

Vaccine Uptake in Children in Wales

COVER Annual report 2012

Data for the year ending 31st March 2012



Key points

- Annual uptake of all routine immunisations in one year old children for Wales as a whole exceed the 95% target, and 20 of the 22 Local Authority areas have exceeded the 95% uptake target for the 5 in 1 immunisation in one year olds for 2011/12.
- Annual uptake of the first dose of MMR at 2 years increased to 92.7%
- This report includes figures for the proportion of children reaching four years of age who are up to date in their routine immunisation schedule. During the period April 2011 to March 2012, 81% of children had completed all recommended immunisations by their fourth birthday.
- Uptake of the second dose of MMR by 5 years of age increased to 87.1%, the highest ever annual uptake of MMR2 at five years of age.
- Uptake of pre-school 4 in 1 booster in five year old children has decreased to 89.6%.
- Uptake of a complete three dose course of Human Papilloma Virus (HPV) vaccine in girls in the first year of the routine campaign (2010/11 School Year 8) was 85.5%.

Findings

1. These results are for children living in Wales in May 2011 and reaching their first, second, fourth, fifth, 15th and 16th birthdays in the year ending March 31st 2012, and girls in school year 8 in 2010/2011.
2. Annual uptake of the completed course of '5 in 1'¹ vaccine, scheduled at 2, 3 and 4 months of age, in children reaching their first birthday increased to 96.4%. Uptake ranged by Health Board (HB) from 95.2% (Cardiff and Vale University HB) to 97.2% (Cwm Taf HB) and by Local Authority (LA) from 94.8% (Monmouthshire) to 98.1% (Anglesey). Twenty of the 22 LAs achieved the 95% target (Figures 1, 2, 4 and Tables 1, 2).
3. Annual uptake of a completed course of MenC² vaccine in children reaching their first birthday this year was 96.1% ranging by HB from 94.5 % (Cardiff and Vale University HB) to 97.1 % (Cwm Taf HB) and by LA from 94.2 % (Cardiff) to 98.0 % (Anglesey) (Figure 1 and Tables 1, 2).
4. Uptake of a complete two dose primary course of pneumococcal conjugate vaccination (PCV³) in children at one year of age was 95.8%, ranging by HB from 94.1% (Cardiff and Vale University HB) to 96.7% (Cwm Taf HB and Abertawe Bro Morgannwg University HB) and by LA from 93.6% (Cardiff) to 98.2% (Blaenau Gwent) (Figure 1 and Table 2).
5. Uptake of one dose of MMR⁴ by two years of age increased by 1.2% to 92.7%. Uptake ranged by HB from 91.4% (Hywel Dda HB) to 94.0% (Cwm Taf HB) and by LA from 89.4 % (Pembrokeshire) to 94.6 % (Vale of Glamorgan and Flintshire). No HB achieved the target uptake of 95% for one dose of MMR by 2 years of age (Figures 1, 2 and 5 and Tables 1, 3), although uptake in 21 of the 22 LA areas exceeded 90%.
6. Annual uptake of the final dose of Pneumococcal Conjugate Vaccine (PCV³) by 2 years of age was 93.5%. Uptake by HB ranged from 92.9% (Hywel Dda HB) to 94.8% (Cwm Taf HB) and by LA from 90.7% (Pembrokeshire) to 95.7% (Flintshire) (Tables 1, 3).

¹ DTaP/IPV/Hib vaccine protects against diphtheria, tetanus, pertussis (Whooping Cough), polio and Hib infection.

² Men C vaccine protects against meningitis caused by meningococcus group C infection. Children reaching 1yr of age would have been offered one dose of MenC vaccine at 3 months of age and one dose at 4 months of age.

³ PCV protects against pneumococcal meningitis, bacteraemia, pneumonia and otitis media. Children reaching 1yr of age would have been offered one dose of PCV at 2 months of age and one dose at 4 months of age. Children reaching 2yrs would have been offered their third and final PCV dose at around 13 months of age.

⁴ MMR protects against measles, mumps and rubella infections.

⁵ DTaP/IPV (and dTaP/IPV) vaccines boost protection against diphtheria, tetanus, pertussis and polio infection before school entry

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

7. Annual uptake of the Hib/MenC booster scheduled by 2 years of age was 93.7%, ranging by HB from 92.5% (Cardiff and Vale University HB) to 95.7% (Cwm Taf HB) and by LA from 91.4% (Newport) to 96.6% (Merthyr Tydfil) (Tables 1, 3).
8. In children reaching their fourth birthday, coverage of the 4 in 1 preschool booster was 86.2%, coverage of a complete course of pneumococcal conjugate vaccine was 91.9%, coverage of the Hib/MenC booster was 94.0% and uptake of two doses of MMR was 84.4%. The proportion of children who were up to date with all of these immunisations by four years of age was 80.8% (Table 4). This ranged by HB from 78.0% (Cardiff and Vale University HB) to 83.3% (Betsi Cadwaladr University HB) and by LA from 75.3% (Pembrokeshire) to 85.1% (Gwynedd and Merthyr Tydfil)
9. At five years of age annual uptake of two doses of MMR has increased by 0.2% to 87.1%. This is the highest ever annual uptake of MMR2 at five years of age (Figures 1, 3, 6, Tables 1, 5). Uptake of the second dose of MMR by five years of age ranged by HB from 84.0% (Powys Teaching HB) to 89.8% (Betsi Cadwaladr University HB) and by LA from 83.8% (Bridgend) to 91.0% (Flintshire and Wrexham). No LHB achieved the 95% target for this immunisation.
10. Uptake of the "4 in 1" DTaP/IPV⁵ pre-school booster in children reaching their fifth birthday this year was 89.6% (a fall of 0.4% on the previous year), ranging by HB from 87.6% (Hywel Dda HB) to 91.8% (Betsi Cadwaladr University HB) and by LA from 85.8% (Bridgend) to 92.9% (Flintshire) (Figures 3, 7, Tables 1, 5).
11. Uptake of all three doses of HPV vaccine, routinely scheduled in School Year 8, in girls in the 2010/11 School Year 8 (reaching their 13th birthday between 01/09/10 and 31/08/11) was 85.5%, ranging by HB from 81.1% (Powys teaching HB) to 89.4% (Abertawe Bro Morgannwg University HB) and by LA from 75.1% (Monmouthshire) to 91.3% (Neath Port Talbot) (Table 6). Uptake in girls in the 2010/11 School Year 8 group was higher than for girls in the 2009/10 School Year 8 group (83.0%). Immunisation sessions for the current (2011/12) School Year 8 are in progress and uptakes for one and two HPV doses in this group are reported in [COVER Report 102](#).
12. At 15 years of age, annual coverage of two doses of MMR was 81.6% (Table 7), ranging by HB from 74.4% (Powys Teaching HB) to 87.0% (Betsi Cadwaladr University HB) and by LA from 69.3% (Monmouthshire) to 89.7% (Conwy). Coverage of one dose of MMR in 15 year olds was 90.7%, ranging by HB from 86.1% (Powys Teaching HB) to 94.7% (Betsi Cadwaladr University HB) and by LA from 81.5% (Monmouthshire) to 95.6% (Conwy). A breakdown by sex indicates that 82.0% of girls had received a full (2 MMR doses) course of immunisation against rubella this year and coverage of only 1 dose was 90.7%.
13. At 16 years of age annual coverage of two doses of MMR was 83.4% (Tables 1, 8), ranging by HB from 72.6% (Powys Teaching HB) to 90.2% (Betsi Cadwaladr University HB) and by LA from 69.7% (Monmouthshire) to 91.8% (Wrexham). Annual coverage of one dose of MMR in 16 year olds was 91.7%, ranging by LA from 80.6% (Monmouthshire) to 96.9% (Flintshire). A breakdown by sex indicates that 83.9% of girls had received a full (2 MMR doses) course of immunisation against rubella this year and coverage of only 1 dose was 92.1%.
14. National uptake of the Td/IPV⁶ teenage booster in children reaching 16 years of age in the year ending 31st March 2012 was 71.1% (Tables 1, 8), ranging by HB from 52.0% (Aneurin Bevan HB) to 83.3% (Cwm Taf HB) and by LA from 26.7% (Pembrokeshire) to 85.2% (Flintshire).

Comment

Overall annual trends in immunisation uptake in Wales remain positive. This year, 20 of the 22 LA areas in Wales achieved the 95% target for a completed course of the 5 in 1 immunisation in babies at one year of age. Trends in uptake of immunisation in older children are generally positive, although uptake is lower than it is in babies. Annual uptake of the first dose of MMR in two year olds increased this year, as did uptake of completed two dose course in five year olds, which is now higher than it has ever been. Uptake of the teenage booster against diphtheria, tetanus and polio increased again this year, mainly due to large improvements in uptake in Aneurin Bevan Health Board, although other areas in Wales have also seen coverage increase at 15 and 16 years of age.

