

Vaccine Uptake in Children in Wales

COVER Annual Report 2021

Data for the year ending 31st March 2021



Key points

- In 2020/21 uptake of the '6 in 1' (DTaP/IPV/Hib/HepB) and pneumococcal conjugate vaccinations in one year old children in Wales was 95.6% and 96.0% respectively.
- MenB vaccine uptake was 95.4% for two doses, and uptake of two doses of rotavirus vaccine was 93.8% at one year.
- MMR uptake was 94.8% for the first dose at two years.
- MenB uptake was 94.3% for the complete course at two years, this is the third full cohort of eligible children reported on at two years of age.
- By their fourth birthday, 87.6% of children were up to date with recommended immunisations.
- MMR dose two uptake in children at five years of age was 92.2%, and uptake of the pre-school '4 in 1' (DTaP/IPV) booster in this age-group was 92.9%.
- Human Papillomavirus (HPV) vaccine uptake in girls turning 14 years of age during the 2020/21 school year (School Year 9) was 67.4% for the first dose. Uptake of the complete two-dose course in girls turning 15 years of age (School Year 10) was 56.5%.
- MMR uptake, for a full two-dose course, was 91.6% and 91.5% for teenagers turning 15 and 16 years of age respectively during the 2020/21 school year.
- MenACWY vaccine uptake in teenagers turning 15 and 16 years of age during the 2020/21 school year was 77.4% and 86.1%.

Background

These annual results for 2020/21 are for one year cohorts of children living in Wales as at 31st March 2021 and reaching their first, second, fourth and fifth birthdays between 01/04/2020 and 31/03/2021. 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 remained stable at 95.6%, compared to 95.8% in the previous year. Uptake ranged by health board (HB) from 94.0% (Cardiff and Vale) to 97.2% (Cwm Taf Morgannwg) and by local authority (LA) from 93.5% (Cardiff) to 98.4% (Anglesey). Sixteen of the 22 LAs achieved the 95% target (Figures 1, 2, 4, 6 and Tables 2, 3).
2. Pneumococcal conjugate vaccination (PCV²) uptake of a complete primary course in children at one year of age was 96.0%, ranging by HB from 94.6% (Cardiff and Vale and Hywel Dda) to 97.6% (Cwm Taf Morgannwg) and by LA from 93.9% (Pembrokeshire) to 97.8% (Anglesey) (Figures 1, 2 and Tables 2, 3). Children born 1st January 2020 to March 2020 would have been offered the revised one dose primary course [1].
3. Rotavirus vaccine uptake of two doses in children reaching their first birthday remained stable compared to the previous year at 93.8%. Uptake ranged by HB from 92.1% (Cardiff & Vale) to 96.3% (Cwm Taf Morgannwg) and by LA from 90.7% (Newport) to 96.5% (Bridgend) (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 95.4%, ranging by HB from 93.6% (Cardiff and Vale) to 97.4% (Cwm Taf Morgannwg) and by LA from 93.2% (Cardiff) to 98.2% (Anglesey) (Table 3).
5. MMR³ uptake of one dose by two years of age remained stable at 94.8%, compared to 94.5% in the previous year. Uptake ranged by HB from 93.1% (Cardiff and Vale) to 96.2% (Cwm Taf Morgannwg and Powys) and by LA from 92.9% (Cardiff) to 97.5% (Blaenau Gwent). Three HBs achieved the target uptake of 95%, and 12 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 92.6% (Cardiff and Vale) to 96.4% (Powys) and by LA from 92.5% (Cardiff) to 97.5% (Anglesey) (Figure 2 and Tables 2, 4).
7. Hib/MenC⁴ booster uptake by two years of age was 94.4%, ranging by HB from 92.2% (Cardiff and Vale) to 95.9% (Cwm Taf Morgannwg and Powys) and by LA from 92.0% (Cardiff) 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 94.3%, ranging by HB from 91.4% (Cardiff and Vale) to 96.1% (Powys), and by LA from 91.1% (Cardiff) to 97.0 (Blaenau Gwent Rhondda Cynon Taf).
9. Hib/MenC booster coverage in children by their fourth birthday was 95.2% and ranged by HB from 94.0% (Cardiff and Vale) to 96.7% (Cwm Taf Morgannwg) (Table 5).
10. '4 in 1' DTaP/IPV⁵ 'pre-school booster' uptake in children by four years of age was 88.9%, this ranged by HB from 86.2% (Cardiff and Vale) to 91.7% (Powys) (Table 5).
11. MMR vaccine uptake of a complete two dose course in children by four years of age was 88.5%, this ranged by HB from 85.9% (Cardiff and Vale) to 90.9% (Powys) (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 87.6%. This ranged by HB from 84.5% (Cardiff and Vale) to 90.4% (Powys) and by LA from 82.4% (Newport) to 93.8% (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

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.

they resided. Nationally, the percentage of children up to date with their routine immunisations by four years of age ranged from 83.0% in the most deprived quintile of LSOAs to 91.5% in the least deprived quintile of LSOAs. The difference in uptake between the least deprived quintile and the most deprived quintile was 8.5% (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 90.4% (Hywel Dda) to 93.9% (Betsi Cadwaladr). Coverage of one dose of MMR in children at five years of age was 96.6% and ranged by HB from 95.0% (Powys) to 97.5% (Cwm Taf Morgannwg) (Figures 1, 2, 5, 8 and Tables 2, 7).
15. '4 in 1' DTaP/IPV 'pre-school booster' uptake in children reaching their fifth birthday this year was 92.9% (Figures 2, 5, 9 and Tables 2, 7).
16. The 2020/21 School Year 9 group included the first cohort of boys to be offered the HPV vaccine in addition to girls [2]. HPV vaccine uptake in the full 2020/21 School Year 9 group (reaching their 14th birthday between 01/09/20 and 31/08/21) was 67.4%. This is a decrease compared to the previous years' girls only cohort where uptake was 87.3%. Uptake ranged by HB from 5.9% (Powys) to 90.4% (Swansea Bay) and by LA from 5.9% (Powys) to 90.4% (Swansea). Coverage of two doses of HPV vaccine in girls in the 2020/21 School Year 10 is currently 56.5%, this is a significant decrease from the previous year which had an uptake of 83.5%. (Figure 12 and Table 8).
17. MMR coverage of two doses in teenagers turning 15 years of age between 01/09/20 and 31/08/21 was 91.6%, ranging by HB from 88.3% (Powys) to 92.8% (Aneurin Bevan) and by LA from 88.3% (Powys) to 95.2% (Caerphilly). Coverage of one dose of MMR in 15 year olds was 95.3%, ranging by LA from 92.7% (Powys) to 98.0% (Caerphilly). A breakdown by sex indicates that 92.0% of girls had received a full (two MMR doses) course of immunisation against rubella and coverage of one dose was 95.5% (Figure 12 and Table 9).
18. Td/IPV⁶ 'teenage booster' uptake in teenagers reaching 15 years of age between 01/09/20 and 31/08/21 was 77.2%. Uptake ranged by HB from 65.5% (Hywel Dda) to 88.4% (Cwm Taf Morgannwg) and by LA from 59.4% (Pembrokeshire) to 89.0% (Rhondda Cynon Taf) (Figure 12 and Table 9).
19. Coverage of MenACWY vaccine in the 2020/21 School Year 10 group is currently 77.4%. Coverage in the 2020/21 School Year 11 group, is currently 86.1% (Figure 12, Table 9 and 10).
20. MMR coverage of two doses in teenagers turning 16 years of age during the 2020/21 school year was 91.5%, ranging by HB from 88.8% (Powys) to 93.4% (Aneurin Bevan) and by LA from 88.2% (Cardiff) to 95.0% (Torfaen). Coverage of one dose of MMR in 16 year olds was 95.1%, ranging by LA from 93.2% (Powys) to 97.4% (Caerphilly). A breakdown by sex indicates that 91.9% of girls had received a full (two MMR doses) course of immunisation against rubella and coverage of one dose was 95.4% (Table 10).
21. Td/IPV 'teenage booster' uptake in teenagers reaching 16 years during the 2020/21 school year was 86.0%. Uptake ranged by HB from 78.5% (Cardiff and Vale) to 91.6% (Swansea Bay) and by LA from 77.0% (Cardiff) to 92.1% (Neath Port Talbot) (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 2021 was 95.2%. Uptake of four doses in children who were at risk of perinatal infection and reached their second birthday in the year ending 31st March 2021 was 64.6%. Uptake of four doses in children who were at risk of perinatal infection and reached their fifth birthday in the year ending 31st March 2021 was 77.4%.

Comment

The majority of children in this report for the year to March 2021 would have been due their final immunisations reported here during the COVID-19 pandemic, however vaccination uptake in Wales remains at high levels. Uptake of routine vaccinations reported on at two and five years of age have increased compared to 2019/20, whilst uptake of routine vaccinations reported on at one and four years of age has remained stable.

Uptake of the '6 in 1' (or '5 in 1') vaccine and pneumococcal conjugate vaccines remained above 95% in children at one year of age for the thirteenth consecutive year. Uptake varies between health board areas.

Uptake of two doses of Men B vaccine at one year of age was also over 95%, with uptake of a complete three dose course in eligible two year olds slightly lower (94.3%). Uptake of MMR1 at two years of age remains slightly below 95% for the full year cohort with uptake in the most recent quarterly cohort (Jan to Mar 2021) 94.3% and uptake in the first quarterly cohort (Apr to Jun 2020) 95.5% [3].

The proportion of children who were up to date with their routine immunisations by four years of age decreased slightly this year to 87.6%. Last year saw the highest coverage since this measure was first reported on (88.0%). Of all the immunisations that are included in this composite measure, uptake of the second dose of MMR remains the lowest (88.5%), followed by the '4 in 1' preschool booster (88.9%) then Hib/MenC booster (95.2%).

The reported inequality gap in immunisation coverage between four year olds residing in the most and least deprived areas increased compared to 2019/20, from 7.7 to 8.5 percentage points. Coverage in the most deprived quintile has decreased whilst coverage in the other four quintiles has remained stable. 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.

Although coverage for younger children who receive their immunisations in general practice remains positive, coverage of immunisations in teenagers is lower compared to previous years. School based vaccination sessions were disrupted during the 2020/21 academic year due to school closures and catch-up activities have been planned. The 2020/21 School Year 9 cohort was the first to include boys as part of the HPV vaccination programme, uptake of one dose in these children is currently 67.4% (71.1% for girls and 64.0% for boys) [2]. Of all the vaccinations given to teenagers, HPV uptake appears to be the most impacted by school closures over the past year.

During early 2020 there was an increase in notifications of mumps to Public Health Wales Health Protection Teams, with the highest number of cases in 10 to 19 year olds. Week 4 of 2020 (week commencing 20th January) saw 222 mumps notifications, and the number of notifications remained relatively high until week 16 (week commencing 13th April) when notifications declined [4]. During 2020 there were no confirmed cases of measles in Wales (provisional data). Social distancing measures implemented in response to the COVID-19 pandemic, reducing transmission of infections and reduced reporting during this time has led to fewer notifications of vaccine preventable disease. However, there remains potential for outbreaks in Wales following importation from people acquiring measles virus abroad when travel resumes and there is a need to monitor vaccination uptake more closely as routine appointments may have been missed.

