

Vaccine Uptake in Children in Wales July to September 2018

COVER 128: Wales November 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 “6 in 1” vaccine was 95% or higher in four of the seven Health Boards (HB) and in 12 of 22 Local Authority (LA) areas.
- Uptake of the complete three-dose course of MenB vaccine in two year olds was 94.1% this quarter. Two HBs and nine LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children was 94.5% 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 was 85.4% this quarter and was 88.1% in five year olds.
- Uptake of one dose of HPV vaccine in 2017-18 school year 8 (12-13 year olds) is currently 85.6%. In girls in the 2017-18 school year 9 (13-14 year olds), uptake of two doses is currently 80.3%.
- Uptake of routine MenACWY vaccine in the 2017-18 school year 9 cohort is currently 82.7%. Coverage of the MenACWY vaccine in the 2017-18 school year 10 cohort is 84.4%.
- Uptake of the Td/IPV teenage booster in the 2017-18 school year 9 cohort is currently 82.5%. Coverage of the Td/IPV teenage booster in the 2017-18 school year 10 was 84.1%.
- 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 92.5%, coverage of two doses was 87.4%.

Background

These results are for children living in Wales in September 2018 and reaching their first, second, fourth, fifth and 16th birthdays during the quarter 01/07/2018 to 30/09/2018. Uptake of key immunisations in older children, which are mainly provided through school based programmes in all areas other than Cardiff and Vale University Health Board, are presented 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. The majority of one year olds referred to in this report (those born 1st August 2017 onwards) would have been eligible for the recent inclusion of hepatitis B vaccination in the universal childhood schedule as the ‘6 in 1’ vaccine, replacing the ‘5 in 1’ vaccine due at four, eight and 12 months of age [1]. MenACWY conjugate vaccine uptake figures for teenagers and young adults born from 01/09/1996 to 31/08/1999, vaccinated as part of the general practice-based catch-up campaign are available from: <http://www.wales.nhs.uk/sitesplus/888/page/88528>

Findings

1. Uptake of all three doses of the combined “6 in 1” DTaP/IPV/Hib/HepB¹ vaccine, scheduled at two, three and four months of age, in children reaching their first birthday was 95.3% this quarter. Uptake ranged by HB from 94.4% (Cardiff and Vale) to 97.0% (Cwm Taf) and by LA from 92.5 % (Conwy) to 97.7% (Rhondda Cynon Taf). Four of the seven HBs and 12 of the 22 LA areas achieved the target 95% uptake (Figures 2, 3 and 6, Tables 2 and 3).
2. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV2) in children reaching their first birthday remained stable at 95.6% this quarter compared to 95.5% last quarter, and ranged by LA from 93.3% (Conwy) to 98.2% (Rhondda Cynon Taf). Five of the seven HBs and 14 of the 22 LA areas achieved the target 95% uptake (Figures 2 and 3, Tables 2 and 3).
3. Uptake of two doses of MenB vaccine, scheduled at two and four months of age, in children reaching their first birthday was 95.4% this quarter. Uptake in HBs ranged from 93.9% (Cardiff and Vale) to 97.5% (Cwm Taf) and ranged by LA from 92.9% (Conwy) to 98.1% (Blaenau Gwent) (Figure 3, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday decreased to 93.7% this quarter from 94.1% last quarter. Uptake in HBs ranged from 92.2% (Cardiff and Vale) to 96.3% (Cwm Taf) and ranged by LA from 90.4% (Gwynedd) to 97.0% (Rhondda Cynon Taf) (Figures 2 and 3, Tables 2 and 3).
5. Uptake of the first dose of MMR² in children reaching their second birthday (scheduled at 12 to 13 months of age) decreased to 94.5% this quarter from 94.9% in previous quarter. Uptake ranged by HB from 92.4% (Cardiff and Vale) to 97.7% (Cwm Taf) and by LA area from 91.4% (Ceredigion) to 98.0% (Rhondda Cynon Taf). Three HBs and 12 LA areas achieved the target of 95% uptake (Figures 2, 3 and 7, Tables 2 and 4).
6. Uptake of the complete three dose course of MenB vaccine in children reaching their second birthday was 94.1% this quarter. Uptake ranged by HB from 91.2% (Cardiff and Vale) to 97.7% (Cwm Taf) and by LA from 90.3% (Pembrokeshire) to 97.8% (Rhondda Cynon Taf). Two of the seven HBs and nine of the 22 LA areas achieved the target 95% uptake (Figures 2 and 3, Tables 2 and 4).
7. Uptake of the final dose of Pneumococcal Conjugate Vaccine (PCVf, scheduled at 12 to 13 months of age) in children reaching their second birthday was 95.0% this quarter. Uptake ranged by HB from 92.6% (Hywel Dda) to 97.9% (Cwm Taf) and ranged by LA from 91.5% (Pembrokeshire) to 98.0% (Rhondda Cynon Taf). Four HBs and 14 LA areas achieved an uptake of 95% or over (Figure 3, Tables 2 and 4).
8. Uptake of the Hib/MenC booster (given at 12 to 13 months of age) in children reaching two years of age was 94.4% this quarter compared to 94.7% last quarter. Uptake ranged by HB from 92.1% (Hywel Dda) to 97.6% (Cwm Taf), and ranged by LA from 90.3% (Pembrokeshire) to 97.9% (Rhondda Cynon Taf). Three HBs and 12 LA areas achieved uptakes in excess of 95% (Figures 1, 2 and 3, Tables 2 and 4).
9. In children reaching four years of age this quarter (Table 5), uptake of:
 - The “4 in 1” DTaP/IPV³ pre-school booster was 88.6%
 - The Hib/MenC booster was 94.1%
 - Two doses of MMR was 86.4%

The proportion of children who were up to date with all these routine immunisations at four years of age was 85.4%. This ranged by HB from 83.5% (Aneurin Bevan) to 88.4% (Powys) and by LA from 80.7% (Newport) to 91.4% (Ceredigion) (Figures 4 and 5, Tables 1, 2 and 5).

¹ DTaP/IPV/Hib/HepB vaccine protects against Diphtheria, Tetanus, Pertussis (Whooping Cough), Polio, Hib and Hep B infection. The majority of one year olds referred to in this report would have been eligible for the ‘6 in 1’ vaccine, replacing the ‘5 in 1’ vaccine due at four, eight and 12 months.

² MMR protects against measles, mumps and rubella infections.

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

10. The proportion of children who were up to date with routine immunisations by their fifth birthday was 88.1% this quarter, an increase from 87.9% last quarter. This ranged by HB from 83.9% (Cardiff and Vale) to 90.9% (Cwm Taf) (Table 6). There has been an improvement of 3.2% 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 is 96.6%. Uptake of two doses of MMR decreased to 89.5%, compared to 89.7% last quarter. Uptake of two doses of MMR ranged by HB from 86.3% (Cardiff and Vale) to 91.6% (Cwm Taf) and by LA from 84.9% (Pembrokeshire) to 93.3% (Caerphilly and Anglesey) (Figures 1, 2, 3 and 8, Tables 2, 6 and 7).
12. Uptake of the "4 in 1" DTaP/IPV³ pre-school booster in children reaching their fifth birthday is 92.5% this quarter compared to 92.6% in the previous quarter, ranging by HB from 90.2% (Cardiff and Vale) to 94.1% (Betsi Cadwaladr) and by LA from 87.4% (Newport) to 96.8% (Monmouthshire). None of the seven HBs, and four of the 22 LAs achieved the 95% uptake target (Figure 3 and 9, Tables 2, 6 and 7).
13. Uptake of the first dose of HPV vaccine for girls in the 2017-18 school year 8 group (turning 13 years of age during 01/09/17 to 31/08/18) is currently 85.6%. Coverage of the first dose in the 2017-18 school year 9 is currently 89.3% and uptake of the second dose in this age group is currently 80.3%. 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 84.7% (Table 8).
14. Current uptake of the MenACWY vaccine in the 2017-18 routine school year 9 cohort is 82.7%, vaccination sessions are now complete but data entry may not be (Table 9 and 10). Coverage in the 2017-18 school years 10, 11 and 12, is currently 84.4%, 82.2% 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 82.5%. Coverage of two doses of MMR in this year group is currently 89.0% and coverage of one dose is currently 93.1%. Coverage of two doses of MMR vaccine ranged by HB from 80.9% (Powys) to 91.2% (Cwm Taf). Coverage of a full course of immunisation against rubella (two doses of MMR) in 14 year old girls in this school year group was 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 84.1%. Coverage ranged by HB from 74.9% (Cardiff and Vale) to 90.1% (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 78.0% (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 84.8%. Coverage ranged by HB from 76.1% (Cardiff and Vale) to 91.5% (Cwm Taf). Coverage of two doses of MMR in this year group was 87.4% and coverage of one dose was 92.5%. Coverage of two doses of MMR vaccine ranged by HB from 81.2% (Powys) to 90.1% (Betsi Cadwaladr). Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls in this school year group was 88.1% (Table 12).
18. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st July 2018 and 30th September 2018) remained stable at 87.4%. Coverage of one dose of MMR also remained stable this quarter at 92.6%. Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls was 87.9%. National coverage of the Td/IPV

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

teenage booster in children reaching 16 years of age is 84.1% this quarter (Figures 1, 2 and 3, Tables 2 and 13).

- 19.** Uptake of BCG immunisation is presented in Table 14. These data are based on BCG immunisations recorded in the National Community Child Health Database. BCG immunisation has been received by 7.0%, 4.4%, 5.8% and 4.4% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter three of 2018. This quarter Cardiff LA had the highest proportions of children given BCG by one year of age (20.3%) and Newport LA by two years of age (13.4%).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 75.0%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their second birthday this quarter was 40.0%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their fifth birthday this quarter was 100%. Proportions should be interpreted with caution as small numbers of babies require hepatitis B immunisation.

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

Comment

This is the first report to include one year old children eligible for the '6 in 1' (DTaP/IPV/Hib/HepB) vaccine which replaced the '5 in 1' (DTaP/IPV/Hib) vaccine in August 2017. Uptake of the complete three-dose course of '6 in 1' vaccine, or '5 in 1' for a small proportion of children, was high and above 95%. Uptake of all other routine primary immunisations in infants reaching their first birthday this quarter also remain at 95% or higher, excluding rotavirus (which cannot be given beyond 24 weeks of age).

The uptake of the third scheduled dose of meningococcal group B vaccine measured at two years of age, remained slightly under 95%. National uptake of MMR vaccination in two year olds was also slightly below 95%, for the sixth consecutive quarter.

There was a slight increase in the proportion of children up to date with all routine immunisations at four years of age this quarter, with uptake just above 85%. Whilst uptake of all routine immunisations at five years of age remained stable. 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 Hib/MenC vaccines.

This report presents the end of 2017-18 school year uptake figures for MMR, MenACWY, the '3 in 1' teenage booster and HPV vaccine for girls. Uptake of both MMR dose one and MMR dose two were approximately 1% lower in the 2017-18 School Year 11 group (16 years of age) compared to the 2016-17 School Year 11 group at the same time last year. Uptake of the '3 in 1' booster in School Year 11 was similar and uptake of the MenACWY vaccine was higher compared to the previous School Year 11. Uptake of a complete course of MMR vaccine is not at 95% in any age group currently. Routine immunisation status checks at school entry and at delivery of other vaccines, along with catch-up at every opportunity remain vital in averting future outbreaks of measles.

Where possible individuals should be vaccinated before they reach school-leaving age, when catch-up becomes more challenging. Uptake of MenACWY vaccine in 14 to 17 year olds mainly immunised through school based programmes ranges between 80-84% whilst uptake in 19 to 21 year olds who were immunised in General Practice is currently low, between 40 and 42% [2].

