

Vaccine Uptake in Children in Wales

January to March 2019

COVER 130: Wales May 2019



Iechyd Cyhoeddus
Cymru
Public Health
Wales

Key points

- For children at one year of age in Wales, uptake of all routine immunisations, apart from rotavirus, remained above 95% this quarter. Uptake of three doses of the "6 in 1" vaccine was 95% or higher in five of the seven Health Boards (HB) and in 14 of 22 Local Authority (LA) areas.
- Uptake of the complete three-dose course of MenB vaccine in two year olds was 94.2% this quarter. Four HBs and eleven LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children was 94.6% this quarter. Four HBs and 12 LA areas achieved an uptake of 95% or over.
- The proportion of children up to date with all routine immunisations by four years of age was 87.6% this quarter and was 90.7% in five year olds.
- Uptake of one dose of HPV vaccine in 2018-19 school year 8 girls (12-13 year olds) is currently 36.6%. In girls in the 2018-19 school year 9 (13-14 year olds), uptake of two doses is currently 34.9%. Vaccination sessions had just started in these age-groups at time of reporting and uptake will increase over the next two quarters as more immunisation sessions take place.
- Uptake of routine MenACWY vaccine in the 2018-19 school year 9 cohort is currently 59.0%, this will increase in coming months as more vaccination sessions take place. Coverage of the MenACWY vaccine in the 2018-19 school year 10 cohort was 83.8%.
- Uptake of the Td/IPV teenage booster in the 2018-19 school year 9 cohort is currently 59.2%, this will increase in coming months as more vaccination sessions take place. Coverage of the Td/IPV teenage booster in the 2018-19 school year 10 was 83.7%.
- Coverage of one dose of MMR vaccine in the 2018-19 school year 10 (age 14-15 years) was 95.0%, coverage of two doses was 91.2%.
- Coverage of one dose of MMR vaccine in the 2018-19 school year 11 (age 15-16 years) was 94.2%, coverage of two doses was 89.8%.

Background

These results are for children living in Wales in March 2019 and reaching their first, second, fourth, fifth and 16th birthdays during the quarter 01/01/2019 to 31/03/2019. Uptake of key immunisations in older children, which are mainly provided through school based programmes in all areas other than Cardiff and Vale University Health Board, are presented in school year cohorts (children reaching their 14th, 15th and 16th birthdays between 01/09/2018 and 31/08/2019). BCG immunisation uptake data are also presented here. For the children referred to in this report, these immunisations would have been given selectively following risk assessment. Coverage of neonatal hepatitis B immunisation in infants at risk is also presented, using data from the Public Health Wales Neonatal Hepatitis B database. MenACWY conjugate vaccine uptake figures for teenagers and young adults born from 01/09/1996 to 31/08/1999, vaccinated as part of the general practice-based catch-up campaign are available from: <http://www.wales.nhs.uk/sitesplus/888/page/88528>

Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre, working with Powys Teaching Health Board and the NHS Wales Informatics Service, have recently carried out a COVER data quality assurance project. This project has 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. Uptake of all three doses of the combined “6 in 1” DTaP/IPV/Hib/HepB¹ vaccine, scheduled at two, three and four months of age, in children reaching their first birthday was 95.3% this quarter. Uptake ranged by HB from 92.8% (Hywel Dda) to 97.6% (Cwm Taf) and by LA from 91.1 % (Denbighshire) to 99.4% (Blaenau Gwent). Five of the seven HBs and 14 of the 22 LA areas achieved the target 95% uptake (Figures 2, 3 and 6, Tables 2 and 3).
2. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV2) in children reaching their first birthday remained stable at 95.4% this quarter compared to 95.9% last quarter, and ranged by LA from 91.6% (Denbighshire) to 99.4% (Blaenau Gwent). Five of the seven HBs and 15 of the 22 LA areas achieved the target 95% uptake (Figures 2 and 3, Tables 2 and 3).
3. Uptake of two doses of MenB vaccine, scheduled at two and four months of age, in children reaching their first birthday was 95.2% this quarter. Uptake in HBs ranged from 91.9% (Hywel Dda) to 97.2% (Cwm Taf) and ranged by LA from 91.1% (Pembrokeshire) to 99.4% (Blaenau Gwent) (Figure 3, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday remained stable at 93.6% this quarter. Uptake in HBs ranged from 92.4% (Cardiff and Vale) to 95.7% (Cwm Taf) and ranged by LA from 90.3% (Denbighshire) to 96.8% (Bridgend) (Figures 2 and 3, Tables 2 and 3).
5. Uptake of the first dose of MMR² in children reaching their second birthday (scheduled at 12 to 13 months of age) remained stable at 94.6% this quarter. Uptake ranged by HB from 92.1% (Hywel Dda) to 96.2% (Cwm Taf) and by LA area from 91.0% (Pembrokeshire) to 99.4% (Anglesey). Four HBs and 12 LA areas achieved the target of 95% uptake (Figures 2, 3 and 7, Tables 2 and 4).
6. Uptake of the complete three dose course of MenB vaccine in children reaching their second birthday was 94.2 this quarter compared to 93.9% last quarter. Uptake ranged by HB from 91.5% (Hywel Dda) to 96.3% (Cwm Taf) and by LA from 90.1% (Ceredigion) to 98.8% (Blaenau Gwent). Four of the seven HBs and 11 of the 22 LA areas achieved the target 95% uptake (Figures 2 and 3, Tables 2 and 4).
7. Uptake of the final dose of Pneumococcal Conjugate Vaccine (PCVf, scheduled at 12 to 13 months of age) in children reaching their second birthday was stable at 94.9% this quarter compared to 94.5% last quarter. Uptake ranged by HB from 92.0% (Hywel Dda) to 96.6% (Cwm Taf) and ranged by LA from 91.0% (Pembrokeshire) to 98.8% (Blaenau Gwent). Four HBs and 13 LA areas achieved an uptake of 95% or over (Figure 3, Tables 2 and 4).
8. Uptake of the Hib/MenC booster (given at 12 to 13 months of age) in children reaching two years of age remained stable at 94.5% this quarter compared to 94.1% last quarter. Uptake ranged by HB from 91.2% (Cardiff and Vale) to 96.5% (Cwm Taf), and ranged by LA from 90.1% (Ceredigion) to 99.4% (Anglesey). Four HBs and 13 LA areas achieved uptakes in excess of 95% (Figures 1, 2 and 3, Tables 2 and 4).
9. In children reaching four years of age this quarter (Table 5), uptake of:
 - The “4 in 1” DTaP/IPV³ pre-school booster was 89.0%
 - The Hib/MenC booster was 95.4%
 - Two doses of MMR was 88.8%

The proportion of children who were up to date with all these routine immunisations at four years of age was 87.6%. This ranged by HB from 83.9% (Aneurin Bevan) to 91.0% (Powys) and by LA from 81.8% (Newport) to 95.2% (Anglesey) (Figures 4 and 5, Tables 1, 2 and 5).

¹ DTaP/IPV/Hib/HepB vaccine protects against Diphtheria, Tetanus, Pertussis (Whooping Cough), Polio, Hib and Hep B infection.

² MMR protects against measles, mumps and rubella infections.

³ DTaP/IPV (and dTaP/IPV) vaccines boost protection against Diphtheria, Tetanus, Pertussis and Polio infection before school entry.

10. The proportion of children who were up to date with routine immunisations by their fifth birthday remained stable at 90.7% this quarter. This ranged by HB from 88.5% (Cardiff and Vale) to 93.0% (Betsi Cadwaladr) (Table 6).
11. In children reaching five years of age this quarter, coverage of one dose of MMR was 97.2%. Coverage of two doses of MMR was 92.4%. Coverage of two doses of MMR ranged by HB from 90.6% (Hywel Dda) to 94.0% (Betsi Cadwaladr) and by LA from 89.5% (Carmarthenshire) to 95.5% (Wrexham) (Figures 1, 2, 3 and 8, Tables 2, 6 and 7).
12. Uptake of the “4 in 1” DTaP/IPV³ pre-school booster in children reaching their fifth birthday was 92.9% this quarter, ranging by HB from 91.2% (Abertawe Bro Morgannwg) to 94.6% (Betsi Cadwaladr) and by LA from 89.2% (Swansea) to 96.6% (Anglesey). Three of the 22 LAs achieved the 95% uptake target (Figure 3 and 9, Tables 2, 6 and 7).
13. Uptake of the first dose of HPV vaccine for girls in the 2018-19 school year 8 group (turning 13 years of age during 01/09/18 to 31/08/19) is currently 36.6%. Coverage of the first dose in the 2018-19 school year 9 is currently 87.0% and uptake of the second dose in this age group is currently 34.9%. Timings of school vaccination sessions vary throughout the year and uptake will increase as vaccination sessions take place over the next two quarters. Coverage of a complete two dose course of HPV vaccine in 2018-19 school year 10 girls (girls reaching their 15th birthday during 01/09/18 to 31/08/19) is currently 89.4% (Table 8).
14. Current uptake of the MenACWY vaccine in the 2018-19 routine school year 9 cohort is 59.0% and will increase over the next two quarters as vaccination sessions take place (Table 9 and 10). Coverage in the 2018-19 school years 10, 11 and 12, is currently 83.8%, 84.6% and 82.2% respectively (Table 9).
15. Uptake of the Td/IPV⁴ teenage booster in the 2018-19 school year 9 (children reaching 14 years of age) is currently 59.2%. Coverage of two doses of MMR in this year group is currently 91.0% and coverage of one dose is 94.8%. Coverage of two doses of MMR vaccine ranged by HB from 87.8% (Powys) to 93.4% (Aneurin Bevan). Coverage of a full course of immunisation against rubella (two doses of MMR) in 14 year old girls in this school year group was 91.4% (Table 10).
16. Coverage of the Td/IPV teenage booster in the 2018-19 school year 10 (children reaching 15 years of age) is currently 83.7%. Coverage ranged by HB from 75.0% (Cardiff and Vale) to 91.1% (Cwm Taf). Coverage of two doses of MMR in this year group was 91.2% and coverage of one dose was 95.0%. Coverage of two doses of MMR vaccine ranged by HB from 88.8% (Cardiff and Vale) to 92.8% (Aneurin Bevan). Coverage of a full course of immunisation against rubella (two doses of MMR) in 15 year old girls in this school year group was 91.6% (Table 11).
17. Coverage of the Td/IPV teenage booster in the 2018-19 school year 11 (children reaching 16 years of age) is currently 84.4%. Coverage ranged by HB from 76.0% (Cardiff and Vale) to 90.0% (Cwm Taf). Coverage of two doses of MMR in this year group was 89.8% and coverage of one dose was 94.2%. Coverage of two doses of MMR vaccine ranged by HB from 86.7% (Cardiff and Vale) to 92.4% (Betsi Cadwaladr). Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls in this school year group was 90.6% (Table 12).
18. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st January 2019 and 31st March 2019) was 89.6%, whilst coverage of one dose of MMR was 94.1%. Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls was 90.9%. National coverage of the Td/IPV teenage booster in children reaching 16 years of age this quarter was 84.3% (Figures 1, 2 and 3, Tables 2 and 13).
19. Uptake of BCG immunisation is presented in Table 14. These data are based on BCG immunisations recorded in the National Community Child Health Database. BCG immunisation has been received by 7.3%, 4.7%, 7.2% and 4.6% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter one of 2019. This quarter

⁴ Td/IPV boosts protection against Diphtheria, Tetanus and Polio infection before entering adulthood.

Newport LA had the highest proportion of children given BCG by one year of age (18.7%) and Swansea LA by two years of age (14.5%).⁵

20. Uptake data for hepatitis B immunisation, extracted from the Public Health Wales All Wales Neonatal Hepatitis B Immunisation Database, is presented in Table 15. Uptake of three doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their first birthday this quarter was 100.0%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their second birthday this quarter was 61.5%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their fifth birthday this quarter was 100%. Proportions should be interpreted with caution as small numbers of babies require an enhanced course of hepatitis B immunisation.

