0	100.0	100.0	100.0	7693	10	100.0	100.0	100.0	100.0
Cardiff and Vale UHB	5862	27	100.0	100.0	96.3	5813	29	100.0	100.0	100.0	86.2	6023	27	100.0	100.0	100.0	92.6
Cwm Taf UHB	3364	0	0.0	0.0	0.0	3383	0	0.0	0.0	0.0	0.0	3486	1	100.0	100.0	100.0	100.0
Hywel Dda UHB	3642	1	100.0	100.0	100.0	3703	2	100.0	100.0	100.0	100.0	3997	2	100.0	100.0	100.0	100.0
Powys Teaching HB	1083	0	0.0	0.0	0.0	1170	0	0.0	0.0	0.0	0.0	1254	1	100.0	100.0	100.0	100.0
Unknown	33	0	0.0	0.0	0.0	92	0	0.0	0.0	0.0	0.0	69	0	0.0	0.0	0.0	0.0
Wales Total	33085	59	100.0	100.0	98.3	33600	59	100.0	100.0	100.0	88.1	35532	60	100.0	100.0	100.0	95.0

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

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

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>

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