



Public Health
England

Protecting and improving the nation's health

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

Health Protection Report
Volume 12 Number 23
29 June 2018

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

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 and area team, country and UK levels.

Key points for the fourth quarterly report for 2017/18

- This quarter UK vaccine coverage evaluated at the first birthday decreased by at least 0.5% for all vaccines, except rotavirus, offered in the first year of life compared to the previous quarter. These are the lowest quarterly figures recorded for DTaP/IPV/Hib3 (93.1%) and PCV2 (93.3%) since the April to June 2009 quarter
- This report includes the UK second evaluation of MenB booster coverage at 24 months, which increased 0.4% to 88.8%. UK coverage of all other vaccines evaluated at the second birthday decreased between 0.1% and 0.2%
- A similar downward trend was observed for UK coverage of the three vaccines offered shortly after the third birthday and evaluated at the fifth birthday. The pre-school (DTaP/IPV) and Hib/MenC boosters declined by 0.5% and 0.2% to 86.4% and 93% respectively and MMR2 declined by 0.3% 87.7%.
- UK coverage of DTaP/IPV/Hib3 and MMR1 at five years continued to exceed the 95% WHO target at 95.8% and 95.3% respectively

1. Cohort definitions for January to March 2018

Children who reached their first birthday in the quarter (born January to March 2017) were scheduled for three doses of the combined diphtheria, tetanus, acellular pertussis, polio, and *Haemophilus influenzae* type b vaccine (DTaP/IPV/Hib vaccine), and two doses of pneumococcal conjugate vaccine (PCV), Meningococcal B vaccine (MenB), and rotavirus vaccine [1].

Children who reached their second birthday in the quarter (born January to March 2016) were scheduled to receive their third DTaP/IPV/Hib, second PCV, MenB and rotavirus vaccinations between May and July 2016, 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 February and April 2017.

Children who reached their fifth birthday in the quarter (born January to March 2013) were scheduled to receive their third dose DTaP/IPV/Hib and second PCV and either one or two MenC vaccinations (depending on month of birth) [2] between May and July 2013. They were also scheduled to receive their first MMR, Hib/MenC booster and PCV booster after their first birthday (January to March 2014) between February and April 2014, and their pre-school diphtheria, tetanus, acellular pertussis, inactivated polio booster (DTaP/IPV) and second dose MMR from April 2016.

Children born to hepatitis B surface antigen (HBsAg) positive mothers, who reached their first birthday in this quarter (born January to March 2017) were scheduled to receive an initial dose of hepatitis B vaccine at birth, with further doses at one and two months of age, and those who reached their second birthday in this quarter (born January to March 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 $\geq 40/100,000$ and London boroughs regardless of TB incidence) who reach their first birthday in this quarter (born January to March 2017) were scheduled to receive BCG at birth.

Appendix A describes coverage evaluated at the first, second and fifth birthdays by country and NHS England local and area teams.

2. Participation and data quality

Data were received from all Health Boards (HBs) in Scotland, Northern Ireland and Wales. In England, Area Teams (ATs) and Child Health Record Departments (CHRDs) provided data for all upper tier local authorities (LAs).

Individual LA data with relevant caveats where applicable are available [here](#).

This is the seventh quarterly COVER report to publish MenB coverage at 12 months and the second to publish MenB booster coverage at 24 months.

Four CHIS Hubs provide COVER data for the whole of London and the third data submitted from these newly established Hubs reflects a system in transition, therefore changes in LA vaccine coverage in London should be interpreted with caution (see 3.1). London neonatal

hepatitis B coverage data has not been included in this COVER report as data migrated from legacy systems has only provided partial data for those born to HepB positive mothers, resulting in a significant reduction in both the 12 month and 24 month birth cohorts denominators. As almost half of all babies born to HepB positive mothers in the national denominator are in London national coverage estimates at 12 and 24 months have not been calculated either (table 4). This issue may persist until babies born from 1 April 2017 are evaluated (September 2018).

3. Developments in Immunisation data

3.1 NHS Digital Child Health Strategy

The new NHS England Healthy Children: transforming child health information strategy [3] 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.

3.2 New COVER information standard published

An updated **COVER Information Standard Notice (ISN)** with related documentation was published on 23 November 2017. This standard defines what information needs to be extracted from CHISs following recent changes to the national immunisation schedule so that it will comply with future reporting requirements of the COVER programme.

From autumn 2017, all babies born on or after 1 August 2017 become eligible for a hexavalent vaccine which includes hepatitis B (HepB) for their primary immunisations. This vaccine, called **Infanrix hexa®**, will replace the pentavalent infant vaccines **Infanrix®-IPV+Hib** and **Pediacel®**. High risk babies (born to HepB surface-antigen positive mothers) are still required to be given monovalent HepB at birth, 4 weeks and 12 months in addition to the routine hexavalent vaccine. More information about the hexavalent vaccine can be found [here](#).

