



## Infection report

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### Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): July to September 2016

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 second quarterly report for 2016/17

- Quarterly UK coverage for most vaccines evaluated at one and two years decreased between 0.1% and 0.4% compared to the previous quarter, continuing the trend highlighted in the recently published 2015-16 annual immunisation statistics for England and the previous COVER report from April to June 2016.
- The first quarterly UK MenB vaccine coverage data shows that 92.2% of the first cohort of children routinely offered the vaccine after it was introduced in July 2015 received two doses by their first birthday. Country level coverage ranged from 96.0% in Northern Ireland to 91.6% in England
- UK coverage of MMR1 at five years continues to exceed the WHO target of 95%, remaining at 95.4%. England achieved 95% whilst all three devolved administrations achieved at least 97%. UK MMR2 decreased by 0.2% to 88% compared to the previous quarter. All countries achieved above 90% except England where coverage was 87.3%. Coverage at five years predominantly reflects vaccinations given more than two years ago.
- This is the second quarterly COVER report to include experimental BCG coverage figures, extracted from Child Health Information Systems (CHISs), for local authorities running a universal neonatal programme in England. The BCG vaccine shortage which started in May 2015 is likely to have impacted on coverage for those evaluated in this quarter. All nine London local authorities with a TB incidence over 40 per 100,000 reported BCG coverage at one year of age to be lower than that reported in the previous quarter. Coverage ranged from 16.0% to 88.8% (compared to 22.35 to 92.6% in April to June 2016).

## 1. Cohort definitions for July to September 2016

Children who reached their first birthday in the quarter (born July to September 2015) were scheduled for three doses of the combined diphtheria, tetanus, acellular pertussis, polio, and *Haemophilus influenzae* type b vaccine (DTaP/IPV/Hib vaccine), two doses of pneumococcal conjugate vaccine (PCV), one dose of meningococcal serogroup C conjugate vaccine (MenC vaccine) at three months of age and two doses of rotavirus vaccine at two and three months of age [1].

Children who reached their second birthday in the quarter (born July to September 2014) were scheduled to receive their third DTaP/IPV/Hib, second MenC and PCV vaccinations between August and October 2014, and their first measles, mumps, and rubella (MMR) vaccination, a booster dose of Hib and MenC (given as a combined Hib/MenC vaccine) and PCV vaccines at the same visit at 12 months of age, between August and October 2015.

Children who reached their fifth birthday in the quarter (born July to September 2011) were scheduled to receive their third dose DTaP/IPV/Hib and second MenC and PCV vaccinations between November 2011 and January 2012. They were also scheduled to receive their first MMR, Hib/MenC booster and PCV booster after their first birthday (July to September 2012) between August and October 2012, and their pre-school diphtheria, tetanus, acellular pertussis, inactivated polio booster (DTaP/IPV) and second dose MMR from November 2014.

Children born to hepatitis B surface antigen (HBsAg) positive mothers, who reached their first birthday in this quarter (born July to September 2015) 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 July to September 2014) were scheduled to receive a four 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 July to September 2015) 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), however, due to data quality issues all data for one LA was omitted and 12 and 24 month data omitted for another.

In England, implementation of a new COVER Information Standard Notice (ISN) [2] by CHIS suppliers for the vaccination schedule changes introduced in 2013 is almost complete, with MenC coverage data at 12 months available for all 152 LAs and 12 month rotavirus coverage data for all but eight LAs. This is the first quarterly COVER report to publish MenB coverage at 12 months and data were received from 126 of the 52 LAs. Due to limitations in the current CHIS IT infrastructure, the requested change to collecting COVER data by resident rather than responsible LA population has been postponed, and for the foreseeable future COVER will only be requesting CHISs to submit data by responsible LA population. This is the second quarterly COVER report to publish data by LA responsible population and individual LA data, with relevant caveats, are available [here](#).

## 3. Results

### 3.1 Coverage at 12 months

Vaccine coverage for the first cohort of children routinely offered MenB vaccine was evaluated in this quarter. UK two-dose MenB coverage (MenB2) was 92.2%, ranging from 96.0% in Northern Ireland to 91.6% in England. England MenB2 coverage was estimated from data submitted by 126 of the 152 English LAs and therefore should be interpreted with caution where LT data do not represent all LAs in the area. Additionally, to provide a rapid assessment of this new programme, monthly national and local level MenB dose one and dose two vaccine coverage data are estimated through a temporary rapid sentinel surveillance system. General practice (GP) MenB data are automatically uploaded via four GP IT suppliers to the ImmForm website [3]. The England COVER data for MenB2 at 12 months presented in this report, for children born between July and September 2015, is very similar to the ImmForm estimate of two-dose coverage evaluated at 52 weeks for children born in August 2015 (91.6% vs 91.5%) [3] (tables 1a-b).

