



Infection report

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

Commentary on the fourth quarterly report for 2014/15

One year old children evaluated in the current quarter (born October to December 2013), are the third cohort to have been routinely offered rotavirus vaccine at two and three months, and the fourth quarterly cohort offered only one primary MenC dose at three months of age [1].

In Scotland, Northern Ireland and Wales the programmes extracting COVER data from Child Health Information Systems (CHISs) have 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 (98.0% in Scotland, 98.5% in Northern Ireland, and 97.8% in Wales). Coverage of two doses of rotavirus vaccine evaluated at one year is also high – in Scotland rotavirus coverage is 93.4%, in Northern Ireland 94.8%, and in Wales 92.7% (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 and currently only seven Area Teams (ATs) are able to supply one dose MenC vaccine coverage data for their area, although in all of these areas coverage was similar to or exceeded that of other vaccines evaluated at one year. As a consequence 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.

England is the only country in the UK unable to provide robust estimates rotavirus coverage at this age from CHIS despite the request to prioritise the inclusion of the new requirements for immunisations evaluated at 12 months in the COVER ISN, with data flowing for only around a quarter of Local Authorities and complete reporting available for only one Area Team. 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]. Those children born between January and March 2014, ie the cohort evaluated this quarter at 12 months, were assessed at aged 25 weeks in July, August and September 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 remained at 94.5% and 94.4% respectively compared to the previous quarter (table 1a).

UK coverage at two years increased marginally by 0.2% for MMR to 92.5%, and for PCV and Hib/MenC boosters to 92.6% and 92.5% respectively when compared to the previous quarter [5]. DTaP/IPV/Hib3 decreased by 0.1% to 95.9% [5]. At country level Scotland and Wales achieved at least 95% coverage for all antigens evaluated at two years of age, as did five of the 25 ATs in England (table 2a).

At five years coverage was at least 95% for the primary course of DTaP/IPV/Hib in all countries and all but three English ATs (Kent and Medway, Surrey and Sussex, and London). UK coverage of MMR1 at

five years remained close to the WHO target at 94.9%, with all countries and all but four English ATs achieving at least 95%. Scotland, Northern Ireland, Wales and 18 English ATs achieved at least 90% coverage for MMR2 at five years (table 3a).

Selective neonatal hepatitis B coverage remained very similar to the previous quarter with 84% of at risk children completing three doses by 12 months of age and 72% receiving four doses by 24 months (table 4a).

COVER data in England from April 2013

From April 2013, the responsibility for commissioning and coordinating immunisation programmes transferred to NHS England [6]. Population vaccination coverage is a key indicator included in the Public Health Outcomes Framework (PHOF) (Indicator 3.3) [7] with reporting expected for the Local Authority (LA) resident population.

COVER reports present data by English Area Teams (AT) (tables 1a-4a) while former Strategic Health Authority tabulations are provided for historical comparisons (tables 1b-4b). From April 2014 England COVER data became Official Statistics and is subject to the code of practice associated with such data [8].

New 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]. Some CHIS IT suppliers have yet to implement the changes outlined below despite the request to prioritise the inclusion of the new requirements for immunisations evaluated at 12 months and as a result England is the only country in the UK unable to provide robust estimates of MenC and rotavirus coverage at this age. PHE published a new COVER User Guide, aimed at all those submitting COVER data, to support the implementation of the ISN. All these documents are available via the [COVER Programme Information Standards](#) webpage.

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 expectations of reporting of population vaccination coverage for the PHOF [7];
- 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 reporting – this will only become active should the vaccine be procured at a cost-effective price and a national programme implemented;
- 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 January to March 2015

This report presents quarterly coverage data for children in the UK who reached their first, second, or fifth birthday during the evaluation quarter (January to March 2015). Those reaching one year of age in the quarter are the third 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 January to March 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 January to March 2013) were scheduled to receive their third DTaP/IPV/Hib, second MenC and PCV vaccinations between May and July 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 February and April 2014 [9].

Children who reached their fifth birthday in the quarter (born January to March 2010) were scheduled to receive their third dose DTaP/IPV/Hib and second MenC and PCV vaccinations between May and July 2011. They were also scheduled to receive their first MMR between February and April 2011 and their pre-school diphtheria, tetanus, acellular pertussis, inactivated polio booster and second dose MMR from April 2013. Children born between January and March 2010 were scheduled to receive Hib/MenC booster vaccine at 12 months and PCV booster vaccine at 13 months.

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. Four 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 Commissioning 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. Twenty-four 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 January to March 2014), are the third cohort to have been routinely offered two doses of rotavirus vaccine at two and three months of age, and the fourth 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.

Only seven 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 (table 1a).