The COVER documentation has been updated to include some minor reporting changes already implemented by CHISs which include (i) the removal of MenC coverage at 12 months, (ii) MenB reporting from 2016, and (iii) confirmation of collection of data at LA upper tier responsible. Providers must ensure full conformance with this standard by 31 May 2018 to allow vaccine coverage at 12 months for the routine hexavalent vaccine and selective neonatal HepB vaccine and to be reported through the COVER programme from late 2018. Documentation related to the new COVER ISN can be found [here](#) and the updated COVER user guide can be found [here](#). A modified COVER data submission template for the revised ISN extraction will be available from the April to June 2018 quarter.

3.3 NHS England South Reconfiguration – 1 April 2018

From the next quarter the COVER report will use the new NHS England configurations that came into effect from 1 April 2018, and cease 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](#).

4. Results

4.1 Coverage at 12 months

Compared to the previous quarter UK coverage decreased by 0.6% for PCV2 to 93.3%, by 0.5% for DTaP/IPV/Hib3 to 93.1% and by 0.2% for two-dose Rotavirus to 90.8%, (table 1a) [4]. All devolved administrations achieved at least 95% for DTaP/IPV/Hib3, PCV2 and MenB2. In England, coverage was at least 92% for these three vaccines (table 1a). DTaP/IPV/Hib3 coverage in England was 92.6%, the lowest since April to June 2009 (91.9%) [5].

Vaccine coverage for the seventh cohort of children routinely offered MenB vaccine was evaluated in this quarter. UK two-dose MenB coverage (MenB2) decreased by 0.5% to 92.9% compared to the previous quarter and ranged from 92.5% in England to 95.7% in Wales and Scotland [3]. England MenB2 coverage at local team (LT) level achieved at least 90% in all areas except London (88.5%) and Lancashire and Greater Manchester (narrowly missed this level at 89.9% (see [LA vaccine coverage statistics](#) for caveats relating to data qualities issues).

Coverage at 12 months by former AT level is described in table 1b.

4.2 Coverage at 24 months

Compared to the previous quarter UK coverage for DTaP/IPV/Hib3 evaluated at two years of age decreased 0.1% to 95.4%, PCV and Hib/MenC boosters by 0.1% to 91.7% and MMR1 by 0.2% to 91.4% (table 2a) [4]. UK MenB booster coverage, reported for the second time, increased 0.4% to was 88.8% and ranged from 87.9% in England to 94.7% in Wales.

Coverage at 24 months by former AT level is described in table 2b.

4.3 Coverage at five years

UK MMR1 coverage remained at 95.3% and continues to exceed to WHO 95% target. UK DTaP/IPV/Hib3 coverage decreased 0.1% to 95.8% (table 3a) At the country level MMR1 Scotland, Wales and Northern Ireland achieved at least 96% and in England coverage remained at 95.1% [4]. Coverage at 5 years for these vaccines primarily reflects children vaccinated four or five years ago.

UK MMR2 coverage decreased by 0.3% this quarter to 87.7% and by 0.5% for the pre-school booster (DTaP/IPV) to 86.4% (table 3a) [4].

Coverage at five years by former AT level is described in table 3b.

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 January to March 2017), and coverage of four doses of vaccine in infants who reached two years of age (i.e. those born between January to March 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 as almost half of all babies born to HepB positive mothers in the national denominator are in London, national coverage estimates at 12 and 24 months have not been calculated. Since the introduction of the hexavalent vaccine in October 2017, infants born to hepatitis B surface antigen (HBsAg) positive mothers are scheduled to receive 6 doses of hepatitis B containing vaccine by the age of one year. 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.

4.5 Universal BCG programme vaccine coverage in England

The BCG immunisation programme across England is based on risk of exposure to TB. The vaccine is recommended at birth for all children that live in an area that has a TB incidence of higher than 40 per 100,000 population. Due to large cross-boundary movement, the vaccine had been also recommended in all London local authorities, regardless of TB incidence. However, following a shortage in BCG vaccine, the London BCG delivery model has been modified and now only the five boroughs with a high TB incidence (using the 2014-16 average annual TB rate [4]) offer universal BCG vaccination. The 28 remaining boroughs deliver a 'once-only' offer of BCG in hospital. If not vaccinated in hospital, only those babies that fall into a high risk category will be offered vaccine after discharge. Neonatal BCG has been included in the data extraction template from local CHISs since April 2015, as part of the COVER (Cover of vaccination evaluated rapidly) programme. This provides an opportunity to estimate BCG vaccine at 12 months for LAs offering a universal neonatal programme.

