

Vaccine Uptake in Children in Wales January to March 2018

COVER 126: Wales May 2018

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 “5 in 1” vaccine was 95% or higher in six of the seven Health Boards (HB) and in 16 of 22 Local Authority (LA) areas.
- Uptake of the complete three dose course of MenB vaccine in two year olds was slightly below 95% this quarter. Four HB and 14 LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children was slightly below 95% again this quarter. Four HBs and 14 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 decreased to 86% this quarter and was 88% in five year olds.
- Vaccination sessions for the first dose of the Human Papillomavirus vaccine (HPV) schedule in girls in the 2017-18 school year 8 (12-13 year olds), and for the second dose of the HPV schedule in girls in the 2017-18 school year 9 (13-14 year olds) are currently underway. Uptake of these immunisations is expected to increase over the next two quarters as more vaccination sessions take place. Uptake of one dose of HPV in 2017-18 school year 9 (13-14 year olds) is currently 87%. In girls in the 2017-18 school year 10 (14-15 year olds), uptake of one dose was 89% and uptake of two doses was 83%.
- Uptake of routine MenACWY vaccine in the 2017-18 school year 9 cohort (in progress) is currently 49%. Coverage of the MenACWY vaccine in the 2017-18 school year 10 cohort was 83%.
- Uptake of the Td/IPV teenage booster in the 2017-18 school year 9 cohort (in progress) is currently 49%. Coverage of the Td/IPV teenage booster in the 2017-18 school year 10 was 83%.
- Coverage of one dose of MMR vaccine in the 2017-18 school year 10 (age 14-15 years) was 93%, coverage of two doses was 88%.
- Coverage of one dose of MMR vaccine in the 2017-18 school year 11 (age 15-16 years) was 93%, coverage of two doses was 87%.

Background

These results are for children living in Wales in March 2018 and reaching their first, second, fourth, fifth and 16th birthdays during the quarter 01/01/2018 to 31/03/2018. Uptake of key immunisation in older children, which are mainly provided through school based programmes in all areas other than Cardiff and Vale University Health Board, are presented as school year cohorts (children reaching their 14th, 15th and 16th birthdays between 01/09/2017 and 31/08/2018). 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. All children referred to in this report would have been too old to have been eligible for the recent inclusion of hepatitis B vaccination in the universal childhood schedule. 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>

Findings

1. Uptake of all three doses of the combined “5 in 1” DTaP/IPV/Hib¹ vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday increased to 96.2% this quarter from 95.8% last quarter. Uptake ranged by HB from 93.6% (Hywel Dda) to 97.7% (Cwm Taf) and by LA from 93.4 % (Carmarthenshire) to 99.4% (Blaenau Gwent). Six of the seven HBs and 16 of the 22 LA areas achieved the target 95% uptake (Figures 1, 2 and 5, Tables 2 and 3).
2. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV2) in children reaching their first birthday was 96.2% this quarter compared to 95.9% last quarter, ranging by LA from 92.7% (Carmarthenshire) to 98.9% (Wrexham). Six of the seven HBs and 18 of the 22 LA areas achieved the target 95% uptake (Figures 1 and 2, 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 95.7% this quarter. Uptake in HBs ranged from 93.6% (Hywel Dda) to 97.2% (Cwm Taf) and ranged by LA from 92.3% (Carmarthenshire) to 98.9% (Wrexham) (Figures 1 and 2, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday increased to 94.5% this quarter from 94.0% last quarter. Uptake in HBs ranged from 91.4% (Hywel Dda) to 96.9% (Cwm Taf) and ranged by LA from 86.5% (Ceredigion) to 98.2% (Anglesey) (Figures 1 and 2, 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) was 94.9% this quarter compared to 94.6% last quarter. Uptake ranged by HB from 92.7% (Cardiff and Vale) to 95.9% (Betsi Cadwaladr) and by LA area from 92.1% (Cardiff) to 99.4% (Anglesey). Four HBs and 14 LA areas achieved the target of 95% uptake (Figures 1, 2 and 6, Tables 2 and 4).
6. Uptake of the complete three dose course of MenB vaccine in children reaching their second birthday was 94.7% this quarter. Uptake ranged by HB from 91.4% (Cardiff and Vale) to 96.1% (Cwm Taf) and by LA from 90.7% (Cardiff) to 98.2% (Anglesey). Four of the seven HBs and 14 of the 22 LA areas achieved the target 95% uptake (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 increased to 95.5% this quarter from 95.2% last quarter. Uptake ranged by HB from 93.1% (Cardiff and Vale) to 96.5 (Aneurin Bevan and Cwm Taf) and ranged by LA from 92.7% (Cardiff) to 98.8% (Anglesey). Five HBs and 16 LA areas achieved an uptake of 95% or over (Figure 2, 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 was 94.9% this quarter compared to 94.6% last quarter. Uptake ranged by HB from 92.2% (Cardiff and Vale) to 96.0% (Betsi Cadwaladr and Cwm Taf), and ranged by LA from 91.5% (Cardiff) to 98.8% (Anglesey). Four HBs and 13 LA areas achieved uptakes in excess of 95% (Figures 1 and 2, 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 94.2%
 - Two doses of MMR was 87.0%

The proportion of children who were up to date with all these routine immunisations at four years of age decreased to 85.7% this quarter, compared to 86.7% last quarter. This ranged by HB from 83.4% (Aneurin Bevan) to 89.8% (Cwm Taf) and by LA from 76.9% (Newport) to 92.4% (Merthyr Tydfil) (Figures 3 and 4, Tables 1, 2 and 5).

¹ DTaP/IPV/Hib vaccine protects against Diphtheria, Tetanus, Pertussis (Whooping Cough), Polio and Hib 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 5th birthday was 87.6% this quarter, a decrease from 88.1% last quarter. This ranged by HB from 84.6% (Cardiff and Vale) to 90.7% (Betsi Cadwaladr) (Table 6). There has been an improvement of 2.7% in the proportion up to date in this cohort of children since we reported on them, aged four years, this time last year.
11. In children reaching five years of age this quarter, coverage of one dose of MMR decreased to 96.5%, from 96.7% last quarter. Uptake of two doses of MMR decreased to 89.3%, compared to 89.9%, last quarter. Uptake of two doses of MMR ranged by HB from 87.1% (Cardiff and Vale) to 91.8% (Betsi Cadwaladr) and by LA from 85.2% (Pembrokeshire) to 93.5% (Caerphilly) (Figures 1, 2 and 7, Tables 2, 6 and 7).
12. Uptake of the “4 in 1” DTaP/IPV⁴ pre-school booster in children reaching their fifth birthday decreased to 92.1% this quarter compared to 92.5% in the previous quarter, ranging by HB from 90.1% (Cardiff and Vale) to 95.3% (Betsi Cadwaladr) and by LA from 87.2% (Newport) to 97.0% (Flintshire). One of the seven HBs, and four of the 22 LAs achieved the 95% uptake target (Figure 8, Tables 2, 6 and 7).
13. Vaccination uptake for children reaching 5 years of age is currently undergoing enhanced quality assurance checks. These figures should be interpreted with caution (Table 2, Table 6 and Table 7).
14. Uptake of the first dose of HPV vaccine for girls in the 2017-18 school year 8 group (turning 13 years of age during 01/09/17 to 31/08/18) is currently 40.4%. Coverage of the first dose in the 2017-18 school year 9 is currently 86.6% and uptake of the second dose in this age group is currently 39.0%. Timings of school vaccination sessions vary throughout the year and vaccination sessions for girls in the 2017-18 school year 8 group (dose one) and 2017-18 school year 9 (dose two) are currently underway. Coverage of a complete two dose course of HPV vaccine in 2017-18 school year 10 girls (girls reaching their 15th birthday during 01/09/17 to 31/08/18) is currently 83.0% (Table 8).
15. Current uptake of the MenACWY vaccine in the 2017-18 routine school year 9 cohort is 49.0%, vaccination sessions are currently underway (Table 9 and Table 10). Coverage in the 2017-18 school years 10, 11 and 12, is currently 83.4%, 81.6% and 79.9% respectively (Table 9).
16. Uptake of the Td/IPV⁴ teenage booster in the 2017-18 school year 9 (children reaching 14 years of age) is currently 48.9%. Coverage of two doses of MMR in this year group is currently 88.7% and coverage of one dose is currently 92.9%. Coverage of two doses of MMR vaccine ranged by HB from 81.1% (Powys) to 91.2% (Cwm Taf). Coverage of a full course of immunisation against rubella (two doses of MMR) in 14 year old girls in this school year group was 88.6% (Table 10).
17. Coverage of the Td/IPV teenage booster in the 2017-18 school year 10 group (children reaching 15 years of age) was 83.0%. Coverage ranged by HB from 73.9% (Cardiff and Vale) to 89.4% (Cwm Taf). Coverage of two doses of MMR in this year group was 88.0% and coverage of one dose was 92.8%. Coverage of two doses of MMR vaccine ranged by HB from 78.3% (Powys) to 90.3% (Betsi Cadwaladr). Coverage of a full course of immunisation against rubella (two doses of MMR) in 15 year old girls in this school year group was 88.5% (Table 11).
18. Coverage of the Td/IPV teenage booster in the 2017-18 school year 11 group (children reaching 16 years of age) was 84.2%. Coverage ranged by HB from 74.8% (Cardiff and Vale) to 91.5% (Cwm Taf). Coverage of two doses of MMR in this year group was 87.4% and coverage of one dose was 92.5%. Coverage of two doses of MMR vaccine ranged by HB from 82.0% (Powys) to 90.3% (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 88.1% (Table 12).
19. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st January 2018 and 31st March 2018) increased to 87.6% this quarter, compared to 86.9% for the previous quarter. Coverage of one dose of MMR increased to 92.7% this quarter,

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

compared to 92.3% last quarter. Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls increased this quarter to 88.4% from 87.5% last quarter. National coverage of the Td/IPV teenage booster in children reaching 16 years of age remained stable at 84.2% this quarter compared to 83.8% last quarter (Figures 1 and 2, Tables 2 and 13).

- 20.** Uptake of BCG⁵ 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 4.5%, 6.1%, 5.7% and 5.2% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter one of 2018. This quarter Swansea LA had the highest proportions of children given BCG by one year of age (14.4%) and Newport LA by two years of age (14.3%).⁵
- 21.** 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 64.3%. 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 57.1%. 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 hepatitis B immunisation.

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

Comment

Uptake of all routine primary immunisations in infants reaching their first birthday this quarter remains at 95% or higher, excluding rotavirus (which can't be given beyond 24 weeks of age). This is the third quarterly COVER report to include uptake figures for the third scheduled dose of meningococcal group B vaccine at two years of age, and uptake remained slightly under 95%.

National uptake of MMR vaccination in two year olds also remains slightly below 95% although there was an increase compared to children reported on in the previous quarter. Uptake of two doses of MMR vaccine at four and five years were both below 90% this quarter with only one Health Board achieving uptake over 90% for five year olds and no Health Boards achieving uptake over 90% for four year olds. There was a decrease in children up to date with all routine immunisations at four years of age this quarter but uptake remains higher than seen throughout most of 2017. Uptake of all routine immunisations at five years of age has also decreased. Uptake of two doses of MMR remains the lowest of all immunisations included in this composite measure, for both age groups.

The measles outbreak declared on the 6th March 2018 is ongoing, as at 28th March there were 14 confirmed cases [1]. National coverage of two MMR doses remains suboptimal and a large number of children, teenagers and young adults in Wales continue to be potentially susceptible to measles virus. As summer approaches, individuals should make sure they have received two doses of MMR as there is a continued risk of measles being imported from ongoing outbreak areas and of transmission at mass gathering events such as festivals [2, 3]. Checking of MMR status at all points of contact with school nurses and health care workers in general practice is encouraged, as is opportunistic catch-up of individuals who have missed vaccinations.

