



Infection report

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Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): April to June 2015

Commentary on the first quarterly report for 2015/16

One year old children evaluated in the current quarter (born April to June 2014), are the third cohort to have been routinely offered rotavirus vaccine at two and three months, and the fifth quarterly cohort offered only one primary MenC dose at three months of age [1].

In Scotland, Northern Ireland and Wales the COVER data extraction from Child Health Information Systems (CHISs) has been modified to reflect these changes. Data presented in this report shows that coverage of one dose of MenC is higher than the other vaccines evaluated at one year in those countries (98.1% in Scotland, 98.4% in Northern Ireland, and 98.1% in Wales). Coverage of two doses of rotavirus vaccine evaluated at one year is also high – rotavirus coverage is 93.2% in Scotland, 94.9% in Northern Ireland, and 94.4% in Wales (table 1a).

In England, a new *Information Standards Notice* (ISN) for the COVER programme was approved by the Standardisation Committee for Care Information (SCCI) in September and published in November 2014 [2]. Some CHIS IT suppliers are still making the necessary changes to their systems in order to become compliant with the ISN. As a result only eleven of the 25 Area Teams (ATs) in England were able to supply one dose MenC vaccine coverage data for all Local Authorities in their area, although where it was reported coverage was similar to or exceeded that of other vaccines evaluated at one year, as seen in the devolved administrations. As a consequence of this missing data we are not able to produce MenC vaccine coverage at one year for England or the UK (table 1a). This is a technical rather than a delivery issue which should resolve once all CHIS IT suppliers comply with the ISN, by the end of September 2015 at the latest.

For the same reason, England could not provide robust estimates of rotavirus coverage at this age from CHIS with data flowing for around a quarter of Local Authorities and complete reporting available for six Area Teams (table 1b). However, PHE introduced a temporary sentinel collection via ImmForm to extract monthly coverage data directly from GP practices in England for children who had just reached the upper age for receiving the vaccine (25 weeks) in order to rapidly assess rotavirus vaccine coverage [3]. This early evaluation of vaccine coverage has provided assurance that the vaccine has been well accepted in England. Monthly coverage estimates at the national and AT levels have been published [4]. GP data for those children born between April and June 2014 (i.e. the COVER cohort evaluated in this quarter at 12 months of age), were assessed at aged 25 weeks in October, November and December 2014, and two-dose rotavirus coverage was estimated at 88% nationally during these months [4].

UK coverage for DTaP/IPV/Hib3 and PCV2 evaluated at 12 months decreased by 0.3% to 94.2% and 94.1% respectively compared to the previous quarter (table 1a).

UK coverage at two years increased by 0.1% for MMR to 92.6%, by 0.2% for the Hib/MenC booster to 92.7% and both DTaP/IPV/Hib3 and PCV booster coverage remained at 95.9% and 92.6% respectively [5]. At country level Scotland, Northern Ireland and Wales all achieved at least 95% coverage for all antigens evaluated at two years of age, as did five of the 25 ATs in England (table 2b).

At five years coverage was at least 95% for the primary course of DTaP/IPV/Hib in all countries. UK coverage of MMR1 at five years exceeded the WHO target at 95.1%, the highest quarterly UK figure ever recorded, with all countries and all but five English ATs achieving at least 95%. Scotland, Northern Ireland, Wales and 20 English ATs achieved at least 90% coverage for MMR2 at five years (table 3b). UK pre-school booster coverage (DTaP/IPV) decreased by 0.7% to 88.5% when compared to the previous quarter; decreases were seen in all countries except Scotland (table 3a).

Selective neonatal hepatitis B coverage for three doses by 12 months of age increased by 1% to 85% compared to the previous quarter and increased by 3% to 75% for those receiving four doses by 24 months (table 4a).

On September 23rd 2015, the Health and Social Care Information Centre (HSCIC) published national statistics for England in their 'NHS Immunisation Statistics, England 2014-15', which also includes 2014-15 annual coverage data for the UK childhood immunisation programme [6]. UK coverage for one dose of MMR vaccine at 24 months decreased by 0.3% to 92.8% compared to 2013-14, with decreases observed in all UK countries. However, UK coverage of MMR1 evaluated at five years increased by 0.2% to 94.8% and MMR2 increased by 0.3% to 89.3%, when compared to the previous year [6, 7]. These are the highest annual MMR coverage estimates achieved for five year olds since evaluation of the two-dose programme began in 1998. UK coverage of other vaccines evaluated at 12 months decreased marginally by 0.1%, by 0.2 – 0.4% at 24 months, but remained very similar to or slightly higher at five years, ranging from -0.1 to 0.4%.