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 (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>

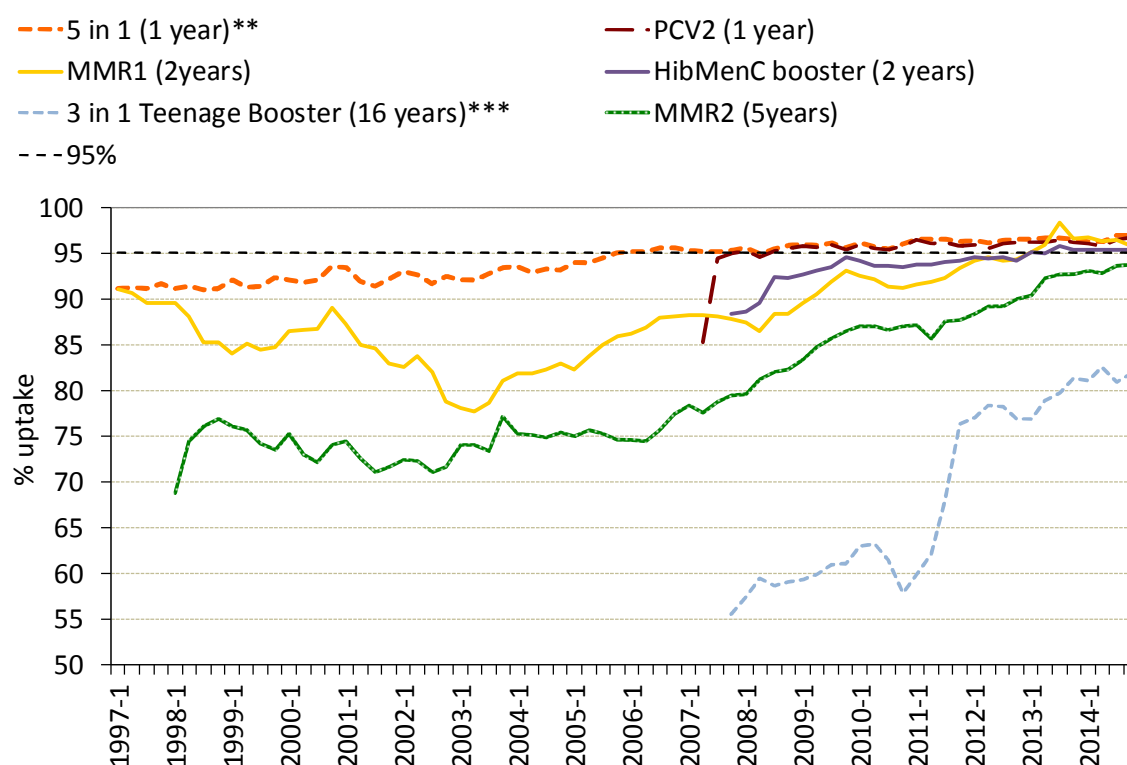
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

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 2014*.

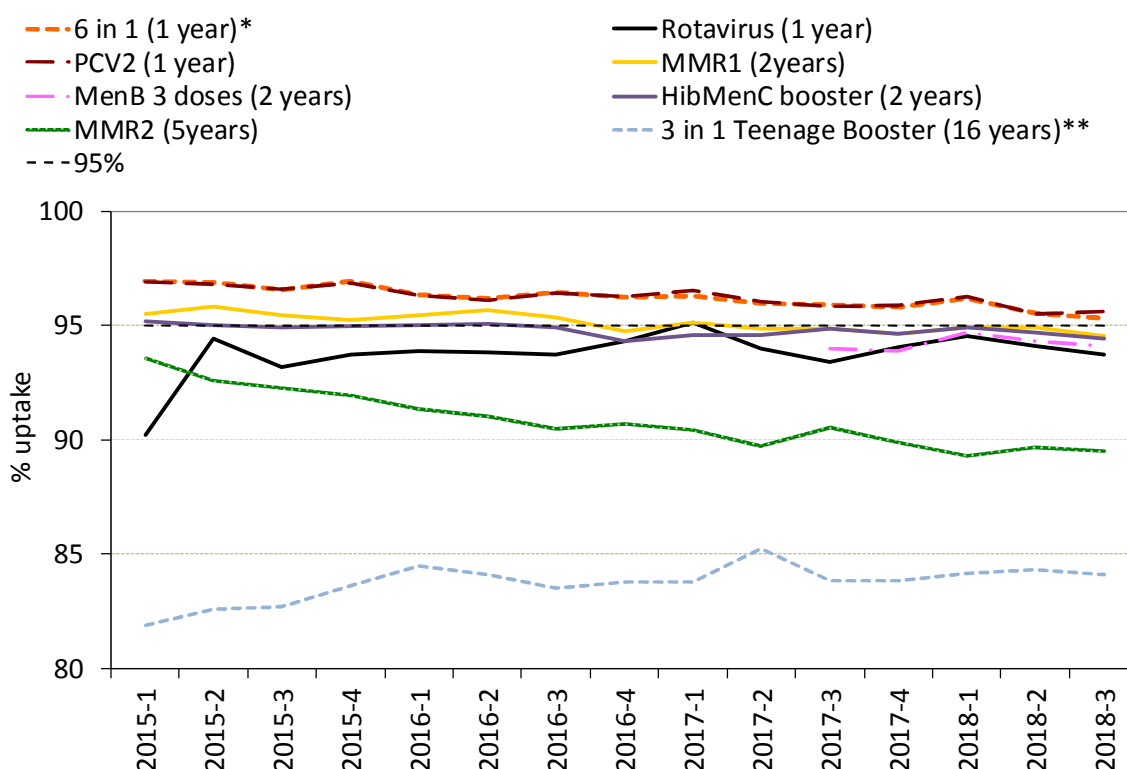


*Uptake data for quarter 3 2014 to quarter 4 2014 presented here are based on estimates calculated in August 2015, rather than published data, due to data quality problems affecting reported uptake of some immunisations in reports published during this period.

**Uptake of pertussis used as a proxy.

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

Figure 2. Percentage uptake of childhood immunisations in Wales, quarter 1 2015 to quarter 3 2018.



* Uptake of pertussis used as proxy.

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

Figure 3. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/07/18 and 30/09/18 and resident on 30/09/18.

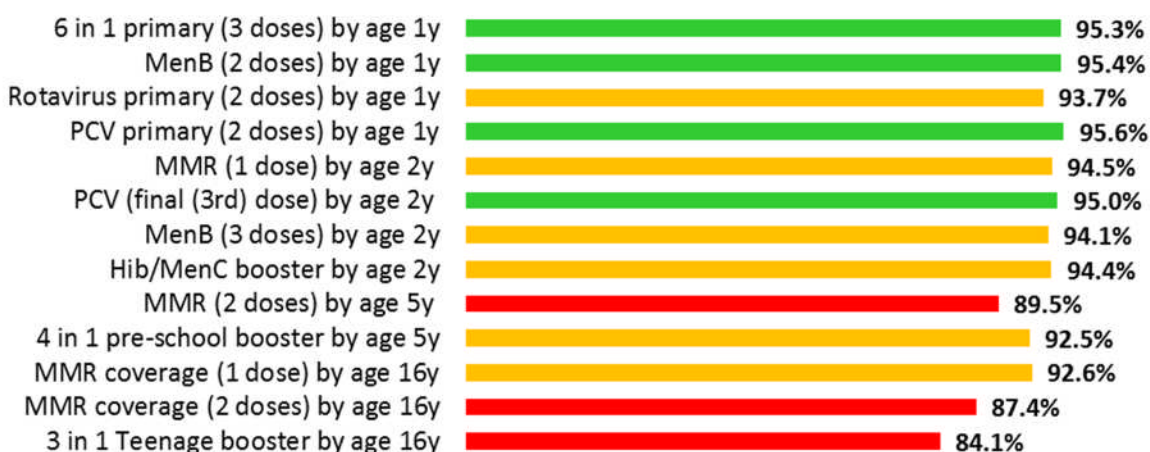


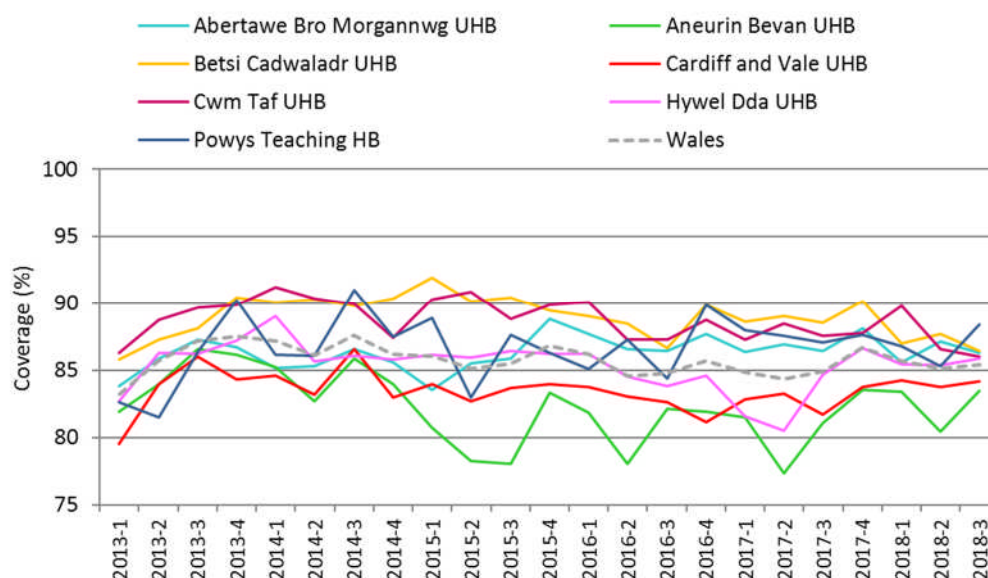
Figure 4. Percentage uptake of resident children reaching their 4th birthday between 01/07/18 and 30/09/18 and are up to date with all scheduled vaccines⁷ by Health Board.



Table 1. Percentages of resident children reaching their 4th birthday during quarter 3 2017 to quarter 3 2018 who are up to date with all scheduled vaccines⁷, by Health Board.

Area					
	2017-3	2017-4	2018-1	2018-2	2018-3
Abertawe Bro Morgannwg UHB	86.5	88.1	85.6	87.1	86.3
Aneurin Bevan UHB	81.1	83.6	83.4	80.4	83.5
Betsi Cadwaladr UHB	88.6	90.2	87.0	87.7	86.5
Cardiff and Vale UHB	81.7	83.8	84.2	83.8	84.2
Cwm Taf UHB	87.6	87.8	89.8	86.6	86.0
Hywel Dda UHB	84.7	86.7	85.5	85.4	85.8
Powys Teaching HB	87.1	87.7	86.8	85.3	88.4
Wales	84.9	86.7	85.7	85.1	85.4

Figure 5. Trends in the percentages of children reaching their 4th birthday during quarter 1 2013 to quarter 3 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 6. Uptake of “6 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/07/18 and 30/09/18.

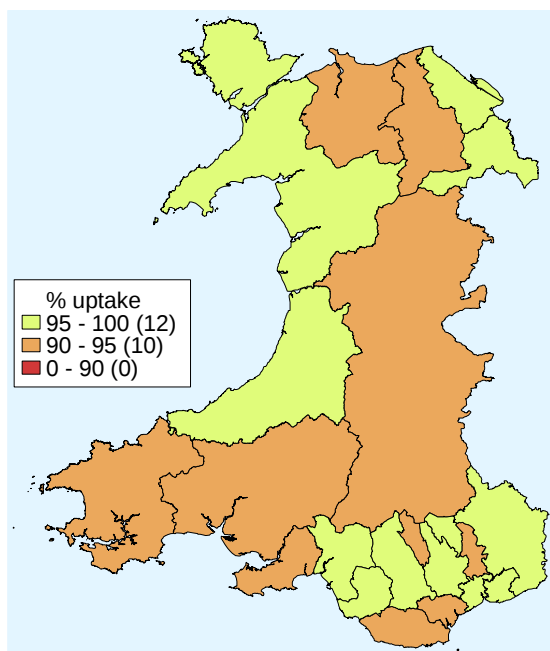


Figure 7. Uptake of at least one dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/07/18 and 30/09/18.

