

Vaccine Uptake in Children in Wales October to December 2017

COVER 125: Wales February 2018



Key points

- For children at one year of age in Wales, uptake of all routine immunisations, apart from rotavirus, exceeded 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.
- National uptake of two doses of MenB vaccine in one year olds was higher than 95% again this quarter. Five HBs and 13 LA areas had an uptake above 95%.
- Uptake of the complete three dose course of MenB vaccine in two year olds was 94% again this quarter. One HB and nine LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children was slightly below 95% this quarter. Three HBs and 12 LA areas achieved an uptake of 95% or over.
- The proportion of children up to date with all routine immunisations by four years of age increased to 87% 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 three quarters as more vaccination sessions take place. Uptake of one dose of HPV in 2017-18 school year 9 (13-14 year olds) is 85%. In girls in the 2017-18 school year 10 (14-15 year olds), uptake of one dose was 88% and uptake of two doses was 82%.
- Coverage of routine MenACWY vaccine in the 2017-18 School Year 9 cohort is currently 9%. Uptake in the previous routine year 9 cohort, now in school year 10, was 83%. The MenACWY catch-up programme is now complete for school-aged children. Uptake in the final 2016-17 school year 11 catch-up programme cohort, now in year 12, was 80%.
- Coverage of the Td/IPV teenage booster in the 2017-18 school year 10 (age 14-15 years) was 83%.
- 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 December 2017 and reaching their first, second, fourth, fifth and 13th to 17th birthdays and relevant school years during the quarter 01/10/2017 to 31/12/2017. 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). Current uptake of HPV vaccination¹ dose 1 in girls in the 2017-18 school years 8, 9 and 10 is also presented. All of these school year groups are offered the newer, two dose HPV schedule. BCG and hepatitis B 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 here, 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 affected by 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>

¹ HPV vaccination protects girls against cervical cancer associated with HPV types 16 and 18.

Findings

1. Uptake of all three doses of the combined “5 in 1” DTaP/IPV/Hib² vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday remained stable this quarter at 95.8%. Uptake ranged by HB from 93.9% (Hywel Dda) to 97.2% (Powys) and by LA from 93.2 % (Ceredigion) to 98.4% (Blaenau Gwent). 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 remained stable at 95.9% this quarter compared to 95.8% last quarter, ranging by LA from 92.6% (Ceredigion) to 98.4% (Blaenau Gwent). 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 95.5% again this quarter. Uptake in HBs ranged from 93.2% (Cardiff and Vale) to 96.8% (Cwm Taf) and ranged by LA from 92.6% (Ceredigion) to 98.4% (Blaenau Gwent) (Figures 1 and 2, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday increased to 94.0% this quarter from 93.4% last quarter. Uptake in HBs ranged from 92.4% (Cardiff and Vale) to 96.0% (Cwm Taf) and ranged by LA from 90.8% (Pembrokeshire) to 97.2% (Merthyr Tydfil) (Figures 1 and 2, Tables 2 and 3).
5. Uptake of the first dose of MMR³ in children reaching their second birthday (scheduled at 12 to 13 months of age) was 94.6% this quarter compared to 94.9% last quarter. Uptake ranged by HB from 93.1% (Cardiff and Vale) to 96.2% (Cwm Taf) and by LA area from 90.4% (Denbighshire) to 98.3% (Anglesey) (Figures 1, 2 and 6, Tables 2 and 4). Three HBs and 12 LA areas achieved the target of 95% uptake.
6. Uptake of the complete three dose course of MenB vaccine in children reaching their second birthday was 94% again this quarter. Uptake ranged by HB from 92.1% (Cardiff and Vale) to 95.8% (Cwm Taf) and by LA from 90.0% (Denbighshire) to 98.3% (Anglesey). One of the seven HBs and nine 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 was decreased to 95.2 % this quarter from 95.5% last quarter. Uptake ranged by HB from 93.7% (Cardiff and Vale) to 96.4 (Cwm Taf) and ranged by LA from 90.8% (Denbighshire) to 98.3% (Anglesey) (Figure 2, Tables 2 and 4). Four HBs and 14 LA areas achieved an uptake of 95% or over.
8. Uptake of the Hib/MenC booster (given at 12 to 13 months of age) in children reaching two years of age was 94.6% this quarter compared to 94.9% last quarter. Uptake ranged by HB from 93.4% (Cardiff and Vale) to 96.2% (Cwm Taf), and ranged by LA from 90.0% (Denbighshire) to 98.3% (Anglesey). Two HBs and 11 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/IPV⁴ pre-school booster was 89.8%
 - The Hib/MenC booster was 93.8%
 - Two doses of MMR was 88.0%

The proportion of children who were up to date with all these routine immunisations at four years of age increased to 86.7% this quarter, compared to 84.9% last quarter. This ranged by HB from 83.6% (Aneurin Bevan) to 90.2% (Betsi Cadwaladr) and by LA from 78.6% (Newport) to 94.7% (Wrexham) (Figures 3 and 4, Tables 1, 2 and 5).

² DTaP/IPV/Hib vaccine protects against Diphtheria, Tetanus, Pertussis (Whooping Cough), Polio and Hib infection.

³ MMR protects against measles, mumps and rubella infections.

⁴DTaP/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 88.1% this quarter, stable compared to last quarter. This ranged by HB from 85.1% (Cardiff and Vale) to 90.9% (Powys) (Table 6). There has been an improvement of 2.4% in the proportion up to date in this cohort of children since we reported on them, aged 4 years, this time last year.
11. In children reaching five years of age this quarter, coverage of one dose of MMR decreased to 96.7% this quarter, from 97.1% last quarter. Uptake of two doses of MMR decreased to 89.9% this quarter, compared to 90.5%, last quarter. Uptake of two doses of MMR ranged by HB from 87.2% (Hywel Dda) to 91.8% (Cwm Taf and Betsi Cadwaladr) and by LA from 86.5% (Monmouthshire) to 96.5% (Anglesey) (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 92.5% this quarter compared to 93.0% in the previous quarter, ranging by HB from 90.6% (Hywel Dda) to 95.3% (Powys) and by LA from 89.1% (Carmarthenshire) to 97.5% (Anglesey). Two of the seven HBs, and five 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 6.3%. Coverage of the first dose in the 2017-18 school year 9 is currently 85.0% and uptake of the second dose in this age group is currently 6.7%. 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 81.5% (Table 8).
15. The MenACWY conjugate vaccine was introduced in September 2015 replacing the single antigen meningococcal C teenage booster that was previously given to children in school year 9 [1]. A phased catch up campaign was also introduced for older children with those aged 16 years (school year 11) being vaccinated in school and those aged 17 to 19 being vaccinated in general practice.
 - Current uptake of the MenACWY vaccine in the 2017-18 routine school year 9 cohort is 9.2% (Table 9 and Table 10).
 - Coverage in the in the 2016-17 year 9 cohort, now in 2017-18 school year 10, is 82.8% (Table 9 and Table 11).
 - Coverage in the 2015-16 year 9 cohort, now in 2017-18 school year 11, is 81.0% (Table 9 and Table 12).
 - Coverage in the 2017-18 school year 12 cohort, the final catch-up cohort to be offered the new vaccine in 2016-17 school year 11, is currently 79.8% (Table 9).
16. Uptake of the Td/IPV⁵ teenage booster in the 2017-18 school year 9 (children reaching 14 years of age) is currently 9.4%. 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 81.8% (Powys) to 91.5% (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 88.8% (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 82.5%. Coverage ranged by HB from 73.3% (Cardiff and Vale) to 88.8% (Cwm Taf). Coverage of two doses of MMR in this year group was 88.1% and coverage of one dose was 92.9%. Coverage of two doses of MMR vaccine ranged by HB from 78.5% (Powys) to 90.5% (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).

⁵Td/IPV boosts protection against Diphtheria, Tetanus and Polio infection before entering adulthood.

- 18.** Coverage of the Td/IPV teenage booster in the 2017-18 school year 11 group (children reaching 16 years of age) was 83.7%. Coverage ranged by HB from 73.8% (Cardiff and Vale) to 91.4% (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 82.4% (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 88.2% (Table 12).
- 19.** Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st October 2017 and 31st December 2017) decreased to 86.9% this quarter, compared to 87.9% for the previous quarter. Coverage of one dose of MMR decreased to 92.3% this quarter, compared to 93.2% last quarter. Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls decreased this quarter to 87.5% from 88.9% last quarter. National coverage of the Td/IPV teenage booster in children reaching 16 years of age remained stable at 83.8% this quarter (Figures 1 and 2, Tables 2 and 13).
- 20.** Uptake of BCG⁶ 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 3.9%, 6.9%, 6.4% and 4.5% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter four of 2017. This quarter Swansea LA had the highest proportions of children given BCG by one year of age (12.9%) and Cardiff LA by two years of age (18.8%).
- 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 83.3%. 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 90.9%. 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.⁶

⁶BCG 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 second 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 at 94% this quarter. All babies born in Wales from 1st August 2017 will have been eligible for hepatitis B immunisation, as part of the hexavalent primary vaccination offered at two, three and four months of age [1]. Uptake of the new hexavalent vaccine will be reported during quarter 3 of 2018, when these babies have reached their first birthday.

National uptake of MMR vaccination in two year olds remains slightly below 95% again this quarter, reaching 95% in only three of the seven HBs. Uptake of two doses of MMR vaccine remains the lowest of all vaccinations for both four and five year olds. There has been a generally decreasing trend in uptake of routine immunisations in four and five year olds over the past two years, further decreases were seen in five year olds this quarter, however uptake in four year olds increased. There is considerable variation seen at Health Board and Local Authority levels, this quarter, fewer HBs and LAs reached uptakes higher than 90% for children by their 5th birthday compared to children who were up to date by this age last year. In one LA (Anglesey) however, uptake of two doses in five year old children exceeded 95%. A higher proportion of children were up to date with their routine immunisations by their 4th birthday this quarter compared to children at the same age this time last year.

On 6th March 2018, an outbreak of measles was declared by Public Health Wales, affecting parts of South and South East Wales [2]. As at 7th March, there were six confirmed cases with a further two probable cases under investigation. While coverage of a complete two dose course of MMR remains below 95% there is potential to see onward transmission of measles. National coverage of two MMR doses has remained suboptimal for a number of years and has declined in recent years. As a result, there are a large number of children and teenagers in Wales who are potentially susceptible to measles virus. In recent outbreaks, there has also been transmission to those who are too young to have been vaccinated. Routine immunisation status checking in schools and offer of catch-up, both in schools and opportunistically in general practice, remains vital in preventing transmission of this highly infectious virus in Wales.

