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Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme) : January to March 2017

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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 and area team, country and UK levels.

Key points for the fourth quarterly report for 2016/17

- The third evaluation of UK coverage for two doses of MenB vaccine at the first birthday increased by 0.4% to 93.1% when compared to the previous quarter. This coverage is similar to coverage for other vaccines offered in the first year of life. Country level coverage ranged from 96.5% in Northern Ireland to 92.6% in England. UK coverage for two doses of rotavirus is now 90.7%, the highest level since reporting started.
- Quarterly UK coverage at the first birthday for the completed DTaP/IPV/Hib course (3 doses) decreased by 0.3% to 93.5% and for PCV2 by 0.2% to 93.8%. All the devolved administrations achieved at least 96% coverage for these two vaccines.
- The 12 week MenC dose was removed from the routine immunisation schedule from 1st July 2016. Children evaluated in this quarter at 12 months were the last to be scheduled to receive this dose but those presenting after 1st July may not have been offered the vaccine, resulting in decreased coverage (85.7%).
- UK coverage at two years for the PCV and Hib/MenC boosters, and MMR1, all offered at the beginning of the second year of life, decreased by 0.3-0.4% this quarter, to 91.8% (PCV and Hib/MenC) and 91.7% (MMR1).
- UK coverage of MMR1 at five years continues to exceed the WHO target of 95%, remaining at 95.4% for the fourth successive quarter. England achieved 95.1% whilst all three devolved administrations achieved at least 97%. UK MMR2 decreased by 0.4% to 88.1%. All countries achieved above 90% except England where coverage was 87.4%. Coverage at five years predominantly reflects vaccinations given more than two years ago.
- In England, neonatal hepatitis B coverage of three doses at one year increased by 2% to 86% but decreased 3% to 69% for four doses at two years.
- This is the fourth 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.
- Coverage for London LAs ranged from 2% to 90.5% (compared with 3.6% to 93% in October to December, 1.9% to 94.1% in July to September and 3.9% to 92.6% in April to June 2016). The wide range in coverage by LA may reflect a combination of vaccine shortage, programme delivery and data issues.

1. Cohort definitions for January to March 2017

Children who reached their first birthday in the quarter (born January to March 2016) 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), and two doses of rotavirus vaccine at two and three months of age [1]. They are the last quarterly cohort to be offered one dose of meningococcal serogroup C conjugate vaccine (MenC vaccine) at three months of age [1,2].

Children who reached their second birthday in the quarter (born January to March 2015) were scheduled to receive their third DTaP/IPV/Hib, second MenC and PCV vaccinations between May and July 2015, 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 February and April 2016.

Children who reached their fifth birthday in the quarter (born January to March 2012) were scheduled to receive their third dose DTaP/IPV/Hib and second MenC and PCV vaccinations between May and July 2012. They were also scheduled to receive their first MMR, Hib/MenC booster and PCV booster after their first birthday (January to March 2013) between February and April 2013, and their pre-school diphtheria, tetanus, acellular pertussis, inactivated polio booster (DTaP/IPV) and second dose MMR from April 2015.

Children born to hepatitis B surface antigen (HBsAg) positive mothers, who reached their first birthday in this quarter (January to March 2016) 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 (January to March 2015) 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 (January to March 2016) 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).

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 third quarterly COVER report to publish data by LA responsible population and individual LA data, with relevant caveats, are available here.

This is the third quarterly COVER report to publish MenB coverage at 12 months and data were received from 142 of the 152 LAs. This is the final quarterly evaluation of MenC at 12 months as birth cohorts evaluated from the April to June 2017 quarter will not have been offered a MenC vaccine at 12 weeks.

As part of NHS England's *Healthy Children: Transforming Child Health Information* [3] the 19 CHIS providers in London have merged into 4 CHIS Hubs covering the whole of London from 1 April 2017. The change has coincided with the submission period for this current quarterly COVER report, resulting in decreased coverage for some antigens in a number of London LAs. It is anticipated that there may be further data quality issues in some London COVER returns for the next few reports as the new Hubs become responsible for generating coverage data. Changes in vaccine coverage in London should therefore be interpreted with caution for the time being.

3. Results

3.1 Coverage at 12 months

Vaccine coverage for the third cohort of children routinely offered MenB vaccine was evaluated in this quarter. UK two-dose MenB coverage (MenB2) increased by 0.4% to 93.1% compared to the previous quarter and ranged from 96.5% in Northern Ireland to 92.6% in England. England MenB2 coverage at local team (LT) level achieved at least 90% in all areas except London. However, as data was submitted by only 142 of the 152 English LAs figures should be interpreted with caution where LT data do not represent all LAs in the area (see LA vaccine coverage statistics).

Compared to the previous quarter (October to December 2016) UK coverage increased by 0.1% to 90.7% for two-dose rotavirus and decreased by 0.3% to 93.5% for DTaP/IPV/Hib3 and by 0.2% to 93.8% for PCV to 93.8% (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; all LTs except London achieving at least 90% (table 1a).