COVER collections for BCG data are of variable quality and should be interpreted with caution as estimates of low coverage may in part be reflecting poor data quality. Shortages of BCG vaccine have impacted on BCG coverage estimates published in previous quarterly COVER reports [4,6].

This quarterly COVER report presents BCG coverage data for the fourth quarter of 2017-18 alongside comparative data for the third quarter (table 5). Using the 2014-16 average annual TB rate per 100,100 population, there are currently six LAs in England with a high incidence of TB [6] and running a universal programme; five in London and one in the South East (table 5). BCG coverage estimates for children born between January and March 2017 in these LAs ranged from 20.4% to 72.8%, similar to the previous quarter (range 29.4% to 73.4%), suggesting supply of BCG vaccine improved following shortages from May 2015 [6].

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/catalogue/PUB30085>

Quarterly Northern Ireland: <http://www.publichealthagency.org/directorate-public-health/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>

6. References

1. Public Health England. The complete routine immunisation schedule.
<https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule>
2. Public Health England (2014). Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): January to March 2014. 2014 HPR 8 (25). Available at <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2013-to-2014-quarterly-figures>
3. NHS England. Digital Child Health Transformation Programme.
<https://www.england.nhs.uk/digitaltechnology/child-health/>
4. Public Health England (2017). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, October to December 2017. 2018 HPR 12 (11). Available at <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2017-to-2018-quarterly-data>
5. Health Protection Agency (2009). Quarterly vaccination coverage statistics for children aged up to five years in the United Kingdom (COVER): April to June 2009. 2009 HPR 3 (38). Available at http://webarchive.nationalarchives.gov.uk/20140713020901/http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1195733757253
6. Public Health England (2017). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, July to September 2017. 2017 HPR 11 (45). Available at <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2017-to-2018-quarterly-data>
7. Public Health England (2017). Tuberculosis in England 2017 report: presenting data to end of 2016. Available at <https://www.gov.uk/government/publications/tuberculosis-in-england-annual-report>

Appendix: Tables

Table 1a. Completed UK primary immunisations at 12 months by country and England local team : January to March 2018 (*October to December 2017*)

Table 1b. Completed UK primary immunisations at 12 months by NHS England Area Team: January to March 2018 (*October to December 2017*)

Table 2a. Completed UK primary immunisations at 24 months by country and NHS England local team: January to March 2018 (*October to December 2017*)

Table 2b. Completed primary immunisations at 24 months by NHS England Area Team: January to March 2018 (*October to December 2017*)

Table 3a. Completed UK primary immunisations and boosters at five years by country and NHS England local team: January to March 2018 (*October to December 2017*)

Table 3b. Completed primary immunisations and boosters at five years by NHS England Area Team : January to March 2018 (*October to December 2017*)

Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHS England Local Team : January to March 2018 (*October to December 2017*)

Table 5. BCG vaccine coverage at 12 months in English local authorities with TB incidence ≥ 40 per 100,000 and offering a universal programme: January to March 2018 (*October to December 2017*)

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

About Health Protection Report

Health Protection Report is a national public health bulletin for England and Wales, published by Public Health England. It is PHE's principal channel for the dissemination of laboratory data relating to pathogens and infections/communicable diseases of public health significance and of reports on outbreaks, incidents and ongoing investigations.

Public Health England, Wellington House, 133-155 Waterloo Road, London SE1 8UG

Tel: 020 7654 8000 www.gov.uk/phe

Twitter: [@PHE_uk](https://twitter.com/PHE_uk) Facebook: www.facebook.com/PublicHealthEngland

Queries relating to this document should be directed to:

Immunisation, Hepatitis and Blood Safety Department,
National Infection Service, PHE Colindale,
61 Colindale Avenue, London NW9 5EQ.

COVER@phe.gov.uk

© Crown copyright 2018

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](https://www.ogil.io) or email psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published June 2018

PHE publications

gateway number: 2018206

PHE supports the UN

Sustainable Development Goals



**Table 1a. Completed UK primary immunisations at 12 months by country and English Local Team:
 January to March 2018 (October to December 2017)**

