

Vaccine Uptake in Children in Wales July to September 2017

COVER 124: Wales November 2017



Key points

- For children at one year of age in Wales, uptake of all routine immunisations, apart from rotavirus, exceeded 95% this quarter. Uptake of three doses of the “5 in 1” vaccine was 95% or higher in five of the seven Health Boards (HB) and in 17 of 22 Local Authority (LA) areas.
- Uptake of two doses of MenB vaccine in one year olds was 96% this quarter. Five HBs and 15 LA areas had an uptake above 95%.
- Uptake of the complete three dose course of MenB vaccine in two year olds was 94% this quarter. Three HBs and 12 LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children was just under 95% this quarter. Four HBs and 13 LA areas achieved an uptake of 95% or over. Uptake of two doses of MMR vaccine by five years of age increased to 91%.
- The proportion of children up to date with all routine immunisations by four years of age was 85% this quarter and was 88% in five year olds.
- Vaccination sessions for the first dose of the Human Papillomavirus (HPV) vaccine scheduled in girls in the 2016-17 school year 8 (12-13 year olds) will have been complete for all areas when data for this report were extracted, and uptake is currently 85%. Uptake of one dose of HPV vaccine in the 2016-17 school year 9 (13-14 year olds) is 89%. In girls in the 2016-17 school year 10 (14-15 year olds), uptake of one dose was 91% and uptake of two doses was 87%.
- Coverage of MenACWY vaccine in 2015-16 school year 9 and school year 11 children remained stable at 81% and 78% respectively. In the 2016-17 school year 9 and 11 groups, uptake is currently 83% and 80% respectively.
- Coverage of the Td/IPV teenage booster in the 2016-17 school year 10 (age 14-15 years) was 84%.
- Coverage of one dose of MMR vaccine in the 2016-17 school year 11 (age 15-16 years) was 93%, coverage of two doses was 88%.

Background

These results are for children living in Wales in September 2017 and reaching their first, second, fourth, fifth and 13th to 17th birthdays and relevant school years during the quarter 01/07/2017 to 30/09/2017. Uptake of key immunisation in older children, which are mainly provided through school based programmes in all areas other than Cardiff and Vale University Health Board, are presented as school year cohorts (children reaching their 14th, 15th and 16th birthdays between 01/09/2016 and 31/08/2017). Current uptake of HPV vaccination¹ dose 1 in girls in the 2016-17 school years 8, 9 and 10 is also presented. All of these school year groups will have been on the newer, two dose HPV vaccine schedule. BCG and hepatitis B immunisation uptake data are also presented here. For the children referred to in this report, these immunisations would have been given selectively following risk assessment. Coverage of neonatal hepatitis B immunisation in infants at risk is also presented here, using data from the Public Health Wales Neonatal Hepatitis B database. All children referred to in this report would have been too old to have been affected by the recent inclusion of hepatitis B vaccination in the universal childhood schedule.

MenACWY conjugate vaccine uptake figures for teenagers and young adults born from 01/09/1996 to 31/08/1999, vaccinated as part of the general practice-based catch-up campaign are available from: <http://www.wales.nhs.uk/sitesplus/888/page/88528>

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

Findings

1. Uptake of all three doses of the combined “5 in 1” DTaP/IPV/Hib² vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday remained stable this quarter at 95.9%. Uptake ranged by HB from 93.7% (Hywel Dda) to 97.9% (Cwm Taf) and by LA from 93.1% (Carmarthenshire) to 98.9% (Anglesey). Five of the seven HBs and 17 of the 22 LA areas achieved the target 95% uptake (Figures 1, 2 and 5, Tables 2 and 3).
2. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV2) in children reaching their first birthday was 95.8% this quarter compared to 96.0% last quarter, ranging by LA from 92.7% (Carmarthenshire) to 98.9% (Anglesey). Five of the seven HBs and 17 of the 22 LA areas achieved the target 95% uptake (Figures 1 and 2, Tables 2 and 3).
3. Uptake of two doses of MenB vaccine, scheduled at two and four months of age, in children reaching their first birthday remained stable at 95.6% this quarter compared to 95.5% last quarter. Uptake in HBs ranged from 93.2% (Hywel Dda) to 97.9% (Cwm Taf) and ranged by LA from 92.7% (Carmarthenshire) to 98.7% (Flintshire) (Figures 1 and 2, Tables 2 and 3).
4. Uptake of two doses of rotavirus vaccine in children reaching their first birthday decreased to 93.4% this quarter compared to 94.0% last quarter. Uptake in HBs ranged from 91.8% (Cardiff and Vale) to 96.7% (Cwm Taf) and ranged by LA from 90.1% (Newport) to 97.8% (Anglesey) (Figures 1 and 2, Tables 2 and 3).
5. Uptake of the first dose of MMR³ in children reaching their second birthday (scheduled at 12 to 13 months of age) was 94.9% this quarter compared to 94.8% last quarter. Uptake ranged by HB from 92.4% (Hywel Dda) to 96.6% (Cwm Taf) and by LA area from 90.6% (Pembrokeshire) to 97.7% (Blaenau Gwent) (Figures 1, 2 and 6, Tables 2 and 4). Four HBs and 13 LA areas achieved the target of 95% uptake.
6. Uptake of the complete three dose course of MenB vaccine in children reaching their second birthday was 94% this quarter. Uptake ranged by HB from 89.8% (Cardiff and Vale) to 96.3% (Cwm Taf) and by LA from 89.5% (Cardiff) to 98.3% (Blaenau Gwent). Three of the seven HBs and 12 of the 22 LA areas achieved the target 95% uptake (Tables 2 and 4).
7. Uptake of the final dose of Pneumococcal Conjugate Vaccine (PCVf, scheduled at 12 to 13 months of age) in children reaching their second birthday was increased to 95.5% this quarter from 95.3% last quarter. Uptake ranged by HB from 92.9% (Cardiff and Vale) to 97.2% (Cwm Taf) and ranged by LA from 91.2% (Pembrokeshire) to 98.3% (Blaenau Gwent) (Figure 2, Tables 2 and 4). Five HBs and 17 LA areas achieved an uptake of 95% or over.
8. Uptake of the Hib/MenC booster (given at 12 to 13 months of age) in children reaching two years of age remained increased to 94.9% this quarter compared to 94.6% last quarter. Uptake ranged by HB from 92.1% (Hywel Dda) to 96.3% (Cwm Taf), and ranged by LA from 89.8% (Pembrokeshire) to 97.2% (Blaenau Gwent). Five HBs and 16 LA areas achieved uptakes in excess of 95% (Figures 1 and 2, Tables 2 and 4).
9. In children reaching four years of age this quarter (Table 5), uptake of:
 - The “4 in 1” DTaP/IPV⁴ pre-school booster was 88.1%
 - The Hib/MenC booster was 94.1%
 - Two doses of MMR was 86.6%

The proportion of children who were up to date with all these routine immunisations at four years of age increased to 84.9% this quarter, compared to 84.3% last quarter. This ranged by HB from 81.1% (Aneurin Bevan) to 88.6% (Betsi Cadwaladr) and by LA from 70.5% (Newport) to 93.6% (Anglesey) (Figures 3 and 4, Tables 1, 2 and 5).

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

³ MMR protects against measles, mumps and rubella infections.

⁴DTaP/IPV (and dTaP/IPV) vaccines boost protection against Diphtheria, Tetanus, Pertussis and Polio infection before school entry.

9. The proportion of children who were up to date with routine immunisations by their 5th birthday increased to 88.2% this quarter, compared to 87.8% last quarter. This ranged by HB from 85.5% (Cardiff and Vale) to 90.2% (Betsi Cadwaladr) (Table 6). There has been an improvement of 3.4% in the proportion up to date in this cohort of children since we reported on them, aged 4 years, this time last year.
10. In children reaching five years of age this quarter, coverage of one dose of MMR was 97.1%. Uptake of two doses of MMR was 90.5% this quarter, compared to 89.7%, last quarter. Uptake of two doses of MMR ranged by HB from 87.5% (Cardiff and Vale) to 92.4% (Abertawe Bro Morgannwg) and by LA from 84.7% (Pembrokeshire) to 95.9% (Blaenau Gwent) (Figures 1, 2 and 7, Tables 2, 6 and 7).
 11. Uptake of the “4 in 1” DTaP/IPV⁴ pre-school booster in children reaching their fifth birthday remained stable at 93.0% this quarter compared to 92.7% in the previous quarter, ranging by HB from 90.6% (Hywel Dda) to 95.8% (Betsi Cadwaladr) and by LA from 88.6% (Pembrokeshire) to 98.2% (Anglesey). One of the seven HBs, and five of the 22 LAs achieved the 95% uptake target (Figure 8, Tables 2, 6 and 7).
 12. Uptake of the first dose of HPV vaccine for girls in the 2016-17 school year 8 group (turning 13 years of age during 01/09/16 to 31/08/17) is currently 85.2%. Coverage of the first dose in the 2016-17 school year 9 is currently 88.7% and uptake of the second dose in this age group is currently 81.3%. Timings of school vaccination sessions vary throughout the year and although vaccination sessions for girls in the 2016-17 school year 8 group (dose one) and 2016-17 school year 9 (dose two) would be mostly complete, some sessions and data-entry may have taken place after the data were extracted for this report. Coverage of a complete two dose course of HPV vaccine in 2016-17 school year 10 girls (girls reaching their 15th birthday during 01/09/16 to 31/08/17) is currently 87.2% (Table 8).
 13. The MenACWY conjugate vaccine was introduced in September 2015 replacing the single antigen meningococcal C teenage booster that was previously given to children in school year 9 [1]. A phased catch up campaign was also introduced for older children with those aged 16 years (school year 11) being vaccinated in school and those aged 17 to 19 being vaccinated in general practice.
 - Current uptake of the MenACWY vaccine in the 2016-17 school year 9 routine cohort is 82.5% (Table 9 and Table 10).
 - Coverage in the in the 2016-17 school year 10 group, the first school year 9 routine cohort to be offered the new vaccine, is currently 80.9% (Table 9 and Table 11).
 - Current uptake of the MenACWY vaccine in the 2016-17 school year 11 catch-up cohort is 79.8% (Table 9 and Table 12).
 - Coverage in the in the 2016-17 school year 12 group, the first catch-up cohort to be offered the new vaccine in Year 11, is currently 78.3% (Table 9).
 14. Uptake of the Td/IPV⁵ teenage booster in the 2016-17 school year 9 group (children reaching 14 years of age) was 81.9%. Coverage of two doses of MMR in this year group was 88.2% and coverage of one dose was 93.1%. Coverage of two doses of MMR vaccine ranged by HB from 78.5% (Powys) to 90.6% (Betsi Cadwaladr). Coverage of a full course (two doses of MMR) of immunisation against rubella in 14 year old girls in this school year group was 88.6% (Table 10).
 15. Coverage of the Td/IPV teenage booster in the 2016-17 school year 10 group (children reaching 15 years of age) was 83.6%. Coverage ranged by HB from 73.6% (Cardiff and Vale) to 91.3% (Cwm Taf). Coverage of two doses of MMR in this year group was 87.5% and coverage of one dose was 92.7%. Coverage of two doses of MMR vaccine ranged by HB from 82.7% (Powys) to 90.5% (Betsi Cadwaladr). Coverage of a full course (two doses of MMR) of immunisation against rubella in 15 year old girls in this school year group was currently 88.2% (Table 11).
 16. Coverage of the Td/IPV teenage booster in the 2016-17 school year 11 group (children reaching 16 years of age) was 84.9%. Coverage ranged by HB from 76.8% (Cardiff and Vale) to 91.8% (Cwm Taf). Coverage of two doses of MMR in this year group was 88.3%

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

and coverage of one dose was 93.4%. Coverage of two doses of MMR vaccine ranged by HB from 83.2% (Powys) to 90.1% (Betsi Cadwaladr). Coverage of a full course (two doses of MMR) of immunisation against rubella in 16 year old girls in this school year group was 89.1% (Table 12).

17. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st July 2017 and 30th September 2017) increased to 87.9% this quarter, compared to 88.6% for the previous quarter. Coverage of one dose of MMR was 93.2% this quarter, compared to 93.3% last quarter. Coverage of a full course (two doses of MMR) of immunisation against rubella in 16 year old girls this quarter was 88.9% this quarter compared to 89.5% last quarter. National coverage of the Td/IPV teenage booster in children reaching 16 years of age decreased to 83.8% this quarter, compared to 85.2% last quarter (Figures 1 and 2, Tables 2 and 13).
18. Uptake of BCG⁶ immunisation is presented in Table 14. These data are based on BCG immunisations recorded in the National Community Child Health Database. BCG immunisation has been received by 4.2%, 7.3%, 6.4% and 4.5% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter two of 2017. This quarter Newport LA had the highest proportions of children given BCG by both one year of age (13.3%) and Cardiff LA by two years of age (20.6%).
19. 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 81.3%. Uptake of four doses of hepatitis B vaccine in children who were at risk of perinatal infection and reached their second birthday this quarter was 76.5%. 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 93.3%. Proportions should be interpreted with caution as small numbers of babies require hepatitis B immunisation.⁶

⁶BCG protects against tuberculosis infection. Numbers of eligible children for BCG are not known.

Comment

Uptake of all routine primary immunisations in infants reaching their first birthday this quarter remains at 95% or higher, excluding rotavirus (which can't be given beyond 24 weeks of age). This is the first quarterly COVER report to include uptake figures for the third scheduled dose of meningococcal group B vaccine at two years of age, and uptake is 94%. All babies born in Wales from 1st August 2017 will have been eligible for hepatitis B immunisation, as part of the hexavalent primary vaccination offered at two, three and four months of age [1]. Uptake of the new hexavalent vaccine will be reported one year from now, when these babies have reached their first birthday.

National uptake of MMR vaccination in two year olds remains slightly below 95% again this quarter, reaching 95% in four of the seven HBs. There has been a generally decreasing trend in uptake of routine immunisations in four and five year olds over the past two years, with variation seen at Health Board and Local Authority levels. Uptake of two doses of MMR vaccine remains the lowest of all vaccinations included in this composite measure.

In September 2017, the World Health Organisation announced that the United Kingdom is now one of 33 countries in Europe to have eliminated endemic transmission of measles [2]. This means that ongoing transmission of the virus has been successfully interrupted in the UK for 36 consecutive months. Whilst this is excellent news, there remain a large number of children in Wales who have not received MMR vaccination and are susceptible to measles infection either following exposure through travel or from those returning from areas experiencing outbreaks.

The outbreak of measles in the Newport and Torfaen areas of Aneurin Bevan HB which had been ongoing since May 2017 was declared over in September 2017. A total of 21 cases were reported (17 of whom were confirmed). Cases were mainly school-aged children and teenagers, however there were cases in younger children and adults. The outbreak was caused by the same genotype of measles which has caused large outbreaks elsewhere in Europe during 2017. School-based catch-up vaccination sessions were organised in response to the outbreak and more than 1,200 vaccines were administered, with additional catch-up vaccinations delivered by primary care [3]. Routine checking of MMR status on entry to school, including in children who begin or change school during the school-year and catch-up remain an important component of avoiding future outbreaks of measles.

Uptake of MenACWY vaccine in last year's routine Year 9 cohort (current 2016-17 school year 10) and last year's catch-up Year 11 cohort (current 2016-17 school year 12) remain stable this quarter at 81% and 78% respectively. Vaccination sessions for 2016-17 school year 9 and 11 groups have been completed in all areas, and are currently 83% and 80% respectively. Uptake of the MenACWY vaccine in age groups vaccinated in General Practice (now aged 18, 19 and 20 years of age), remains low at 37.4%, 40% and 41% respectively as at 08/08/2017 [4].

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] World Health Organization (2017). Sixth Meeting of the European Regional Verification Commission for Measles and Rubella Elimination (RVC). http://www.euro.who.int/_data/assets/pdf_file/0019/348013/6th-RVC-final-for-web-posting.pdf?ua=1
- [3] Currie Jonny, Davies Llion, McCarthy Joanne, Perry Malorie, Moore Catherine, Cottrell Simon, Bowley Mererid, Williams Chris, Shankar Ananda Giri, Stiff Rhianwen. (2017) Measles outbreak linked to European B3 outbreaks, Wales, United Kingdom. Eurosurveillance <http://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2017.22.42.17-00673>
- [4] 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>

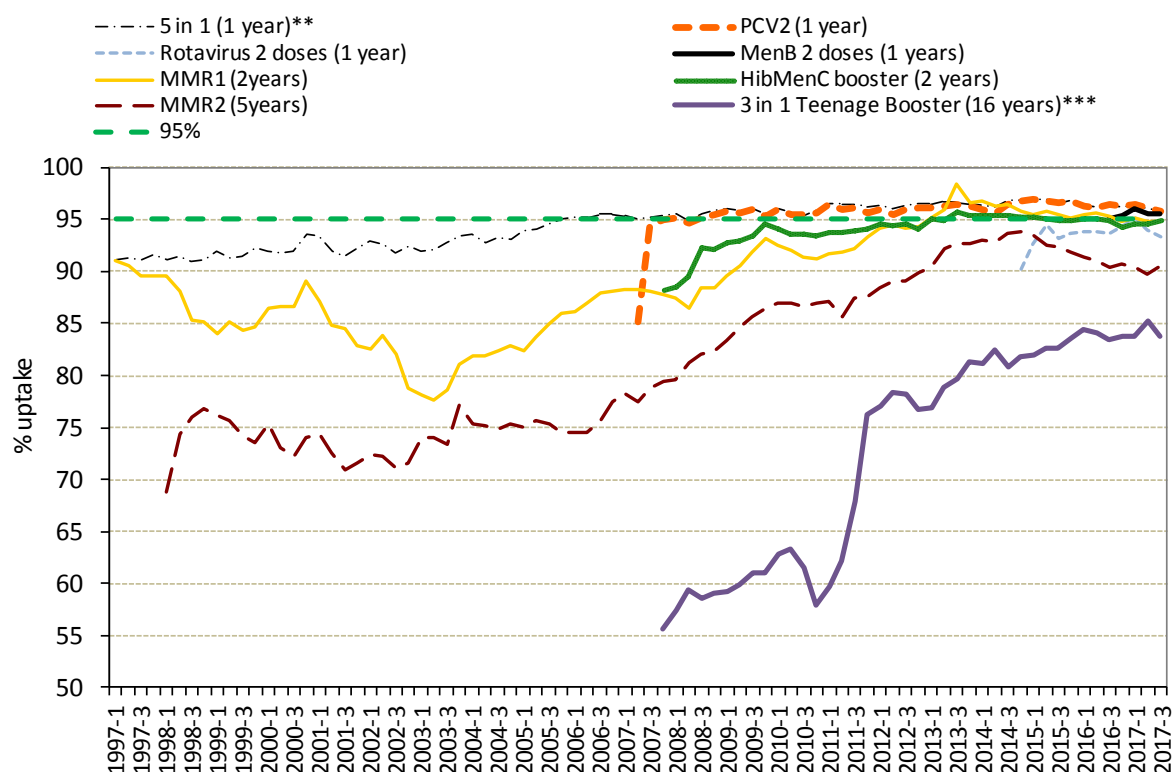
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

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.

Suggested citation for this report: Public Health Wales Health Protection Division. Vaccine uptake in Children in Wales, July to September 2017: COVER report 124, August 2017. 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 3 2017*. Data are for children reaching 1 year of age each quarter for '5 in 1', MenB (two doses), Rotavirus (two doses) and pneumococcal conjugate vaccine (PCV2), children reaching 2 years of age for MMR1 (first dose) and the Hib/MenC booster, 5 years of age for MMR2 (second dose) and 16 years of age for the '3 in 1' teenage booster*



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

** Uptake of pertussis used as proxy

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

Figure 2. Summary of uptake rates for selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/07/17 and 30/09/17 and resident on 30/09/17.

All Wales Summary - COVER124

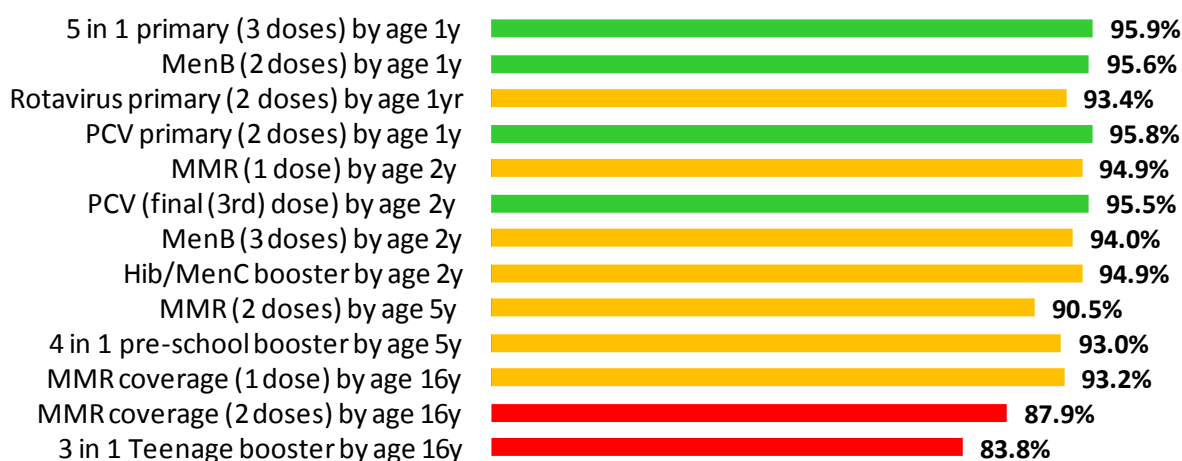


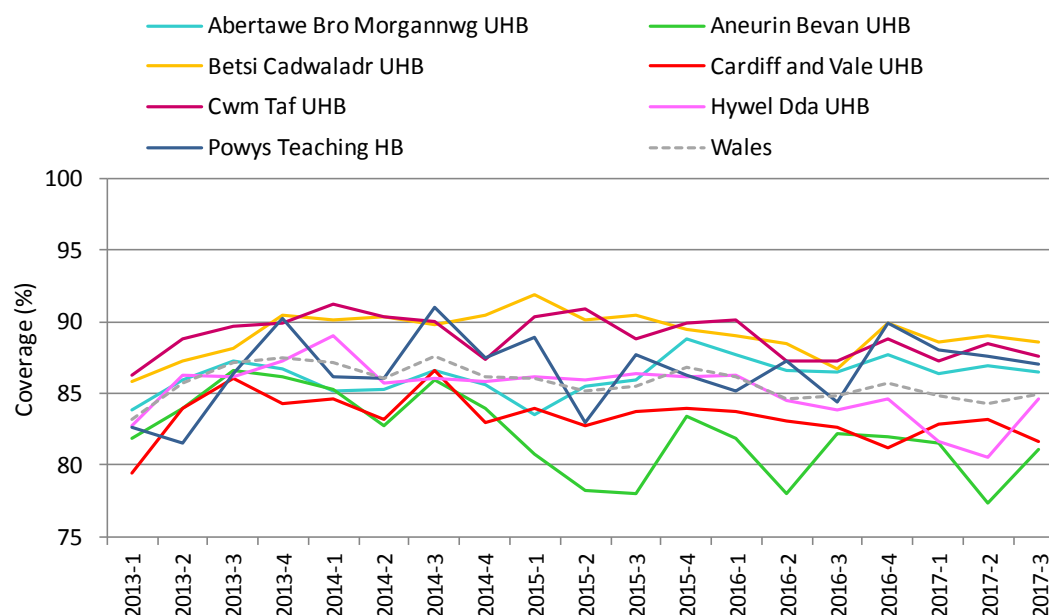
Figure 3. Percentage uptake of resident children reaching their 4th birthday between 01/07/17 and 30/09/17 and are up to date with all scheduled vaccines⁷ by Health Board.



Table 1. Percentages of resident children reaching their 4th birthday during quarter 3 2016 to quarter 3 2017 who are up to date with all scheduled vaccines⁷, by Health Board.

