

Inequalities in uptake of routine childhood immunisations in Wales 2018-19

Authors

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Date: 12/09/2019

Version: 1

Publication/ Distribution

Public Health Wales: VPDP, CDSC, Health Protection Team, Local Public Health Teams

Health Boards: Immunisation Coordinators and Directors of Public Health

Welsh Government

Purpose and Summary of Document:

This annual surveillance report summarises trends in socioeconomic inequalities and geographic variation in the uptake of routine childhood immunisations in Wales up to 2018-19.

Long-term trends in immunisation coverage, improving equality in uptake and reducing variation in coverage in Wales remain positive. However, between 2017-18 and 2018-19 socioeconomic inequities in uptake of routine immunisations in two to five-year-olds have widened. In addition, variation in uptake between health boards has increased for one and two-year-olds.

Implementation of existing policies and guidance designed to improve follow-up of children who have missed scheduled immunisations would reduce inequities in uptake.

Appendix A contains additional charts and data tables for health boards, presenting annual uptake statistics by national quintile of socioeconomic deprivation.

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Key points

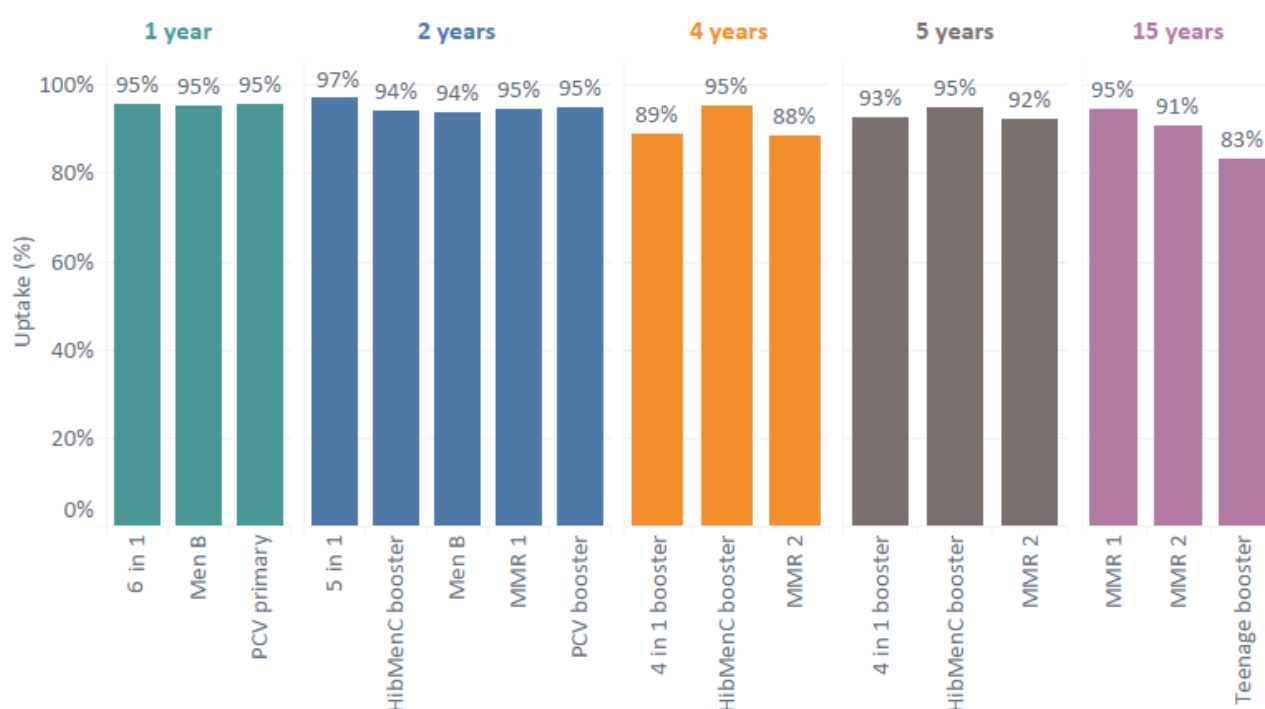
- Long-term trends in immunisation uptake and in reducing socioeconomic and geographical inequalities in uptake in Wales remain positive or stable. However, trends over the 2017-18 and 2018-19 period are mixed.
- Socioeconomic inequalities and geographic variation in immunisation uptake remain smallest in one and two-year-olds and are greater in older children and teenagers.
- Following a childhood vaccination data quality exercise in 2018-19 there was an update to the procedures used to compile the National Community Child Health Database. This has resulted in more complete vaccination history information being available for children who have moved area. The impact of this change on reported inequalities is unknown.
- Compared to the previous year, in 2018-19 national uptake of routine immunisations has remained broadly stable and was:
 - 94.5% in one-year-olds (compared to 94.8% in 2017-18)
 - 92.6% in two-year-olds (compared to 92.9% in 2017-18)
 - 87.2% in four-year-olds (compared to 84.9% in 2017-18)
 - 90.4% in five-year-olds (compared to 87.6% in 2017-18)
 - 77.4% in 15-year-olds (compared 74.5% in 2017-18)
- Compared to 2017-18, the gap in uptake of routine immunisations in the most deprived and least deprived areas in Wales have:
 - **Was stable** in one-year-olds (2.7% compared to 3.0%)
 - **Increased** in two-year-olds from 2.9% to 3.5%
 - **Increased** in four-year-olds from 6.2% to 9.2%
 - **Increased** in five-year-olds from 3.6% to 5.0%
 - **Decreased** in 15-year-olds from 6.7% to 6.1%
- Compared to 2017-18, health board variation in uptake of routine immunisations has:
 - **Increased** in one-year-olds from 4.0% to 4.9%
 - **Increased** in two-year-olds from 4.4% to 6.5%
 - **Decreased** in four-year-olds from 7.2% to 5.6%
 - **Was stable** in five-year-olds (5.9% compared to 5.7%)
 - **Decreased** in 15-year-olds from 16.7% to 15.0%
- The data in this report suggest that routine catch-up activities play an important role in increasing uptake and reducing inequalities.
- Implementation of existing policies and guidance designed to improve follow-up of children who have missed scheduled immunisations would continue to reduce inequalities.

Background

During 2018/19 national coverage of immunisations in one-year-old infants in Wales remained at 95% or above (apart from rotavirus, where there are strict upper age-limits for receiving the vaccine, which prevent catch-up if the course was started late). Uptake of all routine immunisations in two-year-old children was also 95% or above, apart from the Hib/MenC booster immunisation which was just below 95% and the Meningococcal B (Men B) vaccine which was added to the schedule in September 2015.

Uptake of immunisation generally declines with increasing scheduled immunisation age. More detailed information on uptake of routine childhood immunisations is available from the 2018-19 Public Health Wales Annual COVER (Coverage Of Vaccination Evaluated Rapidly) report [1].

Figure 1. National coverage of vaccinations in children reaching their first, second, fourth, fifth and 15th birthdays during April 2018 to March 2019.



Although uptake of scheduled immunisations in the youngest children in Wales is high, there is variation in uptake at health board (HB) level, Local Authority area (LA) level and according to the level of socioeconomic deprivation of area of residence. Socioeconomic inequalities in uptake increase as the scheduled age of vaccination increases [2, 3].

A large number of factors are likely to affect uptake of immunisations. Previously published studies from other countries report that ethnic group and religious group, family mobility, family size, child age, socioeconomic status, geography and rurality, and service delivery method can all influence the likelihood of children receiving routine immunisations. Inequalities due to method of service delivery have previously been reported in Wales [4].



The Public Health Wales COVER scheme has reported on the proportions of children who are up to date with immunisations by their fourth birthday in each quintile of deprivation since 2012-13. The percentage of children who are up to date with routine immunisations by four years of age is included as an indicator in the Public Health Outcomes Framework for Wales [5].

This report provides a high-level view of inequalities and variation in routine childhood immunisation uptake in Wales, with respect to socioeconomic deprivation, HB and LA of residence.

Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre, working with Powys Teaching Health Board and the NHS Wales Informatics Service, carried out a COVER data quality assurance project at the end of 2018. This project led to improvements in completeness of vaccination data in the national COVER dataset. As a result reported vaccination uptake has increased, primarily in children aged four years and older. Data for years prior to 2018-19 in this report have not been updated to take into account these changes.

Methods

Source data for previously published annual COVER reports [6] were analysed. Public Health Wales Vaccine Preventable Disease Programme (VPDP) and Communicable Disease Surveillance Centre (CDSC) are responsible for the COVER reporting scheme in Wales. This is the standard measure of vaccination uptake and provides comparable data to other UK countries. The data on which these reports are based are sourced from HB child health office databases, via the National Community Child Health Database (NCCHD, managed by the NHS Wales Informatics Service).

Uptake of immunisations by key birthdays were calculated on the basis of LA and HB of residence at the time of issue of Annual COVER reports. The annual proportions (%) of children who were up to date with routine vaccinations in 2018-19 were calculated as defined below. Vaccinations introduced into the schedule during the last ten years were not included in calculations for annual periods prior to their introduction. Up to date measures do not include the rotavirus immunisation, introduced in 2013, where there are strict upper age-limits for receiving the vaccine.

Vaccinations included in calculation

<i>Up to date by one year of age</i>	3 rd dose of 6 in 1 vaccination against diphtheria, tetanus, pertussis, polio, <i>Haemophilus influenzae</i> type b and hepatitis B (DTaP/IPV/Hib/HepB), 2 nd dose of pneumococcal conjugate vaccine (PCV) and 2 nd dose of meningococcal type B (MenB) vaccine
<i>Up to date by two years of age</i>	3 rd dose of 5 in 1 vaccine (DTaP/IPV/Hib), first dose of combined measles, mumps and rubella (MMR) vaccine, 3 rd dose of PCV, 3 rd dose of meningococcal type B (MenB) and Hib/MenC booster vaccine
<i>Up to date by four years of age</i>	4 in 1 booster vaccine against diphtheria, tetanus, pertussis and polio (DTaP/IPV), second dose of MMR vaccine, and Hib/MenC booster vaccine
<i>Up to date by five years of age</i>	4 in 1 booster vaccine against diphtheria, tetanus, pertussis and polio (DTaP/IPV), second dose of MMR vaccine, and Hib/MenC booster vaccine
<i>Up to date by 15 years of age</i>	3 in 1 booster vaccine against Diphtheria, tetanus and polio (Td/IPV), second dose of MMR vaccine, and MenACWY vaccine

In order to calculate uptake by socioeconomic status, data were linked to the Welsh Index of Multiple Deprivation (WIMD) at Lower Super Output Area (LSOA) level. The WIMD provides a composite ranking deprivation for each LSOA in Wales, weighted across eight domains: income, employment, health, education, access to services, community safety, physical environment and housing. For this report, LSOAs were allocated into quintiles based on overall WIMD deprivation ranking, to provide an indication of the deprivation status of the LSOA in which each child lived. In this report, Quintile 1 refers to children who were living in the most deprived fifth of LSOAs in Wales and Quintile 5 refers to children who were living in the least deprived fifth of LSOAs in Wales.

All analyses of socioeconomic inequalities in this report use 2014 WIMD national quintiles of deprivation. Care should be taken when interpreting deprivation quintile level immunisation uptakes reported for each health board (Appendix A), as uptake calculations may be based on small numbers of children in some



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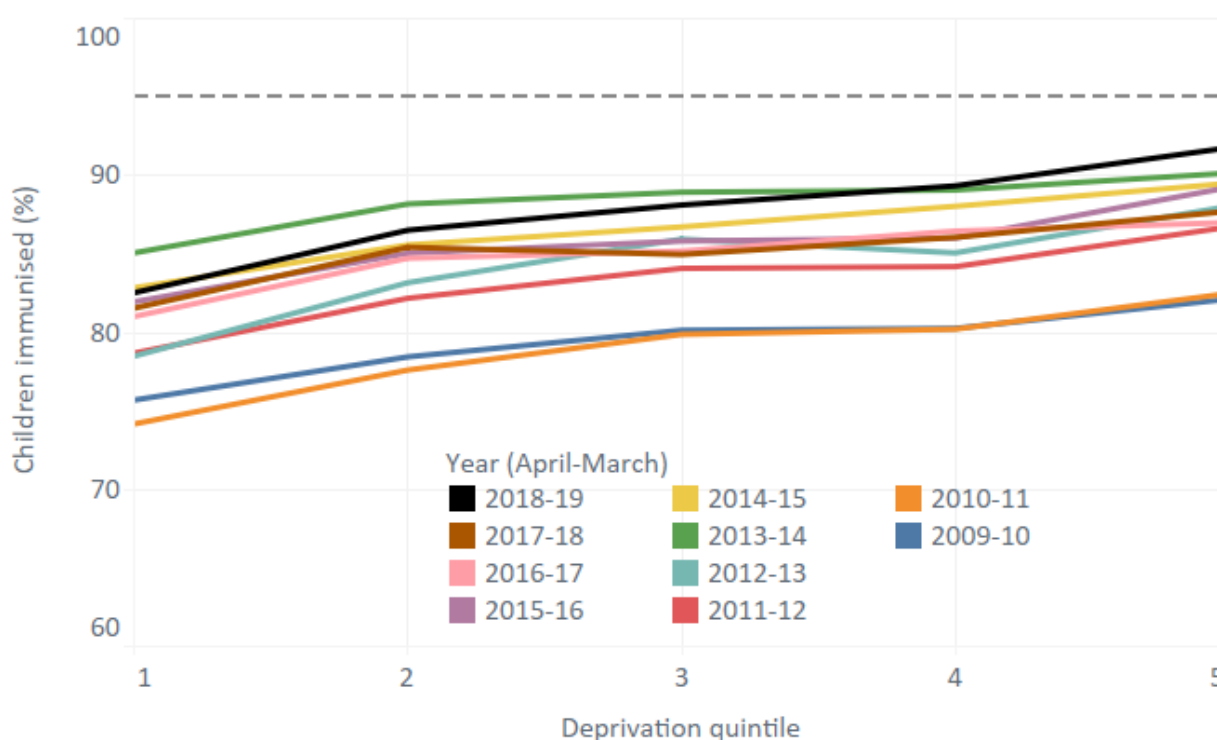
Vaccine Preventable Disease Programme (VPDP) and Communicable Disease
Surveillance Centre (CDSC): Inequalities in Uptake of Childhood Immunisations
2018/19

instances. Aggregated LA areas were used to provide historic data for current HB areas from 2008 to 2009 (prior to health board restructuring).

Inequalities in uptake according to socioeconomic status

Uptake of routine immunisations by the Public Health Outcomes Framework indicator age of four years increased across all quintiles of deprivation in Wales between 2009-10 and 2013-14 (Figure 2). Between 2014-15 and 2017-18 the proportion of children up to date by their fourth birthday decreased in all deprivation quintiles. In the most recent period (2017-18 to 2018-19) uptake increased across all quintiles of deprivation. The uptake in 2018-19 at 4 years of age from most deprived fifth of areas to the least deprived fifth for quintiles 1 to 5 was 82.5%, 86.5%, 88.1%, 89.3% and 91.8% respectively.

Figure 2. The percentage of children up to date with immunisations by four years of age, by quintile of deprivation of the area they are resident in, for April to March years 2009-10 to 2018-19.



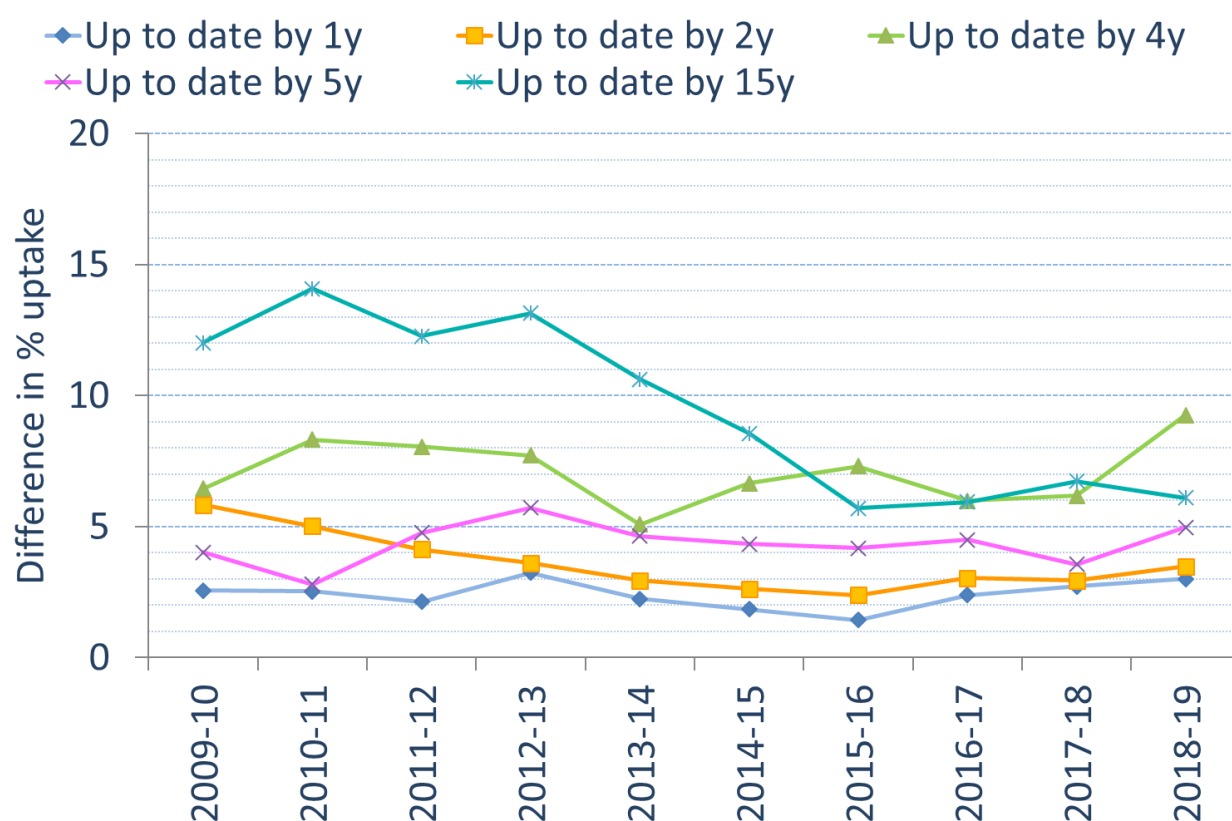
In 2018-19, there continued to be statistically significant differences between the most and least deprived areas of Wales in proportions of children who were up to date with routine immunisations at all ages. Compared to the previous report, for 2017-18, the gap between quintiles has remained stable in one-year-olds, increased in children aged two, four and five year and decreased in 15-year-olds (Table 1) [2]. When comparing the gap in immunisation uptake in 2018-19 to 2009-10 it is smaller for children aged two years and 15 years but is larger for those aged one, four and five years (Figure 3).

During 2018-19, the proportion of children who were up to date with immunisations remained highest in those who resided in the least deprived areas of Wales and lowest in those residing in the most deprived areas of Wales, with the exception of 15-year-olds where the middle quintile had slightly higher uptake than the least deprived quintile (Table 1).

Table 1. Percentage of children in Wales who had completed routine immunisations by key birthdays in 2017-18 compared to 2018-19; and the difference (inequality gap) in percentage of children who are up to date with routine immunisations (green indicates increased uptake and decreased inequality, red indicates decreased uptake and increased inequality).

Measure	National level uptake		Quintiles with highest and lowest uptakes				Difference in % uptake in highest and lowest uptake quintiles	
			2017-18		2018-19			
	2017-18	2018-19	Highest uptake quintile	Lowest uptake quintile	Highest uptake quintile	Lowest uptake quintile	2017-18	2018-19
Up to date by 1y	94.8	94.5	5	1	5	1	2.7	3.0
Up to date by 2y	92.9	92.6	5	1	5	1	2.9	3.5
Up to date by 4y	84.9	87.2	5	1	5	1	6.2	9.2
Up to date by 5y	87.6	90.4	5	1	5	1	3.6	5.0
Up to date by 15y	74.5	77.4	3	1	5	1	6.7	6.1

Figure 3. The difference (inequality gap) between quintiles of highest and lowest deprivation percentages of children up to date with immunisations by key birthdays.



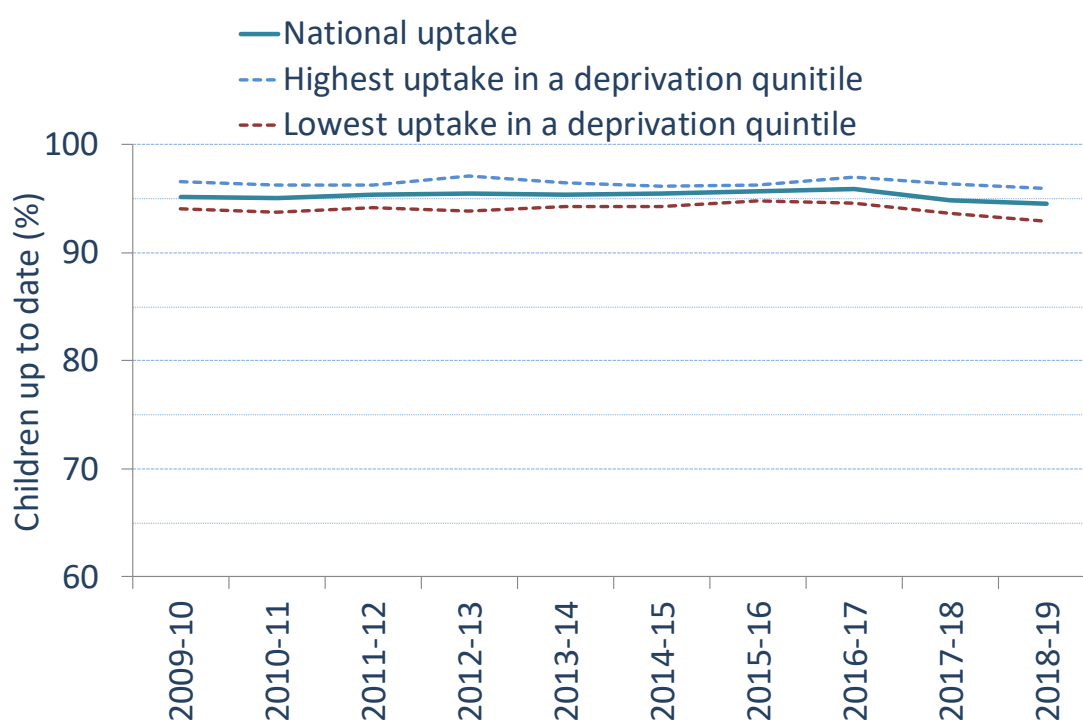
Socioeconomic inequalities at one year of age

The immunisation inequality gap in children in Wales who were up to date by one year of age, reduced by almost half between 2009-10 (2.6%) and 2015-16 (1.4%). However, the immunisation inequality gap has increased and in 2018-19 was 3.0%, the largest gap since reporting began.

The proportion of children who had completed all routine immunisations by their first birthday continues to be lowest (93.0%) in children residing in areas in the most deprived quintile of Wales. The proportion of children up to date was above 95% in the three least deprived quintiles, and below it in the other quintiles. In the second most deprived quintile uptake decreased to 94.4% from 95.2% in 2017-18.

As with most previous years, areas in the least deprived quintile in Wales had the highest proportion (96.0%) of children who were up to date with immunisation by one year of age (Figure 4).

Figure 4. *Proportion of children reaching their first birthday during April to March years 2009-10 to 2018-19 who were up to date with routine immunisations (with highest and lowest uptake deprivation quintiles)*



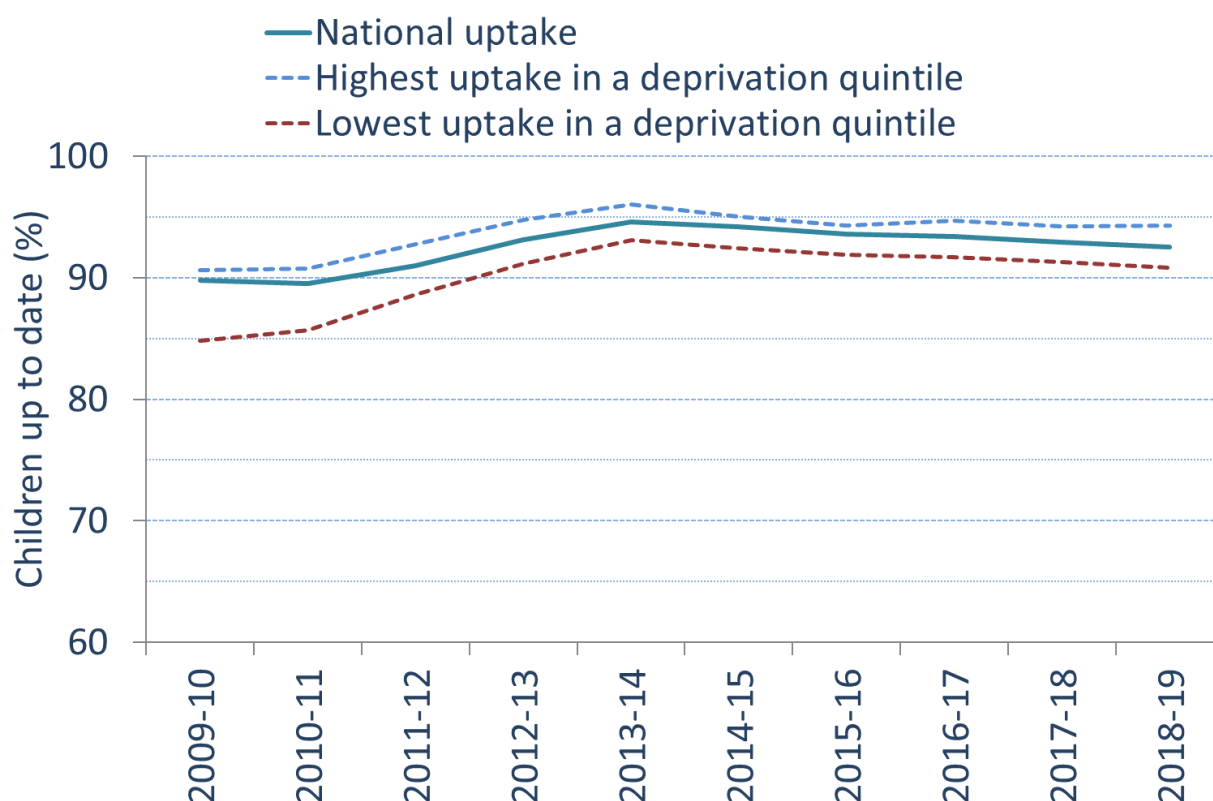
Socioeconomic inequalities at two years of age

The inequality gap in proportion of children in Wales who were up to date with routine immunisations by two years of age halved from 5.8% in 2009-10 to 2.9% in 2017-18 (Figure 5). Between 2017-18 and 2018-19, the gap has increased to 3.5%.

As with previous years, the proportion of children who had completed all routine immunisations by their second birthday was lowest (90.8%) in children residing in areas in the most deprived quintile.

During 2018-19, areas in the least deprived quintile of Wales had the highest proportion (94.3%) of children up to date with immunisations by two years of age, although uptake in all quintiles remained below 95% (Figure 5).

Figure 5. *Proportion of children reaching their second birthday during April to March years 2009-10 to 2018-19 who were up to date with routine immunisations (with highest and lowest uptake deprivation quintiles)*



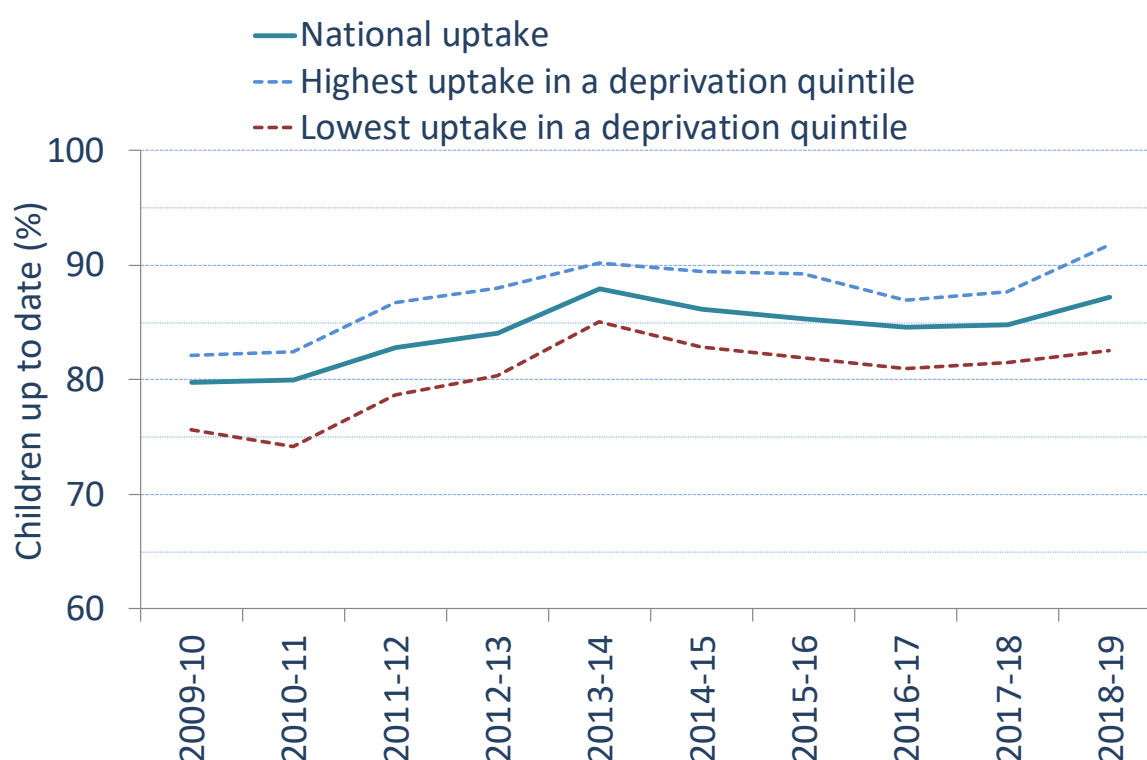
Socioeconomic inequalities at four years of age

The inequality gap in immunisation uptake by four years of age increased in 2018-19 compared to 2017-18, from 6.2% to 9.2%. This is the largest gap since reporting began (Figure 6), the smallest was in 2013-14 (5.1%).

As with previous years, the proportion of children who had completed all routine immunisations by their fourth birthday was lowest (82.5%) in those residing in areas in the most deprived quintile of Wales and highest (91.8%) in those residing in areas in the least deprived quintile of Wales. The widening gap is the result of coverage in the most deprived areas increasing at a slower rate than in the least deprived areas since 2017/18.

Out of all of the immunisations that are included in this composite measure, uptake of the second MMR dose is the lowest. Uptake of MMR dose two is usually the vaccine with lowest coverage in four-year-olds, however uptake of the 4 in 1 (DTaP/IPV) is often at similar levels. Both of these immunisations are scheduled at around three years four months of age and allow for six to eight months of follow-up activity before the measurement point of a child's fourth birthday.

