

Vaccine Uptake in Children in Wales July to September 2016

COVER 120: Wales November 2016



Key points

- For children at one year of age, uptake of the “5 in 1”, MenC, pneumococcal conjugate and MenB vaccines was 95% or over this quarter. Uptake of the “5 in 1” vaccine was 95% or over in all Health Boards (HB) and in 18 local authority (LA) areas.
- Uptake of two doses of rotavirus vaccine remained stable at 94%. Two HBs and seven LA areas had an uptake above 95%.
- Uptake of the first dose of MMR vaccine in two year old children remained above 95% this quarter. Five HBs and 16 LA areas achieved an uptake of 95%.
- The proportion of children up to date with all routine immunisations by four years of age remained stable at 85%. For children reaching their fifth birthday this quarter, 89% were up to date.
- Uptake of the second MMR dose by five years of age remained stable at 91%.
- Uptake of the “4 in 1” pre-school booster in five year old children remained at 92% again this quarter.
- Uptake of the first dose of the Human Papillomavirus (HPV) vaccine schedule in girls in the 2015-16 School Year 8 (12-13 year olds) was 85%. Uptake of the two doses in girls in the 2015-16 School Year 9 (13-14 year olds) was also 85%.
- Uptake of MenACWY vaccine in the 2015-16 School Year 9 was 78%, uptake in the 2015-16 School Year 11 (15-16 year olds) was also 78%.
- Coverage of one dose of MMR vaccine in the 2015-16 School Year 10 was 94% and coverage of a completed two dose course was 89%.
- Coverage of the Td/IPV teenage booster in the 2015-16 School Year 10 was 84%.

Background

These results are for children living in Wales in September 2016 and reaching their first, second, fourth, fifth and 16th birthdays during the quarter 01/07/2016 to 30/09/2016. For the second time this quarter, 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 01/09/2015 and 31/08/2016). Current uptake of HPV vaccination¹ dose 1 in girls in the 2015-16 School Years 8 and 9 is presented. Both of these school year groups will have been on the new, two dose HPV vaccine schedule. Coverage of HPV in the 2015-16 School Year 10 girls, who would have been the last school year group to receive three dose HPV vaccine schedule, is also presented. BCG and hepatitis B immunisation uptake data are also presented here. BCG and hepatitis B immunisations are not part of the routine childhood schedule and are given selectively following risk assessment; further information on circumstances in which these immunisations should be given can be found in: Immunisation Against Infectious Disease (The Green Book, available from <http://immunisation.dh.gov.uk/category/the-green-book/>). Coverage of neonatal hepatitis B immunisation is presented here, using data from the Public Health Wales Neonatal Hepatitis B database.

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 96.4%. Uptake ranged by health board from 95.0% (Hywel Dda UHB) to 97.9% (Cwm Taf UHB) and by Local Authority (LA) from 93.8% (Pembrokeshire) to 98.9% (Blaenau Gwent). All health boards and 18 of the 22 LA areas achieved the target 95% uptake (Figures 2 and 5, Tables 2 and 3).
2. National uptake of a completed one dose course of MenC³ vaccine in children reaching their first birthday this quarter was 96.8% compared to 97.2% last quarter. Uptake in health boards ranged from 95.5% (Hywel Dda UHB) to 99.2% (Cwm Taf UHB) and ranged by LA from 92.5% (Gwynedd) to 99.4% (Blaenau Gwent). All seven Health Boards and 19 LA areas achieved an uptake in excess of the 95% target (Figures 1 and 2, Tables 2 and 3).
3. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV2³) in children reaching their first birthday was 96.4% this quarter compared to 96.1% last quarter, ranging by LA from 93.5% (Pembrokeshire) to 99.4% (Blaenau Gwent). All health boards and 18 LA areas achieved the target 95% uptake (Figures 1 and 2, Table 3).
4. Uptake of two doses of MenB vaccine, scheduled at two and four months of age, in children reaching their first birthday was 95.0% this quarter. Uptake in health boards ranged from 93.3% (Cardiff and Vale UHB) to 97.1% (Cwm Taf UHB) and ranged by LA from 91.7% (Pembrokeshire) to 100% (Blaenau Gwent) (Figure 2, Table 3).
5. Uptake of two doses of rotavirus vaccine in children reaching their first birthday remained stable at 93.7% this quarter compared to 93.8% last quarter. Uptake in health boards ranged from 92.3% (Cardiff and Vale UHB) to 96.2% (Abertawe Bro Morgannwg UHB) and ranged by LA from 89.8% (Ceredigion and Blaenau Gwent) to 97.7% (Merthyr Tydfil) (Figure 2, Tables 2 and 3).
6. Uptake of the first dose of MMR⁴ in children reaching their second birthday (scheduled at 12 to 13 months of age) was 95.3% this quarter compared to 95.7% last quarter. Uptake ranged by health board from 94.1% (Cardiff and Vale UHB) to 96.2% (Abertawe Bro Morgannwg UHB) and by LA area from 94.0% (Cardiff and Carmarthenshire) to 98.0% (Caerphilly) (Figures 1, 2 and 6, Tables 2 and 4). Five health boards and 16 LA areas achieved the target of 95% uptake.
7. Uptake of the final dose of Pneumococcal Conjugate Vaccine (PCVf, scheduled at 12 to 13 months of age) in children reaching their second birthday was 95.8% this quarter compared to 96.0% last quarter. Uptake by LA ranged from 94.2% (Carmarthenshire) to 98.0% (Caerphilly) (Figure 2, Tables 2 and 4). Six health boards 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 stable at 94.9% this quarter, compared to 95.1% last quarter. Uptake ranged by health board from 93.5% (Cardiff and Vale UHB) to 96.3% (Cwm Taf UHB), and ranged by LA from 92.3% (Newport) to 97.1% (Caerphilly) (Tables 2 and 4). Thirteen LA areas achieved uptakes in excess of 95% (Figures 1 and 2).
9. In children reaching four years of age this quarter, uptake of the “4 in 1” DTaP/IPV⁵ pre-school booster remained stable at 87.8%, compared to 87.9% last quarter. Coverage of

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

³ MenC vaccine protects against meningitis caused by meningococcus group C infection. PCV protects against pneumococcal meningitis, bacteraemia, pneumonia and otitis media. Children reaching one and two years of age this quarter have been scheduled for the two dose course of pneumococcal conjugate vaccination (PCV) at two and four months of age and a one dose MenC primary course scheduled at three months of age. Children reaching 2 years of age this quarter should have been offered a routine dose of the Hib/ MenC and PCV at 12 to 13 months of age.

⁴ MMR protects against measles, mumps and rubella infections.

the Hib/MenC booster is currently 93.9% and uptake of two doses of MMR was 87.4% (Table 5). The proportion of children who were up to date with all these routine immunisations at four years of age remained stable at 84.8% this quarter, compared to 84.6% last quarter. This ranged by health board from 82.2% (Aneurin Bevan UHB) to 87.3% (Cwm Taf UHB) and by LA from 79.4% (Caerphilly) to 90.7% (Anglesey) (Figure 3, Tables 1, 2 and 5). The proportion of children who were up to date with the above immunisations by their 5th birthday remained stable at 88.6% this quarter, ranging by health board from 86.0% (Cardiff and Vale UHB) to 91.7% (Betsi Cadwaladr UHB) (Table 6). There has been an improvement of 3.1% in the proportion up to date in these children since we reported on them, aged 4years, this time last year.

10. In children reaching five years of age this quarter, coverage of one dose of MMR is currently 97.0%. Uptake of two doses of MMR was 90.5% this quarter, compared to 91.0%, last quarter (Table 7). Uptake of two doses of MMR ranged by health board from 88.2% (Cardiff and Vale UHB) to 92.4% (Betsi Cadwaladr UHB) and by LA from 85.5% (Newport and Monmouthshire) to 95.9% (Anglesey) (Figures 1 and 2, Tables 2 and 7). One LA area exceeded 95% uptake for two doses of MMR by five years of age (Figure 7).
11. Uptake of the “4 in 1” DTaP/IPV⁵ pre-school booster in children reaching their fifth birthday remained stable at 92.4% this quarter compared to 92.3% in the previous quarter, ranging by health board from 90.1% (Aneurin Bevan UHB) to 95.6% (Betsi Cadwaladr UHB) and by LA from 85.7% (Newport) to 97.4% (Anglesey) (Tables 2, 7). Four LAs achieved the 95% uptake target (Figure 8).
12. Uptake of a two dose primary course of MenC in children reaching their fifth birthday this quarter was 93.4%, compared to 93.7%, last quarter. Uptake ranged by health board from 90.2% (Powys THB) to 96.0% (Cwm Taf UHB) and by LA from 88.2% (Ceredigion) to 97.2% (Torfaen) (Table 7).
13. From September 2014, the HPV vaccination programme changed for School Year 8 girls from a three dose to a two dose schedule following a Joint Committee on Vaccination and Immunisation (JCVI) recommendation. In the revised schedule, the first dose of HPV should be given to girls during School Year 8 with JCVI recommending a gap of 6-24 months before the second dose of HPV is received, with 12 months appropriate for planning purposes. Further information on the changes to the HPV vaccination programme can be found within the [CMO\(2014\)13](#) letter [1]. Timings of school vaccination sessions for the first dose vary in health boards throughout school year 8. Vaccination sessions for girls in the 2015-16 School Year 8 group are now complete for the school year, uptake in girls in this group was 85.1% compared to coverage of dose 1 in the 2015-16 School Year 9 which is currently 90.5% (Table 8). Current School Year 9 girls (turning 14 years of age during 01/09/15 to 31/08/2016) were the first School Year 8 group to be offered the two dose HPV schedule and should have received dose 1 in the 2014-15 school year followed by dose 2 in the 2015-16 school year. Uptake of the second dose in this group was 84.7% at the end of the 2015-16 school year (Table 8).
14. Coverage in 2015-16 school year 10 girls (girls reaching their 15th birthday during 01/09/15 to 31/08/16) of a complete three dose course of HPV vaccine is currently 84.8% (Table 8). The 2015-16 School Year 10 was the last group to be offered the three dose schedule of HPV. A very small minority of girls who started their vaccination course late would be on the two dose schedule and as such will never expect to have a third dose. Although appropriate for the vast majority of girls within this group, this should be kept in mind if using uptake of three doses to indicated a completed HPV course in this group.
15. The MenACWY conjugate vaccine was introduced in September 2015 replacing the single antigen meningococcal C teenage booster that was previously given to children in School Year 9 [2]. A phased catch up campaign was also introduced for older children with children turning 16 years of age between 01/09/15 and 31/08/2016 (2015-16 School Year 11) being vaccinated in school and those aged 17 to 19 being vaccinated in general practice. At the end of the school year, uptake of the MenACWY vaccine in the 2015-16 School Year 9 group was 78.3% (Table 9). Uptake of the MenACWY vaccine in the 2015-16 School Year 11 group was 77.9% (Table 11).

Children in the current School Year 10 group will be offered the MenACWY vaccine when they are in the 2016-17 School Year 11, having previously been offered the single antigen Men C booster when they were in the 2014-15 School Year 9. Coverage of the single antigen Men C booster vaccine, in this school year group is 81.3%.