Uptake of MenACWY vaccine in last year's routine year 9 cohort (current 2017-18 school year 10) and last year's catch-up year 11 cohort (current 2017-18 school year 12) remain stable this quarter at 82.8% and 79.8% respectively. Vaccination sessions for 2017-18 school year 9 have begun, and is currently 9.2%. Uptake of the MenACWY vaccine in age groups vaccinated in General Practice (now aged 19, 20 and 21 years of age), remains low at 39.5%, 41.2% and 41.4% respectively as at 12/02/2018 [3].

References

- [1] Welsh Government (2017). Introduction of the hexavalent ("6 in 1") vaccine including hepatitis B into the routine immunisation schedule for babies born on or after 1 August 2017. Welsh Health Circular. WHC(2017)039. <http://gov.wales/docs/dhss/publications/170809whc039en.pdf>
- [2] Public Health Wales news. 7 March 2018. <http://www.wales.nhs.uk/sitesplus/888/news/47763>
- [3] Public Health Wales (2017). MenACWY catch-up immunisation uptake data (collected through Audit+). Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre. <http://www.wales.nhs.uk/sitesplus/888/page/88528>

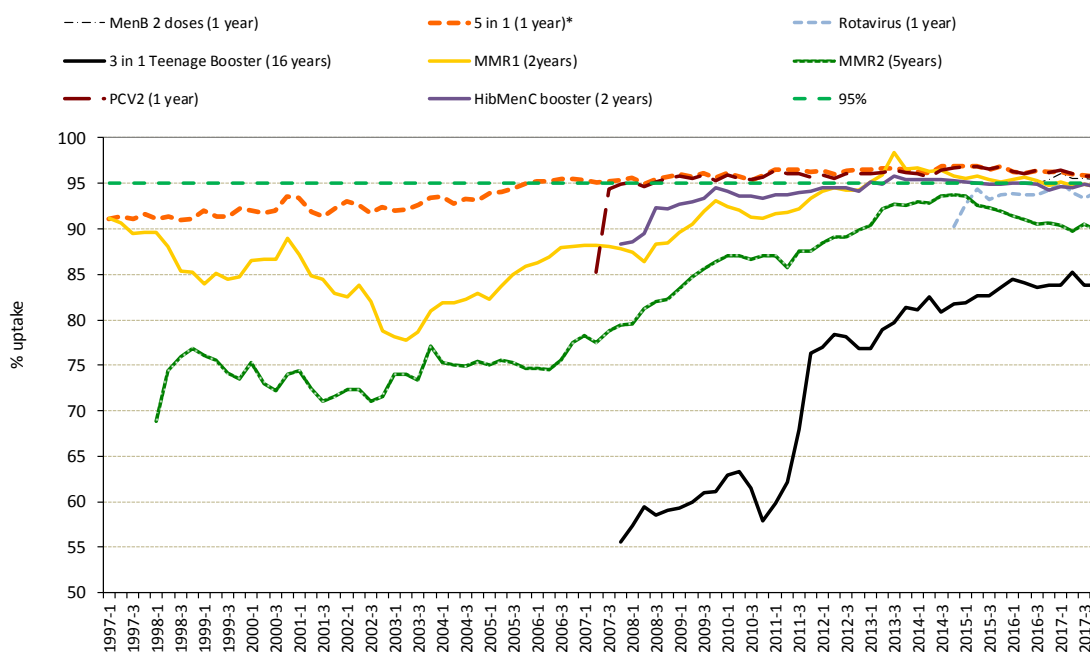
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

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 4 2017*. 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 01/10/17 and 31/12/17 and resident on 31/12/17.

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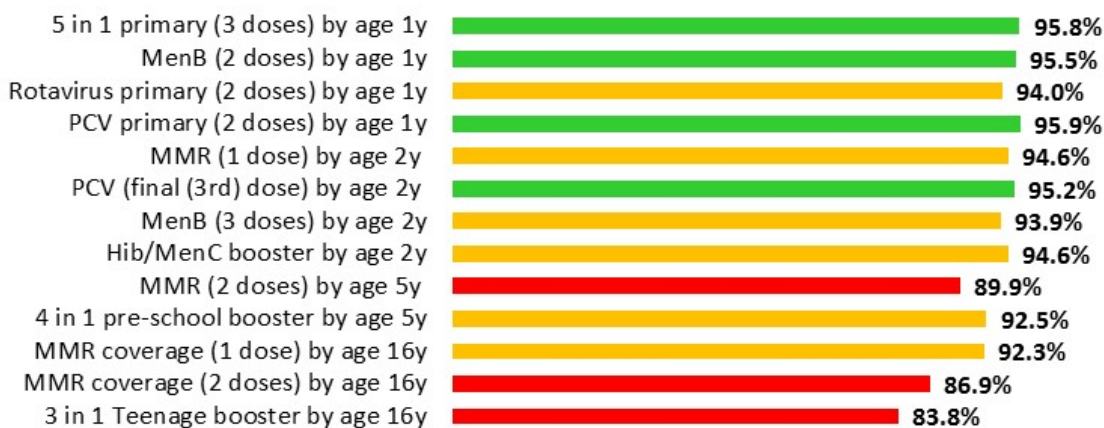


Figure 3. Percentage uptake of resident children reaching their 4th birthday between 01/10/17 and 31/12/17 and are up to date with all scheduled vaccines⁷ by Health Board.

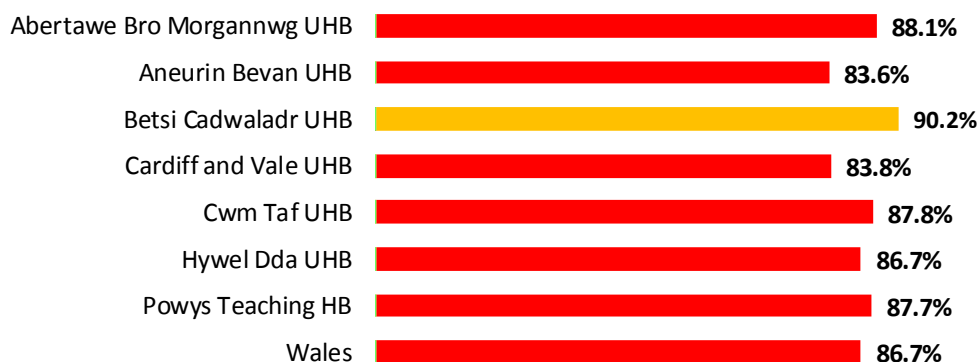
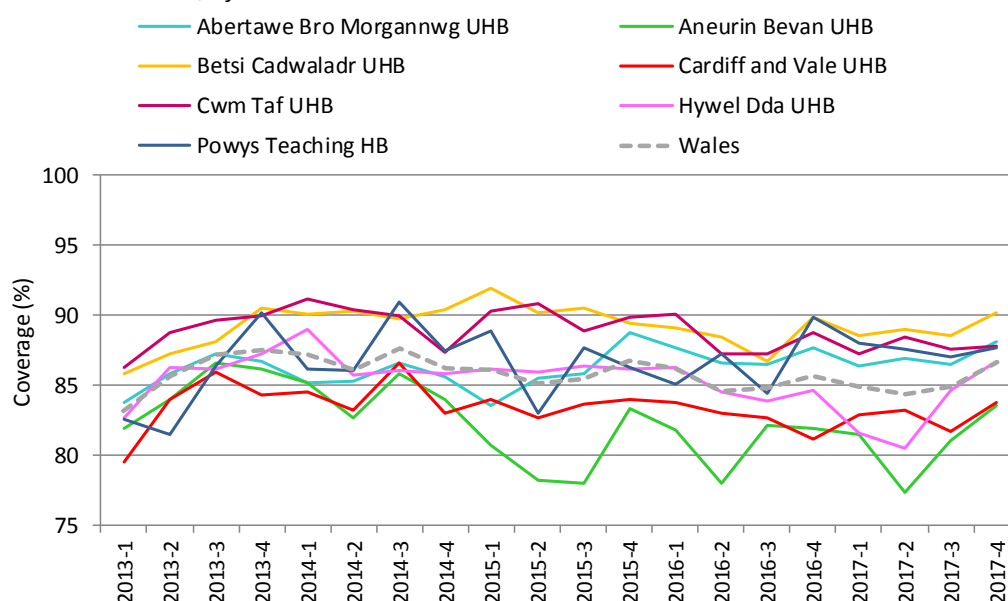


Table 1. Percentages of resident children reaching their 4th birthday during quarter 4 2016 to quarter 4 2017 who are up to date with all scheduled vaccines⁷, by Health Board.

Area	Up to date in schedule				
	2016-4	2017-1	2017-2	2017-3	2017-4
Abertawe Bro Morgannwg UHB	87.7	86.4	87.0	86.5	88.1
Aneurin Bevan UHB	81.9	81.5	77.3	81.1	83.6
Betsi Cadwaladr UHB	89.9	88.6	89.0	88.6	90.2
Cardiff and Vale UHB	81.2	82.9	83.3	81.7	83.8
Cwm Taf UHB	88.8	87.3	88.5	87.6	87.8
Hywel Dda UHB	84.6	81.6	80.5	84.7	86.7
Powys Teaching HB	89.9	88.0	87.5	87.1	87.7
Wales	85.7	84.9	84.3	84.9	86.7

Figure 4. Trends in the percentages of children reaching their 4th birthday 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

Figure 5. Uptake of “5 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/10/17 and 31/12/17.

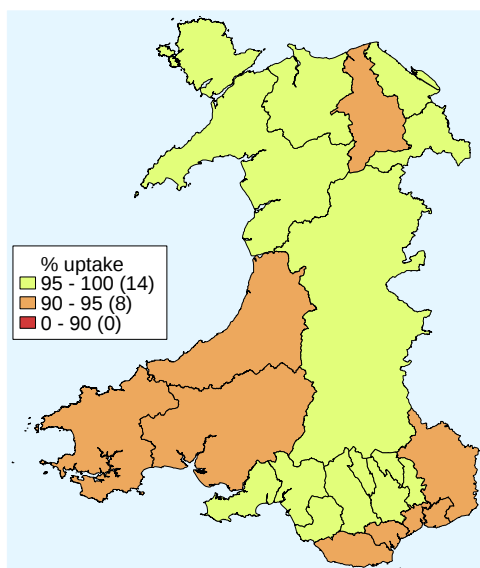


Figure 6. Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/10/17 and 31/12/17.

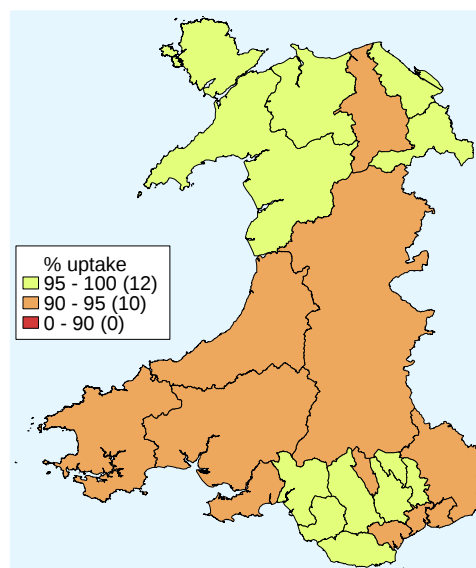


Figure 7. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/10/17 and 31/12/17.

