

Protecting and improving the nation's health

Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): July to September 2018

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This report summarises UK quarterly vaccine coverage data for each routine childhood vaccination for children who reached their first, second, or fifth birthday during the evaluation quarter. Analyses are presented at NHS England local team (April 2018 configuration) and devolved administration levels only.

Key points for the second quarterly report for 2018/19

- On-going issues with migrated GP data to the North East (NE) London Child Health Information System (CHIS) hub continues to affect coverage estimates for many of the local authorities reported by this hub. As a consequence, London and national coverage measurements are likely to be under-estimated this quarter.
- ➤ Due to the impact London data has on national figures, vaccine coverage for England excluding London has been calculated for this report. Comparison of trends data for the last three quarters in England, including and excluding London, for vaccines evaluated at 12 months, 24 months and five years show that, even after taking quality issues with London data into account, coverage is still decreasing, continuing the trend observed since 2012/13.
- ➤ In England (excluding London), vaccine coverage evaluated at the first birthday decreased by 0.1- 0.6% for all antigens compared with the previous quarter. Scotland, Wales and Northern Ireland also experienced small decreases in coverage for most antigens when measured at 12 months
- Scotland and Wales continue to achieve above 95% coverage for DTaP/IPV/Hib3, PCV2 and MenB2 at 12 months, and Northern Ireland achieved above 94% for each of these vaccines. Within England, only one of the 13 local teams, Cumbria and North East, achieved 95% coverage for these three vaccines, with North (Yorkshire & Humber) achieving above 94%
- ➤ In England (excluding London), vaccine coverage evaluated at five years of age was more stable and exceeded 95% for DTaP/IPV/Hib3 (96.2%) and MMR1 (95.7%). Even with known underestimation of coverage resulting from London data quality issues, all-England coverage for these antigens was above or close to 95% (95.5% and 94.7% respectively).

1. Cohort definitions for July to September 2018

Children who reached their first birthday in the quarter (born July to September 2017) were scheduled for three doses of combined diphtheria, tetanus, acellular pertussis, polio, and *Haemophilus influenzae* type b vaccine (DTaP/IPV/Hib vaccine) or DTaP/IPV/Hib/HepB vaccine (a hexavalent vaccine which also protects against hepatitis B) which replaced DTaP/IPV/Hib vaccine from autumn 2017 [1]. The third dose of priming vaccine would have been scheduled between November 2017 and January 2018. Children born July to September 2017 will also have been scheduled for two doses of pneumococcal conjugate vaccine (PCV), Meningococcal B vaccine (MenB), and rotavirus vaccine [2].

Children who reached their second birthday in the quarter (born July to September 2016) were scheduled to receive their third DTaP/IPV/Hib, second PCV, MenB and rotavirus vaccinations between November 2016 and January 2017, and their first measles, mumps, and rubella (MMR) vaccination, a booster dose of Hib and MenC (given as a combined Hib/MenC vaccine), MenB and PCV vaccines at the same visit at 12 months of age, between August to October 2017.

Children who reached their fifth birthday in the quarter (born July to September 2013) were scheduled to receive their third dose DTaP/IPV/Hib and second PCV and one or two MenC vaccinations (depending on month of birth) [3] between November 2013 and January 2014. They were also scheduled to receive their first MMR, Hib/MenC booster and PCV booster after their first birthday (July to September 2014) between August to October 2014, and their preschool diphtheria, tetanus, acellular pertussis, inactivated polio booster (DTaP/IPV) and second dose MMR from October 2016.

The change to a universal infant HepB programme from autumn 2017 applied to only some of the children evaluated in this quarter, depending on whether they were born before or after 1 August 2017. Those children born in July 2017 to hepatitis B surface antigen (HBsAg) positive mothers, who reached their first birthday in this quarter, were scheduled to receive an initial dose of monovalent hepatitis B vaccine at birth, with further doses at four and eight weeks of age as they will not have been scheduled to receive any hexavalent vaccine. Those born 1 August to 30 September 2017 should have received monovalent hepatitis B vaccine at birth and four weeks and then three doses of the hexavalent vaccine at eight, 12 and 16 weeks of age.