The Vaccine Preventable Disease Programme have been producing a monthly enhanced immunisation report to monitor the impact on uptake and timeliness of routine immunisations in infants and young children during the COVID-19 pandemic [5]. These reports suggest that, overall, timeliness of immunisations has remained stable, despite a slight decline over the winter period whilst practices were prioritising influenza vaccination sessions. The impact of the extra workload from the COVID-19 vaccine roll out on general practices in combination with COVID-19 restrictions may result in further decreases in timeliness. Delays in data entry should also be taken into account when interpreting this data.

Parents should be reminded that routine immunisation appointments are important medical reasons to leave the home.

[1] Welsh Health Circular- Changes to the infant pneumococcal conjugate vaccine (PCV) immunisation schedule. Available from:

<https://gov.wales/sites/default/files/publications/2019-12/changes-to-the-infant-pneumococcal-conjugate-vaccine-immunisation-schedule.pdf>

[2] Welsh Health Circular- Changes to the HPV immunisation programme from the academic school year starting September 2019. Available from:

[http://www.gpone.wales.nhs.uk/sitesplus/documents/1000/WHC%202019%20020%20%27Changes%20to%20the%20Human%20Papillomavirus%20\(HPV\)%20Immunisation%20Programme%27%20-%20English.pdf](http://www.gpone.wales.nhs.uk/sitesplus/documents/1000/WHC%202019%20020%20%27Changes%20to%20the%20Human%20Papillomavirus%20(HPV)%20Immunisation%20Programme%27%20-%20English.pdf)

[3] Public Health Wales Health Protection Division. Vaccine uptake in Children in Wales, January to March 2021: COVER report 138, June 2021. Cardiff, Public Health Wales.

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=54144>

[4] Public Health Wales Weekly Notification of Mumps Dashboard. May 2021:

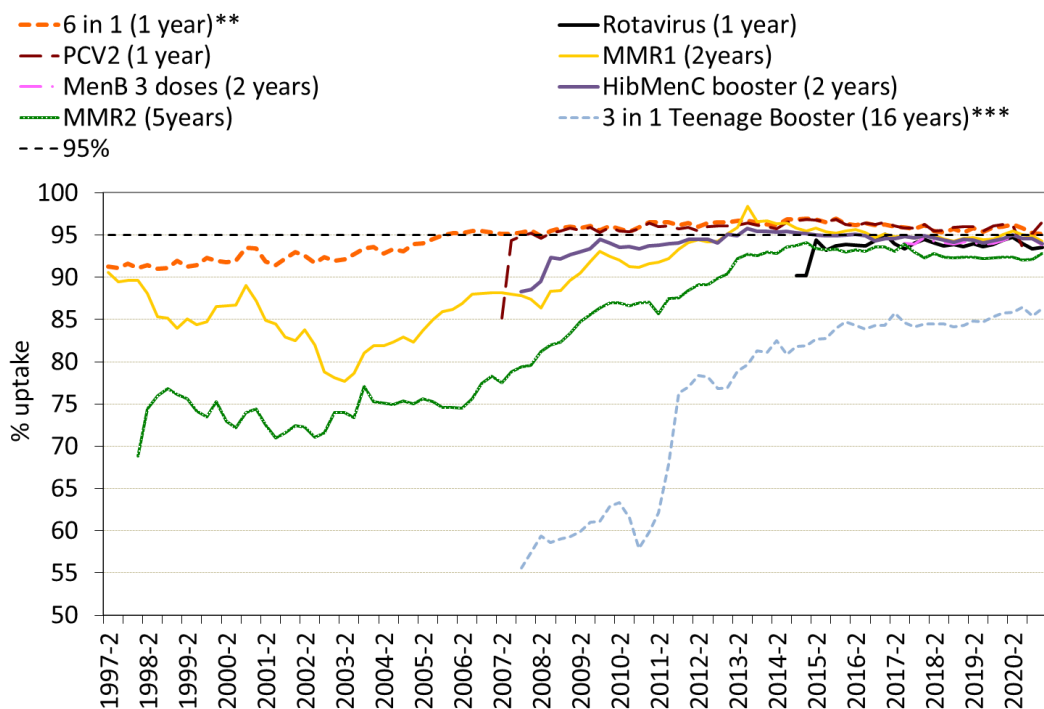
<https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/NotificationsofMUMPSinWales2018-2021/Dashboard2>

[5] Public Health Wales Immunisation and Vaccine Preventable Disease Programme, COVID-19 and immunisation programmes <http://nww.immunisation.wales.nhs.uk/covid-19-and-immunisation-programmes> [NHS access only]

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 1. Percentage uptake of childhood immunisations in Wales, quarter 2 1997 to quarter 1 2021*.

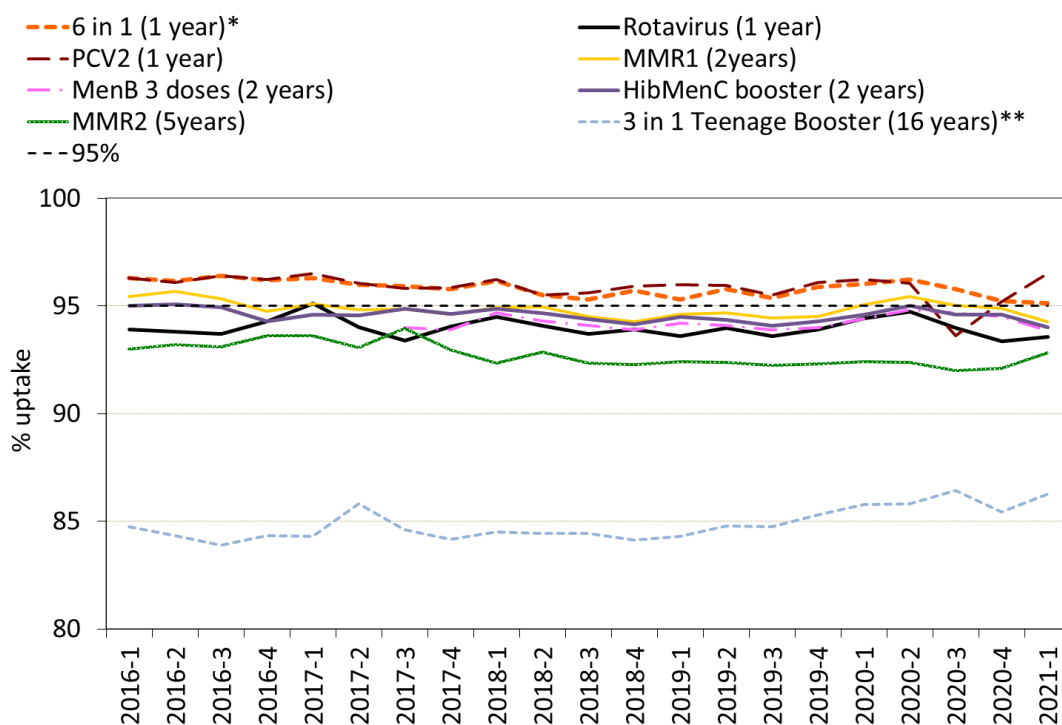


*Uptake data for quarter 3 2014 to quarter 4 2014 presented here are based on estimates calculated in August 2015, rather than published data, due to data quality problems affecting reported uptake of some immunisations in reports published during this period.

**Uptake of pertussis used as a proxy.

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

Figure 2. Percentage uptake of childhood immunisations in Wales, quarter 1 2016 to quarter 1 2021**



* 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 01/04/20 and 31/03/21 and resident on 31/03/21.

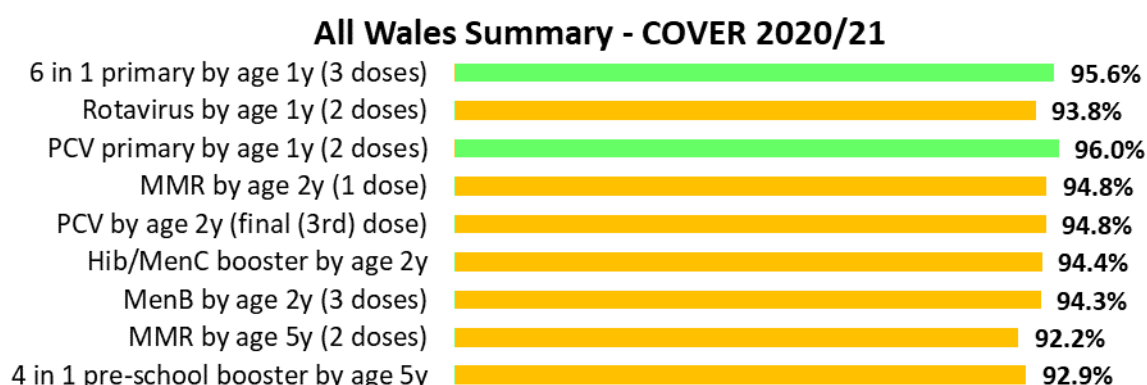


Figure 3. Percentage of resident children reaching their 4th birthday between 01/04/20 and 31/03/21 and are up to date with all scheduled vaccines³ by Health Board.



Table 1. Percentage of resident children reaching their 4th birthday and are up to date with all scheduled vaccines by Health Board, annually 2016/17 to 2020/21.

Area	Up to date in schedule				
	2016/17	2017/18	2018/19	2019/20	2020/21
Aneurin Bevan UHB	80.7	81.0	84.1	86.6	86.6
Betsi Cadwaladr UHB	88.3	87.9	89.7	90.3	90.1
Cardiff and Vale UHB	81.7	82.6	86.8	86.7	84.5
Cwm Taf UHB	87.3	88.2	87.9	88.6	90.1
Hywel Dda UHB	83.0	84.0	86.3	86.7	86.1
Powys Teaching HB	86.2	86.2	88.9	90.2	90.4
Swansea Bay University HB	86.3	86.2	88.0	87.6	87.0
Wales	84.6	84.9	87.2	88.0	87.6

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 01/04/2020 and 31/03/2021 and resident on 31/03/2021.

