

Vaccine Uptake in Children in Wales

COVER Annual Report 2019

Data for the year ending 31st March 2019



Key points

- In 2018/19 uptake of the '6 in 1' and pneumococcal conjugate vaccinations in one year old children in Wales was 95.4% and 95.5% respectively.
- MenB vaccine uptake was 95.1% for two doses, this is the second full cohort of eligible children reported on at one year of age. Uptake of two doses of rotavirus vaccine was 93.6%.
- MMR uptake was 94.5% for the first dose at two years.
- MenB uptake was 93.8% for the complete course at two years, this is the first full cohort of eligible children reported on at two years old.
- By their fourth birthday, 87.2% of children were up to date with recommended immunisations.
- MMR dose two uptake in children at five years of age was 92.2%. Uptake of the pre-school '4 in 1' booster in this age-group was 92.5%.
- Human Papillomavirus (HPV) vaccine uptake in girls turning 14 years of age during the 2018/19 school year (School Year 9) was 86.7% for the first dose. Uptake of the complete two-dose course in girls turning 15 years of age (School Year 10) was 81.8%.
- MMR uptake, for a full two-dose course, was 91.2% and 89.8% for teenagers turning 15 and 16 years of age respectively during the 2018/19 school year.
- MenACWY vaccine uptake in teenagers turning 15 years of age during the 2018/19 school year was 84%.

Background

These annual results for 2018/19 are for one year cohorts of children living in Wales as at 31st March 2019 and reaching their first, second, fourth and fifth birthdays between 01/04/2018 and 31/03/2019. Uptake of vaccinations in those reaching 15 and 16 years of age are presented by school year.

Inequalities in uptake of routine vaccinations at four years of age are also presented. National quintiles of deprivation were calculated according to the Lower Super Output Area (LSOA) rankings contained in the Welsh Index of Multiple Deprivation (WIMD 2014). 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 all residents in the LSOA as a whole, not the circumstances of individual residents within the LSOA.

Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre, working with Powys Teaching Health Board and the NHS Wales Informatics Service, carried out a COVER data quality assurance project at the end of 2018. This project led to improvements in completeness of vaccination data in the national COVER dataset. The impact is that reported vaccination uptake has increased; primarily in children aged four years and older. National trends in this report for 2015 – 2018 are updated to take into account these changes.

Findings

1. '6 in 1' DTaP/IPV/Hib/HepB¹ vaccine uptake (all three doses) in children reaching their first birthday decreased to 95.4%, from 95.9% in the previous year. Uptake ranged by health board (HB) from 93.9% (Hywel Dda) to 97.5% (Cwm Taf) and by local authority (LA) from 93.2% (Conwy) to 97.8% (Rhondda Cynon Taf). Fourteen of the 22 LAs achieved the 95% target (Figures 1, 2, 4, 6 and Tables 2, 3). The '6 in 1' vaccine was introduced for babies born on or after 1st August 2017 [1]. A small proportion of one year olds in this cohort would have received the '5 in 1' DTaP/IPV/Hib vaccine.
2. Pneumococcal conjugate vaccination (PCV²) uptake of a complete two-dose primary course in children at one year of age was 95.5%, ranging by HB from 93.8% (Hywel Dda) to 97.8% (Cwm Taf) and by LA from 92.9% (Ceredigion) to 98.0% (Rhondda Cynon Taf) (Figures 1, 2 and Tables 2, 3).
3. Rotavirus vaccine uptake of two doses in children reaching their first birthday was 93.6% compared to 93.8% in the previous year. Uptake ranged by HB from 92.3% (Cardiff & Vale and Hywel Dda) to 96.3% (Cwm Taf) and by LA from 90.4% (Ceredigion) to 96.5% (Rhondda Cynon Taf) (Figures 1, 2 and Tables 2, 3).
4. Meningococcal serotype B vaccination (MenB) uptake of two doses in children at one year of age was 95.1%, ranging by HB from 93.1% (Cardiff and Vale) to 97.5% (Cwm Taf) and by LA from 92.6% (Cardiff and Ceredigion) to 97.6% (Rhondda Cynon Taf) (Table 3). This is the second annual report to report on a full cohort of children reaching their 1st birthday who would have been eligible for MenB vaccine, which was introduced in September 2015 for those born 1st May 2015 onwards [2].
5. MMR³ uptake of one dose by two years of age decreased to 94.5%, compared to 94.7% in the previous year. Uptake ranged by HB from 92.5% (Hywel Dda) to 96.9% (Cwm Taf) and by LA from 91.4% (Ceredigion) to 97.0% (Anglesey and Rhondda Cynon Taf). Two HBs achieved the target uptake of 95%, and 11 out of 22 LAs exceeded the 95% target (Figures 1, 4, 7 and Tables 2, 4).
6. Pneumococcal Conjugate Vaccine (PCVf) uptake of the final dose by two years of age was 94.8%. Uptake by HB ranged from 92.5% (Hywel Dda) to 97.3% (Cwm Taf) and by LA from 91.7% (Ceredigion) to 97.4% (Rhondda Cynon Taf) (Figure 2 and Tables 2, 4).
7. Hib/MenC⁴ booster uptake by two years of age was 94.2%, ranging by HB from 91.8% (Cardiff and Vale) to 97.0% (Cwm Taf) and by LA from 91.3% (Ceredigion) to 97.2% (Anglesey) (Figures 1, 2 and Tables 2, 4).
8. MenB vaccine uptake of a complete course in children at two years of age was 93.8%, ranging by HB from 90.5% (Cardiff and Vale) to 96.9% (Cwm Taf), and by LA from 89.9% (Cardiff) to 97.0 (Anglesey). This is the first annual report to report on a full cohort of children reaching their 2nd birthday who would have been eligible for MenB vaccine, which was introduced in September 2015 for those born 1st May 2015 onwards [2].
9. Hib/MenC booster coverage in children by their fourth birthday was 95.1% and ranged by HB from 94.1% (Aneurin Bevan) to 96.2% (Cwm Taf) (Table 5).
10. '4 in 1' DTaP/IPV⁵ 'pre-school booster' uptake in children by four years of age was 88.8%, this ranged by HB from 86.2% (Aneurin Bevan) to 91.0% (Betsi Cadwaladr and Powys) (Table 5).

¹ DTaP/IPV/Hib/HepB vaccine protects against diphtheria, tetanus, pertussis (Whooping Cough), polio, Hib and Hepatitis B infection. The majority of one year olds referred to in this report would have been eligible for the '6 in 1' vaccine, replacing the '5 in 1' vaccine due at four, eight and 12 months.

² 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.

³ MMR protects against measles, mumps and rubella

⁴ Hib/MenC vaccine protects against Hib and MenC infections and a routine dose should be offered at 12-13 months of age.

11. MMR vaccine uptake of a complete two dose course in children by four years of age was 88.4%, this ranged by HB from 85.7% (Aneurin Bevan) to 90.6% (Cwm Taf) (Table 5).
12. The percentage 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 87.2%. This ranged by HB from 84.1% (Aneurin Bevan) to 89.7% (Betsi Cadwaladr) and by LA from 81.4% (Newport) to 91.4% (Anglesey) (Figure 3 and Tables 1, 2, 5).
13. The percentage of children who were up to date with their routine vaccinations by four years of age varied according to the national quintile of deprivation of the LSOA in which they resided. Nationally, the percentage of children up to date with their routine immunisations by four years of age ranged from 83.9% in the most deprived quintile of LSOAs to 91.8% in the least deprived quintile of LSOAs. The difference in uptake between the least deprived quintile and the most deprived quintile was 9.2% (Figures 10, 11 and Table 6).
14. MMR uptake of two doses in children at five years of age was 92.2%, ranging by HB from 90.3% (Hywel Dda) to 94.3% (Betsi Cadwaladr). Coverage of one dose of MMR in children at five years of age was 96.8% and ranged by HB from 95.2% (Hywel Dda) to 97.4% (Betsi Cadwaladr) (Figures 1, 2, 5, 8 and Tables 2, 6).
15. '4 in 1' DTaP/IPV 'pre-school booster' uptake in children reaching their fifth birthday this year was 92.5% (Figures 2, 5, 9 and Tables 2, 7).
16. HPV vaccine uptake of one dose in girls in the 2017/18 School Year 9 (reaching their 14th birthday between 01/09/18 and 31/08/19) was 86.7%. Uptake ranged by HB from 80.8% (Aneurin Bevan) to 90.8% (Cwm Taf) and by LA from 76.6% (Newport) to 93.2% (Neath Port Talbot). Coverage of two doses of HPV vaccine in girls in the 2018/19 School Year 10 is currently 81.8%. (Figure 12 and Table 8).
17. MMR coverage of two doses in teenagers turning 15 years of age between 01/09/18 and 31/08/19 was 91.2%, ranging by HB from 88.8% (Cardiff & Vale) to 92.8% (Aneurin Bevan) and by LA from 88.3% (Cardiff) to 95.4% (Blaenau Gwent). Coverage of one dose of MMR in 15 year olds was 95.0%, ranging by LA from 93.6% (Powys) to 97.9% (Blaenau Gwent and Torfaen). A breakdown by sex indicates that 91.6% of girls had received a full (two MMR doses) course of immunisation against rubella and coverage of one dose was 95.4% (Figure 12 and Table 9).
18. Td/IPV⁶ 'teenage booster' uptake in teenagers reaching 15 years of age between 01/09/18 and 31/08/19 was 83.8%. Uptake ranged by HB from 75.0% (Cardiff and Vale) to 91.1% (Cwm Taf) and by LA from 72.2% (Cardiff) to 91.9% (Rhondda Cynon Taf) (Figure 12 and Table 9).
19. Coverage of MenACWY vaccine in the in the 2017/18 School Year 10 group, the second Year 9 routine cohort to be offered the new vaccine is currently 84.6% Coverage in the 2018/19 School Year 10 group, the third Year 9 routine cohort to be offered the new vaccine is currently 83.8% (Figure 12 and Table 9).
20. MMR coverage of two doses in teenagers turning 16 years of age during the 2018/19 school year was 89.8%, ranging by HB from 86.7% (Cardiff & Vale) to 92.4% (Betsi Cadwaladr) and by LA from 85.5% (Cardiff) to 95.5% (Gwynedd). Coverage of one dose of MMR in 16 year olds was 94.2%, ranging by LA from 91.6% (Cardiff) to 97.5% (Gwynedd). A breakdown by sex indicates that 90.6% of girls had received a full (two MMR doses) course of immunisation against rubella and coverage of one dose was 94.6% (Table 10).
21. Td/IPV 'teenage booster' uptake in teenagers reaching 16 years during the 2018/19 school year was 84.4%. Uptake ranged by HB from 76.0% (Cardiff and Vale) to 90.0% (Cwm Taf) and by LA from 74.0% (Cardiff) to 90.7% (Conwy) (Table 10).
22. Uptake of hepatitis B immunisation in babies at risk of perinatal infection, 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 31st March 2019 was 96.4%. Uptake of four doses in children who were at risk of perinatal infection and reached their second birthday in the year ending 31st March 2019 was 59.6%. Uptake of four doses in children who were at risk of perinatal infection and reached their fifth birthday in the year ending 31st March 2019 was 94.8%.

Comment

Uptake in Wales is currently at high levels, but the last few years has seen a gradual drift downwards since the very highest coverage levels seen a few years ago (see Figs 1a and 1b). This trend is also apparent in other UK countries, and has been noted by the UK Joint Committee on Vaccination and Immunisation (JCVI).

This is the first report to include one year old children eligible for the '6 in 1' (DTaP/IPV/Hib/HepB) vaccine which replaced the '5 in 1' (DTaP/IPV/Hib) vaccine in August 2017. Uptake of both the '6 in 1' vaccine, or '5 in 1', and pneumococcal conjugate vaccines remained above 95% in children at one year of age for the eleventh consecutive year.

This is the second annual report to include uptake of two doses of MenB vaccine in a full cohort of children reaching one year of age. Uptake of two doses at one year of age was over 95% and uptake of a complete course in eligible two year olds who were the first full eligible cohort for this vaccination programme was 94%.

Although overall uptake of immunisations at one year remains high, uptake varies between health board areas. Uptake of the '6 in 1' vaccine in the 2018/19 year varied from 93.9% to 97.5% whilst uptake of two doses of the MenB vaccine varied from 93.1% to 97.5%.

During 2018, a COVER data quality project identified procedures to make vaccination data held in the National Community Child Health Database more accurate. As a result, there have been increases in uptake in immunisations reported on at 4 years of age and above. The proportion of children who were up to date with their routine immunisations by four years of age was 87.2% this year, compared to 84.9% as reported during the 2017-18 financial year. However, of all the immunisations that are included in this composite measure, uptake of the second dose of MMR remains the lowest (88%), followed by the '4 in 1' preschool booster (89%) and Hib/MenC booster (95%).

