

Vaccine Uptake in Children in Wales

October to December 2018

COVER 129: Wales February 2019



Iechyd Cyhoeddus
Cymru
Public Health
Wales

Key points

- For children at one year of age in Wales, uptake of all routine immunisations, apart from rotavirus, remained above 95% this quarter. Uptake of three doses of the "6 in 1" vaccine was 95% or higher in four of the seven Health Boards (HB) and in 15 of 22 Local Authority (LA) areas.
- Uptake of the complete three-dose course of MenB vaccine in two year olds was 93.9% this quarter. Three HBs and eleven LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children was 94.3% this quarter. Three HBs and nine 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 88.3% this quarter and was 90.5% in five year olds.
- Uptake of one dose of HPV vaccine in 2017-18 school year 8 girls (12-13 year olds) is currently 2.2%. In girls in the 2017-18 school year 9 (13-14 year olds), uptake of two doses is currently 1.9%. Vaccination sessions had just started in these age-groups at time of reporting and uptake will increase over the next three quarters as more immunisation sessions take place.
- Uptake of routine MenACWY vaccine in the 2018-19 school year 9 cohort is currently 9.3%, this will increase in coming months as more vaccination sessions take place. Coverage of the MenACWY vaccine in the 2018-19 school year 10 cohort was 83.0%.
- Uptake of the Td/IPV teenage booster in the 2018-19 school year 9 cohort is currently 9.7%, this will increase in coming months as more vaccination sessions take place. Coverage of the Td/IPV teenage booster in the 2018-19 school year 10 was 82.8%.
- Coverage of one dose of MMR vaccine in the 2018-19 school year 10 (age 14-15 years) was 95.1%, coverage of two doses was 91.3%.
- Coverage of one dose of MMR vaccine in the 2018-19 school year 11 (age 15-16 years) was 94.4%, coverage of two doses was 89.9%.

Background

These results are for children living in Wales in December 2018 and reaching their first, second, fourth, fifth and 16th birthdays during the quarter 01/10/2018 to 31/12/2018. 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 in school year cohorts (children reaching their 14th, 15th and 16th birthdays between 01/09/2018 and 31/08/2019). BCG immunisation uptake data are also presented here. For the children referred to in this report, these immunisations would have been given selectively following risk assessment. Coverage of neonatal hepatitis B immunisation in infants at risk is also presented, using data from the Public Health Wales Neonatal Hepatitis B database. MenACWY conjugate vaccine uptake figures for teenagers and young adults born from 01/09/1996 to 31/08/1999, vaccinated as part of the general practice-based catch-up campaign are available from: <http://www.wales.nhs.uk/sitesplus/888/page/88528>

Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre, working with Powys Teaching Health Board and the NHS Wales Informatics Service, have recently carried out a COVER data quality assurance project. This project has led to improvements in completeness of vaccination data in the national COVER dataset. The impact is that reported vaccination uptake has increased; primarily in children aged four years and older. National trends in this report for 2015 – 2018 are updated to take into account these changes.

Findings

1. Uptake of all three doses of the combined “6 in 1” DTaP/IPV/Hib/HepB¹ vaccine, scheduled at two, three and four months of age, in children reaching their first birthday was 95.7% this quarter. Uptake ranged by HB from 94.1% (Cardiff and Vale and Hywel Dda) to 98.0% (Cwm Taf) and by LA from 92.0 % (Ceredigion) to 98.3% (Merthyr Tydfil). Four of the seven HBs and 15 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 95.9% this quarter compared to 95.6% last quarter, and ranged by LA from 91.3% (Ceredigion) to 98.3% (Merthyr Tydfil). Four of the seven HBs and 16 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 95.6% this quarter. Uptake in HBs ranged from 93.0% (Cardiff and Vale) to 97.7% (Cwm Taf) and ranged by LA from 92.0% (Ceredigion) to 98.3% (Merthyr Tydfil) (Figure 3, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday remained stable at 93.9% this quarter. Uptake in HBs ranged from 92.5% (Powys) to 96.3% (Cwm Taf) and ranged by LA from 89.0% (Torfaen) to 98.0% (Anglesey) (Figures 2 and 3, Tables 2 and 3).
5. Uptake of the first dose of MMR² in children reaching their second birthday (scheduled at 12 to 13 months of age) remained stable at 94.3% this quarter. Uptake ranged by HB from 92.0% (Hywel Dda) to 96.7% (Cwm Taf) and by LA area from 90.2% (Vale of Glamorgan) to 97.2% (Merthyr Tydfil). Three HBs and nine 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 93.9% this quarter compared to 94.1% last quarter. Uptake ranged by HB from 90.3% (Cardiff and Vale) to 97.0% (Cwm Taf) and by LA from 89.9% (Vale of Glamorgan) to 97.3% (Anglesey). Three of the seven HBs and eleven 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 decreased to 94.5% this quarter compared to 95.0% last quarter. Uptake ranged by HB from 91.7% (Cardiff and Vale) to 97.3% (Cwm Taf) and ranged by LA from 90.7% (Vale of Glamorgan) to 97.8% (Merthyr Tydfil). Four HBs and 13 LA areas achieved an uptake of 95% or over (Figure 3, Tables 2 and 4).
8. Uptake of the Hib/MenC booster (given at 12 to 13 months of age) in children reaching two years of age was 94.1% this quarter compared to 94.4% last quarter. Uptake ranged by HB from 91.2% (Cardiff and Vale) to 96.5% (Cwm Taf), and ranged by LA from 89.3% (Vale of Glamorgan) to 97.3% (Anglesey). Three HBs and eleven LA areas achieved uptakes in excess of 95% (Figures 1, 2 and 3, Tables 2 and 4).
9. In children reaching four years of age this quarter (Table 5), uptake of:
 - The “4 in 1” DTaP/IPV³ pre-school booster was 89.9%
 - The Hib/MenC booster was 95.5%
 - Two doses of MMR was 89.4%

The proportion of children who were up to date with all these routine immunisations at four years of age was 88.3%. This ranged by HB from 85.9% (Aneurin Bevan) to 91.0% (Betsi

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

² MMR protects against measles, mumps and rubella infections.

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

Cadwaladr) and by LA from 83.6% (Torfaen) to 92.7% (Wrexham) (Figures 4 and 5, Tables 1, 2 and 5).

10. The proportion of children who were up to date with routine immunisations by their fifth birthday was 90.5% this quarter. This ranged by HB from 88.3% (Cardiff and Vale) to 94.8% (Betsi Cadwaladr) (Table 6).
11. In children reaching five years of age this quarter, coverage of one dose of MMR was 96.6%. Coverage of two doses of MMR was 92.3%. Coverage of two doses of MMR ranged by HB from 90.9% (Powys) to 95.6% (Betsi Cadwaladr) and by LA from 88.3% (Monmouthshire) to 97.5% (Wrexham) (Figures 1, 2, 3 and 8, Tables 2, 6 and 7).
12. Uptake of the “4 in 1” DTaP/IPV³ pre-school booster in children reaching their fifth birthday was 92.7% this quarter, ranging by HB from 90.8% (Cardiff and Vale) to 96.1% (Betsi Cadwaladr) and by LA from 89.8% (Swansea) to 98.3% (Wrexham). One of the seven HBs, and five of the 22 LAs achieved the 95% uptake target (Figure 3 and 9, Tables 2, 6 and 7).
13. Uptake of the first dose of HPV vaccine for girls in the 2018-19 school year 8 group (turning 13 years of age during 01/09/18 to 31/08/19) is currently 2.2%. Coverage of the first dose in the 2018-19 school year 9 is currently 85.7% and uptake of the second dose in this age group is currently 1.9%. Timings of school vaccination sessions vary throughout the year and uptake will increase as vaccination sessions take place over the next three quarters. Coverage of a complete two dose course of HPV vaccine in 2018-19 school year 10 girls (girls reaching their 15th birthday during 01/09/18 to 31/08/19) is currently 80.4% (Table 8).
14. Current uptake of the MenACWY vaccine in the 2018-19 routine school year 9 cohort is 9.3% and will increase over the next three quarters as vaccination sessions take place (Table 9 and 10). Coverage in the 2018-19 school years 10, 11 and 12, is currently 83.0%, 84.5% and 82.3% respectively (Table 9).
15. Uptake of the Td/IPV⁴ teenage booster in the 2018-19 school year 9 (children reaching 14 years of age) is currently 9.7%. Coverage of two doses of MMR in this year group is currently 91.2% and coverage of one dose is 95.0%. Coverage of two doses of MMR vaccine ranged by HB from 88.0% (Powys) to 94.1% (Aneurin Bevan). Coverage of a full course of immunisation against rubella (two doses of MMR) in 14 year old girls in this school year group was 91.4% (Table 10).
16. Coverage of the Td/IPV teenage booster in the 2018-19 school year 10 (children reaching 15 years of age) is currently 82.8%. Coverage ranged by HB from 74.5% (Cardiff and Vale) to 89.8% (Cwm Taf). Coverage of two doses of MMR in this year group was 91.3% and coverage of one dose was 95.1%. Coverage of two doses of MMR vaccine ranged by HB from 88.8% (Cardiff and Vale and Powys) to 93.3% (Aneurin Bevan). Coverage of a full course of immunisation against rubella (two doses of MMR) in 15 year old girls in this school year group was 91.6% (Table 11).
17. Coverage of the Td/IPV teenage booster in the 2018-19 school year 11 (children reaching 16 years of age) is currently 84.3%. Coverage ranged by HB from 75.4% (Cardiff and Vale) to 90.0% (Cwm Taf). Coverage of two doses of MMR in this year group was 89.9% and coverage of one dose was 94.4%. Coverage of two doses of MMR vaccine ranged by HB from 86.3% (Powys) to 92.4% (Betsi Cadwaladr). Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls in this school year group was 90.8% (Table 12).
18. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st October 2018 and 31st December 2018) was 89.6%, whilst coverage of one dose of MMR was 94.2%. Coverage of a full course of immunisation against rubella (two doses of MMR) in 16 year old girls was 90.5%. National coverage of the Td/IPV teenage booster in children reaching 16 years of age was 84.1% (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 6.3%, 4.6%, 7.8% and 4.5% of children reaching their

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

first, second, fifth and 16th birthdays (respectively) during quarter four of 2018. This quarter Cardiff LA had the highest proportion of children given BCG by one year of age (18.9%) and Swansea 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 100.0%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their second birthday this quarter was 66.7%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their fifth birthday this quarter was 92.3%. Proportions should be interpreted with caution as small numbers of babies require an enhanced course of hepatitis B immunisation.

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

Comment

This is the second 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, was high and above 95%, with no apparent negative impact on uptake trends from the change in vaccine. 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).

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

During 2018, a comprehensive audit of COVER data was carried out comparing the national COVER dataset and local data in Powys Teaching Health board. Results of this audit suggested an improvement in national data collation procedures that would ensure better consistency between the national dataset and local child health system data, particularly with respect to children who have moved between areas of Wales. The result of this change is that completeness of vaccination history data for children aged four and older has improved and is better matched to local records. Consequently, reported uptake of some vaccinations has increased in four and five year olds, and to a lesser extent older children and teenagers.

Previously published quarterly COVER reports state that the percentage of children who were up to date with vaccinations by four years of age varied from 84.3% to 86.8% between 2015 and 2018. These figures have been re-calculated following the change in data collation processes and it is estimated that uptake was higher, with the likely quarterly proportion of children who were up to date by four years of age now varying from 86.0% to 88.3%. The reported proportion of children up to date with vaccinations by their fifth birthday is similarly higher at 90.5%. Uptake of two doses of MMR remains the lowest of all immunisations included in this composite measure at four and five years, followed by the “4 in 1” and Hib/MenC vaccines. At an all Wales level, the effect on uptake of the updated process for compiling the national COVER extract was small for teenagers across all immunisations and health boards, apart from MMR.