Compared to the previous quarter (April to June 2016), UK coverage in July to September 2016 decreased by 0.4% for MenC to 95.1%, by 0.1% for Rota2 and DTaP/IPV/Hib3 to 90.0% and 93.5% respectively, and PCV remained at 93.7% (table 1a) [4]. All devolved administrations achieved above 96% for DTaP/IPV/Hib3, PCV2 and MenC. In England, coverage was at least 92% for these three vaccines; all but two of the 13 LTs (South (South East), and London) achieving at least 90% and 4 of 13 LTs achieved the WHO 95% target for all three vaccines (table 1a).

### 3.2 Coverage at 24 months

UK coverage for the primary course (three doses) of DTaP/IPV/Hib at two years of age decreased 0.2% to 95.3% compared to the previous quarter (table 2a) [4]. Devolved administrations achieved the 95% WHO target and England's coverage was 94.9%, just below the threshold. All but two English LTs (London and South (South East)) achieved the WHO target (table 2a). UK coverage decreased by 0.3% for the Hib/MenC booster to 91.8% and PCV booster remained at 92.0% (table 2a) [4]. Coverage at 24 months by former AT level is described in table 2b.

UK MMR1 coverage evaluated at two years decreased by 0.3% to 91.7% and Wales was the only country to achieve the 95% target (table 2a).

### 3.3 Coverage at five years

UK coverage evaluated at five years for both DTaP/IPV/Hib3 and MMR1 exceeded the 95% WHO target at 95.9% and 95.4% respectively (table 3a) [4]. MMR1 coverage in Scotland, Wales and Northern Ireland achieved at least 97%, in England it was 95% overall with only two of the LTs in England (London, South East) failed to achieve 95% (table 3a). UK MMR2 coverage decreased a further 0.2% this quarter to 88.0%, and is now the lowest level reported in four years (since the July to September 2012 quarter) (table 3a) [4, 5]. Coverage at five years by former AT level is described in table 3b.

### **3.4 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 July and September 2015), and coverage of four doses of vaccine in infants who reached two years of age (i.e. those born between July and September 2014) are presented by area team in table 4.

The quality of these data is variable and coverage by former area 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. Compared with the previous quarter, coverage for three doses by 12 months of age decreased by 4% to 83% and increased by 8% to 63% for those receiving four doses by 24 months (table 4) [4].

### **3.5 BCG 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 is also recommended in all London local authorities, regardless of TB incidence. 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. For the first time, the 2016 annual TB report for England (published in September 2016) includes experimental annual 2015-16 BCG coverage figures for local authorities running a universal neonatal programme, collected as part of the annual 2015-16 COVER programme in England.

This quarterly COVER report presents BCG coverage data for the second quarter of 2016-17 alongside the 2015-16 annual data for comparison in table 5. There are currently 11 LAs in England with a high incidence of TB, of which 10 are running a universal programme, 9 of which are in London. A further 25 local authorities (24 in London, one outside) offer universal vaccination. Coverage estimates for children born between July and September 2015 in LAs with high TB incidence ranged from 16.0% to 88.8%. In the remaining 21 London LAs that provided data, coverage ranged from 1.9% to 94.1% (table 5).

COVER collections for BCG data have only recently been established and data are of variable quality. A shortage of BCG vaccine since May 2015 is likely to have impacted on coverage for those evaluated in this quarter (born between July and September 2015). Estimates of low coverage may therefore in part be reflecting poor data quality but also vaccine supply issues, and should be interpreted with caution.