The 12 week MenC dose was removed from the routine immunisation schedule from 1st July 2016 and although children born January to March 2016 would have been scheduled to receive this 12 week dose, those presenting for their 12 week immunisation late (after 1st July) may not have been offered the vaccine, resulting in decreased coverage for this antigen.

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

3.2 Coverage at 24 months

UK coverage for the primary course (three doses) of DTaP/IPV/Hib at two years of age decreased 0.1% to 95.5% compared to the previous quarter (table 2a) with all countries and all but two English LTs (London and South (South East)) achieving the 95% WHO target (table 2a). Compared to the October to December quarter, UK coverage for MMR1 decreased by 0.4% to 91.7% and the Hib/MenC and PCV boosters by 0.3% to 91.8, reversing the increases observed in the last report (table 2a) [4].

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

3.3 Coverage at five years

UK coverage evaluated at five years for both DTaP/IPV/Hib3 and MMR1 continues to exceed the 95% WHO target at 95.8% and 95.4% respectively (table 3a). UK MMR1 coverage remained at 95.4% for the fourth consecutive quarter; at the country level Scotland, Wales and Northern Ireland achieved at least 97% and in England it was 95.1% overall, with four of the LTs in England (Wessex, London, South East, South Central) failing to achieve 95%. UK MMR2 coverage decreased by 0.4% this quarter to 88.1% reversing the increases observed in the last report (table 3a) [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 January to March 2016), and coverage of four doses of vaccine in infants who reached two years of age (i.e. those born between January to March 2015) are presented by local team in table 4.

Participation was the same as for the previous quarter where just over 90% of all LAs (138/152) [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. Compared with the previous quarter, coverage for three doses by 12 months of age increased by 2% to 86%, and decreased by 3% to 69% 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. The 2016 annual TB report for England (published in September 2016) included 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 [6].

This quarterly COVER report presents BCG coverage data for the fourth quarter of 2016-17 alongside the first, second and third quarters 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 January and March 2016 in LAs with a universal BCG programme ranged from 2.0% to 90.5% (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 January to March 2016). 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

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.

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. MenC vaccination schedule: planned changes from July 2016. https://www.gov.uk/government/publications/menc-vaccination-schedule-planned-changesfrom-july-2016
- 3. NHS England. Digital Child Health Transformation Programme. https://www.england.nhs.uk/digitaltechnology/child-health/
- 4. Public Health England (2016). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, October to December 2016. 2017 HPR 11 (13). Available at https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2016-to-2017-quarterly-data
- Public Health England (2016). Vaccination coverage statistics for children up to the age of five years in the United Kingdom, July to September 2016. 2016 HPR 10 (44). Available at https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-coverprogramme-2016-to-2017-quarterly-data
- 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 andEngland local team: January to March 2017 (October to December 2016)

Table 1b. Completed UK primary immunisations at 12 months by NHS England AreaTeam: January to March 2017 (October to December 2016)

Table 2a. Completed UK primary immunisations at 24 months by country and NHSEngland local team:January to March 2017 (October to December 2016)

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Table 3a. Completed UK primary immunisations and boosters at five years by country and NHS England local team: January to March 2017 (October to December 2016)

Table 3b. Completed primary immunisations and boosters at five years by NHSEngland Area Team: January to March 2017 (October to December 2016)

Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHSEngland Area Team: January to March 2017 (October to December 2016)

Table 5. BCG vaccine coverage at 12 months in England by NHS England Area Team:January to March 2017 (October to December 2016)

Table 1a. Completed UK primary immunisations at 12 months by country and English Local Teams: January to March 2017 (*October to December 2016*)

