

Vaccine Uptake in Children in Wales

April to June 2018 **REVISED**

COVER 127: Wales August 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 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 slightly below 95% this quarter. Three HBs and 13 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 15 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 85.6% this quarter and was 87.9% in five year olds.
- Vaccination sessions for the first dose of the Human Papillomavirus vaccine (HPV) scheduled in girls in the 2017-18 school year 8 (12-13 year olds), and for the second dose of the HPV vaccine scheduled in girls in the 2017-18 school year 9 (13-14 year olds) should now be complete, although data entry may not be. Uptake of one dose of HPV in 2017-18 school year 8 (12-13 year olds) is currently 77.1%. In girls in the 2017-18 school year 9 (13-14 year olds), uptake of two doses is currently 72.4%.
- Uptake of routine MenACWY vaccine in the 2017-18 school year 9 cohort is currently 81.3%. Coverage of the MenACWY vaccine in the 2017-18 school year 10 cohort is 84.1%.
- Uptake of the Td/IPV teenage booster in the 2017-18 school year 9 cohort is currently 81.1%. Coverage of the Td/IPV teenage booster in the 2017-18 school year 10 was 83.8%.
- Coverage of one dose of MMR vaccine in the 2017-18 school year 10 (age 14-15 years) was 92.8%, coverage of two doses was 88.0%.
- Coverage of one dose of MMR vaccine in the 2017-18 school year 11 (age 15-16 years) was 92.6%, coverage of two doses was 87.4%.

Background

These results are for children living in Wales in June 2018 and reaching their first, second, fourth, fifth and 16th birthdays during the quarter 01/04/2018 to 30/06/2018. 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. 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 as the ‘6 in 1’ vaccine replaced the ‘5 in 1’ vaccine from August 2017 onwards, however a small number of children immunised late would have received the ‘6 in 1’ vaccine. 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>

This is a revised version of COVER 127 following data quality issues identified in December 2018. Uptake figures for 4 year olds and 13 to 17 year olds have been amended.

Findings

1. Uptake of all three doses of the combined “5 in 1” DTaP/IPV/Hib¹ vaccine, scheduled at two, three and four months of age, in children reaching their first birthday decreased to 95.5% this quarter from 96.2% last quarter. Uptake ranged by HB from 93.8% (Hywel Dda) to 97.6% (Cwm Taf) and by LA from 90.8 % (Ceredigion) to 97.8% (Merthyr Tydfil). Five of the seven HBs and 14 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 decreased to 95.5% this quarter from 96.2% last quarter, and ranged by LA from 90.5% (Conwy) to 98.3% (Merthyr Tydfil). Five of the seven HBs and 14 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 95.2% this quarter. Uptake in HBs ranged from 93.5% (Hywel Dda) to 97.5% (Cwm Taf) and ranged by LA from 90.1% (Ceredigion) to 98.3% (Merthyr Tydfil) (Figures 1 and 2, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday decreased to 94.1% this quarter from 94.5% last quarter. Uptake in HBs ranged from 91.3% (Hywel Dda) to 96.9% (Cwm Taf) and ranged by LA from 85.5% (Ceredigion) to 97.8% (Merthyr Tydfil) (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% again this quarter. Uptake ranged by HB from 92.6% (Hywel Dda) to 97.2% (Cwm Taf) and by LA area from 91.3% (Carmarthenshire) to 97.5% (Merthyr Tydfil and Blaenau Gwent). Four HBs and 15 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 94.3% this quarter. Uptake ranged by HB from 90.6% (Cardiff and Vale) to 97.4% (Cwm Taf) and by LA from 89.3% (Ceredigion) to 97.5% (Merthyr Tydfil). Three of the seven HBs and 13 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 decreased to 95.2% this quarter from 95.5% last quarter. Uptake ranged by HB from 92.7% (Cardiff and Vale) to 97.8 (Cwm Taf) and ranged by LA from 91.9% (Vale of Glamorgan) to 97.9% (Rhondda Cynon Taf and Wrexham). Five HBs and 14 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 94.7% this quarter compared to 94.9% last quarter. Uptake ranged by HB from 92.2% (Cardiff and Vale and Hywel Dda) to 97.8% (Cwm Taf), and ranged by LA from 90.7% (Ceredigion) to 97.9% (Rhondda Cynon Taf). Three HBs and 12 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 94.1%
 - Two doses of MMR was 86.9%

The proportion of children who were up to date with all these routine immunisations at four years of age decreased to 85.6% this quarter, compared to 85.7% last quarter. This ranged

¹ DTaP/IPV/Hib vaccine protects against Diphtheria, Tetanus, Pertussis (Whooping Cough), Polio and Hib infection. A small number of children immunised late may have received the DTaP/IPV/Hib/HepB (‘6 in1’) vaccine which also protects against hepatitis B.

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.

by HB from 81.3% (Aneurin Bevan) to 88.4% (Betsi Cadwaladr) and by LA from 75.7% (Newport) to 91.4% (Neath Port Talbot) (Figures 3 and 4, Tables 1, 2 and 5).

10. The proportion of children who were up to date with routine immunisations by their fifth birthday was 87.9% this quarter, an increase from 87.6% last quarter. This ranged by HB from 83.5% (Hywel Dda) to 91.0% (Cwm Taf) (Table 6). There has been an improvement of 3.6% 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 increased to 96.7%, from 96.5% last quarter. Uptake of two doses of MMR increased to 89.7%, compared to 89.3% last quarter. Uptake of two doses of MMR ranged by HB from 85.6% (Hywel Dda) to 92.5% (Cwm Taf) and by LA from 78.9% (Pembrokeshire) to 94.1% (Merthyr Tydfil) (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 increased to 92.6% this quarter compared to 92.1% in the previous quarter, ranging by HB from 89.0% (Hywel Dda) to 94.7% (Betsi Cadwaladr) and by LA from 83.0% (Pembrokeshire) to 97.4% (Anglesey). None of the seven HBs, and four of the 22 LAs achieved the 95% uptake target (Figure 8, Tables 2, 6 and 7).
13. 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 77.1%. Coverage of the first dose in the 2017-18 school year 9 is currently 88.6% and uptake of the second dose in this age group is currently 72.4%. Timings of school vaccination sessions vary throughout the year and although vaccination sessions for girls in the 2017-18 school year 8 group (dose one) and 2017-18 school year 9 (dose two) will be complete, data entry may not be. 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 84.3% (Table 8).
14. Current uptake of the MenACWY vaccine in the 2017-18 routine school year 9 cohort is 81.3%, vaccination sessions are now complete but data entry may not be (Table 9 and Table 10). Coverage in the 2017-18 school years 10, 11 and 12, is currently 84.1%, 82.0% and 80.0% respectively (Table 9).
15. Uptake of the Td/IPV⁴ teenage booster in the 2017-18 school year 9 (children reaching 14 years of age) is currently 81.1%. Coverage of two doses of MMR in this year group is currently 88.9% and coverage of one dose is currently 93.1%. Coverage of two doses of MMR vaccine ranged by HB from 81.0% (Powys) to 91.1% (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 89.0% (Table 10).
16. Coverage of the Td/IPV teenage booster in the 2017-18 school year 10 group (children reaching 15 years of age) was 83.8%. Coverage ranged by HB from 74.4% (Cardiff and Vale) to 89.7% (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 88.6% (Table 11).
17. Coverage of the Td/IPV teenage booster in the 2017-18 school year 11 group (children reaching 16 years of age) was 84.6%. Coverage ranged by HB from 75.3% (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 92.6%. Coverage of two doses of MMR vaccine ranged by HB from 81.3% (Powys) to 90.2% (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 88.2% (Table 12).
18. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st April 2018 and 30th June 2018) decreased to 87.3% this quarter, compared to 87.6% for the previous quarter. Coverage of one dose of MMR stable this quarter at 92.7%. Coverage of a

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

full course of immunisation against rubella (two doses of MMR) in 16 year old girls was 88.5%. National coverage of the Td/IPV teenage booster in children reaching 16 years of age remained stable at 84.2% this quarter (Figures 1 and 2, Tables 2 and 13).

- 19.** 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 5.7%, 4.4%, 6.3% and 4.4% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter two of 2018. This quarter Cardiff LA had the highest proportions of children given BCG by one year of age (15.1%) and Newport LA by two years of age (14.6%).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 78.6%. 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 85.7%. 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 90.9%. 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 cannot be given beyond 24 weeks of age).

The uptake of the third scheduled dose of meningococcal group B vaccine measured at two years of age, which has now been reported on in the last four COVER reports, remained slightly under 95%. National uptake of MMR vaccination in two year olds was also slightly below 95%, for the fifth consecutive quarter.

There was a decrease in children up to date with all routine immunisations at four years of age again this quarter but uptake continues to remain higher than seen throughout most of 2017. There is a wide variation in children up to date by four years of age across LA area, ranging from 76% to 91%. Nationally, uptake of all routine immunisations at five years of age has increased. Uptake of two doses of MMR, which has been on a downward trend since 2015, remains the lowest of all immunisations included in this composite measure, for both age groups, followed by the '4 in 1' and HibMenC vaccines.

The measles outbreak affecting parts of South Wales declared on the 6th March 2018 was declared over on 16th May 2018 with a total of 15 confirmed cases [1]. Coverage of one dose of MMR vaccine in children in 2017-18 school years 9 to 11 remains below 95% and uptake for two doses remains below 90%. National coverage of two MMR doses remains well below the 95% recommended target needed to prevent future outbreaks. As at 13th July, eight European countries including the UK report ongoing measles outbreaks, with 31 deaths reported so far in 2018 across all reporting EU countries [2]. As summer continues, 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 [3, 4].

Public Health Wales has recently published the 2017-18 report on inequalities in vaccine uptake across Wales [5]. It shows that although long term trends in reducing inequalities in vaccine uptake between the most and least deprived neighbourhoods in Wales are positive, there are still inequalities seen across all age groups. Identifying areas with the lowest uptake and implementation of existing policies and guidance designed to improve follow-up of children would continue to reduce inequalities and improve uptake at a national level.