Despite coverage increasing across all quintiles, the reported inequality gap in immunisation coverage between four year olds residing in the most and least deprived areas increased compared to 2017/18, from 6.2 to 9.2 percentage points. This is the largest inequality gap since inequalities were first reported in the annual COVER report in 2012/13. The widening gap is the result of coverage in the most deprived areas increasing at a slower rate than in the least deprived areas since 2016/17. Further work is needed to identify the root cause of these inequalities and identify interventions to reduce this gap in addition to existing enhanced primary care nursing services including Flying Start.

Uptake of MMR vaccination remains suboptimal for preventing further outbreaks of measles, being below 95% for two doses in all ages in this report. Outbreaks of measles are ongoing across Europe. Between April 2018 and March 2019 there were 11,838 cases of measles reported across EU countries, with the highest numbers from Italy (2,107), France (2,082), Romania (1,390), Greece (870) and the UK (860) [3]. A recent ECDC assessment highlights risks of continued widespread circulation of measles in EU/EEA in the near future, while suboptimal vaccination coverage remains [4]. There remains potential for outbreaks in Wales following importation from people acquiring measles virus abroad. The 2017 and 2018 Welsh outbreaks both began with importation events [5, 6].

Over the past months there has also been an increase in notifications of mumps to Public Health Wales Health Protection Teams [7]. MMR vaccination remains the best form of protection against both measles and mumps infection. The suboptimal MMR uptake in children is of concern and should be actively addressed to prevent further outbreaks and maintain elimination of measles in the longer term.

Uptake of a complete course of HPV immunisation in year 10 girls (reaching 15 years of age) has fallen for the third year in a row and is now 81.8%. This is the lowest uptake reported out of all immunisations measured at 15 years of age. In July 2018, it was announced that Welsh

Government would extend the HPV vaccination programme to include boys following recommendations from JCVI [8].

[1] Welsh Government (2017). Introduction of the hexavalent ("6 in 1") vaccine including hepatitis B into the routine immunisation schedule for babies born on or after 1 August 2017. Welsh Health Circular. WHC(2017)039. <http://gov.wales/docs/dhss/publications/170809whc039en.pdf>

[2] Welsh Government (2015). Introduction of MenB Immunisation for Infants, Welsh Health Circular. WHC(2015)040. <http://gov.wales/docs/dhss/publications/150727whc040en.pdf>

[3] European Centre for Disease Prevention and Control. Monthly measles and rubella monitoring report, May 2019. Sweden, ECDC. <https://www.ecdc.europa.eu/sites/portal/files/documents/measles-monthly-report-may-2019.pdf>

[4] European Centre for Disease Prevention and Control. Risk Assessment: Who is at risk for measles in the EU/EEA? May 2019. Sweden, ECDC. <https://ecdc.europa.eu/sites/portal/files/documents/RRA-Measles-EU-EEA-May-2019.pdf>

[5] Currie J, Davies L, McCarthy J, Perry M, Moore C, Cottrell S, Bowley M, Williams C, Shankar A G, Stiff R. (2017) Measles outbreak linked to European B3 outbreaks, Wales, United Kingdom. Eurosurveillance. <http://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2017.22.42.17-00673>

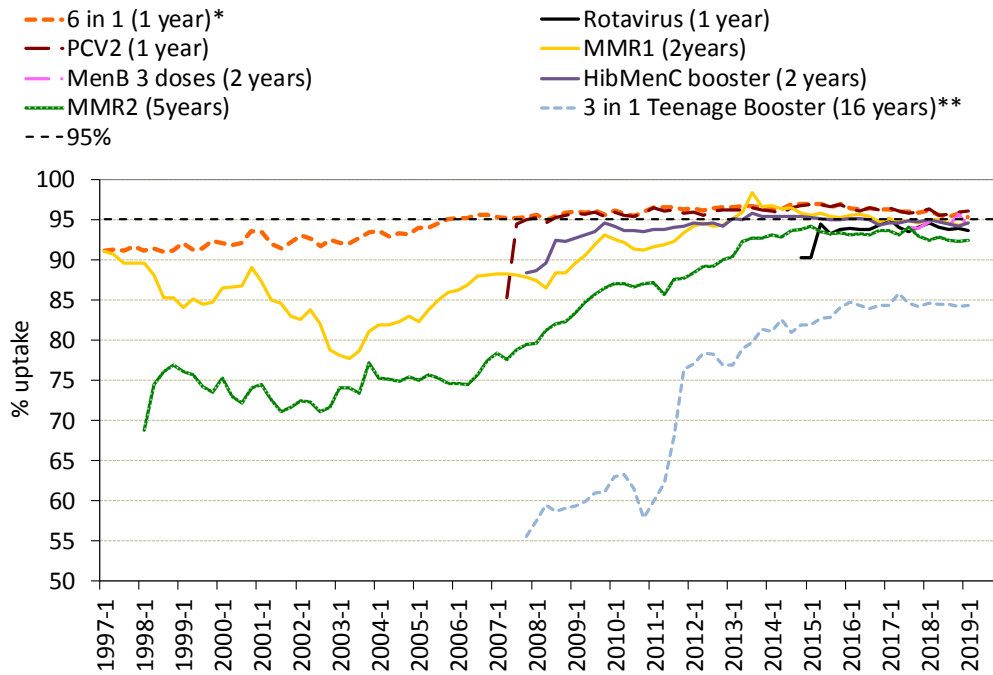
[6] Public Health Wales news. 28 March 2018. <http://howis.wales.nhs.uk/sitesplus/888/news/59618>

[7] Public Health Wales Weekly Notification of Mumps Dashboard. May 2019: <http://www.wales.nhs.uk/sitesplus/888/page/60048>

[8] Joint Committee on Vaccination and Immunisation. Statement on HPV vaccination, July 2018. UK, JCVI. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/726319/JCVI_Statement_on_HPV_vaccination_2018.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 2 are best viewed in colour*

Figure 1a. Percentage uptake of childhood immunisations in Wales, quarter 1 1997 to quarter 1 2019*.

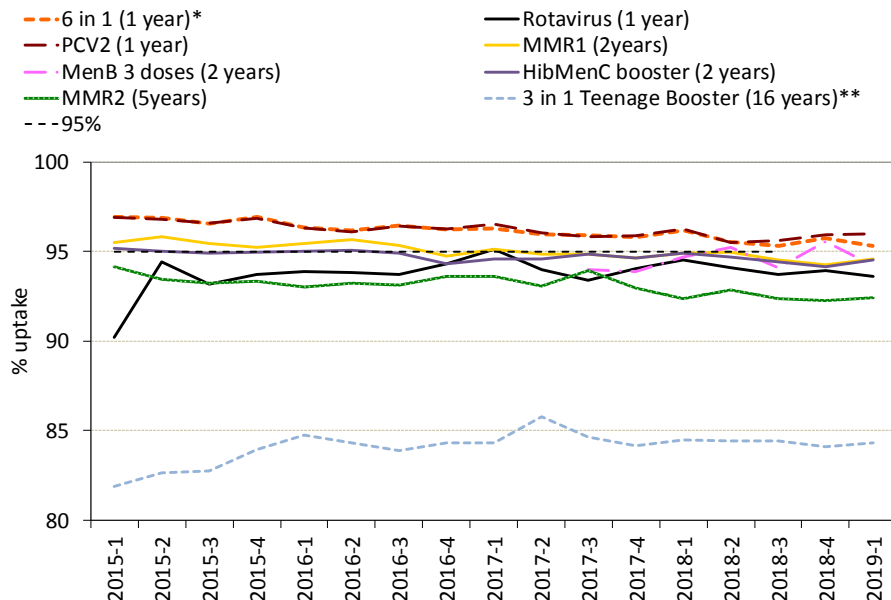


*Uptake data for quarter 3 2014 to quarter 4 2014 presented here are based on estimates calculated in August 2015, rather than published data, due to data quality problems affecting reported uptake of some immunisations in reports published during this period.

**Uptake of pertussis used as a proxy.

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

Figure 1b. Percentage uptake of childhood immunisations in Wales, quarter 1 2015 to quarter 1 2019***



* Uptake of pertussis used as proxy.

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

***Uptake data for MMR2 at 5 years and the "3 in 1" teenage booster at 16 years from 2015 Q1 to 2018 Q3 are based on estimates calculated in February 2019, rather than published data. This is due to improvements in data quality made during early 2019.

Figure 2. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd and 5th birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

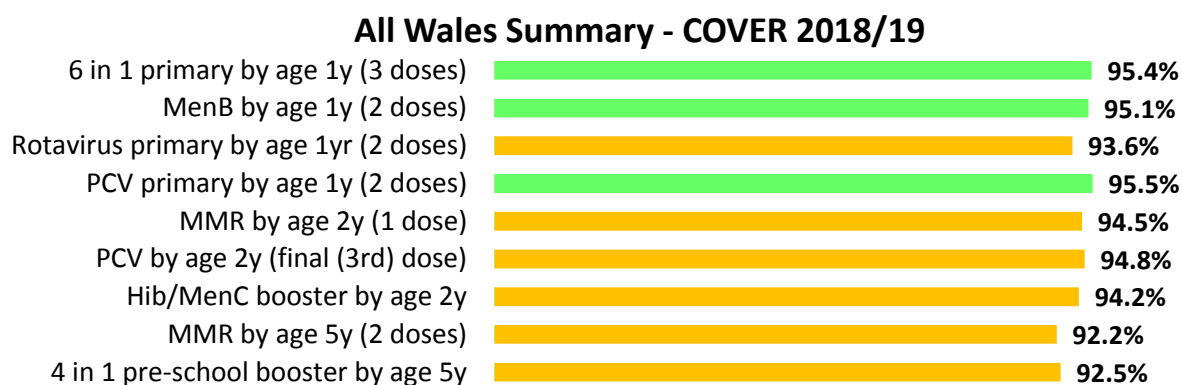


Figure 3. Percentage of resident children reaching their 4th birthday between 01/04/18 and 31/03/19 and are up to date with all scheduled vaccines³ by Health Board.



Table 1. Percentage of resident children reaching their 4th birthday and are up to date with all scheduled vaccines by Health Board, annually 2014/15 to 2017/18.

Area	Up to date in schedule			
	2015/16	2016/17	2017/18	2018/19
Abertawe Bro Morgannwg UHB	86.5	86.3	86.2	88.0
Aneurin Bevan UHB	80.0	80.7	81.0	84.1
Betsi Cadwaladr UHB	89.2	88.3	87.9	89.7
Cardiff and Vale UHB	82.7	81.7	82.6	86.8
Cwm Taf UHB	89.5	87.3	88.2	87.9
Hywel Dda UHB	85.3	83.0	84.0	86.3
Powys Teaching HB	84.9	86.2	86.2	88.9
Wales	85.3	84.6	84.9	87.2

³ Completed '4 in 1' pre-school booster, the Hib/MenC booster and second MMR dose by four years of age.

Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 4th and 5th birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

Area	Age 1 year								Age 2 years								Age 4 years		Age 5 years							
	Resident children (n)	6 in 1 ¹		MenB ²		PCV2		Rotavirus		Resident children (n)	MMR1		PCV ³		MenB		Hib/MenC booster	Resident children (n)	Up to date in schedule ⁴	Resident children (n)	MMR2		4 in 1 ¹			
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(n)	(n)	(%)	(n)	(%)		
Abertawe Bro Morgannwg University LHB																										
Bridgend LA	1501	1452	96.7	1451	96.7	1452	96.7	1443	96.1	1585	1505	95.0	1514	95.5	1506	95.0	1505	95.0	1586	1400	88.3	1643	1534	93.4	1534	93.4
Neath Port Talbot LA	1514	1461	96.5	1461	96.5	1463	96.6	1434	94.7	1522	1442	94.7	1448	95.1	1445	94.9	1439	94.5	1555	1376	88.5	1529	1404	91.8	1414	92.5
Swansea LA	2410	2292	95.1	2277	94.5	2290	95.0	2257	93.7	2431	2284	94.0	2292	94.3	2269	93.3	2276	93.6	2565	2244	87.5	2601	2360	90.7	2366	91.0
Health Board Total	5425	5205	95.9	5189	95.6	5205	95.9	5134	94.6	5538	5231	94.5	5254	94.9	5220	94.3	5220	94.3	5706	5020	88.0	5773	5298	91.8	5314	92.0
Aneurin Bevan University LHB																										
Blaenau Gwent LA	741	721	97.3	720	97.2	722	97.4	689	93.0	736	711	96.6	716	97.3	711	96.6	712	96.7	749	627	83.7	801	751	93.8	754	94.1
Caerphilly LA	1996	1922	96.3	1922	96.3	1928	96.6	1899	95.1	1959	1890	96.5	1893	96.6	1888	96.4	1884	96.2	2105	1806	85.8	2109	1974	93.6	1988	94.3
Monmouthshire LA	783	753	96.2	751	95.9	752	96.0	730	93.2	805	765	95.0	765	95.0	761	94.5	766	95.2	865	762	88.1	884	822	93.0	830	93.9
Newport LA	1974	1865	94.5	1861	94.3	1872	94.8	1812	91.8	2071	1913	92.4	1914	92.4	1894	91.5	1901	91.8	2142	1744	81.4	2079	1864	89.7	1837	88.4
Torfaen LA	1029	977	94.9	985	95.7	985	95.7	945	91.8	1047	996	95.1	1000	95.5	994	94.9	992	94.7	1000	832	83.2	1131	1051	92.9	1049	92.7
Health Board Total	6523	6238	95.6	6239	95.6	6259	96.0	6075	93.1	6618	6275	94.8	6288	95.0	6248	94.4	6255	94.5	6861	5771	84.1	7004	6462	92.3	6458	92.2
Betsi Cadwaladr University LHB																										
Anglesey LA	685	659	96.2	660	96.4	660	96.4	656	95.8	725	703	97.0	705	97.2	703	97.0	705	97.2	740	676	91.4	755	724	95.9	731	96.8
Conwy LA	1021	952	93.2	957	93.7	956	93.6	938	91.9	1031	970	94.1	979	95.0	964	93.5	970	94.1	1143	1026	89.8	1107	1037	93.7	1041	94.0
Denbighshire LA	972	916	94.2	914	94.0	916	94.2	897	92.3	1025	960	93.7	967	94.3	955	93.2	962	93.9	1076	948	88.1	1087	1011	93.0	1016	93.5
Flintshire LA	1592	1537	96.5	1535	96.4	1540	96.7	1513	95.0	1576	1518	96.3	1521	96.5	1513	96.0	1522	96.6	1617	1457	90.1	1690	1613	95.4	1617	95.7
Gwynedd LA	1118	1065	95.3	1060	94.8	1068	95.5	1029	92.0	1160	1107	95.4	1116	96.2	1110	95.7	1112	95.9	1154	1036	89.8	1227	1138	92.7	1142	93.1
Wrexham LA	1528	1467	96.0	1469	96.1	1469	96.1	1437	94.0	1501	1446	96.3	1449	96.5	1439	95.9	1440	95.9	1578	1411	89.4	1604	1523	95.0	1532	95.5
Health Board Total	6916	6596	95.4	6595	95.4	6609	95.6	6470	93.6	7018	6704	95.5	6737	96.0	6684	95.2	6711	95.6	7308	6554	89.7	7470	7046	94.3	7079	94.8
Cardiff and Vale University LHB																										
Cardiff LA	4043	3801	94.0	3743	92.6	3788	93.7	3710	91.8	4216	3908	92.7	3899	92.5	3791	89.9	3855	91.4	4374	3758	85.9	4439	4000	90.1	4007	90.3
Vale of Glamorgan LA	1386	1317	95.0	1312	94.7	1313	94.7	1299	93.7	1481	1378	93.0	1380	93.2	1365	92.2	1376	92.9	1455	1300	89.3	1508	1387	92.0	1389	92.1
Health Board Total	5429	5118	94.3	5055	93.1	5101	94.0	5009	92.3	5697	5286	92.8	5279	92.7	5156	90.5	5231	91.8	5829	5058	86.8	5947	5387	90.6	5396	90.7
Cwm Taf University LHB																										
Merthyr Tydfil LA	707	682	96.5	686	97.0	686	97.0	676	95.6	694	670	96.5	673	97.0	672	96.8	668	96.3	786	694	88.3	682	632	92.7	639	93.7
Rhondda Cynon Taff LA	2553	2496	97.8	2493	97.6	2502	98.0	2463	96.5	2651	2571	97.0	2581	97.4	2570	96.9	2575	97.1	2749	2415	87.9	2850	2655	93.2	2671	93.7
Health Board Total	3260	3178	97.5	3179	97.5	3188	97.8	3139	96.3	3345	3241	96.9	3254	97.3	3242	96.9	3243	97.0	3535	3109	87.9	3532	3287	93.1	3310	93.7
Hywel Dda University LHB																										
Cardiff and Vale LA	1869	1760	94.2	1756	94.0	1759	94.1	1738	93.0	1895	1756	92.7	1760	92.9	1740	91.8	1754	92.6	1905	1643	86.2	1971	1799	91.3	1819	92.3
Ceredigion LA	564	526	93.3	522	92.6	524	92.9	510	90.4	606	554	91.4	556	91.7	549	90.6	553	91.3	641	569	88.8	652	598	91.7	609	93.4
Pembrokeshire LA	1140	1068	93.7	1061	93.1	1069	93.8	1050	92.1	1223	1135	92.8	1129	92.3	1116	91.3	1120	91.6	1300	1108	85.2	1240	1092	88.1	1094	88.2
Health Board Total	3573	3354	93.9	3339	93.5	3352	93.8	3298	92.3	3724	3445	92.5	3445	92.5	3405	91.4	3427	92.0	3846	3320	86.3	3863	3489	90.3	3522	91.2
Powys Teaching LHB																										
Powys LA	1138	1096	96.3	1090	95.8	1094	96.1	1077	94.6	1127	1068	94.8	1076	95.5	1064	94.4	1073	95.2	1149	1022	88.9	1235	1127	91.3	1146	92.8
Unknown	18	17	94.4	17	94.4	17	94.4	18	100.0	22	20	90.9	20	90.9	1064	94.4	20	90.9	20	13	65.0	65	60	92.3	61	93.8
Wales Total	32282	30802	95.4	30703	95.1	30825	95.5	30220	93.6	33089	31270	94.5	31353	94.8	31039	93.8	31180	94.2	34254	29867	87.2	34889	32156	92.2	32286	92.5

¹ Uptake of pertussis used as proxy.

² Uptake of two doses of meningococcal serogroup B (MenB) vaccine, scheduled at two and four months of age.

³ Children receiving the final dose of PCV.

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

Figure 4. (a) Uptake of '6 in 1' vaccine¹ in Welsh Local Authority areas in children reaching their 1st birthday between 01/04/18 and 31/03/19. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/04/18 and 31/03/19.

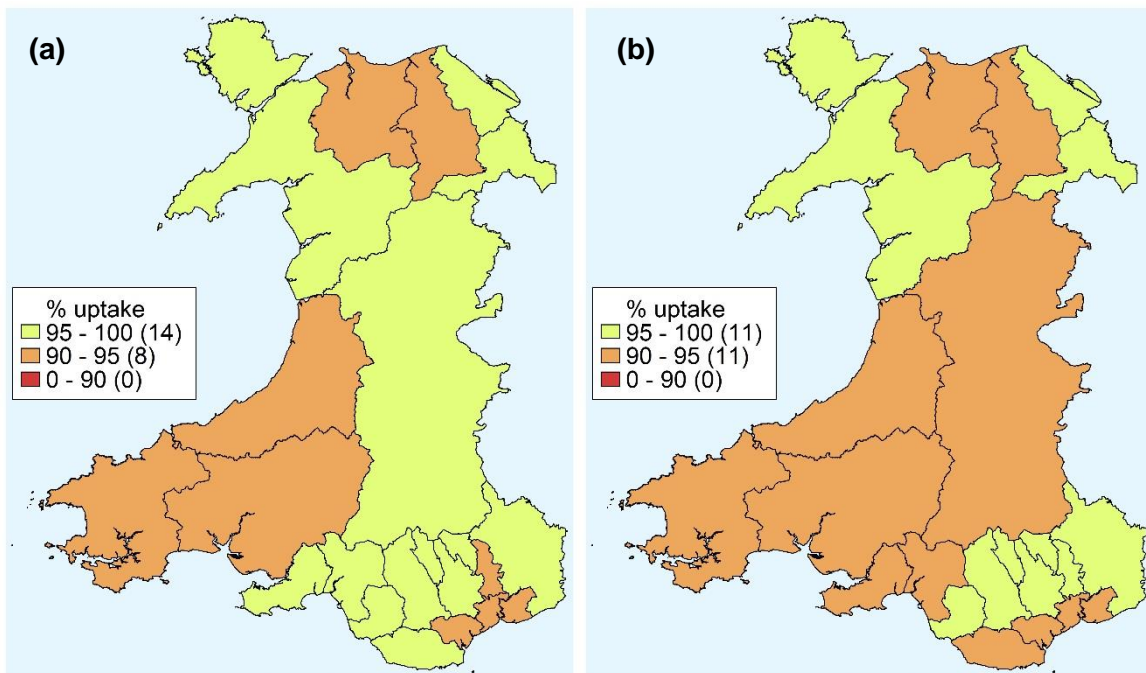
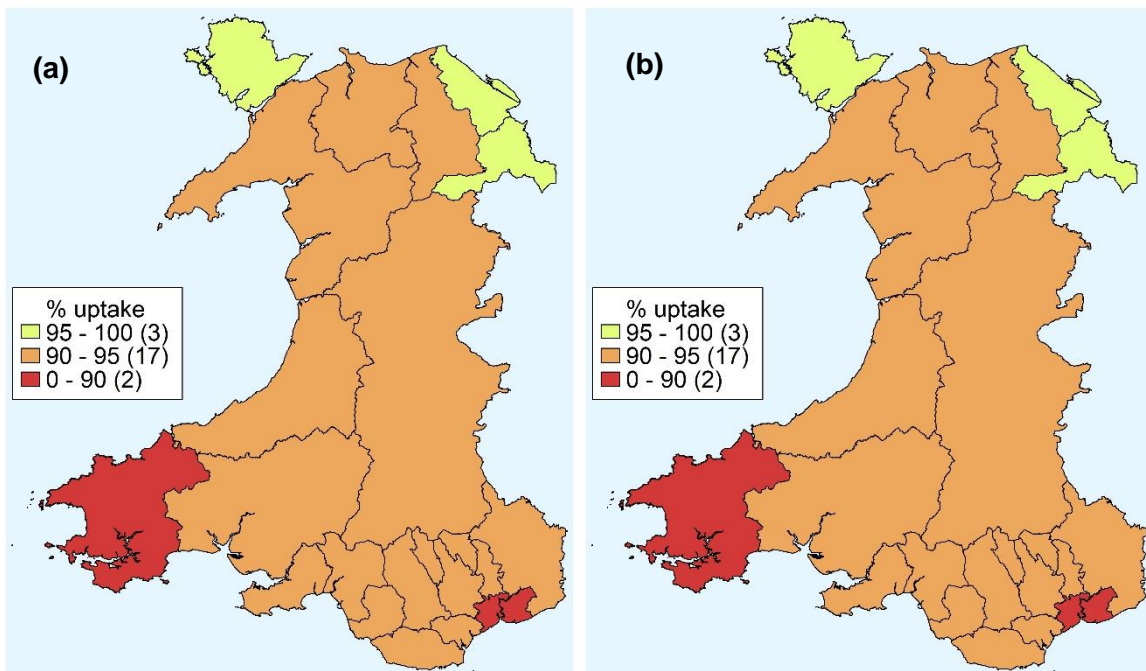
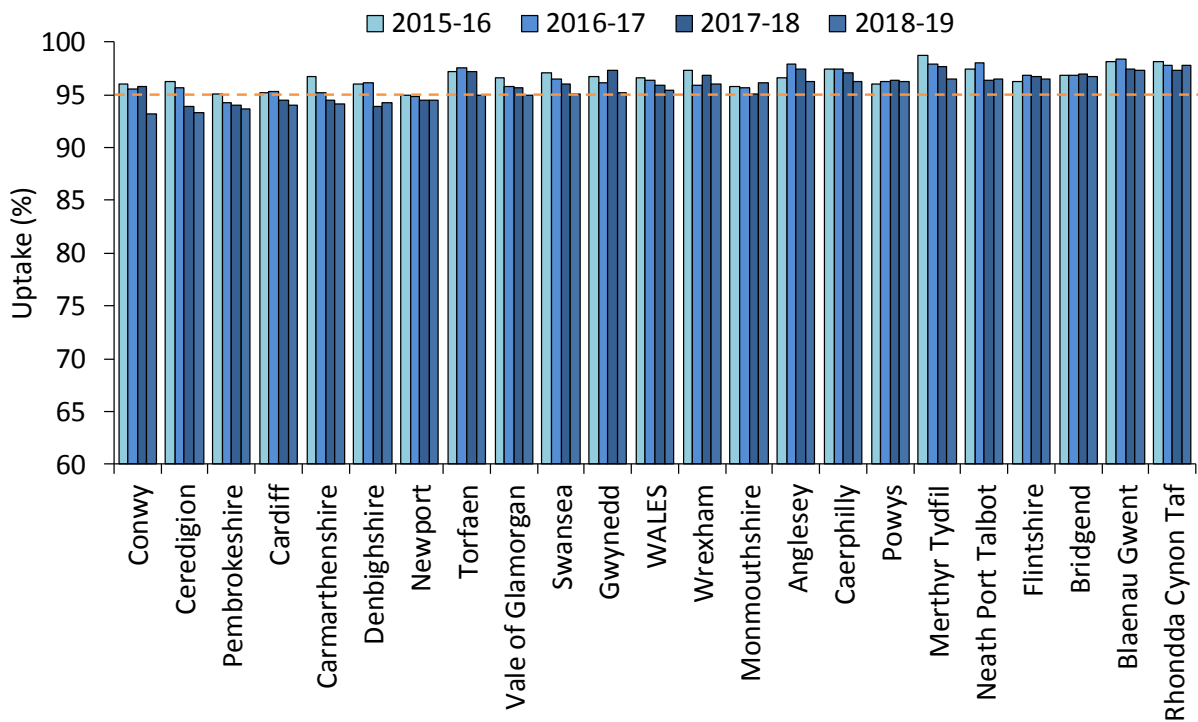


Figure 5. (a) Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/18 and 31/03/19. **(b)** Uptake of '4 in 1' vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/18 and 31/03/19.