Uptake of one dose of MMR in 2018-19 School Years 9 and 10 (children reaching 14 and 15 years of age) was above 95% with uptake in School Year 11 at 94.4%. Uptake of two doses remains below 95% for all teenage age groups and health boards.

During 2018 a total of 12,352 cases of measles were reported across 30 EU/EEA Member States with 34 deaths [1]. Suboptimal vaccination uptake leaves the potential for outbreaks following importation of cases from elsewhere in the UK and overseas. There were 20 confirmed cases of measles in Wales in 2018 (provisional data), 15 of whom were associated with an outbreak in early 2018.

References

1. European Centre for Disease Control. Monthly measles and rubella monitoring report. February 2019. Available from: <https://ecdc.europa.eu/sites/portal/files/documents/measles-rubella-monthly-monitoring-report-february-2019.pdf>

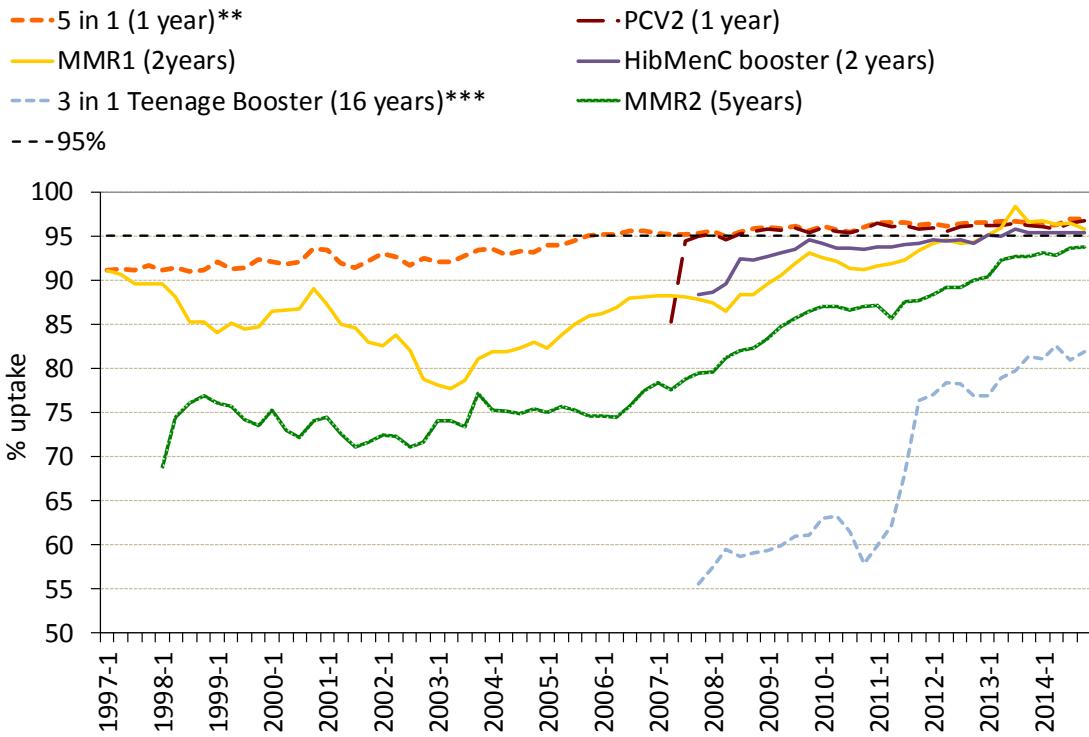
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

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

Suggested citation for this report: Public Health Wales Health Protection Division. Vaccine uptake in Children in Wales, October to December 2018: COVER report 129, March 2019. Cardiff, Public Health Wales.

For further information on this report please contact: surveillance.requests@wales.nhs.uk

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

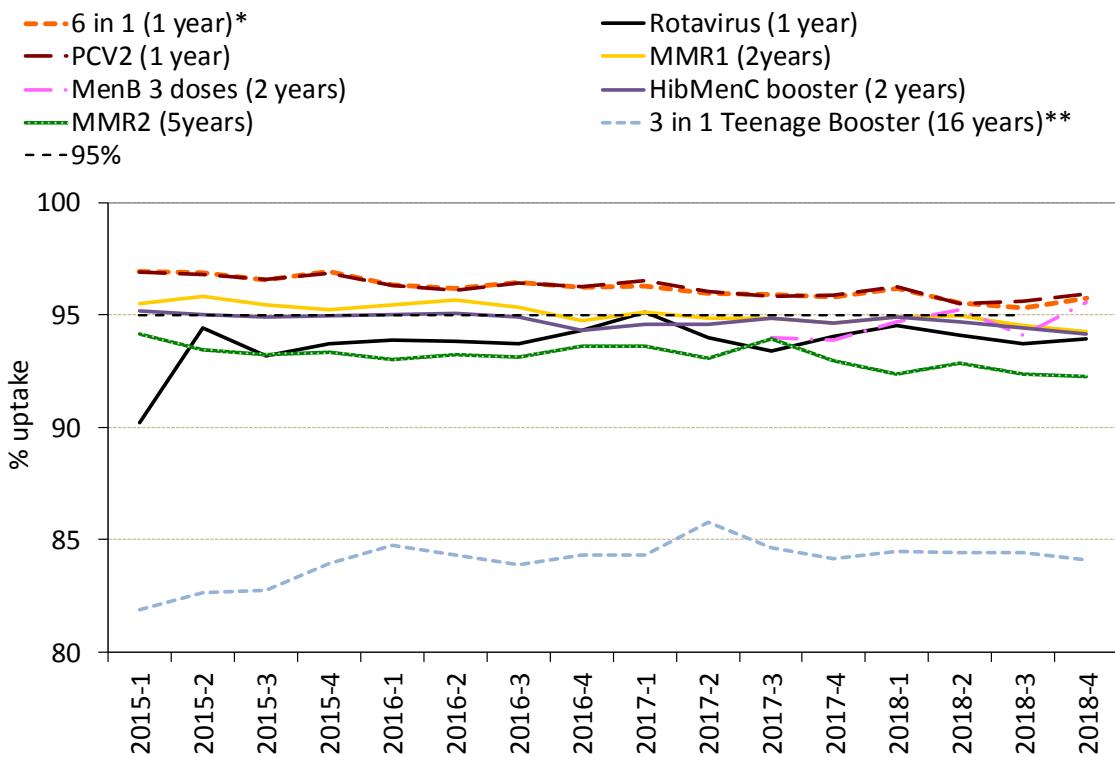


*Uptake data for quarter 3 2014 to quarter 4 2014 presented here are based on estimates calculated in August 2015, rather than published data, due to data quality problems affecting reported uptake of some immunisations in reports published during this period.

**Uptake of pertussis used as a proxy.

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

Figure 2. Percentage uptake of childhood immunisations in Wales, quarter 1 2015 to quarter 4 2018.***



* Uptake of pertussis used as proxy.

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

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

Figure 3. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/10/18 and 31/12/18 and resident on 31/12/18.

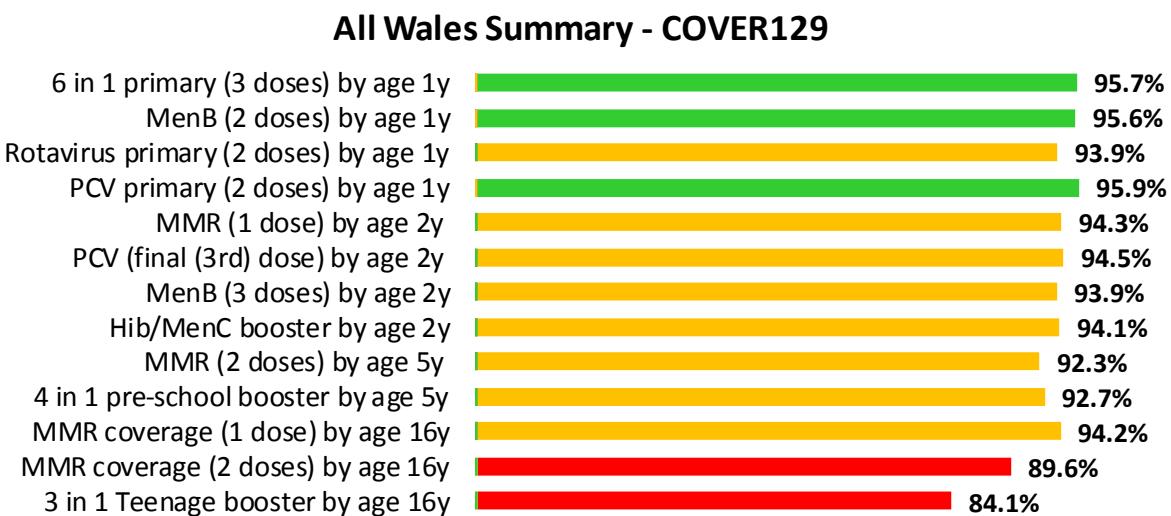


Figure 4. Percentage uptake of resident children reaching their 4th birthday between 01/10/18 and 31/12/18 and are up to date with all scheduled vaccines⁷ by health board.

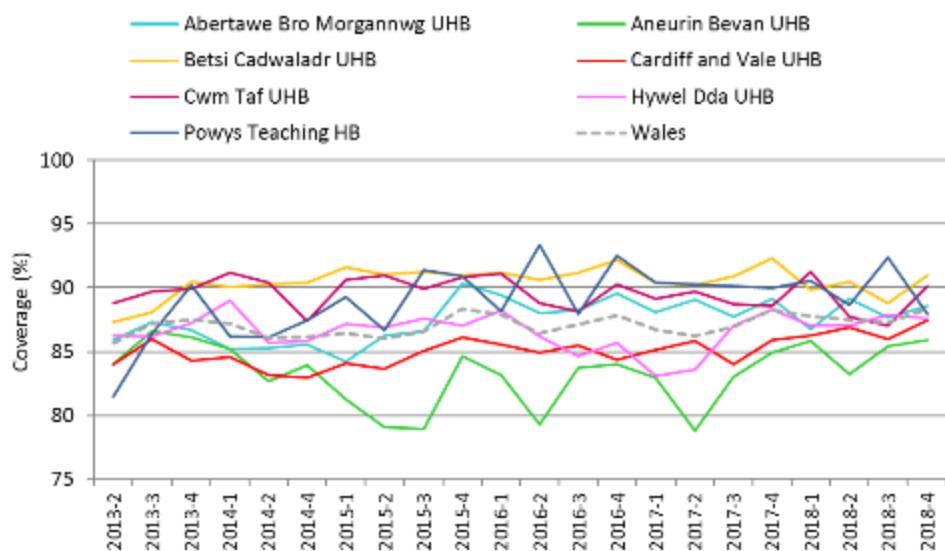


Table 1. Percentages of resident children reaching their 4th birthday during quarter 4 2017 to quarter 4 2018 who are up to date with all scheduled vaccines⁷, by Health Board.*

Area	2017-4	2018-1	2018-2	2018-3	2018-4
Abertawe Bro Morgannwg UHB	89.2	86.8	89.1	87.7	88.6
Aneurin Bevan UHB	85.0	85.9	83.2	85.4	85.9
Betsi Cadwaladr UHB	92.3	89.9	90.5	88.8	91.0
Cardiff and Vale UHB	86.0	86.3	86.9	86.0	87.5
Cwm Taf UHB	88.6	91.3	87.8	87.0	90.2
Hywel Dda UHB	88.3	87.0	87.0	87.9	87.6
Powys Teaching HB	90.0	90.6	88.7	92.4	88.0
Wales	88.3	87.8	87.5	87.3	88.3

* Uptake data from 2017 Q4 to 2018 Q3 are based on estimates calculated in February 2019, rather than published data. This is due to improvements in data quality made during early 2019.