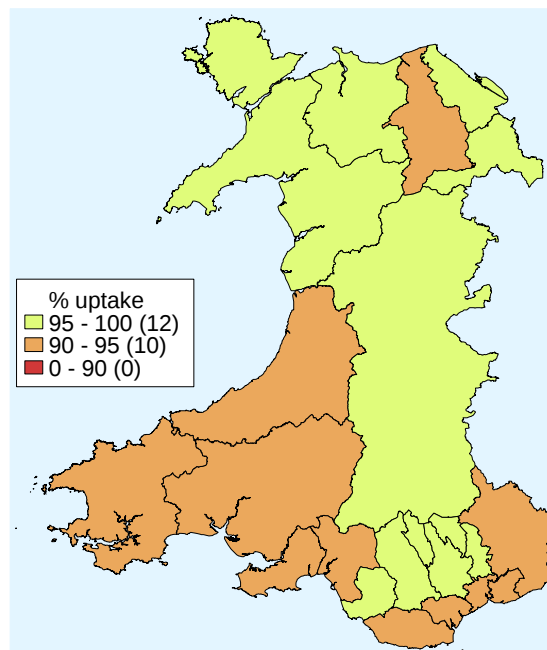


Figure 8. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/07/18 and 30/09/18.

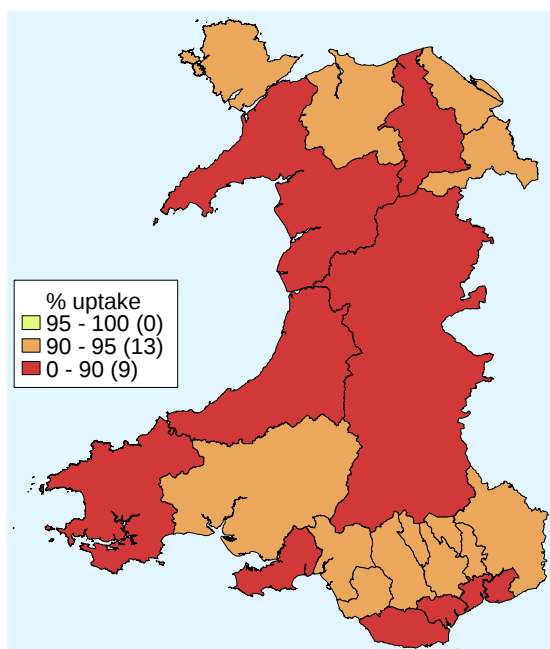


Figure 9. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/07/18 and 30/09/18.

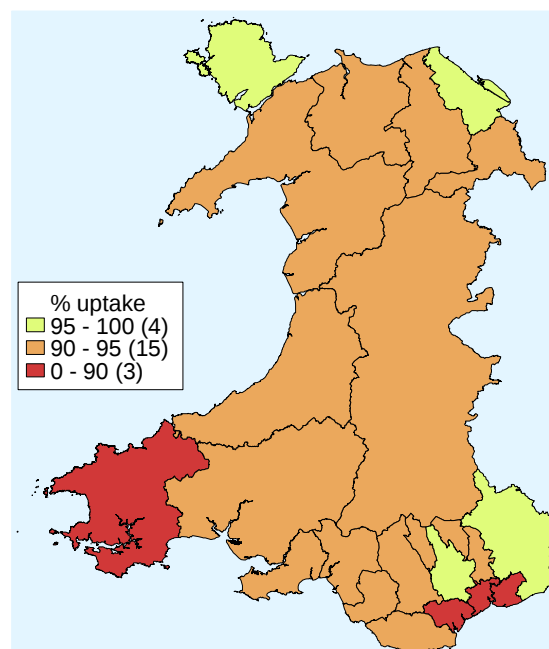


Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 4th, 5th and 16th birthday between 01/07/18 and 30/09/18 and resident on 30/09/18.

Area	Age 1 year					Age 2 years					Age 4 years		Age 5 years			Age 16 years				
	Resident children (n)	6 in 1 ¹	MenB ²	PCV2	Rotavirus	Resident children (n)	MMR1	PCV1 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	409	96.1	96.3	96.3	96.1	408	95.3	95.8	94.9	94.6	401	86.0	445	91.9	93.9	397	94.0	88.4	90.4	90.2
Neath Port Talbot LA	376	96.8	96.5	96.8	94.9	394	94.2	95.2	94.9	94.9	401	86.5	424	90.3	92.2	361	94.2	87.8	88.4	87.0
Swansea LA	637	94.8	94.3	94.5	93.6	637	92.9	94.0	93.4	93.4	668	86.4	676	88.5	92.0	622	92.0	84.9	88.4	87.9
Health Board Total	1422	95.7	95.5	95.6	94.7	1439	94.0	94.9	94.2	94.2	1470	86.3	1545	90.0	92.6	1380	93.1	86.7	89.0	88.3
Aneurin Bevan UHB																				
Blaenau Gwent LA	208	97.6	98.1	98.1	91.8	176	96.0	97.7	97.7	96.6	193	81.3	203	91.1	92.6	192	96.4	92.2	85.9	85.9
Caerphilly LA	518	96.1	96.5	96.7	95.6	535	95.9	95.9	95.7	95.9	541	87.6	571	93.3	95.4	549	96.0	90.2	85.2	85.8
Monmouthshire LA	192	95.8	96.4	96.4	94.8	196	94.9	95.4	94.4	95.4	223	84.3	222	90.1	96.8	255	83.9	77.6	77.3	76.9
Newport LA	524	96.0	95.4	96.4	92.0	506	92.7	93.3	92.1	91.5	570	80.7	516	86.2	87.4	469	93.2	88.3	80.2	81.2
Torfaen LA	237	92.8	94.5	94.1	91.6	265	96.2	96.6	95.1	95.1	277	81.9	332	91.0	91.0	279	95.3	90.0	87.1	87.1
Health Board Total	1679	95.8	96.1	96.4	93.3	1678	94.9	95.4	94.6	94.5	1804	83.5	1844	90.3	92.2	1744	93.4	88.0	83.1	83.5
Betsi Cadwaladr UHB																				
Anglesey LA	175	96.6	97.1	97.1	95.4	186	96.2	97.8	97.3	97.3	186	84.4	193	93.3	96.4	193	97.9	95.9	81.9	83.4
Conwy LA	253	92.5	92.9	93.3	91.7	274	95.6	96.4	94.5	95.3	305	85.6	299	90.3	93.3	290	91.4	87.6	90.7	91.0
Denbighshire LA	260	93.8	93.5	93.8	91.9	273	91.6	93.0	91.6	92.3	299	88.3	283	89.8	92.9	298	86.2	81.9	78.2	78.5
Flintshire LA	406	95.6	96.1	95.8	94.3	407	96.3	97.1	97.1	96.8	408	86.0	426	91.1	96.0	417	94.7	90.2	83.5	82.7
Gwynedd LA	312	95.5	95.2	96.2	90.4	278	95.3	95.7	95.7	95.7	317	86.4	331	89.7	94.0	286	95.5	92.7	83.9	83.6
Wrexham LA	389	95.9	96.9	96.9	94.9	392	96.7	96.4	95.9	96.4	434	87.1	412	91.0	92.5	352	95.7	94.0	86.6	85.5
Health Board Total	1795	95.0	95.4	95.6	93.1	1810	95.4	96.1	95.4	95.7	1949	86.5	1944	90.7	94.1	1836	93.5	90.1	84.3	84.1
Cardiff and Vale UHB																				
Cardiff LA	1091	94.2	93.5	93.8	91.1	1083	92.2	92.8	90.6	92.1	1122	84.3	1149	85.8	89.4	972	89.4	82.6	73.1	72.6
Vale of Glamorgan LA	350	94.9	95.1	94.9	95.4	361	92.8	94.2	93.1	93.9	389	83.8	408	87.5	92.6	339	92.0	86.7	80.2	79.9
Health Board Total	1441	94.4	93.9	94.0	92.2	1444	92.4	93.1	91.2	92.5	1511	84.2	1557	86.3	90.2	1311	90.1	83.7	75.0	74.5
Cwm Taf UHB																				
Merthyr Tydfil LA	189	94.2	95.8	95.2	93.7	194	96.4	97.4	97.4	96.4	217	82.9	171	90.6	93.0	150	93.3	85.3	92.7	93.3
Rhondda Cynon Taf LA	703	97.7	98.0	98.2	97.0	715	98.0	98.0	97.8	97.9	727	86.9	739	91.9	93.6	673	95.5	91.5	91.5	91.5
Health Board Total	892	97.0	97.5	97.5	96.3	909	97.7	97.9	97.7	97.6	944	86.0	910	91.6	93.5	823	95.1	90.4	91.7	91.9
Hywel Dda UHB																				
Cardiganshire LA	493	94.9	94.7	95.5	94.1	507	93.5	93.3	92.1	93.1	487	84.8	498	90.6	93.8	541	94.1	90.4	91.3	90.4
Ceredigion LA	145	95.9	95.2	95.9	91.7	163	91.4	92.6	92.0	92.6	174	91.4	203	89.2	93.1	177	91.5	87.6	83.1	83.6
Pembrokeshire LA	308	93.5	93.5	93.8	92.2	319	91.5	91.5	90.3	90.3	335	84.5	285	84.9	88.1	313	89.1	82.4	77.3	77.3
Health Board Total	946	94.6	94.4	95.0	93.1	989	92.5	92.6	91.5	92.1	996	85.8	986	88.6	92.0	1031	92.1	87.5	85.6	85.3
Powys Teaching UHB																				
	308	94.5	94.5	94.8	94.5	308	95.5	96.1	94.8	95.8	276	88.4	300	87.7	92.3	339	87.6	80.5	87.6	85.8
Unknown	6	100.0	100.0	100.0	100.0	7	85.7	85.7	85.7	85.7	4	100.0	20	90.0	95.0	21	85.7	85.7	85.7	85.7
Wales Total	8489	95.3	95.4	95.6	93.7	8584	94.5	95.0	94.1	94.4	8954	85.4	9106	89.5	92.5	8485	92.6	87.4	84.4	84.1

¹ Uptake of pertussis used as proxy. Although the majority of one year olds referred to in this report would have been eligible for the '6 in 1' vaccine, a proportion of infants would have received the '5 in 1'.

² 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 01/07/18 and 30/09/18 and resident on 30/09/18.