COVER data in England from April 2013

From April 2013, the responsibility for commissioning and coordinating immunisation programmes transferred to NHS England [8]. Population vaccination coverage is a key indicator included in the Public Health Outcomes Framework (PHOF) (Indicator 3.3) [9] with reporting expected for the Local Authority (LA) resident population. From April 2014 England COVER data became Official Statistics and is subject to the code of practice associated with such data [10].

From April 2015, NHS England made changes to its internal structure as part of its Organisational Change Programme 2014/15 (see <http://www.england.nhs.uk/about/regional-area-teams/>). To reflect these changes this COVER report presents data by English Local Teams (tables 1a-3a) and Area Teams (tables 1b-3b, 4a).

COVER Information Standards Notice and COVER user guide

A new *Information Standards Notice* (ISN) for the COVER programme was approved by the Standardisation Committee for Care Information (SCCI) in September and published by the Health and Social Care Information Centre (HSCIC) in November 2014 [2]. PHE published a new COVER User Guide, aimed at all those submitting COVER data, to support the implementation of the ISN. All these documents can be found here: <https://www.gov.uk/government/publications/cover-of-vaccination-evaluated-rapidly-cover-programme-information-standards>.

The ISN provides detailed instruction for CHIS IT suppliers and all data providers on the:

- geographies required for data output (new LA resident output, continuation of PCT responsible population output for trend). This will bring COVER in line with the PHOF requirements for reporting population vaccination coverage [9].
- changes to the routine childhood immunisation schedule (primary MenC reduced from two to one dose, the introduction of Rotavirus immunisation at two and three months). The final sentence in the description section of the ISN states, '*...the implementation completion date of 01/10/15 is the full conformance date. Care providers and suppliers should aim on a best endeavours basis to achieve earlier implementation, in particular in respect of rotavirus and Meningitis C, to enable the commencement of national surveillance.*'
- inclusion of neonatal BCG coverage to be evaluated at 12 months for those areas offering a universal programme

- inclusion of a field for MenB vaccine which was introduced to the childhood vaccination schedule in September 2015
- need to refine the definition of completed doses for age-dependent vaccines in the COVER request parameters to ensure information on children who were immunised outside the UK is captured accurately.

The HSCIC alerted IT system suppliers of the publication of the new COVER ISN in November 2014. The PHE national COVER team has raised awareness of the new ISN via PHE's [Vaccine Update](#), DH's [Children, Families and Maternity e-bulletin](#) and the NHS England Area Team Bulletin. COVER data providers and NHS England Screening and Immunisation Teams have been contacted directly to keep them informed with developments. Area Teams have been asked to contact local CHIS suppliers and other stakeholders to alert them to the new ISN and engage with them to ensure compliance is achieved for all aspects.

Results for April to June 2015

This report presents quarterly coverage data for children in the UK who reached their first, second, or fifth birthday during the evaluation quarter (April to June 2015). Those reaching one year of age in the quarter are the fourth quarterly cohort to be offered rotavirus vaccine routinely at two and three months of age.

Children who reached their first birthday in the quarter (born April to June 2014) were scheduled for three doses of 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 April to June 2013) were scheduled to receive their third DTaP/IPV/Hib, second MenC and PCV vaccinations between August and October 2013, and their first measles, mumps, and rubella (MMR) vaccination, a booster dose of Hib and MenC vaccine (given as a combined Hib/MenC vaccine) and PCV vaccine at the same visit at 12 months of age, between May and July 2014 [11].

Children who reached their fifth birthday in the quarter (born April to June 2010) were scheduled to receive their third dose DTaP/IPV/Hib and second MenC and PCV vaccinations between August and October 2010. They were also scheduled to receive their first MMR, Hib/MenC booster and PCV booster after their first birthday (April to June 2011) May and July 2011 and their pre-school diphtheria, tetanus, acellular pertussis, inactivated polio booster and second dose MMR from July 2013.

Participation and data quality

Data were received from all Health Boards (HBs) in Scotland, Northern Ireland and Wales. In England, ATs and Child Health Record Departments (CHRDs) submitted data for all former PCTs. Eleven former PCTs reported data quality issues this quarter which were related to changes in information flows or incomplete data for unregistered children.

Across England there are some challenges with maintaining data flows for the PCT level collection as these organisations formally ceased to exist on 1 April 2013. Some CHISs have moved to extracting data at the Clinical Commission Group (CCG) level and we have aggregated these returns to produce a PCT report, based on postcode. Many CHISs are still not able to provide accurate LA resident population coverage data, however, where LAs are coterminous with a former PCT boundary, coverage data for the PCT responsible population will approximate to the LA responsible population. Eleven of the 41 LAs that are not coterminous with PCT boundaries are currently not able to provide LA responsible population data.