Figure 5. Trends in the percentages of children reaching their 4th birthday during quarter 1 2013 to quarter 4 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. Uptake data from 2015 Q1 to 2018 Q3 are based on estimates calculated in February 2019, rather than published data. This is due to improvements in data quality made during early 2019.

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

Figure 6. Uptake of “6 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/10/18 and 31/12/18.

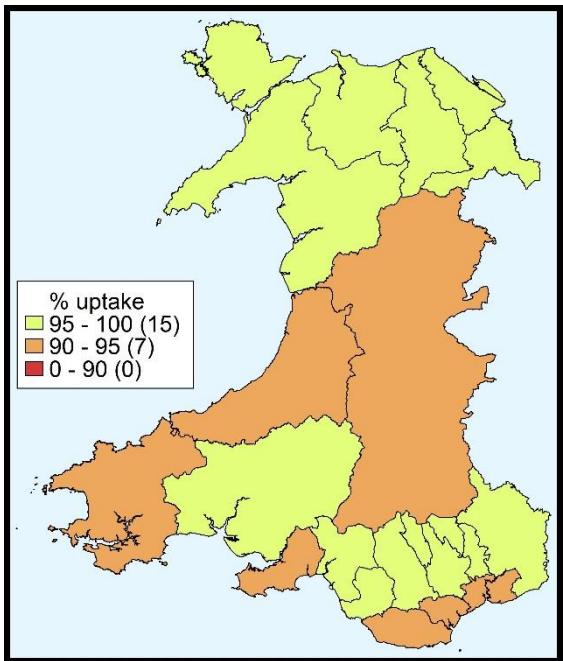


Figure 7. Uptake of at least one dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/10/18 and 31/12/18.

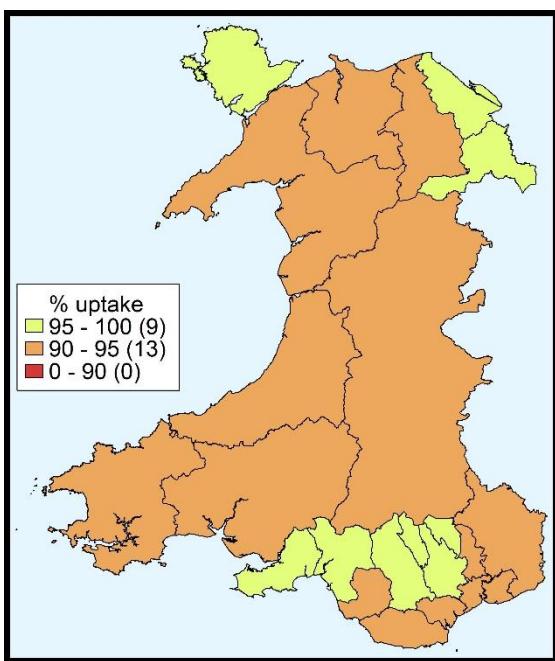


Figure 8. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/10/18 and 31/12/18.

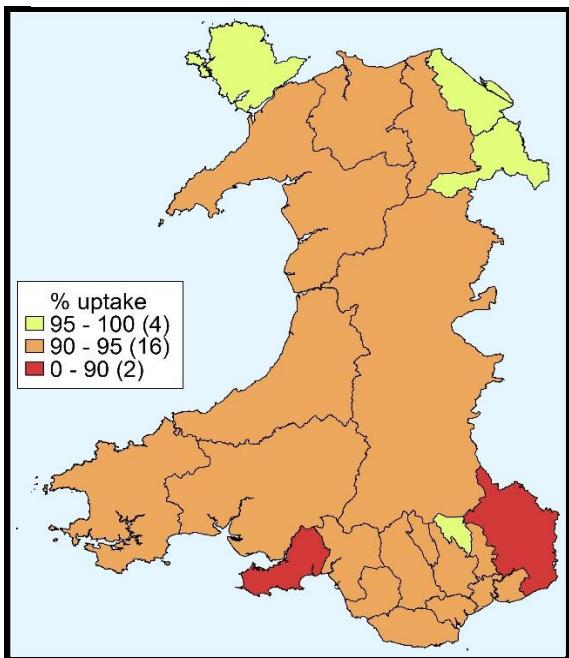


Figure 9. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/10/18 and 31/12/18.

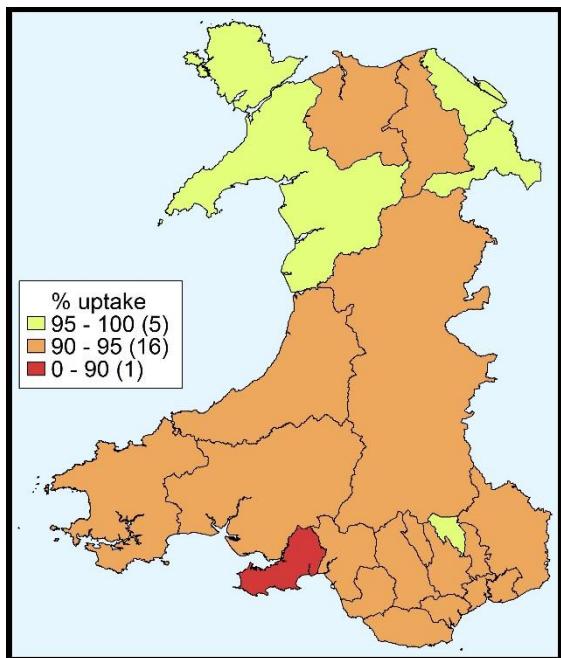


Table 2. Summary table with uptake of selected immunisations in children reaching their 1st, 2nd, 4th, 5th and 16th birthday between 01/10/18 and 31/12/18 and resident on 31/12/18.

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	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	353	96.6	96.0	96.0	94.9	372	94.6	95.7	95.7	95.4	435	89.4	427	93.0	92.7	410	93.9	88.5	88.0	88.3
Neath Port Talbot LA	393	97.5	98.0	98.0	95.4	383	96.1	96.1	96.1	95.3	406	88.4	388	92.3	92.8	384	97.4	92.2	89.6	88.3
Swansea LA	595	94.5	95.3	95.6	93.3	604	95.0	95.4	94.4	94.4	638	88.1	628	89.0	89.8	660	90.8	85.2	88.5	87.6
Health Board Total	1341	95.9	96.3	96.4	94.3	1359	95.2	95.7	95.2	94.9	1479	88.6	1443	91.1	91.5	1454	93.4	88.0	88.7	88.0
Aneurin Bevan UHB																				
Blaenau Gwent LA	184	97.8	97.8	97.8	91.8	196	96.9	96.9	95.9	96.9	177	84.7	198	96.0	97.0	181	95.0	93.9	84.0	84.5
Caerphilly LA	503	97.2	97.4	97.8	95.6	480	96.7	96.7	96.5	96.5	562	86.7	517	93.2	93.8	525	97.0	92.8	85.5	85.3
Monmouthshire LA	172	96.5	96.5	96.5	93.0	224	92.0	92.0	92.0	92.4	228	87.7	213	88.3	91.5	262	95.8	91.2	79.0	79.8
Newport LA	496	94.2	94.0	94.2	92.7	511	91.6	91.8	91.0	92.0	535	85.8	538	90.5	90.0	455	94.7	90.3	79.1	80.0
Torfaen LA	283	95.1	95.8	95.8	89.0	258	94.6	95.3	95.0	94.6	250	83.6	269	92.2	92.6	238	95.4	94.1	86.1	86.1
Health Board Total	1638	95.9	96.0	96.2	92.9	1669	94.2	94.4	93.9	94.3	1752	85.9	1735	91.9	92.5	1661	95.7	92.2	82.7	83.0
Betsi Cadwaladr UHB																				
Anglesey LA	152	96.7	95.4	96.7	98.0	186	96.8	97.3	97.3	97.3	185	89.7	195	95.9	95.9	176	93.2	90.3	83.0	83.0
Conwy LA	269	96.7	97.8	97.0	93.3	270	94.1	94.8	93.7	94.1	276	89.9	263	93.9	94.7	279	91.4	88.5	85.3	86.0
Denbighshire LA	233	96.1	96.1	95.7	92.7	244	93.9	94.7	93.4	94.3	253	88.1	235	93.2	93.2	246	92.3	87.8	84.1	82.9
Flintshire LA	408	97.1	97.3	97.8	97.1	400	96.0	96.3	95.5	96.5	423	92.0	454	96.7	96.9	359	96.7	93.3	83.6	85.0
Gwynedd LA	244	95.9	95.5	95.9	93.4	281	94.7	96.1	96.1	95.4	286	91.6	314	94.9	95.5	292	96.6	95.5	83.2	84.9
Wrexham LA	374	96.8	96.5	96.8	95.5	362	95.0	96.1	95.9	95.6	396	92.7	400	97.5	98.3	337	95.0	92.6	84.3	85.2
Health Board Total	1680	96.6	96.6	96.8	95.1	1743	95.1	95.9	95.3	95.5	1819	91.0	1861	95.6	96.1	1689	94.4	91.7	84.0	84.7
Cardiff and Vale UHB																				
Cardiff LA	997	94.3	92.7	94.1	92.6	1061	93.3	92.1	90.4	91.8	1128	86.6	1140	91.2	90.8	955	92.0	85.1	73.5	73.6
Vale of Glamorgan LA	330	93.6	93.9	93.9	93.0	356	90.2	90.7	89.9	89.3	373	90.1	386	90.9	90.7	356	96.6	90.2	80.9	80.1
Health Board Total	1327	94.1	93.0	94.0	92.7	1417	92.5	91.7	90.3	91.2	1501	87.5	1526	91.2	90.8	1311	93.3	86.5	75.5	75.4
Cwm Taf UHB																				
Merthyr Tydfil LA	176	98.3	98.3	98.3	96.6	178	97.2	97.8	97.2	96.1	200	92.5	180	90.6	91.7	169	94.7	85.8	88.8	88.8
Rhondda Cynon Taf LA	654	97.9	97.6	98.0	96.2	662	96.5	97.1	97.0	96.7	675	89.5	718	92.2	93.0	682	95.2	88.7	91.2	90.9
Health Board Total	830	98.0	97.7	98.1	96.3	840	96.7	97.3	97.0	96.5	875	90.2	898	91.9	92.8	851	95.1	88.1	90.7	90.5
Hywel Dda UHB																				
Carmarthenshire LA	460	95.2	95.7	95.2	94.3	462	91.3	92.2	91.6	92.4	476	86.3	494	91.3	92.1	451	92.7	90.9	87.8	88.7
Ceredigion LA	138	92.0	92.0	91.3	89.9	148	91.9	91.9	91.9	91.9	148	92.6	154	90.9	94.2	158	95.6	91.1	84.2	84.2
Pembrokeshire LA	270	93.3	92.6	94.1	92.2	300	93.0	92.0	91.3	92.0	304	87.2	329	90.6	90.6	287	94.4	89.9	81.9	80.8
Health Board Total	868	94.1	94.1	94.2	93.0	910	92.0	92.1	91.5	92.2	928	87.6	977	91.0	91.9	896	93.8	90.6	85.3	85.4
Powys Teaching UHB																				
	293	94.9	94.2	94.5	92.5	280	94.6	95.0	94.3	95.0	299	88.0	318	90.9	91.8	380	92.6	87.9	85.3	85.0
Unknown	5	80.0	80.0	80.0	100.0	2	100.0	100.0	100.0	100.0	7	28.6	13	84.6	84.6	22	77.3	72.7	77.3	77.3
Wales Total	7982	95.7	95.6	95.9	93.9	8220	94.3	94.5	93.9	94.1	8660	88.3	8771	92.3	92.7	8264	94.2	89.6	84.1	84.1

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 01/10/18 and 31/12/18 and resident on 31/12/18.