16. Uptake of the Td/IPV⁶ teenage booster in the 2015-16 School Year 9 group (children reaching 14 years of age) was 81.1%. Uptake ranged by health board from 71.9% (Cardiff and Vale UHB) to 89.2% (Abertawe Bro Morgannwg UHB). Coverage of two doses of MMR in this year group is 87.6% and coverage of one dose is 92.9%. Coverage of two doses of MMR vaccine ranges by health board from 82.5% (Powys THB) to 90.6% (Betsi Cadwaladr UHB). Coverage of a full course (two doses of MMR) of immunisation against rubella in 14 year old girls in this school year group is currently 88.3% (Table 9).
17. Coverage of the Td/IPV teenage booster in the 2015-16 School Year 10 group (children reaching 15 years of age) is currently 83.5%. Coverage ranges by health board from 76.2% (Cardiff and Vale UHB) to 91.5% (Cwm Taf UHB). Coverage of two doses of MMR in this year group is currently 88.5% and coverage of one dose is 93.7%. Coverage of two doses of MMR vaccine ranges by health board from 83.6% (Powys THB) to 89.9% (Betsi Cadwaladr UHB). Coverage of a full course (two doses of MMR) of immunisation against rubella in 15 year old girls in this school year group is currently 89.1% (Table 10).
18. Coverage of the Td/IPV teenage booster in the 2015-16 School Year 11 group (children reaching 16 years of age) is currently 84.4%. Coverage ranges by health board from 78.1% (Powys THB) to 91.2% (Cwm Taf UHB). Coverage of two doses of MMR in this year group is currently 89.2% and coverage of one dose is 94.1%. Coverage of two doses of MMR vaccine ranges by health board from 83.9% (Powys THB) to 90.7% (Cwm Taf UHB). Coverage of a full course (two doses of MMR) of immunisation against rubella in 16 year old girls in this school year group is currently 89.8% (Table 11).
19. Coverage of two doses of MMR in children reaching 16 years of age this quarter (between 1st July 2016 and 30th September 2016) is 89.2%, compared to 88.5% in children reaching this age during the previous quarter. Coverage ranged by LA from 82.6% (Monmouthshire) to 94.1% (Torfaen). Coverage of one dose of MMR is 94.4% this quarter, compared to 93.8% last quarter. Coverage of a full course (two doses of MMR) of immunisation against rubella in 16 year old girls this quarter is 89.6% this quarter compared to 89.0% last quarter. National coverage of the Td/IPV teenage booster in children reaching 16 years of age decreased to 83.5% this quarter, compared to 84.1% last quarter (Table 2 and 12).
20. Uptake of BCG⁸ immunisation is presented in Table 13. These data are based on BCG immunisations recorded in the National Community Child Health Database. BCG immunisation has been received by 4.6%, 7.3%, 6.9% and 4.2% of children reaching their first, second, fifth and 16th birthdays (respectively) during quarter three 2016. This quarter Newport LA had the highest proportions of children given BCG by one year of age (13.1%) and Cardiff LA had the highest proportions of children given BCG by two years of age (22.4%).
21. Uptake data for hepatitis B immunisation, extracted from the Public Health Wales All Wales Neonatal Hepatitis B immunisation database, is presented in Table 14. 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 88.2%. 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 100%. 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 also 100%.

⁵DTaP/IPV (and dTaP/IPV) vaccines boost protection against Diphtheria, Tetanus, Pertussis and Polio infection before school entry.

⁶Td/IPV boosts protection against Diphtheria, Tetanus and Polio infection before entering adulthood.

⁷BCG protects against tuberculosis infection. Numbers of eligible children for BCG are not known.

Comment

Uptake of all routine primary immunisations in babies reaching their first birthday was 95% or over again this quarter, except for rotavirus (which can't be given beyond 24 weeks of age). This is the first COVER report to include uptake figures for two doses of meningococcal serotype B vaccine in babies, which was introduced in Wales in September 2015 [3]. Uptake of two doses of Men B vaccine in babies reaching one year of age this quarter was 95% and ranged by health board area, from 93% to 97%. Uptake of one dose of MMR vaccine in two year olds also remains above 95%.

The proportion of children who were up to date with their routine immunisations by four years of age remained stable compared to last quarter, with increases in uptake in some health board areas and a decrease in uptake seen in others. Uptake of two doses of MMR vaccine remains the lowest of all vaccinations included in this composite measure. The proportion of children up to date by 5 years of age this quarter has also remained stable compared to last quarter, although there has been a 3% increase compared to when the same cohort of children were reported on last year at 4 years of age.

This report presents final uptake figures for the first routine School Year 9 group to receive the MenACWY vaccine, which replaced the single antigen meningococcal C teenage booster previously given this age group [2]. Uptake of MenACWY vaccine in this group was 78%. Uptake of the MenACWY vaccine offered to the 2015-16 School Year 11 (16 year olds) as part of the MenACWY catch-up campaign was also 78%. Where possible individuals should be vaccinated before they reach school-leaving age, when catch-up becomes more challenging. From August 2015, those born September 1996 to August 1997 (reaching 19 years of age during the 2015-16 Academic Year) were offered the MenACWY vaccine through General Practices as part of the MenACWY catch-up campaign for older teenagers in Wales. In April 2016 this was extended to include those born September 1997 to August 1999 (reaching 17 and 18 years of age during the 2015-16 Academic Year). Uptake of the MenACWY vaccine in these age groups, vaccinated in General Practice, was 37%, 32% and 19% respectively as at 07/11/2016 [4].

Following the end of the 2015-16 academic year, uptake of the two dose HPV vaccine in girls aged 14 years (2015-16 School Year 9) who were the first school year group to be offered the two dose schedule, was 85% [1]. This is the same as the uptake of the complete three dose schedule that was given to girls in the 2014-15 School Year 9, at the same time last year.

Between July and September there were 20 confirmed cases of measles in Wales, seven of which were in Wales residents who attended music and arts festivals across the UK [5]. Coverage of two doses of MMR vaccine remains under 90% in several areas and age-groups in Wales, and has exhibited a downward trend nationally over recent quarters. It is unlikely that these levels of coverage are high enough to fully eliminate transmission of measles and parts of Wales remain vulnerable to outbreaks following introduction of measles virus. Catch-up doses should continue to be given opportunistically and children missing MMR doses should be identified and offered vaccination at key ages in line with existing policies.

Changes to the COVER report

Provision of coverage figures by school year for the older age groups in this report is intended to give a clearer picture of the proportion of children protected against preventable disease at any given quarter and the progress of school based vaccine programmes throughout the academic year. At the time data for this report were extracted, vaccination sessions for the 2015-16 school year would have been complete. All vaccinations in Cardiff and Vale (apart from the HPV vaccine and the MenACWY catch-up campaign in 16 year olds) are given through General Practice and children are invited for vaccinations throughout the year when they turn the appropriate age, at the time data were extracted for this report all eligible children in the 2015-16 school year should have been invited for the relevant vaccinations.

This is the first report to show figures for uptake of two doses of meningococcal group B vaccine in infants that was introduced in 2015 [3].

References

- [1] Welsh Government (2014) Changes to the Human Papillomavirus (HPV) vaccination programme from September 2014, CMO letter (2014) 13.
<http://gov.wales/docs/phhs/publications/140707vaccinationen.pdf>
- [2] Welsh Government (2015) Meningococcal ACWY conjugate vaccination (MenACWY) - Revision, Welsh Health Circular. WHC(2015)037. <http://gov.wales/docs/dhss/publications/150724whc037en.pdf>
- [3] Welsh Government (2015) Introduction of MenB Immunisation for Infants, Welsh Health Circular. WHC(2015)040. <http://gov.wales/docs/dhss/publications/150727whc040en.pdf>
- [4] Public Health Wales (2016). 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>
- [5] le Polain de Waroux O, Saliba V, Cottrell S, Young N, Perry M, Bukasa A, Ramsay M, Brown K, Amirthalingam G. Summer music and arts festivals as hot spots for measles transmission: experience from England and Wales, June to October 2016. Euro Surveill. 2016;21(44):pii=30390. DOI: <http://dx.doi.org/10.2807/1560-7917.ES.2016.21.44.30390>

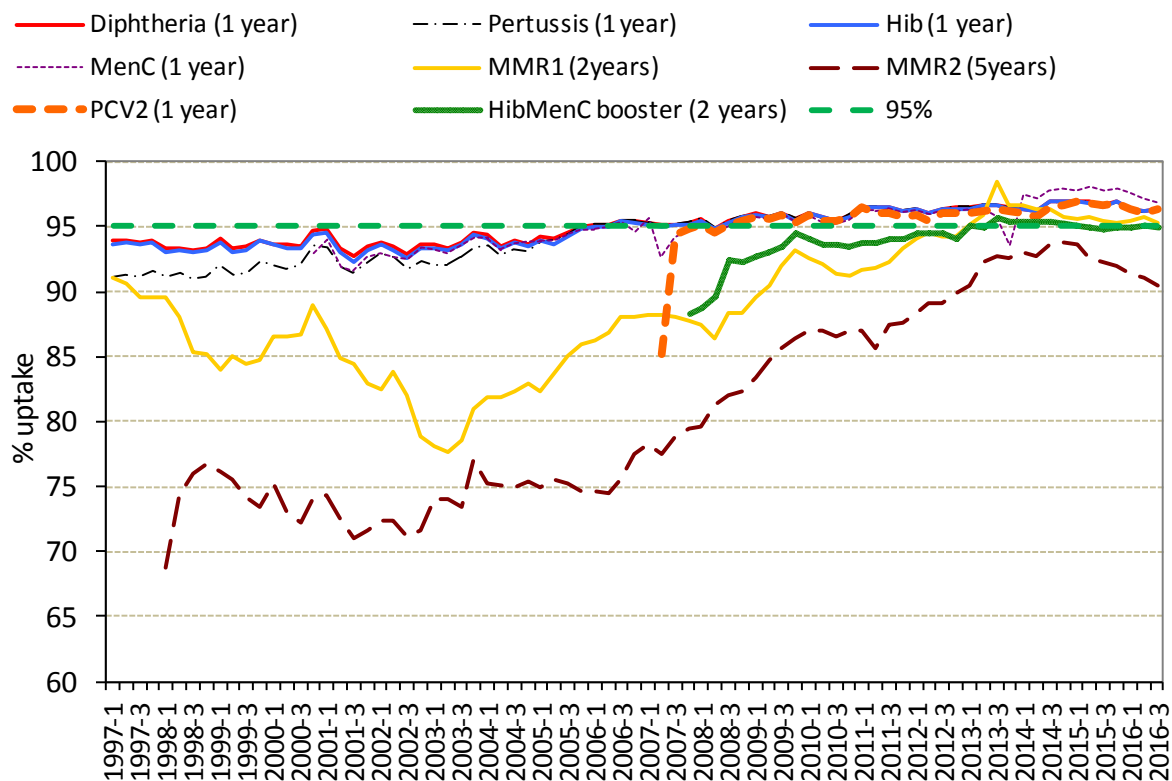
Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre.

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

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

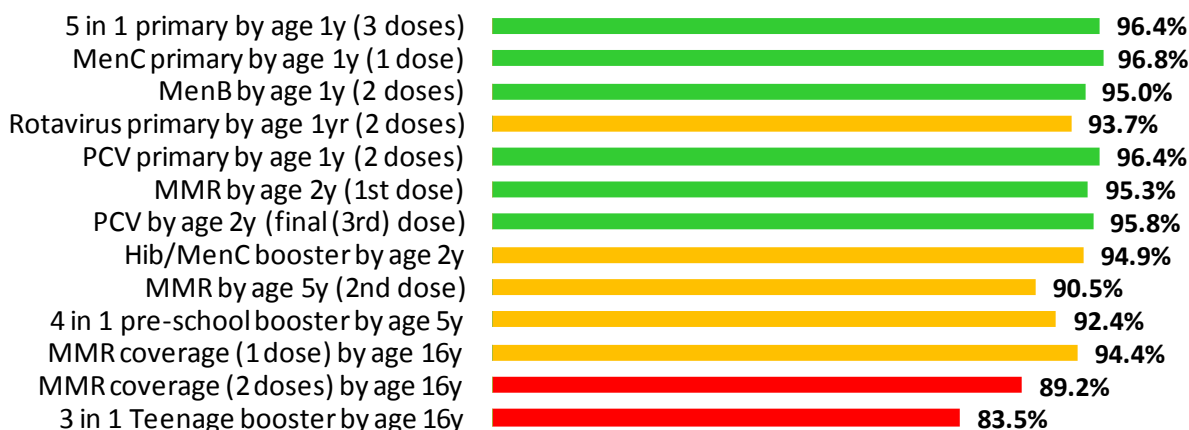
Figure 1. Percentage uptake of childhood immunisations in Wales, quarter 1 1997 to quarter 3 2016*. Data are for children reaching 1 year of age each quarter for diphtheria, pertussis, Hib, MenC⁹ and pneumococcal conjugate vaccine (PCV2), children reaching 2 years of age for MMR1 (first dose) and the Hib/MenC booster, and 5 years of age for MMR2 (second dose).



* 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.

Figure 2. Summary of uptake rates for selected immunisations⁹ in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/07/16 and 30/09/16 and resident on 30/09/16.

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⁹ MenC uptake for children reaching one year of age is based on a completed one dose course of MenC vaccination.