Those who reached their second birthday in this quarter (born July to September 2016) were scheduled to receive a fourth dose at one year of age.

Children born in areas where there is a universal neonatal BCG programme (i.e. TB incidence ≥40/100,000) who reached their first birthday in this quarter (born July to September 2017) were scheduled to receive BCG at birth.

Coverage evaluated at the first, second and fifth birthdays by country and new NHS England local teams (configuration as at 1 April 2018) are described in the appendix.

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2. Participation and data quality

Data were received from all Health Boards (HBs) in Scotland, Northern Ireland and Wales. In England, Local Teams (LTs) and Child Health Record Departments (CHRDs) provided data for all upper tier local authorities (LAs). Individual LA data including numerators, denominators, coverage and relevant caveats where applicable are available here.

Since April 2017, four CHIS hubs provide COVER data for the whole of London and the data submitted from these newly established hubs reflects a system in transition (see 3.1). The NE London hub reported data quality issues associated with a second phase of migrating data in July 2018 which resulted in decreases in London-level coverage estimates at 12 and 24 month and 5 year evaluations. Due to the impact London data has on national figures there were no national or UK level data published in the previous quarter [4]. Although data quality has improved, in particular for legacy data (figure 3), these issues have not been completely resolved and July to September 2018 quarter (Q2) data for London continues to be affected by complexities in data flows between providers and child health information systems, and inconsistencies in data coding.

Despite these ongoing data quality issues, England coverage data is provided this quarter and is known to be underestimated. However, in order to assess trends in coverage accounting for these issues, England data excluding London is also provided and compared to England (excluding London) in the previous quarter. These data are presented in tables 1-3 for the current and previous quarter, with a representative vaccine evaluated at 12 months, 24 months and five years displayed graphically in figures 1-3 for the current and previous two quarters (representing data for January through to September 2018).

There is low confidence in the data for one CCG within Lancashire, which is adversely affecting uptake across the area. Although data is improving, actions are on-going to provide resolution. Detailed caveats regarding any data quality issues for individual LA data are available here.

3. Developments in Immunisation data

3.1 NHS Digital Child Health Strategy

The new NHS England Healthy Children: Transforming Child Health Information strategy [5] aims to transform child health information services by making these systems interoperable, reducing the administrative burden of information recording and sharing. Part of this programme includes merging CHIS systems into local hubs that can provide COVER data for several LAs in one submission. Since April 2017 four CHIS Hubs are providing COVER data for all London boroughs. In England, the number of CHIS systems has decreased from over 100 in 2015 to around 70 by mid-2017. As different phases of the digital strategy are implemented across the country it is anticipated that there may be further temporary local data quality issues associated with transition (also see section 2 above).

3.2 NHS England South Reconfiguration – 1 April 2018

From last quarter the COVER report uses the new NHS England configurations that came into effect from 1 April 2018, and has ceased to provide former Area Team tabulations for historical comparisons.

The South of England Commissioning Region (Y57) split into two new Commissioning Regions with each having two new NHS England Local Teams:

South West Commissioning Region (Y58)

NHS England South West (South West South) (Q85) NHS England South West (South West North) (Q86)

South East Commissioning Region (Y59)

NHS England South East (Hampshire, Isle of Wight and Thames Valley) (Q87) NHS England South East (Kent, Surrey and Sussex) (Q88)

Full details can be found here.

3.3 Changes to COVER data tables and new figures

From the April to June 2018 quarter (Q1 2018-19) the format of the COVER report and its associated data tables for England has changed in line with the April 2018 NHS England configurations (see above) [4]. Tables that included data for former Area Teams have been removed.