Area	Resident children			D3		T3		P3		Po3		Hib3		HepB ¹		MMR1		Rotavirus		PCV2 ²		Men B ³		HibMenC	
	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	
Abertawe Bro Morgannwg University HB																									
Bridgend LA	353	341	96.6	341	96.6	341	96.6	341	96.6	341	96.6	341	96.6	340	96.3	1	0.3	335	94.9	339	96.0	339	96.0	1	0.3
Neath Port Talbot LA	393	383	97.5	383	97.5	383	97.5	383	97.5	383	97.5	382	97.2	2	0.5	375	95.4	385	98.0	385	98.0	2	0.5		
Swansea LA	595	562	94.5	562	94.5	562	94.5	562	94.5	562	94.5	560	94.1	0	0.0	555	93.3	569	95.6	567	95.3	0	0.0		
Health Board Total	1341	1286	95.9	1282	95.6	3	0.2	1265	94.3	1293	96.4	1291	96.3	3	0.2										
Aneurin Bevan University HB																									
Blaenau Gwent LA	184	180	97.8	180	97.8	180	97.8	180	97.8	180	97.8	180	97.8	0	0.0	169	91.8	180	97.8	180	97.8	0	0.0		
Caerphilly LA	503	489	97.2	489	97.2	489	97.2	489	97.2	488	97.0	483	96.0	0	0.0	481	95.6	492	97.8	490	97.4	1	0.2		
Monmouthshire LA	172	166	96.5	166	96.5	166	96.5	166	96.5	166	96.5	166	96.5	0	0.0	160	93.0	166	96.5	166	96.5	0	0.0		
Newport LA	496	467	94.2	467	94.2	467	94.2	467	94.2	467	94.2	463	93.3	1	0.2	460	92.7	467	94.2	466	94.0	2	0.4		
Torfaen LA	283	269	95.1	269	95.1	269	95.1	269	95.1	269	95.1	269	95.1	1	0.4	252	89.0	271	95.8	271	95.8	1	0.4		
Health Board Total	1638	1571	95.9	1571	95.9	1571	95.9	1571	95.9	1570	95.8	1561	95.3	2	0.1	1522	92.9	1576	96.2	1573	96.0	4	0.2		
Betsi Cadwaladr University HB																									
Anglesey LA	152	147	96.7	147	96.7	147	96.7	147	96.7	147	96.7	147	96.7	0	0.0	149	98.0	147	96.7	145	95.4	0	0.0		
Conwy LA	269	260	96.7	260	96.7	260	96.7	260	96.7	260	96.7	261	97.0	1	0.4	251	93.3	261	97.0	263	97.8	2	0.7		
Denbighshire LA	233	224	96.1	224	96.1	224	96.1	224	96.1	224	96.1	223	95.7	0	0.0	216	92.7	223	95.7	224	96.1	1	0.4		
Flintshire LA	408	396	97.1	396	97.1	396	97.1	396	97.1	396	97.1	396	97.1	1	0.2	396	97.1	399	97.8	397	97.3	1	0.2		
Gwynedd LA	244	234	95.9	234	95.9	234	95.9	234	95.9	234	95.9	234	95.9	1	0.4	228	93.4	234	95.9	233	95.5	0	0.0		
Wrexham LA	374	362	96.8	362	96.8	362	96.8	362	96.8	362	96.8	361	96.5	1	0.3	357	95.5	362	96.8	361	96.5	1	0.3		
Health Board Total	1680	1623	96.6	1622	96.5	4	0.2	1597	95.1	1626	96.8	1623	96.6	5	0.3										
Cardiff and Vale University HB																									
Cardiff LA	997	940	94.3	940	94.3	940	94.3	940	94.3	940	94.3	936	93.9	5	0.5	923	92.6	938	94.1	924	92.7	4	0.4		
Vale of Glamorgan LA	330	309	93.6	309	93.6	309	93.6	309	93.6	309	93.6	308	93.3	2	0.6	307	93.0	310	93.9	310	93.9	1	0.3		
Health Board Total	1327	1249	94.1	1244	93.7	7	0.5	1230	92.7	1248	94.0	1234	93.0	5	0.4										
Cwm Taf University HB																									
Merthyr Tydfil LA	176	173	98.3	173	98.3	173	98.3	173	98.3	173	98.3	173	98.3	0	0.0	170	96.6	173	98.3	173	98.3	0	0.0		
Rhondda Cynon Taf LA	654	640	97.9	640	97.9	640	97.9	640	97.9	640	97.9	640	97.9	0	0.0	629	96.2	641	98.0	638	97.6	0	0.0		
Health Board Total	830	813	98.0	0	0.0	799	96.3	814	98.1	811	97.7	0	0.0												
Hywel Dda University HB																									
Carmarthenshire LA	460	438	95.2	438	95.2	438	95.2	438	95.2	438	95.2	432	93.9	1	0.2	434	94.3	438	95.2	440	95.7	1	0.2		
Ceredigion LA	138	127	92.0	127	92.0	127	92.0	127	92.0	127	92.0	122	88.4	1	0.7	124	89.9	126	91.3	127	92.0	1	0.7		
Pembrokeshire LA	270	252	93.3	252	93.3	252	93.3	252	93.3	252	93.3	249	92.2	0	0.0	249	92.2	254	94.1	250	92.6	0	0.0		
Health Board Total	868	817	94.1	803	92.5	2	0.2	807	93.0	818	94.2	817	94.1	2	0.2										
Powys Teaching HB																									
Unknown	5	4	80.0	4	80.0	4	80.0	4	80.0	4	80.0	4	80.0	0	0.0	5	100.0	4	80.0	4	80.0	0	0.0		
Wales Total	7982	7641	95.7	7641	95.7	7641	95.7	7640	95.7	7608	95.3	19	0.2	7496	93.9	7656	95.9	7629	95.6	20	0.3				

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 01/10/18 and 31/12/18 and resident on 31/12/18.

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)	(%)										
Abertawe Bro Morgannwg University HB																							
Bridgend LA	372	364	97.8	364	97.8	364	97.8	364	97.8	364	97.8	352	94.6	362	97.3	356	95.7	356	95.7	355	95.4		
Neath Port Talbot LA	383	375	97.9	375	97.9	375	97.9	375	97.9	375	97.9	368	96.1	369	96.3	368	96.1	368	96.1	365	95.3		
Swansea LA	604	587	97.2	587	97.2	587	97.2	587	97.2	586	97.0	574	95.0	578	95.7	576	95.4	570	94.4	570	94.4		
Health Board Total	1359	1326	97.6	1326	97.6	1326	97.6	1326	97.6	1325	97.5	1294	95.2	1309	96.3	1300	95.7	1294	95.2	1290	94.9		
Aneurin Bevan University HB																							
Blaenau Gwent LA	196	194	99.0	194	99.0	194	99.0	194	99.0	194	99.0	190	96.9	193	98.5	190	96.9	188	95.9	190	96.9		
Caerphilly LA	480	474	98.8	474	98.8	474	98.8	474	98.8	474	98.8	464	96.7	471	98.1	464	96.7	463	96.5	463	96.5		
Monmouthshire LA	224	210	93.8	210	93.8	210	93.8	210	93.8	210	93.8	206	92.0	209	93.3	206	92.0	206	92.0	207	92.4		
Newport LA	511	487	95.3	487	95.3	487	95.3	487	95.3	487	95.3	468	91.6	481	94.1	469	91.8	465	91.0	470	92.0		
Torfaen LA	258	251	97.3	251	97.3	251	97.3	251	97.3	251	97.3	244	94.6	250	96.9	246	95.3	245	95.0	244	94.6		
Health Board Total	1669	1616	96.8	1572	94.2	1604	96.1	1575	94.4	1567	93.9	1574	94.3										
Betsi Cadwaladr University HB																							
Anglesey LA	186	183	98.4	183	98.4	183	98.4	183	98.4	183	98.4	180	96.8	180	96.8	181	97.3	181	97.3	181	97.3		
Conwy LA	270	263	97.4	263	97.4	263	97.4	263	97.4	263	97.4	254	94.1	259	95.9	256	94.8	253	93.7	254	94.1		
Denbighshire LA	244	234	95.9	234	95.9	234	95.9	234	95.9	234	95.9	229	93.9	227	93.0	231	94.7	228	93.4	230	94.3		
Flintshire LA	400	390	97.5	390	97.5	390	97.5	390	97.5	390	97.5	384	96.0	387	96.8	385	96.3	382	95.5	386	96.5		
Gwynedd LA	281	274	97.5	274	97.5	274	97.5	274	97.5	273	97.2	266	94.7	271	96.4	270	96.1	270	96.1	268	95.4		
Wrexham LA	362	352	97.2	352	97.2	352	97.2	352	97.2	352	97.2	344	95.0	348	96.1	348	96.1	347	95.9	346	95.6		
Health Board Total	1743	1696	97.3	1696	97.3	1696	97.3	1696	97.3	1695	97.2	1657	95.1	1672	95.9	1671	95.9	1661	95.3	1665	95.5		
Cardiff and Vale University HB																							
Cardiff LA	1061	1022	96.3	1022	96.3	1022	96.3	1022	96.3	1022	96.3	990	93.3	997	94.0	977	92.1	959	90.4	974	91.8		
Vale of Glamorgan LA	356	344	96.6	344	96.6	344	96.6	344	96.6	344	96.6	321	90.2	339	95.2	323	90.7	320	89.9	318	89.3		
Health Board Total	1417	1366	96.4	1311	92.5	1336	94.3	1300	91.7	1279	90.3	1292	91.2										
Cwm Taf University HB																							
Merthyr Tydfil LA	178	175	98.3	175	98.3	175	98.3	175	98.3	175	98.3	173	97.2	172	96.6	174	97.8	173	97.2	171	96.1		
Rhondda Cynon Taf LA	662	648	97.9	648	97.9	648	97.9	648	97.9	648	97.9	639	96.5	645	97.4	643	97.1	642	97.0	640	96.7		
Health Board Total	840	823	98.0	812	96.7	817	97.3	817	97.3	815	97.0	811	96.5										
Hywel Dda University HB																							
Carmarthenshire LA	462	440	95.2	440	95.2	440	95.2	440	95.2	439	95.0	422	91.3	431	93.3	426	92.2	423	91.6	427	92.4		
Ceredigion LA	148	139	93.9	139	93.9	139	93.9	139	93.9	139	93.9	136	91.9	137	92.6	136	91.9	136	91.9	136	91.9		
Pembrokeshire LA	300	285	95.0	285	95.0	285	95.0	284	94.7	284	94.7	279	93.0	280	93.3	276	92.0	274	91.3	276	92.0		
Health Board Total	910	864	94.9	864	94.9	864	94.9	863	94.8	862	94.7	837	92.0	848	93.2	838	92.1	833	91.5	839	92.2		
Powys Teaching HB																							
	280	269	96.1	265	94.6	269	96.1	266	95.0	264	94.3	266	95.0										
Unknown	2	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0	2	100.0		
Wales Total	8220	7962	96.9	7962	96.9	7962	96.9	7961	96.8	7958	96.8	7750	94.3	7857	95.6	7769	94.5	7715	93.9	7739	94.1		

¹ Full primary two dose course of pneumococcal conjugate vaccine.