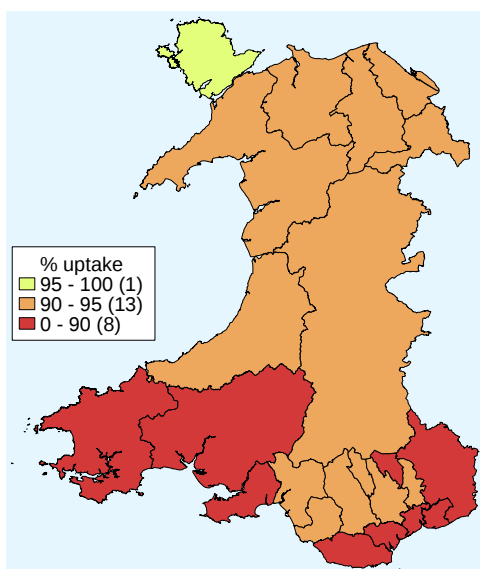
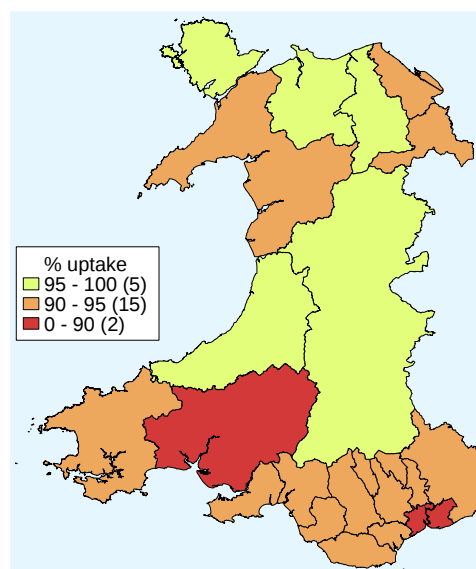


Figure 8. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/10/17 and 31/12/17.



revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age

Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/10/17 and 31/12/17 and resident on 31/12/17.

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	369	97.6	97.6	97.8	96.7	382	95.8	95.8	95.8	95.0	416	90.1	442	91.2	91.9	400	92.8	85.8	89.0	88.5
Neath Port Talbot LA	384	96.1	95.8	95.8	95.3	386	96.4	96.9	95.9	96.1	389	88.2	402	91.3	92.0	401	90.3	82.8	92.5	91.5
Swansea LA	605	95.7	94.7	96.0	95.2	637	93.1	94.3	92.8	93.6	621	86.8	675	89.9	91.7	637	91.5	85.4	89.3	89.8
Health Board Total	1358	96.3	95.8	96.5	95.7	1405	94.7	95.4	94.4	94.7	1426	88.1	1519	90.7	91.8	1438	91.5	84.8	90.1	89.9
Aneurin Bevan UHB																				
Blaenau Gwent LA	191	98.4	98.4	98.4	92.1	191	95.8	96.3	95.8	95.8	200	85.5	219	89.5	91.3	186	92.5	89.2	88.7	88.7
Caerphilly LA	482	97.9	98.3	98.1	95.4	543	95.9	96.7	96.1	95.9	519	88.8	589	91.9	93.2	522	95.8	89.8	87.4	88.7
Monmouthshire LA	223	94.2	93.3	94.2	93.3	197	94.4	94.9	92.9	94.4	209	80.4	222	86.5	93.2	265	86.0	79.2	76.2	76.2
Newport LA	509	93.7	94.1	94.9	91.2	548	94.3	94.2	91.8	93.2	518	78.6	496	86.7	89.5	455	92.3	87.7	80.4	81.1
Torfaen LA	252	97.6	98.0	98.0	93.3	269	95.9	97.0	96.3	95.9	257	84.0	294	90.8	90.8	226	96.0	93.8	85.8	85.0
Health Board Total	1657	96.1	96.3	96.6	93.1	1748	95.3	95.7	94.4	94.9	1703	83.6	1820	89.3	91.6	1654	92.9	88.0	83.6	84.1
Betsi Cadwaladr UHB																				
Anglesey LA	190	97.4	96.8	96.8	95.8	173	98.3	98.3	98.3	98.3	191	91.6	202	96.5	97.5	175	94.9	92.6	84.0	85.7
Conwy LA	279	95.3	95.7	96.1	91.8	312	96.2	95.5	94.6	96.2	256	85.5	296	91.6	95.9	292	92.1	87.3	88.0	87.3
Denbighshire LA	238	93.7	93.7	93.7	93.3	249	90.4	90.8	90.0	90.0	231	84.0	295	90.8	95.6	239	90.4	87.9	80.3	82.4
Flintshire LA	406	97.5	97.3	97.5	96.1	397	96.2	97.0	95.7	96.2	447	91.5	416	90.1	94.7	373	93.6	87.4	76.7	77.7
Gwynedd LA	275	96.7	96.7	96.7	95.3	312	95.5	97.1	95.5	96.2	305	90.2	318	91.5	94.3	307	94.1	92.2	82.4	83.1
Wrexham LA	361	97.2	97.2	97.2	96.1	375	95.2	95.5	94.1	94.9	397	94.7	438	92.0	94.3	371	94.9	93.0	83.3	83.3
Health Board Total	1749	96.5	96.4	96.5	94.9	1818	95.3	95.7	94.6	95.3	1827	90.2	1965	91.8	95.2	1757	93.4	90.0	82.2	82.9
Cardiff and Vale UHB																				
Cardiff LA	1080	94.5	93.3	93.7	92.6	1109	92.4	93.0	91.3	92.6	1135	83.9	1160	87.2	90.6	945	90.8	83.2	41.9	72.6
Vale of Glamorgan LA	343	93.3	92.7	93.6	91.8	381	95.0	95.8	94.5	95.5	387	83.5	400	89.0	91.5	356	91.6	84.6	51.1	78.7
Health Board Total	1423	94.2	93.2	93.7	92.4	1490	93.1	93.7	92.1	93.4	1522	83.8	1560	87.7	90.8	1301	91.0	83.6	44.4	74.3
Cwm Taf UHB																				
Merthyr Tydfil LA	180	97.8	97.2	97.8	97.2	165	94.5	94.5	93.3	93.9	181	88.4	202	92.6	94.6	150	94.7	88.7	90.7	89.3
Rhondda Cynon Taf LA	661	96.7	96.7	97.0	95.6	645	96.6	96.9	96.4	96.7	717	87.6	697	91.5	93.8	673	92.9	88.1	90.5	90.2
Health Board Total	841	96.9	96.8	97.1	96.0	810	96.2	96.4	95.8	96.2	898	87.8	899	91.8	94.0	823	93.2	88.2	90.5	90.0
Hywel Dda UHB																				
Cardiganshire LA	450	94.2	93.8	94.2	94.0	479	92.9	94.4	92.1	93.1	479	86.8	543	86.6	89.1	474	92.4	89.7	88.8	88.6
Ceredigion LA	148	93.2	92.6	92.6	91.2	138	92.0	94.2	94.2	94.2	147	88.4	164	90.2	95.1	127	91.3	87.4	85.8	86.6
Pembrokeshire LA	282	93.6	94.0	94.3	90.8	287	94.4	95.1	92.7	94.8	320	85.6	331	86.7	90.6	333	91.6	86.5	76.0	76.0
Health Board Total	880	93.9	93.6	94.0	92.5	904	93.3	94.6	92.6	93.8	946	86.7	1038	87.2	90.6	934	92.0	88.2	83.8	83.8
Powys Teaching UHB	283	97.2	96.5	97.2	93.6	260	93.5	93.8	92.7	93.5	308	87.7	296	91.6	95.3	341	89.7	80.9	84.8	83.9
Unknown	3	100.0	100.0	100.0	100.0	1	100.0	100.0	100.0	100.0	15	80.0	18	100.0	94.4	28	89.3	89.3	82.1	82.1
Wales Total	8194	95.8	95.5	95.9	94.0	8436	94.6	95.2	93.9	94.6	8645	86.7	9115	89.9	92.5	8276	92.3	86.9	79.0	83.8

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 01/10/17 and 31/12/17 and resident on 31/12/17.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	Rotavirus	PCV2 ¹	Men B ²	HibMenC
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB											
Bridgend LA	369	360	97.6	360	97.6	360	97.6	360	97.6	360	97.6
Neath Port Talbot LA	384	369	96.1	369	96.1	369	96.1	369	96.1	368	95.8
Swansea LA	605	579	95.7	579	95.7	579	95.7	579	95.7	573	94.7
Health Board Total	1358	1308	96.3	1308	96.3	1308	96.3	1308	96.3	1301	95.8
Aneurin Bevan University HB											
Blaenau Gwent LA	191	188	98.4	188	98.4	188	98.4	188	98.4	188	98.4
Caerphilly LA	482	472	97.9	472	97.9	472	97.9	472	97.9	474	98.3
Monmouthshire LA	223	210	94.2	210	94.2	210	94.2	210	94.2	208	93.3
Newport LA	509	477	93.7	477	93.7	477	93.7	477	93.7	479	94.1
Torfaen LA	252	246	97.6	246	97.6	246	97.6	246	97.6	247	98.0
Health Board Total	1657	1593	96.1	1593	96.1	1593	96.1	1593	96.1	1596	96.3
Betsi Cadwaladr University HB											
Anglesey LA	190	185	97.4	185	97.4	185	97.4	185	97.4	184	96.8
Conwy LA	279	266	95.3	266	95.3	266	95.3	266	95.3	267	95.7
Denbighshire LA	238	223	93.7	223	93.7	223	93.7	223	93.7	223	93.7
Flintshire LA	406	396	97.5	396	97.5	396	97.5	396	97.5	395	97.3
Gwynedd LA	275	266	96.7	266	96.7	266	96.7	266	96.7	266	96.7
Wrexham LA	361	351	97.2	351	97.2	351	97.2	351	97.2	351	97.2
Health Board Total	1749	1687	96.5	1687	96.5	1687	96.5	1687	96.5	1686	96.4
Cardiff and Vale University HB											
Cardiff LA	1080	1021	94.5	1021	94.5	1021	94.5	1021	94.5	1008	93.3
Vale of Glamorgan LA	343	320	93.3	320	93.3	320	93.3	320	93.3	318	92.7
Health Board Total	1423	1341	94.2	1341	94.2	1341	94.2	1341	94.2	1326	93.2
Cwm Taf University HB											
Merthyr Tydfil LA	180	176	97.8	176	97.8	176	97.8	176	97.8	175	97.2
Rhondda Cynon Taf LA	661	639	96.7	639	96.7	639	96.7	639	96.7	639	96.7
Health Board Total	841	815	96.9	815	96.9	815	96.9	815	96.9	814	96.8
Hywel Dda University HB											
Carmarthenshire LA	450	424	94.2	424	94.2	424	94.2	424	94.2	422	93.8
Ceredigion LA	148	138	93.2	138	93.2	138	93.2	138	93.2	137	92.6
Pembrokeshire LA	282	264	93.6	264	93.6	264	93.6	263	93.3	265	94.0
Health Board Total	880	826	93.9	826	93.9	826	93.9	825	93.8	824	93.6
Powys Teaching HB	283	275	97.2	275	97.2	275	97.2	275	97.2	273	96.5
Unknown	3	3	100.0	3	100.0	3	100.0	3	100.0	3	100.0
Wales Total	8194	7848	95.8	7848	95.8	7848	95.8	7847	95.8	7823	95.5

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 01/10/17 and 31/12/17 and resident on 31/12/17.