No AT is able to produce rotavirus vaccine coverage data for all former PCTs in their area from CHIS. However, in order to rapidly assess rotavirus vaccine coverage 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) [3]. This early

evaluation of vaccine coverage has provided assurance that the vaccine has been well accepted in England. This collection will remain in place until routine COVER rotavirus data are available for all areas.

Coverage at 12 months

UK coverage at 12 months for DTaP/IPV/Hib3 remained at 94.5% and PCV2 remained at 94.4% (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 94%. Within England 17 out of 25 ATs achieved at least 95% coverage at 12 months (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 seven English ATs (Q44, Q53, Q60, Q64, Q65, Q66 and Q69). In the devolved administrations MenC coverage exceeded 97% and English AT level (where data available) coverage ranged from 96.3% in Thames Valley (Q69) to 98.5% 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 94.8%, Scotland achieved 93.4% and Wales achieved 92.7%. Rotavirus data was available for only around a quarter of Local Authorities and Thames Valley (Q69) was the only AT with full data (table 1a). Although complete English data were not available through COVER, rotavirus coverage estimates have been published at the national and AT levels using data from the ImmForm GP practice-based sentinel collection. Monthly coverage data for children in England born in January to March 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 July and September 2014. Monthly vaccine coverage at this age ranged between 88.1% and 88.4% [4].

Table 1a. Completed primary immunisations at 12 months by country and English Area Team: January to March 2015 (October to December 2014)

Country and English Area Team (AT code)	Number of PCTs/HBs†	DTaP/IPV/Hib3 %	MenC%	PCV2%	Rota2%
United Kingdom	176	94.5 (94.5)	n/a (n/a)	94.4 (94.4)	n/a (n/a)
Wales	7	96.9 (95.1)	97.8 (96.2)	96.9 (95.0)	92.7 (90.2)
Northern Ireland	4	97.5 (97.9)	98.5 (98.6)	97.5 (97.8)	94.8 (94.9)
Scotland	14	97.3 (97.7)	98.0 (98.2)	97.4 (97.7)	93.4 (93.7)
England (Total)	151	94.1 (94.1)	n/a (n/a)	93.9 (94.0)	See commentary
<i>English Area Teams</i>					
Cheshire, Warrington and Wirral (Q44)	4	96.6 (96.5)	97.7 (97.8)	96.4 (96.3)	n/a
Durham, Darlington and Tees (Q45)	6	95.6 (97.1)	n/a (n/a)	95.6 (97.0)	n/a
Greater Manchester (Q46)	10	94.8 (95.7)	n/a (n/a)	94.6 (95.3)	n/a
Lancashire (Q47)	5	93.1 (91.5)	n/a (93.1)	90.6 (89.5)	n/a
Merseyside (Q48)	4	93.3 (94.9)	n/a (n/a)	93.1 (95.2)	n/a
Cumbria, Northumberland, Tyne and Wear (Q49)	7	96.9 (96.9)	n/a (n/a)	96.8 (96.7)	n/a
N Yorkshire and Humber (Q50)	5	95.3 (94.9)	n/a (n/a)	96.1 (95.1)	n/a
S Yorkshire and Bassetlaw (Q51)	5	95.4 (95.6)	n/a (n/a)	95.0 (95.4)	n/a
W Yorkshire (Q52)	5	95.9 (96.0)	n/a (n/a)	95.7 (95.8)	n/a
Arden, Herefordshire and Worcestershire (Q53)	4	95.9 (96.5)	96.6 (96.5)	95.7 (96.2)	n/a
Birmingham and the Black Country (Q54)	8	93.1 (93.1)	n/a (n/a)	93.0 (92.9)	n/a
Derbyshire and Nottinghamshire (Q55)	4	96.3 (95.4)	n/a (n/a)	95.8 (94.9)	n/a
East Anglia (Q56)	5	95.6 (95.8)	n/a (n/a)	95.3 (95.8)	n/a
Essex (Q57)	5	96.4 (96.0)	n/a (n/a)	96.2 (95.7)	n/a
Hertfordshire and the S Midlands (Q58)	5	96.6 (96.9)	n/a (n/a)	96.4 (96.8)	n/a
Leicestershire and Lincolnshire (Q59)	3	96.2 (96.1)	n/a (n/a)	95.9 (95.9)	n/a
Shropshire and Staffordshire (Q60)	5	97.1 (96.5)	98.5 (98.1)	97.0 (96.4)	n/a
Bath, Gloucestershire, Swindon and Wiltshire (Q64)	4	95.6 (95.36)	97.9 ¹ (98.0)	95.6 (96.5)	n/a
Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	4	95.7 (96.1)	96.9 (97.8)	95.5 (96.1)	n/a
Devon, Cornwall, Isles of Scilly (Q66)	4	94.7 (95.7)	96.4 (97.4)	94.7 (95.5)	n/a
Kent and Medway (Q67)	3	90.1 (89.5)	n/a (n/a)	90.0 (89.2)	n/a
Surrey and Sussex (Q68)	5	89.8 (89.7)	n/a (n/a)	89.8 (89.7)	n/a
Thames Valley (Q69)	4	95.5 (95.4)	96.3 (95.9)	95.1 (95.1)	90.5
Wessex (Q70)	6	95.9 (95.7)	n/a (n/a)	95.7 (95.8)	n/a
London (Q71)	31	90.3 (90.0)	n/a (n/a)	90.2 (90.3)	n/a