New for the July to September 2018 quarter is an additional line in tables 1-3 showing 'England (excluding London)' and selected graphical comparisons of these data with 'total England' data evaluated at 12 month, 24 month and five years in figures 1-3 (see section 2 above for details).

Additionally, to align the COVER data tables with the annual childhood vaccination coverage statistics publication these now also include numerator data, alongside denominators, coverage and relevant caveats where applicable.

4. Results

National and UK-level coverage data were not published for the last quarter [5]. Due to the ongoing data quality issues resulting in some under-estimation of coverage in London the current quarter has also been analysed for England excluding London (see section 2 above).

4.1 Coverage at 12 months

Due to the impact London data has on national figures, vaccine coverage estimates for England excluding London have been calculated for this report. Comparison of trends data for the last three quarters in England, including and excluding London, for vaccines evaluated at 12 months show that after taking in consideration quality issues with London data which account for most

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of the decline seen this quarter, coverage is still decreasing, continuing the trend observed since 2012/13. In England (excluding London), vaccine coverage evaluated at the first birthday decreased by 0.1- 0.6% for all antigens compared with the previous quarter (table 1). Figure 1 shows coverage in England (including and excluding London) for DTaP/IPV/Hib3 at 12 months of age.

Scotland and Wales continue to achieve above 95% coverage for DTaP/IPV/Hib(HepB)3, PCV2 and MenB2 at 12 months, and Northern Ireland achieved above 94% for each of these vaccines. In England, only one of the 13 local teams, Cumbria and North East, achieved 95% coverage for these three vaccines, with North (Yorkshire & Humber) achieving above 94% (table 1). However, Scotland, experienced small decreases in coverage for all antigens, and Wales and Northern Ireland for some, compared with the previous quarter when measured at 12 months.

4.2 Coverage at 24 months

London data quality issues also affected coverage at 24 months, and national figures including London are therefore known to be underestimated. When London was excluded, coverage in England decreased between 0.1 and 0.5% for DTaP/IPV/Hib3, PCV booster, Hib/MenC booster and MMR1, and increased by 0.2% for the MenB booster. Figure 2 shows MMR1 in England (including and excluding London) measured at 24 months.

Quarterly coverage for DTaP/IPV/Hib3 evaluated at two years of age in Scotland and Northern Ireland was above 97%, with PCV and Hib/MenC boosters and MMR1 exceeding 93% in all the devolved administrations (table 2) [4]. In England, nine of 13 local teams achieved above 95% for DTaP/IPV/Hib3, and three exceeded 93% coverage for PCV, Hib/MenC and MMR2. Northern Ireland reported increased coverage for all vaccines evaluated at 24 months of age, compared to the previous quarter [4].

MenB booster coverage, reported for the fourth time, ranged from 93.7% in Northern Ireland to 94.2% in Scotland. In England, MenB booster coverage achieved at least 90% in eight of 13 local teams.

4.3 Coverage at five years

Analysis of coverage trends for England as a whole over the most recent three quarters (January through to September 2018) evaluated at five years show that after excluding London, coverage was relatively stable (table 3). Therefore the decline seen over the time period can be attributed to London data. Figure 3 shows MMR1 coverage for England (including and excluding London) measured at five years.

Coverage for the three devolved administrations continued to exceed the 95% WHO target for MMR1 and Scotland and Northern Ireland achieved 95% coverage for DTaP/IPV/Hib3. In England, even with known underestimation of coverage resulting from London data quality issues, coverage for these antigens was above or close to 95% (95.5% for DTaP/IPV/Hib3 and 94.7% for MMR1). Coverage at five years for these vaccines primarily reflects children vaccinated four years ago.

Both MMR2 and pre-school booster (DTaP/IPV) coverage was at least 90% in Scotland and Northern Ireland, but only one English local team reached this level for both (table 3) [4].