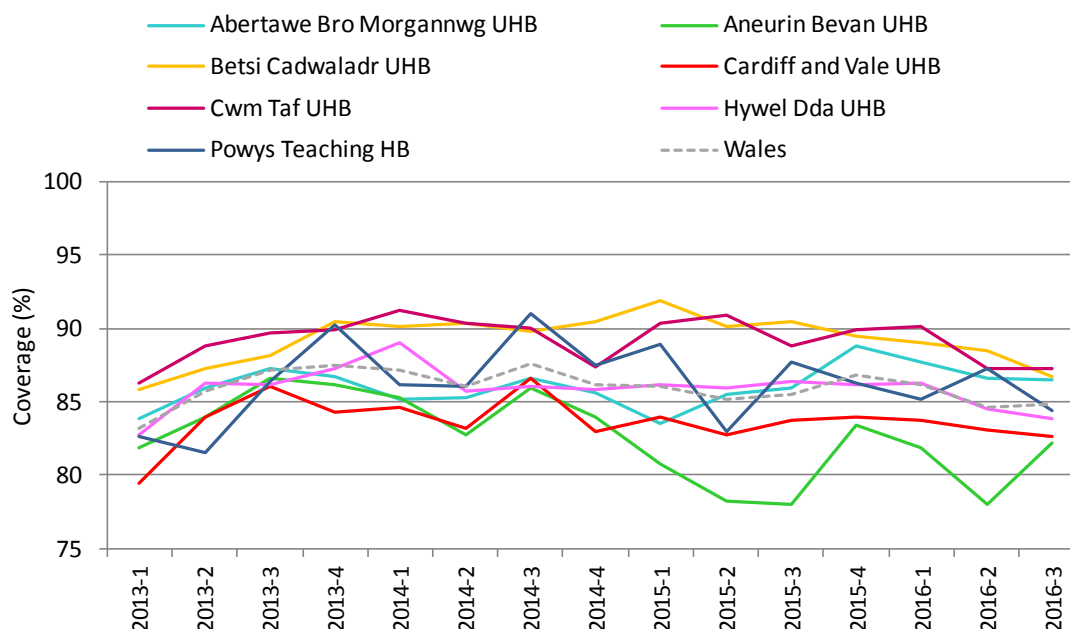
Figure 3. Percentage uptake of resident children reaching their 4th birthday between 01/07/16 and 30/09/16 and are up to date with all scheduled vaccines¹⁰ by Health Board.



Table 1. Percentages of resident children reaching their 4th birthday during quarter 3 2015 to quarter 3 2016* who are up to date with all scheduled vaccines¹⁰, by Health Board.

Area	Up to date in schedule				
	2015-3	2015-4	2016-1	2016-2	2016-3
Abertawe Bro Morgannwg UHB	85.9	88.8	87.7	86.6	86.4
Aneurin Bevan UHB	78.1	83.4	81.9	78.0	82.2
Betsi Cadwaladr UHB	90.5	89.5	89.1	88.5	86.7
Cardiff and Vale UHB	83.7	84.0	83.7	83.0	82.7
Cwm Taf UHB	88.7	89.9	90.1	87.3	87.3
Hywel Dda UHB	86.4	86.2	86.3	84.5	83.8
Powys Teaching HB	87.7	86.3	85.1	87.3	84.4
Wales	85.5	86.8	86.2	84.6	84.8

Figure 4. Trends in the percentages of children reaching their 4th birthday who are up to date with all scheduled vaccines¹⁰, 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.

¹⁰ Completed "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 revised during 2014 quarter 1, to remove the pneumococcal conjugate vaccine booster dose, as this is not clinically indicated after two years of age.

Figure 5. Uptake of “5 in 1” vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/07/16 and 30/09/16.

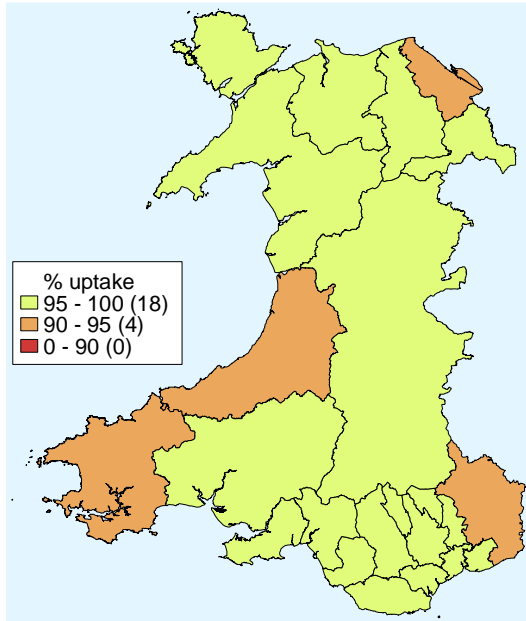


Figure 6. Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/07/16 and 30/09/16.

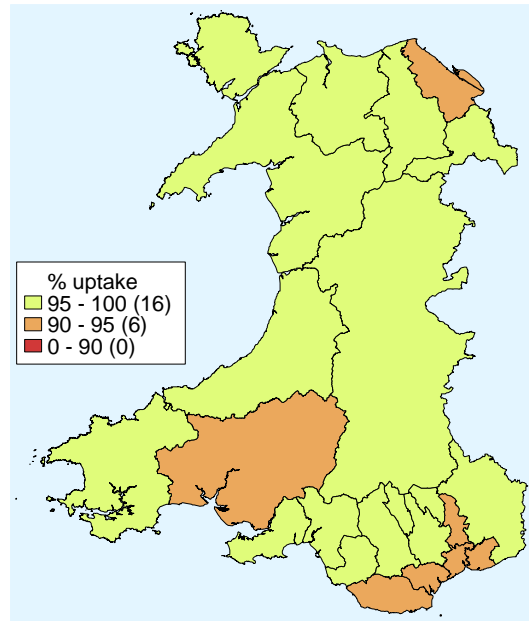


Figure 7. Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/07/16 and 30/09/16.

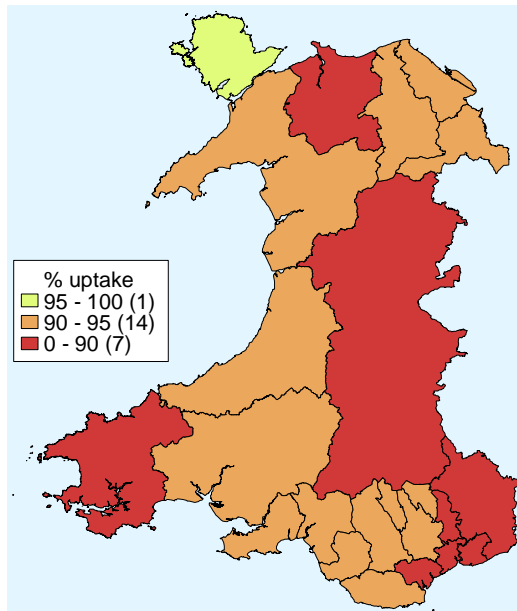


Figure 8. Uptake of “4 in 1” vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/07/16 and 30/09/16.

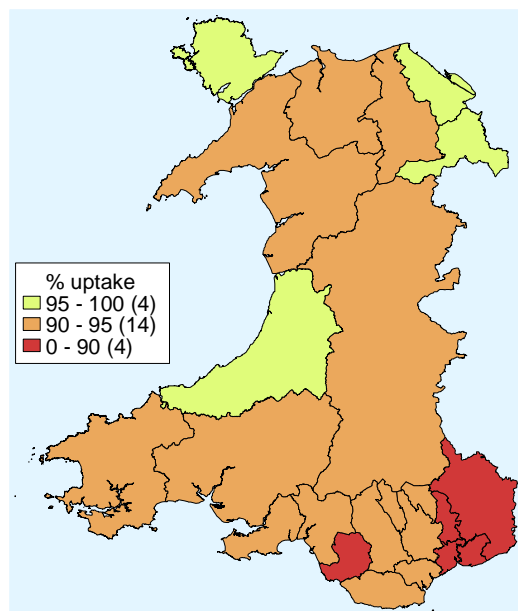


Table 2. Summary table with uptake of selected immunisations in resident children reaching their 1st, 2nd, 5th and 16th birthday between 01/07/16 and 30/09/16 and resident on 30/09/16.

Area	Age 1 year				Age 2 years				Age 4 years			Age 5 years			Age 16 years				
	Resident children (n)	5 in 1 ¹ (n) (%)	MenC ² (n) (%)	Rotavirus (n) (%)	Resident children (n)	MMR1 (n) (%)	PCVf ³ (n) (%)	Hib/MenC (n) (%)	Resident Children (n)	Up to date in schedule ⁴ (n) (%)	Resident children (n)	MMR2 (n) (%)	4 in 1 ¹ (n) (%)	Resident children (n)	MMR1 (n) (%)	MMR2 (n) (%)	3 in 1 Teenage booster ⁵ (n) (%)		
Abertawe Bro Morgannwg UHB																			
Bridgend LA	423	413 97.6	410 96.9	407 96.2	387	375 96.9	377 97.4	374 96.6	414	362 87.4	443	404 91.2	397 89.6	402	389 96.8	365 90.8	348 86.6		
Neath Port Talbot LA	388	380 97.9	383 98.7	377 97.2	386	367 95.1	371 96.1	367 95.1	390	327 83.8	397	363 91.4	362 91.2	414	395 95.4	363 87.7	343 82.9		
Swansea LA	658	640 97.3	639 97.1	629 95.6	690	665 96.4	668 96.8	662 95.9	738	644 87.3	755	692 91.7	695 92.1	639	589 92.2	549 85.9	566 88.6		
Health Board Total	1469	1433 97.5	1432 97.5	1413 96.2	1463	1407 96.2	1416 96.8	1403 95.9	1542	1333 86.4	1595	1459 91.5	1454 91.2	1455	1373 94.4	1277 87.8	1257 86.4		
Aneurin Bevan UHB																			
Blaenau Gwent LA	176	174 98.9	175 99.4	158 89.8	184	179 97.3	179 97.3	178 96.7	196	173 88.3	189	174 92.1	177 93.7	170	163 95.9	156 91.8	148 87.1		
Caerphilly LA	544	527 96.9	530 97.4	512 94.1	548	537 98.0	537 98.0	532 97.1	540	429 79.4	557	523 93.9	526 94.4	555	537 96.8	512 92.3	458 82.5		
Monmouthshire LA	234	222 94.9	222 94.9	212 90.6	199	194 97.5	192 96.5	189 95.0	236	195 82.6	221	189 85.5	191 86.4	287	256 89.2	237 82.6	226 78.7		
Newport LA	550	526 95.6	526 95.6	505 91.8	555	522 94.1	526 94.8	512 92.3	503	421 83.7	475	406 85.5	407 85.7	495	461 93.1	432 87.3	396 80.0		
Torfaen LA	262	255 97.3	258 98.5	250 95.4	266	251 94.4	251 94.4	251 94.4	296	237 80.1	249	219 88.0	222 89.2	255	247 96.9	240 94.1	213 83.5		
Health Board Total	1766	1704 96.5	1711 96.9	1637 92.7	1752	1683 96.1	1685 96.2	1662 94.9	1771	1455 82.2	1691	1511 89.4	1523 90.1	1762	1664 94.4	1577 89.5	1441 81.8		
Betsi Cadwaladr UHB																			
Anglesey LA	183	178 97.3	179 97.8	174 95.1	180	171 95.0	173 96.1	172 95.6	215	195 90.7	196	188 95.9	191 97.4	170	159 93.5	156 91.8	143 84.1		
Conwy LA	272	259 95.2	265 97.4	251 92.3	296	283 95.6	283 95.6	279 94.3	300	260 86.7	297	267 89.9	279 93.9	288	262 91.0	252 87.5	233 80.9		
Denbighshire LA	277	271 97.8	270 97.5	256 92.4	292	278 95.2	280 95.9	277 94.9	273	237 86.8	265	244 92.1	251 94.7	287	262 91.3	245 85.4	247 86.1		
Flintshire LA	412	388 94.2	393 95.4	383 93.0	403	382 94.8	385 95.5	379 94.0	465	397 85.4	420	386 91.9	403 96.0	415	397 95.7	384 92.5	349 84.1		
Gwynedd LA	318	307 96.5	294 92.5	301 94.7	319	303 95.0	303 95.0	301 94.4	353	295 83.6	366	334 91.3	346 94.5	311	298 95.8	288 92.6	268 86.2		
Wrexham LA	367	351 95.6	352 95.9	340 92.6	437	416 95.2	418 95.7	417 95.4	452	400 88.5	438	413 94.3	424 96.8	399	383 96.0	372 93.2	351 88.0		
Health Board Total	1829	1754 95.9	1753 95.8	1705 93.2	1927	1833 95.1	1842 95.6	1825 94.7	2058	1784 86.7	1982	1832 92.4	1894 95.6	1870	1761 94.2	1697 90.7	1591 85.1		
Cardiff and Vale UHB																			
Cardiff LA	1164	1112 95.5	1123 96.5	1069 91.8	1174	1103 94.0	1110 94.5	1094 93.2	1123	914 81.4	1171	1022 87.3	1060 90.5	989	936 94.6	879 88.9	756 76.4		
Vale of Glamorgan LA	336	323 96.1	326 97.0	315 93.8	351	332 94.6	333 94.9	332 94.6	353	306 86.7	394	359 91.1	370 93.9	360	348 96.7	334 92.8	289 80.3		
Health Board Total	1500	1435 95.7	1449 96.6	1384 92.3	1525	1435 94.1	1443 94.6	1426 93.5	1476	1220 82.7	1565	1381 88.2	1430 91.4	1349	1284 95.2	1213 89.9	1045 77.5		
Cwm Taf UHB																			
Merthyr Tydfil LA	217	214 98.6	215 99.1	212 97.7	215	207 96.3	208 96.7	208 96.7	195	173 88.7	205	188 91.7	192 93.7	182	176 96.7	166 91.2	165 90.7		
Rhondda Cynon Taf LA	709	693 97.7	704 99.3	677 95.5	708	678 95.8	684 96.6	681 96.2	758	659 86.9	773	710 91.8	721 93.3	670	647 96.6	606 90.4	611 91.2		
Health Board Total	926	907 97.9	919 99.2	889 96.0	923	885 95.9	892 96.6	889 96.3	953	832 87.3	978	898 91.8	913 93.4	852	823 96.6	772 90.6	776 91.1		
Hywel Dda UHB																			
Carmarthenshire LA	493	473 95.9	476 96.6	468 94.9	468	440 94.0	441 94.2	439 93.8	527	441 83.7	521	471 90.4	485 93.1	511	475 93.0	443 86.7	417 81.6		
Ceredigion LA	167	158 94.6	159 95.2	150 89.8	171	163 95.3	164 95.9	163 95.3	176	158 89.8	161	147 91.3	154 95.7	173	162 93.6	158 91.3	151 87.3		
Pembrokeshire LA	324	304 93.8	305 94.1	296 91.4	316	301 95.3	302 95.6	302 95.6	349	283 81.1	346	301 87.0	313 90.5	346	323 93.4	306 88.4	290 83.8		
Health Board Total	984	935 95.0	940 95.5	914 92.9	955	904 94.7	907 95.0	904 94.7	1052	882 83.8	1028	919 89.4	952 92.6	1030	960 93.2	907 88.1	858 83.3		
Powys Teaching UHB	283	275 97.2	275 97.2	268 94.7	279	266 95.3	268 96.1	268 96.1	340	287 84.4	326	292 89.6	306 93.9	366	332 90.7	309 84.4	283 77.3		
Unknown	2	2 100.0	2 100.0	1 50.0	12	12 100.0	12 100.0	11 91.7	18	16 88.9	19	16 84.2	16 84.2	34	30 88.2	28 82.4	28 82.4		
Wales Total	8759	8445 96.4	8481 96.8	8211 93.7	8836	8425 95.3	8465 95.8	8388 94.9	9210	7809 84.8	9184	8308 90.5	8488 92.4	8718	8227 94.4	7780 89.2	7279 83.5		