	Country	No. of LAs/HBs [†]	DTaP/IPV/Hib3%	PCV2%	Rota2%	MenB2%
	United Kingdom	177	93.1 (93.6)	93.3 (93.9)	90.8 (91.0)	92.9 (93.4)
	Wales	7	96.2 (95.8)	96.2 (95.9)	94.5 (94.0)	95.7 (95.5)
	Northern Ireland	4	95.5 (96.3)	95.8 (96.5)	93.7 (93.9)	95.4 (96.2)
	Scotland	14	96.0 (96.5)	96.4 (96.8)	93.5 (93.4)	95.7 (96.3)
	England (Total)	152	92.6 (93.1)	92.8 (93.5)	90.3 (90.6)	92.5 (93.0)
LT code	NHS England Local Teams					
Q70	Wessex	7	95.0 (95.1)	95.0 (95.1)	93.1 (92.8)	94.5 (94.7)
Q71	London	33	89.1 (88.9)	89.5 (89.3)	87.1 (87.2)	88.5 (88.0)
Q72	North (Yorkshire & Humber)	15	94.4 (94.9)	94.6 (95.1)	92.4 (92.7)	94.3 (94.7)
Q73	North (Lancashire & Grt. Manchester)	13	90.7 (91.7)	88.2 (92.8)	86.8 (86.0)	89.9 (92.2)
Q74	North (Cumbria & North East)	13	95.1 (95.2)	95.3 (95.6)	93.5 (94.1)	94.9 (95.2)
Q75	North (Cheshire & Merseyside)	9	94.2 (95.0)	94.6 (95.3)	91.6 (92.8)	94.8 (95.9 ¹)
Q76	Midlands & East (North Midlands)	8	94.0 (95.2)	94.5 (95.6)	92.2 (92.9)	94.1 (95.2)
Q77	Midlands & East (West Midlands)	10	92.0 (93.1)	92.7 (94.0)	88.6 (89.0)	92.3 (93.7)
Q78	Midlands & East (Central Midlands)	10	93.4 (94.5)	94.1 (94.9)	91.2 (92.5)	93.6 (94.5)
Q79	Midlands & East (East)	7	94.4 (94.5)	94.8 (94.8)	92.4 (92.3)	94.5 (94.3)
Q80	South (South West)	9	94.5 (94.8)	94.6 (95.0)	90.9 (91.1)	94.4 (94.9)
Q81	South (South East)	6	91.3 (92.0)	91.8 (92.4)	89.4 (90.3)	91.6 (92.2)
Q82	South (South Central)	12	94.6 (94.9)	94.8 (94.8)	92.7 (92.5)	94.3 (94.4)

[†] Local Authorities /Health Boards.

¹ MenB data for two LAs not provided

Table 1b. Completed UK primary imms at 12 months by NHS England Area Team: January to March 2018 (October to December 2017)

NHS England Local Team code*	English Area Team (AT code)	No. of LAs [†]	DTaP/IPV/Hib3%	PCV2%	Rota2%	MenB2%
Q70	Wessex (Q70)	7	95.0 (95.1)	95.0 (95.1)	93.1 (92.8)	94.5 (94.7)
Q71	London (Q71)	33	89.1 (88.9)	89.5 (89.3)	87.1 (87.2)	88.5 (88.0)
Q72	North Yorkshire and Humber (Q50)	6	94.8 (95.3)	95.0 (95.4)	93.4 (93.6)	94.9 (95.1)
	South Yorkshire and Bassetlaw (Q51)	4	95.2 (95.3)	95.3 (95.5)	93.5 (93.1)	94.8 (94.8)
	West Yorkshire (Q52)	5	93.8 (94.6)	94.0 (94.8)	91.2 (92.0)	93.7 (94.4)
Q73	Greater Manchester (Q46)	10	93.4 (95.0)	94.2 (95.4)	88.8 (88.3)	91.8 (95.4)
	Lancashire (Q47)	3	84.7 (84.5)	74.9 (87.0)	82.5 (80.7)	85.6 (85.0)
Q74	Durham, Darlington and Tees (Q45)	6	96.8 (96.6)	96.9 (97.0)	94.8 (95.0)	96.5 (96.4)
	Cumbria, Northumberland, Tyne and Wear (Q49)	7	94.30(94.3)	94.3 (94.7)	92.6 (93.4)	93.9 (94.5)
Q75	Cheshire, Warrington and Wirral (Q44)	4	95.4 (96.0)	95.7 (96.3)	93.4 (94.8)	95.7(96.5)
	Merseyside (Q48)	5	93.2 (94.2)	93.6 (94.3)	90.0 (91.0)	94.0 (94.4 ¹)
Q76	Derbyshire and Nottinghamshire (Q55)	4	93.9 (95.1)	94.1 (95.2)	91.8 (93.0)	93.6 (94.8)
	Shropshire and Staffordshire (Q60)	4	94.3 (95.3)	94.9 (96.1)	92.8 (92.9)	94.8 (95.7)
Q77	Arden, Herefordshire and Worcestershire (Q53)	4	92.4 (95.9)	93.5 (97.3)	89.5 (93.3)	92.8 (97.0)
	Birmingham and the Black Country (Q54)	6	91.7 (91.6)	92.3 (92.3)	88.2 (86.9)	92.0 (92.0)
Q78	Hertfordshire and the S Midlands (Q58)	6	92.8 (94.1)	93.6 (94.7)	91.2 (92.3)	93.0 (94.2)
	Leicestershire and Lincolnshire (Q59)	4	94.4 (95.3)	94.9 (95.4)	91.3 (92.8)	94.8 (95.0)
Q79	East Anglia (Q56)	4	94.5 (94.6)	95.0 (94.9)	92.7 (92.5)	94.6 (94.4)
	Essex (Q57)	3	94.2 (94.4)	94.6 (94.7)	92.0 (92.2)	94.4 (94.1)
Q80	Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	4	94.8 (95.4)	94.8 (95.3)	92.0 (92.3)	94.6 (95.1)
	Devon, Cornwall, Isles of Scilly (Q66)	5	94.2 (94.2)	94.4 (94.7)	89.8 (90.0)	94.2 (94.6)
Q81	Kent and Medway (Q67)	2	91.5 (92.0)	91.9 (92.3)	90.3 (90.3)	91.3 (91.8)
	Surrey and Sussex (Q68)	4	91.2 (92.1)	91.8 (92.5)	88.8 (90.2)	91.8 (92.5)
Q82	Bath, Gloucestershire, Swindon and Wiltshire (Q64)	4	95.0 (95.2)	95.2 (95.3)	93.0 (92.7)	94.7 (95.0)
	Thames Valley (Q69)	8	94.4 (94.7)	94.6 (94.6)	92.5 (92.4)	94.0 (93.9)