Vaccination sessions for the MenACWY and the '3 in 1' Td/IPV booster vaccines that are mainly given through school based programmes during school year 9 are currently under way. Uptake of these vaccines in the current 2017-18 school year 10 group remain under 85% but are higher than uptake of these vaccinations in the 2016-17 school year 10 group at the same time last year. However, uptake of two doses of HPV vaccine in 2017-18 school year 10 girls is lower than uptake of the HPV vaccination in 2016-17 school year 10 girls at the same time last year, by 1.7% and 2.8% for dose one and two, respectively.

References

- [1] Public Health Wales news. 28 March 2018. <http://howis.wales.nhs.uk/sitesplus/888/news/59618>
- [2] Currie J, Davies L, McCarthy J, Perry M, Moore C, Cottrell S, Bowley M, Williams C, Shankar A G, Stiff R. (2017) Measles outbreak linked to European B3 outbreaks, Wales, United Kingdom. Eurosurveillance. <http://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2017.22.42.17-00673>
- [3] le Polain de Waroux O, Saliba V, Cottrell S, Young N, Perry M, Bukasa A, Ramsay M, Brown K, Amirthalingam G. Summer music and arts festivals as hot spots for measles transmission: experience from England and Wales, June to October 2016. Euro Surveill. 2016;21(44):pii=30390. DOI: <http://dx.doi.org/10.2807/1560-7917.ES.2016.21.44.30390>

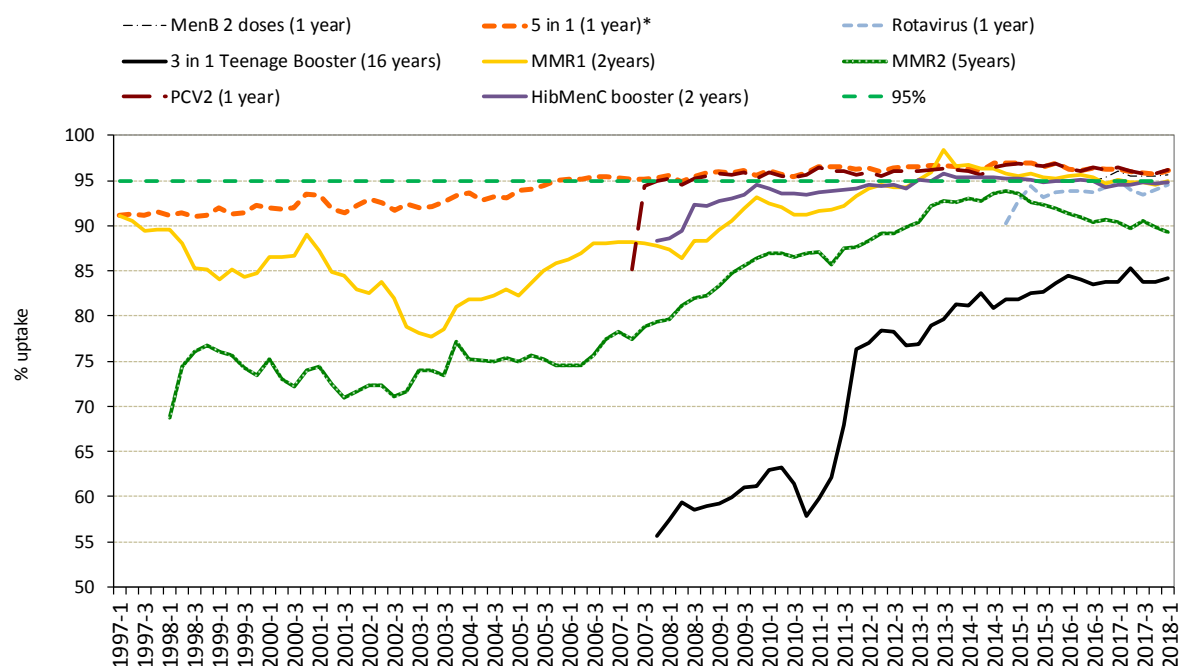
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

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 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: COVER report 126, May 2018. 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 1 2018*. Data are for children reaching 1 year of age each quarter for '5 in 1', MenB (two doses), Rotavirus (two doses) and pneumococcal conjugate vaccine (PCV2), children reaching 2 years of age for MMR1 (first dose) and the Hib/MenC booster, 5 years of age for MMR2 (second dose) and 16 years of age for the '3 in 1' teenage booster*



* 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 proxy

*** Teenage booster dose of diphtheria, tetanus and polio (diphtheria used as proxy). Uptake not reported prior to 2007 quarter 4.

Figure 2. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/01/18 and 31/03/18 and resident on 31/03/18.

All Wales Summary - COVER126

5 in 1 primary (3 doses) by age 1y	96.2%
MenB (2 doses) by age 1y	95.7%
Rotavirus primary (2 doses) by age 1y	94.5%
PCV primary (2 doses) by age 1y	96.2%
MMR (1 dose) by age 2y	94.9%
PCV (final (3rd) dose) by age 2y	95.5%
MenB (3 doses) by age 2y	94.7%
Hib/MenC booster by age 2y	94.9%
MMR (2 doses) by age 5y	89.3%
4 in 1 pre-school booster by age 5y	92.1%
MMR coverage (1 dose) by age 16y	92.7%
MMR coverage (2 doses) by age 16y	87.6%
3 in 1 Teenage booster by age 16y	84.2%

Figure 3. Percentage uptake of resident children reaching their 4th birthday between 01/01/18 and 31/03/18 and are up to date with all scheduled vaccines⁷ by Health Board.

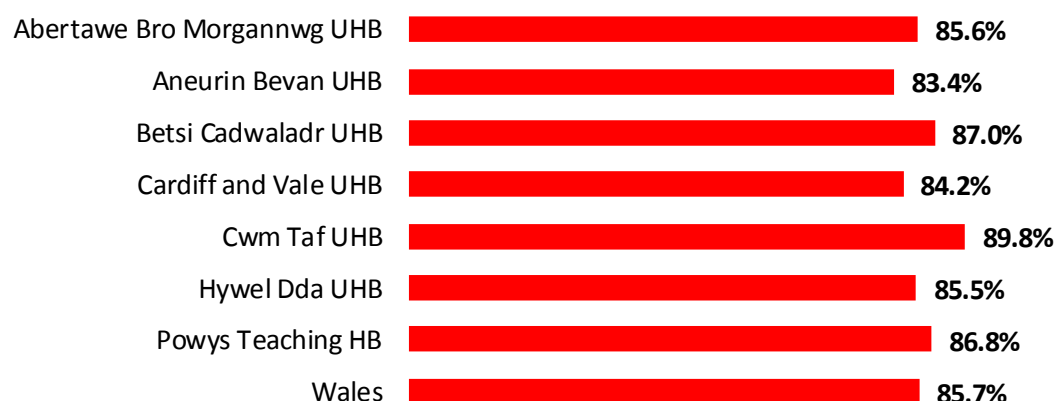
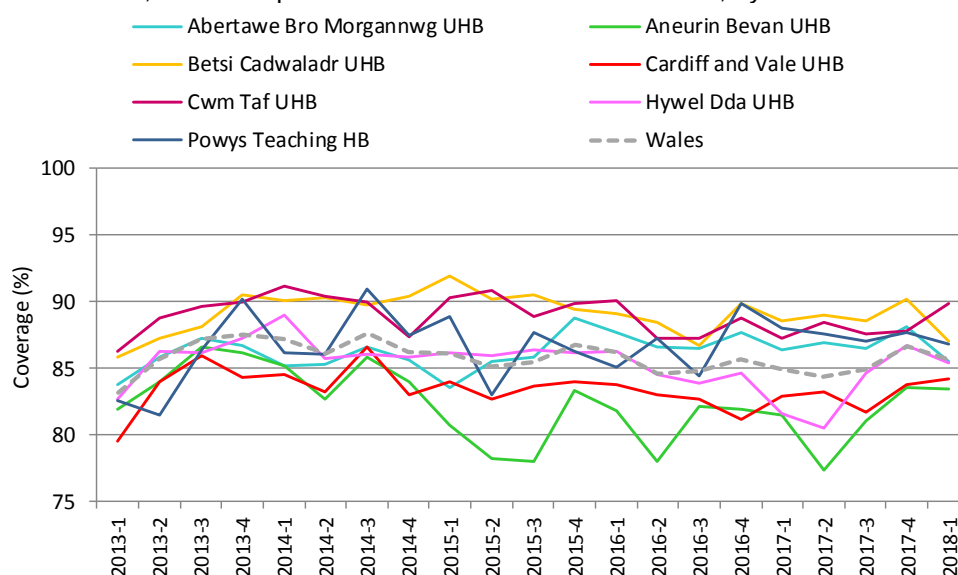


Table 1. Percentages of resident children reaching their 4th birthday during quarter 1 2017 to quarter 1 2018 who are up to date with all scheduled vaccines⁷, by Health Board.

Area	Up to date in schedule				
	2017-1	2017-2	2017-3	2017-4	2018-1
Abertawe Bro Morgannwg UHB	86.4	87.0	86.5	88.1	85.6
Aneurin Bevan UHB	81.5	77.3	81.1	83.6	83.4
Betsi Cadwaladr UHB	88.6	89.0	88.6	90.2	87.0
Cardiff and Vale UHB	82.9	83.3	81.7	83.8	84.2
Cwm Taf UHB	87.3	88.5	87.6	87.8	89.8
Hywel Dda UHB	81.6	80.5	84.7	86.7	85.5
Powys Teaching HB	88.0	87.5	87.1	87.7	86.8
Wales	84.9	84.3	84.9	86.7	85.7

Figure 4. Trends in the percentages of children reaching their 4th birthday during quarter 1 2013 to quarter 1 2018, 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.

⁷Completed "4 in 1" preschool booster, the Hib/MenC booster and second MMR dose by four years of age. The calculation method for proportions of children up to date with routine immunisation by four years of age was revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age

Figure 5. Uptake of “5 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/01/18 and 31/03/18.

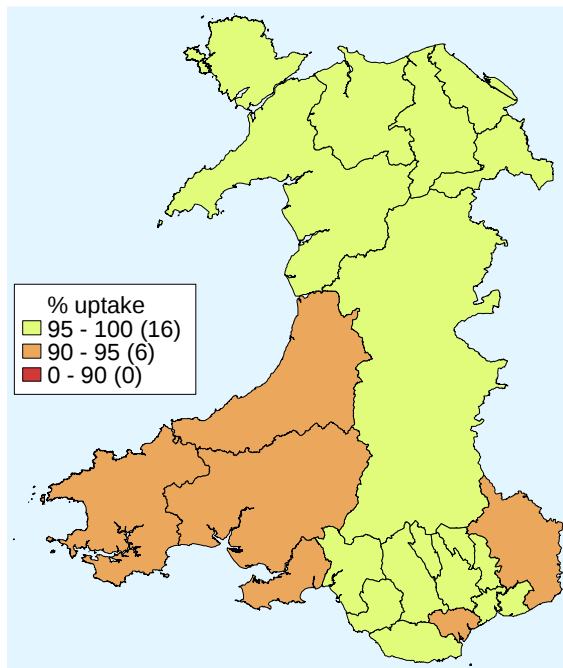


Figure 6. Uptake of at least one dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/01/18 and 31/03/18.