References

- [1] Public Health Wales news. 28 March 2018. <http://howis.wales.nhs.uk/sitesplus/888/news/59618>
- [2] ECDC. 14 July 2018. Communicable Disease Threats Report Week 28, 8-14 July 2018. https://ecdc.europa.eu/sites/portal/files/documents/CDTR_14July2018.pdf
- [3] 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>
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- [5] Public Health Wales Health Protection Division. Inequalities in uptake of routine childhood immunisations in Wales 2017-18, July 2018. Cardiff, Public Health Wales. [http://www2.nphs.wales.nhs.uk:8080/CommunitySurveillanceDocs.nsf/3dc04669c9e1eaa880257062003b246b/cbf6bffb5f6be95802582dc0051bd81/\\$FILE/COVER_Inequalities_AnnualReport_201718_v1.pdf](http://www2.nphs.wales.nhs.uk:8080/CommunitySurveillanceDocs.nsf/3dc04669c9e1eaa880257062003b246b/cbf6bffb5f6be95802582dc0051bd81/$FILE/COVER_Inequalities_AnnualReport_201718_v1.pdf)

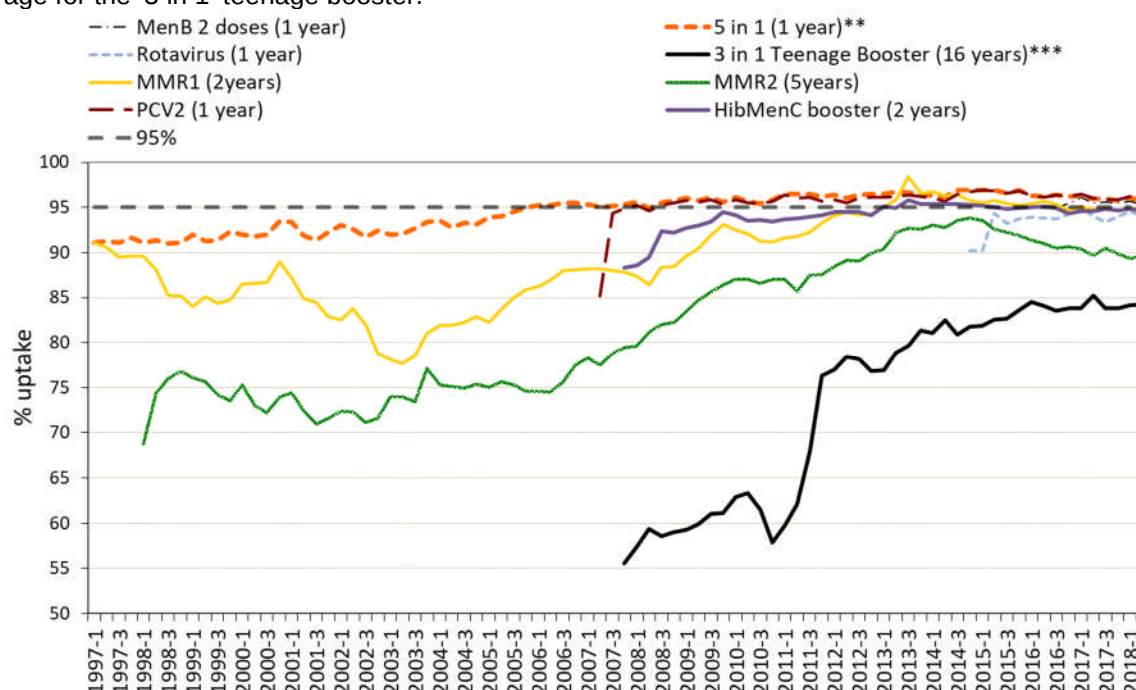
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

Data for this report was provided by NHS Wales Informatics Service from the National Community Child Health Database (NCCHD). The data was sourced from Community Child Health databases maintained by local Child Health Office staff in Trusts throughout Wales based on regular returns from doctors and nurses who immunise or advise on immunisation. Uptake data presented throughout are for HB resident population, not for HB GP practice populations. The maps, graphs, tables 1 and 2 are best viewed in colour.

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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 2 2018*. Data are for children reaching one year of age each quarter for '5 in 1', MenB (two doses), Rotavirus (two doses) and pneumococcal conjugate vaccine (PCV2), children reaching two years of age for MMR1 (first dose) and the Hib/MenC booster, five 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 01/04/18 and 30/06/18 and resident on 30/06/18.

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5 in 1 primary (3 doses) by age 1y	95.5%
MenB (2 doses) by age 1y	95.2%
Rotavirus primary (2 doses) by age 1y	94.1%
PCV primary (2 doses) by age 1y	95.5%
MMR (1 dose) by age 2y	94.9%
PCV (final (3rd) dose) by age 2y	95.2%
MenB (3 doses) by age 2y	94.3%
Hib/MenC booster by age 2y	94.7%
MMR (2 doses) by age 5y	89.7%
4 in 1 pre-school booster by age 5y	92.6%
MMR coverage (1 dose) by age 16y	92.7%
MMR coverage (2 doses) by age 16y	87.3%
3 in 1 Teenage booster by age 16y	84.2%

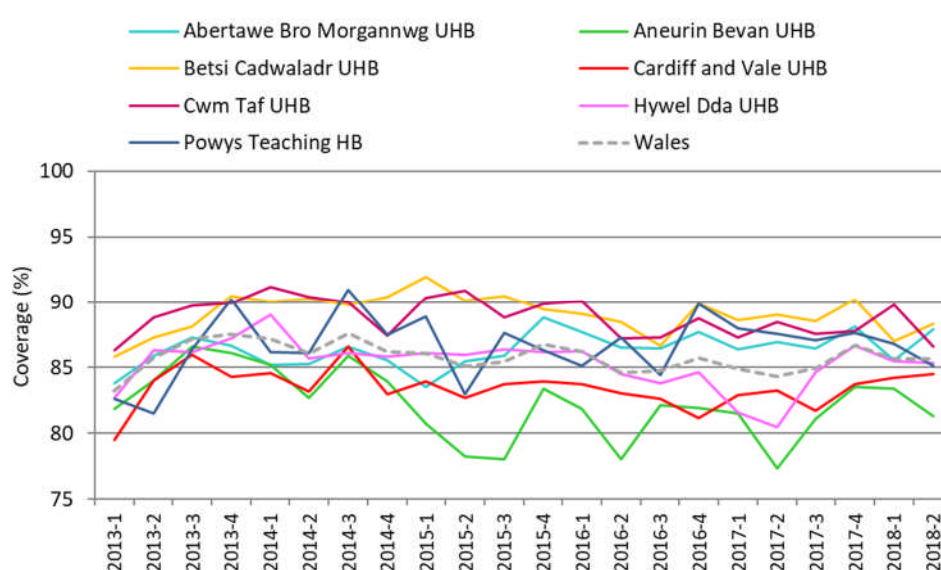
Figure 3. Percentage uptake of resident children reaching their 4th birthday between 01/04/18 and 30/06/18 and are up to date with all scheduled vaccines⁷ by Health Board.



Table 1. Percentages of resident children reaching their 4th birthday during quarter 22017 to quarter 2 2018 who are up to date with all scheduled vaccines⁷, by Health Board.

Area	Up to date in schedule				
	2017-2	2017-3	2017-4	2018-1	2018-2
Abertawe Bro Morgannwg UHB	87.0	86.5	88.1	85.6	87.9
Aneurin Bevan UHB	77.3	81.1	83.6	83.4	81.3
Betsi Cadwaladr UHB	89.0	88.6	90.2	87.0	88.4
Cardiff and Vale UHB	83.3	81.7	83.8	84.2	84.5
Cwm Taf UHB	88.5	87.6	87.8	89.8	86.6
Hywel Dda UHB	80.5	84.7	86.7	85.5	85.4
Powys Teaching HB	87.5	87.1	87.7	86.8	85.2
Wales	84.3	84.9	86.7	85.7	85.6

Figure 4. Trends in the percentages of children reaching their 4th birthday during quarter 1 2013 to quarter 2 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. 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.

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

Figure 5. Uptake of “5 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/04/18 and 30/06/18.

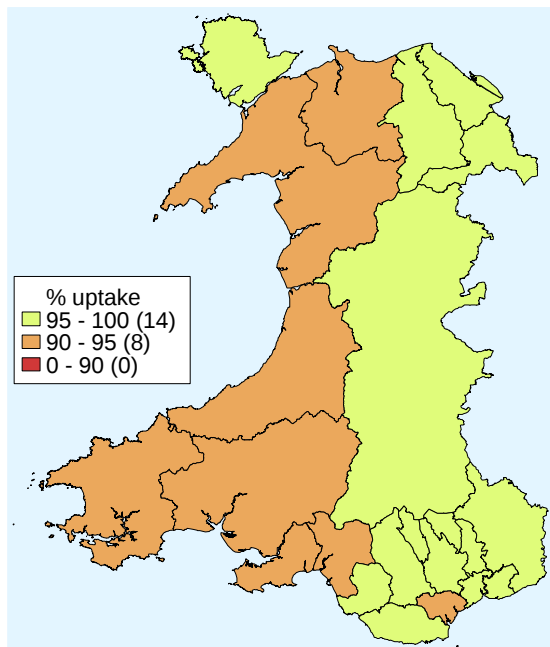


Figure 6. Uptake of at least one dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/04/18 and 30/06/18.

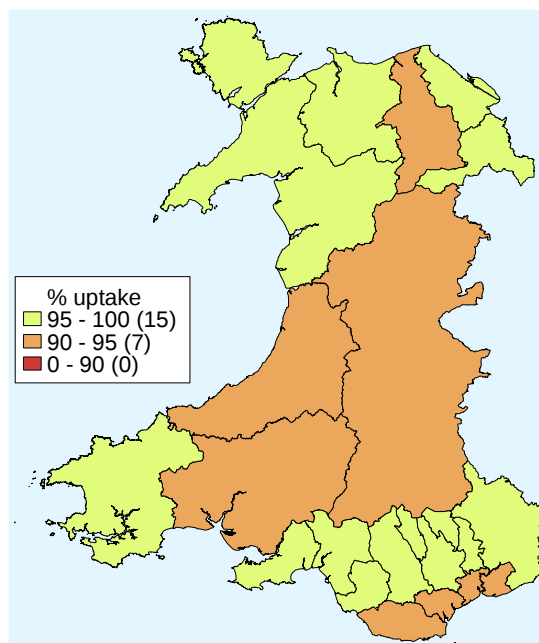


Figure 7. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/18 and 30/06/18.