* See table 1a for key to local team organisational code ¹MenB data for two LAs not provided

Table 2a. Completed UK primary immunisations at 24 months by country and NHS England local team: January to March 2018 (October to December 2017)

Country	No. of LAs/ HBs [†]	DTaP/IPV/Hib3%	PCV booster%	Hib/MenC booster%	MMR1%	MenB booster%
United Kingdom	177	95.4 (95.5)	91.7 (91.8)	91.7 (91.8)	91.4 (91.6)	88.8 (88.4)
Wales	7	97.4 (96.9)	95.5 (95.2)	94.9 (94.6)	94.9 (94.6)	94.7 (93.9)
Northern Ireland	4	98.0 (97.7)	95.1 (94.6)	95.0 (94.4)	94.6 (93.8)	94.6 (94.1)
Scotland	14	97.4 (97.6)	94.9 (94.6)	94.9 (94.9)	94.3 (94.4)	93.8 (93.6)
England (Total)	152	95.0 (95.2)	91.2 (91.3)	91.2 (91.3)	90.8 (91.1)	87.9 (87.4)
NHS England local teams*						
Q70	7	95.9 (95.9)	93.4 (93.0)	93.7 (93.2)	93.4 (93.1)	92.3 (91.6)
Q71	33	92.3 (91.6)	84.7 (84.0)	85.2 (84.2)	84.3 (83.7)	82.7 (78.3)
Q72	15	96.3 (96.5)	93.7 (93.7)	93.6 (93.6)	93.3 (93.3)	91.5 (90.0)
Q73	13	93.2 (94.9)	91.1 (92.7)	91.6 (92.8)	91.6 (92.9)	79.0 (87.0)
Q74	12	97.7 (96.9)	95.6 (94.7)	95.6 (94.8)	95.4 (94.4)	92.9 (92.1)
Q75	9	96.8 (96.5)	93.9 (93.6)	94.1 (93.6)	93.7 (93.0)	92.4 (92.2)
Q76	8	96.5 (97.0)	93.8 (93.7)	93.0 (93.4)	93.3 (93.4)	90.9 (90.5)
Q77	10	94.7 (95.8)	89.8 (92.3)	89.4 (92.3)	90.1 (92.3)	87.8 (89.8)
Q78	10	96.1 (96.5)	92.9 (93.1)	93.4 (93.5)	92.9 (93.1)	89.7 (89.5)
Q79	7	95.6 (95.7)	92.5 (92.0)	92.4 (91.7)	89.5 (91.4)	90.1 (89.5)
Q80	9	96.3 (96.5)	92.8 (93.1)	92.6 (92.9)	92.8 (92.9)	92.6 (92.3)
Q81	6	94.0 (94.1)	90.9 (91.2)	90.6 (90.8)	90.6 (90.9)	87.4 (86.1)
Q82	12	96.6 (96.3)	93.1 (92.6)	93.1 (93.0)	93.3 (92.8)	87.0 (88.0)