Figure 6. *Proportion of children reaching their fourth birthday during April to March years 2009-10 to 2018-19 who were up to date with routine immunisations (with highest and lowest uptake deprivation quintiles)*



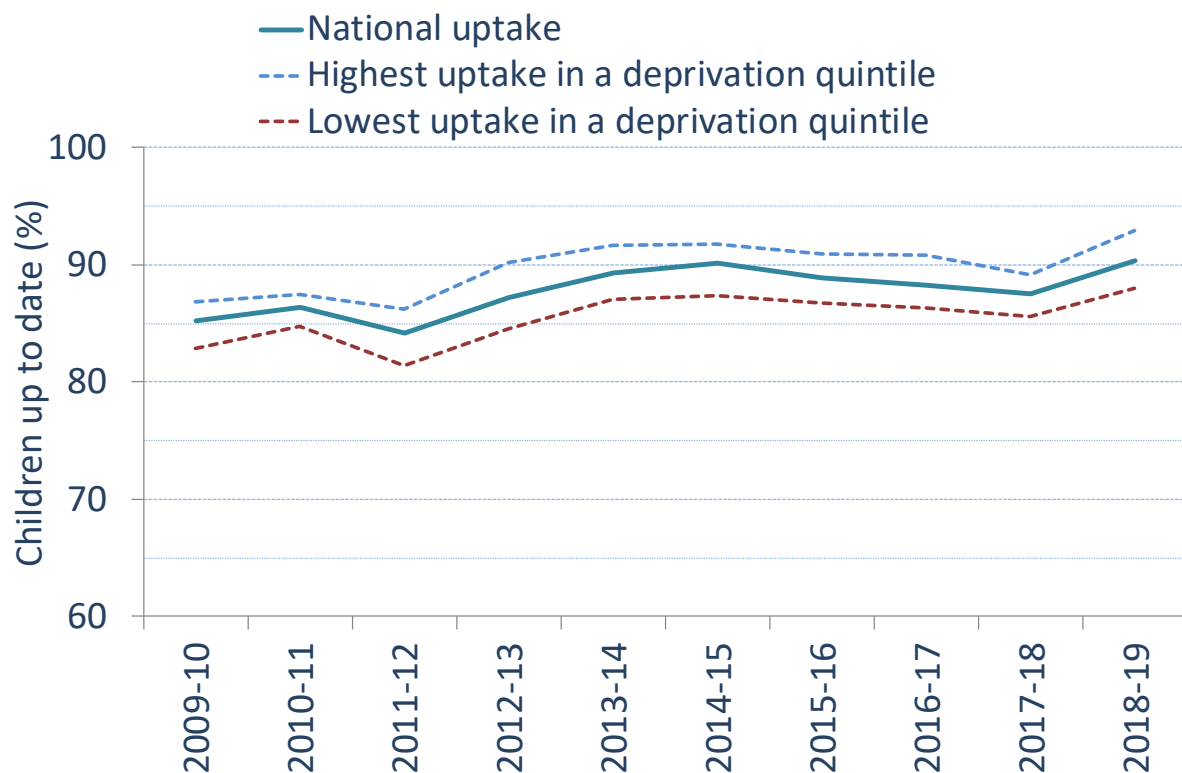
Socioeconomic inequalities at five years of age

The inequality gap in immunisation uptake by five years of age increased in 2018-19 compared to 2017-18, from 3.6% to 5.0%. However, the gap in inequalities in this age group has fluctuated between a low of 2.8% (2010-11) and a high of 5.7% (2012-13) over the previous ten years (Figure 7).

As with previous years, the proportion of children who had completed all routine immunisations by their fifth birthday was lowest (88.0%) in children residing in areas in the most deprived quintile of Wales and highest (93.0%) in children residing in areas in the least deprived quintile of Wales.

The inequalities in immunisation coverage seen in children at five years are smaller than at four years of age, reflecting the longer period available for follow-up activities undertaken and catch-up opportunity between fourth and fifth birthdays. The percentage gap in uptake between those living in the most and least deprived quintiles decreased by 1.2 when comparing uptake of all routine immunisations in those reaching 5 years of age during 2018-19 to children reaching 4 years of age during 2017-18.

Figure 7. *Proportion of children reaching their fifth birthday during April to March years 2009-10 to 2018-19 who were up to date with routine immunisations (with highest and lowest uptake deprivation quintiles)*



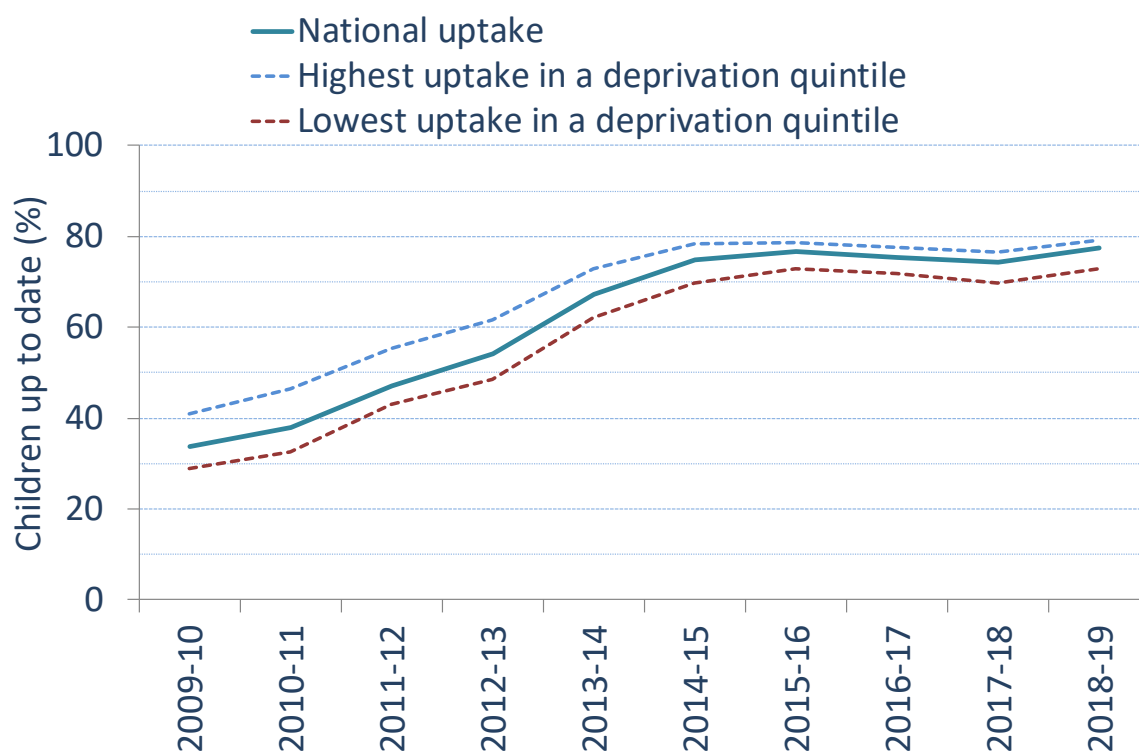
Socioeconomic inequalities at 15 years of age

Between 2009-10 and 2016-17, the inequality gap in immunisation uptake by 15 years of age more than halved from 12.0% to 5.9%. In 2018-19 the inequality gap in uptake by 15 years of age decreased to 6.1%, from 6.7% in 2017-18 (Figure 8).

As with the previous seven years, the proportion of teenagers who had completed all routine immunisations by 15 years of age was lowest (69.8%) in children residing in areas in the most deprived quintile of Wales.

The proportion of children who were up to date with their immunisations by 15 years of age was highest (79.1%) in children residing in areas in the middle quintile of Wales. The proportion of children who are up to date continues to be below 80% in all quintiles of deprivation.

Figure 8. *Proportion of children reaching their 15th birthday during April to March years 2009-10 to 2018-19 who were up to date with routine immunisations (with highest and lowest uptake deprivation quintiles)*



Variation in geographical uptake at health board and local authority level

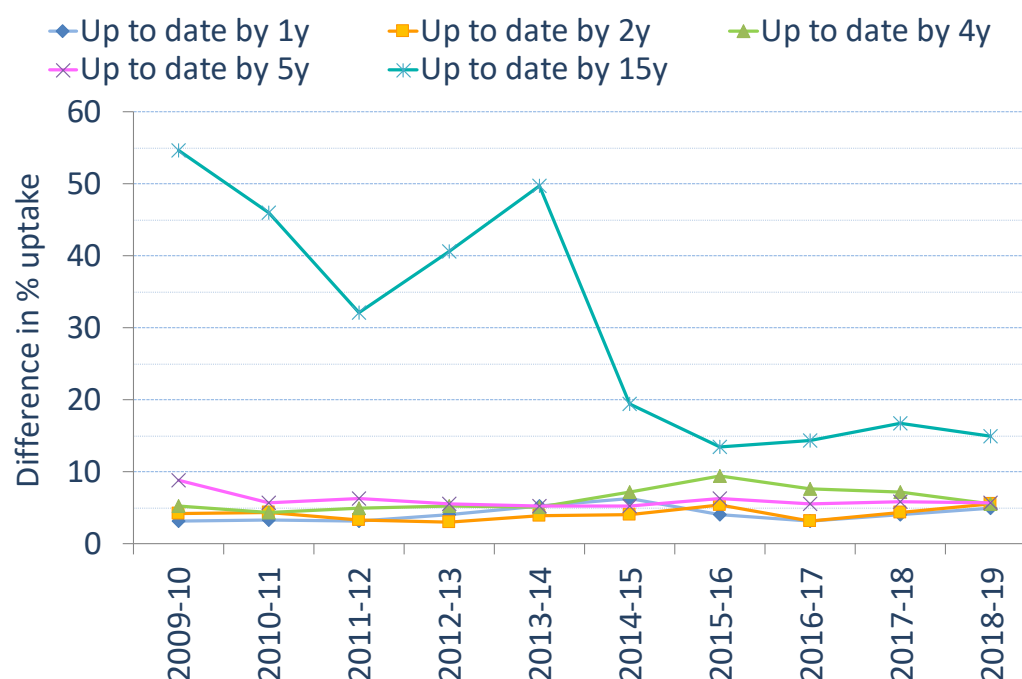
Compared to the previous report (2017-18) the gap between the highest uptake and lowest uptake HBs has increased in one-year-olds and two-year-olds, and decreased for four, five and 15-year-olds (Table 2). The largest variation continues to be in 15-year-olds (15.0%) whilst the lowest level of variation is in one-year-olds (4.9%).

The gap between the highest uptake LAs and lowest uptake LAs has increased in one and two-year-olds, decreased in four-year-olds, increased in five-year-olds and remained stable in 15-year-olds (Table 2). The largest variation continues to be in 15-year-olds (17.8%) whilst the lowest variation is in one-year-olds (5.7%).

Table 2. Percentage of children who had completed routine immunisations by key birthdays in 2017-18 compared to 2018-19; and the difference in percentage of children who are up to date at health board (HB) and local authority (LA) level (green indicates increased uptake and decreased variation, red indicates decreased uptake and increased variation).

Measure	National level uptake		Difference in % uptake in highest and lowest uptake HB		Difference in % uptake in highest and lowest uptake LA	
	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19
Up to date by 1y	94.8	94.5	4.0	4.9	4.9	5.7
Up to date by 2y	92.9	92.6	4.4	6.5	6.6	7.7
Up to date by 4y	84.9	87.2	7.2	5.6	17.4	9.9
Up to date by 5y	87.6	90.4	5.9	5.7	10.0	11.1
Up to date by 15y	74.5	77.4	16.7	15.0	17.9	17.8

Figure 9. The difference in percentage of children up to date with immunisations by key birthdays between health boards where uptake is highest and uptake is lowest



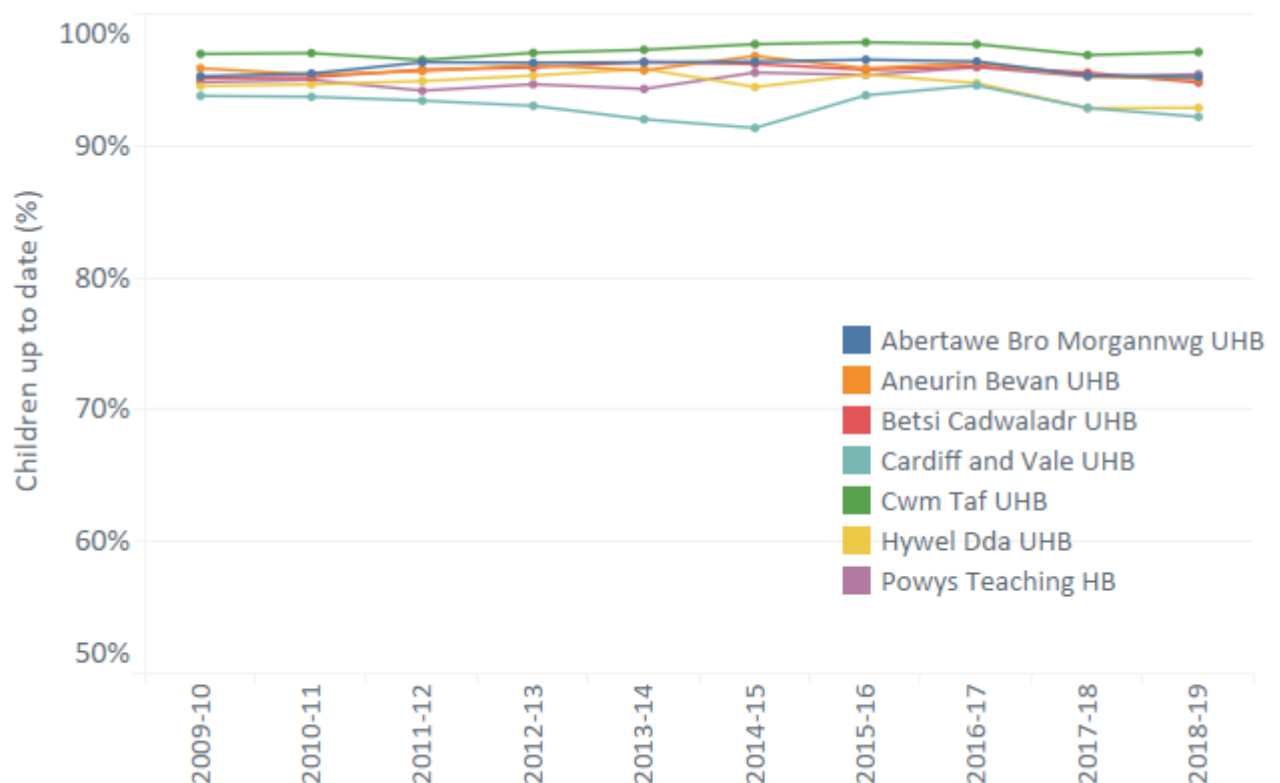
Health board and LA level variation at one year of age

The variation in proportion of children who are up to date with all routine immunisations¹ by one year of age between the highest uptake HB and lowest uptake HB has increased in 2018-19 (4.9%) compared to 2017-18 (4.0%). Over the previous ten years, variation in uptake between HBs has ranged from 3.1% (2011-12 and 2016-17) to 6.4% (2014-15) (Figure 10).

The variation in proportion of children who are up to date with all routine immunisations by one year of age between the highest uptake LA and the lowest uptake LA has also increased in 2018-19 (5.7%) compared to 2017-18 (5.0%). Over the previous ten years, variation in uptake between LAs has ranged from 4.4% (2010-11 and 2016-17) to 7.5% (2014-15).

Nationally, the proportion of children who are up to date with all their routine immunisations by one year of age remained above 95% between 2009-10 and 2016-17, but was below 95% in 2017-18 and 2018-19. During 2018-19, the proportion of children who were up to date with routine immunisations by one year of age was 95% or higher in four HBs compared to five in 2017-18 (Figure 10).

Figure 10. Proportion of children up to date with immunisations by one year of age, by health board, Wales; 2009-10 – 2018-19.



¹ Excluding rotavirus which has a strict upper age limit and less time for catch-up.

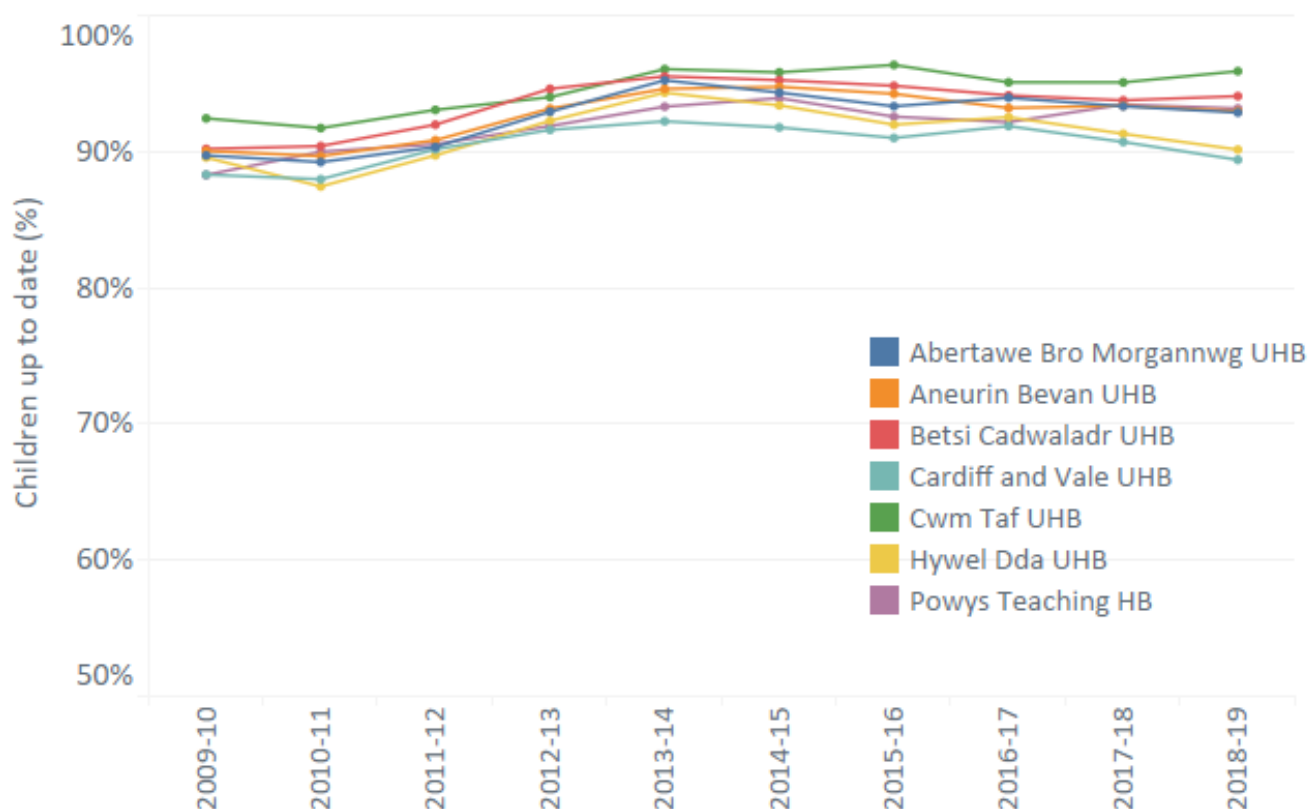
Health board level variation at two years of age

The variation in proportion of children who are up to date with all routine immunisations by two years of age between the highest uptake HB and lowest uptake HB increased in 2018-19 (to 6.5%) compared to 2017-18 (4.4%). The variation between health boards is currently the highest it has been since 2009-10 and is twice that seen in 2012-13 (3.0%) when variation was at its lowest (Figure 11).

The variation in proportion of children who are up to date with all routine immunisations by two years of age between the highest uptake LA and the lowest uptake LA also increased in 2018-19 (to 7.7%) compared to 2017-18 (5.3%). Between 2008-09 and 2016-17 variation in uptake between LAs halved, from 10.0% in 2008-09 to 5.1% in 2016-17; however the gap has now widened in 2018-19.

Nationally, the proportion of children who are up to date with all routine immunisations by two years of age increased from 85.5% in 2008-09 to 94.6% in 2013-14, before decreasing to 92.6% in 2018-19. There has been a mixed pattern of increasing and decreasing trends in health boards for the proportion of children who are up to date with immunisations by two years of ages since 2016-17. This has resulting in a widening gap in variation for two consecutive years. During 2018-19, the proportion of children who were up to date with routine immunisations by two years of age was 95% or over in one HB area, the same as in 2017-18 (Figure 11).

Figure 11. Proportion of children up to date with immunisations by two years of age, by health board, Wales; 2009-10 – 2018-19.



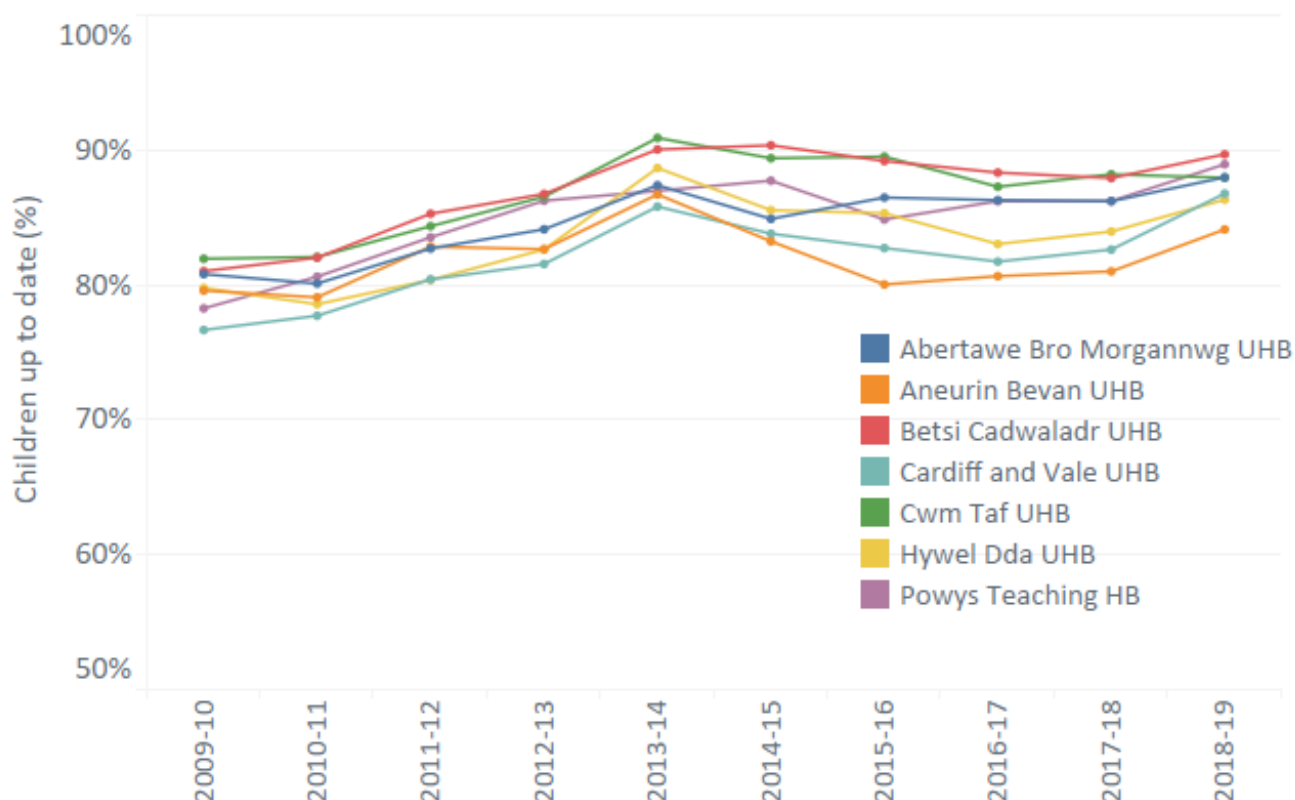
Health board level variation at four years of age

The variation in proportion of children who are up to date with all routine immunisations by four years of age between the highest uptake HB and lowest uptake HB decreased in 2018-19 (5.6%) compared to 2017-18 (7.2%). Since 2009-10, variation in uptake between HBs has ranged from 4.4% (2010-11) to 9.5% (2015-16) (Figure 12).

The variation by LA, in proportion of children who are up to date with all routine immunisations by four years of age decreased in 2018-19 (9.9%) compared to 2017-18 (17.9%). Over the previous nine years, variation in uptake between LAs has ranged from 8.2% (2012-13) to 17.9% (2017-18).

Nationally, the proportion of children who are up to date with all routine immunisations by four years of age increased from 79.8% in 2009-10 to 88.0% in 2013-14. In 2018-19 uptake was to 87.2%.

Figure 12. Proportion of children up to date with immunisations by four years of age, by health board, Wales; 2009-10 – 2018-19.



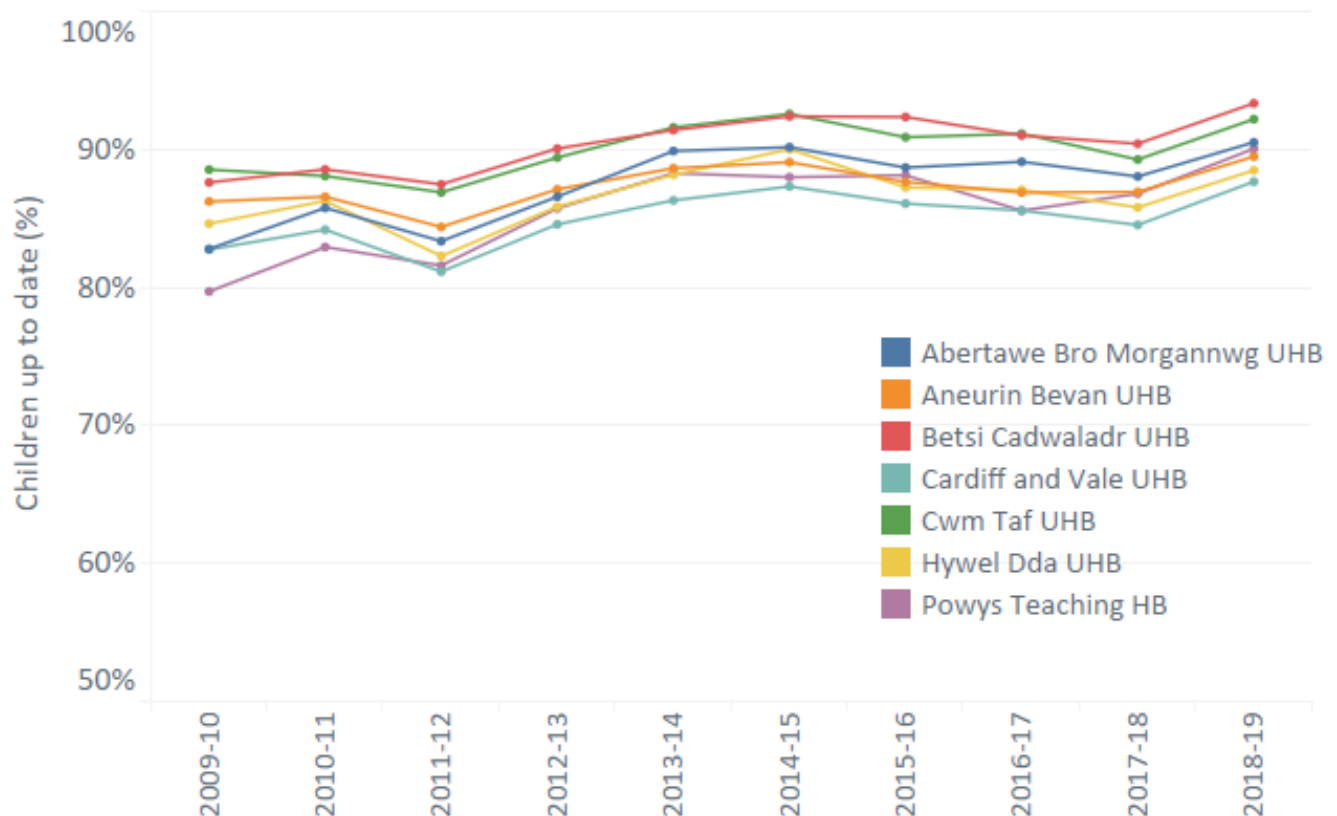
Health board level variation at five years of age

The variation in proportion of children who are up to date with all routine immunisations by five years of age between the highest uptake HB and lowest uptake HB was stable in 2018-19 at 5.7%, compared to 5.9% in 2017-18. Since 2009-10, variation in uptake between HBs has ranged from 5.3% (2013-14 and 2014-15) to 8.8% (2009-10) (Figure 13).

The LA variation in proportion of children who are up to date with all routine immunisations by five years of age was also stable in 2018-19 (11.1%) compared to 2017-18 (10.7%). since 2009-10, variation in uptake between LAs has ranged from 7.2% (2014-15) to 11.1% (2018-19).

Nationally, the proportion of children who are up to date with all routine immunisations by five years of age has increased from 81.5% in 2008-09 to 90.4% in 2018-19.

Figure 13. Proportion of children up to date with immunisations by five years of age, by health board, Wales; 2009-10 – 2018-19.



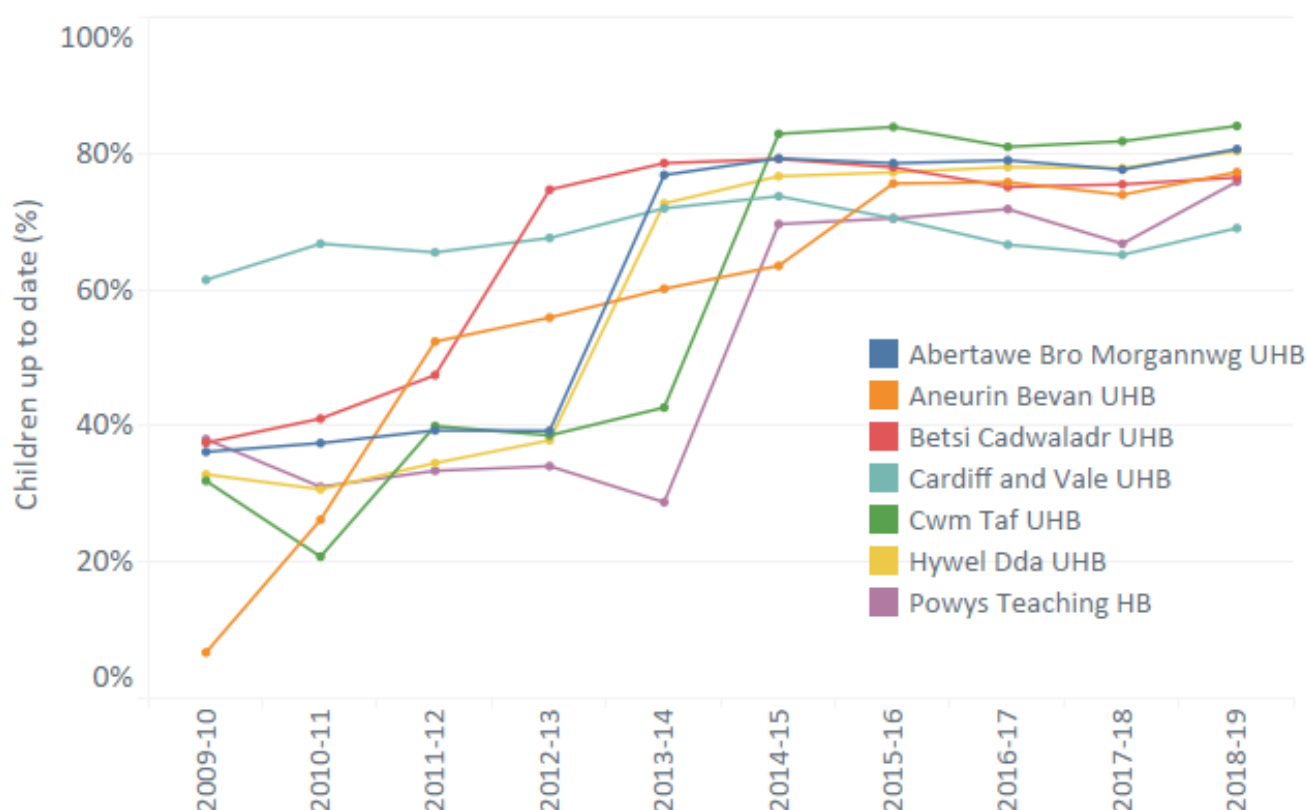
Health board level variation at fifteen years of age

The variation in proportion of children who are up to date with routine immunisations by 15 years of age between the HBs with the highest and lowest coverage decreased in 2018-19 (15.0%) compared to 2017-18 (16.7%). Over the previous ten years, variation in uptake between HBs has ranged from 13.4% (2015-16) to 54.8% (2008-09) (Figure 14).