	Country	No. of LAs/HBs†	DTaP/IPV/Hib3 %	MenC% ¹	PCV2%	Rota2%	MenB2%
	United Kingdom	177	93.4 (<i>93.8</i>)	85.6 (<i>94.0</i>)	93.7 (<i>94.0</i>)	90.7 (<i>90.6</i>)	93.1 ² (92.7 ²)
	Wales	7	96.3 (<i>96.2</i>)	n/a (<i>96.2</i>)	96.5 (96.2)	95.1 (<i>94.3</i>)	96.1 (95.4)
	Northern Ireland	4	96.9 (96.6)	90.4 (97.3)	97.0 (96.7)	95.1 (<i>94.3</i>)	96.5 (95.7)
	Scotland	14	96.4 (96.6)	95.8 (<i>97.1</i>)	96.6 (96.7)	93.6 (93.5)	95.9 (95.8)
	England (Total)	152	92.9 (<i>93.4</i>)	84.6 (<i>93.6)</i>	93.2 (93.6)	90.0 (<i>90.1)</i>	92.6 ² (92.2 ²)
LT code	NHS England Local Teams						
Q70	Wessex	7	94.8 (95.2)	85.8 (95.1)	94.5 (94.9)	94.2 (94.0)	95.9 (<i>95.5</i>)
Q71	London	33	88.4 (89.2)	78.0 (89.2)	89.1 (89.6)	86.6 (86.3)	86.8 (86.3)
Q72	North (Yorkshire & Humber)	15	95.1 (95.1)	87.4 (95.7)	95.3 (95.1)	92.5 (92.8)	94.5 (94.6)
Q73	North (Lancashire & Grt. Manchester)	13	92.2 (93.4)	84.3 (<i>94.4</i>)	92.8 (94.2)	84.5 (85.5)	95.0 (94.6)
Q74	North (Cumbria & North East)	13	96.1 (96.0)	89.7 (95.9)	96.0 (96.2)	94.7 (94.1)	95.6 (95.4)
Q75	North (Cheshire & Merseyside)	9	94.9 (94.9)	87.6 (95.8)	95.0 (95.2)	92.9 (92.3)	94.7 (95.1)
Q76	Midlands & East (North Midlands)	8	95.2 (95.1)	89.5 (95.9)	95.4 (95.2)	93.4 (93.3)	94.7 (94.5)
Q77	Midlands & East (West Midlands)	10	92.2 (92.4)	83.0 (93.2)	92.9 (92.9)	89.0 (88.2)	92.3 (91.6)
Q78	Midlands & East (Central Midlands)	10	95.1 (<i>95.8</i>)	88.1 (<i>96.4</i>)	95.4 (96.0)	93.1 (93.5)	93.8 (94.7)
Q79	Midlands & East (East)	7	94.3 (95.0)	87.2 (95.6)	94.6 (95.2)	92.0 (91.6)	93.9 (94.2)
Q80	South (South West)	9	92.5 (94.3)	82.7 (94.7)	93.5 (94.6)	89.0 (<i>89.0</i>)	93.1 (93.8)
Q81	South (South East)	6	91.1 (<i>91.2</i>)	83.4 (89.4)	91.3 (<i>91.3</i>)	85.5 (87.8)	90.9 (90.3)
Q82	South (South Central)	12	95.1 (<i>94.6</i>)	86.7 (94.1)	94.6 (94.5)	93.1 (<i>91.9</i>)	94.6 (90.3)

1. Twelve week MenC dose was removed from the routine immunisation schedule from 1July 2016 and children born Jan to Mar 2016 but presenting for their 12 week immunisation late (after 1 July) may not have been offered the vaccine, resulting in decreased coverage

2. Estimated figures based on data from only 142 of 152 English local authorities.

† Local Authorities /health boards.