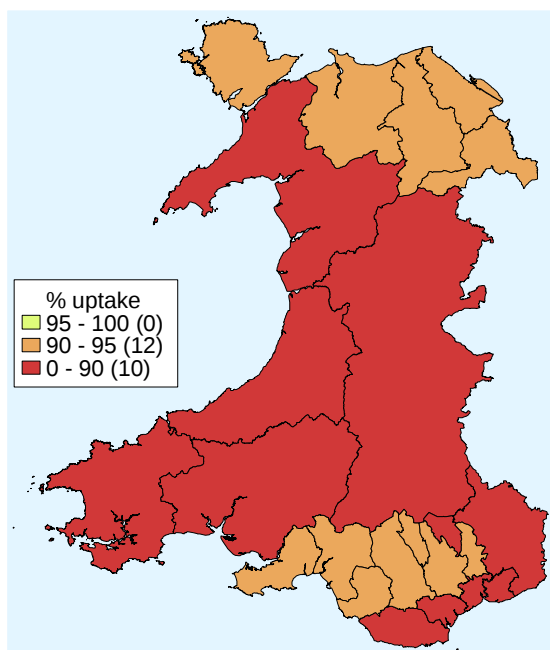


Figure 8. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/18 and 30/06/18.

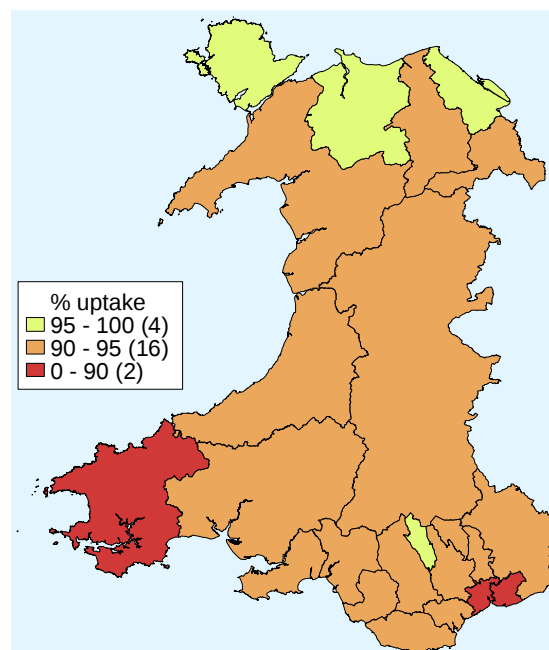


Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 4th, 5th and 16th birthday between 01/04/18 and 30/06/18 and resident on 30/06/18.

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	358	96.6	96.9	96.4	96.4	411	95.1	95.4	95.1	95.4	390	86.2	381	91.1	94.0	382	91.9	84.3	90.3	88.7
Neath Port Talbot LA	367	94.6	94.8	94.8	92.9	391	95.4	95.7	95.1	94.9	374	91.4	356	92.1	94.4	359	94.2	88.0	92.2	90.0
Swansea LA	579	94.6	93.4	94.3	94.5	623	95.0	94.7	94.4	94.5	615	86.8	657	90.9	92.8	614	91.5	84.7	89.9	88.9
Health Board Total	1304	95.2	94.8	95.0	94.6	1425	95.2	95.2	94.8	94.9	1379	87.9	1394	91.2	93.5	1355	92.3	85.5	90.6	89.2
Aneurin Bevan UHB																				
Blaenau Gwent LA	170	95.3	94.7	95.3	93.5	198	97.5	97.5	96.5	96.0	180	80.6	181	89.5	91.7	158	97.5	91.1	88.6	88.6
Caerphilly LA	494	96.4	96.2	96.6	96.8	497	96.8	97.6	97.2	96.0	500	83.6	488	92.2	93.4	494	96.4	92.9	86.4	86.6
Monmouthshire LA	204	97.5	97.5	97.5	93.1	191	95.8	96.3	95.8	95.3	200	89.5	221	87.3	93.7	270	86.7	80.7	74.8	75.9
Newport LA	499	95.8	95.4	95.6	92.4	507	94.3	93.7	93.3	93.7	506	75.7	534	86.9	87.8	471	94.9	87.7	76.4	77.1
Torfaen LA	272	96.0	96.7	97.1	95.2	252	96.8	96.8	96.8	96.0	251	82.1	260	93.1	93.5	280	94.3	88.2	86.1	86.8
Health Board Total	1639	96.2	96.0	96.3	94.4	1645	96.0	96.1	95.7	95.2	1637	81.3	1684	89.7	91.5	1673	94.1	88.5	81.9	82.4
Betsi Cadwaladr UHB																				
Anglesey LA	166	97.0	97.6	97.0	95.8	187	95.7	95.7	95.7	95.7	201	87.1	193	90.7	97.4	187	93.6	92.0	84.5	85.0
Conwy LA	252	90.9	91.3	90.5	91.3	225	96.4	96.9	96.0	95.1	292	88.4	263	90.9	95.1	289	94.1	92.4	88.2	85.8
Denbighshire LA	244	97.1	96.7	97.5	95.1	268	93.3	93.7	92.9	93.7	263	85.2	267	91.0	93.6	277	92.4	87.7	86.3	85.2
Flintshire LA	402	96.5	96.0	96.3	94.3	395	97.2	97.0	97.0	97.5	414	88.6	405	93.3	96.3	382	92.7	89.0	85.6	86.1
Gwynedd LA	266	94.4	93.6	94.7	90.6	306	95.8	96.7	95.8	96.4	290	90.7	285	88.8	91.9	304	92.8	89.8	85.9	84.9
Wrexham LA	420	96.4	96.4	96.7	94.0	380	97.1	97.9	97.1	96.3	386	89.1	405	90.6	94.3	288	95.5	93.1	83.3	84.0
Health Board Total	1750	95.5	95.3	95.5	93.5	1761	96.1	96.5	95.9	96.0	1846	88.4	1818	91.0	94.7	1727	93.5	90.5	85.7	85.2
Cardiff and Vale UHB																				
Cardiff LA	996	94.2	93.7	94.4	93.4	1123	92.8	93.0	90.5	92.1	1075	83.3	1050	87.5	91.3	880	89.2	81.7	68.2	69.1
Vale of Glamorgan LA	357	96.1	95.5	95.5	94.4	360	92.8	91.9	91.1	92.5	341	88.6	362	89.0	92.5	314	93.0	88.2	88.5	87.6
Health Board Total	1353	94.7	94.2	94.7	93.6	1483	92.8	92.7	90.6	92.2	1416	84.5	1412	87.9	91.6	1194	90.2	83.4	73.5	74.0
Cwm Taf UHB																				
Merthyr Tydfil LA	179	97.8	98.3	98.3	97.8	160	97.5	97.5	97.5	97.5	187	86.6	170	94.1	95.9	165	95.2	86.7	88.5	87.9
Rhondda Cynon Taf LA	629	97.6	97.3	97.6	96.7	676	97.2	97.9	97.3	97.9	671	86.6	692	92.1	93.6	614	95.0	90.1	92.8	92.0
Health Board Total	808	97.6	97.5	97.8	96.9	836	97.2	97.8	97.4	97.8	858	86.6	862	92.5	94.1	779	95.0	89.3	91.9	91.1
Hywel Dda UHB																				
Cardiff LA	448	94.2	94.0	93.8	92.0	472	91.3	92.2	90.7	91.3	455	84.4	474	89.0	91.4	500	90.4	88.0	88.4	89.0
Ceredigion LA	131	90.8	90.1	90.8	85.5	140	91.4	92.1	89.3	90.7	141	87.9	139	87.8	93.5	156	94.2	92.3	90.4	91.0
Pembrokeshire LA	270	94.4	94.4	94.1	93.0	293	95.2	94.5	94.2	94.2	312	85.6	294	78.9	83.0	267	93.3	86.1	75.7	79.0
Health Board Total	849	93.8	93.5	93.4	91.3	905	92.6	92.9	91.6	92.2	908	85.4	907	85.6	89.0	923	91.9	88.2	85.0	86.5
Powys Teaching UHB	288	96.5	95.8	96.2	95.8	293	93.5	95.6	93.9	94.9	290	85.2	300	86.3	92.0	297	87.9	78.1	82.2	82.8
Unknown	0	0.0	0.0	0.0	0.0	4	50.0	50.0	50.0	50.0	1	100.0	18	88.9	88.9	20	100.0	95.0	85.0	75.0
Wales Total	7991	95.5	95.2	95.5	94.1	8352	94.9	95.2	94.3	94.7	8335	85.6	8395	89.7	92.6	7968	92.7	87.3	84.3	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 01/04/18 and 30/06/18 and resident on 30/06/18.