Area	Age 1 year								Age 2 years								Age 4 years			Age 5 years			
	Resident children (n)	6 in 1 ¹ (n) (%)	MenB ² (n) (%)	PCV (n) (%)	Rotavirus (n) (%)	Resident children (n)	MMR1 (n) (%)	PCV3 ³ (n) (%)	MenB (n) (%)	Hib/MenC booster (n) (%)	Resident children (n)	Up to date in schedule ⁴ (n) (%)	Resident children (n)	MMR2 (n) (%)	4 in 1 ¹ (n) (%)								
Aneurin Bevan University HB																							
Blaenau Gwent LA	749	716 95.6	722 96.4	722 96.4	701 93.6	693	676 97.5	675 97.4	672 97.0	670 96.7	727	645 88.7	712	667 93.7	666 93.5								
Caerphilly LA	1783	1728 96.9	1731 97.1	1732 97.1	1695 95.1	1855	1784 96.2	1786 96.3	1782 96.1	1778 95.8	1979	1742 88.0	2114	1991 94.2	1999 94.6								
Monmouthshire LA	736	720 97.8	713 96.9	718 97.6	705 95.8	771	742 96.2	743 96.4	737 95.6	742 96.2	841	744 88.5	904	852 94.2	868 96.0								
Newport LA	1884	1766 93.7	1767 93.8	1777 94.3	1708 90.7	1954	1819 93.1	1818 93.0	1812 92.7	1807 92.5	2048	1687 82.4	2175	1932 88.8	1942 89.3								
Torfaen LA	954	910 95.4	913 95.7	920 96.4	876 91.8	990	924 93.3	926 93.5	926 93.5	921 93.0	1073	959 89.4	1118	1029 92.0	1041 93.1								
Health Board Total	6106	5840 95.6	5846 95.7	5869 96.1	5685 93.1	6263	5945 94.9	5948 95.0	5929 94.7	5918 94.5	6668	5777 86.6	7023	6471 92.1	6516 92.8								
Betsi Cadwaladr University HB																							
Anglesey LA	554	545 98.4	544 98.2	542 97.8	534 96.4	636	619 97.3	620 97.5	613 96.4	618 97.2	738	692 93.8	703	677 96.3	681 96.9								
Conwy LA	1036	970 93.6	970 93.6	984 95.0	953 92.0	1015	954 94.0	962 94.8	953 93.9	955 94.1	1068	925 86.6	1153	1073 93.1	1079 93.6								
Denbighshire LA	959	912 95.1	913 95.2	915 95.4	877 91.4	934	892 95.5	890 95.3	886 94.9	892 95.5	1069	946 88.5	1052	991 94.2	996 94.7								
Flintshire LA	1381	1325 95.9	1319 95.5	1332 96.5	1306 94.6	1495	1430 95.7	1430 95.7	1426 95.4	1425 95.3	1617	1456 90.0	1634	1530 93.6	1535 93.9								
Gwynedd LA	1041	1009 96.9	1004 96.4	1008 96.8	980 94.1	1057	1018 96.3	1018 96.3	1015 96.0	1017 96.2	1143	1049 91.8	1198	1124 93.8	1133 94.6								
Wrexham LA	1360	1308 96.2	1302 95.7	1309 96.3	1268 93.2	1369	1316 96.1	1318 96.3	1312 95.8	1313 95.9	1458	1321 90.6	1509	1411 93.5	1428 94.6								
Health Board Total	6331	6069 95.9	6052 95.6	6090 96.2	5918 93.5	6506	6229 95.7	6238 95.9	6205 95.4	6220 95.6	7093	6389 90.1	7249	6806 93.9	6852 94.5								
Cardiff and Vale University HB																							
Cardiff LA	3733	3490 93.5	3480 93.2	3523 94.4	3422 91.7	3886	3611 92.9	3594 92.5	3540 91.1	3576 92.0	4185	3500 83.6	4401	4003 91.0	4029 91.5								
Vale of Glamorgan LA	1230	1173 95.4	1163 94.6	1171 95.2	1150 93.5	1334	1249 93.6	1241 93.0	1232 92.4	1239 92.9	1532	1329 86.7	1517	1416 93.3	1431 94.3								
Health Board Total	4963	4663 94.0	4643 93.6	4694 94.6	4572 92.1	5220	4860 93.1	4835 92.6	4772 91.4	4815 92.2	5717	4829 84.5	5918	5419 91.6	5460 92.3								
Cwm Taf Morgannwg University HB																							
Bridgend LA	1324	1285 97.1	1286 97.1	1290 97.4	1277 96.5	1501	1431 95.3	1430 95.3	1422 94.7	1417 94.4	1611	1448 89.9	1596	1442 90.4	1452 91.0								
Merthyr Tydfil LA	617	596 96.6	599 97.1	603 97.7	592 95.9	672	641 95.4	640 95.2	638 94.9	637 94.8	705	639 90.6	764	700 91.6	705 92.3								
Rhondda Cynon Taf LA	2422	2359 97.4	2366 97.7	2367 97.7	2334 96.4	2591	2509 96.8	2512 97.0	2513 97.0	2514 97.0	2676	2409 90.0	2784	2618 94.0	2642 94.9								
Health Board Total	4363	4240 97.2	4251 97.4	4260 97.6	4203 96.3	4764	4581 96.2	4582 96.2	4573 96.0	4568 95.9	4992	4496 90.1	5144	4760 92.5	4799 93.3								
Hywel Dda University HB																							
Cardemarthenshire LA	1671	1586 94.9	1581 94.6	1587 95.0	1580 94.6	1782	1677 94.1	1667 93.5	1659 93.1	1666 93.5	1948	1692 86.9	1990	1806 90.8	1822 91.6								
Ceredigion LA	521	493 94.6	492 94.4	494 94.8	482 92.5	565	535 94.7	534 94.5	532 94.2	534 94.5	603	530 87.9	653	609 93.3	612 93.7								
Pembrokeshire LA	1054	986 93.5	985 93.5	990 93.9	977 92.7	1082	1014 93.7	1014 93.7	1008 93.2	1007 93.1	1254	1055 84.1	1265	1116 88.2	1122 88.7								
Health Board Total	3246	3065 94.4	3058 94.2	3071 94.6	3039 93.6	3429	3226 94.1	3215 93.8	3199 93.3	3207 93.5	3805	3277 86.1	3908	3531 90.4	3556 91.0								
Powys Teaching HB																							
Health Board Total	1030	995 96.6	991 96.2	1001 97.2	987 95.8	1130	1087 96.2	1089 96.4	1086 96.1	1084 95.9	1187	1073 90.4	1245	1148 92.2	1167 93.7								
Swansea Bay University HB																							
Neath Port Talbot LA	1270	1219 96.0	1217 95.8	1226 96.5	1205 94.9	1393	1318 94.6	1321 94.8	1316 94.5	1315 94.4	1537	1335 86.9	1543	1429 92.6	1435 93.0								
Swansea LA	2221	2130 95.9	2119 95.4	2131 95.9	2100 94.6	2334	2200 94.3	2197 94.1	2193 94.0	2188 93.7	2432	2120 87.2	2604	2370 91.0	2391 91.8								
Health Board Total	3491	3349 95.9	3336 95.6	3357 96.2	3305 94.7	3727	3518 94.4	3518 94.4	3509 94.2	3503 94.0	3969	3455 87.0	4147	3799 91.6	3826 92.3								
Unknown	44	41 93.2	41 93.2	41 93.2	37 84.1	63	54 85.7	54 85.7	55 94.2	53 84.1	37	33 89.2	35	33 94.3	33 94.3								
Wales Total	29574	28262 95.6	28218 95.4	28383 96.0	27746 93.8	31102	29500 94.8	29479 94.8	29328 94.3	29368 94.4	33468	29329 87.6	34669	31967 92.2	32209 92.9								

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 01/04/20 and 31/03/21. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/04/20 and 31/03/21.

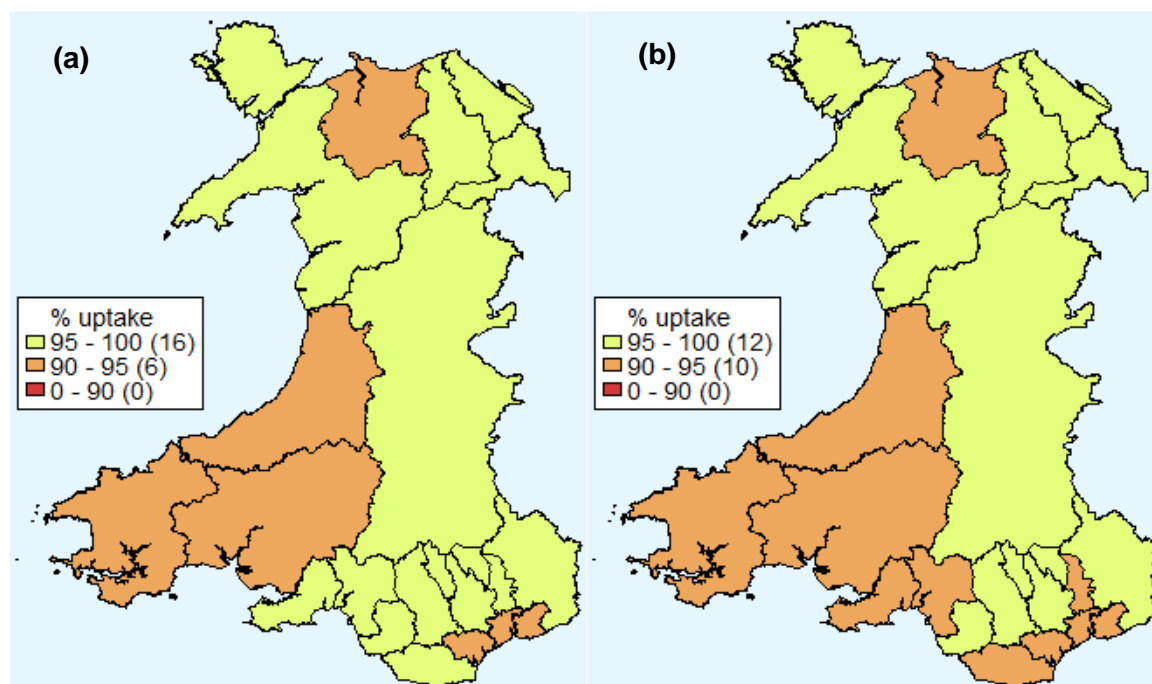
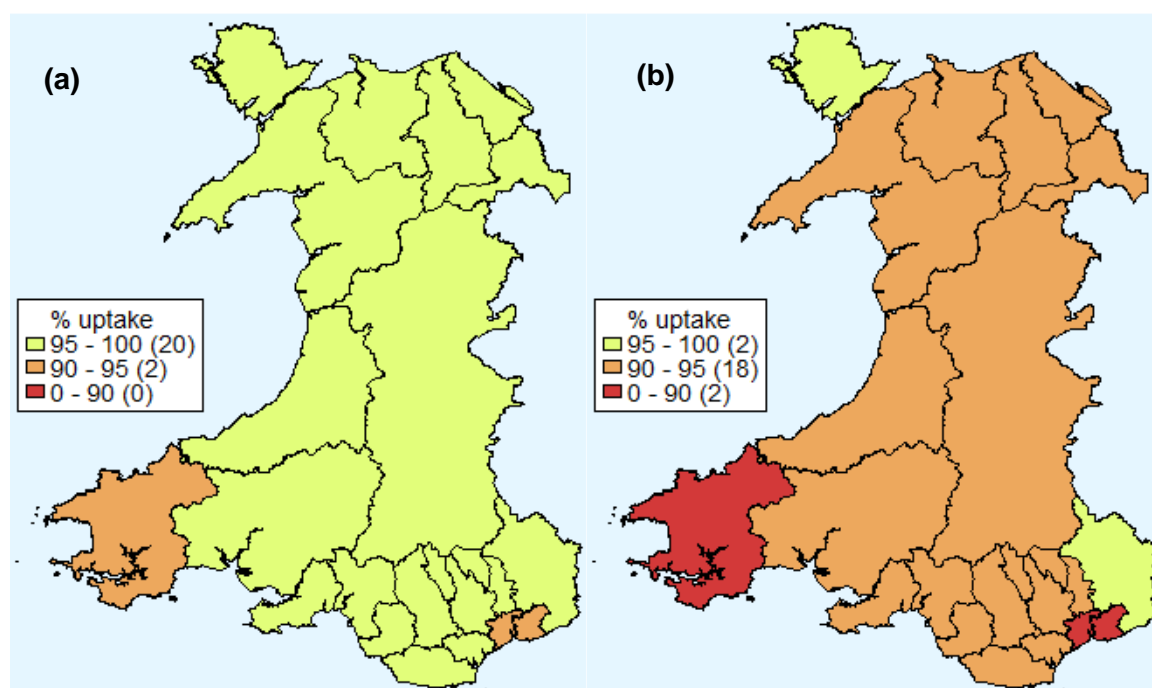
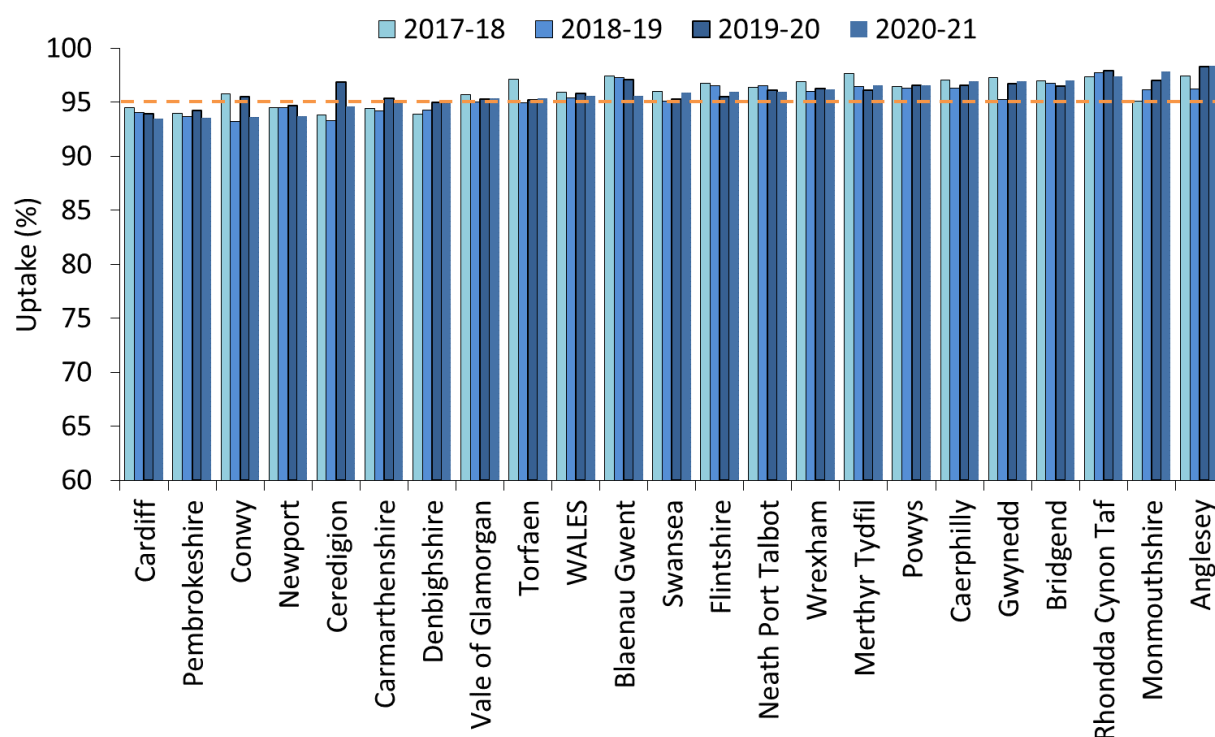