Area	Up to date in schedule				
	2016-3	2016-4	2017-1	2017-2	2017-3
Abertawe Bro Morgannwg UHB	86.4	87.7	86.4	87.0	86.5
Aneurin Bevan UHB	82.2	81.9	81.5	77.3	81.1
Betsi Cadwaladr UHB	86.7	89.9	88.6	89.0	88.6
Cardiff and Vale UHB	82.7	81.2	82.9	83.3	81.7
Cwm Taf UHB	87.3	88.8	87.3	88.5	87.6
Hywel Dda UHB	83.8	84.6	81.6	80.5	84.7
Powys Teaching HB	84.4	89.9	88.0	87.5	87.1
Wales	84.8	85.7	84.9	84.3	84.9

Figure 4. Trends in the percentages of children reaching their 4th birthday who are up to date with all scheduled vaccines⁷, by Health Board*.



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

⁷Completed "4 in 1" preschool booster, the Hib/MenC booster and second MMR dose by four years of age. The calculation method for proportions of children up to date with routine immunisation by four years of age was

Figure 5. Uptake of “5 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/07/17 and 30/09/17.

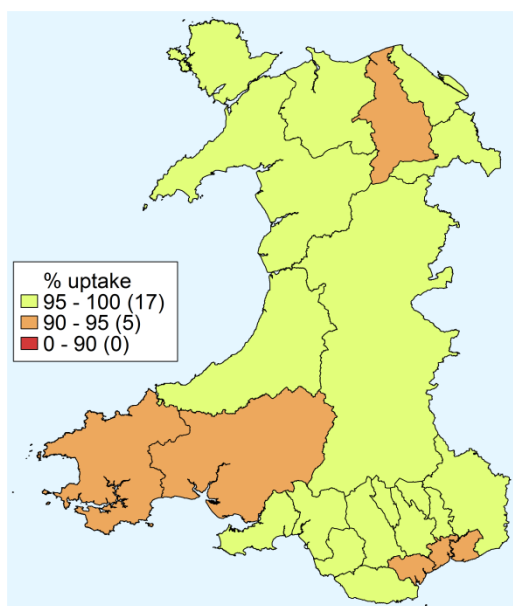


Figure 6. Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/07/17 and 30/09/17.

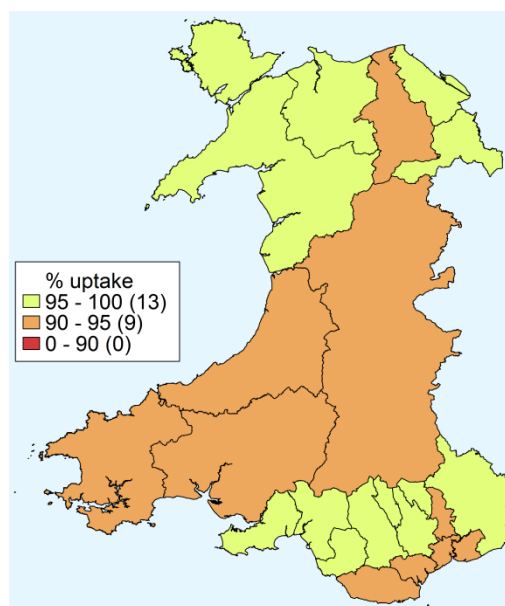


Figure 7. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/07/17 and 30/09/17.

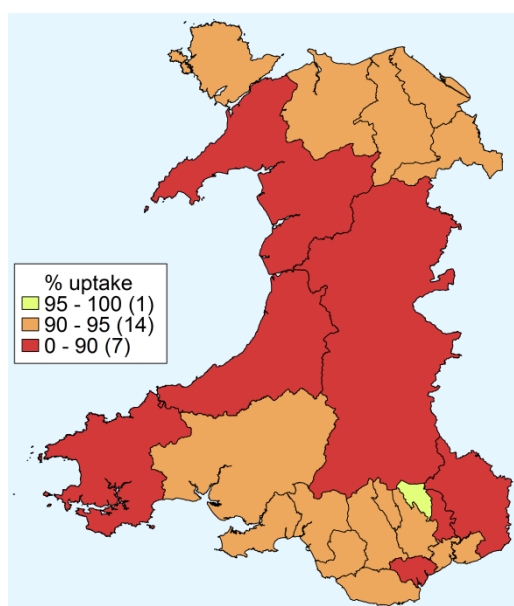


Figure 8. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/07/17 and 30/09/17.

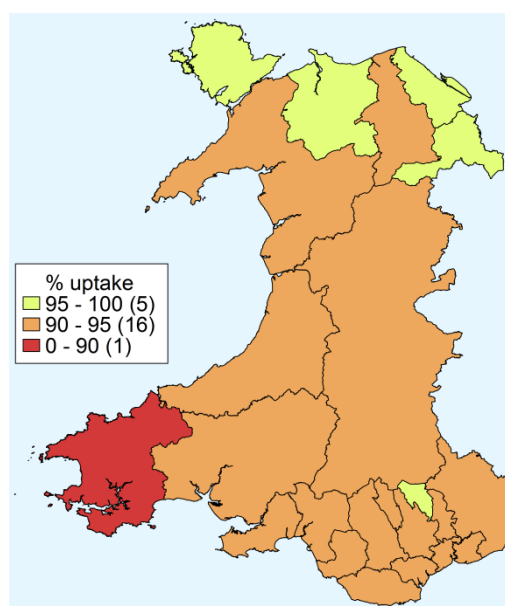


Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/07/17 and 30/09/17 and resident on 30/09/17.

Area	Age 1 year					Age 2 years					Age 4 years		Age 5 years			Age 16 years				
	Resident children (n)	5 in 1 ¹	MenB ²	PCV2	Rotavirus	Resident children (n)	MMR1	PCV ³	MenB ⁴	Hib/MenC	Resident Children (n)	Up to date in schedule ⁵	Resident children (n)	MMR2	4 in 1 ¹	Resident children (n)	MMR1	MMR2	MenACWY	3 in 1 Teenage booster ⁶
Abertawe Bro Morgannwg UHB																				
Bridgend LA	400	95.8	95.8	96.0	93.8	432	96.1	95.8	95.1	95.6	437	90.6	417	93.8	90.9	419	94.7	91.2	85.9	89.7
Neath Port Talbot LA	391	96.4	95.9	96.2	94.6	378	95.2	97.1	96.0	96.6	424	84.9	387	91.2	91.7	363	94.5	89.5	87.3	89.3
Swansea LA	632	95.9	95.6	96.0	92.9	672	95.4	96.9	95.1	96.1	669	84.8	746	92.2	92.4	664	91.9	85.5	84.6	86.3
Health Board Total	1423	96.0	95.7	96.1	93.6	1482	95.5	96.6	95.3	96.1	1530	86.5	1550	92.4	91.8	1446	93.4	88.2	85.7	88.0
Aneurin Bevan UHB																				
Blaenau Gwent LA	178	96.6	97.2	97.2	92.1	176	97.7	98.3	98.3	97.2	197	79.2	194	95.9	96.4	160	91.9	89.4	81.9	81.9
Caerphilly LA	535	96.8	96.6	96.8	94.2	544	96.3	96.7	95.8	96.1	566	87.8	542	92.8	93.9	506	95.3	91.7	84.4	84.6
Monmouthshire LA	192	96.4	94.3	96.4	90.6	236	95.3	95.3	94.1	95.8	222	86.5	241	88.8	92.9	266	86.1	77.8	76.3	78.9
Newport LA	496	94.2	94.8	95.4	90.1	555	94.8	95.5	93.7	94.1	511	70.5	524	91.4	92.2	462	93.1	86.1	80.3	83.3
Torfaen LA	260	97.7	97.7	98.1	93.1	266	94.4	95.9	94.0	95.5	325	83.7	293	88.7	91.1	253	96.8	91.7	83.0	88.9
Health Board Total	1661	96.1	96.0	96.6	92.2	1777	95.6	96.2	94.9	95.4	1821	81.1	1794	91.5	93.1	1647	93.1	87.7	81.5	83.7
Betsi Cadwaladr UHB																				
Anglesey LA	180	98.9	97.8	98.9	97.8	184	95.7	96.7	95.7	96.2	188	93.6	217	92.6	98.2	187	90.4	85.6	68.4	78.1
Conwy LA	274	96.4	96.4	96.7	93.4	269	95.5	96.3	95.9	95.2	293	85.7	301	91.4	95.7	299	93.3	88.6	79.3	83.3
Denbighshire LA	274	93.8	93.1	93.4	92.3	277	94.2	95.7	94.2	95.7	284	85.6	272	90.8	94.9	275	93.1	89.8	78.9	82.9
Flintshire LA	393	98.7	98.7	98.7	96.2	421	97.1	97.1	96.4	97.1	424	87.7	477	91.4	96.4	401	95.5	92.5	78.6	85.5
Gwynedd LA	280	96.4	96.1	96.4	92.9	310	96.1	96.5	95.2	95.8	321	90.3	359	88.0	94.7	328	94.5	90.2	73.8	85.7
Wrexham LA	385	96.4	96.4	96.6	93.2	370	97.0	97.6	96.2	96.8	414	89.9	446	92.2	95.7	349	94.6	92.3	77.4	85.1
Health Board Total	1786	96.8	96.5	96.8	94.2	1831	96.1	96.7	95.7	96.2	1924	88.6	2072	91.0	95.8	1839	93.9	90.3	76.6	84.0
Cardiff and Vale UHB																				
Cardiff LA	1078	93.9	92.9	93.0	91.2	1178	92.5	93.0	89.5	92.2	1146	80.9	1131	86.6	91.2	929	91.5	84.9	55.5	71.7
Vale of Glamorgan LA	365	97.0	96.7	95.6	93.4	350	92.0	92.9	90.9	92.3	395	84.1	359	90.5	93.6	335	92.5	85.4	52.5	81.2
Health Board Total	1443	94.7	93.8	93.7	91.8	1528	92.4	92.9	89.8	92.2	1541	81.7	1490	87.5	91.8	1264	91.8	85.0	54.7	74.2
Cwm Taf UHB																				
Merthyr Tydfil LA	192	97.4	97.9	97.4	96.4	218	96.8	96.8	97.2	96.8	171	91.2	195	92.8	93.8	170	92.4	86.5	84.1	89.4
Rhondda Cynon Taf LA	718	98.1	97.9	97.9	96.8	707	96.6	97.3	96.0	96.2	729	86.7	762	92.1	92.9	658	94.8	86.8	87.1	89.5
Health Board Total	910	97.9	97.9	97.8	96.7	925	96.6	97.2	96.3	96.3	900	87.6	957	92.3	93.1	828	94.3	86.7	86.5	89.5
Hywel Dda UHB																				
Cardiff and Vale UHB	492	93.1	92.7	92.7	92.5	488	93.2	94.1	92.8	93.2	505	85.9	526	90.5	90.7	512	92.8	90.6	85.5	90.6
Ceredigion LA	163	95.1	93.9	94.5	91.4	172	93.6	93.6	93.0	93.6	200	86.5	178	89.9	94.4	160	94.4	89.4	83.1	86.9
Pembrokeshire LA	306	93.8	93.8	94.1	94.8	342	90.6	91.2	89.8	89.8	293	81.2	359	84.7	88.6	287	95.1	88.9	67.2	78.7
Health Board Total	961	93.7	93.2	93.4	93.0	1002	92.4	93.0	91.8	92.1	998	84.7	1063	88.4	90.6	959	93.7	89.9	79.7	86.4
Powys Teaching UHB																				
Unknown	318	97.2	96.2	96.9	94.7	284	94.7	95.4	94.7	95.8	302	87.1	342	88.0	92.1	335	91.6	83.6	82.4	80.3
Wales Total	8513	95.9	95.6	95.8	93.4	8837	94.9	95.5	94.0	94.9	9038	84.9	9283	90.5	93.0	8356	93.2	87.9	77.4	83.8

¹ Uptake of pertussis used as proxy

² Uptake of two doses of meningococcal serogroup B (MenB) vaccine, scheduled at two and four months of age

³ Children receiving the final dose of PCV

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

⁵ 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 01/07/17 and 30/09/17 and resident on 30/09/17.