¹ Uptake of pertussis used as proxy

² Uptake of a completed one dose primary course of MenC vaccination

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 01/07/16 and 30/09/16 and resident on 30/09/16.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC ¹	Rotavirus	PCV2 ²	Men B ³	HibMenC
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University HB												
Bridgend LA	423	413 97.6	413 97.6	413 97.6	413 97.6	413 97.6	0 0.0	410 96.9	407 96.2	412 97.4	403 95.3	0 0.0
Neath Port Talbot LA	388	380 97.9	380 97.9	380 97.9	380 97.9	380 97.9	3 0.8	383 98.7	377 97.2	380 97.9	376 96.9	3 0.8
Swansea LA	658	640 97.3	640 97.3	640 97.3	640 97.3	640 97.3	3 0.5	639 97.1	629 95.6	637 96.8	634 96.4	2 0.3
Health Board Total	1469	1433 97.5	1433 97.5	1433 97.5	1433 97.5	1433 97.5	6 0.4	1432 97.5	1413 96.2	1429 97.3	1413 96.2	5 0.3
Aneurin Bevan University HB												
Blaenau Gwent LA	176	174 98.9	174 98.9	174 98.9	174 98.9	174 98.9	0 0.0	175 99.4	158 89.8	175 99.4	176 100.0	0 0.0
Caerphilly LA	544	527 96.9	527 96.9	527 96.9	527 96.9	527 96.9	0 0.0	530 97.4	512 94.1	528 97.1	523 96.1	0 0.0
Monmouthshire LA	234	222 94.9	222 94.9	222 94.9	222 94.9	222 94.9	1 0.4	222 94.9	212 90.6	223 95.3	220 94.0	1 0.4
Newport LA	550	526 95.6	526 95.6	526 95.6	526 95.6	526 95.6	0 0.0	526 95.6	505 91.8	529 96.2	521 94.7	0 0.0
Torfaen LA	262	255 97.3	255 97.3	255 97.3	255 97.3	255 97.3	0 0.0	258 98.5	250 95.4	255 97.3	251 95.8	0 0.0
Health Board Total	1766	1704 96.5	1704 96.5	1704 96.5	1704 96.5	1704 96.5	1 0.1	1711 96.9	1637 92.7	1710 96.8	1691 95.8	1 0.1
Betsi Cadwaladr University HB												
Anglesey LA	183	178 97.3	178 97.3	178 97.3	178 97.3	178 97.3	0 0.0	179 97.8	174 95.1	178 97.3	176 96.2	0 0.0
Conwy LA	272	259 95.2	259 95.2	259 95.2	259 95.2	259 95.2	1 0.4	265 97.4	251 92.3	258 94.9	257 94.5	1 0.4
Denbighshire LA	277	271 97.8	271 97.8	271 97.8	271 97.8	271 97.8	3 1.1	270 97.5	256 92.4	271 97.8	264 95.3	3 1.1
Flintshire LA	412	388 94.2	388 94.2	388 94.2	388 94.2	387 93.9	1 0.2	393 95.4	383 93.0	387 93.9	381 92.5	1 0.2
Gwynedd LA	318	307 96.5	307 96.5	307 96.5	307 96.5	307 96.5	3 0.9	294 92.5	301 94.7	305 95.9	300 94.3	4 1.3
Wrexham LA	367	351 95.6	351 95.6	351 95.6	351 95.6	351 95.6	0 0.0	352 95.9	340 92.6	351 95.6	346 94.3	0 0.0
Health Board Total	1829	1754 95.9	1754 95.9	1754 95.9	1754 95.9	1753 95.8	8 0.4	1753 95.8	1705 93.2	1750 95.7	1724 94.3	9 0.5
Cardiff and Vale University HB												
Cardiff LA	1164	1112 95.5	1112 95.5	1112 95.5	1112 95.5	1111 95.4	5 0.4	1123 96.5	1069 91.8	1110 95.4	1084 93.1	4 0.3
Vale of Glamorgan LA	336	323 96.1	323 96.1	323 96.1	323 96.1	323 96.1	2 0.6	326 97.0	315 93.8	324 96.4	316 94.0	2 0.6
Health Board Total	1500	1435 95.7	1435 95.7	1435 95.7	1435 95.7	1434 95.6	7 0.5	1449 96.6	1384 92.3	1434 95.6	1400 93.3	6 0.4
Cwm Taf University HB												
Merthyr Tydfil LA	217	214 98.6	214 98.6	214 98.6	214 98.6	214 98.6	0 0.0	215 99.1	212 97.7	214 98.6	212 97.7	0 0.0
Rhondda Cynon Taf LA	709	693 97.7	693 97.7	693 97.7	693 97.7	693 97.7	1 0.1	704 99.3	677 95.5	695 98.0	687 96.9	1 0.1
Health Board Total	926	907 97.9	907 97.9	907 97.9	907 97.9	907 97.9	1 0.1	919 99.2	889 96.0	909 98.2	899 97.1	1 0.1
Hywel Dda University HB												
Cardiff LA	493	473 95.9	473 95.9	473 95.9	473 95.9	473 95.9	5 1.0	476 96.6	468 94.9	474 96.1	468 94.9	5 1.0
Ceredigion LA	167	158 94.6	158 94.6	158 94.6	158 94.6	158 94.6	0 0.0	159 95.2	150 89.8	158 94.6	157 94.0	0 0.0
Pembrokeshire LA	324	304 93.8	304 93.8	304 93.8	304 93.8	304 93.8	0 0.0	305 94.1	296 91.4	303 93.5	297 91.7	0 0.0
Health Board Total	984	935 95.0	935 95.0	935 95.0	935 95.0	935 95.0	5 0.5	940 95.5	914 92.9	935 95.0	922 93.7	5 0.5
Powys Teaching HB	283	275 97.2	275 97.2	275 97.2	275 97.2	275 97.2	1 0.4	275 97.2	268 94.7	276 97.5	273 96.5	0 0.0
Unknown	2	2 100.0	2 100.0	2 100.0	2 100.0	2 100.0	0 0.0	2 100.0	1 50.0	2 100.0	2 100.0	0 0.0
Wales Total	8759	8445 96.4	8445 96.4	8445 96.4	8445 96.4	8443 96.4	29 0.3	8481 96.8	8211 93.7	8445 96.4	8324 95.0	27 0.3

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

² Full primary two dose course of pneumococcal conjugate vaccine.

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

Table 4. Vaccine uptake in children reaching their 2nd birthday between 01/07/16 and 30/09/16 and resident on 30/09/16.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC ¹	PCV2 ²	PCVf ³	HibMenC
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
<u>Abertawe Bro Morgannwg University HB</u>											
Bridgend LA	387	377 97.4	377 97.4	377 97.4	377 97.4	377 97.4	375 96.9	378 97.7	373 96.4	377 97.4	374 96.6
Neath Port Talbot LA	386	378 97.9	378 97.9	378 97.9	378 97.9	378 97.9	367 95.1	378 97.9	373 96.6	371 96.1	367 95.1
Swansea LA	690	674 97.7	674 97.7	674 97.7	673 97.7	673 97.5	665 96.4	672 97.4	666 96.5	668 96.8	662 95.9
Health Board Total	1463	1429 97.7	1429 97.7	1429 97.7	1428 97.7	1428 97.6	1407 96.2	1428 97.6	1412 96.5	1416 96.8	1403 95.9
<u>Aneurin Bevan University HB</u>											
Blaenau Gwent LA	184	181 98.4	181 98.4	181 98.4	181 98.4	181 98.4	179 97.3	181 98.4	179 97.3	179 97.3	178 96.7
Caerphilly LA	548	540 98.5	540 98.5	540 98.5	540 98.5	540 98.5	537 98.0	545 99.5	533 97.3	537 98.0	532 97.1
Monmouthshire LA	199	193 97.0	193 97.0	193 97.0	192 96.5	193 97.0	194 97.5	189 95.0	187 94.0	192 96.5	189 95.0
Newport LA	555	533 96.0	533 96.0	533 96.0	532 95.9	532 95.9	522 94.1	528 95.1	519 93.5	526 94.8	512 92.3
Torfaen LA	266	260 97.7	260 97.7	260 97.7	260 97.7	260 97.7	251 94.4	258 97.0	258 97.0	251 94.4	251 94.4
Health Board Total	1752	1707 97.4	1707 97.4	1707 97.4	1705 97.3	1706 97.4	1683 96.1	1701 97.1	1676 95.7	1685 96.2	1662 94.9
<u>Betsi Cadwaladr University HB</u>											
Anglesey LA	180	174 96.7	174 96.7	174 96.7	174 96.7	174 96.7	171 95.0	178 98.9	172 95.6	173 96.1	172 95.6
Conwy LA	296	288 97.3	288 97.3	288 97.3	288 97.3	288 97.3	283 95.6	287 97.0	283 95.6	283 95.6	279 94.3
Denbighshire LA	292	289 99.0	289 99.0	289 99.0	289 99.0	289 99.0	278 95.2	289 99.0	284 97.3	280 95.9	277 94.9
Flintshire LA	403	386 95.8	386 95.8	386 95.8	386 95.8	386 95.8	382 94.8	383 95.0	381 94.5	385 95.5	379 94.0
Gwynedd LA	319	309 96.9	309 96.9	309 96.9	309 96.9	309 96.9	303 95.0	308 96.6	307 96.2	303 95.0	301 94.4
Wrexham LA	437	428 97.9	428 97.9	428 97.9	427 97.7	428 97.9	416 95.2	425 97.3	423 96.8	418 95.7	417 95.4
Health Board Total	1927	1874 97.2	1874 97.2	1874 97.2	1873 97.2	1874 97.2	1833 95.1	1870 97.0	1850 96.0	1842 95.6	1825 94.7
<u>Cardiff and Vale University HB</u>											
Cardiff LA	1174	1139 97.0	1139 97.0	1139 97.0	1139 97.0	1139 97.0	1136 96.8	1103 94.0	1123 95.7	1110 94.5	1094 93.2
Vale of Glamorgan LA	351	341 97.2	341 97.2	341 97.2	341 97.2	341 97.2	341 97.2	332 94.6	342 97.4	339 96.6	332 94.6
Health Board Total	1525	1480 97.0	1480 97.0	1480 97.0	1480 97.0	1480 97.0	1477 96.9	1435 94.1	1465 96.1	1449 95.0	1443 94.6
<u>Cwm Taf University HB</u>											
Merthyr Tydfil LA	215	212 98.6	212 98.6	212 98.6	212 98.6	212 98.6	207 96.3	209 97.2	212 98.6	208 96.7	208 96.7
Rhondda Cynon Taf LA	708	698 98.6	698 98.6	698 98.6	698 98.6	698 98.6	695 98.2	678 95.8	700 98.9	695 98.2	681 96.2
Health Board Total	923	910 98.6	910 98.6	910 98.6	910 98.6	910 98.6	907 98.3	885 95.9	909 98.5	907 98.3	892 96.6
<u>Hywel Dda University HB</u>											
Carmarthenshire LA	468	452 96.6	452 96.6	452 96.6	452 96.6	452 96.6	440 94.0	455 97.2	445 95.1	441 94.2	439 93.8
Ceredigion LA	171	164 95.9	164 95.9	164 95.9	164 95.9	164 95.9	163 95.3	164 95.9	162 94.7	164 95.9	163 95.3
Pembrokeshire LA	316	307 97.2	307 97.2	307 97.2	307 97.2	307 97.2	301 95.3	309 97.8	303 95.9	302 95.6	302 95.6
Health Board Total	955	923 96.6	923 96.6	923 96.6	923 96.6	923 96.6	904 94.7	928 97.2	910 95.3	907 95.0	904 94.7
<u>Powys Teaching HB</u>											
Unknown	12	12 100.0	12 100.0	12 100.0	12 100.0	12 100.0	12 100.0	12 100.0	11 91.7	12 100.0	11 91.7
Wales Total	8836	8606 97.4	8606 97.4	8606 97.4	8602 97.4	8598 97.3	8425 95.3	8584 97.1	8485 96.0	8465 95.8	8388 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 01/07/16 and 30/09/16 and resident on 30/09/16. The proportion of children who have received all of these vaccines by their 4th birthday is also presented.