## 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:** <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/immunisation>

**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>

## 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. Cover of Vaccination Evaluated Rapidly (COVER) : Information Standards. <https://www.gov.uk/government/publications/cover-of-vaccination-evaluated-rapidly-cover-programme-information-standards>
3. Public Health England (2016). Preliminary vaccine coverage estimates for the new meningococcal B (MenB) immunisation programme for England, update to the end of August 2016. Available at <https://www.gov.uk/government/publications/meningococcal-b-immunisation-programme-vaccine-coverage-estimates>
4. Public Health England (2016). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, April to June 2016. HPR 10 (33). Available at <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2016-to-2017-quarterly-data>
5. Health Protection Agency (2012). Quarterly vaccination coverage statistics for children up to five years in the UK (COVER programme): July to September 2012. HPR 6 (50). Available at [http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/hpr/archives/2012/hpr5012\\_cover.pdf](http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/hpr/archives/2012/hpr5012_cover.pdf)
6. Public Health England (2016). Tuberculosis in England 2016 report: presenting data to end of 2015. 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 English : July to September 2016 (*April to June 2016*)**

**Table 1b. Completed UK primary immunisations at 12 months by NHS England Area Teams: July to September 2016 (*April to June 2016*)**

**Table 2a. Completed UK primary immunisations at 24 months by country and NHS England local team: July to September 2016 (*April to June 2016*)**

**Table 2b. Completed primary immunisations at 24 months by NHS England Area Teams: July to September 2016 (*April to June 2016*)**

**Table 3a. Completed UK primary immunisations and boosters at five years by country and NHS England local team: July to September 2016 (*April to June 2016*)**

**Table 3b. Completed primary immunisations and boosters at five years by NHS England Area Team : July to September 2016 (*April to June 2016*)**

**Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHS England Area Team : July to September 2016 (*April to June 2016*)**

**Table 5. BCG vaccine coverage at 12 months in England by NHS England Area Team : July to September 2016 (*April to June 2016*)**



**Table 1a. Completed UK primary immunisations at 12 months by country and English Local Teams:  
July to September 2016 (April to June 2016)**

	Country	No. of LAs/HBs†	DTaP/IPV/Hib3 %	MenC%	PCV2%	Rota2%	MenB2%
	United Kingdom	175 <sup>1</sup>	93.5 (93.6)	95.1 (95.5)	93.7 (93.7)	90.0 (90.1)	92.2 <sup>2</sup>
	Wales	7	96.4 (96.2)	96.8 (97.2)	96.4 (96.1)	93.7 (93.8)	95.0
	Northern Ireland	4	97.1 (96.7)	97.8 (97.8)	97.1 (96.7)	94.5 (94.2)	96.0
	Scotland	14	97.1 (97.1)	97.6 (97.8)	97.2 (97.1)	93.0 (93.2)	94.5
	England (Total)	150 <sup>1</sup>	92.9 (93.0)	94.7 (95.2)	93.1 (93.1)	89.3 (89.5)	91.6 <sup>2</sup>
<b>LT code</b>	<b>NHS England Local Teams</b>						
Q70	Wessex	6 <sup>3</sup>	95.6 (95.4)	96.5 (96.3)	95.4 (95.1)	94.1 (93.7)	95.8
Q71	London	33	88.7 (88.8)	90.1 (90.5)	89.0 (89.0)	86.2 (86.6)	83.7 <sup>2</sup>
Q72	North (Yorkshire & Humber)	15	95.1 (95.4)	96.8 (97.3)	95.1 (95.3)	91.6 (92.6)	93.9
Q73	North (Lancashire & Grt. Manchester)	13	93.9 (93.8)	95.9 (96.4)	93.8 (93.9)	84.5 (82.6)	95.5 <sup>2</sup>
Q74	North (Cumbria & North East)	12 <sup>1,3</sup>	96.1 (94.6)	97.2 (96.9)	96.9 (94.6)	95.0 (92.6)	95.3 <sup>2</sup>
Q75	North (Cheshire & Merseyside)	9	94.8 (94.8)	96.4 (96.7)	94.7 (94.8)	91.2 (91.1)	94.4 <sup>2</sup>
Q76	Midlands & East (North Midlands)	8	95.2 (94.7)	96.6 (96.5)	94.8 (94.8)	92.5 (92.3)	93.9
Q77	Midlands & East (West Midlands)	10	91.9 (92.4)	94.6 (95.5)	92.2 (92.6)	87.4 (89.0)	95.5
Q78	Midlands & East (Central Midlands)	10	95.8 (95.7)	96.8 (97.3)	96.0 (95.8)	93.7 (93.2)	94.5
Q79	Midlands & East (East)	7	95.0 (95.0)	96.4 (97.2)	95.1 (95.3)	91.3 (91.8)	93.6
Q80	South (South West)	9	94.2 (93.7)	95.7 (96.0)	94.3 (93.9)	88.8 (87.8)	94.3
Q81	South (South East)	6	86.3 (88.8)	91.7 (93.1)	87.6 (89.5)	84.3 (85.9)	83.9
Q82	South (South Central)	12	94.7 (95.2)	95.2 (96.3)	94.5 (94.9)	91.4 (92.2)	93.2 <sup>2</sup>

1. two local authorities data not included due to data quality issues, currently under local investigation

2. estimated figures based on data from only 126 of 152 English local authorities.