Figure 5. (a) Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/20 and 31/03/21. **(b)** Uptake of '4 in 1' vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/20 and 31/03/21.



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 (2017 – 2021 financial years, ranked by uptake in 2020/21).¹



¹ During 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 (2017 – 2021 financial years, ranked by uptake in 2020/21).

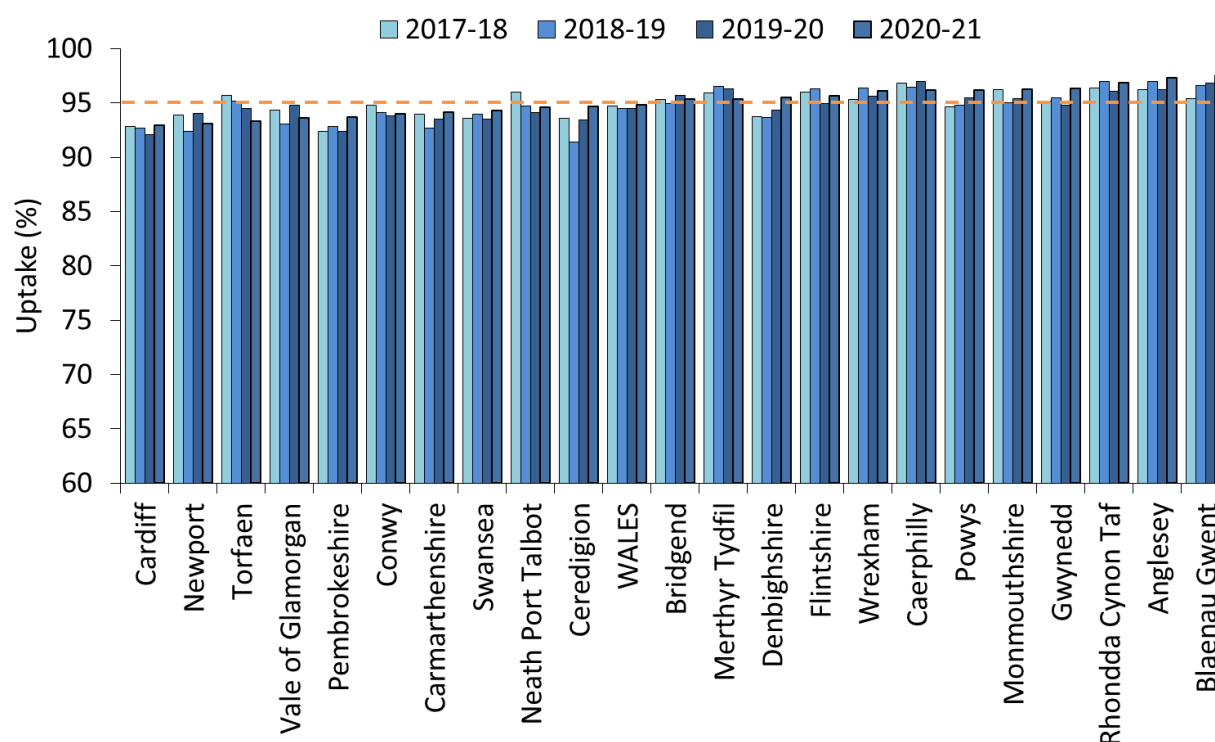


Figure 8. Annual uptake of 2 doses of MMR by 5 years of age (2017 – 2021 financial years, ranked by uptake in 2020/21).

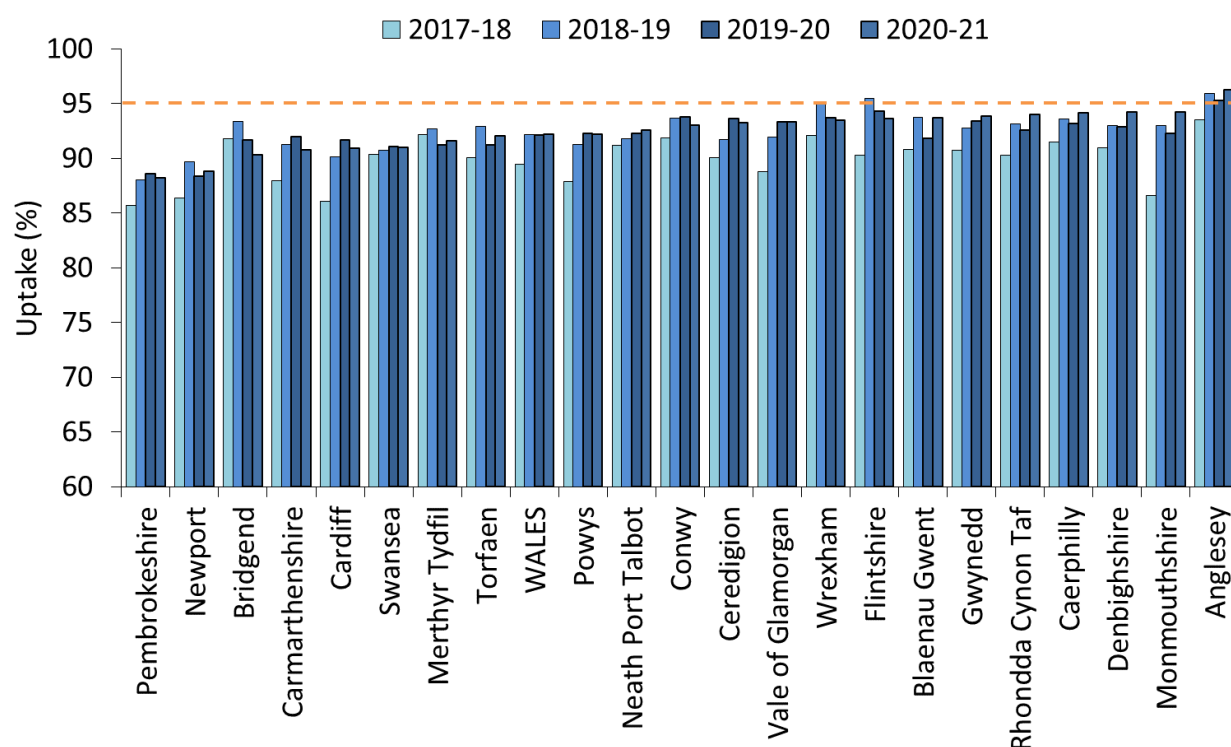


Figure 9. Annual uptake of the '4 in 1' pre-school booster by 5 years of age (2017 – 2021 financial years, ranked by uptake in 2020/21).