4.4 Neonatal hepatitis B vaccine coverage in England

Vaccine coverage data in England for three doses of hepatitis B vaccine, in infants born to hepatitis B surface antigen (HBsAg) positive mothers, who reached the age of one year in this quarter (i.e. those born between April to June 2017), and coverage of four doses of vaccine in infants who reached two years of age (i.e. those born between April to June 2016) are presented by local team in table 4. The quality of these data is variable and coverage by former local team relies on small numbers. As such, data should be interpreted with caution. Where an area reported no vaccinated children, a check was made to ensure that this was zero reporting rather than absence of available data.

Data for London is not available this quarter (see Section 2 above) and national coverage has not been calculated. From the July to September 2018 quarter, COVER will start to report coverage on babies receiving five doses of HepB-containing vaccine by the age of one year (i.e. those born July to September 2017; only those born from 1 August will have been offered five doses) although full data will not be available until the October to December 2018 quarter. Likewise, six doses by the age of two years will start to be evaluated from the July to September 2019 quarter evaluation.

5. Relevant links for country-specific coverage data

Quarterly England data: https://www.gov.uk/government/collections/vaccine-uptake#cover-of-vaccination-evaluated-rapidly-programme

Annual England data: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-immunisation-statistics

Quarterly Northern Ireland: http://www.publichealthagency.org/directorate-publichealth/health-protection/vaccination-coverage

Scotland: http://www.isdscotland.org/Health-Topics/Child-Health/Immunisation/

Wales: http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=54144/

COVER submission and publication dates:

https://www.gov.uk/government/publications/vaccine-coverage-statistics-publication-dates

Other relevant links

https://www.gov.uk/government/collections/immunisation

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6. References

- 1. Public Health England. Hexavalent combination vaccine: routine programme guidance. https://www.gov.uk/government/publications/hexavalent-combination-vaccine-programme-quidance
- 2. Public Health England. The complete routine immunisation schedule. https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule
- 3. Public Health England (2014). Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): January to March 2014. *HPR* **8**(25). Available at https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2013-to-2014-quarterly-figures
- 4. Public Health England (2018). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, April to June 2018. *HPR* **12**(35). Available at https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2018-to-2019-quarterly-data
- Public Health England (2018). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, January to March 2018. HPR 12(23). Available at https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-coverprogramme-2017-to-2018-quarterly-data
- 6. NHS England. Digital Child Health Transformation Programme. https://www.england.nhs.uk/digital technology/child-health/

Appendix: Tables

Table 1. Completed UK primary immunisations at 12 months by country and England local team: July to September 2018 (*April to June 2018*)

Table 2. Completed UK primary immunisations at 24 months by country and NHS England local team: July to September 2018 (*April to June 2018*)

Table 3. Completed UK primary immunisations and boosters at five years by country and NHS England local team: July to September 2018 (*April to June 2018*)

Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHS England Area Team: July to September 2018 (*April to June 2018*)

Table 5. BCG vaccine coverage at 12 months in English local authorities with TB incidence ≥40 per 100,000 and offering a universal programme: July to September 2018 (*April to June 2018*)

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Appendix

Table 1. Completed UK primary immunisations at 12 months by country and English Local Teams¹: July to September 2018 (*April to June 2018*)