3. one local authority's data not included due to data quality issues, currently under local investigation

† Local Authorities /health boards.

**Table 1b. Completed UK primary immunisations at 12 months by NHS England Area Teams: July to September 2016 (April to June 2016)**

NHS England Local Team code*	English Area Team (AT code)	No. of formerLA's	DTaP/IPV/Hib3%	MenC%	PCV2%	Rota2%	MenB2% <sup>2</sup>
Q70	Wessex (Q70)	6 <sup>1</sup>	95.6 (95.5)	96.5 (96.3)	95.4 (95.1)	94.1 (93.7)	95.8
Q71	London (Q71)	33	88.7 (88.8)	90.1 (90.5)	89.0 (89.0)	86.2 (86.6)	83.7 <sup>3</sup>
Q72	North Yorkshire and Humber (Q50)	6	96.2 (95.9)	97.7 (97.6)	96.1 (96.0)	93.6 (94.4)	95.5
	South Yorkshire and Bassetlaw (Q51)	4	94.1 (95.2)	96.2 (97.0)	94.2 (95.0)	91.5 (93.3)	92.6
	West Yorkshire (Q52)	5	95.0 (95.2)	96.7 (97.3)	94.9 (95.0)	90.9 (91.7)	93.6
Q73	Greater Manchester (Q46)	10	94.8 (94.3)	96.2 (96.8)	94.5 (94.3)	86.1 (83.8)	95.5 <sup>3</sup>
	Lancashire (Q47)	3	91.9 (92.5)	95.1 (95.5)	92.2 (93.0)	81.0 (79.9)	n/a
Q74	Durham, Darlington and Tees (Q45)	6	95.6 (96.4)	96.7 (98.0)	97.3 (96.4)	95.6 (95.2)	95.5
	Cumbria, Northumberland, Tyne and Wear (Q49)	7 <sup>1</sup>	96.6 (93.4)	97.6 (96.1)	96.6 (93.5)	94.7 (91.7)	95.0 <sup>3</sup>
Q75	Cheshire, Warrington and Wirral (Q44)	4	96.3 (96.4)	97.4 (97.1)	96.5 (96.4)	94.0 (93.9)	95.5 <sup>3</sup>
	Merseyside (Q48)	5	93.3 (93.2)	95.4 (96.3)	92.9 (93.1)	88.5 (88.3)	93.4
Q76	Derbyshire and Nottinghamshire (Q55)	4	94.0 (93.9)	95.8 (95.7)	94.0 (94.2)	91.5 (91.5)	91.1
	Shropshire and Staffordshire (Q60)	4	96.9 (95.7)	97.7 (97.5)	96.1 (95.8)	93.9 (93.5)	97.9
Q77	Arden, Herefordshire and Worcestershire (Q53)	4	95.3 (96.0)	97.0 (97.6)	95.7 (95.8)	92.1 (92.5)	97.6
	Birmingham and the Black Country (Q54)	6	90.2 (90.6)	93.4 (94.4)	90.5 (91.0)	85.0 (87.2)	94.5
Q78	Hertfordshire and the S Midlands (Q58)	6	95.7 (95.6)	96.6 (97.2)	95.9 (95.7)	94.2 (93.3)	94.3
	Leicestershire and Lincolnshire (Q59)	4	96.0 (96.0)	97.2 (97.5)	96.2 (95.9)	92.9 (93.1)	94.7
Q79	East Anglia (Q56)	4	95.2 (95.0)	96.6 (97.2)	95.1 (95.3)	91.5 (91.6)	94.1
	Essex (Q57)	3	94.8 (95.0)	96.2 (97.2)	95.1 (95.2)	91.1 (92.0)	93.0
Q80	Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	4	94.9 (94.6)	96.5 (96.4)	94.9 (94.5)	90.8 (89.8)	93.6
	Devon, Cornwall, Isles of Scilly (Q66)	5	93.5 (92.8)	94.9 (95.7)	93.8 (93.2)	86.8 (85.9)	95.0
Q81	Kent and Medway (Q67)	2	80.1 (86.9)	88.5 (92.2)	82.3 (87.6)	79.6 (83.4)	77.4
	Surrey and Sussex (Q68)	4	90.6 (90.1)	93.9 (93.7)	91.3 (90.8)	87.6 (87.5)	88.5
Q82	Bath, Gloucestershire, Swindon and Wiltshire (Q64)	4	94.4 (94.7)	95.6 (96.5)	94.6 (94.8)	90.8 (92.1)	94.1
	Thames Valley (Q69)	8	94.9 (95.0)	94.8 (95.7)	94.5 (94.9)	91.7 (92.3)	92.2 <sup>3</sup>

