# Vaccine Uptake in Children in Wales COVER Annual Report 2020



Data for the year ending 31st March 2020

# **Key points**

- In 2019/20 uptake of the '6 in 1' and pneumococcal conjugate vaccinations in one year old children in Wales was 95.8% and 95.9% respectively.
- MenB vaccine uptake was 95.5% for two doses, uptake of two doses of rotavirus vaccine was 93.8%.
- 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 second full cohort of eligible children reported on at two years old.
- By their fourth birthday, 88.0% of children were up to date with recommended immunisations.
- MMR dose two uptake in children at five years of age was 92.1%. Uptake of the preschool '4 in 1' booster in this age-group was 92.6%.
- Human Papillomavirus (HPV) vaccine uptake in girls turning 14 years of age during the 2019/20 school year (School Year 9) was 87.3% for the first dose. Uptake of the complete two-dose course in girls turning 15 years of age (School Year 10) was 83.5%.
- MMR uptake, for a full two-dose course, was 91.7% and 91.5% for teenagers turning 15 and 16 years of age respectively during the 2019/20 school year.
- MenACWY vaccine uptake in teenagers turning 15 and 16 years of age during the 2019/20 school year was 85.5% and 85.7%.

# **Background**

These annual results for 2019/20 are for one year cohorts of children living in Wales as at 31<sup>st</sup> March 2020 and reaching their first, second, fourth and fifth birthdays between 01/04/2019 and 31/03/2020. 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 increased to 95.8%, from 95.4% in the previous year. Uptake ranged by health board (HB) from 94.2% (Cardiff and Vale) to 97.2% (Cwm Taf Morgannwg) and by local authority (LA) from 93.9% (Cardiff) to 98.3% (Anglesey). Seventeen of the 22 LAs achieved the 95% target (Figures 1, 2, 4, 6 and Tables 2, 3).
- 2. Pneumococcal conjugate vaccination (PCV2²) uptake of a complete two-dose primary course in children at one year of age was 95.9%, ranging by HB from 94.3% (Cardiff and Vale) to 97.3% (Cwm Taf Morgannwg) and by LA from 94.1% (Cardiff) to 98.3% (Anglesey) (Figures 1, 2 and Tables 2, 3).
- 3. Rotavirus vaccine uptake of two doses in children reaching their first birthday was 93.8% compared to 93.6% in the previous year. Uptake ranged by HB from 92.2% (Cardiff & Vale) to 95.9% (Cwm Taf Morgannwg) and by LA from 91.5% (Cardiff) 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 95.5%, ranging by HB from 93.3% (Cardiff and Vale) to 97.1% (Cwm Taf Morgannwg) and by LA from 92.8% (Cardiff and Ceredigion) to 98.1% (Anglesey) (Table 3). This is the third annual report to report on a full cohort of children reaching their 1<sup>st</sup> birthday who would have been eligible for MenB vaccine, which was introduced in September 2015 for those born 1<sup>st</sup> May 2015 onwards [2].
- 5. MMR<sup>3</sup> uptake of one dose by two years of age remained stable at 94.5%, compared to the previous year. Uptake ranged by HB from 92.8% (Cardiff and Vale) to 96.0% (Cwm Taf Morgannwg) and by LA from 92.1% (Cardiff) to 97.0% (Caerphilly). Three HBs achieved the target uptake of 95%, and 9 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 94.6%. Uptake by HB ranged from 92.6% (Cardiff and Vale) to 96.3% (Cwm Taf Morgannwg) and by LA from 91.9% (Cardiff) to 97.0% (Caerphilly) (Figure 2 and Tables 2, 4).
- 7. Hib/MenC<sup>4</sup> booster uptake by two years of age was 94.1%, ranging by HB from 91.8% (Cardiff and Vale) to 95.8% (Cwm Taf Morgannwg) and by LA from 91.0% (Cardiff) to 96.6% (Caerphilly) (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 90.4% (Cardiff and Vale) to 96.0% (Cwm Taf Morgannwg), and by LA from 89.3% (Cardiff) to 96.7 (Caerphilly). This is the second annual report to report on a full cohort of children reaching their 2<sup>nd</sup> 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 95.2% and ranged by HB from 94.0% (Hywel Dda) to 96.2% (Cwm Taf Morgannwg) (Table 5).
- **10.** '4 in 1' DTaP/IPV<sup>5</sup> 'pre-school booster' uptake in children by four years of age was 89.7%, this ranged by HB from 88.4% (Hywel Dda) to 92.1% (Powys) (Table 5).
- **11.** MMR vaccine uptake of a complete two dose course in children by four years of age was 89.0%, this ranged by HB from 87.9% (Hywel Dda) to 91.0% (Betsi Cadwaladr) (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 88.0%. This

<sup>&</sup>lt;sup>1</sup> 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.

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

<sup>&</sup>lt;sup>3</sup> MMR protects against measles, mumps and rubella

<sup>&</sup>lt;sup>4</sup> Hib/MenC vaccine protects against Hib and MenC infections and a routine dose should be offered at 12-13 months of age.

- ranged by HB from 86.6% (Aneurin Bevan) to 90.3% (Betsi Cadwaladr) and by LA from 81.8% (Newport) to 93.7% (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 84.0% in the most deprived quintile of LSOAs to 91.7% in the least deprived quintile of LSOAs. The difference in uptake between the least deprived quintile and the most deprived quintile was 7.7% (Figures 10, 11 and Table 6).
- **14.** MMR uptake of two doses in children at five years of age was 92.1%, ranging by HB from 91.1% (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 95.7% (Hywel Dda & Powys) to 97.5% (Cwm Taf) (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 92.6% (Figures 2, 5, 9 and Tables 2, 7).
- **16.** HPV vaccine uptake of one dose in girls in the 2019/20 School Year 9 (reaching their 14<sup>th</sup> birthday between 01/09/19 and 31/08/20) was 87.3%. Uptake ranged by HB from 81.4% (Aneurin Bevan) to 94.7% (Swansea Bay) and by LA from 78.0% (Caerphilly) to 96.1% (Neath Port Talbot). Coverage of two doses of HPV vaccine in girls in the 2018/19 School Year 10 is currently 83.5%. (Figure 12 and Table 8).
- 17. MMR coverage of two doses in teenagers turning 15 years of age between 01/09/19 and 31/08/20 was 91.7%, ranging by HB from 89.6% (Powys) to 93.8% (Aneurin Bevan) and by LA from 88.9% (Cardiff) to 95.2% (Blaenau Gwent). Coverage of one dose of MMR in 15 year olds was 95.3%, ranging by LA from 93.3% (Denbighshire) to 97.5% (Caerphilly). A breakdown by sex indicates that 92.1% of girls had received a full (two MMR doses) course of immunisation against rubella and coverage of one dose was 95.6% (Figure 12 and Table 9).
- **18.** Td/IPV<sup>6</sup> 'teenage booster' uptake in teenagers reaching 15 years of age between 01/09/19 and 31/08/20 was 85.4%. Uptake ranged by HB from 77.3% (Cardiff and Vale) to 91.9% (Swansea Bay) and by LA from 75.6% (Cardiff) to 92.3% (Neath Port Talbot) (Figure 12 and Table 9).
- **19.** Coverage of MenACWY vaccine in the in the 2018/19 School Year 10 group, the third Year 9 routine cohort to be offered the new vaccine is currently 85.7%. Coverage in the 2019/20 School Year 10 group, is currently 85.5% (Figure 12, Table 9 and 10).
- 20. MMR coverage of two doses in teenagers turning 16 years of age during the 2019/20 school year was 91.5%, ranging by HB from 88.3% (Cardiff & Vale) to 93.4% (Aneurin Bevan) and by LA from 87.8% (Cardiff) to 95.9% (Blaenau Gwent). Coverage of one dose of MMR in 16 year olds was 95.1%, ranging by LA from 93.0% (Cardiff) to 98.1% (Blaenau Gwent). 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 95.5% (Table 10).
- **21.** Td/IPV 'teenage booster' uptake in teenagers reaching 16 years during the 2019/20 school year was 85.5%. Uptake ranged by HB from 78.3% (Cardiff and Vale) to 90.5% (Swansea Bay) and by LA from 76.4% (Cardiff) to 92.3% (Rhondda Cynon Taf) (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 2020 was 95.8%. Uptake of four doses in children who were at risk of perinatal infection and reached their second birthday in the year ending 31st March 2020 was 74.1%. Uptake of four doses in children who were at risk of perinatal infection and reached their fifth birthday in the year ending 31st March 2020 was 89.5%.

#### Comment

Vaccination uptake in Wales remains at high levels. Uptake of routine vaccinations reported on at one and four years of age have increased compared to 2018/19, whilst uptake of routine vaccinations reported on at two and five years has remained stable.

This is the second annual 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 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 twelfth 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 (93.8%). Uptake of MMR1 at two years of age remains below 95% for the full year cohort, however the latest quarterly COVER report shows uptake of over 95% for the first quarter in the last three years [1].

The proportion of children who were up to date with their routine immunisations by four years of age was 88.0% this year, the highest since this measure was first reported on. Of all the immunisations that are included in this composite measure, uptake of the second dose of MMR remains the lowest (89%), followed by the '4 in 1' preschool booster (90%) and Hib/MenC booster (95%).

The reported inequality gap in immunisation coverage between four year olds residing in the most and least deprived areas decreased compared to 2018/19, from 9.2 to 7.7 percentage points. However, further work is needed to identify the root cause of these inequalities and identify interventions to reduce this gap in addition to exiting enhanced primary care nursing services including Flying Start.

During 2019 and early 2020 there was an increase in notifications of mumps to Public Health Wales Health Protection Teams, with the highest number of cases in 16 to 30 year olds. Week 48 of 2019 (week commencing 25<sup>th</sup> November) saw 251 mumps notifications, the highest number of weekly notifications in over 10 years [2]. During 2019 there were 13 confirmed cases of measles in Wales (provisional data); three small clusters plus sporadic cases. 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. Between March 2019 and February 2020 there were 11,576 cases of measles reported across EU countries, with the highest numbers from France (2,466), Romania (1,542), Italy ((1,353), Bulgaria (1,347) and Poland (1,032) [3]. Rates of measles globally is expected to rise due to disruption to vaccine programme delivery caused by the COVID-19 response.