The LA variation in proportion of children who are up to date with all routine immunisations by 15 years of age also decreased in 2018-19 (17.8%) compared to 2017-18 (20.2%).

Nationally, the proportion of children who are up to date with all routine immunisations by 15 years of age has increased from 35.7% in 2008-09 to 77.4% in 2018-19.

Figure 14. Proportion of children up to date with immunisations by 15 years of age, by health board, Wales; 2009-10 – 2018-19.



Discussion

Long-term trends in both improving uptake and in reducing inequalities in immunisation coverage in Wales remain positive although there has been widening of inequalities in some age groups in 2018-19. Socioeconomic inequalities in immunisation coverage in Wales continue to be smallest in the youngest children, with the gap widening as scheduled immunisation age increases.

Over the past three years, socioeconomic inequities in immunisation uptake have remained stable or increased slightly, whereas variation in uptake at health board level has shown a mixed pattern of increases and decreases across different age-groups.

Socioeconomic inequalities in immunisation uptake in one-year-olds remained stable this year, but variation between health board areas increased. All infants turning one year of age during 2018-19 would have been eligible for the meningococcal vaccination introduced in July 2015 and this is the second year this immunisation has been included in the composite measure for this age group.

There has also been an increase in socioeconomic inequities in immunisation uptake at two years of age and also in variation seen between HBs.

The uptake of routine immunisations in four-year-olds increased in 2018-19, however socioeconomic inequalities in uptake in this group have now widened to the largest gap since reporting began (9.2%). In contrast, variation in health board uptake has narrowed between 2017-18 (17.4%) and 2018-19 (9.9%). The measurement age of four years allows limited time for catch-up of children who have missed immunisations normally scheduled at three years and four months of age. The reported percentage uptake for children at five years of age showed an improvement in 2018-19 and a reduction in the inequity gap, compared to uptake reported when these children were four years of age in 2017-18. The improvement in uptake in the most deprived quintile (6.4%) was greater than that of the least deprived quintile (5.3%) suggesting that, although timeliness and reduced capacity for catch-up may still be an issue, improvements are being made. Further investigations are needed to identify why the inequality gap has widened in children aged four and five years in 2018-19.

Uptake of all routine immunisations at four years of age is a key indicator for Public Health Outcomes Framework for Wales [5], the Healthy Child Wales Programme (HCWP) [7] and Flying Start programme [8]. Over 36,000 children in Wales received Flying Start services in 2018-19. Uptake in these areas, which are some of the most deprived in Wales, is routinely lower than other areas. There was a small improvement in uptake between 2017-18 and 2018-19 in the proportion of children living in Flying Start areas who were fully immunised by their fourth birthday [9]. A recent survey showed that the complexity of social circumstances and frequently changing contact details are some of the greatest barriers to vaccination uptake in this group [10]. Recommendations from this report suggested offering families flexibility with appointment time and date, alternative venue administration and checking contact details at every opportunity would help improve vaccination uptake in those living in more deprived areas of Wales.

Socioeconomic inequities in immunisation uptake in 15-year-olds have remained broadly stable since 2015-16 and significantly lower than the years preceding this. The improved uptake and equity in vaccination uptake in 15-year-olds occurred as a result of the move in most areas of Wales to School Nurses delivering teenage vaccinations. The only health board delivering the teenage Td/IPV vaccine through general practice is the health board where uptake appears lowest, however incompleteness of data returned to the child health system in this area may result in underestimation of true uptake. In all other health boards, Td/IPV is offered in Schools in Year 9. This suggests immunisation in schools is associated with improved uptake and reduced inequity. In light of recent measles outbreaks involving secondary school aged children, monitoring variation in uptake in this group and continued offer of catch-up alongside other routine vaccinations also remain important in addressing inequalities in coverage.

Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre, working with Powys Teaching Health Board and the NHS Wales Informatics Service, carried out a COVER data quality assurance project at the end of 2018. This project led to improvements in completeness of vaccination data in the national COVER dataset. The impact is that reported vaccination uptake has increased; primarily in children aged four years and older. Caution should be taken when comparing data between 2018-19 and previous years.

There is still continued need for improvement in the quality of data in the child health system. Development of electronic transfer of immunisation data between general practices and HB child health offices remains a priority in order to enable efficient follow-up of children who have missed immunisations. Establishing electronic links between local education authority databases and HB child health offices is also important in improving data quality.

The Public Health Wales VPDP provide a number of tools for locally monitoring uptake of childhood immunisations and variation in uptake at GP, GP cluster or small-area geography levels (see Appendix C). An annual report is also produced which includes a summary of inequalities in coverage of immunisations in four-year-olds.

Implementation of existing policy and guidance on immunisation status checking and targeted catch-up is key in addressing issues of decreased and inequitable uptake in children at four years of age and older. Pre-school follow-up is mainly the responsibility of the health visiting services, this transfers to school nurses from four years of age. NICE guidance [11] is available on reducing differences in uptake in those aged younger than 19 years, including poorly reached population groups. Guidance on best practice for follow up of children who have not responded to initial and follow up invitations to attend general practice for immunisation at scheduled ages has been published by the VPDP [12, 13]. In addition the all Wales School Nursing Framework aims to ensure consistency in the provision of immunisation services for school age children [14].



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Public Health Wales continues to work closely with HBs, and national service guidelines and standards have been developed in consultation with the child health, health visiting and school nursing services to help improve uptakes and reduce inequalities.

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Report prepared by Public Health Wales Vaccine Preventable Disease Programme.

Data for this report were provided by NHS Wales Informatics Service from the National Community Child Health Database (NCCHD). Data were 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.

Suggested citation for this report: Public Health Wales Health Protection Division. Inequalities in uptake of routine childhood immunisations in Wales 2018-19, September 2019. Cardiff, Public Health Wales.

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



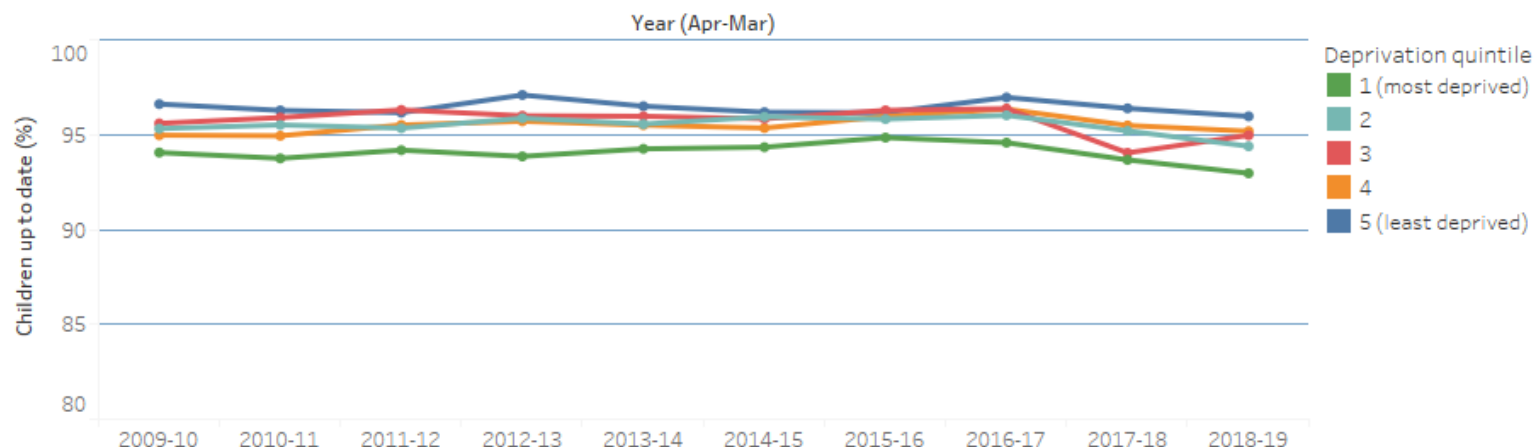
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Appendix A – proportions of children up to date with immunisations at different ages in Wales and in each health board, by national quintiles of socioeconomic deprivation

The proportion (%) of children up to date with routine immunisations by 1 years of age in Wales



Year (Apr-Mar)	1 (most deprived)			2			Deprivation quintile 3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	8,399	8,930	94.1	7,161	7,513	95.3	6,374	6,668	95.6	5,660	5,960	95.0	5,470	5,662	96.6
2010-11	8,381	8,940	93.7	7,531	7,885	95.5	6,383	6,656	95.9	5,608	5,907	94.9	5,223	5,425	96.3
2011-12	8,788	9,331	94.2	7,386	7,747	95.3	6,537	6,788	96.3	5,742	6,012	95.5	5,203	5,411	96.2
2012-13	8,685	9,254	93.9	7,373	7,691	95.9	6,422	6,690	96.0	5,792	6,052	95.7	5,334	5,494	97.1
2013-14	8,361	8,871	94.3	7,199	7,534	95.6	6,565	6,841	96.0	5,707	5,976	95.5	5,096	5,281	96.5
2014-15	8,064	8,548	94.3	6,946	7,240	95.9	6,168	6,436	95.8	5,451	5,717	95.3	5,138	5,342	96.2
2015-16	7,962	8,395	94.8	6,784	7,080	95.8	6,417	6,665	96.3	5,489	5,720	96.0	4,982	5,181	96.2
2016-17	8,055	8,517	94.6	6,993	7,283	96.0	6,368	6,608	96.4	5,480	5,688	96.3	5,198	5,361	97.0
2017-18	7,707	8,228	93.7	6,658	6,994	95.2	6,120	6,508	94.0	5,518	5,779	95.5	5,092	5,283	96.4
2018-19	7,609	8,185	93.0	6,489	6,875	94.4	6,093	6,416	95.0	5,292	5,560	95.2	5,017	5,228	96.0

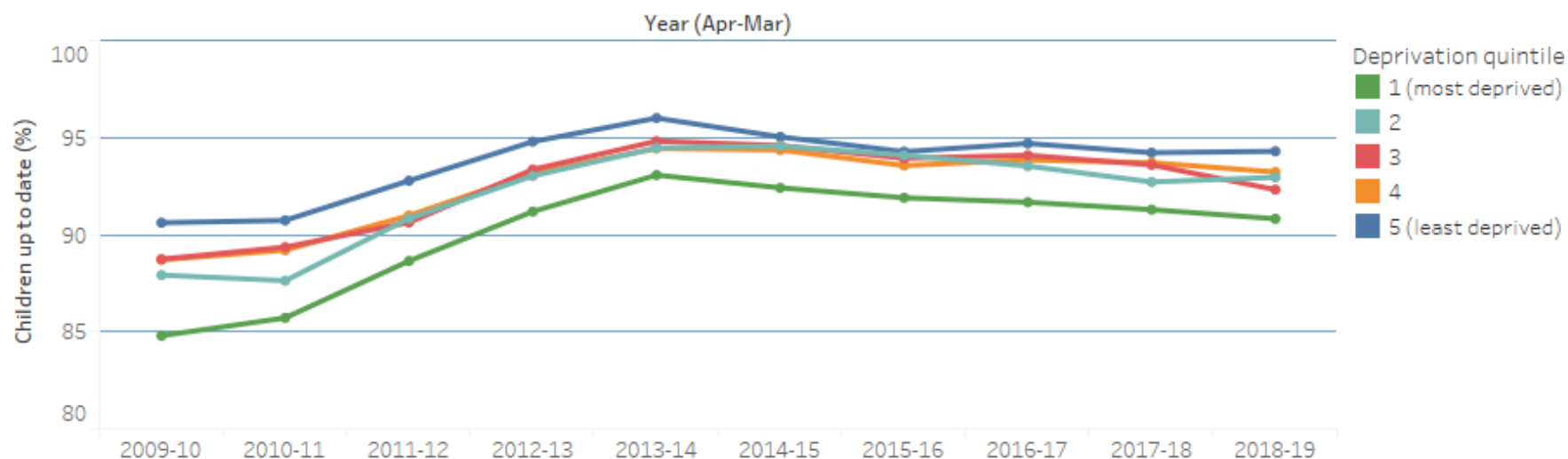


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The proportion (%) of children up to date with routine immunisations by 2 years of age in Wales



Year (Apr-Mar)	1 (most deprived)			2			Deprivation quintile 3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	7,515	8,863	84.8	6,417	7,299	87.9	5,845	6,587	88.7	5,359	6,042	88.7	5,250	5,794	90.6
2010-11	7,648	8,923	85.7	6,557	7,483	87.6	5,901	6,604	89.4	5,367	6,017	89.2	5,227	5,761	90.7
2011-12	7,874	8,883	88.6	7,129	7,849	90.8	6,002	6,623	90.6	5,427	5,965	91.0	5,174	5,577	92.8
2012-13	8,409	9,222	91.2	7,181	7,720	93.0	6,275	6,722	93.4	5,595	6,006	93.2	5,183	5,468	94.8
2013-14	8,587	9,227	93.1	7,185	7,606	94.5	6,362	6,710	94.8	5,720	6,057	94.4	5,424	5,650	96.0
2014-15	8,131	8,799	92.4	6,922	7,320	94.6	6,502	6,874	94.6	5,668	6,007	94.4	5,278	5,554	95.0
2015-16	7,846	8,538	91.9	6,808	7,236	94.1	6,078	6,471	93.9	5,400	5,772	93.6	5,167	5,481	94.3
2016-17	7,899	8,617	91.7	6,621	7,079	93.5	6,317	6,714	94.1	5,409	5,764	93.8	5,157	5,446	94.7
2017-18	7,867	8,618	91.3	6,804	7,339	92.7	6,216	6,642	93.6	5,416	5,780	93.7	5,311	5,637	94.2
2018-19	7,543	8,306	90.8	6,498	6,991	92.9	6,006	6,506	92.3	5,392	5,784	93.2	5,167	5,480	94.3

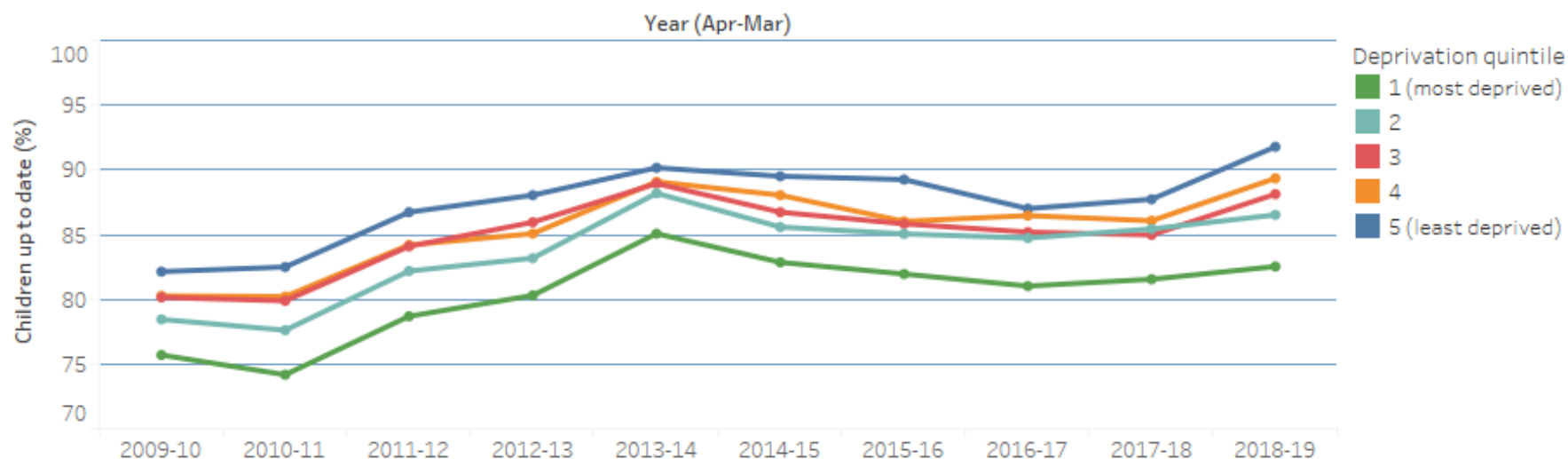


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The proportion (%) of children up to date with routine immunisations by 4 years of age in Wales



Year (Apr-Mar)	1 (most deprived)			2			Deprivation quintile 3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	6,040	7,979	75.7	5,290	6,743	78.5	5,091	6,352	80.1	4,592	5,721	80.3	4,842	5,895	82.1
2010-11	6,043	8,147	74.2	5,568	7,174	77.6	4,972	6,224	79.9	4,813	6,000	80.2	4,816	5,838	82.5
2011-12	6,831	8,681	78.7	5,910	7,191	82.2	5,539	6,587	84.1	5,153	6,120	84.2	5,274	6,081	86.7
2012-13	7,134	8,884	80.3	6,230	7,490	83.2	5,666	6,592	86.0	5,187	6,097	85.1	5,200	5,906	88.0
2013-14	7,467	8,777	85.1	6,804	7,715	88.2	5,895	6,628	88.9	5,359	6,016	89.1	5,323	5,904	90.2
2014-15	7,481	9,029	82.9	6,405	7,484	85.6	6,013	6,933	86.7	5,332	6,056	88.0	5,245	5,860	89.5
2015-16	7,404	9,034	82.0	6,244	7,341	85.1	5,887	6,859	85.8	5,262	6,117	86.0	5,430	6,084	89.3
2016-17	7,198	8,884	81.0	6,323	7,462	84.7	5,995	7,037	85.2	5,334	6,169	86.5	5,230	6,011	87.0
2017-18	7,113	8,722	81.6	6,218	7,278	85.4	5,706	6,715	85.0	5,071	5,892	86.1	5,211	5,940	87.7
2018-19	7,126	8,634	82.5	6,201	7,167	86.5	5,982	6,788	88.1	5,241	5,866	89.3	5,304	5,779	91.8

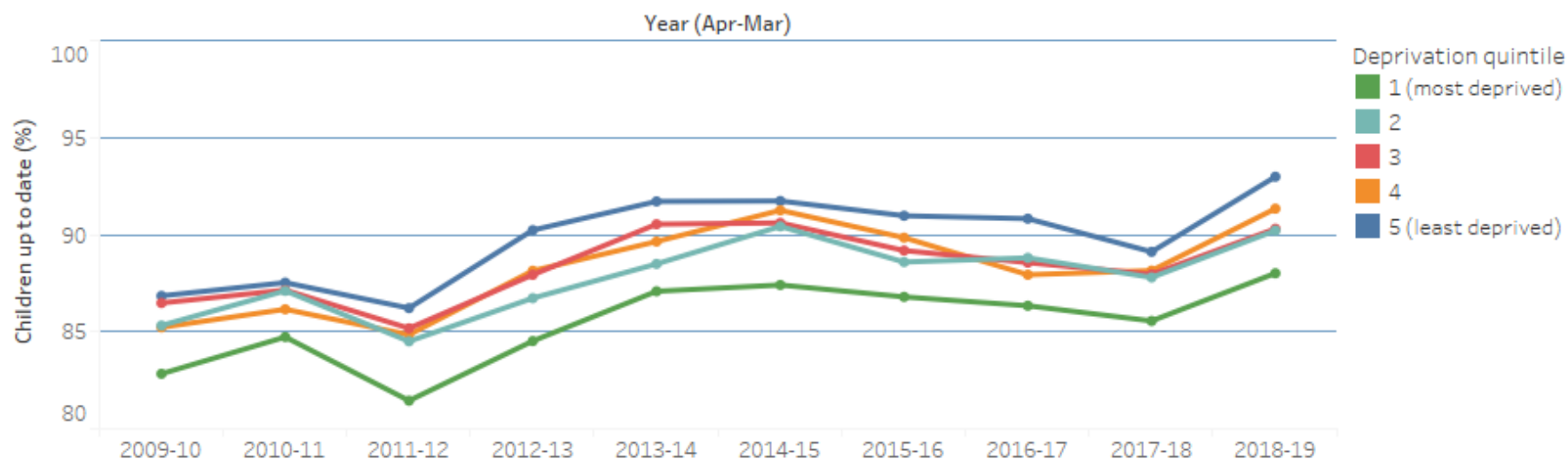


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The proportion (%) of children up to date with routine immunisations by 5 years of age in Wales



Year (Apr-Mar)	1 (most deprived)			2			Deprivation quintile 3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	6,561	7,921	82.8	5,817	6,818	85.3	5,295	6,123	86.5	4,827	5,664	85.2	5,122	5,898	86.8
2010-11	6,673	7,876	84.7	5,898	6,771	87.1	5,497	6,308	87.1	4,940	5,734	86.2	5,263	6,013	87.5
2011-12	6,620	8,128	81.4	6,042	7,150	84.5	5,285	6,205	85.2	5,161	6,083	84.8	5,103	5,919	86.2
2012-13	7,386	8,739	84.5	6,214	7,165	86.7	5,711	6,495	87.9	5,409	6,137	88.1	5,476	6,069	90.2
2013-14	7,698	8,840	87.1	6,557	7,410	88.5	5,978	6,603	90.5	5,461	6,092	89.6	5,508	6,006	91.7
2014-15	7,606	8,702	87.4	6,809	7,530	90.4	6,055	6,683	90.6	5,569	6,103	91.3	5,624	6,131	91.7
2015-16	7,833	9,025	86.8	6,682	7,543	88.6	6,131	6,875	89.2	5,439	6,054	89.8	5,420	5,958	91.0
2016-17	7,948	9,206	86.3	6,677	7,519	88.8	6,283	7,095	88.6	5,538	6,298	87.9	5,777	6,361	90.8
2017-18	7,627	8,915	85.6	6,581	7,496	87.8	6,251	7,107	88.0	5,539	6,284	88.1	5,476	6,145	89.1
2018-19	7,721	8,773	88.0	6,579	7,293	90.2	6,079	6,732	90.3	5,429	5,944	91.3	5,655	6,082	93.0

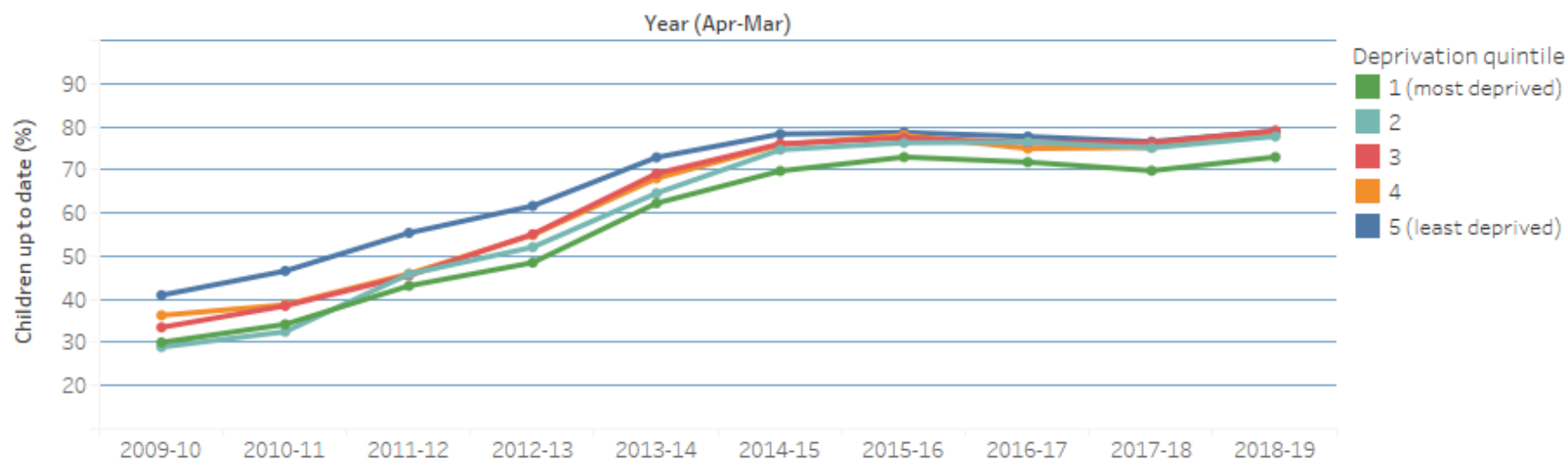


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The proportion (%) of children up to date with routine immunisations by 15 years of age in Wales



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	2,372	7,902	30.0	2,122	7,332	28.9	2,375	7,089	33.5	2,467	6,798	36.3	2,842	6,939	41.0
2010-11	2,626	7,678	34.2	2,337	7,193	32.5	2,630	6,834	38.5	2,540	6,560	38.7	3,194	6,859	46.6
2011-12	3,429	7,951	43.1	3,360	7,327	45.9	3,106	6,824	45.5	3,097	6,745	45.9	3,807	6,873	55.4
2012-13	3,759	7,751	48.5	3,671	7,049	52.1	3,629	6,588	55.1	3,589	6,535	54.9	4,197	6,809	61.6
2013-14	4,688	7,528	62.3	4,419	6,841	64.6	4,648	6,722	69.1	4,311	6,336	68.0	4,756	6,525	72.9
2014-15	4,989	7,153	69.7	4,904	6,567	74.7	4,827	6,349	76.0	4,506	5,941	75.8	5,151	6,578	78.3
2015-16	5,206	7,135	73.0	4,864	6,377	76.3	4,756	6,143	77.4	4,629	5,931	78.0	5,091	6,472	78.7
2016-17	5,162	7,191	71.8	4,871	6,371	76.5	4,817	6,308	76.4	4,613	6,156	74.9	5,072	6,526	77.7
2017-18	5,055	7,241	69.8	4,967	6,614	75.1	4,857	6,364	76.3	4,423	5,881	75.2	4,965	6,487	76.5
2018-19	5,483	7,515	73.0	5,235	6,733	77.8	5,205	6,584	79.1	4,832	6,143	78.7	5,403	6,841	79.0

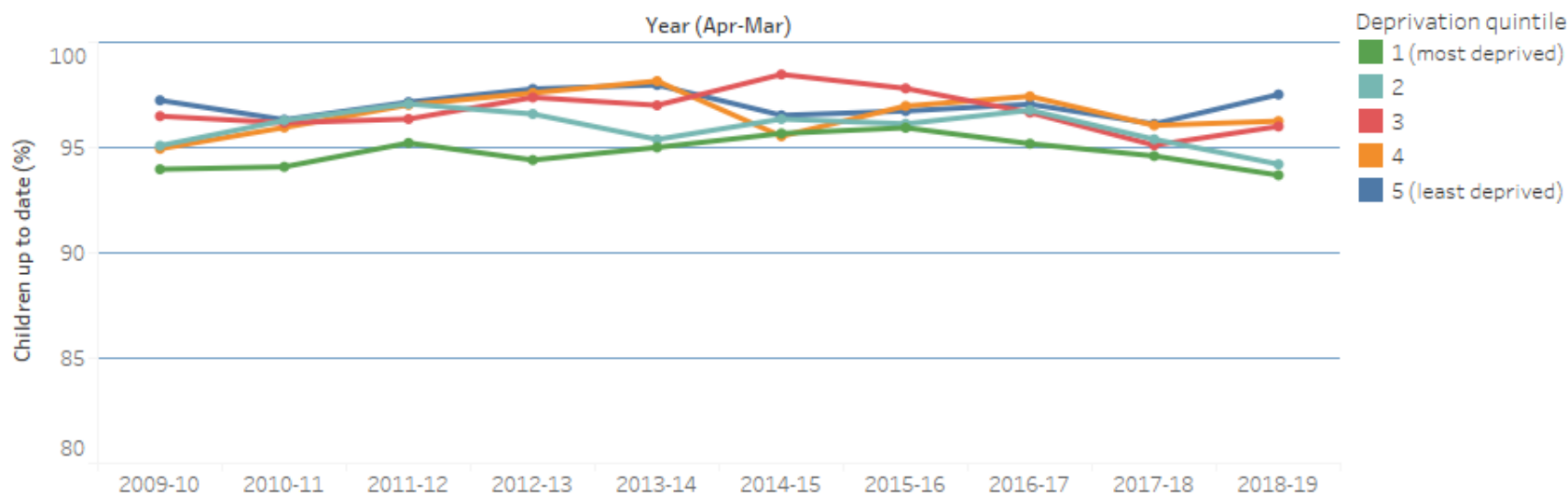


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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Abertawe Bro Morgannwg UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,808	1,924	94.0	1,142	1,201	95.1	770	798	96.5	732	771	94.9	1,023	1,052	97.2
2010-11	1,861	1,978	94.1	1,246	1,294	96.3	754	784	96.2	711	741	96.0	995	1,033	96.3
2011-12	1,932	2,029	95.2	1,194	1,230	97.1	820	851	96.4	751	774	97.0	992	1,021	97.2
2012-13	1,925	2,039	94.4	1,248	1,292	96.6	855	878	97.4	771	790	97.6	971	993	97.8
2013-14	1,751	1,843	95.0	1,179	1,236	95.4	778	802	97.0	799	814	98.2	967	987	98.0
2014-15	1,657	1,732	95.7	1,216	1,262	96.4	838	851	98.5	578	605	95.5	1,002	1,038	96.5
2015-16	1,654	1,724	95.9	1,191	1,239	96.1	893	913	97.8	609	628	97.0	978	1,011	96.7
2016-17	1,660	1,744	95.2	1,230	1,271	96.8	869	899	96.7	645	662	97.4	1,023	1,054	97.1
2017-18	1,612	1,704	94.6	1,139	1,194	95.4	856	900	95.1	633	659	96.1	1,016	1,057	96.1
2018-19	1,574	1,680	93.7	1,090	1,157	94.2	889	926	96.0	591	614	96.3	1,022	1,048	97.5