Area	Resident children		D3	T3		P3		Po3		Hib3		MMR1		Rotavirus		PCV2 ¹		Men B ²		HibMenC	
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Bridgend LA	400	383	95.8	383	95.8	383	95.8	383	95.8	383	95.8	0	0.0	375	93.8	384	96.0	383	95.8	0	0.0
Neath Port Talbot LA	391	377	96.4	377	96.4	377	96.4	377	96.4	377	96.4	0	0.0	370	94.6	376	96.2	375	95.9	0	0.0
Swansea LA	632	606	95.9	606	95.9	606	95.9	606	95.9	606	95.9	1	0.2	587	92.9	607	96.0	604	95.6	1	0.2
Health Board Total	1423	1366	96.0	1366	96.0	1366	96.0	1366	96.0	1366	96.0	1	0.1	1332	93.6	1367	96.1	1362	95.7	1	0.1
<u>Aneurin Bevan University HB</u>																					
Blaenau Gwent LA	178	173	97.2	172	96.6	172	96.6	172	96.6	172	96.6	0	0.0	164	92.1	173	97.2	173	97.2	0	0.0
Caerphilly LA	535	518	96.8	518	96.8	518	96.8	518	96.8	518	96.8	0	0.0	504	94.2	518	96.8	517	96.6	0	0.0
Monmouthshire LA	192	185	96.4	185	96.4	185	96.4	185	96.4	185	96.4	1	0.5	174	90.6	185	96.4	181	94.3	1	0.5
Newport LA	496	467	94.2	467	94.2	467	94.2	467	94.2	467	94.2	2	0.4	447	90.1	473	95.4	470	94.8	0	0.0
Torfaen LA	260	254	97.7	254	97.7	254	97.7	254	97.7	254	97.7	0	0.0	242	93.1	255	98.1	254	97.7	0	0.0
Health Board Total	1661	1597	96.1	1596	96.1	1596	96.1	1596	96.1	1596	96.1	3	0.2	1531	92.2	1604	96.6	1595	96.0	1	0.1
<u>Betsi Cadwaladr University HB</u>																					
Anglesey LA	180	178	98.9	178	98.9	178	98.9	178	98.9	178	98.9	1	0.6	176	97.8	178	98.9	176	97.8	2	1.1
Conwy LA	274	264	96.4	264	96.4	264	96.4	264	96.4	264	96.4	2	0.7	256	93.4	265	96.7	264	96.4	2	0.7
Denbighshire LA	274	257	93.8	257	93.8	257	93.8	257	93.8	257	93.8	1	0.4	253	92.3	256	93.4	255	93.1	1	0.4
Flintshire LA	393	388	98.7	388	98.7	388	98.7	388	98.7	388	98.7	3	0.8	378	96.2	388	98.7	388	98.7	1	0.3
Gwynedd LA	280	270	96.4	270	96.4	270	96.4	270	96.4	270	96.4	2	0.7	260	92.9	270	96.4	269	96.1	3	1.1
Wrexham LA	385	371	96.4	371	96.4	371	96.4	371	96.4	371	96.4	1	0.3	359	93.2	372	96.6	371	96.4	0	0.0
Health Board Total	1786	1728	96.8	1728	96.8	1728	96.8	1728	96.8	1728	96.8	10	0.6	1682	94.2	1729	96.8	1723	96.5	9	0.5
<u>Cardiff and Vale University HB</u>																					
Cardiff LA	1078	1012	93.9	1011	93.8	1012	93.9	1011	93.8	1011	93.8	10	0.9	983	91.2	1003	93.0	1001	92.9	5	0.5
Vale of Glamorgan LA	365	354	97.0	354	97.0	354	97.0	354	97.0	354	97.0	2	0.5	341	93.4	349	95.6	353	96.7	1	0.3
Health Board Total	1443	1366	94.7	1365	94.6	1366	94.7	1365	94.6	1365	94.6	12	0.8	1324	91.8	1352	93.7	1354	93.8	6	0.4
<u>Cwm Taf University HB</u>																					
Merthyr Tydfil LA	192	187	97.4	187	97.4	187	97.4	187	97.4	187	97.4	1	0.5	185	96.4	187	97.4	188	97.9	1	0.5
Rhondda Cynon Taf LA	718	704	98.1	704	98.1	704	98.1	704	98.1	704	98.1	5	0.7	695	96.8	703	97.9	703	97.9	5	0.7
Health Board Total	910	891	97.9	891	97.9	891	97.9	891	97.9	891	97.9	6	0.7	880	96.7	890	97.8	891	97.9	6	0.7
<u>Hywel Dda University HB</u>																					
Cardiff LA	492	458	93.1	458	93.1	458	93.1	458	93.1	458	93.1	3	0.6	455	92.5	456	92.7	456	92.7	2	0.4
Ceredigion LA	163	155	95.1	155	95.1	155	95.1	155	95.1	155	95.1	0	0.0	149	91.4	154	94.5	153	93.9	0	0.0
Pembrokeshire LA	306	287	93.8	287	93.8	287	93.8	287	93.8	287	93.8	0	0.0	290	94.8	288	94.1	287	93.8	0	0.0
Health Board Total	961	900	93.7	900	93.7	900	93.7	900	93.7	900	93.7	3	0.3	894	93.0	898	93.4	896	93.2	2	0.2
<u>Powys Teaching HB</u>	318	309	97.2	309	97.2	309	97.2	309	97.2	309	97.2	2	0.6	301	94.7	308	96.9	306	96.2	2	0.6
Unknown	11	9	81.8	9	81.8	9	81.8	9	81.8	9	81.8	0	0.0	8	72.7	9	81.8	9	81.8	0	0.0
Wales Total	8513	8166	95.9	8164	95.9	8165	95.9	8164	95.9	8164	95.9	37	0.4	7952	93.4	8157	95.8	8136	95.6	27	0.3

¹ Full primary two dose course of pneumococcal conjugate vaccine.

² Uptake of two doses of meningococcal serogroup B (MenB) vaccine, scheduled at two and four months of age.

Table 4. Vaccine uptake in children reaching their 2nd birthday between 01/07/17 and 30/09/17 and resident on 30/09/17.

Area	Resident children	D3		T3		P3		Po3		Hib3		MMR1		MenC ¹		PCV2 ²		PCVf ³		Men B ⁴		HibMenC	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB																							
Bridgend LA	432	423	97.9	423	97.9	423	97.9	423	97.9	423	97.9	415	96.1	415	96.1	419	97.0	414	95.8	411	95.1	413	95.6
Neath Port Talbot LA	378	374	98.9	374	98.9	374	98.9	374	98.9	374	98.9	360	95.2	368	97.4	368	97.4	367	97.1	363	96.0	365	96.6
Swansea LA	672	653	97.2	653	97.2	653	97.2	653	97.2	653	97.2	641	95.4	638	94.9	646	96.1	651	96.9	639	95.1	646	96.1
Health Board Total	1482	1450	97.8	1450	97.8	1450	97.8	1450	97.8	1450	97.8	1416	95.5	1421	95.9	1433	96.7	1432	96.6	1413	95.3	1424	96.1
Aneurin Bevan University HB																							
Blaenau Gwent LA	176	175	99.4	175	99.4	175	99.4	175	99.4	175	99.4	172	97.7	174	98.9	174	98.9	173	98.3	173	98.3	171	97.2
Caerphilly LA	544	535	98.3	535	98.3	535	98.3	535	98.3	535	98.3	524	96.3	529	97.2	529	97.2	526	96.7	521	95.8	523	96.1
Monmouthshire LA	236	225	95.3	225	95.3	225	95.3	225	95.3	225	95.3	225	95.3	224	94.9	226	95.8	225	95.3	222	94.1	226	95.8
Newport LA	555	542	97.7	542	97.7	542	97.7	542	97.7	541	97.5	526	94.8	526	94.8	533	96.0	530	95.5	520	93.7	522	94.1
Torfaen LA	266	261	98.1	261	98.1	261	98.1	261	98.1	261	98.1	251	94.4	260	97.7	259	97.4	255	95.9	250	94.0	254	95.5
Health Board Total	1777	1738	97.8	1738	97.8	1738	97.8	1738	97.8	1737	97.7	1698	95.6	1713	96.4	1721	96.8	1709	96.2	1686	94.9	1696	95.4
Betsi Cadwaladr University HB																							
Anglesey LA	184	181	98.4	181	98.4	181	98.4	181	98.4	181	98.4	176	95.7	179	97.3	181	98.4	178	96.7	176	95.7	177	96.2
Conwy LA	269	263	97.8	263	97.8	263	97.8	263	97.8	263	97.8	257	95.5	261	97.0	256	95.2	259	96.3	258	95.9	256	95.2
Denbighshire LA	277	271	97.8	271	97.8	271	97.8	271	97.8	271	97.8	261	94.2	269	97.1	271	97.8	265	95.7	261	94.2	265	95.7
Flintshire LA	421	414	98.3	414	98.3	414	98.3	414	98.3	413	98.1	409	97.1	402	95.5	414	98.3	409	97.1	406	96.4	409	97.1
Gwynedd LA	310	301	97.1	301	97.1	301	97.1	301	97.1	301	97.1	298	96.1	284	91.6	296	95.5	299	96.5	295	95.2	297	95.8
Wrexham LA	370	363	98.1	363	98.1	363	98.1	363	98.1	363	98.1	359	97.0	357	96.5	359	97.0	361	97.6	356	96.2	358	96.8
Health Board Total	1831	1793	97.9	1793	97.9	1793	97.9	1793	97.9	1792	97.9	1760	96.1	1752	95.7	1777	97.1	1771	96.7	1752	95.7	1762	96.2
Cardiff and Vale University HB																							
Cardiff LA	1178	1131	96.0	1131	96.0	1131	96.0	1131	96.0	1129	95.8	1090	92.5	1107	94.0	1100	93.4	1095	93.0	1054	89.5	1086	92.2
Vale of Glamorgan LA	350	336	96.0	336	96.0	336	96.0	336	96.0	336	96.0	322	92.0	335	95.7	334	95.4	325	92.9	318	90.9	323	92.3
Health Board Total	1528	1467	96.0	1467	96.0	1467	96.0	1467	96.0	1465	95.9	1412	92.4	1442	94.4	1434	93.8	1420	92.9	1372	89.8	1409	92.2
Cwm Taf University HB																							
Merthyr Tydfil LA	218	216	99.1	216	99.1	216	99.1	216	99.1	216	99.1	211	96.8	215	98.6	214	98.2	211	96.8	212	97.2	211	96.8
Rhondda Cynon Taf LA	707	699	98.9	699	98.9	699	98.9	699	98.9	699	98.9	683	96.6	698	98.7	692	97.9	688	97.3	679	96.0	680	96.2
Health Board Total	925	915	98.9	915	98.9	915	98.9	915	98.9	915	98.9	894	96.6	913	98.7	906	97.9	899	97.2	891	96.3	891	96.3
Hywel Dda University HB																							
Cardiff and Vale LA	488	473	96.9	473	96.9	473	96.9	473	96.9	473	96.9	455	93.2	471	96.5	469	96.1	459	94.1	453	92.8	455	93.2
Ceredigion LA	172	166	96.5	166	96.5	166	96.5	166	96.5	165	95.9	161	93.6	160	93.0	162	94.2	161	93.6	160	93.0	161	93.6
Pembrokeshire LA	342	321	93.9	321	93.9	321	93.9	321	93.9	320	93.6	310	90.6	311	90.9	315	92.1	312	91.2	307	89.8	307	89.8
Health Board Total	1002	960	95.8	960	95.8	960	95.8	960	95.8	958	95.6	926	92.4	942	94.0	946	94.4	932	93.0	920	91.8	923	92.1
Powys Teaching HB	284	275	96.8	275	96.8	275	96.8	275	96.8	275	96.8	269	94.7	272	95.8	273	96.1	271	95.4	269	94.7	272	95.8
Unknown	8	8	100.0	8	100.0	8	100.0	8	100.0	8	100.0	7	87.5	8	100.0	8	100.0	7	87.5	6	75.0	7	87.5
Wales Total	8837	8606	97.4	8606	97.4	8606	97.4	8606	97.4	8600	97.3	8382	94.9	8463	95.8	8498	96.2	8441	95.5	8309	94.0	8384	94.9

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

² Full primary two dose course of pneumococcal conjugate vaccine.

³ Final (booster) dose of pneumococcal conjugate vaccine.

Table 5. Vaccine uptake in children reaching their 4th birthday between 01/07/17 and 30/09/17 and resident on 30/09/17. The proportion of children who have received all of these vaccines by their 4th birthday is also presented.