It is too early to fully assess the impact of the COVID-19 pandemic on the uptake of childhood immunisation using routine COVER reports. However, the Vaccine Preventable Disease Programme are producing a monthly enhanced immunisation report to monitor the early impact on uptake of routine childhood immunisations across Wales. Early indications suggest uptake rates have remained high. MMR vaccination remains the best protection against both measles and mumps infection. Parents should be reminded that routine immunisation appointments are important medical reasons to leave the home.

[1] Public Health Wales Health Protection Division. Vaccine uptake in Children in Wales, January to March 2020: COVER report 134, May 2020. Cardiff, Public Health Wales.

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

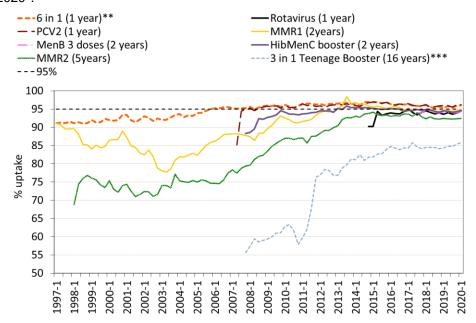
[2] Public Health Wales Weekly Notification of Mumps Dashboard. June 2020:

http://www.wales.nhs.uk/sitesplus/888/page/60048

[3] European Centre for Disease Prevention and Control. Monthly measles and rubella monitoring report, April 2020. Sweden, ECDC. <a href="https://www.ecdc.europa.eu/sites/default/files/documents/measles-rubella-monthly-report-april-2020.pdf">https://www.ecdc.europa.eu/sites/default/files/documents/measles-rubella-monthly-report-april-2020.pdf</a>

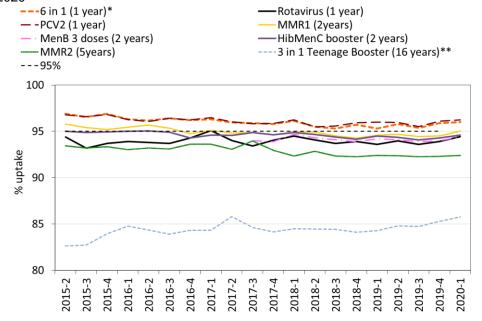
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre. Data for this report was provided by NHS Wales Informatics Service from the National Community Child Health Database (NCCHD). The data was sourced from Community Child Health databases 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 2020\*.



<sup>\*</sup>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.

**Figure 1b.** Percentage uptake of childhood immunisations in Wales, quarter 1 2015 to quarter 1 2020\*\*\*



<sup>\*</sup> Uptake of pertussis used as proxy.

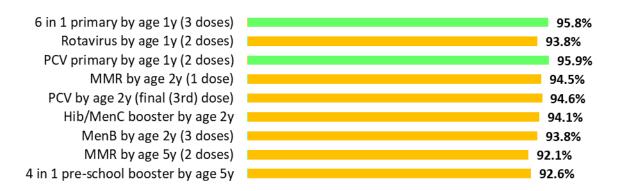
<sup>\*\*</sup>Uptake of pertussis used as a proxy.

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

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

<sup>\*\*\*</sup>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, 2<sup>nd</sup> and 5th birthday between 01/04/19 and 31/03/20 and resident on 31/03/20.



**Figure 3.** Percentage of resident children reaching their 4<sup>th</sup> birthday between 01/04/19 and 31/03/20 and are up to date with all scheduled vaccines<sup>3</sup> by Health Board.



**Table 1.** Percentage of resident children reaching their 4<sup>th</sup> birthday and are up to date with all scheduled vaccines by Health Board, annually 2015/16 to 2019/20.

Area	Ul	o to date ir	n schedule		
Alea	2015/16	2016/17	2017/18	2018/19	2019/20
Aneurin Bevan UHB	80.0	80.7	81.0	84.1	86.6
Betsi Cadwaladr UHB	89.2	88.3	87.9	89.7	90.3
Cardiff and Vale UHB	82.7	81.7	82.6	86.8	86.7
Cwm Taf UHB	89.5	87.3	88.2	87.9	88.6
Hywel Dda UHB	85.3	83.0	84.0	86.3	86.7
Powys Teaching HB	84.9	86.2	86.2	88.9	90.2
Swansea Bay UHB	86.5	86.3	86.2	88.0	87.6
Wales	85.3	84.6	84.9	87.2	88.0

 $<sup>^{3}</sup>$  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 01/04/2019 and 31/03/2020 and resident on 31/03/2020.

				Ac	je 1 year							Age	2 years					Age	4 years			Age	5 year	s		
Area	Resident			T	, ,					Resident				,			Hib/N	lonC	Resident	Up to c	late in	Resident		,		
1332	children	6 in	<b>1</b> <sup>1</sup>	Ma	nB²	PC	·V2	Rota	virue	children	MN	ID1	PC\	/f <sup>3</sup>	Mer	·R	boos		children	sched		children	мм	R2	4 ir	0.1 <sup>1</sup>
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
Blaenau Gwent LA	701	681	97.1	682	97.3	684	97.6	668	95.3	759	735	96.8	732	964	731	96.3	728	95.9	711	617	86.8	748	687	91.8	687	91.8
Caerphilly LA	1857	1793	96.6	1801	97.0	1802	97.0	1744	93.9	2009	1948	97.0	1948	97.0	1943	96.7	1941	96.6	2106	1863	88.5	2105	1961	93.2	1969	93.5
Monmouthshire LA	726	704	97.0	701	96.6	707	97.4	689	94.9	824	786	95.4	788	95.6	783	95.0	785	95.3	878	804	91.6	898	829	92.3	833	92.8
Newport LA	1934	1832	94.7	1835	94.9	1844	95.3	1775	91.8	1994	1875	94.0	1877	94.1	1862	93.4	1865	93.5	2151	1759	81.8	2149	1900	88.4	1917	89.2
Torfaen LA	998	950	95.2	952	95.4	954	95.6	916	91.8	1036	979	94.5	985	95.1	982	94.8	980	94.6	1111	984	88.6	1006	917	91.2	926	92.0
Health Board Total	6216	5960	95.9	5971	96.1	5991	96.4	5792	93.2	6622	6323	95.5	6330	95.6	6301	95.2	6299	95.1	6957	6027	86.6	6906	6294	91.1	6332	91.7
Betsi Cadwaladr University HB																										
Anglesey LA	631	620	98.3	619	98.1	620	98.3	601	95.2	684	658	96.2	660	96.5	659	96.3	660	96.5	709	664	93.7	750	715	95.3	717	95.6
Conwy LA	1002	957	95.5	952	95.0	959	95.7	940	93.8	1032	968	93.8	968	93.8	958	92.8	958	92.8	1146	1009	88.0	1153	1082	93.8	1088	94.4
Denbighshire LA	921	875	95.0	876	95.1	877	95.2	856	92.9	985	929	94.3	932	94.6	928	94.2	929	94.3	1045	934	89.4	1087	1010	92.9	1018	93.7
Flintshire LA	1469	1403	95.5	1398	95.2	1407	95.8	1382	94.1	1597	1516	94.9	1519	95.1	1513	94.7	1519	95.1	1618	1455	89.9	1658	1564	94.3	1566	94.5
Gwynedd LA	1068	1033	96.7	1033	96.7	1028	96.3	998	93.4	1133	1074	94.8	1081	95.4	1074	94.8	1073	94.7	1185	1076	90.8	1171	1094	93.4	1097	93.7
Wrexham LA	1381	1330	96.3	1328	96.2	1334	96.6	1303	94.4	1514	1448	95.6	1450	95.8	1438	95.0	1443	95.3	1512	1379	91.2	1564	1465	93.7	1475	94.3
Health Board Total	6472	6218	96.1	6206	95.9	6225	96.2	6080	93.9	6945	6593	94.9	6610	95.2	6570	94.6	6582	94.8	7215	6517	90.3	7383	6930	93.9	6961	94.3
Cardiff and Vale University HB																										
Cardiff LA	3928	3688	93.9	3644	92.8	3695	94.1	3595	91.5	4046	3727	92.1	3720	91.9	3612	89.3	3682	91.0	4402	3769	85.6	4396	4033	91.7	4049	92.1
Vale of Glamorgan LA	1319	1257	95.3	1251	94.8	1251	94.8	1241	94.1	1426	1352	94.8	1348	94.5	1335	93.6	1342	94.1	1500	1347	89.8	1494	1394	93.3	1401	93.8
Health Board Total	5247	4945	94.2	4895	93.3	4946	94.3	4836	92.2	5472	5079	92.8	5068	92.6	4947	90.4	5024	91.8	5902	5116	86.7	5890	5427	92.1	5450	92.5
Cwm Taf Morgannwg University HB																										
Bridgend LA	1491	1439	96.5	1436	96.3	1438	96.4	1417	95.0	1528	1462	95.7	1463	95.7	1460	95.5	1450	94.9	1589	1373	86.4	1599	1467	91.7	1473	92.1
Merthyr Tydfil LA	667	641	96.1	643	96.4	645	96.7	638	95.7	712	686	96.3	689	96.8	684	96.1	684	96.1	762	677	88.8	792	722	91.2	726	91.7
Rhondda Cynon Taf LA	2585	2530	97.9	2527	97.8	2534	98.0	2494	96.5	2556	2457	96.1	2468	96.6	2459	96.2	2459	96.2	2800	2515	89.8	2751	2548	92.6	2562	93.1
Health Board Total	4743	4610	97.2	4606	97.1	4617	97.3	4549	95.9	4796	4605	96.0	4620	96.3	4603	96.0	4593	95.8	5151	4565	88.6	5142	4737	92.1	4761	92.6
Hywel Dda University HB																										
Carmarthenshire LA	1760	1679	95.4	1671	94.9	1683	95.6	1651	93.8	1883	1761	93.5	1768	93.9	1750	92.9	1757	93.3	2001	1730	86.5	1934	1780	92.0	1788	92.5
Ceredigion LA	552	535	96.9	533	96.6	534	96.7	514	93.1	575	537	93.4	541	94.1	535	93.0	537	93.4	663	603	91.0	659	617	93.6	618	93.8
Pembrokeshire LA	1069	1007	94.2	1008	94.3	1010	94.5	994	93.0	1156	1068	92.4	1068	92.4	1056	91.3	1058	91.5	1246	1056	84.8	1321	1170	88.6	1171	88.6
Health Board Total	3381	3221	95.3	3212	95.0	3227	95.4	3159	93.4	3614	3366	93.1	3377	93.4	3341	92.4	3352	92.8	3910	3389	86.7	3914	3567	91.1	3577	91.4
Powys Teaching HB																										
Health Board Total	1118	1080	96.6	1075	96.2	1080	96.6	1057	94.5	1166	1113	95.5	1113	95.5	1102	94.5	1109	95.1	1213	1094	90.2	1176	1085	92.3	1099	93.5
Swansea Bay University HB	1071	4007	0.00	4005	0.4.4	4005	0.0	4040	0	4500	4.405				4.440		4.40.4	0.15	4500	1005	00.5	4500	4.446	00.5	4.450	00.5
Neath Port Talbot LA	1374	1321	96.1	1325	96.4	1323	96.3	1310	95.3	1523	1433	94.1	1447	95.0	1440	94.6	1434	94.2	1532	1363	89.0	1562	1442	92.3	1453	93.0
Swansea LA	2326	2216	95.3	2200	94.6	2212	95.1	2177	93.6	2418	2260	93.5	2251	93.1	2235	92.4	2240	92.6	2598	2253	86.7	2543	2317	91.1	2317	91.1
Health Board Total	3700	3537	95.6	3525	95.3	3535	95.5	3487	94.2	3941	3693	93.7	3698	93.8	3675	93.3	3674	93.2	4130	3616	87.6	4105	3759	91.6	3770	91.8
Unknown	12	10	83.3	10	83.3	10	83.3	10	83.3	18	17	94.4	15	83.3	3675	93.3	16	88.9	18	16	88.9	22	16	72.7	16	72.7
Wales Total	30889	29581	95.8	29500	95.5	29631	95.9	28970	93.8	32574	30789	94.5	30831	94.6	30555	93.8	30649	94.1	34496	30340	88.0	34538	31815	92.1	31966	92.6