Area	Resident children	D3	T3	P3	Po3	Hib3	HepB ¹	MMR1	Rotavirus	PCV2 ²	Men B ³	HibMenC											
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)		
Bridgend LA	409	393	96.1	393	96.1	393	96.1	393	96.1	393	96.1	274	67.0	5	1.2	393	96.1	394	96.3	394	96.3	0	0.0
Neath Port Talbot LA	376	364	96.8	364	96.8	364	96.8	364	96.8	364	96.8	247	65.7	0	0.0	357	94.9	364	96.8	363	96.5	0	0.0
Swansea LA	637	604	94.8	604	94.8	604	94.8	604	94.8	604	94.8	425	66.7	0	0.0	596	93.6	602	94.5	601	94.3	0	0.0
Health Board Total	1422	1361	95.7	1361	95.7	1361	95.7	1361	95.7	1361	95.7	946	66.5	5	0.4	1346	94.7	1360	95.6	1358	95.5	0	0.0
<u>Aneurin Bevan University HB</u>																							
Blaenau Gwent LA	208	203	97.6	203	97.6	203	97.6	203	97.6	203	97.6	144	69.2	0	0.0	191	91.8	204	98.1	204	98.1	0	0.0
Caerphilly LA	518	498	96.1	498	96.1	498	96.1	498	96.1	498	96.1	342	66.0	2	0.4	495	95.6	501	96.7	500	96.5	2	0.4
Monmouthshire LA	192	184	95.8	184	95.8	184	95.8	184	95.8	184	95.8	140	72.9	0	0.0	182	94.8	185	96.4	185	96.4	0	0.0
Newport LA	524	503	96.0	503	96.0	503	96.0	503	96.0	503	96.0	365	69.7	1	0.2	482	92.0	505	96.4	500	95.4	0	0.0
Torfaen LA	237	220	92.8	220	92.8	220	92.8	220	92.8	220	92.8	153	64.6	0	0.0	217	91.6	223	94.1	224	94.5	0	0.0
Health Board Total	1679	1608	95.8	1608	95.8	1608	95.8	1608	95.8	1608	95.8	1144	68.1	3	0.2	1567	93.3	1618	96.4	1613	96.1	2	0.1
<u>Betsi Cadwaladr University HB</u>																							
Anglesey LA	175	169	96.6	169	96.6	169	96.6	169	96.6	169	96.6	118	67.4	0	0.0	167	95.4	170	97.1	170	97.1	1	0.6
Conwy LA	253	234	92.5	234	92.5	234	92.5	234	92.5	234	92.5	172	68.0	3	1.2	232	91.7	236	93.3	235	92.9	3	1.2
Denbighshire LA	260	244	93.8	244	93.8	244	93.8	244	93.8	244	93.8	181	69.6	1	0.4	239	91.9	244	93.8	243	93.5	1	0.4
Flintshire LA	406	388	95.6	388	95.6	388	95.6	388	95.6	388	95.6	269	66.3	2	0.5	383	94.3	389	95.8	390	96.1	2	0.5
Gwynedd LA	312	298	95.5	298	95.5	298	95.5	298	95.5	298	95.5	198	63.5	3	1.0	282	90.4	300	96.2	297	95.2	3	1.0
Wrexham LA	389	373	95.9	373	95.9	373	95.9	373	95.9	373	95.9	272	69.9	0	0.0	369	94.9	377	96.9	377	96.9	0	0.0
Health Board Total	1795	1706	95.0	1706	95.0	1706	95.0	1706	95.0	1706	95.0	1210	67.4	9	0.5	1672	93.1	1716	95.6	1712	95.4	10	0.6
<u>Cardiff and Vale University HB</u>																							
Cardiff LA	1091	1029	94.3	1028	94.2	1028	94.2	1028	94.2	1028	94.2	743	68.1	7	0.6	994	91.1	1023	93.8	1020	93.5	4	0.4
Vale of Glamorgan LA	350	332	94.9	332	94.9	332	94.9	332	94.9	332	94.9	246	70.3	0	0.0	334	95.4	332	94.9	333	95.1	0	0.0
Health Board Total	1441	1361	94.4	1360	94.4	1360	94.4	1360	94.4	1360	94.4	989	68.6	7	0.5	1328	92.2	1355	94.0	1353	93.9	4	0.3
<u>Cwm Taf University HB</u>																							
Merthyr Tydfil LA	189	178	94.2	178	94.2	178	94.2	178	94.2	178	94.2	115	60.8	0	0.0	177	93.7	180	95.2	181	95.8	0	0.0
Rhondda Cynon Taf LA	703	687	97.7	687	97.7	687	97.7	687	97.7	687	97.7	484	68.8	3	0.4	682	97.0	690	98.2	689	98.0	2	0.3
Health Board Total	892	865	97.0	865	97.0	865	97.0	865	97.0	865	97.0	599	67.2	3	0.3	859	96.3	870	97.5	870	97.5	2	0.2
<u>Hywel Dda University HB</u>																							
Carmarthenshire LA	493	468	94.9	468	94.9	468	94.9	467	94.7	468	94.9	327	66.3	4	0.8	464	94.1	471	95.5	467	94.7	2	0.4
Ceredigion LA	145	139	95.9	139	95.9	139	95.9	139	95.9	139	95.9	87	60.0	0	0.0	133	91.7	139	95.9	138	95.2	0	0.0
Pembrokeshire LA	308	288	93.5	288	93.5	288	93.5	288	93.5	288	93.5	203	65.9	1	0.3	284	92.2	289	93.8	288	93.5	0	0.0
Health Board Total	946	895	94.6	895	94.6	895	94.6	894	94.5	895	94.6	617	65.2	5	0.5	881	93.1	899	95.0	893	94.4	2	0.2
<u>Powys Teaching HB</u>	308	291	94.5	291	94.5	291	94.5	291	94.5	291	94.5	194	63.0	2	0.6	291	94.5	292	94.8	291	94.5	1	0.3
Unknown	6	6	100.0	6	100.0	6	100.0	6	100.0	6	100.0	4	66.7	0	0.0	6	100.0	6	100.0	6	100.0	0	0.0
Wales Total	8489	8093	95.3	8092	95.3	8092	95.3	8091	95.3	8092	95.3	5703	67.2	34	0.4	7950	93.7	8116	95.6	8096	95.4	21	0.2

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

² Full primary two dose course of pneumococcal conjugate vaccine.

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

Table 4. Vaccine uptake in children reaching their 2nd birthday between 01/07/18 and 30/09/18 and resident on 30/09/18.

Area	Resident children	D3		T3		P3		Po3		Hib3		MMR1		PCV2 ¹		PCVf ²		Men B ³		HibMenC	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>																					
Bridgend LA	408	395	96.8	395	96.8	395	96.8	395	96.8	395	96.8	389	95.3	392	96.1	391	95.8	387	94.9	386	94.6
Neath Port Talbot LA	394	381	96.7	381	96.7	381	96.7	381	96.7	381	96.7	371	94.2	379	96.2	375	95.2	374	94.9	374	94.9
Swansea LA	637	616	96.7	616	96.7	616	96.7	616	96.7	616	96.7	592	92.9	609	95.6	599	94.0	595	93.4	595	93.4
Health Board Total	1439	1392	96.7	1392	96.7	1392	96.7	1392	96.7	1392	96.7	1352	94.0	1380	95.9	1365	94.9	1356	94.2	1355	94.2
<u>Aneurin Bevan University HB</u>																					
Blaenau Gwent LA	176	174	98.9	174	98.9	174	98.9	174	98.9	174	98.9	169	96.0	171	97.2	172	97.7	172	97.7	170	96.6
Caerphilly LA	535	522	97.6	522	97.6	522	97.6	522	97.6	522	97.6	513	95.9	520	97.2	513	95.9	512	95.7	513	95.9
Monmouthshire LA	196	188	95.9	188	95.9	188	95.9	188	95.9	188	95.9	186	94.9	187	95.4	187	95.4	185	94.4	187	95.4
Newport LA	506	479	94.7	479	94.7	479	94.7	479	94.7	479	94.7	469	92.7	470	92.9	472	93.3	466	92.1	463	91.5
Torfaen LA	265	261	98.5	261	98.5	261	98.5	261	98.5	261	98.5	255	96.2	260	98.1	256	96.6	252	95.1	252	95.1
Health Board Total	1678	1624	96.8	1624	96.8	1624	96.8	1624	96.8	1624	96.8	1592	94.9	1608	95.8	1600	95.4	1587	94.6	1585	94.5
<u>Betsi Cadwaladr University HB</u>																					
Anglesey LA	186	184	98.9	184	98.9	184	98.9	184	98.9	184	98.9	179	96.2	183	98.4	182	97.8	181	97.3	181	97.3
Conwy LA	274	266	97.1	266	97.1	266	97.1	266	97.1	266	97.1	262	95.6	263	96.0	264	96.4	259	94.5	261	95.3
Denbighshire LA	273	260	95.2	260	95.2	260	95.2	260	95.2	260	95.2	250	91.6	253	92.7	254	93.0	250	91.6	252	92.3
Flintshire LA	407	401	98.5	401	98.5	401	98.5	401	98.5	401	98.5	392	96.3	400	98.3	395	97.1	395	97.1	394	96.8
Gwynedd LA	278	271	97.5	271	97.5	271	97.5	271	97.5	271	97.5	265	95.3	268	96.4	266	95.7	266	95.7	266	95.7
Wrexham LA	392	380	96.9	380	96.9	380	96.9	380	96.9	380	96.9	379	96.7	377	96.2	378	96.4	376	95.9	378	96.4
Health Board Total	1810	1762	97.3	1762	97.3	1762	97.3	1762	97.3	1762	97.3	1727	95.4	1744	96.4	1739	96.1	1727	95.4	1732	95.7
<u>Cardiff and Vale University HB</u>																					
Cardiff LA	1083	1034	95.5	1033	95.4	1034	95.5	1033	95.4	1033	95.4	999	92.2	997	92.1	1005	92.8	981	90.6	997	92.1
Vale of Glamorgan LA	361	354	98.1	354	98.1	354	98.1	354	98.1	354	98.1	335	92.8	346	95.8	340	94.2	336	93.1	339	93.9
Health Board Total	1444	1388	96.1	1387	96.1	1388	96.1	1387	96.1	1387	96.1	1334	92.4	1343	93.0	1345	93.1	1317	91.2	1336	92.5
<u>Cwm Taf University HB</u>																					
Merthyr Tydfil LA	194	190	97.9	190	97.9	190	97.9	190	97.9	190	97.9	187	96.4	189	97.4	189	97.4	189	97.4	187	96.4
Rhondda Cynon Taf LA	715	709	99.2	709	99.2	709	99.2	709	99.2	709	99.2	701	98.0	705	98.6	701	98.0	699	97.8	700	97.9
Health Board Total	909	899	98.9	899	98.9	899	98.9	899	98.9	899	98.9	888	97.7	894	98.3	890	97.9	888	97.7	887	97.6
<u>Hywel Dda University HB</u>																					
Cardiff LA	507	485	95.7	485	95.7	485	95.7	485	95.7	485	95.7	474	93.5	473	93.3	473	93.3	467	92.1	472	93.1
Ceredigion LA	163	154	94.5	154	94.5	154	94.5	154	94.5	154	94.5	149	91.4	153	93.9	151	92.6	150	92.0	151	92.6
Pembrokeshire LA	319	305	95.6	305	95.6	305	95.6	305	95.6	305	95.6	292	91.5	299	93.7	292	91.5	288	90.3	288	90.3
Health Board Total	989	944	95.4	944	95.4	944	95.4	944	95.4	944	95.4	915	92.5	925	93.5	916	92.6	905	91.5	911	92.1
<u>Powys Teaching HB</u>																					
Unknown	7	6	85.7	6	85.7	6	85.7	6	85.7	6	85.7	6	85.7	6	85.7	6	85.7	6	85.7	6	85.7
Wales Total	8584	8316	96.9	8315	96.9	8316	96.9	8315	96.9	8315	96.9	8108	94.5	8200	95.5	8157	95.0	8078	94.1	8107	94.4