¹Although the majority of one year olds referred to in this report would have been eligible for the '6 in 1' vaccine, a proportion of infants would have received the '5 in 1'.

Figure 6. Annual uptake of '5 in 1' or '6 in 1' vaccine by 1 year of age (2015 – 2019 financial years, ranked by uptake in 2018/19).¹



¹ For 2018-19 the majority of one year olds would have been eligible for the '6 in 1' vaccine, a proportion of infants would have received the '5 in 1'.

Figure 7. Annual uptake of 1 dose of MMR by 2 years of age (2015 – 2019 financial years, ranked by uptake in 2018/19).

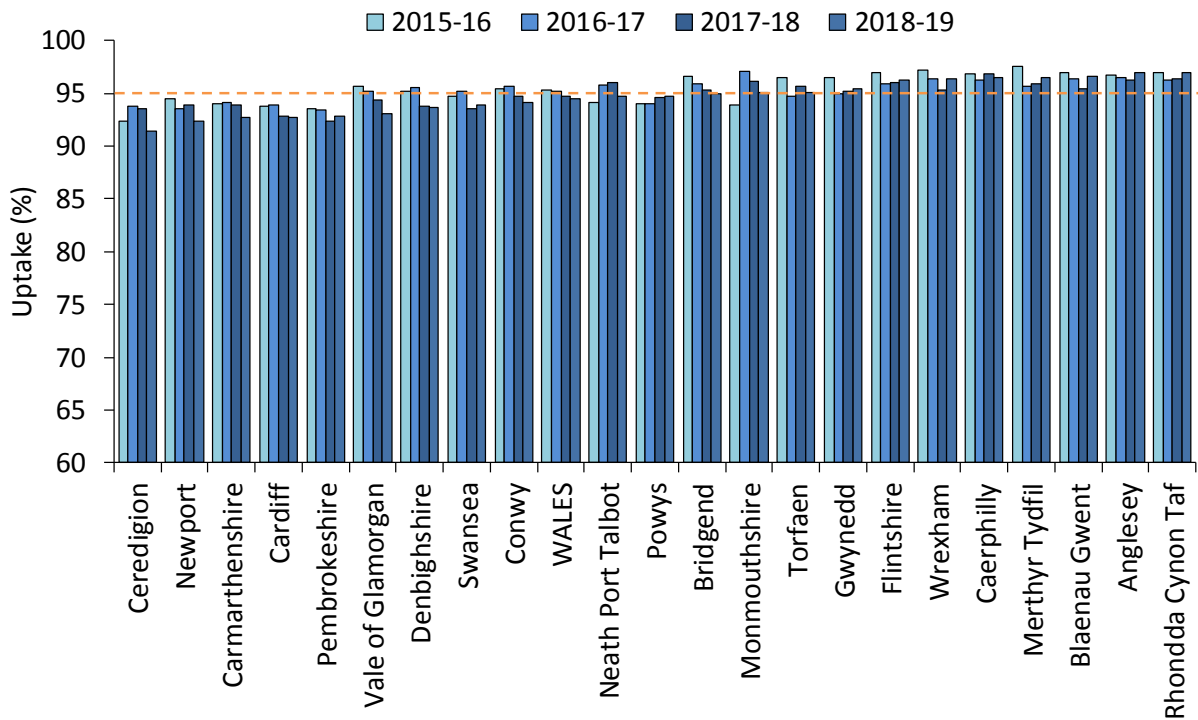


Figure 8. Annual uptake of 2 doses of MMR by 5 years of age (2015 – 2019 financial years, ranked by uptake in 2018/19).

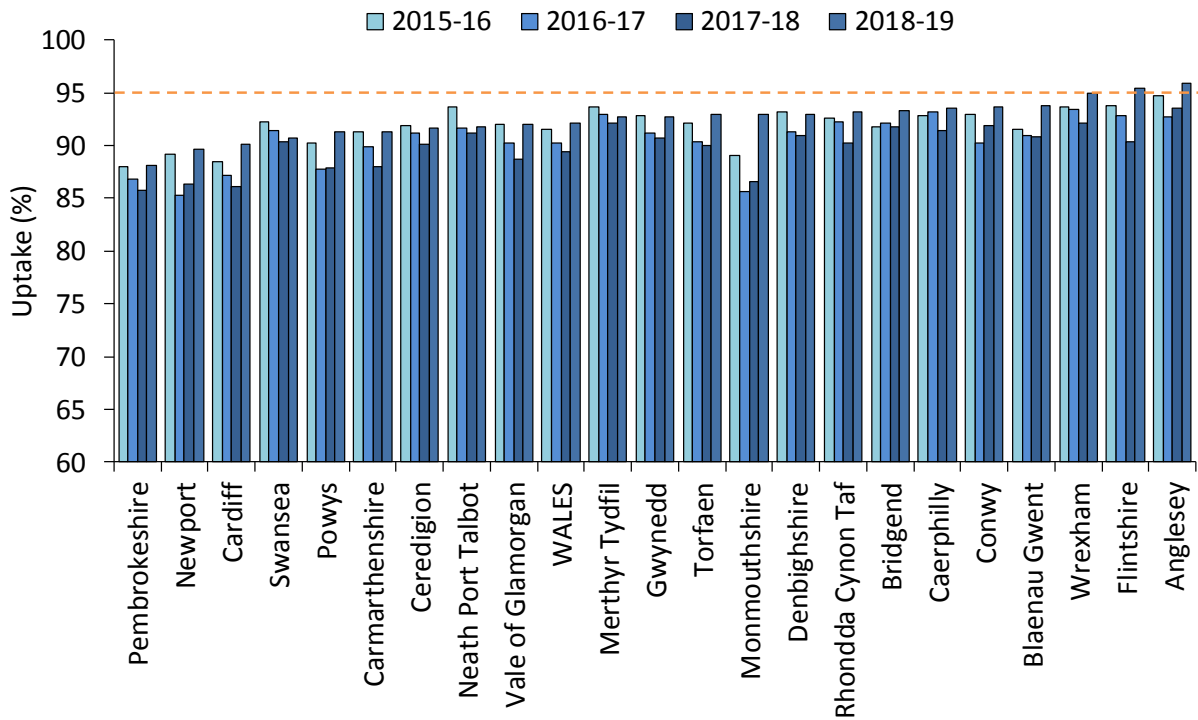


Figure 9. Annual uptake of the '4 in 1' pre-school booster by 5 years of age (2015 – 2019 financial years, ranked by uptake in 2018/19).

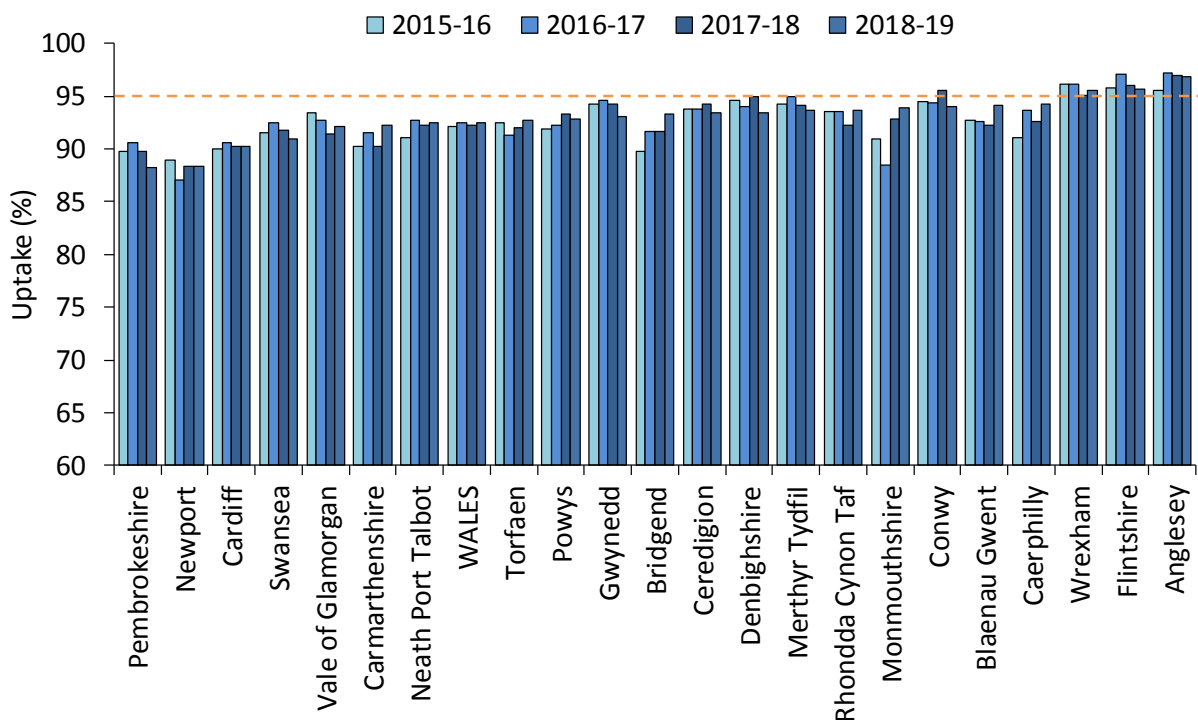
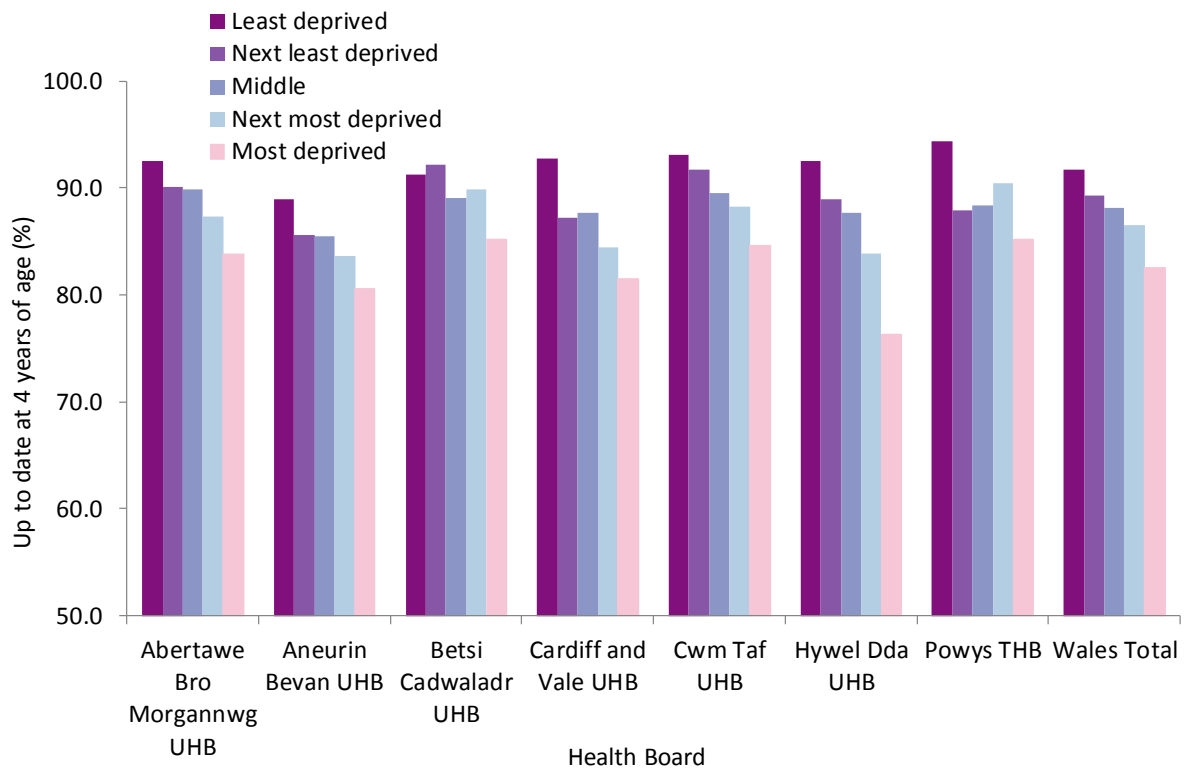
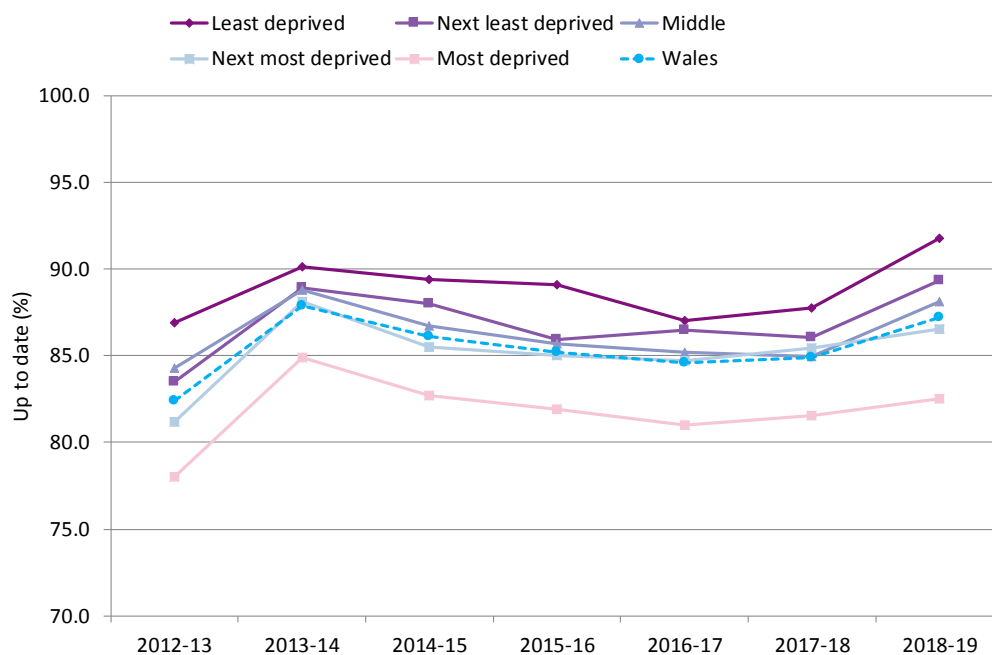