⁵ BCG protects against tuberculosis infection. Numbers of eligible children for BCG are not known.

Comment

This is the third 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 complete three-dose course of “6 in 1” vaccine remains high and above 95% but has decreased slightly by 0.4% compared to 2018 quarter 4. Uptake of all other routine primary immunisations in infants reaching their first birthday this quarter also remain at 95% or higher, excluding rotavirus (which cannot be given beyond 24 weeks of age, so is not possible to ‘catch up’).

Uptakes of immunisations measured at two years of age were slightly below 95% this quarter, of which uptake of the third scheduled dose of meningococcal group B vaccine was lowest. There has been a consistent gradual decrease in uptake of the first MMR dose in two years olds since 2013 and the last quarter where uptake exceeded 95% was 2017 quarter one.

Uptake of one dose of MMR in 2018-19 School Year 10 (children reaching 15 years of age) was above 95%, but in School Years 9 and 11 (children reaching 14 and 16 years of age respectively) uptake was below 95%. Uptake of two doses remains below 95% for all teenage age groups in all health boards.

During 2018 a total of 12,352 cases of measles were reported across 30 EU/EEA Member States with 34 deaths [1]. In January of 2019, 881 cases were reported across 19 EU/EEA Member States [2]. Suboptimal vaccination uptake creates the potential for outbreaks following importation of cases from elsewhere in the UK and overseas.

There were 20 confirmed cases of measles in Wales in 2018 (provisional data), 15 of whom were associated with an outbreak in early 2018. Since January 2019, there have been no cases of measles in Wales. In recent years in Wales, there have been outbreaks following measles virus infection at summer festivals and also travel to and from other countries in Europe. It is important that individuals who have not had two doses of MMR are reminded to catch-up on missed MMR vaccinations in good time for both of these activities. Since March 2019, there have also been increases in mumps activity reported in Wales [3] and clusters of cases affecting students in universities in both England and Wales. MMR catch-up in teenagers and children who are not up to date with two doses of MMR should continue to be encouraged to prevent further cases of measles and mumps in Wales.

References

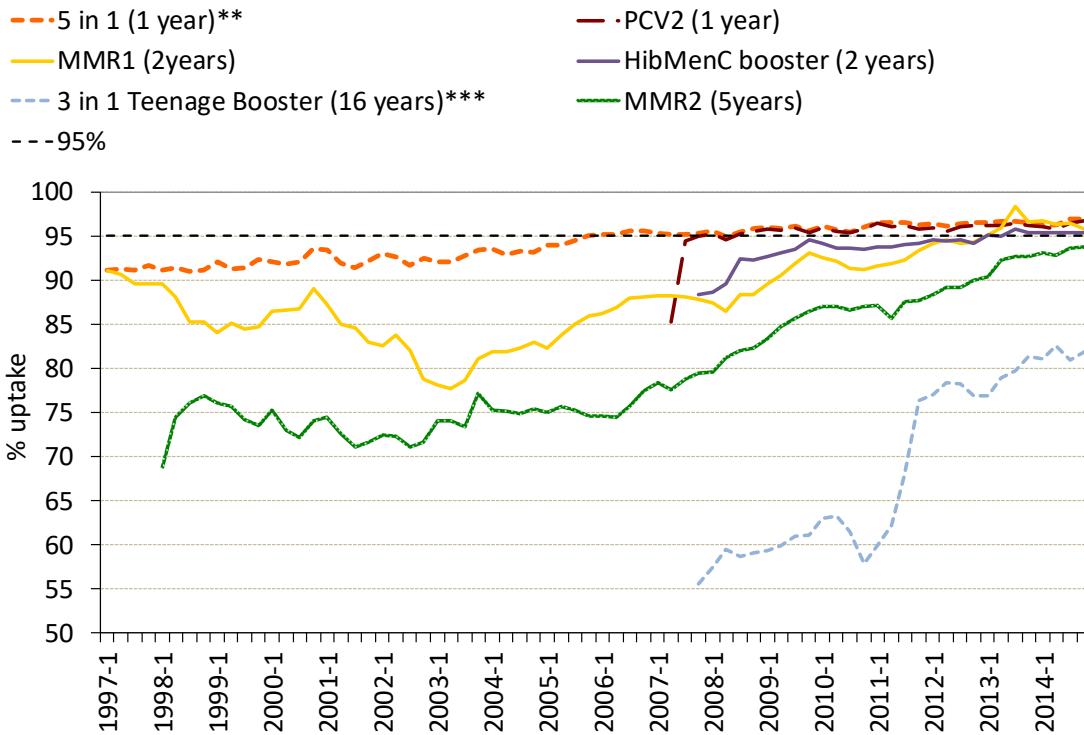
1. European Centre for Disease Control. Monthly measles and rubella monitoring report. February 2019. Available from: <https://ecdc.europa.eu/sites/portal/files/documents/measles-rubella-monthly-monitoring-report-february-2019.pdf>
2. European Centre for Disease Control. Monthly measles and rubella monitoring report. March 2019. Available from: <https://ecdc.europa.eu/sites/portal/files/documents/measles-monthly-report-march-2019.pdf>
3. Public Health Wales Weekly Notification of Mumps Dashboard. March 2019: <https://public.tableau.com/profile/public.health.wales.health.protection#/vizhome/NotificationsofMUMPSinWales2014-2017/Dashboard2>

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 nurses and doctors who immunise or advise on immunisation. Uptake data presented throughout are for HB resident population, not for HB GP practice populations. The maps, graphs, tables 1 and 2 are best viewed in colour.

Suggested citation for this report: Public Health Wales Health Protection Division. Vaccine uptake in Children in Wales, January to March 2019: COVER report 130, May 2019. Cardiff, Public Health Wales. For further information on this report please contact: surveillance.requests@wales.nhs.uk

Figure 1. Percentage uptake of childhood immunisations in Wales, quarter 1 1997 to quarter 4 2014*.

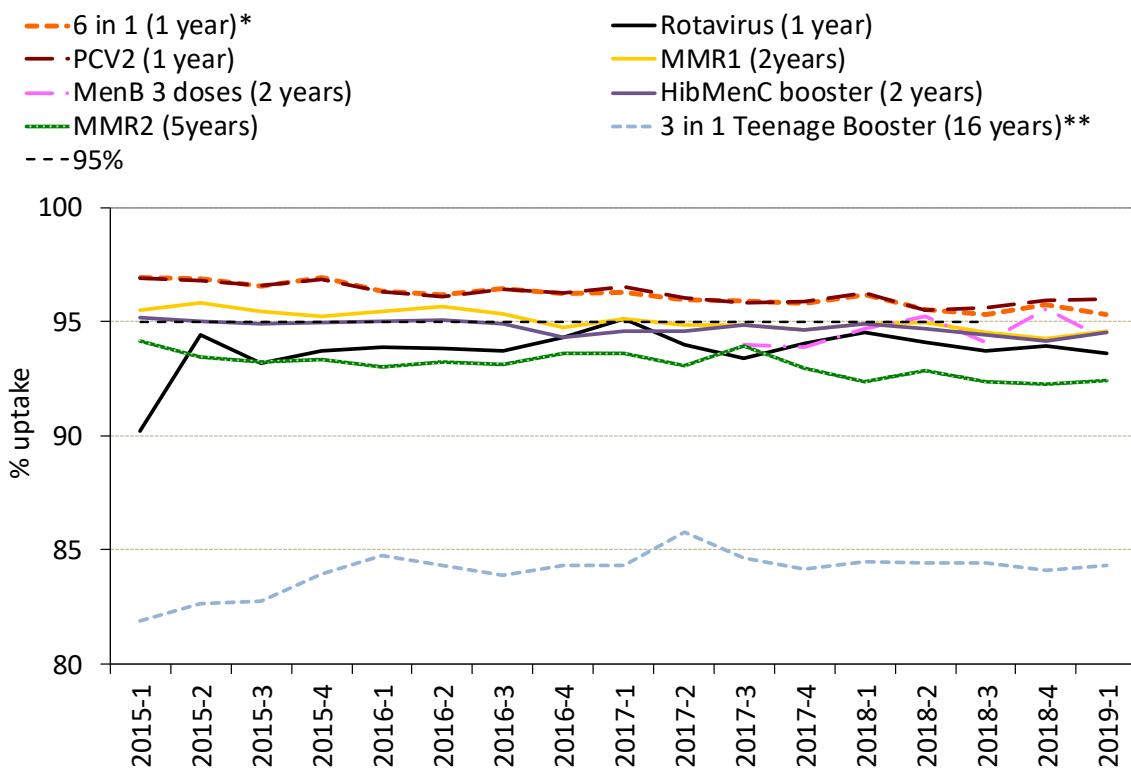


*Uptake data for quarter 3 2014 to quarter 4 2014 presented here are based on estimates calculated in August 2015, rather than published data, due to data quality problems affecting reported uptake of some immunisations in reports published during this period.

**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 2015 to quarter 1 2019***



* Uptake of pertussis used as proxy.

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

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

Figure 3. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/01/19 and 31/03/19 and resident on 31/03/19.

All Wales Summary - COVER129

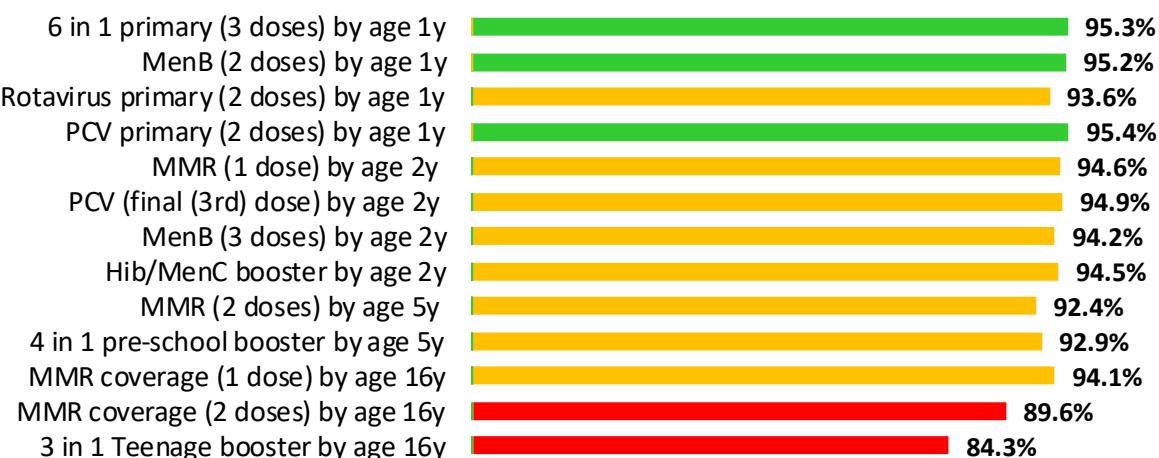


Figure 4. Percentage uptake of resident children reaching their 4th birthday between 01/01/19 and 31/03/19 and are up to date with all scheduled vaccines⁷ by health board.