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)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB																							
Bridgend LA	382	372	97.4	372	97.4	372	97.4	371	97.1	372	97.4	366	95.8	369	96.6	371	97.1	366	95.8	366	95.8	363	95.0
Neath Port Talbot LA	386	381	98.7	381	98.7	381	98.7	381	98.7	381	98.7	372	96.4	372	96.4	376	97.4	374	96.9	370	95.9	371	96.1
Swansea LA	637	618	97.0	618	97.0	618	97.0	618	97.0	618	97.0	593	93.1	596	93.6	608	95.4	601	94.3	591	92.8	596	93.6
Health Board Total	1405	1371	97.6	1371	97.6	1371	97.6	1370	97.5	1371	97.6	1331	94.7	1337	95.2	1355	96.4	1341	95.4	1327	94.4	1330	94.7
Aneurin Bevan University HB																							
Blaenau Gwent LA	191	189	99.0	189	99.0	189	99.0	189	99.0	189	99.0	183	95.8	188	98.4	189	99.0	184	96.3	183	95.8	183	95.8
Caerphilly LA	543	536	98.7	536	98.7	536	98.7	536	98.7	536	98.7	521	95.9	531	97.8	531	97.8	525	96.7	522	96.1	521	95.9
Monmouthshire LA	197	190	96.4	190	96.4	190	96.4	190	96.4	190	96.4	186	94.4	188	95.4	189	95.9	187	94.9	183	92.9	186	94.4
Newport LA	548	525	95.8	525	95.8	525	95.8	525	95.8	525	95.8	517	94.3	521	95.1	525	95.8	516	94.2	503	91.8	511	93.2
Torfaen LA	269	265	98.5	265	98.5	265	98.5	265	98.5	265	98.5	258	95.9	263	97.8	265	98.5	261	97.0	259	96.3	258	95.9
Health Board Total	1748	1705	97.5	1705	97.5	1705	97.5	1705	97.5	1705	97.5	1665	95.3	1691	96.7	1699	97.2	1673	95.7	1650	94.4	1659	94.9
Betsi Cadwaladr University HB																							
Anglesey LA	173	170	98.3	170	98.3	170	98.3	170	98.3	170	98.3	170	98.3	168	97.1	170	98.3	170	98.3	170	98.3	170	98.3
Conwy LA	312	302	96.8	302	96.8	302	96.8	301	96.5	302	96.8	300	96.2	300	96.2	300	96.2	298	95.5	295	94.6	300	96.2
Denbighshire LA	249	236	94.8	236	94.8	236	94.8	236	94.8	236	94.8	225	90.4	230	92.4	231	92.8	226	90.8	224	90.0	224	90.0
Flintshire LA	397	385	97.0	385	97.0	385	97.0	385	97.0	385	97.0	382	96.2	377	95.0	380	95.7	385	97.0	380	95.7	382	96.2
Gwynedd LA	312	304	97.4	304	97.4	304	97.4	304	97.4	304	97.4	298	95.5	282	90.4	299	95.8	303	97.1	298	95.5	300	96.2
Wrexham LA	375	361	96.3	361	96.3	361	96.3	361	96.3	361	96.3	357	95.2	355	94.7	358	95.5	358	95.5	353	94.1	356	94.9
Health Board Total	1818	1758	96.7	1758	96.7	1758	96.7	1757	96.6	1758	96.7	1732	95.3	1712	94.2	1738	95.6	1740	95.7	1720	94.6	1732	95.3
Cardiff and Vale University HB																							
Cardiff LA	1109	1064	95.9	1064	95.9	1064	95.9	1065	96.0	1064	95.9	1025	92.4	1037	93.5	1043	94.0	1031	93.0	1012	91.3	1027	92.6
Vale of Glamorgan LA	381	368	96.6	368	96.6	368	96.6	368	96.6	368	96.6	362	95.0	368	96.6	361	94.8	365	95.8	360	94.5	364	95.5
Health Board Total	1490	1432	96.1	1432	96.1	1432	96.1	1433	96.2	1432	96.1	1387	93.1	1405	94.3	1404	94.2	1396	93.7	1372	92.1	1391	93.4
Cwm Taf University HB																							
Merthyr Tydfil LA	165	161	97.6	161	97.6	161	97.6	161	97.6	161	97.6	156	94.5	161	97.6	159	96.4	156	94.5	154	93.3	155	93.9
Rhondda Cynon Taf LA	645	636	98.6	636	98.6	636	98.6	636	98.6	636	98.6	623	96.6	631	97.8	633	98.1	625	96.9	622	96.4	624	96.7
Health Board Total	810	797	98.4	797	98.4	797	98.4	797	98.4	797	98.4	779	96.2	792	97.8	792	97.8	781	96.4	776	95.8	779	96.2
Hywel Dda University HB																							
Carmarthenshire LA	479	459	95.8	459	95.8	459	95.8	459	95.8	459	95.8	445	92.9	449	93.7	450	93.9	452	94.4	441	92.1	446	93.1
Ceredigion LA	138	131	94.9	131	94.9	131	94.9	131	94.9	131	94.9	127	92.0	132	95.7	131	94.9	130	94.2	130	94.2	130	94.2
Pembrokeshire LA	287	274	95.5	274	95.5	274	95.5	275	95.8	274	95.5	271	94.4	269	93.7	270	94.1	273	95.1	266	92.7	272	94.8
Health Board Total	904	864	95.6	864	95.6	864	95.6	865	95.7	864	95.6	843	93.3	850	94.0	851	94.1	855	94.6	837	92.6	848	93.8
Powys Teaching HB	260	246	94.6	246	94.6	246	94.6	246	94.6	246	94.6	243	93.5	242	93.1	245	94.2	244	93.8	241	92.7	243	93.5
Unknown	1	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0
Wales Total	8436	8174	96.9	8174	96.9	8174	96.9	8174	96.9	8174	96.9	7981	94.6	8030	95.2	8085	95.8	8031	95.2	7924	93.9	7983	94.6

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 01/10/17 and 31/12/17 and resident on 31/12/17. 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	416	380	91.3	402	96.6	380	91.3	375	90.1
Neath Port Talbot LA	389	350	90.0	366	94.1	345	88.7	343	88.2
Swansea LA	621	555	89.4	580	93.4	542	87.3	539	86.8
Health Board Total	1426	1285	90.1	1348	94.5	1267	88.8	1257	88.1
Aneurin Bevan University HB									
Blaenau Gwent LA	200	182	91.0	186	93.0	177	88.5	171	85.5
Caerphilly LA	519	471	90.8	496	95.6	465	89.6	461	88.8
Monmouthshire LA	209	184	88.0	180	86.1	170	81.3	168	80.4
Newport LA	518	434	83.8	465	89.8	443	85.5	407	78.6
Torfaen LA	257	221	86.0	245	95.3	219	85.2	216	84.0
Health Board Total	1703	1492	87.6	1572	92.3	1474	86.6	1423	83.6
Betsi Cadwaladr University HB									
Anglesey LA	191	180	94.2	183	95.8	176	92.1	175	91.6
Conwy LA	256	229	89.5	240	93.8	223	87.1	219	85.5
Denbighshire LA	231	206	89.2	214	92.6	197	85.3	194	84.0
Flintshire LA	447	420	94.0	429	96.0	410	91.7	409	91.5
Gwynedd LA	305	281	92.1	293	96.1	278	91.1	275	90.2
Wrexham LA	397	386	97.2	387	97.5	379	95.5	376	94.7
Health Board Total	1827	1702	93.2	1746	95.6	1663	91.0	1648	90.2
Cardiff and Vale University HB									
Cardiff LA	1135	992	87.4	1046	92.2	976	86.0	952	83.9
Vale of Glamorgan LA	387	337	87.1	364	94.1	325	84.0	323	83.5
Health Board Total	1522	1329	87.3	1410	92.6	1301	85.5	1275	83.8
Cwm Taf University HB									
Merthyr Tydfil LA	181	165	91.2	174	96.1	160	88.4	160	88.4
Rhondda Cynon Taf LA	717	637	88.8	687	95.8	630	87.9	628	87.6
Health Board Total	898	802	89.3	861	95.9	790	88.0	788	87.8
Hywel Dda University HB									
Carmarthenshire LA	479	430	89.8	447	93.3	425	88.7	416	86.8
Ceredigion LA	147	139	94.6	139	94.6	131	89.1	130	88.4
Pembrokeshire LA	320	283	88.4	294	91.9	275	85.9	274	85.6
Health Board Total	946	852	90.1	880	93.0	831	87.8	820	86.7
Powys Teaching HB	308	284	92.2	283	91.9	272	88.3	270	87.7
Unknown	15	13	86.7	13	86.7	12	80.0	12	80.0
Wales Total	8645	7759	89.8	8113	93.8	7610	88.0	7493	86.7