NHS England Local Team code*	English Area Team (AT code)	No. of formerLA's	DTaP/IPV/Hib3%	MenC%	PCV2%	Rota2%	MenB2% ¹
Q70	Wessex (Q70)	7	94.8 (95.2)	85.8 (95.1)	94.5 (<i>94.0</i>)	94.2 (94.0)	95.9 <i>(95.6)</i>
Q71	London (Q71)	33	88.4 (89.2)	78.0 (89.2)	89.1 (<i>89.6</i>)	86.6 (<i>86.3</i>)	86.8 (86.3)
	North Yorkshire and Humber (Q50)	6	95.9 (96.1)	89.0 (97.3)	96.2 (95.9)	93.3 (95.2)	94.7 (96.3)
Q72	South Yorkshire and Bassetlaw (Q51)	4	94.3 (94.8)	86.7 (94.4)	94.5 (<i>94.8</i>)	92.4 (93.1)	93.7 <i>(93.6)</i>
	West Yorkshire (Q52)	5	95.2 (94.7)	86.5 (95.4)	95.3 (<i>94.8)</i>	92.3 (91.9)	94.7 <i>(94.1)</i>
070	Greater Manchester (Q46)	10	95.7 (<i>95.6</i>)	84.0 (95.3)	95.0 (<i>95.6</i>)	87.8 (87.4)	95.0 <i>(94.6)</i>
Q73	Lancashire (Q47)	3	84.8 (88.6)	85.0 (92.2)	88.2 (91.1)	77.4 (81.4)	n/a <i>(n/a)</i>
074	Durham, Darlington and Tees (Q45)	6	95.9 (<i>96.7</i>)	91.2 (97.0)	96.1 (<i>96.9</i>)	95.6 (95.1)	96.4 (96.5)
Q74	Cumbria, Northumberland, Tyne and Wear (Q49)	7	96.2 (<i>95.6</i>)	88.7 (95.1)	96.0 (<i>95.8)</i>	94.1 (93.5)	95.2 (94.6)
075	Cheshire, Warrington and Wirral (Q44)	4	95.7 (95.9)	88.9 (96.0)	95.8 (96.1)	94.9 (94.4)	95.1 <i>(95.7)</i>
Q75	Merseyside (Q48)	5	94.1 (93.9)	86.4 (95.5)	94.3 (94.3)	91.0 (<i>90.1</i>)	94.4 <i>(94.5)</i>
	Derbyshire and Nottinghamshire (Q55)	4	94.8 (94.3)	89.9 (95.2)	94.8 (94.3)	93.1 (<i>92.8</i>)	93.9 <i>(</i> 93.4)
Q76	Shropshire and Staffordshire (Q60)	4	95.8 (96.3)	88.9 (97.0)	96.1 (<i>96.4</i>)	93.9 (<i>94.0</i>)	96.0 <i>(95.9)</i>
077	Arden, Herefordshire and Worcestershire (Q53)	4	94.0 (<i>94.4</i>)	86.0 (95.4)	94.9 (95.2)	91.1 (<i>90.4</i>)	94.4 <i>(94.3)</i>
Q77	Birmingham and the Black Country (Q54)	6	91.4 (<i>91.4</i>)	81.5 (<i>92.1</i>)	92.0 (91.7)	88.0 (87.2)	91.3 <i>(90.2)</i>
Q78	Hertfordshire and the S Midlands (Q58)	6	94.7 (<i>95.7</i>)	87.5 (96.3)	95.0 (<i>95.8</i>)	93.0 (93.6)	93.9 <i>(94.4)</i>
Q78	Leicestershire and Lincolnshire (Q59)	4	95.6 (<i>95.9</i>)	89.2 (96.5)	96.0 (<i>96.3</i>)	93.3 (93.4)	93.5 <i>(95.1)</i>
Q79	East Anglia (Q56)	4	95.0 (95.2)	87.6 (95.8)	95.1 (<i>95.3</i>)	92.1 (<i>91.6</i>)	94.6 <i>(94.4)</i>
Q79	Essex (Q57)	3	93.6 (<i>94.8)</i>	86.6 (95.4)	94.0 (95.2)	91.8 (<i>91.6</i>)	93.0 <i>(</i> 93.8)
Q80	Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	4	92.2 (<i>94.5</i>)	84.4 (95.0)	93.2 (<i>94.5</i>)	89.5 (91.1)	92.7 <i>(</i> 93.5)
000	Devon, Cornwall, Isles of Scilly (Q66)	5	92.9 (94.1)	80.9 (<i>94.5</i>)	93.8 (94.7)	88.5 (86.8)	93.4 <i>(94.0)</i>
0.94	Kent and Medway (Q67)	2	90.3 (91.7)	78.1 (<i>83.4</i>)	90.2 (91.6)	79.7 (86.1)	88.8 (90.5)
Q81	Surrey and Sussex (Q68)	4	91.7 (<i>90.8)</i>	87.0 (93.5)	92.1 (91.1)	89.6 (<i>89.0</i>)	92.3 (90.2)
000	Bath, Gloucestershire, Swindon and Wiltshire (Q64)	4	95.4 (95.5)	87.4 (95.6)	95.5 (95.7)	93.4 (92.6)	95.3 <i>(94.3)</i>
Q82	Thames Valley (Q69)	8	94.9 (94.0)	86.2 (93.4)	94.0 (93.7)	93.0 (<i>91.5</i>)	94.1 <i>(</i> 87.6)

Table 1b. Completed UK primary imms at 12 months by NHS England Area Teams: January to March 2017 (October to December 2016)

* See table 1a for key to local team organisational code ¹ Based on coverage data from 142/152 LAs, see full tables <u>here;</u>

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Table 2a. Completed UK primary immunisations at 24 months by country and NHS England local team: January to March 2017 (*October to December 2016*)