Area	Resident children	4 in 1 Preschool Booster ¹		HibMenC		MMR dose 2		Up to date in schedule ²	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB									
Bridgend LA	437	402	92.0	423	96.8	399	91.3	396	90.6
Neath Port Talbot LA	424	372	87.7	401	94.6	367	86.6	360	84.9
Swansea LA	669	590	88.2	632	94.5	572	85.5	567	84.8
Health Board Total	1530	1364	89.2	1456	95.2	1338	87.5	1323	86.5
Aneurin Bevan University HB									
Blaenau Gwent LA	197	161	81.7	191	97.0	157	79.7	156	79.2
Caerphilly LA	566	511	90.3	549	97.0	501	88.5	497	87.8
Monmouthshire LA	222	206	92.8	206	92.8	195	87.8	192	86.5
Newport LA	511	381	74.6	461	90.2	422	82.6	360	70.5
Torfaen LA	325	275	84.6	310	95.4	277	85.2	272	83.7
Health Board Total	1821	1534	84.2	1717	94.3	1552	85.2	1477	81.1
Betsi Cadwaladr University HB									
Anglesey LA	188	179	95.2	181	96.3	177	94.1	176	93.6
Conwy LA	293	256	87.4	277	94.5	252	86.0	251	85.7
Denbighshire LA	284	249	87.7	266	93.7	246	86.6	243	85.6
Flintshire LA	424	388	91.5	394	92.9	377	88.9	372	87.7
Gwynedd LA	321	301	93.8	304	94.7	293	91.3	290	90.3
Wrexham LA	414	381	92.0	397	95.9	373	90.1	372	89.9
Health Board Total	1924	1754	91.2	1819	94.5	1718	89.3	1704	88.6
Cardiff and Vale University HB									
Cardiff LA	1146	977	85.3	1062	92.7	954	83.2	927	80.9
Vale of Glamorgan LA	395	348	88.1	359	90.9	335	84.8	332	84.1
Health Board Total	1541	1325	86.0	1421	92.2	1289	83.6	1259	81.7
Cwm Taf University HB									
Merthyr Tydfil LA	171	159	93.0	166	97.1	156	91.2	156	91.2
Rhondda Cynon Taf LA	729	644	88.3	703	96.4	635	87.1	632	86.7
Health Board Total	900	803	89.2	869	96.6	791	87.9	788	87.6
Hywel Dda University HB									
Carmarthenshire LA	505	450	89.1	468	92.7	437	86.5	434	85.9
Ceredigion LA	200	184	92.0	189	94.5	176	88.0	173	86.5
Pembrokeshire LA	293	249	85.0	263	89.8	243	82.9	238	81.2
Health Board Total	998	883	88.5	920	92.2	856	85.8	845	84.7
Powys Teaching HB	302	279	92.4	278	92.1	264	87.4	263	87.1
Unknown	22	19	86.4	22	100.0	18	81.8	18	81.8
Wales Total	9038	7961	88.1	8502	94.1	7826	86.6	7677	84.9

¹ Uptake of acellular pertussis used as proxy

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

Table 6. Vaccine uptake in children reaching their 5th birthday between 01/07/17 and 30/09/17 and resident on 30/09/17. The proportion of children who have received all of these vaccines by their 5th birthday is also presented.

Area	Resident children	4 in 1 Preschool Booster ¹		HibMenCb		MMR dose 2		Up to date in schedule ²	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>									
Bridgend LA	417	379	90.9	401	96.2	391	93.8	370	88.7
Neath Port Talbot LA	387	355	91.7	360	93.0	353	91.2	337	87.1
Swansea LA	746	689	92.4	695	93.2	688	92.2	662	88.7
Health Board Total	1550	1423	91.8	1456	93.9	1432	92.4	1369	88.3
<u>Aneurin Bevan University HB</u>									
Blaenau Gwent LA	194	187	96.4	190	97.9	186	95.9	185	95.4
Caerphilly LA	542	509	93.9	521	96.1	503	92.8	495	91.3
Monmouthshire LA	241	224	92.9	219	90.9	214	88.8	212	88.0
Newport LA	524	483	92.2	477	91.0	479	91.4	452	86.3
Torfaen LA	293	267	91.1	281	95.9	260	88.7	255	87.0
Health Board Total	1794	1670	93.1	1688	94.1	1642	91.5	1599	89.1
<u>Betsi Cadwaladr University HB</u>									
Anglesey LA	217	213	98.2	203	93.5	201	92.6	199	91.7
Conwy LA	301	288	95.7	280	93.0	275	91.4	275	91.4
Denbighshire LA	272	258	94.9	254	93.4	247	90.8	245	90.1
Flintshire LA	477	460	96.4	439	92.0	436	91.4	432	90.6
Gwynedd LA	359	340	94.7	324	90.3	316	88.0	312	86.9
Wrexham LA	446	427	95.7	419	93.9	411	92.2	405	90.8
Health Board Total	2072	1986	95.8	1919	92.6	1886	91.0	1868	90.2
<u>Cardiff and Vale University HB</u>									
Cardiff LA	1131	1032	91.2	1021	90.3	979	86.6	952	84.2
Vale of Glamorgan LA	359	336	93.6	342	95.3	325	90.5	322	89.7
Health Board Total	1490	1368	91.8	1363	91.5	1304	87.5	1274	85.5
<u>Cwm Taf University HB</u>									
Merthyr Tydfil LA	195	183	93.8	184	94.4	181	92.8	175	89.7
Rhondda Cynon Taf LA	762	708	92.9	729	95.7	702	92.1	685	89.9
Health Board Total	957	891	93.1	913	95.4	883	92.3	860	89.9
<u>Hywel Dda University HB</u>									
Carmarthenshire LA	526	477	90.7	482	91.6	476	90.5	457	86.9
Ceredigion LA	178	168	94.4	161	90.4	160	89.9	158	88.8
Pembrokeshire LA	359	318	88.6	326	90.8	304	84.7	299	83.3
Health Board Total	1063	963	90.6	969	91.2	940	88.4	914	86.0
<u>Powys Teaching HB</u>	342	315	92.1	305	89.2	301	88.0	293	85.7
Unknown	15	14	93.3	14	93.3	14	93.3	14	93.3
Wales Total	9283	8630	93.0	8627	92.9	8402	90.5	8191	88.2

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 01/07/17 and 30/09/17 and resident on 30/09/17.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC ¹	PCVf ²	HibMenC	MMR1	MMR2	D4	T4	aP	Po4															
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)															
Bridgend LA	417	404	96.9	404	96.9	404	96.9	404	96.9	404	96.9	394	94.5	398	95.4	401	96.2	408	97.8	391	93.8	379	90.9	379	90.9	379	90.9	379	90.9	
Neath Port Talbot LA	387	370	95.6	370	95.6	370	95.6	370	95.6	370	95.6	360	93.0	359	92.8	360	93.0	380	98.2	353	91.2	355	91.7	355	91.7	355	91.7	355	91.7	
Swansea LA	746	696	93.3	696	93.3	696	93.3	696	93.3	696	93.3	677	90.8	686	92	695	93.2	718	96.2	688	92.2	689	92.4	689	92.4	689	92.4	689	92.4	
Health Board Total	1550	1470	94.8	1470	94.8	1470	94.8	1470	94.8	1470	94.8	1431	92.3	1443	93.1	1456	93.9	1506	97.2	1432	92.4	1423	91.8	1423	91.8	1423	91.8	1423	91.8	
<u>Aneurin Bevan University HB</u>																														
Blaenau Gwent LA	194	191	98.5	191	98.5	191	98.5	191	98.5	191	98.5	187	96.4	190	97.9	190	97.9	194	100.0	186	95.9	187	96.4	187	96.4	187	96.4	187	96.4	
Caerphilly LA	542	532	98.2	532	98.2	532	98.2	532	98.2	531	98.0	525	96.9	523	96.5	521	96.1	534	98.5	503	92.8	509	93.9	509	93.9	509	93.9	509	93.9	
Monmouthshire LA	241	222	92.1	222	92.1	222	92.1	222	92.1	222	92.1	218	90.5	219	90.9	219	90.9	227	94.2	214	88.8	224	92.9	224	92.9	224	92.9	224	92.9	
Newport LA	524	487	92.9	487	92.9	487	92.9	487	92.9	487	92.9	466	88.9	481	91.8	477	91.0	513	97.9	479	91.4	483	92.2	483	92.2	483	92.2	484	92.4	
Torfaen LA	293	284	96.9	284	96.9	284	96.9	283	96.6	284	96.9	279	95.2	279	95.2	281	95.9	289	98.6	260	88.7	267	91.1	267	91.1	267	91.1	267	91.1	
Health Board Total	1794	1716	95.7	1716	95.7	1716	95.7	1715	95.6	1715	95.6	1675	93.4	1692	94.3	1688	94.1	1757	97.9	1642	91.5	1670	93.1	1670	93.1	1670	93.1	1671	93.1	
<u>Betsi Cadwaladr University HB</u>																														
Anglesey LA	217	202	93.1	202	93.1	202	93.1	202	93.1	202	93.1	197	90.8	205	94.5	203	93.5	215	99.1	201	92.6	213	98.2	213	98.2	213	98.2	213	98.2	
Conwy LA	301	284	94.4	284	94.4	284	94.4	284	94.4	284	94.4	276	91.7	276	91.7	280	93.0	293	97.3	275	91.4	288	95.7	288	95.7	288	95.7	288	95.7	
Denbighshire LA	272	258	94.9	258	94.9	258	94.9	257	94.5	258	94.9	247	90.8	252	92.6	254	93.4	262	96.3	247	90.8	258	94.9	258	94.9	258	94.9	258	94.9	
Flintshire LA	477	436	91.4	436	91.4	436	91.4	436	91.4	436	91.4	427	89.5	437	91.6	439	92.0	464	97.3	436	91.4	460	96.4	460	96.4	460	96.4	460	96.4	
Gwynedd LA	359	325	90.5	325	90.5	325	90.5	325	90.5	325	90.5	319	88.9	317	88.3	324	90.3	347	96.7	316	88.0	340	94.7	340	94.7	340	94.7	340	94.7	
Wrexham LA	446	423	94.8	423	94.8	423	94.8	423	94.8	423	94.8	416	93.3	419	93.9	419	93.9	439	98.4	411	92.2	427	95.7	427	95.7	427	95.7	427	95.7	
Health Board Total	2072	1928	93.1	1928	93.1	1928	93.1	1927	93.0	1928	93.1	1882	90.8	1906	92	1919	92.6	2020	97.5	1886	91.0	1986	95.8	1986	95.8	1986	95.8	1986	95.8	
<u>Cardiff and Vale University HB</u>																														
Cardiff LA	1131	1030	91.1	1030	91.1	1030	91.1	1030	91.1	1027	90.8	979	86.6	1000	88.4	1021	90.3	1092	96.6	979	86.6	1033	91.3	1033	91.3	1032	91.2	1033	91.3	
Vale of Glamorgan LA	359	337	93.9	337	93.9	337	93.9	337	93.9	337	93.9	333	92.8	337	93.9	342	95.3	354	98.6	325	90.5	336	93.6	336	93.6	336	93.6	336	93.6	
Health Board Total	1490	1367	91.7	1367	91.7	1367	91.7	1367	91.7	1364	91.5	1312	88.1	1337	89.7	1363	91.5	1446	97.0	1304	87.5	1369	91.9	1369	91.9	1368	91.8	1369	91.9	
<u>Cwm Taf University HB</u>																														
Merthyr Tydfil LA	195	190	97.4	190	97.4	190	97.4	190	97.4	190	97.4	185	94.9	189	96.9	184	94.4	189	96.9	181	92.8	183	93.8	183	93.8	183	93.8	183	93.8	
Rhondda Cynon Taf LA	762	743	97.5	744	97.6	743	97.5	744	97.6	744	97.6	730	95.8	732	96.1	729	95.7	744	97.6	702	92.1	708	92.9	708	92.9	708	92.9	708	92.9	
Health Board Total	957	933	97.5	934	97.6	933	97.5	934	97.6	934	97.6	915	95.6	921	96.2	913	95.4	933	97.5	883	92.3	891	93.1	891	93.1	891	93.1	891	93.1	
<u>Hywel Dda University HB</u>																														
Carmarthenshire LA	526	498	94.7	498	94.7	498	94.7	498	94.7	498	94.7	482	91.6	479	91.1	482	91.6	503	95.6	476	90.5	477	90.7	477	90.7	477	90.7	477	90.7	
Ceredigion LA	178	163	91.6	163	91.6	163	91.6	162	91.0	162	91.0	160	89.9	161	90.4	161	90.4	170	95.5	160	89.9	168	94.4	168	94.4	168	94.4	168	94.4	
Pembrokeshire LA	359	329	91.6	329	91.6	329	91.6	329	91.6	329	91.6	318	88.6	323	90	326	90.8	340	94.7	304	84.7	318	88.6	318	88.6	318	88.6	318	88.6	
Health Board Total	1063	990	93.1	990	93.1	990	93.1	989	93.0	989	93.0	960	90.3	963	90.6	969	91.2	1013	95.3	940	88.4	963	90.6	963	90.6	963	90.6	963	90.6	
<u>Powys Teaching HB</u>																														
Unknown	15	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	14	93.3	
Wales Total	9283	8726	94.0	8727	94.0	8726	94.0	8725	94.0	8722	94.0	8489	91.4	8580	92.4	8627	92.9	9014	97.1	8402	90.5	8631	93.0	8631	93.0	8630	93.0	8632	93.0	

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

² Final (booster) dose of pneumococcal conjugate vaccine

Table 8. Uptake of HPV vaccine in girls reaching 13, 14 and 15 years of age between 01/09/16 and 31/08/17 and resident on 30/09/17.