\* See table 1a for key to local team organisational code. 1. One local authority's data not included due to data quality issues, currently under local investigation; 2. Based on coverage data from 126/152 LAs, see full tables [here](#); 3. Interpret with caution as some local authorities not represented.



**Table 2a. Completed UK primary immunisations at 24 months by country and NHS England local team: July to September 2016 (April to June 2016)**

Country	No. of former LAs/ HBs†	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
United Kingdom	175 <sup>1</sup>	95.3 (95.5)	92.0 (92.0)	91.8 (92.1)	91.7 (92.0)
Wales	7	97.4 (97.9)	96.0 (96.0)	94.9 (95.1)	95.3 (97.5)
Northern Ireland	4	97.9 (97.9)	94.9 (95.5)	95.0 (95.3)	94.5 (95.0)
Scotland	14	97.7 (97.9)	95.1 (95.4)	95.3 (95.6)	94.8 (95.1)
England (Total)	150 <sup>1</sup>	94.9 (95.1)	91.4 (91.4)	91.2 (91.5)	91.2 (91.4)
NHS England local teams*					
Q70	6 <sup>2</sup>	96.2 (95.9)	93.7 (93.3)	93.5 (93.2)	93.7 (93.1)
Q71	33	91.9 (92.2)	84.8 (83.7)	84.2 (84.8)	85.0 (84.4)
Q72	15	96.6 (96.0)	94.3 (94.4)	94.1 (94.2)	93.8 (94.1)
Q73	13	95.1 (95.0)	92.3 (92.5)	92.0 (92.3)	92.6 (92.7)
Q74	12 <sup>2</sup>	97.5 (97.6)	96.1 (95.0)	95.7 (94.8)	95.6 (94.8)
Q75	9	96.8 (96.9)	93.2 (93.7)	94.3 (92.4)	93.7 (93.6)
Q76	8	96.1 (96.8)	93.2 (93.8)	93.2 (93.7)	92.8 (93.6)
Q77	10	95.4 (95.9)	92.1 (92.6)	92.1 (92.6)	92.0 (92.5)
Q78	10	96.7 (97.5)	94.4 (95.2)	94.6 (95.3)	94.3 (94.9)
Q79	7	96.0 (96.3)	94.2 (93.7)	94.1 (93.6)	93.6 (93.3)
Q80	9	96.4 (96.4)	92.7 (93.0)	92.5 (92.7)	92.6 (92.8)
Q81	6	90.1 (90.7)	87.3 (88.3)	87.2 (88.3)	86.4 (88.0)
Q82	12	95.7 (96.0)	92.0 (92.8)	92.2 (93.1)	91.8 (93.3)

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

† Local Authorities/health boards

‡ two local authorities data not included due to data quality issues, currently under local investigation

<sup>2</sup> one local authority's data not included due to data quality issues, currently under local investigation

**Table 2b. Completed primary immunisations at 24 months by NHS England Area Teams: July to September 2016 (April to June 2016)**