For the first time, immunisation coverage in children at four years of age is presented in this report, along with the percentages of children in each area who are up to date with their routine schedule by their fourth birthday. Although uptake of individual vaccinations has improved recently in toddlers, this report shows that, during 2011-12, one in five children in Wales had not completed all of their recommended immunisation by school entry age. The new measure of the percentage of children who are up to date with their schedule by four years of age will be a routine feature of the annual COVER report.

This year, Wales has seen a large outbreak of measles and a national increase in numbers of children with confirmed whooping cough (pertussis). The measles outbreak affected North Wales and as at May 2012 there were 57 confirmed cases, mainly in children and teenagers. During 2011, there were 67 confirmed cases of whooping cough in Wales, the highest number in more than ten years, with children under one year of age particularly affected. Improving uptake of MMR and the 4 in 1 preschool booster in children in their fourth year of life and ensuring that babies start their routine immunisations in as timely a way as possible (at eight weeks of age) are essential in averting future cases of measles and whooping cough.

Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre. *Data for this report was provided by Health Solutions Wales 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 LHB resident population, not for LHB GP practice populations. The maps, graphs and Table 1 are best viewed in colour.*

Figure 1. Percentage uptake of childhood immunisations in Wales, quarter 1 1997 to quarter 1 2012. Data are for: children reaching 1 year of age each quarter for diphtheria, pertussis, Hib, MenC and pneumococcal conjugate vaccine, children reaching 2 years of age for MMR1 (first dose) and the Hib MenC booster, and 5 years of age for MMR2 (second dose).

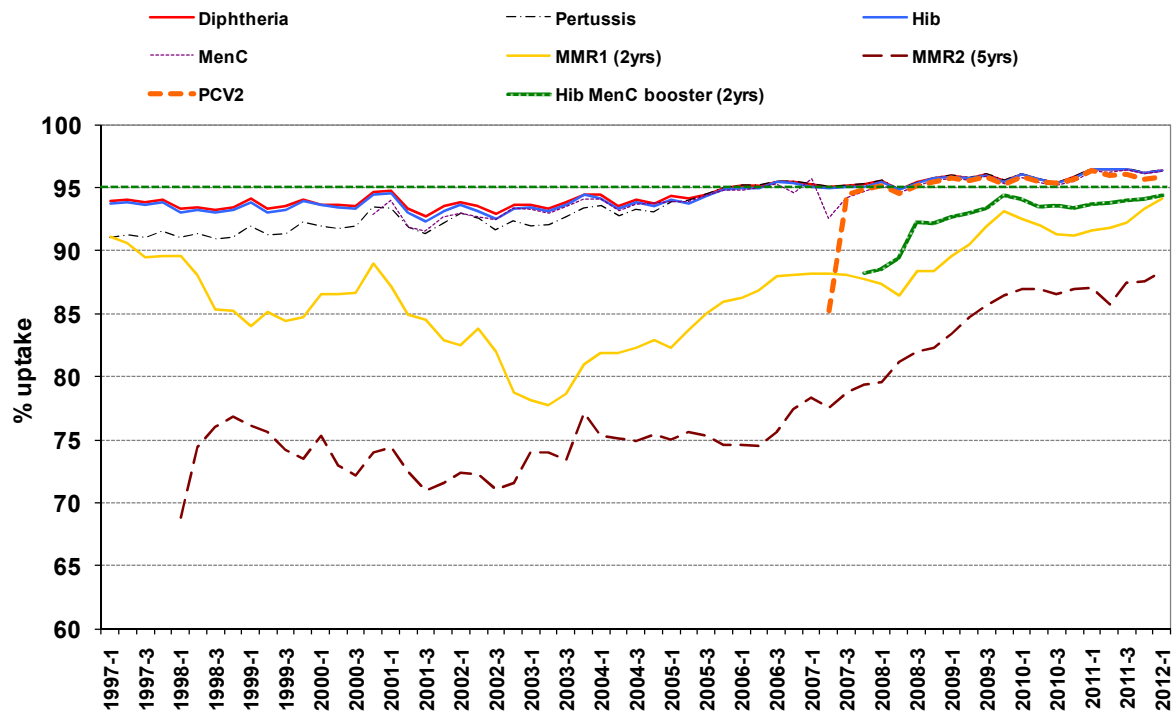


Figure 2. (a) Uptake of 5 in 1 vaccine in Welsh Local Authority areas in children reaching their 1st birthday between 01/04/11 and 31/03/12. **(b)** Uptake of at least 1 dose of MMR immunisation in Welsh Local Authority areas in children reaching their 2nd birthday between 01/04/11 and 31/03/12

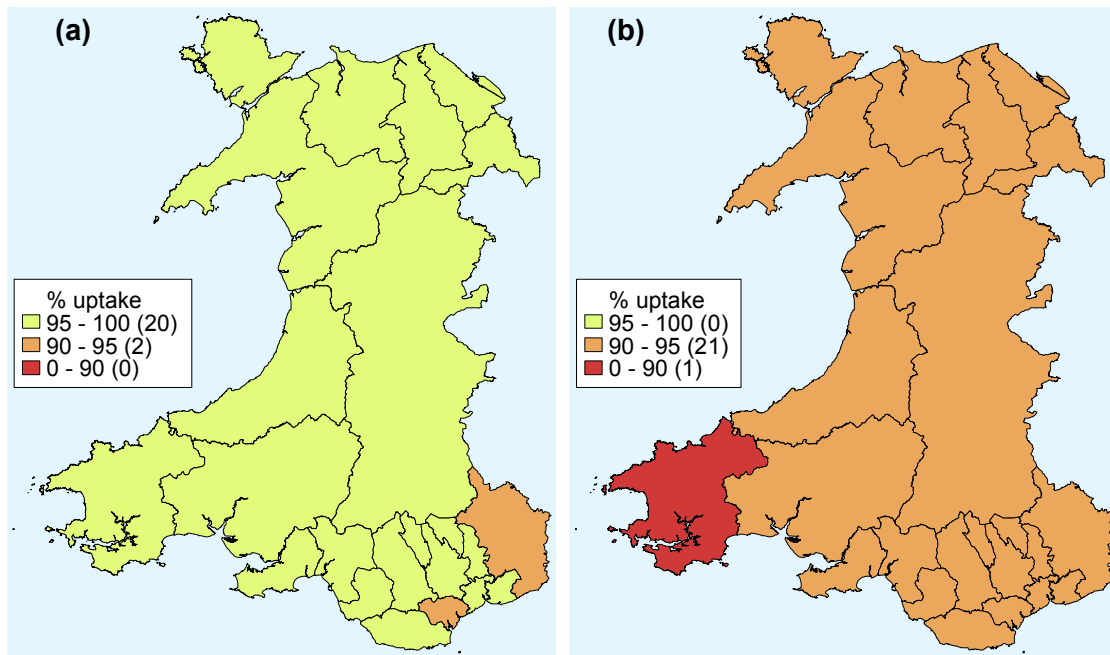


Figure 3. (a) Uptake of two doses of MMR vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/11 and 31/03/12. **(b)** Uptake of 4 in 1 vaccine in Welsh Local Authority areas in children reaching their 5th birthday between 01/04/11 and 31/03/12.