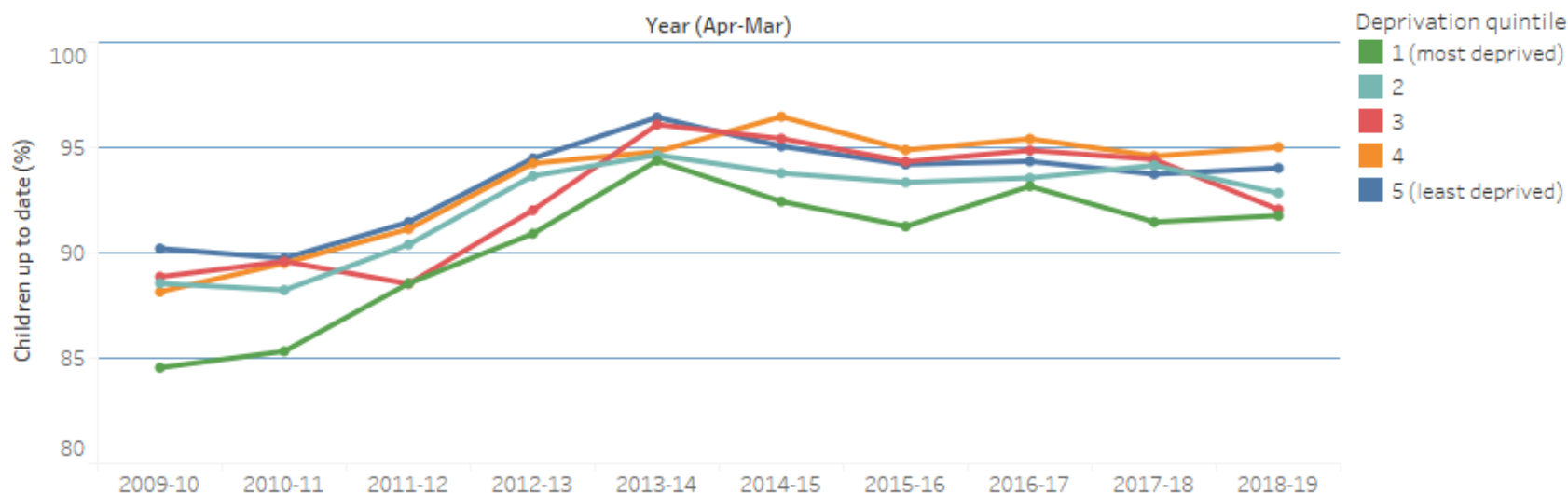


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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Abertawe Bro Morgannwg UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,658	1,961	84.5	1,029	1,162	88.6	750	844	88.9	677	768	88.2	985	1,092	90.2
2010-11	1,628	1,908	85.3	1,042	1,181	88.2	706	788	89.6	708	791	89.5	936	1,043	89.7
2011-12	1,732	1,956	88.5	1,167	1,291	90.4	687	776	88.5	668	733	91.1	985	1,077	91.5
2012-13	1,830	2,013	90.9	1,151	1,229	93.7	773	840	92.0	721	765	94.2	994	1,052	94.5
2013-14	1,931	2,046	94.4	1,184	1,251	94.6	835	869	96.1	748	789	94.8	1,027	1,065	96.4
2014-15	1,577	1,706	92.4	1,222	1,303	93.8	855	896	95.4	682	707	96.5	1,020	1,073	95.1
2015-16	1,576	1,727	91.3	1,192	1,277	93.3	832	882	94.3	575	606	94.9	991	1,052	94.2
2016-17	1,663	1,785	93.2	1,161	1,241	93.6	850	896	94.9	603	632	95.4	1,018	1,079	94.3
2017-18	1,629	1,781	91.5	1,192	1,266	94.2	832	881	94.4	630	666	94.6	1,033	1,102	93.7
2018-19	1,560	1,700	91.8	1,115	1,201	92.8	835	907	92.1	610	642	95.0	1,023	1,088	94.0

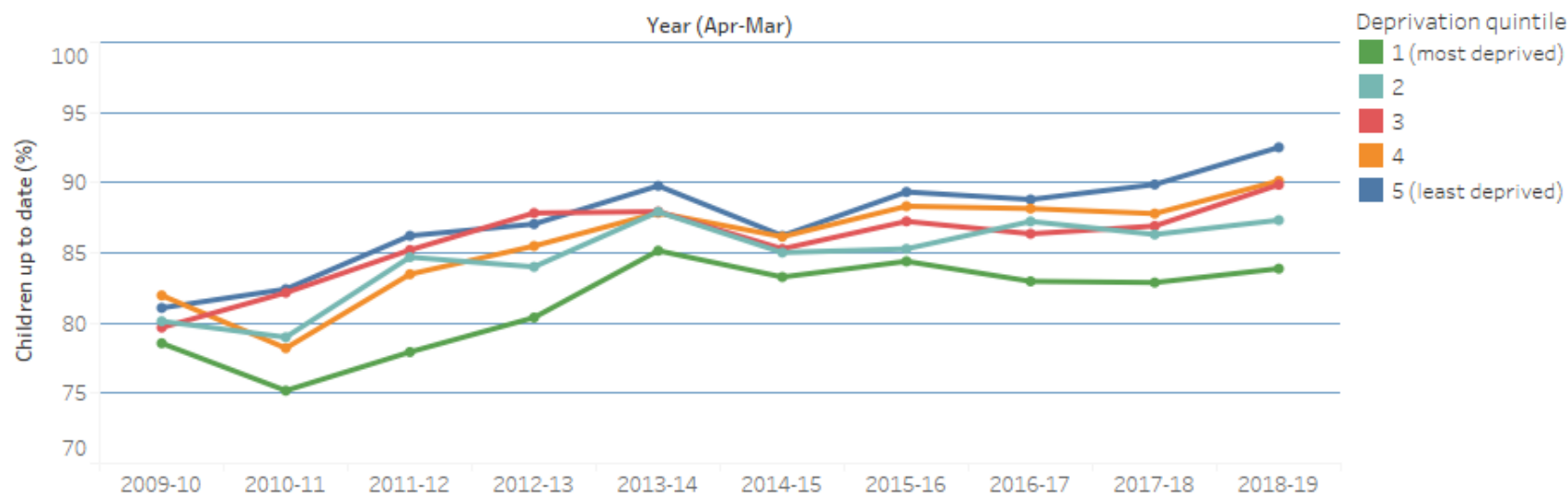


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Abertawe Bro Morgannwg UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,334	1,698	78.6	875	1,092	80.1	647	812	79.7	582	710	82.0	917	1,131	81.1
2010-11	1,303	1,733	75.2	940	1,190	79.0	631	768	82.2	578	739	78.2	942	1,143	82.4
2011-12	1,473	1,890	77.9	974	1,150	84.7	714	838	85.2	667	799	83.5	976	1,132	86.2
2012-13	1,517	1,887	80.4	982	1,169	84.0	679	773	87.8	701	820	85.5	948	1,089	87.1
2013-14	1,589	1,866	85.2	1,143	1,300	87.9	700	796	87.9	658	749	87.9	1,001	1,115	89.8
2014-15	1,519	1,824	83.3	1,073	1,262	85.0	852	999	85.3	591	686	86.2	1,001	1,161	86.2
2015-16	1,601	1,897	84.4	1,107	1,298	85.3	855	980	87.2	605	685	88.3	1,081	1,210	89.3
2016-17	1,423	1,715	83.0	1,169	1,340	87.2	785	909	86.4	640	726	88.2	1,039	1,170	88.8
2017-18	1,477	1,782	82.9	1,116	1,293	86.3	777	894	86.9	554	631	87.8	1,020	1,135	89.9
2018-19	1,498	1,786	83.9	1,089	1,247	87.3	832	926	89.8	575	638	90.1	1,026	1,109	92.5

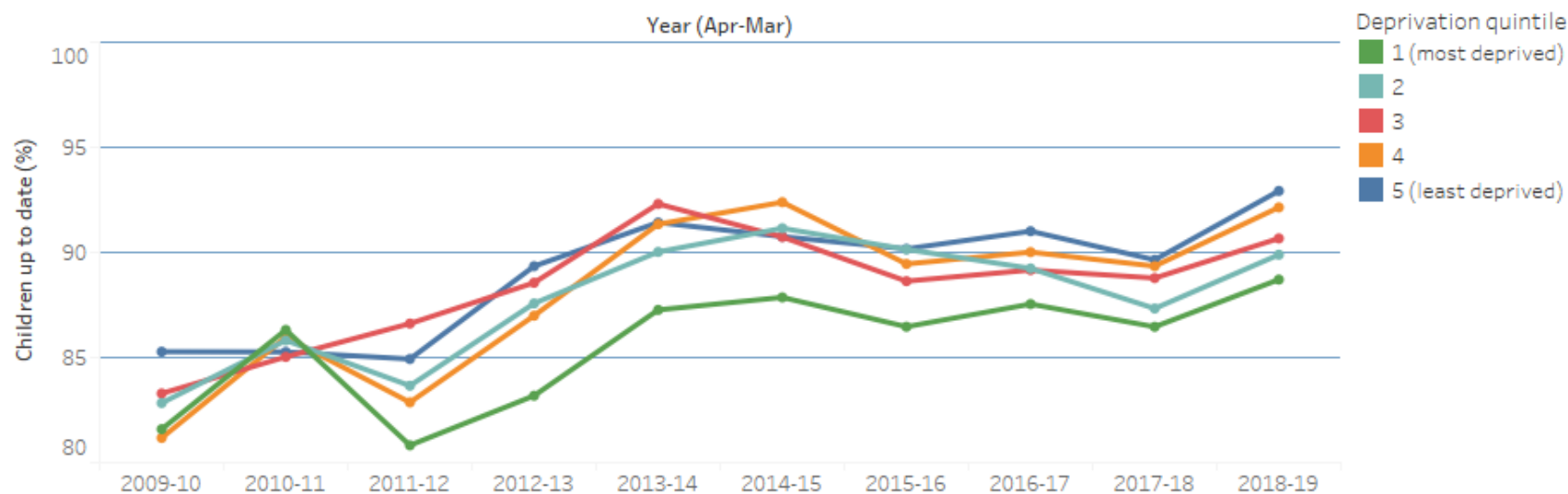


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Abertawe Bro Morgannwg UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,414	1,733	81.6	917	1,107	82.8	668	802	83.3	565	696	81.2	921	1,080	85.3
2010-11	1,438	1,666	86.3	950	1,107	85.8	693	815	85.0	631	734	86.0	978	1,147	85.3
2011-12	1,391	1,721	80.8	983	1,175	83.7	673	777	86.6	624	753	82.9	958	1,128	84.9
2012-13	1,573	1,891	83.2	1,022	1,167	87.6	743	839	88.6	682	784	87.0	1,023	1,145	89.3
2013-14	1,638	1,877	87.3	1,074	1,193	90.0	696	754	92.3	728	797	91.3	1,002	1,096	91.4
2014-15	1,549	1,763	87.9	1,205	1,322	91.1	803	885	90.7	607	657	92.4	1,099	1,211	90.8
2015-16	1,565	1,810	86.5	1,125	1,248	90.1	889	1,003	88.6	636	711	89.5	1,064	1,180	90.2
2016-17	1,708	1,951	87.5	1,186	1,329	89.2	905	1,015	89.2	649	721	90.0	1,154	1,268	91.0
2017-18	1,488	1,721	86.5	1,172	1,342	87.3	815	918	88.8	671	751	89.3	1,091	1,217	89.6
2018-19	1,587	1,789	88.7	1,147	1,276	89.9	816	900	90.7	598	649	92.1	1,077	1,159	92.9

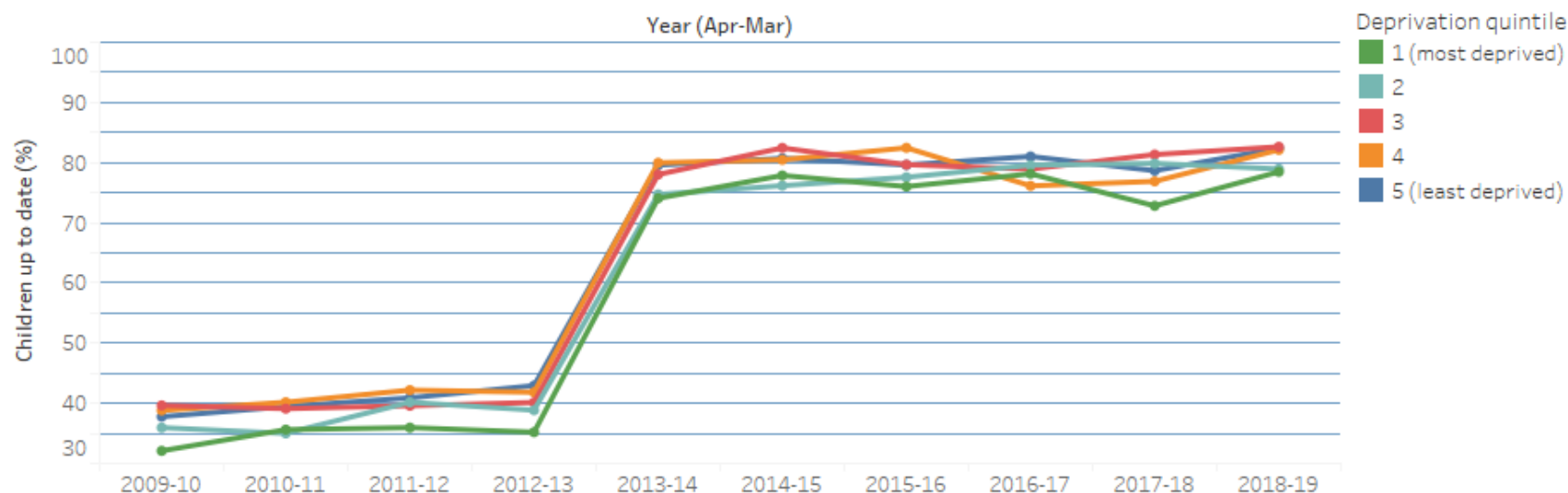


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
Abertawe Bro Morgannwg UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	537	1,673	32.1	444	1,235	36.0	337	850	39.6	323	832	38.8	465	1,231	37.8
2010-11	612	1,718	35.6	419	1,197	35.0	343	877	39.1	321	799	40.2	477	1,209	39.5
2011-12	617	1,716	36.0	470	1,170	40.2	335	846	39.6	362	858	42.2	549	1,342	40.9
2012-13	597	1,696	35.2	455	1,171	38.9	346	862	40.1	356	851	41.8	532	1,239	42.9
2013-14	1,183	1,597	74.1	863	1,155	74.7	664	851	78.0	623	779	80.0	971	1,220	79.6
2014-15	1,161	1,491	77.9	847	1,112	76.2	728	883	82.4	519	645	80.5	1,079	1,337	80.7
2015-16	1,100	1,447	76.0	927	1,195	77.6	658	826	79.7	550	667	82.5	1,035	1,300	79.6
2016-17	1,169	1,496	78.1	904	1,136	79.6	704	892	78.9	536	704	76.1	1,063	1,312	81.0
2017-18	1,039	1,427	72.8	956	1,197	79.9	728	895	81.3	509	662	76.9	1,017	1,293	78.7
2018-19	1,210	1,542	78.5	945	1,197	78.9	799	967	82.6	574	699	82.1	1,096	1,330	82.4

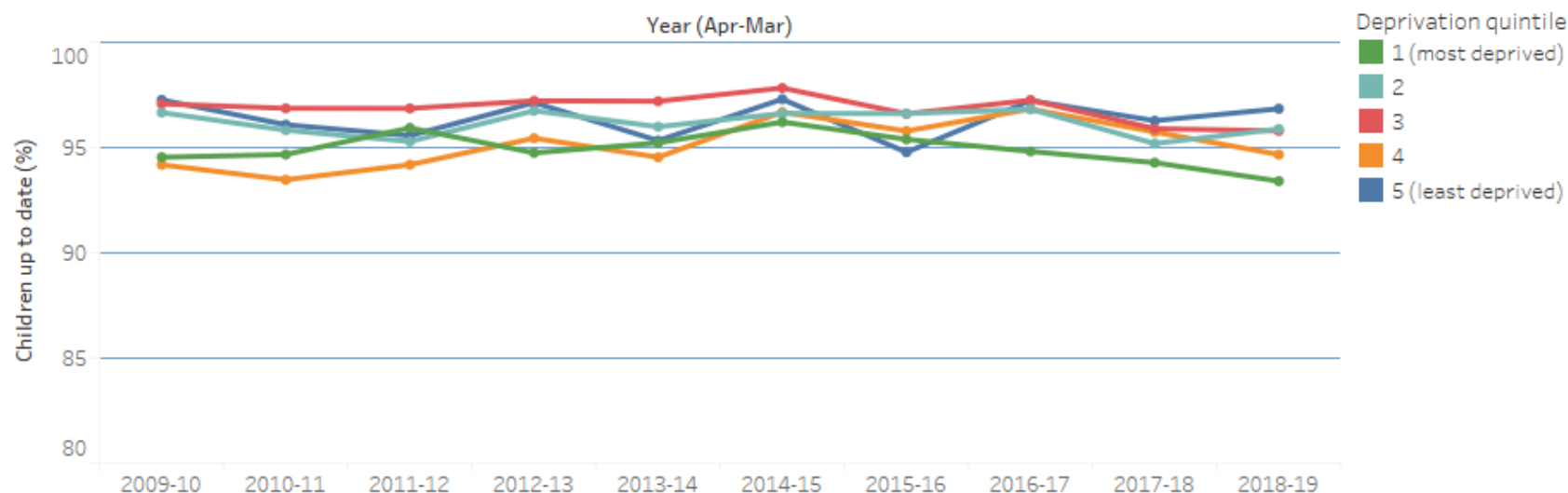


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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Aneurin Bevan UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,836	1,942	94.5	1,738	1,798	96.7	1,162	1,197	97.1	858	911	94.2	960	987	97.3
2010-11	1,794	1,895	94.7	1,790	1,868	95.8	1,143	1,180	96.9	816	873	93.5	908	945	96.1
2011-12	1,935	2,017	95.9	1,719	1,804	95.3	1,203	1,242	96.9	810	860	94.2	906	948	95.6
2012-13	1,804	1,904	94.7	1,726	1,784	96.7	1,154	1,187	97.2	817	856	95.4	881	907	97.1
2013-14	1,834	1,926	95.2	1,699	1,770	96.0	1,250	1,286	97.2	814	861	94.5	837	878	95.3
2014-15	1,981	2,059	96.2	1,487	1,539	96.6	1,216	1,243	97.8	815	843	96.7	828	851	97.3
2015-16	1,904	1,996	95.4	1,456	1,507	96.6	1,223	1,266	96.6	773	807	95.8	853	900	94.8
2016-17	1,976	2,084	94.8	1,521	1,571	96.8	1,238	1,273	97.3	794	820	96.8	878	903	97.2
2017-18	1,847	1,959	94.3	1,425	1,497	95.2	1,216	1,268	95.9	832	869	95.7	879	913	96.3
2018-19	1,955	2,093	93.4	1,421	1,482	95.9	1,184	1,236	95.8	781	825	94.7	859	887	96.8

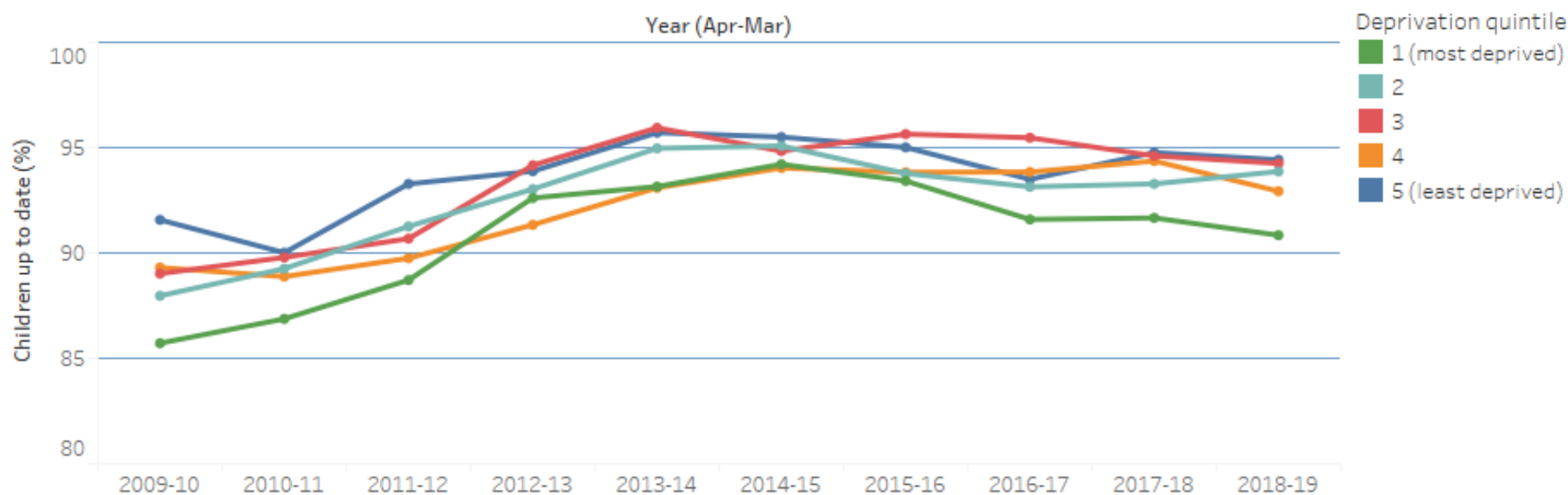


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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Aneurin Bevan UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,632	1,904	85.7	1,491	1,695	88.0	997	1,120	89.0	760	851	89.3	945	1,032	91.6
2010-11	1,707	1,965	86.9	1,603	1,796	89.3	1,046	1,165	89.8	815	917	88.9	928	1,031	90.0
2011-12	1,674	1,887	88.7	1,702	1,865	91.3	1,080	1,191	90.7	788	878	89.7	888	952	93.3
2012-13	1,842	1,989	92.6	1,668	1,793	93.0	1,161	1,233	94.2	780	854	91.3	920	980	93.9
2013-14	1,768	1,898	93.2	1,679	1,768	95.0	1,134	1,182	95.9	822	883	93.1	892	932	95.7
2014-15	2,018	2,142	94.2	1,527	1,606	95.1	1,230	1,297	94.8	804	855	94.0	849	889	95.5
2015-16	1,916	2,051	93.4	1,461	1,558	93.8	1,207	1,262	95.6	821	875	93.8	857	902	95.0
2016-17	1,884	2,057	91.6	1,439	1,545	93.1	1,201	1,258	95.5	777	828	93.8	891	953	93.5
2017-18	1,957	2,135	91.7	1,471	1,577	93.3	1,228	1,298	94.6	787	834	94.4	905	955	94.8
2018-19	1,825	2,009	90.8	1,423	1,516	93.9	1,180	1,252	94.2	828	891	92.9	897	950	94.4

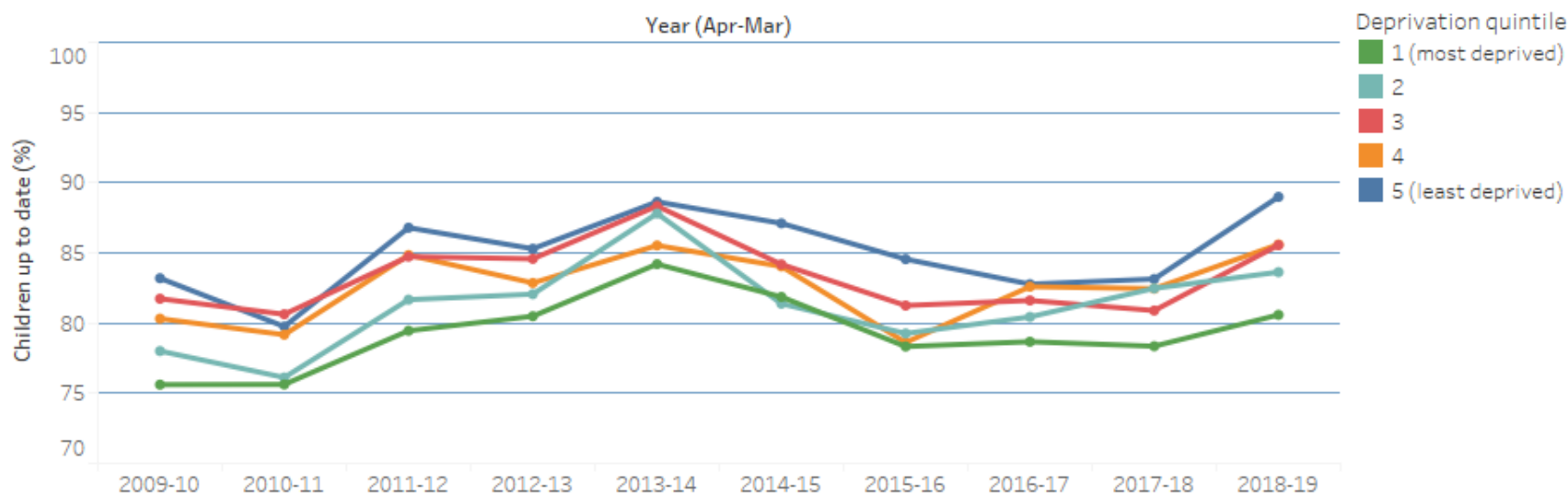


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Aneurin Bevan UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,355	1,792	75.6	1,199	1,537	78.0	971	1,188	81.7	665	828	80.3	891	1,071	83.2
2010-11	1,328	1,756	75.6	1,272	1,671	76.1	899	1,115	80.6	688	869	79.2	835	1,047	79.8
2011-12	1,481	1,864	79.5	1,372	1,680	81.7	949	1,120	84.7	739	871	84.8	966	1,113	86.8
2012-13	1,588	1,973	80.5	1,482	1,806	82.1	998	1,180	84.6	754	910	82.9	928	1,088	85.3
2013-14	1,572	1,867	84.2	1,613	1,837	87.8	1,045	1,183	88.3	792	926	85.5	928	1,047	88.6
2014-15	1,792	2,189	81.9	1,298	1,595	81.4	1,075	1,277	84.2	716	852	84.0	905	1,039	87.1
2015-16	1,623	2,072	78.3	1,242	1,567	79.3	1,001	1,232	81.3	706	898	78.6	854	1,010	84.6
2016-17	1,693	2,152	78.7	1,320	1,641	80.4	1,074	1,316	81.6	745	902	82.6	831	1,004	82.8
2017-18	1,672	2,134	78.4	1,294	1,569	82.5	1,054	1,303	80.9	747	906	82.5	853	1,026	83.1
2018-19	1,681	2,086	80.6	1,323	1,582	83.6	1,113	1,301	85.5	749	875	85.6	905	1,017	89.0

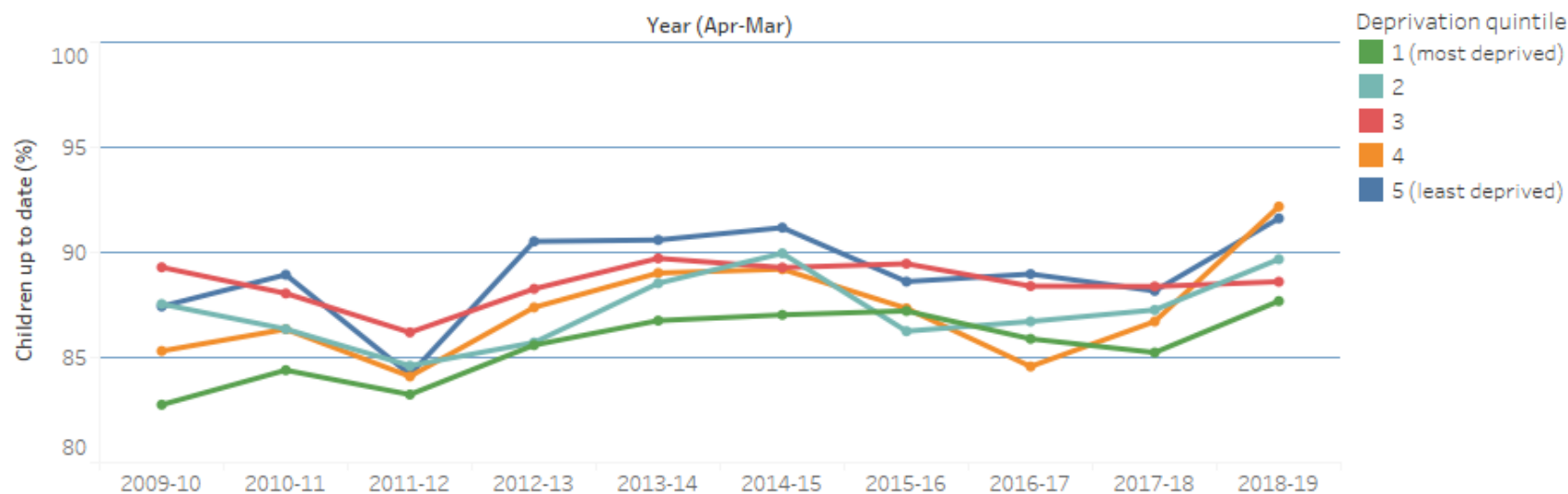


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Aneurin Bevan UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,454	1,757	82.8	1,469	1,678	87.5	959	1,074	89.3	726	851	85.3	960	1,098	87.4
2010-11	1,504	1,782	84.4	1,348	1,561	86.4	1,039	1,180	88.1	721	835	86.3	981	1,103	88.9
2011-12	1,460	1,754	83.2	1,424	1,683	84.6	974	1,130	86.2	746	887	84.1	900	1,069	84.2
2012-13	1,598	1,867	85.6	1,470	1,715	85.7	993	1,125	88.3	762	872	87.4	1,003	1,108	90.5
2013-14	1,723	1,986	86.8	1,575	1,779	88.5	1,082	1,206	89.7	819	920	89.0	1,011	1,116	90.6
2014-15	1,785	2,051	87.0	1,496	1,663	90.0	1,116	1,250	89.3	793	889	89.2	982	1,077	91.2
2015-16	1,924	2,206	87.2	1,393	1,615	86.3	1,146	1,281	89.5	752	861	87.3	965	1,089	88.6
2016-17	1,826	2,126	85.9	1,384	1,596	86.7	1,120	1,267	88.4	773	914	84.6	960	1,079	89.0
2017-18	1,871	2,195	85.2	1,439	1,649	87.3	1,179	1,334	88.4	816	941	86.7	924	1,048	88.2
2018-19	1,901	2,168	87.7	1,416	1,579	89.7	1,151	1,299	88.6	837	908	92.2	962	1,050	91.6