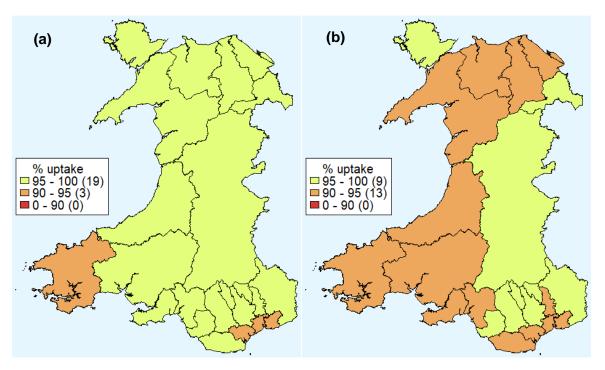
<sup>&</sup>lt;sup>1</sup> Uptake of pertussis used as proxy.

<sup>&</sup>lt;sup>2</sup> Uptake of two doses of meningococcal serogroup B (MenB) vaccine, scheduled at two and four months of age.

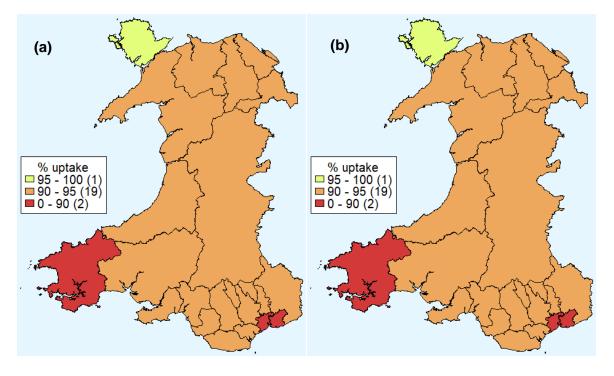
<sup>&</sup>lt;sup>3</sup> Children receiving the final dose of PCV.

<sup>&</sup>lt;sup>4</sup> 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 01/04/19 and 31/03/20. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/04/19 and 31/03/20.

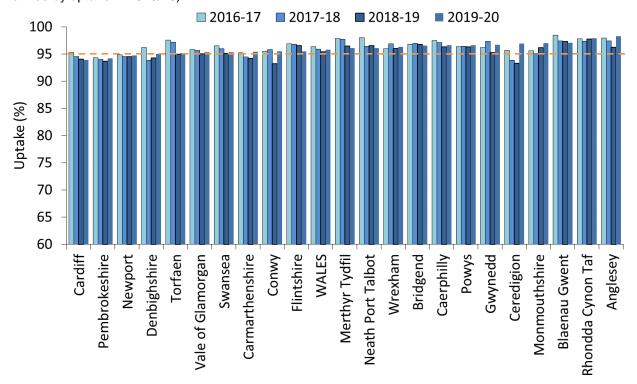


**Figure 5. (a)** Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5<sup>th</sup> birthday between 01/04/19 and 31/03/20. **(b)** Uptake of '4 in 1' vaccine in Welsh Local Authority areas in children reaching their 5<sup>th</sup> birthday between 01/04/19 and 31/03/20.



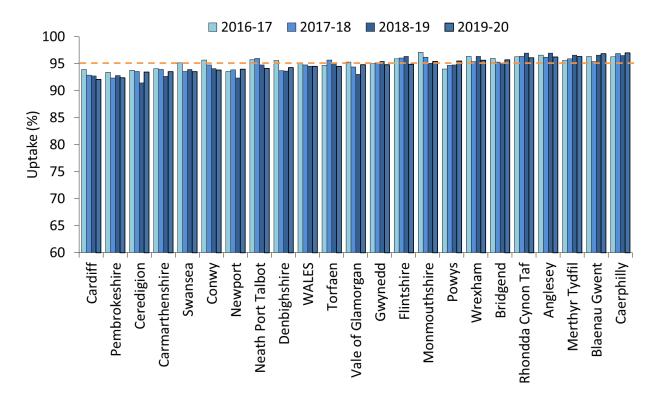
<sup>&</sup>lt;sup>1</sup>Although the majority of one year olds referred to in this report would have been eligible for the '6 in 1' vaccine, a proportion of infants would have received the '5 in 1'.

**Figure 6.** Annual uptake of '5 in 1' or '6 in 1' vaccine by 1 year of age (2016 – 2020 financial years, ranked by uptake in 2019/20).<sup>1</sup>

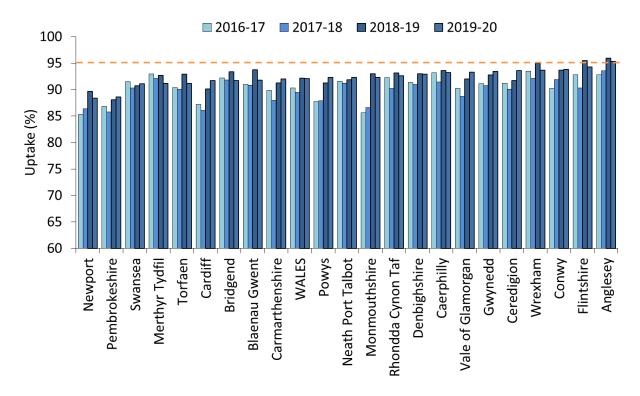


<sup>&</sup>lt;sup>1</sup> During 2018-19 the majority of one year olds would have been eligible for the '6 in 1' vaccine, a proportion of infants would have received the '5 in 1'.

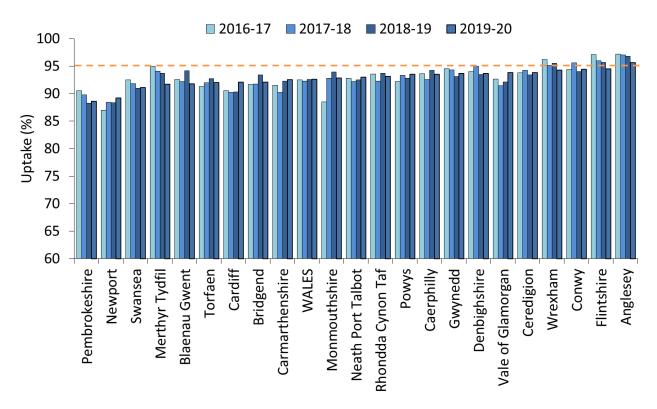
**Figure 7.** Annual uptake of 1 dose of MMR by 2 years of age (2016 – 2020 financial years, ranked by uptake in 2019/20).



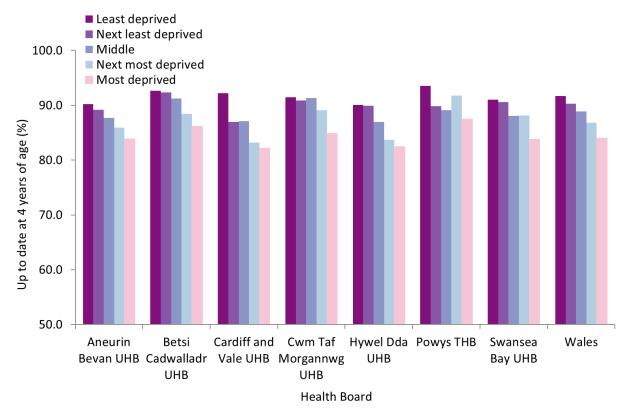
**Figure 8.** Annual uptake of 2 doses of MMR by 5 years of age (2016 – 2020 financial years, ranked by uptake in 2019/20).