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 01/10/17 and 31/12/17 and resident on 31/12/17. 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)	(%)
<u>Abertawe Bro Morgannwg University HB</u>									
Bridgend LA	442	406	91.9	415	93.9	403	91.2	392	88.7
Neath Port Talbot LA	402	370	92.0	380	94.5	367	91.3	358	89.1
Swansea LA	675	619	91.7	629	93.2	607	89.9	591	87.6
Health Board Total	1519	1395	91.8	1424	93.7	1377	90.7	1341	88.3
<u>Aneurin Bevan University HB</u>									
Blaenau Gwent LA	219	200	91.3	203	92.7	196	89.5	193	88.1
Caerphilly LA	589	549	93.2	569	96.6	541	91.9	536	91.0
Monmouthshire LA	222	207	93.2	192	86.5	192	86.5	189	85.1
Newport LA	496	444	89.5	437	88.1	430	86.7	406	81.9
Torfaen LA	294	267	90.8	275	93.5	267	90.8	261	88.8
Health Board Total	1820	1667	91.6	1676	92.1	1626	89.3	1585	87.1
<u>Betsi Cadwaladr University HB</u>									
Anglesey LA	202	197	97.5	197	97.5	195	96.5	193	95.5
Conwy LA	296	284	95.9	279	94.3	271	91.6	270	91.2
Denbighshire LA	295	282	95.6	271	91.9	268	90.8	265	89.8
Flintshire LA	416	394	94.7	380	91.3	375	90.1	370	88.9
Gwynedd LA	318	300	94.3	296	93.1	291	91.5	288	90.6
Wrexham LA	438	413	94.3	413	94.3	403	92.0	399	91.1
Health Board Total	1965	1870	95.2	1836	93.4	1803	91.8	1785	90.8
<u>Cardiff and Vale University HB</u>									
Cardiff LA	1160	1051	90.6	1055	90.9	1012	87.2	977	84.2
Vale of Glamorgan LA	400	366	91.5	374	93.5	356	89.0	350	87.5
Health Board Total	1560	1417	90.8	1429	91.6	1368	87.7	1327	85.1
<u>Cwm Taf University HB</u>									
Merthyr Tydfil LA	202	191	94.6	194	96.0	187	92.6	185	91.6
Rhondda Cynon Taf LA	697	654	93.8	660	94.7	638	91.5	629	90.2
Health Board Total	899	845	94.0	854	95.0	825	91.8	814	90.5
<u>Hywel Dda University HB</u>									
Carmarthenshire LA	543	484	89.1	488	89.9	470	86.6	458	84.3
Ceredigion LA	164	156	95.1	154	93.9	148	90.2	148	90.2
Pembrokeshire LA	331	300	90.6	297	89.7	287	86.7	283	85.5
Health Board Total	1038	940	90.6	939	90.5	905	87.2	889	85.6
<u>Powys Teaching HB</u>	296	282	95.3	280	94.6	271	91.6	269	90.9
Unknown	18	17	94.4	18	100.0	18	100.0	17	94.4
Wales Total	9115	8433	92.5	8456	92.8	8193	89.9	8027	88.1

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 01/10/17 and 31/12/17 and resident on 31/12/17.

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
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University HB															
Bridgend LA	442	422 95.5	422 95.5	422 95.5	422 95.5	422 95.5	403 91.2	414 93.7	415 93.9	428 96.8	403 91.2	406 91.9	406 91.9	406 91.9	406 91.9
Neath Port Talbot LA	402	382 95.0	382 95.0	382 95.0	382 95.0	382 95.0	366 91.0	376 93.5	380 94.5	386 96.0	367 91.3	370 92.0	370 92.0	370 92.0	370 92.0
Swansea LA	675	629 93.2	629 93.2	629 93.2	627 92.9	629 93.2	603 89.3	619 91.7	629 93.2	648 96.0	607 89.9	619 91.7	619 91.7	619 91.7	619 91.7
Health Board Total	1519	1433 94.3	1433 94.3	1433 94.3	1431 94.2	1433 94.3	1372 90.3	1409 92.8	1424 93.7	1462 96.2	1377 90.7	1395 91.8	1395 91.8	1395 91.8	1395 91.8
Aneurin Bevan University HB															
Blaenau Gwent LA	219	209 95.4	209 95.4	209 95.4	210 95.9	209 95.4	201 91.8	203 92.7	203 92.7	211 96.3	196 89.5	200 91.3	200 91.3	200 91.3	200 91.3
Caerphilly LA	589	571 96.9	571 96.9	571 96.9	570 96.8	571 96.9	548 93.0	564 95.8	569 96.6	579 98.3	541 91.9	549 93.2	549 93.2	549 93.2	549 93.2
Monmouthshire LA	222	192 86.5	192 86.5	192 86.5	192 86.5	193 86.9	185 83.3	192 86.5	192 86.5	210 94.6	192 86.5	207 93.2	207 93.2	207 93.2	207 93.2
Newport LA	496	456 91.9	456 91.9	456 91.9	456 91.9	456 91.9	425 85.7	439 88.5	437 88.1	475 95.8	430 86.7	444 89.5	444 89.5	444 89.5	444 89.5
Torfaen LA	294	281 95.6	281 95.6	281 95.6	281 95.6	281 95.6	268 91.2	274 93.2	275 93.5	284 96.6	267 90.8	267 90.8	267 90.8	267 90.8	267 90.8
Health Board Total	1820	1709 93.9	1709 93.9	1709 93.9	1709 93.9	1710 94.0	1627 89.4	1672 91.9	1676 92.1	1759 96.6	1626 89.3	1667 91.6	1667 91.6	1667 91.6	1667 91.6
Betsi Cadwaladr University HB															
Anglesey LA	202	196 97.0	196 97.0	196 97.0	196 97.0	196 97.0	192 95.0	196 97	197 97.5	200 99.0	195 96.5	197 97.5	197 97.5	197 97.5	197 97.5
Conwy LA	296	278 93.9	278 93.9	278 93.9	278 93.9	278 93.9	267 90.2	277 93.6	279 94.3	291 98.3	271 91.6	284 95.9	284 95.9	284 95.9	284 95.9
Denbighshire LA	295	276 93.6	276 93.6	276 93.6	276 93.6	276 93.6	258 87.5	271 91.9	271 91.9	289 98.0	268 90.8	282 95.6	282 95.6	282 95.6	282 95.6
Flintshire LA	416	381 91.6	381 91.6	381 91.6	381 91.6	381 91.6	368 88.5	378 90.9	380 91.3	405 97.4	375 90.1	394 94.7	394 94.7	394 94.7	394 94.7
Gwynedd LA	318	300 94.3	300 94.3	300 94.3	299 94.0	299 94.0	283 89.0	296 93.1	296 93.1	307 96.5	291 91.5	300 94.3	300 94.3	300 94.3	300 94.3
Wrexham LA	438	412 94.1	412 94.1	412 94.1	413 94.3	412 94.1	398 90.9	412 94.1	413 94.3	425 97.0	403 92.0	413 94.3	413 94.3	413 94.3	413 94.3
Health Board Total	1965	1843 93.8	1843 93.8	1843 93.8	1843 93.8	1843 93.8	1766 89.9	1830 93.1	1836 93.4	1917 97.6	1803 91.8	1870 95.2	1870 95.2	1870 95.2	1870 95.2
Cardiff and Vale University HB															
Cardiff LA	1160	1067 92.0	1067 92.0	1067 92.0	1067 92.0	1066 91.9	985 84.9	1036 89.3	1055 90.9	1117 96.3	1012 87.2	1052 90.7	1052 90.7	1051 90.6	1052 90.7
Vale of Glamorgan LA	400	369 92.3	369 92.3	369 92.3	369 92.3	370 92.5	354 88.5	373 93.3	374 93.5	388 97.0	356 89.0	366 91.5	366 91.5	366 91.5	366 91.5
Health Board Total	1560	1436 92.1	1436 92.1	1436 92.1	1436 92.1	1436 92.1	1339 85.8	1409 90.3	1429 91.6	1505 96.5	1368 87.7	1418 90.9	1418 90.9	1417 90.8	1418 90.9
Cwm Taf University HB															
Merthyr Tydfil LA	202	194 96.0	194 96.0	194 96.0	194 96.0	194 96.0	191 94.6	193 95.5	194 96.0	199 98.5	187 92.6	191 94.6	191 94.6	191 94.6	191 94.6
Rhondda Cynon Taf LA	697	669 96.0	669 96.0	669 96.0	669 96.0	670 96.1	651 93.4	663 95.1	660 94.7	682 97.8	638 91.5	654 93.8	654 93.8	654 93.8	654 93.8
Health Board Total	899	863 96.0	863 96.0	863 96.0	863 96.0	864 96.1	842 93.7	856 95.2	854 95.0	881 98.0	825 91.8	845 94.0	845 94.0	845 94.0	845 94.0
Hywel Dda University HB															
Carmarthenshire LA	543	504 92.8	504 92.8	504 92.8	503 92.6	504 92.8	489 90.1	488 89.9	488 89.9	514 94.7	470 86.6	484 89.1	484 89.1	484 89.1	484 89.1
Ceredigion LA	164	154 93.9	154 93.9	154 93.9	154 93.9	154 93.9	153 93.3	152 92.7	154 93.9	157 95.7	148 90.2	156 95.1	156 95.1	156 95.1	156 95.1
Pembrokeshire LA	331	309 93.4	309 93.4	309 93.4	309 93.4	309 93.4	288 87.0	297 89.7	297 89.7	310 93.7	287 86.7	300 90.6	300 90.6	300 90.6	300 90.6
Health Board Total	1038	967 93.2	967 93.2	967 93.2	966 93.1	967 93.2	930 89.6	937 90.3	939 90.5	981 94.5	905 87.2	940 90.6	940 90.6	940 90.6	940 90.6
Powys Teaching HB	296	275 92.9	275 92.9	275 92.9	275 92.9	275 92.9	267 90.2	279 94.3	280 94.6	288 97.3	271 91.6	282 95.3	282 95.3	282 95.3	282 95.3
Unknown	18	18 100.0	18 100.0	18 100.0	18 100.0	18 100.0	17 94.4	18 100	18 100.0	18 100.0	18 100.0	17 94.4	17 94.4	17 94.4	17 94.4
Wales Total	9115	8544 93.7	8544 93.7	8544 93.7	8541 93.7	8545 93.7	8160 89.5	8410 92.3	8456 92.8	8811 96.7	8193 89.9	8434 92.5	8434 92.5	8433 92.5	8434 92.5

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 31/12/17.