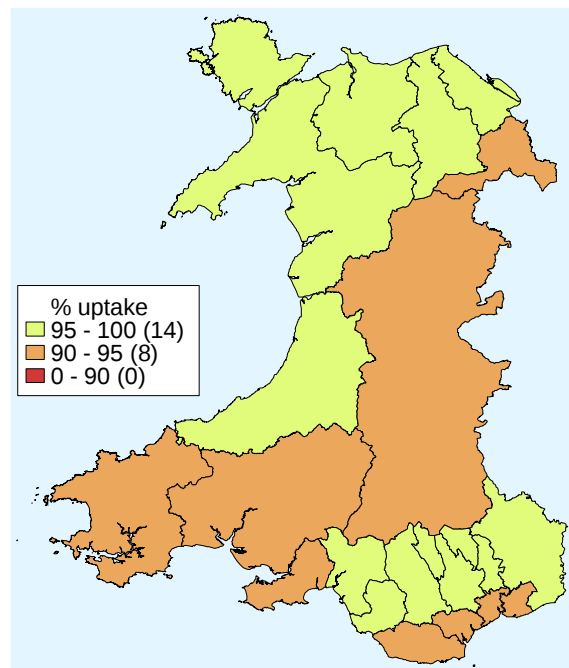


Figure 7. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/01/18 and 31/03/18.

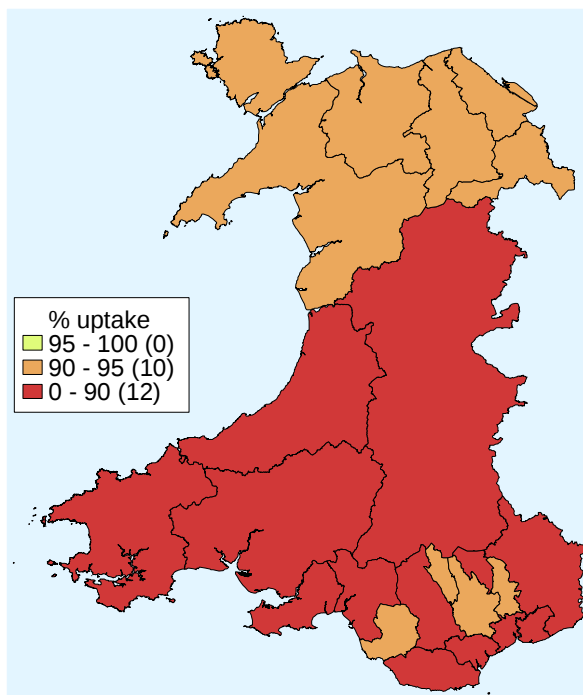


Figure 8. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/01/18 and 31/03/18.

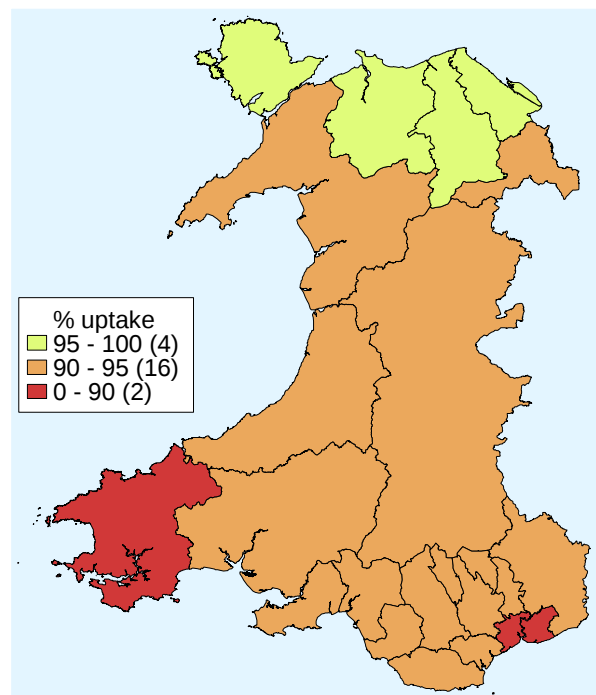


Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 4th, 5th and 16th birthday between 01/01/18 and 31/03/18 and resident on 31/03/18.

Vaccination uptake for children reaching 5 years of age is currently undergoing enhanced quality assurance checks. These figures should be interpreted with caution.

Area	Age 1 year					Age 2 years					Age 4 years		Age 5 years			Age 16 years				
	Resident children (n)	5 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	373	97.9	97.1	97.9	97.6	376	96.5	96.5	95.7	95.2	372	87.1	399	91.2	92.5	344	94.2	89.0	91.0	91.0
Neath Port Talbot LA	350	96.3	95.4	96.3	94.6	385	96.4	96.9	96.6	97.4	355	86.2	365	89.3	91.5	344	90.7	82.8	91.6	90.1
Swansea LA	571	94.6	93.3	94.4	93.0	636	93.7	95.0	93.9	94.2	624	84.3	625	88.2	91.4	616	89.9	84.4	89.4	88.5
Health Board Total	1294	96.0	95.0	95.9	94.7	1397	95.2	95.9	95.1	95.3	1351	85.6	1389	89.3	91.7	1304	91.3	85.2	90.4	89.6
Aneurin Bevan UHB																				
Blaenau Gwent LA	164	99.4	98.2	98.8	97.6	166	95.2	95.8	95.2	94.6	226	87.2	204	89.7	90.7	166	96.4	91.0	89.8	89.2
Caerphilly LA	452	97.3	97.8	97.8	93.1	494	97.8	97.6	97.0	96.8	526	84.6	506	93.5	94.9	464	97.2	93.8	86.9	87.1
Monmouthshire LA	186	94.6	94.1	94.6	95.7	188	97.9	98.4	96.8	97.9	234	83.8	264	87.5	93.9	251	83.7	76.1	80.5	80.9
Newport LA	493	95.9	95.1	95.9	93.3	481	92.9	93.8	92.5	92.9	468	76.9	531	86.3	87.2	463	93.5	87.5	81.6	82.3
Torfaen LA	249	97.6	96.8	97.6	94.4	255	96.5	98.4	97.3	97.3	260	89.2	278	90.6	93.5	230	96.1	92.6	89.1	89.1
Health Board Total	1544	96.8	96.4	96.9	94.2	1584	95.8	96.5	95.5	95.6	1714	83.4	1783	89.6	91.8	1574	93.7	88.6	84.9	85.2
Betsi Cadwaladr UHB																				
Anglesey LA	165	98.8	98.2	98.8	98.2	171	99.4	98.8	98.2	98.8	178	91.6	179	92.7	96.1	179	91.1	88.3	77.7	77.7
Conwy LA	254	95.3	95.7	96.1	94.5	278	96.0	96.4	96.0	96.0	264	84.5	286	92.7	95.5	275	90.9	85.5	85.1	84.0
Denbighshire LA	244	95.1	94.3	93.9	95.1	223	96.0	95.1	96.0	95.5	298	84.9	248	92.7	95.6	261	90.4	85.4	79.7	82.8
Flintshire LA	360	97.5	96.9	97.5	95.6	359	95.8	95.8	95.5	95.8	372	86.0	406	90.9	97.0	397	94.5	91.2	79.1	79.6
Gwynedd LA	290	98.3	98.3	98.6	96.6	297	96.6	96.6	96.0	96.6	281	87.5	316	92.1	94.0	278	95.7	91.7	83.5	83.1
Wrexham LA	366	98.4	98.9	98.9	94.8	362	93.6	94.8	94.5	94.5	397	88.9	380	91.1	93.7	312	96.5	95.2	83.0	83.7
Health Board Total	1679	97.3	97.1	97.4	95.6	1690	95.9	96.0	95.8	96.0	1790	87.0	1815	91.8	95.3	1702	93.5	89.9	81.4	81.9
Cardiff and Vale UHB																				
Cardiff LA	979	94.8	94.2	95.0	93.1	1069	92.1	92.7	90.7	91.5	1100	83.6	1084	87.1	90.1	888	90.9	84.3	56.8	72.4
Vale of Glamorgan LA	373	95.7	95.2	95.4	96.5	322	94.7	94.4	93.8	94.4	333	86.2	385	87.3	90.1	348	93.7	89.1	62.4	77.0
Health Board Total	1352	95.0	94.5	95.1	94.0	1391	92.7	93.1	91.4	92.2	1433	84.2	1469	87.1	90.1	1236	91.7	85.7	58.3	73.7
Cwm Taf UHB																				
Merthyr Tydfil LA	163	97.5	96.9	96.9	96.3	184	96.7	96.7	95.1	96.2	157	92.4	180	92.2	94.4	156	96.8	91.0	94.9	95.5
Rhondda Cynon Taf LA	611	97.7	97.2	97.9	97.1	735	95.4	96.5	96.3	95.9	698	89.3	725	88.7	91.0	613	94.6	87.8	92.7	92.2
Health Board Total	774	97.7	97.2	97.7	96.9	919	95.6	96.5	96.1	96.0	855	89.8	905	89.4	91.7	769	95.1	88.4	93.1	92.8
Hywel Dda UHB																				
Cardamarthenshire LA	452	93.4	92.3	92.7	93.1	482	94.8	95.6	94.6	94.4	498	82.5	463	87.7	90.7	526	91.3	89.0	87.1	88.0
Ceredigion LA	141	93.6	93.6	95.7	86.5	163	95.1	96.9	96.3	96.3	172	88.4	166	89.8	92.2	145	92.4	85.5	84.8	85.5
Pembrokeshire LA	294	93.9	95.6	95.6	91.2	279	92.5	94.6	93.2	93.2	313	88.5	305	85.2	89.5	274	91.6	86.5	77.0	80.3
Health Board Total	887	93.6	93.6	94.1	91.4	924	94.2	95.6	94.5	94.4	983	85.5	934	87.3	90.6	945	91.5	87.7	83.8	85.4
Powys Teaching UHB																				
Unknown	239	95.8	95.4	95.4	94.1	285	93.7	94.0	93.3	94.0	311	86.8	317	88.3	93.4	316	90.2	84.8	84.5	84.5
Wales Total	7773	96.2	95.7	96.2	94.5	8192	94.9	95.5	94.7	94.9	8454	85.7	8630	89.3	92.1	7869	92.7	87.6	81.6	84.2

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

	95% and higher
	90% to 95%
	below 90%

Table 3. Vaccine uptake in children reaching their 1st birthday between 01/01/18 and 31/03/18 and resident on 31/03/18.