Area	Resident children (n)	4 in 1 Preschool Booster ¹		HibMenC		MMR dose 2		Up to date in schedule ²	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB									
Bridgend LA	414	368	88.9	401	96.9	389	94.0	362	87.4
Neath Port Talbot LA	390	338	86.7	361	92.6	350	89.7	327	83.8
Swansea LA	738	661	89.6	700	94.9	682	92.4	644	87.3
Health Board Total	1542	1367	88.7	1462	94.8	1421	92.2	1333	86.4
Aneurin Bevan University HB									
Blaenau Gwent LA	196	174	88.8	192	98.0	174	88.8	173	88.3
Caerphilly LA	540	440	81.5	519	96.1	438	81.1	429	79.4
Monmouthshire LA	236	204	86.4	217	91.9	199	84.3	195	82.6
Newport LA	503	435	86.5	469	93.2	437	86.9	421	83.7
Torfaen LA	296	243	82.1	284	95.9	244	82.4	237	80.1
Health Board Total	1771	1496	84.5	1681	94.9	1492	84.2	1455	82.2
Betsi Cadwaladr University HB									
Anglesey LA	215	201	93.5	205	95.3	196	91.2	195	90.7
Conwy LA	300	265	88.3	283	94.3	260	86.7	260	86.7
Denbighshire LA	273	248	90.8	254	93.0	238	87.2	237	86.8
Flintshire LA	465	409	88.0	438	94.2	401	86.2	397	85.4
Gwynedd LA	353	312	88.4	326	92.4	297	84.1	295	83.6
Wrexham LA	452	410	90.7	436	96.5	403	89.2	400	88.5
Health Board Total	2058	1845	89.7	1942	94.4	1795	87.2	1784	86.7
Cardiff and Vale University HB									
Cardiff LA	1123	975	86.8	1014	90.3	944	84.1	914	81.4
Vale of Glamorgan LA	353	316	89.5	336	95.2	309	87.5	306	86.7
Health Board Total	1476	1291	87.5	1350	91.5	1253	84.9	1220	82.7
Cwm Taf University HB									
Merthyr Tydfil LA	195	177	90.8	184	94.4	178	91.3	173	88.7
Rhondda Cynon Taf LA	758	673	88.8	731	96.4	679	89.6	659	86.9
Health Board Total	953	850	89.2	915	96.0	857	89.9	832	87.3
Hywel Dda University HB									
Carmarthenshire LA	527	453	86.0	491	93.2	471	89.4	441	83.7
Ceredigion LA	176	164	93.2	164	93.2	159	90.3	158	89.8
Pembrokeshire LA	349	297	85.1	323	92.6	287	82.2	283	81.1
Health Board Total	1052	914	86.9	978	93.0	917	87.2	882	83.8
Powys Teaching HB	340	304	89.4	306	90.0	298	87.6	287	84.4
Unknown	18	16	88.9	16	88.9	16	88.9	16	88.9
Wales Total	9210	8083	87.8	8650	93.9	8049	87.4	7809	84.8

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 01/07/16 and 30/09/16 and resident on 30/09/16. 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	443	397	89.6	422	95.3	404	91.2	388	87.6
Neath Port Talbot LA	397	362	91.2	374	94.2	363	91.4	350	88.2
Swansea LA	755	695	92.1	713	94.4	692	91.7	673	89.1
Health Board Total	1595	1454	91.2	1509	94.6	1459	91.5	1411	88.5
<u>Aneurin Bevan University HB</u>									
Blaenau Gwent LA	189	177	93.7	182	96.3	174	92.1	172	91.0
Caerphilly LA	557	526	94.4	538	96.6	523	93.9	516	92.6
Monmouthshire LA	221	191	86.4	201	91.0	189	85.5	184	83.3
Newport LA	475	407	85.7	430	90.5	406	85.5	389	81.9
Torfaen LA	249	222	89.2	236	94.8	219	88.0	214	85.9
Health Board Total	1691	1523	90.1	1587	93.8	1511	89.4	1475	87.2
<u>Betsi Cadwaladr University HB</u>									
Anglesey LA	196	191	97.4	192	98.0	188	95.9	187	95.4
Conwy LA	297	279	93.9	281	94.6	267	89.9	267	89.9
Denbighshire LA	265	251	94.7	248	93.6	244	92.1	239	90.2
Flintshire LA	420	403	96.0	397	94.5	386	91.9	384	91.4
Gwynedd LA	366	346	94.5	343	93.7	334	91.3	333	91.0
Wrexham LA	438	424	96.8	415	94.7	413	94.3	407	92.9
Health Board Total	1982	1894	95.6	1876	94.7	1832	92.4	1817	91.7
<u>Cardiff and Vale University HB</u>									
Cardiff LA	1171	1060	90.5	1059	90.4	1022	87.3	991	84.6
Vale of Glamorgan LA	394	370	93.9	372	94.4	359	91.1	355	90.1
Health Board Total	1565	1430	91.4	1431	91.4	1381	88.2	1346	86.0
<u>Cwm Taf University HB</u>									
Merthyr Tydfil LA	205	192	93.7	197	96.1	188	91.7	187	91.2
Rhondda Cynon Taf LA	773	721	93.3	735	95.1	710	91.8	700	90.6
Health Board Total	978	913	93.4	932	95.3	898	91.8	887	90.7
<u>Hywel Dda University HB</u>									
Carmarthenshire LA	521	485	93.1	489	93.9	471	90.4	461	88.5
Ceredigion LA	161	154	95.7	146	90.7	147	91.3	143	88.8
Pembrokeshire LA	346	313	90.5	321	92.8	301	87.0	295	85.3
Health Board Total	1028	952	92.6	956	93.0	919	89.4	899	87.5
<u>Powys Teaching HB</u>	326	306	93.9	297	91.1	292	89.6	284	87.1
Unknown	19	16	84.2	17	89.5	16	84.2	16	84.2
Wales Total	9184	8488	92.4	8605	93.7	8308	90.5	8135	88.6

¹ Uptake of acellular pertussis used as proxy

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

Table 7. Vaccine uptake in children reaching their 5th birthday between 01/07/16 and 30/09/16 and resident on 30/09/16.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC ¹	PCVf ²	HibMenC	MMR1	MMR2	D4	T4	aP	Po4
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University HE															
Bridgend LA	443	427 96.4	427 96.4	427 96.4	427 96.4	426 96.2	418 94.4	422 95.3	422 95.3	430 97.1	404 91.2	397 89.6	397 89.6	397 89.6	397 89.6
Neath Port Talbot LA	397	382 96.2	382 96.2	382 96.2	382 96.2	382 96.2	376 94.7	372 93.7	374 94.2	386 97.2	363 91.4	362 91.2	362 91.2	362 91.2	362 91.2
Swansea LA	755	722 95.6	722 95.6	722 95.6	721 95.5	721 95.5	707 93.6	709 93.9	713 94.4	732 97.0	692 91.7	695 92.1	695 92.1	695 92.1	695 92.1
Health Board Total	1595	1531 96.0	1531 96.0	1531 96.0	1530 95.9	1529 95.9	1501 94.1	1503 94.2	1509 94.6	1548 97.1	1459 91.5	1454 91.2	1454 91.2	1454 91.2	1454 91.2
Aneurin Bevan University HB															
Blaenau Gwent LA	189	183 96.8	183 96.8	183 96.8	183 96.8	183 96.8	182 96.3	182 96.3	182 96.3	186 98.4	174 92.1	177 93.7	177 93.7	177 93.7	177 93.7
Caerphilly LA	557	547 98.2	547 98.2	547 98.2	547 98.2	545 97.8	535 96.1	537 96.4	538 96.6	550 98.7	523 93.9	526 94.4	526 94.4	526 94.4	525 94.3
Monmouthshire LA	221	208 94.1	208 94.1	208 94.1	208 94.1	208 94.1	204 92.3	206 93.2	201 91.0	210 95.0	189 85.5	191 86.4	191 86.4	191 86.4	191 86.4
Newport LA	475	440 92.6	440 92.6	440 92.6	439 92.4	438 92.2	430 90.5	435 91.6	430 90.5	450 94.7	406 85.5	407 85.7	407 85.7	407 85.7	407 85.7
Torfaen LA	249	245 98.4	245 98.4	245 98.4	245 98.4	245 98.4	242 97.2	238 95.6	236 94.8	246 98.8	219 88.0	222 89.2	222 89.2	222 89.2	222 89.2
Health Board Total	1691	1623 96.0	1623 96.0	1623 96.0	1622 95.9	1619 95.7	1593 94.2	1598 94.5	1587 93.8	1642 97.1	1511 89.4	1523 90.1	1523 90.1	1523 90.1	1522 90.0
Betsi Cadwaladr University HB															
Anglesey LA	196	192 98.0	192 98.0	192 98.0	192 98.0	192 98.0	190 96.9	189 96.4	192 98.0	194 99.0	188 95.9	191 97.4	191 97.4	191 97.4	191 97.4
Conwy LA	297	280 94.3	280 94.3	280 94.3	281 94.6	280 94.3	278 93.6	278 93.6	281 94.6	286 96.3	267 89.9	279 93.9	279 93.9	279 93.9	279 93.9
Denbighshire LA	265	251 94.7	251 94.7	251 94.7	251 94.7	251 94.7	246 92.8	248 93.6	248 93.6	256 96.6	244 92.1	251 94.7	251 94.7	251 94.7	251 94.7
Flintshire LA	420	398 94.8	398 94.8	398 94.8	398 94.8	398 94.8	396 94.3	391 93.1	397 94.5	408 97.1	386 91.9	403 96.0	403 96.0	403 96.0	403 96.0
Gwynedd LA	366	344 94.0	344 94.0	344 94.0	344 94.0	344 94.0	332 90.7	342 93.4	343 93.7	353 96.4	334 91.3	346 94.5	346 94.5	346 94.5	346 94.5
Wrexham LA	438	424 96.8	424 96.8	424 96.8	423 96.6	424 96.8	419 95.7	419 95.7	415 94.7	425 97.0	413 94.3	424 96.8	424 96.8	424 96.8	424 96.8
Health Board Total	1982	1889 95.3	1889 95.3	1889 95.3	1889 95.3	1889 95.3	1861 93.9	1867 94.2	1876 94.7	1922 97.0	1832 92.4	1894 95.6	1894 95.6	1894 95.6	1894 95.6
Cardiff and Vale University HB															
Cardiff LA	1171	1101 94.0	1101 94.0	1101 94.0	1100 93.9	1096 93.6	1053 89.9	1053 89.9	1059 90.4	1133 96.8	1022 87.3	1060 90.5	1060 90.5	1060 90.5	1060 90.5
Vale of Glamorgan LA	394	382 97.0	382 97.0	382 97.0	382 97.0	382 97.0	372 94.4	372 94.4	372 94.4	385 97.7	359 91.1	370 93.9	370 93.9	370 93.9	369 93.7
Health Board Total	1565	1483 94.8	1483 94.8	1483 94.8	1482 94.7	1478 94.4	1425 91.1	1425 91.1	1431 91.4	1518 97.0	1381 88.2	1430 91.4	1430 91.4	1430 91.4	1429 91.3
Cwm Taf University HB															
Merthyr Tydfil LA	205	196 95.6	196 95.6	196 95.6	196 95.6	196 95.6	195 95.1	198 96.6	197 96.1	201 98.0	188 91.7	192 93.7	192 93.7	192 93.7	192 93.7
Rhondda Cynon Taf LA	773	754 97.5	754 97.5	754 97.5	753 97.4	754 97.5	744 96.2	739 95.6	735 95.1	752 97.3	710 91.8	721 93.3	721 93.3	721 93.3	721 93.3
Health Board Total	978	950 97.1	950 97.1	950 97.1	949 97.0	950 97.1	939 96.0	937 95.8	932 95.3	953 97.4	898 91.8	913 93.4	913 93.4	913 93.4	913 93.4
Hywel Dda University HB															
Carmarthenshire LA	521	499 95.8	499 95.8	499 95.8	499 95.8	498 95.6	486 93.3	493 94.6	489 93.9	504 96.7	471 90.4	486 93.3	486 93.3	485 93.1	485 93.1
Ceredigion LA	161	147 91.3	147 91.3	147 91.3	147 91.3	147 91.3	142 88.2	146 90.7	146 90.7	156 96.9	147 91.3	154 95.7	154 95.7	154 95.7	154 95.7
Pembrokeshire LA	346	327 94.5	327 94.5	327 94.5	327 94.5	327 94.5	322 93.1	320 92.5	321 92.8	337 97.4	301 87.0	313 90.5	313 90.5	313 90.5	313 90.5
Health Board Total	1028	973 94.6	973 94.6	973 94.6	973 94.6	972 94.6	950 92.4	959 93.3	956 93.0	997 97.0	919 89.4	953 92.7	953 92.7	952 92.6	952 92.6
Powys Teaching HB	326	304 93.3	304 93.3	304 93.3	304 93.3	304 93.3	294 90.2	296 90.8	297 91.1	311 95.4	292 89.6	306 93.9	306 93.9	306 93.9	304 93.3
Unknown	19	17 89.5	17 89.5	17 89.5	17 89.5	17 89.5	17 89.5	17 89.5	17 89.5	17 89.5	16 84.2	16 84.2	16 84.2	16 84.2	16 84.2
Wales Total	9184	8770 95.5	8770 95.5	8770 95.5	8766 95.4	8758 95.4	8580 93.4	8602 93.7	8605 93.7	8908 97.0	8308 90.5	8489 92.4	8489 92.4	8488 92.4	8484 92.4