² Final (booster) dose of pneumococcal conjugate vaccine.

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

Table 5. Vaccine uptake in children reaching their 4th birthday between 01/10/18 and 31/12/18 and resident on 31/12/18. The proportion of children who have received all of these vaccines by their 4th birthday is also presented.

Area	Resident children		4 in 1 Preschool Booster ¹		HibMenC		MMR dose 2		Up to date in schedule ²	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	
Abertawe Bro Morgannwg University HB										
Bridgend LA	435	396	91.0	420	96.6	394	90.6	389	89.4	
Neath Port Talbot LA	406	364	89.7	394	97.0	362	89.2	359	88.4	
Swansea LA	638	569	89.2	617	96.7	568	89.0	562	88.1	
Health Board Total	1479	1329	89.9	1431	96.8	1324	89.5	1310	88.6	
Aneurin Bevan University HB										
Blaenau Gwent LA	177	154	87.0	169	95.5	156	88.1	150	84.7	
Caerphilly LA	562	491	87.4	543	96.6	488	86.8	487	86.7	
Monmouthshire LA	228	202	88.6	218	95.6	202	88.6	200	87.7	
Newport LA	535	475	88.8	491	91.8	470	87.9	459	85.8	
Torfaen LA	250	215	86.0	238	95.2	212	84.8	209	83.6	
Health Board Total	1752	1537	87.7	1659	94.7	1528	87.2	1505	85.9	
Betsi Cadwaladr University HB										
Anglesey LA	185	167	90.3	175	94.6	168	90.8	166	89.7	
Conwy LA	276	249	90.2	263	95.3	249	90.2	248	89.9	
Denbighshire LA	253	229	90.5	242	95.7	227	89.7	223	88.1	
Flintshire LA	423	393	92.9	407	96.2	392	92.7	389	92.0	
Gwynedd LA	286	266	93.0	270	94.4	266	93.0	262	91.6	
Wrexham LA	396	375	94.7	381	96.2	372	93.9	367	92.7	
Health Board Total	1819	1679	92.3	1738	95.5	1674	92.0	1655	91.0	
Cardiff and Vale University HB										
Cardiff LA	1128	1002	88.8	1065	94.4	992	87.9	977	86.6	
Vale of Glamorgan LA	373	339	90.9	359	96.2	339	90.9	336	90.1	
Health Board Total	1501	1341	89.3	1424	94.9	1331	88.7	1313	87.5	
Cwm Taf University HB										
Merthyr Tydfil LA	200	188	94.0	194	97.0	187	93.5	185	92.5	
Rhondda Cynon Taf LA	675	612	90.7	654	96.9	610	90.4	604	89.5	
Health Board Total	875	800	91.4	848	96.9	797	91.1	789	90.2	
Hywel Dda University HB										
Carmarthenshire LA	476	420	88.2	454	95.4	417	87.6	411	86.3	
Ceredigion LA	148	139	93.9	143	96.6	139	93.9	137	92.6	
Pembrokeshire LA	304	270	88.8	293	96.4	266	87.5	265	87.2	
Health Board Total	928	829	89.3	890	95.9	822	88.6	813	87.6	
Powys Teaching HB	299	269	90.0	276	92.3	266	89.0	263	88.0	
Unknown	7	2	28.6	5	71.4	2	28.6	2	28.6	
Wales Total	8660	7786	89.9	8271	95.5	7744	89.4	7650	88.3	

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 01/10/18 and 31/12/18 and resident on 31/12/18. 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	427	396	92.7	413	96.7	397	93.0	392	91.8
Neath Port Talbot LA	388	360	92.8	369	95.1	358	92.3	356	91.8
Swansea LA	628	564	89.8	590	93.9	559	89.0	553	88.1
Health Board Total	1443	1320	91.5	1372	95.1	1314	91.1	1301	90.2
Aneurin Bevan University HB									
Blaenau Gwent LA	198	192	97.0	188	94.9	190	96.0	183	92.4
Caerphilly LA	517	485	93.8	496	95.9	482	93.2	477	92.3
Monmouthshire LA	213	195	91.5	196	92.0	188	88.3	183	85.9
Newport LA	538	484	90.0	484	90.0	487	90.5	456	84.8
Torfaen LA	269	249	92.6	253	94.1	248	92.2	241	89.6
Health Board Total	1735	1605	92.5	1617	93.2	1595	91.9	1540	88.8
Betsi Cadwaladr University HB									
Anglesey LA	195	187	95.9	191	97.9	187	95.9	187	95.9
Conwy LA	263	249	94.7	251	95.4	247	93.9	242	92.0
Denbighshire LA	235	219	93.2	229	97.4	219	93.2	217	92.3
Flintshire LA	454	440	96.9	445	98.0	439	96.7	437	96.3
Gwynedd LA	314	300	95.5	303	96.5	298	94.9	295	93.9
Wrexham LA	400	393	98.3	393	98.3	390	97.5	387	96.8
Health Board Total	1861	1788	96.1	1812	97.4	1780	95.6	1765	94.8
Cardiff and Vale University HB									
Cardiff LA	1140	1035	90.8	1056	92.6	1040	91.2	1002	87.9
Vale of Glamorgan LA	386	350	90.7	369	95.6	351	90.9	345	89.4
Health Board Total	1526	1385	90.8	1425	93.4	1391	91.2	1347	88.3
Cwm Taf University HB									
Merthyr Tydfil LA	180	165	91.7	175	97.2	163	90.6	162	90.0
Rhondda Cynon Taf LA	718	668	93.0	691	96.2	662	92.2	658	91.6
Health Board Total	898	833	92.8	866	96.4	825	91.9	820	91.3
Hywel Dda University HB									
Carmarthenshire LA	494	455	92.1	463	93.7	451	91.3	440	89.1
Ceredigion LA	154	145	94.2	145	94.2	140	90.9	138	89.6
Pembrokeshire LA	329	298	90.6	309	93.9	298	90.6	290	88.1
Health Board Total	977	898	91.9	917	93.9	889	91.0	868	88.8
Powys Teaching HB	318	292	91.8	297	93.4	289	90.9	286	89.9
Unknown	13	11	84.6	12	92.3	11	84.6	11	84.6
Wales Total	8771	8132	92.7	8318	94.8	8094	92.3	7938	90.5

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 01/10/18 and 31/12/18 and resident on 31/12/18.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC ¹	PCVf ²	HibMenC	MMR1	MMR2	D4	T4	aP	Po4	
Abertawe Bro Morgannwg University HB		(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Bridgend LA	427	418	97.9	418	97.9	418	97.9	417	97.7	418	97.9	413	96.7	411	96.3	
Neath Port Talbot LA	388	376	96.9	376	96.9	376	96.9	376	96.9	371	95.6	364	93.8	369	95.1	
Swansea LA	628	601	95.7	601	95.7	601	95.7	599	95.4	584	93.0	584	93	590	93.9	
Health Board Total	1443	1395	96.7	1395	96.7	1395	96.7	1394	96.6	1393	96.5	1368	94.8	1359	94.2	
Aneurin Bevan University HB																
Blaenau Gwent LA	198	197	99.5	197	99.5	197	99.5	197	99.5	195	98.5	191	96.5	188	94.9	
Caerphilly LA	517	507	98.1	507	98.1	507	98.1	507	98.1	506	97.9	504	97.5	496	95.9	
Monmouthshire LA	213	204	95.8	204	95.8	204	95.8	202	94.8	198	93.0	195	91.5	196	92.0	
Newport LA	538	517	96.1	517	96.1	517	96.1	516	95.9	516	95.9	498	92.6	492	91.4	
Torfaen LA	269	261	97.0	261	97.0	260	96.7	260	96.7	256	95.2	253	94.1	253	94.1	
Health Board Total	1735	1686	97.2	1686	97.2	1686	97.2	1684	97.1	1681	96.9	1651	95.2	1627	93.8	
Betsi Cadwaladr University HB																
Anglesey LA	195	193	99.0	193	99.0	193	99.0	193	99.0	192	98.5	191	97.9	191	97.9	
Conwy LA	263	258	98.1	258	98.1	258	98.1	258	98.1	249	94.7	247	93.9	251	95.4	
Denbighshire LA	235	233	99.1	233	99.1	233	99.1	233	99.1	223	94.9	226	96.2	229	97.4	
Flintshire LA	454	449	98.9	449	98.9	449	98.9	449	98.9	441	97.1	444	97.8	445	98.0	
Gwynedd LA	314	306	97.5	306	97.5	306	97.5	306	97.5	296	94.3	301	95.9	303	96.5	
Wrexham LA	400	397	99.3	397	99.3	397	99.3	396	99.0	392	98.0	391	97.8	393	98.3	
Health Board Total	1861	1836	98.7	1836	98.7	1836	98.7	1835	98.6	1793	96.3	1800	96.7	1812	97.4	
Cardiff and Vale University HB																
Cardiff LA	1140	1099	96.4	1099	96.4	1099	96.4	1099	96.4	1097	96.2	1036	90.9	1042	91.4	
Vale of Glamorgan LA	386	379	98.2	379	98.2	379	98.2	379	98.2	369	95.6	369	95.6	375	97.2	
Health Board Total	1526	1478	96.9	1478	96.9	1478	96.9	1476	96.7	1405	92.1	1411	92.5	1425	93.4	
Cwm Taf University HB																
Merthyr Tydfil LA	180	176	97.8	176	97.8	176	97.8	176	97.8	175	97.2	175	97.2	175	97.2	
Rhondda Cynon Taf LA	718	707	98.5	707	98.5	707	98.5	707	98.5	702	97.8	685	95.4	691	96.2	
Health Board Total	898	883	98.3	883	98.3	883	98.3	883	98.3	877	97.7	860	95.8	866	96.4	
Hywel Dda University HB																
Carmarthenshire LA	494	477	96.6	477	96.6	477	96.6	476	96.4	477	96.6	469	94.9	466	94.3	
Ceredigion LA	154	150	97.4	150	97.4	149	96.8	149	96.8	142	92.2	144	93.5	145	94.2	
Pembrokeshire LA	329	321	97.6	321	97.6	321	97.6	321	97.6	309	93.9	310	94.2	309	93.9	
Health Board Total	977	948	97.0	948	97.0	946	96.8	947	96.9	920	94.2	917	93.9	932	95.4	
Powys Teaching HB																
318	303	95.3	303	95.3	301	94.7	301	94.7	295	92.8	290	91.2	297	93.4	301	
Unknown	13	13	100.0	13	100.0	13	100.0	13	100.0	13	100.0	12	92.3	12	92.3	
Wales Total	8771	8542	97.4	8542	97.4	8540	97.4	8535	97.3	8529	97.2	8322	94.9	8279	94.4	

¹ One dose of MenC vaccine scheduled at 12 weeks of age.

² Final (booster) dose of pneumococcal conjugate vaccine

Table 8. Uptake of HPV vaccine in girls reaching 13, 14 and 15 years of age between 01/09/18 and 31/08/19 and resident on 31/12/18.