Area	Resident children		D3	T3		P3		Po3		Hib3		MMR1		Rotavirus		PCV2 ¹		Men B ²		HibMenC	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>																					
Bridgend LA	373	365	97.9	365	97.9	365	97.9	365	97.9	365	97.9	1	0.3	364	97.6	365	97.9	362	97.1	0	0.0
Neath Port Talbot LA	350	337	96.3	337	96.3	337	96.3	337	96.3	337	96.3	0	0.0	331	94.6	337	96.3	334	95.4	0	0.0
Swansea LA	571	540	94.6	540	94.6	540	94.6	540	94.6	539	94.4	2	0.4	531	93.0	539	94.4	533	93.3	1	0.2
Health Board Total	1294	1242	96.0	1242	96.0	1242	96.0	1242	96.0	1241	95.9	3	0.2	1226	94.7	1241	95.9	1229	95.0	1	0.1
<u>Aneurin Bevan University HB</u>																					
Blaenau Gwent LA	164	163	99.4	163	99.4	163	99.4	163	99.4	163	99.4	0	0.0	160	97.6	162	98.8	161	98.2	0	0.0
Caerphilly LA	452	440	97.3	440	97.3	440	97.3	440	97.3	440	97.3	1	0.2	421	93.1	442	97.8	442	97.8	2	0.4
Monmouthshire LA	186	176	94.6	176	94.6	176	94.6	176	94.6	176	94.6	4	2.2	178	95.7	176	94.6	175	94.1	4	2.2
Newport LA	493	473	95.9	473	95.9	473	95.9	473	95.9	472	95.7	1	0.2	460	93.3	473	95.9	469	95.1	0	0.0
Torfaen LA	249	243	97.6	243	97.6	243	97.6	243	97.6	243	97.6	1	0.4	235	94.4	243	97.6	241	96.8	1	0.4
Health Board Total	1544	1495	96.8	1495	96.8	1495	96.8	1495	96.8	1494	96.8	7	0.5	1454	94.2	1496	96.9	1488	96.4	7	0.5
<u>Betsi Cadwaladr University HB</u>																					
Anglesey LA	165	163	98.8	163	98.8	163	98.8	163	98.8	163	98.8	3	1.8	162	98.2	163	98.8	162	98.2	3	1.8
Conwy LA	254	242	95.3	242	95.3	242	95.3	242	95.3	242	95.3	2	0.8	240	94.5	244	96.1	243	95.7	1	0.4
Denbighshire LA	244	232	95.1	232	95.1	232	95.1	232	95.1	232	95.1	1	0.4	232	95.1	229	93.9	230	94.3	1	0.4
Flintshire LA	360	351	97.5	351	97.5	351	97.5	351	97.5	351	97.5	2	0.6	344	95.6	351	97.5	349	96.9	2	0.6
Gwynedd LA	290	285	98.3	285	98.3	285	98.3	285	98.3	285	98.3	1	0.3	280	96.6	286	98.6	285	98.3	1	0.3
Wrexham LA	366	360	98.4	360	98.4	360	98.4	360	98.4	360	98.4	1	0.3	347	94.8	362	98.9	362	98.9	1	0.3
Health Board Total	1679	1633	97.3	1633	97.3	1633	97.3	1633	97.3	1633	97.3	10	0.6	1605	95.6	1635	97.4	1631	97.1	9	0.5
<u>Cardiff and Vale University HB</u>																					
Cardiff LA	979	928	94.8	928	94.8	928	94.8	928	94.8	928	94.8	4	0.4	911	93.1	930	95.0	922	94.2	2	0.2
Vale of Glamorgan LA	373	357	95.7	357	95.7	357	95.7	357	95.7	357	95.7	3	0.8	360	96.5	356	95.4	355	95.2	3	0.8
Health Board Total	1352	1285	95.0	1285	95.0	1285	95.0	1285	95.0	1285	95.0	7	0.5	1271	94.0	1286	95.1	1277	94.5	5	0.4
<u>Cwm Taf University HB</u>																					
Merthyr Tydfil LA	163	159	97.5	159	97.5	159	97.5	159	97.5	159	97.5	1	0.6	157	96.3	158	96.9	158	96.9	1	0.6
Rhondda Cynon Taf LA	611	597	97.7	597	97.7	597	97.7	597	97.7	597	97.7	2	0.3	593	97.1	598	97.9	594	97.2	1	0.2
Health Board Total	774	756	97.7	756	97.7	756	97.7	756	97.7	756	97.7	3	0.4	750	96.9	756	97.7	752	97.2	2	0.3
<u>Hywel Dda University HB</u>																					
Carmarthenshire LA	452	422	93.4	422	93.4	422	93.4	422	93.4	422	93.4	1	0.2	421	93.1	419	92.7	417	92.3	1	0.2
Ceredigion LA	141	132	93.6	132	93.6	132	93.6	132	93.6	132	93.6	0	0.0	122	86.5	135	95.7	132	93.6	0	0.0
Pembrokeshire LA	294	276	93.9	276	93.9	276	93.9	276	93.9	276	93.9	0	0.0	268	91.2	281	95.6	281	95.6	0	0.0
Health Board Total	887	830	93.6	830	93.6	830	93.6	830	93.6	830	93.6	1	0.1	811	91.4	835	94.1	830	93.6	1	0.1
<u>Powys Teaching HB</u>	239	229	95.8	229	95.8	229	95.8	229	95.8	229	95.8	0	0.0	225	94.1	228	95.4	228	95.4	0	0.0
Unknown	4	4	100.0	4	100.0	4	100.0	4	100.0	4	100.0	0	0.0	4	100.0	4	100.0	4	100.0	0	0.0
Wales Total	7773	7474	96.2	7474	96.2	7474	96.2	7474	96.2	7472	96.1	31	0.4	7346	94.5	7481	96.2	7439	95.7	25	0.3

¹ Full primary two dose course of pneumococcal conjugate vaccine.

² 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 01/01/18 and 31/03/18 and resident on 31/03/18.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC ¹	PCV2 ²	PCVf ³	Men B ⁴	HibMenC											
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)										
Abertawe Bro Morgannwg University HB																							
Bridgend LA	376	367	97.6	367	97.6	367	97.6	367	97.6	363	96.5	334	88.8	364	96.8	363	96.5	360	95.7	358	95.2		
Neath Port Talbot LA	385	383	99.5	383	99.5	383	99.5	383	99.5	371	96.4	355	92.2	380	98.7	373	96.9	372	96.6	375	97.4		
Swansea LA	636	620	97.5	620	97.5	620	97.5	620	97.5	619	97.3	596	93.7	552	86.8	611	96.1	604	95.0	597	93.9	599	94.2
Health Board Total	1397	1370	98.1	1370	98.1	1370	98.1	1370	98.1	1369	98.0	1330	95.2	1241	88.8	1355	97.0	1340	95.9	1329	95.1	1332	95.3
Aneurin Bevan University HB																							
Blaenau Gwent LA	166	163	98.2	163	98.2	163	98.2	163	98.2	163	98.2	158	95.2	150	90.4	162	97.6	159	95.8	158	95.2	157	94.6
Caerphilly LA	494	485	98.2	485	98.2	485	98.2	485	98.2	485	98.2	483	97.8	442	89.5	483	97.8	482	97.6	479	97.0	478	96.8
Monmouthshire LA	188	184	97.9	184	97.9	184	97.9	184	97.9	184	97.9	184	97.9	173	92.0	184	97.9	185	98.4	182	96.8	184	97.9
Newport LA	481	461	95.8	461	95.8	461	95.8	461	95.8	460	95.6	447	92.9	387	80.5	458	95.2	451	93.8	445	92.5	447	92.9
Torfaen LA	255	254	99.6	254	99.6	254	99.6	253	99.2	253	99.2	246	96.5	233	91.4	252	98.8	251	98.4	248	97.3	248	97.3
Health Board Total	1584	1547	97.7	1547	97.7	1547	97.7	1546	97.6	1545	97.5	1518	95.8	1385	87.4	1539	97.2	1528	96.5	1512	95.5	1514	95.6
Betsi Cadwaladr University HB																							
Anglesey LA	171	171	100.0	171	100.0	171	100.0	171	100.0	171	100.0	170	99.4	159	93.0	169	98.8	169	98.8	168	98.2	169	98.8
Conwy LA	278	272	97.8	272	97.8	272	97.8	272	97.8	272	97.8	267	96.0	238	85.6	268	96.4	268	96.4	267	96.0	267	96.0
Denbighshire LA	223	216	96.9	216	96.9	216	96.9	216	96.9	216	96.9	214	96.0	196	87.9	216	96.9	212	95.1	214	96.0	213	95.5
Flintshire LA	359	352	98.1	352	98.1	352	98.1	352	98.1	352	98.1	344	95.8	324	90.3	353	98.3	344	95.8	343	95.5	344	95.8
Gwynedd LA	297	288	97.0	288	97.0	288	97.0	288	97.0	289	97.3	287	96.6	241	81.1	282	94.9	287	96.6	285	96.0	287	96.6
Wrexham LA	362	350	96.7	350	96.7	350	96.7	350	96.7	350	96.7	339	93.6	327	90.3	346	95.6	343	94.8	342	94.5	342	94.5
Health Board Total	1690	1649	97.6	1649	97.6	1649	97.6	1649	97.6	1650	97.6	1621	95.9	1485	87.9	1634	96.7	1623	96.0	1619	95.8	1622	96.0
Cardiff and Vale University HB																							
Cardiff LA	1069	1033	96.6	1033	96.6	1033	96.6	1033	96.6	1033	96.6	985	92.1	899	84.1	1005	94.0	991	92.7	970	90.7	978	91.5
Vale of Glamorgan LA	322	310	96.3	310	96.3	310	96.3	310	96.3	310	96.3	305	94.7	280	87.0	308	95.7	304	94.4	302	93.8	304	94.4
Health Board Total	1391	1343	96.5	1343	96.5	1343	96.5	1343	96.5	1343	96.5	1290	92.7	1179	84.8	1313	94.4	1295	93.1	1272	91.4	1282	92.2
Cwm Taf University HB																							
Merthyr Tydfil LA	184	182	98.9	182	98.9	182	98.9	182	98.9	182	98.9	178	96.7	173	94.0	181	98.4	178	96.7	175	95.1	177	96.2
Rhondda Cynon Taf LA	735	719	97.8	719	97.8	719	97.8	719	97.8	719	97.8	701	95.4	667	90.7	711	96.7	709	96.5	708	96.3	705	95.9
Health Board Total	919	901	98.0	901	98.0	901	98.0	901	98.0	901	98.0	879	95.6	840	91.4	892	97.1	887	96.5	883	96.1	882	96.0
Hywel Dda University HB																							
Carmarthenshire LA	482	468	97.1	468	97.1	468	97.1	468	97.1	468	97.1	457	94.8	430	89.2	460	95.4	461	95.6	456	94.6	455	94.4
Ceredigion LA	163	159	97.5	159	97.5	159	97.5	159	97.5	159	97.5	155	95.1	152	93.3	157	96.3	158	96.9	157	96.3	157	96.3
Pembrokeshire LA	279	270	96.8	270	96.8	270	96.8	270	96.8	270	96.8	258	92.5	236	84.6	264	94.6	264	94.6	260	93.2	260	93.2
Health Board Total	924	897	97.1	897	97.1	897	97.1	897	97.1	897	97.1	870	94.2	818	88.5	881	95.3	883	95.6	873	94.5	872	94.4
Powys Teaching HB	285	271	95.1	271	95.1	271	95.1	271	95.1	271	95.1	267	93.7	240	84.2	267	93.7	268	94.0	266	93.3	268	94.0
Unknown	2	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0	1	50.0	1	50.0	2	100.0	1	50.0	1	50.0	1	50.0
Wales Total	8192	7980	97.4	7980	97.4	7980	97.4	7979	97.4	7978	97.4	7776	94.9	7189	87.8	7883	96.2	7825	95.5	7755	94.7	7773	94.9

¹ Uptake of a completed one dose primary course of MenC vaccination.

² Full primary two dose course of pneumococcal conjugate vaccine.

³ Final (booster) dose of pneumococcal conjugate vaccine.