Country	No. of former LAs/ HBs†	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
United Kingdom	177	95.5 (95.6)	91.8 (<i>92.1</i>)	91.8 (<i>92.1</i>)	91.7 (<i>92.1)</i>
Wales	7	97.4 (97.5)	95.4 (95.1)	94.6 (<i>94.3</i>)	95.1 (<i>94.7</i>)
Northern Ireland	4	98.0 (<i>97.9</i>)	95.0 (95.2)	94.8 (<i>94.9)</i>	94.7 <i>(94.8)</i>
Scotland	14	97.5 (<i>97.8</i>)	94.5 (95.2)	94.7 (<i>95.3</i>)	94.4 (94.8)
England (Total)	152	95.1 (95.3)	91.3 (<i>91.5</i>)	91.3 (<i>91.6</i>)	91.2 (91.6)
NHS England local teams*					
Q70	6	96.2 (96.2)	93.3 (<i>93.0</i>)	93.1 (<i>93.1</i>)	93.0 (93.2)
Q71	33	90.8 (91.8)	83.0 (84.2)	83.2 (<i>84.6</i>)	83.3 (84.8)
Q72	15	96.8 (96.8)	94.4 (94.6)	94.6 (<i>94.6</i>)	94.1 (<i>94.4</i>)
Q73	13	96.3 (<i>95.9)</i>	92.3 (92.8)	92.2 (92.7)	92.2 (93.0)
Q74	12	97.2 (97.9)	95.3 (95.5)	95.3 (<i>95.5</i>)	95.2 (95.3)
Q75	9	96.5 (96.7)	93.5 (93.1)	93.8 (93.7)	93.6 (93.1)
Q76	8	96.9 (96.2)	94.0 (<i>93.0</i>)	93.8 (92.9)	93.5 (92.8)
Q77	10	95.5 (95.6)	91.9 (<i>92.1</i>)	91.8 (<i>92.1</i>)	92.1 (92.2)
Q78	10	96.6 (<i>96.7)</i>	94.1 (<i>94.3</i>)	94.4 (<i>94.5</i>)	94.1 (93 <i>.9</i>)
Q79	7	96.6 (<i>96.4</i>)	94.0 (<i>94.4</i>)	94.0 (<i>94.4</i>)	93.8 (<i>94.0</i>)
Q80	9	96.2 (96.5)	92.8 (92.8)	92.5 (92.7)	92.7 (92.8)
Q81	6	93.5 (<i>92.4</i>)	90.4 (<i>89.8)</i>	90.5 (<i>89.7</i>)	90.4 (89.7)
Q82	12	95.8 (96.4)	92.2 (92.8)	92.6 (92.8)	92.4 (93 <i>.0</i>)

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

† Local Authorities/health boards

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Table 2b. Completed primary immunisations at 24 months by NHS England Area Teams: January to March 2017 (October to December 2016)

NHS England Local Team Code*	Area Team code*	No. of LAs †	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
Q70	Q70	7	96.2 (96.2)	93.3 (<i>93.0</i>)	93.1 (<i>93.1</i>)	93.0 (93.2)
Q71	Q71	33	90.8 (91.8)	83.0 (84.2)	83.2 (84.6)	83.3 (<i>84.8</i>)
	Q50	6	97.1 (<i>96.8</i>)	95.1 (<i>94.6)</i>	95.3 (94.7)	94.9 (<i>94.3</i>)
Q72	Q51	4	96.3 (96.8)	93.7 (94.3)	94.1 (<i>94.3</i>)	93.4 (94.1)
	Q52	5	96.8 (96.8)	94.4 (94.8)	94.4 (<i>94.9</i>)	94.0 (94.6)
070	Q46	10	96.9 (96.5)	93.5 (93.5)	93.4 (93 <i>.4</i>)	93.5 (93.8)
Q73	Q47	3	94.9 (<i>94.6</i>)	89.9 (91.4)	89.7 (91.3)	89.6 (<i>91.3</i>)
074	Q45	6	97.3 (97.5)	96.0 (95.2)	95.8 (95.7)	95.6 (95.3)
Q74	Q49	7	97.1 (98.1)	94.8 (95.6)	94.9 (95.3)	95.0 (<i>95.3</i>)
	Q44	4	97.1 (97.8)	94.4 (93.9)	95.6 (<i>95.4</i>)	95.0 (94.2)
Q75	Q48	5	96.0 (95.7)	92.6 (92.4)	92.1 (<i>92.0)</i>	92.2 (92.1)
070	Q55	4	97.0 (95.2)	93.4 (91.8)	93.3 (91.7)	93.0 (91.5)
Q76	Q60	4	96.7 (97.5)	94.8 (94.5)	94.7 (94.5)	94.2 (<i>94.5</i>)
077	Q53	4	97.5 (97.5)	95.0 (95.2)	95.1 (95.2)	95.6 (<i>95.6)</i>
Q77 ·	Q54	6	94.5 (<i>94.7</i>)	90.4 (<i>90.6)</i>	90.2 (90.6)	90.3 (<i>90.5</i>)
070	Q58	6	96.3 (96.6)	94.0 (94.2)	94.3 (94.6)	93.7 (93.7)
Q78	Q59	4	97.0 (96.8)	94.2 (94.3)	94.5 (<i>94.4</i>)	94.8 (94.2)
070	Q56	4	96.3 (96.4)	94.0 (94.1)	94.0 (<i>94.1)</i>	94.0 (93.9)
Q79	Q57	3	96.9 (96.4)	94.0 (94.7)	93.9 (<i>94.8</i>)	93.6 (94.1)
000	Q65	4	96.7 (96.6)	92.3 (92.6)	92.2 (92.5)	91.6 (92.1)
Q80	Q66	5	95.7 (96.5)	93.3 (93.1)	92.8 (92.8)	93.8 (93.5)
004	Q67	2	94.6 (90.0)	89.8 (89.9)	89.9 (<i>89.6</i>)	89.8 (89.5)
Q81	Q68	4	92.7 (90.7)	90.8 (89.8)	90.8 (<i>89.8</i>)	90.8 (89.9)
000	Q64	4	95.5 (96.7)	93.2 (93.7)	93.2 (93.7)	92.9 (93.8)
Q82	Q69	8	95.9 (96.2)	91.6 (92.3)	92.2 (92.2)	92.1 (<i>92.5</i>)