	Country	No. of LAs/HBs [†]	DTaP/IPV/Hib(HepB)3% ³	PCV2%	Rota2%	MenB2%
	United Kingdom ²	177	92.1 (n/a)	92.6 (<i>n/a)</i>	89.7 (n/a)	92.4 (<i>n/a</i>)
	Wales	7	95.3 (95.5)	95.6 (<i>95.5</i>)	93.7 (94.1)	95.4 (95.2)
	Northern Ireland	4	94.5 (94.0)	94.9 (<i>95.4</i>)	92.3 (93.5)	94.7 (95.1)
	Scotland	14	95.7 (96.1)	96.2 (<i>96.5</i>)	92.4 (93.5)	95.5 (<i>95.9</i>)
	England ²	152	91.6 (<i>n/a)</i>	92.1 (<i>n/a</i>)	89.1 <i>(n/a)</i>	91.9 (<i>n/a</i>)
	England (excluding London)	119	93.0 (93.2)	93.3 (93.6)	90.3 (90.9)	93.4 (93.5)
LT code	NHS England Local Teams ¹					
Q71	London	33	85.5 (86.3)	87.0 (87.2)	84.1 (<i>84.7</i>)	86.0 (86.1)
Q72	North (Yorkshire & Humber)	15	94.2 (94.2)	94.5 (94.4)	91.7 (92.2)	94.3 (94.2)
Q73	North (Lancashire & Grt. Manchester)	13	91.1 (88.2)	89.8 (87.9)	87.9 (84.6)	92.4 (89.3)
Q74	North (Cumbria & North East)	13	96.0 (95.8)	96.0 (95.9)	94.2 (94.5)	95.7 (<i>95.7</i>)
Q75	North (Cheshire & Merseyside)	9	91.8 (93.2)	93.4 (<i>94.3</i>)	88.7 (91.8)	94.3 (94.6)
Q76	Midlands & East (North Midlands)	8	93.4 (94.7)	93.9 (95.1)	91.7 (93.0)	93.7 (94.3)
Q77	Midlands & East (West Midlands)	10	90.9 (92.6)	92.0 (93.0)	86.8 (88.5)	91.3 (92.4)
Q78	Midlands & East (Central Midlands)	10	92.9 (93.2)	93.8 (94.0)	90.9 (91.2)	93.6 (93.6)
Q79	Midlands & East (East)	7	93.5 (94.3)	94.1 (<i>94.6</i>)	91.6 (<i>91.8</i>)	93.8 (94.2)
Q85	South West (South West South)	9	93.8 (94.2)	94.4 (94.6)	90.9 (91.6)	94.1 (94.3)
Q86	South West (South West North)	7	93.2 (94.4)	93.9 (94.7)	91.5 (92.1)	93.5 <i>(94.5</i>)
Q87	South East (Hampshire, Isle of Wight and Thames Valley)	12	93.3 (94.7)	94.0 (94.9)	91.1 (92.5)	93.2 <i>(94.3</i>)
Q88	South East (Kent, Surrey and Sussex)	6	93.3 (91.6)	92.0 (92.5)	88.6 (90.2)	91.9 <i>(92.4</i>)

 $^{^{\}dagger}$ Local Authorities /Health Boards.

¹ April 2018 configuration of NHS England Local Teams

² Data quality issues associated with data migration to the NE London CHIS hub has affected many of the LAs resulting in London coverage be significantly under-estimated this quarter.

³ some children in this birth cohort will have received only DTaP/IPV/Hib vaccine, others only DTaP/IPV/Hib/HepB vaccine, and some a combination of both vaccines

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Table 2. Completed UK primary immunisations at 24 months by country and NHS England local team¹: July to September 2018 (*April to June 2018*)