⁴ 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 01/01/18 and 31/03/18 and resident on 31/03/18. 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)	(%)
Abertawe Bro Morgannwg University HB									
Bridgend LA	372	329	88.4	359	96.5	327	87.9	324	87.1
Neath Port Talbot LA	355	312	87.9	338	95.2	308	86.8	306	86.2
Swansea LA	624	538	86.2	587	94.1	531	85.1	526	84.3
Health Board Total	1351	1179	87.3	1284	95.0	1166	86.3	1156	85.6
Aneurin Bevan University HB									
Blaenau Gwent LA	226	201	88.9	221	97.8	198	87.6	197	87.2
Caerphilly LA	526	465	88.4	500	95.1	450	85.6	445	84.6
Monmouthshire LA	234	212	90.6	213	91.0	199	85.0	196	83.8
Newport LA	468	383	81.8	426	91.0	389	83.1	360	76.9
Torfaen LA	260	240	92.3	252	96.9	238	91.5	232	89.2
Health Board Total	1714	1501	87.6	1612	94.0	1474	86.0	1430	83.4
Betsi Cadwaladr University HB									
Anglesey LA	178	165	92.7	170	95.5	164	92.1	163	91.6
Conwy LA	264	232	87.9	247	93.6	227	86.0	223	84.5
Denbighshire LA	298	261	87.6	280	94.0	253	84.9	253	84.9
Flintshire LA	372	335	90.1	347	93.3	323	86.8	320	86.0
Gwynedd LA	281	254	90.4	259	92.2	249	88.6	246	87.5
Wrexham LA	397	364	91.7	381	96.0	358	90.2	353	88.9
Health Board Total	1790	1611	90.0	1684	94.1	1574	87.9	1558	87.0
Cardiff and Vale University HB									
Cardiff LA	1100	972	88.4	1019	92.6	943	85.7	920	83.6
Vale of Glamorgan LA	333	298	89.5	312	93.7	289	86.8	287	86.2
Health Board Total	1433	1270	88.6	1331	92.9	1232	86.0	1207	84.2
Cwm Taf University HB									
Merthyr Tydfil LA	157	146	93.0	156	99.4	145	92.4	145	92.4
Rhondda Cynon Taf LA	698	635	91.0	674	96.6	630	90.3	623	89.3
Health Board Total	855	781	91.3	830	97.1	775	90.6	768	89.8
Hywel Dda University HB									
Carmarthenshire LA	498	436	87.6	458	92.0	419	84.1	411	82.5
Ceredigion LA	172	160	93.0	155	90.1	153	89.0	152	88.4
Pembrokeshire LA	313	283	90.4	302	96.5	278	88.8	277	88.5
Health Board Total	983	879	89.4	915	93.1	850	86.5	840	85.5
Powys Teaching HB	311	287	92.3	290	93.2	271	87.1	270	86.8
Unknown	17	15	88.2	15	88.2	14	82.4	14	82.4
Wales Total	8454	7523	89.0	7961	94.2	7356	87.0	7243	85.7

¹ Uptake of acellular pertussis used as proxy

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

Table 6. Vaccine uptake in children reaching their 5th birthday between 01/01/18 and 31/03/18 and resident on 31/03/18. The proportion of children who have received all of these vaccines by their 5th birthday is also presented.

Vaccination uptake for children reaching 5 years of age is currently undergoing enhanced quality assurance checks. These figures should be interpreted with caution.

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	399	369	92.5	380	95.2	364	91.2	357	89.5
Neath Port Talbot LA	365	334	91.5	341	93.4	326	89.3	322	88.2
Swansea LA	625	571	91.4	576	92.2	551	88.2	539	86.2
Health Board Total	1389	1274	91.7	1297	93.4	1241	89.3	1218	87.7
Aneurin Bevan University HB									
Blaenau Gwent LA	204	185	90.7	192	94.1	183	89.7	181	88.7
Caerphilly LA	506	480	94.9	492	97.2	473	93.5	472	93.3
Monmouthshire LA	264	248	93.9	233	88.3	231	87.5	227	86.0
Newport LA	531	463	87.2	470	88.5	458	86.3	431	81.2
Torfaen LA	278	260	93.5	256	92.1	252	90.6	245	88.1
Health Board Total	1783	1636	91.8	1643	92.1	1597	89.6	1556	87.3
Betsi Cadwaladr University HB									
Anglesey LA	179	172	96.1	168	93.9	166	92.7	164	91.6
Conwy LA	286	273	95.5	265	92.7	265	92.7	259	90.6
Denbighshire LA	248	237	95.6	236	95.2	230	92.7	229	92.3
Flintshire LA	406	394	97.0	374	92.1	369	90.9	367	90.4
Gwynedd LA	316	297	94.0	298	94.3	291	92.1	289	91.5
Wrexham LA	380	356	93.7	352	92.6	346	91.1	339	89.2
Health Board Total	1815	1729	95.3	1693	93.3	1667	91.8	1647	90.7
Cardiff and Vale University HB									
Cardiff LA	1084	977	90.1	984	90.8	944	87.1	911	84.0
Vale of Glamorgan LA	385	347	90.1	356	92.5	336	87.3	332	86.2
Health Board Total	1469	1324	90.1	1340	91.2	1280	87.1	1243	84.6
Cwm Taf University HB									
Merthyr Tydfil LA	180	170	94.4	172	95.6	166	92.2	165	91.7
Rhondda Cynon Taf LA	725	660	91.0	681	93.9	643	88.7	636	87.7
Health Board Total	905	830	91.7	853	94.3	809	89.4	801	88.5
Hywel Dda University HB									
Cardiganshire LA	463	420	90.7	424	91.6	406	87.7	398	86.0
Ceredigion LA	166	153	92.2	155	93.4	149	89.8	148	89.2
Pembrokeshire LA	305	273	89.5	279	91.5	260	85.2	255	83.6
Health Board Total	934	846	90.6	858	91.9	815	87.3	801	85.8
Powys Teaching HB	317	296	93.4	291	91.8	280	88.3	277	87.4
Unknown	18	17	94.4	17	94.4	17	94.4	17	94.4
Wales Total	8630	7952	92.1	7992	92.6	7706	89.3	7560	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 five years of age.

Table 7. Vaccine uptake in children reaching their 5th birthday between 01/01/18 and 31/03/18 and resident on 31/03/18.

Vaccination uptake for children reaching 5 years of age is currently undergoing enhanced quality assurance checks. These figures should be interpreted with caution.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC ¹	PCVf ²	HibMenC	MMR1	MMR2	D4	T4	aP	Po4														
Abertawe Bro Morgannwg University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)														
Bridgend LA	399	377	94.5	377	94.5	377	94.5	376	94.2	377	94.5	167	41.9	376	94.2	380	95.2	387	97.0	364	91.2	369	92.5	369	92.5	369	92.5		
Neath Port Talbot LA	365	346	94.8	346	94.8	346	94.8	346	94.8	346	94.8	139	38.1	341	93.4	341	93.4	355	97.3	326	89.3	334	91.5	334	91.5	334	91.5		
Swansea LA	625	576	92.2	576	92.2	576	92.2	575	92.0	579	92.6	270	43.2	569	91	576	92.2	598	95.7	551	88.2	572	91.5	572	91.5	571	91.4	572	91.5
Health Board Total	1389	1299	93.5	1299	93.5	1299	93.5	1297	93.4	1302	93.7	576	41.5	1286	92.6	1297	93.4	1340	96.5	1241	89.3	1275	91.8	1275	91.8	1274	91.7	1275	91.8
Aneurin Bevan University HB																													
Blaenau Gwent LA	204	196	96.1	196	96.1	196	96.1	196	96.1	196	96.1	75	36.8	194	95.1	192	94.1	196	96.1	183	89.7	185	90.7	185	90.7	185	90.7	185	90.7
Caerphilly LA	506	493	97.4	493	97.4	493	97.4	493	97.4	494	97.6	196	38.7	489	96.6	492	97.2	496	98.0	473	93.5	480	94.9	480	94.9	480	94.9	480	94.9
Monmouthshire LA	264	232	87.9	232	87.9	232	87.9	232	87.9	232	87.9	91	34.5	230	87.1	233	88.3	253	95.8	231	87.5	248	93.9	248	93.9	248	93.9	248	93.9
Newport LA	531	482	90.8	482	90.8	482	90.8	482	90.8	481	90.6	192	36.2	477	89.8	470	88.5	510	96.0	458	86.3	463	87.2	463	87.2	463	87.2	463	87.2
Torfaen LA	278	262	94.2	262	94.2	262	94.2	262	94.2	261	93.9	104	37.4	259	93.2	256	92.1	270	97.1	252	90.6	260	93.5	260	93.5	260	93.5	260	93.5
Health Board Total	1783	1665	93.4	1665	93.4	1665	93.4	1665	93.4	1664	93.3	658	36.9	1649	92.5	1643	92.1	1725	96.7	1597	89.6	1636	91.8	1636	91.8	1636	91.8	1636	91.8
Betsi Cadwaladr University HB																													
Anglesey LA	179	170	95.0	170	95.0	170	95.0	170	95.0	171	95.5	102	57.0	168	93.9	168	93.9	175	97.8	166	92.7	172	96.1	172	96.1	172	96.1	172	96.1
Conwy LA	286	272	95.1	272	95.1	272	95.1	272	95.1	272	95.1	124	43.4	266	93	265	92.7	278	97.2	265	92.7	273	95.5	273	95.5	273	95.5	273	95.5
Denbighshire LA	248	233	94.0	233	94.0	233	94.0	233	94.0	233	94.0	133	53.6	236	95.2	236	95.2	243	98.0	230	92.7	237	95.6	237	95.6	237	95.6	237	95.6
Flintshire LA	406	375	92.4	375	92.4	375	92.4	375	92.4	375	92.4	182	44.8	372	91.6	374	92.1	400	98.5	369	90.9	394	97.0	394	97.0	394	97.0	394	97.0
Gwynedd LA	316	299	94.6	299	94.6	299	94.6	299	94.6	299	94.6	123	38.9	295	93.4	298	94.3	302	95.6	291	92.1	297	94.0	297	94.0	297	94.0	297	94.0
Wrexham LA	380	356	93.7	356	93.7	356	93.7	356	93.7	356	93.7	155	40.8	353	92.9	352	92.6	369	97.1	346	91.1	356	93.7	356	93.7	356	93.7	356	93.7
Health Board Total	1815	1705	93.9	1705	93.9	1705	93.9	1705	93.9	1706	94.0	819	45.1	1690	93.1	1693	93.3	1767	97.4	1667	91.8	1729	95.3	1729	95.3	1729	95.3	1729	95.3
Cardiff and Vale University HB																													
Cardiff LA	1084	993	91.6	993	91.6	993	91.6	992	91.5	990	91.3	523	48.2	963	88.8	984	90.8	1046	96.5	944	87.1	977	90.1	977	90.1	977	90.1	977	90.1
Vale of Glamorgan LA	385	354	91.9	354	91.9	353	91.7	354	91.9	353	91.7	202	52.5	354	91.9	356	92.5	371	96.4	336	87.3	347	90.1	347	90.1	347	90.1	347	90.1
Health Board Total	1469	1347	91.7	1347	91.7	1346	91.6	1346	91.6	1343	91.4	725	49.4	1317	89.7	1340	91.2	1417	96.5	1280	87.1	1324	90.1	1324	90.1	1324	90.1	1324	90.1
Cwm Taf University HB																													
Merthyr Tydfil LA	180	176	97.8	176	97.8	176	97.8	176	97.8	176	97.8	110	61.1	171	95	172	95.6	175	97.2	166	92.2	170	94.4	170	94.4	170	94.4	170	94.4
Rhondda Cynon Taf LA	725	691	95.3	691	95.3	691	95.3	691	95.3	690	95.2	378	52.1	682	94.1	681	93.9	703	97.0	643	88.7	660	91.0	660	91.0	660	91.0	660	91.0
Health Board Total	905	867	95.8	867	95.8	867	95.8	867	95.8	866	95.7	488	53.9	853	94.3	853	94.3	878	97.0	809	89.4	830	91.7	830	91.7	830	91.7	830	91.7
Hywel Dda University HB																													
Cardiganshire LA	463	430	92.9	430	92.9	430	92.9	430	92.9	430	92.9	222	47.9	424	91.6	424	91.6	439	94.8	406	87.7	420	90.7	420	90.7	420	90.7	420	90.7
Ceredigion LA	166	155	93.4	155	93.4	155	93.4	155	93.4	154	92.8	64	38.6	153	92.2	155	93.4	154	92.8	149	89.8	153	92.2	153	92.2	153	92.2	153	92.2
Pembrokeshire LA	305	279	91.5	279	91.5	279	91.5	279	91.5	279	91.5	121	39.7	280	91.8	279	91.5	291	95.4	260	85.2	273	89.5	273	89.5	273	89.5	273	89.5
Health Board Total	934	864	92.5	864	92.5	864	92.5	864	92.5	863	92.4	407	43.6	857	91.8	858	91.9	884	94.6	815	87.3	846	90.6	846	90.6	846	90.6	846	90.6
Powys Teaching HB	317	295	93.1	295	93.1	295	93.1	295	93.1	296	93.4	118	37.2	290	91.5	291	91.8	304	95.9	280	88.3	296	93.4	296	93.4	296	93.4	296	93.4
Unknown	18	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	7	38.9	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4	17	94.4
Wales Total	8630	8059	93.4	8059	93.4	8058	93.4	8056	93.3	8057	93.4	3798	44.0	7959	92.2	7992	92.6	8332	96.5	7706	89.3	7953	92.2	7953	92.2	7952	92.1	7953	92.2

¹ Completed three dose course, or two dose course with the second delivered after 115 days of age

² Final (booster) dose of pneumococcal conjugate vaccine

Table 8. Uptake of HPV vaccine in girls reaching 13, 14 and 15 years of age between 01/09/17 and 31/08/18 and resident on 31/03/18.