Area	13 years (2018-19 School Year 8) ¹			14 years (2018-19 School Year 9) ¹				15 years (2018-19 School Year 10)					
	Resident girls (n)	(n)	(%)	Resident girls (n)	(n)	(%)	HPV 2 dose (n)	(%)	Resident girls (n)	(n)	(%)	HPV 2 dose (n)	(%)
Abertawe Bro Morgannwg University HB													
Bridgend LA	775	0	0.0	792	700	88.4	1	0.1	807	750	92.9	680	84.3
Neath Port Talbot LA	811	0	0.0	822	746	90.8	1	0.1	746	707	94.8	640	85.8
Swansea LA	1284	0	0.0	1217	1046	85.9	1	0.1	1232	1135	92.1	1055	85.6
Health Board Total	2870	0	0.0	2831	2492	88.0	3	0.1	2785	2592	93.1	2375	85.3
Aneurin Bevan University HB													
Blaenau Gwent LA	409	0	0.0	344	282	82.0	0	0.0	373	328	87.9	276	74.0
Caerphilly LA	1021	0	0.0	1020	876	85.9	0	0.0	1015	919	90.5	784	77.2
Monmouthshire LA	491	1	0.2	492	386	78.5	4	0.8	536	444	82.8	362	67.5
Newport LA	935	2	0.2	969	744	76.8	1	0.1	909	747	82.2	598	65.8
Torfaen LA	551	1	0.2	546	444	81.3	1	0.2	489	437	89.4	356	72.8
Health Board Total	3407	4	0.1	3371	2732	81.0	6	0.2	3322	2875	86.5	2376	71.5
Betsi Cadwaladr University HB													
Anglesey LA	337	27	8.0	337	283	84.0	22	6.5	344	308	89.5	281	81.7
Conwy LA	589	2	0.3	531	466	87.8	3	0.6	581	519	89.3	472	81.2
Denbighshire LA	531	1	0.2	533	439	82.4	2	0.4	502	432	86.1	381	75.9
Flintshire LA	819	0	0.0	809	696	86.0	1	0.1	795	725	91.2	665	83.6
Gwynedd LA	674	320	47.5	646	551	85.3	250	38.7	537	478	89.0	463	86.2
Wrexham LA	750	0	0.0	733	638	87.0	6	0.8	704	614	87.2	565	80.3
Health Board Total	3700	350	9.5	3589	3073	85.6	284	7.9	3463	3076	88.8	2827	81.6
Cardiff and Vale University HB													
Cardiff LA	2037	4	0.2	1996	1675	83.9	10	0.5	1884	1641	87.1	1418	75.3
Vale of Glamorgan LA	735	1	0.1	750	661	88.1	2	0.3	736	662	89.9	634	86.1
Health Board Total	2772	5	0.2	2746	2336	85.1	12	0.4	2620	2303	87.9	2052	78.3
Cwm Taf University HB													
Merthyr Tydfil LA	316	0	0.0	353	313	88.7	1	0.3	317	293	92.4	271	85.5
Rhondda Cynon Taf LA	1394	2	0.1	1394	1265	90.7	2	0.1	1313	1237	94.2	1160	88.3
Health Board Total	1710	2	0.1	1747	1578	90.3	3	0.2	1630	1530	93.9	1431	87.8
Hywel Dda University HB													
Carmarthenshire LA	987	3	0.3	979	882	90.1	4	0.4	973	885	91.0	827	85.0
Ceredigion LA	301	0	0.0	287	242	84.3	3	1.0	324	282	87.0	265	81.8
Pembrokeshire LA	636	0	0.0	600	519	86.5	2	0.3	631	539	85.4	505	80.0
Health Board Total	1924	3	0.2	1866	1643	88.0	9	0.5	1928	1706	88.5	1597	82.8
Powys Teaching HB													
639	2	0.3		647	536	82.8	0	0.0	667	569	85.3	544	81.6
Unknown	53	4	7.5	48	39	81.3	2	4.2	50	40	80.0	39	78.0
Wales Total	17075	370	2.2	16845	14429	85.7	319	1.9	16465	14691	89.2	13241	80.4

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

Table 9. Uptake of MenACWY vaccine in teenagers reaching 14, 15, 16 and 17 years of age between 01/09/18 and 31/08/19 and resident on 31/12/18.

Area	14 years (2018-19 School Year 9) ¹			15 years (2018-19 School Year 10)			16 years (2018-19 School Year 11) ¹			17 years (2018-19 School Year 12)		
	Resident children (n)	(n)	MenACWY (%)	Resident children (n)	(n)	MenACWY (%)	Resident children (n)	(n)	MenACWY (%)	Resident children (n)	(n)	MenACWY (%)
Abertawe Bro Morgannwg University HB												
Bridgend LA	1689	3	0.2	1587	1348	84.9	1561	1393	89.2	1522	1372	90.1
Neath Port Talbot LA	1656	4	0.2	1514	1371	90.6	1435	1285	89.5	1468	1347	91.8
Swansea LA	2600	15	0.6	2598	2351	90.5	2598	2305	88.7	2511	2243	89.3
Health Board Total	5945	22	0.4	5699	5070	89.0	5594	4983	89.1	5501	4962	90.2
Aneurin Bevan University HB												
Blaenau Gwent LA	686	1	0.1	750	655	87.3	691	598	86.5	710	636	89.6
Caerphilly LA	2075	35	1.7	2144	1785	83.3	2086	1776	85.1	2020	1737	86.0
Monmouthshire LA	1030	0	0.0	1128	876	77.7	1098	901	82.1	1047	805	76.9
Newport LA	1921	38	2.0	1896	1489	78.5	1855	1483	79.9	1845	1472	79.8
Torfaen LA	1118	2	0.2	1004	886	88.2	977	830	85.0	1017	885	87.0
Health Board Total	6830	76	1.1	6922	5691	82.2	6707	5588	83.3	6639	5535	83.4
Betsi Cadwaladr University HB												
Anglesey LA	701	1	0.1	729	590	80.9	704	589	83.7	729	601	82.4
Conwy LA	1164	2	0.2	1173	961	81.9	1160	1043	89.9	1136	1003	88.3
Denbighshire LA	1100	5	0.5	1066	831	78.0	1027	870	84.7	1095	887	81.0
Flintshire LA	1640	6	0.4	1665	1316	79.0	1507	1272	84.4	1584	1316	83.1
Gwynedd LA	1268	4	0.3	1168	954	81.7	1172	1008	86.0	1170	1006	86.0
Wrexham LA	1495	4	0.3	1449	1170	80.7	1426	1197	83.9	1322	1129	85.4
Health Board Total	7368	22	0.3	7250	5822	80.3	6996	5979	85.5	7036	5942	84.5
Cardiff and Vale University HB												
Cardiff LA	4027	2164	53.7	3790	2714	71.6	3789	2786	73.5	3665	2112	57.6
Vale of Glamorgan LA	1498	905	60.4	1433	1173	81.9	1481	1192	80.5	1352	900	66.6
Health Board Total	5525	3069	55.5	5223	3887	74.4	5270	3978	75.5	5017	3012	60.0
Cwm Taf University HB												
Merthyr Tydfil LA	710	0	0.0	667	583	87.4	661	599	90.6	621	565	91.0
Rhondda Cynon Taf LA	2856	30	1.1	2669	2427	90.9	2820	2545	90.2	2537	2336	92.1
Health Board Total	3566	30	0.8	3336	3010	90.2	3481	3144	90.3	3158	2901	91.9
Hywel Dda University HB												
Carmarthenshire LA	2012	4	0.2	1995	1722	86.3	2051	1806	88.1	2031	1814	89.3
Ceredigion LA	655	3	0.5	672	595	88.5	619	534	86.3	594	517	87.0
Pembrokeshire LA	1233	0	0.0	1262	1043	82.6	1222	982	80.4	1168	906	77.6
Health Board Total	3900	7	0.2	3929	3360	85.5	3892	3322	85.4	3793	3237	85.3
Powys Teaching HB	1334	4	0.3	1346	1127	83.7	1343	1136	84.6	1298	1112	85.7
Unknown	106	1	0.9	113	90	79.6	94	74	78.7	96	82	85.4
Wales Total	34574	3231	9.3	33818	28057	83.0	33377	28204	84.5	32538	26783	82.3

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

Table 10. MMR, Td/IPV and MenACWY vaccine uptake in children in 2018-19 school year 9 reaching their 14th birthday between 01/09/18 and 31/08/19 and resident on 31/12/18, with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		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)	(%)	
Abertawe Bro Morgannwg University HB																			
Bridgend LA	1689	1618	95.8	1546	91.5	3	0.2	3	0.2	792	759	95.8	732	92.4	897	859	95.8	814	90.7
Neath Port Talbot LA	1656	1575	95.1	1497	90.4	11	0.7	4	0.2	822	780	94.9	744	90.5	834	795	95.3	753	90.3
Swansea LA	2600	2439	93.8	2338	89.9	28	1.1	15	0.6	1217	1135	93.3	1086	89.2	1383	1304	94.3	1252	90.5
Health Board Total	5945	5632	94.7	5381	90.5	42	0.7	22	0.4	2831	2674	94.5	2562	90.5	3114	2958	95.0	2819	90.5
Aneurin Bevan University HB																			
Blaenau Gwent LA	686	670	97.7	649	94.6	5	0.7	1	0.1	344	335	97.4	328	95.3	342	335	98.0	321	93.9
Caerphilly LA	2075	2031	97.9	1972	95.0	42	2.0	35	1.7	1020	1002	98.2	977	95.8	1055	1029	97.5	995	94.3
Monmouthshire LA	1030	986	95.7	950	92.2	4	0.4	0	0.0	492	473	96.1	452	91.9	538	513	95.4	498	92.6
Newport LA	1921	1854	96.5	1784	92.9	44	2.3	38	2.0	969	935	96.5	902	93.1	949	917	96.6	882	92.9
Torfaen LA	1118	1096	98.0	1069	95.6	13	1.2	2	0.2	546	533	97.6	524	96.0	572	563	98.4	545	95.3
Health Board Total	6830	6637	97.2	6424	94.1	108	1.6	76	1.1	3371	3278	97.2	3183	94.4	3456	3357	97.1	3241	93.8
Betsi Cadwaladr University HB																			
Anglesey LA	701	659	94.0	640	91.3	5	0.7	1	0.1	337	317	94.1	308	91.4	364	342	94.0	332	91.2
Conwy LA	1164	1100	94.5	1063	91.3	4	0.3	2	0.2	531	504	94.9	488	91.9	633	596	94.2	575	90.8
Denbighshire LA	1100	1021	92.8	979	89.0	7	0.6	5	0.5	533	492	92.3	470	88.2	567	529	93.3	509	89.8
Flintshire LA	1640	1546	94.3	1492	91.0	10	0.6	6	0.4	809	760	93.9	733	90.6	831	786	94.6	759	91.3
Gwynedd LA	1268	1205	95.0	1166	92.0	6	0.5	4	0.3	646	615	95.2	592	91.6	622	590	94.9	574	92.3
Wrexham LA	1495	1432	95.8	1378	92.2	6	0.4	4	0.3	733	698	95.2	662	90.3	762	734	96.3	716	94.0
Health Board Total	7368	6963	94.5	6718	91.2	38	0.5	22	0.3	3589	3386	94.3	3253	90.6	3779	3577	94.7	3465	91.7
Cardiff and Vale University HB																			
Cardiff LA	4027	3790	94.1	3585	89.0	2169	53.9	2164	53.7	1996	1894	94.9	1801	90.2	2030	1896	93.4	1784	87.9
Vale of Glamorgan LA	1498	1436	95.9	1369	91.4	909	60.7	905	60.4	750	718	95.7	683	91.1	747	718	96.1	686	91.8
Health Board Total	5525	5226	94.6	4954	89.7	3078	55.7	3069	55.5	2746	2612	95.1	2484	90.5	2777	2614	94.1	2470	88.9
Cwm Taf University HB																			
Merthyr Tydfil LA	710	683	96.2	655	92.3	0	0.0	0	0.0	353	338	95.8	325	92.1	357	345	96.6	330	92.4
Rhondda Cynon Taf LA	2856	2733	95.7	2625	91.9	42	1.5	30	1.1	1394	1341	96.2	1295	92.9	1461	1392	95.3	1330	91.0
Health Board Total	3566	3416	95.8	3280	92.0	42	1.2	30	0.8	1747	1679	96.1	1620	92.7	1818	1737	95.5	1660	91.3
Hywel Dda University HB																			
Carmarthenshire LA	2012	1875	93.2	1805	89.7	16	0.8	4	0.2	979	918	93.8	880	89.9	1033	957	92.6	925	89.5
Ceredigion LA	655	613	93.6	595	90.8	6	0.9	3	0.5	287	267	93.0	258	89.9	368	346	94.0	337	91.6
Pembrokeshire LA	1233	1154	93.6	1092	88.6	11	0.9	0	0.0	600	562	93.7	527	87.8	633	592	93.5	565	89.3
Health Board Total	3900	3642	93.4	3492	89.5	33	0.8	7	0.2	1866	1747	93.6	1665	89.2	2034	1895	93.2	1827	89.8
Powys Teaching HB	1334	1231	92.3	1174	88.0	11	0.8	4	0.3	647	603	93.2	578	89.3	687	628	91.4	596	86.8
Unknown	106	98	92.5	93	87.7	2	1.9	1	0.9	48	44	91.7	43	89.6	58	54	93.1	50	86.2
Wales Total	34574	32845	95.0	31516	91.2	3354	9.7	3231	9.3	16845	16023	95.1	15388	91.4	17723	16820	94.9	16128	91.0