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	358	346	96.6	346	96.6	346	96.6	346	96.6	346	96.6	0	0.0	345	96.4	345	96.4	347	96.9	2	0.6
Neath Port Talbot LA	367	347	94.6	347	94.6	347	94.6	347	94.6	347	94.6	0	0.0	341	92.9	348	94.8	348	94.8	0	0.0
Swansea LA	579	548	94.6	548	94.6	548	94.6	548	94.6	548	94.6	2	0.3	547	94.5	546	94.3	541	93.4	2	0.3
Health Board Total	1304	1241	95.2	1241	95.2	1241	95.2	1241	95.2	1241	95.2	2	0.2	1233	94.6	1239	95.0	1236	94.8	4	0.3
<u>Aneurin Bevan University HB</u>																					
Blaenau Gwent LA	170	162	95.3	162	95.3	162	95.3	162	95.3	162	95.3	0	0.0	159	93.5	162	95.3	161	94.7	1	0.6
Caerphilly LA	494	476	96.4	476	96.4	476	96.4	476	96.4	476	96.4	2	0.4	478	96.8	477	96.6	475	96.2	2	0.4
Monmouthshire LA	204	199	97.5	199	97.5	199	97.5	199	97.5	199	97.5	0	0.0	190	93.1	199	97.5	199	97.5	0	0.0
Newport LA	499	478	95.8	478	95.8	478	95.8	478	95.8	478	95.8	1	0.2	461	92.4	477	95.6	476	95.4	0	0.0
Torfaen LA	272	261	96.0	261	96.0	261	96.0	261	96.0	261	96.0	0	0.0	259	95.2	264	97.1	263	96.7	0	0.0
Health Board Total	1639	1576	96.2	1576	96.2	1576	96.2	1576	96.2	1576	96.2	3	0.2	1547	94.4	1579	96.3	1574	96.0	3	0.2
<u>Betsi Cadwaladr University HB</u>																					
Anglesey LA	166	161	97.0	161	97.0	161	97.0	161	97.0	161	97.0	0	0.0	159	95.8	161	97.0	162	97.6	1	0.6
Conwy LA	252	229	90.9	229	90.9	229	90.9	229	90.9	229	90.9	0	0.0	230	91.3	228	90.5	230	91.3	0	0.0
Denbighshire LA	244	237	97.1	237	97.1	237	97.1	237	97.1	237	97.1	1	0.4	232	95.1	238	97.5	236	96.7	1	0.4
Flintshire LA	402	388	96.5	388	96.5	388	96.5	388	96.5	388	96.5	2	0.5	379	94.3	387	96.3	386	96.0	1	0.2
Gwynedd LA	266	251	94.4	251	94.4	251	94.4	251	94.4	251	94.4	1	0.4	241	90.6	252	94.7	249	93.6	1	0.4
Wrexham LA	420	405	96.4	405	96.4	405	96.4	405	96.4	405	96.4	2	0.5	395	94.0	406	96.7	405	96.4	2	0.5
Health Board Total	1750	1671	95.5	1671	95.5	1671	95.5	1671	95.5	1671	95.5	6	0.3	1636	93.5	1672	95.5	1668	95.3	6	0.3
<u>Cardiff and Vale University HB</u>																					
Cardiff LA	996	938	94.2	938	94.2	938	94.2	938	94.2	938	94.2	11	1.1	930	93.4	940	94.4	933	93.7	5	0.5
Vale of Glamorgan LA	357	343	96.1	343	96.1	343	96.1	343	96.1	343	96.1	0	0.0	337	94.4	341	95.5	341	95.5	1	0.3
Health Board Total	1353	1281	94.7	1281	94.7	1281	94.7	1281	94.7	1281	94.7	11	0.8	1267	93.6	1281	94.7	1274	94.2	6	0.4
<u>Cwm Taf University HB</u>																					
Merthyr Tydfil LA	179	175	97.8	175	97.8	175	97.8	175	97.8	175	97.8	1	0.6	175	97.8	176	98.3	176	98.3	1	0.6
Rhondda Cynon Taf LA	629	614	97.6	614	97.6	614	97.6	614	97.6	614	97.6	1	0.2	608	96.7	614	97.6	612	97.3	1	0.2
Health Board Total	808	789	97.6	789	97.6	789	97.6	789	97.6	789	97.6	2	0.2	783	96.9	790	97.8	788	97.5	2	0.2
<u>Hywel Dda University HB</u>																					
Carmarthenshire LA	448	422	94.2	422	94.2	422	94.2	422	94.2	422	94.2	2	0.4	412	92.0	420	93.8	421	94.0	3	0.7
Ceredigion LA	131	119	90.8	119	90.8	119	90.8	119	90.8	119	90.8	0	0.0	112	85.5	119	90.8	118	90.1	0	0.0
Pembrokeshire LA	270	255	94.4	255	94.4	255	94.4	255	94.4	254	94.1	0	0.0	251	93.0	254	94.1	255	94.4	0	0.0
Health Board Total	849	796	93.8	796	93.8	796	93.8	796	93.8	795	93.6	2	0.2	775	91.3	793	93.4	794	93.5	3	0.4
<u>Powys Teaching HB</u>	288	278	96.5	278	96.5	278	96.5	278	96.5	278	96.5	0	0.0	276	95.8	277	96.2	276	95.8	0	0.0
Unknown	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Wales Total	7991	7632	95.5	7632	95.5	7632	95.5	7632	95.5	7631	95.5	26	0.3	7517	94.1	7631	95.5	7610	95.2	24	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 01/04/18 and 30/06/18 and resident on 30/06/18.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	PCV2 ¹	PCVf ²	Men B ³	HibMenC
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Bridgend LA	411	398	96.8	398	96.8	398	96.8	398	96.8	391	95.1
Neath Port Talbot LA	391	385	98.5	385	98.5	385	98.5	385	98.5	373	95.4
Swansea LA	623	608	97.6	608	97.6	608	97.6	608	97.6	592	95.0
Health Board Total	1425	1391	97.6	1391	97.6	1391	97.6	1391	97.6	1356	95.2
<u>Aneurin Bevan University HB</u>											
Blaenau Gwent LA	198	197	99.5	197	99.5	197	99.5	197	99.5	193	97.5
Caerphilly LA	497	488	98.2	488	98.2	488	98.2	488	98.2	481	96.8
Monmouthshire LA	191	181	94.8	181	94.8	181	94.8	181	94.8	183	95.8
Newport LA	507	488	96.3	488	96.3	488	96.3	488	96.3	478	94.3
Torfaen LA	252	247	98.0	247	98.0	247	98.0	247	98.0	244	96.8
Health Board Total	1645	1601	97.3	1601	97.3	1601	97.3	1601	97.3	1579	96.0
<u>Betsi Cadwaladr University HB</u>											
Anglesey LA	187	181	96.8	181	96.8	181	96.8	181	96.8	179	95.7
Conwy LA	225	220	97.8	220	97.8	220	97.8	220	97.8	217	96.4
Denbighshire LA	268	258	96.3	258	96.3	258	96.3	258	96.3	250	93.3
Flintshire LA	395	383	97.0	383	97.0	383	97.0	383	97.0	384	97.2
Gwynedd LA	306	303	99.0	303	99.0	303	99.0	303	99.0	293	95.8
Wrexham LA	380	376	98.9	376	98.9	376	98.9	376	98.9	369	97.1
Health Board Total	1761	1721	97.7	1721	97.7	1721	97.7	1721	97.7	1692	96.1
<u>Cardiff and Vale University HB</u>											
Cardiff LA	1123	1079	96.1	1079	96.1	1079	96.1	1079	96.1	1042	92.8
Vale of Glamorgan LA	360	347	96.4	347	96.4	347	96.4	347	96.4	334	92.8
Health Board Total	1483	1426	96.2	1426	96.2	1426	96.2	1426	96.2	1376	92.8
<u>Cwm Taf University HB</u>											
Merthyr Tydfil LA	160	157	98.1	157	98.1	157	98.1	157	98.1	156	97.5
Rhondda Cynon Taf LA	676	662	97.9	662	97.9	662	97.9	662	97.9	657	97.2
Health Board Total	836	819	98.0	819	98.0	819	98.0	819	98.0	813	97.2
<u>Hywel Dda University HB</u>											
Cardiff LA	472	452	95.8	452	95.8	452	95.8	452	95.8	431	91.3
Ceredigion LA	140	132	94.3	132	94.3	132	94.3	132	94.3	128	91.4
Pembrokeshire LA	293	282	96.2	282	96.2	282	96.2	282	96.2	279	95.2
Health Board Total	905	866	95.7	866	95.7	866	95.7	866	95.7	838	92.6
<u>Powys Teaching HB</u>	293	284	96.9	284	96.9	284	96.9	284	96.9	274	93.5
Unknown	4	2	50.0	2	50.0	2	50.0	2	50.0	2	50.0
Wales Total	8352	8110	97.1	8110	97.1	8110	97.1	8108	97.1	8107	97.1

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 01/04/18 and 30/06/18 and resident on 30/06/18. 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	390	343	87.9	373	95.6	339	86.9	336	86.2
Neath Port Talbot LA	374	350	93.6	365	97.6	346	92.5	342	91.4
Swansea LA	615	550	89.4	580	94.3	546	88.8	534	86.8
Health Board Total	1379	1243	90.1	1318	95.6	1231	89.3	1212	87.9
Aneurin Bevan University HB									
Blaenau Gwent LA	180	148	82.2	172	95.6	146	81.1	145	80.6
Caerphilly LA	500	433	86.6	476	95.2	424	84.8	418	83.6
Monmouthshire LA	200	187	93.5	191	95.5	181	90.5	179	89.5
Newport LA	506	416	82.2	449	88.7	400	79.1	383	75.7
Torfaen LA	251	216	86.1	231	92.0	209	83.3	206	82.1
Health Board Total	1637	1400	85.5	1519	92.8	1360	83.1	1331	81.3
Betsi Cadwaladr University HB									
Anglesey LA	201	186	92.5	185	92.0	177	88.1	175	87.1
Conwy LA	292	265	90.8	279	95.5	262	89.7	258	88.4
Denbighshire LA	263	232	88.2	250	95.1	227	86.3	224	85.2
Flintshire LA	414	388	93.7	387	93.5	371	89.6	367	88.6
Gwynedd LA	290	269	92.8	279	96.2	265	91.4	263	90.7
Wrexham LA	386	353	91.5	367	95.1	345	89.4	344	89.1
Health Board Total	1846	1693	91.7	1747	94.6	1647	89.2	1631	88.4
Cardiff and Vale University HB									
Cardiff LA	1075	943	87.7	996	92.7	920	85.6	895	83.3
Vale of Glamorgan LA	341	310	90.9	327	95.9	302	88.6	302	88.6
Health Board Total	1416	1253	88.5	1323	93.4	1222	86.3	1197	84.5
Cwm Taf University HB									
Merthyr Tydfil LA	187	170	90.9	174	93.0	164	87.7	162	86.6
Rhondda Cynon Taf LA	671	593	88.4	640	95.4	585	87.2	581	86.6
Health Board Total	858	763	88.9	814	94.9	749	87.3	743	86.6
Hywel Dda University HB									
Cardemarthenshire LA	455	396	87.0	427	93.8	391	85.9	384	84.4
Ceredigion LA	141	129	91.5	132	93.6	125	88.7	124	87.9
Pembrokeshire LA	312	277	88.8	289	92.6	270	86.5	267	85.6
Health Board Total	908	802	88.3	848	93.4	786	86.6	775	85.4
Powys Teaching HB	290	264	91.0	270	93.1	251	86.6	247	85.2
Unknown	1	1	100.0	1	100.0	1	100.0	1	100.0
Wales Total	8335	7419	89.0	7840	94.1	7247	86.9	7137	85.6