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) (%)	
Abertawe Bro Morgannwg University HB													
Bridgend LA	791	0	0.0	811	724	89.3	1	0.1	782	728	93.1	680	87.0
Neath Port Talbot LA	829	1	0.1	748	672	89.8	2	0.3	702	647	92.2	593	84.5
Swansea LA	1226	0	0.0	1231	1080	87.7	3	0.2	1244	1132	91.0	1026	82.5
Health Board Total	2846	1	0.0	2790	2476	88.7	6	0.2	2728	2507	91.9	2299	84.3
Aneurin Bevan University HB													
Blaenau Gwent LA	347	1	0.3	373	306	82.0	1	0.3	321	289	90.0	265	82.6
Caerphilly LA	1018	0	0.0	1020	851	83.4	12	1.2	979	829	84.7	812	82.9
Monmouthshire LA	466	2	0.4	525	360	68.6	3	0.6	545	447	82.0	414	76.0
Newport LA	969	2	0.2	895	675	75.4	0	0.0	898	756	84.2	645	71.8
Torfaen LA	539	2	0.4	482	389	80.7	1	0.2	481	425	88.4	390	81.1
Health Board Total	3339	7	0.2	3295	2581	78.3	17	0.5	3224	2746	85.2	2526	78.3
Betsi Cadwaladr University HB													
Anglesey LA	344	21	6.1	340	290	85.3	19	5.6	347	310	89.3	276	79.5
Conwy LA	533	0	0.0	569	499	87.7	7	1.2	543	488	89.9	445	82.0
Denbighshire LA	520	1	0.2	500	421	84.2	1	0.2	467	422	90.4	381	81.6
Flintshire LA	804	1	0.1	794	684	86.1	2	0.3	736	664	90.2	630	85.6
Gwynedd LA	644	261	40.5	543	476	87.7	220	40.5	558	502	90.0	486	87.1
Wrexham LA	733	2	0.3	697	585	83.9	5	0.7	678	589	86.9	534	78.8
Health Board Total	3578	286	8.0	3443	2955	85.8	254	7.4	3329	2975	89.4	2752	82.7
Cardiff and Vale University HB													
Cardiff LA	2069	3	0.1	1894	1560	82.4	3	0.2	1858	1574	84.7	1419	76.4
Vale of Glamorgan LA	751	0	0.0	730	642	87.9	0	0.0	702	618	88.0	562	80.1
Health Board Total	2820	3	0.1	2624	2202	83.9	3	0.1	2560	2192	85.6	1981	77.4
Cwm Taf University HB													
Merthyr Tydfil LA	349	0	0.0	319	285	89.3	0	0.0	332	306	92.2	288	86.7
Rhondda Cynon Taf LA	1389	0	0.0	1289	1174	91.1	1	0.1	1386	1297	93.6	1222	88.2
Health Board Total	1738	0	0.0	1608	1459	90.7	1	0.1	1718	1603	93.3	1510	87.9
Hywel Dda University HB													
Carmarthenshire LA	950	20	2.1	964	844	87.6	26	2.7	992	885	89.2	823	83.0
Ceredigion LA	293	235	80.2	319	276	86.5	259	81.2	296	252	85.1	244	82.4
Pembrokeshire LA	635	507	79.8	637	544	85.4	504	79.1	614	516	84.0	482	78.5
Health Board Total	1878	762	40.6	1920	1664	86.7	789	41.1	1902	1653	86.9	1549	81.4
Powys Teaching HB	644	0	0.0	661	554	83.8	18	2.7	647	545	84.2	510	78.8
Unknown	54	2	3.7	53	43	81.1	4	7.5	44	39	88.6	38	86.4
Wales Total	16897	1061	6.3	16394	13934	85.0	1092	6.7	16152	14260	88.3	13165	81.5

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 Men ACWY vaccine in teenagers reaching 14, 15, 16 and 17 years of age between 01/09/17 and 31/08/18 and resident on 31/12/2017.

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)	(%)
Abertawe Bro Morgannwg University HB												
Bridgend LA	1593	3	0.2	1563	1391	89.0	1520	1371	90.2	1679	1444	86.0
Neath Port Talbot LA	1510	3	0.2	1432	1279	89.3	1472	1347	91.5	1521	1291	84.9
Swansea LA	2604	14	0.5	2607	2301	88.3	2500	2226	89.0	2566	2169	84.5
Health Board Total	5707	20	0.4	5602	4971	88.7	5492	4944	90.0	5766	4904	85.1
Aneurin Bevan University HB												
Blaenau Gwent LA	764	0	0.0	690	587	85.1	698	624	89.4	739	605	81.9
Caerphilly LA	2148	39	1.8	2088	1758	84.2	2022	1739	86.0	2028	1648	81.3
Monmouthshire LA	1074	5	0.5	1090	881	80.8	1040	798	76.7	1107	822	74.3
Newport LA	1869	35	1.9	1860	1460	78.5	1859	1483	79.8	1789	1375	76.9
Torfaen LA	995	3	0.3	969	816	84.2	1017	883	86.8	1062	860	81.0
Health Board Total	6850	82	1.2	6697	5502	82.2	6636	5527	83.3	6725	5310	79.0
Betsi Cadwaladr University HB												
Anglesey LA	726	6	0.8	710	567	79.9	729	592	81.2	722	526	72.9
Conwy LA	1158	1	0.1	1147	1004	87.5	1131	968	85.6	1265	987	78.0
Denbighshire LA	1072	8	0.7	1000	842	84.2	1044	833	79.8	1145	909	79.4
Flintshire LA	1658	1	0.1	1514	1209	79.9	1591	1255	78.9	1614	1270	78.7
Gwynedd LA	1183	150	12.7	1183	957	80.9	1178	970	82.3	1241	920	74.1
Wrexham LA	1418	5	0.4	1420	1146	80.7	1310	1088	83.1	1440	1096	76.1
Health Board Total	7215	171	2.4	6974	5725	82.1	6983	5706	81.7	7427	5708	76.9
Cardiff and Vale University HB												
Cardiff LA	3806	1986	52.2	3793	2704	71.3	3674	1995	54.3	3735	2845	76.2
Vale of Glamorgan LA	1415	795	56.2	1474	1157	78.5	1349	861	63.8	1367	1007	73.7
Health Board Total	5221	2781	53.3	5267	3861	73.3	5023	2856	56.9	5102	3852	75.5
Cwm Taf University HB												
Merthyr Tydfil LA	664	0	0.0	661	585	88.5	623	567	91.0	643	550	85.5
Rhondda Cynon Taf LA	2646	17	0.6	2803	2507	89.4	2535	2330	91.9	2637	2287	86.7
Health Board Total	3310	17	0.5	3464	3092	89.3	3158	2897	91.7	3280	2837	86.5
Hywel Dda University HB												
Cardiganshire LA	1966	3	0.2	2029	1765	87.0	2021	1779	88.0	1997	1668	83.5
Ceredigion LA	669	1	0.1	623	538	86.4	590	512	86.8	628	528	84.1
Pembrokeshire LA	1300	2	0.2	1215	962	79.2	1179	908	77.0	1206	841	69.7
Health Board Total	3935	6	0.2	3867	3265	84.4	3790	3199	84.4	3831	3037	79.3
Powys Teaching HB	1335	5	0.4	1327	1090	82.1	1284	1071	83.4	1313	1063	81.0
Unknown	120	4	3.3	96	72	75.0	101	83	82.2	145	106	73.1
Wales Total	33693	3086	9.2	33294	27578	82.8	32467	26283	81.0	33589	26817	79.8

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 31/12/17 , 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)	(%)
Abertawe Bro Morgannwg University HB																			
Bridgend LA	1593	1509	94.7	1423	89.3	6	0.4	3	0.2	811	778	95.9	739	91.1	782	731	93.5	684	87.5
Neath Port Talbot LA	1510	1422	94.2	1361	90.1	4	0.3	3	0.2	748	712	95.2	680	90.9	762	710	93.2	681	89.4
Swansea LA	2604	2422	93.0	2317	89.0	35	1.3	14	0.5	1231	1138	92.4	1090	88.5	1373	1284	93.5	1227	89.4
Health Board Total	5707	5353	93.8	5101	89.4	45	0.8	20	0.4	2790	2628	94.2	2509	89.9	2917	2725	93.4	2592	88.9
Aneurin Bevan University HB																			
Blaenau Gwent LA	764	737	96.5	708	92.7	1	0.1	0	0.0	373	362	97.1	349	93.6	391	375	95.9	359	91.8
Caerphilly LA	2148	2060	95.9	1984	92.4	48	2.2	39	1.8	1020	969	95.0	937	91.9	1127	1090	96.7	1046	92.8
Monmouthshire LA	1074	954	88.8	913	85.0	16	1.5	5	0.5	525	458	87.2	437	83.2	549	496	90.3	476	86.7
Newport LA	1869	1771	94.8	1693	90.6	42	2.2	35	1.9	895	852	95.2	818	91.4	974	919	94.4	875	89.8
Torfaen LA	995	963	96.8	920	92.5	6	0.6	3	0.3	482	465	96.5	444	92.1	513	498	97.1	476	92.8
Health Board Total	6850	6485	94.7	6218	90.8	113	1.6	82	1.2	3295	3106	94.3	2985	90.6	3554	3378	95.0	3232	90.9
Betsi Cadwaladr University HB																			
Anglesey LA	726	686	94.5	671	92.4	7	1.0	6	0.8	340	322	94.7	318	93.5	386	364	94.3	353	91.5
Conwy LA	1158	1076	92.9	1026	88.6	8	0.7	1	0.1	569	527	92.6	496	87.2	589	549	93.2	530	90.0
Denbighshire LA	1072	980	91.4	945	88.2	13	1.2	8	0.7	500	452	90.4	435	87.0	572	528	92.3	510	89.2
Flintshire LA	1658	1533	92.5	1484	89.5	2	0.1	1	0.1	794	738	92.9	716	90.2	864	795	92.0	768	88.9
Gwynedd LA	1183	1099	92.9	1059	89.5	95	8.0	150	12.7	543	505	93.0	486	89.5	640	594	92.8	573	89.5
Wrexham LA	1418	1319	93.0	1288	90.8	8	0.6	5	0.4	697	643	92.3	628	90.1	721	676	93.8	660	91.5
Health Board Total	7215	6693	92.8	6473	89.7	133	1.8	171	2.4	3443	3187	92.6	3079	89.4	3772	3506	92.9	3394	90.0
Cardiff and Vale University HB																			
Cardiff LA	3806	3499	91.9	3279	86.2	1991	52.3	1986	52.2	1894	1739	91.8	1624	85.7	1912	1760	92.1	1655	86.6
Vale of Glamorgan LA	1415	1321	93.4	1246	88.1	793	56.0	795	56.2	730	675	92.5	640	87.7	685	646	94.3	606	88.5
Health Board Total	5221	4820	92.3	4525	86.7	2784	53.3	2781	53.3	2624	2414	92.0	2264	86.3	2597	2406	92.6	2261	87.1
Cwm Taf University HB																			
Merthyr Tydfil LA	664	620	93.4	593	89.3	0	0.0	0	0.0	319	290	90.9	276	86.5	344	330	95.9	317	92.2
Rhondda Cynon Taf LA	2646	2521	95.3	2434	92.0	24	0.9	17	0.6	1289	1235	95.8	1191	92.4	1357	1286	94.8	1243	91.6
Health Board Total	3310	3141	94.9	3027	91.5	24	0.7	17	0.5	1608	1525	94.8	1467	91.2	1701	1616	95.0	1560	91.7
Hywel Dda University HB																			
Carmarthenshire LA	1966	1805	91.8	1709	86.9	20	1.0	3	0.2	964	882	91.5	837	86.8	1002	923	92.1	872	87.0
Ceredigion LA	669	614	91.8	597	89.2	3	0.4	1	0.1	319	295	92.5	285	89.3	350	319	91.1	312	89.1
Pembrokeshire LA	1300	1169	89.9	1111	85.5	17	1.3	2	0.2	637	571	89.6	546	85.7	663	598	90.2	565	85.2
Health Board Total	3935	3588	91.2	3417	86.8	40	1.0	6	0.2	1920	1748	91.0	1668	86.9	2015	1840	91.3	1749	86.8
Powys Teaching HB	1335	1168	87.5	1092	81.8	12	0.9	5	0.4	661	576	87.1	543	82.1	674	592	87.8	549	81.5
Unknown	120	109	90.8	102	85.0	4	3.3	4	3.3	53	47	88.7	44	83.0	67	62	92.5	58	86.6
Wales Total	33693	31357	93.1	29955	88.9	3155	9.4	3086	9.2	16394	15231	92.9	14559	88.8	17297	16125	93.2	15395	89.0