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

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

Table 11. MMR, Td/IPV and MenACWY vaccine uptake in children in 2018-19 school year 10 reaching their 15th birthday between 01/09/18 and 31/08/19 and resident on 31/12/18, with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children	Teenage 3 in 1								Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)		
		MMR1		MMR2		booster ¹		MenACWY			(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB		(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	
Bridgend LA	1587	1519	95.7	1434	90.4	1338	84.3	1348	84.9	807	783	97.0	746	92.4	780	736	94.4	688	88.2	
Neath Port Talbot LA	1514	1448	95.6	1383	91.3	1351	89.2	1371	90.6	746	725	97.2	689	92.4	768	723	94.1	694	90.4	
Swansea LA	2598	2446	94.1	2336	89.9	2329	89.6	2351	90.5	1232	1162	94.3	1116	90.6	1366	1284	94.0	1220	89.3	
Health Board Total	5699	5413	95.0	5153	90.4	5018	88.1	5070	89.0	2785	2670	95.9	2551	91.6	2914	2743	94.1	2602	89.3	
Aneurin Bevan University HB																				
Blaenau Gwent LA	750	738	98.4	719	95.9	656	87.5	655	87.3	373	367	98.4	357	95.7	377	371	98.4	362	96.0	
Caerphilly LA	2144	2090	97.5	2031	94.7	1781	83.1	1785	83.3	1015	987	97.2	964	95.0	1128	1102	97.7	1066	94.5	
Monmouthshire LA	1128	1060	94.0	1020	90.4	878	77.8	876	77.7	536	508	94.8	490	91.4	592	552	93.2	530	89.5	
Newport LA	1896	1801	95.0	1739	91.7	1498	79.0	1489	78.5	909	867	95.4	843	92.7	987	934	94.6	896	90.8	
Torfaen LA	1004	985	98.1	952	94.8	888	88.4	886	88.2	489	480	98.2	463	94.7	515	505	98.1	489	95.0	
Health Board Total	6922	6674	96.4	6461	93.3	5701	82.4	5691	82.2	3322	3209	96.6	3117	93.8	3599	3464	96.2	3343	92.9	
Betsi Cadwaladr University HB																				
Anglesey LA	729	700	96.0	684	93.8	587	80.5	590	80.9	344	330	95.9	324	94.2	385	370	96.1	360	93.5	
Conwy LA	1173	1115	95.1	1060	90.4	957	81.6	961	81.9	581	550	94.7	519	89.3	592	565	95.4	541	91.4	
Denbighshire LA	1066	1002	94.0	961	90.2	827	77.6	831	78.0	502	467	93.0	445	88.6	564	535	94.9	516	91.5	
Flintshire LA	1665	1586	95.3	1540	92.5	1320	79.3	1316	79.0	795	763	96.0	746	93.8	870	823	94.6	794	91.3	
Gwynedd LA	1168	1124	96.2	1092	93.5	955	81.8	954	81.7	537	520	96.8	501	93.3	631	604	95.7	591	93.7	
Wrexham LA	1449	1374	94.8	1339	92.4	1170	80.7	1170	80.7	704	671	95.3	652	92.6	745	703	94.4	687	92.2	
Health Board Total	7250	6901	95.2	6676	92.1	5816	80.2	5822	80.3	3463	3301	95.3	3187	92.0	3787	3600	95.1	3489	92.1	
Cardiff and Vale University HB																				
Cardiff LA	3790	3551	93.7	3348	88.3	2721	71.8	2714	71.6	1884	1777	94.3	1671	88.7	1906	1774	93.1	1677	88.0	
Vale of Glamorgan LA	1433	1361	95.0	1291	90.1	1171	81.7	1173	81.9	736	698	94.8	664	90.2	697	663	95.1	627	90.0	
Health Board Total	5223	4912	94.0	4639	88.8	3892	74.5	3887	74.4	2620	2475	94.5	2335	89.1	2603	2437	93.6	2304	88.5	
Cwm Taf University HB																				
Merthyr Tydfil LA	667	629	94.3	602	90.3	583	87.4	583	87.4	317	293	92.4	279	88.0	349	336	96.3	323	92.6	
Rhondda Cynon Taf LA	2669	2546	95.4	2456	92.0	2412	90.4	2427	90.9	1313	1257	95.7	1210	92.2	1356	1289	95.1	1246	91.9	
Health Board Total	3336	3175	95.2	3058	91.7	2995	89.8	3010	90.2	1630	1550	95.1	1489	91.3	1705	1625	95.3	1569	92.0	
Hywel Dda University HB																				
Carmarthenshire LA	1995	1894	94.9	1824	91.4	1716	86.0	1722	86.3	973	925	95.1	890	91.5	1022	969	94.8	934	91.4	
Ceredigion LA	672	643	95.7	626	93.2	599	89.1	595	88.5	324	312	96.3	303	93.5	348	331	95.1	323	92.8	
Pembrokeshire LA	1262	1197	94.8	1141	90.4	1039	82.3	1043	82.6	631	601	95.2	574	91.0	631	596	94.5	567	89.9	
Health Board Total	3929	3734	95.0	3591	91.4	3354	85.4	3360	85.5	1928	1838	95.3	1767	91.6	2001	1896	94.8	1824	91.2	
Powys Teaching HB		1346	1255	93.2	1195	88.8	1121	83.3	1127	83.7	667	627	94.0	599	89.8	679	628	92.5	596	87.8
Unknown	113	103	91.2	97	85.8	90	79.6	90	79.6	50	44	88.0	41	82.0	63	59	93.7	56	88.9	
Wales Total	33818	32167	95.1	30870	91.3	27987	82.8	28057	83.0	16465	15714	95.4	15086	91.6	17351	16452	94.8	15783	91.0	

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

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

Area	Teenage 3 in										Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)	
	Resident children		MMR1		MMR2		1 booster ¹		MenACWY			(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)
Abertawe Bro Morgannwg University HB																				
Bridgend LA	1561	1474	94.4	1385	88.7	1380	88.4	1393	89.2	781	746	95.5	708	90.7	780	728	93.3	677	86.8	
Neath Port Talbot LA	1435	1382	96.3	1306	91.0	1264	88.1	1285	89.5	705	683	96.9	655	92.9	730	699	95.8	651	89.2	
Swansea LA	2598	2382	91.7	2247	86.5	2299	88.5	2305	88.7	1238	1129	91.2	1072	86.6	1360	1253	92.1	1175	86.4	
Health Board Total	5594	5238	93.6	4938	88.3	4943	88.4	4983	89.1	2724	2558	93.9	2435	89.4	2870	2680	93.4	2503	87.2	
Aneurin Bevan University HB																				
Blaenau Gwent LA	691	667	96.5	646	93.5	596	86.3	598	86.5	319	309	96.9	299	93.7	372	358	96.2	347	93.3	
Caerphilly LA	2086	2028	97.2	1950	93.5	1781	85.4	1776	85.1	978	947	96.8	917	93.8	1107	1081	97.7	1033	93.3	
Monmouthshire LA	1098	1026	93.4	978	89.1	894	81.4	901	82.1	548	513	93.6	482	88.0	550	513	93.3	496	90.2	
Newport LA	1855	1745	94.1	1650	88.9	1488	80.2	1483	79.9	898	854	95.1	816	90.9	954	891	93.4	834	87.4	
Torfaen LA	977	936	95.8	911	93.2	829	84.9	830	85.0	486	469	96.5	457	94.0	491	467	95.1	454	92.5	
Health Board Total	6707	6402	95.5	6135	91.5	5588	83.3	5588	83.3	3229	3092	95.8	2971	92.0	3474	3310	95.3	3164	91.1	
Betsi Cadwaladr University HB																				
Anglesey LA	704	675	95.9	653	92.8	589	83.7	589	83.7	339	330	97.3	320	94.4	365	345	94.5	333	91.2	
Conwy LA	1160	1087	93.7	1051	90.6	1040	89.7	1043	89.9	542	515	95.0	499	92.1	615	569	92.5	549	89.3	
Denbighshire LA	1027	959	93.4	917	89.3	862	83.9	870	84.7	482	448	92.9	431	89.4	544	511	93.9	486	89.3	
Flintshire LA	1507	1452	96.4	1396	92.6	1276	84.7	1272	84.4	730	707	96.8	679	93.0	777	745	95.9	717	92.3	
Gwynedd LA	1172	1144	97.6	1119	95.5	1007	85.9	1008	86.0	555	540	97.3	532	95.9	617	604	97.9	587	95.1	
Wrexham LA	1426	1366	95.8	1331	93.3	1196	83.9	1197	83.9	679	651	95.9	632	93.1	747	715	95.7	699	93.6	
Health Board Total	6996	6683	95.5	6467	92.4	5970	85.3	5979	85.5	3327	3191	95.9	3093	93.0	3665	3489	95.2	3371	92.0	
Cardiff and Vale University HB																				
Cardiff LA	3789	3480	91.8	3249	85.7	2782	73.4	2786	73.5	1847	1718	93.0	1614	87.4	1942	1762	90.7	1635	84.2	
Vale of Glamorgan LA	1481	1406	94.9	1329	89.7	1194	80.6	1192	80.5	706	667	94.5	626	88.7	775	739	95.4	703	90.7	
Health Board Total	5270	4886	92.7	4578	86.9	3976	75.4	3978	75.5	2553	2385	93.4	2240	87.7	2717	2501	92.1	2338	86.1	
Cwm Taf University HB																				
Merthyr Tydfil LA	661	620	93.8	587	88.8	599	90.6	599	90.6	329	314	95.4	299	90.9	332	306	92.2	288	86.7	
Rhondda Cynon Taf LA	2820	2682	95.1	2552	90.5	2534	89.9	2545	90.2	1394	1334	95.7	1280	91.8	1426	1348	94.5	1272	89.2	
Health Board Total	3481	3302	94.9	3139	90.2	3133	90.0	3144	90.3	1723	1648	95.6	1579	91.6	1758	1654	94.1	1560	88.7	
Hywel Dda University HB																				
Carmarthenshire LA	2051	1909	93.1	1863	90.8	1805	88.0	1806	88.1	998	932	93.4	915	91.7	1053	977	92.8	948	90.0	
Ceredigion LA	619	590	95.3	566	91.4	537	86.8	534	86.3	296	282	95.3	270	91.2	323	308	95.4	296	91.6	
Pembrokeshire LA	1222	1155	94.5	1094	89.5	977	80.0	982	80.4	617	589	95.5	559	90.6	605	566	93.6	535	88.4	
Health Board Total	3892	3654	93.9	3523	90.5	3319	85.3	3322	85.4	1911	1803	94.3	1744	91.3	1981	1851	93.4	1779	89.8	
Powys Teaching HB																				
Unknown	94	82	87.2	78	83.0	75	79.8	74	78.7	44	42	95.5	39	88.6	50	40	80.0	39	78.0	
Wales Total	33377	31494	94.4	30017	89.9	28129	84.3	28204	84.5	16172	15339	94.8	14681	90.8	17197	16152	93.9	15333	89.2	