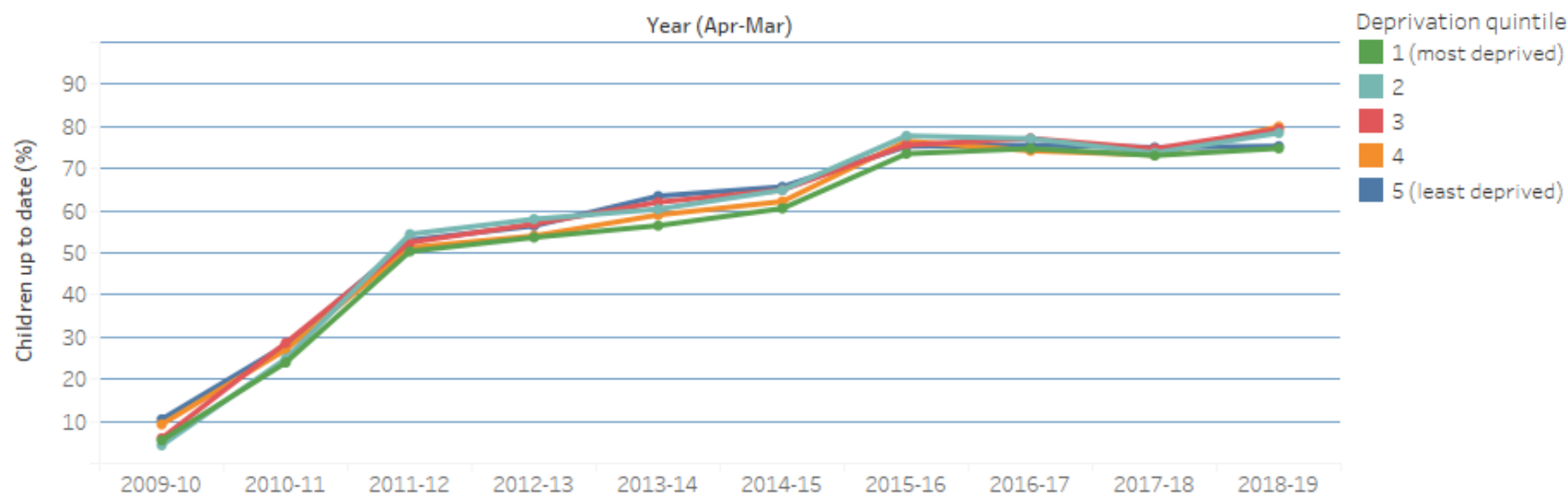


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
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Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	100	1,829	5.5	78	1,809	4.3	82	1,373	6.0	96	1,035	9.3	143	1,364	10.5
2010-11	422	1,761	24.0	441	1,772	24.9	350	1,223	28.6	271	1,004	27.0	380	1,353	28.1
2011-12	932	1,851	50.4	974	1,789	54.4	709	1,351	52.5	519	1,012	51.3	761	1,436	53.0
2012-13	959	1,787	53.7	1,050	1,810	58.0	691	1,215	56.9	564	1,044	54.0	774	1,372	56.4
2013-14	982	1,739	56.5	990	1,640	60.4	807	1,301	62.0	567	961	59.0	845	1,331	63.5
2014-15	1,126	1,860	60.5	954	1,470	64.9	809	1,246	64.9	533	857	62.2	844	1,285	65.7
2015-16	1,309	1,780	73.5	1,120	1,440	77.8	858	1,135	75.6	702	917	76.6	941	1,250	75.3
2016-17	1,360	1,819	74.8	1,035	1,342	77.1	896	1,161	77.2	657	885	74.2	1,004	1,328	75.6
2017-18	1,335	1,826	73.1	1,081	1,466	73.7	925	1,238	74.7	643	878	73.2	958	1,277	75.0
2018-19	1,363	1,822	74.8	1,170	1,491	78.5	1,012	1,275	79.4	759	949	80.0	1,032	1,370	75.3

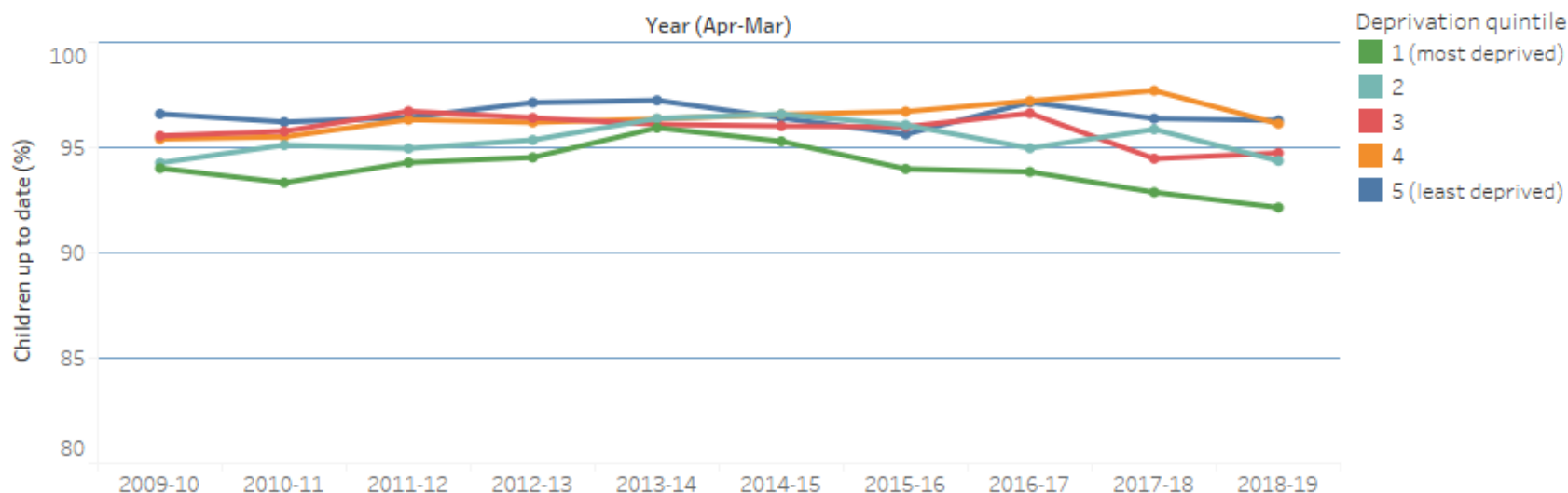


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Surveillance Centre (CDSC): Inequalities in Uptake of Childhood Immunisations
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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Betsi Cadwaladr UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,226	1,304	94.0	1,448	1,536	94.3	1,720	1,800	95.6	1,662	1,742	95.4	1,136	1,176	96.6
2010-11	1,246	1,335	93.3	1,559	1,639	95.1	1,722	1,798	95.8	1,595	1,670	95.5	1,093	1,136	96.2
2011-12	1,288	1,366	94.3	1,488	1,567	95.0	1,712	1,770	96.7	1,651	1,714	96.3	1,160	1,203	96.4
2012-13	1,227	1,298	94.5	1,479	1,551	95.4	1,746	1,811	96.4	1,695	1,762	96.2	1,154	1,188	97.1
2013-14	1,299	1,354	95.9	1,465	1,520	96.4	1,751	1,822	96.1	1,642	1,704	96.4	1,128	1,160	97.2
2014-15	1,114	1,169	95.3	1,443	1,494	96.6	1,617	1,684	96.0	1,635	1,693	96.6	1,126	1,168	96.4
2015-16	1,125	1,197	94.0	1,369	1,425	96.1	1,626	1,694	96.0	1,587	1,641	96.7	1,094	1,144	95.6
2016-17	1,144	1,219	93.8	1,322	1,392	95.0	1,605	1,661	96.6	1,571	1,616	97.2	1,124	1,157	97.1
2017-18	1,108	1,193	92.9	1,298	1,354	95.9	1,555	1,646	94.5	1,658	1,697	97.7	1,064	1,104	96.4
2018-19	1,080	1,172	92.2	1,307	1,385	94.4	1,513	1,597	94.7	1,541	1,603	96.1	1,116	1,159	96.3

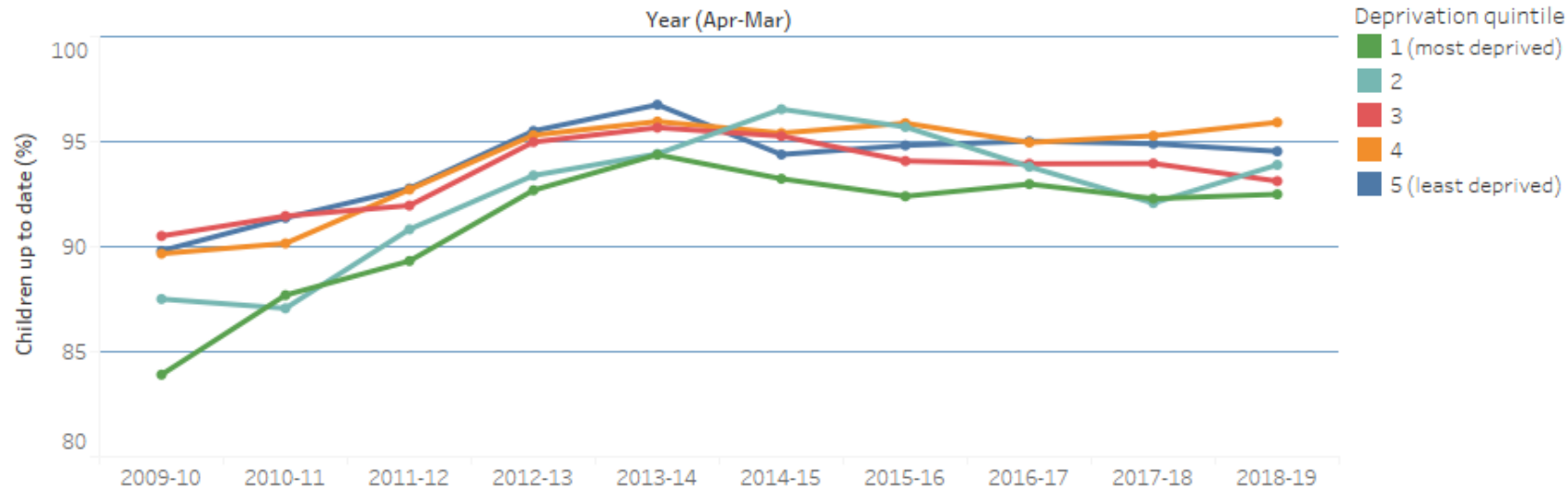


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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Betsi Cadwaladr UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,074	1,280	83.9	1,289	1,473	87.5	1,602	1,770	90.5	1,562	1,742	89.7	1,171	1,304	89.8
2010-11	1,147	1,308	87.7	1,326	1,523	87.1	1,649	1,803	91.5	1,575	1,747	90.2	1,101	1,205	91.4
2011-12	1,204	1,348	89.3	1,475	1,624	90.8	1,635	1,778	92.0	1,566	1,689	92.7	1,091	1,176	92.8
2012-13	1,229	1,326	92.7	1,469	1,573	93.4	1,684	1,773	95.0	1,625	1,705	95.3	1,148	1,202	95.5
2013-14	1,242	1,316	94.4	1,420	1,504	94.4	1,766	1,846	95.7	1,685	1,756	96.0	1,193	1,233	96.8
2014-15	1,226	1,315	93.2	1,480	1,533	96.5	1,670	1,753	95.3	1,683	1,764	95.4	1,160	1,229	94.4
2015-16	1,094	1,184	92.4	1,424	1,488	95.7	1,589	1,689	94.1	1,628	1,698	95.9	1,117	1,178	94.8
2016-17	1,139	1,225	93.0	1,317	1,404	93.8	1,629	1,734	93.9	1,582	1,666	95.0	1,107	1,165	95.0
2017-18	1,125	1,219	92.3	1,301	1,413	92.1	1,587	1,689	94.0	1,574	1,652	95.3	1,135	1,196	94.9
2018-19	1,109	1,199	92.5	1,276	1,359	93.9	1,516	1,628	93.1	1,645	1,715	95.9	1,056	1,117	94.5

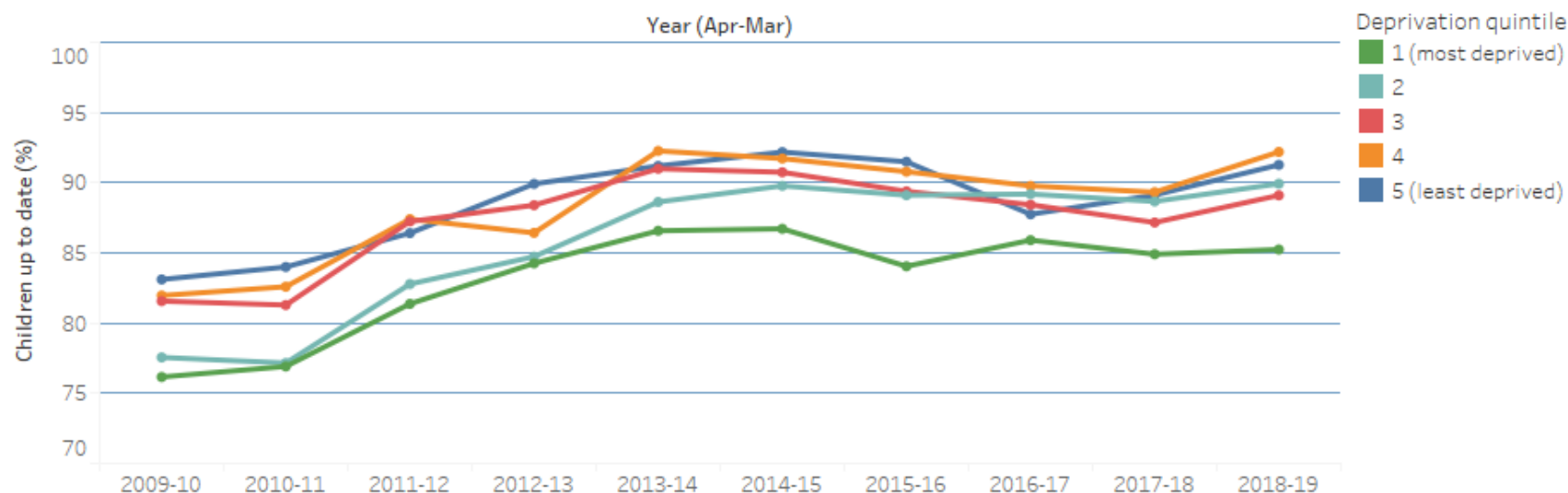


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Betsi Cadwaladr UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	904	1,187	76.2	1,116	1,439	77.6	1,345	1,649	81.6	1,363	1,663	82.0	1,038	1,249	83.1
2010-11	956	1,243	76.9	1,118	1,449	77.2	1,316	1,619	81.3	1,461	1,769	82.6	1,102	1,312	84.0
2011-12	1,035	1,272	81.4	1,221	1,475	82.8	1,524	1,747	87.2	1,540	1,762	87.4	1,144	1,324	86.4
2012-13	1,113	1,321	84.3	1,293	1,526	84.7	1,592	1,801	88.4	1,547	1,790	86.4	1,123	1,249	89.9
2013-14	1,180	1,363	86.6	1,387	1,565	88.6	1,606	1,765	91.0	1,562	1,693	92.3	1,149	1,260	91.2
2014-15	1,103	1,272	86.7	1,387	1,545	89.8	1,568	1,728	90.7	1,650	1,799	91.7	1,202	1,304	92.2
2015-16	1,027	1,222	84.0	1,309	1,469	89.1	1,633	1,827	89.4	1,704	1,877	90.8	1,204	1,316	91.5
2016-17	1,158	1,348	85.9	1,369	1,535	89.2	1,574	1,780	88.4	1,615	1,799	89.8	1,110	1,265	87.7
2017-18	1,046	1,232	84.9	1,275	1,438	88.7	1,487	1,706	87.2	1,556	1,742	89.3	1,114	1,250	89.1
2018-19	1,051	1,233	85.2	1,276	1,419	89.9	1,561	1,752	89.1	1,558	1,690	92.2	1,108	1,214	91.3

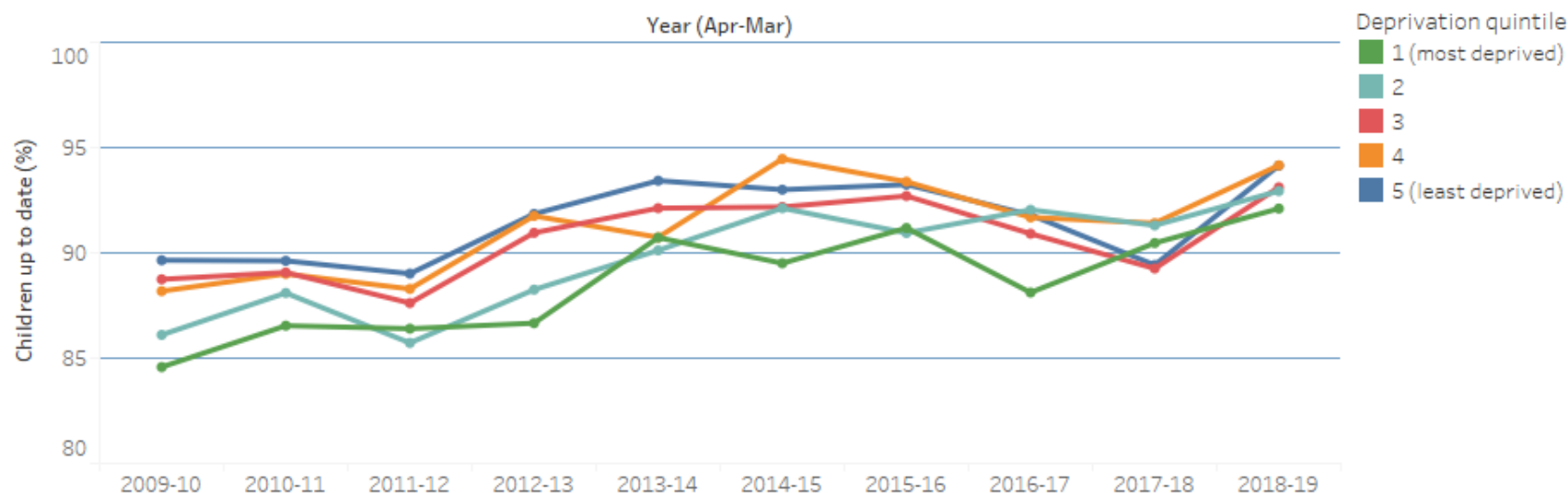


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Betsi Cadwaladr UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,009	1,193	84.6	1,134	1,317	86.1	1,435	1,617	88.7	1,485	1,684	88.2	1,204	1,343	89.7
2010-11	1,016	1,174	86.5	1,273	1,445	88.1	1,475	1,656	89.1	1,473	1,655	89.0	1,140	1,272	89.6
2011-12	1,061	1,228	86.4	1,243	1,450	85.7	1,408	1,607	87.6	1,583	1,793	88.3	1,191	1,338	89.0
2012-13	1,124	1,297	86.7	1,292	1,464	88.3	1,568	1,724	91.0	1,636	1,783	91.8	1,217	1,325	91.8
2013-14	1,164	1,283	90.7	1,359	1,508	90.1	1,696	1,841	92.1	1,646	1,814	90.7	1,194	1,278	93.4
2014-15	1,177	1,315	89.5	1,450	1,574	92.1	1,591	1,726	92.2	1,722	1,823	94.5	1,209	1,300	93.0
2015-16	1,189	1,304	91.2	1,406	1,546	90.9	1,575	1,699	92.7	1,692	1,812	93.4	1,242	1,332	93.2
2016-17	1,090	1,237	88.1	1,377	1,496	92.0	1,700	1,870	90.9	1,742	1,900	91.7	1,232	1,342	91.8
2017-18	1,224	1,353	90.5	1,407	1,541	91.3	1,612	1,806	89.3	1,682	1,840	91.4	1,133	1,267	89.4
2018-19	1,143	1,241	92.1	1,355	1,458	92.9	1,609	1,728	93.1	1,659	1,762	94.2	1,206	1,281	94.1

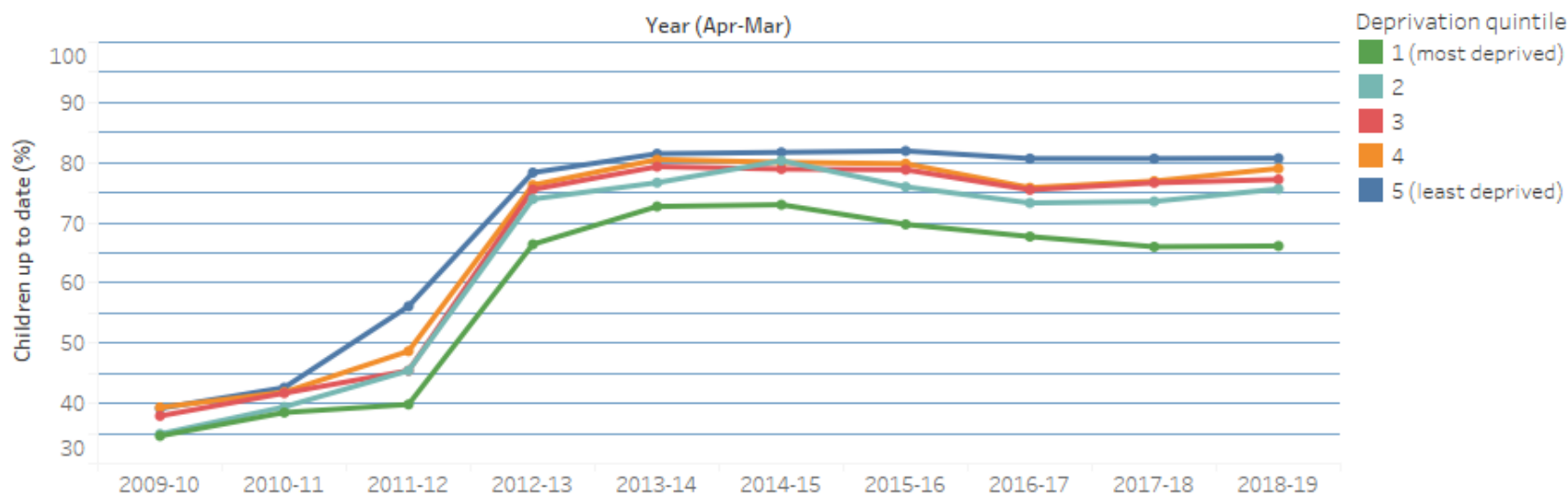


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
Betsi Cadwaladr UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	383	1,107	34.6	500	1,432	34.9	714	1,883	37.9	736	1,871	39.3	624	1,593	39.2
2010-11	416	1,081	38.5	542	1,375	39.4	739	1,772	41.7	772	1,844	41.9	656	1,539	42.6
2011-12	462	1,160	39.8	659	1,450	45.4	798	1,756	45.4	944	1,939	48.7	823	1,466	56.1
2012-13	728	1,096	66.4	974	1,317	74.0	1,306	1,729	75.5	1,402	1,838	76.3	1,194	1,524	78.3
2013-14	829	1,140	72.7	1,032	1,346	76.7	1,386	1,747	79.3	1,450	1,801	80.5	1,232	1,512	81.5
2014-15	752	1,030	73.0	1,061	1,321	80.3	1,319	1,671	78.9	1,474	1,841	80.1	1,211	1,482	81.7
2015-16	717	1,028	69.7	946	1,245	76.0	1,269	1,610	78.8	1,460	1,829	79.8	1,257	1,534	81.9
2016-17	707	1,044	67.7	887	1,210	73.3	1,170	1,550	75.5	1,451	1,913	75.8	1,119	1,387	80.7
2017-18	649	983	66.0	921	1,252	73.6	1,215	1,585	76.7	1,321	1,717	76.9	1,102	1,366	80.7
2018-19	696	1,052	66.2	971	1,284	75.6	1,233	1,597	77.2	1,413	1,788	79.0	1,169	1,448	80.7

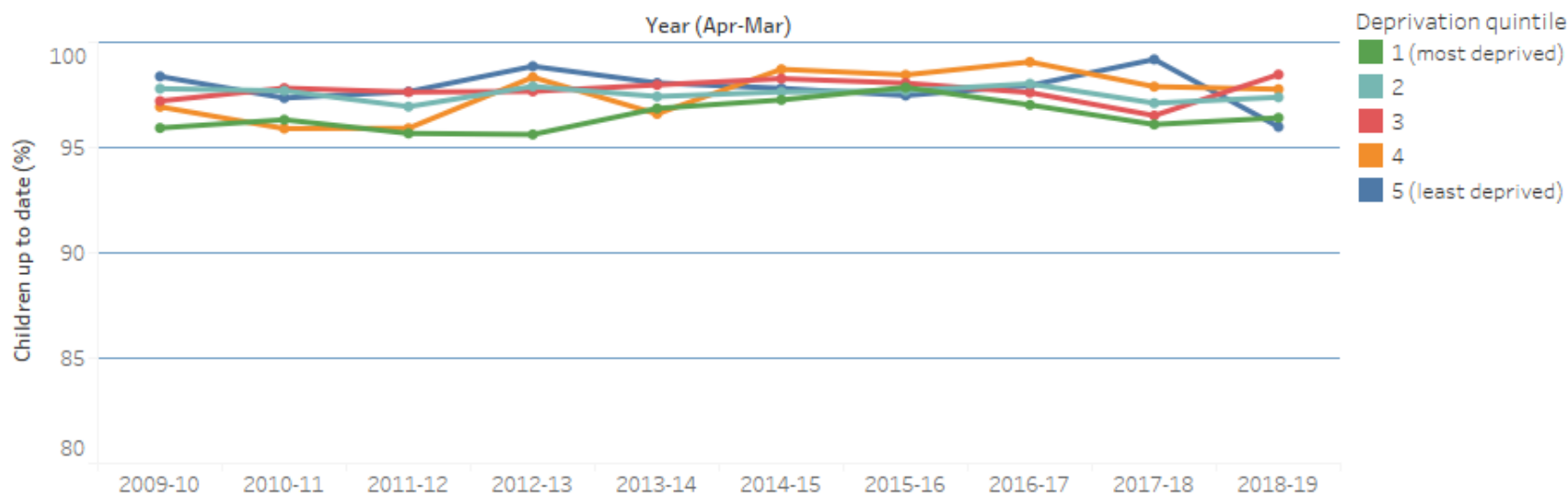


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Surveillance Centre (CDSC): Inequalities in Uptake of Childhood Immunisations
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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Cwm Taf UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,320	1,376	95.9	932	953	97.8	592	609	97.2	253	261	96.9	364	370	98.4
2010-11	1,283	1,332	96.3	933	955	97.7	584	597	97.8	234	244	95.9	368	378	97.4
2011-12	1,393	1,456	95.7	920	949	96.9	537	550	97.6	282	294	95.9	333	341	97.7
2012-13	1,420	1,485	95.6	934	954	97.9	544	557	97.7	237	241	98.3	347	351	98.9
2013-14	1,326	1,369	96.9	870	893	97.4	581	593	98.0	284	294	96.6	305	311	98.1
2014-15	1,137	1,169	97.3	1,077	1,103	97.6	455	463	98.3	308	312	98.7	313	320	97.8
2015-16	1,096	1,120	97.9	1,103	1,129	97.7	505	515	98.1	318	323	98.5	270	277	97.5
2016-17	1,174	1,210	97.0	1,094	1,116	98.0	531	544	97.6	318	321	99.1	286	292	97.9
2017-18	1,108	1,153	96.1	1,109	1,142	97.1	499	517	96.5	279	285	97.9	244	246	99.2
2018-19	1,102	1,143	96.4	1,044	1,072	97.4	450	457	98.5	307	314	97.8	263	274	96.0

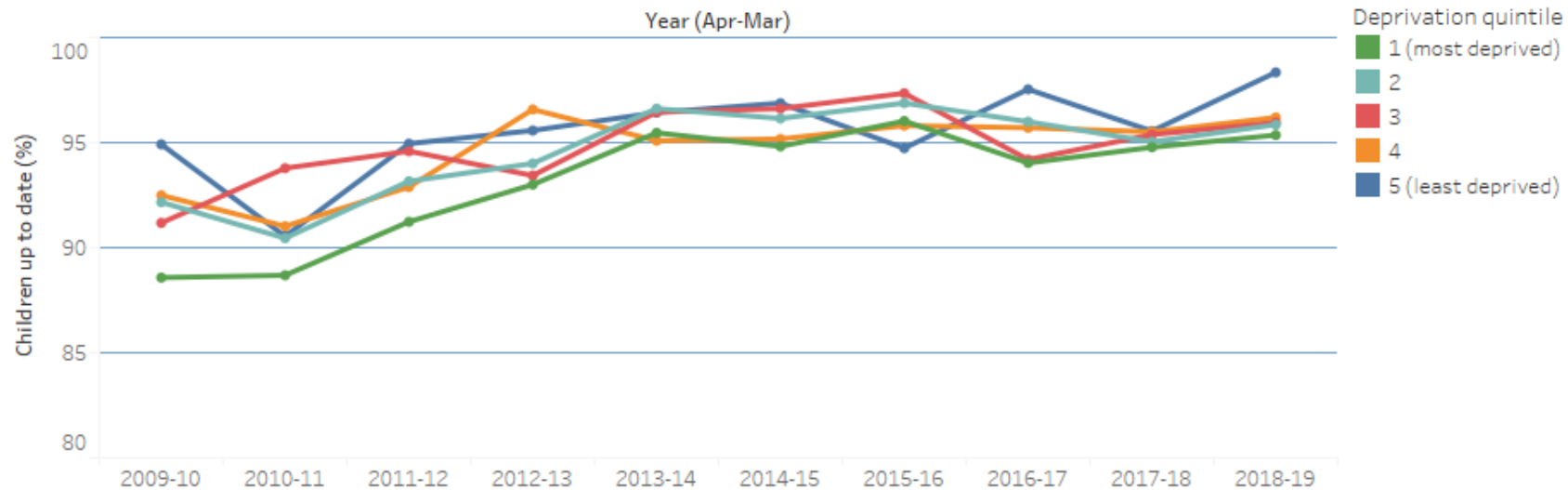


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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Cwm Taf UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,217	1,374	88.6	823	893	92.2	527	578	91.2	234	253	92.5	336	354	94.9
2010-11	1,199	1,352	88.7	862	953	90.5	573	611	93.8	233	256	91.0	335	370	90.5
2011-12	1,217	1,334	91.2	885	950	93.2	542	573	94.6	235	253	92.9	357	376	94.9
2012-13	1,342	1,443	93.0	894	951	94.0	512	548	93.4	282	292	96.6	324	339	95.6
2013-14	1,410	1,477	95.5	942	975	96.6	543	563	96.4	213	224	95.1	324	336	96.4
2014-15	1,116	1,177	94.8	1,023	1,064	96.1	514	532	96.6	335	352	95.2	310	320	96.9
2015-16	1,160	1,208	96.0	1,056	1,090	96.9	440	452	97.3	297	310	95.8	306	323	94.7
2016-17	1,118	1,189	94.0	1,078	1,123	96.0	519	551	94.2	312	326	95.7	277	284	97.5
2017-18	1,161	1,225	94.8	1,091	1,148	95.0	516	541	95.4	319	334	95.5	279	292	95.5
2018-19	1,109	1,163	95.4	1,086	1,133	95.9	498	519	96.0	278	289	96.2	237	241	98.3