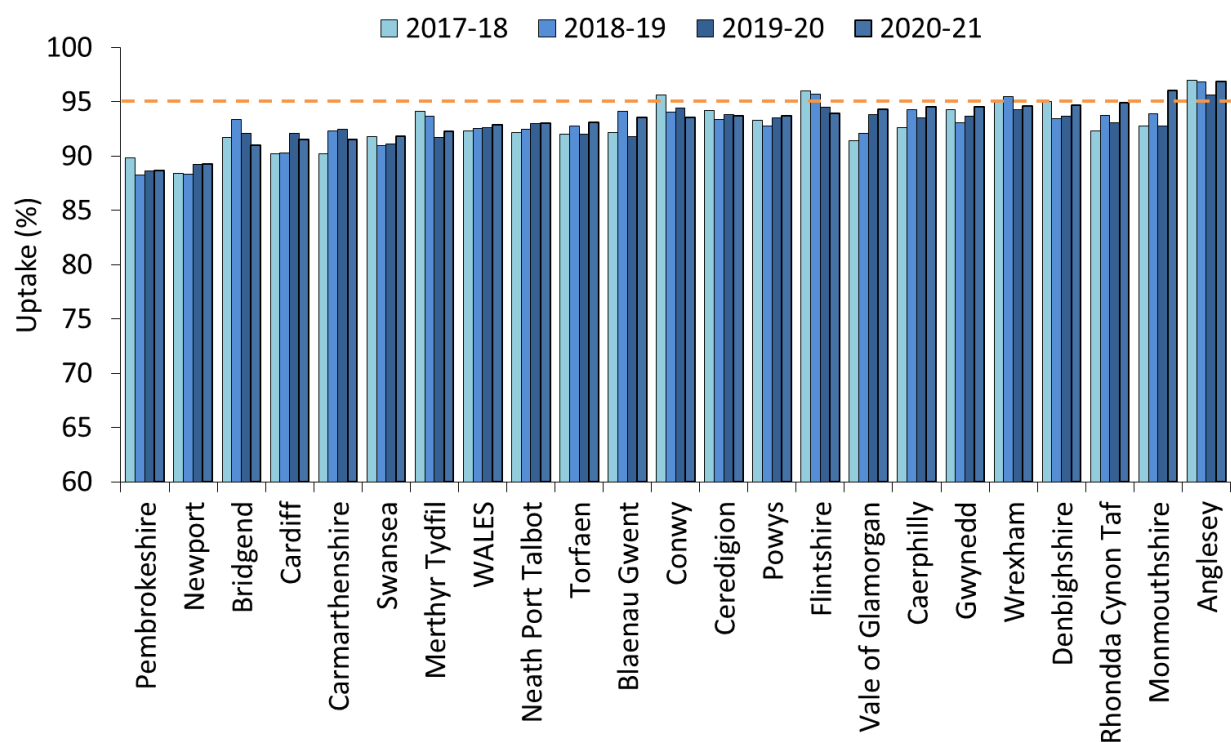
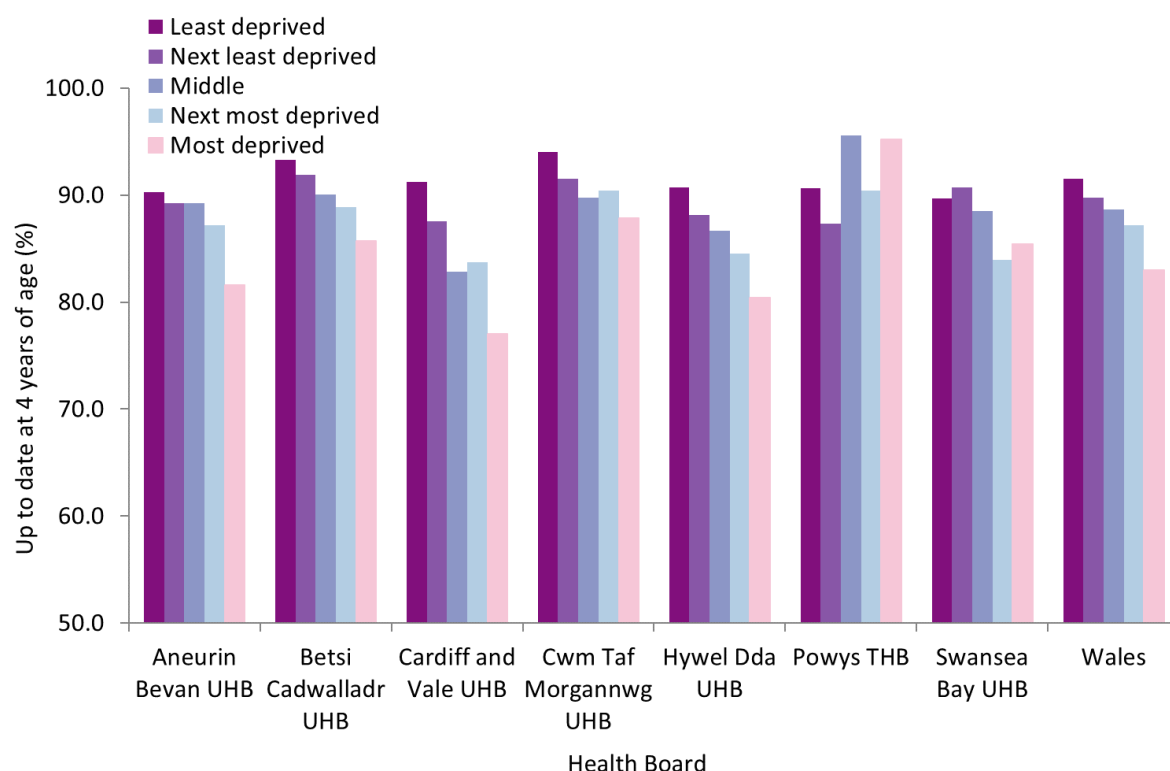
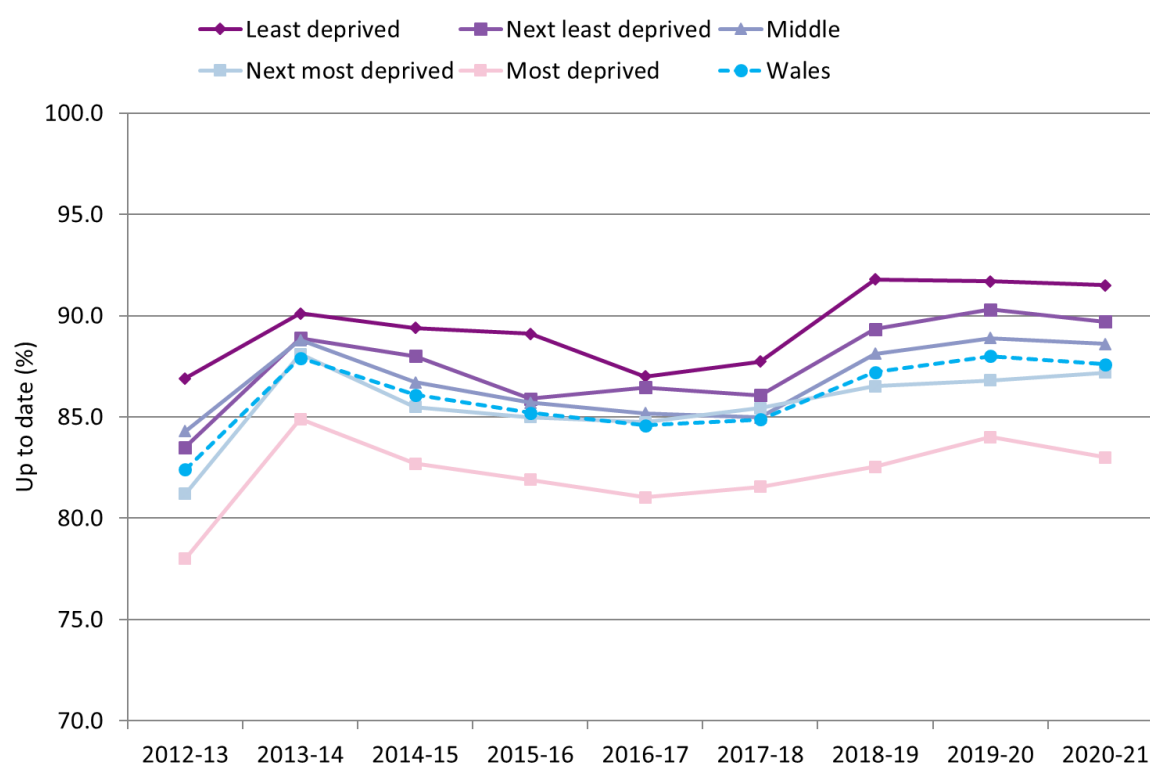


Figure 10. Percentage of children who are up to date with routine immunisations¹ by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2020 and 31/03/2021 and resident on 31/03/2021.



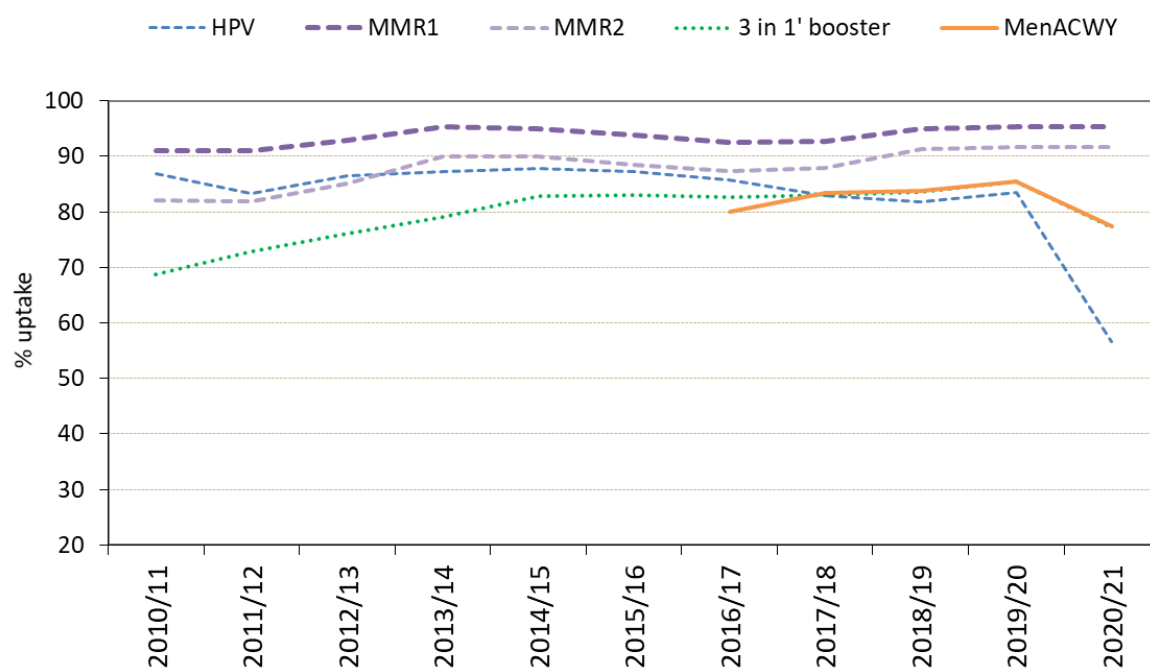
¹ Completed '4 in 1' pre-school booster, the Hib/MenC booster and second MMR dose by four years of age.

Figure 11. Percentage of children who are up to date with routine immunisations¹ by four years of age during 2012-2021 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 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 2020/21.³



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 2020/21 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.

Table 3. Vaccine uptake in children reaching their 1st birthday between 01/04/2020 and 31/03/2021 and resident on 31/03/2021.