¹ Completed three dose course, or two doses 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 01/09/15 and 31/08/16 and resident on 30/09/16.

Area	13 years (2015-16 School Year 8) ¹			14 years (2015-16 School Year 9) ^{1,2}					15 years (2015-16 School Year 10)					
	Resident girls (n)	HPV 1 dose (n) (%)		Resident girls (n)	HPV 1 dose (n) (%)	HPV 2 dose (n) (%)		Resident girls (n)	HPV 1 dose (n) (%)	HPV 2 dose (n) (%)	HPV 3 dose (n) (%)			
Abertawe Bro Morgannwg University HB														
Bridgend LA	773	709 91.7		742	693 93.4	643 86.7		848	786 92.7	775 91.4	716 84.4			
Neath Port Talbot LA	708	630 89.0		715	678 94.8	634 88.7		725	680 93.8	672 92.7	641 88.4			
Swansea LA	1242	1086 87.4		1225	1156 94.4	1064 86.9		1283	1178 91.8	1162 90.6	1099 85.7			
Health Board Total	2723	2425 89.1		2682	2527 94.2	2341 87.3		2856	2644 92.6	2609 91.4	2456 86.0			
Aneurin Bevan University HB														
Blaenau Gwent LA	322	287 89.1		373	353 94.6	337 90.3		363	348 95.9	344 94.8	319 87.9			
Caerphilly LA	987	823 83.4		947	891 94.1	836 88.3		962	901 93.7	898 93.3	858 89.2			
Monmouthshire LA	533	427 80.1		505	406 80.4	381 75.4		517	408 78.9	398 77.0	377 72.9			
Newport LA	901	733 81.4		924	794 85.9	737 79.8		857	731 85.3	726 84.7	679 79.2			
Torfaen LA	476	415 87.2		494	452 91.5	425 86.0		514	478 93.0	473 92.0	450 87.5			
Health Board Total	3219	2685 83.4		3243	2896 89.3	2716 83.7		3213	2866 89.2	2839 88.4	2683 83.5			
Betsi Cadwaladr University HB														
Anglesey LA	345	296 85.8		352	320 90.9	281 79.8		354	320 90.4	315 89.0	301 85.0			
Conwy LA	541	399 73.8		538	489 90.9	444 82.5		629	567 90.1	565 89.8	544 86.5			
Denbighshire LA	467	377 80.7		480	434 90.4	395 82.3		547	482 88.1	483 88.3	473 86.5			
Flintshire LA	739	634 85.8		794	734 92.4	661 83.2		796	722 90.7	718 90.2	696 87.4			
Gwynedd LA	562	484 86.1		555	492 88.6	480 86.5		599	545 91.0	544 90.8	527 88.0			
Wrexham LA	690	558 80.9		651	580 89.1	531 81.6		710	654 92.1	644 90.7	627 88.3			
Health Board Total	3344	2748 82.2		3370	3049 90.5	2792 82.8		3635	3290 90.5	3269 89.9	3168 87.2			
Cardiff and Vale University HB														
Cardiff LA	1874	1541 82.2		1731	1490 86.1	1370 79.1		1751	1532 87.5	1506 86.0	1329 75.9			
Vale of Glamorgan LA	699	607 86.8		658	602 91.5	552 83.9		664	609 91.7	600 90.4	526 79.2			
Health Board Total	2573	2148 83.5		2389	2092 87.6	1922 80.5		2415	2141 88.7	2106 87.2	1855 76.8			
Cwm Taf University HB														
Merthyr Tydfil LA	332	296 89.2		288	268 93.1	264 91.7		300	280 93.3	278 92.7	274 91.3			
Rhondda Cynon Taf LA	1369	1263 92.3		1221	1166 95.5	1144 93.7		1268	1222 96.4	1207 95.2	1169 92.2			
Health Board Total	1701	1559 91.7		1509	1434 95.0	1408 93.3		1568	1502 95.8	1485 94.7	1443 92.0			
Hywel Dda University HB														
Carmarthenshire LA	977	877 89.8		933	861 92.3	834 89.4		963	899 93.4	886 92.0	868 90.1			
Ceredigion LA	323	266 82.4		312	271 86.9	267 85.6		307	278 90.6	277 90.2	272 88.6			
Pembrokeshire LA	615	513 83.4		537	463 86.2	445 82.9		563	494 87.7	485 86.1	464 82.4			
Health Board Total	1915	1656 86.5		1782	1595 89.5	1546 86.8		1833	1671 91.2	1648 89.9	1604 87.5			
Powys Teaching HB	630	481 76.3		622	530 85.2	489 78.6		630	518 82.2	511 81.1	487 77.3			
Unknown	47	39 83.0		53	46 86.8	41 77.4		76	59 77.6	59 77.6	58 76.3			
Wales Total	16152	13741 85.1		15650	14169 90.5	13255 84.7		16226	14691 90.5	14526 89.5	13754 84.8			

¹ Timings of HPV immunisation sessions vary between health boards and data entry to local Child Health offices databases 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. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 14th birthday between 01/09/15 and 31/08/16 and resident on 30/09/16 (2015-16 school year 9), with breakdown of MMR1 and MMR2 coverage by sex.

Area	Resident children		Teenage 3 in 1 booster ¹								Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)
Abertawe Bro Morgannwg University HB	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)	(n)	(n) (%)
Bridgend LA	1515	1421 93.8	1327	87.6	1358	89.6	4	0.3	1366	90.2	742	699 94.2	657	88.5	773	722 93.4	670	86.7				
Neath Port Talbot LA	1458	1352 92.7	1250	85.7	1315	90.2	2	0.1	1337	91.7	715	675 94.4	624	87.3	743	677 91.1	626	84.3				
Swansea LA	2490	2287 91.8	2127	85.4	2198	88.3	7	0.3	2208	88.7	1225	1133 92.5	1055	86.1	1265	1154 91.2	1072	84.7				
Health Board Total	5463	5060 92.6	4704 86.1	4871 89.2	13	0.2	4911 89.9	2682	2507 93.5	2336 87.1	2781	2553 91.8	2368 85.1									
Aneurin Bevan University HB																						
Blaenau Gwent LA	695	660 95.0	628	90.4	623	89.6	0	0.0	624	89.8	373	355 95.2	342	91.7	322	305 94.7	286	88.8				
Caerphilly LA	2022	1947 96.3	1853	91.6	1736	85.9	30	1.5	1726	85.4	947	911 96.2	863	91.1	1075	1036 96.4	990	92.1				
Monmouthshire LA	1027	875 85.2	811	79.0	787	76.6	3	0.3	783	76.2	505	428 84.8	403	79.8	521	447 85.8	408	78.3				
Newport LA	1861	1685 90.5	1571	84.4	1468	78.9	24	1.3	1458	78.3	924	839 90.8	794	85.9	935	845 90.4	777	83.1				
Torfaen LA	1018	957 94.0	908	89.2	880	86.4	2	0.2	879	86.3	494	462 93.5	440	89.1	524	495 94.5	468	89.3				
Health Board Total	6623	6124 92.5	5771 87.1	5494 83.0	59	0.9	5470 82.6	3243	2995 92.4	2842 87.6	3377	3128 92.6	2929 86.7									
Betsi Cadwaladr University HB																						
Anglesey LA	715	677 94.7	661	92.4	575	80.4	1	0.1	564	78.9	352	334 94.9	327	92.9	363	343 94.5	334	92.0				
Conwy LA	1123	1047 93.2	1001	89.1	934	83.2	1	0.1	942	83.9	538	505 93.9	481	89.4	584	541 92.6	519	88.9				
Denbighshire LA	1038	967 93.2	919	88.5	825	79.5	0	0.0	807	77.7	480	443 92.3	422	87.9	558	524 93.9	497	89.1				
Flintshire LA	1580	1479 93.6	1417	89.7	921	58.3	0	0.0	903	57.2	794	742 93.5	716	90.2	786	737 93.8	701	89.2				
Gwynedd LA	1167	1105 94.7	1062	91.0	887	76.0	4	0.3	903	77.4	555	527 95.0	506	91.2	612	578 94.4	556	90.8				
Wrexham LA	1323	1258 95.1	1233	93.2	1022	77.2	1	0.1	1014	76.6	651	621 95.4	614	94.3	672	637 94.8	619	92.1				
Health Board Total	6946	6533 94.1	6293 90.6	5164 74.3	7	0.1	5133 73.9	3370	3172 94.1	3066 91.0	3575	3360 94.0	3226 90.2									
Cardiff and Vale University HB																						
Cardiff LA	3661	3340 91.2	3073	83.9	2532	69.2	1134	31.0	1895	51.8	1731	1576 91.0	1453	83.9	1929	1764 91.4	1620	84.0				
Vale of Glamorgan LA	1335	1253 93.9	1181	88.5	1062	79.6	461	34.5	822	61.6	658	626 95.1	597	90.7	677	627 92.6	584	86.3				
Health Board Total	4996	4593 91.9	4254 85.1	3594 71.9	1595	31.9	2717 54.4	2389	2202 92.2	2050 85.8	2606	2391 91.7	2204 84.6									
Cwm Taf University HB																						
Merthyr Tydfil LA	627	595 94.9	550	87.7	555	88.5	1	0.2	555	88.5	288	276 95.8	256	88.9	338	319 94.4	294	87.0				
Rhondda Cynon Taf LA	2514	2383 94.8	2248	89.4	2211	87.9	12	0.5	2214	88.1	1221	1167 95.6	1109	90.8	1293	1216 94.0	1139	88.1				
Health Board Total	3141	2978 94.8	2798 89.1	2766 88.1	13	0.4	2769 88.2	1509	1443 95.6	1365 90.5	1631	1535 94.1	1433 87.9									
Hywel Dda University HB																						
Carmarthenshire LA	1997	1857 93.0	1813	90.8	1770	88.6	5	0.3	1769	88.6	933	867 92.9	844	90.5	1064	990 93.0	969	91.1				
Ceredigion LA	620	572 92.3	546	88.1	533	86.0	1	0.2	530	85.5	312	287 92.0	277	88.8	308	285 92.5	269	87.3				
Pembrokeshire LA	1178	1086 92.2	1016	86.2	911	77.3	8	0.7	894	75.9	537	499 92.9	468	87.2	641	587 91.6	548	85.5				
Health Board Total	3795	3515 92.6	3375 88.9	3214 84.7	14	0.4	3193 84.1	1782	1653 92.8	1589 89.2	2013	1862 92.5	1786 88.7									
Powys Teaching HB	1289	1159 89.9	1063 82.5	1051 81.5	1	0.1	1055 81.8	622	568 91.3	526 84.6	667	591 88.6	537 80.5									
Unknown	109	98 89.9	94	86.2	79	72.5	3	2.8	84	77.1	53	49 92.5	47	88.7	56	49 87.5	47	83.9				
Wales Total	32362	30060 92.9	28352 87.6	26233 81.1	1705	5.3	25332 78.3	15650	14589 93.2	13821 88.3	16706	15469 92.6	14530 87.0									