Children evaluated in the current quarter (born April to June 2014), are the fourth cohort to have been routinely offered two doses of rotavirus vaccine at two and three months of age, and the fifth to be exclusively offered one dose of MenC at three months of age. In Scotland, Wales and Northern Ireland the programmes extracting COVER data from CHISs have already been modified to reflect these changes and coverage is presented in table 1a.

Eleven ATs are currently able to supply one dose MenC vaccine coverage data for most former PCTs in their area and so MenC vaccine coverage at one year is not published for England or the UK (table 1a). This is a technical rather than a delivery issue and, as evidenced by the areas that have made the change, MenC coverage is expected to be similar to DTaP/IPV/Hib3 and PCV2 coverage at one year (tables 1a-b).

Five ATs are able to produce rotavirus vaccine coverage data for all former PCTs in their area from CHIS. However, more complete data are available from the temporary PHE sentinel collection via the ImmForm web platform. This collection was introduced to rapidly assess coverage by extracting monthly coverage data directly from GP practices in England for children who had just reached the upper age for receiving the vaccine (25 weeks) [4]. This early evaluation of vaccine coverage has provided assurance that the vaccine has been well accepted in England and will remain in place until routine COVER rotavirus data are available for all areas.

Coverage at 12 months

UK coverage at 12 months for both DTaP/IPV/Hib3 and PCV2 slightly dropped by 0.3% to 94.2% and 94.1% respectively (table 1a) when compared to the previous quarter [5]. Country-specific minimum coverage levels achieved for DTaP/IPV/Hib3 and PCV2 evaluated at 12 months show that Scotland and Northern Ireland achieved at least 97% coverage, Wales at least 96%, and England at least 93%. Within England 14 out of 25 ATs achieved at least 95% coverage at 12 months for both these antigens (table 1a).

UK coverage of one dose of MenC at 12 months cannot be calculated this quarter (see commentary above), however, accurate data were provided by all HBs in Scotland, Wales, Northern Ireland and from eleven English ATs (Q44, Q46, Q47, Q53, Q57, Q59, Q60, Q64, Q65, Q66 and Q69) an increase from seven from previous quarter. In the devolved administrations MenC coverage exceeded 97% and English AT level (where data available) coverage ranged from 95.3% in Thames Valley (Q69) to 98.2% in Shropshire and Staffordshire (Q60). Where available, MenC coverage at the national or AT level always exceeded coverage of other vaccines evaluated at 12 months (table 1a).

Quarterly coverage of two doses of rotavirus vaccine, evaluated at 12 months, was available for all the devolved administrations. Northern Ireland reported the highest coverage at 94.9 %, Scotland achieved 93.2% and Wales achieved 94.4%. Although rotavirus data was available for only around a quarter of Local Authorities, six ATs (Q53, Q59, Q60, Q65, Q66, Q69) were able to provide full data, where coverage ranged from 85.2% in Devon, Cornwall and Isle of Scilly to 93.6% in Shropshire and Staffordshire (table 1a). Although complete English data were not available through COVER, monthly coverage data for children in England born in April to June 2014 (the 12 month cohort in this COVER report) were evaluated when they had just reached the upper age for receiving the vaccine (25 weeks) between October and December 2014. Monthly vaccine coverage for two doses of rotavirus vaccine at this age was 88.4% [4].

Table 1a. Completed UK primary immunisations at 12 months by country and English Local Teams: April to June 2015 (January to March 2015)