Area	Resident children	D3	T3	P3	Po3	Hib3	HepB ¹	MMR1	Rotavirus	PCV ²	HibMenCb	MenB ³	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Aneurin Bevan University HB</u>													
Blaenau Gwent LA	749	716	95.6	716	95.6	716	95.6	716	95.6	716	95.6	716	95.6
Caerphilly LA	1783	1728	96.9	1728	96.9	1728	96.9	1728	96.9	1728	96.9	1728	96.9
Monmouthshire LA	736	720	97.8	720	97.8	720	97.8	720	97.8	717	97.4	717	97.4
Newport LA	1884	1766	93.7	1766	93.7	1766	93.7	1766	93.7	1765	93.7	1764	93.6
Torfaen LA	954	910	95.4	910	95.4	910	95.4	910	95.4	910	95.4	910	95.4
Health Board Total	6106	5840	95.6	5840	95.6	5840	95.6	5840	95.6	5839	95.6	5834	95.5
<u>Betsi Cadwaladr University HB</u>													
Anglesey LA	554	545	98.4	545	98.4	545	98.4	545	98.4	545	98.4	545	98.4
Conwy LA	1036	970	93.6	970	93.6	970	93.6	970	93.6	970	93.6	970	93.6
Denbighshire LA	959	912	95.1	912	95.1	912	95.1	912	95.1	912	95.1	912	95.1
Flintshire LA	1381	1325	95.9	1325	95.9	1325	95.9	1325	95.9	1324	95.9	1324	95.9
Gwynedd LA	1041	1009	96.9	1009	96.9	1009	96.9	1009	96.9	1009	96.9	1009	96.9
Wrexham LA	1360	1308	96.2	1308	96.2	1308	96.2	1308	96.2	1305	96.0	1305	96.0
Health Board Total	6331	6069	95.9	6069	95.9	6069	95.9	6069	95.9	6069	95.9	6063	95.8
<u>Cardiff and Vale University HB</u>													
Cardiff LA	3733	3490	93.5	3490	93.5	3490	93.5	3490	93.5	3490	93.5	3490	93.5
Vale of Glamorgan LA	1230	1173	95.4	1173	95.4	1173	95.4	1172	95.3	1172	95.3	1170	95.1
Health Board Total	4963	4663	94.0	4663	94.0	4663	94.0	4662	93.9	4662	93.9	4660	93.9
<u>Cwm Taf Morgannwg University HB</u>													
Bridgend LA	1324	1285	97.1	1285	97.1	1285	97.1	1285	97.1	1285	97.1	1284	97.0
Merthyr Tydfil LA	617	596	96.6	596	96.6	596	96.6	596	96.6	596	96.6	596	96.6
Rhondda Cynon Taf LA	2422	2359	97.4	2359	97.4	2359	97.4	2359	97.4	2359	97.4	2359	97.4
Health Board Total	4363	4240	97.2	4240	97.2	4240	97.2	4240	97.2	4239	97.2	4239	97.2
<u>Hywel Dda University HB</u>													
Carmarthenshire LA	1671	1586	94.9	1586	94.9	1586	94.9	1586	94.9	1585	94.9	1586	94.9
Ceredigion LA	521	493	94.6	493	94.6	493	94.6	493	94.6	493	94.6	490	94.0
Pembrokeshire LA	1054	986	93.5	986	93.5	986	93.5	986	93.5	986	93.5	986	93.5
Health Board Total	3246	3065	94.4	3065	94.4	3065	94.4	3065	94.4	3064	94.4	3062	94.3
<u>Powys Teaching HB</u>													
Health Board Total	1030	995	96.6	995	96.6	995	96.6	994	96.5	995	96.6	992	96.3
<u>Swansea Bay University HB</u>													
Neath Port Talbot LA	1270	1219	96.0	1219	96.0	1219	96.0	1219	96.0	1219	96.0	1219	96.0
Swansea LA	2221	2130	95.9	2130	95.9	2130	95.9	2129	95.9	2130	95.9	2130	95.9
Health Board Total	3491	3349	95.9	3349	95.9	3349	95.9	3348	95.9	3349	95.9	3349	95.9
Unknown	44	41	93.2	41	93.2	41	93.2	41	93.2	41	93.2	41	93.2
Wales Total	29574	28262	95.6	28262	95.6	28262	95.6	28259	95.6	28259	95.6	28240	95.5

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'.

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 01/04/2020 and 31/03/2021 and resident on 31/03/2021.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenB ¹	PCV2 ²	PCVf ³	HibMenCb
<u>Aneurin Bevan University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Blaenau Gwent LA	693	681	98.3	681	98.3	681	98.3	680	98.1	680	98.1
Caerphilly LA	1855	1815	97.8	1815	97.8	1815	97.8	1815	97.8	1784	96.2
Monmouthshire LA	771	753	97.7	753	97.7	753	97.7	753	97.7	742	96.2
Newport LA	1954	1867	95.5	1867	95.5	1867	95.5	1868	95.6	1867	95.5
Torfaen LA	990	951	96.1	951	96.1	951	96.1	950	96.0	951	96.1
Health Board Total	6263	6067	96.9	6067	96.9	6067	96.9	6066	96.9	6066	96.9
<u>Betsi Cadwaladr University HB</u>											
Anglesey LA	636	630	99.1	630	99.1	630	99.1	631	99.2	630	99.1
Conwy LA	1015	984	96.9	984	96.9	984	96.9	984	96.9	983	96.8
Denbighshire LA	934	898	96.1	898	96.1	898	96.1	898	96.1	892	95.5
Flintshire LA	1495	1443	96.5	1443	96.5	1443	96.5	1442	96.5	1443	96.5
Gwynedd LA	1057	1035	97.9	1035	97.9	1035	97.9	1035	97.9	1018	96.3
Wrexham LA	1369	1335	97.5	1335	97.5	1335	97.5	1335	97.5	1316	96.1
Health Board Total	6506	6325	97.2	6325	97.2	6325	97.2	6325	97.2	6324	97.2
<u>Cardiff and Vale University HB</u>											
Cardiff LA	3886	3723	95.8	3723	95.8	3723	95.8	3723	95.8	3719	95.7
Vale of Glamorgan LA	1334	1281	96.0	1281	96.0	1281	96.0	1281	96.0	1249	93.6
Health Board Total	5220	5004	95.9	5004	95.9	5004	95.9	5004	95.9	5000	95.8
<u>Cwm Taf Morgannwg University HB</u>											
Bridgend LA	1501	1463	97.5	1463	97.5	1463	97.5	1463	97.5	1431	95.3
Merthyr Tydfil LA	672	651	96.9	651	96.9	651	96.9	652	97.0	651	96.9
Rhondda Cynon Taf LA	2591	2548	98.3	2548	98.3	2548	98.3	2548	98.3	2509	96.8
Health Board Total	4764	4662	97.9	4662	97.9	4662	97.9	4663	97.9	4662	97.9
<u>Hywel Dda University HB</u>											
Carmarthenshire LA	1782	1718	96.4	1718	96.4	1718	96.4	1718	96.4	1677	94.1
Ceredigion LA	565	548	97.0	548	97.0	548	97.0	548	97.0	535	94.7
Pembrokeshire LA	1082	1034	95.6	1034	95.6	1034	95.6	1034	95.6	1014	93.7
Health Board Total	3429	3300	96.2	3300	96.2	3300	96.2	3300	96.2	3299	96.2
<u>Powys Teaching HB</u>											
Health Board Total	1130	1100	97.3	1100	97.3	1100	97.3	1100	97.3	1100	97.3
<u>Swansea Bay University HB</u>											
Neath Port Talbot LA	1393	1352	97.1	1352	97.1	1352	97.1	1352	97.1	1318	94.6
Swansea LA	2334	2252	96.5	2252	96.5	2252	96.5	2251	96.4	2200	94.3
Health Board Total	3727	3604	96.7	3604	96.7	3604	96.7	3603	96.7	3604	96.7
Unknown	63	58	92.1	58	92.1	58	92.1	58	92.1	54	85.7
Wales Total	31102	30120	96.8	30120	96.8	30120	96.8	30119	96.8	30113	96.8

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 01/04/2020 and 31/03/2021 and resident on 31/03/2021.

Area	Resident Children	4 in 1 Preschool booster ¹		HibMenCb		MMR dose 2		Up to date in schedule ²	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Aneurin Bevan University HB</u>									
Blaenau Gwent LA	727	653	89.8	703	96.7	650	89.4	645	88.7
Caerphilly LA	1979	1763	89.1	1910	96.5	1762	89.0	1742	88.0
Monmouthshire LA	841	760	90.4	794	94.4	754	89.7	744	88.5
Newport LA	2048	1737	84.8	1886	92.1	1728	84.4	1687	82.4
Torfaen LA	1073	975	90.9	1024	95.4	970	90.4	959	89.4
Health Board Total	6668	5888	88.3	6317	94.7	5864	87.9	5777	86.6
<u>Betsi Cadwaladr University HB</u>									
Anglesey LA	738	696	94.3	721	97.7	693	93.9	692	93.8
Conwy LA	1068	937	87.7	1027	96.2	932	87.3	925	86.6
Denbighshire LA	1069	950	88.9	1018	95.2	951	89.0	946	88.5
Flintshire LA	1617	1471	91.0	1555	96.2	1462	90.4	1456	90.0
Gwynedd LA	1143	1063	93.0	1103	96.5	1056	92.4	1049	91.8
Wrexham LA	1458	1341	92.0	1406	96.4	1328	91.1	1321	90.6
Health Board Total	7093	6458	91.0	6830	96.3	6422	90.5	6389	90.1
<u>Cardiff and Vale University HB</u>									
Cardiff LA	4185	3584	85.6	3918	93.6	3563	85.1	3500	83.6
Vale of Glamorgan LA	1532	1344	87.7	1457	95.1	1349	88.1	1329	86.7
Health Board Total	5717	4928	86.2	5375	94.0	4912	85.9	4829	84.5
<u>Cwm Taf Morgannwg University HB</u>									
Bridgend LA	1611	1463	90.8	1552	96.3	1460	90.6	1448	89.9
Merthyr Tydfil LA	705	646	91.6	676	95.9	646	91.6	639	90.6
Rhondda Cynon Taf LA	2676	2427	90.7	2601	97.2	2420	90.4	2409	90.0
Health Board Total	4992	4536	90.9	4829	96.7	4526	90.7	4496	90.1
<u>Hywel Dda University HB</u>									
Carmarthenshire LA	1948	1721	88.3	1850	95.0	1708	87.7	1692	86.9
Ceredigion LA	603	536	88.9	566	93.9	536	88.9	530	87.9
Pembrokeshire LA	1254	1070	85.3	1168	93.1	1065	84.9	1055	84.1
Health Board Total	3805	3327	87.4	3584	94.2	3309	87.0	3277	86.1
<u>Powys Teaching HB</u>									
Health Board Total	1187	1088	91.7	1128	95.0	1079	90.9	1073	90.4
<u>Swansea Bay University HB</u>									
Neath Port Talbot LA	1537	1349	87.8	1479	96.2	1339	87.1	1335	86.9
Swansea LA	2432	2159	88.8	2300	94.6	2146	88.2	2120	87.2
Health Board Total	3969	3508	88.4	3779	95.2	3485	87.8	3455	87.0
Unknown	37	33	89.2	36	97.3	33	89.2	33	89.2
Wales Total	33468	29766	88.9	31878	95.2	29630	88.5	29329	87.6

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 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 01/04/2020 and 31/03/2021 and resident on 31/03/2021.

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)	(%)
Aneurin Bevan	985	889	90.3	880	785	89.2	1306	1165	89.2	1519	1324	87.2	1978	1614	81.6
Betsi Cadwalladr University	1188	1108	93.3	1706	1568	91.9	1643	1480	90.1	1348	1198	88.9	1208	1035	85.7
Cardiff and Vale University	1847	1685	91.2	721	631	87.5	582	482	82.8	806	675	83.7	1761	1356	77.0
Cwm Taf Morgannwg	621	584	94.0	542	496	91.5	714	641	89.8	1532	1385	90.4	1583	1390	87.8
Hywel Dda	216	196	90.7	985	868	88.1	1336	1158	86.7	865	731	84.5	403	324	80.4
Powys Teaching	128	116	90.6	567	495	87.3	294	281	95.6	156	141	90.4	42	40	95.2
Swansea Bay University	796	714	89.7	421	382	90.7	663	587	88.5	810	680	84.0	1279	1092	85.4
Wales Total	5781	5292	91.5	5822	5225	89.7	6538	5794	88.6	7036	6134	87.2	8254	6851	83.0