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

² Single antigen meningococcal group C vaccination

Table 10. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 15th birthday between 01/09/15 and 31/08/16 and resident on 30/09/16 (2015-16 school year 10), with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		Teenage 3 in 1 booster ¹								Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n) (%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
Abertawe Bro Morgannwg University HB																						
Bridgend LA	1682	1609 95.7	1529 90.9	1503 89.4	1509 89.7	6 0.4	848	810 95.5	769 90.7	834	799 95.8	760 91.1										
Neath Port Talbot LA	1524	1438 94.4	1327 87.1	1340 87.9	1323 86.8	9 0.6	725	696 96.0	652 89.9	799	742 92.9	675 84.5										
Swansea LA	2550	2358 92.5	2173 85.2	2213 86.8	2124 83.3	14 0.5	1283	1189 92.7	1112 86.7	1267	1169 92.3	1061 83.7										
Health Board Total	5756	5405 93.9	5029 87.4	5056 87.8	4956 86.1	29 0.5	2856	2695 94.4	2533 88.7	2900	2710 93.4	2496 86.1										
Aneurin Bevan University HB																						
Blaenau Gwent LA	732	693 94.7	665 90.8	618 84.4	611 83.5	112 15.3	363	340 93.7	325 89.5	369	353 95.7	340 92.1										
Caerphilly LA	2017	1964 97.4	1904 94.4	1693 83.9	1668 82.7	167 8.3	962	933 97.0	891 92.6	1055	1031 97.7	1013 96.0										
Monmouthshire LA	1076	946 87.9	867 80.6	833 77.4	815 75.7	366 34.0	517	461 89.2	433 83.8	559	485 86.8	434 77.6										
Newport LA	1776	1662 93.6	1557 87.7	1458 82.1	1428 80.4	234 13.2	857	799 93.2	748 87.3	918	862 93.9	808 88.0										
Torfaen LA	1055	1016 96.3	976 92.5	926 87.8	918 87.0	209 19.8	514	494 96.1	474 92.2	541	522 96.5	502 92.8										
Health Board Total	6656	6281 94.4	5969 89.7	5528 83.1	5440 81.7	1088 16.3	3213	3027 94.2	2871 89.4	3442	3253 94.5	3097 90.0										
Betsi Cadwaladr University HB																						
Anglesey LA	715	679 95.0	662 92.6	586 82.0	537 75.1	10 1.4	354	337 95.2	327 92.4	361	342 94.7	335 92.8										
Conwy LA	1254	1156 92.2	1076 85.8	1004 80.1	980 78.1	12 1.0	629	581 92.4	546 86.8	625	575 92.0	530 84.8										
Denbighshire LA	1125	1037 92.2	981 87.2	913 81.2	887 78.8	14 1.2	547	506 92.5	483 88.3	577	531 92.0	498 86.3										
Flintshire LA	1613	1523 94.4	1457 90.3	1340 83.1	1307 81.0	8 0.5	796	759 95.4	728 91.5	817	764 93.5	729 89.2										
Gwynedd LA	1241	1182 95.2	1139 91.8	1041 83.9	952 76.7	12 1.0	599	577 96.3	554 92.5	642	605 94.2	585 91.1										
Wrexham LA	1449	1386 95.7	1333 92.0	1210 83.5	1176 81.2	7 0.5	710	684 96.3	650 91.5	739	702 95.0	683 92.4										
Health Board Total	7397	6963 94.1	6648 89.9	6094 82.4	5839 78.9	63 0.9	3635	3444 94.7	3288 90.5	3761	3519 93.6	3360 89.3										
Cardiff and Vale University HB																						
Cardiff LA	3706	3416 92.2	3171 85.6	2755 74.3	2622 70.8	137 3.7	1751	1618 92.4	1509 86.2	1955	1798 92.0	1662 85.0										
Vale of Glamorgan LA	1347	1265 93.9	1181 87.7	1095 81.3	1051 78.0	46 3.4	664	624 94.0	585 88.1	683	641 93.9	596 87.3										
Health Board Total	5053	4681 92.6	4352 86.1	3850 76.2	3673 72.7	183 3.6	2415	2242 92.8	2094 86.7	2638	2439 92.5	2258 85.6										
Cwm Taf University HB																						
Merthyr Tydfil LA	632	601 95.1	561 88.8	577 91.3	570 90.2	14 2.2	300	287 95.7	269 89.7	332	314 94.6	292 88.0										
Rhondda Cynon Taf LA	2619	2515 96.0	2354 89.9	2398 91.6	2351 89.8	66 2.5	1268	1226 96.7	1156 91.2	1350	1289 95.5	1198 88.7										
Health Board Total	3251	3116 95.8	2915 89.7	2975 91.5	1568 89.8	80 2.5	1568	1513 96.5	1425 90.9	1682	1603 95.3	1490 88.6										
Hywel Dda University HB																						
Carmarthenshire LA	1989	1853 93.2	1792 90.1	1765 88.7	1730 87.0	25 1.3	963	912 94.7	886 92.0	1026	941 91.7	906 88.3										
Ceredigion LA	665	623 93.7	596 89.6	583 87.7	578 86.9	5 0.8	307	293 95.4	284 92.5	358	330 92.2	312 87.2										
Pembrokeshire LA	1241	1144 92.2	1089 87.8	927 74.7	893 72.0	13 1.0	563	524 93.1	494 87.7	678	620 91.4	595 87.8										
Health Board Total	3895	3620 92.9	3477 89.3	3275 84.1	3201 82.2	43 1.1	1833	1729 94.3	1664 90.8	2062	1891 91.7	1813 87.9										
Powys Teaching HB	1329	1194 89.8	1111 83.6	1075 80.9	1094 82.3	16 1.2	630	567 90.0	522 82.9	699	627 89.7	589 84.3										
Unknown	161	143 88.8	135 83.9	117 72.7	117 72.7	9 5.6	76	67 88.2	65 85.5	85	76 89.4	70 82.4										
Wales Total	33498	31403 93.7	29636 88.5	27970 83.5	27241 81.3	1511 4.5	16226	15284 94.2	14462 89.1	17269	16118 93.3	15173 87.9										

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

² Single antigen meningococcal group C vaccination

Table 11. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 16th birthday between 01/09/15 and 31/08/16 and resident on 30/09/16 (2015-16 school year 11), with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children						Teenage 3 in 1 booster ¹					Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(%)
Abertawe Bro Morgannwg University HB																							
Bridgend LA	1548	1485	95.9	1406	90.8	1326	85.7	1310	84.6	1348	87.1	766	730	95.3	692	90.3	782	755	96.5	714	91.3		
Neath Port Talbot LA	1511	1437	95.1	1356	89.7	1289	85.3	1280	84.7	1270	84.1	711	679	95.5	645	90.7	800	758	94.8	711	88.9		
Swansea LA	2643	2460	93.1	2312	87.5	2313	87.5	2275	86.1	2174	82.3	1265	1178	93.1	1108	87.6	1378	1282	93.0	1204	87.4		
Health Board Total	5702	5382	94.4	5074	89.0	4928	86.4	4865	85.3	4792	84.0	2742	2587	94.3	2445	89.2	2960	2795	94.4	2629	88.8		
Aneurin Bevan University HB																							
Blaenau Gwent LA	770	740	96.1	701	91.0	667	86.6	661	85.8	606	78.7	389	371	95.4	354	91.0	381	369	96.9	347	91.1		
Caerphilly LA	2122	2057	96.9	1961	92.4	1787	84.2	1768	83.3	1628	76.7	1001	962	96.1	918	91.7	1121	1095	97.7	1043	93.0		
Monmouthshire LA	1143	1017	89.0	956	83.6	872	76.3	855	74.8	780	68.2	581	528	90.9	510	87.8	562	489	87.0	446	79.4		
Newport LA	1917	1782	93.0	1651	86.1	1509	78.7	1471	76.7	1354	70.6	899	832	92.5	771	85.8	1016	949	93.4	879	86.5		
Torfaen LA	1002	971	96.9	929	92.7	846	84.4	832	83.0	749	74.8	477	464	97.3	443	92.9	525	507	96.6	486	92.6		
Health Board Total	6954	6567	94.4	6198	89.1	5681	81.7	5587	80.3	5117	73.6	3347	3157	94.3	2996	89.5	3605	3409	94.6	3201	88.8		
Betsi Cadwaladr University HB																							
Anglesey LA	699	659	94.3	637	91.1	585	83.7	544	77.8	516	73.8	353	333	94.3	323	91.5	346	326	94.2	314	90.8		
Conwy LA	1299	1202	92.5	1147	88.3	1156	89.0	1096	84.4	971	74.7	611	572	93.6	543	88.9	688	630	91.6	604	87.8		
Denbighshire LA	1090	988	90.6	928	85.1	918	84.2	877	80.5	773	70.9	533	488	91.6	463	86.9	557	500	89.8	465	83.5		
Flintshire LA	1636	1556	95.1	1501	91.7	1446	88.4	1394	85.2	1238	75.7	804	765	95.1	742	92.3	832	791	95.1	759	91.2		
Gwynedd LA	1252	1192	95.2	1158	92.5	1114	89.0	1083	86.5	976	78.0	606	582	96.0	565	93.2	646	610	94.4	593	91.8		
Wrexham LA	1535	1460	95.1	1416	92.2	1327	86.4	1221	79.5	1143	74.5	744	714	96.0	694	93.3	791	746	94.3	722	91.3		
Health Board Total	7511	7057	94.0	6787	90.4	6546	87.2	6215	82.7	5617	74.8	3651	3454	94.6	3330	91.2	3860	3603	93.3	3457	89.6		
Cardiff and Vale University HB																							
Cardiff LA	3687	3416	92.6	3223	87.4	2847	77.2	1356	36.8	2774	75.2	1807	1690	93.5	1598	88.4	1880	1726	91.8	1625	86.4		
Vale of Glamorgan LA	1480	1411	95.3	1351	91.3	1225	82.8	616	41.6	1134	76.6	736	701	95.2	673	91.4	744	710	95.4	678	91.1		
Health Board Total	5167	4827	93.4	4574	88.5	4072	78.8	1972	38.2	3908	75.6	2543	2391	94.0	2271	89.3	2624	2436	92.8	2303	87.8		
Cwm Taf University HB																							
Merthyr Tydfil LA	713	682	95.7	644	90.3	658	92.3	655	91.9	609	85.4	337	323	95.8	306	90.8	376	359	95.5	338	89.9		
Rhondda Cynon Taf LA	2635	2536	96.2	2392	90.8	2395	90.9	2359	89.5	2258	85.7	1306	1263	96.7	1206	92.3	1329	1273	95.8	1186	89.2		
Health Board Total	3348	3218	96.1	3036	90.7	3053	91.2	3014	90.0	2867	85.6	1643	1586	96.5	1512	92.0	1705	1632	95.7	1524	89.4		
Hywel Dda University HB																							
Carmarthenshire LA	1986	1840	92.6	1732	87.2	1648	83.0	1606	80.9	1635	82.3	936	873	93.3	824	88.0	1050	967	92.1	908	86.5		
Ceredigion LA	686	655	95.5	626	91.3	600	87.5	590	86.0	581	84.7	331	320	96.7	308	93.1	355	335	94.4	318	89.6		
Pembrokeshire LA	1274	1201	94.3	1144	89.8	1093	85.8	1012	79.4	937	73.5	629	589	93.6	559	88.9	645	612	94.9	585	90.7		
Health Board Total	3946	3696	93.7	3502	88.7	3341	84.7	3208	81.3	3153	79.9	1896	1782	94.0	1691	89.2	2050	1914	93.4	1811	88.3		
Powys Teaching HB	1399	1269	90.7	1174	83.9	1093	78.1	965	69.0	1073	76.7	677	609	90.0	567	83.8	721	660	91.5	607	84.2		
Unknown	169	152	89.9	144	85.2	133	78.7	126	74.6	127	75.1	69	64	92.8	61	88.4	99	88	88.9	83	83.8		
Wales Total	34196	32168	94.1	30489	89.2	28847	84.4	25952	75.9	26654	77.9	16568	15630	94.3	14873	89.8	17624	16537	93.8	15615	88.6		