**Figure 9.** Annual uptake of the '4 in 1' pre-school booster by 5 years of age (2016 – 2020 financial years, ranked by uptake in 2019/20).

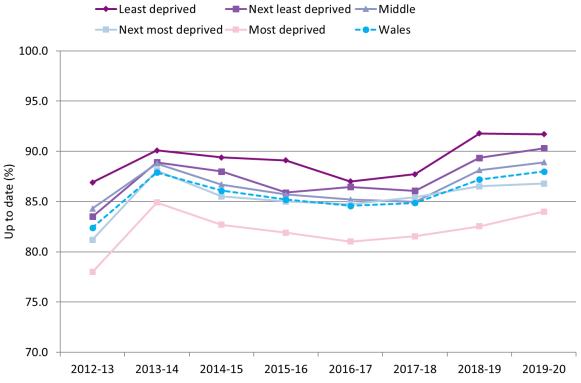


**Figure 10.** Percentage of children who are up to date with routine immunisations<sup>1</sup> by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2019 and 31/03/2020 and resident on 31/03/2020.



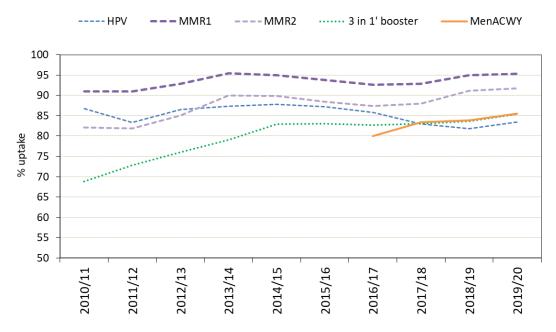
<sup>&</sup>lt;sup>1</sup> Completed '4 in 1' pre-school booster, the Hib/MenC booster and second MMR dose by four years of age.

**Figure 11.** Percentage of children who are up to date with routine immunisations<sup>1</sup> by four years of age during 2012-2020 financial years, by quintile of deprivation of the Lower Super Output Area in which they reside.



<sup>&</sup>lt;sup>1</sup> 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 2019/20.3



<sup>&</sup>lt;sup>1</sup>A 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 2019/20 school year 10 girls.

<sup>&</sup>lt;sup>2</sup>Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy)
<sup>3</sup>Data in resident children as at 31<sup>st</sup> March of the academic year reported on.

Table 3. Vaccine uptake in children reaching their 1st birthday between 01/04/2019 and 31/03/2020 and resident on 31/03/2020.

Area	Resident children	D	3	T	3	P	3	Po	3	Hil	03	Hep	B <sup>1</sup>	ММ	IR1	Rota	/irus	PC	<b>V2</b> <sup>2</sup>	HibN	lenCb	Mer	nB³
Aneurin Bevan University HB		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Blaenau Gwent LA	<b>(n)</b> 701	<b>(n)</b> 681	97.1	681	97.1	<b>(n)</b> 681	97.1	680	97.0	681	97.1	680	97.0	(11)	0.1	668	95.3	684	97.6	(11)	0.1	682	97.3
Caerphilly LA	1857	1793	96.6	1793	96.6	1793	96.6	1793	96.6	1793	96.6	1787	96.2	3	0.1	1744	93.9	1802	97.0	-	0.1	1801	97.0
Monmouthshire LA	726	704	97.0	704	97	704	97.0	704	97.0	704	97.0	701	96.6	5	0.7	689	94.9	707	97.4	_	0.3	701	96.6
Newport LA	1934	1832	94.7	1832	94.7	1832	94.7	1832	94.7	1832	94.7	1830	94.6	8	0.4	1775	91.8	1844	95.3	1	0.1	1835	94.9
Torfaen LA	998	950	95.2	950	95.2	950	95.2	950	95.2	950	95.2	949	95.1	2	0.2	916	91.8	954	95.6	1	0.1	952	95.4
Health Board Total	6216	5960	95.9	5960	95.9	5960	95.9	5959	95.9	5960	95.9		95.7	19	0.2	5792	93.2	5991	96.4	7	0.1	5971	96.
Betsi Cadwaladr University HB	02.0		00.0				00.0		00.0		00.0	•••			0.0	0.02	<b></b>			•	<b></b>		
Anglesey LA	631	620	98.3	620	98.3	620	98.3	620	98.3	620	98.3	620	98.3	1	0.2	601	95.2	620	98.3	1	0.2	619	98.1
Conwy LA	1002	957	95.5	957	95.5	957	95.5	957	95.5	956	95.4	956	95.4	3	0.3	940	93.8	959	95.7	4	0.4	952	95.0
Denbighshire LA	921	875	95.0	875	95	875	95.0	875	95.0	875	95.0	874	94.9	0	0.0	856	92.9	877	95.2		0.1	876	95.
Flintshire LA	1469	1403	95.5	1403	95.5	1403	95.5	1402	95.4	1402	95.4	1404	95.6	5	0.3	1382	94.1	1407	95.8		0.3	1398	95.2
Gwynedd LA	1068	1033	96.7	1033	96.7	1033	96.7	1033	96.7	1033	96.7	1032	96.6	3	0.3	998	93.4	1028	96.3	-	0.3	1033	96.7
Wrexham LA	1381	1330	96.3	1330	96.3	1330	96.3	1330	96.3	1330	96.3	1329	96.2	6	0.4	1303	94.4	1334	96.6	-	0.3	1328	96.2
Health Board Total	6472	6218	96.1	6218	96.1	6218	96.1	6217	96.1	6216	96.0		96.0	18	0.3	6080	93.9	6225	96.2		0.3	6206	95.9
Cardiff and Vale University HB																							
Cardiff LA	3928	3688	93.9	3688	93.9	3688	93.9	3687	93.9	3683	93.8	3688	93.9	30	0.8	3595	91.5	3695	94.1	8	0.2	3644	92.8
Vale of Glamorgan LA	1319	1257	95.3	1257	95.3	1257	95.3	1257	95.3	1257	95.3		95.3	13	1.0	1241	94.1	1251	94.8	-	0.8	1251	94.8
Health Board Total	5247	4945	94.2	4945	94.2	4945	94.2	4944	94.2	4940	94.1		94.2	43	0.8	4836	92.2	4946	94.3		0.3	4895	93.3
Cwm Taf Morgannwg University HB			-		-		-	-	-		-						-						
Bridgend LA	1491	1439	96.5	1439	96.5	1439	96.5	1439	96.5	1439	96.5	1439	96.5	4	0.3	1417	95.0	1438	96.4	2	0.1	1436	96.3
Merthyr Tydfil LA	667	641	96.1	641	96.1	641	96.1	642	96.3	641	96.1	642	96.3	2	0.3	638	95.7	645	96.7	3	0.4	643	96.4
Rhondda Cynon Taf LA	2585	2530	97.9	2530	97.9	2530	97.9	2530	97.9	2530	97.9	2530	97.9	5	0.2	2494	96.5	2534	98.0	3	0.1	2527	97.8
Health Board Total	4743	4610	97.2	4610	97.2	4610	97.2	4611	97.2	4610	97.2	4611	97.2	11	0.2	4549	95.9	4617	97.3	8	0.2	4606	97.
Hywel Dda University HB																							
Carmarthenshire LA	1760	1679	95.4	1679	95.4	1679	95.4	1679	95.4	1679	95.4	1666	94.7	16	0.9	1651	93.8	1683	95.6	15	0.9	1671	94.9
Ceredigion LA	552	535	96.9	535	96.9	535	96.9	535	96.9	534	96.7	531	96.2	6	1.1	514	93.1	534	96.7	5	0.9	533	96.6
Pembrokeshire LA	1069	1007	94.2	1007	94.2	1007	94.2	1007	94.2	1007	94.2	1007	94.2	3	0.3	994	93.0	1010	94.5	0	0.0	1008	94.3
Health Board Total	3381	3221	95.3	3221	95.3	3221	95.3	3221	95.3	3220	95.2	3204	94.8	25	0.7	3159	93.4	3227	95.4	20	0.6	3212	95.0
Powys Teaching HB																							
Health Board Total	1118	1080	96.6	1080	96.6	1080	96.6	1080	96.6	1080	96.6	1072	95.9	7	0.6	1057	94.5	1080	96.6	4	0.4	1075	96.2
Swansea Bay University HB																							
Neath Port Talbot LA	1374	1321	96.1	1321	96.1	1321	96.1	1321	96.1	1321	96.1	1321	96.1	4	0.3	1310	95.3	1323	96.3	1	0.1	1325	96.4
Swansea LA	2326	2216	95.3	2216	95.3	2216	95.3	2216	95.3	2216	95.3		95.4	14	0.6	2177	93.6	2212	95.1	6	0.3	2200	94.6
Health Board Total	3700	3537	95.6	3537	95.6	3537	95.6	3537	95.6	3537		3539	95.6	18	0.5	3487	94.2	3535	95.5	7	0.2	3525	95.3
Unknown	12	10	83.3	10	83.3	10	83.3	10	83.3	10	83.3	10	80.0	1	8.3	10	83.3	10	83.3	1	8.3	10	83.3
Wales Total	30889	29581	95.8	29581	95.8	29581	95.8	29579	95.8	29573	95.7	29543	95.6	142	0.5	28970	93.8	29631	95.9	83	0.3	29500	95.

<sup>&</sup>lt;sup>1</sup>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'.

<sup>2</sup> Full primary two dose course of pneumococcal conjugate vaccine.

<sup>3</sup> 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 01/04/2019 and 31/03/2020 and resident on 31/03/2020.