¹Completed '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 01/04/2020 and 31/03/2021 and resident on 31/03/2021.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC	PCVr ¹	HibMenCb	MMR1	MMR2	D4	T4	aP	Po4
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Blaenau Gwent LA	712	705	99.0	705	99.0	705	99.0	705	99.0	685	96.21	689	96.8	686	96.3
Caerphilly LA	2114	2070	97.9	2070	97.9	2070	97.9	2070	97.9	1995	94.37	2030	96.0	2040	96.5
Monmouthshire LA	904	862	95.4	862	95.4	862	95.4	861	95.2	860	95.1	833	92.15	855	94.6
Newport LA	2175	2060	94.7	2061	94.8	2059	94.7	2061	94.8	2055	94.5	1902	87.4	1992	91.6
Torfaen LA	1118	1098	98.2	1098	98.2	1098	98.2	1098	98.2	1067	95.44	1074	96.1	1067	95.4
Health Board Total	7023	6795	96.8	6796	96.8	6794	96.7	6795	96.8	6787	96.6	6482	92.3	6640	94.5
Betsi Cadwaladr University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Anglesey LA	703	695	98.9	695	98.9	695	98.9	695	98.9	695	98.9	660	93.9	682	97.0
Conwy LA	1153	1120	97.1	1120	97.1	1120	97.1	1118	97.0	1120	97.1	1046	90.7	1095	95.0
Denbighshire LA	1052	1025	97.4	1025	97.4	1025	97.4	1025	97.4	1025	97.4	964	91.6	994	94.5
Flintshire LA	1634	1593	97.5	1593	97.5	1593	97.5	1593	97.5	1592	97.4	1486	90.9	1562	95.6
Gwynedd LA	1198	1160	96.8	1160	96.8	1160	96.8	1160	96.8	1160	96.8	1044	87.1	1141	95.2
Wrexham LA	1509	1463	97.0	1463	97.0	1463	97.0	1461	96.8	1463	97.0	1382	91.6	1429	94.7
Health Board Total	7249	7056	97.3	7056	97.3	7056	97.3	7052	97.3	7055	97.3	6582	90.8	6903	95.2
Cardiff and Vale University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Cardiff LA	4401	4224	96.0	4224	96.0	4224	96.0	4224	96.0	4220	95.9	3868	87.9	4054	92.1
Vale of Glamorgan LA	1517	1476	97.3	1476	97.3	1476	97.3	1476	97.3	1475	97.2	1394	91.9	1426	94.0
Health Board Total	5918	5700	96.3	5700	96.3	5700	96.3	5700	96.3	5695	96.2	5262	88.9	5480	92.6
Cwm Taf Morgannwg University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Bridgend LA	1596	1554	97.4	1554	97.4	1554	97.4	1552	97.2	1552	97.2	1469	92.0	1511	94.7
Merthyr Tydfil LA	764	745	97.5	745	97.5	745	97.5	745	97.5	745	97.5	728	95.3	723	94.6
Rhondda Cynon Taf LA	2784	2750	98.8	2751	98.8	2750	98.8	2751	98.8	2750	98.8	2676	96.1	2714	97.5
Health Board Total	5144	5049	98.2	5050	98.2	5049	98.2	5048	98.1	5047	98.1	4873	94.7	4948	96.2
Hywel Dda University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Carmarthenshire LA	1990	1935	97.2	1935	97.2	1935	97.2	1935	97.2	1933	97.1	1829	91.9	1881	94.5
Ceredigion LA	653	625	95.7	625	95.7	625	95.7	624	95.6	623	95.4	589	90.2	606	92.8
Pembrokeshire LA	1265	1203	95.1	1203	95.1	1203	95.1	1204	95.2	1202	95.0	1125	88.9	1171	92.6
Health Board Total	3908	3763	96.3	3763	96.3	3763	96.3	3763	96.3	3758	96.2	3543	90.7	3658	93.6
Powys Teaching HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Health Board Total	1245	1192	95.7	1192	95.7	1192	95.7	1192	95.7	1192	95.7	1132	90.9	1165	93.6
Swansea Bay University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Neath Port Talbot LA	1543	1520	98.5	1520	98.5	1520	98.5	1520	98.5	1461	94.7	1487	96.4	1498	97.1
Swansea LA	2604	2510	96.4	2510	96.4	2509	96.4	2509	96.4	2503	96.1	2337	89.7	2437	93.6
Health Board Total	4147	4030	97.2	4030	97.2	4029	97.2	4029	97.2	4023	97.0	3798	91.6	3924	94.6
Unknown	35	34	97.1	34	97.1	34	97.1	34	97.1	34	97.1	30	85.7	33	94.3
Wales Total	34669	33619	97.0	33621	97.0	33617	97.0	33613	97.0	33591	96.9	31702	91.4	32751	94.5

¹ Final (booster) dose of pneumococcal conjugate vaccine

Table 8. HPV Vaccine uptake in children reaching their 14th, 15th and 16th birthdays between 01/09/2020 and 31/08/2021 and resident on 31/03/2021 (School Year 9, 10 and 11 during 2019/20). Uptake for those reaching 15 and 16 years of age is for girls only.

Area	14 years (2020-21 School Year 9)			15 years (2020-21 School Year 10)					16 years (2020-21 School Year 11)				
	Resident Children	HPV 1 dose		Resident girls	HPV 1 dose		HPV 2 doses		Resident girls	HPV 1 dose		HPV 2 doses	
		(n)	(%)		(n)	(%)	(n)	(%)		(n)	(%)	(n)	(%)
<u>Aneurin Bevan University HB</u>													
Blaenau Gwent LA	724	315	43.5	414	359	86.7	274	66.2	342	312	91.2	293	85.7
Caerphilly LA	2093	1168	55.8	1028	921	89.6	541	52.6	1014	930	91.7	881	86.9
Monmouthshire LA	1056	324	30.7	519	423	81.5	250	48.2	528	419	79.4	389	73.7
Newport LA	2033	963	47.4	959	788	82.2	378	39.4	955	793	83.0	756	79.2
Torfaen LA	1130	570	50.4	551	486	88.2	303	55.0	548	479	87.4	457	83.4
Health Board Total	7036	3340	47.5	3471	2977	85.8	1746	50.3	3387	2933	86.6	2776	82.0
<u>Betsi Cadwaladr University HB</u>													
Anglesey LA	778	578	74.3	342	295	86.3	247	72.2	344	298	86.6	288	83.7
Conwy LA	1211	707	58.4	596	528	88.6	328	55.0	535	492	92.0	463	86.5
Denbighshire LA	1109	643	58.0	545	461	84.6	340	62.4	533	473	88.7	442	82.9
Flintshire LA	1811	1385	76.5	824	709	86.0	606	73.5	814	738	90.7	661	81.2
Gwynedd LA	1329	1112	83.7	678	620	91.4	586	86.4	634	570	89.9	554	87.4
Wrexham LA	1562	1149	73.6	768	664	86.5	566	73.7	739	670	90.7	620	83.9
Health Board Total	7800	5574	71.5	3753	3277	87.3	2673	71.2	3599	3241	90.1	3028	84.1
<u>Cardiff and Vale University HB</u>													
Cardiff LA	4285	3159	73.7	1988	1719	86.5	1398	70.3	1998	1747	87.4	1638	82.0
Vale of Glamorgan LA	1614	1283	79.5	743	692	93.1	581	78.2	764	687	89.9	664	86.9
Health Board Total	5899	4442	75.3	2731	2411	88.3	1979	72.5	2762	2434	88.1	2302	83.3
<u>Cwm Taf Morgannwg University HB</u>													
Bridgend LA	1749	1260	72.0	795	729	91.7	13	1.6	793	727	91.7	677	85.4
Merthyr Tydfil LA	710	452	63.7	323	290	89.8	14	4.3	355	329	92.7	306	86.2
Rhondda Cynon Taf LA	2848	2025	71.1	1407	1311	93.2	45	3.2	1402	1309	93.4	1234	88.0
Health Board Total	5307	3737	70.4	2525	2330	92.3	72	2.9	2550	2365	92.7	2217	86.9
<u>Hywel Dda University HB</u>													
Carmarthenshire LA	2148	1840	85.7	1011	903	89.3	828	81.9	979	893	91.2	863	88.2
Ceredigion LA	704	589	83.7	301	266	88.4	247	82.1	298	256	85.9	254	85.2
Pembrokeshire LA	1345	714	53.1	614	541	88.1	281	45.8	620	548	88.4	506	81.6
Health Board Total	4197	3143	74.9	1926	1710	88.8	1356	70.4	1897	1697	89.5	1623	85.6
<u>Powys Teaching HB</u>													
Health Board Total	1347	79	5.9	686	590	86.0	44	6.4	677	572	84.5	527	77.8
<u>Swansea Bay University HB</u>													
Neath Port Talbot LA	1632	1474	90.3	802	774	96.5	709	88.4	828	780	94.2	754	91.1
Swansea LA	2701	2443	90.4	1228	1152	93.8	1101	89.7	1185	1085	91.6	1052	88.8
Health Board Total	4333	3917	90.4	2030	1926	94.9	1810	89.2	2013	1865	92.6	1806	89.7
Unknown	70	40	57.1	32	27	84.4	19	59.4	45	39	86.7	38	84.4
Wales Total	35989	24272	67.4	17154	15248	88.9	9699	56.5	16930	15146	89.5	14317	84.6