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 01/04/18 and 30/06/18 and resident on 30/06/18. 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)	(%)
<u>Abertawe Bro Morgannwg University HB</u>									
Bridgend LA	381	358	94.0	352	92.4	347	91.1	341	89.5
Neath Port Talbot LA	356	336	94.4	345	96.9	328	92.1	326	91.6
Swansea LA	657	610	92.8	616	93.8	597	90.9	589	89.6
Health Board Total	1394	1304	93.5	1313	94.2	1272	91.2	1256	90.1
<u>Aneurin Bevan University HB</u>									
Blaenau Gwent LA	181	166	91.7	176	97.2	162	89.5	162	89.5
Caerphilly LA	488	456	93.4	465	95.3	450	92.2	441	90.4
Monmouthshire LA	221	207	93.7	197	89.1	193	87.3	190	86.0
Newport LA	534	469	87.8	475	89.0	464	86.9	435	81.5
Torfaen LA	260	243	93.5	252	96.9	242	93.1	239	91.9
Health Board Total	1684	1541	91.5	1565	92.9	1511	89.7	1467	87.1
<u>Betsi Cadwaladr University HB</u>									
Anglesey LA	193	188	97.4	181	93.8	175	90.7	174	90.2
Conwy LA	263	250	95.1	249	94.7	239	90.9	238	90.5
Denbighshire LA	267	250	93.6	251	94.0	243	91.0	240	89.9
Flintshire LA	405	390	96.3	385	95.1	378	93.3	375	92.6
Gwynedd LA	285	262	91.9	267	93.7	253	88.8	251	88.1
Wrexham LA	405	382	94.3	379	93.6	367	90.6	363	89.6
Health Board Total	1818	1722	94.7	1712	94.2	1655	91.0	1641	90.3
<u>Cardiff and Vale University HB</u>									
Cardiff LA	1050	959	91.3	950	90.5	919	87.5	891	84.9
Vale of Glamorgan LA	362	335	92.5	336	92.8	322	89.0	316	87.3
Health Board Total	1412	1294	91.6	1286	91.1	1241	87.9	1207	85.5
<u>Cwm Taf University HB</u>									
Merthyr Tydfil LA	170	163	95.9	161	94.7	160	94.1	157	92.4
Rhondda Cynon Taf LA	692	648	93.6	662	95.7	637	92.1	627	90.6
Health Board Total	862	811	94.1	823	95.5	797	92.5	784	91.0
<u>Hywel Dda University HB</u>									
Carmarthenshire LA	474	433	91.4	429	90.5	422	89.0	408	86.1
Ceredigion LA	139	130	93.5	123	88.5	122	87.8	120	86.3
Pembrokeshire LA	294	244	83.0	251	85.4	232	78.9	229	77.9
Health Board Total	907	807	89.0	803	88.5	776	85.6	757	83.5
<u>Powys Teaching HB</u>	300	276	92.0	263	87.7	259	86.3	253	84.3
Unknown	18	16	88.9	16	88.9	16	88.9	16	88.9
Wales Total	8395	7771	92.6	7781	92.7	7527	89.7	7381	87.9

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 01/04/18 and 30/06/18 and resident on 30/06/18

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)	(%)
Abertawe Bro Morgannwg University HB															
Bridgend LA	381	357	93.7	357	93.7	357	93.7	356	93.4	354	92.9	352	92.4	352	92.4
Neath Port Talbot LA	356	344	96.6	344	96.6	344	96.6	344	96.6	344	96.6	343	96.3	336	94.4
Swansea LA	657	616	93.8	616	93.8	616	93.8	616	93.8	616	93.8	607	92.4	603	91.8
Health Board Total	1394	1317	94.5	1317	94.5	1317	94.5	1316	94.4	1314	94.3	1302	93.4	1291	92.6
Aneurin Bevan University HB															
Blaenau Gwent LA	181	176	97.2	176	97.2	176	97.2	176	97.2	176	97.2	177	97.8	176	97.2
Caerphilly LA	488	471	96.5	471	96.5	471	96.5	471	96.5	471	96.5	470	96.3	470	96.3
Monmouthshire LA	221	194	87.8	194	87.8	194	87.8	194	87.8	194	87.8	194	87.8	197	89.1
Newport LA	534	480	89.9	480	89.9	480	89.9	480	89.9	480	89.9	474	88.8	479	89.7
Torfaen LA	260	250	96.2	250	96.2	250	96.2	250	96.2	250	96.2	248	95.4	251	96.5
Health Board Total	1684	1571	93.3	1571	93.3	1571	93.3	1571	93.3	1571	93.3	1563	92.8	1570	93.2
Betsi Cadwaladr University HB															
Anglesey LA	193	178	92.2	178	92.2	178	92.2	178	92.2	178	92.2	177	91.7	180	93.3
Conwy LA	263	251	95.4	251	95.4	251	95.4	251	95.4	251	95.4	249	94.7	247	93.9
Denbighshire LA	267	250	93.6	250	93.6	250	93.6	250	93.6	250	93.6	249	93.3	252	94.4
Flintshire LA	405	383	94.6	383	94.6	383	94.6	383	94.6	381	94.1	376	92.8	380	93.8
Gwynedd LA	285	259	90.9	259	90.9	259	90.9	259	90.9	259	90.9	255	89.5	263	92.3
Wrexham LA	405	383	94.6	383	94.6	383	94.6	382	94.3	383	94.6	377	93.1	379	93.6
Health Board Total	1818	1704	93.7	1704	93.7	1704	93.7	1703	93.7	1702	93.6	1683	92.6	1701	93.6
Cardiff and Vale University HB															
Cardiff LA	1050	966	92.0	966	92.0	966	92.0	966	92.0	966	92.0	928	88.4	948	90.3
Vale of Glamorgan LA	362	330	91.2	330	91.2	330	91.2	330	91.2	330	91.2	325	89.8	333	92
Health Board Total	1412	1296	91.8	1296	91.8	1296	91.8	1296	91.8	1296	91.8	1253	88.7	1281	90.7
Cwm Taf University HB															
Merthyr Tydfil LA	170	164	96.5	164	96.5	164	96.5	164	96.5	164	96.5	162	95.3	161	94.7
Rhondda Cynon Taf LA	692	669	96.7	669	96.7	669	96.7	669	96.7	669	96.7	660	95.4	661	95.5
Health Board Total	862	833	96.6	833	96.6	833	96.6	833	96.6	833	96.6	822	95.4	822	95.4
Hywel Dda University HB															
Carmarthenshire LA	474	441	93.0	441	93.0	441	93.0	441	93.0	441	93.0	439	92.6	437	92.2
Ceredigion LA	139	122	87.8	122	87.8	122	87.8	122	87.8	122	87.8	121	87.1	121	87.1
Pembrokeshire LA	294	260	88.4	260	88.4	260	88.4	260	88.4	264	89.8	252	85.7	251	85.4
Health Board Total	907	823	90.7	823	90.7	823	90.7	823	90.7	823	90.7	824	90.8	810	89.3
Powys Teaching HB	300	273	91.0	273	91.0	273	91.0	273	91.0	273	91.0	271	90.3	267	89
Unknown	18	16	88.9	16	88.9	16	88.9	16	88.9	16	88.9	15	83.3	16	88.9
Wales Total	8395	7833	93.3	7833	93.3	7833	93.3	7831	93.3	7828	93.2	7733	92.1	7758	92.4

¹ One dose of MenC vaccine scheduled at 12 weeks 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 30/06/18.

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	790	700	88.6	811	752	92.7	678	83.6	783	730	93.2	705	90.0
Neath Port Talbot LA	825	746	90.4	743	708	95.3	638	85.9	705	660	93.6	639	90.6
Swansea LA	1223	1049	85.8	1239	1133	91.4	1053	85.0	1240	1136	91.6	1088	87.7
Health Board Total	2838	2495	87.9	2793	2593	92.8	2369	84.8	2728	2526	92.6	2432	89.1
<u>Aneurin Bevan University HB</u>													
Blaenau Gwent LA	345	136	39.4	373	317	85.0	145	38.9	319	290	90.9	268	84.0
Caerphilly LA	1021	539	52.8	1020	900	88.2	501	49.1	978	834	85.3	818	83.6
Monmouthshire LA	480	274	57.1	539	440	81.6	256	47.5	548	453	82.7	424	77.4
Newport LA	960	179	18.6	913	705	77.2	133	14.6	895	754	84.2	652	72.8
Torfaen LA	545	245	45.0	491	421	85.7	188	38.3	485	430	88.7	397	81.9
Health Board Total	3351	1373	41.0	3336	2783	83.4	1223	36.7	3225	2761	85.6	2559	79.3
<u>Betsi Cadwaladr University HB</u>													
Anglesey LA	337	283	84.0	342	307	89.8	281	82.2	342	313	91.5	287	83.9
Conwy LA	533	461	86.5	576	517	89.8	462	80.2	543	487	89.7	469	86.4
Denbighshire LA	526	429	81.6	496	433	87.3	374	75.4	477	428	89.7	400	83.9
Flintshire LA	807	692	85.7	799	725	90.7	658	82.4	731	664	90.8	636	87.0
Gwynedd LA	646	548	84.8	538	479	89.0	438	81.4	557	503	90.3	495	88.9
Wrexham LA	733	626	85.4	699	610	87.3	553	79.1	679	597	87.9	552	81.3
Health Board Total	3582	3039	84.8	3450	3071	89.0	2766	80.2	3329	2992	89.9	2839	85.3
<u>Cardiff and Vale University HB</u>													
Cardiff LA	2009	1676	83.4	1893	1647	87.0	1414	74.7	1851	1589	85.8	1491	80.6
Vale of Glamorgan LA	751	664	88.4	734	660	89.9	631	86.0	707	631	89.3	588	83.2
Health Board Total	2760	2340	84.8	2627	2307	87.8	2045	77.8	2558	2220	86.8	2079	81.3
<u>Cwm Taf University HB</u>													
Merthyr Tydfil LA	355	296	83.4	319	293	91.8	251	78.7	330	307	93.0	299	90.6
Rhondda Cynon Taf LA	1388	1230	88.6	1301	1225	94.2	1100	84.6	1388	1303	93.9	1250	90.1
Health Board Total	1743	1526	87.6	1620	1518	93.7	1351	83.4	1718	1610	93.7	1549	90.2
<u>Hywel Dda University HB</u>													
Carmarthenshire LA	974	877	90.0	970	885	91.2	827	85.3	999	901	90.2	872	87.3
Ceredigion LA	279	238	85.3	318	277	87.1	262	82.4	295	253	85.8	247	83.7
Pembrokeshire LA	599	515	86.0	630	540	85.7	508	80.6	610	517	84.8	482	79.0
Health Board Total	1852	1630	88.0	1918	1702	88.7	1597	83.3	1904	1671	87.8	1601	84.1
<u>Powys Teaching HB</u>													
	643	520	80.9	664	565	85.1	529	79.7	653	558	85.5	528	80.9
Unknown	47	38	80.9	48	40	83.3	38	79.2	44	39	88.6	38	86.4
Wales Total	16816	12961	77.1	16456	14579	88.6	11918	72.4	16159	14377	89.0	13625	84.3

¹ Timings of HPV immunisation sessions vary between HBs and data entry 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 30/06/18.