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 01/07/18 and 30/09/18 and resident on 30/09/18. 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	
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Bridgend LA	401	353	88.0	383	95.5	346	86.3	345	86.0
Neath Port Talbot LA	401	359	89.5	380	94.8	352	87.8	347	86.5
Swansea LA	668	593	88.8	634	94.9	580	86.8	577	86.4
Health Board Total	1470	1305	88.8	1397	95.0	1278	86.9	1269	86.3
<u>Aneurin Bevan University HB</u>									
Blaenau Gwent LA	193	161	83.4	186	96.4	158	81.9	157	81.3
Caerphilly LA	541	481	88.9	527	97.4	480	88.7	474	87.6
Monmouthshire LA	223	203	91.0	202	90.6	192	86.1	188	84.3
Newport LA	570	485	85.1	514	90.2	472	82.8	460	80.7
Torfaen LA	277	238	85.9	259	93.5	232	83.8	227	81.9
Health Board Total	1804	1568	86.9	1688	93.6	1534	85.0	1506	83.5
<u>Betsi Cadwaladr University HB</u>									
Anglesey LA	186	168	90.3	171	91.9	160	86.0	157	84.4
Conwy LA	305	271	88.9	289	94.8	262	85.9	261	85.6
Denbighshire LA	299	267	89.3	286	95.7	264	88.3	264	88.3
Flintshire LA	408	364	89.2	379	92.9	356	87.3	351	86.0
Gwynedd LA	317	283	89.3	301	95.0	278	87.7	274	86.4
Wrexham LA	434	391	90.1	415	95.6	381	87.8	378	87.1
Health Board Total	1949	1744	89.5	1841	94.5	1701	87.3	1685	86.5
<u>Cardiff and Vale University HB</u>									
Cardiff LA	1122	985	87.8	1054	93.9	961	85.7	946	84.3
Vale of Glamorgan LA	389	343	88.2	363	93.3	328	84.3	326	83.8
Health Board Total	1511	1328	87.9	1417	93.8	1289	85.3	1272	84.2
<u>Cwm Taf University HB</u>									
Merthyr Tydfil LA	217	190	87.6	201	92.6	181	83.4	180	82.9
Rhondda Cynon Taf LA	727	650	89.4	692	95.2	638	87.8	632	86.9
Health Board Total	944	840	89.0	893	94.6	819	86.8	812	86.0
<u>Hywel Dda University HB</u>									
Carmarthenshire LA	487	431	88.5	453	93.0	420	86.2	413	84.8
Ceredigion LA	174	163	93.7	162	93.1	161	92.5	159	91.4
Pembrokeshire LA	335	290	86.6	310	92.5	285	85.1	283	84.5
Health Board Total	996	884	88.8	925	92.9	866	86.9	855	85.8
<u>Powys Teaching HB</u>	276	258	93.5	257	93.1	248	89.9	244	88.4
Unknown	4	4	100.0	4	100.0	4	100.0	4	100.0
Wales Total	8954	7931	88.6	8422	94.1	7739	86.4	7647	85.4

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 01/07/18 and 30/09/18 and resident on 30/09/18. 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)	(%)
Abertawe Bro Morgannwg University HB									
Bridgend LA	445	418	93.9	424	95.3	409	91.9	406	91.2
Neath Port Talbot LA	424	391	92.2	399	94.1	383	90.3	375	88.4
Swansea LA	676	622	92.0	629	93.0	598	88.5	591	87.4
Health Board Total	1545	1431	92.6	1452	94.0	1390	90.0	1372	88.8
Aneurin Bevan University HB									
Blaenau Gwent LA	203	188	92.6	195	96.1	185	91.1	183	90.1
Caerphilly LA	571	545	95.4	550	96.3	533	93.3	529	92.6
Monmouthshire LA	222	215	96.8	204	91.9	200	90.1	197	88.7
Newport LA	516	451	87.4	457	88.6	445	86.2	418	81.0
Torfaen LA	332	302	91.0	313	94.3	302	91.0	298	89.8
Health Board Total	1844	1701	92.2	1719	93.2	1665	90.3	1625	88.1
Betsi Cadwaladr University HB									
Anglesey LA	193	186	96.4	182	94.3	180	93.3	179	92.7
Conwy LA	299	279	93.3	281	94.0	270	90.3	269	90.0
Denbighshire LA	283	263	92.9	266	94.0	254	89.8	252	89.0
Flintshire LA	426	409	96.0	391	91.8	388	91.1	380	89.2
Gwynedd LA	331	311	94.0	303	91.5	297	89.7	293	88.5
Wrexham LA	412	381	92.5	386	93.7	375	91.0	373	90.5
Health Board Total	1944	1829	94.1	1809	93.1	1764	90.7	1746	89.8
Cardiff and Vale University HB									
Cardiff LA	1149	1027	89.4	1056	91.9	986	85.8	957	83.3
Vale of Glamorgan LA	408	378	92.6	367	90.0	357	87.5	350	85.8
Health Board Total	1557	1405	90.2	1423	91.4	1343	86.3	1307	83.9
Cwm Taf University HB									
Merthyr Tydfil LA	171	159	93.0	163	95.3	155	90.6	155	90.6
Rhondda Cynon Taf LA	739	692	93.6	707	95.7	679	91.9	672	90.9
Health Board Total	910	851	93.5	870	95.6	834	91.6	827	90.9
Hywel Dda University HB									
Carmarthenshire LA	498	467	93.8	461	92.6	451	90.6	446	89.6
Ceredigion LA	203	189	93.1	190	93.6	181	89.2	178	87.7
Pembrokeshire LA	285	251	88.1	255	89.5	242	84.9	238	83.5
Health Board Total	986	907	92.0	906	91.9	874	88.6	862	87.4
Powys Teaching HB	300	277	92.3	275	91.7	263	87.7	262	87.3
Unknown	20	19	95.0	18	90.0	18	90.0	18	90.0
Wales Total	9106	8420	92.5	8472	93.0	8151	89.5	8019	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 01/07/18 and 30/09/18 and resident on 30/09/18

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)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>																													
Bridgend LA	445	426	95.7	426	95.7	426	95.7	426	95.7	426	95.7	423	95.1	421	94.6	424	95.3	435	97.8	409	91.9	418	93.9	418	93.9	418	93.9	418	93.9
Neath Port Talbot LA	424	410	96.7	410	96.7	410	96.7	410	96.7	410	96.7	408	96.2	398	93.9	399	94.1	410	96.7	383	90.3	391	92.2	391	92.2	391	92.2	391	92.2
Swansea LA	676	629	93.0	629	93.0	629	93.0	629	93.0	628	92.9	617	91.3	614	90.8	629	93.0	655	96.9	598	88.5	622	92.0	622	92.0	622	92.0	622	92.0
Health Board Total	1545	1465	94.8	1465	94.8	1465	94.8	1465	94.8	1464	94.8	1448	93.7	1433	92.8	1452	94.0	1500	97.1	1390	90.0	1431	92.6	1431	92.6	1431	92.6	1431	92.6
<u>Aneurin Bevan University HB</u>																													
Blaenau Gwent LA	203	194	95.6	194	95.6	194	95.6	194	95.6	194	95.6	194	95.6	194	95.6	195	96.1	201	99.0	185	91.1	188	92.6	188	92.6	188	92.6	188	92.6
Caerphilly LA	571	555	97.2	555	97.2	555	97.2	555	97.2	555	97.2	552	96.7	549	96.1	550	96.3	556	97.4	533	93.3	545	95.4	545	95.4	545	95.4	545	95.4
Monmouthshire LA	222	195	87.8	195	87.8	195	87.8	195	87.8	195	87.8	194	87.4	203	91.4	204	91.9	220	99.1	200	90.1	215	96.8	215	96.8	215	96.8	215	96.8
Newport LA	516	467	90.5	467	90.5	467	90.5	466	90.3	467	90.5	459	89.0	459	89	457	88.6	491	95.2	445	86.2	451	87.4	451	87.4	451	87.4	451	87.4
Torfaen LA	332	313	94.3	313	94.3	313	94.3	313	94.3	313	94.3	313	94.3	314	94.6	313	94.3	317	95.5	302	91.0	302	91.0	302	91.0	302	91.0	302	91.0
Health Board Total	1844	1724	93.5	1724	93.5	1724	93.5	1723	93.4	1724	93.5	1712	92.8	1719	93.2	1719	93.2	1785	96.8	1665	90.3	1701	92.2	1701	92.2	1701	92.2	1701	92.2
<u>Betsi Cadwaladr University HB</u>																													
Anglesey LA	193	180	93.3	180	93.3	180	93.3	180	93.3	180	93.3	181	93.8	183	94.8	182	94.3	190	98.4	180	93.3	186	96.4	186	96.4	186	96.4	186	96.4
Conwy LA	299	283	94.6	283	94.6	283	94.6	283	94.6	283	94.6	279	93.3	279	93.3	281	94.0	291	97.3	270	90.3	279	93.3	279	93.3	279	93.3	279	93.3
Denbighshire LA	283	270	95.4	270	95.4	270	95.4	269	95.1	269	95.1	267	94.3	268	94.7	266	94.0	277	97.9	254	89.8	263	92.9	263	92.9	263	92.9	263	92.9
Flintshire LA	426	392	92.0	392	92.0	392	92.0	391	91.8	391	91.8	383	89.9	391	91.8	391	91.8	418	98.1	388	91.1	409	96.0	409	96.0	409	96.0	409	96.0
Gwynedd LA	331	297	89.7	297	89.7	297	89.7	297	89.7	297	89.7	288	87.0	298	90	303	91.5	315	95.2	297	89.7	311	94.0	311	94.0	311	94.0	311	94.0
Wrexham LA	412	383	93.0	383	93.0	383	93.0	383	93.0	383	93.0	378	91.7	382	92.7	386	93.7	394	95.6	375	91.0	381	92.5	381	92.5	381	92.5	381	92.5
Health Board Total	1944	1805	92.8	1805	92.8	1805	92.8	1803	92.7	1803	92.7	1776	91.4	1801	92.6	1809	93.1	1885	97.0	1764	90.7	1829	94.1	1829	94.1	1829	94.1	1829	94.1
<u>Cardiff and Vale University HB</u>																													
Cardiff LA	1149	1058	92.1	1058	92.1	1058	92.1	1057	92.0	1058	92.1	1029	89.6	1031	89.7	1056	91.9	1101	95.8	986	85.8	1027	89.4	1027	89.4	1027	89.4	1027	89.4
Vale of Glamorgan LA	408	370	90.7	370	90.7	370	90.7	370	90.7	371	90.9	366	89.7	366	89.7	367	90.0	396	97.1	357	87.5	378	92.6	378	92.6	378	92.6	378	92.6
Health Board Total	1557	1428	91.7	1428	91.7	1428	91.7	1427	91.7	1429	91.8	1395	89.6	1397	89.7	1423	91.4	1497	96.1	1343	86.3	1405	90.2	1405	90.2	1405	90.2	1405	90.2
<u>Cwm Taf University HB</u>																													
Merthyr Tydfil LA	171	165	96.5	165	96.5	165	96.5	165	96.5	165	96.5	165	96.5	163	95.3	163	95.3	165	96.5	155	90.6	159	93.0	159	93.0	159	93.0	159	93.0
Rhondda Cynon Taf LA	739	713	96.5	713	96.5	713	96.5	713	96.5	713	96.5	711	96.2	707	95.7	707	95.7	720	97.4	679	91.9	692	93.6	692	93.6	692	93.6	692	93.6
Health Board Total	910	878	96.5	878	96.5	878	96.5	878	96.5	878	96.5	876	96.3	870	95.6	870	95.6	885	97.3	834	91.6	851	93.5	851	93.5	851	93.5	851	93.5
<u>Hywel Dda University HB</u>																													
Cardemarthenshire LA	498	464	93.2	464	93.2	464	93.2	464	93.2	464	93.2	459	92.2	457	91.8	461	92.6	478	96.0	451	90.6	467	93.8	467	93.8	467	93.8	467	93.8
Ceredigion LA	203	191	94.1	191	94.1	191	94.1	191	94.1	191	94.1	188	92.6	188	92.6	190	93.6	192	94.6	181	89.2	189	93.1	189	93.1	189	93.1	189	93.1
Pembrokeshire LA	285	262	91.9	262	91.9	262	91.9	262	91.9	262	91.9	261	91.6	256	89.8	255	89.5	270	94.7	242	84.9	252	88.4	252	88.4	251	88.1	251	88.1
Health Board Total	986	917	93.0	917	93.0	917	93.0	917	93.0	917	93.0	908	92.1	901	91.4	906	91.9	940	95.3	874	88.6	908	92.1	908	92.1	907	92.0	907	92.0
<u>Powys Teaching HB</u>	300	270	90.0	270	90.0	270	90.0	270	90.0	270	90.0	265	88.3	271	90.3	275	91.7	282	94.0	263	87.7	277	92.3	277	92.3	277	92.3	277	92.3
Unknown	20	17	85.0	17	85.0	17	85.0	17	85.0	17	85.0	17	85.0	18	90	18	90.0	19	95.0	18	90.0	19	95.0	19	95.0	19	95.0	19	95.0
Wales Total	9106	8504	93.4	8504	93.4	8504	93.4	8500	93.3	8502	93.4	8397	92.2	8410	92.4	8472	93.0	8793	96.6	8151	89.5	8421	92.5	8421	92.5	8420	92.5	8420	92.5

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 30/09/18.