Area	13 years (2016-17 School Year 8) ¹			14 years (2016-17 School Year 9) ¹					15 years (2016-17 School Year 10) ²				
	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	813	728	89.5	782	728	93.1	678	86.7	740	693	93.6	670	90.5
Neath Port Talbot LA	743	677	91.1	701	649	92.6	593	84.6	718	680	94.7	657	91.5
Swansea LA	1229	1082	88.0	1243	1133	91.2	1025	82.5	1226	1153	94.0	1126	91.8
Health Board Total	2785	2487	89.3	2726	2510	92.1	2296	84.2	2684	2526	94.1	2453	91.4
<u>Aneurin Bevan University HB</u>													
Blaenau Gwent LA	373	306	82.0	321	289	90.0	263	81.9	373	351	94.1	337	90.3
Caerphilly LA	1017	849	83.5	981	835	85.1	813	82.9	947	892	94.2	839	88.6
Monmouthshire LA	524	376	71.8	544	451	82.9	403	74.1	513	414	80.7	388	75.6
Newport LA	894	675	75.5	903	758	83.9	626	69.3	927	798	86.1	742	80.0
Torfaen LA	483	387	80.1	479	426	88.9	382	79.7	491	449	91.4	425	86.6
Health Board Total	3291	2593	78.8	3228	2759	85.5	2487	77.0	3251	2904	89.3	2731	84.0
<u>Betsi Cadwaladr University HB</u>													
Anglesey LA	344	293	85.2	347	313	90.2	276	79.5	361	326	90.3	296	82.0
Conwy LA	565	495	87.6	546	492	90.1	447	81.9	546	498	91.2	472	86.4
Denbighshire LA	498	418	83.9	465	422	90.8	379	81.5	487	443	91.0	423	86.9
Flintshire LA	801	687	85.8	732	665	90.8	632	86.3	794	743	93.6	687	86.5
Gwynedd LA	545	475	87.2	554	500	90.3	479	86.5	554	492	88.8	480	86.6
Wrexham LA	708	588	83.1	681	591	86.8	536	78.7	649	586	90.3	551	84.9
Health Board Total	3461	2956	85.4	3325	2983	89.7	2749	82.7	3391	3190	94.1	3004	88.6
<u>Cardiff and Vale University HB</u>													
Cardiff LA	1880	1571	83.6	1849	1574	85.1	1417	76.6	1732	1492	86.1	1409	81.4
Vale of Glamorgan LA	726	644	88.7	703	628	89.3	563	80.1	661	604	91.4	563	85.2
Health Board Total	2606	2215	85.0	2552	2202	86.3	1980	77.6	2393	2096	87.6	1972	82.4
<u>Cwm Taf University HB</u>													
Merthyr Tydfil LA	323	287	88.9	333	307	92.2	288	86.5	287	267	93.0	263	91.6
Rhondda Cynon Taf LA	1303	1178	90.4	1387	1301	93.8	1221	88.0	1231	1174	95.4	1153	93.7
Health Board Total	1626	1465	90.1	1720	1608	93.5	1509	87.7	1518	1441	94.9	1416	93.3
<u>Hywel Dda University HB</u>													
Cardiff LA	958	851	88.8	986	896	90.9	830	84.2	937	855	91.2	843	90.0
Ceredigion LA	322	278	86.3	294	252	85.7	244	83.0	297	262	88.2	258	86.9
Pembrokeshire LA	638	534	83.7	617	521	84.4	483	78.3	538	461	85.7	446	82.9
Health Board Total	1918	1663	86.7	1897	1669	88.0	1557	82.1	1772	1578	89.1	1547	87.3
<u>Powys Teaching HB</u>	656	545	83.1	651	554	85.1	514	79.0	617	531	86.1	509	82.5
Unknown	55	45	81.8	47	40	85.1	38	80.9	52	46	88.5	43	82.7
Wales Total	16398	13969	85.2	16146	14325	88.7	13130	81.3	15678	14312	91.3	13675	87.2

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

² Represents the first school year 8 group (2014-15) to receive the two dose HPV schedule.

Table 9. Uptake of Men ACWY vaccine in teenagers reaching 14, 15, 16 and 17 years of age between 01/09/16 and 31/08/17 and resident on 30/09/17.

Area	14 years (2016-17 School Year 9) ¹			15 years (2016-17 School Year 10)			16 years (2016-17 School Year 11) ¹			17 years (2016-17 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	1562	1384	88.6	1521	1370	90.1	1679	1443	85.9	1556	1352	86.9
Neath Port Talbot LA	1430	1276	89.2	1467	1346	91.8	1522	1292	84.9	1513	1274	84.2
Swansea LA	2608	2299	88.2	2501	2225	89.0	2564	2169	84.6	2652	2187	82.5
Health Board Total	5600	4959	88.6	5489	4941	90.0	5765	4904	85.1	5721	4813	84.1
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	687	583	84.9	696	624	89.7	737	605	82.1	767	605	78.9
Caerphilly LA	2090	1752	83.8	2023	1737	85.9	2026	1644	81.1	2124	1631	76.8
Monmouthshire LA	1090	882	80.9	1040	798	76.7	1105	819	74.1	1159	806	69.5
Newport LA	1867	1455	77.9	1871	1482	79.2	1795	1378	76.8	1916	1363	71.1
Torfaen LA	965	816	84.6	1014	883	87.1	1061	858	80.9	1008	756	75.0
Health Board Total	6699	5488	81.9	6644	5524	83.1	6724	5304	78.9	6974	5161	74.0
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	711	567	79.7	726	592	81.5	721	527	73.1	699	531	76.0
Conwy LA	1149	1006	87.6	1125	963	85.6	1259	985	78.2	1305	985	75.5
Denbighshire LA	996	837	84.0	1049	836	79.7	1140	910	79.8	1104	784	71.0
Flintshire LA	1513	1202	79.4	1584	1257	79.4	1617	1265	78.2	1635	1263	77.2
Gwynedd LA	1181	944	79.9	1171	967	82.6	1235	915	74.1	1256	986	78.5
Wrexham LA	1428	1147	80.3	1317	1087	82.5	1440	1095	76.0	1537	1152	75.0
Health Board Total	6978	5703	81.7	6972	5702	81.8	7412	5697	76.9	7536	5701	75.7
<u>Cardiff and Vale University HB</u>												
Cardiff LA	3775	2661	70.5	3667	1979	54.0	3739	2857	76.4	3705	2789	75.3
Vale of Glamorgan LA	1477	1151	77.9	1346	850	63.2	1364	998	73.2	1481	1137	76.8
Health Board Total	5252	3812	72.6	5013	2829	56.4	5103	3855	75.5	5186	3926	75.7
<u>Cwm Taf University HB</u>												
Merthyr Tydfil LA	663	586	88.4	623	567	91.0	641	549	85.6	713	608	85.3
Rhondda Cynon Taf LA	2805	2505	89.3	2533	2329	91.9	2638	2281	86.5	2641	2262	85.6
Health Board Total	3468	3091	89.1	3156	2896	91.8	3279	2830	86.3	3354	2870	85.6
<u>Hywel Dda University HB</u>												
Cardiff and Vale LA	2017	1766	87.6	2016	1781	88.3	1992	1667	83.7	1992	1644	82.5
Ceredigion LA	626	539	86.1	591	511	86.5	624	528	84.6	657	558	84.9
Pembrokeshire LA	1218	957	78.6	1185	908	76.6	1222	848	69.4	1272	931	73.2
Health Board Total	3861	3262	84.5	3792	3200	84.4	3838	3043	79.3	3921	3133	79.9
<u>Powys Teaching HB</u>	1334	1093	81.9	1286	1073	83.4	1321	1066	80.7	1404	1080	76.9
Unknown	101	73	72.3	101	83	82.2	147	109	74.1	165	126	76.4
Wales Total	33293	27481	82.5	32453	26248	80.9	33589	26808	79.8	34261	26810	78.3

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

Table 10. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children in 2016-17 school year 9 reaching their 14th birthday between 01/09/16 and 31/08/17 and resident on 30/09/17 , with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ^{1,2}				MenACWY ²		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	
<u>Abertawe Bro Morgannwg University HB</u>																								
Bridgend LA	1562	1464	93.7	1377	88.2	1371	87.8	1384	88.6				782	737	94.2	697	89.1		780	727	93.2	680	87.2	
Neath Port Talbot LA	1430	1366	95.5	1284	89.8	1257	87.9	1276	89.2				701	676	96.4	644	91.9		729	690	94.7	640	87.8	
Swansea LA	2608	2369	90.8	2230	85.5	2295	88.0	2299	88.2				1243	1119	90.0	1058	85.1		1365	1250	91.6	1172	85.9	
Health Board Total	5600	5199	92.8	4891	87.3	4923	87.9	4959	88.6				2726	2532	92.9	2399	88.0		2874	2667	92.8	2492	86.7	
<u>Aneurin Bevan University HB</u>																								
Blaenau Gwent LA	687	650	94.6	621	90.4	582	84.7	583	84.9				321	305	95.0	292	91.0		366	345	94.3	329	89.9	
Caerphilly LA	2090	1999	95.6	1906	91.2	1759	84.2	1752	83.8				981	936	95.4	897	91.4		1108	1063	95.9	1009	91.1	
Monmouthshire LA	1090	962	88.3	904	82.9	880	80.7	882	80.9				544	474	87.1	437	80.3		546	488	89.4	467	85.5	
Newport LA	1867	1725	92.4	1614	86.4	1461	78.3	1455	77.9				903	840	93.0	790	87.5		961	885	92.1	824	85.7	
Torfaen LA	965	914	94.7	876	90.8	815	84.5	816	84.6				479	456	95.2	438	91.4		486	458	94.2	438	90.1	
Health Board Total	6699	6250	93.3	5921	88.4	5497	82.1	5488	81.9				3228	3011	93.3	2854	88.4		3467	3239	93.4	3067	88.5	
<u>Betsi Cadwaladr University HB</u>																								
Anglesey LA	711	674	94.8	645	90.7	561	78.9	567	79.7				347	331	95.4	317	91.4		364	343	94.2	328	90.1	
Conwy LA	1149	1073	93.4	1037	90.3	1000	87.0	1006	87.6				546	512	93.8	497	91.0		600	558	93.0	537	89.5	
Denbighshire LA	996	920	92.4	876	88.0	826	82.9	837	84.0				465	428	92.0	408	87.7		530	492	92.8	468	88.3	
Flintshire LA	1513	1430	94.5	1369	90.5	1204	79.6	1202	79.4				732	694	94.8	662	90.4		781	736	94.2	707	90.5	
Gwynedd LA	1181	1134	96.0	1095	92.7	926	78.4	944	79.9				554	536	96.8	523	94.4		627	598	95.4	572	91.2	
Wrexham LA	1428	1340	93.8	1303	91.2	1136	79.6	1147	80.3				681	637	93.5	614	90.2		747	703	94.1	689	92.2	
Health Board Total	6978	6571	94.2	6325	90.6	5653	81.0	5703	81.7				3325	3138	94.4	3021	90.9		3649	3430	94.0	3301	90.5	
<u>Cardiff and Vale University HB</u>																								
Cardiff LA	3775	3485	92.3	3232	85.6	2657	70.4	2661	70.5				1849	1723	93.2	1609	87.0		1926	1762	91.5	1623	84.3	
Vale of Glamorgan LA	1477	1386	93.8	1310	88.7	1154	78.1	1151	77.9				703	655	93.2	612	87.1		774	731	94.4	698	90.2	
Health Board Total	5252	4871	92.7	4542	86.5	3811	72.6	3812	72.6				2552	2378	93.2	2221	87.0		2700	2493	92.3	2321	86.0	
<u>Cwm Taf University HB</u>																								
Merthyr Tydfil LA	663	621	93.7	586	88.4	585	88.2	586	88.4				333	317	95.2	302	90.7		330	304	92.1	284	86.1	
Rhondda Cynon Taf LA	2805	2662	94.9	2535	90.4	2374	84.6	2505	89.3				1387	1325	95.5	1274	91.9		1418	1337	94.3	1261	88.9	
Health Board Total	3468	3283	94.7	3121	90.0	2959	85.3	3091	89.1				1720	1642	95.5	1576	91.6		1748	1641	93.9	1545	88.4	
<u>Hywel Dda University HB</u>																								
Carmarthenshire LA	2017	1855	92.0	1803	89.4	1763	87.4	1766	87.6				986	908	92.1	887	90.0		1031	947	91.9	916	88.8	
Ceredigion LA	626	586	93.6	559	89.3	539	86.1	539	86.1				294	276	93.9	262	89.1		332	310	93.4	297	89.5	
Pembrokeshire LA	1218	1133	93.0	1061	87.1	952	78.2	957	78.6				617	576	93.4	538	87.2		601	557	92.7	523	87.0	
Health Board Total	3861	3574	92.6	3423	88.7	3254	84.3	3262	84.5				1897	1760	92.8	1687	88.9		1964	1814	92.4	1736	88.4	
<u>Powys Teaching HB</u>	1334	1154	86.5	1047	78.5	1084	81.3	1093	81.9				651	562	86.3	515	79.1		683	592	86.7	532	77.9	
Unknown	101	83	82.2	78	77.2	73	72.3	73	72.3				47	43	91.5	39	83.0		54	40	74.1	39	72.2	
Wales Total	33293	30985	93.1	29348	88.2	27254	81.9	27481	82.5				16146	15066	93.3	14312	88.6		17139	15916	92.9	15033	87.7	