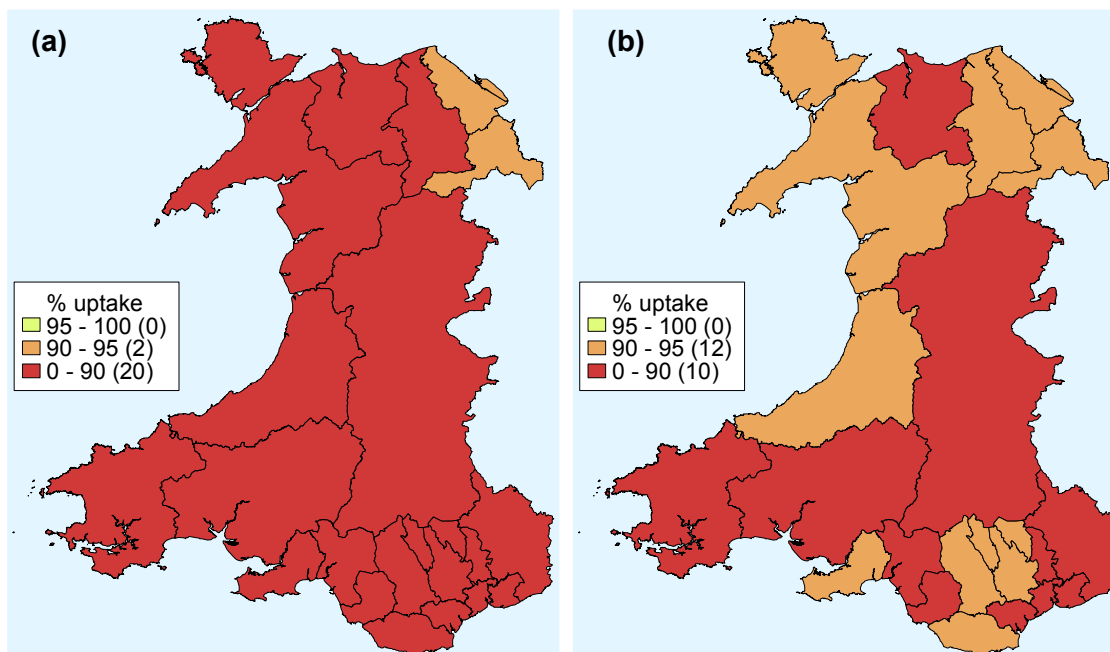


Figure 4. Annual uptake of 5 in 1 vaccine by 1 year of age (2007 – 2012 financial years, ranked by uptake in 2011-2012).

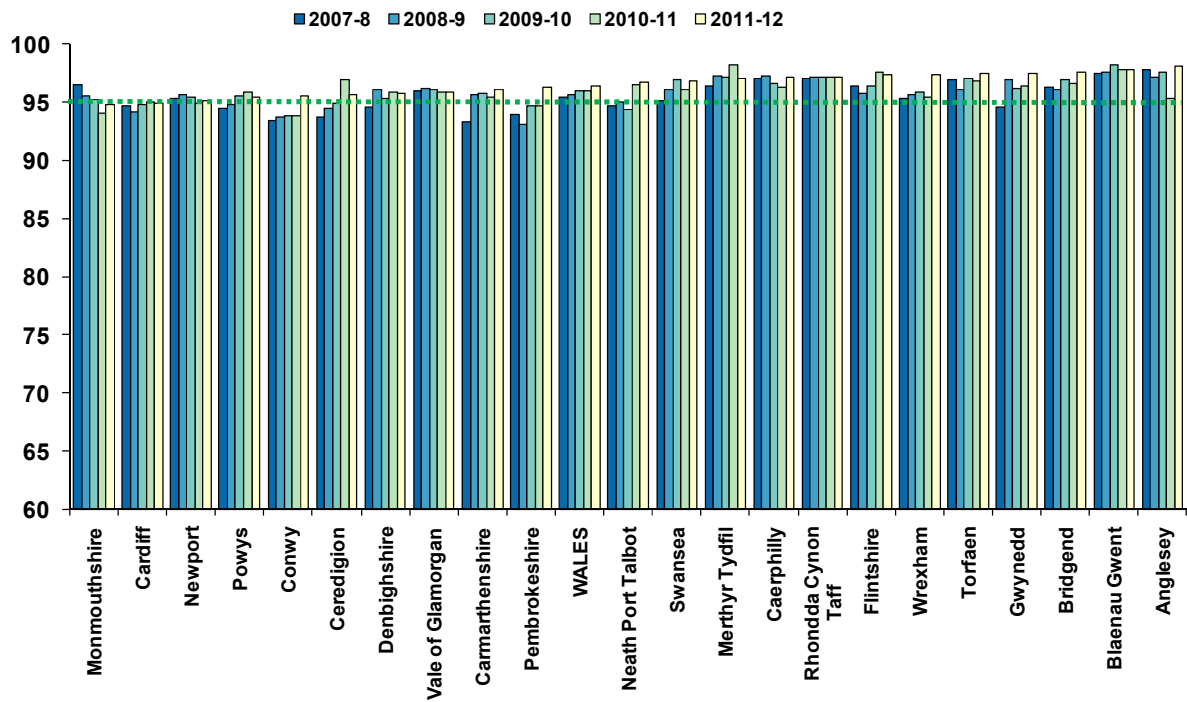


Figure 5. Annual uptake of 1 dose of MMR by 2 years of age (2007 – 2012 financial years, ranked by uptake in 2011-2012).

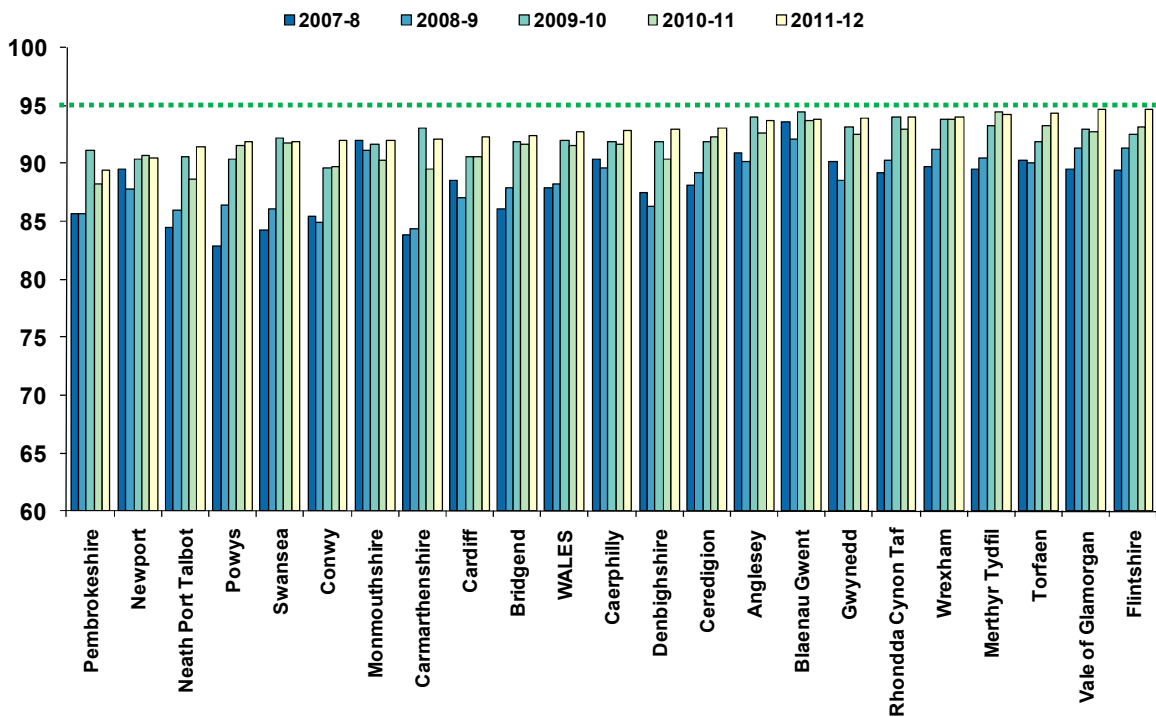


Figure 6. Annual uptake of 2 doses of MMR by 5 years of age (2007 – 2012 financial years, ranked by uptake in 2011-2012).