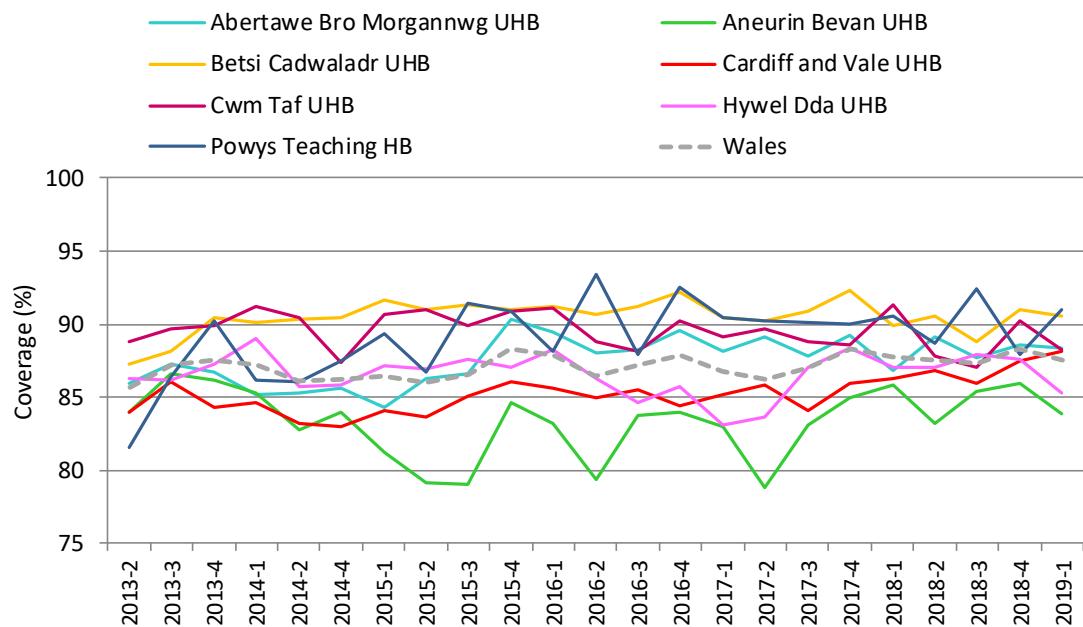


Table 1. Percentages of resident children reaching their 4th birthday during quarter 1 2018 to quarter 1 2019 who are up to date with all scheduled vaccines⁷, by Health Board.*

Area	2018-1	2018-2	2018-3	2018-4	2019-1
Abertawe Bro Morgannwg UHB	86.8	89.1	87.7	88.6	88.4
Aneurin Bevan UHB	85.9	83.2	85.4	85.9	83.9
Betsi Cadwaladr UHB	89.9	90.5	88.8	91.0	90.6
Cardiff and Vale UHB	86.3	86.9	86.0	87.5	88.2
Cwm Taf UHB	91.3	87.8	87.0	90.2	88.3
Hywel Dda UHB	87.0	87.0	87.9	87.6	85.3
Powys Teaching HB	90.6	88.7	92.4	88.0	91.0
Wales	87.8	87.5	87.3	88.3	87.6

* Uptake data from 2018 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 5. Trends in the percentages of children reaching their 4th birthday during quarter 2 2013 to quarter 1 2019, who are up to date with all scheduled vaccines⁷, by health board*.



* 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. The calculation method for proportions of children up to date with routine immunisation by four years of age was revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age. Uptake data 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.

⁷Completed “4 in 1” preschool booster, the Hib/MenC booster and second MMR dose by four years of age.

Figure 6. Uptake of “6 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/01/19 and 31/03/19.

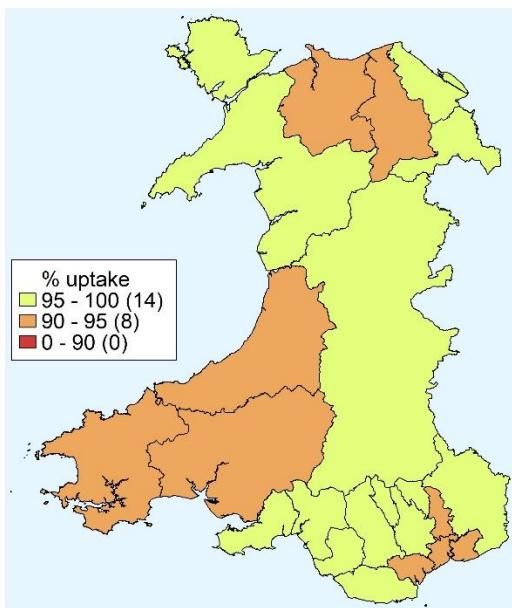


Figure 7. Uptake of at least one dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/01/19 and 31/03/19.

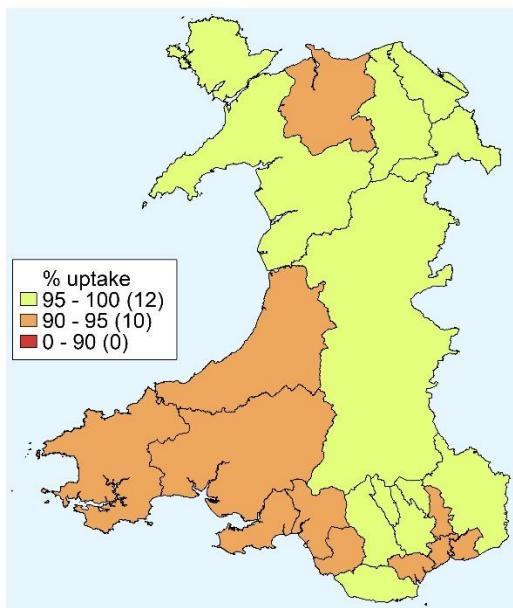


Figure 8. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/01/19 and 31/03/19.

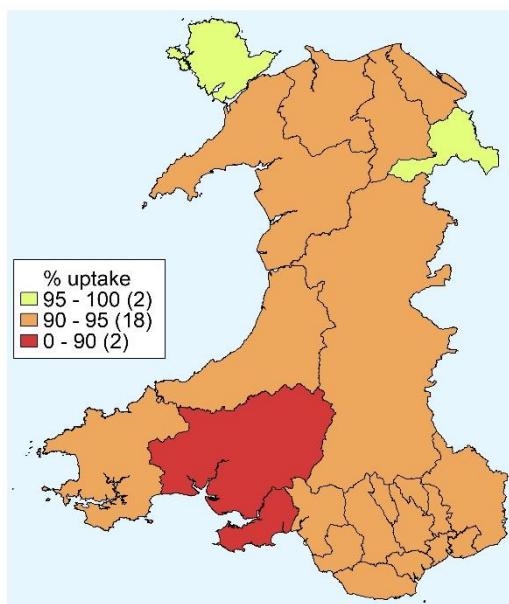


Figure 9. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/01/19 and 31/03/19.

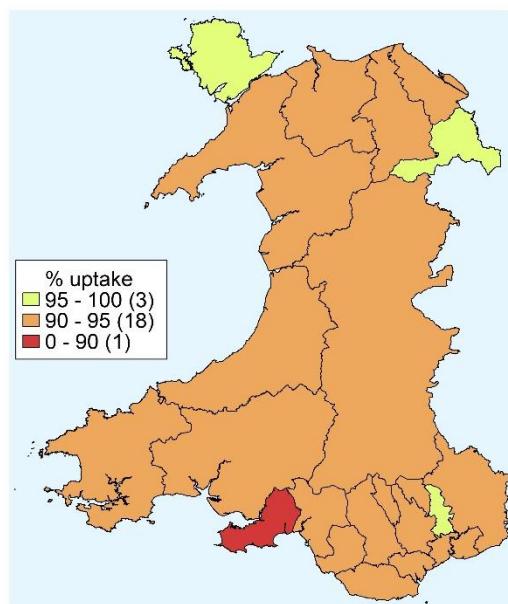


Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 4th, 5th and 16th birthday between 01/01/19 and 31/03/19 and resident on 31/03/19.

Area	Age 1 year					Age 2 years					Age 4 years			Age 5 years			Age 16 years				
	Resident children (n)	6 in 1 ¹	MenB ²	PCV2	Rotavirus	Resident children (n)	MMR1	PCV ³	MenB ⁴	Hib/MenC	Resident Children (n)	Up to date in schedule ⁵	Resident children (n)	MMR2	4 in 1 ¹	Resident children (n)	MMR1	MMR2	MenACWY	3 in 1 Teenage booster ⁶	
Abertawe Bro Morgannwg UHB																					
Bridgend LA	370	97.0	96.8	96.8	96.8	381	94.5	94.8	94.8	94.5	359	90.5	386	92.5	93.3	344	93.6	88.7	88.7	87.8	
Neath Port Talbot LA	378	96.6	96.6	96.3	95.0	350	94.3	94.9	94.9	94.3	368	87.0	357	92.2	92.4	330	97.0	90.9	91.5	89.7	
Swansea LA	593	96.1	95.8	95.6	94.3	580	93.1	93.4	91.7	92.9	618	88.0	623	89.6	89.2	604	91.2	84.6	87.4	88.1	
Health Board Total	1341	96.5	96.3	96.1	95.2	1311	93.8	94.2	93.4	93.7	1345	88.4	1366	91.1	91.2	1278	93.3	87.3	88.8	88.4	
Aneurin Bevan UHB																					
Blaenau Gwent LA	174	99.4	99.4	99.4	95.4	160	97.5	98.8	98.8	98.8	199	85.4	220	94.5	94.5	155	96.1	93.5	90.3	89.7	
Caerphilly LA	471	96.0	95.8	96.0	93.6	457	96.7	96.9	96.9	96.9	496	84.1	530	93.6	94.0	505	95.6	93.1	81.8	82.8	
Monmouthshire LA	194	95.9	95.9	95.9	93.8	183	96.7	95.6	96.2	96.7	208	87.0	231	93.5	94.8	273	90.8	86.1	81.3	80.6	
Newport LA	454	93.0	94.3	94.7	91.6	510	93.5	93.1	92.5	92.9	512	81.8	476	91.2	90.5	461	93.7	88.1	81.8	81.3	
Torfaen LA	229	94.8	95.2	95.2	91.3	261	94.6	95.0	95.0	95.0	221	83.7	268	94.8	95.1	223	96.9	95.5	83.0	83.4	
Health Board Total	1522	95.3	95.7	95.9	92.9	1571	95.4	95.4	95.3	95.5	1636	83.9	1725	93.2	93.4	1617	94.5	90.8	82.7	82.7	
Betsi Cadwaladr UHB																					
Anglesey LA	188	95.2	95.2	95.2	94.7	166	99.4	98.8	98.2	99.4	167	95.2	178	95.5	96.6	155	96.8	91.0	85.8	87.1	
Conwy LA	237	94.1	94.9	95.4	93.2	263	91.6	93.2	91.3	92.4	270	90.7	269	94.1	94.1	275	93.1	90.2	92.4	91.6	
Denbighshire LA	237	91.1	91.6	91.6	90.3	246	95.1	95.5	94.7	95.1	253	91.3	301	92.7	93.7	266	94.4	89.1	82.0	82.0	
Flintshire LA	357	97.8	98.0	98.0	96.6	367	96.7	97.3	96.7	97.3	364	90.7	400	93.8	94.5	349	95.4	92.3	84.8	85.4	
Gwynedd LA	298	96.0	96.0	96.0	94.0	292	96.2	96.6	96.2	96.6	261	89.7	286	93.0	92.7	268	97.8	95.9	88.4	89.2	
Wrexham LA	350	95.7	96.0	94.9	91.4	361	97.5	97.2	96.7	97.0	360	88.3	397	95.2	96.2	352	98.3	95.2	84.4	84.1	
Health Board Total	1667	95.3	95.6	95.4	93.5	1695	96.0	96.4	95.6	96.2	1675	90.6	1831	94.0	94.6	1665	96.0	92.5	86.2	86.4	
Cardiff and Vale UHB																					
Cardiff LA	979	93.5	92.7	93.7	91.8	969	92.3	92.9	90.7	91.7	1056	87.5	1095	90.5	91.1	892	91.0	83.7	74.4	74.6	
Vale of Glamorgan LA	329	97.3	96.7	97.3	94.2	383	95.0	95.3	94.8	95.0	349	90.3	343	92.1	92.7	355	93.0	89.9	77.5	77.7	
Health Board Total	1308	94.4	93.7	94.6	92.4	1352	93.0	93.6	91.9	92.7	1405	88.2	1438	90.9	91.4	1247	91.6	85.5	75.3	75.5	
Cwm Taf UHB																					
Merthyr Tydfil LA	164	96.3	95.7	96.3	95.7	158	96.2	96.8	96.8	96.8	178	89.3	164	92.1	93.3	187	90.4	86.6	88.8	87.7	
Rhondda Cynon Taf LA	576	97.9	97.6	97.9	95.7	608	96.2	96.5	96.2	96.4	667	88.0	696	94.3	94.3	682	94.9	91.3	89.3	88.6	
Health Board Total	740	97.6	97.2	97.6	95.7	766	96.2	96.6	96.3	96.5	845	88.3	860	93.8	94.1	869	93.9	90.3	89.2	88.4	
Hywel Dda UHB																					
Carmarthenshire LA	453	92.7	92.1	92.7	92.7	446	92.8	92.8	92.4	91.9	478	86.6	506	89.5	91.1	510	96.5	93.5	90.6	89.8	
Ceredigion LA	142	93.7	93.0	93.0	94.4	152	92.1	91.4	90.1	90.1	171	87.1	164	90.9	92.1	166	96.4	91.6	89.8	90.4	
Pembrokeshire LA	282	92.6	91.1	92.6	91.1	299	91.0	91.0	91.0	90.6	330	82.4	321	92.2	92.5	321	93.8	87.5	80.1	78.2	
Health Board Total	877	92.8	91.9	92.7	92.5	897	92.1	92.0	91.5	91.2	979	85.3	991	90.6	91.7	997	95.6	91.3	87.1	86.2	
Powys Teaching UHB	251	97.2	96.8	97.6	94.8	241	95.9	96.3	95.9	95.9	267	91.0	315	92.7	94.6	317	92.7	86.4	84.5	83.6	
Unknown	4	100.0	100.0	100.0	100.0	7	100.0	100.0	100.0	100.0	3	33.3	18	94.4	100.0	18	83.3	83.3	66.7	72.2	
Wales Total	7710	95.3	95.2	95.4	93.6	7840	94.6	94.9	94.2	94.5	8155	87.6	8544	92.4	92.9	8008	94.1	89.6	84.5	84.3	