Area	13 years (2017-18 School Year 8) ¹			14 years (2017-18 School Year 9) ¹					15 years (2017-18 School Year 10)				
	Resident girls (n)	HPV 1 dose (n) (%)		Resident girls (n)	HPV 1 dose (n) (%)	HPV 2 dose (n) (%)			Resident girls (n)	HPV 1 dose (n) (%)	HPV 2 dose (n) (%)		
<u>Abertawe Bro Morgannwg University HB</u>													
Bridgend LA	789	684	86.7	813	752	92.5	660	81.2	784	730	93.1	706	90.1
Neath Port Talbot LA	827	729	88.1	748	708	94.7	623	83.3	704	658	93.5	636	90.3
Swansea LA	1225	1038	84.7	1240	1129	91.0	999	80.6	1242	1136	91.5	1082	87.1
Health Board Total	2841	2451	86.3	2801	2589	92.4	2282	81.5	2730	2524	92.5	2424	88.8
<u>Aneurin Bevan University HB</u>													
Blaenau Gwent LA	345	3	0.9	373	307	82.3	3	0.8	320	290	90.6	266	83.1
Caerphilly LA	1018	12	1.2	1022	860	84.1	17	1.7	982	835	85.0	815	83.0
Monmouthshire LA	465	5	1.1	539	388	72.0	5	0.9	544	446	82.0	412	75.7
Newport LA	963	7	0.7	903	686	76.0	13	1.4	899	758	84.3	649	72.2
Torfaen LA	545	2	0.4	488	394	80.7	1	0.2	487	431	88.5	395	81.1
Health Board Total	3336	29	0.9	3325	2635	79.2	39	1.2	3232	2760	85.4	2537	78.5
<u>Betsi Cadwaladr University HB</u>													
Anglesey LA	342	21	6.1	344	296	86.0	23	6.7	344	311	90.4	275	79.9
Conwy LA	528	58	11.0	578	508	87.9	65	11.2	546	488	89.4	446	81.7
Denbighshire LA	520	207	39.8	501	425	84.8	166	33.1	468	426	91.0	386	82.5
Flintshire LA	803	476	59.3	793	707	89.2	459	57.9	731	664	90.8	634	86.7
Gwynedd LA	642	435	67.8	541	477	88.2	351	64.9	558	502	90.0	490	87.8
Wrexham LA	726	333	45.9	700	598	85.4	319	45.6	676	594	87.9	542	80.2
Health Board Total	3561	1530	43.0	3457	3011	87.1	1383	40.0	3323	2985	89.8	2773	83.4
<u>Cardiff and Vale University HB</u>													
Cardiff LA	2073	1279	61.7	1895	1613	85.1	1185	62.5	1853	1584	85.5	1467	79.2
Vale of Glamorgan LA	757	646	85.3	729	651	89.3	560	76.8	705	629	89.2	574	81.4
Health Board Total	2830	1925	68.0	2624	2264	86.3	1745	66.5	2558	2213	86.5	2041	79.8
<u>Cwm Taf University HB</u>													
Merthyr Tydfil LA	354	3	0.8	319	287	90.0	0	0.0	330	306	92.7	289	87.6
Rhondda Cynon Taf LA	1388	41	3.0	1301	1196	91.9	40	3.1	1385	1299	93.8	1224	88.4
Health Board Total	1742	44	2.5	1620	1483	91.5	40	2.5	1715	1605	93.6	1513	88.2
<u>Hywel Dda University HB</u>													
Carmarthenshire LA	975	42	4.3	970	860	88.7	104	10.7	997	901	90.4	837	84.0
Ceredigion LA	280	238	85.0	319	277	86.8	261	81.8	294	252	85.7	246	83.7
Pembrokeshire LA	602	513	85.2	629	539	85.7	505	80.3	612	517	84.5	483	78.9
Health Board Total	1857	793	42.7	1918	1676	87.4	870	45.4	1903	1670	87.8	1566	82.3
<u>Powys Teaching HB</u>	637	17	2.7	658	551	83.7	36	5.5	647	551	85.2	511	79.0
Unknown	52	23	44.2	50	40	80.0	19	38.0	44	39	88.6	38	86.4
Wales Total	16856	6812	40.4	16453	14249	86.6	6414	39.0	16152	14347	88.8	13403	83.0

¹ Timings of HPV immunisation sessions vary between HBs and may not have been complete at the time this report was produced.

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

Area	14 years (2017-18 School Year 9) ¹			15 years (2017-18 School Year 10)			16 years (2017-18 School Year 11) ¹			17 years (2017-18 School Year 12)		
	Resident children (n)	MenACWY (n)	(%)	Resident children (n)	MenACWY (n)	(%)	Resident children (n)	MenACWY (n)	(%)	Resident children	MenACWY (n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>												
Bridgend LA	1597	41	2.6	1566	1395	89.1	1522	1372	90.1	1684	1447	85.9
Neath Port Talbot LA	1515	25	1.7	1431	1281	89.5	1473	1348	91.5	1518	1290	85.0
Swansea LA	2619	33	1.3	2604	2301	88.4	2503	2233	89.2	2562	2169	84.7
Health Board Total	5731	99	1.7	5601	4977	88.9	5498	4953	90.1	5764	4906	85.1
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	754	607	80.5	688	590	85.8	704	629	89.3	743	608	81.8
Caerphilly LA	2153	1615	75.0	2090	1767	84.5	2016	1735	86.1	2026	1650	81.4
Monmouthshire LA	1105	768	69.5	1091	887	81.3	1034	796	77.0	1107	824	74.4
Newport LA	1874	960	51.2	1860	1474	79.2	1852	1475	79.6	1786	1369	76.7
Torfaen LA	1002	790	78.8	975	825	84.6	1024	890	86.9	1066	863	81.0
Health Board Total	6888	4740	68.8	6704	5543	82.7	6630	5525	83.3	6728	5314	79.0
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	727	380	52.3	707	574	81.2	733	594	81.0	716	528	73.7
Conwy LA	1177	907	77.1	1165	1020	87.6	1136	991	87.2	1270	989	77.9
Denbighshire LA	1065	570	53.5	1008	859	85.2	1056	876	83.0	1159	912	78.7
Flintshire LA	1660	388	23.4	1506	1218	80.9	1588	1273	80.2	1616	1272	78.7
Gwynedd LA	1182	550	46.5	1180	978	82.9	1177	991	84.2	1245	925	74.3
Wrexham LA	1428	669	46.8	1419	1165	82.1	1313	1105	84.2	1442	1108	76.8
Health Board Total	7239	3464	47.9	6985	5814	83.2	7003	5830	83.3	7448	5734	77.0
<u>Cardiff and Vale University HB</u>												
Cardiff LA	3798	2547	67.1	3788	2731	72.1	3664	2027	55.3	3736	2847	76.2
Vale of Glamorgan LA	1417	1049	74.0	1479	1167	78.9	1352	876	64.8	1371	1012	73.8
Health Board Total	5215	3596	69.0	5267	3898	74.0	5016	2903	57.9	5107	3859	75.6
<u>Cwm Taf University HB</u>												
Merthyr Tydfil LA	668	540	80.8	663	596	89.9	627	569	90.7	641	547	85.3
Rhondda Cynon Taf LA	2662	2229	83.7	2805	2520	89.8	2536	2333	92.0	2642	2292	86.8
Health Board Total	3330	2769	83.2	3468	3116	89.9	3163	2902	91.7	3283	2839	86.5
<u>Hywel Dda University HB</u>												
Carmarthenshire LA	1979	59	3.0	2044	1775	86.8	2035	1793	88.1	2001	1669	83.4
Ceredigion LA	667	548	82.2	619	534	86.3	593	515	86.8	626	525	83.9
Pembrokeshire LA	1257	402	32.0	1214	963	79.3	1180	908	76.9	1203	841	69.9
Health Board Total	3903	1009	25.9	3877	3272	84.4	3808	3216	84.5	3830	3035	79.2
<u>Powys Teaching HB</u>	1331	810	60.9	1330	1106	83.2	1291	1103	85.4	1311	1060	80.9
Unknown	113	64	56.6	93	72	77.4	100	84	84.0	145	106	73.1
Wales Total	33750	16551	49.0	33325	27798	83.4	32509	26516	81.6	33616	26853	79.9

¹ Timings of MenACWY immunisation sessions vary between HBs.