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	791	700	88.5	809	750	92.7	679	83.9	782	728	93.1	702	89.8
Neath Port Talbot LA	824	746	90.5	743	708	95.3	638	85.9	704	659	93.6	640	90.9
Swansea LA	1219	1049	86.1	1236	1140	92.2	1057	85.5	1234	1135	92.0	1100	89.1
Health Board Total	2834	2495	88.0	2788	2598	93.2	2374	85.2	2720	2522	92.7	2442	89.8
<u>Aneurin Bevan University HB</u>													
Blaenau Gwent LA	345	282	81.7	371	329	88.7	276	74.4	318	289	90.9	271	85.2
Caerphilly LA	1023	876	85.6	1014	917	90.4	782	77.1	977	835	85.5	829	84.9
Monmouthshire LA	489	384	78.5	538	443	82.3	356	66.2	546	453	83.0	424	77.7
Newport LA	965	744	77.1	913	751	82.3	597	65.4	896	754	84.2	657	73.3
Torfaen LA	544	439	80.7	492	439	89.2	357	72.6	486	431	88.7	399	82.1
Health Board Total	3366	2725	81.0	3328	2879	86.5	2368	71.2	3223	2762	85.7	2580	80.0
<u>Betsi Cadwaladr University HB</u>													
Anglesey LA	336	283	84.2	344	307	89.2	282	82.0	338	312	92.3	286	84.6
Conwy LA	533	463	86.9	579	519	89.6	471	81.3	543	488	89.9	472	86.9
Denbighshire LA	529	436	82.4	501	433	86.4	381	76.0	480	427	89.0	401	83.5
Flintshire LA	806	695	86.2	798	725	90.9	664	83.2	728	659	90.5	634	87.1
Gwynedd LA	647	551	85.2	536	478	89.2	462	86.2	554	503	90.8	495	89.4
Wrexham LA	730	635	87.0	705	613	87.0	564	80.0	677	596	88.0	553	81.7
Health Board Total	3581	3063	85.5	3463	3075	88.8	2824	81.5	3320	2985	89.9	2841	85.6
<u>Cardiff and Vale University HB</u>													
Cardiff LA	1999	1675	83.8	1881	1637	87.0	1415	75.2	1841	1579	85.8	1481	80.4
Vale of Glamorgan LA	750	663	88.4	736	663	90.1	635	86.3	707	632	89.4	590	83.5
Health Board Total	2749	2338	85.0	2617	2300	87.9	2050	78.3	2548	2211	86.8	2071	81.3
<u>Cwm Taf University HB</u>													
Merthyr Tydfil LA	355	314	88.5	319	294	92.2	273	85.6	328	306	93.3	299	91.2
Rhondda Cynon Taf LA	1392	1260	90.5	1308	1236	94.5	1153	88.1	1393	1311	94.1	1258	90.3
Health Board Total	1747	1574	90.1	1627	1530	94.0	1426	87.6	1721	1617	94.0	1557	90.5
<u>Hywel Dda University HB</u>													
Cardmarthenshire LA	978	878	89.8	972	885	91.0	828	85.2	999	901	90.2	871	87.2
Ceredigion LA	280	237	84.6	319	277	86.8	262	82.1	294	252	85.7	247	84.0
Pembrokeshire LA	599	517	86.3	632	540	85.4	507	80.2	616	520	84.4	486	78.9
Health Board Total	1857	1632	87.9	1923	1702	88.5	1597	83.0	1909	1673	87.6	1604	84.0
<u>Powys Teaching HB</u>	644	531	82.5	666	568	85.3	542	81.4	659	561	85.1	532	80.7
Unknown	50	40	80.0	49	40	81.6	39	79.6	44	39	88.6	39	88.6
Wales Total	16828	14398	85.6	16461	14692	89.3	13220	80.3	16144	14370	89.0	13666	84.7

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 30/09/18.

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	1589	1347	84.8	1565	1397	89.3	1520	1369	90.1	1689	1448	85.7
Neath Port Talbot LA	1511	1369	90.6	1431	1282	89.6	1473	1349	91.6	1521	1291	84.9
Swansea LA	2599	2349	90.4	2598	2306	88.8	2509	2240	89.3	2564	2172	84.7
Health Board Total	5699	5065	88.9	5594	4985	89.1	5502	4958	90.1	5774	4911	85.1
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	748	652	87.2	688	595	86.5	706	630	89.2	738	607	82.2
Caerphilly LA	2147	1785	83.1	2083	1772	85.1	2015	1733	86.0	2022	1652	81.7
Monmouthshire LA	1126	873	77.5	1096	896	81.8	1032	794	76.9	1102	823	74.7
Newport LA	1898	1483	78.1	1855	1480	79.8	1841	1470	79.8	1780	1368	76.9
Torfaen LA	1008	885	87.8	973	827	85.0	1020	887	87.0	1062	862	81.2
Health Board Total	6927	5678	82.0	6695	5570	83.2	6614	5514	83.4	6704	5312	79.2
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	726	590	81.3	702	589	83.9	726	598	82.4	715	534	74.7
Conwy LA	1170	958	81.9	1162	1042	89.7	1136	1001	88.1	1269	990	78.0
Denbighshire LA	1064	831	78.1	1023	866	84.7	1089	884	81.2	1192	920	77.2
Flintshire LA	1668	1310	78.5	1502	1269	84.5	1585	1312	82.8	1617	1273	78.7
Gwynedd LA	1169	953	81.5	1170	1007	86.1	1170	1005	85.9	1244	926	74.4
Wrexham LA	1446	1165	80.6	1423	1195	84.0	1315	1123	85.4	1439	1115	77.5
Health Board Total	7243	5807	80.2	6982	5968	85.5	7021	5923	84.4	7476	5758	77.0
<u>Cardiff and Vale University HB</u>												
Cardiff LA	3789	2684	70.8	3773	2760	73.2	3667	2098	57.2	3736	2858	76.5
Vale of Glamorgan LA	1429	1156	80.9	1484	1184	79.8	1354	891	65.8	1370	1018	74.3
Health Board Total	5218	3840	73.6	5257	3944	75.0	5021	2989	59.5	5106	3876	75.9
<u>Cwm Taf University HB</u>												
Merthyr Tydfil LA	672	585	87.1	661	599	90.6	624	567	90.9	640	546	85.3
Rhondda Cynon Taf LA	2659	2416	90.9	2813	2544	90.4	2539	2338	92.1	2641	2297	87.0
Health Board Total	3331	3001	90.1	3474	3143	90.5	3163	2905	91.8	3281	2843	86.7
<u>Hywel Dda University HB</u>												
Carmarthenshire LA	1992	1722	86.4	2047	1802	88.0	2032	1820	89.6	1996	1669	83.6
Ceredigion LA	667	595	89.2	617	534	86.5	592	513	86.7	623	524	84.1
Pembrokeshire LA	1262	1042	82.6	1220	979	80.2	1176	908	77.2	1206	846	70.1
Health Board Total	3921	3359	85.7	3884	3315	85.4	3800	3241	85.3	3825	3039	79.5
<u>Powys Teaching HB</u>	1344	1122	83.5	1343	1131	84.2	1303	1113	85.4	1315	1061	80.7
Unknown	111	89	80.2	94	74	78.7	97	83	85.6	145	105	72.4
Wales Total	33794	27961	82.7	33323	28130	84.4	32521	26726	82.2	33626	26905	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 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 30/09/18, with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		Teenage 3 in 1						Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)		
	MMR1	MMR2	booster		MenACWY ²		(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	1589	1505	94.7	1420	89.4	1337	84.1	1347	84.8	809	776	95.9	738	91.2	780	729	93.5	682	87.4
Neath Port Talbot LA	1511	1423	94.2	1360	90.0	1351	89.4	1369	90.6	743	710	95.6	676	91.0	768	713	92.8	684	89.1
Swansea LA	2599	2407	92.6	2304	88.6	2327	89.5	2349	90.4	1236	1138	92.1	1095	88.6	1363	1269	93.1	1209	88.7
Health Board Total	5699	5335	93.6	5084	89.2	5015	88.0	5065	88.9	2788	2624	94.1	2509	90.0	2911	2711	93.1	2575	88.5
<u>Aneurin Bevan University HB</u>																			
Blaenau Gwent LA	748	729	97.5	705	94.3	654	87.4	652	87.2	371	362	97.6	350	94.3	377	367	97.3	355	94.2
Caerphilly LA	2147	2071	96.5	1999	93.1	1781	83.0	1785	83.1	1014	971	95.8	939	92.6	1132	1099	97.1	1059	93.6
Monmouthshire LA	1126	990	87.9	943	83.7	874	77.6	873	77.5	538	477	88.7	451	83.8	588	513	87.2	492	83.7
Newport LA	1898	1787	94.2	1704	89.8	1495	78.8	1483	78.1	913	865	94.7	829	90.8	985	922	93.6	875	88.8
Torfaen LA	1008	975	96.7	930	92.3	885	87.8	885	87.8	492	475	96.5	453	92.1	516	500	96.9	477	92.4
Health Board Total	6927	6552	94.6	6281	90.7	5689	82.1	5678	82.0	3328	3150	94.7	3022	90.8	3598	3401	94.5	3258	90.6
<u>Betsi Cadwaladr University HB</u>																			
Anglesey LA	726	687	94.6	669	92.1	579	79.8	590	81.3	344	327	95.1	321	93.3	382	360	94.2	348	91.1
Conwy LA	1170	1081	92.4	1030	88.0	954	81.5	958	81.9	579	532	91.9	502	86.7	591	549	92.9	528	89.3
Denbighshire LA	1064	959	90.1	922	86.7	828	77.8	831	78.1	501	442	88.2	424	84.6	563	517	91.8	498	88.5
Flintshire LA	1668	1547	92.7	1497	89.7	1315	78.8	1310	78.5	798	745	93.4	724	90.7	870	802	92.2	773	88.9
Gwynedd LA	1169	1099	94.0	1068	91.4	954	81.6	953	81.5	536	508	94.8	491	91.6	633	591	93.4	577	91.2
Wrexham LA	1446	1345	93.0	1306	90.3	1164	80.5	1165	80.6	705	653	92.6	633	89.8	741	692	93.4	673	90.8
Health Board Total	7243	6718	92.8	6492	89.6	5794	80.0	5807	80.2	3463	3207	92.6	3095	89.4	3780	3511	92.9	3397	89.9
<u>Cardiff and Vale University HB</u>																			
Cardiff LA	3789	3500	92.4	3274	86.4	2695	71.1	2684	70.8	1881	1743	92.7	1627	86.5	1908	1757	92.1	1647	86.3
Vale of Glamorgan LA	1429	1330	93.1	1258	88.0	1156	80.9	1156	80.9	736	679	92.3	645	87.6	693	651	93.9	613	88.5
Health Board Total	5218	4830	92.6	4532	86.9	3851	73.8	3840	73.6	2617	2422	92.5	2272	86.8	2601	2408	92.6	2260	86.9
<u>Cwm Taf University HB</u>																			
Merthyr Tydfil LA	672	629	93.6	602	89.6	585	87.1	585	87.1	319	292	91.5	278	87.1	352	337	95.7	324	92.0
Rhondda Cynon Taf LA	2659	2522	94.8	2435	91.6	2400	90.3	2416	90.9	1308	1246	95.3	1202	91.9	1351	1276	94.4	1233	91.3
Health Board Total	3331	3151	94.6	3037	91.2	2985	89.6	3001	90.1	1627	1538	94.5	1480	91.0	1703	1613	94.7	1557	91.4
<u>Hywel Dda University HB</u>																			
Carmarthenshire LA	1992	1842	92.5	1769	88.8	1715	86.1	1722	86.4	972	896	92.2	859	88.4	1020	946	92.7	910	89.2
Ceredigion LA	667	610	91.5	594	89.1	599	89.8	595	89.2	319	298	93.4	288	90.3	348	312	89.7	306	87.9
Pembrokeshire LA	1262	1152	91.3	1094	86.7	1038	82.3	1042	82.6	632	577	91.3	552	87.3	630	575	91.3	542	86.0
Health Board Total	3921	3604	91.9	3457	88.2	3352	85.5	3359	85.7	1923	1771	92.1	1699	88.4	1998	1833	91.7	1758	88.0
<u>Powys Teaching HB</u>	1344	1163	86.5	1087	80.9	1115	83.0	1122	83.5	666	576	86.5	542	81.4	678	587	86.6	545	80.4
Unknown	111	97	87.4	92	82.9	88	79.3	89	80.2	49	42	85.7	39	79.6	62	55	88.7	53	85.5
Wales Total	33794	31450	93.1	30062	89.0	27889	82.5	27961	82.7	16461	15330	93.1	14658	89.0	17331	16119	93.0	15403	88.9