Figure 10. Percentage of children who are up to date with routine immunisations¹ by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.



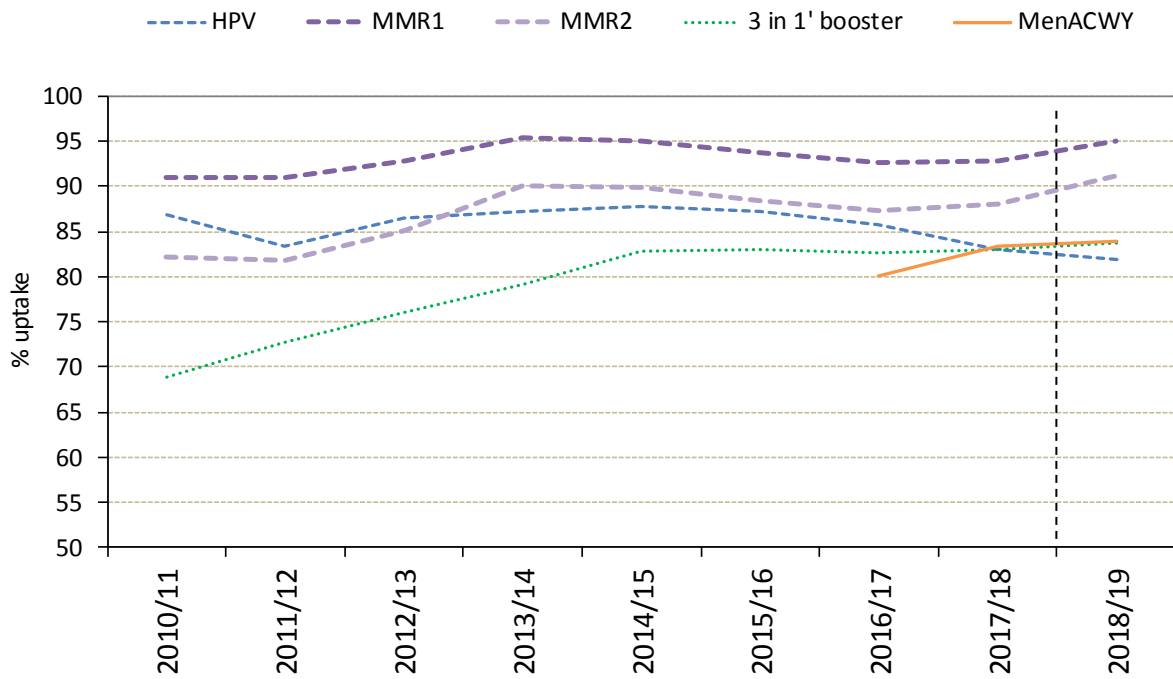
¹ Completed '4 in 1' pre-school booster, the Hib/MenC booster and second MMR dose by four years of age.

Figure 11. Percentage of children who are up to date with routine immunisations¹ by four years of age during 2012-2019 financial years, by quintile of deprivation of the Lower Super Output Area in which they reside.



¹ Completed '4 in 1' pre-school booster, the Hib/MenC booster and second MMR dose by four years of age.

Figure 12. Percentage of uptake of the '3 in 1' Td/IPV teenage booster² vaccine in resident children and a complete course of HPV¹ vaccine in resident girls, in School Year 10 academic years 2010/11 to 2018/19.³



¹A complete three dose course of HPV vaccine in 2010/11 to 2015/16 school year 10 girls and a complete two dose course in 2016/17 to 2018/19 school year 10 girls.

²Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy)

³Data in resident children as at 31st March of the academic year reported on. Vertical line indicates the point at which a large data quality audit took place on COVER data which resulted in increases in uptake in immunisations reported on at 4 years of age and above.

Table 3. Vaccine uptake in children reaching their 1st birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

Area	Resident children	D3	T3	P3	Po3	Hib3	HepB ¹	MMR1	Rotavirus	PCV2 ²	HibMenCb	MenB ³
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
<u>Abertawe Bro Morgannwg University HB</u>												
Bridgend LA	1501	1452 96.7	1452 96.7	1452 96.7	1452 96.7	1452 96.7	980 65.3	6 0.4	1443 96.1	1452 96.7	3 0.2	1451 96.7
Neath Port Talbot LA	1514	1461 96.5	1461 96.5	1461 96.5	1461 96.5	1461 96.5	998 65.9	2 0.1	1434 94.7	1463 96.6	2 0.1	1461 96.5
Swansea LA	2410	2292 95.1	2292 95.1	2292 95.1	2292 95.1	2292 95.1	1568 65.1	3 0.1	2257 93.7	2290 95.0	3 0.1	2277 94.5
Health Board Total	5425	5205 95.9	5205 95.9	5205 95.9	5205 95.9	5205 95.9	3546 65.4	11 0.2	5134 94.6	5205 95.9	8 0.1	5189 95.6
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	741	721 97.3	721 97.3	721 97.3	721 97.3	721 97.3	514 69.4	0 0.0	689 93.0	722 97.4	1 0.1	720 97.2
Caerphilly LA	1996	1922 96.3	1922 96.3	1922 96.3	1922 96.3	1922 96.3	1293 64.8	5 0.3	1899 95.1	1928 96.6	6 0.3	1922 96.3
Monmouthshire LA	783	753 96.2	753 96.2	753 96.2	753 96.2	753 96.2	510 65.1	2 0.3	730 93.2	752 96.0	0 0.0	751 95.9
Newport LA	1974	1865 94.5	1865 94.5	1865 94.5	1865 94.5	1866 94.5	1283 65.0	5 0.3	1812 91.8	1872 94.8	2 0.1	1861 94.3
Torfaen LA	1029	977 94.9	977 94.9	977 94.9	977 94.9	977 94.9	652 63.4	2 0.2	945 91.8	985 95.7	1 0.1	985 95.7
Health Board Total	6523	6238 95.6	6238 95.6	6238 95.6	6238 95.6	6239 95.6	4252 65.2	14 0.2	6075 93.1	6259 96.0	10 0.2	6239 95.6
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	685	659 96.2	659 96.2	659 96.2	659 96.2	658 96.1	448 65.4	4 0.6	656 95.8	660 96.4	3 0.4	660 96.4
Conwy LA	1021	952 93.2	952 93.2	952 93.2	952 93.2	952 93.2	666 65.2	12 1.2	938 91.9	956 93.6	10 1.0	957 93.7
Denbighshire LA	972	916 94.2	916 94.2	916 94.2	916 94.2	916 94.2	631 64.9	5 0.5	897 92.3	916 94.2	6 0.6	914 94.0
Flintshire LA	1592	1537 96.5	1537 96.5	1537 96.5	1537 96.5	1537 96.5	1033 64.9	7 0.4	1513 95.0	1540 96.7	8 0.5	1535 96.4
Gwynedd LA	1118	1065 95.3	1065 95.3	1065 95.3	1065 95.3	1065 95.3	724 64.8	8 0.7	1029 92.0	1068 95.5	7 0.6	1060 94.8
Wrexham LA	1528	1467 96.0	1467 96.0	1467 96.0	1467 96.0	1467 96.0	984 64.4	5 0.3	1437 94.0	1469 96.1	5 0.3	1469 96.1
Health Board Total	6916	6596 95.4	6596 95.4	6596 95.4	6596 95.4	6595 95.4	4486 64.9	41 0.6	6470 93.6	6609 95.6	39 0.6	6595 95.4
<u>Cardiff and Vale University HB</u>												
Cardiff LA	4043	3801 94.0	3801 94.0	3801 94.0	3801 94.0	3801 94.0	2653 65.6	46 1.1	3710 91.8	3788 93.7	20 0.5	3743 92.6
Vale of Glamorgan LA	1386	1317 95.0	1317 95.0	1317 95.0	1317 95.0	1317 95.0	904 65.2	4 0.3	1299 93.7	1313 94.7	3 0.2	1312 94.7
Health Board Total	5429	5118 94.3	5118 94.3	5118 94.3	5118 94.3	5118 94.3	3557 65.5	50 0.9	5009 92.3	5101 94.0	23 0.4	5055 93.1
<u>Cwm Taf University HB</u>												
Merthyr Tydfil LA	707	682 96.5	682 96.5	682 96.5	682 96.5	682 96.5	446 63.1	3 0.4	676 95.6	686 97.0	4 0.6	686 97.0
Rhondda Cynon Taf LA	2553	2496 97.8	2496 97.8	2496 97.8	2496 97.8	2496 97.8	1692 66.3	5 0.2	2463 96.5	2502 98.0	4 0.2	2493 97.6
Health Board Total	3260	3178 97.5	3178 97.5	3178 97.5	3178 97.5	3178 97.5	2138 65.6	8 0.2	3139 96.3	3188 97.8	8 0.2	3179 97.5
<u>Hywel Dda University HB</u>												
Cardiganshire LA	1869	1760 94.2	1760 94.2	1760 94.2	1760 94.2	1759 94.1	1203 64.4	7 0.4	1738 93.0	1759 94.1	6 0.3	1756 94.0
Ceredigion LA	564	526 93.3	526 93.3	526 93.3	526 93.3	526 93.3	345 61.2	2 0.4	510 90.4	524 92.9	2 0.4	522 92.6
Pembrokeshire LA	1140	1068 93.7	1068 93.7	1068 93.7	1068 93.7	1067 93.6	729 63.9	4 0.4	1050 92.1	1069 93.8	1 0.1	1061 93.1
Health Board Total	3573	3354 93.9	3354 93.9	3354 93.9	3354 93.9	3353 93.8	2277 63.7	13 0.4	3298 92.3	3352 93.8	9 0.3	3339 93.5
<u>Powys Teaching HB</u>												
Unknown	18	17 94.4	17 94.4	17 94.4	17 94.4	17 94.4	12 66.7	0 0.0	18 100.0	17 94.4	0 0.0	17 94.4
Wales Total	32282	30802 95.4	30802 95.4	30802 95.4	30802 95.4	30802 95.4	20988 65.0	143 0.4	30220 93.6	30825 95.5	102 0.3	30703 95.1

¹ Although the majority of one year olds referred to in this report would have been eligible for the '6 in 1' vaccine, a proportion of infants would have received the '5 in 1'.