Table 10. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children in 2017-18 school year 9 reaching their 14th birthday between 01/09/17 and 31/08/18 and resident on 31/03/18, with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ^{1,2}		MenACWY ²		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
<u>Abertawe Bro Morgannwg University HB</u>																						
Bridgend LA	1597	1511	94.6	1426	89.3	45	2.8	41	2.6	813	778	95.7	740	91.0	784	733	93.5	686	87.5			
Neath Port Talbot LA	1515	1426	94.1	1363	90.0	28	1.8	25	1.7	748	715	95.6	681	91.0	767	711	92.7	682	88.9			
Swansea LA	2619	2418	92.3	2313	88.3	58	2.2	33	1.3	1240	1139	91.9	1091	88.0	1379	1279	92.7	1222	88.6			
Health Board Total	5731	5355	93.4	5102	89.0	131	2.3	99	1.7	2801	2632	94.0	2512	89.7	2930	2723	92.9	2590	88.4			
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	754	722	95.8	695	92.2	609	80.8	607	80.5	373	358	96.0	346	92.8	381	364	95.5	349	91.6			
Caerphilly LA	2153	2059	95.6	1981	92.0	1615	75.0	1615	75.0	1022	967	94.6	933	91.3	1130	1091	96.5	1047	92.7			
Monmouthshire LA	1105	974	88.1	933	84.4	771	69.8	768	69.5	539	469	87.0	448	83.1	566	505	89.2	485	85.7			
Newport LA	1874	1767	94.3	1688	90.1	973	51.9	960	51.2	903	853	94.5	818	90.6	971	914	94.1	870	89.6			
Torfaen LA	1002	968	96.6	924	92.2	795	79.3	790	78.8	488	469	96.1	448	91.8	514	499	97.1	476	92.6			
Health Board Total	6888	6490	94.2	6221	90.3	4763	69.1	4740	68.8	3325	3116	93.7	2993	90.0	3562	3373	94.7	3227	90.6			
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	727	685	94.2	670	92.2	365	50.2	380	52.3	344	325	94.5	321	93.3	383	360	94.0	349	91.1			
Conwy LA	1177	1089	92.5	1037	88.1	901	76.6	907	77.1	578	531	91.9	500	86.5	599	558	93.2	537	89.6			
Denbighshire LA	1065	968	90.9	932	87.5	574	53.9	570	53.5	501	449	89.6	431	86.0	564	519	92.0	501	88.8			
Flintshire LA	1660	1540	92.8	1483	89.3	387	23.3	388	23.4	793	743	93.7	715	90.2	867	797	91.9	768	88.6			
Gwynedd LA	1182	1103	93.3	1067	90.3	539	45.6	550	46.5	541	506	93.5	491	90.8	641	597	93.1	576	89.9			
Wrexham LA	1428	1326	92.9	1293	90.5	668	46.8	669	46.8	700	647	92.4	630	90.0	728	679	93.3	663	91.1			
Health Board Total	7239	6711	92.7	6482	89.5	3434	47.4	3464	47.9	3457	3201	92.6	3088	89.3	3782	3510	92.8	3394	89.7			
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	3798	3513	92.5	3285	86.5	2552	67.2	2547	67.1	1895	1756	92.7	1632	86.1	1903	1757	92.3	1653	86.9			
Vale of Glamorgan LA	1417	1318	93.0	1246	87.9	1049	74.0	1049	74.0	729	673	92.3	639	87.7	688	645	93.8	607	88.2			
Health Board Total	5215	4831	92.6	4531	86.9	3601	69.1	3596	69.0	2624	2429	92.6	2271	86.5	2591	2402	92.7	2260	87.2			
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	668	625	93.6	598	89.5	540	80.8	540	80.8	319	291	91.2	277	86.8	348	334	96.0	321	92.2			
Rhondda Cynon Taf LA	2662	2526	94.9	2439	91.6	2130	80.0	2229	83.7	1301	1241	95.4	1196	91.9	1361	1285	94.4	1243	91.3			
Health Board Total	3330	3151	94.6	3037	91.2	2670	80.2	2769	83.2	1620	1532	94.6	1473	90.9	1709	1619	94.7	1564	91.5			
<u>Hywel Dda University HB</u>																						
Cardiff LA	1979	1811	91.5	1711	86.5	75	3.8	59	3.0	970	885	91.2	838	86.4	1009	926	91.8	873	86.5			
Ceredigion LA	667	611	91.6	594	89.1	556	83.4	548	82.2	319	299	93.7	288	90.3	348	312	89.7	306	87.9			
Pembrokeshire LA	1257	1133	90.1	1074	85.4	416	33.1	402	32.0	629	566	90.0	541	86.0	628	567	90.3	533	84.9			
Health Board Total	3903	3555	91.1	3379	86.6	1047	26.8	1009	25.9	1918	1750	91.2	1667	86.9	1985	1805	90.9	1712	86.2			
<u>Powys Teaching HB</u>	1331	1154	86.7	1080	81.1	809	60.8	810	60.9	658	569	86.5	536	81.5	673	585	86.9	544	80.8			
Unknown	113	101	89.4	94	83.2	63	55.8	64	56.6	50	43	86.0	40	80.0	63	58	92.1	54	85.7			
Wales Total	33750	31348	92.9	29926	88.7	16518	48.9	16551	49.0	16453	15272	92.8	14580	88.6	17295	16075	92.9	15345	88.7			

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

² Timings of immunisation sessions vary between HBs and may not have been complete at the time this report was produced.

Table 11. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children in 2017-18 school year 10 reaching their 15th birthday between 01/09/17 and 31/08/18 and resident on 31/03/18, 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														
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)	
Bridgend LA	1566	1466	93.6	1380	88.1	1380	88.1	1395	89.1	784	740	94.39	701	89.4	782	726	92.84	679	86.8			
Neath Port Talbot LA	1431	1366	95.5	1286	89.9	1260	88.1	1281	89.5	704	679	96.45	648	92.0	727	687	94.5	638	87.8			
Swansea LA	2604	2364	90.8	2225	85.4	2295	88.1	2301	88.4	1242	1118	90.02	1057	85.1	1362	1246	91.48	1168	85.8			
Health Board Total	5601	5196	92.8	4891	87.3	4935	88.1	4977	88.9	2730	2537	92.93	2406	88.1	2871	2659	92.62	2485	86.6			
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	688	649	94.3	620	90.1	588	85.5	590	85.8	320	303	94.69	290	90.6	368	346	94.02	330	89.7			
Caerphilly LA	2090	1996	95.5	1904	91.1	1777	85.0	1767	84.5	982	935	95.21	896	91.2	1107	1061	95.84	1008	91.1			
Monmouthshire LA	1091	955	87.5	900	82.5	882	80.8	887	81.3	544	469	86.21	433	79.6	547	486	88.85	467	85.4			
Newport LA	1860	1724	92.7	1613	86.7	1478	79.5	1474	79.2	899	839	93.33	791	88.0	958	885	92.38	822	85.8			
Torfaen LA	975	923	94.7	885	90.8	824	84.5	825	84.6	487	462	94.87	445	91.4	488	461	94.47	440	90.2			
Health Board Total	6704	6247	93.2	5922	88.3	5549	82.8	5543	82.7	3232	3008	93.07	2855	88.3	3468	3239	93.4	3067	88.4			
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	707	665	94.1	637	90.1	569	80.5	574	81.2	344	329	95.64	315	91.6	363	336	92.56	322	88.7			
Conwy LA	1165	1073	92.1	1035	88.8	1018	87.4	1020	87.6	546	508	93.04	491	89.9	616	562	91.23	541	87.8			
Denbighshire LA	1008	925	91.8	880	87.3	848	84.1	859	85.2	468	430	91.88	410	87.6	539	495	91.84	470	87.2			
Flintshire LA	1506	1422	94.4	1364	90.6	1210	80.3	1218	80.9	731	690	94.39	660	90.3	775	732	94.45	704	90.8			
Gwynedd LA	1180	1132	95.9	1096	92.9	963	81.6	978	82.9	558	536	96.06	523	93.7	622	596	95.82	573	92.1			
Wrexham LA	1419	1332	93.9	1295	91.3	1154	81.3	1165	82.1	676	634	93.79	610	90.2	743	698	93.94	685	92.2			
Health Board Total	6985	6549	93.8	6307	90.3	5762	82.5	5814	83.2	3323	3127	94.1	3009	90.6	3658	3419	93.47	3295	90.1			
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	3788	3474	91.7	3227	85.2	2724	71.9	2731	72.1	1853	1714	92.5	1606	86.7	1935	1760	90.96	1621	83.8			
Vale of Glamorgan LA	1479	1388	93.8	1309	88.5	1169	79.0	1167	78.9	705	656	93.05	612	86.8	774	732	94.57	697	90.1			
Health Board Total	5267	4862	92.3	4536	86.1	3893	73.9	3898	74.0	2558	2370	92.65	2218	86.7	2709	2492	91.99	2318	85.6			
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	663	621	93.7	587	88.5	596	89.9	596	89.9	330	315	95.45	300	90.9	333	306	91.89	287	86.2			
Rhondda Cynon Taf LA	2805	2657	94.7	2533	90.3	2506	89.3	2520	89.8	1385	1322	95.45	1271	91.8	1420	1335	94.01	1262	88.9			
Health Board Total	3468	3278	94.5	3120	90.0	3102	89.4	3116	89.9	1715	1637	95.45	1571	91.6	1753	1641	93.61	1549	88.4			
<u>Hywel Dda University HB</u>																						
Cardiff LA	2044	1863	91.1	1810	88.6	1770	86.6	1775	86.8	997	911	91.37	891	89.4	1047	952	90.93	919	87.8			
Ceredigion LA	619	579	93.5	553	89.3	534	86.3	534	86.3	294	276	93.88	262	89.1	325	303	93.23	291	89.5			
Pembrokeshire LA	1214	1128	92.9	1057	87.1	958	78.9	963	79.3	612	571	93.3	533	87.1	602	557	92.52	524	87.0			
Health Board Total	3877	3570	92.1	3420	88.2	3262	84.1	3272	84.4	1903	1758	92.38	1686	88.6	1974	1812	91.79	1734	87.8			
<u>Powys Teaching HB</u>	1330	1148	86.3	1041	78.3	1096	82.4	1106	83.2	647	561	86.71	515	79.6	683	587	85.94	526	77.0			
Unknown	93	78	83.9	74	79.6	73	78.5	72	77.4	44	41	93.18	38	86.4	49	37	75.51	36	73.5			
Wales Total	33325	30928	92.8	29311	88.0	27672	83.0	27798	83.4	16152	15039	93.11	14298	88.5	17165	15886	92.55	15010	87.4			

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

Table 12. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children in 2017-18 school year 11 reaching their 16th birthday between 01/09/17 and 31/08/18 and resident on 31/03/18, 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)	
	(n)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)		
<u>Abertawe Bro Morgannwg University HB</u>																						
Bridgend LA	1522	1421 93.4	1326 87.1	1366 89.8	1372 90.1	740	696 94.1	654 88.4	782 85.9													
Neath Port Talbot LA	1473	1359 92.3	1257 85.3	1329 90.2	1348 91.5	721	681 94.5	632 87.7	752 83.1													
Swansea LA	2503	2284 91.3	2123 84.8	2223 88.8	2233 89.2	1224	1127 92.1	1051 85.9	1279 83.8													
Health Board Total	5498	5064 92.1	4706 85.6	4918 89.5	4953 90.1	2685	2504 93.3	2337 87.0	2813 84.2													
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	704	664 94.3	632 89.8	627 89.1	629 89.3	377	356 94.4	343 91.0	327 88.4													
Caerphilly LA	2016	1938 96.1	1845 91.5	1746 86.6	1735 86.1	943	906 96.1	859 91.1	1073 91.9													
Monmouthshire LA	1034	874 84.5	809 78.2	800 77.4	796 77.0	506	427 84.4	402 79.4	527 77.2													
Newport LA	1852	1727 93.3	1618 87.4	1490 80.5	1475 79.6	916	860 93.9	805 87.9	934 87.0													
Torfaen LA	1024	974 95.1	930 90.8	890 86.9	890 86.9	499	473 94.8	456 91.4	525 90.3													
Health Board Total	6630	6177 93.2	5834 88.0	5553 83.8	5525 83.3	3241	3022 93.2	2865 88.4	3386 87.7													
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	733	687 93.7	669 91.3	604 82.4	594 81.0	365	341 93.4	334 91.5	368 91.0													
Conwy LA	1136	1047 92.2	1001 88.1	983 86.5	991 87.2	546	507 92.9	482 88.3	589 87.9													
Denbighshire LA	1056	962 91.1	920 87.1	882 83.5	876 83.0	492	440 89.4	423 86.0	564 88.1													
Flintshire LA	1588	1488 93.7	1428 89.9	1287 81.0	1273 80.2	795	745 93.7	718 90.3	793 89.5													
Gwynedd LA	1177	1107 94.1	1074 91.2	985 83.7	991 84.2	558	527 94.4	511 91.6	619 91.0													
Wrexham LA	1313	1253 95.4	1231 93.8	1105 84.2	1105 84.2	647	618 95.5	614 94.9	666 92.6													
Health Board Total	7003	6544 93.4	6323 90.3	5846 83.5	5830 83.3	3403	3178 93.4	3082 90.6	3599 90.0													
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	3664	3311 90.4	3056 83.4	2647 72.2	2027 55.3	1734	1560 90.0	1438 82.9	1929 83.9													
Vale of Glamorgan LA	1352	1254 92.8	1182 87.4	1103 81.6	876 64.8	662	626 94.6	597 90.2	690 84.8													
Health Board Total	5016	4565 91.0	4238 84.5	3750 74.8	2903 57.9	2396	2186 91.2	2035 84.9	2619 84.1													
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	627	594 94.7	550 87.7	567 90.4	569 90.7	287	276 96.2	256 89.2	339 86.7													
Rhondda Cynon Taf LA	2536	2395 94.4	2257 89.0	2326 91.7	2333 92.0	1233	1175 95.3	1117 90.6	1303 87.5													
Health Board Total	3163	2989 94.5	2807 88.7	2893 91.5	2902 91.7	1520	1451 95.5	1373 90.3	1642 87.3													
<u>Hywel Dda University HB</u>																						
Carmarthenshire LA	2035	1863 91.5	1810 88.9	1798 88.4	1793 88.1	947	865 91.3	839 88.6	1088 89.2													
Ceredigion LA	593	546 92.1	523 88.2	517 87.2	515 86.8	296	274 92.6	266 89.9	297 86.5													
Pembrokeshire LA	1180	1081 91.6	1014 85.9	926 78.5	908 76.9	532	492 92.5	463 87.0	648 85.0													
Health Board Total	3808	3490 91.6	3347 87.9	3241 85.1	3216 84.5	1775	1631 91.9	1568 88.3	2033 87.5													
<u>Powys Teaching HB</u>	1291	1156 89.5	1058 82.0	1087 84.2	1103 85.4	617	563 91.2	521 84.4	674 79.7													
Unknown	100	92 92.0	90 90.0	81 81.0	84 84.0	51	47 92.2	46 90.2	49 89.8													
Wales Total	32509	30077 92.5	28403 87.4	27369 84.2	26516 81.6	15688	14582 93.0	13827 88.1	16815 86.7													

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

² Timings of MenACWY immunisation sessions vary between HBs.