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 Uptake of 3 doses of meningococcal serogroup B (MenB) vaccine, scheduled at two, four and 12-13 months of age

⁵ Completed "4 in 1" preschool booster, the Hib/ MenC booster and second MMR dose by four years of age

⁶ Uptake of diphtheria (reinforcing booster dose) used as proxy

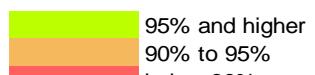


Table 3. Vaccine uptake in children reaching their 1st birthday between 01/01/19 and 31/03/19 and resident on 31/03/19.

Area	Resident children			D3		T3		P3		Po3		Hib3		HepB ¹		MMR1		Rotavirus		PCV2 ²		Men B ³		HibMenC	
	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	
Abertawe Bro Morgannwg University HB																									
Bridgend LA	370	359	97.0	359	359	97.0	359	359	97.0	359	359	97.0	358	358	96.8	0	0.0	358	358	96.8	358	358	96.8	0	0.0
Neath Port Talbot LA	378	365	96.6	365	365	96.6	365	365	96.6	365	365	96.6	362	362	95.8	0	0.0	359	364	96.3	365	365	96.6	0	0.0
Swansea LA	593	570	96.1	570	570	96.1	570	570	96.1	570	570	96.1	568	568	95.8	1	0.2	559	567	95.6	568	568	95.8	1	0.2
Health Board Total	1341	1294	96.5	1294	1294	96.5	1294	1294	96.5	1294	1288	96.0	1	0.1	1276	95.2	1289	96.1	1291	96.3	1	0.1			
Aneurin Bevan University HB																									
Blaenau Gwent LA	174	173	99.4	173	173	99.4	173	173	99.4	173	173	99.4	173	173	99.4	0	0.0	166	95.4	173	99.4	173	99.4	0	0.0
Caerphilly LA	471	452	96.0	452	452	96.0	452	452	96.0	452	452	96.0	453	453	96.2	1	0.2	441	93.6	452	96.0	451	95.8	1	0.2
Monmouthshire LA	194	186	95.9	186	186	95.9	186	186	95.9	186	186	95.9	186	186	95.9	1	0.5	182	93.8	186	95.9	186	95.9	0	0.0
Newport LA	454	422	93.0	422	422	93.0	422	422	93.0	422	422	93.0	422	422	93.0	0	0.0	416	91.6	430	94.7	428	94.3	0	0.0
Torfaen LA	229	217	94.8	217	217	94.8	217	217	94.8	217	217	94.8	216	216	94.3	1	0.4	209	91.3	218	95.2	218	95.2	0	0.0
Health Board Total	1522	1450	95.3	1450	1450	95.3	3	0.2	1414	92.9	1459	95.9	1456	95.7	1	0.1									
Betsi Cadwaladr University HB																									
Anglesey LA	188	179	95.2	179	179	95.2	179	179	95.2	178	178	94.7	178	178	94.7	4	2.1	178	94.7	179	95.2	179	95.2	1	0.5
Conwy LA	237	223	94.1	223	223	94.1	223	223	94.1	223	223	94.1	223	223	94.1	1	0.4	221	93.2	226	95.4	225	94.9	1	0.4
Denbighshire LA	237	216	91.1	216	216	91.1	216	216	91.1	216	216	91.1	216	216	91.1	1	0.4	214	90.3	217	91.6	217	91.6	1	0.4
Flintshire LA	357	349	97.8	349	349	97.8	349	349	97.8	349	349	97.8	349	349	97.8	0	0.0	345	96.6	350	98.0	350	98.0	2	0.6
Gwynedd LA	298	286	96.0	286	286	96.0	286	286	96.0	286	286	96.0	285	285	95.6	1	0.3	280	94.0	286	96.0	286	96.0	1	0.3
Wrexham LA	350	335	95.7	335	335	95.7	335	335	95.7	335	335	95.7	334	334	95.4	0	0.0	320	91.4	332	94.9	336	96.0	0	0.0
Health Board Total	1667	1588	95.3	1588	1588	95.3	1588	1588	95.3	1587	1587	95.2	1586	1586	95.1	7	0.4	1558	93.5	1590	95.4	1593	95.6	6	0.4
Cardiff and Vale University HB																									
Cardiff LA	979	915	93.5	915	915	93.5	915	915	93.5	915	915	93.5	913	913	93.3	12	1.2	899	91.8	917	93.7	908	92.7	3	0.3
Vale of Glamorgan LA	329	320	97.3	320	320	97.3	320	320	97.3	320	320	97.3	320	320	97.3	1	0.3	310	94.2	320	97.3	318	96.7	1	0.3
Health Board Total	1308	1235	94.4	1235	1235	94.4	1235	1235	94.4	1235	1235	94.4	1233	1233	94.3	13	1.0	1209	92.4	1237	94.6	1226	93.7	4	0.3
Cwm Taf University HB																									
Merthyr Tydfil LA	164	158	96.3	158	158	96.3	158	158	96.3	158	158	96.3	158	158	96.3	1	0.6	157	95.7	158	96.3	157	95.7	2	1.2
Rhondda Cynon Taf LA	576	564	97.9	564	564	97.9	564	564	97.9	564	564	97.9	563	563	97.7	1	0.2	551	95.7	564	97.9	562	97.6	1	0.2
Health Board Total	740	722	97.6	722	722	97.6	722	722	97.6	722	721	97.4	2	0.3	708	95.7	722	97.6	719	97.2	3	0.4			
Hywel Dda University HB																									
Carmarthenshire LA	453	420	92.7	420	420	92.7	420	420	92.7	420	420	92.7	421	421	92.9	1	0.2	420	92.7	420	92.7	417	92.1	0	0.0
Ceredigion LA	142	133	93.7	133	133	93.7	133	133	93.7	133	132	93.0	0	0.0	134	94.4	132	93.0	132	93.0	0	0.0			
Pembrokeshire LA	282	261	92.6	261	261	92.6	261	261	92.6	261	260	92.2	1	0.4	257	91.1	261	92.6	257	91.1	0	0.0			
Health Board Total	877	814	92.8	814	814	92.8	814	814	92.8	814	813	92.7	2	0.2	811	92.5	813	92.7	806	91.9	0	0.0			
Powys Teaching HB																									
Unknown	4	4	100.0	4	100.0	4	100.0	4	100.0	4	100.0	4	80.0	0	0.0	4	100.0	4	100.0	4	100.0	4	100.0	0	0.0
Wales Total	7710	7351	95.3	7351	7351	95.3	7351	7351	95.3	7350	7341	95.2	28	0.4	7218	93.6	7359	95.4	7338	95.2	15	0.2			

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

² Full primary two dose course of pneumococcal conjugate vaccine.

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

Table 4. Vaccine uptake in children reaching their 2nd birthday between 01/01/19 and 31/03/19 and resident on 31/03/19.

Area	Resident children		D3		T3		P3		Po3		Hib3		MMR1		PCV2 ¹		PCVf ²		Men B ³		HibMenC		
	(n)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)										
Abertawe Bro Morgannwg University HB																							
Bridgend LA	381	373	97.9	373	97.9	373	97.9	373	97.9	373	97.9	360	94.5	372	97.6	361	94.8	361	94.8	360	94.5		
Neath Port Talbot LA	350	340	97.1	340	97.1	340	97.1	340	97.1	340	97.1	330	94.3	335	95.7	332	94.9	332	94.9	330	94.3		
Swansea LA	580	554	95.5	554	95.5	554	95.5	554	95.5	553	95.3	540	93.1	542	93.4	542	93.4	532	91.7	539	92.9		
Health Board Total	1311	1267	96.6	1267	96.6	1267	96.6	1267	96.6	1266	96.6	1230	93.8	1249	95.3	1235	94.2	1225	93.4	1229	93.7		
Aneurin Bevan University HB																							
Blaenau Gwent LA	160	160	100.0	160	100.0	160	100.0	160	100.0	160	100.0	156	97.5	158	98.8	158	98.8	158	98.8	158	98.8		
Caerphilly LA	457	449	98.2	449	98.2	449	98.2	449	98.2	449	98.2	442	96.7	449	98.2	443	96.9	443	96.9	443	96.9		
Monmouthshire LA	183	178	97.3	178	97.3	178	97.3	178	97.3	178	97.3	177	96.7	175	95.6	175	95.6	176	96.2	177	96.7		
Newport LA	510	486	95.3	487	95.5	486	95.3	487	95.5	486	95.3	477	93.5	478	93.7	475	93.1	472	92.5	474	92.9		
Torfaen LA	261	256	98.1	256	98.1	256	98.1	256	98.1	256	98.1	247	94.6	256	98.1	248	95.0	248	95.0	248	95.0		
Health Board Total	1571	1529	97.3	1530	97.4	1529	97.3	1530	97.4	1529	97.3	1499	95.4	1516	96.5	1499	95.4	1497	95.3	1500	95.5		
Betsi Cadwaladr University HB																							
Anglesey LA	166	165	99.4	165	99.4	165	99.4	165	99.4	165	99.4	165	99.4	165	99.4	164	98.8	163	98.2	165	99.4		
Conwy LA	263	256	97.3	256	97.3	256	97.3	256	97.3	256	97.3	241	91.6	252	95.8	245	93.2	240	91.3	243	92.4		
Denbighshire LA	246	240	97.6	240	97.6	240	97.6	240	97.6	240	97.6	234	95.1	231	93.9	235	95.5	233	94.7	234	95.1		
Flintshire LA	367	358	97.5	358	97.5	358	97.5	358	97.5	358	97.5	355	96.7	358	97.5	357	97.3	355	96.7	357	97.3		
Gwynedd LA	292	287	98.3	287	98.3	287	98.3	287	98.3	287	98.3	281	96.2	286	97.9	282	96.6	281	96.2	282	96.6		
Wrexham LA	361	359	99.4	359	99.4	359	99.4	359	99.4	359	99.4	352	97.5	356	98.6	351	97.2	349	96.7	350	97.0		
Health Board Total	1695	1665	98.2	1628	96.0	1648	97.2	1634	96.4	1621	95.6	1631	96.2										
Cardiff and Vale University HB																							
Cardiff LA	969	934	96.4	934	96.4	934	96.4	934	96.4	934	96.4	894	92.3	918	94.7	900	92.9	879	90.7	889	91.7		
Vale of Glamorgan LA	383	371	96.9	371	96.9	371	96.9	371	96.9	371	96.9	364	95.0	366	95.6	365	95.3	363	94.8	364	95.0		
Health Board Total	1352	1305	96.5	1258	93.0	1284	95.0	1265	93.6	1242	91.9	1253	92.7										
Cwm Taf University HB																							
Merthyr Tydfil LA	158	154	97.5	154	97.5	154	97.5	154	97.5	154	97.5	152	96.2	154	97.5	153	96.8	153	96.8	153	96.8		
Rhondda Cynon Taf LA	608	596	98.0	596	98.0	596	98.0	595	97.9	596	98.0	585	96.2	593	97.5	587	96.5	585	96.2	586	96.4		
Health Board Total	766	750	97.9	750	97.9	750	97.9	749	97.8	750	97.9	737	96.2	747	97.5	740	96.6	738	96.3	739	96.5		
Hywel Dda University HB																							
Carmarthenshire LA	446	428	96.0	428	96.0	428	96.0	428	96.0	428	96.0	414	92.8	419	93.9	414	92.8	412	92.4	410	91.9		
Ceredigion LA	152	145	95.4	145	95.4	145	95.4	145	95.4	145	95.4	140	92.1	145	95.4	139	91.4	137	90.1	137	90.1		
Pembrokeshire LA	299	279	93.3	279	93.3	279	93.3	279	93.3	279	93.3	272	91.0	282	94.3	272	91.0	272	91.0	271	90.6		
Health Board Total	897	852	95.0	826	92.1	846	94.3	825	92.0	821	91.5	818	91.2										
Powys Teaching HB																							
	241	236	97.9	231	95.9	232	96.3	232	96.3	231	95.9	231	95.9										
Unknown	7	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0	7	100.0		
Wales Total	7840	7611	97.1	7612	97.1	7611	97.1	7611	97.1	7610	97.1	7416	94.6	7529	96.0	7437	94.9	7382	94.2	7408	94.5		