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 (n)	MenACWY (n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>												
Bridgend LA	1594	1348	84.6	1567	1398	89.2	1521	1372	90.2	1684	1447	85.9
Neath Port Talbot LA	1512	1366	90.3	1433	1282	89.5	1472	1348	91.6	1518	1289	84.9
Swansea LA	2612	2333	89.3	2606	2302	88.3	2504	2236	89.3	2562	2170	84.7
Health Board Total	5718	5047	88.3	5606	4982	88.9	5497	4956	90.2	5764	4906	85.1
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	753	620	82.3	687	592	86.2	707	631	89.3	739	607	82.1
Caerphilly LA	2150	1739	80.9	2083	1768	84.9	2018	1734	85.9	2023	1651	81.6
Monmouthshire LA	1126	843	74.9	1098	894	81.4	1031	794	77.0	1105	825	74.7
Newport LA	1896	1420	74.9	1852	1480	79.9	1841	1469	79.8	1779	1369	77.0
Torfaen LA	1007	846	84.0	972	824	84.8	1018	887	87.1	1062	861	81.1
Health Board Total	6932	5468	78.9	6692	5558	83.1	6615	5515	83.4	6708	5313	79.2
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	723	585	80.9	705	590	83.7	724	597	82.5	715	534	74.7
Conwy LA	1167	946	81.1	1164	1028	88.3	1134	992	87.5	1269	989	77.9
Denbighshire LA	1059	825	77.9	1020	864	84.7	1073	881	82.1	1189	920	77.4
Flintshire LA	1668	1291	77.4	1505	1262	83.9	1585	1306	82.4	1614	1270	78.7
Gwynedd LA	1170	947	80.9	1175	1006	85.6	1176	1005	85.5	1246	928	74.5
Wrexham LA	1429	1135	79.4	1426	1195	83.8	1315	1117	84.9	1444	1114	77.1
Health Board Total	7216	5729	79.4	6995	5945	85.0	7007	5898	84.2	7477	5755	77.0
<u>Cardiff and Vale University HB</u>												
Cardiff LA	3815	2653	69.5	3792	2751	72.5	3670	2061	56.2	3741	2855	76.3
Vale of Glamorgan LA	1426	1114	78.1	1483	1175	79.2	1354	883	65.2	1369	1015	74.1
Health Board Total	5241	3767	71.9	5275	3926	74.4	5024	2944	58.6	5110	3870	75.7
<u>Cwm Taf University HB</u>												
Merthyr Tydfil LA	669	564	84.3	662	596	90.0	626	568	90.7	643	548	85.2
Rhondda Cynon Taf LA	2657	2378	89.5	2808	2531	90.1	2537	2336	92.1	2640	2293	86.9
Health Board Total	3326	2942	88.5	3470	3127	90.1	3163	2904	91.8	3283	2841	86.5
<u>Hywel Dda University HB</u>												
Carmarthenshire LA	1985	1710	86.1	2045	1801	88.1	2037	1822	89.4	2001	1673	83.6
Ceredigion LA	666	595	89.3	621	536	86.3	592	513	86.7	624	524	84.0
Pembrokeshire LA	1260	1027	81.5	1212	971	80.1	1178	910	77.2	1203	842	70.0
Health Board Total	3911	3332	85.2	3878	3308	85.3	3807	3245	85.2	3828	3039	79.4
<u>Powys Teaching HB</u>	1339	1095	81.8	1334	1121	84.0	1304	1111	85.2	1316	1061	80.6
Unknown	111	89	80.2	94	72	76.6	98	84	85.7	146	105	71.9
Wales Total	33794	27469	81.3	33344	28039	84.1	32515	26657	82.0	33632	26890	80.0

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

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 30/06/18, 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)
<u>Abertawe Bro Morgannwg University HB</u>																				
Bridgend LA	1594	1510	94.7	1425	89.4	1336	83.8	1348	84.6		811	778	95.9	740	91.2	783	732	93.5	685	87.5
Neath Port Talbot LA	1512	1425	94.2	1362	90.1	1348	89.2	1366	90.3		743	711	95.7	677	91.1	769	714	92.8	685	89.1
Swansea LA	2612	2418	92.6	2311	88.5	2311	88.5	2333	89.3		1239	1139	91.9	1094	88.3	1373	1279	93.2	1217	88.6
Health Board Total	5718	5353	93.6	5098	89.2	4995	87.4	5047	88.3		2793	2628	94.1	2511	89.9	2925	2725	93.2	2587	88.4
<u>Aneurin Bevan University HB</u>																				
Blaenau Gwent LA	753	731	97.1	707	93.9	622	82.6	620	82.3		373	362	97.1	350	93.8	380	369	97.1	357	93.9
Caerphilly LA	2150	2069	96.2	1994	92.7	1735	80.7	1739	80.9		1020	974	95.5	938	92.0	1129	1094	96.9	1055	93.4
Monmouthshire LA	1126	987	87.7	939	83.4	846	75.1	843	74.9		539	474	87.9	449	83.3	587	513	87.4	490	83.5
Newport LA	1896	1777	93.7	1697	89.5	1431	75.5	1420	74.9		913	860	94.2	826	90.5	983	917	93.3	871	88.6
Torfaen LA	1007	971	96.4	928	92.2	849	84.3	846	84.0		491	471	95.9	451	91.9	516	500	96.9	477	92.4
Health Board Total	6932	6535	94.3	6265	90.4	5483	79.1	5468	78.9		3336	3141	94.2	3014	90.3	3595	3393	94.4	3250	90.4
<u>Betsi Cadwaladr University HB</u>																				
Anglesey LA	723	685	94.7	667	92.3	575	79.5	585	80.9		342	326	95.3	320	93.6	381	359	94.2	347	91.1
Conwy LA	1167	1079	92.5	1027	88.0	942	80.7	946	81.1		576	528	91.7	497	86.3	591	551	93.2	530	89.7
Denbighshire LA	1059	960	90.7	923	87.2	822	77.6	825	77.9		496	443	89.3	425	85.7	563	517	91.8	498	88.5
Flintshire LA	1668	1549	92.9	1498	89.8	1296	77.7	1291	77.4		799	747	93.5	725	90.7	869	802	92.3	773	89.0
Gwynedd LA	1170	1103	94.3	1070	91.5	947	80.9	947	80.9		538	511	95.0	493	91.6	632	592	93.7	577	91.3
Wrexham LA	1429	1327	92.9	1294	90.6	1132	79.2	1135	79.4		699	647	92.6	630	90.1	730	680	93.2	664	91.0
Health Board Total	7216	6703	92.9	6479	89.8	5714	79.2	5729	79.4		3450	3202	92.8	3090	89.6	3766	3501	93.0	3389	90.0
<u>Cardiff and Vale University HB</u>																				
Cardiff LA	3815	3525	92.4	3296	86.4	2662	69.8	2653	69.5		1893	1756	92.8	1638	86.5	1922	1769	92.0	1658	86.3
Vale of Glamorgan LA	1426	1325	92.9	1252	87.8	1114	78.1	1114	78.1		734	677	92.2	643	87.6	692	648	93.6	609	88.0
Health Board Total	5241	4850	92.5	4548	86.8	3776	72.0	3767	71.9		2627	2433	92.6	2281	86.8	2614	2417	92.5	2267	86.7
<u>Cwm Taf University HB</u>																				
Merthyr Tydfil LA	669	627	93.7	600	89.7	563	84.2	564	84.3		319	292	91.5	278	87.1	349	335	96.0	322	92.3
Rhondda Cynon Taf LA	2657	2519	94.8	2431	91.5	2364	89.0	2378	89.5		1301	1241	95.4	1196	91.9	1356	1278	94.2	1235	91.1
Health Board Total	3326	3146	94.6	3031	91.1	2927	88.0	2942	88.5		1620	1533	94.6	1474	91.0	1705	1613	94.6	1557	91.3
<u>Hywel Dda University HB</u>																				
Carmarthenshire LA	1985	1837	92.5	1764	88.9	1703	85.8	1710	86.1		970	895	92.3	857	88.4	1015	942	92.8	907	89.4
Ceredigion LA	666	611	91.7	595	89.3	599	89.9	595	89.3		318	299	94.0	289	90.9	348	312	89.7	306	87.9
Pembrokeshire LA	1260	1153	91.5	1092	86.7	1028	81.6	1027	81.5		630	576	91.4	549	87.1	630	577	91.6	543	86.2
Health Board Total	3911	3601	92.1	3451	88.2	3330	85.1	3332	85.2		1918	1770	92.3	1695	88.4	1993	1831	91.9	1756	88.1
<u>Powys Teaching HB</u>	1339	1160	86.6	1085	81.0	1089	81.3	1095	81.8		664	575	86.6	541	81.5	675	585	86.7	544	80.6
Unknown	111	99	89.2	92	82.9	88	79.3	89	80.2		48	42	87.5	39	81.3	63	57	90.5	53	84.1
Wales Total	33794	31447	93.1	30049	88.9	27402	81.1	27469	81.3		16456	15324	93.1	14645	89.0	17336	16122	93.0	15403	88.8