NHS England Local Team Code*	Area Team code*	No. of LAs †	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
Q70	Q70	6 <sup>1</sup>	96.2 (95.9)	93.7 (93.3)	93.5 (93.2)	93.7 (93.8)
Q71	Q71	33	91.9 (92.2)	84.8 (83.7)	84.2 (84.8)	85.0 (84.4)
Q72	Q50	6	96.5 (94.2)	95.0 (94.4)	94.7 (93.9)	94.2 (93.9)
	Q51	4	96.5 (96.7)	93.5 (94.0)	93.3 (93.8)	93.3 (93.8)
	Q52	5	96.7 (96.7)	94.3 (94.6)	94.2 (94.7)	93.9 (94.3)
Q73	Q46	10	95.9 (96.1)	92.8 (92.5)	92.3 (92.3)	93.2 (93.0)
	Q47	3	93.5 (92.7)	91.3 (92.4)	91.3 (92.4)	91.4 (92.2)
Q74	Q45	6	96.5 (97.3)	95.2 (95.3)	95.1 (95.7)	95.1 (95.2)
	Q49	6 <sup>1</sup>	98.3 (97.8)	96.8 (94.8)	96.2 (94.3)	96.0 (94.4)
Q75	Q44	4	97.6 (97.1)	93.9 (94.3)	96.2 (92.1)	94.9 (95.0)
	Q48	5	96.0 (96.8)	92.5 (93.2)	92.4 (92.7)	92.5 (92.3)
Q76	Q55	4	95.3 (96.1)	91.8 (92.8)	91.8 (92.8)	91.5 (92.7)
	Q60	4	97.4 (97.8)	95.2 (95.1)	95.2 (95.0)	94.8 (94.8)
Q77	Q53	4	97.8 (97.4)	95.9 (95.8)	96.2 (96.1)	96.6 (96.3)
	Q54	6	94.3 (95.1)	90.2 (91.1)	90.0 (90.8)	89.7 (90.6)
Q78	Q58	6	96.6 (97.7)	94.6 (95.8)	94.8 (96.0)	94.3 (95.4)
	Q59	4	96.8 (97.3)	94.2 (94.1)	94.4 (93.9)	94.3 (94.1)
Q79	Q56	4	96.3 (96.1)	93.8 (92.9)	93.8 (92.8)	93.7 (93.7)
	Q57	3	95.6 (96.6)	94.8 (94.7)	94.4 (94.5)	93.6 (94.0)
Q80	Q65	4	96.4 (97.0)	92.3 (93.5)	92.3 (93.5)	91.6 (93.0)
	Q66	5	96.3 (95.7)	93.1 (92.5)	92.8 (91.9)	93.5 (92.6)
Q81	Q67	2	90.3 (91.3)	85.4 (87.8)	85.2 (87.4)	83.0 (86.6)
	Q68	4	89.9 (90.4)	88.6 (88.7)	88.5 (88.9)	88.6 (89.0)
Q82	Q64	4	95.2 (96.1)	92.3 (92.9)	92.5 (92.7)	92.2 (92.8)
	Q69	8	96.0 (96.0)	91.8 (92.7)	92.0 (93.3)	91.5 (93.6)

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

† Local Authorities

<sup>1</sup> one local authority's data not included due to data quality issues, currently under local investigation

**Table 3a. Completed UK primary immunisations and boosters at five years by country and NHS England local team: July to September 2016 (April to June 2016)**

Country	Number of LAs/HBs†	Primary		Booster		
		DTaP/IPV Hib3%	MMR1%	MMR2%	DTaP/IPV%	Hib/MenC%
United Kingdom	176 <sup>1</sup>	95.9 (96.2)	95.4 (95.4)	88.0 (88.2)	87.0 (87.0)	93.3 (93.1)
Wales	7	95.5 (95.9)	97.0 (97.0)	90.5 (91.0)	92.4 (92.3)	93.7 (93.5)
N. Ireland	4	98.2 (98.4)	97.6 (98.0)	92.5 (92.6)	93.0 (93.6)	96.5 (96.9)
Scotland	14	98.2 (98.3)	97.1 (97.2)	93.3 (92.8)	93.9 (93.4)	96.4 (96.5)
England (Total)	151 <sup>1</sup>	95.7 (96.0)	95.0 (95.0)	87.3 (87.5)	85.9 (85.9)	92.9 (92.6)
<i>English Local Teams</i>						
Q70	7	96.0 (96.1)	94.9 (95.4)	89.2 (89.5)	88.3 (87.9)	93.2 (93.2)
Q71	33	92.7 (92.6)	91.5 (91.0)	79.1 (80.2)	76.8 (77.0)	88.7 (88.1)
Q72	15	97.1 (97.3)	96.7 (96.7)	90.4 (90.2)	90.0 (90.0)	94.2 (94.1)
Q73	13	96.1 (96.4)	96.2 (96.3)	88.6 (88.3)	86.8 (86.1)	95.0 (93.1)
Q74	12 <sup>1</sup>	97.8 (97.7)	97.8 (97.4)	93.5 (91.6)	93.5 (92.2)	96.5 (96.0)
Q75	9	97.3 (97.6)	96.8 (96.5)	91.5 (92.1)	91.7 (91.9)	94.8 (95.8)
Q76	8	96.6 (96.5)	96.1 (96.2)	88.4 (89.3)	87.3 (87.5)	94.3 (94.1)
Q77	10	96.3 (96.0)	95.9 (96.0)	88.2 (88.5)	86.5 (87.1)	94.3 (93.1)
Q78	10	97.2 (97.6)	96.4 (96.8)	91.2 (91.1)	89.5 (91.6)	93.5 (94.1)
Q79	7	96.7 (96.7)	96.0 (95.9)	89.6 (88.9)	88.5 (88.8)	92.9 (92.8)
Q80	9	97.2 (97.5)	96.3 (96.2)	89.5 (90.2)	89.6 (89.2)	95.3 (95.7)
Q81	6	92.3 (95.0)	91.8 (91.8)	81.6 (82.7)	78.6 (79.2)	89.1 (89.2)
Q82	12	96.4 (96.4)	95.5 (95.7)	90.2 (89.6)	88.9 (88.4)	94.3 (94.9)