¹ Full primary two dose course of pneumococcal conjugate vaccine.

² Final (booster) dose of pneumococcal conjugate vaccine.

³ Uptake of 3 doses of meningococcal serogroup B (MenB) vaccine, scheduled at two, four and 12-13 months of age.

Table 5. Vaccine uptake in children reaching their 4th birthday between 01/01/19 and 31/03/19 and resident on 31/03/19. The proportion of children who have received all of these vaccines by their 4th birthday is also presented.

Area	Resident children			4 in 1 Preschool Booster ¹		HibMenC		MMR dose 2		Up to date in schedule ²	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB											
Bridgend LA	359	328	91.4	347	96.7	327	91.1	325	90.5		
Neath Port Talbot LA	368	324	88.0	353	95.9	321	87.2	320	87.0		
Swansea LA	618	552	89.3	588	95.1	551	89.2	544	88.0		
Health Board Total	1345	1204	89.5	1288	95.8	1199	89.1	1189	88.4		
Aneurin Bevan University HB											
Blaenau Gwent LA	199	171	85.9	193	97.0	171	85.9	170	85.4		
Caerphilly LA	496	422	85.1	472	95.2	423	85.3	417	84.1		
Monmouthshire LA	208	185	88.9	195	93.8	186	89.4	181	87.0		
Newport LA	512	432	84.4	470	91.8	430	84.0	419	81.8		
Torfaen LA	221	191	86.4	207	93.7	189	85.5	185	83.7		
Health Board Total	1636	1401	85.6	1537	93.9	1399	85.5	1372	83.9		
Betsi Cadwaladr University HB											
Anglesey LA	167	159	95.2	165	98.8	159	95.2	159	95.2		
Conwy LA	270	249	92.2	259	95.9	250	92.6	245	90.7		
Denbighshire LA	253	232	91.7	243	96.0	232	91.7	231	91.3		
Flintshire LA	364	335	92.0	354	97.3	333	91.5	330	90.7		
Gwynedd LA	261	240	92.0	252	96.6	238	91.2	234	89.7		
Wrexham LA	360	322	89.4	350	97.2	319	88.6	318	88.3		
Health Board Total	1675	1537	91.8	1623	96.9	1531	91.4	1517	90.6		
Cardiff and Vale University HB											
Cardiff LA	1056	940	89.0	1002	94.9	942	89.2	924	87.5		
Vale of Glamorgan LA	349	324	92.8	332	95.1	320	91.7	315	90.3		
Health Board Total	1405	1264	90.0	1334	94.9	1262	89.8	1239	88.2		
Cwm Taf University HB											
Merthyr Tydfil LA	178	160	89.9	174	97.8	162	91.0	159	89.3		
Rhondda Cynon Taf LA	667	595	89.2	646	96.9	593	88.9	587	88.0		
Health Board Total	845	755	89.3	820	97.0	755	89.3	746	88.3		
Hywel Dda University HB											
Carmarthenshire LA	478	425	88.9	456	95.4	419	87.7	414	86.6		
Ceredigion LA	171	152	88.9	158	92.4	151	88.3	149	87.1		
Pembrokeshire LA	330	275	83.3	298	90.3	275	83.3	272	82.4		
Health Board Total	979	852	87.0	912	93.2	845	86.3	835	85.3		
Powys Teaching HB											
Unknown	267	247	92.5	260	97.4	246	92.1	243	91.0		
Wales Total	8155	7261	89.0	7777	95.4	7238	88.8	7142	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. Vaccine uptake in children reaching their 5th birthday between 01/01/19 and 31/03/19 and resident on 31/03/19. The proportion of children who have received all of these vaccines by their 5th birthday is also presented.

Area	Resident children	4 in 1 Preschool Booster ¹		HibMenCb		MMR dose 2		Up to date in schedule ²	
		(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)
Abertawe Bro Morgannwg University HB									
Bridgend LA	386	360	93.3	379	98.2	357	92.5	355	92.0
Neath Port Talbot LA	357	330	92.4	345	96.6	329	92.2	325	91.0
Swansea LA	623	556	89.2	589	94.5	558	89.6	546	87.6
Health Board Total	1366	1246	91.2	1313	96.1	1244	91.1	1226	89.8
Aneurin Bevan University HB									
Blaenau Gwent LA	220	208	94.5	216	98.2	208	94.5	207	94.1
Caerphilly LA	530	498	94.0	515	97.2	496	93.6	487	91.9
Monmouthshire LA	231	219	94.8	220	95.2	216	93.5	211	91.3
Newport LA	476	431	90.5	438	92.0	434	91.2	410	86.1
Torfaen LA	268	255	95.1	261	97.4	254	94.8	250	93.3
Health Board Total	1725	1611	93.4	1650	95.7	1608	93.2	1565	90.7
Betsi Cadwaladr University HB									
Anglesey LA	178	172	96.6	173	97.2	170	95.5	169	94.9
Conwy LA	269	253	94.1	256	95.2	253	94.1	249	92.6
Denbighshire LA	301	282	93.7	290	96.3	279	92.7	278	92.4
Flintshire LA	400	378	94.5	384	96.0	375	93.8	372	93.0
Gwynedd LA	286	265	92.7	268	93.7	266	93.0	262	91.6
Wrexham LA	397	382	96.2	386	97.2	378	95.2	373	94.0
Health Board Total	1831	1732	94.6	1757	96.0	1721	94.0	1703	93.0
Cardiff and Vale University HB									
Cardiff LA	1095	997	91.1	1024	93.5	991	90.5	961	87.8
Vale of Glamorgan LA	343	318	92.7	329	95.9	316	92.1	311	90.7
Health Board Total	1438	1315	91.4	1353	94.1	1307	90.9	1272	88.5
Cwm Taf University HB									
Merthyr Tydfil LA	164	153	93.3	160	97.6	151	92.1	151	92.1
Rhondda Cynon Taf LA	696	656	94.3	680	97.7	656	94.3	648	93.1
Health Board Total	860	809	94.1	840	97.7	807	93.8	799	92.9
Hywel Dda University HB									
Carmarthenshire LA	506	461	91.1	473	93.5	453	89.5	441	87.2
Ceredigion LA	164	151	92.1	151	92.1	149	90.9	147	89.6
Pembrokeshire LA	321	297	92.5	307	95.6	296	92.2	294	91.6
Health Board Total	991	909	91.7	931	93.9	898	90.6	882	89.0
Powys Teaching HB	315	298	94.6	302	95.9	292	92.7	289	91.7
Unknown	18	18	100.0	18	100.0	17	94.4	17	94.4
Wales Total	8544	7938	92.9	8164	95.6	7894	92.4	7753	90.7

¹ Uptake of acellular pertussis used as proxy

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

Table 7. Vaccine uptake in children reaching their 5th birthday between 01/01/19 and 31/03/19 and resident on 31/03/19.