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 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 30/09/18, 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)	(%)	
<u>Abertawe Bro Morgannwg University HB</u>																					
Bridgend LA	1565	1463	93.5	1375	87.9	1382	88.3	1397	89.3		782	738	94.4	698	89.3		783	725	92.6	677	86.5
Neath Port Talbot LA	1431	1362	95.2	1283	89.7	1262	88.2	1282	89.6		704	677	96.2	647	91.9		727	685	94.2	636	87.5
Swansea LA	2598	2359	90.8	2221	85.5	2300	88.5	2306	88.8		1234	1112	90.1	1051	85.2		1364	1247	91.4	1170	85.8
Health Board Total	5594	5184	92.7	4879	87.2	4944	88.4	4985	89.1		2720	2527	92.9	2396	88.1		2874	2657	92.4	2483	86.4
<u>Aneurin Bevan University HB</u>																					
Blaenau Gwent LA	688	654	95.1	627	91.1	594	86.3	595	86.5		318	305	95.9	293	92.1		370	349	94.3	334	90.3
Caerphilly LA	2083	2006	96.3	1919	92.1	1779	85.4	1772	85.1		977	939	96.1	902	92.3		1105	1067	96.6	1017	92.0
Monmouthshire LA	1096	967	88.2	912	83.2	887	80.9	896	81.8		546	476	87.2	441	80.8		550	491	89.3	471	85.6
Newport LA	1855	1725	93.0	1621	87.4	1483	79.9	1480	79.8		896	842	94.0	797	89.0		956	883	92.4	824	86.2
Torfaen LA	973	923	94.9	890	91.5	827	85.0	827	85.0		486	462	95.1	447	92.0		487	461	94.7	443	91.0
Health Board Total	6695	6275	93.7	5969	89.2	5570	83.2	5570	83.2		3223	3024	93.8	2880	89.4		3468	3251	93.7	3089	89.1
<u>Betsi Cadwaladr University HB</u>																					
Anglesey LA	702	661	94.2	633	90.2	587	83.6	589	83.9		338	325	96.2	311	92.0		364	336	92.3	322	88.5
Conwy LA	1162	1065	91.7	1026	88.3	1037	89.2	1042	89.7		543	501	92.3	484	89.1		616	561	91.1	539	87.5
Denbighshire LA	1023	923	90.2	881	86.1	856	83.7	866	84.7		480	430	89.6	412	85.8		542	493	91.0	469	86.5
Flintshire LA	1502	1425	94.9	1366	90.9	1272	84.7	1269	84.5		728	692	95.1	662	90.9		774	733	94.7	704	91.0
Gwynedd LA	1170	1132	96.8	1100	94.0	1006	86.0	1007	86.1		554	536	96.8	525	94.8		616	596	96.8	575	93.3
Wrexham LA	1423	1340	94.2	1300	91.4	1191	83.7	1195	84.0		677	636	93.9	612	90.4		746	704	94.4	688	92.2
Health Board Total	6982	6546	93.8	6306	90.3	5949	85.2	5968	85.5		3320	3120	94.0	3006	90.5		3658	3423	93.6	3297	90.1
<u>Cardiff and Vale University HB</u>																					
Cardiff LA	3773	3436	91.1	3195	84.7	2753	73.0	2760	73.2		1841	1693	92.0	1585	86.1		1932	1743	90.2	1610	83.3
Vale of Glamorgan LA	1484	1392	93.8	1312	88.4	1185	79.9	1184	79.8		707	658	93.1	615	87.0		777	734	94.5	697	89.7
Health Board Total	5257	4828	91.8	4507	85.7	3938	74.9	3944	75.0		2548	2351	92.3	2200	86.3		2709	2477	91.4	2307	85.2
<u>Cwm Taf University HB</u>																					
Merthyr Tydfil LA	661	619	93.6	585	88.5	598	90.5	599	90.6		328	314	95.7	298	90.9		333	305	91.6	287	86.2
Rhondda Cynon Taf LA	2813	2663	94.7	2535	90.1	2531	90.0	2544	90.4		1393	1330	95.5	1275	91.5		1420	1333	93.9	1260	88.7
Health Board Total	3474	3282	94.5	3120	89.8	3129	90.1	3143	90.5		1721	1644	95.5	1573	91.4		1753	1638	93.4	1547	88.2
<u>Hywel Dda University HB</u>																					
Carmarthenshire LA	2047	1861	90.9	1808	88.3	1800	87.9	1802	88.0		999	910	91.1	891	89.2		1048	951	90.7	917	87.5
Ceredigion LA	617	579	93.8	554	89.8	535	86.7	534	86.5		294	278	94.6	264	89.8		323	301	93.2	290	89.8
Pembrokeshire LA	1220	1132	92.8	1063	87.1	972	79.7	979	80.2		616	574	93.2	538	87.3		604	558	92.4	525	86.9
Health Board Total	3884	3572	92.0	3425	88.2	3307	85.1	3315	85.4		1909	1762	92.3	1693	88.7		1975	1810	91.6	1732	87.7
<u>Powys Teaching HB</u>	1343	1161	86.4	1048	78.0	1121	83.5	1131	84.2		659	569	86.3	522	79.2		684	592	86.5	526	76.9
Unknown	94	79	84.0	74	78.7	75	79.8	74	78.7		44	41	93.2	38	86.4		50	38	76.0	36	72.0
Wales Total	33323	30927	92.8	29328	88.0	28033	84.1	28130	84.4		16144	15038	93.1	14308	88.6		17171	15886	92.5	15017	87.5