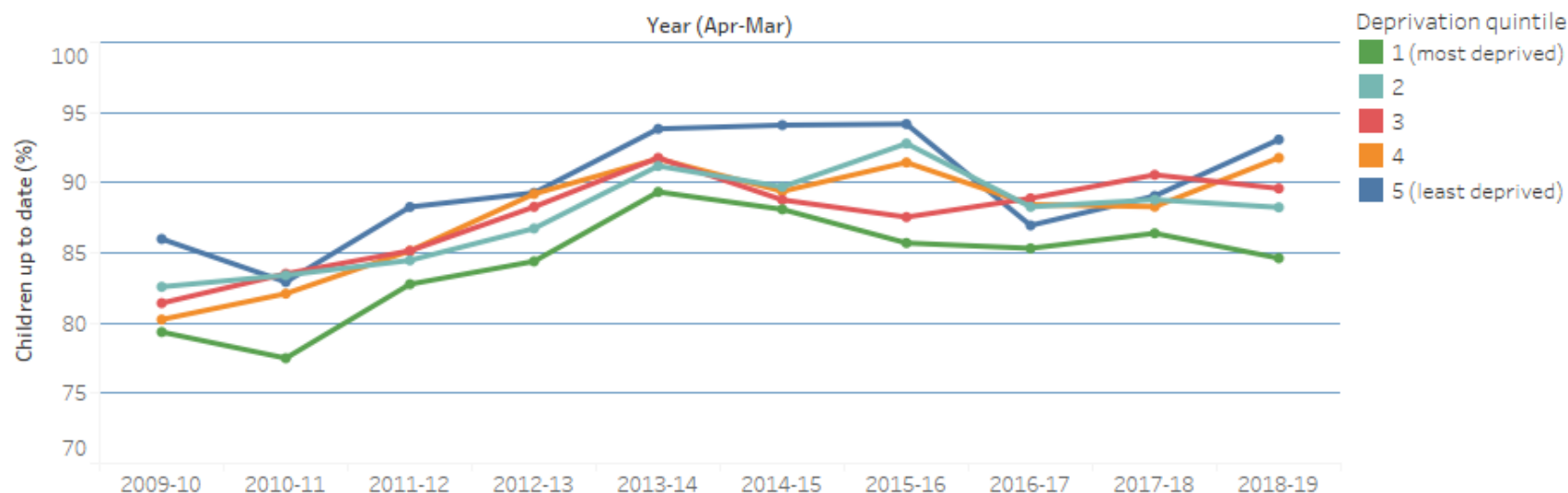


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Cwm Taf UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	996	1,255	79.4	697	844	82.6	447	549	81.4	191	238	80.3	356	414	86.0
2010-11	985	1,271	77.5	744	892	83.4	466	558	83.5	188	229	82.1	306	369	82.9
2011-12	1,124	1,358	82.8	745	882	84.5	493	579	85.1	212	249	85.1	316	358	88.3
2012-13	1,152	1,365	84.4	811	935	86.7	527	597	88.3	223	250	89.2	333	373	89.3
2013-14	1,182	1,323	89.3	859	942	91.2	524	571	91.8	221	241	91.7	350	373	93.8
2014-15	1,066	1,210	88.1	1,036	1,155	89.7	419	472	88.8	303	339	89.4	303	322	94.1
2015-16	1,085	1,266	85.7	1,081	1,165	92.8	443	506	87.5	267	292	91.4	291	309	94.2
2016-17	1,029	1,206	85.3	964	1,092	88.3	536	603	88.9	329	372	88.4	300	345	87.0
2017-18	1,054	1,220	86.4	990	1,115	88.8	470	519	90.6	294	333	88.3	301	338	89.1
2018-19	1,029	1,216	84.6	998	1,131	88.2	499	557	89.6	301	328	91.8	282	303	93.1

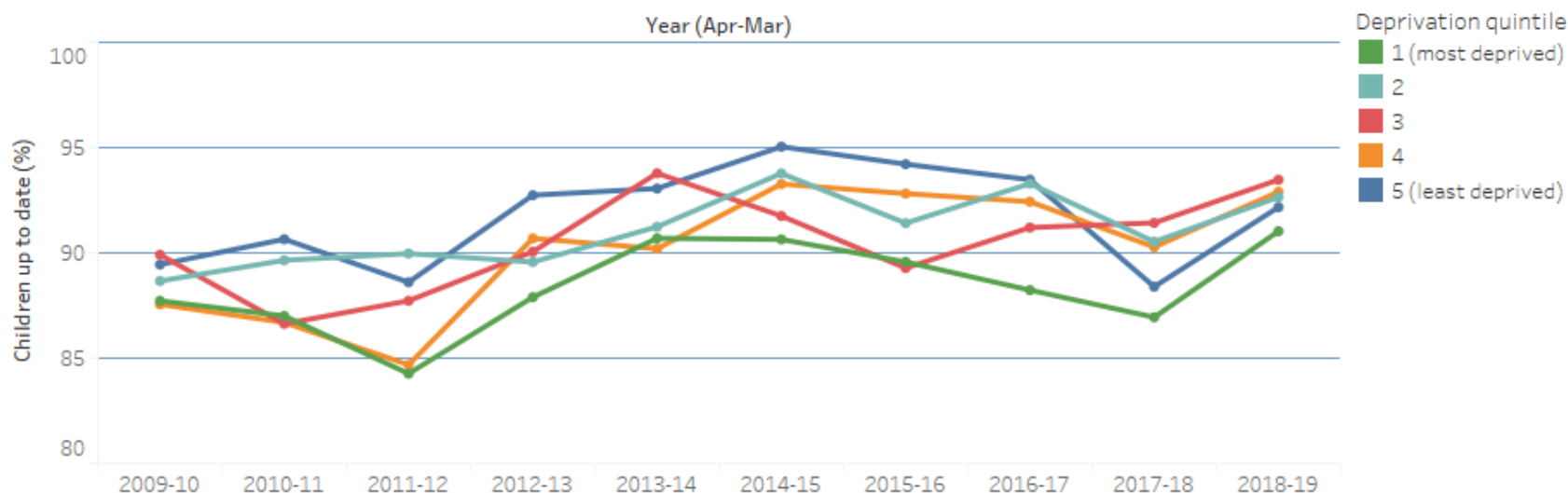


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Cwm Taf UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,086	1,238	87.7	790	891	88.7	508	565	89.9	204	233	87.6	322	360	89.4
2010-11	1,078	1,239	87.0	762	850	89.6	473	546	86.6	202	233	86.7	378	417	90.6
2011-12	1,071	1,271	84.3	798	887	90.0	493	562	87.7	188	222	84.7	311	351	88.6
2012-13	1,198	1,363	87.9	781	872	89.6	507	563	90.1	224	247	90.7	332	358	92.7
2013-14	1,218	1,343	90.7	833	913	91.2	573	611	93.8	230	255	90.2	335	360	93.1
2014-15	1,007	1,111	90.6	1,084	1,156	93.8	445	485	91.8	291	312	93.3	345	363	95.0
2015-16	1,082	1,208	89.6	1,075	1,176	91.4	408	457	89.3	310	334	92.8	293	311	94.2
2016-17	1,162	1,317	88.2	1,112	1,192	93.3	508	557	91.2	293	317	92.4	315	337	93.5
2017-18	1,052	1,210	86.9	994	1,098	90.5	565	618	91.4	325	360	90.3	297	336	88.4
2018-19	1,116	1,226	91.0	1,033	1,115	92.6	487	521	93.5	314	338	92.9	306	332	92.2

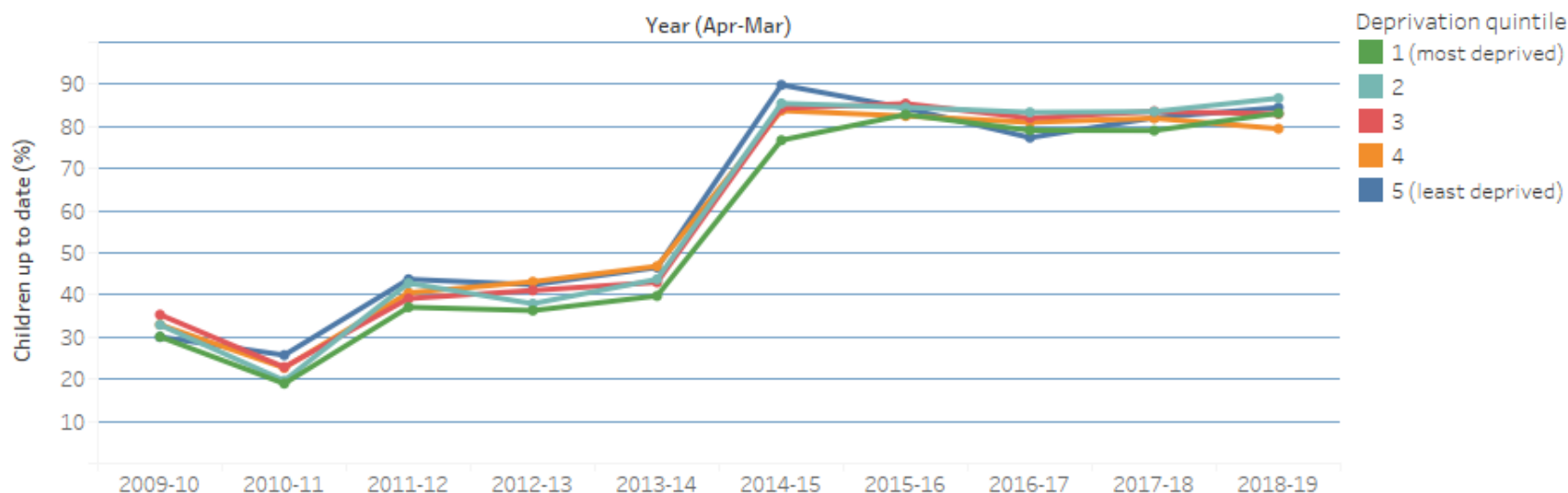


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
Cwm Taf UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	405	1,346	30.1	309	939	32.9	201	569	35.3	86	261	33.0	106	353	30.0
2010-11	233	1,229	19.0	192	976	19.7	126	551	22.9	62	273	22.7	88	342	25.7
2011-12	486	1,310	37.1	426	995	42.8	233	595	39.2	109	269	40.5	150	343	43.7
2012-13	480	1,322	36.3	352	928	37.9	228	555	41.1	107	248	43.1	132	311	42.4
2013-14	471	1,184	39.8	398	910	43.7	243	565	43.0	118	252	46.8	154	331	46.5
2014-15	746	972	76.7	936	1,095	85.5	398	472	84.3	253	302	83.8	275	306	89.9
2015-16	839	1,013	82.8	816	965	84.6	369	432	85.4	231	280	82.5	270	320	84.4
2016-17	791	1,000	79.1	887	1,064	83.4	401	489	82.0	243	300	81.0	263	340	77.4
2017-18	837	1,059	79.0	903	1,081	83.5	397	475	83.6	268	327	82.0	307	374	82.1
2018-19	908	1,092	83.2	934	1,077	86.7	425	512	83.0	275	346	79.5	316	374	84.5

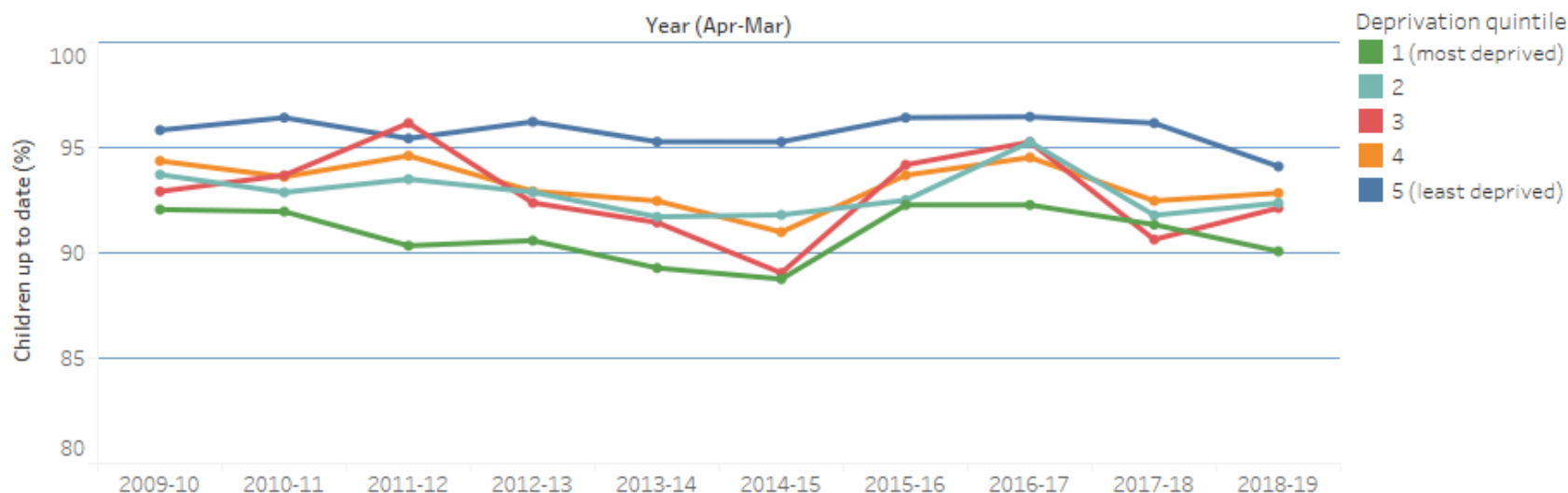


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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Cardiff and Vale UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,750	1,901	92.1	820	875	93.7	682	734	92.9	720	763	94.4	1,699	1,773	95.8
2010-11	1,773	1,928	92.0	899	968	92.9	697	744	93.7	747	798	93.6	1,562	1,620	96.4
2011-12	1,786	1,977	90.3	935	1,000	93.5	701	729	96.2	755	798	94.6	1,546	1,620	95.4
2012-13	1,808	1,996	90.6	900	969	92.9	630	682	92.4	788	848	92.9	1,682	1,748	96.2
2013-14	1,666	1,866	89.3	874	953	91.7	673	736	91.4	761	823	92.5	1,593	1,672	95.3
2014-15	1,697	1,912	88.8	784	854	91.8	569	639	89.0	757	832	91.0	1,552	1,629	95.3
2015-16	1,768	1,916	92.3	777	840	92.5	631	670	94.2	816	871	93.7	1,508	1,564	96.4
2016-17	1,684	1,825	92.3	865	908	95.3	603	633	95.3	760	804	94.5	1,581	1,639	96.5
2017-18	1,614	1,767	91.3	771	840	91.8	571	630	90.6	737	797	92.5	1,578	1,641	96.2
2018-19	1,497	1,662	90.1	750	812	92.4	562	610	92.1	713	768	92.8	1,484	1,577	94.1

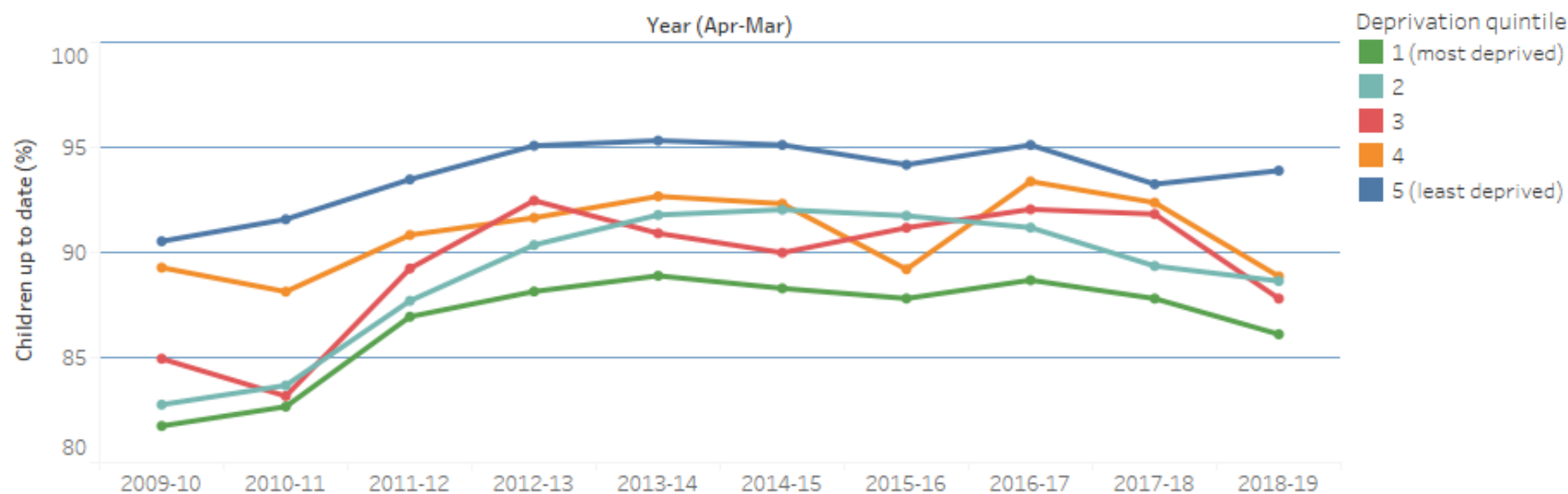


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Surveillance Centre (CDSC): Inequalities in Uptake of Childhood Immunisations
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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Cardiff and Vale UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,527	1,868	81.7	744	899	82.8	598	704	84.9	716	802	89.3	1,520	1,679	90.5
2010-11	1,583	1,915	82.7	738	882	83.7	583	701	83.2	661	750	88.1	1,652	1,804	91.6
2011-12	1,658	1,907	86.9	834	951	87.7	630	706	89.2	733	807	90.8	1,561	1,670	93.5
2012-13	1,717	1,948	88.1	871	964	90.4	675	730	92.5	735	802	91.6	1,525	1,604	95.1
2013-14	1,776	1,998	88.9	860	937	91.8	620	682	90.9	771	832	92.7	1,690	1,773	95.3
2014-15	1,704	1,930	88.3	774	841	92.0	611	679	90.0	757	820	92.3	1,615	1,698	95.1
2015-16	1,635	1,862	87.8	789	860	91.7	568	623	91.2	702	787	89.2	1,583	1,681	94.2
2016-17	1,700	1,917	88.7	734	805	91.2	602	654	92.0	747	800	93.4	1,575	1,656	95.1
2017-18	1,584	1,804	87.8	789	883	89.4	584	636	91.8	714	773	92.4	1,629	1,747	93.2
2018-19	1,537	1,785	86.1	710	801	88.6	540	615	87.8	662	745	88.9	1,644	1,751	93.9

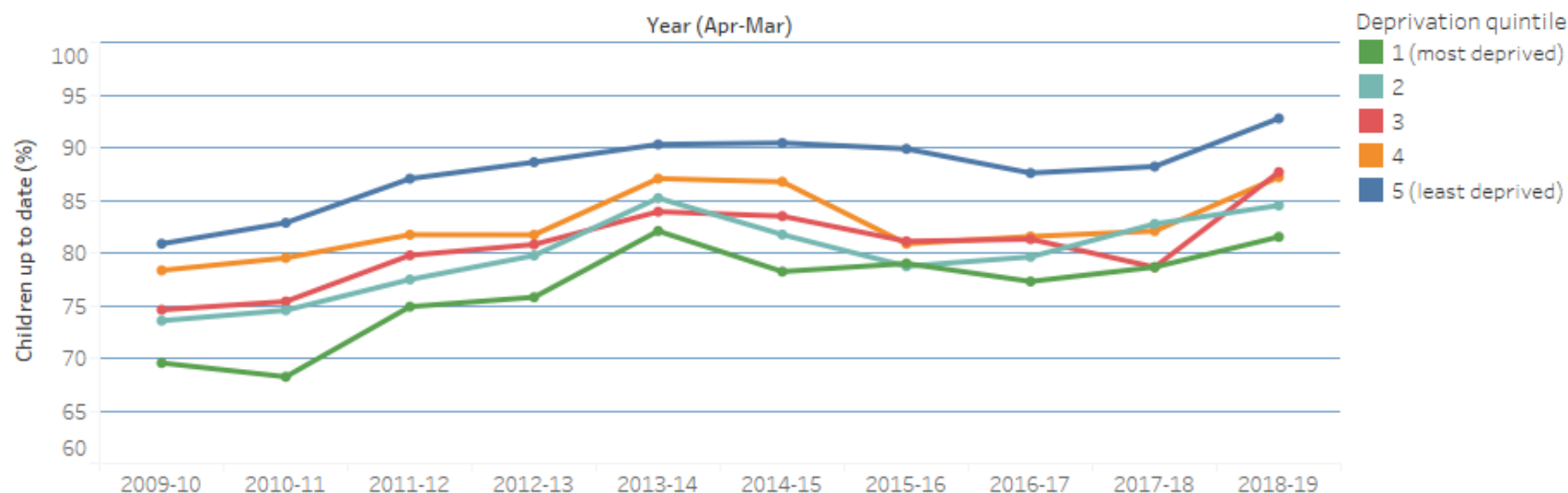


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Cardiff and Vale UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,135	1,632	69.5	562	764	73.6	455	610	74.6	528	674	78.3	1,386	1,714	80.9
2010-11	1,177	1,725	68.2	618	829	74.5	447	593	75.4	594	747	79.5	1,358	1,639	82.9
2011-12	1,360	1,816	74.9	667	861	77.5	552	692	79.8	617	755	81.7	1,579	1,814	87.0
2012-13	1,424	1,879	75.8	693	869	79.7	530	656	80.8	621	760	81.7	1,603	1,809	88.6
2013-14	1,557	1,897	82.1	783	919	85.2	584	696	83.9	679	780	87.1	1,601	1,773	90.3
2014-15	1,584	2,025	78.2	734	898	81.7	546	654	83.5	668	770	86.8	1,523	1,684	90.4
2015-16	1,613	2,042	79.0	655	832	78.7	502	619	81.1	617	763	80.9	1,687	1,877	89.9
2016-17	1,497	1,937	77.3	672	844	79.6	526	647	81.3	650	797	81.6	1,615	1,844	87.6
2017-18	1,455	1,850	78.6	710	858	82.8	497	632	78.6	618	753	82.1	1,607	1,822	88.2
2018-19	1,513	1,856	81.5	698	826	84.5	519	592	87.7	660	757	87.2	1,668	1,798	92.8

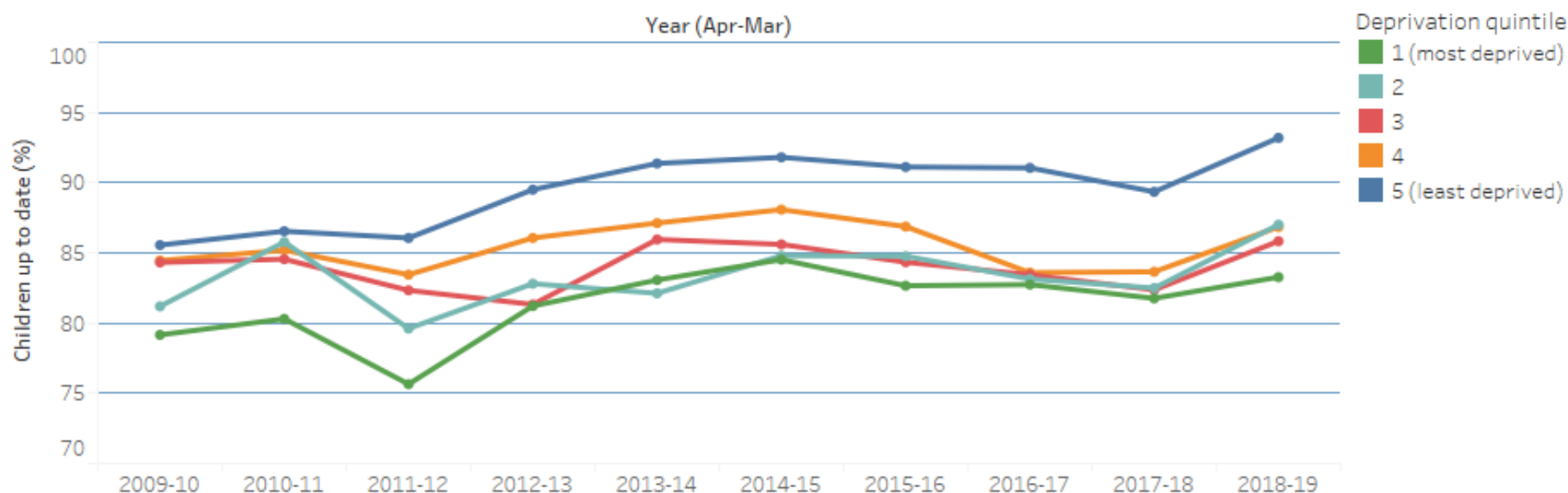


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Cardiff and Vale UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	1,242	1,569	79.2	600	739	81.2	484	574	84.3	527	624	84.5	1,451	1,696	85.6
2010-11	1,292	1,609	80.3	657	766	85.8	509	602	84.6	558	655	85.2	1,511	1,746	86.5
2011-12	1,311	1,733	75.6	652	819	79.6	480	583	82.3	630	755	83.4	1,457	1,693	86.1
2012-13	1,500	1,847	81.2	703	849	82.8	553	680	81.3	667	775	86.1	1,603	1,791	89.5
2013-14	1,565	1,884	83.1	721	878	82.1	563	655	86.0	636	730	87.1	1,694	1,854	91.4
2014-15	1,671	1,977	84.5	725	855	84.8	547	639	85.6	702	797	88.1	1,658	1,806	91.8
2015-16	1,654	2,001	82.7	779	919	84.8	560	664	84.3	642	739	86.9	1,549	1,700	91.1
2016-17	1,697	2,051	82.7	710	854	83.1	534	640	83.4	652	780	83.6	1,781	1,956	91.1
2017-18	1,569	1,919	81.8	702	851	82.5	537	652	82.4	655	783	83.7	1,686	1,887	89.3
2018-19	1,538	1,847	83.3	743	854	87.0	533	621	85.8	647	745	86.8	1,752	1,880	93.2

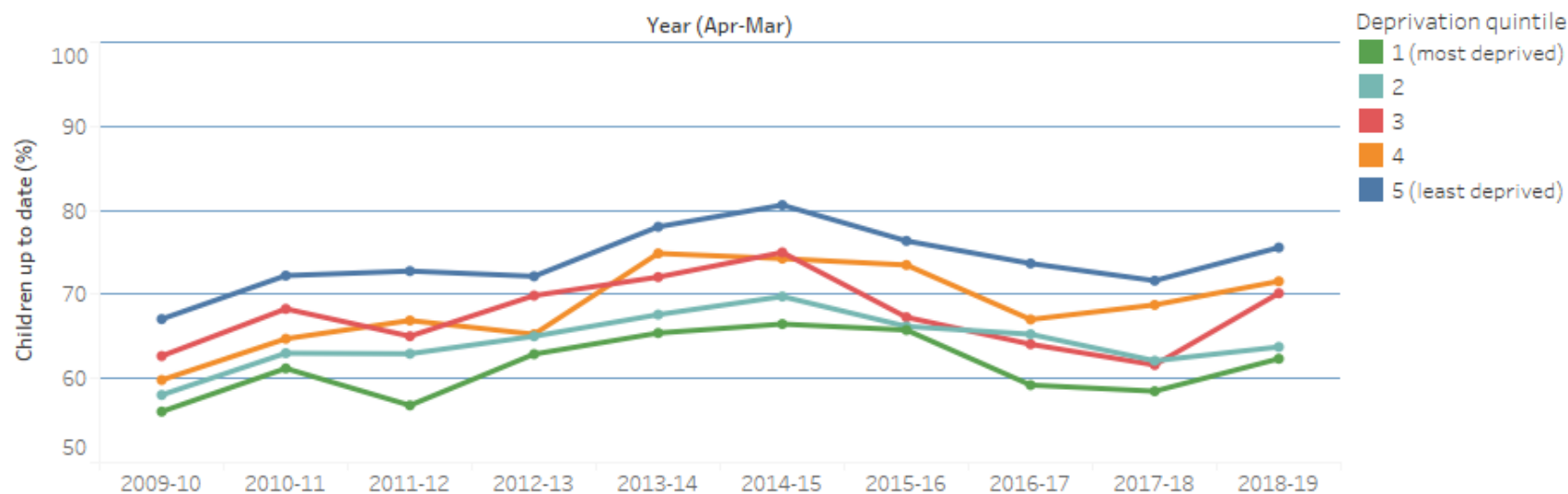


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
Cardiff and Vale UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	868	1,548	56.1	458	789	58.0	393	627	62.7	484	809	59.8	1,369	2,041	67.1
2010-11	901	1,472	61.2	455	722	63.0	435	637	68.3	457	706	64.7	1,481	2,050	72.2
2011-12	838	1,475	56.8	469	745	63.0	385	592	65.0	467	698	66.9	1,388	1,907	72.8
2012-13	914	1,453	62.9	463	712	65.0	371	531	69.9	436	668	65.3	1,410	1,954	72.2
2013-14	959	1,466	65.4	480	710	67.6	418	580	72.1	474	633	74.9	1,369	1,754	78.1
2014-15	960	1,444	66.5	489	701	69.8	372	496	75.0	456	614	74.3	1,436	1,781	80.6
2015-16	980	1,490	65.8	478	722	66.2	358	532	67.3	430	585	73.5	1,299	1,701	76.4
2016-17	860	1,452	59.2	436	668	65.3	314	490	64.1	433	646	67.0	1,302	1,767	73.7
2017-18	895	1,530	58.5	423	681	62.1	289	469	61.6	405	589	68.8	1,281	1,788	71.6
2018-19	994	1,594	62.4	468	734	63.8	343	489	70.1	448	626	71.6	1,427	1,888	75.6

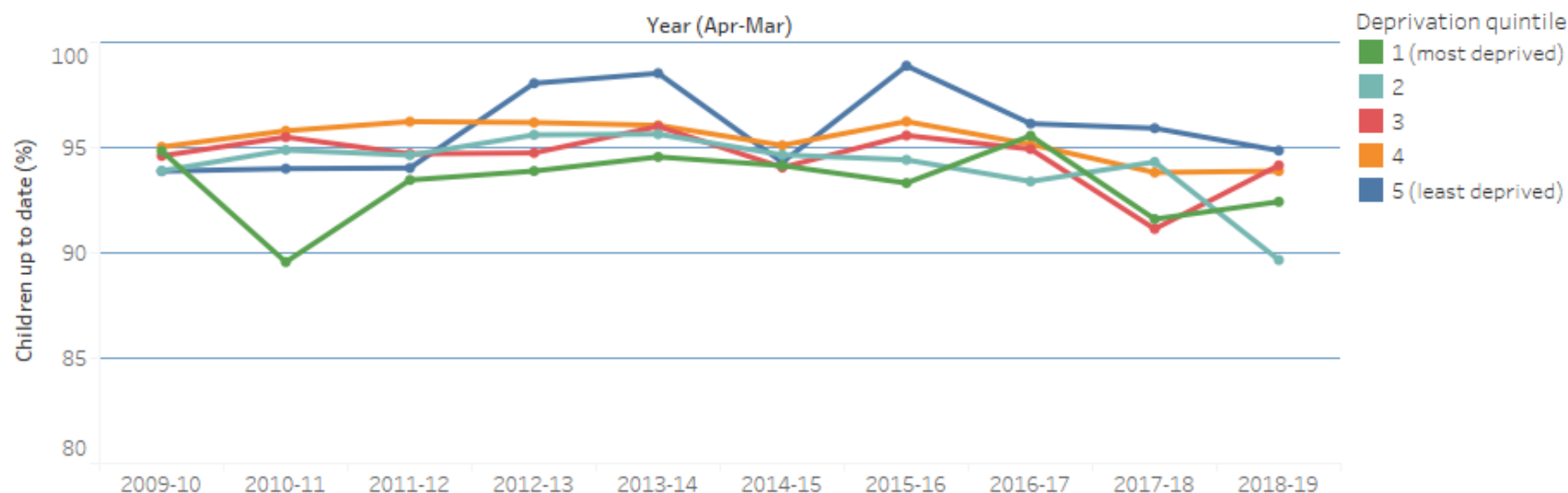


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Surveillance Centre (CDSC): Inequalities in Uptake of Childhood Immunisations
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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Hywel Dda UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	441	465	94.8	846	901	93.9	1,210	1,279	94.6	899	946	95.0	138	147	93.9
2010-11	412	460	89.6	890	938	94.9	1,272	1,332	95.5	957	999	95.8	141	150	94.0
2011-12	443	474	93.5	918	970	94.6	1,305	1,378	94.7	996	1,035	96.2	126	134	94.0
2012-13	476	507	93.9	870	910	95.6	1,280	1,351	94.7	934	971	96.2	151	154	98.1
2013-14	469	496	94.6	877	917	95.6	1,298	1,352	96.0	877	913	96.1	134	136	98.5
2014-15	418	444	94.1	779	823	94.7	1,202	1,278	94.1	855	899	95.1	215	228	94.3
2015-16	363	389	93.3	761	806	94.4	1,253	1,311	95.6	921	957	96.2	177	179	98.9
2016-17	366	383	95.6	834	893	93.4	1,273	1,341	94.9	844	887	95.2	199	207	96.1
2017-18	371	405	91.6	780	827	94.3	1,162	1,275	91.1	880	938	93.8	188	196	95.9
2018-19	354	383	92.4	746	832	89.7	1,224	1,300	94.2	829	883	93.9	166	175	94.9