Area	Resident children		D3		T3		P3		Po3		Hib3		MenC ¹		PCVf ²		HibMenC		MMR1		MMR2		D4		T4		aP		Po4		
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)												
Abertawe Bro Morgannwg University HB																															
Bridgend LA	386	379	98.2	379	98.2	379	98.2	378	97.9	379	98.2	371	96.1	371	96.1	379	98.2	379	98.2	357	92.5	361	93.5	360	93.3	360	93.3	360	93.3		
Neath Port Talbot LA	357	355	99.4	355	99.4	355	99.4	355	99.4	355	99.4	353	98.9	341	95.5	345	96.6	349	97.8	329	92.2	330	92.4	330	92.4	330	92.4	330	92.4		
Swansea LA	623	609	97.8	609	97.8	609	97.8	607	97.4	608	97.6	590	94.7	592	95	589	94.5	602	96.6	558	89.6	556	89.2	556	89.2	556	89.2	556	89.2		
Health Board Total	1366	1343	98.3	1343	98.3	1343	98.3	1340	98.1	1342	98.2	1314	96.2	1304	95.5	1313	96.1	1330	97.4	1244	91.1	1247	91.3	1246	91.2	1246	91.2	1246	91.2		
Aneurin Bevan University HB																															
Blaenau Gwent LA	220	218	99.1	218	99.1	218	99.1	218	99.1	216	98.2	216	98.2	216	98.2	217	98.6	208	94.5	208	94.5	208	94.5	208	94.5	208	94.5	208	94.5		
Caerphilly LA	530	523	98.7	523	98.7	523	98.7	523	98.7	518	97.7	513	96.8	515	97.2	522	98.5	496	93.6	498	94.0	498	94.0	498	94.0	498	94.0	498	94.0		
Monmouthshire LA	231	224	97.0	224	97.0	224	97.0	224	97.0	224	97.0	217	93.9	220	95.2	220	95.2	222	96.1	216	93.5	219	94.8	219	94.8	219	94.8	219	94.8		
Newport LA	476	459	96.4	459	96.4	459	96.4	459	96.4	448	94.1	437	91.8	438	92.0	465	97.7	434	91.2	431	90.5	431	90.5	431	90.5	432	90.8				
Torfaen LA	268	266	99.3	266	99.3	266	99.3	266	99.3	264	98.5	259	96.6	261	97.4	263	98.1	254	94.8	255	95.1	255	95.1	255	95.1	255	95.1	255	95.1		
Health Board Total	1725	1690	98.0	1690	98.0	1690	98.0	1690	98.0	1663	96.4	1645	95.4	1650	95.7	1689	97.9	1608	93.2	1611	93.4	1611	93.4	1612	93.4						
Betsi Cadwaladr University HB																															
Anglesey LA	178	174	97.8	174	97.8	174	97.8	174	97.8	174	97.8	173	97.2	172	96.6	173	97.2	172	96.6	170	95.5	172	96.6	172	96.6	172	96.6	172	96.6		
Conwy LA	269	261	97.0	261	97.0	261	97.0	261	97.0	261	97.0	259	96.3	257	95.5	256	95.2	260	96.7	253	94.1	253	94.1	253	94.1	253	94.1	253	94.1		
Denbighshire LA	301	294	97.7	294	97.7	294	97.7	294	97.7	294	97.7	284	94.4	288	95.7	290	96.3	292	97.0	279	92.7	282	93.7	282	93.7	282	93.7	282	93.7		
Flintshire LA	400	389	97.3	389	97.3	389	97.3	389	97.3	389	97.3	373	93.3	382	95.5	384	96.0	388	97.0	375	93.8	378	94.5	378	94.5	378	94.5	378	94.5		
Gwynedd LA	286	270	94.4	270	94.4	270	94.4	271	94.8	270	94.4	260	90.9	263	92	268	93.7	271	94.8	266	93.0	265	92.7	265	92.7	265	92.7	265	92.7		
Wrexham LA	397	392	98.7	392	98.7	392	98.7	392	98.7	392	98.7	381	96.0	387	97.5	386	97.2	390	98.2	378	95.2	382	96.2	382	96.2	382	96.2	382	96.2		
Health Board Total	1831	1780	97.2	1780	97.2	1780	97.2	1781	97.3	1780	97.2	1730	94.5	1749	95.5	1757	96.0	1773	96.8	1721	94.0	1732	94.6	1732	94.6	1732	94.6	1732	94.6		
Cardiff and Vale University HB																															
Cardiff LA	1095	1058	96.6	1057	96.5	1058	96.6	1057	96.5	1057	96.5	1001	91.4	1007	92	1024	93.5	1057	96.5	991	90.5	997	91.1	997	91.1	997	91.1	998	91.1		
Vale of Glamorgan LA	343	334	97.4	334	97.4	334	97.4	332	96.8	333	97.1	326	95.0	333	97.1	329	95.9	333	97.1	316	92.1	318	92.7	318	92.7	318	92.7	318	92.7		
Health Board Total	1438	1392	96.8	1391	96.7	1392	96.8	1389	96.6	1390	96.7	1327	92.3	1340	93.2	1353	94.1	1390	96.7	1307	90.9	1315	91.4	1315	91.4	1316	91.5				
Cwm Taf University HB																															
Merthyr Tydfil LA	164	159	97.0	159	97.0	159	97.0	159	97.0	159	97.0	158	96.3	159	97	160	97.6	160	97.6	151	92.1	153	93.3	153	93.3	153	93.3	153	93.3		
Rhondda Cynon Taf LA	696	688	98.9	688	98.9	688	98.9	688	98.9	687	98.7	677	97.3	682	98	680	97.7	688	98.9	656	94.3	657	94.4	656	94.3	656	94.3	656	94.3		
Health Board Total	860	847	98.5	847	98.5	847	98.5	847	98.5	846	98.4	835	97.1	841	97.8	840	97.7	848	98.6	807	93.8	810	94.2	810	94.2	809	94.1	809	94.1		
Hywel Dda University HB																															
Carmarthenshire LA	506	486	96.0	486	96.0	486	96.0	485	95.8	486	96.0	477	94.3	471	93.1	473	93.5	486	96.0	453	89.5	461	91.1	461	91.1	461	91.1	461	91.1		
Ceredigion LA	164	156	95.1	156	95.1	156	95.1	155	94.5	156	95.1	147	89.6	149	90.9	151	92.1	153	93.3	149	90.9	151	92.1	151	92.1	151	92.1	151	92.1		
Pembrokeshire LA	321	312	97.2	312	97.2	312	97.2	312	97.2	312	97.2	303	94.4	306	95.3	307	95.6	310	96.6	296	92.2	297	92.5	297	92.5	297	92.5	297	92.5		
Health Board Total	991	954	96.3	954	96.3	954	96.3	952	96.1	954	96.3	927	93.5	926	93.4	931	93.9	949	95.8	898	90.6	909	91.7	909	91.7	909	91.7	909	91.7		
Powys Teaching HB	315	305	96.8	305	96.8	305	96.8	305	96.8	302	95.9	297	94.3	302	95.9	306	97.1	292	92.7	298	94.6										
Unknown	18	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	18	100.0	17	94.4	17	94.4	18	100.0	18	100.0	18	100.0		
Wales Total	8544	8328	97.5	8327	97.5	8328	97.5	8321	97.4	8324	97.4	8115	95.0	8119	95	8164	95.6	8302	97.2	7894	92.4	7940	92.9	7939	92.9	7938	92.9	7940	92.9		

Table 8. Uptake of HPV vaccine in girls reaching 13, 14 and 15 years of age between 01/09/18 and 31/08/19 and resident on 31/03/19.

Area	13 years (2018-19 School Year 8) ¹			14 years (2018-19 School Year 9) ¹				15 years (2018-19 School Year 10)					
	Resident girls (n)	(n)	(%)	Resident girls (n)	(n)	(%)	HPV 2 dose (n)	(%)	Resident girls (n)	(n)	(%)	HPV 2 dose (n)	(%)
Abertawe Bro Morgannwg University HB													
Bridgend LA	799	416	52.1	798	714	89.5	371	46.5	810	752	92.8	693	85.6
Neath Port Talbot LA	816	723	88.6	825	773	93.7	708	85.8	749	709	94.7	671	89.6
Swansea LA	1290	1131	87.7	1215	1086	89.4	1008	83.0	1233	1138	92.3	1105	89.6
Health Board Total	2905	2270	78.1	2838	2573	90.7	2087	73.5	2792	2599	93.1	2469	88.4
Aneurin Bevan University HB													
Blaenau Gwent LA	408	18	4.4	342	283	82.7	16	4.7	374	329	88.0	278	74.3
Caerphilly LA	1023	8	0.8	1021	877	85.9	11	1.1	1017	918	90.3	801	78.8
Monmouthshire LA	504	16	3.2	506	393	77.7	26	5.1	545	447	82.0	372	68.3
Newport LA	941	6	0.6	972	745	76.6	2	0.2	914	748	81.8	630	68.9
Torfaen LA	554	4	0.7	548	445	81.2	2	0.4	492	438	89.0	374	76.0
Health Board Total	3430	52	1.5	3389	2743	80.9	57	1.7	3342	2880	86.2	2455	73.5
Betsi Cadwaladr University HB													
Anglesey LA	337	267	79.2	341	290	85.0	193	56.6	345	310	89.9	286	82.9
Conwy LA	589	164	27.8	532	467	87.8	138	25.9	576	521	90.5	476	82.6
Denbighshire LA	541	137	25.3	533	448	84.1	114	21.4	511	435	85.1	388	75.9
Flintshire LA	820	402	49.0	809	717	88.6	329	40.7	796	731	91.8	689	86.6
Gwynedd LA	676	515	76.2	642	558	86.9	422	65.7	533	475	89.1	460	86.3
Wrexham LA	757	383	50.6	733	653	89.1	405	55.3	693	617	89.0	580	83.7
Health Board Total	3720	1868	50.2	3590	3133	87.3	1601	44.6	3454	3089	89.4	2879	83.4
Cardiff and Vale University HB													
Cardiff LA	2039	857	42.0	2002	1726	86.2	922	46.1	1881	1641	87.2	1448	77.0
Vale of Glamorgan LA	734	455	62.0	746	671	89.9	440	59.0	737	667	90.5	638	86.6
Health Board Total	2773	1312	47.3	2748	2397	87.2	1362	49.6	2618	2308	88.2	2086	79.7
Cwm Taf University HB													
Merthyr Tydfil LA	315	3	1.0	353	314	89.0	6	1.7	316	293	92.7	276	87.3
Rhondda Cynon Taf LA	1392	29	2.1	1392	1271	91.3	39	2.8	1309	1238	94.6	1166	89.1
Health Board Total	1707	32	1.9	1745	1585	90.8	45	2.6	1625	1531	94.2	1442	88.7
Hywel Dda University HB													
Carmarthenshire LA	986	167	16.9	984	897	91.2	189	19.2	978	890	91.0	831	85.0
Ceredigion LA	299	1	0.3	283	240	84.8	4	1.4	326	282	86.5	266	81.6
Pembrokeshire LA	645	516	80.0	608	532	87.5	475	78.1	630	539	85.6	505	80.2
Health Board Total	1930	684	35.4	1875	1669	89.0	668	35.6	1934	1711	88.5	1602	82.8
Powys Teaching HB	640	46	7.2	652	543	83.3	55	8.4	659	565	85.7	541	82.1
Unknown	47	14	29.8	44	37	84.1	12	27.3	48	40	83.3	39	81.3
Wales Total	17152	6278	36.6	16881	14680	87.0	5887	34.9	16472	14723	89.4	13513	82.0

¹ Timings of HPV immunisation sessions vary between HBs and uptake will increase over the next three quarters as more immunisation sessions take place.

Table 9. Uptake of MenACWY vaccine in teenagers reaching 14, 15, 16 and 17 years of age between 01/09/18 and 31/08/19 and resident on 31/03/19.

Area	14 years (2018-19 School Year 9) ¹			15 years (2018-19 School Year 10)			16 years (2018-19 School Year 11) ¹			17 years (2018-19 School Year 12)		
	Resident children (n)	(n)	(%)	Resident children (n)	(n)	(%)	Resident children (n)	(n)	(%)	Resident children (n)	(n)	(%)
Abertawe Bro Morgannwg University HB												
Bridgend LA	1703	21	1.2	1588	1347	84.8	1562	1395	89.3	1521	1371	90.1
Neath Port Talbot LA	1675	1127	67.3	1518	1375	90.6	1438	1286	89.4	1466	1347	91.9
Swansea LA	2617	1903	72.7	2600	2355	90.6	2604	2310	88.7	2514	2244	89.3
Health Board Total	5995	3051	50.9	5706	5077	89.0	5604	4991	89.1	5501	4962	90.2
Aneurin Bevan University HB												
Blaenau Gwent LA	685	555	81.0	754	664	88.1	689	594	86.2	710	635	89.4
Caerphilly LA	2088	1697	81.3	2147	1802	83.9	2097	1779	84.8	2022	1736	85.9
Monmouthshire LA	1065	684	64.2	1149	898	78.2	1118	900	80.5	1064	808	75.9
Newport LA	1939	1444	74.5	1910	1511	79.1	1872	1485	79.3	1864	1475	79.1
Torfaen LA	1123	750	66.8	1009	894	88.6	982	832	84.7	1020	886	86.9
Health Board Total	6900	5130	74.3	6969	5769	82.8	6758	5590	82.7	6680	5540	82.9
Betsi Cadwaladr University HB												
Anglesey LA	703	476	67.7	730	598	81.9	704	594	84.4	730	607	83.2
Conwy LA	1165	925	79.4	1167	1000	85.7	1153	1048	90.9	1138	1005	88.3
Denbighshire LA	1108	543	49.0	1079	864	80.1	1052	878	83.5	1132	891	78.7
Flintshire LA	1646	607	36.9	1665	1350	81.1	1499	1282	85.5	1586	1317	83.0
Gwynedd LA	1264	830	65.7	1165	978	83.9	1177	1030	87.5	1171	1006	85.9
Wrexham LA	1490	718	48.2	1438	1198	83.3	1426	1203	84.4	1322	1129	85.4
Health Board Total	7376	4099	55.6	7244	5988	82.7	7011	6035	86.1	7079	5955	84.1
Cardiff and Vale University HB												
Cardiff LA	4024	2657	66.0	3790	2728	72.0	3802	2819	74.1	3667	2122	57.9
Vale of Glamorgan LA	1498	1090	72.8	1435	1183	82.4	1482	1200	81.0	1349	901	66.8
Health Board Total	5522	3747	67.9	5225	3911	74.9	5284	4019	76.1	5016	3023	60.3
Cwm Taf University HB												
Merthyr Tydfil LA	710	603	84.9	663	587	88.5	667	600	90.0	621	565	91.0
Rhondda Cynon Taf LA	2856	2436	85.3	2668	2458	92.1	2818	2546	90.3	2544	2336	91.8
Health Board Total	3566	3039	85.2	3331	3045	91.4	3485	3146	90.3	3165	2901	91.7
Hywel Dda University HB												
Carmarthenshire LA	2011	158	7.9	2000	1730	86.5	2056	1811	88.1	2033	1813	89.2
Ceredigion LA	646	4	0.6	675	596	88.3	619	533	86.1	586	508	86.7
Pembrokeshire LA	1240	108	8.7	1258	1044	83.0	1226	985	80.3	1167	905	77.5
Health Board Total	3897	270	6.9	3933	3370	85.7	3901	3329	85.3	3786	3226	85.2
Powys Teaching HB	1354	1078	79.6	1336	1134	84.9	1329	1135	85.4	1274	1107	86.9
Unknown	98	56	57.1	111	91	82.0	92	74	80.4	94	82	87.2
Wales Total	34708	20470	59.0	33855	28385	83.8	33464	28319	84.6	32595	26796	82.2

¹ Timings of MenACWY immunisation sessions vary between HBs and uptake will increase over the next three quarters as more immunisation sessions take place.