Country	No. of LAs/ HBs [†]	DTaP/IPV/Hib3%	PCV booster%	Hib/MenC booster%	MMR1%	MenB booster%
United Kingdom ²	177	94.9 (<i>n/a</i>)	90.7 (<i>n/a</i>)	90.8 (<i>n/a</i>)	90.5 (<i>n/a)</i>	88.7 (<i>n/a</i>)
Wales	7	96.9 (97.1)	95.0 (<i>95.2</i>)	94.4 (<i>94.7</i>)	94.5 (94.9)	94.1 (94.3)
Northern Ireland	4	97.4 (97.3)	94.1 (93.7)	93.9 (93.6)	93.6 (93.4)	93.7 (93.3)
Scotland	14	97.6 (<i>97.5</i>)	95.0 (<i>95.3</i>)	95.0 (95.1)	94.3 (94.5)	94.2 (94.3)
England ²	152	94.4 (<i>n/a</i>)	90.0 (<i>n/a)</i>	90.2 (<i>n/a</i>)	89.9 (<i>n/a)</i>	87.7 (<i>n/a</i>)
England (excl. London)	119	95.4 (95.6)	92.0 (92.5)	92.2 (92.7)	91.9 (92.4)	89.9 (89.7)
NHS England local teams*						
Q71	33	90.5 (89.9)	81.3 (<i>81.8</i>)	81.8 (82.2)	81.2 (<i>81.6</i>)	78.4 (78.9)
Q72	15	95.7 (96.0)	93.4 (93.7)	93.3 (93.7)	93.0 (93. <i>4</i>)	91.9 (91.8)
Q73	13	94.4 (94.5)	91.3 (<i>91.4</i>)	92.0 (<i>92.0</i>)	91.8 (92.0)	87.6 (83.4)
Q74	12	96.3 (<i>97.5</i>)	94.1 (95.2)	94.1 (95.0)	93.9 (94.6)	91.5 (92.9)
Q75	9	95.9 (<i>96.4</i>)	92.2 (93.9)	92.3 (94.0)	92.1 (93 <i>.5</i>)	91.7 (94.5)
Q76	8	96.3 (96.5)	93.0 (<i>93.0</i>)	92.8 (92.9)	92.8 (92.8)	91.2 (90.9)
Q77	10	93.9 (94.7)	89.7 (90.5)	89.5 (91.0)	89.6 (90.5)	87.7 (90.4)
Q78	10	95.3 (<i>95.6</i>)	92.0 (92.6)	92.4 (92.9)	91.8 (92.3)	90.2 (90.0)
Q79	7	95.4 (<i>95.5</i>)	92.2 (92.4)	92.2 (92.4)	91.7 (91.9)	90.3 (90.4)
Q85	9	96.0 (<i>96.6</i>)	92.6 (93.9)	92.7 (93.7)	92.7 (93.5)	91.8 (93.1)
Q86	7	96.0 (96.1)	93.3 (93.2)	93.2 (93.3)	93.0 (92.9)	92.3 (92.0)
Q87	12	97.0 (<i>96.4</i>)	91.8 (92.6)	92.0 (92.8)	91.8 (92.7)	88.5 (88.0)
Q88	6	93.8 (93.8)	90.4 (90.3)	90.6 (<i>90.5</i>)	90.4 (90.2)	87.8 (86.7)

[†] Local Authorities/Health Boards

^{*} See table 1 for key to local team organisational code

¹ April 2018 configuration

² Data quality issues associated with data migration to the NE London CHIS hub has affected many of the LAs resulting in London coverage be significantly under-estimated this quarter.

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Table 3. Completed UK primary immunisations and boosters at five years by country and NHS England local team¹: July to September 2018 (*April to June 2018*)