	Country	No. of PCTs/ HBs†	DTaP/IPV/Hib3 %	MenC%	PCV2%	Rota2%
	United Kingdom	176	94.2 (94.5)	n/a (n/a)	94.1 (94.4)	n/a (n/a)
	Wales	7	96.9 (95.9)	98.1 (97.8)	96.8 (96.9)	94.4 (92.7)
	Northern Ireland	4	97.4 (97.5)	98.4 (98.5)	97.3 (97.5)	94.9 (94.8)
	Scotland	14	97.3 (97.3)	98.1 (98.0)	97.3 (97.4)	93.2 (93.4)
	England (Total)	151	93.6 (94.1)	n/a (n/a)	93.5 (93.9)	See commentary
LT code	NHS England Local Teams					
Q70	Wessex	4	95.5 (95.9)	n/a	95.3 (95.7)	n/a
Q71	London	6	90.0 (90.3)	n/a	90.1 (90.2)	n/a
Q72	North (Yorkshire & Humber)	10	95.7 (95.6)	n/a	95.6 (95.6)	n/a
Q73	North (Lancashire & Grt Manchester)	5	92.9 (94.3)	n/a	91.9 (93.3)	n/a
Q74	North (Cumbria & North East)	4	96.6 (96.4)	n/a	96.4 (96.3)	n/a
Q75	North (Cheshire & Merseyside)	7	95.9 (94.9)	n/a	95.7 (94.7)	n/a
Q76	Midlands & East (North Midlands)	5	96.2 (96.6)	n/a	95.8 (96.3)	n/a
Q77	Midlands & East (West Midlands)	5	93.7 (94.0)	n/a	93.8 (93.9)	n/a
Q78	Midlands & East (Central Midlands)	5	96.1 (96.5)	n/a	95.9 (96.2)	n/a
Q79	Midlands & East (East)	4	95.8 (95.9)	n/a	95.6 (95.7)	n/a
Q80	South (South West)	8	94.6 (95.2)	n/a	95.0 (95.1)	n/a
Q81	South (South East)	4	88.5 (89.9)	n/a	89.1 (89.9)	n/a
Q82	South (South Central)	5	94.4 (95.5)	n/a	94.0 (95.3)	n/a

† Primary Care Trusts/health boards.

n/a accurate estimate not available (see commentary above)

¹based on coverage data from 3 of 4 PCTs

Table 1b. Completed UK primary immunisations at 12 months NHS England Area Teams : April to June 2015 (January to March 2015)

NHS England Local team code*	English Area Team (AT code)	No. of former PCT's	DTaP/IPV/Hib3%	MenC%	PCV2%	Rota2%
Q70	Wessex (Q70)	6	95.5 (95.9)	n/a (n/a)	95.3 (95.7)	n/a
Q71	London (Q71)	31	90.0 (90.3)	n/a (n/a)	90.1 (90.2)	n/a
Q72	N Yorkshire and Humber (Q50)	5	96.2 (95.3)	n/a (n/a)	96.1 (96.1)	n/a
	S Yorkshire and Bassetlaw (Q51)	5	95.1 (95.4)	n/a (n/a)	94.8 (95.0)	n/a
	W Yorkshire (Q52)	5	95.8 (95.9)	n/a (n/a)	95.8 (95.7)	n/a
Q73	Greater Manchester (Q46)	10	94.5 (94.8)	96.5 ¹ (n/a)	94.3 (94.6)	n/a
	Lancashire (Q47)	5	89.6 (93.1)	94.2 (n/a)	87.0 (90.6)	n/a
Q74	Durham, Darlington and Tees (Q45)	6	96.4 (95.6)	n/a (n/a)	96.1 (95.6)	n/a
	Cumbria, Northumberland, Tyne and Wear (Q49)	7	96.7 (96.9)	n/a (n/a)	96.5 (96.8)	n/a
Q75	Cheshire, Warrington and Wirral (Q44)	4	96.6 (96.6)	97.9 (97.7)	96.4 (96.4)	n/a
	Merseyside (Q48)	4	95.1 (93.3)	n/a (n/a)	94.9 (93.1)	n/a
Q76	Derbyshire and Nottinghamshire (Q55)	4	95.4 (96.3)	n/a (n/a)	94.8 (95.8)	n/a
	Shropshire and Staffordshire (Q60)	5	97.3 (97.1)	98.2 (98.5)	97.1 (97.0)	93.6
Q77	Arden, Herefordshire and Worcestershire (Q53)	4	97.0 (95.9)	98.0 (96.6)	96.9 (95.7)	94.0
	Birmingham and the Black Country (Q54)	8	92.1 (93.1)	n/a (n/a)	92.2 (93.0)	n/a
Q78	Hertfordshire and the S Midlands (Q58)	5	96.3 (96.6)	n/a (n/a)	95.9 (96.4)	n/a
	Leicestershire and Lincolnshire (Q59)	3	95.9 (96.2)	96.7 (n/a)	96.0 (95.9)	92.6
Q79	East Anglia (Q56)	5	95.6 (95.6)	n/a (n/a)	95.4 (95.3)	n/a
	Essex (Q57)	5	96.1 (96.4)	96.9 (n/a)	96.0 (96.2)	n/a
Q80	Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	4	95.7 (95.7)	97.6 (96.9)	96.0 (95.5)	90.6
	Devon, Cornwall, Isles of Scilly (Q66)	4	93.4 (94.7)	96.4 (96.4)	93.8 (94.7)	85.2
Q81	Kent and Medway (Q67)	3	89.1 (90.1)	n/a (n/a)	89.4 (90.0)	n/a
	Surrey and Sussex (Q68)	5	88.0 (89.8)	n/a (n/a)	88.8 (89.8)	n/a
Q82	Bath, Gloucestershire, Swindon and Wiltshire (Q64)	4	95.0 (95.6)	97.5 ² (97.9)	94.8 (95.6)	n/a
	Thames Valley (Q69)	4	94.0 (95.5)	95.3 (96.3)	93.5 (95.1)	90.7 ²

n/a accurate estimate not available (see commentary above)