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

1. One local authority's data not included due to data quality issues, currently under local investigation

### 3b. Completed primary immunisations and boosters at five years by NHS England Area Team: July to September 2016 (April to June 2016)

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	96.0 (96.1)	94.9 (95.4)	89.2 (89.5)	88.3 (87.9)	93.2 (93.2)
Q71	Q71	33	92.7 (92.6)	91.5 (91.0)	79.1 (80.2)	76.8 (77.0)	88.7 (88.1)
Q72	Q50	6	97.2 (97.9)	96.9 (96.1)	90.9 (91.1)	91.0 (91.5)	94.7 (94.4)
	Q51	4	96.4 (96.9)	96.0 (96.9)	87.5 (88.7)	88.1 (89.3)	92.0 (92.7)
	Q52	5	97.4 (97.2)	97.0 (97.0)	91.7 (90.5)	90.5 (89.4)	95.2 (94.7)
Q73	Q46	10	96.4 (96.6)	96.5 (96.5)	90.0 (89.8)	87.7 (87.3)	93.8 (93.8)
	Q47	3	95.5 (96.0)	95.7 (96.0)	85.9 (85.2)	84.9 (83.6)	97.5 (91.7)
Q74	Q45	6	97.9 (98.1)	97.7 (97.7)	93.6 (93.0)	95.1 (93.4)	96.5 (96.8)
	Q49	6 <sup>1</sup>	97.7 (97.5)	97.8 (97.2)	93.4 (90.7)	92.3 (91.4)	96.5 (95.4)
Q75	Q44	4	97.4 (98.0)	96.5 (97.6)	92.3 (93.2)	93.3 (93.4)	94.3 (95.6)
	Q48	5	97.2 (97.6)	97.2 (97.4)	90.5 (90.9)	90.1 (90.3)	95.3 (96.1)
Q76	Q55	4	96.2 (95.7)	95.9 (95.6)	86.7 (87.2)	86.4 (86.5)	93.2 (92.4)
	Q60	4	97.2 (97.6)	96.5 (96.9)	90.9 (92.3)	88.4 (89.0)	95.9 (96.6)
Q77	Q53	4	97.5 (97.2)	97.6 (97.3)	94.0 (92.9)	92.4 (92.2)	95.7 (95.1)
	Q54	6	95.7 (95.4)	95.0 (95.3)	85.1 (86.1)	83.3 (84.4)	93.5 (92.0)
Q78	Q58	6	96.9 (97.5)	96.1 (96.7)	91.0 (91.0)	88.8 (89.1)	93.5 (94.5)
	Q59	4	97.6 (97.6)	97.1 (97.02)	91.5 (91.3)	90.7 (90.3)	93.7 (93.3)
Q79	Q56	4	96.2 (96.0)	95.6 (95.4)	89.4 (88.2)	88.1 (87.6)	91.8 (91.2)
	Q57	3	97.5 (97.4)	96.6 (96.5)	89.8 (89.7)	89.0 (90.3)	94.2 (94.7)
Q80	Q65	4	97.2 (97.5)	96.3 (96.0)	88.2 (89.2)	91.3 (92.1)	95.4 (95.9)
	Q66	5	97.2 (97.4)	96.3 (96.4)	90.8 (91.1)	87.8 (86.4)	95.3 (95.5)
Q81	Q67	2	94.9 (95.2)	94.9 (95.3)	83.2 (86.4)	81.0 (83.1)	92.2 (92.7)
	Q68	4	90.5 (94.8)	89.8 (89.3)	80.6 (80.1)	77.0 (76.6)	86.9 (86.8)
Q82	Q64	4	96.7 (96.2)	96.3 (95.8)	89.6 (88.6)	87.4 (85.9)	94.2 (94.2)
	Q69	8	96.2 (96.6)	95.0 (95.7)	90.5 (90.2)	89.7 (89.9)	94.4 (95.3)