	Number of LAs/HBs [†]	Primary		Booster		
Country		DTaP/IPV/ Hib3%	MMR1%	MMR2%	DTaP/IPV%	Hib/MenC%
United Kingdom ²	177	95.6 (<i>n/a</i>)	95.0 (<i>n/a)</i>	87.1 (<i>n/a</i>)	86.1 (<i>n/a</i>)	93.1 (<i>n/a</i>)
Wales	7	93.3 (93.3)	96.6 (<i>96.7</i>)	89.5 (<i>89.7</i>)	92.5 (92.6)	93.0 (92.7)
N. Ireland	4	97.3 (97.5)	96.7 (97.1)	91.5 (92.1)	92.2 (92.6)	95.9 (96.1)
Scotland	14	97.9 (<i>98.0</i>)	97.0 (96.9)	91.7 (91.1)	92.1 (91.6)	96.2 (95.9)
England ²	152	95.5 (<i>n/a</i>)	94.7 (<i>n/a</i>)	86.4 (<i>n/a</i>)	85.0 (<i>n/a</i>)	92.7 (<i>n/a)</i>
England (excl. London)	119	96.2 (96.2)	95.7 (95.8)	88.9 (89.2)	87.9 (87.8)	93.8 (93.8)
English Local Teams						
Q71	33	92.0 (<i>89.0</i>)	90.2 (87.5)	74.8 (72.2)	71.8 (69.2)	87.7 (84.9)
Q72	15	96.5 (96.3)	96.1 (<i>96.3</i>)	90.4 (90.3)	89.2 (89.3)	93.6 (94.2)
Q73	13	94.9 (95.2)	95.3 (95.2)	88.0 (<i>88.0</i>)	87.5 (87.2)	93.9 (93. <i>4</i>)
Q74	13	97.4 (98.1)	97.0 (<i>97.7</i>)	92.2 (92.5)	91.1 (9 <i>1.4</i>)	95.5 (96.0)
Q75	9	96.4 (<i>96.5</i>)	96.0 (96.1)	89.4 (90.1)	90.0 (90.2)	94.1 (93.6)
Q76	8	97.4 (97.2)	96.8 (<i>96.8</i>)	89.0 (89.1)	88.1 (88.2)	94.9 (94.7)
Q77	10	96.3 (96.5)	95.9 (<i>95.9)</i>	86.8 (87.8)	85.5 (86.7)	94.5 (94.2)
Q78	10	96.5 (<i>96.6</i>)	96.0 (<i>96.2)</i>	89.4 (90.0)	87.4 (88.1)	94.0 (94.2)
Q79	7	96.2 (<i>96.6</i>)	95.3 (96.1)	87.8 (88.3)	86.7 (<i>86.7</i>)	93.1 (93.8)
Q85	9	97.2 (<i>97.4</i>)	96.3 (96.2)	90.8 (91.6)	89.6 (90.3)	94.8 (95.8)
Q86	7	97.1 (96.8)	96.2 (<i>96.0</i>)	89.6 (90.3)	88.8 (89.5)	95.2 (95.3)
Q87	12	96.6 (96.7)	95.3 (95.4)	88.8 (88.7)	86.0 (85.7)	93.4 (93.5)
Q88	6	93.8 (<i>92.8</i>)	93.4 (92.8)	87.4 (86.9)	87.6 (83.9)	90.4 (89.6)

^{*} See table 1 for key to NHS England local team organisational code.

¹ April 2018 configuration

² Data quality issues associated with data migration to the NE London CHIS hub has affected many of the LAs resulting in London coverage be significantly under-estimated this quarter.

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Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHS England Local Team: July to September 2018 (April to June 2018)

NHS England Local Team Code*	LA returns with 12 month data	12 month deno- minator	% Coverage at 12 months ²	LA returns with 24 month data	24 month deno- minator	% Coverage at 24 months
Q71 ¹	32 of 33	232	82 (<i>n/a</i>)	32 of 33	n/a	n/a (<i>n/a</i>)
Q72	15 of 15	35	83 (96)	15 of 15	48	81 (<i>90</i>)
Q73	10 of 13	205	27 (25)	10 of 13	93	28 (25)
Q74	12 of 13	3	67 (100)	12 of 13	9	89 (100)
Q75	6 of 9	6	100 (<i>17</i>)	6 of 9	7	71 (63)
Q76	8 of 8	19	95 (100)	8 of 8	30	93 (89)
Q77	10 of 10	63	94 (100)	10 of 10	50	98 (100)
Q78	10 of 10	52	75 (82)	10 of 10	42	90 (86)
Q79	7 of 7	35	71 (93)	7 of 7	26	81 <i>(87</i>)
Q85	9 of 9	9	89 (100)	9 of 9	11	91 (<i>100</i>)
Q86	7 of 7	20	95 (100)	7 of 7	18	100 (83)
Q87	12 of 12	54	96 (100)	12 of 12	34	94 (98)
Q88	6 of 6	21	71 (96)	6 of 6	35	94 (100)
England ¹	144 of 152	754	69 (<i>n/a</i>)	144 of 152	n/a	n/a (<i>n/a</i>)