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

² Timings of immunisation sessions vary between HBs and data entry 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 30/06/18, with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ¹				MenACWY	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)	(%)
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)		(n)	(n)	(%)	(n)	(%)		(n)	(n)	(%)	(n)	(%)		
Bridgend LA	1567	1466	93.6	1381	88.1	1383	88.3	1398	89.2		783	740	94.5	702	89.7		784	726	92.6	679	86.6		
Neath Port Talbot LA	1433	1366	95.3	1286	89.7	1262	88.1	1282	89.5		705	680	96.5	649	92.1		728	686	94.2	637	87.5		
Swansea LA	2606	2368	90.9	2230	85.6	2296	88.1	2302	88.3		1240	1117	90.1	1057	85.2		1366	1251	91.6	1173	85.9		
Health Board Total	5606	5200	92.8	4897	87.4	4941	88.1	4982	88.9		2728	2537	93.0	2408	88.3		2878	2663	92.5	2489	86.5		
<u>Aneurin Bevan University HB</u>																							
Blaenau Gwent LA	687	653	95.1	626	91.1	590	85.9	592	86.2		319	305	95.6	293	91.8		368	348	94.6	333	90.5		
Caerphilly LA	2083	2004	96.2	1915	91.9	1776	85.3	1768	84.9		978	940	96.1	902	92.2		1104	1064	96.4	1013	91.8		
Monmouthshire LA	1098	967	88.1	908	82.7	886	80.7	894	81.4		548	477	87.0	440	80.3		550	490	89.1	468	85.1		
Newport LA	1852	1720	92.9	1615	87.2	1482	80.0	1480	79.9		895	837	93.5	792	88.5		954	883	92.6	823	86.3		
Torfaen LA	972	922	94.9	886	91.2	824	84.8	824	84.8		485	461	95.1	445	91.8		487	461	94.7	441	90.6		
Health Board Total	6692	6266	93.6	5950	88.9	5558	83.1	5558	83.1		3225	3020	93.6	2872	89.1		3463	3246	93.7	3078	88.9		
<u>Betsi Cadwaladr University HB</u>																							
Anglesey LA	705	664	94.2	636	90.2	586	83.1	590	83.7		342	328	95.9	314	91.8		363	336	92.6	322	88.7		
Conwy LA	1164	1069	91.8	1030	88.5	1025	88.1	1028	88.3		543	502	92.4	485	89.3		618	564	91.3	542	87.7		
Denbighshire LA	1020	923	90.5	880	86.3	854	83.7	864	84.7		477	430	90.1	411	86.2		542	493	91.0	469	86.5		
Flintshire LA	1505	1431	95.1	1371	91.1	1263	83.9	1262	83.9		731	697	95.3	666	91.1		774	734	94.8	705	91.1		
Gwynedd LA	1175	1133	96.4	1099	93.5	1004	85.4	1006	85.6		557	537	96.4	524	94.1		618	596	96.4	575	93.0		
Wrexham LA	1426	1340	94.0	1300	91.2	1189	83.4	1195	83.8		679	637	93.8	613	90.3		747	703	94.1	687	92.0		
Health Board Total	6995	6560	93.8	6316	90.3	5921	84.6	5945	85.0		3329	3131	94.1	3013	90.5		3662	3426	93.6	3300	90.1		
<u>Cardiff and Vale University HB</u>																							
Cardiff LA	3792	3465	91.4	3221	84.9	2745	72.4	2751	72.5		1851	1707	92.2	1599	86.4		1941	1758	90.6	1622	83.6		
Vale of Glamorgan LA	1483	1390	93.7	1309	88.3	1177	79.4	1175	79.2		707	657	92.9	613	86.7		776	733	94.5	696	89.7		
Health Board Total	5275	4855	92.0	4530	85.9	3922	74.4	3926	74.4		2558	2364	92.4	2212	86.5		2717	2491	91.7	2318	85.3		
<u>Cwm Taf University HB</u>																							
Merthyr Tydfil LA	662	621	93.8	587	88.7	596	90.0	596	90.0		330	316	95.8	300	90.9		332	305	91.9	287	86.4		
Rhondda Cynon Taf LA	2808	2657	94.6	2531	90.1	2518	89.7	2531	90.1		1388	1324	95.4	1271	91.6		1420	1333	93.9	1260	88.7		
Health Board Total	3470	3278	94.5	3118	89.9	3114	89.7	3127	90.1		1718	1640	95.5	1571	91.4		1752	1638	93.5	1547	88.3		
<u>Hywel Dda University HB</u>																							
Carmarthenshire LA	2045	1859	90.9	1806	88.3	1799	88.0	1801	88.1		999	911	91.2	892	89.3		1046	948	90.6	914	87.4		
Ceredigion LA	621	581	93.6	556	89.5	537	86.5	536	86.3		295	277	93.9	263	89.2		326	304	93.3	293	89.9		
Pembrokeshire LA	1212	1127	93.0	1057	87.2	966	79.7	971	80.1		610	570	93.4	533	87.4		602	557	92.5	524	87.0		
Health Board Total	3878	3567	92.0	3419	88.2	3302	85.1	3308	85.3		1904	1758	92.3	1688	88.7		1974	1809	91.6	1731	87.7		
<u>Powys Teaching HB</u>	1334	1155	86.6	1044	78.3	1112	83.4	1121	84.0		653	566	86.7	519	79.5		681	589	86.5	525	77.1		
Unknown	94	78	83.0	74	78.7	73	77.7	72	76.6		44	41	93.2	38	86.4		50	37	74.0	36	72.0		
Wales Total	33344	30959	92.8	29348	88.0	27943	83.8	28039	84.1		16159	15057	93.2	14321	88.6		17177	15899	92.6	15024	87.5		

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 30/06/18, 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	1521	1420	93.4	1324	87.0	1366	89.8	1372	90.2	740	696	94.1	653	88.2	781	724	92.7	671	85.9
Neath Port Talbot LA	1472	1359	92.3	1256	85.3	1330	90.4	1348	91.6	722	682	94.5	633	87.7	750	677	90.3	623	83.1
Swansea LA	2504	2289	91.4	2125	84.9	2225	88.9	2236	89.3	1226	1130	92.2	1052	85.8	1278	1159	90.7	1073	84.0
Health Board Total	5497	5068	92.2	4705	85.6	4921	89.5	4956	90.2	2688	2508	93.3	2338	87.0	2809	2560	91.1	2367	84.3
<u>Aneurin Bevan University HB</u>																			
Blaenau Gwent LA	707	676	95.6	643	90.9	629	89.0	631	89.3	378	363	96.0	345	91.3	329	313	95.1	298	90.6
Caerphilly LA	2018	1948	96.5	1854	91.9	1746	86.5	1734	85.9	940	910	96.8	860	91.5	1078	1038	96.3	994	92.2
Monmouthshire LA	1031	879	85.3	809	78.5	798	77.4	794	77.0	507	431	85.0	402	79.3	523	448	85.7	407	77.8
Newport LA	1841	1727	93.8	1615	87.7	1483	80.6	1469	79.8	917	864	94.2	806	87.9	922	862	93.5	809	87.7
Torfaen LA	1018	972	95.5	933	91.7	889	87.3	887	87.1	495	472	95.4	459	92.7	523	500	95.6	474	90.6
Health Board Total	6615	6202	93.8	5854	88.5	5545	83.8	5515	83.4	3237	3040	93.9	2872	88.7	3375	3161	93.7	2982	88.4
<u>Betsi Cadwaladr University HB</u>																			
Anglesey LA	724	680	93.9	661	91.3	605	83.6	597	82.5	362	339	93.6	331	91.4	362	341	94.2	330	91.2
Conwy LA	1134	1043	92.0	999	88.1	985	86.9	992	87.5	544	505	92.8	481	88.4	589	537	91.2	517	87.8
Denbighshire LA	1073	966	90.0	923	86.0	889	82.9	881	82.1	500	443	88.6	425	85.0	573	523	91.3	498	86.9
Flintshire LA	1585	1484	93.6	1426	90.0	1313	82.8	1306	82.4	793	743	93.7	716	90.3	792	741	93.6	710	89.6
Gwynedd LA	1176	1110	94.4	1079	91.8	1006	85.5	1005	85.5	557	528	94.8	512	91.9	619	582	94.0	567	91.6
Wrexham LA	1315	1257	95.6	1235	93.9	1116	84.9	1117	84.9	650	621	95.5	617	94.9	665	636	95.6	618	92.9
Health Board Total	7007	6540	93.3	6323	90.2	5914	84.4	5898	84.2	3406	3179	93.3	3082	90.5	3600	3360	93.3	3240	90.0
<u>Cardiff and Vale University HB</u>																			
Cardiff LA	3670	3313	90.3	3058	83.3	2675	72.9	2061	56.2	1739	1561	89.8	1440	82.8	1930	1752	90.8	1618	83.8
Vale of Glamorgan LA	1354	1253	92.5	1183	87.4	1108	81.8	883	65.2	662	625	94.4	596	90.0	692	628	90.8	587	84.8
Health Board Total	5024	4566	90.9	4241	84.4	3783	75.3	2944	58.6	2401	2186	91.0	2036	84.8	2622	2380	90.8	2205	84.1
<u>Cwm Taf University HB</u>																			
Merthyr Tydfil LA	626	593	94.7	550	87.9	566	90.4	568	90.7	287	276	96.2	256	89.2	338	317	93.8	294	87.0
Rhondda Cynon Taf LA	2537	2394	94.4	2259	89.0	2328	91.8	2336	92.1	1232	1173	95.2	1117	90.7	1305	1221	93.6	1142	87.5
Health Board Total	3163	2987	94.4	2809	88.8	2894	91.5	2904	91.8	1519	1449	95.4	1373	90.4	1643	1538	93.6	1436	87.4
<u>Hywel Dda University HB</u>																			
Cardiff and Vale LA	2037	1866	91.6	1815	89.1	1829	89.8	1822	89.4	948	868	91.6	842	88.8	1089	998	91.6	973	89.3
Ceredigion LA	592	546	92.2	522	88.2	515	87.0	513	86.7	296	275	92.9	266	89.9	296	271	91.6	256	86.5
Pembrokeshire LA	1178	1080	91.7	1013	86.0	929	78.9	910	77.2	531	492	92.7	463	87.2	647	588	90.9	550	85.0
Health Board Total	3807	3492	91.7	3350	88.0	3273	86.0	3245	85.2	1775	1635	92.1	1571	88.5	2032	1857	91.4	1779	87.5
<u>Powys Teaching HB</u>	1304	1159	88.9	1060	81.3	1103	84.6	1111	85.2	622	563	90.5	520	83.6	682	596	87.4	540	79.2
Unknown	98	92	93.9	91	92.9	81	82.7	84	85.7	50	47	94.0	47	94.0	48	45	93.8	44	91.7
Wales Total	32515	30106	92.6	28433	87.4	27514	84.6	26657	82.0	15698	14607	93.1	13839	88.2	16811	15497	92.2	14593	86.8