† Primary Care Trusts/health boards.

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

1 Based on coverage data from three of four PCTs

Table 1b. UK completed primary immunisations at 12 months by former Strategic Health Authority, England: January to March 2015 (October to December 2014)

Former English Strategic Health Authorities (SHAs)	PCT/HB†	DTaP/IPV /Hib3 %	MenC%	PCV2%
North East	12	96.3 (97.0)	n/a (n/a)	96.2 (96.9)
North West	24	94.7 (94.9)	n/a (n/a)	94.0 (94.4)
Yorkshire and Humber	14	95.6 (95.6)	n/a (n/a)	95.6 (95.5)
East Midlands	9	96.4 (96.1)	n/a (n/a)	96.1 (95.8)
West Midlands	17	94.8 (94.8)	n/a (n/a)	94.7 (94.6)
East of England	13	96.0 (96.2)	n/a (n/a)	95.8 (96.0)
London	31	90.3 (90.0)	n/a (n/a)	90.2 (90.3)
South Central	9	95.8 (95.6)	n/a (n/a)	95.4 (95.5)
SE Coast	8	89.9 (89.6)	n/a (n/a)	89.9 (89.5)
South West	14	95.4 (96.0)	n/a (n/a)	95.3 (96.0)

† Primary Care Trusts/health boards

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

Coverage at 24 months

UK coverage of DTaP/IPV/Hib3 at 24 months decreased by 0.1% to 95.9% compared to the previous quarter [5]. Lancashire (Q47), 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 93.2%, 94.0%, 92.6% and 92.6% respectively (table 2a).

Compared to the previous quarter, UK coverage for PCV booster, Hib/MenC booster and MMR all increased by 0.2% to 92.6% and 92.5% and 92.5% respectively (table 2a) [5]. Country-specific comparisons for minimum coverage levels achieved for these three vaccines evaluated at 24 months show that Scotland and Wales achieved at least 95% coverage, Northern Ireland at least 94% and England at least 92%. Within England five ATs achieved at least 95% for all three vaccines (table 2a).

Table 2a. Completed primary immunisations at 24 months by country and English Area Team: January to March 2015 (October to December 2014)

Country and English Area Team (AT code*)	PCT/HB†	DTaP/IPV/Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
United Kingdom	176	95.9 (96.0)	92.6 (92.4)	92.5 (92.3)	92.5 (92.3)
Wales	7	97.6 (96.9)	95.9 (94.6)	95.2 (94.2)	95.5 (94.5)
Northern Ireland	4	97.9 (98.4)	95.0 (96.4)	94.7 (95.9)	94.5 (95.5)
Scotland	14	97.8 (98.2)	95.5 (95.3)	95.5 (95.5)	95.2 (95.4)
England (Total)	151	95.6 (95.6)	92.1 (91.9)	92.1 (91.8)	92.0 (91.8)
<i>English Area Teams</i>					
Q44	4	97.4 (97.1)	94.2 (94.1)	95.8 (93.4)	95.3 (95.4)
Q45	6	97.5 (97.8)	95.4 (95.5)	96.2 (95.3)	95.1 (94.5)
Q46	10	97.2 (97.1)	93.2 (93.6)	92.7 (92.9)	93.3 (93.7)
Q47	5	93.2 (95.5)	89.7 (88.2)	89.7 (87.7)	90.4 (91.7)
Q48	4	96.0 (97.0)	93.3 (94.2)	92.8 (93.7)	92.8 (93.6)
Q49	7	97.6 (96.0)	95.9 (93.6)	95.9 (93.8)	95.9 (93.6)
Q50	5	96.9 (97.4)	95.4 (95.2)	94.2 (94.1)	95.0 (94.6)
Q51	5	96.6 (96.5)	92.6 (93.1)	93.9 (93.9)	92.4 (92.8)
Q52	5	97.6 (97.4)	95.8 (95.2)	95.8 (95.2)	95.3 (94.7)
Q53	4	98.5 (98.3)	96.4 (96.2)	95.5 (95.2)	96.7 (96.5)
Q54	8	95.2 (94.8)	91.8 (91.4)	90.8 (90.7)	91.1 (91.0)
Q55	4	97.6 (97.7)	94.5 (94.1)	94.7 (94.2)	94.2 (93.7)
Q56	5	96.4 (96.9)	93.9 (94.0)	94.0 (94.0)	93.5 (93.3)
Q57	5	96.5 (97.1)	94.9 (94.6)	94.9 (95.1)	94.2 (93.9)
Q58	5	96.6 (97.3)	95.4 (95.0)	95.2 (95.2)	94.9 (94.6)
Q59	3	97.7 (97.0)	94.5 (93.5)	94.3 (93.6)	94.8 (93.5)
Q60	5	97.3 (98.1)	95.2 (95.9)	94.5 (95.3)	94.6 (95.4)
Q64	4	95.6 (97.0)	94.7 (94.5)	93.9 (93.7)	94.1 (93.5)
Q65	4	97.6 (97.1)	94.2 (93.7)	93.1 (93.1)	93.0 (93.2)
Q66	4	96.7 (96.9)	94.7 (94.2)	94.0 (93.2)	94.3 (93.9)
Q67	3	94.0 (94.1)	88.6 (88.0)	88.8 (88.4)	87.8 (87.5)
Q68	5	92.6 (91.5)	89.3 (88.0)	88.9 (87.7)	88.6 (87.5)
Q69	4	95.4 (95.7)	92.9 (93.5)	92.7 (93.5)	92.4 (93.7)
Q70	6	95.7 (96.5)	92.7 (94.4)	93.5 (93.8)	93.8 (94.0)
Q71	31	92.6 (92.3)	85.7 (85.5)	86.3 (86.1)	86.5 (86.0)