² Full primary two dose course of pneumococcal conjugate vaccine.

³ Uptake of two doses of meningococcal serogroup B (MenB) vaccine, scheduled at two and four months of age.

Table 4. Vaccine uptake in children reaching their 2nd birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

Area	Resident children (n)	D3		T3		P3		Po3		Hib3		MMR1		MenB ¹		PCV2 ²		PCVf ³		HibMenCb		
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	
Abertawe Bro Morgannwg University LHB																						
Bridgend LA	1585	1545	97.5	1545	97.5	1545	97.5	1545	97.5	1545	97.5	1505	95.0	1506	95.0	1537	97.0	1514	95.5	1505	95.0	
Neath Port Talbot LA	1522	1480	97.2	1480	97.2	1480	97.2	1480	97.2	1480	97.2	1442	94.7	1445	94.9	1461	96.0	1448	95.1	1439	94.5	
Swansea LA	2431	2350	96.7	2350	96.7	2350	96.7	2350	96.7	2346	96.5	2284	94.0	2269	93.3	2313	95.1	2292	94.3	2276	93.6	
Health Board Total	5538	5375	97.1	5375	97.1	5375	97.1	5375	97.1	5371	97.0	5231	94.5	5220	94.3	5311	95.9	5254	94.9	5220	94.3	
Aneurin Bevan University LHB																						
Blaenau Gwent LA	736	729	99.0	729	99.0	729	99.0	729	99.0	729	99.0	711	96.6	711	96.6	720	97.8	716	97.3	712	96.7	
Caerphilly LA	1959	1919	98.0	1919	98.0	1919	98.0	1919	98.0	1919	98.0	1890	96.5	1888	96.4	1906	97.3	1893	96.6	1884	96.2	
Monmouthshire LA	805	771	95.8	771	95.8	771	95.8	771	95.8	771	95.8	765	95.0	761	94.5	764	94.9	765	95.0	766	95.2	
Newport LA	2071	1963	94.8	1964	94.8	1963	94.8	1964	94.8	1963	94.8	1913	92.4	1894	91.5	1932	93.3	1914	92.4	1901	91.8	
Torfaen LA	1047	1023	97.7	1023	97.7	1023	97.7	1023	97.7	1023	97.7	996	95.1	994	94.9	1016	97.0	1000	95.5	992	94.7	
Health Board Total	6618	6405	96.8	6406	96.8	6405	96.8	6406	96.8	6405	96.8	6275	94.8	6248	94.4	6338	95.8	6288	95.0	6255	94.5	
Betsi Cadwaladr University LHB																						
Anglesey LA	725	712	98.2	712	98.2	712	98.2	712	98.2	712	98.2	703	97.0	703	97.0	706	97.4	705	97.2	705	97.2	
Conwy LA	1031	1005	97.5	1005	97.5	1005	97.5	1005	97.5	1005	97.5	970	94.1	964	93.5	989	95.9	979	95.0	970	94.1	
Denbighshire LA	1025	990	96.6	990	96.6	990	96.6	990	96.6	990	96.6	960	93.7	955	93.2	964	94.0	967	94.3	962	93.9	
Flintshire LA	1576	1535	97.4	1535	97.4	1535	97.4	1535	97.4	1534	97.3	1518	96.3	1513	96.0	1527	96.9	1521	96.5	1522	96.6	
Gwynedd LA	1160	1135	97.8	1135	97.8	1135	97.8	1135	97.8	1134	97.8	1107	95.4	1110	95.7	1124	96.9	1116	96.2	1112	95.9	
Wrexham LA	1501	1469	97.9	1469	97.9	1469	97.9	1468	97.8	1469	97.9	1446	96.3	1439	95.9	1452	96.7	1449	96.5	1440	95.9	
Health Board Total	7018	6846	97.5	6846	97.5	6846	97.5	6845	97.5	6844	97.5	6704	95.5	6684	95.2	6762	96.4	6737	96.0	6711	95.6	
Cardiff and Vale University LHB																						
Cardiff LA	4216	4052	96.1	4051	96.1	4051	96.1	4051	96.1	4050	96.1	3908	92.7	3791	89.9	3943	93.5	3899	92.5	3855	91.4	
Vale of Glamorgan LA	1481	1437	97.0	1437	97.0	1437	97.0	1437	97.0	1437	97.0	1378	93.0	1365	92.2	1412	95.3	1380	93.2	1376	92.9	
Health Board Total	5697	5489	96.3	5488	96.3	5488	96.3	5488	96.3	5487	96.3	5286	92.8	5156	90.5	5355	94.0	5279	92.7	5231	91.8	
Cwm Taf University LHB																						
Merthyr Tydfil LA	694	678	97.7	678	97.7	678	97.7	678	97.7	678	97.7	670	96.5	672	96.8	673	97.0	673	97.0	668	96.3	
Rhondda Cynon Taf LA	2651	2609	98.4	2609	98.4	2609	98.4	2608	98.4	2609	98.4	2571	97.0	2570	96.9	2594	97.8	2581	97.4	2575	97.1	
Health Board Total	3345	3287	98.3	3287	98.3	3287	98.3	3286	98.2	3287	98.3	3241	96.9	3242	96.9	3267	97.7	3254	97.3	3243	97.0	
Hywel Dda University LHB																						
Carmarthenshire LA	1895	1821	96.1	1821	96.1	1821	96.1	1821	96.1	1820	96.0	1756	92.7	1740	91.8	1781	94.0	1760	92.9	1754	92.6	
Ceredigion LA	606	570	94.1	570	94.1	570	94.1	570	94.1	570	94.1	554	91.4	549	90.6	568	93.7	556	91.7	553	91.3	
Pembrokeshire LA	1223	1165	95.3	1165	95.3	1165	95.3	1164	95.2	1164	95.2	1135	92.8	1116	91.3	1150	94.0	1129	92.3	1120	91.6	
Health Board Total	3724	3556	95.5	3556	95.5	3556	95.5	3555	95.5	3554	95.4	3445	92.5	3405	91.4	3499	94.0	3445	92.5	3427	92.0	
Powys Teaching LHB	1127	1093	97.0	1093	97.0	1093	97.0	1093	97.0	1093	97.0	1068	94.8	1064	94.4	1085	96.3	1076	95.5	1073	95.2	
Unknown	22	20	90.9	20	90.9	20	90.9	20	90.9	20	90.9	20	90.9	1064	94.4	20	90.9	20	90.9	20	90.9	
Wales Total	33089	32071	96.9	32071	96.9	32070	96.9	32068	96.9	32061	96.9	31270	94.5	31039	93.8	31637	95.6	31353	94.8	31180	94.2	

¹Uptake of three doses of MenB vaccine scheduled at 2, 4 and 12-13 months of age.

² Full primary 2 dose course of pneumococcal conjugate vaccine

³ Final (booster) dose of pneumococcal conjugate vaccine

Table 5. Vaccine uptake in children reaching their 4th birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

Area	Resident Children	4 in 1 Preschool booster ¹		HibMenCb		MMR dose 2		Up to date in schedule ²	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University LHB</u>									
Bridgend LA	1586	1416	89.3	1531	96.5	1410	88.9	1400	88.3
Neath Port Talbot LA	1555	1395	89.7	1503	96.7	1390	89.4	1376	88.5
Swansea LA	2565	2277	88.8	2438	95.0	2276	88.7	2244	87.5
Health Board Total	5706	5088	89.2	5472	95.9	5076	89.0	5020	88.0
<u>Aneurin Bevan University LHB</u>									
Blaenau Gwent LA	749	634	84.6	724	96.7	636	84.9	627	83.7
Caerphilly LA	2105	1832	87.0	2028	96.3	1824	86.7	1806	85.8
Monmouthshire LA	865	779	90.1	818	94.6	775	89.6	762	88.1
Newport LA	2142	1813	84.6	1945	90.8	1797	83.9	1744	81.4
Torfaen LA	1000	859	85.9	939	93.9	848	84.8	832	83.2
Health Board Total	6861	5917	86.2	6454	94.1	5880	85.7	5771	84.1
<u>Betsi Cadwaladr University LHB</u>									
Anglesey LA	740	684	92.4	711	96.1	684	92.4	676	91.4
Conwy LA	1143	1037	90.7	1101	96.3	1036	90.6	1026	89.8
Denbighshire LA	1076	962	89.4	1027	95.4	956	88.8	948	88.1
Flintshire LA	1617	1479	91.5	1551	95.9	1471	91.0	1457	90.1
Gwynedd LA	1154	1055	91.4	1109	96.1	1050	91.0	1036	89.8
Wrexham LA	1578	1435	90.9	1516	96.1	1425	90.3	1411	89.4
Health Board Total	7308	6652	91.0	7015	96.0	6622	90.6	6554	89.7
<u>Cardiff and Vale University LHB</u>									
Cardiff LA	4374	3860	88.2	4111	94.0	3854	88.1	3758	85.9
Vale of Glamorgan LA	1455	1319	90.7	1401	96.3	1311	90.1	1300	89.3
Health Board Total	5829	5179	88.8	5512	94.6	5165	88.6	5058	86.8
<u>Cwm Taf University LHB</u>									
Merthyr Tydfil LA	786	707	89.9	754	95.9	703	89.4	694	88.3
Rhondda Cynon Taff LA	2749	2451	89.2	2645	96.2	2438	88.7	2415	87.9
Health Board Total	3535	3158	89.3	3399	96.2	3141	88.9	3109	87.9
<u>Hywel Dda University LHB</u>									
Carmarthenshire LA	1905	1678	88.1	1807	94.9	1668	87.6	1643	86.2
Ceredigion LA	641	579	90.3	599	93.4	578	90.2	569	88.8
Pembrokeshire LA	1300	1122	86.3	1220	93.8	1118	86.0	1108	85.2
Health Board Total	3846	3379	87.9	3626	94.3	3364	87.5	3320	86.3
Powys Teaching Health Board	1149	1046	91.0	1092	95.0	1035	90.1	1022	88.9
Unknown	20	13	65.0	18	90.0	13	65.0	13	65.0
Wales Total	34254	30432	88.8	32588	95.1	30296	88.4	29867	87.2

¹ Uptake of acellular pertussis used as proxy

² Completed '4 in 1' preschool booster, the Hib/MenC booster and second MMR dose by four years of age.

Table 6. 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 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

Health Board	Least deprived			Next least deprived			Middle			Next most deprived			Most deprived		
	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	1109	1026	92.5	638	575	90.1	926	832	89.8	1247	1089	87.3	1786	1498	83.9
Aneurin Bevan	1017	905	89.0	875	749	85.6	1301	1113	85.5	1582	1323	83.6	2086	1681	80.6
Betsi Cadwalladr	1214	1108	91.3	1690	1558	92.2	1752	1561	89.1	1419	1276	89.9	1233	1051	85.2
Cardiff and Vale	1798	1668	92.8	757	660	87.2	592	519	87.7	826	698	84.5	1856	1513	81.5
Cwm Taf	303	282	93.1	328	301	91.8	557	499	89.6	1131	998	88.2	1216	1029	84.6
Hywel Dda	213	197	92.5	1047	931	88.9	1375	1206	87.7	815	684	83.9	396	302	76.3
Powys Teaching	125	118	94.4	531	467	87.9	285	252	88.4	147	133	90.5	61	52	85.2
Wales Total	5779	5304	91.8	5866	5241	89.3	6788	5982	88.1	7167	6201	86.5	8634	7126	82.5

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

Table 7. Vaccine uptake in children reaching their 5th birthday between 01/04/2018 and 31/03/2019 and resident on 31/03/2019.