^{*} See table 1 for key to NHS England Local Team organisational code

Table 5. BCG vaccine coverage at 12 months in English local authorities with TB incidence ≥40 per 100,000 and offering a universal programme: July to September 2018 (*April to June 2018*)

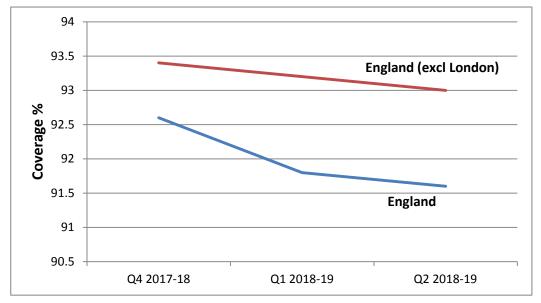
Upper tier Local Authority	Three-year average (2014-16) annual TB rate per 100,000	Number of eligible children (1st birthday in Jul to Sep 2018)	Universal BCG coverage% (previous quarterly estimate)
Newham	69.0	1505	72.1 (65.1)
Brent	57.8	1256	37.4 (25.6)
Hounslow	47.5	1075	49.6 (55.8)
Ealing	47.3	1339	43.9 (43.4)
Slough	41.8		No universal programme
Redbridge	41.5	1207	66.4 (54.1)

¹ The new established CHIS Hubs in London only provided data for all babies vaccinated with HepB vaccine and not just those born to HepB positive mothers and therefore these data were excluded from the analysis. For the current quarter London coverage data has been excluded for the 24 month birth cohort as data migrated from legacy systems has only provided partial data for those born before 1 April 2017 to HepB positive mothers, resulting in a significant reduction in this denominator.

² This 12 month cohort includes babies offered HepB-containing vaccine under two different schedules. Those born before 1 August should have received three doses of monovalent vaccine at birth, 4 and 8 weeks; those born after will have been offered monovalent vaccine at birth and 4 weeks, and then three doses of hexavalent vaccine (see section 1 for full explanation).

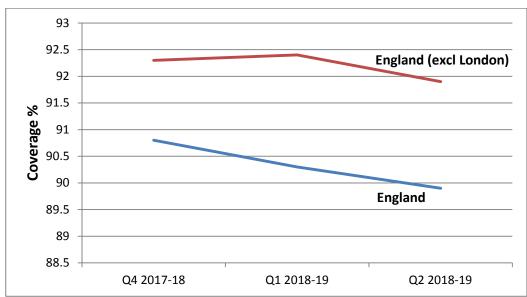
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Figure 1. DTaPIPVHib3 coverage at 12 months for England (including and excluding London): Q4 (Jan to Mar 2018), Q1 (Apr to Jun 2018) and Q2 (Jul to Sep 2018)



Note: England coverage for quarter 1 is estimated and does not represent official coverage.

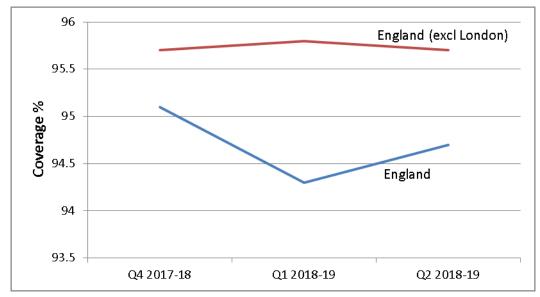
Figure 2. MMR1 coverage at 24 months for England (including and excluding London): Q4 (Jan to Mar 2018), Q1 (Apr to Jun 2018) and Q2 (Jul to Sep 2018)



Note: England coverage for quarter 1 is estimated and does not represent official coverage.

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Figure 3. MMR1 coverage at 5 years for England (including and excluding London): Q4 (Jan to Mar 2018), Q1 (Apr to Jun 2018) and Q2 (Jul to Sep 2018)



Note: England coverage for quarter 1 is estimated and does not represent official coverage.