Table 13. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 16th birthday between 01/01/18 and 31/03/18 and resident on 31/03/18, with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ¹		MenACWY ²	Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>																			
Bridgend LA	344	324	94.2	306	89.0	313	91.0	313	91.0	188	175	93.1	168	89.4	156	149	95.5	138	88.5
Neath Port Talbot LA	344	312	90.7	285	82.8	310	90.1	315	91.6	173	158	91.3	146	84.4	171	154	90.1	139	81.3
Swansea LA	616	554	89.9	520	84.4	545	88.5	551	89.4	296	269	90.9	248	83.8	320	285	89.1	272	85.0
Health Board Total	1304	1190	91.3	1111	85.2	1168	89.6	1179	90.4	657	602	91.6	562	85.5	647	588	90.9	549	84.9
<u>Aneurin Bevan University HB</u>																			
Blaenau Gwent LA	166	160	96.4	151	91.0	148	89.2	149	89.8	89	87	97.8	82	92.1	77	73	94.8	69	89.6
Caerphilly LA	464	451	97.2	435	93.8	404	87.1	403	86.9	213	209	98.1	202	94.8	251	242	96.4	233	92.8
Monmouthshire LA	251	210	83.7	191	76.1	203	80.9	202	80.5	117	97	82.9	89	76.1	134	113	84.3	102	76.1
Newport LA	463	433	93.5	405	87.5	381	82.3	378	81.6	226	212	93.8	199	88.1	236	220	93.2	206	87.3
Torfaen LA	230	221	96.1	213	92.6	205	89.1	205	89.1	119	115	96.6	112	94.1	111	106	95.5	101	91.0
Health Board Total	1574	1475	93.7	1395	88.6	1341	85.2	1337	84.9	764	720	94.2	684	89.5	809	754	93.2	711	87.9
<u>Betsi Cadwaladr University HB</u>																			
Anglesey LA	179	163	91.1	158	88.3	139	77.7	139	77.7	86	77	89.5	74	86.0	93	86	92.5	84	90.3
Conwy LA	275	250	90.9	235	85.5	231	84.0	234	85.1	125	115	92.0	107	85.6	150	135	90.0	128	85.3
Denbighshire LA	261	236	90.4	223	85.4	216	82.8	208	79.7	130	115	88.5	110	84.6	131	121	92.4	113	86.3
Flintshire LA	397	375	94.5	362	91.2	316	79.6	314	79.1	208	198	95.2	192	92.3	189	177	93.7	170	89.9
Gwynedd LA	278	266	95.7	255	91.7	231	83.1	232	83.5	137	131	95.6	127	92.7	141	135	95.7	128	90.8
Wrexham LA	312	301	96.5	297	95.2	261	83.7	259	83.0	150	145	96.7	145	96.7	162	156	96.3	152	93.8
Health Board Total	1702	1591	93.5	1530	89.9	1394	81.9	1386	81.4	836	781	93.4	755	90.3	866	810	93.5	775	89.5
<u>Cardiff and Vale University HB</u>																			
Cardiff LA	888	807	90.9	749	84.3	643	72.4	504	56.8	419	383	91.4	358	85.4	469	424	90.4	391	83.4
Vale of Glamorgan LA	348	326	93.7	310	89.1	268	77.0	217	62.4	173	166	96.0	161	93.1	175	160	91.4	149	85.1
Health Board Total	1236	1133	91.7	1059	85.7	911	73.7	721	58.3	592	549	92.7	519	87.7	644	584	90.7	540	83.9
<u>Cwm Taf University HB</u>																			
Merthyr Tydfil LA	156	151	96.8	142	91.0	149	95.5	148	94.9	70	68	97.1	64	91.4	86	83	96.5	78	90.7
Rhondda Cynon Taf LA	613	580	94.6	538	87.8	565	92.2	568	92.7	299	286	95.7	267	89.3	314	294	93.6	271	86.3
Health Board Total	769	731	95.1	680	88.4	714	92.8	716	93.1	369	354	95.9	331	89.7	400	377	94.3	349	87.3
<u>Hywel Dda University HB</u>																			
Carmarthenshire LA	526	480	91.3	468	89.0	463	88.0	458	87.1	257	232	90.3	227	88.3	269	248	92.2	241	89.6
Ceredigion LA	145	134	92.4	124	85.5	124	85.5	123	84.8	65	60	92.3	57	87.7	80	74	92.5	67	83.8
Pembrokeshire LA	274	251	91.6	237	86.5	220	80.3	211	77.0	139	127	91.4	119	85.6	135	124	91.9	118	87.4
Health Board Total	945	865	91.5	829	87.7	807	85.4	792	83.8	461	419	90.9	403	87.4	484	446	92.1	426	88.0
<u>Powys Teaching HB</u>	316	285	90.2	268	84.8	267	84.5	267	84.5	163	147	90.2	141	86.5	153	138	90.2	127	83.0
Unknown	23	22	95.7	22	95.7	20	87.0	20	87.0	10	10	100.0	10	100.0	13	12	92.3	12	92.3
Wales Total	7869	7292	92.7	6894	87.6	6622	84.2	6418	81.6	3852	3582	93.0	3405	88.4	4016	3709	92.4	3489	86.9

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

² Timings of MenACWY immunisation sessions vary between HBs and may not have been complete at the time this report was produced.

Table 14. Uptake of BCG immunisation in children reaching their 1st, 2nd, 5th and 16th birthdays between 01/01/18 and 31/03/18 and resident on 31/03/18.¹

Area	1 yr			2 yrs			5 yrs			16 yrs		
	Resident children	BCG Immunised		Resident children	BCG Immunised		Resident children	BCG Immunised		Resident children	BCG Immunised	
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Bridgend LA	373	17	4.6	376	19	5.1	399	12	3.0	344	4	1.2
Neath Port Talbot LA	350	12	3.4	385	15	3.9	365	9	2.5	344	4	1.2
Swansea LA	571	82	14.4	636	62	9.7	625	53	8.5	616	41	6.7
Health Board Total	1294	111	8.6	1397	96	6.9	1389	74	5.3	1304	49	3.8
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	164	2	1.2	166	2	1.2	204	7	3.4	166	1	0.6
Caerphilly LA	452	6	1.3	494	15	3.0	506	7	1.4	464	4	0.9
Monmouthshire LA	186	8	4.3	188	11	5.9	264	6	2.3	251	5	2.0
Newport LA	493	52	10.5	481	69	14.3	531	61	11.5	463	44	9.5
Torfaen LA	249	5	2.0	255	6	2.4	278	12	4.3	230	1	0.4
Health Board Total	1544	73	4.7	1584	103	6.5	1783	93	5.2	1574	55	3.5
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	165	0	0.0	171	1	0.6	179	2	1.1	179	5	2.8
Conwy LA	254	13	5.1	278	11	4.0	286	8	2.8	275	9	3.3
Denbighshire LA	244	14	5.7	223	13	5.8	248	10	4.0	261	9	3.4
Flintshire LA	360	12	3.3	359	7	1.9	406	14	3.4	397	8	2.0
Gwynedd LA	290	7	2.4	297	17	5.7	316	12	3.8	278	2	0.7
Wrexham LA	366	25	6.8	362	29	8.0	380	26	6.8	312	15	4.8
Health Board Total	1679	71	4.2	1690	78	4.6	1815	72	4.0	1702	48	2.8
<u>Cardiff and Vale University HB</u>												
Cardiff LA	979	26	2.7	1069	137	12.8	1084	184	17.0	888	158	17.8
Vale of Glamorgan LA	373	4	1.1	322	1	0.3	385	11	2.9	348	15	4.3
Health Board Total	1352	30	2.2	1391	138	9.9	1469	195	13.3	1236	173	14.0
<u>Cwm Taf Univeristy HB</u>												
Merthyr Tydfil LA	163	6	3.7	184	14	7.6	180	10	5.6	156	2	1.3
Rhondda Cynon Taf LA	611	21	3.4	735	30	4.1	725	15	2.1	613	16	2.6
Health Board Total	774	27	3.5	919	44	4.8	905	25	2.8	769	18	2.3
<u>Hywel Dda University HB</u>												
Cardiganshire LA	452	18	4.0	482	18	3.7	463	23	5.0	526	47	8.9
Ceredigion LA	141	6	4.3	163	6	3.7	166	5	3.0	145	2	1.4
Pembrokeshire LA	294	3	1.0	279	9	3.2	305	3	1.0	274	2	0.7
Health Board Total	887	27	3.0	924	33	3.6	934	31	3.3	945	51	5.4
<u>Powys Teaching Health Board</u>	239	8	3.3	285	8	2.8	317	5	1.6	316	11	3.5
Unknown	4	1	25.0	2	0	0.0	18	0	0.0	23	3	13.0
Wales Total	7773	348	4.5	8192	500	6.1	8630	495	5.7	7869	408	5.2

¹Data 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 01/01/18 and 31/03/18 and resident on 31/03/18, 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
	(n)	(n)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)
Abertawe Bro Morgannwg UHB	1294	1	100.0	100.0	100.0	1397	2	100.0	100.0	100.0	50.0	1389	0	-	-	-	-
Aneurin Bevan UHB	1544	3	100.0	-	-	1584	1	100.0	100.0	100.0	-	1783	2	100.0	100.0	100.0	100.0
Betsi Cadwaladr UHB	1679	3	100.0	100.0	100.0	1690	2	100.0	100.0	100.0	100.0	1815	0	-	-	-	-
Cardiff and Vale UHB	1352	7	100.0	100.0	71.4	1391	6	100.0	100.0	100.0	66.7	1469	6	100.0	100.0	100.0	100.0
Cwm Taf UHB	774	0	-	-	-	919	3	100.0	100.0	100.0	33.3	905	0	-	-	-	-
Hywel Dda UHB	887	0	-	-	-	924	0	-	-	-	-	934	0	-	-	-	-
Powys Teaching HB	239	0	-	-	-	285	0	-	-	-	-	317	0	-	-	-	-
Unknown	4	0	-	-	-	2	0	-	-	-	-	18	0	-	-	-	-
Wales Total	7773	14	100.0	78.6	64.3	8192	14	100.0	100.0	100.0	57.1	8630	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.