Area	Resident children	D	3	Т	3	Р	3	Po	3	Hil	b3	MM	IR1	Meı	nB <sup>1</sup>	РС	V2 <sup>2</sup>	РС	Vf <sup>3</sup>	HibM	lenCl
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%												
Blaenau Gwent LA	759	744	98.0	744	98.0	744	98.0	744	98.0	744	98.0	735	96.8	731	96.3	738	97.2	732	96.4	728	95.9
Caerphilly LA	2009	1965	97.8	1965	97.8	1965	97.8	1965	97.8	1964	97.8	1948	97.0	1943	96.7	1937	96.4	1948	97.0	1941	96.6
Monmouthshire LA	824	795	96.5	795	96.5	795	96.5	795	96.5	795	96.5	786	95.4	783	95.0	790	95.9	788	95.6	785	95.3
Newport LA	1994	1901	95.3	1901	95.3	1901	95.3	1901	95.3	1901	95.3	1875	94.0	1862	93.4	1870	93.8	1877	94.1	1865	93.5
Torfaen LA	1036	1000	96.5	1000	96.5	1000	96.5	1000	96.5	1000	96.5	979	94.5	982	94.8	993	95.8	985	95.1	980	94.6
Health Board Total	6622	6405	96.7	6405	96.7	6405	96.7	6405	96.7	6404	96.7	6323	95.5	6301	95.2	6328	95.6	6330	95.6	6299	95.
Betsi Cadwaladr University HB																					
Anglesey LA	684	668	97.7	668	97.7	668	97.7	667	97.5	667	97.5	658	96.2	659	96.3	658	96.2	660	96.5	660	96.
Conwy LA	1032	979	94.9	979	94.9	979	94.9	979	94.9	979	94.9	968	93.8	958	92.8	965	93.5	968	93.8	958	92.8
Denbighshire LA	985	950	96.4	950	96.4	950	96.4	949	96.3	950	96.4	929	94.3	928	94.2	930	94.4	932	94.6	929	94.3
Flintshire LA	1597	1542	96.6	1542	96.6	1542	96.6	1542	96.6	1541	96.5	1516	94.9	1513	94.7	1530	95.8	1519	95.1	1519	95.
Gwynedd LA	1133	1090	96.2	1090	96.2	1090	96.2	1090	96.2	1090	96.2	1074	94.8	1074	94.8	1076	95.0	1081	95.4	1073	94.
Wrexham LA	1514	1466	96.8	1466	96.8	1466	96.8	1466	96.8	1466	96.8	1448	95.6	1438	95.0	1451	95.8	1450	95.8	1443	95.3
Health Board Total	6945	6695	96.4	6695	96.4	6695	96.4	6693	96.4	6693	96.4	6593	94.9	6570	94.6	6610	95.2	6610	95.2	6582	94.8
Cardiff and Vale University HB																					
Cardiff LA	4046	3848	95.1	3848	95.1	3848	95.1	3848	95.1	3848	95.1	3727	92.1	3612	89.3	3752	92.7	3720	91.9	3682	91.0
Vale of Glamorgan LA	1426	1376	96.5	1376	96.5	1376	96.5	1376	96.5	1376	96.5	1352	94.8	1335	93.6	1355	95.0	1348	94.5	1342	94.
Health Board Total	5472	5224	95.5	5224	95.5	5224	95.5	5224	95.5	5224	95.5	5079	92.8	4947	90.4	5107	93.3	5068	92.6	5024	91.8
Cwm Taf Morgannwg University HB																					
Bridgend LA	1528	1497	98.0	1497	98.0	1497	98.0	1497	98.0	1497	98.0	1462	95.7	1460	95.5	1480	96.9	1463	95.7	1450	94.9
Merthyr Tydfil LA	712	694	97.5	694	97.5	694	97.5	694	97.5	693	97.3	686	96.3	684	96.1	692	97.2	689	96.8	684	96.
Rhondda Cynon Taf LA	2556	2506	98.0	2506	98.0	2506	98.0	2506	98.0	2505	98.0	2457	96.1	2459	96.2	2499	97.8	2468	96.6	2459	96.
Health Board Total	4796	4697	97.9	4697	97.9	4697	97.9	4697	97.9	4695	97.9	4605	96.0	4603	96.0	4671	97.4	4620	96.3	4593	95.8
Hywel Dda University HB																					
Carmarthenshire LA	1883	1810	96.1	1810	96.1	1810	96.1	1808	96.0	1809	96.1	1761	93.5	1750	92.9	1785	94.8	1768	93.9	1757	93.3
Ceredigion LA	575	546	95.0	546	95.0	546	95.0	545	94.8	545	94.8	537	93.4	535	93.0	537	93.4	541	94.1	537	93.4
Pembrokeshire LA	1156	1096	94.8	1096	94.8	1096	94.8	1095	94.7	1094	94.6	1068	92.4	1056	91.3	1082	93.6	1068	92.4	1058	91.
Health Board Total	3614	3452	95.5	3452	95.5	3452	95.5	3448	95.4	3448	95.4	3366	93.1	3341	92.4	3404	94.2	3377	93.4	3352	92.
Powys Teaching HB																					
Health Board Total	1166	1127	96.7	1127	96.7	1127	96.7	1128	96.7	1126	96.6	1113	95.5	1102	94.5	1111	95.3	1113	95.5	1109	95.
Swansea Bay University HB																					
Neath Port Talbot LA	1523	1485	97.5	1485	97.5	1485	97.5	1485	97.5	1485	97.5	1433	94.1	1440	94.6	1471	96.6	1447	95.0	1434	94.2
Swansea LA	2418	2325	96.2	2325	96.2	2325	96.2	2325	96.2	2325	96.2	2260	93.5	2235	92.4	2273	94.0	2251	93.1	2240	92.0
Health Board Total	3941	3810	96.7	3810	96.7	3810	96.7	3810	96.7	3810	96.7	3693	93.7	3675	93.3	3744	95.0	3698	93.8	3674	93.
Unknown	18	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	16	93.3	17	94.4	15	83.3	16	88.9
Wales Total	32574	31427	96.5	31427	96.5	31427	96.5	31422	96.5	31417	96.4	30789	94.5	30555	93.8	30992	95.1	30831	94.6	30649	94.

<sup>&</sup>lt;sup>1</sup>Uptake of three doses of MenB vaccine scheduled at 2, 4 and 12-13 months of age. <sup>2</sup> Full primary 2 dose course of pneumococcal conjugate vaccine

<sup>&</sup>lt;sup>3</sup> Final (booster) dose of pneumococcal conjugate vaccine

**Table 5.** Vaccine uptake in children reaching their 4th birthday between 01/04/2019 and 31/03/2020 and resident on 31/03/2020.

Area	Resident Children	4 in 1 Presch	nool booster <sup>1</sup>	HibMo	enCb	MMR	dose 2	Up to date i	n schedule <sup>2</sup>
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Blaenau Gwent LA	711	625	87.9	683	96.1	626	88.0	617	86.8
Caerphilly LA	2106	1887	89.6	2031	96.4	1880	89.3	1863	88.5
Monmouthshire LA	878	825	94.0	845	96.2	812	92.5	804	91.6
Newport LA	2151	1820	84.6	1978	92.0	1809	84.1	1759	81.8
Torfaen LA	1111	1007	90.6	1063	95.7	996	89.6	984	88.6
Health Board Total	6957	6164	88.6	6600	94.9	6123	88.0	6027	86.6
Betsi Cadwaladr University HB									
Anglesey LA	709	671	94.6	696	98.2	669	94.4	664	93.7
Conwy LA	1146	1026	89.5	1096	95.6	1018	88.8	1009	88.0
Denbighshire LA	1045	943	90.2	1002	95.9	940	90.0	934	89.4
Flintshire LA	1618	1476	91.2	1549	95.7	1465	90.5	1455	89.9
Gwynedd LA	1185	1096	92.5	1133	95.6	1087	91.7	1076	90.8
Wrexham LA	1512	1400	92.6	1451	96.0	1386	91.7	1379	91.2
Health Board Total	7215	6612	91.6	6927	96.0	6565	91.0	6517	90.3
Cardiff and Vale University HB									
Cardiff LA	4402	3874	88.0	4126	93.7	3847	87.4	3769	85.6
Vale of Glamorgan LA	1500	1374	91.6	1439	95.9	1361	90.7	1347	89.8
Health Board Total	5902	5248	88.9	5565	94.3	5208	88.2	5116	86.7
Cwm Taf Morgannwg University HB									
Bridgend LA	1589	1399	88.0	1517	95.5	1387	87.3	1373	86.4
Merthyr Tydfil LA	762	691	90.7	725	95.1	684	89.8	677	88.8
Rhondda Cynon Taf LA	2800	2555	91.3	2715	97.0	2539	90.7	2515	89.8
Health Board Total	5151	4645	90.2	4957	96.2	4610	89.5	4565	88.6
Hywel Dda University HB									
Carmarthenshire LA	2001	1771	88.5	1895	94.7	1759	87.9	1730	86.5
Ceredigion LA	663	611	92.2	623	94.0	607	91.6	603	91.0
Pembrokeshire LA	1246	1075	86.3	1159	93.0	1069	85.8	1056	84.8
Health Board Total	3910	3457	88.4	3677	94.0	3435	87.9	3389	86.7
Powys Teaching HB									
Health Board Total	1213	1117	92.1	1156	95.3	1103	90.9	1094	90.2
Swansea Bay University HB									
Neath Port Talbot LA	1532	1379	90.0	1484	96.9	1374	89.7	1363	89.0
Swansea LA	2598	2291	88.2	2456	94.5	2279	87.7	2253	86.7
Health Board Total	4130	3670	88.9	3940	95.4	3653	88.5	3616	87.6
Unknown	18	17	94.4	17	94.4	16	88.9	16	88.9
Wales Total	34496	30930	89.7	32839	95.2	30713	89.0	30340	88.0

Uptake of acellular pertussis used as proxy
 Completed '4 in 1' preschool booster, the Hib/MenC booster and second MMR dose by four years of age.

**Table 6.** Percentages of children who are up to date with routine immunisations<sup>1</sup> by four years of age, by quintile of deprivation of the Lower Super Output Area in which they reside. Vaccine uptake is presented for children reaching their 4th birthday between 01/04/2019 and 31/03/2020 and resident on 31/03/2020.