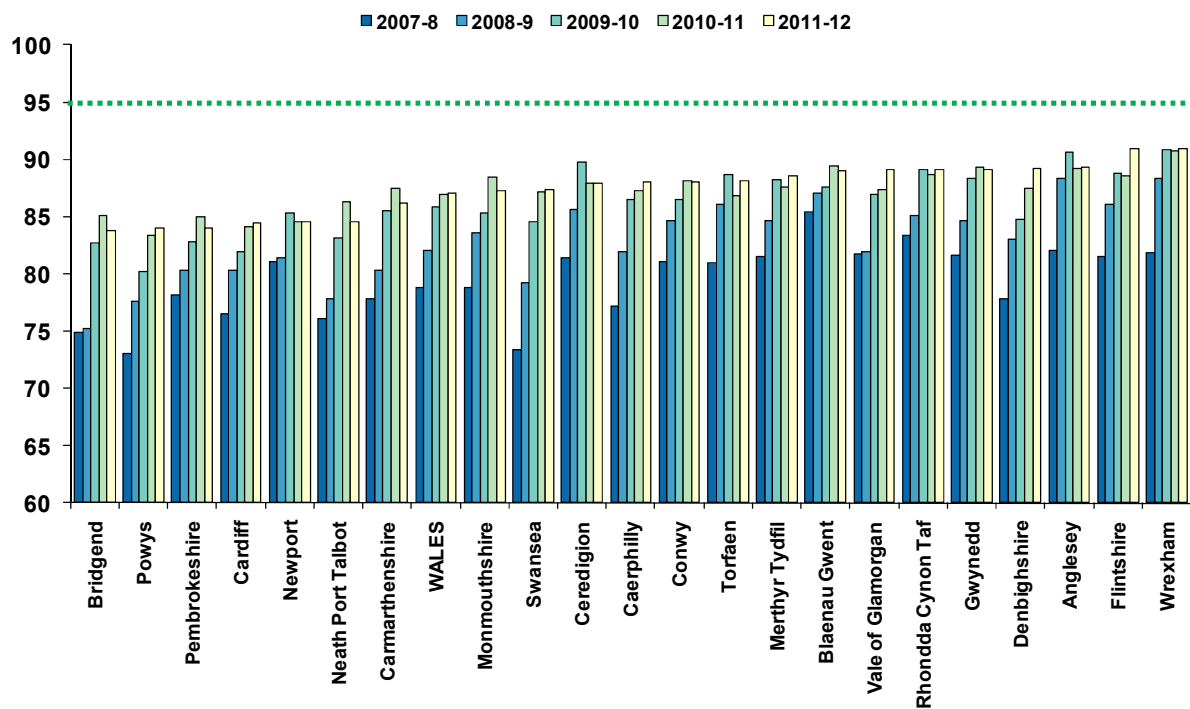


Figure 7. Annual uptake of the 4 in 1 pre-school booster by 5 years of age (2007 – 2012 financial years, ranked by uptake in 2011-2012).

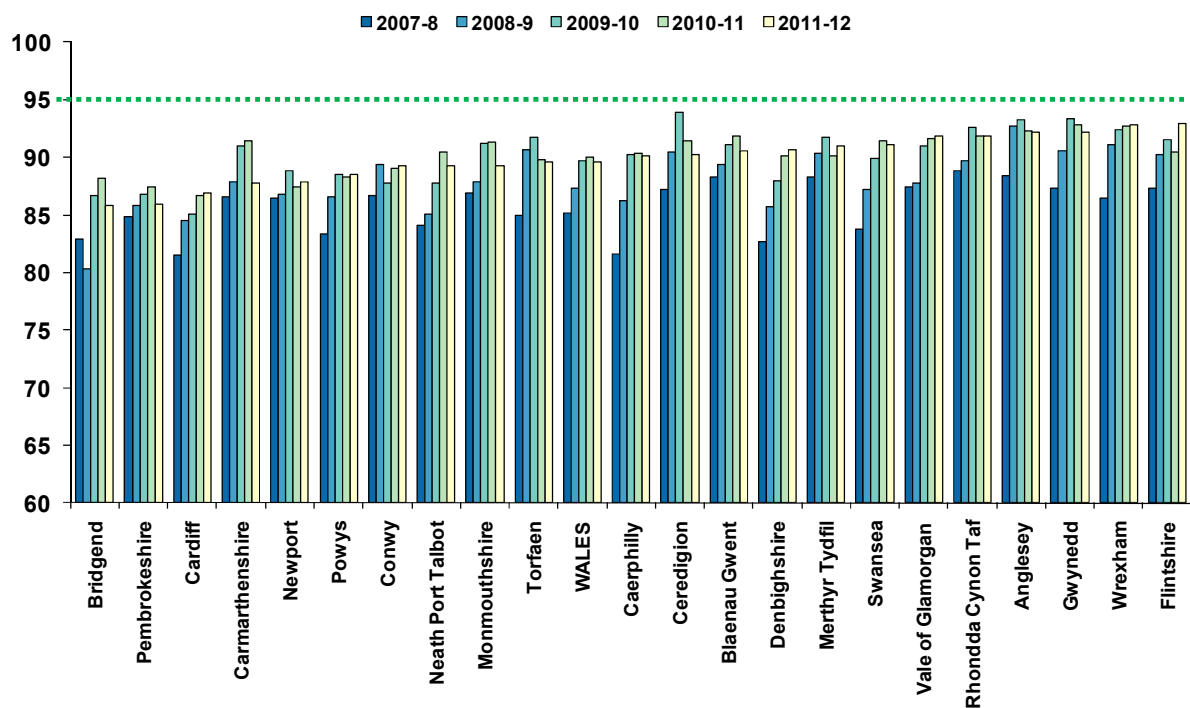


Table 2. Vaccine uptake in children reaching their 1st birthday between 01/04/11 and 31/03/12 and resident on 01/05/2012

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC	PCV2*	HibMenCb
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
<u>Abertawe Bro Morgannwg University LHB</u>										
Bridgend LA	1609	1571 97.6	1571 97.6	1571 97.6	1570 97.6	1570 97.6	3 0.2	1568 97.5	1562 97.1	3 0.2
Neath Port Talbot LA	1617	1564 96.7	1564 96.7	1564 96.7	1564 96.7	1564 96.7	2 0.1	1562 96.6	1560 96.5	2 0.1
Swansea LA	2682	2597 96.8	2597 96.8	2597 96.8	2598 96.9	2592 96.6	16 0.6	2591 96.6	2593 96.7	13 0.5
Health Board Total	5908	5732 97.0	5732 97.0	5732 97.0	5732 97.0	5732 97.0	21 0.4	5721 96.8	5715 96.7	18 0.3
<u>Aneurin Bevan LHB</u>										
Blaenau Gwent LA	789	772 97.8	772 97.8	772 97.8	772 97.8	772 97.8	3 0.4	772 97.8	775 98.2	1 0.1
Caerphilly LA	2164	2103 97.2	2103 97.2	2103 97.2	2102 97.1	2102 97.1	14 0.6	2101 97.1	2091 96.6	8 0.4
Monmouthshire LA	848	804 94.8	804 94.8	804 94.8	804 94.8	804 94.8	2 0.2	803 94.7	805 94.9	2 0.2
Newport LA	1977	1881 95.1	1881 95.1	1881 95.1	1878 95.0	1877 94.9	11 0.6	1874 94.8	1869 94.5	7 0.4
Torfaen LA	1096	1069 97.5	1069 97.5	1069 97.5	1069 97.5	1069 97.5	4 0.4	1065 97.2	1061 96.8	4 0.4
Health Board Total	6874	6629 96.4	6629 96.4	6629 96.4	6625 96.4	6624 96.4	34 0.5	6615 96.2	6601 96.0	22 0.3
<u>Betsi Cadwaladr University LHB</u>										
Anglesey LA	782	767 98.1	767 98.1	767 98.1	767 98.1	767 98.1	7 0.9	766 98.0	767 98.1	6 0.8
Conwy LA	1132	1082 95.6	1082 95.6	1082 95.6	1082 95.6	1082 95.6	3 0.3	1075 95.0	1066 94.2	5 0.4
Denbighshire LA	1070	1025 95.8	1025 95.8	1025 95.8	1025 95.8	1024 95.7	11 1.0	1024 95.7	1024 95.7	10 0.9
Flintshire LA	1712	1667 97.4	1667 97.4	1667 97.4	1666 97.3	1667 97.4	6 0.4	1664 97.2	1655 96.7	6 0.4
Gwynedd LA	1219	1189 97.5	1189 97.5	1189 97.5	1189 97.5	1189 97.5	7 0.6	1175 96.4	1177 96.6	7 0.6
Wrexham LA	1711	1666 97.4	1666 97.4	1666 97.4	1663 97.2	1662 97.1	13 0.8	1654 96.7	1647 96.3	18 1.1
Health Board Total	7626	7396 97.0	7396 97.0	7396 97.0	7392 96.9	7391 96.9	47 0.6	7358 96.5	7336 96.2	52 0.7
<u>Cardiff and Vale University LHB</u>										
Cardiff LA	4734	4495 95.0	4495 95.0	4494 94.9	4494 94.9	4491 94.9	36 0.8	4460 94.2	4431 93.6	29 0.6
Vale of Glamorgan LA	1391	1335 96.0	1335 96.0	1334 95.9	1335 96.0	1334 95.9	6 0.4	1328 95.5	1330 95.6	8 0.6
Health Board Total	6125	5830 95.2	5830 95.2	5828 95.2	5829 95.2	5825 95.1	42 0.7	5788 94.5	5761 94.1	37 0.6
<u>Cwm Taf LHB</u>										
Merthyr Tydfil LA	698	678 97.1	678 97.1	678 97.1	678 97.1	677 97.0	12 1.7	678 97.1	678 97.1	13 1.9
Rhondda Cynon Taf LA	2895	2813 97.2	2813 97.2	2813 97.2	2813 97.2	2812 97.1	19 0.7	2811 97.1	2796 96.6	16 0.6
Health Board Total	3593	3491 97.2	3491 97.2	3491 97.2	3491 97.2	3489 97.1	31 0.9	3489 97.1	3474 96.7	29 0.8
<u>Hywel Dda LHB</u>										
Carmarthenshire LA	1989	1912 96.1	1912 96.1	1912 96.1	1911 96.1	1910 96.0	9 0.5	1906 95.8	1889 95.0	6 0.3
Ceredigion LA	693	663 95.7	663 95.7	663 95.7	663 95.7	663 95.7	0 0.0	661 95.4	659 95.1	0 0.0
Pembrokeshire LA	1311	1262 96.3	1262 96.3	1262 96.3	1261 96.2	1261 96.2	5 0.4	1257 95.9	1261 96.2	5 0.4
Health Board Total	3993	3837 96.1	3837 96.1	3837 96.1	3835 96.0	3834 96.0	14 0.4	3824 95.8	3809 95.4	11 0.3
<u>Powys Teaching LHB</u>	1188	1134 95.5	1134 95.5	1134 95.5	1133 95.4	1134 95.5	43 3.6	1126 94.8	1128 94.9	47 4.0
Unknown	138	131 94.9	131 94.9	131 94.9	130 94.2	130 94.2	0 0.0	129 93.5	131 94.9	1 0.7
Wales Total	35445	34180 96.4	34180 96.4	34178 96.4	34167 96.4	34153 96.4	232 0.7	34050 96.1	33955 95.8	217 0.6