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

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

Table 13. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 16th birthday between 01/04/18 and 30/06/18 and resident on 30/06/18, with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children					Teenage 3 in 1 booster ¹				MenACWY ²					Resident girls					Resident boys				
	(n)	MMR1 (n)	MMR1 (%)	MMR2 (n)	MMR2 (%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	MMR1 (n)	MMR1 (%)	MMR2 (n)	MMR2 (%)	(n)	MMR1 (n)	MMR1 (%)	MMR2 (n)	MMR2 (%)
Abertawe Bro Morgannwg University HB																								
Bridgend LA	382	351	91.9	322	84.3	339	88.7	345	90.3	170	158	92.9	143	84.1	212	193	91.0	179	84.4					
Neath Port Talbot LA	359	338	94.2	316	88.0	323	90.0	331	92.2	180	174	96.7	164	91.1	179	164	91.6	152	84.9					
Swansea LA	614	562	91.5	520	84.7	546	88.9	552	89.9	308	287	93.2	275	89.3	306	275	89.9	245	80.1					
Health Board Total	1355	1251	92.3	1158	85.5	1208	89.2	1228	90.6	658	619	94.1	582	88.4	697	632	90.7	576	82.6					
Aneurin Bevan University HB																								
Blaenau Gwent LA	158	154	97.5	144	91.1	140	88.6	140	88.6	86	84	97.7	77	89.5	72	70	97.2	67	93.1					
Caerphilly LA	494	476	96.4	459	92.9	428	86.6	427	86.4	235	228	97.0	215	91.5	259	248	95.8	244	94.2					
Monmouthshire LA	270	234	86.7	218	80.7	205	75.9	202	74.8	145	125	86.2	116	80.0	125	109	87.2	102	81.6					
Newport LA	471	447	94.9	413	87.7	363	77.1	360	76.4	226	214	94.7	201	88.9	245	233	95.1	212	86.5					
Torfaen LA	280	264	94.3	247	88.2	243	86.8	241	86.1	154	144	93.5	139	90.3	126	120	95.2	108	85.7					
Health Board Total	1673	1575	94.1	1481	88.5	1379	82.4	1370	81.9	846	795	94.0	748	88.4	827	780	94.3	733	88.6					
Betsi Cadwaladr University HB																								
Anglesey LA	187	175	93.6	172	92.0	159	85.0	158	84.5	88	82	93.2	81	92.0	99	93	93.9	91	91.9					
Conwy LA	289	272	94.1	267	92.4	248	85.8	255	88.2	140	134	95.7	131	93.6	148	137	92.6	135	91.2					
Denbighshire LA	277	256	92.4	243	87.7	236	85.2	239	86.3	122	112	91.8	108	88.5	155	144	92.9	135	87.1					
Flintshire LA	382	354	92.7	340	89.0	329	86.1	327	85.6	194	180	92.8	173	89.2	188	174	92.6	167	88.8					
Gwynedd LA	304	282	92.8	273	89.8	258	84.9	261	85.9	148	137	92.6	131	88.5	156	145	92.9	142	91.0					
Wrexham LA	288	275	95.5	268	93.1	242	84.0	240	83.3	137	130	94.9	130	94.9	151	145	96.0	138	91.4					
Health Board Total	1727	1614	93.5	1563	90.5	1472	85.2	1480	85.7	829	775	93.5	754	91.0	897	838	93.4	808	90.1					
Cardiff and Vale University HB																								
Cardiff LA	880	785	89.2	719	81.7	608	69.1	600	68.2	410	366	89.3	335	81.7	470	419	89.1	384	81.7					
Vale of Glamorgan LA	314	292	93.0	277	88.2	275	87.6	278	88.5	147	138	93.9	132	89.8	167	154	92.2	145	86.8					
Health Board Total	1194	1077	90.2	996	83.4	883	74.0	878	73.5	557	504	90.5	467	83.8	637	573	90.0	529	83.0					
Cwm Taf University HB																								
Merthyr Tydfil LA	165	157	95.2	143	86.7	145	87.9	146	88.5	84	81	96.4	76	90.5	81	76	93.8	67	82.7					
Rhondda Cynon Taf LA	614	583	95.0	553	90.1	565	92.0	570	92.8	289	276	95.5	264	91.3	325	307	94.5	289	88.9					
Health Board Total	779	740	95.0	696	89.3	710	91.1	716	91.9	373	357	95.7	340	91.2	406	383	94.3	356	87.7					
Hywel Dda University HB																								
Cardiff and Vale LA	500	452	90.4	440	88.0	445	89.0	442	88.4	234	213	91.0	206	88.0	266	239	89.8	234	88.0					
Ceredigion LA	156	147	94.2	144	92.3	142	91.0	141	90.4	82	79	96.3	78	95.1	74	68	91.9	66	89.2					
Pembrokeshire LA	267	249	93.3	230	86.1	211	79.0	202	75.7	113	106	93.8	101	89.4	154	143	92.9	129	83.8					
Health Board Total	923	848	91.9	814	88.2	798	86.5	785	85.0	429	398	92.8	385	89.7	494	450	91.1	429	86.8					
Powys Teaching HB	297	261	87.9	232	78.1	246	82.8	244	82.2	140	127	90.7	114	81.4	157	134	85.4	118	75.2					
Unknown	20	20	100.0	19	95.0	15	75.0	17	85.0	13	13	100.0	13	100.0	7	7	100.0	6	85.7					
Wales Total	7968	7386	92.7	6959	87.3	6711	84.2	6718	84.3	3845	3588	93.3	3403	88.5	4122	3797	92.1	3555	86.2					

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

² Timings of MenACWY immunisation sessions vary between HBs and data entry 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 01/04/18 and 30/06/18 and resident on 30/06/18.¹

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	
Abertawe Bro Morgannwg University HB	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Bridgend LA	358	10	2.8	411	13	3.2	381	22	5.8	382	3	0.8
Neath Port Talbot LA	367	11	3.0	391	10	2.6	356	13	3.7	359	6	1.7
Swansea LA	579	68	11.7	623	67	10.8	657	63	9.6	614	40	6.5
Health Board Total	1304	89	6.8	1425	90	6.3	1394	98	7.0	1355	49	3.6
Aneurin Bevan University HB												
Blaenau Gwent LA	170	1	0.6	198	4	2.0	181	3	1.7	158	0	0.0
Caerphilly LA	494	6	1.2	497	10	2.0	488	7	1.4	494	6	1.2
Monmouthshire LA	204	7	3.4	191	3	1.6	221	6	2.7	270	9	3.3
Newport LA	499	71	14.2	507	74	14.6	534	76	14.2	471	37	7.9
Torfaen LA	272	4	1.5	252	4	1.6	260	12	4.6	280	6	2.1
Health Board Total	1639	89	5.4	1645	95	5.8	1684	104	6.2	1673	58	3.5
Betsi Cadwaladr University HB												
Anglesey LA	166	3	1.8	187	4	2.1	193	2	1.0	187	3	1.6
Conwy LA	252	14	5.6	225	11	4.9	263	15	5.7	289	7	2.4
Denbighshire LA	244	8	3.3	268	15	5.6	267	11	4.1	277	9	3.2
Flintshire LA	402	16	4.0	395	17	4.3	405	12	3.0	382	15	3.9
Gwynedd LA	266	9	3.4	306	12	3.9	285	8	2.8	304	6	2.0
Wrexham LA	420	20	4.8	380	22	5.8	405	16	4.0	288	7	2.4
Health Board Total	1750	70	4.0	1761	81	4.6	1818	64	3.5	1727	47	2.7
Cardiff and Vale University HB												
Cardiff LA	996	150	15.1	1123	24	2.1	1050	177	16.9	880	122	13.9
Vale of Glamorgan LA	357	11	3.1	360	5	1.4	362	17	4.7	314	11	3.5
Health Board Total	1353	161	11.9	1483	29	2.0	1412	194	13.7	1194	133	11.1
Cwm Taf Univeristy HB												
Merthyr Tydfil LA	179	6	3.4	160	13	8.1	170	11	6.5	165	5	3.0
Rhondda Cynon Taf LA	629	17	2.7	676	27	4.0	692	28	4.0	614	11	1.8
Health Board Total	808	23	2.8	836	40	4.8	862	39	4.5	779	16	2.1
Hywel Dda University HB												
Carmarthenshire LA	448	11	2.5	472	17	3.6	474	15	3.2	500	42	8.4
Ceredigion LA	131	8	6.1	140	6	4.3	139	6	4.3	156	3	1.9
Pembrokeshire LA	270	6	2.2	293	6	2.0	294	4	1.4	267	2	0.7
Health Board Total	849	25	2.9	905	29	3.2	907	25	2.8	923	47	5.1
Powys Teaching Health Board	288	0	0.0	293	7	2.4	300	7	2.3	297	3	1.0
Unknown	0	0	0.0	4	0	0.0	18	1	5.6	20	1	5.0
Wales Total	7991	457	5.7	8352	371	4.4	8395	532	6.3	7968	354	4.4

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 01/04/18 and 30/06/18 and resident on 30/06/18, 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	1304	1	100.0	100.0	100.0	1425	2	100.0	100.0	100.0	100.0	1394	0	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	1639	3	100.0	100.0	-	1645	0	-	-	-	-	1684	0	100.0	100.0	100.0	100.0
Betsi Cadwaladr UHB	1750	2	100.0	100.0	100.0	1761	1	100.0	100.0	100.0	100.0	1818	0	100.0	100.0	100.0	100.0
Cardiff and Vale UHB	1353	7	100.0	100.0	100.0	1483	3	100.0	100.0	100.0	100.0	1412	0	100.0	100.0	100.0	85.7
Cwm Taf UHB	808	1	100.0	100.0	100.0	836	1	100.0	100.0	100.0	-	862	0	-	-	-	-
Hywel Dda UHB	849	0	-	-	-	905	0	-	-	-	-	907	0	100.0	100.0	100.0	100.0
Powys Teaching HB	288	0	-	-	-	293	0	-	-	-	-	300	0	-	-	-	-
Unknown	0	0	-	-	-	4	0	-	-	-	-	18	0	-	-	-	-
Wales Total	7991	14	100.0	100.0	78.6	8352	7	100.0	100.0	100.0	85.7	8395	0	100.0	100.0	100.0	90.9

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.