¹based on coverage data from 9 of 10 LAs

²based on coverage data from 3 of 4 LAs

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

Coverage at 24 months

UK coverage of DTaP/IPV/Hib3 at 24 months remained at 95.9% compared to the previous quarter [5]. Lancashire (Q47), Birmingham and the Black Country (Q54), Kent and Medway (Q67), Surrey and Sussex (Q68) and London (Q71) are the only ATs with DTaP/IPV/Hib3 coverage below the 95% target at 90.5%, 94.5%, 92.6%, 91% and 92.8% respectively (table 2b).

Compared to the previous quarter, UK coverage for Hib/MenC booster increased by 0.2% to 92.7% and MMR increased by 0.1% to 92.6% (table 2a) [5]. Country-specific comparisons for minimum coverage levels achieved for these vaccines evaluated at 24 months show that Scotland, Wales and Northern Ireland achieved at least 95% coverage, and England achieved at least 92% coverage. Within England four ATs achieved at least 95% for all three vaccines (table 2a).

Table 2a. Completed UK primary immunisations at 24 months by country and NHS England local team: April to June 2015 (January to March 2015)

Country	No. of former PCTs/ HBs†	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
United Kingdom	176	95.9 (95.9)	92.6 (92.6)	92.7 (92.5)	92.6 (92.5)
Wales	7	97.6 (97.6)	96.1 (95.9)	95.0 (95.2)	95.8 (95.5)
Northern Ireland	4	98.2 (97.9)	95.9 (95.0)	95.8 (94.7)	96.1 (94.5)
Scotland	14	97.9 (97.8)	95.4 (95.5)	95.6 (95.5)	95.3 (95.2)
England (Total)	151	95.5 (95.6)	92.1 (92.1)	92.2 (92.1)	92.1 (92.0)
NHS England local teams*					
Q70	4	96.8 (95.7)	93.9 (92.7)	94.0 (93.5)	94.1 (93.8)
Q71	6	92.8 (92.6)	86.3 (85.7)	86.4 (86.3)	86.7 (86.5)
Q72	10	97.1 (97.1)	94.8 (94.8)	94.8 (94.8)	94.3 (94.4)
Q73	5	94.9 (95.9)	92.0 (92.1)	91.9 (91.8)	92.4 (92.4)
Q74	4	97.7 (97.6)	95.5 (95.7)	95.7 (96.0)	95.3 (95.6)
Q75	7	97.0 (96.7)	93.8 (93.7)	94.8 (94.3)	94.3 (94.0)
Q76	5	97.6 (97.5)	94.9 (94.8)	94.7 (94.6)	94.4 (94.3)
Q77	5	95.8 (96.3)	92.6 (93.4)	92.8 (92.4)	92.6 (93.1)
Q78	5	97.4 (97.0)	95.0 (95.1)	95.2 (94.9)	94.6 (94.8)
Q79	4	96.7 (96.5)	94.6 (94.3)	94.6 (94.4)	94.0 (93.8)
Q80	8	96.8 (97.1)	93.8 (94.5)	93.8 (93.6)	93.6 (93.7)
Q81	4	91.6 (93.2)	88.8 (89.0)	89.0 (88.8)	88.7 (88.3)
Q82	5	96.0 (95.5)	93.1 (93.6)	92.9 (93.2)	93.0 (93.1)

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

† Primary Care Trusts/health boards

Table 2b. Completed primary immunisations at 24 months by NHS England Area Teams : April to June 2015 (January to March 2015)