Area	Resident children	D3		T3		P3		Po3		Hib3		MenC		PCVf ¹		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																													
Bridgend LA	1643	1613	98.2	1613	98.2	1613	98.2	1609	97.9	1610	98.0	1579	96.1	1575	95.9	1591	96.8	1606	97.7	1534	93.4	1535	93.4	1534	93.4	1534	93.4	1534	93.4
Neath Port Talbot LA	1529	1495	97.8	1495	97.8	1495	97.8	1495	97.8	1482	96.93	1442	94.3	1460	95.5	1472	96.3	1404	91.8	1414	92.5	1414	92.5	1414	92.5	1414	92.5	1414	92.5
Swansea LA	2601	2521	96.9	2521	96.9	2521	96.9	2519	96.8	2517	96.8	2436	93.66	2439	93.8	2463	94.7	2500	96.1	2360	90.7	2366	91.0	2366	91.0	2366	91.0	2367	91.0
Health Board Total	5773	5629	97.5	5629	97.5	5629	97.5	5623	97.4	5622	97.4	5497	95.2	5456	94.5	5514	95.5	5578	96.6	5298	91.8	5315	92.1	5314	92.0	5314	92.0	5314	92.0
Aneurin Bevan University LHB																													
Blaenau Gwent LA	801	793	99.0	793	99.0	792	98.9	793	99.0	792	98.9	787	98.3	780	97.4	778	97.1	790	98.6	751	93.8	755	94.3	755	94.3	754	94.1	755	94.3
Caerphilly LA	2109	2081	98.7	2081	98.7	2081	98.7	2081	98.7	2080	98.6	2066	98.0	2044	96.9	2037	96.6	2064	97.9	1974	93.6	1988	94.3	1988	94.3	1988	94.3	1986	94.2
Monmouthshire LA	884	853	96.5	853	96.5	853	96.5	853	96.5	851	96.3	835	94.5	830	93.9	835	94.5	854	96.6	822	93.0	830	93.9	830	93.9	830	93.9	830	93.9
Newport LA	2079	1978	95.1	1978	95.1	1978	95.1	1975	95.0	1977	95.1	1923	92.5	1902	91.5	1885	90.7	1983	95.4	1864	89.7	1837	88.4	1837	88.4	1837	88.4	1838	88.4
Torfaen LA	1131	1106	97.8	1106	97.8	1106	97.8	1104	97.6	1105	97.7	1092	96.6	1082	95.7	1084	95.8	1098	97.1	1051	92.9	1049	92.7	1049	92.7	1049	92.7	1049	92.7
Health Board Total	7004	6811	97.2	6811	97.2	6810	97.2	6806	97.2	6805	97.2	6703	95.7	6638	94.8	6619	94.5	6789	96.9	6462	92.3	6459	92.2	6459	92.2	6458	92.2	6458	92.2
Betsi Cadwaladr University LHB																													
Anglesey LA	755	745	98.7	745	98.7	745	98.7	745	98.7	745	98.7	729	96.6	739	97.9	738	97.7	738	97.7	724	95.9	731	96.8	731	96.8	731	96.8	731	96.8
Conwy LA	1107	1082	97.7	1082	97.7	1082	97.7	1082	97.7	1081	97.7	1060	95.8	1058	95.6	1065	96.2	1080	97.6	1037	93.7	1041	94.0	1041	94.0	1041	94.0	1041	94.0
Denbighshire LA	1087	1068	98.3	1068	98.3	1068	98.3	1066	98.1	1067	98.2	1040	95.7	1044	96.0	1046	96.2	1061	97.6	1011	93.0	1016	93.5	1016	93.5	1016	93.5	1016	93.5
Flintshire LA	1690	1656	98.0	1656	98.0	1656	98.0	1653	97.8	1652	97.8	1592	94.2	1627	96.3	1635	96.7	1654	97.9	1613	95.4	1617	95.7	1617	95.7	1617	95.7	1617	95.7
Gwynedd LA	1227	1171	95.4	1171	95.4	1171	95.4	1173	95.6	1170	95.4	1123	91.5	1147	93.5	1160	94.5	1172	95.5	1138	92.7	1142	93.1	1142	93.1	1142	93.1	1143	93.2
Wrexham LA	1604	1575	98.2	1575	98.2	1575	98.2	1574	98.1	1574	98.1	1532	95.5	1552	96.8	1554	96.9	1570	97.9	1523	95.0	1532	95.5	1532	95.5	1532	95.5	1532	95.5
Health Board Total	7470	7297	97.7	7297	97.7	7297	97.7	7293	97.6	7289	97.6	7076	94.7	7167	95.9	7198	96.4	7275	97.4	7046	94.3	7079	94.8	7079	94.8	7079	94.8	7079	94.8
Cardiff and Vale University LHB																													
Cardiff LA	4439	4288	96.6	4287	96.6	4287	96.6	4287	96.6	4279	96.4	4026	90.7	4072	91.7	4115	92.7	4269	96.2	4000	90.1	4008	90.3	4008	90.3	4007	90.3	4012	90.4
Vale of Glamorgan LA	1508	1472	97.6	1472	97.6	1472	97.6	1470	97.5	1471	97.5	1425	94.5	1445	95.8	1440	95.5	1464	97.1	1387	92.0	1389	92.1	1389	92.1	1389	92.1	1389	92.1
Health Board Total	5947	5760	96.9	5759	96.8	5759	96.8	5757	96.8	5750	96.7	5451	91.7	5517	92.8	5555	93.4	5733	96.4	5387	90.6	5397	90.8	5397	90.8	5396	90.7	5401	90.8
Cwm Taf University LHB																													
Merthyr Tydfil LA	682	667	97.8	667	97.8	667	97.8	667	97.8	667	97.8	663	97.2	659	96.6	660	96.8	667	97.8	632	92.7	639	93.7	639	93.7	639	93.7	639	93.7
Rhondda Cynon Taff LA	2850	2811	98.6	2811	98.6	2811	98.6	2811	98.6	2810	98.6	2778	97.5	2759	96.8	2761	96.9	2797	98.1	2655	93.2	2674	93.8	2674	93.8	2671	93.7	2673	93.8
Health Board Total	3532	3478	98.5	3478	98.5	3478	98.5	3478	98.5	3477	98.4	3441	97.4	3418	96.8	3421	96.9	3464	98.1	3287	93.1	3313	93.8	3313	93.8	3310	93.7	3312	93.8
Hywel Dda University LHB																													
Carmarthenshire LA	1971	1902	96.5	1902	96.5	1902	96.5	1899	96.3	1902	96.5	1878	95.3	1858	94.3	1848	93.8	1899	96.3	1799	91.3	1820	92.3	1820	92.3	1819	92.3	1819	92.3
Ceredigion LA	652	625	95.9	625	95.9	625	95.9	623	95.6	624	95.7	602	92.3	607	93.1	614	94.2	614	94.2	598	91.7	609	93.4	609	93.4	609	93.4	609	93.4
Pembrokeshire LA	1240	1183	95.4	1183	95.4	1183	95.4	1184	95.5	1183	95.4	1157	93.3	1149	92.7	1146	92.4	1166	94.0	1092	88.1	1095	88.3	1095	88.3	1094	88.2	1094	88.2
Health Board Total	3863	3710	96.0	3710	96.0	3710	96.0	3706	95.9	3709	96.0	3637	94.1	3614	93.6	3608	93.4	3679	95.2	3489	90.3	3524	91.2	3524	91.2	3522	91.2	3522	91.2
Powys Teaching LHB	1235	1189	96.3	1189	96.3	1188	96.2	1187	96.1	1188	96.2	1166	94.4	1154	93.4	1161	94.0	1179	95.5	1127	91.3	1146	92.8	1146	92.8	1146	92.8	1146	92.8
Unknown	65	63	96.9	63	96.9	63	96.9	63	96.9	63	96.9	63	96.9	62	95.4	63	96.9	62	95.4	60	92.3	61	93.8	61	93.8	61	93.8	61	93.8
Wales Total	34889	33937	97.3	33936	97.3	33934	97.3	33913	97.2	33903	97.2	33034	94.7	33026	94.7	33139	95.0	33759	96.8	32156	92.2	32294	92.6	32293	92.6	32286	92.5	32295	92.6

¹ Final (booster) dose of pneumococcal conjugate vaccine

Table 8. HPV Vaccine uptake in girls reaching their 14th, 15th and 16th birthdays between 01/09/2018 and 31/08/2019 and resident on 31/03/2019 (School Year 9, 10 and 11 during 2018/19).

Area	14 years (2018-19 School Year 9)			15 years (2018-19 School Year 10)					16 years (2018-19 School Year 11)				
	Resident girls	HPV 1 dose		Resident girls	HPV 1 dose		HPV 2 doses		Resident girls	HPV 1 dose		HPV 2 doses	
	(n)	(%)		(n)	(%)	(n)	(%)		(n)	(%)	(n)	(%)	
Abertawe Bro Morgannwg University LHB													
Bridgend LA	798	713	89.3	810	750	92.6	692	85.4	782	729	93.2	702	89.8
Neath Port Talbot LA	825	769	93.2	749	701	93.6	669	89.3	705	659	93.5	640	90.8
Swansea LA	1215	1083	89.1	1233	1131	91.7	1100	89.2	1239	1143	92.3	1110	89.6
Health Board Total	2838	2565	90.4	2792	2582	92.5	2461	88.1	2726	2531	92.8	2452	89.9
Aneurin Bevan University LHB													
Blaenau Gwent LA	342	282	82.5	374	329	88.0	278	74.3	319	289	90.6	273	85.6
Caerphilly LA	1021	877	85.9	1017	914	89.9	801	78.8	985	887	90.1	832	84.5
Monmouthshire LA	506	391	77.3	545	430	78.9	368	67.5	556	455	81.8	424	76.3
Newport LA	972	745	76.6	914	743	81.3	629	68.8	904	760	84.1	660	73.0
Torfaen LA	548	444	81.0	492	436	88.6	374	76.0	488	433	88.7	400	82.0
Health Board Total	3389	2739	80.8	3342	2852	85.3	2450	73.3	3252	2824	86.8	2589	79.6
Betsi Cadwaladr University LHB													
Anglesey LA	341	290	85.0	345	307	89.0	284	82.3	339	314	92.6	288	85.0
Conwy LA	532	466	87.6	576	520	90.3	475	82.5	543	498	91.7	477	87.8
Denbighshire LA	533	447	83.9	511	435	85.1	388	75.9	496	439	88.5	410	82.7
Flintshire LA	809	714	88.3	796	731	91.8	689	86.6	725	658	90.8	636	87.7
Gwynedd LA	642	557	86.8	533	475	89.1	460	86.3	557	507	91.0	493	88.5
Wrexham LA	733	652	88.9	693	616	88.9	579	83.5	676	601	88.9	562	83.1
Health Board Total	3590	3126	87.1	3454	3084	89.3	2875	83.2	3336	3017	90.4	2866	85.9
Cardiff and Vale University LHB													
Cardiff LA	2002	1710	85.4	1881	1620	86.1	1437	76.4	1855	1590	85.7	1490	80.3
Vale of Glamorgan LA	746	669	89.7	737	658	89.3	635	86.2	705	632	89.6	591	83.8
Health Board Total	2748	2379	86.6	2618	2278	87.0	2072	79.1	2560	2222	86.8	2081	81.3
Cwm Taf University LHB													
Merthyr Tydfil LA	353	314	89.0	316	290	91.8	275	87.0	332	306	92.2	300	90.4
Rhondda Cynon Taff LA	1392	1271	91.3	1309	1235	94.3	1166	89.1	1394	1310	94.0	1256	90.1
Health Board Total	1745	1585	90.8	1625	1525	93.8	1441	88.7	1726	1616	93.6	1556	90.2
Hywel Dda University LHB													
Carmarthenshire LA	984	890	90.4	978	882	90.2	828	84.7	1001	906	90.5	872	87.1
Ceredigion LA	283	240	84.8	326	281	86.2	266	81.6	296	253	85.5	246	83.1
Pembrokeshire LA	608	532	87.5	630	539	85.6	505	80.2	621	526	84.7	493	79.4
Health Board Total	1875	1662	88.6	1934	1702	88.0	1599	82.7	1918	1685	87.9	1611	84.0
Powys Teaching LHB	652	541	83.0	659	565	85.7	541	82.1	658	569	86.5	537	81.6
Unknown	44	37	84.1	48	40	83.3	39	81.3	43	39	90.7	38	88.4
Wales Total	16881	14634	86.7	16472	14628	88.8	13478	81.8	16219	14503	89.4	13730	84.7