	Le	ast deprive	d	Nex	t least depri	ved		Middle		Next	most depri	ved	M	ost deprive	d
Health Board	Resident children	Up to da	ite by 4y	Resident children	Up to da	te by 4y	Resident children	Up to da	ite by 4y	Resident children	Up to da	ite by 4y	Resident children	Up to da	ite by 4y
	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Aneurin Bevan	1009	910	90.2	878	783	89.2	1321	1158	87.7	1601	1376	85.9	2146	1799	83.8
Betsi Cadwalladr University	1247	1155	92.6	1690	1561	92.4	1656	1511	91.2	1371	1212	88.4	1250	1077	86.2
Cardiff and Vale University	1929	1778	92.2	719	625	86.9	613	534	87.1	869	723	83.2	1772	1456	82.2
Cwm Taf Morgannwg	658	602	91.5	527	479	90.9	808	738	91.3	1548	1379	89.1	1610	1367	84.9
Hywel Dda	231	208	90.0	978	879	89.9	1398	1216	87.0	910	762	83.7	393	324	82.4
Powys Teaching	123	115	93.5	622	559	89.9	275	245	89.1	145	133	91.7	48	42	87.5
Swansea Bay University	815	742	91.0	479	434	90.6	669	589	88.0	826	728	88.1	1341	1123	83.7
Wales Total	6012	5510	91.7	5893	5320	90.3	6740	5991	88.9	7270	6313	86.8	8560	7188	84.0

<sup>&</sup>lt;sup>1</sup>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 01/04/2019 and 31/03/2020 and resident on 31/03/2020.

Area	Resident children	D	3	T	3	P	3	Po	3	Hil	b3	Me	nC	PC	Vf <sup>1</sup>	HibM	enCb	MM	R1	MN	IR2	D	4	T	4	al	•	Po	)4
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)										
Blaenau Gwent LA	748	729	97.5	729	97.5	729	97.5	729	97.5	729	97.5	731	97.73	715	95.6	718	96.0	726	97.1	687	91.8	687	91.8	687	91.8	687	91.8	687	91.8
Caerphilly LA	2105	2059	97.8	2059	97.8	2059	97.8	2059	97.8	2059	97.8	2051	97.43	2025	96.2	2027	96.3	2057	97.7	1961	93.2	1969	93.5	1969	93.5	1969	93.5	1968	93.5
Monmouthshire LA	898	859	95.7	859	95.7	859	95.7	858	95.5	857	95.4	838	93.32	840	93.5	840	93.5	864	96.2	829	92.3	833	92.8	833	92.8	833	92.8	832	92.7
Newport LA	2149	2041	95.0	2041	95.0	2041	95.0	2041	95.0	2037	94.8	1975	91.9	1959	91.2	1932	89.9	2027	94.3	1900	88.4	1917	89.2	1917	89.2	1917	89.2	1917	89.2
Torfaen LA	1006	983	97.7	983	97.7	983	97.7	983	97.7	983	97.7	973	96.72	954	94.8	950	94.4	973	96.7	917	91.2	926	92.0	926	92.0	926	92.0	926	92.0
Health Board Total	6906	6671	96.6	6671	96.6	6671	96.6	6670	96.6	6665	96.5	6568	95.1	6493	94.0	6467	93.6	6647	96.2	6294	91.1	6332	91.7	6332	91.7	6332	91.7	6330	91.7
Betsi Cadwaladr University HB																													
Anglesey LA	750	729	97.2	729	97.2	729	97.2	729	97.2	729	97.2	712	94.9	718	95.7	718	95.7	729	97.2	715	95.3	717	95.6	717	95.6	717	95.6	717	95.6
Conwy LA	1153	1129	97.9	1129	97.9	1129	97.9	1129	97.9	1129	97.9	1109	96.2	1097	95.1	1106	95.9	1119	97.1	1082	93.8	1088	94.4	1088	94.4	1088	94.4	1088	94.4
Denbighshire LA	1087	1061	97.6	1061	97.6	1061	97.6	1061	97.6	1061	97.6	1036	95.3	1040	95.7	1043	96.0	1055	97.1	1010	92.9	1018	93.7	1018	93.7	1018	93.7	1018	93.7
Flintshire LA	1658	1604	96.7	1604	96.7	1604	96.7	1604	96.7	1602	96.6	1523	91.9	1580	95.3	1574	94.9	1600	96.5	1564	94.3	1566	94.5	1566	94.5	1566	94.5	1566	94.5
Gwynedd LA	1171	1138	97.2	1138	97.2	1137	97.1	1137	97.1	1135	96.9	1103	94.2	1106	94.4	1119	95.6	1137	97.1	1094	93.4	1098	93.8	1098	93.8	1097	93.7	1098	93.8
Wrexham LA	1564	1530	97.8	1530	97.8	1530	97.8	1526	97.6	1528	97.7	1475	94.3	1500	95.9	1502	96.0	1522	97.3	1465	93.7	1476	94.4	1476	94.4	1475	94.3	1476	94.4
Health Board Total	7383	7191	97.4	7191	97.4	7190	97.4	7186	97.3	7184	97.3	6958	94.2	7041	95.4	7062	95.7	7162	97.0	6930	93.9	6963	94.3	6963	94.3	6961	94.3	6963	94.3
Cardiff and Vale University HB																													
Cardiff LA	4396	4250	96.7	4250	96.7	4250	96.7	4248	96.6	4233	96.3	3999	91.0	4054	92.2	4122	93.8	4242	96.5	4033	91.7	4049	92.1	4049	92.1	4049	92.1	4050	92.1
Vale of Glamorgan LA	1494	1462	97.9	1462	97.9	1462	97.9	1462	97.9	1460	97.7	1427	95.5	1426	95.4	1441	96.5	1459	97.7	1394	93.3	1401	93.8	1401	93.8	1401	93.8	1402	93.8
Health Board Total	5890	5712	97.0	5712	97.0	5712	97.0	5710	96.9	5693	96.7	5426	92.1	5480	93.0	5563	94.4	5701	96.8	5427	92.1	5450	92.5	5450	92.5	5450	92.5	5452	92.6
Cwm Taf Morgannwg University HB																													
Bridgend LA	1599	1558	97.4	1558	97.4	1558	97.4	1558	97.4	1558	97.4	1523	95.2	1534	95.9	1541	96.4	1556	97.3	1467	91.7	1474	92.2	1474	92.2	1473	92.1	1472	92.1
Merthyr Tydfil LA	792	775	97.9	775	97.9	775	97.9	774	97.7	774	97.7	764	96.5	757	95.6	757	95.6	776	98.0	722	91.2	727	91.8	726	91.7	726	91.7	726	91.7
Rhondda Cynon Taf LA	2751	2705	98.3	2705	98.3	2705	98.3	2703	98.3	2701	98.2	2687	97.7	2648	96.3	2648	96.3	2683	97.5	2548	92.6	2562	93.1	2562	93.1	2562	93.1	2562	93.1
Health Board Total	5142	5038	98.0	5038	98.0	5038	98.0	5035	97.9	5033	97.9	4974	96.7	4939	96.1	4946	96.2	5015	97.5	4737	92.1	4763	92.6	4762	92.6	4761	92.6	4760	92.6
Hywel Dda University HB																													
Carmarthenshire LA	1934	1873	96.8	1873	96.8	1873	96.8	1871	96.7	1873	96.8	1839	95.1	1821	94.2	1829	94.6	1863	96.3	1780	92.0	1788	92.5	1788	92.5	1788	92.5	1787	92.4
Ceredigion LA	659	640	97.1	640	97.1	640	97.1	639	97.0	637	96.7	609	92.4	619	93.9	622	94.4	634	96.2	617	93.6	618	93.8	618	93.8	618	93.8	619	93.9
Pembrokeshire LA	1321	1267	95.9	1267	95.9	1267	95.9	1266	95.8	1266	95.8	1233	93.3	1217	92.1	1234	93.4	1248	94.5	1170	88.6	1171	88.6	1171	88.6	1171	88.6	1173	88.8
Health Board Total	3914	3780	96.6	3780	96.6	3780	96.6	3776	96.5	3776	96.5	3681	94.0	3657	93.4	3685	94.1	3745	95.7	3567	91.1	3577	91.4	3577	91.4	3577	91.4	3579	91.4
Powys Teaching HB																													
Health Board Total	1176	1130	96.1	1130	96.1	1130	96.1	1130	96.1	1129	96.0	1106	94.0	1101	93.6	1112	94.6	1126	95.7	1085	92.3	1099	93.5	1099	93.5	1099	93.5	1098	93.4
Swansea Bay University HB			00		00		00		00	0	00.0		00		00.0		0	0	00		02.0	.000	00.0		00.0		00.0	.000	00
Neath Port Talbot LA	1562	1533	98.1	1533	98.1	1533	98.1	1533	98.1	1533	98.1	1512	96.8	1505	96.4	1504	96.3	1521	97.4	1442	92.3	1453	93.0	1453	93.0	1453	93.0	1453	93.0
Swansea LA	2543	2449	96.3	2449	96.3	2449	96.3	2449	96.3	2440	95.9	2362	92.9	2372	93.3	2411	94.8	2443	96.1	2317	91.1	2317	91.1	2317	91.1	2317	91.1	2317	91.1
Health Board Total	4105	3982	97.0	3982	97.0	3982	97.0	3982	97.0	3973	96.8	3874	94.4	3877	94.4	3915	95.4	3964	96.6	3759	91.6	3770	91.8	3770	91.8	3770	91.8	3770	91.8
Unknown	22	20	90.9	20	90.9	20	90.9	20	90.9	20	90.9	19	86.4	20	90.9	20	90.9	20	90.9	16	72.7	16	72.7	16	72.7	16	72.7	16	72.7
Wales Total	34538	33524	97.1	33524	97.1	33523	97.1	33509	97.0	33473	96.9	32606	94.4	32608	94.4	32770	94.9	33380	96.6	31815	92.1	31970	92.6	31969	92.6	31966	92.6	31968	92.6

<sup>&</sup>lt;sup>1</sup> Final (booster) dose of pneumococcal conjugate vaccine

**Table 8.** HPV Vaccine uptake in girls reaching their 14<sup>th</sup>, 15<sup>th</sup> and 16<sup>th</sup> birthdays between 01/09/2019 and 31/08/2020 and resident on 31/03/2020 (School Year 9, 10 and 11 during 2019/20).