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 31/12/17, with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		Teenage 3 in 1 booster ¹						Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)		
	(n)	MMR1 (n) (%)	MMR2 (n) (%)	(n)	(%)	(n)	(%)	MenACWY (n) (%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB	(n)	(n) (%)	(n) (%)	(n)	(%)	(n)	(%)	(n) (%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
Bridgend LA	1563	1465 93.7	1378 88.2	1376 88.0	1391 89.0				782	738 94.37	698 89.3			781	727 93.09	680 87.1					
Neath Port Talbot LA	1432	1365 95.3	1284 89.7	1260 88.0	1279 89.3				702	677 96.44	646 92.0			730	688 94.25	638 87.4					
Swansea LA	2607	2368 90.8	2231 85.6	2298 88.1	2301 88.3				1244	1119 89.95	1060 85.2			1363	1249 91.64	1171 85.9					
Health Board Total	5602	5198 92.8	4893 87.3	4934 88.1	4971 88.7				2728	2534 92.89	2404 88.1			2874	2664 92.69	2489 86.6					
Aneurin Bevan University HB																					
Blaenau Gwent LA	690	651 94.3	622 90.1	586 84.9	587 85.1				321	304 94.7	291 90.7			369	347 94.04	331 89.7					
Caerphilly LA	2088	1997 95.6	1904 91.2	1766 84.6	1758 84.2				979	934 95.4	895 91.4			1108	1063 95.94	1009 91.1					
Monmouthshire LA	1090	960 88.1	904 82.9	879 80.6	881 80.8				545	473 86.79	437 80.2			545	487 89.36	467 85.7					
Newport LA	1860	1726 92.8	1616 86.9	1465 78.8	1460 78.5				898	840 93.54	792 88.2			959	886 92.39	824 85.9					
Torfaen LA	969	916 94.5	880 90.8	815 84.1	816 84.2				481	456 94.8	440 91.5			488	460 94.26	440 90.2					
Health Board Total	6697	6250 93.3	5926 88.5	5511 82.3	5502 82.2				3224	3007 93.27	2855 88.6			3469	3243 93.49	3071 88.5					
Betsi Cadwaladr University HB																					
Anglesey LA	710	670 94.4	640 90.1	562 79.2	567 79.9				347	332 95.68	317 91.4			363	338 93.11	323 89.0					
Conwy LA	1147	1067 93.0	1031 89.9	997 86.9	1004 87.5				543	507 93.37	492 90.6			601	557 92.68	536 89.2					
Denbighshire LA	1000	922 92.2	878 87.8	831 83.1	842 84.2				467	430 92.08	410 87.8			532	492 92.48	468 88.0					
Flintshire LA	1514	1427 94.3	1367 90.3	1204 79.5	1209 79.9				736	693 94.16	661 89.8			778	734 94.34	706 90.7					
Gwynedd LA	1183	1134 95.9	1096 92.6	936 79.1	957 80.9				558	537 96.24	525 94.1			625	597 95.52	571 91.4					
Wrexham LA	1420	1334 93.9	1298 91.4	1135 79.9	1146 80.7				678	635 93.66	612 90.3			742	699 94.2	686 92.5					
Health Board Total	6974	6554 94.0	6310 90.5	5665 81.2	5725 82.1				3329	3134 94.14	3017 90.6			3641	3417 93.85	3290 90.4					
Cardiff and Vale University HB																					
Cardiff LA	3793	3480 91.7	3230 85.2	2699 71.2	2704 71.3				1858	1721 92.63	1610 86.7			1935	1759 90.9	1620 83.7					
Vale of Glamorgan LA	1474	1381 93.7	1305 88.5	1160 78.7	1157 78.5				702	653 93.02	610 86.9			772	728 94.3	695 90.0					
Health Board Total	5267	4861 92.3	4535 86.1	3859 73.3	3861 73.3				2560	2374 92.73	2220 86.7			2707	2487 91.87	2315 85.5					
Cwm Taf University HB																					
Merthyr Tydfil LA	661	620 93.8	585 88.5	583 88.2	585 88.5				332	316 95.18	301 90.7			329	304 92.4	284 86.3					
Rhondda Cynon Taf LA	2803	2658 94.8	2534 90.4	2492 88.9	2507 89.4				1386	1324 95.53	1273 91.8			1417	1334 94.14	1261 89.0					
Health Board Total	3464	3278 94.6	3119 90.0	3075 88.8	3092 89.3				1718	1640 95.46	1574 91.6			1746	1638 93.81	1545 88.5					
Hywel Dda University HB																					
Cardiff and Vale LA	2029	1855 91.4	1804 88.9	1762 86.8	1765 87.0				992	909 91.63	889 89.6			1037	946 91.22	915 88.2					
Ceredigion LA	623	583 93.6	557 89.4	538 86.4	538 86.4				296	277 93.58	263 88.9			327	306 93.58	294 89.9					
Pembrokeshire LA	1215	1131 93.1	1060 87.2	958 78.8	962 79.2				614	575 93.65	537 87.5			601	556 92.51	523 87.0					
Health Board Total	3867	3569 92.3	3421 88.5	3258 84.3	3265 84.4				1902	1761 92.59	1689 88.8			1965	1808 92.01	1732 88.1					
Powys Teaching HB	1327	1149 86.6	1042 78.5	1082 81.5	1090 82.1				647	561 86.71	514 79.4			680	588 86.47	528 77.6					
Unknown	96	80 83.3	76 79.2	72 75.0	72 75.0				44	41 93.18	38 86.4			52	39 75	38 73.1					
Wales Total	33294	30939 92.9	29322 88.1	27456 82.5	27578 82.8				16152	15052 93.19	14311 88.6			17134	15884 92.7	15008 87.6					