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

† Local Authorities

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Table 3a. Completed UK primary immunisations and boosters at five years by country
and NHS England local team: January to March 2017 (October to December 2016)

	Number of	Prin	nary		Booster	
Country	LAs/HBs†	DTaP/IPV Hib3%	MMR1%	MMR2%	DTaP/IPV%	Hib/ MenC% 93.2 (93.1) 93.0 (93.1) 96.7 (95.9) 96.2 (96.1) 92.8 (92.7) 92.7 (92.6) 88.3 (88.4) 94.7 (94.6) 92.8 (93.0) 95.7 (95.7) 94.1 (94.6) 95.3 (94.7) 95.1 (94.9) 93.4 (93.7) 94.0 (93.6) 95.8 (95.0) 89.9 (89.1) 93.2 (93.2)
United Kingdom	177	95.8 (96 <i>.0</i>)	95.4 (95.4)	88.0 (<i>88.5</i>)	87.3 (87.6)	93.2 (93 <i>.1</i>)
Wales	7	94.9 (94.7)	97.3 (96.8)	90.4 (<i>90.7</i>)	93.1 (93.2)	93.0 (<i>93.1</i>)
N. Ireland	4	97.5 (<i>96.9</i>)	97.5 (96.6)	93.4 (<i>92.2</i>)	93.7 (<i>92.7</i>)	96.7 (<i>95.9</i>)
Scotland	14	98.1 (<i>98.0</i>)	97.0 (96.8)	92.5 (93. <i>4</i>)	92.9 (94.0)	96.2 (<i>96.1</i>)
England (Total)	152	95.6 (<i>95.8</i>)	95.1 (95 <i>.2</i>)	87.4 (<i>87.8</i>)	86.3 (86.5)	92.8 (92.7)
English Local Teams						
Q70	7	95.7 (95.7)	94.9 (94.8)	88.6 (89.2)	88.6 (88.2)	92.7 (92.6)
Q71	33	91.8 (92.5)	90.8 (91.3)	77.7 (79.1)	75.0 (76.4)	88.3 (88.4)
Q72	15	97.1 (<i>97.3</i>)	96.8 (<i>97.0</i>)	91.0 (<i>90.1</i>)	90.9 (<i>90.9</i>)	94.7 (<i>94.6</i>)
Q73	13	96.1 (<i>96.5</i>)	96.4 (96.5)	89.7 (<i>89.4</i>)	88.1 (86.2)	92.8 (<i>93.0</i>)
Q74	13	97.9 (<i>97.9</i>)	97.6 (<i>98.0</i>)	92.6 (93.1)	92.6 (92.2)	95.7 (95.7)
Q75	9	96.8 (<i>96.9</i>)	96.5 (96.9)	90.7 (<i>90.7</i>)	90.9 (<i>90.9</i>)	94.1 (<i>94.6)</i>
Q76	8	97.5 (96.9)	97.5 (<i>96.4</i>)	90.2 (<i>89.4</i>)	88.9 (88.2)	95.3 (<i>94.7</i>)
Q77	10	97.0 (<i>97.0</i>)	97.0 (96.6)	89.5 (89.1)	88.7 (88.5)	95.1 (<i>94.9</i>)
Q78	10	96.5 (96.9)	96.1 (96.3)	89.7 (<i>90.4</i>)	89.3 (<i>90.6)</i>	93.4 (93.7)
Q79	7	96.6 (96.5)	96.1 (<i>96.0)</i>	90.4 (90.4)	89.8 (89.2)	94.0 (93.6)
Q80	9	97.2 (97.4)	96.3 (96.1)	90.4 (90.2)	89.4 (88.5)	95.8 (<i>95.0)</i>
Q81	6	93.4 (93.2)	92.5 (92.3)	83.0 (84.2)	81.9 (<i>8</i> 2 <i>.5)</i>	89.9 (89.1)
Q82	12	95.8 (96.7)	94.7 (95.8)	89.0 (<i>90.5</i>)	88.1 (<i>89.9</i>)	93.2 (93.2)

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

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3b. Completed primary immunisations and boosters at five years by NHS England Area Team: January to March 2017 (October to December 2016)