NHS England Local Team Code*	Area Team code*	No. of former PCTs†	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
Q70	Q70	6	96.8 (95.7)	93.9 (92.7)	94.0 (93.5)	94.1 (93.8)
Q71	Q71	31	92.8 (92.6)	86.3 (85.7)	86.4 (86.3)	86.7 (86.5)
Q72	Q50	5	97.3 (96.9)	95.6 (95.4)	94.9 (94.2)	95.1 (95.0)
	Q51	5	96.7 (96.6)	93.3 (92.6)	94.0 (93.9)	92.9 (92.4)
	Q52	5	97.3 (97.6)	95.1 (95.8)	95.2 (95.8)	94.7 (95.3)
Q73	Q46	10	96.9 (97.2)	93.5 (93.2)	93.2 (92.7)	93.9 (93.3)
	Q47	5	90.5 (93.2)	89.0 (89.7)	89.0 (89.7)	89.3 (90.4)
Q74	Q45	6	97.7 (97.5)	95.4 (95.4)	95.8 (96.2)	95.1 (95.1)
	Q49	7	97.7 (97.6)	95.6 (95.9)	95.7 (95.9)	95.5 (95.9)
Q75	Q44	4	97.1 (97.4)	93.4 (94.2)	95.8 (95.8)	94.7 (95.3)
	Q48	4	97.0 (96.0)	94.3 (93.3)	93.7 (92.8)	93.9 (92.8)
Q76	Q55	4	97.2 (97.6)	93.8 (94.5)	93.7 (94.7)	93.4 (94.2)
	Q60	5	98.2 (97.3)	96.2 (95.2)	96.0 (94.5)	95.7 (94.6)
Q77	Q53	4	98.4 (98.5)	96.0 (96.4)	96.5 (95.5)	96.8 (96.7)
	Q54	8	94.5 (95.2)	90.9 (91.8)	91.0 (90.8)	90.6 (91.1)
Q78	Q58	5	97.3 (96.6)	95.2 (95.4)	95.3 (95.2)	94.6 (94.9)
	Q59	3	97.6 (97.7)	94.7 (94.5)	95.0 (94.3)	94.8 (94.8)
Q79	Q56	5	96.5 (96.4)	93.6 (93.9)	93.8 (94.0)	93.4 (93.5)
	Q57	5	97.1 (96.5)	95.7 (94.9)	95.7 (94.9)	94.8 (94.2)
Q80	Q65	4	97.4 (97.6)	94.4 (94.2)	94.4 (93.1)	93.6 (93.0)
	Q66	4	96.1 (96.7)	93.2 (94.7)	93.2 (94.0)	93.5 (94.3)
Q81	Q67	3	92.6 (94.0)	89.7 (88.6)	90.2 (88.8)	89.7 (87.8)
	Q68	5	91.0 (92.6)	88.1 (89.3)	88.3 (88.9)	88.0 (88.6)
Q82	Q64	4	96.8 (95.6)	94.0 (94.7)	93.5 (93.9)	93.3 (94.1)
	Q69	4	95.4 (95.4)	92.4 (92.9)	92.5 (92.7)	92.8 (92.4)

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

† former Primary Care Trusts

Coverage at five years

UK coverage of MMR1 at five years increased by 0.2% to 95.1%, the highest level ever recorded. All countries and all English ATs except for Surrey and Sussex (Q68) achieved at least 90%. Scotland, Northern Ireland, Wales and 21 English ATs achieved at least 95% coverage for MMR1 and 20 achieved at least 90% for MMR2 at five years (tables 3a and 3b).

UK coverage evaluated at five years increased by 0.4% for Hib/MenC booster, remained at the same levels for DTaP/IPV/Hib3, and decreased by 0.1% for MMR2 and 0.7% for DTaP/IPV booster when compared to the previous quarter [5]. At least 95% coverage was achieved for the primary course of DTaP/IPV/Hib3 for all countries and all but two English ATs (Surrey and Sussex (Q68) and London (Q71)) (tables 3a and 3b).

All devolved administrations and all but nine English ATs achieved at least 90% coverage for the DTaP/IPV booster.

Table 3a. Completed UK primary immunisations and boosters at five years by country and NHS England local team: April to June 2015 (January to March 2015)