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

² Single antigen meningococcal group C vaccination

Table 12. MMR, Td/IPV, MenC and MenACWY vaccine uptake in children reaching their 16th birthday between 01/07/16 and 30/09/16 and resident on 30/09/16 (2015-16 school year 12), with breakdown of MMR1 and MMR2 coverage by sex

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster ¹		MenC ²		MenACWY ³		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)	(%)	
Abertawe Bro Morgannwg University HB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)	
Bridgend LA	402	389	96.8	365	90.8	348	86.6	351	87.3	220	54.7	214	208	97.2	195	91.1	188	181	96.3	170	90.4			
Neath Port Talbot LA	414	395	95.4	363	87.7	343	82.9	339	81.9	219	52.9	196	188	95.9	175	89.3	218	207	95.0	188	86.2			
Swansea LA	639	589	92.2	549	85.9	566	88.6	551	86.2	356	55.7	303	277	91.4	256	84.5	336	312	92.9	293	87.2			
Health Board Total	1455	1373	94.4	1277	87.8	1257	86.4	1241	85.3	795	54.6	713	673	94.4	626	87.8	742	700	94.3	651	87.7			
Aneurin Bevan University HB																								
Blaenau Gwent LA	170	163	95.9	156	91.8	148	87.1	145	85.3	84	49.4	87	83	95.4	80	92.0	83	80	96.4	76	91.6			
Caerphilly LA	555	537	96.8	512	92.3	458	82.5	456	82.2	278	50.1	250	239	95.6	226	90.4	305	298	97.7	286	93.8			
Monmouthshire LA	287	256	89.2	237	82.6	226	78.7	221	77.0	152	53.0	131	121	92.4	116	88.5	156	135	86.5	121	77.6			
Newport LA	495	461	93.1	432	87.3	396	80.0	389	78.6	244	49.3	231	214	92.6	201	87.0	264	247	93.6	231	87.5			
Torfaen LA	255	247	96.9	240	94.1	213	83.5	214	83.9	116	45.5	110	106	96.4	103	93.6	145	141	97.2	137	94.5			
Health Board Total	1762	1664	94.4	1577	89.5	1441	81.8	1425	80.9	874	49.6	809	763	94.3	726	89.7	953	901	94.5	851	89.3			
Betsi Cadwaladr University HB																								
Anglesey LA	170	159	93.5	156	91.8	143	84.1	129	75.9	89	52.4	83	78	94.0	77	92.8	87	81	93.1	79	90.8			
Conwy LA	288	262	91.0	252	87.5	233	80.9	227	78.8	146	50.7	132	122	92.4	116	87.9	156	140	89.7	136	87.2			
Denbighshire LA	287	262	91.3	245	85.4	247	86.1	238	82.9	134	46.7	133	123	92.5	114	85.7	153	139	90.8	131	85.6			
Flintshire LA	415	397	95.7	384	92.5	349	84.1	336	81.0	212	51.1	192	184	95.8	181	94.3	223	213	95.5	203	91.0			
Gwynedd LA	311	298	95.8	288	92.6	268	86.2	253	81.4	157	50.5	148	141	95.3	136	91.9	163	157	96.3	152	93.3			
Wrexham LA	399	383	96.0	372	93.2	351	88.0	332	83.2	215	53.9	207	199	96.1	191	92.3	192	184	95.8	181	94.3			
Health Board Total	1870	1761	94.2	1697	90.7	1591	85.1	1515	81.0	953	51.0	895	847	94.6	815	91.1	974	914	93.8	882	90.6			
Cardiff and Vale University HB																								
Cardiff LA	989	936	94.6	879	88.9	756	76.4	716	72.4	475	48.0	470	448	95.3	420	89.4	519	488	94.0	459	88.4			
Vale of Glamorgan LA	360	348	96.7	334	92.8	289	80.3	282	78.3	180	50.0	172	166	96.5	162	94.2	188	182	96.8	172	91.5			
Health Board Total	1349	1284	95.2	1213	89.9	1045	77.5	998	74.0	655	48.6	642	614	95.6	582	90.7	707	670	94.8	631	89.3			
Cwm Taf University HB																								
Merthyr Tydfil LA	182	176	96.7	166	91.2	165	90.7	164	90.1	110	60.4	74	71	95.9	70	94.6	108	105	97.2	96	88.9			
Rhondda Cynon Taf LA	670	647	96.6	606	90.4	611	91.2	601	89.7	380	56.7	307	298	97.1	279	90.9	363	349	96.1	327	90.1			
Health Board Total	852	823	96.6	772	90.6	776	91.1	765	89.8	490	57.5	381	369	96.9	349	91.6	471	454	96.4	423	89.8			
Hywel Dda University HB																								
Carmarthenshire LA	511	475	93.0	443	86.7	417	81.6	413	80.8	278	54.4	234	219	93.6	205	87.6	277	256	92.4	238	85.9			
Ceredigion LA	173	162	93.6	158	91.3	151	87.3	151	87.3	107	61.8	80	75	93.8	73	91.3	93	87	93.5	85	91.4			
Pembrokeshire LA	346	323	93.4	306	88.4	290	83.8	273	78.9	174	50.3	180	168	93.3	157	87.2	166	155	93.4	149	89.8			
Health Board Total	1030	960	93.2	907	88.1	858	83.3	837	81.3	559	54.3	494	462	93.5	435	88.1	536	498	92.9	472	88.1			
Powys Teaching HB																								
Unknown	34	30	88.2	28	82.4	28	82.4	28	82.4	22	64.7	18	16	88.9	16	88.9	16	14	87.5	12	75.0			
Wales Total	8718	8227	94.4	7780	89.2	7279	83.5	7075	81.2	4529	51.9	4131	3907	94.6	3701	89.6	4586	4320	94.2	4079	88.9			

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

² Single antigen meningococcal group C vaccination

³ Those turning 16 years of age between 01/07/2016 and 31/08/2016 would have been offered the vaccine as part of the 2015-16 Year 11 catch-up cohort. Those turning 16 years of age between 01/09/2016 and 30/09/2016 will be offered the MenACWY vaccine as part of the 2016-17 Year 11 catch-up cohort, vaccination sessions for the 2016-17 Year 11 catch-up cohort will take place at different times throughout the school year so uptake in this group will increase over the next three quarters.

Table 13. Uptake of BCG immunisation in children reaching their 1st, 2nd, 5th and 16th birthdays between 01/07/16 and 30/09/16 and resident on 30/09/16.

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	423	18	4.3	387	9	2.3	443	18	4.1	402	7	1.7
Neath Port Talbot LA	388	6	1.5	386	5	1.3	397	14	3.5	414	1	0.2
Swansea LA	658	75	11.4	690	85	12.3	755	86	11.4	639	30	4.7
Health Board Total	1469	99	6.7	1463	99	6.8	1595	118	7.4	1455	38	2.6
<u>Aneurin Bevan University HB</u>												
Blaenau Gwent LA	176	3	1.7	184	3	1.6	189	3	1.6	170	1	0.6
Caerphilly LA	544	8	1.5	548	12	2.2	557	11	2.0	555	7	1.3
Monmouthshire LA	234	11	4.7	199	8	4.0	221	7	3.2	287	5	1.7
Newport LA	550	72	13.1	555	79	14.2	475	59	12.4	495	35	7.1
Torfaen LA	262	2	0.8	266	2	0.8	249	11	4.4	255	3	1.2
Health Board Total	1766	96	5.4	1752	104	5.9	1691	91	5.4	1762	51	2.9
<u>Betsi Cadwaladr University HB</u>												
Anglesey LA	183	8	4.4	180	5	2.8	196	5	2.6	170	2	1.2
Conwy LA	272	8	2.9	296	10	3.4	297	5	1.7	288	4	1.4
Denbighshire LA	277	11	4.0	292	19	6.5	265	10	3.8	287	13	4.5
Flintshire LA	412	7	1.7	403	17	4.2	420	21	5.0	415	7	1.7
Gwynedd LA	318	17	5.3	319	12	3.8	366	7	1.9	311	3	1.0
Wrexham LA	367	22	6.0	437	37	8.5	438	35	8.0	399	21	5.3
Health Board Total	1829	73	4.0	1927	100	5.2	1982	83	4.2	1870	50	2.7
<u>Cardiff and Vale University HB</u>												
Cardiff LA	1164	41	3.5	1174	263	22.4	1171	224	19.1	989	138	14.0
Vale of Glamorgan LA	336	3	0.9	351	16	4.6	394	20	5.1	360	13	3.6
Health Board Total	1500	44	2.9	1525	279	18.3	1565	244	15.6	1349	151	11.2
<u>Cwm Taf Univeristy HB</u>												
Merthyr Tydfil LA	217	19	8.8	215	12	5.6	205	18	8.8	182	6	3.3
Rhondda Cynon Taf LA	709	32	4.5	708	24	3.4	773	34	4.4	670	12	1.8
Health Board Total	926	51	5.5	923	36	3.9	978	52	5.3	852	18	2.1
<u>Hywel Dda University HB</u>												
Carmarthenshire LA	493	21	4.3	468	11	2.4	521	18	3.5	511	43	8.4
Ceredigion LA	167	9	5.4	171	6	3.5	161	10	6.2	173	5	2.9
Pembrokeshire LA	324	7	2.2	316	5	1.6	346	9	2.6	346	4	1.2
Health Board Total	984	37	3.8	955	22	2.3	1028	37	3.6	1030	52	5.0
<u>Powys Teaching Health Board</u>												
Unknown	283	4	1.4	279	7	2.5	326	11	3.4	366	5	1.4
Unknown	2	1	50.0	12	0	0.0	19	1	5.3	34	1	2.9
Wales Total	8759	405	4.6	8836	647	7.3	9184	637	6.9	8718	366	4.2

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 14. 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 01/07/16 and 30/09/16 and resident on 30/09/16, and percentage who are recorded as completing doses 1 to 3.

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	1469	4	100.0	100.0	100.0	1463	1	100.0	100.0	100.0	100.0	1595	3	100.0	100.0	100.0	100.0
Aneurin Bevan UHB	1766	3	100.0	66.7	33.3	1752	0	-	-	-	-	1691	3	100.0	100.0	100.0	100.0
Betsi Cadwaladr UHB	1829	1	100.0	100.0	100.0	1927	1	100.0	100.0	100.0	100.0	1982	2	100.0	100.0	100.0	100.0
Cardiff and Vale UHB	1500	7	100.0	100.0	100.0	1525	3	100.0	100.0	100.0	100.0	1565	9	100.0	100.0	100.0	100.0
Cwm Taf UHB	926	1	100.0	100.0	100.0	923	0	-	-	-	-	978	0	-	-	-	-
Hywel Dda UHB	984	0	-	-	-	955	0	-	-	-	-	1028	1	100.0	100.0	100.0	100.0
Powys Teaching HB	283	1	100.0	100.0	100.0	279	0	-	-	-	-	326	0	-	-	-	-
Unknown	2	0	-	-	-	12	0	-	-	-	-	19	0	-	-	-	-
Wales Total	8759	17	100.0	94.1	88.2	8836	5	100.0	100.0	100.0	100.0	9184	18	100.0	100.0	100.0	100.0

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