NHS England		No. of	Prin	nary		Booster	
local team Code*	Area Team (AT) code*	LAs† in AT	DTaP/IPV Hib3 %	MMR1 %	MMR2 %	DTaP/ IPV %	% Hib/ MenC 92.7 (92.6) 4) 88.3 (88.4) 94.9 (94.7) 3) 93.5 (93.7) 9) 95.3 (95.0) 9) 94.1 (94.5) 8) 89.9 (90.0) 9) 95.6 (96.2) 9) 94.5 (94.5) 9) 94.3 (93.2) 9) 96.7 (96.8) 7) 96.4 (96.3) 8) 94.5 (94.1) 9) 93.1 (93.3) 8) 93.2 (93.0) 7) 95.1 (94.4) 9) 93.6 (93.9) 9) 93.1 (93.3) 8) 93.2 (93.0) 7) 95.1 (94.4) 9) 95.1 (94.6) 7) 95.1 (94.3)
Q70	Q70	7	95.7 (95.7)	94.9 (94.8)	88.6 (89.2)	88.6 (88.2)	92.7 (92.6)
Q71	Q71	33	91.8 (92.5)	90.8 (91.3)	77.7 (79.1)	75.0 (76.4)	88.3 <i>(88.4</i>)
	Q50	6	97.3 (97.3)	96.9 (97.0)	90.8 (91.1)	89.5 (91.1)	94.9 (94.7)
Q72	Q51	4	97.0 (97.1)	97.4 (97.2)	90.0 (<i>90.0</i>)	90.2 (<i>90.3</i>)	93.5 (<i>93.7</i>)
	Q52	5	97.0 (97.4)	96.4 (96.8)	91.7 (91.4)	92.1 (91.1)	95.3 (<i>95.0</i>)
070	Q46	10	97.0 (97.2)	96.7 (<i>97.0</i>)	91.2 (91.6)	89.8 (87.1)	94.1 (<i>94.5</i>)
Q73	Q47	3	93.9 (94.9)	95.7 (95.3)	86.4 (84.9)	84.2 (84.3)	89.9 (<i>90.0</i>)
	Q45	6	98.0 (97.8)	97.6 (97.7)	93.3 (92.7)	93.1 (<i>90.5</i>)	95.9 (95.1)
Q74	Q49	7	97.8 (<i>97.9</i>)	97.5 (98.1)	92.2 (93.4)	92.3 (93.1)	95.6 (96.2)
	Q44	4	96.7 (97.3)	96.5 (97.0)	92.1 (93.6)	92.7 (93.8)	93.7 (<i>94.7</i>)
Q75	Q48	5	96.9 (96.5)	96.6 (96.7)	89.2 (87.8)	89.0 (<i>87.9</i>)	94.5 (<i>94.5</i>)
0.70	Q55	4	97.3 (96.2)	97.3 (95.8)	88.6 (87.3)	87.8 (87.2)	94.3 (93.2)
Q76	Q60	4	97.8 (<i>97.9</i>)	97.7 (97.3)	92.4 (92.4)	90.5 (<i>89.5</i>)	96.7 (96.8)
	Q53	4	98.3 (98.5)	98.1 (98.5)	94.0 (94.4)	93.6 (94.7)	96.4 (96.3)
Q77 ·	Q54	6	96.3 (96.2)	96.4 (95.7)	87.2 (86.5)	86.3 (<i>85.3</i>)	94.5 (<i>94.1</i>)
0.70	Q58	6	96.2 (96.8)	95.9 (96.2)	89.4 (90.3)	89.0 (<i>90.0</i>)	93.6 (<i>93.9</i>)
Q78	Q59	4	97.0 (97.1)	96.6 (96.6)	90.2 (<i>90.5</i>)	89.7 (91.6)	93.1 (93.3)
	Q56	4	96.2 (96.2)	95.6 (95.5)	90.1 (<i>90.1</i>)	89.1 (<i>88.8)</i>	93.2 (<i>93.0</i>)
Q79	Q57	3	97.1 (96.9)	96.7 (96.6)	90.8 (<i>90.7</i>)	90.7 (<i>89.7</i>)	95.1 (<i>94.4</i>)
	Q65	4	97.4 (97.4)	96.1 (96.3)	88.8 (88.9)	90.7 (89.9)	96.1 (<i>95.5</i>)
Q80	Q66	5	97.1 (97.3)	96.5 (<i>96.0</i>)	91.9 <i>(91.3</i>)	88.1 (87.2)	95.6 (<i>94.6)</i>
	Q67	2	95.2 (95.5)	95.5 (96.0)	81.4 (87.1)	79.3 (83.7)	92.7 (92.3)
Q81	Q68	4	92.1 (91.7)	90.3 (89.9)	84.2 (82.3)	83.7 (81.7)	87.8 (87.0)
	Q64	4	96.0 (97.2)	95.3 (96.4)	89.6 (91.7)	88.8 (91.2)	93.5 (94.7)
Q82	Q69	8	95.7 (96.4)	94.3 (95.4)	88.6 (89.7)	87.6 (89.2)	93.0 (92.3)

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

† Local Authorities.