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

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

Table 11. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children in 2016-17 school year 10 reaching their 15th birthday between 01/09/16 and 31/08/17 and resident on 30/09/17, 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)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>																						
Bridgend LA	1521	1421	93.4	1326	87.2	1364	89.7	1370	90.1	740	696	94.05	654	88.4	781	725	92.83	672	86.0			
Neath Port Talbot LA	1467	1357	92.5	1255	85.5	1326	90.4	1346	91.8	718	678	94.43	629	87.6	749	679	90.65	626	83.6			
Swansea LA	2501	2288	91.5	2127	85.0	2216	88.6	2225	89.0	1226	1132	92.33	1056	86.1	1275	1156	90.67	1071	84.0			
Health Board Total	5489	5066	92.3	4708	85.8	4906	89.4	4941	90.0	2684	2506	93.37	2339	87.1	2805	2560	91.27	2369	84.5			
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	696	659	94.7	627	90.1	622	89.4	624	89.7	373	353	94.64	340	91.2	323	306	94.74	287	88.9			
Caerphilly LA	2023	1944	96.1	1850	91.4	1748	86.4	1737	85.9	947	910	96.09	862	91.0	1076	1034	96.1	988	91.8			
Monmouthshire LA	1040	881	84.7	817	78.6	799	76.8	798	76.7	513	433	84.41	408	79.5	526	448	85.17	409	77.8			
Newport LA	1871	1736	92.8	1620	86.6	1498	80.1	1482	79.2	927	865	93.31	808	87.2	942	870	92.36	812	86.2			
Torfaen LA	1014	962	94.9	917	90.4	884	87.2	883	87.1	491	465	94.7	447	91.0	523	497	95.03	470	89.9			
Health Board Total	6644	6182	93.0	5831	87.8	5551	83.5	5524	83.1	3251	3026	93.08	2865	88.1	3390	3155	93.07	2966	87.5			
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	726	685	94.4	668	92.0	600	82.6	592	81.5	361	340	94.18	333	92.2	365	345	94.52	335	91.8			
Conwy LA	1125	1044	92.8	997	88.6	956	85.0	963	85.6	546	507	92.86	483	88.5	578	536	92.73	513	88.8			
Denbighshire LA	1049	961	91.6	921	87.8	856	81.6	836	79.7	487	439	90.14	423	86.9	562	522	92.88	498	88.6			
Flintshire LA	1584	1491	94.1	1425	90.0	1272	80.3	1257	79.4	794	747	94.08	716	90.2	790	744	94.18	709	89.7			
Gwynedd LA	1171	1106	94.4	1071	91.5	964	82.3	967	82.6	554	525	94.77	508	91.7	617	581	94.17	563	91.2			
Wrexham LA	1317	1253	95.1	1231	93.5	1087	82.5	1087	82.5	649	620	95.53	615	94.8	668	633	94.76	616	92.2			
Health Board Total	6972	6540	93.8	6313	90.5	5735	82.3	5702	81.8	3391	3178	93.72	3078	90.8	3580	3361	93.88	3234	90.3			
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	3667	3317	90.5	3059	83.4	2607	71.1	1979	54.0	1732	1562	90.18	1444	83.4	1934	1755	90.74	1615	83.5			
Vale of Glamorgan LA	1346	1250	92.9	1178	87.5	1081	80.3	850	63.2	661	625	94.55	595	90.0	685	625	91.24	583	85.1			
Health Board Total	5013	4567	91.1	4237	84.5	3688	73.6	2829	56.4	2393	2187	91.39	2039	85.2	2619	2380	90.87	2198	83.9			
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	623	592	95.0	547	87.8	564	90.5	567	91.0	287	276	96.17	256	89.2	335	316	94.33	291	86.9			
Rhondda Cynon Taf LA	2533	2392	94.4	2253	88.9	2319	91.6	2329	91.9	1231	1173	95.29	1114	90.5	1302	1219	93.63	1139	87.5			
Health Board Total	3156	2984	94.6	2800	88.7	2883	91.3	2896	91.8	1518	1449	95.45	1370	90.3	1637	1535	93.77	1430	87.4			
<u>Hywel Dda University HB</u>																						
Carmarthenshire LA	2016	1851	91.8	1803	89.4	1782	88.4	1781	88.3	937	858	91.57	834	89.0	1079	993	92.03	969	89.8			
Ceredigion LA	591	544	92.0	520	88.0	514	87.0	511	86.5	297	276	92.93	266	89.6	293	268	91.47	254	86.7			
Pembrokeshire LA	1185	1086	91.6	1019	86.0	926	78.1	908	76.6	538	498	92.57	469	87.2	647	588	90.88	550	85.0			
Health Board Total	3792	3481	91.8	3342	88.1	3222	85.0	3200	84.4	1772	1632	92.1	1569	88.5	2019	1849	91.58	1773	87.8			
<u>Powys Teaching HB</u>	1286	1161	90.3	1064	82.7	1064	82.7	1073	83.4	617	566	91.73	524	84.9	669	595	88.94	540	80.7			
Unknown	101	93	92.1	91	90.1	80	79.2	83	82.2	52	48	92.31	47	90.4	49	45	91.84	44	89.8			
Wales Total	32453	30074	92.7	28386	87.5	27129	83.6	26248	80.9	15678	14592	93.07	13831	88.2	16768	15480	92.32	14554	86.8			

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

Table 12. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children in 2016-17 school year 11 reaching their 16th birthday between 01/09/16 and 31/08/17 and resident on 30/06/17, with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ¹		MenACWY ²		Resident girls	MMR1 (girls)		MMR2 (girls)		Resident boys	MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)		(n)	(%)	(n)	(%)		(n)	(n)	(%)	(n)
<u>Abertawe Bro Morgannwg University HB</u>																				
Bridgend LA	1679	1605	95.6	1526	90.9	1506	89.7	1443	85.9	845	804	95.1	764	90.4	834	801	96.0	762	91.4	
Neath Port Talbot LA	1522	1433	94.2	1322	86.9	1348	88.6	1292	84.9	724	696	96.1	652	90.1	798	737	92.4	670	84.0	
Swansea LA	2564	2360	92.0	2175	84.8	2226	86.8	2169	84.6	1290	1193	92.5	1115	86.4	1274	1167	91.6	1060	83.2	
Health Board Total	5765	5398	93.6	5023	87.1	5080	88.1	4904	85.1	2859	2693	94.2	2531	88.5	2906	2705	93.1	2492	85.8	
<u>Aneurin Bevan University HB</u>																				
Blaenau Gwent LA	737	696	94.4	666	90.4	623	84.5	605	82.1	362	338	93.4	322	89.0	375	358	95.5	344	91.7	
Caerphilly LA	2026	1962	96.8	1901	93.8	1698	83.8	1644	81.1	966	932	96.5	888	91.9	1060	1030	97.2	1013	95.6	
Monmouthshire LA	1105	951	86.1	873	79.0	842	76.2	819	74.1	526	458	87.1	431	81.9	579	493	85.1	442	76.3	
Newport LA	1795	1684	93.8	1578	87.9	1471	81.9	1378	76.8	867	816	94.1	761	87.8	927	867	93.5	816	88.0	
Torfaen LA	1061	1018	95.9	977	92.1	926	87.3	858	80.9	515	494	95.9	473	91.8	546	524	96.0	504	92.3	
Health Board Total	6724	6311	93.9	5995	89.2	5560	82.7	5304	78.9	3236	3038	93.9	2875	88.8	3487	3272	93.8	3119	89.4	
<u>Betsi Cadwaladr University HB</u>																				
Anglesey LA	721	679	94.2	662	91.8	611	84.7	527	73.1	359	338	94.2	327	91.1	362	341	94.2	335	92.5	
Conwy LA	1259	1151	91.4	1079	85.7	1043	82.8	985	78.2	627	576	91.9	546	87.1	632	575	91.0	533	84.3	
Denbighshire LA	1140	1044	91.6	988	86.7	991	86.9	910	79.8	552	512	92.8	486	88.0	587	532	90.6	502	85.5	
Flintshire LA	1617	1530	94.6	1469	90.8	1414	87.4	1265	78.2	796	761	95.6	733	92.1	821	769	93.7	736	89.6	
Gwynedd LA	1235	1182	95.7	1149	93.0	1089	88.2	915	74.1	599	577	96.3	561	93.7	636	605	95.1	588	92.5	
Wrexham LA	1440	1379	95.8	1328	92.2	1249	86.7	1095	76.0	706	679	96.2	648	91.8	734	700	95.4	680	92.6	
Health Board Total	7412	6965	94.0	6675	90.1	6397	86.3	5697	76.9	3639	3443	94.6	3301	90.7	3772	3522	93.4	3374	89.4	
<u>Cardiff and Vale University HB</u>																				
Cardiff LA	3739	3411	91.2	3169	84.8	2807	75.1	2857	76.4	1748	1609	92.0	1506	86.2	1991	1802	90.5	1663	83.5	
Vale of Glamorgan LA	1364	1275	93.5	1192	87.4	1111	81.5	998	73.2	664	621	93.5	584	88.0	700	654	93.4	608	86.9	
Health Board Total	5103	4686	91.8	4361	85.5	3918	76.8	3855	75.5	2412	2230	92.5	2090	86.7	2691	2456	91.3	2271	84.4	
<u>Cwm Taf University HB</u>																				
Merthyr Tydfil LA	641	605	94.4	565	88.1	589	91.9	549	85.6	306	290	94.8	272	88.9	335	315	94.0	293	87.5	
Rhondda Cynon Taf LA	2638	2520	95.5	2362	89.5	2420	91.7	2281	86.5	1286	1237	96.2	1167	90.7	1351	1283	95.0	1195	88.5	
Health Board Total	3279	3125	95.3	2927	89.3	3009	91.8	2830	86.3	1592	1527	95.9	1439	90.4	1686	1598	94.8	1488	88.3	
<u>Hywel Dda University HB</u>																				
Cardiganshire LA	1992	1847	92.7	1800	90.4	1819	91.3	1667	83.7	967	911	94.2	894	92.5	1025	936	91.3	906	88.4	
Ceredigion LA	624	587	94.1	565	90.5	555	88.9	528	84.6	288	275	95.5	267	92.7	336	312	92.9	298	88.7	
Pembrokeshire LA	1222	1136	93.0	1078	88.2	993	81.3	848	69.4	554	518	93.5	489	88.3	668	618	92.5	589	88.2	
Health Board Total	3838	3570	93.0	3443	89.7	3367	87.7	3043	79.3	1809	1704	94.2	1650	91.2	2029	1866	92.0	1793	88.4	
<u>Powys Teaching HB</u>	1321	1178	89.2	1099	83.2	1075	81.4	1066	80.7	618	559	90.5	516	83.5	701	619	88.3	583	83.2	
Unknown	147	130	88.4	123	83.7	113	76.9	109	74.1	69	60	87.0	58	84.1	78	70	89.7	65	83.3	
Wales Total	33589	31363	93.4	29646	88.3	28519	84.9	26808	79.8	16234	15254	94.0	14460	89.1	17350	16108	92.8	15185	87.5	