* Full primary 2 dose course of pneumococcal conjugate vaccine

Table 3. Vaccine uptake in children reaching their 2nd birthday between 01/04/11 and 31/03/12 and resident on 01/05/2012.

Area	Resident children	D3	T3	P3	Po3	Hib3	MMR1	MenC*	PCV2**	PCVf***	HibMenCb
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University LHE											
Bridgend LA	1635	1603 98.0	1603 98.0	1603 98.0	1603 98.0	1602 98.0	1510 92.4	1583 96.8	1568 95.9	1522 93.1	1544 94.4
Neath Port Talbot LA	1585	1553 98.0	1553 98.0	1553 98.0	1552 97.9	1552 97.9	1449 91.4	1532 96.7	1515 95.6	1465 92.4	1485 93.7
Swansea LA	2616	2547 97.4	2547 97.4	2547 97.4	2545 97.3	2543 97.2	2402 91.8	2500 95.6	2467 94.3	2457 93.9	2460 94.0
Health Board Total	5836	5703 97.7	5703 97.7	5703 97.7	5700 97.7	5697 97.6	5361 91.9	5615 96.2	5550 95.1	5444 93.3	5489 94.1
Aneurin Bevan LHB											
Blaenau Gwent LA	803	788 98.1	788 98.1	788 98.1	787 98.0	786 97.9	753 93.8	785 97.8	776 96.6	762 94.9	763 95.0
Caerphilly LA	2153	2112 98.1	2112 98.1	2112 98.1	2112 98.1	2111 98.0	1999 92.8	2101 97.6	2064 95.9	2022 93.9	2032 94.4
Monmouthshire LA	827	795 96.1	795 96.1	795 96.1	795 96.1	794 96.0	761 92.0	782 94.6	776 93.8	772 93.3	770 93.1
Newport LA	1932	1850 95.8	1849 95.7	1849 95.7	1847 95.6	1845 95.5	1748 90.5	1810 93.7	1800 93.2	1756 90.9	1765 91.4
Torfaen LA	1062	1043 98.2	1043 98.2	1043 98.2	1043 98.2	1043 98.2	1001 94.3	1037 97.6	1015 95.6	1014 95.5	1014 95.5
Health Board Total	6777	6588 97.2	6587 97.2	6587 97.2	6584 97.2	6579 97.1	6262 92.4	6515 96.1	6431 94.9	6326 93.3	6344 93.6
Betsi Cadwaladr University LHB											
Anglesey LA	745	718 96.4	718 96.4	718 96.4	718 96.4	717 96.2	698 93.7	711 95.4	701 94.1	696 93.4	695 93.3
Conwy LA	1143	1102 96.4	1102 96.4	1102 96.4	1101 96.3	1101 96.3	1052 92.0	1085 94.9	1062 92.9	1050 91.9	1059 92.7
Denbighshire LA	1040	1012 97.3	1012 97.3	1012 97.3	1012 97.3	1012 97.3	966 92.9	1006 96.7	981 94.3	972 93.5	977 93.9
Flintshire LA	1731	1706 98.6	1705 98.5	1706 98.6	1703 98.4	1705 98.5	1638 94.6	1690 97.6	1664 96.1	1657 95.7	1644 95.0
Gwynedd LA	1291	1256 97.3	1256 97.3	1256 97.3	1256 97.3	1255 97.2	1212 93.9	1228 95.1	1229 95.2	1210 93.7	1216 94.2
Wrexham LA	1668	1621 97.2	1621 97.2	1621 97.2	1618 97.0	1619 97.1	1568 94.0	1599 95.9	1574 94.4	1578 94.6	1573 94.3
Health Board Total	7618	7415 97.3	7414 97.3	7415 97.3	7408 97.2	7409 97.3	7134 93.6	7319 96.1	7211 94.7	7163 94.0	7164 94.0
Cardiff and Vale University LHB											
Cardiff LA	4522	4395 97.2	4395 97.2	4395 97.2	4386 97.0	4380 96.9	4173 92.3	4263 94.3	4187 92.6	4179 92.4	4152 91.8
Vale of Glamorgan LA	1519	1485 97.8	1485 97.8	1485 97.8	1485 97.8	1485 97.8	1437 94.6	1472 96.9	1450 95.5	1448 95.3	1437 94.6
Health Board Total	6041	5880 97.3	5880 97.3	5880 97.3	5871 97.2	5865 97.1	5610 92.9	5735 94.9	5637 93.3	5627 93.1	5589 92.5
Cwm Taf LHB											
Merthyr Tydfil LA	671	661 98.5	661 98.5	661 98.5	660 98.4	660 98.4	632 94.2	660 98.4	650 96.9	636 94.8	648 96.6
Rhondda Cynon Taf LA	2818	2770 98.3	2770 98.3	2770 98.3	2770 98.3	2770 98.3	2649 94.0	2750 97.6	2724 96.7	2670 94.7	2691 95.5
Health Board Total	3489	3431 98.3	3431 98.3	3431 98.3	3430 98.3	3430 98.3	3281 94.0	3410 97.7	3374 96.7	3306 94.8	3339 95.7
Hywel Dda LHB											
Cardiff LA	1946	1889 97.1	1889 97.1	1889 97.1	1884 96.8	1884 96.8	1792 92.1	1860 95.6	1848 95.0	1819 93.5	1825 93.8
Ceredigion LA	661	643 97.3	643 97.3	643 97.3	643 97.3	643 97.3	615 93.0	635 96.1	633 95.8	631 95.5	628 95.0
Pembrokeshire LA	1306	1259 96.4	1259 96.4	1259 96.4	1258 96.3	1257 96.2	1168 89.4	1244 95.3	1226 93.9	1184 90.7	1200 91.9
Health Board Total	3913	3791 96.9	3791 96.9	3791 96.9	3785 96.7	3784 96.7	3575 91.4	3739 95.6	3707 94.7	3634 92.9	3653 93.4
Powys Teaching LHB											
Unknown	1237	1198 96.8	1198 96.8	1198 96.8	1196 96.7	1196 96.7	1136 91.8	1176 95.1	1164 94.1	1160 93.8	1159 93.7
Wales Total	35053	34138 97.4	34136 97.4	34137 97.4	34106 97.3	34092 97.3	32482 92.7	33636 96.0	33202 94.7	32784 93.5	32860 93.7

* Reflects uptake of the completed primary course in this age group

** Full primary 2 dose course of pneumococcal conjugate vaccine

*** Final (booster) dose of pneumococcal conjugate vaccine

Table 4. Vaccine uptake in children reaching their 4th birthday between 01/04/11 and 31/03/12 and resident on 01/05/2012