Table 9. Vaccine uptake in children reaching their 15th birthday between 01/09/2020 and 31/08/2021 and resident on 31/03/2021 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		Teenage 3 in 1								Resident girls		MMR1 (girls)		MMR2 (girls)		HPV 2 doses		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)		
<u>Aneurin Bevan University HB</u>	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)		
Blaenau Gwent LA	776	756 97.4	737 95.0	648 83.5	649 83.6	414	408 98.6	398 96.1	274 66.2	362	348 96.1	339 93.6												
Caerphilly LA	2140	2098 98.0	2037 95.2	1744 81.5	1746 81.6	1028	1017 98.9	987 96.0	541 52.6	1112	1081 97.2	1050 94.4												
Monmouthshire LA	1080	1006 93.1	974 90.2	817 75.6	820 75.9	519	491 94.6	476 91.7	250 48.2	561	515 91.8	498 88.8												
Newport LA	1918	1823 95.0	1739 90.7	1468 76.5	1474 76.9	959	916 95.5	879 91.7	378 39.4	958	907 94.7	860 89.8												
Torfaen LA	1139	1103 96.8	1056 92.7	853 74.9	855 75.1	551	532 96.6	514 93.3	303 55.0	588	571 97.1	542 92.2												
Health Board Total	7053	6786 96.2	6543 92.8	5530 78.4	5544 78.6	3471	3364 96.9	3254 93.7	1746 50.3	3581	3422 95.6	3289 91.8												
<u>Betsi Cadwaladr University HB</u>																								
Anglesey LA	719	687 95.5	666 92.6	552 76.8	543 75.5	342	326 95.3	316 92.4	247 72.2	377	361 95.8	350 92.8												
Conwy LA	1231	1160 94.2	1136 92.3	978 79.4	981 79.7	596	551 92.4	537 90.1	328 55.0	634	608 95.9	598 94.3												
Denbighshire LA	1094	1053 96.3	1017 93.0	805 73.6	812 74.2	545	526 96.5	502 92.1	340 62.4	549	527 96.0	515 93.8												
Flintshire LA	1695	1609 94.9	1549 91.4	1052 62.1	1054 62.2	824	776 94.2	748 90.8	606 73.5	871	833 95.6	801 92.0												
Gwynedd LA	1354	1295 95.6	1258 92.9	1045 77.2	1035 76.4	678	654 96.5	630 92.9	586 86.4	676	641 94.8	628 92.9												
Wrexham LA	1569	1513 96.4	1475 94.0	1083 69.0	1090 69.5	768	746 97.1	731 95.2	566 73.7	801	767 95.8	744 92.9												
Health Board Total	7662	7317 95.5	7101 92.7	5515 72.0	5515 72.0	3753	3579 95.4	3464 92.3	2673 71.2	3908	3737 95.6	3636 93.0												
<u>Cardiff and Vale University HB</u>																								
Cardiff LA	4133	3881 93.9	3652 88.4	3160 76.5	3162 76.5	1988	1866 93.9	1749 88.0	1398 70.3	2145	2015 93.9	1903 88.7												
Vale of Glamorgan LA	1507	1444 95.8	1385 91.9	1269 84.2	1268 84.1	743	714 96.1	688 92.6	581 78.2	764	730 95.5	697 91.2												
Health Board Total	5640	5325 94.4	5037 89.3	4429 78.5	4430 78.5	2731	2580 94.5	2437 89.2	1979 72.5	2909	2745 94.4	2600 89.4												
<u>Cwm Taf Morgannwg University HB</u>																								
Bridgend LA	1637	1557 95.1	1488 90.9	1434 87.6	1435 87.7	795	758 95.3	729 91.7	13 1.6	841	798 94.9	758 90.1												
Merthyr Tydfil LA	702	667 95.0	644 91.7	618 88.0	618 88.0	323	305 94.4	291 90.1	14 4.3	379	362 95.5	353 93.1												
Rhondda Cynon Taf LA	2869	2761 96.2	2669 93.0	2552 89.0	2559 89.2	1407	1360 96.7	1324 94.1	45 3.2	1462	1401 95.8	1345 92.0												
Health Board Total	5208	4985 95.7	4801 92.2	4604 88.4	4612 88.6	2525	2423 96.0	2344 92.8	72 2.9	2682	2561 95.5	2456 91.6												
<u>Hywel Dda University HB</u>																								
Carmarthenshire LA	2118	1981 93.5	1929 91.1	1394 65.8	1398 66.0	1011	955 94.5	928 91.8	828 81.9	1107	1026 92.7	1001 90.4												
Ceredigion LA	608	580 95.4	563 92.6	474 78.0	472 77.6	301	287 95.3	279 92.7	247 82.1	307	293 95.4	284 92.5												
Pembrokeshire LA	1368	1285 93.9	1227 89.7	812 59.4	807 59.0	614	583 95.0	560 91.2	281 45.8	754	702 93.1	667 88.5												
Health Board Total	4094	3846 93.9	3719 90.8	2680 65.5	2677 65.4	1926	1825 94.8	1767 91.7	1356 70.4	2168	2021 93.2	1952 90.0												
<u>Powys Teaching HB</u>																								
Health Board Total	1356	1257 92.7	1197 88.3	1102 81.3	1110 81.9	686	636 92.7	604 88.0	44 6.4	670	621 92.7	593 88.5												
<u>Swansea Bay University HB</u>																								
Neath Port Talbot LA	1622	1567 96.6	1517 93.5	1337 82.4	1343 82.8	802	782 97.5	757 94.4	709 88.4	820	785 95.7	760 92.7												
Swansea LA	2611	2492 95.4	2387 91.4	2023 77.5	2037 78.0	1228	1168 95.1	1125 91.6	1101 89.7	1383	1324 95.7	1262 91.3												
Health Board Total	4233	4059 95.9	3904 92.2	3360 79.4	3380 79.8	2030	1950 96.1	1882 92.7	1810 89.2	2203	2109 95.7	2022 91.8												
Unknown	78	74 94.9	72 92.3	60 76.9	59 75.6	32	31 96.9	31 96.9	19 59.4	46	43 93.5	41 89.1												
Wales Total	35324	33649 95.3	32374 91.6	27280 77.2	27327 77.4	17154	16388 95.5	15783 92.0	9699 56.5	18167	17259 95.0	16589 91.3												

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

Table 10. Vaccine uptake in children reaching their 16th birthday between 01/09/2020 and 31/08/2021 and resident on 31/03/2021 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		Teenage 3 in 1						Resident girls	MMR1		MMR2		HPV 2 doses		Resident boys	MMR1		MMR2		
										(girls)	(girls)	(girls)	(girls)	(girls)	(girls)		(boys)	(boys)	(boys)	(boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
<u>Aneurin Bevan University HB</u>																					
Blaenau Gwent LA	689	669	97.1	653	94.8	606	88.0	605	87.8	342	332	97.1	324	94.7	293	85.7	347	337	97.1	329	94.8
Caerphilly LA	2076	2023	97.4	1971	94.9	1801	86.8	1806	87.0	1014	993	97.9	970	95.7	881	86.9	1062	1030	97.0	1001	94.3
Monmouthshire LA	1102	1035	93.9	1006	91.3	878	79.7	883	80.1	528	496	93.9	482	91.3	389	73.7	574	539	93.9	524	91.3
Newport LA	1914	1823	95.2	1753	91.6	1577	82.4	1585	82.8	955	910	95.3	880	92.1	756	79.2	956	911	95.3	873	91.3
Torfaen LA	1122	1092	97.3	1066	95.0	983	87.6	969	86.4	548	532	97.1	524	95.6	457	83.4	574	560	97.6	542	94.4
Health Board Total	6903	6642	96.2	6449	93.4	5845	84.7	5848	84.7	3387	3263	96.3	3180	93.9	2776	82.0	3513	3377	96.1	3269	93.1
<u>Betsi Cadwaladr University HB</u>																					
Anglesey LA	711	668	94.0	648	91.1	600	84.4	594	83.5	344	325	94.5	315	91.6	288	83.7	367	343	93.5	333	90.7
Conwy LA	1172	1111	94.8	1079	92.1	1039	88.7	1047	89.3	535	510	95.3	497	92.9	463	86.5	637	601	94.3	582	91.4
Denbighshire LA	1109	1037	93.5	999	90.1	913	82.3	923	83.2	533	500	93.8	482	90.4	442	82.9	576	537	93.2	517	89.8
Flintshire LA	1649	1563	94.8	1513	91.8	1374	83.3	1376	83.4	814	774	95.1	750	92.1	661	81.2	835	789	94.5	763	91.4
Gwynedd LA	1260	1220	96.8	1189	94.4	1108	87.9	1107	87.9	634	620	97.8	601	94.8	554	87.4	626	600	95.8	588	93.9
Wrexham LA	1504	1456	96.8	1413	93.9	1251	83.2	1257	83.6	739	715	96.8	688	93.1	620	83.9	765	741	96.9	725	94.8
Health Board Total	7405	7055	95.3	6841	92.4	6285	84.9	6304	85.1	3599	3444	95.7	3333	92.6	3028	84.1	3806	3611	94.9	3508	92.2
<u>Cardiff and Vale University HB</u>																					
Cardiff LA	4031	3763	93.4	3557	88.2	3105	77.0	3099	76.9	1998	1877	93.9	1784	89.3	1638	82.0	2032	1886	92.8	1773	87.3
Vale of Glamorgan LA	1518	1449	95.5	1383	91.1	1251	82.4	1251	82.4	764	724	94.8	690	90.3	664	86.9	753	725	96.3	693	92.0
Health Board Total	5549	5212	93.9	4940	89.0	4356	78.5	4350	78.4	2762	2601	94.2	2474	89.6	2302	83.3	2785	2611	93.8	2466	88.5
<u>Cwm Taf Morgannwg University HB</u>																					
Bridgend LA	1693	1621	95.7	1552	91.7	1543	91.1	1549	91.5	793	763	96.2	737	92.9	677	85.4	900	858	95.3	815	90.6
Merthyr Tydfil LA	711	681	95.8	651	91.6	637	89.6	640	90.0	355	339	95.5	324	91.3	306	86.2	356	342	96.1	327	91.9
Rhondda Cynon Taf LA	2879	2763	96.0	2652	92.1	2649	92.0	2642	91.8	1402	1350	96.3	1302	92.9	1234	88.0	1476	1413	95.7	1350	91.5
Health Board Total	5283	5065	95.9	4855	91.9	4829	91.4	4831	91.4	2550	2452	96.2	2363	92.7	2217	86.9	2732	2613	95.6	2492	91.2
<u>Hywel Dda University HB</u>																					
Carmarthenshire LA	2018	1920	95.1	1873	92.8	1789	88.7	1786	88.5	979	939	95.9	912	93.2	863	88.2	1039	981	94.4	961	92.5
Ceredigion LA	660	627	95.0	603	91.4	582	88.2	580	87.9	298	280	94.0	268	89.9	254	85.2	362	347	95.9	335	92.5
Pembrokeshire LA	1261	1208	95.8	1146	90.9	1067	84.6	1058	83.9	620	596	96.1	561	90.5	506	81.6	641	612	95.5	585	91.3
Health Board Total	3939	3755	95.3	3622	92.0	3438	87.3	3424	86.9	1897	1815	95.7	1741	91.8	1623	85.6	2042	1940	95.0	1881	92.1
<u>Powys Teaching HB</u>																					
Health Board Total	1406	1310	93.2	1249	88.8	1230	87.5	1238	88.1	677	638	94.2	615	90.8	527	77.8	729	672	92.2	634	87.0
<u>Swansea Bay University HB</u>																					
Neath Port Talbot LA	1661	1584	95.4	1502	90.4	1529	92.1	1536	92.5	828	787	95.0	754	91.1	754	91.1	833	797	95.7	748	89.8
Swansea LA	2552	2393	93.8	2291	89.8	2329	91.3	2344	91.8	1185	1112	93.8	1061	89.5	1052	88.8	1367	1281	93.7	1230	90.0
Health Board Total	4213	3977	94.4	3793	90.0	3858	91.6	3880	92.1	2013	1899	94.3	1815	90.2	1806	89.7	2200	2078	94.5	1978	89.9
Unknown	93	86	92.5	84	90.3	78	83.9	76	81.7	45	41	91.1	40	88.9	38	84.4	48	45	93.8	44	91.7
Wales Total	34791	33102	95.1	31833	91.5	29919	86.0	29951	86.1	16930	16153	95.4	15561	91.9	14317	84.6	17855	16947	94.9	16272	91.1

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 01/04/2020 and 31/03/2021 and resident on 31/03/2021.¹

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)	(%)	(%)	(%)	(%)
Aneurin Bevan	6106	13	100.0	100.0	100.0	6263	11	100.0	100.0	100.0	36.4	7023	7	100.0	100.0	85.7	28.6
Betsi Cadwalladr University	6331	5	100.0	100.0	100.0	6506	6	100.0	100.0	100.0	100.0	7249	6	100.0	100.0	100.0	100.0
Cardiff and Vale University	4963	17	100.0	100.0	94.1	5220	20	100.0	100.0	100.0	55.0	5918	25	100.0	100.0	100.0	84.0
Cwm Taf Morgannwg	4363	1	100.0	100.0	100.0	4764	2	100.0	100.0	100.0	100.0	5144	6	100.0	100.0	100.0	66.7
Hywel Dda	3246	0	0.0	0.0	0.0	3429	1	100.0	100.0	100.0	0.0	3908	1	100.0	100.0	100.0	100.0
Powys Teaching	1030	0	0.0	0.0	0.0	1130	1	100.0	100.0	100.0	100.0	1245	1	100.0	100.0	100.0	100.0
Swansea Bay University	3491	5	100.0	100.0	100.0	3727	6	100.0	100.0	100.0	100.0	4147	6	100.0	100.0	100.0	83.3
Unknown	44	0	0.0	0.0	0.0	63	0	0.0	0.0	0.0	0.0	35	0	0.0	0.0	0.0	0.0
Wales	29574	42	100.0	97.6	95.2	31102	48	100.0	100.0	100.0	64.6	34669	53	100.0	100.0	98.1	77.4

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:
<https://phw.nhs.wales/services-and-teams/health-protection/>

Report Team

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