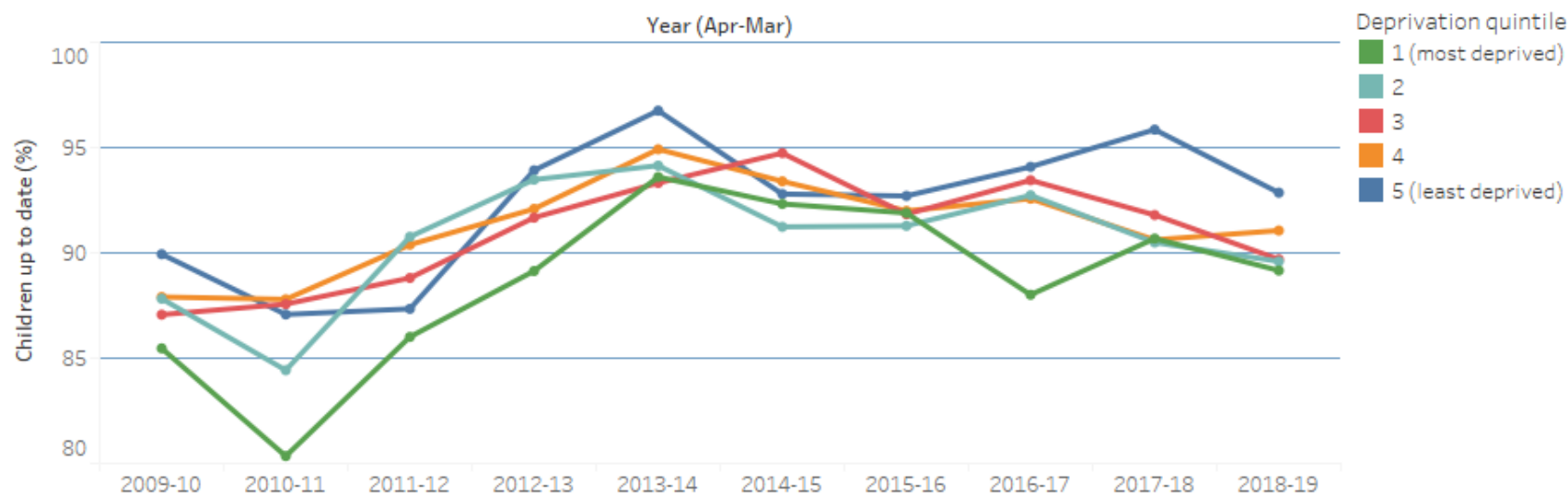


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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Hywel Dda UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	394	461	85.5	815	928	87.8	1,151	1,322	87.1	923	1,050	87.9	143	159	89.9
2010-11	368	458	80.3	759	899	84.4	1,134	1,295	87.6	856	975	87.8	128	147	87.1
2011-12	375	436	86.0	855	942	90.8	1,214	1,367	88.8	912	1,009	90.4	138	158	87.3
2012-13	435	488	89.1	903	966	93.5	1,233	1,345	91.7	966	1,049	92.1	139	148	93.9
2013-14	439	469	93.6	868	922	94.1	1,257	1,347	93.3	934	984	94.9	149	154	96.8
2014-15	421	456	92.3	760	833	91.2	1,332	1,406	94.7	877	939	93.4	206	222	92.8
2015-16	408	444	91.9	733	803	91.3	1,181	1,286	91.8	862	937	92.0	216	233	92.7
2016-17	345	392	88.0	753	812	92.7	1,241	1,328	93.4	922	996	92.6	175	186	94.1
2017-18	360	397	90.7	828	915	90.5	1,231	1,341	91.8	850	938	90.6	208	217	95.9
2018-19	362	406	89.2	749	836	89.6	1,175	1,310	89.7	876	962	91.1	195	210	92.9

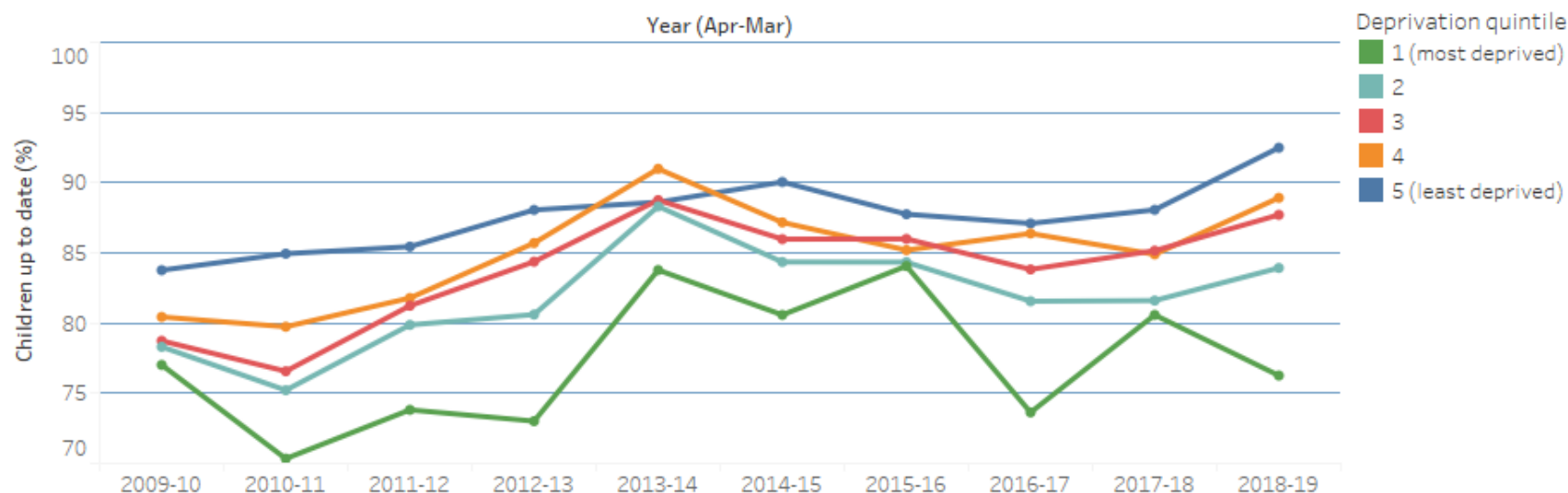


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Hywel Dda UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	305	396	77.0	657	839	78.3	1,033	1,312	78.7	810	1,007	80.4	129	154	83.8
2010-11	287	408	70.3	689	916	75.2	1,026	1,340	76.6	850	1,066	79.7	141	166	84.9
2011-12	344	466	73.8	730	914	79.9	1,104	1,359	81.2	889	1,087	81.8	135	158	85.4
2012-13	322	441	73.0	744	923	80.6	1,123	1,331	84.4	851	993	85.7	118	134	88.1
2013-14	377	450	83.8	816	924	88.3	1,216	1,370	88.8	939	1,032	91.0	140	158	88.6
2014-15	361	448	80.6	733	869	84.3	1,257	1,462	86.0	924	1,060	87.2	190	211	90.0
2015-16	385	458	84.1	727	862	84.3	1,185	1,378	86.0	869	1,020	85.2	215	245	87.8
2016-17	338	459	73.6	712	873	81.6	1,228	1,465	83.8	850	984	86.4	216	248	87.1
2017-18	361	448	80.6	692	848	81.6	1,159	1,361	85.2	798	940	84.9	214	243	88.1
2018-19	302	396	76.3	684	815	83.9	1,206	1,375	87.7	931	1,047	88.9	197	213	92.5

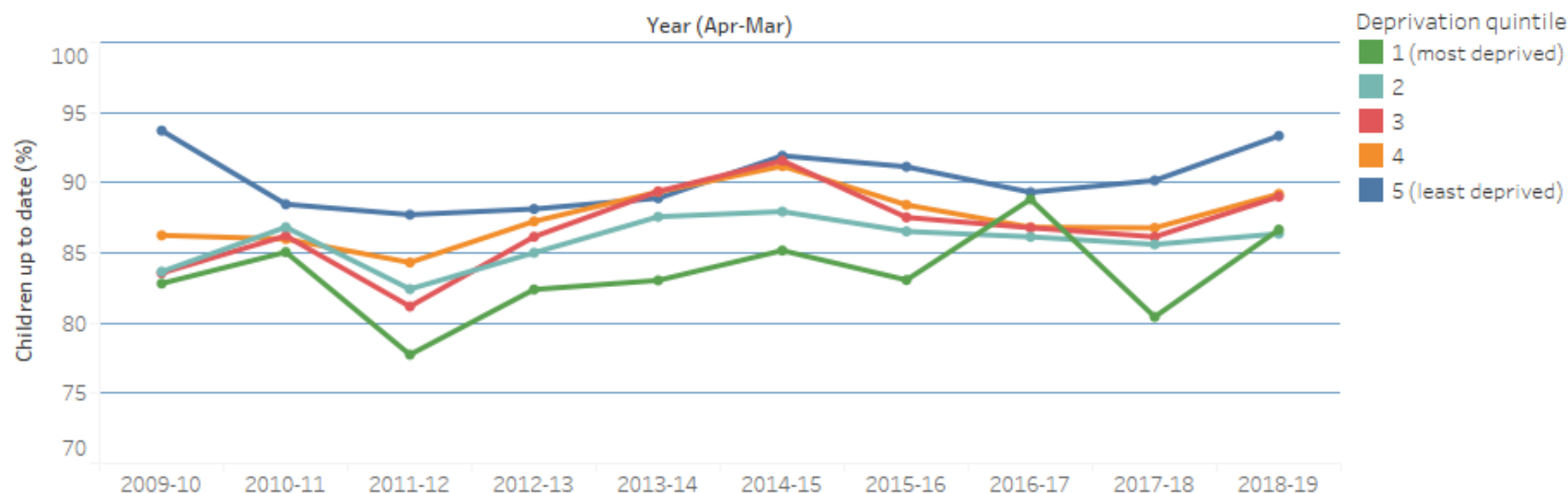


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Hywel Dda UHB



Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	347	419	82.8	722	863	83.7	1,042	1,247	83.6	834	967	86.2	134	143	93.7
2010-11	330	388	85.1	712	820	86.8	1,113	1,291	86.2	859	999	86.0	138	156	88.5
2011-12	318	409	77.8	750	910	82.4	1,070	1,318	81.2	903	1,071	84.3	150	171	87.7
2012-13	379	460	82.4	737	867	85.0	1,132	1,314	86.1	930	1,066	87.2	141	160	88.1
2013-14	377	454	83.0	768	877	87.6	1,144	1,280	89.4	889	995	89.3	120	135	88.9
2014-15	356	418	85.2	722	821	87.9	1,281	1,399	91.6	910	998	91.2	216	235	91.9
2015-16	363	437	83.1	758	876	86.5	1,263	1,443	87.5	916	1,036	88.4	185	203	91.1
2016-17	397	447	88.8	777	902	86.1	1,222	1,408	86.8	916	1,055	86.8	234	262	89.3
2017-18	366	455	80.4	755	882	85.6	1,268	1,472	86.1	860	991	86.8	229	254	90.2
2018-19	383	442	86.7	741	858	86.4	1,214	1,364	89.0	842	944	89.2	238	255	93.3

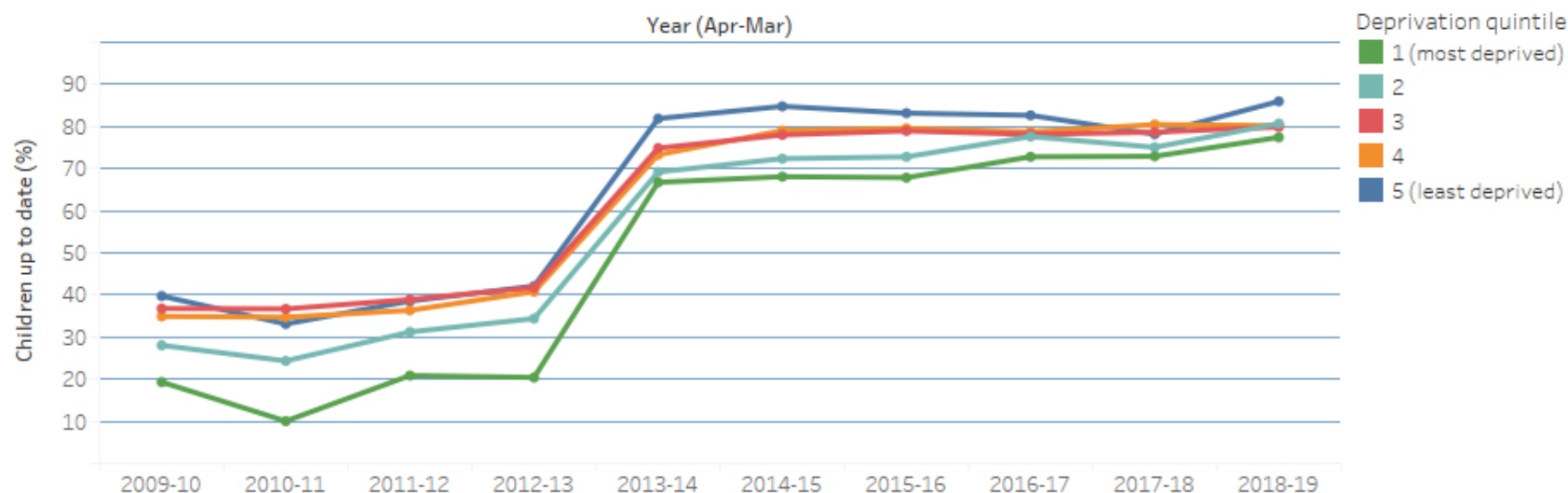


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
Hywel Dda UHB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	74	383	19.3	255	909	28.1	557	1,514	36.8	421	1,206	34.9	64	161	39.8
2010-11	41	408	10.0	225	924	24.4	549	1,496	36.7	415	1,195	34.7	53	160	33.1
2011-12	90	431	20.9	296	948	31.2	553	1,421	38.9	437	1,202	36.4	59	153	38.6
2012-13	78	382	20.4	300	872	34.4	592	1,417	41.8	464	1,138	40.8	72	171	42.1
2013-14	259	388	66.8	589	851	69.2	1,061	1,417	74.9	870	1,187	73.3	113	138	81.9
2014-15	207	304	68.1	529	731	72.4	986	1,264	78.0	769	973	79.0	184	217	84.8
2015-16	209	308	67.9	479	658	72.8	1,013	1,283	79.0	806	1,013	79.6	168	202	83.2
2016-17	241	331	72.8	628	809	77.6	1,108	1,418	78.1	833	1,058	78.7	200	242	82.6
2017-18	264	362	72.9	599	798	75.1	1,080	1,373	78.7	840	1,044	80.5	197	252	78.2
2018-19	271	350	77.4	669	829	80.7	1,144	1,432	79.9	859	1,071	80.2	239	278	86.0

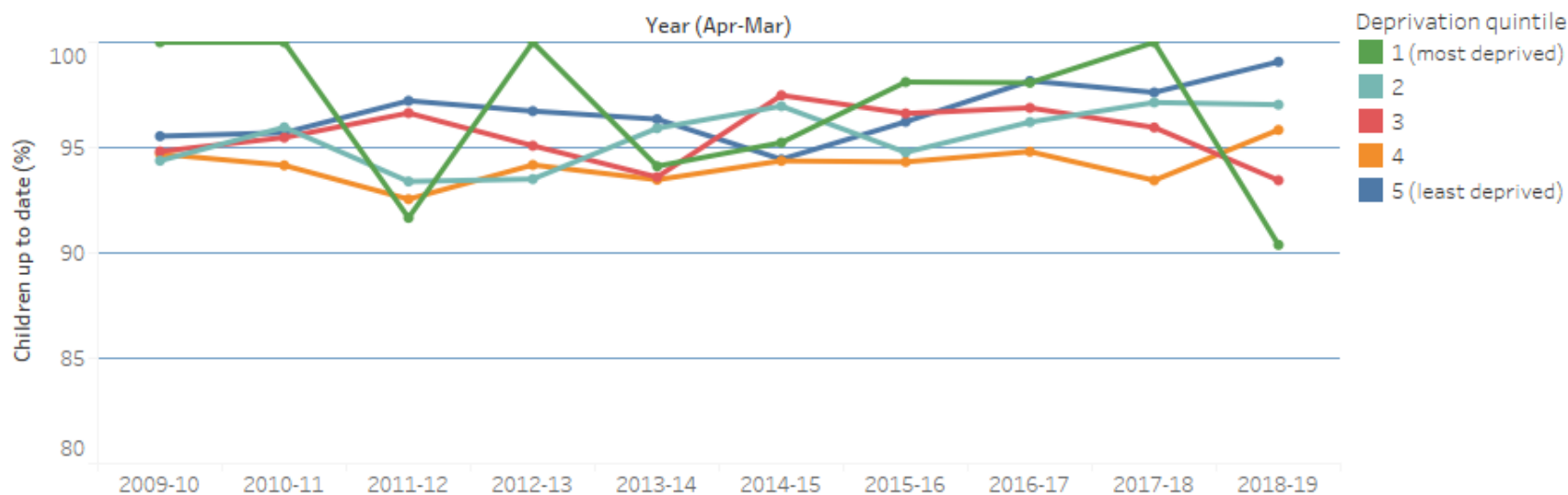


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The Proportion (%) of children up to date with routine immunisations by 1 years of age in
Powys Teaching HB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	18	18	100.0	235	249	94.4	238	251	94.8	536	566	94.7	150	157	95.5
2010-11	12	12	100.0	214	223	96.0	211	221	95.5	548	582	94.2	156	163	95.7
2011-12	11	12	91.7	212	227	93.4	259	268	96.6	497	537	92.6	140	144	97.2
2012-13	25	25	100.0	216	231	93.5	213	224	95.1	550	584	94.2	148	153	96.7
2013-14	16	17	94.1	235	245	95.9	234	250	93.6	530	567	93.5	132	137	96.4
2014-15	60	63	95.2	160	165	97.0	271	278	97.5	503	533	94.4	102	108	94.4
2015-16	52	53	98.1	127	134	94.8	286	296	96.6	465	493	94.3	102	106	96.2
2016-17	51	52	98.1	127	132	96.2	249	257	96.9	548	578	94.8	107	109	98.2
2017-18	47	47	100.0	136	140	97.1	261	272	96.0	499	534	93.4	123	126	97.6
2018-19	47	52	90.4	131	135	97.0	271	290	93.4	530	553	95.8	107	108	99.1

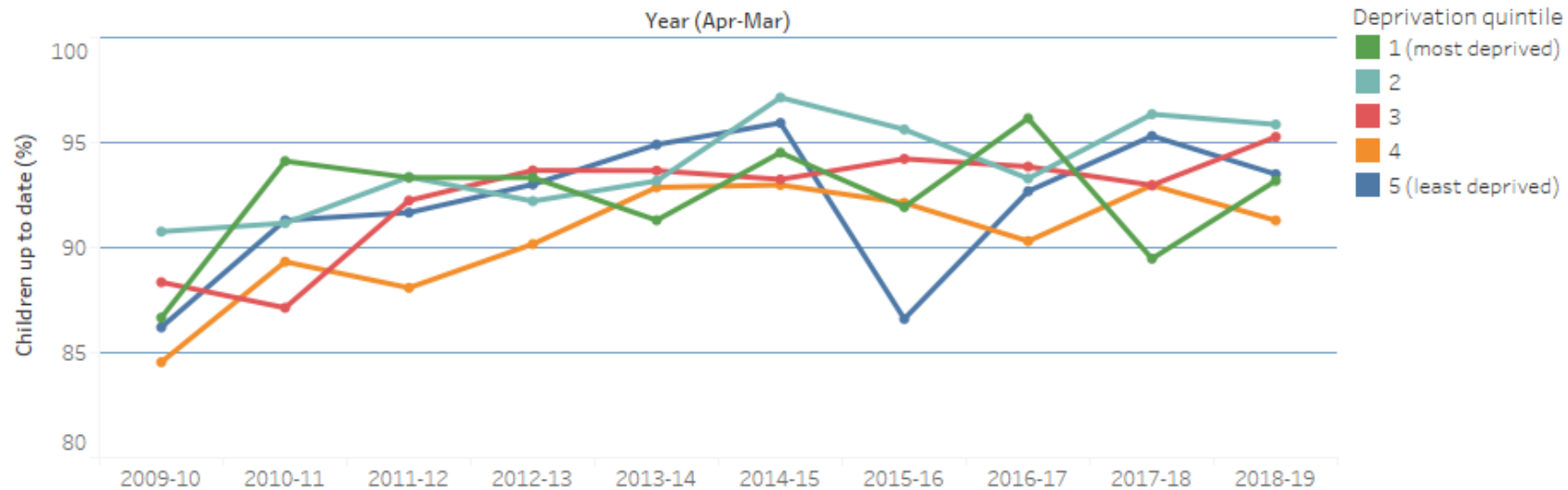


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The Proportion (%) of children up to date with routine immunisations by 2 years of age in
Powys Teaching HB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	13	15	86.7	226	249	90.8	220	249	88.4	487	576	84.5	150	174	86.2
2010-11	16	17	94.1	227	249	91.2	210	241	87.1	519	581	89.3	147	161	91.3
2011-12	14	15	93.3	211	226	93.4	214	232	92.2	525	596	88.1	154	168	91.7
2012-13	14	15	93.3	225	244	92.2	237	253	93.7	486	539	90.2	133	143	93.0
2013-14	21	23	91.3	232	249	93.2	207	221	93.7	547	589	92.9	149	157	94.9
2014-15	69	73	94.5	136	140	97.1	290	311	93.2	530	570	93.0	118	123	95.9
2015-16	57	62	91.9	153	160	95.6	261	277	94.2	515	559	92.1	97	112	86.6
2016-17	50	52	96.2	139	149	93.3	275	293	93.9	466	516	90.3	114	123	92.7
2017-18	51	57	89.5	132	137	96.4	238	256	93.0	542	583	93.0	122	128	95.3
2018-19	41	44	93.2	139	145	95.9	262	275	95.3	493	540	91.3	115	123	93.5

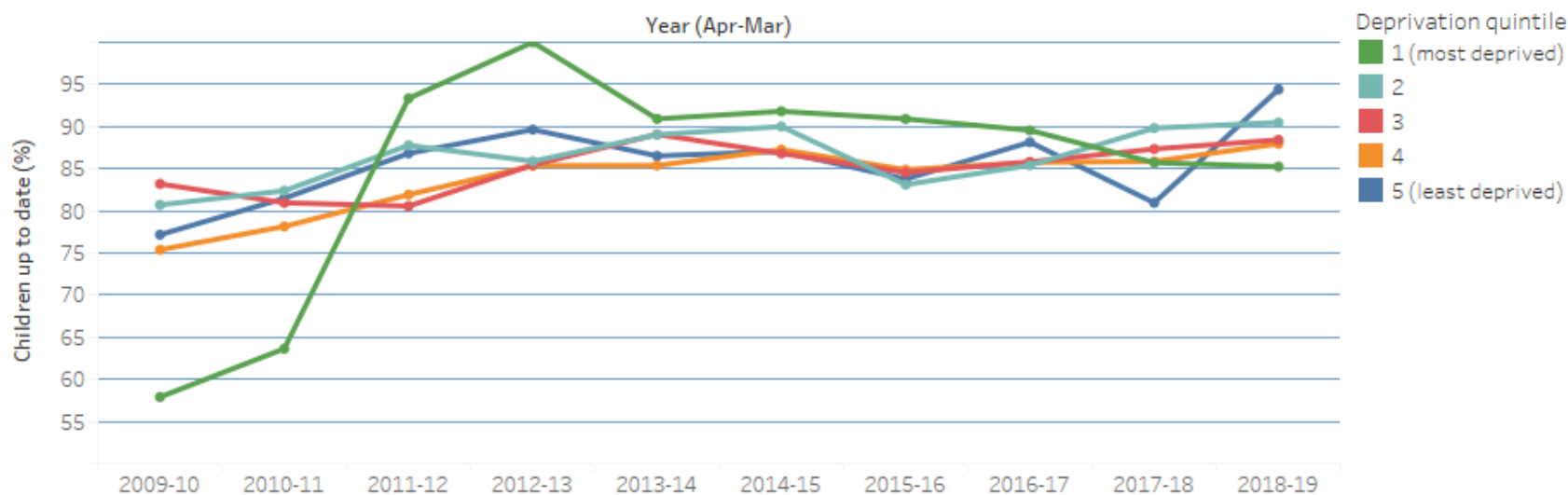


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The Proportion (%) of children up to date with routine immunisations by 4 years of age in
Powys Teaching HB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	11	19	57.9	184	228	80.7	193	232	83.2	453	601	75.4	125	162	77.2
2010-11	7	11	63.6	187	227	82.4	187	231	81.0	454	581	78.1	132	162	81.5
2011-12	14	15	93.3	201	229	87.8	203	252	80.6	489	597	81.9	158	182	86.8
2012-13	18	18	100.0	225	262	85.9	217	254	85.4	490	574	85.4	147	164	89.6
2013-14	10	11	90.9	203	228	89.0	220	247	89.1	508	595	85.4	154	178	86.5
2014-15	56	61	91.8	144	160	90.0	296	341	86.8	480	550	87.3	121	139	87.1
2015-16	70	77	90.9	123	148	83.1	268	317	84.5	494	582	84.9	98	117	83.8
2016-17	60	67	89.6	117	137	85.4	272	317	85.8	505	589	85.7	119	135	88.1
2017-18	48	56	85.7	141	157	89.8	262	300	87.3	504	587	85.9	102	126	81.0
2018-19	52	61	85.2	133	147	90.5	252	285	88.4	467	531	87.9	118	125	94.4

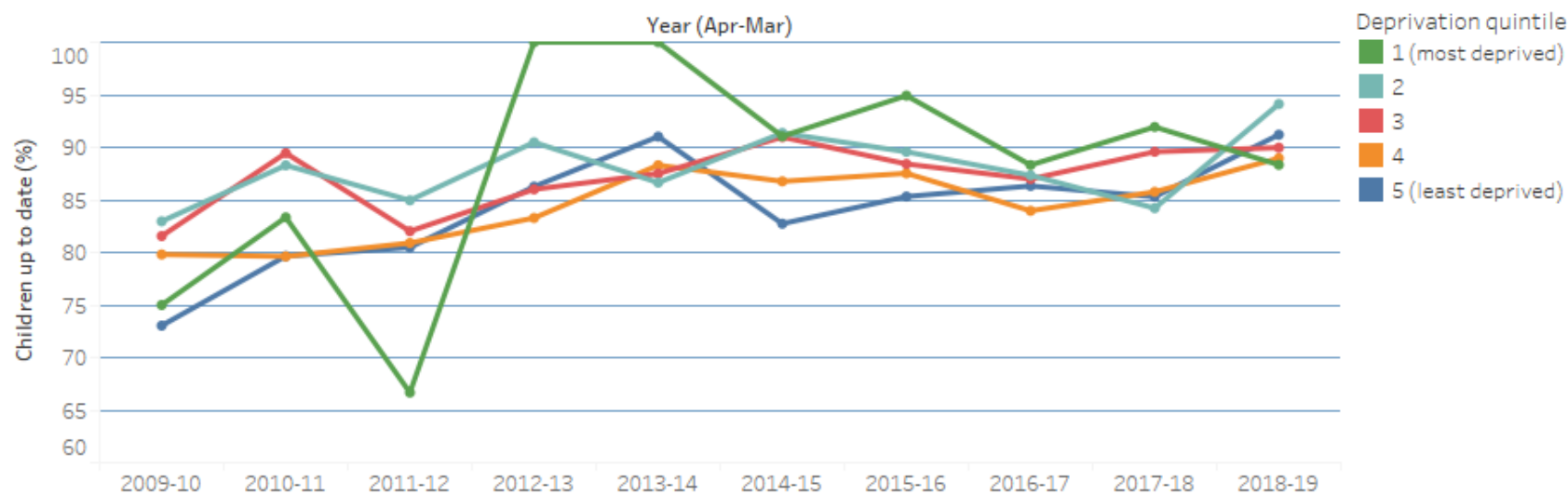


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The Proportion (%) of children up to date with routine immunisations by 5 years of age in
Powys Teaching HB



Year (Apr-Mar)	Deprivation quintile														
	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	9	12	75.0	185	223	83.0	199	244	81.6	486	609	79.8	130	178	73.0
2010-11	15	18	83.3	196	222	88.3	195	218	89.4	496	623	79.6	137	172	79.7
2011-12	8	12	66.7	192	226	85.0	187	228	82.0	487	602	80.9	136	169	80.5
2012-13	14	14	100.0	209	231	90.5	215	250	86.0	508	610	83.3	157	182	86.3
2013-14	13	13	100.0	227	262	86.6	224	256	87.5	513	581	88.3	152	167	91.0
2014-15	61	67	91.0	127	139	91.4	272	299	91.0	544	627	86.8	115	139	82.7
2015-16	56	59	94.9	146	163	89.6	290	328	88.4	491	561	87.5	122	143	85.3
2016-17	68	77	88.3	131	150	87.3	294	338	87.0	513	611	84.0	101	117	86.3
2017-18	57	62	91.9	112	133	84.2	275	307	89.6	530	618	85.8	116	136	85.3
2018-19	53	60	88.3	144	153	94.1	269	299	90.0	532	598	89.0	114	125	91.2