Area	Resident Children	4 in 1 Preschool booster*	PCVf**	HibMenCb	MMR dose 2	Up to date in schedule***
	(n)	(n) (%)	(n) (%)	(n) (%)	(n) (%)	(n) (%)
Abertawe Bro Morgannwg University						
Bridgend LA	1559	1324 84.9	1460 93.6	1477 94.7	1297 83.2	1262 80.9
Neath Port Talbot LA	1541	1342 87.1	1419 92.1	1465 95.1	1304 84.6	1256 81.5
Swansea LA	2711	2336 86.2	2492 91.9	2568 94.7	2277 84.0	2171 80.1
Health Board Total	5811	5002 86.1	5371 92.4	5510 94.8	4878 83.9	4689 80.7
Aneurin Bevan						
Blaenau Gwent LA	760	671 88.3	706 92.9	733 96.4	663 87.2	638 83.9
Caerphilly LA	2050	1770 86.3	1911 93.2	1961 95.7	1738 84.8	1677 81.8
Monmouthshire LA	868	760 87.6	800 92.2	818 94.2	749 86.3	722 83.2
Newport LA	1905	1598 83.9	1689 88.7	1749 91.8	1551 81.4	1458 76.5
Torfaen LA	1066	934 87.6	982 92.1	1011 94.8	920 86.3	884 82.9
Health Board Total	6649	5733 86.2	6088 91.6	6272 94.3	5621 84.5	5379 80.9
Betsi Cadwaladr University						
Anglesey LA	765	668 87.3	710 92.8	724 94.6	658 86.0	629 82.2
Conwy LA	1108	939 84.7	1026 92.6	1036 93.5	929 83.8	900 81.2
Denbighshire LA	1041	904 86.8	966 92.8	993 95.4	889 85.4	857 82.3
Flintshire LA	1807	1587 87.8	1658 91.8	1700 94.1	1558 86.2	1501 83.1
Gwynedd LA	1232	1116 90.6	1154 93.7	1180 95.8	1088 88.3	1048 85.1
Wrexham LA	1628	1455 89.4	1512 92.9	1535 94.3	1441 88.5	1380 84.8
Health Board Total	7581	6669 88.0	7026 92.7	7168 94.6	6563 86.6	6315 83.3
Cardiff and Vale University						
Cardiff LA	4424	3716 84.0	3956 89.4	4049 91.5	3654 82.6	3401 76.9
Vale of Glamorgan LA	1514	1320 87.2	1416 93.5	1438 95.0	1287 85.0	1232 81.4
Health Board Total	5938	5036 84.8	5372 90.5	5487 92.4	4941 83.2	4633 78.0
Cwm Taf						
Merthyr Tydfil LA	691	615 89.0	654 94.6	663 95.9	602 87.1	588 85.1
Rhondda Cynon Taff LA	2737	2375 86.8	2577 94.2	2619 95.7	2334 85.3	2261 82.6
Health Board Total	3428	2990 87.2	3231 94.3	3282 95.7	2936 85.6	2849 83.1
Hywel Dda						
Cardiff LA	2021	1717 85.0	1839 91.0	1887 93.4	1662 82.2	1589 78.6
Ceredigion LA	648	574 88.6	598 92.3	607 93.7	562 86.7	543 83.8
Pembrokeshire LA	1318	1053 79.9	1175 89.2	1209 91.7	1041 79.0	993 75.3
Health Board Total	3987	3344 83.9	3612 90.6	3703 92.9	3265 81.9	3125 78.4
Powys Teaching Health Board	1275	1100 86.3	1155 90.6	1184 92.9	1071 84.0	1038 81.4
Unknown	184	157 85.3	168 91.3	171 92.9	151 82.1	148 80.4
Wales Total	34853	30031 86.2	32023 91.9	32777 94.0	29426 84.4	28176 80.8

* Uptake of acellular pertussis used as proxy

** Full primary 2 dose course of pneumococcal conjugate vaccine

*** Completed 4 in 1 preschool booster, final dose of pneumococcal conjugate vaccine, the Hib/ MenC booster and second MMR dose by four years of age

Table 5. Vaccine uptake in children reaching their 5th birthday between 01/04/11 and 31/03/12 and resident on 01/05/2012.

Area	Resident children	D3	T3	P3	Po3	Hib3	MenC*	PCV***	HibMenCb	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 LHB																
Bridgend LA	1510	1487 98.5	1487 98.5	1487 98.5	1485 98.3	1484 98.3	1461 96.8	1306 86.5	1397 92.5	1430 94.7	1265 83.8	1296 85.8	1296 85.8	1296 85.8	1295 85.8	
Neath Port Talbot LA	1500	1458 97.2	1458 97.2	1458 97.2	1457 97.1	1455 97.0	1435 95.7	1304 86.9	1397 93.1	1407 93.8	1268 84.5	1339 89.3	1339 89.3	1339 89.3	1339 89.3	
Swansea LA	2544	2480 97.5	2480 97.5	2480 97.5	2476 97.3	2462 96.8	2391 94.0	2178 85.6	2378 93.5	2405 94.5	2224 87.4	2317 91.1	2317 91.1	2317 91.1	2316 91.0	
Health Board Total	5554	5425 97.7	5425 97.7	5425 97.7	5418 97.6	5401 97.2	5287 95.2	4788 86.2	5172 93.1	5242 94.4	4757 85.6	4952 89.2	4952 89.2	4952 89.2	4950 89.1	
Aneurin Bevan LHB																
Blaenau Gwent LA	734	721 98.2	721 98.2	721 98.2	721 98.2	720 98.1	708 96.5	660 89.9	688 93.7	704 95.9	653 89.0	665 90.6	665 90.6	665 90.6	665 90.6	
Caerphilly LA	2087	2044 97.9	2044 97.9	2044 97.9	2043 97.9	2043 97.9	2012 96.4	1880 90.1	1957 93.8	1984 95.1	1837 88.0	1881 90.1	1881 90.1	1881 90.1	1881 90.1	
Monmouthshire LA	909	857 94.3	857 94.3	857 94.3	855 94.1	855 94.1	844 92.8	801 88.1	817 89.9	840 92.4	794 87.3	813 89.4	812 89.3	812 89.3	812 89.3	
Newport LA	1732	1648 95.2	1648 95.2	1648 95.2	1643 94.9	1642 94.8	1598 92.3	1515 87.5	1571 90.7	1625 93.8	1464 84.5	1523 87.9	1523 87.9	1522 87.9	1521 87.8	
Torfaen LA	1061	1039 97.9	1039 97.9	1039 97.9	1040 98.0	1039 97.9	1025 96.6	961 90.6	1001 94.3	1025 96.6	935 88.1	951 89.6	951 89.6	951 89.6	951 89.6	
Health Board Total	6523	6309 96.7	6309 96.7	6309 96.7	6302 96.6	6299 96.6	6187 94.8	5817 89.2	6034 92.5	6178 94.7	5683 87.1	5833 89.4	5832 89.4	5831 89.4	5830 89.4	
Betsi Cadwaladr University LHB																
Anglesey LA	721	703 97.5	703 97.5	703 97.5	703 97.5	703 97.5	685 95.0	644 89.3	683 94.7	687 95.3	644 89.3	665 92.2	665 92.2	665 92.2	665 92.2	
Conwy LA	1156	1117 96.6	1117 96.6	1117 96.6	1116 96.5	1115 96.5	1087 94.0	1008 87.2	1073 92.8	1089 94.2	1017 88.0	1032 89.3	1032 89.3	1032 89.3	1030 89.1	
Denbighshire LA	976	950 97.3	950 97.3	950 97.3	948 97.1	950 97.3	915 93.8	856 87.7	908 93.0	935 95.8	871 89.2	885 90.7	885 90.7	885 90.7	884 90.6	
Flintshire LA	1687	1645 97.5	1644 97.5	1645 97.5	1643 97.4	1643 97.4	1619 96.0	1509 89.4	1584 93.9	1622 92.1	1535 91.0	1568 92.9	1568 92.9	1567 92.9	1567 92.9	
Gwynedd LA	1314	1264 96.2	1264 96.2	1264 96.2	1264 96.2	1254 95.4	1202 91.5	1163 88.5	1225 93.2	1245 94.7	1171 89.1	1212 92.2	1212 92.2	1212 92.2	1207 91.9	
Wrexham LA	1565	1521 97.2	1521 97.2	1521 97.2	1519 97.1	1514 96.7	1483 94.8	1430 91.4	1466 93.7	1498 95.7	1424 91.0	1452 92.8	1452 92.8	1452 92.8	1451 92.7	
Health Board Total	7419	7200 97.0	7199 97.0	7200 97.0	7193 97.0	7179 96.8	6991 94.2	6610 89.1	6939 93.5	7076 95.4	6662 89.8	6814 91.8	6814 91.8	6814 91.8	6804 91.7	
Cardiff and Vale University LHB																
Cardiff LA	4147	3998 96.4	3997 96.4	3997 96.4	3988 96.2	3961 95.5	3762 90.7	3507 84.6	3691 89.0	3905 94.2	3502 84.4	3608 87.0	3608 87.0	3604 86.9	3608 87.0	
Vale of Glamorgan LA	1436	1415 98.5	1415 98.5	1415 98.5	1414 98.5	1412 98.3	1379 96.0	1308 91.1	1336 93.0	1383 96.3	1279 89.1	1320 91.9	1320 91.9	1319 91.9	1321 92.0	
Health Board Total	5583	5413 97.0	5412 96.9	5412 96.9	5402 96.8	5373 96.2	5141 92.1	4815 86.2	5027 90.0	5288 94.7	4781 85.6	4928 88.3	4928 88.3	4923 88.2	4929 88.3	
Cwm Taf LHB																
Merthyr Tydfil LA	676	650 96.2	650 96.2	650 96.2	649 96.0	647 95.7	640 94.7	607 89.8	634 93.8	644 95.3	599 88.6	615 91.0	615 91.0	615 91.0	615 91.0	
Rhondda Cynon Taff LA	2617	2579 98.5	2579 98.5	2579 98.5	2577 98.5	2576 98.4	2542 97.1	2380 90.9	2474 94.5	2516 96.1	2331 89.1	2405 91.9	2405 91.9	2405 91.9	2405 91.9	
Health Board Total	3293	3229 98.1	3229 98.1	3229 98.1	3226 98.0	3223 97.9	3182 96.6	2987 90.7	3108 94.4	3160 96.0	2930 89.0	3020 91.7	3020 91.7	3020 91.7	3020 91.7	
Hywel Dda LHB																
Carmarthenshire LA	1921	1841 95.8	1841 95.8	1841 95.8	1830 95.3	1826 95.1	1783 92.8	1564 81.4	1713 89.2	1795 93.4	1656 86.2	1688 87.9	1688 87.9	1687 87.8	1686 87.8	
Ceredigion LA	643	604 93.9	604 93.9	603 93.8	601 93.5	602 93.6	585 91.0	557 86.6	585 91.0	597 92.8	565 87.9	582 90.5	582 90.5	580 90.2	582 90.5	
Pembrokeshire LA	1316	1256 95.4	1256 95.4	1255 95.4	1255 95.4	1252 95.1	1229 93.4	1127 85.6	1196 90.9	1220 92.7	1105 84.0	1131 85.9	1131 85.9	1130 85.9	1129 85.8	
Health Board Total	3880	3701 95.4	3701 95.4	3699 95.3	3686 95.0	3680 94.8	3597 92.7	3248 83.7	3494 90.1	3612 93.1	3326 85.7	3401 87.7	3401 87.7	3397 87.6	3397 87.6	
Powys Teaching LHB																
Unknown	155	139 89.7	139 89.7	139 89.7	139 89.7	138 89.0	137 88.4	129 83.2	136 87.7	137 88.4	127 81.9	127 81.9	127 81.9	127 81.9	127 81.9	
Wales Total	33645	32598 96.9	32596 96.9	32595 96.9	32547 96.7	32463 96.5	31680 94.2	29484 87.6	31031 92.2	31835 94.6	29306 87.1	30171 89.7	30170 89.7	30160 89.6	30153 89.6	