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

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

Table 13. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 16th birthday between 01/07/17 and 30/09/17 and resident on 30/09/17, with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ¹		MenACWY ²		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)		(n)	(%)	(n)	(%)	(n)		(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University HB</u>	(n)		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)		(n)	(%)	(n)	(%)	(n)		(n)	(%)	(n)	(%)
Bridgend LA	419	397	94.7	382	91.2	376	89.7	360	85.9		197	187	94.9	180	91.4	222	210	94.6	202	91.0		
Neath Port Talbot LA	363	343	94.5	325	89.5	324	89.3	317	87.3		182	173	95.1	163	89.6	181	170	93.9	162	89.5		
Swansea LA	664	610	91.9	568	85.5	573	86.3	562	84.6		339	309	91.2	292	86.1	325	301	92.6	276	84.9		
Health Board Total	1446	1350	93.4	1275	88.2	1273	88.0	1239	85.7		718	669	93.2	635	88.4	728	681	93.5	640	87.9		
<u>Aneurin Bevan University HB</u>																						
Blaenau Gwent LA	160	147	91.9	143	89.4	131	81.9	131	81.9		78	71	91.0	68	87.2	82	76	92.7	75	91.5		
Caerphilly LA	506	482	95.3	464	91.7	428	84.6	427	84.4		253	241	95.3	228	90.1	253	241	95.3	236	93.3		
Monmouthshire LA	266	229	86.1	207	77.8	210	78.9	203	76.3		128	110	85.9	105	82.0	138	119	86.2	102	73.9		
Newport LA	462	430	93.1	398	86.1	385	83.3	371	80.3		221	208	94.1	189	85.5	241	222	92.1	209	86.7		
Torfaen LA	253	245	96.8	232	91.7	225	88.9	210	83.0		127	122	96.1	118	92.9	126	123	97.6	114	90.5		
Health Board Total	1647	1533	93.1	1444	87.7	1379	83.7	1342	81.5		807	752	93.2	708	87.7	840	781	93.0	736	87.6		
<u>Betsi Cadwaladr University HB</u>																						
Anglesey LA	187	169	90.4	160	85.6	146	78.1	128	68.4		102	92	90.2	88	86.3	85	77	90.6	72	84.7		
Conwy LA	299	279	93.3	265	88.6	249	83.3	237	79.3		144	135	93.8	131	91.0	155	144	92.9	134	86.5		
Denbighshire LA	275	256	93.1	247	89.8	228	82.9	217	78.9		135	127	94.1	122	90.4	140	129	92.1	125	89.3		
Flintshire LA	401	383	95.5	371	92.5	343	85.5	315	78.6		198	189	95.5	185	93.4	203	194	95.6	186	91.6		
Gwynedd LA	328	310	94.5	296	90.2	281	85.7	242	73.8		159	153	96.2	143	89.9	169	157	92.9	153	90.5		
Wrexham LA	349	330	94.6	322	92.3	297	85.1	270	77.4		173	167	96.5	163	94.2	176	163	92.6	159	90.3		
Health Board Total	1839	1727	93.9	1661	90.3	1544	84.0	1409	76.6		911	863	94.7	832	91.3	928	864	93.1	829	89.3		
<u>Cardiff and Vale University HB</u>																						
Cardiff LA	929	850	91.5	789	84.9	666	71.7	516	55.5		430	400	93.0	375	87.2	499	450	90.2	414	83.0		
Vale of Glamorgan LA	335	310	92.5	286	85.4	272	81.2	176	52.5		165	156	94.5	146	88.5	170	154	90.6	140	82.4		
Health Board Total	1264	1160	91.8	1075	85.0	938	74.2	692	54.7		595	556	93.4	521	87.6	669	604	90.3	554	82.8		
<u>Cwm Taf University HB</u>																						
Merthyr Tydfil LA	170	157	92.4	147	86.5	152	89.4	143	84.1		76	72	94.7	66	86.8	94	85	90.4	81	86.2		
Rhondda Cynon Taf LA	658	624	94.8	571	86.8	589	89.5	573	87.1		327	313	95.7	289	88.4	331	311	94.0	282	85.2		
Health Board Total	828	781	94.3	718	86.7	741	89.5	716	86.5		403	385	95.5	355	88.1	425	396	93.2	363	85.4		
<u>Hywel Dda University HB</u>																						
Cardiff and Vale LA	512	475	92.8	464	90.6	464	90.6	438	85.5		252	230	91.3	226	89.7	260	245	94.2	238	91.5		
Ceredigion LA	160	151	94.4	143	89.4	139	86.9	133	83.1		69	67	97.1	62	89.9	91	84	92.3	81	89.0		
Pembrokeshire LA	287	273	95.1	255	88.9	226	78.7	193	67.2		136	131	96.3	121	89.0	151	142	94.0	134	88.7		
Health Board Total	959	899	93.7	862	89.9	829	86.4	764	79.7		457	428	93.7	409	89.5	502	471	93.8	453	90.2		
<u>Powys Teaching HB</u>	335	307	91.6	280	83.6	269	80.3	276	82.4		162	151	93.2	143	88.3	173	156	90.2	137	79.2		
Unknown	38	33	86.8	33	86.8	31	81.6	29	76.3		15	13	86.7	13	86.7	23	20	87.0	20	87.0		
Wales Total	8356	7790	93.2	7348	87.9	7004	83.8	6467	77.4		4068	3817	93.8	3616	88.9	4288	3973	92.7	3732	87.0		

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

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

Table 14. Uptake of BCG immunisation in children reaching their 1st, 2nd, 5th and 16th birthdays between 01/07/17 and 30/09/17 and resident on 30/09/17.

Area	1 yr			2 yrs			5 yrs			16 yrs		
	Resident children	BCG Immunised		Resident children	BCG Immunised		Resident children	BCG Immunised		Resident children	BCG Immunised	
<u>Abertawe Bro Morgannwg University HB</u>	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Bridgend LA	400	17	4.3	432	23	5.3	417	15	3.6	419	6	1.4
Neath Port Talbot LA	391	16	4.1	378	4	1.1	387	10	2.6	363	5	1.4
Swansea LA	632	75	11.9	672	84	12.5	746	66	8.8	664	33	5.0
Health Board Total	1423	108	7.6	1482	111	7.5	1550	91	5.9	1446	44	3.0
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	178	3	1.7	176	3	1.7	194	6	3.1	160	1	0.6
Caerphilly LA	535	8	1.5	544	8	1.5	542	13	2.4	506	8	1.6
Monmouthshire LA	192	8	4.2	236	9	3.8	241	9	3.7	266	4	1.5
Newport LA	496	66	13.3	555	81	14.6	524	78	14.9	462	34	7.4
Torfaen LA	260	7	2.7	266	4	1.5	293	9	3.1	253	6	2.4
Health Board Total	1661	92	5.5	1777	105	5.9	1794	115	6.4	1647	53	3.2
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	180	4	2.2	184	7	3.8	217	3	1.4	187	5	2.7
Conwy LA	274	6	2.2	269	8	3.0	301	11	3.7	299	9	3.0
Denbighshire LA	274	15	5.5	277	11	4.0	272	15	5.5	275	16	5.8
Flintshire LA	393	19	4.8	421	11	2.6	477	13	2.7	401	8	2.0
Gwynedd LA	280	12	4.3	310	17	5.5	359	9	2.5	328	1	0.3
Wrexham LA	385	23	6.0	370	25	6.8	446	31	7.0	349	11	3.2
Health Board Total	1786	79	4.4	1831	79	4.3	2072	82	4.0	1839	50	2.7
<u>Cardiff and Vale University HB</u>												
Cardiff LA	1078	15	1.4	1178	243	20.6	1131	211	18.7	929	120	12.9
Vale of Glamorgan LA	365	3	0.8	350	13	3.7	359	14	3.9	335	11	3.3
Health Board Total	1443	18	1.2	1528	256	16.8	1490	225	15.1	1264	131	10.4
<u>Cwm Taf Univeristy HB</u>												
Merthyr Tydfil LA	192	8	4.2	218	18	8.3	195	17	8.7	170	7	4.1
Rhondda Cynon Taf LA	718	13	1.8	707	31	4.4	762	25	3.3	658	20	3.0
Health Board Total	910	21	2.3	925	49	5.3	957	42	4.4	828	27	3.3
<u>Hywel Dda University HB</u>												
Carmarthenshire LA	492	16	3.3	488	18	3.7	526	18	3.4	512	53	10.4
Ceredigion LA	163	7	4.3	172	10	5.8	178	9	5.1	160	6	3.8
Pembrokeshire LA	306	5	1.6	342	11	3.2	359	7	1.9	287	6	2.1
Health Board Total	961	28	2.9	1002	39	3.9	1063	34	3.2	959	65	6.8
<u>Powys Teaching Health Board</u>	318	9	2.8	284	7	2.5	342	3	0.9	335	8	2.4
Unknown	11	2	18.2	8	1	12.5	15	1	6.7	38	1	2.6
Wales Total	8513	357	4.2	8837	647	7.3	9283	593	6.4	8356	379	4.5

Data reflects immunisations given and recorded on the NCCHD (following notifications to local Child Health Administration Offices), may be subject to under-reporting. BCG is not a routinely scheduled immunisation.

Table 15. Uptake of hepatitis B immunisation in children receiving their first dose within seven days of birth, reaching their 1st, 2nd, 5th and 16th birthdays during 01/07/17 and 30/09/17 and resident on 30/06/17, and percentage who are recorded as completing doses 1 to 4.

Area	1yr					2yrs						5yrs					
	Resident children	Babies at risk of perinatal infection	1 dose	2 doses	3 doses	Resident children	Babies at risk of perinatal infection	1 dose	2 doses	3 doses	4 doses	Resident children	Babies at risk of perinatal infection	1 dose	2 dose	3 doses	4 doses
	(n)	(n)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)	(n)	(n)	(%)	(%)	(%)	(%)
Abertawe Bro Morgannwg UHB	1423	5	100.0	100.0	100.0	1482	4	100.0	100.0	100.0	100.0	1550	1	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	1661	5	100.0	60.0	40.0	1777	3	100.0	66.7	33.3	-	1794	4	100.0	100.0	100.0	100.0
Betsi Cadwaladr UHB	1786	1	100.0	100.0	100.0	1831	1	100.0	100.0	100.0	100.0	2072	4	100.0	100.0	100.0	100.0
Cardiff and Vale UHB	1443	4	100.0	100.0	100.0	1528	7	100.0	100.0	100.0	85.7	1490	5	100.0	100.0	100.0	80.0
Cwm Taf UHB	910	1	100.0	100.0	100.0	925	1	100.0	100.0	100.0	100.0	957	0	-	-	-	-
Hywel Dda UHB	961	0	-	-	-	1002	0	-	-	-	-	1063	1	100.0	100.0	100.0	100.0
Powys Teaching HB	318	0	-	-	-	284	1	100.0	100.0	100.0	100.0	342	0	-	-	-	-
Unknown	11	0	-	-	-	8	0	-	-	-	-	15	0	-	-	-	-
Wales Total	8513	16	100.0	87.5	81.3	8837	17	100.0	94.1	88.2	76.5	9283	15	100.0	100.0	100.0	93.3

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