	14 years (201	19-20 Scho	ool Year 9)	15 yea	rs (2019	-20 Sch	ool Year	10)	16 years	s (2019-	20 Sch	ool Yea	r 11)
Area	Resident girls	HPV	1 dose	Resident girls	HPV 1	dose	HPV 2	doses	Resident girls	HPV 1	dose	HPV 2	doses
Aneurin Bevan University HB		(n)	(%)		(n)	(%)	(n)	(%)	_	(n)	(%)	(n)	(%)
Blaenau Gwent LA	410	353	86.1	346	314	90.8	288	83.2	376	332	88.3	313	83.2
Caerphilly LA	1027	801	78.0	1013	929	91.7	855	84.4	1016	917	90.3	866	85.2
Monmouthshire LA	521	416	79.8	520	415	79.8	372	71.5	546	429	78.6	409	74.9
Newport LA	959	778	81.1	957	795	83.1	735	76.8	903	742	82.2	687	76.1
Torfaen LA	550	473	86.0	550	479	87.1	430	78.2	491	439	89.4	423	86.2
Health Board Total	3467	2821	81.4	3386	2932	86.6	2680	79.1	3332	2859	85.8	2698	81.0
Betsi Cadwaladr University HB													
Anglesey LA	335	287	85.7	344	297	86.3	272	79.1	346	307	88.7	290	83.8
Conwy LA	587	519	88.4	536	489	91.2	458	85.4	575	527	91.7	507	88.2
Denbighshire LA	544	453	83.3	534	473	88.6	427	80.0	515	457	88.7	429	83.3
Flintshire LA	827	698	84.4	808	730	90.3	647	80.1	797	731	91.7	705	88.5
Gwynedd LA	683	620	90.8	633	567	89.6	549	86.7	533	481	90.2	479	89.9
Wrexham LA	773	655	84.7	737	668	90.6	610	82.8	699	622	89.0	599	85.7
Health Board Total	3749	3232	86.2	3592	3224	89.8	2963	82.5	3465	3125	90.2	3009	86.8
Cardiff and Vale University HB													
Cardiff LA	2010	1690	84.1	1995	1757	88.1	1632	81.8	1879	1612	85.8	1451	77.2
Vale of Glamorgan LA	741	674	91.0	756	683	90.3	656	86.8	755	673	89.1	650	86.1
Health Board Total	2751	2364	85.9	2751	2440	88.7	2288	83.2	2634	2285	86.8	2101	79.8
Cwm Taf Morgannwg University HB													
Bridgend LA	792	712	89.9	795	725	91.2	664	83.5	811	748	92.2	707	87.2
Merthyr Tydfil LA	322	291	90.4	355	331	93.2	305	85.9	318	290	91.2	280	88.1
Rhondda Cynon Taf LA	1405	1305	92.9	1400	1307	93.4	1232	88.0	1313	1244	94.7	1192	90.8
Health Board Total	2519	2308	91.6	2550	2363	92.7	2201	86.3	2442	2282	93.4	2179	89.2
Hywel Dda University HB													
Carmarthenshire LA	1002	894	89.2	986	897	91.0	853	86.5	980	883	90.1	848	86.5
Ceredigion LA	300	264	88.0	292	253	86.6	243	83.2	324	279	86.1	270	83.3
Pembrokeshire LA	620	546	88.1	612	544	88.9	499	81.5	636	544	85.5	513	80.7
Health Board Total	1922	1704	88.7	1890	1694	89.6	1595	84.4	1940	1706	87.9	1631	84.1
Powys Teaching HB													
Health Board Total	662	578	87.3	658	566	86.0	520	79.0	659	566	85.9	555	84.2
Swansea Bay University HB													
Neath Port Talbot LA	804	773	96.1	822	779	94.8	752	91.5	744	702	94.4	674	90.6
Swansea LA	1229	1152	93.7	1173	1079	92.0	1045	89.1	1220	1129	92.5	1106	90.7
Health Board Total	2033	1925	94.7	1995	1858	93.1	1797	90.1	1964	1831	93.2	1780	90.6
Unknown	37	30	81.1	45	38	84.4	37	82.2	47	39	83.0	38	80.9
Wales Total	17140	14962	87.3	16867	15115	89.6	14081	83.5	16483	14693	89.1	13991	84.9

**Table 9.** Vaccine uptake in children reaching their 15th birthday between 01/09/2019 and 31/08/2020 and resident on 31/03/2020 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident					Teenage	e 3 in 1			Resident	ММ	R1	MM	R2	HP	V 2	Resident	MN	IR1	MN	/IR2
Area	children	MM	IR1	MN	IR2	boos	ster <sup>1</sup>	MenA	CWY	girls	(gir	ls)	(gir	ls)	dos	ses	boys	(bo	ys)	(bc	oys)
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
Blaenau Gwent LA	687	668	97.2	654	95.2	602	87.6	601	87.5	346	336	97.1	330	95.4	288	83.2	341	332	97.4	324	95.0
Caerphilly LA	2072	2021	97.5	1970	95.1	1794	86.6	1794	86.6	1013	994	98.1	971	95.9	855	84.4	1059	1027	97.0	999	94.3
Monmouthshire LA	1087	1029	94.7	999	91.9	866	79.7	869	79.9	520	492	94.6	477	91.7	372	71.5	567	537	94.7	522	92.1
Newport LA	1910	1829	95.8	1759	92.1	1574	82.4	1582	82.8	957	917	95.8	886	92.6	735	76.8	950	910	95.8	873	91.9
Torfaen LA	1129	1100	97.4	1074	95.1	979	86.7	966	85.6	550	534	97.1	526	95.6	430	78.2	579	566	97.8	548	94.6
Health Board Total	6885	6647	96.5	6456	93.8	5815	84.5	5812	84.4	3386	3273	96.7	3190	94.2	2680	79.1	3496	3372	96.5	3266	93.4
Betsi Cadwaladr University HB																					
Anglesey LA	703	662	94.2	639	90.9	559	79.5	555	78.9	344	325	94.5	311	90.4	272	79.1	359	337	93.9	328	91.4
Conwy LA	1176	1116	94.9	1086	92.3	1029	87.5	1036	88.1	536	511	95.3	499	93.1	458	85.4	640	605	94.5	587	91.7
Denbighshire LA	1109	1035	93.3	994	89.6	904	81.5	913	82.3	534	500	93.6	480	89.9	427	80.0	575	535	93.0	514	89.4
Flintshire LA	1641	1558	94.9	1508	91.9	1356	82.6	1362	83.0	808	770	95.3	743	92.0	647	80.1	833	788	94.6	765	91.8
Gwynedd LA	1256	1212	96.5	1183	94.2	1076	85.7	1074	85.5	633	616	97.3	599	94.6	549	86.7	623	596	95.7	584	93.7
Wrexham LA	1501	1457	97.1	1414	94.2	1243	82.8	1249	83.2	737	714	96.9	687	93.2	610	82.8	764	743	97.3	727	95.2
Health Board Total	7386	7040	95.3	6824	92.4	6167	83.5	6189	83.8	3592	3436	95.7	3319	92.4	2963	82.5	3794	3604	95.0	3505	92.4
Cardiff and Vale University HB																					
Cardiff LA	4019	3779	94.0	3571	88.9	3040	75.6	3031	75.4	1995	1889	94.7	1795	90.0	1632	81.8	2023	1890	93.4	1776	87.8
Vale of Glamorgan LA	1513	1449	95.8	1383	91.4	1237	81.8	1235	81.6	756	723	95.6	689	91.1	656	86.8	756	726	96.0	694	91.8
Health Board Total	5532	5228	94.5	4954	89.6	4277	77.3	4266	77.1	2751	2612	94.9	2484	90.3	2288	83.2	2779	2616	94.1	2470	88.9
Cwm Taf Morgannwg University HB																					
Bridgend LA	1701	1622	95.4	1550	91.1	1537	90.4	1544	90.8	795	763	96.0	736	92.6	664	83.5	906	859	94.8	814	89.8
Merthyr Tydfil LA	712	682	95.8	655	92.0	634	89.0	636	89.3	355	339	95.5	326	91.8	305	85.9	357	343	96.1	329	92.2
Rhondda Cynon Taf LA	2874	2754	95.8	2643	92.0	2622	91.2	2616	91.0	1400	1345	96.1	1297	92.6	1232	88.0	1473	1409	95.7	1346	91.4
Health Board Total	5287	5058	95.7	4848	91.7	4793	90.7	4796	90.7	2550	2447	96.0	2359	92.5	2201	86.3	2736	2611	95.4	2489	91.0
Hywel Dda University HB																					
Carmarthenshire LA	2021	1923	95.2	1871	92.6	1765	87.3	1763	87.2	986	944	95.7	913	92.6	853	86.5	1035	979	94.6	958	92.6
Ceredigion LA	657	625	95.1	601	91.5	582	88.6	580	88.3	292	275	94.2	263	90.1	243	83.2	365	350	95.9	338	92.6
Pembrokeshire LA	1241	1191	96.0	1131	91.1	1052	84.8	1044	84.1	612	589	96.2	555	90.7	499	81.5	629	602	95.7	576	91.6
Health Board Total	3919	3739	95.4	3603	91.9	3399	86.7	3387	86.4	1890	1808	95.7	1731	91.6	1595	84.4	2029	1931	95.2	1872	92.3
Powys Teaching HB																					
Health Board Total	1381	1300	94.1	1237	89.6	1226	88.8	1234	89.4	658	625	95.0	602	91.5	520	79.0	723	675	93.4	635	87.8
Swansea Bay University HB																					
Neath Port Talbot LA	1662	1589	95.6	1508	90.7	1534	92.3	1540	92.7	822	786	95.6	752	91.5	752	91.5	840	803	95.6	756	90.0
Swansea LA	2532	2374	93.8	2273	89.8	2321	91.7	2334	92.2	1173	1104	94.1	1054	89.9	1045	89.1	1359	1270	93.5	1219	89.7
Health Board Total	4194	3963	94.5	3781	90.2	3855	91.9	3874	92.4	1995	1890	94.7	1806	90.5	1797	90.1	2199	2073	94.3	1975	89.8
Unknown	89	84	94.4	82	92.1	74	83.1	74	83.1	45	42	93.3	42	93.3	37	82.2	44	42	95.5	40	90.9
Wales Total	34673	33059	95.3	31785	91.7	29606	85.4	29632	85.5	16867	16133	95.6	15533	92.1	14081	83.5	17800	16924	95.1	16252	91.3