* refers to full completed courses of MenC (before the 2006 schedule change)

Table 6. HPV Vaccine uptake in girls reaching their 14th birthday between 01/09/2011 and 31/08/2012 and resident on 01/05/2012 (School Year 8 during 2010-11).

Area	Resident girls	HPV 1 dose		HPV 2 doses		HPV 3 doses	
		(n)	(%)	(n)	(%)	(n)	(%)
<u>Abertawe Bro Morgannwg University LHB</u>							
Bridgend LA	789	731	92.6	726	92.0	710	90.0
Neath Port Talbot LA	779	734	94.2	726	93.2	711	91.3
Swansea LA	1247	1137	91.2	1121	89.9	1097	88.0
Health Board Total	2815	2602	92.4	2573	91.4	2518	89.4
<u>Aneurin Bevan LHB</u>							
Blaenau Gwent LA	399	365	91.5	360	90.2	355	89.0
Caerphilly LA	1043	940	90.1	927	88.9	904	86.7
Monmouthshire LA	497	387	77.9	382	76.9	373	75.1
Newport LA	984	842	85.6	834	84.8	821	83.4
Torfaen LA	570	514	90.2	514	90.2	501	87.9
Health Board Total	3493	3048	87.3	3017	86.4	2954	84.6
<u>Betsi Cadwaladr University LHB</u>							
Anglesey LA	377	345	91.5	341	90.5	335	88.9
Conwy LA	609	546	89.7	546	89.7	516	84.7
Denbighshire LA	533	472	88.6	469	88.0	449	84.2
Flintshire LA	842	758	90.0	754	89.5	729	86.6
Gwynedd LA	616	536	87.0	534	86.7	527	85.6
Wrexham LA	717	648	90.4	643	89.7	635	88.6
Health Board Total	3694	3305	89.5	3287	89.0	3191	86.4
<u>Cardiff and Vale University LHB</u>							
Cardiff LA	1838	1622	88.2	1596	86.8	1499	81.6
Vale of Glamorgan LA	744	667	89.7	653	87.8	607	81.6
Health Board Total	2582	2289	88.7	2249	87.1	2106	81.6
<u>Cwm Taf LHB</u>							
Merthyr Tydfil LA	324	297	91.7	295	91.0	291	89.8
Rhondda Cynon Taff LA	1306	1214	93.0	1194	91.4	1161	88.9
Health Board Total	1630	1511	92.7	1489	91.3	1452	89.1
<u>Hywel Dda LHB</u>							
Carmarthenshire LA	953	841	88.2	840	88.1	826	86.7
Ceredigion LA	341	290	85.0	288	84.5	281	82.4
Pembrokeshire LA	655	568	86.7	559	85.3	542	82.7
Health Board Total	1949	1699	87.2	1687	86.6	1649	84.6
<u>Powys Teaching LHB</u>							
	689	578	83.9	575	83.5	559	81.1
Unknown	106	70	66.0	67	63.2	67	63.2
Wales Total	16958	15102	89.1	14944	88.1	14526	85.5

Table 7. Vaccine uptake in children reaching their 15th birthday between 01/04/11 and 31/03/12 and resident on 01/05/2012 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster*		Resident girls		MMR1 (girls)		MMR2 (girls)		Resident boys		MMR1 (boys)		MMR2 (boys)	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)		
Abertawe Bro Morgannwg University LHB	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(n)	(n)	(%)	(n)	(%)	(n)	(n)	(%)	(n)	(%)		
Bridgend LA	1652	1522	92.1	1415	85.7	773	46.8	790	732	92.7	688	87.1	862	790	91.6	727	84.3			
Neath Port Talbot LA	1619	1455	89.9	1318	81.4	774	47.8	791	705	89.1	638	80.7	828	750	90.6	680	82.1			
Swansea LA	2661	2345	88.1	2042	76.7	1238	46.5	1276	1125	88.2	981	76.9	1385	1220	88.1	1061	76.6			
Health Board Total	5932	5322	89.7	4775	80.5	2785	46.9	2857	2562	89.7	2307	80.7	3075	2760	89.8	2468	80.3			
Aneurin Bevan LHB																				
Blaenau Gwent LA	808	742	91.8	662	81.9	558	69.1	397	359	90.4	322	81.1	411	383	93.2	340	82.7			
Caerphilly LA	2232	1996	89.4	1750	78.4	1446	64.8	1099	975	88.7	839	76.3	1133	1021	90.1	911	80.4			
Monmouthshire LA	1213	989	81.5	841	69.3	765	63.1	588	479	81.5	404	68.7	625	510	81.6	437	69.9			
Newport LA	1966	1721	87.5	1539	78.3	1187	60.4	941	810	86.1	723	76.8	1023	911	89.1	816	79.8			
Torfaen LA	1223	1138	93.0	1032	84.4	788	64.4	578	536	92.7	492	85.1	645	602	93.3	540	83.7			
Health Board Total	7442	6586	88.5	5824	78.3	4744	63.7	3603	3159	87.7	2780	77.2	3837	3427	89.3	3044	79.3			
Betsi Cadwaladr University LHB																				
Anglesey LA	817	777	95.1	719	88.0	344	42.1	399	379	95.0	355	89.0	418	398	95.2	364	87.1			
Conwy LA	1277	1221	95.6	1145	89.7	612	47.9	624	593	95.0	563	90.2	652	627	96.2	581	89.1			
Denbighshire LA	1140	1080	94.7	969	85.0	662	58.1	557	530	95.2	470	84.4	583	550	94.3	499	85.6			
Flintshire LA	1761	1676	95.2	1519	86.3	1017	57.8	870	822	94.5	755	86.8	891	854	95.8	764	85.7			
Gwynedd LA	1383	1293	93.5	1198	86.6	636	46.0	689	649	94.2	604	87.7	694	644	92.8	594	85.6			
Wrexham LA	1402	1319	94.1	1222	87.2	684	48.8	676	632	93.5	594	87.9	726	687	94.6	628	86.5			
Health Board Total	7780	7366	94.7	6772	87.0	3955	50.8	3815	3605	94.5	3341	87.6	3964	3760	94.9	3430	86.5			
Cardiff and Vale University LHB																				
Cardiff LA	3833	3465	90.4	3144	82.0	2612	68.1	1805	1649	91.4	1508	83.5	2027	1816	89.6	1636	80.7			
Vale of Glamorgan LA	1584	1468	92.7	1371	86.6	1274	80.4	818	755	92.3	709	86.7	766	713	93.1	662	86.4			
Health Board Total	5417	4933	91.1	4515	83.3	3886	71.7	2623	2404	91.7	2217	84.5	2793	2529	90.5	2298	82.3			
Cwm Taf LHB																				
Merthyr Tydfil LA	759	687	90.5	608	80.1	372	49.0	398	362	91.0	316	79.4	360	325	90.3	292	81.1			
Rhondda Cynon Taff LA	2753	2573	93.5	2340	85.0	1236	44.9	1329	1244	93.6	1146	86.2	1424	1329	93.3	1194	83.8			
Health Board Total	3512	3260	92.8	2948	83.9	1608	45.8	1727	1606	93.0	1462	84.7	1784	1654	92.7	1486	83.3			
Hywel Dda LHB																				
Carmarthenshire LA	2082	1845	88.6	1619	77.8	1142	54.9	988	884	89.5	774	78.3	1094	961	87.8	845	77.2			
Ceredigion LA	682	624	91.5	551	80.8	276	40.5	327	303	92.7	266	81.3	355	321	90.4	285	80.3			
Pembrokeshire LA	1391	1238	89.0	1101	79.2	244	17.5	685	618	90.2	563	82.2	706	620	87.8	538	76.2			
Health Board Total	4155	3707	89.2	3271	78.7	1662	40.0	2000	1805	90.3	1603	80.2	2155	1902	88.3	1668	77.4			
Powys Teaching LHB	1494	1286	86.1	1111	74.4	633	42.4	697	597	85.7	521	74.7	797	689	86.4	590	74.0			
Unknown	275	198	72.0	175	63.6	112	40.7	125	89	71.2	81	64.8	149	109	73.2	94	63.1			
Wales Total	36007	32658	90.7	29391	81.6	19385	53.8	17447	15827	90.7	14312	82.0	18554	16830	90.7	15078	81.3			