Table 9. Vaccine uptake in children reaching their 15th birthday between 01/09/2018 and 31/08/2019 and resident on 31/03/2019 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		Teenage 3 in 1							Resident girls				Resident boys							
	MMR1	MMR2	MMR1	MMR2	booster ¹	MenACWY	MMR1 (girls)	MMR2 (girls)	HPV 2 doses	MMR1 (boys)	MMR2 (boys)	MMR1 (boys)	MMR2 (boys)								
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)		
Abertawe Bro Morgannwg University LHB																					
Bridgend LA	1588	1521	95.8	1435	90.4	1337	84.2	1347	84.8	810	786	97.0	748	92.3	692	85.4	778	735	94.5	687	88.3
Neath Port Talbot LA	1518	1450	95.5	1384	91.2	1355	89.3	1375	90.6	749	727	97.1	691	92.3	669	89.3	769	723	94.0	693	90.1
Swansea LA	2600	2447	94.1	2337	89.9	2335	89.8	2355	90.6	1233	1163	94.3	1116	90.5	1100	89.2	1367	1284	93.9	1221	89.3
Health Board Total	5706	5418	95.0	5156	90.4	5027	88.1	5077	89.0	2792	2676	95.8	2555	91.5	2461	88.1	2914	2742	94.1	2601	89.3
Aneurin Bevan University LHB																					
Blaenau Gwent LA	754	738	97.9	719	95.4	665	88.2	664	88.1	374	367	98.1	357	95.5	278	74.3	380	371	97.6	362	95.3
Caerphilly LA	2147	2091	97.4	2032	94.6	1798	83.7	1802	83.9	1017	988	97.1	965	94.9	801	78.8	1129	1102	97.6	1066	94.4
Monmouthshire LA	1149	1062	92.4	1021	88.9	898	78.2	898	78.2	545	511	93.8	492	90.3	368	67.5	604	551	91.2	529	87.6
Newport LA	1910	1799	94.2	1737	90.9	1520	79.6	1511	79.1	914	866	94.7	842	92.1	629	68.8	996	933	93.7	895	89.9
Torfaen LA	1009	988	97.9	955	94.6	896	88.8	894	88.6	492	482	98.0	465	94.5	374	76.0	517	506	97.9	490	94.8
Health Board Total	6969	6678	95.8	6464	92.8	5777	82.9	5769	82.8	3342	3214	96.2	3121	93.4	2450	73.3	3626	3463	95.5	3342	92.2
Betsi Cadwaladr University LHB																					
Anglesey LA	730	701	96.0	684	93.7	597	81.8	598	81.9	345	332	96.2	325	94.2	284	82.3	385	369	95.8	359	93.2
Conwy LA	1167	1112	95.3	1056	90.5	997	85.4	1000	85.7	576	547	95.0	516	89.6	475	82.5	591	565	95.6	540	91.4
Denbighshire LA	1079	1011	93.7	967	89.6	862	79.9	864	80.1	511	476	93.2	451	88.3	388	75.9	568	535	94.2	516	90.8
Flintshire LA	1665	1588	95.4	1541	92.6	1350	81.1	1350	81.1	796	765	96.1	748	94.0	689	86.6	869	823	94.7	793	91.3
Gwynedd LA	1165	1121	96.2	1092	93.7	979	84.0	978	83.9	533	516	96.8	499	93.6	460	86.3	632	605	95.7	593	93.8
Wrexham LA	1438	1367	95.1	1337	93.0	1198	83.3	1198	83.3	693	663	95.7	649	93.7	579	83.5	745	704	94.5	688	92.3
Health Board Total	7244	6900	95.3	6677	92.2	5983	82.6	5988	82.7	3454	3299	95.5	3188	92.3	2875	83.2	3790	3601	95.0	3489	92.1
Cardiff and Vale University LHB																					
Cardiff LA	3790	3547	93.6	3346	88.3	2737	72.2	2728	72.0	1881	1772	94.2	1668	88.7	1437	76.4	1909	1775	93.0	1678	87.9
Vale of Glamorgan LA	1435	1364	95.1	1294	90.2	1182	82.4	1183	82.4	737	699	94.8	665	90.2	635	86.2	698	665	95.3	629	90.1
Health Board Total	5225	4911	94.0	4640	88.8	3919	75.0	3911	74.9	2618	2471	94.4	2333	89.1	2072	79.1	2607	2440	93.6	2307	88.5
Cwm Taf University LHB																					
Merthyr Tydfil LA	663	625	94.3	598	90.2	584	88.1	587	88.5	316	292	92.4	278	88.0	275	87.0	346	333	96.2	320	92.5
Rhondda Cynon Taff LA	2668	2547	95.5	2459	92.2	2451	91.9	2458	92.1	1309	1256	96.0	1210	92.4	1166	89.1	1359	1291	95.0	1249	91.9
Health Board Total	3331	3172	95.2	3057	91.8	3035	91.1	3045	91.4	1625	1548	95.3	1488	91.6	1441	88.7	1705	1624	95.2	1569	92.0
Hywel Dda University LHB																					
Carmarthenshire LA	2000	1904	95.2	1830	91.5	1725	86.3	1730	86.5	978	932	95.3	895	91.5	828	84.7	1022	972	95.1	935	91.5
Ceredigion LA	675	645	95.6	628	93.0	600	88.9	596	88.3	326	312	95.7	303	92.9	266	81.6	349	333	95.4	325	93.1
Pembrokeshire LA	1258	1190	94.6	1136	90.3	1040	82.7	1044	83.0	630	598	94.9	572	90.8	505	80.2	628	592	94.3	564	89.8
Health Board Total	3933	3739	95.1	3594	91.4	3365	85.6	3370	85.7	1934	1842	95.2	1770	91.5	1599	82.7	1999	1897	94.9	1824	91.2
Powys Teaching LHB	1336	1250	93.6	1195	89.4	1124	84.1	1134	84.9	659	620	94.1	596	90.4	541	82.1	677	630	93.1	599	88.5
Unknown	111	101	91.0	95	85.6	92	82.9	91	82.0	48	42	87.5	40	83.3	39	81.3	63	59	93.7	55	87.3
Wales Total	33855	32169	95.0	30878	91.2	28322	83.7	28385	83.8	16472	15712	95.4	15091	91.6	13478	81.8	17381	16456	94.7	15786	90.8

¹ Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy)

Table 10. Vaccine uptake in children reaching their 16th birthday between 01/09/2017 and 31/08/2018 and resident on 31/03/2018 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		Teenage 3 in 1 booster ¹							Resident girls		MMR1 (girls)		MMR2 (girls)		HPV complete course		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	1562	1475 94.4	1386	88.7	1381	88.4	1395	89.3	782	746 95.4	708	90.5	702	89.8	780	729 93.5	678	86.9					
Neath Port Talbot LA	1438	1384 96.2	1308	91.0	1265	88.0	1286	89.4	705	682 96.7	654	92.8	637	90.4	733	702 95.8	654	89.2					
Swansea LA	2604	2389 91.7	2255	86.6	2304	88.5	2310	88.7	1239	1130 91.2	1074	86.7	1106	89.3	1365	1259 92.2	1181	86.5					
Health Board Total	5604	5248 93.6	4949 88.3	4950 88.3	4991 89.1				2726	2558 93.8	2436 89.4	2445 89.7			2878	2690 93.5	2513 87.3						
Aneurin Bevan University LHB																							
Blaenau Gwent LA	689	663 96.2	642	93.2	592	85.9	594	86.2	319	309 96.9	299	93.7	273	85.6	370	354 95.7	343	92.7					
Caerphilly LA	2097	2032 96.9	1954	93.2	1783	85.0	1779	84.8	985	949 96.3	919	93.3	830	84.3	1111	1083 97.5	1035	93.2					
Monmouthshire LA	1118	1025 91.7	977	87.4	891	79.7	900	80.5	556	512 92.1	481	86.5	424	76.3	562	513 91.3	496	88.3					
Newport LA	1872	1748 93.4	1653	88.3	1490	79.6	1485	79.3	904	854 94.5	816	90.3	658	72.8	965	894 92.6	837	86.7					
Torfaen LA	982	937 95.4	912	92.9	831	84.6	832	84.7	488	469 96.1	457	93.6	399	81.8	494	468 94.7	455	92.1					
Health Board Total	6758	6405 94.8	6138 90.8	5587 82.7	5590 82.7				3252	3093 95.1	2972 91.4	2584 79.5			3502	3312 94.6	3166 90.4						
Betsi Cadwaladr University LHB																							
Anglesey LA	704	675 95.9	655	93.0	593	84.2	594	84.4	339	330 97.3	321	94.7	288	85.0	365	345 94.5	334	91.5					
Conwy LA	1153	1087 94.3	1051	91.2	1046	90.7	1048	90.9	543	516 95.0	500	92.1	477	87.8	607	568 93.6	548	90.3					
Denbighshire LA	1052	967 91.9	924	87.8	869	82.6	878	83.5	496	454 91.5	436	87.9	410	82.7	555	513 92.4	488	87.9					
Flintshire LA	1499	1446 96.5	1394	93.0	1283	85.6	1282	85.5	725	703 97.0	678	93.5	634	87.4	774	743 96.0	716	92.5					
Gwynedd LA	1177	1147 97.5	1124	95.5	1029	87.4	1030	87.5	557	541 97.1	534	95.9	493	88.5	620	606 97.7	590	95.2					
Wrexham LA	1426	1366 95.8	1333	93.5	1198	84.0	1203	84.4	676	648 95.9	630	93.2	560	82.8	750	718 95.7	703	93.7					
Health Board Total	7011	6688 95.4	6481 92.4	6018 85.8	6035 86.1				3336	3192 95.7	3099 92.9	2862 85.8			3671	3493 95.2	3379 92.0						
Cardiff and Vale University LHB																							
Cardiff LA	3802	3483 91.6	3251	85.5	2812	74.0	2819	74.1	1855	1721 92.8	1616	87.1	1487	80.2	1947	1762 90.5	1635	84.0					
Vale of Glamorgan LA	1482	1406 94.9	1329	89.7	1202	81.1	1200	81.0	705	666 94.5	625	88.7	588	83.4	777	740 95.2	704	90.6					
Health Board Total	5284	4889 92.5	4580 86.7	4014 76.0	4019 76.1				2560	2387 93.2	2241 87.5	2075 81.1			2724	2502 91.9	2339 85.9						
Cwm Taf University LHB																							
Merthyr Tydfil LA	667	622 93.3	589	88.3	599	89.8	600	90.0	332	315 94.9	300	90.4	300	90.4	335	307 91.6	289	86.3					
Rhondda Cynon Taff LA	2818	2679 95.1	2548	90.4	2536	90.0	2546	90.3	1394	1334 95.7	1280	91.8	1254	90.0	1424	1345 94.5	1268	89.0					
Health Board Total	3485	3301 94.7	3137 90.0	3135 90.0	3146 90.3				1726	1649 95.5	1580 91.5	1554 90.0			1759	1652 93.9	1557 88.5						
Hywel Dda University LHB																							
Carmarthenshire LA	2056	1912 93.0	1866	90.8	1810	88.0	1811	88.1	1001	935 93.4	918	91.7	866	86.5	1055	977 92.6	948	89.9					
Ceredigion LA	619	587 94.8	564	91.1	536	86.6	533	86.1	296	280 94.6	269	90.9	244	82.4	323	307 95.0	295	91.3					
Pembrokeshire LA	1226	1159 94.5	1095	89.3	979	79.9	985	80.3	621	592 95.3	561	90.3	490	78.9	605	567 93.7	534	88.3					
Health Board Total	3901	3658 93.8	3525 90.4	3325 85.2	3329 85.3				1918	1807 94.2	1748 91.1	1600 83.4			1983	1851 93.3	1777 89.6						
Powys Teaching LHB																							
Unknown	92	80 87.0	76	82.6	75	81.5	74	80.4	43	41 95.3	38	88.4	38	88.4	49	39 79.6	38	77.6					
Wales Total	33464	31509 94.2	30040 89.8	28228 84.4	28319 84.6				16219	15345 94.6	14692 90.6	13692 84.4			17237	16161 93.8	15345 89.0						

¹ Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy).

Table 11. Uptake of hepatitis B immunisation in children born to hepatitis B positive mothers reaching their 1st, 2nd and 5th birthdays during 01/04/2018 and 31/03/2019 and resident on 31/03/2019.¹

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	5425	10	100.0	100.0	100.0	5538	10	100.0	100.0	100.0	80.0	5773	7	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	6523	9	100.0	100.0	100.0	6618	10	100.0	80.0	70.0	20.0	7004	11	100.0	100.0	100.0	100.0
Betsi Cadwaladr UHB	6916	10	100.0	100.0	100.0	7018	7	100.0	100.0	100.0	100.0	7470	8	100.0	100.0	100.0	100.0
Cardiff and Vale UHB	5429	23	100.0	95.7	91.3	5697	18	100.0	100.0	88.9	61.1	5947	30	100.0	100.0	100.0	90.0
Cwm Taf UHB	3260	2	100.0	100.0	100.0	3345	2	100.0	100.0	100.0	0.0	3532	0	0.0	0.0	0.0	0.0
Hywel Dda UHB	3573	1	100.0	100.0	100.0	3724	0	0.0	0.0	0.0	0.0	3863	2	100.0	100.0	100.0	100.0
Powys Teaching HB	1138	0	0.0	0.0	0.0	1127	0	0.0	0.0	0.0	0.0	1235	0	0.0	0.0	0.0	0.0
Unknown	18	0	0.0	0.0	0.0	22	0	0.0	0.0	0.0	0.0	65	0	0.0	0.0	0.0	0.0
Wales Total	32282	55	100.0	98.2	96.4	33089	47	100.0	95.7	89.4	59.6	34889	58	100.0	100.0	100.0	94.8

¹Data 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

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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