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 31/12/17, 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)	(n)	(%)	(n)	(%)	
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	
Bridgend LA	1520	1421	93.5	1325	87.2	1365	89.8	1371	90.2	741	697	94.1	654	88.3	779	724	92.9	671	86.1			
Neath Port Talbot LA	1472	1359	92.3	1256	85.3	1328	90.2	1347	91.5	719	680	94.6	630	87.6	753	679	90.2	626	83.1			
Swansea LA	2500	2285	91.4	2124	85.0	2215	88.6	2226	89.0	1221	1127	92.3	1051	86.1	1279	1158	90.5	1073	83.9			
Health Board Total	5492	5065	92.2	4705	85.7	4908	89.4	4944	90.0	2681	2504	93.4	2335	87.1	2811	2561	91.1	2370	84.3			
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	698	659	94.4	627	89.8	622	89.1	624	89.4	374	354	94.7	341	91.2	324	305	94.1	286	88.3			
Caerphilly LA	2022	1943	96.1	1849	91.4	1750	86.5	1739	86.0	946	909	96.1	861	91.0	1076	1034	96.1	988	91.8			
Monmouthshire LA	1040	880	84.6	815	78.4	801	77.0	798	76.7	511	431	84.3	406	79.5	528	449	85.0	409	77.5			
Newport LA	1859	1734	93.3	1626	87.5	1498	80.6	1483	79.8	918	862	93.9	808	88.0	939	871	92.8	818	87.1			
Torfaen LA	1017	965	94.9	922	90.7	883	86.8	883	86.8	492	465	94.5	449	91.3	525	500	95.2	473	90.1			
Health Board Total	6636	6181	93.1	5839	88.0	5554	83.7	5527	83.3	3241	3021	93.2	2865	88.4	3392	3159	93.1	2974	87.7			
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	729	686	94.1	669	91.8	600	82.3	592	81.2	362	340	93.9	333	92.0	367	346	94.3	336	91.6			
Conwy LA	1131	1044	92.3	998	88.2	960	84.9	968	85.6	546	506	92.7	482	88.3	584	537	92.0	515	88.2			
Denbighshire LA	1044	957	91.7	917	87.8	856	82.0	833	79.8	485	438	90.3	422	87.0	559	519	92.8	495	88.6			
Flintshire LA	1591	1490	93.7	1423	89.4	1271	79.9	1255	78.9	797	746	93.6	714	89.6	794	744	93.7	709	89.3			
Gwynedd LA	1178	1107	94.0	1072	91.0	965	81.9	970	82.3	555	526	94.8	509	91.7	623	581	93.3	563	90.4			
Wrexham LA	1310	1250	95.4	1229	93.8	1086	82.9	1088	83.1	644	617	95.8	613	95.2	666	633	95.0	616	92.5			
Health Board Total	6983	6534	93.6	6308	90.3	5738	82.2	5706	81.7	3389	3173	93.6	3073	90.7	3593	3360	93.5	3234	90.0			
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	3674	3315	90.2	3056	83.2	2621	71.3	1995	54.3	1737	1560	89.8	1441	83.0	1936	1755	90.7	1615	83.4			
Vale of Glamorgan LA	1349	1252	92.8	1181	87.5	1088	80.7	861	63.8	663	627	94.6	598	90.2	686	625	91.1	583	85.0			
Health Board Total	5023	4567	90.9	4237	84.4	3709	73.8	2856	56.9	2400	2187	91.1	2039	85.0	2622	2380	90.8	2198	83.8			
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	623	591	94.9	546	87.6	564	90.5	567	91.0	287	276	96.2	256	89.2	335	315	94.0	290	86.6			
Rhondda Cynon Taf LA	2535	2394	94.4	2256	89.0	2323	91.6	2330	91.9	1232	1174	95.3	1115	90.5	1303	1220	93.6	1141	87.6			
Health Board Total	3158	2985	94.5	2802	88.7	2887	91.4	2897	91.7	1519	1450	95.5	1371	90.3	1638	1535	93.7	1431	87.4			
<u>Hywel Dda University HB</u>																						
Cardamarthenshire LA	2021	1851	91.6	1802	89.2	1782	88.2	1779	88.0	943	860	91.2	835	88.5	1078	991	91.9	967	89.7			
Ceredigion LA	590	545	92.4	522	88.5	515	87.3	512	86.8	294	275	93.5	266	90.5	296	270	91.2	256	86.5			
Pembrokeshire LA	1179	1083	91.9	1016	86.2	925	78.5	908	77.0	532	495	93.0	466	87.6	647	588	90.9	550	85.0			
Health Board Total	3790	3479	91.8	3340	88.1	3222	85.0	3199	84.4	1769	1630	92.1	1567	88.6	2021	1849	91.5	1773	87.7			
<u>Powys Teaching HB</u>																						
Unknown	1284	1155	90.0	1058	82.4	1062	82.7	1071	83.4	618	565	91.4	523	84.6	666	590	88.6	535	80.3			
Wales Total	32467	30059	92.6	28380	87.4	27160	83.7	26283	81.0	15669	14578	93.0	13820	88.2	16792	15479	92.2	14559	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 01/10/17 and 31/12/17 and resident on 31/12/17, 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)	(%)	
Abertawe Bro Morgannwg University HB																				
Bridgend LA	400	371	92.8	343	85.8	354	88.5	356	89.0	198	187	94.4	176	88.9	202	184	91.1	167	82.7	
Neath Port Talbot LA	401	362	90.3	332	82.8	367	91.5	371	92.5	188	178	94.7	163	86.7	213	184	86.4	169	79.3	
Swansea LA	637	583	91.5	544	85.4	572	89.8	569	89.3	334	309	92.5	285	85.3	303	274	90.4	259	85.5	
Health Board Total	1438	1316	91.5	1219	84.8	1293	89.9	1296	90.1	720	674	93.6	624	86.7	718	642	89.4	595	82.9	
Aneurin Bevan University HB																				
Blaenau Gwent LA	186	172	92.5	166	89.2	165	88.7	165	88.7	98	89	90.8	89	90.8	88	83	94.3	77	87.5	
Caerphilly LA	522	500	95.8	469	89.8	463	88.7	456	87.4	251	239	95.2	225	89.6	271	261	96.3	244	90.0	
Monmouthshire LA	265	228	86.0	210	79.2	202	76.2	202	76.2	127	104	81.9	100	78.7	137	124	90.5	110	80.3	
Newport LA	455	420	92.3	399	87.7	369	81.1	366	80.4	240	221	92.1	207	86.3	215	199	92.6	192	89.3	
Torfaen LA	226	217	96.0	212	93.8	192	85.0	194	85.8	96	93	96.9	89	92.7	130	124	95.4	123	94.6	
Health Board Total	1654	1537	92.9	1456	88.0	1391	84.1	1383	83.6	812	746	91.9	710	87.4	841	791	94.1	746	88.7	
Betsi Cadwaladr University HB																				
Anglesey LA	175	166	94.9	162	92.6	150	85.7	147	84.0	104	100	96.2	98	94.2	71	66	93.0	64	90.1	
Conwy LA	292	269	92.1	255	87.3	255	87.3	257	88.0	140	128	91.4	122	87.1	152	141	92.8	133	87.5	
Denbighshire LA	239	216	90.4	210	87.9	197	82.4	192	80.3	116	104	89.7	100	86.2	123	112	91.1	110	89.4	
Flintshire LA	373	349	93.6	326	87.4	290	77.7	286	76.7	183	166	90.7	156	85.2	190	183	96.3	170	89.5	
Gwynedd LA	307	289	94.1	283	92.2	255	83.1	253	82.4	140	134	95.7	132	94.3	167	155	92.8	151	90.4	
Wrexham LA	371	352	94.9	345	93.0	309	83.3	309	83.3	191	180	94.2	178	93.2	180	172	95.6	167	92.8	
Health Board Total	1757	1641	93.4	1581	90.0	1456	82.9	1444	82.2	874	812	92.9	786	89.9	883	829	93.9	795	90.0	
Cardiff and Vale University HB																				
Cardiff LA	945	858	90.8	786	83.2	686	72.6	396	41.9	457	408	89.3	376	82.3	487	450	92.4	410	84.2	
Vale of Glamorgan LA	356	326	91.6	301	84.6	280	78.7	182	51.1	172	161	93.6	150	87.2	184	165	89.7	151	82.1	
Health Board Total	1301	1184	91.0	1087	83.6	966	74.3	578	44.4	629	569	90.5	526	83.6	671	615	91.7	561	83.6	
Cwm Taf University HB																				
Merthyr Tydfil LA	150	142	94.7	133	88.7	134	89.3	136	90.7	72	70	97.2	66	91.7	78	72	92.3	67	85.9	
Rhondda Cynon Taf LA	673	625	92.9	593	88.1	607	90.2	609	90.5	327	305	93.3	295	90.2	346	320	92.5	298	86.1	
Health Board Total	823	767	93.2	726	88.2	741	90.0	745	90.5	399	375	94.0	361	90.5	424	392	92.5	365	86.1	
Hywel Dda University HB																				
Cardiganshire LA	474	438	92.4	425	89.7	420	88.6	421	88.8	208	192	92.3	186	89.4	266	246	92.5	239	89.8	
Ceredigion LA	127	116	91.3	111	87.4	110	86.6	109	85.8	65	60	92.3	58	89.2	62	56	90.3	53	85.5	
Pembrokeshire LA	333	305	91.6	288	86.5	253	76.0	253	76.0	138	131	94.9	121	87.7	195	174	89.2	167	85.6	
Health Board Total	934	859	92.0	824	88.2	783	83.8	783	83.8	411	383	93.2	365	88.8	523	476	91.0	459	87.8	
Powys Teaching HB	341	306	89.7	276	80.9	286	83.9	289	84.8	163	150	92.0	134	82.2	178	156	87.6	142	79.8	
Unknown	28	25	89.3	25	89.3	23	82.1	23	82.1	13	12	92.3	12	92.3	15	13	86.7	13	86.7	
Wales Total	8276	7635	92.3	7194	86.9	6939	83.8	6541	79.0	4021	3721	92.5	3518	87.5	4253	3914	92.0	3676	86.4	

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 01/09/17 and 31/08/18 and resident on 31/12/17.

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	369	12	3.3	382	12	3.1	442	17	3.8	400	7	1.8
Neath Port Talbot LA	384	9	2.3	386	17	4.4	402	13	3.2	401	12	3.0
Swansea LA	605	78	12.9	637	74	11.6	675	71	10.5	637	22	3.5
Health Board Total	1358	99	7.3	1405	103	7.3	1519	101	6.6	1438	41	2.9
Aneurin Bevan University HB												
Blaenau Gwent LA	191	1	0.5	191	2	1.0	219	4	1.8	186	2	1.1
Caerphilly LA	482	13	2.7	543	19	3.5	589	16	2.7	522	7	1.3
Monmouthshire LA	223	11	4.9	197	10	5.1	222	11	5.0	265	5	1.9
Newport LA	509	47	9.2	548	69	12.6	496	65	13.1	455	52	11.4
Torfaen LA	252	2	0.8	269	2	0.7	294	5	1.7	226	6	2.7
Health Board Total	1657	74	4.5	1748	102	5.8	1820	101	5.5	1654	72	4.4
Betsi Cadwaladr University HB												
Anglesey LA	190	1	0.5	173	6	3.5	202	4	2.0	175	2	1.1
Conwy LA	279	14	5.0	312	9	2.9	296	14	4.7	292	10	3.4
Denbighshire LA	238	13	5.5	249	14	5.6	295	15	5.1	239	8	3.3
Flintshire LA	406	16	3.9	397	15	3.8	416	16	3.8	373	11	2.9
Gwynedd LA	275	9	3.3	312	17	5.4	318	8	2.5	307	4	1.3
Wrexham LA	361	19	5.3	375	30	8.0	438	18	4.1	371	12	3.2
Health Board Total	1749	72	4.1	1818	91	5.0	1965	75	3.8	1757	47	2.7
Cardiff and Vale University HB												
Cardiff LA	1080	19	1.8	1109	208	18.8	1160	213	18.4	945	135	14.3
Vale of Glamorgan LA	343	1	0.3	381	10	2.6	400	17	4.3	356	13	3.7
Health Board Total	1423	20	1.4	1490	218	14.6	1560	230	14.7	1301	148	11.4
Cwm Taf Univeristy HB												
Merthyr Tydfil LA	180	7	3.9	165	12	7.3	202	10	5.0	150	0	0.0
Rhondda Cynon Taf LA	661	12	1.8	645	19	2.9	697	28	4.0	673	13	1.9
Health Board Total	841	19	2.3	810	31	3.8	899	38	4.2	823	13	1.6
Hywel Dda University HB												
Cardiganshire LA	450	11	2.4	479	20	4.2	543	17	3.1	474	36	7.6
Ceredigion LA	148	11	7.4	138	5	3.6	164	4	2.4	127	5	3.9
Pembrokeshire LA	282	12	4.3	287	10	3.5	331	10	3.0	333	6	1.8
Health Board Total	880	34	3.9	904	35	3.9	1038	31	3.0	934	47	5.0
Powys Teaching Health Board	283	4	1.4	260	4	1.5	296	3	1.0	341	2	0.6
Unknown	3	0	0.0	1	0	0.0	18	0	0.0	28	2	7.1
Wales Total	8194	322	3.9	8436	584	6.9	9115	579	6.4	8276	372	4.5

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 receiving their first dose within seven days of birth, reaching their 1st, 2nd, and 5th birthdays during 01/09/17 and 31/08/18 and resident on 31/12/17, and percentage who are recorded as completing doses 1 to 4.

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	1358	3	100.0	100.0	100.0	1405	1	100.0	100.0	100.0	100.0	1519	1	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	1657	3	100.0	100.0	66.7	1748	0	-	-	-	-	1820	0	-	-	-	-
Betsi Cadwaladr UHB	1749	2	100.0	100.0	100.0	1818	2	100.0	100.0	100.0	100.0	1965	0	-	-	-	-
Cardiff and Vale UHB	1423	4	100.0	100.0	75.0	1490	6	100.0	100.0	100.0	83.3	1560	4	100.0	100.0	100.0	100.0
Cwm Taf UHB	841	0	-	-	-	810	0	-	-	-	-	899	0	-	-	-	-
Hywel Dda UHB	880	0	-	-	-	904	1	100.0	100.0	100.0	100.0	1038	0	-	-	-	-
Powys Teaching HB	283	0	-	-	-	260	0	-	-	-	-	296	0	-	-	-	-
Unknown	3	0	-	-	-	1	1	100.0	100.0	100.0	100.0	18	0	-	-	-	-
Wales Total	8194	12	100.0	100.0	83.3	8436	11	100.0	100.0	100.0	90.9	9115	5	100.0	100.0	100.0	100.0

Data reflects immunisations given and recorded on the Public Health Wales All Wales Neonatal Hepatitis B database of babies born to hepatitis B positive mothers.