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

Table 8. Vaccine uptake in children reaching their 16th birthday between 01/04/11 and 31/03/12 and resident on 01/05/2012 (with breakdown of MMR1 and MMR2 coverage by sex).

Area	Resident children		MMR1		MMR2		Teenage 3 in 1 booster*		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 LHB																				
Bridgend LA	1485	1375	92.6	1269	85.5	1187	79.9		704	648	92.0	598	84.9	781	727	93.1	671	85.9		
Neath Port Talbot LA	1631	1502	92.1	1353	83.0	1286	78.8		781	722	92.4	646	82.7	850	780	91.8	707	83.2		
Swansea LA	2616	2399	91.7	2133	81.5	2141	81.8		1265	1181	93.4	1052	83.2	1351	1218	90.2	1081	80.0		
Health Board Total	5732	5276	92.0	4755	83.0	4614	80.5		2750	2551	92.8	2296	83.5	2982	2725	91.4	2459	82.5		
Aneurin Bevan LHB																				
Blaenau Gwent LA	821	768	93.5	710	86.5	432	52.6		416	392	94.2	358	86.1	405	376	92.8	352	86.9		
Caerphilly LA	2059	1856	90.1	1668	81.0	1060	51.5		996	891	89.5	804	80.7	1063	965	90.8	864	81.3		
Monmouthshire LA	1104	890	80.6	770	69.7	662	60.0		496	398	80.2	342	69.0	608	492	80.9	428	70.4		
Newport LA	1952	1714	87.8	1519	77.8	981	50.3		926	818	88.3	721	77.9	1026	896	87.3	798	77.8		
Torfaen LA	1190	1101	92.5	1023	86.0	567	47.6		551	505	91.7	463	84.0	639	596	93.3	560	87.6		
Health Board Total	7126	6329	88.8	5690	79.8	3702	52.0		3385	3004	88.7	2688	79.4	3741	3325	88.9	3002	80.2		
Betsi Cadwaladr University LHB																				
Anglesey LA	761	724	95.1	679	89.2	539	70.8		361	347	96.1	332	92.0	400	377	94.3	347	86.8		
Conwy LA	1164	1114	95.7	1044	89.7	933	80.2		586	561	95.7	532	90.8	577	553	95.8	512	88.7		
Denbighshire LA	1103	1054	95.6	971	88.0	922	83.6		555	535	96.4	500	90.1	547	519	94.9	471	86.1		
Flintshire LA	1749	1695	96.9	1589	90.9	1491	85.2		866	850	98.2	807	93.2	883	845	95.7	782	88.6		
Gwynedd LA	1302	1242	95.4	1179	90.6	1017	78.1		641	615	95.9	585	91.3	661	627	94.9	594	89.9		
Wrexham LA	1457	1408	96.6	1338	91.8	1183	81.2		689	670	97.2	645	93.6	768	738	96.1	693	90.2		
Health Board Total	7536	7237	96.0	6800	90.2	6085	80.7		3698	3578	96.8	3401	92.0	3836	3659	95.4	3399	88.6		
Cardiff and Vale University LHB																				
Cardiff LA	3944	3591	91.0	3282	83.2	2837	71.9		1860	1710	91.9	1575	84.7	2084	1881	90.3	1707	81.9		
Vale of Glamorgan LA	1587	1462	92.1	1364	85.9	1309	82.5		781	730	93.5	687	88.0	806	732	90.8	677	84.0		
Health Board Total	5531	5053	91.4	4646	84.0	4146	75.0		2641	2440	92.4	2262	85.6	2890	2613	90.4	2384	82.5		
Cwm Taf LHB																				
Merthyr Tydfil LA	710	652	91.8	587	82.7	603	84.9		354	323	91.2	292	82.5	356	329	92.4	295	82.9		
Rhondda Cynon Taff LA	2631	2491	94.7	2284	86.8	2181	82.9		1275	1207	94.7	1093	85.7	1356	1284	94.7	1191	87.8		
Health Board Total	3341	3143	94.1	2871	85.9	2784	83.3		1629	1530	93.9	1385	85.0	1712	1613	94.2	1486	86.8		
Hywel Dda LHB																				
Carmarthenshire LA	2089	1895	90.7	1666	79.8	1512	72.4		1042	947	90.9	834	80.0	1047	948	90.5	832	79.5		
Ceredigion LA	724	672	92.8	597	82.5	591	81.6		322	297	92.2	264	82.0	402	375	93.3	333	82.8		
Pembrokeshire LA	1397	1249	89.4	1120	80.2	373	26.7		684	602	88.0	538	78.7	713	647	90.7	582	81.6		
Health Board Total	4210	3816	90.6	3383	80.4	2476	58.8		2048	1846	90.1	1636	79.9	2162	1970	91.1	1747	80.8		
Powys Teaching LHB	1457	1260	86.5	1058	72.6	1108	76.0		709	612	86.3	523	73.8	747	647	86.6	534	71.5		
Unknown	313	215	68.7	183	58.5	157	50.2		139	93	66.9	79	56.8	173	122	70.5	104	60.1		
Wales Total	35246	32329	91.7	29386	83.4	25072	71.1		16999	15654	92.1	14270	83.9	18243	16674	91.4	15115	82.9		

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

Links

HPV catch-up for young women born between 1 September 1990 and 31 August 1991:
<http://wales.gov.uk/topics/health/publications/health/ministerial/hpvvaccination/?lang=en>

Welsh Health Circular (2005) 081 – MMR immunisation catch-up:
http://www.wales.nhs.uk/documents/WHC_2005_081.pdf

Accelerated HPV catch-up for young women born between 1 September 1991 and 31 August 1995 (intranet): <http://howis.wales.nhs.uk/sites3/page.cfm?orgid=474&pid=21255>

Public Health Wales Vaccination and Immunisation intranet site HPV pages:
<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=474&pid=21297>

Link to guidance on follow up of children who have missed scheduled MMR doses (WHC (2005)81):
http://www.wales.nhs.uk/documents/WHC_2005_081.pdf

Public Health Wales Vaccination and Immunisation intranet (NHS Wales only):
<http://howis.wales.nhs.uk/sites3/home.cfm?orgid=474>

Public Health Wales Health Protection internet:
<http://www.wales.nhs.uk/sites3/home.cfm?orgid=457>

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