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

Table 13. MMR, Td/IPV and MenACWY vaccine uptake in children reaching their 16th birthday between 01/10/18 and 31/12/18 and resident on 31/12/18, with breakdown of MMR1 and MMR2 coverage by sex

Area	Teenage 3 in										Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)	
	Resident children	MMR1		MMR2		1 booster ¹		MenACWY			(n)	(n)	(%)	(n)	(%)		(n)	(n)	(%)	(n)
Abertawe Bro Morgannwg University HB		(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)
Bridgend LA	410	385	93.9	363	88.5	362	88.3	361	88.0	206	197	95.6	187	90.8	204	188	92.2	176	86.3	
Neath Port Talbot LA	384	374	97.4	354	92.2	339	88.3	344	89.6	191	187	97.9	181	94.8	193	187	96.9	173	89.6	
Swansea LA	660	599	90.8	562	85.2	578	87.6	584	88.5	299	271	90.6	261	87.3	361	328	90.9	301	83.4	
Health Board Total	1454	1358	93.4	1279	88.0	1279	88.0	1289	88.7	696	655	94.1	629	90.4	758	703	92.7	650	85.8	
Aneurin Bevan University HB																				
Blaenau Gwent LA	181	172	95.0	170	93.9	153	84.5	152	84.0	82	79	96.3	78	95.1	99	93	93.9	92	92.9	
Caerphilly LA	525	509	97.0	487	92.8	448	85.3	449	85.5	226	217	96.0	208	92.0	299	292	97.7	279	93.3	
Monmouthshire LA	262	251	95.8	239	91.2	209	79.8	207	79.0	138	132	95.7	125	90.6	124	119	96.0	114	91.9	
Newport LA	455	431	94.7	411	90.3	364	80.0	360	79.1	226	216	95.6	207	91.6	229	215	93.9	204	89.1	
Torfaen LA	238	227	95.4	224	94.1	205	86.1	205	86.1	109	106	97.2	104	95.4	129	121	93.8	120	93.0	
Health Board Total	1661	1590	95.7	1531	92.2	1379	83.0	1373	82.7	781	750	96.0	722	92.4	880	840	95.5	809	91.9	
Betsi Cadwaladr University HB																				
Anglesey LA	176	164	93.2	159	90.3	146	83.0	146	83.0	79	74	93.7	73	92.4	97	90	92.8	86	88.7	
Conwy LA	279	255	91.4	247	88.5	240	86.0	238	85.3	136	126	92.6	119	87.5	142	128	90.1	127	89.4	
Denbighshire LA	246	227	92.3	216	87.8	204	82.9	207	84.1	114	105	92.1	101	88.6	132	122	92.4	115	87.1	
Flintshire LA	359	347	96.7	335	93.3	305	85.0	300	83.6	180	174	96.7	167	92.8	179	173	96.6	168	93.9	
Gwynedd LA	292	282	96.6	279	95.5	248	84.9	243	83.2	142	136	95.8	136	95.8	150	146	97.3	143	95.3	
Wrexham LA	337	320	95.0	312	92.6	287	85.2	284	84.3	146	138	94.5	134	91.8	191	182	95.3	178	93.2	
Health Board Total	1689	1595	94.4	1548	91.7	1430	84.7	1418	84.0	797	753	94.5	730	91.6	891	841	94.4	817	91.7	
Cardiff and Vale University HB																				
Cardiff LA	955	879	92.0	813	85.1	703	73.6	702	73.5	478	448	93.7	412	86.2	477	431	90.4	401	84.1	
Vale of Glamorgan LA	356	344	96.6	321	90.2	285	80.1	288	80.9	157	151	96.2	139	88.5	199	193	97.0	182	91.5	
Health Board Total	1311	1223	93.3	1134	86.5	988	75.4	990	75.5	635	599	94.3	551	86.8	676	624	92.3	583	86.2	
Cwm Taf University HB																				
Merthyr Tydfil LA	169	160	94.7	145	85.8	150	88.8	150	88.8	89	85	95.5	80	89.9	80	75	93.8	65	81.3	
Rhondda Cynon Taf LA	682	649	95.2	605	88.7	620	90.9	622	91.2	344	327	95.1	305	88.7	338	322	95.3	300	88.8	
Health Board Total	851	809	95.1	750	88.1	770	90.5	772	90.7	433	412	95.2	385	88.9	418	397	95.0	365	87.3	
Hywel Dda University HB																				
Carmarthenshire LA	451	418	92.7	410	90.9	400	88.7	396	87.8	229	216	94.3	215	93.9	222	202	91.0	195	87.8	
Ceredigion LA	158	151	95.6	144	91.1	133	84.2	133	84.2	84	81	96.4	77	91.7	74	70	94.6	67	90.5	
Pembrokeshire LA	287	271	94.4	258	89.9	232	80.8	235	81.9	148	139	93.9	133	89.9	139	132	95.0	125	89.9	
Health Board Total	896	840	93.8	812	90.6	765	85.4	764	85.3	461	436	94.6	425	92.2	435	404	92.9	387	89.0	
Powys Teaching HB	380	352	92.6	334	87.9	323	85.0	324	85.3	182	171	94.0	166	91.2	198	181	91.4	168	84.8	
Unknown	22	17	77.3	16	72.7	17	77.3	17	77.3	11	10	90.9	10	90.9	11	7	63.6	6	54.5	
Wales Total	8264	7784	94.2	7404	89.6	6951	84.1	6947	84.1	3996	3786	94.7	3618	90.5	4267	3997	93.7	3785	88.7	

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

Table 14. Uptake of BCG immunisation in children reaching their 1st, 2nd, 5th and 16th birthdays between 01/10/18 and 31/12/18 and resident on 31/12/18.¹

Area	1 yr BCG Immunised			2 yrs BCG Immunised			5 yrs BCG Immunised			16 yrs BCG Immunised		
	Resident children	(n)	(%)	Resident children	(n)	(%)	Resident children	(n)	(%)	Resident children	(n)	(%)
Abertawe Bro Morgannwg University HB												
Bridgend LA	353	8	2.3	372	11	3.0	427	20	4.7	410	8	2.0
Neath Port Talbot LA	393	12	3.1	383	11	2.9	388	10	2.6	384	5	1.3
Swansea LA	595	56	9.4	604	81	13.4	628	82	13.1	660	36	5.5
Health Board Total	1341	76	5.7	1359	103	7.6	1443	112	7.8	1454	49	3.4
Aneurin Bevan University HB												
Blaenau Gwent LA	184	6	3.3	196	3	1.5	198	9	4.5	181	4	2.2
Caerphilly LA	503	5	1.0	480	14	2.9	517	11	2.1	525	4	0.8
Monmouthshire LA	172	9	5.2	224	13	5.8	213	10	4.7	262	8	3.1
Newport LA	496	68	13.7	511	63	12.3	538	89	16.5	455	48	10.5
Torfaen LA	283	5	1.8	258	4	1.6	269	6	2.2	238	4	1.7
Health Board Total	1638	93	5.7	1669	97	5.8	1735	125	7.2	1661	68	4.1
Betsi Cadwaladr University HB												
Anglesey LA	152	5	3.3	186	2	1.1	195	7	3.6	176	4	2.3
Conwy LA	269	13	4.8	270	13	4.8	263	9	3.4	279	4	1.4
Denbighshire LA	233	8	3.4	244	13	5.3	235	19	8.1	246	9	3.7
Flintshire LA	408	11	2.7	400	12	3.0	454	21	4.6	359	11	3.1
Gwynedd LA	244	11	4.5	281	11	3.9	314	14	4.5	292	5	1.7
Wrexham LA	374	21	5.6	362	22	6.1	400	24	6.0	337	8	2.4
Health Board Total	1680	69	4.1	1743	73	4.2	1861	94	5.1	1689	41	2.4
Cardiff and Vale University HB												
Cardiff LA	997	188	18.9	1061	39	3.7	1140	228	20.0	955	139	14.6
Vale of Glamorgan LA	330	9	2.7	356	3	0.8	386	14	3.6	356	18	5.1
Health Board Total	1327	197	14.8	1417	42	3.0	1526	242	15.9	1311	157	12.0
Cwm Taf University HB												
Merthyr Tydfil LA	176	11	6.3	178	5	2.8	180	18	10.0	169	7	4.1
Rhondda Cynon Taf LA	654	23	3.5	662	13	2.0	718	30	4.2	682	9	1.3
Health Board Total	830	34	4.1	840	18	2.1	898	48	5.3	851	16	1.9
Hywel Dda University HB												
Carmarthenshire LA	460	12	2.6	462	17	3.7	494	20	4.0	451	20	4.4
Ceredigion LA	138	9	6.5	148	12	8.1	154	15	9.7	158	5	3.2
Pembrokeshire LA	270	10	3.7	300	12	4.0	329	20	6.1	287	4	1.4
Health Board Total	868	31	3.6	910	41	4.5	977	55	5.6	896	29	3.2
Powys Teaching Health Board	293	4	1.4	280	4	1.4	318	9	2.8	380	8	2.1
Unknown	0	0	0.0	2	0	0.0	13	0	0.0	22	1	4.5
Wales Total	7982	506	6.3	8220	378	4.6	8771	685	7.8	8264	369	4.5

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 01/10/18 and 31/12/18 and resident on 31/12/18, 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
Abertawe Bro Morgannwg UHB	(n)	(n)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	
	1341	2	100.0	100.0	100.0	1359	3	100.0	100.0	100.0	100.0	1443	1	100.0	100.0	100.0	
Aneurin Bevan UHB	1638	4	100.0	100.0	100.0	1669	3	100.0	100.0	100.0	66.7	1735	4	100.0	100.0	100.0	
Betsi Cadwaladr UHB	1680	2	100.0	100.0	100.0	1743	2	100.0	100.0	100.0	100.0	1861	0	-	-	-	
Cardiff and Vale UHB	1335	2	100.0	100.0	100.0	1429	4	100.0	100.0	75.0	25.0	1534	7	100.0	100.0	100.0	
Cwm Taf UHB	830	0	-	-	-	840	0	-	-	-	-	899	0	-	-	-	
Hywel Dda UHB	868	0	-	-	-	910	0	-	-	-	-	977	1	100.0	100.0	100.0	
Powys Teaching HB	293	0	-	-	-	280	0	-	-	-	-	318	0	-	-	-	
Unknown	5	0	-	-	-	3	0	-	-	-	-	13	0	-	-	-	
Wales Total	7990	10	100.0	100.0	100.0	8233	12	100.0	100.0	91.7	66.7	8780	13	100.0	100.0	100.0	92.3

¹Data reflects immunisations given and recorded on the Public Health Wales All Wales Neonatal Hepatitis B database of babies born to hepatitis B positive mothers. One year olds in this table would have been eligible for the new Hepatitis B containing "6 in 1" vaccine as part of the routine childhood immunisation schedule. The doses here for one year olds refer to the monovalent dose given at birth (dose 1), monovalent dose given at one month (dose 2) and dose due at two months (dose 3, now part of the "6 in 1" vaccine).