<sup>&</sup>lt;sup>1</sup> Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy)

**Table 10.** Vaccine uptake in children reaching their 16th birthday between 01/09/2019 and 31/08/2020 and resident on 31/03/2020 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident					Teena	ge 3 in			Resident	MIV			IR2	HP	V 2	Resident	MM	IR1	MN	MR2
Alea	children	MN	IR1	MN	IR2	1 boo	oster <sup>1</sup>	Men/	CWY	girls	(gi	rls)	(gi	rls)	do	ses	boys	(bo	ys)	(bc	oys)
Aneurin Bevan University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	('
Blaenau Gwent LA	755	741	98.1	724	95.9	674	89.3	673	89.1	376	369	98.1	360	95.7	313	83.2	379	372	98.2	364	96
Caerphilly LA	2150	2094	97.4	2043	95.0	1810	84.2	1813	84.3	1016	986	97.0	969	95.4	866	85.2	1133	1107	97.7	1073	94
Monmouthshire LA	1148	1079	94.0	1046	91.1	906	78.9	911	79.4	546	514	94.1	500	91.6	409	74.9	602	565	93.9	546	90
Newport LA	1908	1799	94.3	1740	91.2	1518	79.6	1512	79.2	903	860	95.2	839	92.9	687	76.1	1005	939	93.4	901	89
Torfaen LA	1012	989	97.7	961	95.0	905	89.4	903	89.2	491	480	97.8	465	94.7	423	86.2	521	509	97.7	496	95
Health Board Total	6973	6702	96.1	6514	93.4	5813	83.4	5812	83.4	3332	3209	96.3	3133	94.0	2698	81.0	3640	3492	95.9	3380	92
Betsi Cadwaladr University HB																					
Anglesey LA	730	700	95.9	685	93.8	613	84.0	615	84.2	346	332	96.0	326	94.2	290	83.8	384	368	95.8	359	93
Conwy LA	1162	1113	95.8	1066	91.7	1031	88.7	1033	88.9	575	547	95.1	522	90.8	507	88.2	587	566	96.4	544	92
Denbighshire LA	1096	1032	94.2	997	91.0	941	85.9	948	86.5	515	485	94.2	467	90.7	429	83.3	581	547	94.1	530	91
Flintshire LA	1673	1605	95.9	1553	92.8	1435	85.8	1443	86.3	797	775	97.2	751	94.2	705	88.5	876	830	94.7	802	91
Gwynedd LA	1171	1128	96.3	1102	94.1	1025	87.5	1022	87.3	533	518	97.2	506	94.9	479	89.9	638	610	95.6	596	93
Wrexham LA	1451	1386	95.5	1357	93.5	1245	85.8	1255	86.5	699	677	96.9	660	94.4	599	85.7	752	709	94.3	697	92
Health Board Total	7283	6964	95.6	6760	92.8	6290	86.4	6316	86.7	3465	3334	96.2	3232	93.3	3009	86.8	3818	3630	95.1	3528	92
Cardiff and Vale University HB																					
Cardiff LA	3790	3525	93.0	3328	87.8	2897	76.4	2887	76.2	1879	1755	93.4	1654	88.0	1451	77.2	1911	1770	92.6	1674	87
Vale of Glamorgan LA	1460	1379	94.5	1308	89.6	1214	83.2	1212	83.0	755	711	94.2	676	89.5	650	86.1	705	668	94.8	632	89
Health Board Total	5250	4904	93.4	4636	88.3	4111	78.3	4099	78.1	2634	2466	93.6	2330	88.5	2101	79.8	2616	2438	93.2	2306	88
Cwm Taf Morgannwg University HB																					
Bridgend LA	1602	1524	95.1	1436	89.6	1347	84.1	1357	84.7	811	783	96.5	744	91.7	707	87.2	791	741	93.7	692	87
Merthyr Tydfil LA	667	628	94.2	601	90.1	587	88.0	591	88.6	318	294	92.5	280	88.1	280	88.1	348	334	96.0	321	92
Rhondda Cynon Taf LA	2672	2558	95.7	2469	92.4	2466	92.3	2471	92.5	1313	1263	96.2	1217	92.7	1192	90.8	1359	1295	95.3	1252	92
Health Board Total	4941	4710	95.3	4506	91.2	4400	89.1	4419	89.4	2442	2340	95.8	2241	91.8	2179	89.2	2498	2370	94.9	2265	90
Hywel Dda University HB																					
Carmarthenshire LA	2007	1908	95.1	1843	91.8	1766	88.0	1764	87.9	980	932	95.1	897	91.5	848	86.5	1027	976	95.0	946	92
Ceredigion LA	673	640	95.1	623	92.6	596	88.6	592	88.0	324	310	95.7	301	92.9	270	83.3	349	330	94.6	322	92
Pembrokeshire LA	1267	1194	94.2	1144	90.3	1059	83.6	1058	83.5	636	602	94.7	578	90.9	513	80.7	631	592	93.8	566	89
Health Board Total	3947	3742	94.8	3610	91.5	3421	86.7	3414	86.5	1940	1844	95.1	1776	91.5	1631	84.1	2007	1898	94.6	1834	91
Powys Teaching HB																					
Health Board Total	1342	1254	93.4	1198	89.3	1202	89.6	1212	90.3	659	616	93.5	593	90.0	555	84.2	683	638	93.4	605	88
Swansea Bay University HB																					
Neath Port Talbot LA	1508	1444	95.8	1381	91.6	1361	90.3	1381	91.6	744	722	97.0	690	92.7	674	90.6	764	722	94.5	691	90
Swansea LA	2572	2442	94.9	2342	91.1	2331	90.6	2347	91.3	1220	1164	95.4	1114	91.3	1106	90.7	1352	1278	94.5	1228	90
Health Board Total	4080	3886	95.2	3723	91.3	3692	90.5	3728	91.4	1964	1886	96.0	1804	91.9	1780	90.6	2116	2000	94.5	1919	90
Unknown	111	101	91.0	96	86.5	89	80.2	90	81.1	47	43	91.5	40	85.1	38	80.9	64	58	90.6	56	87
Wales Total	33927	32263	95.1	31043	91.5	29018	85.5	29090	85.7	16483	15738	95.5	15149	91.9	13991	84.9	17442	16524	94.7	15893	91

<sup>&</sup>lt;sup>1</sup> 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 1<sup>st</sup>, 2<sup>nd</sup> and 5<sup>th</sup> birthdays during 01/04/2019 and 31/03/2020 and resident on 31/03/2020.<sup>1</sup>

			1yr					2yrs						5yrs			
	Resident	Babies at risk	1 dose	2 doses	3 doses	Resident	Babies at risk	1 dose	2 doses	3 doses	4 doses	Resident	Babies at risk	1 dose	2 dose	3 doses	4 doses
Area	children	of perinatal				children	of perinatal					children	of perinatal				
		infection		_	_		infection				_		infection			_	
	(n)	(n)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)
Aneurin Bevan	6216	10	100.0	100.0	100.0	6622	9	100.0	100.0	100.0	55.6	6906	6	100.0	100.0	100.0	83.3
Betsi Cadwalladr University	6472	6	100.0	100.0	100.0	6945	9	100.0	100.0	100.0	100.0	7383	13	100.0	100.0	100.0	100.0
Cardiff and Vale University	5247	21	95.2	90.5	90.5	5472	23	100.0	95.7	91.3	56.5	5890	27	100.0	100.0	100.0	81.5
Cwm Taf Morgannwg	4743	2	100.0	100.0	100.0	4796	7	100.0	100.0	100.0	100.0	5142	1	100.0	100.0	100.0	100.0
Hywel Dda	3381	1	100.0	100.0	100.0	3614	1	100.0	100.0	100.0	100.0	3914	1	100.0	100.0	100.0	100.0
Powys Teaching	1118	1	100.0	100.0	100.0	1166	0	0.0	0.0	0.0	0.0	1176	0	0.0	0.0	0.0	0.0
Swansea Bay University	3700	6	100.0	100.0	100.0	3941	5	100.0	100.0	100.0	100.0	4105	9	100.0	100.0	100.0	100.0
Unknown	12	0	0.0	0.0	0.0	18	0	0.0	0.0	0.0	0.0	22	0	0.0	0.0	0.0	0.0
Wales	30889	48	97.9	95.8	95.8	32574	54	100.0	98.1	96.3	74.1	34538	57	100.0	100.0	100.0	89.5

<sup>&</sup>lt;sup>1</sup>Data reflects immunisations given and recorded on the Public Health Wales All Wales Neonatal Hepatitis B database of babies born to hepatitis B positive mothers.

## Links

Public Health Wales Vaccination and Immunisation intranet (NHS Wales only): <a href="http://howis.wales.nhs.uk/sites3/home.cfm?orgid=474">http://howis.wales.nhs.uk/sites3/home.cfm?orgid=474</a>

Public Health Wales Health Protection internet: <a href="http://www.wales.nhs.uk/sites3/home.cfm?orgid=457">http://www.wales.nhs.uk/sites3/home.cfm?orgid=457</a>

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