Country	Number of PCTs/HBs†	Primary		Booster		
		DTaP/IPV Hib3%	MMR1%	MMR2%	DTaP/IPV%	Hib/MenC%
United Kingdom	176	96.1 (96.1)	95.1 (94.9)	89.2 (89.3)	88.5 (89.2)	93.6 (93.2)
Wales	7	97.1 (97.7)	97.2 (97.6)	92.6 (93.6)	92.3 (93.6)	94.5 (94.8)
N. Ireland	4	98.0 (98.3)	97.6 (97.4)	93.2 (93.6)	93.6 (94.5)	96.7 (96.7)
Scotland	14	98.5 (98.2)	97.5 (97.2)	93.5 (93.0)	94.2 (93.6)	96.5 (95.3)
England (Total)	151	95.8 (95.7)	94.7 (94.5)	88.5 (88.6)	87.7 (88.4)	93.2 (92.8)
<i>English Local Teams</i>						
Q70	4	95.5 (96.3)	94.4 (96.0)	90.0 (91.6)	90.5 (91.8)	93.0 (94.0)
Q71	6	93.0 (92.3)	91.5 (90.5)	80.4 (80.1)	78.4 (77.0)	88.8 (87.5)
Q72	10	97.1 (97.1)	96.2 (96.2)	91.7 (92.2)	92.1 (92.5)	95.6 (95.5)
Q73	5	96.5 (96.7)	96.3 (96.4)	89.8 (90.9)	86.3 (89.1)	93.7 (93.5)
Q74	4	97.9 (97.8)	97.0 (96.6)	93.3 (93.6)	94.0 (94.4)	96.8 (96.3)
Q75	7	96.6 (96.7)	96.9 (96.4)	90.9 (90.8)	91.6 (90.7)	95.0 (94.4)
Q76	5	97.8 (97.6)	96.6 (96.1)	91.8 (92.3)	92.2 (92.6)	96.1 (95.7)
Q77	5	96.5 (96.7)	96.3 (95.8)	88.8 (90.2)	87.7 (90.6)	93.2 (92.5)
Q78	5	97.1 (96.5)	96.0 (95.6)	91.8 (91.5)	92.4 (92.4)	94.4 (94.7)
Q79	4	96.7 (96.4)	94.9 (94.6)	92.0 (90.8)	92.0 (91.9)	94.4 (94.2)
Q80	8	96.9 (97.4)	96.2 (96.5)	90.8 (92.3)	87.0 (92.2)	95.0 (93.8)
Q81	4	92.5 (93.4)	90.5 (90.8)	83.7 (82.2)	82.9 (83.2)	89.8 (90.3)
Q82	5	96.7 (96.6)	95.6 (95.5)	91.3 (90.5)	90.1 (90.5)	94.5 (94.2)

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

3b. Completed primary immunisations and boosters at five years by NHS England Area Team, April to June 2015 (January to March 2015)

NHS England local team Code*	Area Team (AT) code*	No. of former PCTs† in AT	Primary		Booster		
			DTaP/IPV Hib3 %	MMR1 %	MMR2 %	DTaP/ IPV %	Hib/ MenC
Q70	Q70	6	95.5 (96.3)	94.4 (96.0)	90.0 (91.6)	90.5 (91.8)	93.0 (94.0)
Q71	Q71	31	93.0 (92.3)	91.5 (90.5)	80.4 (80.5)	78.5 (77.0)	88.8 (87.5)
Q72	Q50	5	97.4 (96.6)	96.5 (95.7)	92.4 (91.6)	92.5 (92.4)	94.7 (94.0)
	Q51	5	96.4 (96.6)	95.4 (95.2)	90.3 (90.9)	90.7 (91.1)	95.6 (95.4)
	Q52	5	97.2 (97.6)	96.5 (97.1)	92.1 (93.3)	92.6 (93.4)	96.1 (96.4)
Q73	Q46	10	96.7 (97.1)	96.6 (96.4)	91.6 (92.2)	89.7 (91.4)	94.1 (93.5)
	Q47	5	96.1 (96.0)	95.7 (96.3)	86.2 (87.9)	79.2 (83.9)	93.1 (93.0)
Q74	Q45	6	97.9 (97.5)	96.7 (95.7)	93.2 (92.8)	94.0 (93.6)	96.7 (96.3)
	Q49	7	97.8 (98.0)	97.1 (97.3)	93.4 (94.1)	93.9 (95.0)	96.9 (96.3)
Q75	Q44	4	96.2 (95.8)	96.4 (95.8)	91.2 (90.2)	92.2 (90.6)	94.2 (93.2)
	Q48	4	97.0 (97.5)	97.4 (97.1)	90.6 (91.6)	90.9 (90.7)	95.9 (95.7)
Q76	Q55	4	97.8 (97.5)	96.0 (96.2)	91.3 (92.1)	91.8 (92.0)	95.6 (95.9)
	Q60	5	97.8 (97.7)	97.3 (96.0)	92.4 (92.5)	92.7 (93.5)	96.7 (95.6)
Q77	Q53	4	97.5 (97.7)	97.5 (96.8)	92.8 (94.4)	92.1 (95.3)	93.9 (92.9)
	Q54	8	96.0 (96.1)	95.6 (95.2)	86.5 (87.9)	85.2 (88.0)	92.7 (92.3)
Q78	Q58	5	96.9 (96.5)	95.7 (95.4)	92.1 (91.8)	92.8 (92.9)	95.0 (95.3)
	Q59	3	97.4 (96.4)	96.5 (96.2)	91.2 (91.0)	91.6 (91.4)	93.3 (93.5)
Q79	Q56	5	96.2 (95.8)	94.2 (94.1)	91.4 (89.7)	90.7 (90.7)	93.1 (93.4)
	Q57	5	97.4 (97.1)	95.8 (95.4)	92.7 (92.2)	93.7 (93.5)	96.2 (95.3)
Q80	Q65	4	97.9 (97.7)	97.1 (96.7)	91.5 (92.4)	88.8 (91.5)	96.1 (93.6)
	Q66	4	96.0 (97.1)	95.3 (96.4)	90.2 (92.3)	85.2 (93.0)	94.0 (94.1)
Q81	Q67	3	95.4 (94.5)	94.5 (93.0)	87.4 (81.1)	87.2 (82.3)	93.3 (92.4)
	Q68	5	90.7 (92.6)	88.0 (89.3)	81.3 (82.9)	80.2 (83.8)	87.5 (88.9)
Q82	Q64	4	96.9 (96.6)	95.9 (95.3)	91.9 (91.4)	91.7 (92.3)	95.3 (94.4)
	Q69	4	96.5 (96.5)	95.3 (95.7)	90.9 (90.0)	89.2 (89.4)	94.1 (94.1)