[†] Local Authorities/Health Boards

* See table 1a for key to local team organisational code

Table 2b. Completed primary immunisations at 24 months by NHS England Area Team: January to March 2018 (October to December 2017)

NHS England Local Team Code*	Area Team code*	No. of LAs [†]	DTaP/IPV/Hib3%	PCV booster%	Hib/MenC%	MMR1%	MenB booster%
Q70	Q70	7	95.9 (95.9)	93.4 (93.0)	93.7 (93.2)	93.4 (93.1)	92.3 (91.6)
Q71	Q71	33	92.3 (91.6)	84.7 (84.0)	85.2 (84.2)	84.3 (83.7)	82.7 (78.3)
Q72	Q50	6	96.1 (96.8)	93.6 (94.3)	93.2 (94.3)	92.5 (93.9)	91.2 (86.6)
	Q51	4	96.5 (96.6)	94.4 (93.4)	94.2 (93.0)	94.0 (93.0)	91.0 (90.2)
	Q52	5	96.3 (96.3)	93.5 (93.5)	93.5 (93.4)	93.3 (93.1)	91.8 (91.8)
Q73	Q46	10	95.9 (97.0)	92.3 (93.7)	92.6 (93.6)	93.0 (93.9)	82.2 (93.1)
	Q47	3	87.2 (90.3)	88.4 (90.3)	89.5 (90.9)	88.3 (90.6)	72.0 (77.7)
Q74	Q45	6	97.3 (97.5)	94.9 (95.0)	95.0 (95.0)	94.5 (94.5)	93.2 (93.2)
	Q49	7	98.0 (96.6)	96.1 (94.5)	95.9 (94.6)	95.9 (94.3)	92.8 (91.4)
Q75	Q44	4	97.2 (97.1)	94.6 (95.1)	94.9 (95.4)	94.6 (94.9)	92.9 (93.4)
	Q48	5	96.4 (95.8)	93.2 (92.2)	93.4 (91.8)	92.8 (91.1)	92.0 (89.1)
Q76	Q55	4	96.2 (96.6)	93.3 (93.3)	93.1 (93.3)	92.8 (93.1)	89.3 (89.0)
	Q60	4	96.9 (97.5)	94.4 (94.3)	92.9 (93.7)	94.1 (93.9)	93.0 (92.7)
Q77	Q53	4	94.6 (97.6)	87.9 (96.8)	87.6 (96.6)	88.5 (97.2)	86.8 (95.7)
	Q54	6	94.7 (94.9)	90.9 (90.1)	90.4 (90.1)	90.9 (89.9)	88.3 (86.8)
Q78	Q58	6	95.9 (96.1)	92.5 (92.7)	93.0 (93.2)	92.5 (92.7)	89.8 (89.9)
	Q59	4	96.3 (97.1)	93.6 (93.7)	94.1 (94.1)	93.5 (93.8)	89.4 (88.9)
Q79	Q56	4	96.3 (95.9)	92.9 (92.8)	92.8 (92.5)	92.5 (92.6)	91.3 (90.7)
	Q57	3	94.8 (95.3)	92.0 (91.0)	91.9 (90.8)	85.7 (90.0)	88.6 (88.0)
Q80	Q65	4	96.3 (96.8)	92.4 (93.1)	92.9 (93.1)	92.2 (92.7)	92.0 (92.0)
	Q66	5	96.4 (96.3)	93.2 (93.1)	92.4 (92.8)	93.5 (93.0)	93.2 (92.6)
Q81	Q67	2	93.9 (93.9)	90.2 (90.5)	90.2 (89.3)	90.5 (90.0)	84.7 (81.2)
	Q68	4	94.1 (94.2)	91.4 (91.7)	90.9 (91.8)	90.6 (91.6)	89.3 (89.4)
Q82	Q64	4	96.9 (96.4)	94.8 (94.0)	94.7 (93.9)	94.7 (93.8)	93.4 (92.6)
	Q69	8	96.4 (96.2)	92.0 (91.6)	92.1 (92.5)	92.4 (92.2)	82.7 (85.0)

* See table 1a and 1b for keys to NHS England local team/Area Team organisational code.