Table 10. MMR, Td/IPV and MenACWY vaccine uptake in children in 2018-19 school year 9 reaching their 14th birthday between 01/09/18 and 31/08/19 and resident on 31/03/19, with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		Teenage 3 in						Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)		
	MMR1	MMR2	1 booster ^{1,2}		MenACWY ²		(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Abertawe Bro Morgannwg University HB																					
Bridgend LA	1703	1622	95.2	1548	90.9	20	1.2	21	1.2	798	763	95.6	735	92.1	905	859	94.9	813	89.8		
Neath Port Talbot LA	1675	1588	94.8	1509	90.1	1122	67.0	1127	67.3	825	783	94.9	748	90.7	850	805	94.7	761	89.5		
Swansea LA	2617	2441	93.3	2340	89.4	1897	72.5	1903	72.7	1215	1133	93.3	1084	89.2	1402	1308	93.3	1256	89.6		
Health Board Total	5995	5651	94.3	5397	90.0	3039	50.7	3051	50.9	2838	2679	94.4	2567	90.5	3157	2972	94.1	2830	89.6		
Aneurin Bevan University HB																					
Blaenau Gwent LA	685	669	97.7	648	94.6	557	81.3	555	81.0	342	333	97.4	326	95.3	343	336	98.0	322	93.9		
Caerphilly LA	2088	2035	97.5	1977	94.7	1694	81.1	1697	81.3	1021	1001	98.0	977	95.7	1067	1034	96.9	1000	93.7		
Monmouthshire LA	1065	1002	94.1	967	90.8	680	63.8	684	64.2	506	481	95.1	460	90.9	559	521	93.2	507	90.7		
Newport LA	1939	1853	95.6	1781	91.9	1442	74.4	1444	74.5	972	932	95.9	899	92.5	964	919	95.3	882	91.5		
Torfaen LA	1123	1098	97.8	1071	95.4	765	68.1	750	66.8	548	533	97.3	524	95.6	575	565	98.3	547	95.1		
Health Board Total	6900	6657	96.5	6444	93.4	5138	74.5	5130	74.3	3389	3280	96.8	3186	94.0	3508	3375	96.2	3258	92.9		
Betsi Cadwaladr University HB																					
Anglesey LA	703	660	93.9	642	91.3	485	69.0	476	67.7	341	320	93.8	311	91.2	362	340	93.9	331	91.4		
Conwy LA	1165	1103	94.7	1066	91.5	919	78.9	925	79.4	532	504	94.7	488	91.7	633	599	94.6	578	91.3		
Denbighshire LA	1108	1026	92.6	983	88.7	544	49.1	543	49.0	533	494	92.7	473	88.7	575	532	92.5	510	88.7		
Flintshire LA	1646	1553	94.3	1501	91.2	631	38.3	607	36.9	809	764	94.4	738	91.2	837	789	94.3	763	91.2		
Gwynedd LA	1264	1207	95.5	1177	93.1	834	66.0	830	65.7	642	616	96.0	597	93.0	622	591	95.0	580	93.2		
Wrexham LA	1490	1433	96.2	1380	92.6	728	48.9	718	48.2	733	701	95.6	665	90.7	757	732	96.7	715	94.5		
Health Board Total	7376	6982	94.7	6749	91.5	4141	56.1	4099	55.6	3590	3399	94.7	3272	91.1	3786	3583	94.6	3477	91.8		
Cardiff and Vale University HB																					
Cardiff LA	4024	3783	94.0	3579	88.9	2662	66.2	2657	66.0	2002	1899	94.9	1806	90.2	2021	1884	93.2	1773	87.7		
Vale of Glamorgan LA	1498	1434	95.7	1366	91.2	1096	73.2	1090	72.8	746	713	95.6	679	91.0	751	721	96.0	687	91.5		
Health Board Total	5522	5217	94.5	4945	89.6	3758	68.1	3747	67.9	2748	2612	95.1	2485	90.4	2772	2605	94.0	2460	88.7		
Cwm Taf University HB																					
Merthyr Tydfil LA	710	680	95.8	652	91.8	603	84.9	603	84.9	353	336	95.2	323	91.5	357	344	96.4	329	92.2		
Rhondda Cynon Taf LA	2856	2735	95.8	2626	91.9	2446	85.6	2436	85.3	1392	1337	96.0	1291	92.7	1463	1398	95.6	1335	91.3		
Health Board Total	3566	3415	95.8	3278	91.9	3049	85.5	3039	85.2	1745	1673	95.9	1614	92.5	1820	1742	95.7	1664	91.4		
Hywel Dda University HB																					
Carmarthenshire LA	2011	1885	93.7	1813	90.2	170	8.5	158	7.9	984	930	94.5	893	90.8	1027	955	93.0	920	89.6		
Ceredigion LA	646	601	93.0	584	90.4	7	1.1	4	0.6	283	262	92.6	253	89.4	363	339	93.4	331	91.2		
Pembrokeshire LA	1240	1157	93.3	1090	87.9	118	9.5	108	8.7	608	571	93.9	530	87.2	632	586	92.7	560	88.6		
Health Board Total	3897	3643	93.5	3487	89.5	295	7.6	270	6.9	1875	1763	94.0	1676	89.4	2022	1880	93.0	1811	89.6		
Powys Teaching HB																					
Unknown	98	90	91.8	86	87.8	57	58.2	56	57.1	44	41	93.2	40	90.9	54	49	90.7	46	85.2		
Wales Total	34708	32901	94.8	31575	91.0	20551	59.2	20470	59.0	16881	16057	95.1	15425	91.4	17821	16842	94.5	16150	90.6		

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

² Timings of immunisation sessions vary between HBs and uptake will increase over the next three quarters as more immunisation sessions take place.

Table 11. MMR, Td/IPV and MenACWY vaccine uptake in children in 2018-19 school year 10 reaching their 15th birthday between 01/09/18 and 31/08/19 and resident on 31/03/19, with breakdown of MMR1 and MMR2 coverage by sex.

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

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

Table 12. MMR, Td/IPV and MenACWY vaccine uptake in children in 2018-19 school year 11 reaching their 16th birthday between 01/09/18 and 31/08/19 and resident on 31/03/19, with breakdown of MMR1 and MMR2 coverage by sex

Area	Teenage 3 in										Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)	
	Resident children		MMR1		MMR2		1 booster ¹		MenACWY			(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)
Abertawe Bro Morgannwg University HB																				
Bridgend LA	1562	1475	94.4	1386	88.7	1381	88.4	1395	89.3	782	746	95.4	708	90.5	780	729	93.5	678	86.9	
Neath Port Talbot LA	1438	1384	96.2	1308	91.0	1265	88.0	1286	89.4	705	682	96.7	654	92.8	733	702	95.8	654	89.2	
Swansea LA	2604	2389	91.7	2255	86.6	2304	88.5	2310	88.7	1239	1130	91.2	1074	86.7	1365	1259	92.2	1181	86.5	
Health Board Total	5604	5248	93.6	4949	88.3	4950	88.3	4991	89.1	2726	2558	93.8	2436	89.4	2878	2690	93.5	2513	87.3	
Aneurin Bevan University HB																				
Blaenau Gwent LA	689	663	96.2	642	93.2	592	85.9	594	86.2	319	309	96.9	299	93.7	370	354	95.7	343	92.7	
Caerphilly LA	2097	2032	96.9	1954	93.2	1783	85.0	1779	84.8	985	949	96.3	919	93.3	1111	1083	97.5	1035	93.2	
Monmouthshire LA	1118	1025	91.7	977	87.4	891	79.7	900	80.5	556	512	92.1	481	86.5	562	513	91.3	496	88.3	
Newport LA	1872	1748	93.4	1653	88.3	1490	79.6	1485	79.3	904	854	94.5	816	90.3	965	894	92.6	837	86.7	
Torfaen LA	982	937	95.4	912	92.9	831	84.6	832	84.7	488	469	96.1	457	93.6	494	468	94.7	455	92.1	
Health Board Total	6758	6405	94.8	6138	90.8	5587	82.7	5590	82.7	3252	3093	95.1	2972	91.4	3502	3312	94.6	3166	90.4	
Betsi Cadwaladr University HB																				
Anglesey LA	704	675	95.9	655	93.0	593	84.2	594	84.4	339	330	97.3	321	94.7	365	345	94.5	334	91.5	
Conwy LA	1153	1087	94.3	1051	91.2	1046	90.7	1048	90.9	543	516	95.0	500	92.1	607	568	93.6	548	90.3	
Denbighshire LA	1052	967	91.9	924	87.8	869	82.6	878	83.5	496	454	91.5	436	87.9	555	513	92.4	488	87.9	
Flintshire LA	1499	1446	96.5	1394	93.0	1283	85.6	1282	85.5	725	703	97.0	678	93.5	774	743	96.0	716	92.5	
Gwynedd LA	1177	1147	97.5	1124	95.5	1029	87.4	1030	87.5	557	541	97.1	534	95.9	620	606	97.7	590	95.2	
Wrexham LA	1426	1366	95.8	1333	93.5	1198	84.0	1203	84.4	676	648	95.9	630	93.2	750	718	95.7	703	93.7	
Health Board Total	7011	6688	95.4	6481	92.4	6018	85.8	6035	86.1	3336	3192	95.7	3099	92.9	3671	3493	95.2	3379	92.0	
Cardiff and Vale University HB																				
Cardiff LA	3802	3483	91.6	3251	85.5	2812	74.0	2819	74.1	1855	1721	92.8	1616	87.1	1947	1762	90.5	1635	84.0	
Vale of Glamorgan LA	1482	1406	94.9	1329	89.7	1202	81.1	1200	81.0	705	666	94.5	625	88.7	777	740	95.2	704	90.6	
Health Board Total	5284	4889	92.5	4580	86.7	4014	76.0	4019	76.1	2560	2387	93.2	2241	87.5	2724	2502	91.9	2339	85.9	
Cwm Taf University HB																				
Merthyr Tydfil LA	667	622	93.3	589	88.3	599	89.8	600	90.0	332	315	94.9	300	90.4	335	307	91.6	289	86.3	
Rhondda Cynon Taf LA	2818	2679	95.1	2548	90.4	2536	90.0	2546	90.3	1394	1334	95.7	1280	91.8	1424	1345	94.5	1268	89.0	
Health Board Total	3485	3301	94.7	3137	90.0	3135	90.0	3146	90.3	1726	1649	95.5	1580	91.5	1759	1652	93.9	1557	88.5	
Hywel Dda University HB																				
Carmarthenshire LA	2056	1912	93.0	1866	90.8	1810	88.0	1811	88.1	1001	935	93.4	918	91.7	1055	977	92.6	948	89.9	
Ceredigion LA	619	587	94.8	564	91.1	536	86.6	533	86.1	296	280	94.6	269	90.9	323	307	95.0	295	91.3	
Pembrokeshire LA	1226	1159	94.5	1095	89.3	979	79.9	985	80.3	621	592	95.3	561	90.3	605	567	93.7	534	88.3	
Health Board Total	3901	3658	93.8	3525	90.4	3325	85.2	3329	85.3	1918	1807	94.2	1748	91.1	1983	1851	93.3	1777	89.6	
Powys Teaching HB																				
	1329	1240	93.3	1154	86.8	1124	84.6	1135	85.4	658	618	93.9	578	87.8	671	622	92.7	576	85.8	
Unknown	92	80	87.0	76	82.6	75	81.5	74	80.4	43	41	95.3	38	88.4	49	39	79.6	38	77.6	
Wales Total	33464	31509	94.2	30040	89.8	28228	84.4	28319	84.6	16219	15345	94.6	14692	90.6	17237	16161	93.8	15345	89.0	