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

† former Primary Care Trusts

Neonatal hepatitis B vaccine coverage in England: April to June 2015

Vaccine coverage data in England for three doses of hepatitis B vaccine, in infants born to hepatitis B surface antigen (HBsAg) positive mothers, who reached the age of one year in this quarter (i.e. those born between April to June 2014), and coverage of four doses of vaccine in infants who reached two years of age (i.e. those born between April to June 2013) are presented by Area Team in table 4a below.

PHE received 131 (87%) 12 month coverage returns and 129 (85%) 24 month coverage returns for former PCTs. The quality of these data is variable and should be interpreted with caution. Where a zero was reported a check was made to ensure that this was a true zero rather than due to no data being available. Fifteen of the 25 ATs were able to provide data for the whole patch (table 4a). 12 month coverage of three doses of Hep B in England increased by 1% to 85% compared to the last quarter and coverage of four doses at 24 months increased to 3% to 75% [5].

Table 4a. Neonatal hepatitis B coverage in England by NHS England Area Team: April to June 2015 (January to March 2015)

Area Team (AT code)*	Former PCT returns with 12 month data	12 month denominator	% Coverage at 12 months	Former PCT returns with 24 month data	24 month denominator	% Coverage at 24 months
Q44	4 of 4	5	100 (100)	4 of 4	3	100 (100)
Q45	6 of 6	2	100 (67)	6 of 6	3	100 (100)
Q46	9 of 10	49	55 (80)	9 of 10	94	31 (35)
Q47	0 of 5	–	– (67)	0 of 5	–	– (0)
Q48	3 of 4	7	71 (100)	3 of 4	5	80 (73)
Q49	7 of 7	6	83 (100)	7 of 7	4	100 (100)
Q50	3 of 5	3	100 (57)	3 of 5	3	100 (100)
Q51	5 of 5	13	92 (100)	5 of 5	21	100 (100)
Q52	5 of 5	21	100 (100)	5 of 5	17	94 (90)
Q53	3 of 4	6	83 (100)	3 of 4	6	100 (100)
Q54	3 of 8	6	83 (38)	3 of 8	3	67 (33)
Q55	4 of 4	8	100 (100)	4 of 4	8	88 (100)
Q56	5 of 5	9	100 (100)	5 of 5	10	80 (89)
Q57	5 of 5	19	89 (75)	5 of 5	6	100 (86)
Q58	5 of 5	26	100 (94)	5 of 5	34	94 (94)
Q59	2 of 3	18	17 (25)	2 of 3	9	22 (29)
Q60	5 of 5	6	83 (100)	5 of 5	3	100 (100)
Q64	4 of 4	5	100 (57)	4 of 4	3	100 (80)
Q65	4 of 4	10	100 (100)	4 of 4	6	100 (80)
Q66	4 of 4	2	100 (-)	4 of 4	1	- (100)
Q67	3 of 3	13	100 (100)	3 of 3	6	100 (100)
Q68	4 of 5	10	100 (88)	3 of 5	9	100 (92)
Q69	4 of 4	21	90 (96)	4 of 4	32	94 (75)
Q70	5 of 6	29	100 (79)	5 of 6	9	89 (100)
Q71	29 of 31	191	88 (83)	28 of 31	192	81 (79)
England	131 of 151	485	85 (84)	129 of 151	487	75 (72)

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

Notes: "–" indicates "no data available" for the denominator but "not applicable" for coverage; see table 1a for key to Area Team organisational codes.

Relevant links for country-specific coverage data

England

<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/>

Other relevant links

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

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