[†] Local Authorities

Table 3a. Completed UK primary immunisations and boosters at five years by country and NHS England local team: January to March 2018 (October to December 2017)

Country	Number of LAs/HBs [†]	Primary		Booster		
		DTaP/IPV/ Hib3%	MMR1%	MMR2%	DTaP/IPV%	Hib/MenC%
United Kingdom	177	95.8 (95.9)	95.3 (95.3)	87.7 (88.0)	86.4 (86.9)	93.0 (93.2)
Wales	7	93.4 ¹ (93.7 ¹)	96.5 (96.7)	89.3 (89.9)	92.2 (92.5)	92.6 (92.8)
N. Ireland	4	97.2 (97.6)	96.3 (97.0)	91.8 (92.8)	92.3 (93.6)	95.8 (96.4)
Scotland	14	97.9 (98.0)	96.7 (97.0)	91.0 (92.1)	91.5 (92.7)	95.9 (96.1)
England (Total)	152	95.7 (95.8)	95.1 (95.1)	87.2 (87.3)	85.5 (85.9)	92.7 (92.8)
<i>English Local Teams</i>						
Q70	7	95.7 (95.8)	94.0 (94.2)	89.1 (89.3)	87.0 (86.8)	92.7 (92.7)
Q71	33	93.4 (93.0)	91.9 (91.0)	77.6 (77.1)	75.5 (75.0)	89.2 (88.6)
Q72	15	96.7 (97.2)	96.3 (96.8)	90.3 (90.8)	89.7 (90.1)	94.2 (94.7)
Q73	13	95.5 (95.8)	95.5 (95.9)	88.6 (89.9)	88.2 (89.1)	93.4 (93.6)
Q74	13	97.7 (97.8)	97.3 (97.7)	92.3 (93.0)	91.6 (92.4)	95.4 (95.8)
Q75	9	96.6 (96.4)	96.0 (96.0)	90.2 (89.0)	90.7 (89.5)	94.0 (94.0)
Q76	8	97.0 (97.2)	96.6 (96.9)	88.9 (89.3)	88.5 (88.3)	94.8 (94.9)
Q77	10	96.3 (96.2)	95.8 (96.0)	87.0 (88.1)	84.7 (86.8)	93.4 (94.6)
Q78	10	96.7 (97.2)	96.3 (96.4)	90.0 (90.1)	88.4 (88.8)	93.5 (93.6)
Q79	7	96.9 (96.7)	96.4 (96.0)	89.5 (89.4)	85.9 (88.3)	93.9 (93.6)
Q80	9	97.5 (97.5)	96.2 (96.6)	90.5 (91.3)	89.2 (90.2)	95.4 (95.8)
Q81	6	92.4 (92.2)	92.7 (92.4)	86.3 (85.7)	83.7 (83.7)	88.5 (88.4)
Q82	12	96.7 (97.0)	96.3 (96.3)	89.7 (89.4)	86.7 (86.5)	94.1 (94.5)

* See table 1a for key to NHS England local team organisational code.

[†] These figures are thought to be an under-estimate and are being investigated locally.

3b. Completed primary immunisations and boosters at five years by NHS England Area Team: January to March 2018 (October to December 2017)