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

Table 13. MMR, Td/IPV and MenACWY vaccine uptake in children reaching their 16th birthday between 01/01/19 and 31/03/19 and resident on 31/03/19, with breakdown of MMR1 and MMR2 coverage by sex

Area	Teenage 3 in										Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)		
	Resident children	MMR1		MMR2		1 booster ¹		MenACWY			(n)	(n)	(%)	(n)	(%)		(n)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB		(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)
Bridgend LA	344	322	93.6	305	88.7	302	87.8	305	88.7		163	152	93.3	142	87.1		181	170	93.9	163	90.1
Neath Port Talbot LA	330	320	97.0	300	90.9	296	89.7	302	91.5		157	152	96.8	143	91.1		173	168	97.1	157	90.8
Swansea LA	604	551	91.2	511	84.6	532	88.1	528	87.4		275	247	89.8	235	85.5		329	304	92.4	276	83.9
Health Board Total	1278	1193	93.3	1116	87.3	1130	88.4	1135	88.8		595	551	92.6	520	87.4		683	642	94.0	596	87.3
Aneurin Bevan University HB																					
Blaenau Gwent LA	155	149	96.1	145	93.5	139	89.7	140	90.3		75	73	97.3	71	94.7		80	76	95.0	74	92.5
Caerphilly LA	505	483	95.6	470	93.1	418	82.8	413	81.8		244	235	96.3	230	94.3		260	248	95.4	240	92.3
Monmouthshire LA	273	248	90.8	235	86.1	220	80.6	222	81.3		138	127	92.0	119	86.2		135	121	89.6	116	85.9
Newport LA	461	432	93.7	406	88.1	375	81.3	377	81.8		202	193	95.5	185	91.6		259	239	92.3	221	85.3
Torfaen LA	223	216	96.9	213	95.5	186	83.4	185	83.0		107	105	98.1	104	97.2		116	111	95.7	109	94.0
Health Board Total	1617	1528	94.5	1469	90.8	1338	82.7	1337	82.7		766	733	95.7	709	92.6		850	795	93.5	760	89.4
Betsi Cadwaladr University HB																					
Anglesey LA	155	150	96.8	141	91.0	135	87.1	133	85.8		73	72	98.6	66	90.4		82	78	95.1	75	91.5
Conwy LA	275	256	93.1	248	90.2	252	91.6	254	92.4		135	128	94.8	126	93.3		140	128	91.4	122	87.1
Denbighshire LA	266	251	94.4	237	89.1	218	82.0	218	82.0		138	131	94.9	128	92.8		128	120	93.8	109	85.2
Flintshire LA	349	333	95.4	322	92.3	298	85.4	296	84.8		164	156	95.1	152	92.7		185	177	95.7	170	91.9
Gwynedd LA	268	262	97.8	257	95.9	239	89.2	237	88.4		118	116	98.3	114	96.6		150	146	97.3	143	95.3
Wrexham LA	352	346	98.3	335	95.2	296	84.1	297	84.4		171	168	98.2	161	94.2		181	178	98.3	174	96.1
Health Board Total	1665	1598	96.0	1540	92.5	1438	86.4	1435	86.2		799	771	96.5	747	93.5		866	827	95.5	793	91.6
Cardiff and Vale University HB																					
Cardiff LA	892	812	91.0	747	83.7	665	74.6	664	74.4		423	387	91.5	361	85.3		469	425	90.6	386	82.3
Vale of Glamorgan LA	355	330	93.0	319	89.9	276	77.7	275	77.5		166	153	92.2	147	88.6		189	177	93.7	172	91.0
Health Board Total	1247	1142	91.6	1066	85.5	941	75.5	939	75.3		589	540	91.7	508	86.2		658	602	91.5	558	84.8
Cwm Taf University HB																					
Merthyr Tydfil LA	187	169	90.4	162	86.6	164	87.7	166	88.8		93	84	90.3	81	87.1		94	85	90.4	81	86.2
Rhondda Cynon Taf LA	682	647	94.9	623	91.3	604	88.6	609	89.3		342	328	95.9	318	93.0		340	319	93.8	305	89.7
Health Board Total	869	816	93.9	785	90.3	768	88.4	775	89.2		435	412	94.7	399	91.7		434	404	93.1	386	88.9
Hywel Dda University HB																					
Carmarthenshire LA	510	492	96.5	477	93.5	458	89.8	462	90.6		239	234	97.9	229	95.8		271	258	95.2	248	91.5
Ceredigion LA	166	160	96.4	152	91.6	150	90.4	149	89.8		73	72	98.6	70	95.9		93	88	94.6	82	88.2
Pembrokeshire LA	321	301	93.8	281	87.5	251	78.2	257	80.1		165	158	95.8	147	89.1		156	143	91.7	134	85.9
Health Board Total	997	953	95.6	910	91.3	859	86.2	868	87.1		477	464	97.3	446	93.5		520	489	94.0	464	89.2
Powys Teaching HB	317	294	92.7	274	86.4	265	83.6	268	84.5		150	142	94.7	134	89.3		167	152	91.0	140	83.8
Unknown	18	15	83.3	15	83.3	13	72.2	12	66.7		5	4	80.0	4	80.0		13	11	84.6	11	84.6
Wales Total	8008	7539	94.1	7175	89.6	6752	84.3	6769	84.5		3816	3617	94.8	3467	90.9		4191	3922	93.6	3708	88.5

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

Table 14. Uptake of BCG immunisation in children reaching their 1st, 2nd, 5th and 16th birthdays between 01/09/18 and 31/08/19 and resident on 31/03/19.¹

Area	1 yr BCG Immunised			2 yrs BCG Immunised			5 yrs BCG Immunised			16 yrs BCG Immunised		
	Resident children	(n)	(n) (%)	Resident children	(n)	(n) (%)	Resident children	(n)	(n) (%)	Resident children	(n)	(n) (%)
Abertawe Bro Morgannwg University HB												
Bridgend LA	370	16	4.3	381	16	4.2	386	21	5.4	344	8	2.3
Neath Port Talbot LA	378	13	3.4	350	12	3.4	357	13	3.6	330	6	1.8
Swansea LA	593	55	9.3	580	84	14.5	623	74	11.9	604	28	4.6
Health Board Total	1341	84	6.3	1311	112	8.5	1366	108	7.9	1278	42	3.3
Aneurin Bevan University HB												
Blaenau Gwent LA	174	5	2.9	160	2	1.3	220	6	2.7	155	3	1.9
Caerphilly LA	471	13	2.8	457	6	1.3	530	13	2.5	505	5	1.0
Monmouthshire LA	194	6	3.1	183	11	6.0	231	7	3.0	273	1	0.4
Newport LA	454	85	18.7	510	57	11.2	476	65	13.7	461	41	8.9
Torfaen LA	229	5	2.2	261	6	2.3	268	8	3.0	223	1	0.4
Health Board Total	1522	114	7.5	1571	82	5.2	1725	99	5.7	1617	51	3.2
Betsi Cadwaladr University HB												
Anglesey LA	188	7	3.7	166	0	0.0	178	6	3.4	155	2	1.3
Conwy LA	237	13	5.5	263	13	4.9	269	16	5.9	275	12	4.4
Denbighshire LA	237	14	5.9	246	13	5.3	301	15	5.0	266	13	4.9
Flintshire LA	357	16	4.5	367	13	3.5	400	13	3.3	349	5	1.4
Gwynedd LA	298	11	3.7	292	10	3.4	286	16	5.6	268	6	2.2
Wrexham LA	350	21	6.0	361	26	7.2	397	27	6.8	352	11	3.1
Health Board Total	1667	82	4.9	1695	75	4.4	1831	93	5.1	1665	49	2.9
Cardiff and Vale University HB												
Cardiff LA	979	197	20.1	969	37	3.8	1095	207	18.9	892	167	18.7
Vale of Glamorgan LA	329	20	6.1	383	3	0.8	343	23	6.7	355	14	3.9
Health Board Total	1308	217	16.6	1352	40	3.0	1438	230	16.0	1247	181	14.5
Cwm Taf University HB												
Merthyr Tydfil LA	164	4	2.4	158	5	3.2	164	8	4.9	187	0	0.0
Rhondda Cynon Taf LA	576	31	5.4	608	23	3.8	696	34	4.9	682	14	2.1
Health Board Total	740	35	4.7	766	28	3.7	860	42	4.9	869	14	1.6
Hywel Dda University HB												
Carmarthenshire LA	453	10	2.2	446	17	3.8	506	23	4.5	510	17	3.3
Ceredigion LA	142	6	4.2	152	6	3.9	164	7	4.3	166	3	1.8
Pembrokeshire LA	282	9	3.2	299	3	1.0	321	7	2.2	321	5	1.6
Health Board Total	877	25	2.9	897	26	2.9	991	37	3.7	997	25	2.5
Powys Teaching Health Board												
Unknown	0	0	0.0	7	1	14.3	18	1	5.6	18	0	0.0
Wales Total	7710	563	7.3	7840	372	4.7	8544	619	7.2	8008	371	4.6

¹ Data reflects immunisations given and recorded on the NCCHD (following notifications to local Child Health Administration Offices), may be subject to under-reporting. BCG is not a routinely scheduled immunisation.

Table 15. Uptake of hepatitis B immunisation in children, reaching their 1st, 2nd, and 5th birthdays during between 01/09/18 and 31/08/19 and resident on 31/03/19, and percentage who are recorded as completing doses 1 to 4.¹

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
Abertawe Bro Morgannwg UHB	(n)	(n)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	
	1341	4	100.0	100.0	100.0	1311	1	100.0	100.0	100.0	-	1366	2	100.0	100.0	100.0	
Aneurin Bevan UHB	1522	3	100.0	100.0	100.0	1571	2	100.0	50.0	50.0	-	1725	1	100.0	100.0	100.0	
Betsi Cadwaladr UHB	1667	4	100.0	100.0	100.0	1695	3	100.0	100.0	100.0	100.0	1831	2	100.0	100.0	100.0	
Cardiff and Vale UHB	1308	6	100.0	100.0	100.0	1352	7	100.0	100.0	85.7	71.4	1438	3	100.0	100.0	100.0	
Cwm Taf UHB	740	0	-	-	-	766	0	-	-	-	-	860	0	-	-	-	
Hywel Dda UHB	877	0	-	-	-	897	0	-	-	-	-	991	0	-	-	-	
Powys Teaching HB	251	0	-	-	-	241	0	-	-	-	-	315	0	-	-	-	
Unknown	4	0	-	-	-	7	0	-	-	-	-	18	0	-	-	-	
Wales Total	7710	17	100.0	100.0	100.0	7840	13	100.0	92.3	84.6	61.5	8544	8	100.0	100.0	100.0	100.0

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. One year olds in this table would have been eligible for the new Hepatitis B containing "6 in 1" vaccine as part of the routine childhood immunisation schedule. The doses here for one year olds refer to the monovalent dose given at birth (dose 1), monovalent dose given at one month (dose 2) and dose due at two months (dose 3, now part of the "6 in 1" vaccine).