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Table 4. Neonatal hepatitis B coverage at 12 and 24 months in England by NHS England Local Team: January to March 2017 (October to December 2016)

NHSE Local Team Code	LA returns with 12 month data	12 month deno- minator	% Coverage at 12 months	LA returns with 24 month data	24 month deno- minator	% Coverage at 24 months
Q70	7 of 7	21	100 (<i>100</i>)	7 of 7	7	100 (<i>100</i>)
Q71	30 of 33	229	80 (76)	30 of 33	214	57 (65)
Q72	13 of 15	36	100 (96)	14 of 15	49	98 (<i>98</i>)
Q73	10 of 13	43	65 (62)	10 of 13	84	27 (27)
Q74	13 of 13	13	92 (75)	13 of 13	7	86 (83)
Q75	4 of 9	3	100 (<i>100</i>)	4 of 9	2	100 (33)
Q76	8 of 8	21	90 (95)	8 of 8	13	100 (<i>81)</i>
Q77	10 of 10	38	100 (<i>100</i>)	10 of 10	50	100 (<i>100</i>)
Q78	10 of 10	39	100 (98)	10 of 10	33	88 (<i>89</i>)
Q79	7 of 7	20	80 (95)	7 of 7	13	92 (100)
Q80	9 of 9	9	89 (<i>100</i>)	9 of 9	10	90 (<i>90</i>)
Q81	6 of 6	16	100 (<i>94)</i>	6 of 6	25	92 (100)
Q82	11 of 12	22	100 (<i>91</i>)	11 of 12	24	92 (100)
England	138 of 152	510	86 (<i>84</i>)	139 of 152	531	69 (<i>72</i>)

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

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Table 5. BCG vaccine coverage at 12 months in England by NHS England Area Team:January to March 2017 (October to December 2016, 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 January to March 2016)	Universal BCG coverage% (previous quarterly estimates)
	(a) TB incidence ≥40)/100,00 and univ	ersal BCG vaccination po	licy
731	Newham	100	1355	78.7 (86.6, 88.8, 92.6)
719	Brent	82.9	1128	29.6 (24.5, 16.0, 22.3)
722	Ealing	65.3	1239	35.1 (40.9, 50.8,57.6)
728	Hounslow	64	1010	61.7 (55.4, 54.3, 62.2)
725	Harrow	60.4	848	29.8 (26.1, 16.8, 27.2)
617	Slough	51.5	591	2.9 (4.3, not available)
732	Redbridge	50.5	1052	10.6 (14.7, 36.6, 52.2)
703	Greenwich	42	1141	50.5 (68.5, 73.7,81.0)
727	Hillingdon	41.9	972	19.4 (52.8, 58.6, 67.6)
735	Waltham Forest	41.3	973	7.9 (9.1, 40.5, 71.7)
	(b) TB incidence ≥40)/100,00 and sele	ctive BCG vaccination po	licy
509	Leicester	48	selective programme	
	(c) TB Inciden	ce <40/100,000 ai	nd universal BCG policy	
711	Tower Hamlets	38.3	976	90.5 (93.0, 94.1, 85.0)
611	Luton	35.1	915	80.0 (86.9, 84.3, 81.5)
716	Barking and Dagenham	35	902	5.9 (6.0, 17.0, 37.7)
724	Haringey	33.2	1006	19.6 (8.7, 6.6, 6.6)
704	Hackney	32.4	1021	60.7(58.5, 59.3, 62.0)
710	Southwark	31.7	not available	not available
730	Merton	29.6	637	14.3 (23.4, 24.7, 27.1)
706	Islington	29.3	not available	n/a (85.6, 78.3, 81.8)
721	Croydon	27.6	1392	13.4 (20.2, not available)
708	Lambeth	26.6	not available	not available
709	Lewisham	25.9	1197	55.7 (59.0, 52.4, 50.1)
705	Hammersmith and Fulham	24.2	561	12.1 (27.4, 46.6, 49.0)
713	Westminster	24	610	12.5 (18.3, 31.0, 34.8)
717	Barnet	23.2	1218	29.6 (33.0, 37.5, n/a)
723	Enfield	22.5	1115	8.4 (86.4, 1.9, 3.9)
707	Kensington and Chelsea	22.2	512	8.6 (20.8, 35.6, 34.9)
702	Camden	21.8	644	43.8 (46.5, 51.4, 48.5)
712	Wandsworth	21.7	1184	10.2 (30.1,29.1, 24.8)
729	Kingston upon Thames	15.8	598	5.4 (9.0, 13.7, 16.0)
734	Sutton	13.3	592	14.2 (23.4, 24.7, 27.0)
714	City of London	12.9	10	60.0 (16.7, 52.6, 57.1)
726	Havering	10.9	861	2.0 (3.6, 6.7, 7.9)
718	Bexley	10.7	730	37.5 (51.0, 67.6, 77.9)
720	Bromley	8.1	1050	18.2 (18.1, 22.1, 21.7)
733	Richmond upon Thames	5.9	635	26.9 (20.8, 23.9, 21.4)

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