NHS England local team Code*	Area Team (AT) code*	No. of LAs† in AT	Primary		Booster		
			DTaP/IPV Hib3 %	MMR1 %	MMR2 %	DTaP/ IPV %	Hib/ MenC
Q70	Q70	7	95.7 (95.8)	94.0 (94.2)	89.1 (89.3)	87.0 (86.8)	92.7 (92.7)
Q71	Q71	33	93.4 (93.0)	91.9 (91.0)	77.6 (77.1)	75.5 (75.0)	89.2 (88.6)
Q72	Q50	6	95.5 (97.3)	94.6 (96.6)	89.1 (90.2)	88.3 (88.7)	93.3 (94.6)
	Q51	4	96.9 (96.7)	96.7 (97.1)	89.4 (89.9)	88.6 (89.3)	93.4 (93.8)
	Q52	5	97.4 (97.5)	97.1 (96.8)	91.6 (91.8)	91.1 (91.4)	95.3 (95.2)
Q73	Q46	10	96.9 (97.2)	96.6 (96.8)	90.2 (92.3)	89.1 (91.0)	94.6 (95.3)
	Q47	3	92.2 (92.7)	93.0 (93.7)	84.8 (84.6)	85.9 (84.6)	90.6 (89.9)
Q74	Q45	6	97.8 (97.7)	97.1 (97.7)	92.7 (93.2)	90.0 (91.1)	95.5 (95.3)
	Q49	7	97.5 (97.9)	97.5 (97.7)	92.1 (92.8)	92.7 (93.2)	95.3 (96.1)
Q75	Q44	4	96.8 (96.3)	96.1 (95.9)	92.0 (91.7)	92.8 (92.0)	94.1 (94.4)
	Q48	5	96.4 (96.5)	95.8 (96.1)	88.3 (86.4)	88.5 (86.9)	93.8 (93.6)
Q76	Q55	4	96.6 (97.0)	96.7 (96.9)	88.2 (88.2)	87.8 (88.0)	94.0 (93.9)
	Q60	4	97.4 (97.6)	96.5 (96.8)	89.9 (90.7)	89.5 (88.6)	95.8 (96.3)
Q77	Q53	4	97.2 (97.4)	96.3 (97.6)	89.7 (93.1)	86.2 (92.5)	94.1 (96.0)
	Q54	6	95.8 (95.5)	95.4 (95.2)	85.4 (85.4)	83.9 (83.8)	93.0 (93.8)
Q78	Q58	6	96.5 (97.3)	96.1 (96.7)	89.8 (90.6)	87.6 (88.7)	93.8 (94.3)
	Q59	4	97.0 (97.1)	96.5 (95.9)	90.3 (89.1)	89.9 (88.9)	93.0 (92.4)
Q79	Q56	4	96.8 (96.6)	96.4 (95.8)	90.7 (89.9)	89.2 (88.7)	93.3 (92.7)
	Q57	3	97.0 (96.9)	96.3 (96.3)	88.0 (88.8)	81.6 (87.7)	94.6 (94.7)
Q80	Q65	4	97.7 (97.6)	96.0 (96.6)	88.9 (90.3)	89.3 (90.7)	96.0 (95.9)
	Q66	5	97.2 (97.5)	96.3 (96.6)	91.9 (92.2)	89.1 (89.6)	94.8 (95.7)
Q81	Q67	2	93.0 (93.2)	95.0 (94.5)	86.2 (86.0)	80.3 (81.0)	88.6 (88.4)
	Q68	4	91.9 (91.4)	91.1 (91.0)	86.3 (85.5)	85.9 (85.4)	88.4 (88.4)
Q82	Q64	4	96.9 (96.5)	96.5 (95.7)	91.7 (90.2)	91.0 (89.9)	95.0 (94.7)
	Q69	8	96.6 (97.4)	96.1 (96.7)	88.3 (88.9)	83.9 (84.2)	93.4 (94.3)

* See table 1a and 1b for keys to NHS England local team/Area Team organisational code.

† Local Authorities.

Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHS England Local Team: January to March 2018 (October to December 2017)

NHS England Local Team Code*	LA returns with 12 month data	12 month denominator	% Coverage at 12 months	LA returns with 24 month data	24 month denominator	% Coverage at 24 months
Q70	7 of 7	25	100 (100)	7 of 7	13	100 (100)
Q71 ¹	33 of 33	n/a	n/a (n/a)	33 of 33	n/a	n/a (n/a)
Q72	14 of 15	33	100 (96)	15 of 15	37	92 (88)
Q73	10 of 13	78	59 (48)	10 of 13	82	71 (22)
Q74	12 of 13	8	100 (100)	12 of 13	8	100 (50)
Q75	7 of 9	12	33 (67)	7 of 9	4	100 (67)
Q76	8 of 8	22	95 (100)	8 of 8	19	89 (95)
Q77	10 of 10	48	100 (100)	10 of 10	40	100 (100)
Q78	10 of 10	49	96 (100)	10 of 10	39	95 (100)
Q79	7 of 7	34	82 (86)	7 of 7	31	81 (90)
Q80	9 of 9	8	88 (90)	9 of 9	13	92 (100)
Q81	6 of 6	21	95 (100)	6 of 6	16	100 (92)
Q82	12 of 12	29	100 (96)	12 of 12	22	95 (83)
England¹	144 of 152	n/a	n/a (n/a)	144 of 152	n/a	n/a (n/a)

* See table 1a for key to NHS England Local Team organisational code

¹Last quarter the newly 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 as data migrated from legacy systems has only provided partial data for those born to HepB positive mothers, resulting in a significant reduction in both the 12 month and 24 month birth cohort denominators. As almost half of all babies born to HepB positive mothers in the national denominator are in London national coverage estimates at 12 and 24 months were not calculated

Table 5. BCG vaccine coverage at 12 months in English local authorities with TB incidence ≥40 per 100,000 and offering a universal programme: January to March 2018 (October to December 2017)

Upper tier Local Authority	Three-year average (2014-16) annual TB rate per 100,000	Number of eligible children (1st birthday in Jan to Mar 2016)	Universal BCG coverage% (previous quarterly estimate)
Newham	69.0	1446	72.8 (73.4)
Brent	57.8	1192	31.3 (29.4)
Hounslow	47.5	984	55.8 (42.8)
Ealing	47.3	1253	44.1 (38.1)
Slough	41.8	560	20.5 (43.0)
Redbridge	41.5	1096	58.6 (51.2)