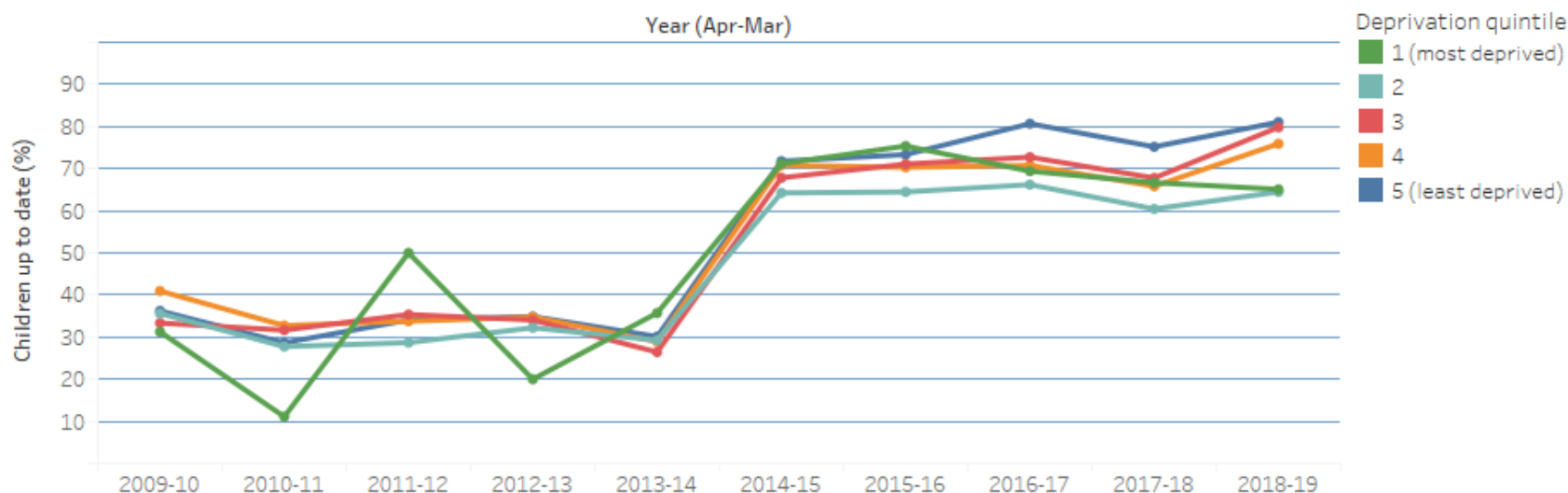


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The Proportion (%) of children up to date with routine immunisations by 15 years of age in
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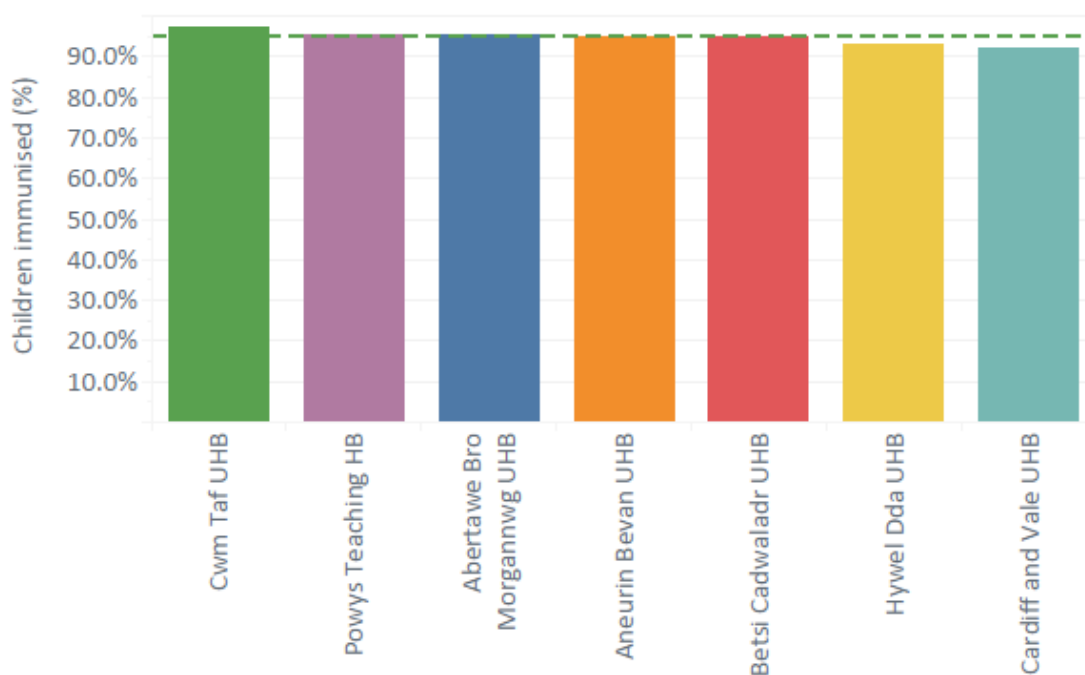


Year (Apr-Mar)	1 (most deprived)			2			3			4			5 (least deprived)		
	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)	Imm'd (n)	Children (n)	Coverage (%)
2009-10	5	16	31.3	78	219	35.6	91	273	33.3	321	784	40.9	71	196	36.2
2010-11	1	9	11.1	63	227	27.8	88	278	31.7	242	739	32.7	59	206	28.6
2011-12	4	8	50.0	66	230	28.7	93	263	35.4	259	767	33.8	77	226	34.1
2012-13	3	15	20.0	77	239	32.2	95	279	34.1	260	748	34.8	83	238	34.9
2013-14	5	14	35.7	67	229	29.3	69	261	26.4	209	723	28.9	72	239	30.1
2014-15	37	52	71.2	88	137	64.2	215	317	67.8	502	709	70.8	122	170	71.8
2015-16	52	69	75.4	98	152	64.5	231	325	71.1	450	640	70.3	121	165	73.3
2016-17	34	49	69.4	94	142	66.2	224	308	72.7	460	650	70.8	121	150	80.7
2017-18	36	54	66.7	84	139	60.4	223	329	67.8	437	664	65.8	103	137	75.2
2018-19	41	63	65.1	78	121	64.5	249	312	79.8	504	664	75.9	124	153	81.0

Appendix B – health board and LA level data 2018-19

Figure B1. Percentage of children who have completed routine immunisations by one year of age during 2018-19

Health Board level uptake (All routine) in children turning 1 year of age during 2018-19



LA level uptake (All routine) in children turning 1 year of age during 2018-19

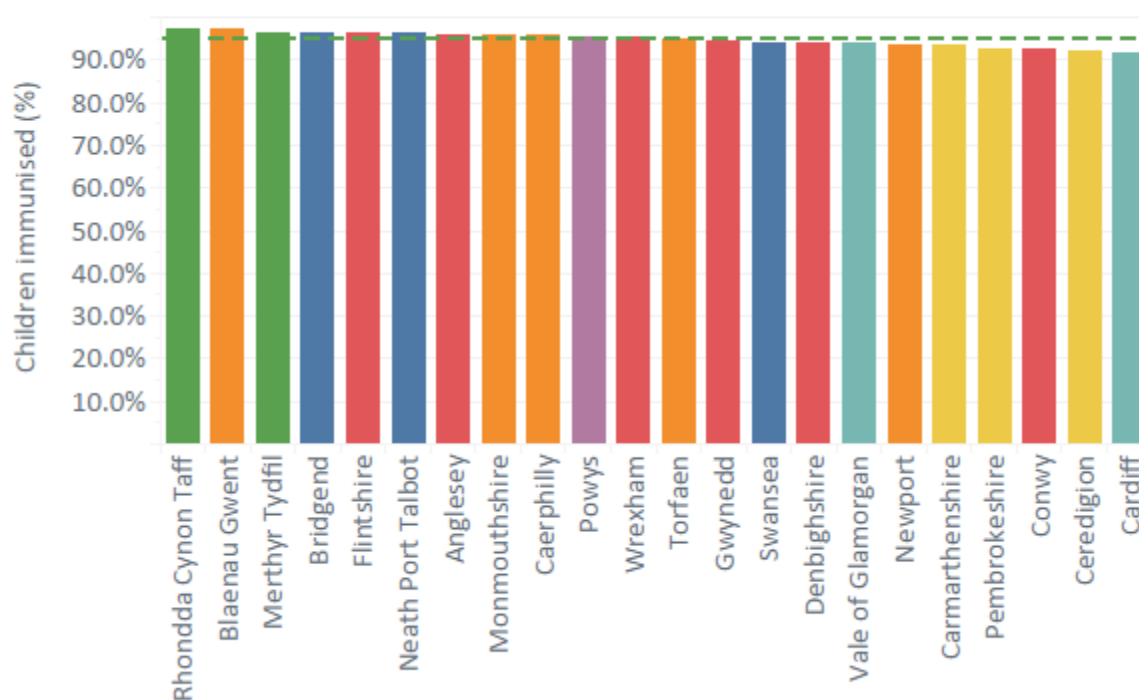
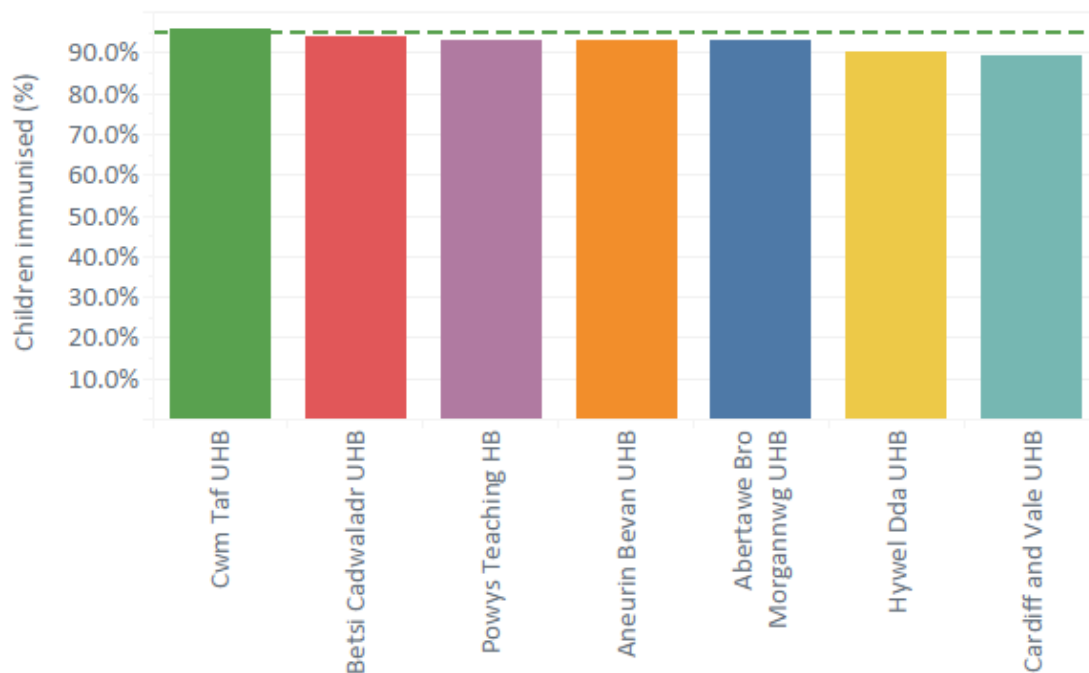


Figure B2. *Percentage of children who have completed routine immunisations by two years of age during 2018-19*

Health Board level uptake (All routine) in children turning 2 years of age during 2018-19



LA level uptake (All routine) in children turning 2 years of age during 2018-19

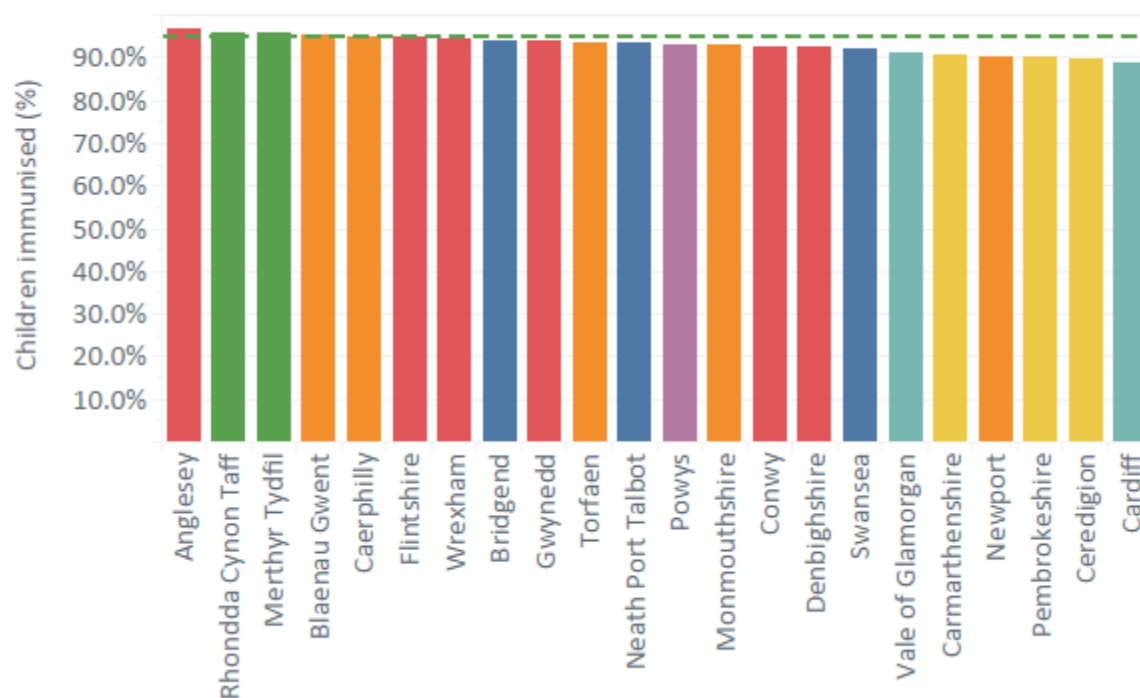
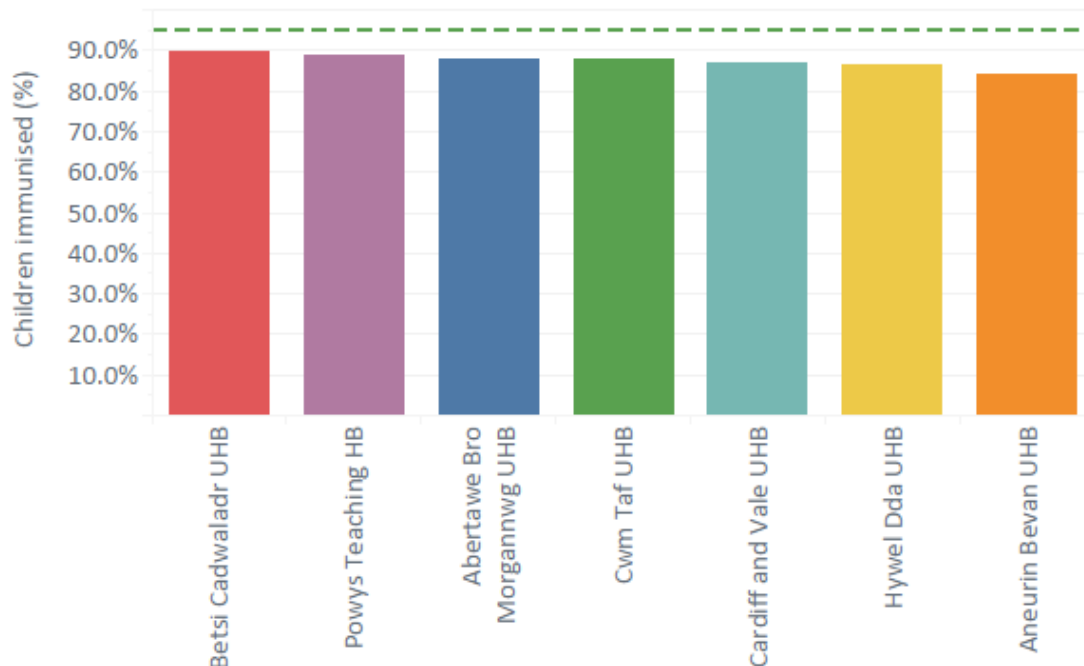


Figure B3. Percentage of children who have completed routine immunisations by four years of age during 2018-19

Health Board level uptake (All routine) in children turning 4 years of age during 2018-19



LA level uptake (All routine) in children turning 4 years of age during 2018-19

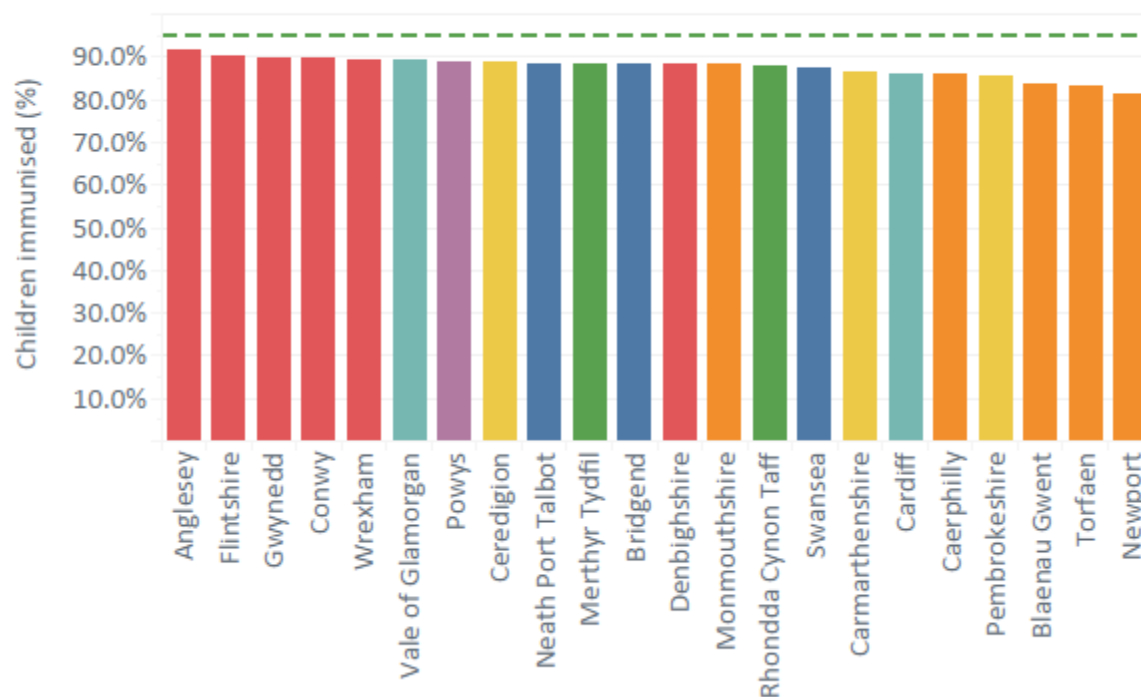
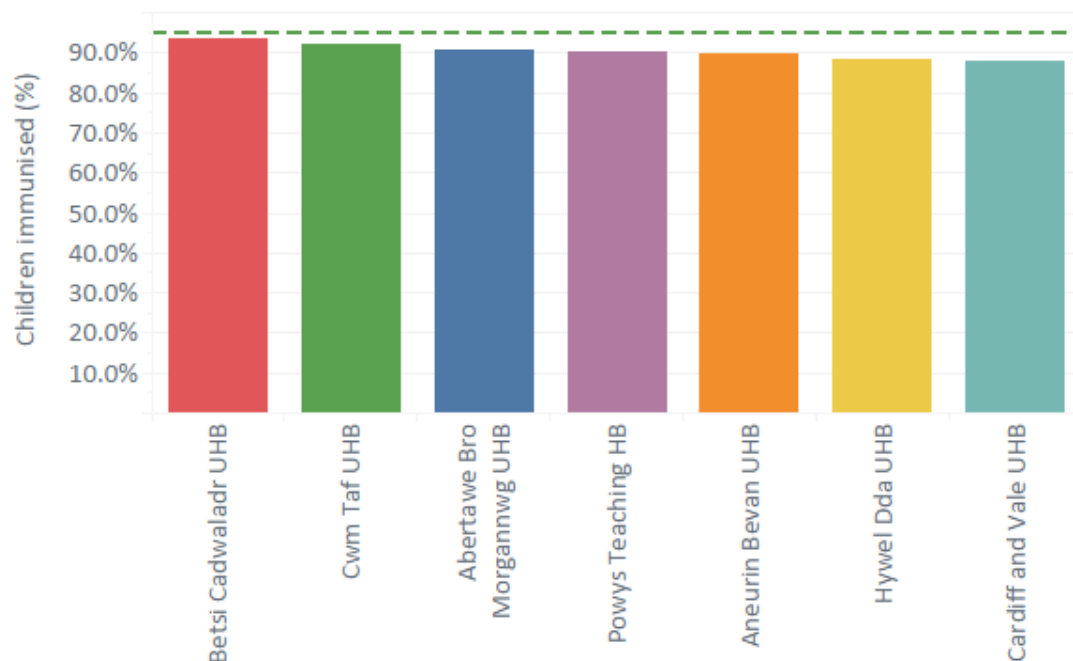


Figure B4. *Percentage of children who have completed routine immunisations by five years of age during 2018-19*

Health Board level uptake (All routine) in children turning 5 years of age during 2018-19



LA level uptake (All routine) in children turning 5 years of age during 2018-19

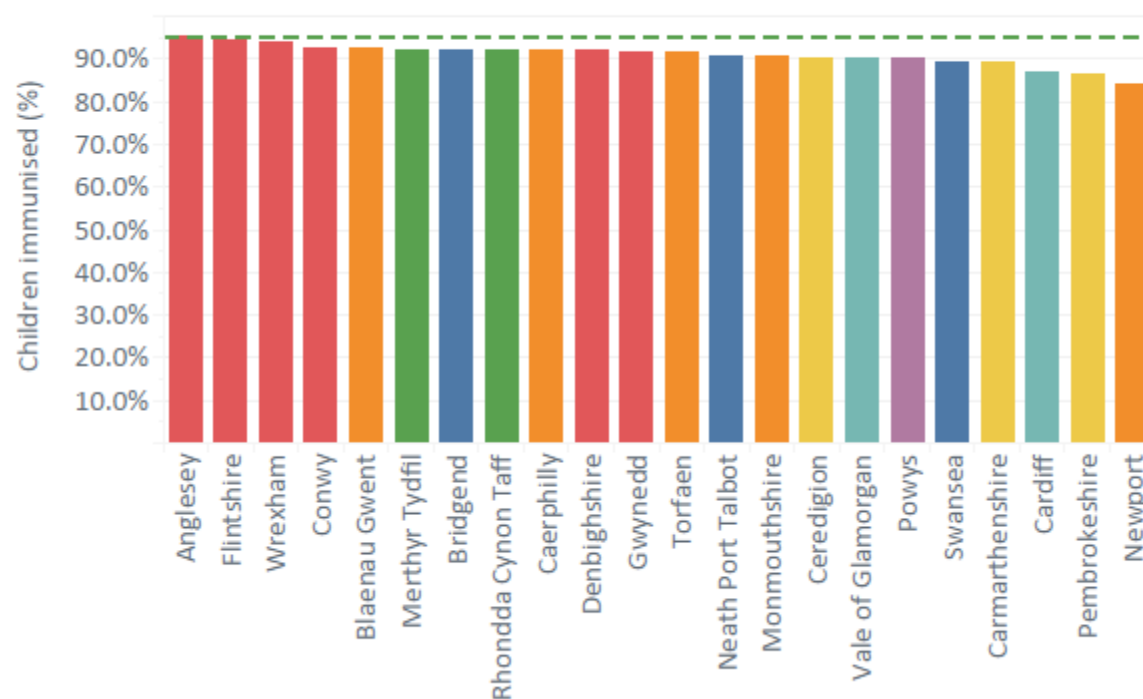
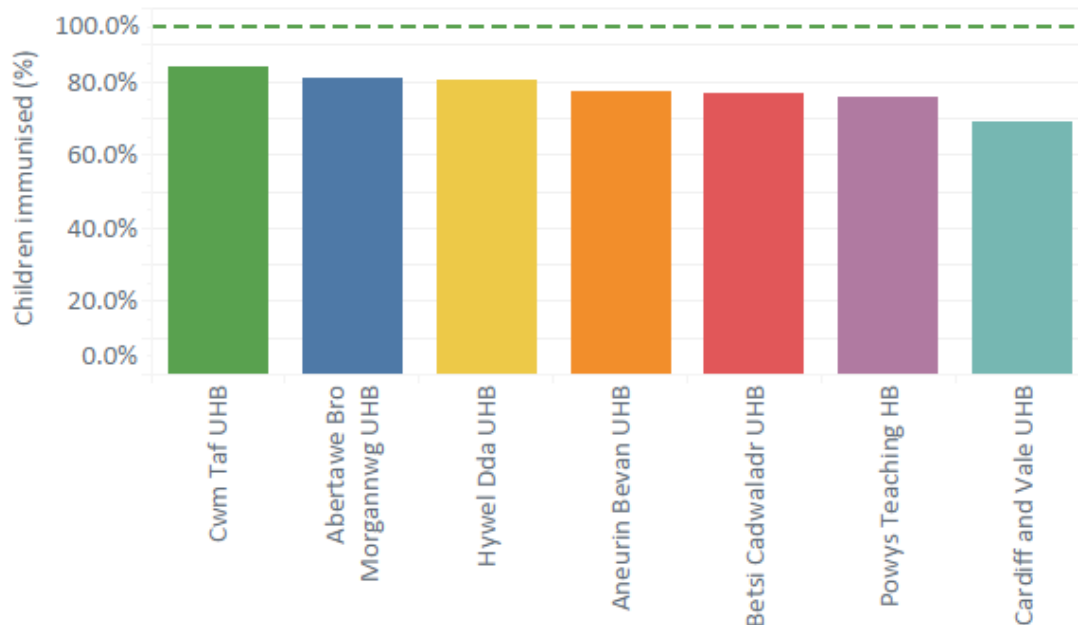
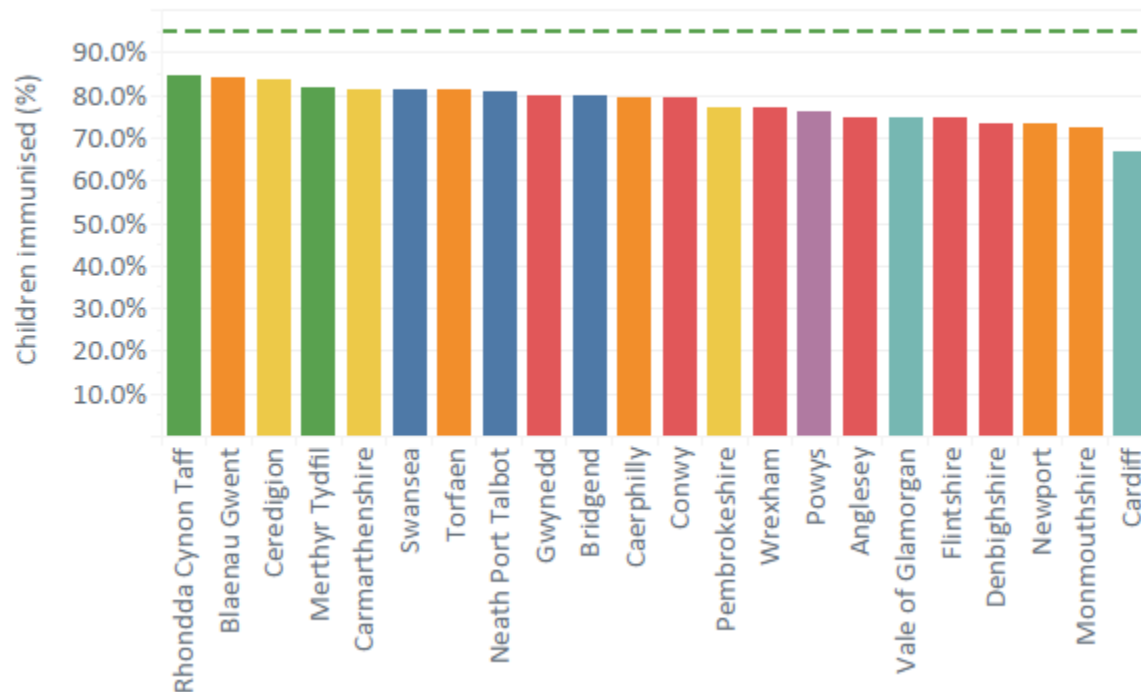


Figure B5. *Percentage of children who have completed routine immunisations by 15 years of age during 2018-19*

Health Board level uptake (All routine) in children turning 15 years of age during 2018-19



LA level uptake (All routine) in children turning 15 years of age during 2018-19



Appendix C – List of immunisation uptake resources produced by Public Health Wales VPDP and CDSC

- **Annual COVER reports** (including inequalities in immunisation coverage at four years of age): <http://nww.immunisation.wales.nhs.uk/annual-cover-reports>
- **Quarterly COVER reports**, including interactive tables, charts and maps at health board and local authority level: <http://nww.immunisation.wales.nhs.uk/quarterlycover>
- **GP and Cluster level COVER reports** for all health boards:
 - Abertawe Bro Morgannwg UHB: <http://nww.immunisation.wales.nhs.uk/abmu-gp-cluster-and-practice-level-data>
 - Aneurin Bevan UHB: <http://nww.immunisation.wales.nhs.uk/gp-cluster-and-practice-level-data-5>
 - Betsi Cadwaladr UHB: <http://nww.immunisation.wales.nhs.uk/gp-cluster-and-practice-level-data-7>
 - Cardiff and Vale UHB: <http://nww.immunisation.wales.nhs.uk/gp-cluster-and-practice-level-data-3>
 - Cwm Taf UHB: <http://nww.immunisation.wales.nhs.uk/gp-cluster-and-practice-level-data-9>
 - Hywel Dda UHB: <http://nww.immunisation.wales.nhs.uk/gp-cluster-and-practice-level-data-11>
 - Powys Teaching HB: <http://nww.immunisation.wales.nhs.uk/gp-cluster-and-practice-level-data-13>
- **Enhanced COVER reports**, including uptake figures for all ages between six month and four years (at three monthly intervals), for all health boards, at health board, LA and GP cluster level:
 - Abertawe Bro Morgannwg UHB: <http://nww.immunisation.wales.nhs.uk/abmu-hb-and-la-data>
 - Aneurin Bevan UHB: <http://nww.immunisation.wales.nhs.uk/hb-and-la-data-1>
 - Betsi Cadwaladr UHB: <http://nww.immunisation.wales.nhs.uk/hb-and-la-data-2>
 - Cardiff and Vale UHB: <http://nww.immunisation.wales.nhs.uk/hb-and-la-data>
 - Cwm Taf UHB: <http://nww.immunisation.wales.nhs.uk/hb-and-la-data-3>
 - Hywel Dda UHB: <http://nww.immunisation.wales.nhs.uk/hb-and-la-data-4>
 - Powys Teaching HB: <http://nww.immunisation.wales.nhs.uk/hb-and-la-data-5>
- **Maps showing geographical coverage of immunisations at middle super output area (MSOA) level for each health board:**
 - Abertawe Bro Morgannwg UHB: <http://nww.immunisation.wales.nhs.uk/abmu-msoa-maps>
 - Aneurin Bevan UHB: <http://nww.immunisation.wales.nhs.uk/ab-msoa-maps>
 - Betsi Cadwaladr UHB: <http://nww.immunisation.wales.nhs.uk/bc-msoa-maps>
 - Cardiff and Vale UHB: <http://nww.immunisation.wales.nhs.uk/cv-msoa-maps>
 - Cwm Taf UHB: <http://nww.immunisation.wales.nhs.uk/ct-msoa-maps>
 - Hywel Dda UHB: <http://nww.immunisation.wales.nhs.uk/hd-msoa-maps>



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- Powys Teaching HB: <http://nww.immunisation.wales.nhs.uk/powys-msoa-maps>
- Report timetable and background information about the COVER reporting scheme in Wales:
<http://nww.immunisation.wales.nhs.uk/what-is-cover--1>
- Annual MMR coverage in schools report, documenting current levels of MMR coverage in each school year group and progress made in catching-up through the school year:
<http://nww.immunisation.wales.nhs.uk/school-aged-mmr-coverage>