\* 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 Area Team: July to September 2016 (April to June 2016)**

NHSE 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	33	100 (100)	7 of 7	14	100 (100)
Q71	32 of 33	259	81 (78)	32 of 33	259	64 (56)
Q72	14 of 15	38	87 (100)	14 of 15	31	90 (88)
Q73	8 of 13	47	51 (61)	8 of 13	103	42 (30)
Q74	13 of 13	19	58 (94)	13 of 13	5	80 (80)
Q75	3 of 9	5	60 (91)	3 of 9	2	50 (73)
Q76	8 of 8	18	94 (100)	8 of 8	13	100 (100)
Q77	8 of 10	36	100 (100)	8 of 10	48	100 (70)
Q78	8 of 10	43	91 (94)	8 of 10	48	90 (85)
Q79	7 of 7	23	100 (81)	7 of 7	24	96 (79)
Q80	9 of 9	6	83 (95)	8 of 9	9	67 (92)
Q81	6 of 6	16	100 (93)	6 of 6	25	84 (95)
Q82	11 of 12	42	93 (100)	11 of 12	28	79 (80)
<b>England</b>	<b>132 of 152</b>	<b>585</b>	<b>83 (87)</b>	<b>131 of 152</b>	<b>609</b>	<b>71 (63)</b>

\* See table 1b for key to NHS England Area Team organisational code

**Table 5. BCG vaccine coverage at 12 months in England by NHS England Area Team: July to September 2016 (April to June 2016)**

Upper Tier Local Authority ODS Code	Upper tier Local Authority	TB rate (per 100,000) 2014 estimates	Number of eligible children (1st birthday during April to June 2015)	Universal BCG coverage (%)
<b>(a) TB incidence <math>\geq 40/100,00</math> and universal BCG vaccination policy</b>				
731	Newham	100	1500	88.8 (92.6)
719	Brent	82.9	1243	16 (22.3)
722	Ealing	65.3	1194	50.8 (57.6)
728	Hounslow	64	1255	54.3 (62.2)
725	Harrow	60.4	868	16.8 (27.2)
617	Slough	51.5	<i>not available</i>	<i>not available</i>
732	Redbridge	50.5	1193	36.6 (52.2)
703	Greenwich	42	1184	73.7 (81)
727	Hillingdon	41.9	1003	58.6 (67.6)
735	Waltham Forest	41.3	1179	40.5 (71.7)
<b>(b) TB incidence <math>\geq 40/100,00</math> and selective BCG vaccination policy</b>				
509	Leicester	48	<i>selective programme</i>	
<b>(c) TB Incidence <math>&lt; 40/100,000</math> and universal BCG policy</b>				
711	Tower Hamlets	38.3	1071	94.1 (85)
611	Luton	35.1	900	84.3 (81.5)
716	Barking and Dagenham	35	952	17 (37.7)
724	Haringey	33.2	1088	6.6 (6.6)
704	Hackney	32.4	1115	59.3 (62)
710	Southwark	31.7	<i>not available</i>	<i>not available</i>
730	Merton	29.6	736	24.7 (27.1)
706	Islington	29.3	627	78.3 (81.8)
721	Croydon	27.6	<i>not available</i>	<i>not available</i>
708	Lambeth	26.6	<i>not available</i>	<i>not available</i>
709	Lewisham	25.9	1185	52.4 (50.1)
705	Hammersmith and Fulham	24.2	517	46.6 (49)
713	Westminster	24	645	31 (34.8)
717	Barnet	23.2	1358	<i>not available</i>
723	Enfield	22.5	1182	1.9 (3.9)
707	Kensington and Chelsea	22.2	559	35.6 (34.9)
702	Camden	21.8	624	51.4 (48.5)
712	Wandsworth	21.7	1286	29.1 (24.8)
729	Kingston upon Thames	15.8	657	13.7 (16)
734	Sutton	13.3	684	24.7 (27)
714	City of London	12.9	19	52.6 (57.1)
726	Havering	10.9	943	6.7 (7.9)
718	Bexley	10.7	820	67.6 (77.9)
720	Bromley	8.1	1126	22.1 (21.7)
733	Richmond upon Thames	5.9	656	23.9 (21.4)