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

Table 12. MMR, Td/IPV and MenACWY vaccine uptake in children in 2017-18 school year 11 reaching their 16th birthday between 01/09/17 and 31/08/18 and resident on 30/09/18, 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)	(n)	(%)	(n)	(%)	
<u>Abertawe Bro Morgannwg University HB</u>																						
Bridgend LA	1520	1416	93.2	1320	86.8	1365	89.8	1369	90.1	738	693	93.9	650	88.1	782	723	92.5	670	85.7			
Neath Port Talbot LA	1473	1359	92.3	1256	85.3	1330	90.3	1349	91.6	721	680	94.3	631	87.5	752	679	90.3	625	83.1			
Swansea LA	2509	2295	91.5	2130	84.9	2230	88.9	2240	89.3	1230	1135	92.3	1057	85.9	1279	1160	90.7	1073	83.9			
Health Board Total	5502	5070	92.1	4706	85.5	4925	89.5	4958	90.1	2689	2508	93.3	2338	86.9	2813	2562	91.1	2368	84.2			
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	706	675	95.6	644	91.2	628	89.0	630	89.2	377	362	96.0	345	91.5	329	313	95.1	299	90.9			
Caerphilly LA	2015	1946	96.6	1854	92.0	1743	86.5	1733	86.0	940	910	96.8	862	91.7	1075	1036	96.4	992	92.3			
Monmouthshire LA	1032	882	85.5	810	78.5	798	77.3	794	76.9	507	433	85.4	402	79.3	524	449	85.7	408	77.9			
Newport LA	1841	1727	93.8	1617	87.8	1483	80.6	1470	79.8	914	861	94.2	805	88.1	925	865	93.5	812	87.8			
Torfaen LA	1020	973	95.4	935	91.7	889	87.2	887	87.0	495	472	95.4	459	92.7	525	501	95.4	476	90.7			
Health Board Total	6614	6203	93.8	5860	88.6	5541	83.8	5514	83.4	3233	3038	94.0	2873	88.9	3378	3164	93.7	2987	88.4			
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	726	681	93.8	662	91.2	606	83.5	598	82.4	362	339	93.6	331	91.4	364	342	94.0	331	90.9			
Conwy LA	1136	1045	92.0	1000	88.0	994	87.5	1001	88.1	544	505	92.8	481	88.4	591	539	91.2	518	87.6			
Denbighshire LA	1089	964	88.5	923	84.8	892	81.9	884	81.2	509	441	86.6	424	83.3	580	523	90.2	499	86.0			
Flintshire LA	1585	1485	93.7	1427	90.0	1320	83.3	1312	82.8	794	744	93.7	717	90.3	791	741	93.7	710	89.8			
Gwynedd LA	1170	1110	94.9	1077	92.1	1009	86.2	1005	85.9	555	528	95.1	511	92.1	615	582	94.6	566	92.0			
Wrexham LA	1315	1258	95.7	1236	94.0	1121	85.2	1123	85.4	649	620	95.5	616	94.9	666	638	95.8	620	93.1			
Health Board Total	7021	6543	93.2	6325	90.1	5942	84.6	5923	84.4	3413	3177	93.1	3080	90.2	3607	3365	93.3	3244	89.9			
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	3667	3304	90.1	3047	83.1	2704	73.7	2098	57.2	1737	1557	89.6	1437	82.7	1929	1747	90.6	1610	83.5			
Vale of Glamorgan LA	1354	1254	92.6	1185	87.5	1116	82.4	891	65.8	660	623	94.4	595	90.2	694	631	90.9	590	85.0			
Health Board Total	5021	4558	90.8	4232	84.3	3820	76.1	2989	59.5	2397	2180	90.9	2032	84.8	2623	2378	90.7	2200	83.9			
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	624	592	94.9	549	88.0	565	90.5	567	90.9	287	276	96.2	256	89.2	336	316	94.0	293	87.2			
Rhondda Cynon Taf LA	2539	2396	94.4	2261	89.1	2330	91.8	2338	92.1	1235	1176	95.2	1119	90.6	1304	1220	93.6	1142	87.6			
Health Board Total	3163	2988	94.5	2810	88.8	2895	91.5	2905	91.8	1522	1452	95.4	1375	90.3	1640	1536	93.7	1435	87.5			
<u>Hywel Dda University HB</u>																						
Carmarthenshire LA	2032	1864	91.7	1813	89.2	1828	90.0	1820	89.6	945	865	91.5	839	88.8	1087	999	91.9	974	89.6			
Ceredigion LA	592	547	92.4	523	88.3	515	87.0	513	86.7	296	276	93.2	267	90.2	296	271	91.6	256	86.5			
Pembrokeshire LA	1176	1075	91.4	1008	85.7	927	78.8	908	77.2	532	491	92.3	462	86.8	644	584	90.7	546	84.8			
Health Board Total	3800	3486	91.7	3344	88.0	3270	86.1	3241	85.3	1773	1632	92.0	1568	88.4	2027	1854	91.5	1776	87.6			
<u>Powys Teaching HB</u>	1303	1157	88.8	1058	81.2	1101	84.5	1113	85.4	623	564	90.5	521	83.6	680	593	87.2	537	79.0			
Unknown	97	91	93.8	90	92.8	80	82.5	83	85.6	49	46	93.9	46	93.9	48	45	93.8	44	91.7			
Wales Total	32521	30096	92.5	28425	87.4	27574	84.8	26726	82.2	15699	14597	93.0	13833	88.1	16816	15497	92.2	14591	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 and MenACWY vaccine uptake in children reaching their 16th birthday between 01/07/18 and 30/09/18 and resident on 30/09/18, with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		Teenage 3 in 1						Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)	
	(n)	MMR1 (n) (%)	MMR2 (n) (%)	booster ¹ (n) (%)	MenACWY ² (n) (%)	(n)	MMR1 (n) (%)	MMR2 (n) (%)		(n)	MMR1 (n) (%)	MMR2 (n) (%)						
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)		
Bridgend LA	397	373 94.0	351 88.4	358 90.2	359 90.4	191	181 94.8	169 88.5	206	192 93.2	182 88.3							
Neath Port Talbot LA	361	340 94.2	317 87.8	314 87.0	319 88.4	183	175 95.6	165 90.2	178	165 92.7	152 85.4							
Swansea LA	622	572 92.0	528 84.9	547 87.9	550 88.4	292	264 90.4	246 84.2	330	308 93.3	282 85.5							
Health Board Total	1380	1285 93.1	1196 86.7	1219 88.3	1228 89.0	666	620 93.1	580 87.1	714	665 93.1	616 86.3							
<u>Aneurin Bevan University HB</u>	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)		
Blaenau Gwent LA	192	185 96.4	177 92.2	165 85.9	165 85.9	103	100 97.1	96 93.2	89	85 95.5	81 91.0							
Caerphilly LA	549	527 96.0	495 90.2	471 85.8	468 85.2	250	240 96.0	223 89.2	299	287 96.0	272 91.0							
Monmouthshire LA	255	214 83.9	198 77.6	196 76.9	197 77.3	121	102 84.3	96 79.3	134	112 83.6	102 76.1							
Newport LA	469	437 93.2	414 88.3	381 81.2	376 80.2	238	226 95.0	214 89.9	229	211 92.1	200 87.3							
Torfaen LA	279	266 95.3	251 90.0	243 87.1	243 87.1	120	112 93.3	106 88.3	159	154 96.9	145 91.2							
Health Board Total	1744	1629 93.4	1535 88.0	1456 83.5	1449 83.1	832	780 93.8	735 88.3	910	849 93.3	800 87.9							
<u>Betsi Cadwaladr University HB</u>	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)		
Anglesey LA	193	189 97.9	185 95.9	161 83.4	158 81.9	85	83 97.6	83 97.6	108	106 98.1	102 94.4							
Conwy LA	290	265 91.4	254 87.6	264 91.0	263 90.7	154	144 93.5	138 89.6	136	121 89.0	116 85.3							
Denbighshire LA	298	257 86.2	244 81.9	234 78.5	233 78.2	131	109 83.2	102 77.9	167	148 88.6	142 85.0							
Flintshire LA	417	395 94.7	376 90.2	345 82.7	348 83.5	204	196 96.1	186 91.2	213	199 93.4	190 89.2							
Gwynedd LA	286	273 95.5	265 92.7	239 83.6	240 83.9	119	113 95.0	111 93.3	167	160 95.8	154 92.2							
Wrexham LA	352	337 95.7	331 94.0	301 85.5	305 86.6	175	170 97.1	167 95.4	177	167 94.4	164 92.7							
Health Board Total	1836	1716 93.5	1655 90.1	1544 84.1	1547 84.3	868	815 93.9	787 90.7	968	901 93.1	868 89.7							
<u>Cardiff and Vale University HB</u>	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)		
Cardiff LA	972	869 89.4	803 82.6	706 72.6	711 73.1	466	409 87.8	380 81.5	506	460 90.9	423 83.6							
Vale of Glamorgan LA	339	312 92.0	294 86.7	271 79.9	272 80.2	165	153 92.7	142 86.1	174	159 91.4	152 87.4							
Health Board Total	1311	1181 90.1	1097 83.7	977 74.5	983 75.0	631	562 89.1	522 82.7	680	619 91.0	575 84.6							
<u>Cwm Taf University HB</u>	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)		
Merthyr Tydfil LA	150	140 93.3	128 85.3	140 93.3	139 92.7	63	59 93.7	51 81.0	86	81 94.2	77 89.5							
Rhondda Cynon Taf LA	673	643 95.5	616 91.5	616 91.5	616 91.5	338	331 97.9	317 93.8	335	312 93.1	299 89.3							
Health Board Total	823	783 95.1	744 90.4	756 91.9	755 91.7	401	390 97.3	368 91.8	421	393 93.3	376 89.3							
<u>Hywel Dda University HB</u>	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)	(n)	(n) (%)	(n) (%)	(n) (%)		
Carmarthenshire LA	541	509 94.1	489 90.4	489 90.4	494 91.3	253	242 95.7	231 91.3	288	267 92.7	258 89.6							
Ceredigion LA	177	162 91.5	155 87.6	148 83.6	147 83.1	84	75 89.3	70 83.3	93	87 93.5	85 91.4							
Pembrokeshire LA	313	279 89.1	258 82.4	242 77.3	242 77.3	148	132 89.2	125 84.5	165	147 89.1	133 80.6							
Health Board Total	1031	950 92.1	902 87.5	879 85.3	883 85.6	485	449 92.6	426 87.8	546	501 91.8	476 87.2							
<u>Powys Teaching HB</u>	339	297 87.6	273 80.5	291 85.8	297 87.6	152	138 90.8	128 84.2	187	159 85.0	145 77.5							
Unknown	21	18 85.7	18 85.7	18 85.7	18 85.7	13	11 84.6	11 84.6	8	7 87.5	7 87.5							
Wales Total	8485	7859 92.6	7420 87.4	7140 84.1	7160 84.4	4048	3765 93.0	3557 87.9	4434	4094 92.3	3863 87.1							

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 01/07/18 and 30/09/18 and resident on 30/09/18.¹

Area	1 yr			2 yrs			5 yrs			16 yrs		
	Resident children	BCG Immunised		Resident children	BCG Immunised		Resident children	BCG Immunised		Resident children	BCG Immunised	
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Bridgend LA	409	20	4.9	408	16	3.9	445	21	4.7	397	8	2.0
Neath Port Talbot LA	376	14	3.7	394	15	3.8	424	10	2.4	361	1	0.3
Swansea LA	637	75	11.8	637	70	11.0	676	65	9.6	622	33	5.3
Health Board Total	1422	109	7.7	1439	101	7.0	1545	96	6.2	1380	42	3.0
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	208	2	1.0	176	4	2.3	203	4	2.0	192	2	1.0
Caerphilly LA	518	9	1.7	535	10	1.9	571	12	2.1	549	6	1.1
Monmouthshire LA	192	4	2.1	196	6	3.1	222	5	2.3	255	4	1.6
Newport LA	524	70	13.4	506	68	13.4	516	63	12.2	469	49	10.4
Torfaen LA	237	9	3.8	265	7	2.6	332	3	0.9	279	2	0.7
Health Board Total	1679	94	5.6	1678	95	5.7	1844	87	4.7	1744	63	3.6
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	175	4	2.3	186	4	2.2	193	4	2.1	193	4	2.1
Conwy LA	253	14	5.5	274	6	2.2	299	17	5.7	290	6	2.1
Denbighshire LA	260	11	4.2	273	14	5.1	283	12	4.2	298	8	2.7
Flintshire LA	406	16	3.9	407	19	4.7	426	13	3.1	417	9	2.2
Gwynedd LA	312	11	3.5	278	13	4.7	331	5	1.5	286	5	1.7
Wrexham LA	389	31	8.0	392	24	6.1	412	23	5.6	352	9	2.6
Health Board Total	1795	87	4.8	1810	80	4.4	1944	74	3.8	1836	41	2.2
<u>Cardiff and Vale University HB</u>												
Cardiff LA	1091	221	20.3	1083	34	3.1	1149	196	17.1	972	152	15.6
Vale of Glamorgan LA	350	13	3.7	361	4	1.1	408	10	2.5	339	16	4.7
Health Board Total	1441	234	16.2	1444	38	2.6	1557	206	13.2	1311	168	12.8
<u>Cwm Taf Univeristy HB</u>												
Merthyr Tydfil LA	189	9	4.8	194	5	2.6	171	10	5.8	150	0	0.0
Rhondda Cynon Taf LA	703	29	4.1	715	18	2.5	739	24	3.2	673	9	1.3
Health Board Total	892	38	4.3	909	23	2.5	910	34	3.7	823	9	1.1
<u>Hywel Dda University HB</u>												
Cardiganshire LA	493	16	3.2	507	19	3.7	498	14	2.8	541	37	6.8
Ceredigion LA	145	6	4.1	163	7	4.3	203	9	4.4	177	5	2.8
Pembrokeshire LA	308	5	1.6	319	5	1.6	285	2	0.7	313	3	1.0
Health Board Total	946	27	2.9	989	31	3.1	986	25	2.5	1031	45	4.4
<u>Powys Teaching Health Board</u>	308	6	1.9	308	9	2.9	300	4	1.3	339	4	1.2
Unknown	0	0	0.0	7	1	14.3	20	0	0.0	21	1	4.8
Wales Total	8489	595	7.0	8584	378	4.4	9106	526	5.8	8485	373	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 01/07/18 and 30/09/18 and resident on 30/09/18, 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	1422	3	100.0	100.0	100.0	1439	4	100.0	100.0	100.0	75.0	1545	0	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	1679	1	100.0	100.0	-	1678	5	100.0	80.0	60.0	-	1844	0	100.0	100.0	100.0	100.0
Betsi Cadwaladr UHB	1795	2	100.0	100.0	100.0	1810	1	100.0	100.0	100.0	100.0	1944	0	100.0	100.0	100.0	100.0
Cardiff and Vale UHB	1441	8	100.0	62.5	62.5	1444	4	100.0	100.0	100.0	50.0	1557	0	100.0	100.0	100.0	100.0
Cwm Taf UHB	892	1	100.0	100.0	100.0	909	1	100.0	100.0	100.0	-	910	0	-	-	-	-
Hywel Dda UHB	946	1	100.0	100.0	100.0	989	0	-	-	-	-	986	0	-	-	-	-
Powys Teaching HB	308	0	-	-	-	308	0	-	-	-	-	300	0	-	-	-	-
Unknown	6	0	-	-	-	7	0	-	-	-	-	20	0	-	-	-	-
Wales Total	8489	16	100.0	81.3	75.0	8584	15	100.0	93.3	86.7	40.0	9106	0	100.0	100.0	100.0	100.0

¹Data reflects immunisations given and recorded on the Public Health Wales All Wales Neonatal Hepatitis B database of babies born to hepatitis B positive mothers.