* See table 1a for key to Area Team organisational code

† Primary Care Trusts/health boards

Table 2b. Completed primary immunisations at 24 months by former Strategic Health Authority, England: January to March 2015 (October to December 2014)

Former English Strategic Health Authorities (SHAs)	PCT/HB†	DTaP/IPV /Hib3 %	PCV booster %	Hib/MenC %	MMR1 %
North East	12	97.6 (98.0)	95.6 (95.5)	96.1 (95.5)	95.4 (94.9)
North West	24	96.3 (96.3)	92.9 (92.4)	92.8 (91.8)	93.2 (93.2)
Yorkshire and Humber	14	97.2 (97.1)	94.9 (94.7)	94.9 (94.6)	94.5 (94.2)
East Midlands	9	97.6 (97.5)	94.9 (94.2)	94.8 (94.2)	94.8 (94.0)
West Midlands	17	96.6 (96.5)	93.8 (93.7)	92.9 (93.0)	93.4 (93.5)
East of England	13	96.7 (97.1)	94.5 (94.4)	94.6 (94.8)	93.9 (93.8)
London	31	92.6 (92.3)	85.7 (85.5)	86.3 (86.1)	86.5 (86.0)
South Central	9	95.2 (96.0)	92.6 (93.7)	92.8 (93.4)	93.1 (93.8)
SE Coast	8	93.2 (92.5)	89.0 (88.0)	88.8 (88.0)	88.3 (87.5)
South West	14	96.5 (96.9)	94.5 (94.3)	93.8 (93.5)	93.8 (93.6)

† Primary Care Trusts/health boards

Coverage at five years

UK coverage evaluated at five years increased by 0.1% for MMR2 and Hib/MenC booster, remained at the same levels for DTaP/IPV/Hib, and decreased by 0.1% for MMR1 and 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 three English ATs (Kent and Medway (Q67), Surrey and Sussex (Q68), and London (Q71)) (tables 3a).

UK coverage of MMR1 at five years reached 95% for the first time last quarter and has only decreased by 0.1% during the current evaluation. 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 19 achieved at least 90% for MMR2 at five years (tables 3a).

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

Table 3a. UK completed primary immunisations and boosters at five years by country and English Area Team: January to March 2015 (October to December 2014)

ENGLAND Area Team (AT) code*	Number of PCTs in AT	Primary		Booster		
		DTaP/IPV Hib3 %	MMR1 %	MMR2 %	DTaP/ IPV %	Hib/ MenC
United Kingdom	176	96.1 (96.1)	94.9 (95.0)	89.3 (89.2)	89.2 (89.3)	93.2 (93.1)
Wales	7	97.7 (97.1)	97.6 (97.0)	93.6 (93.0)	93.6 (93.5)	94.8 (94.1)
N. Ireland	4	98.3 (97.6)	97.4 (96.8)	93.6 (93.2)	94.5 (94.3)	96.7 (96.0)
Scotland	14	98.2 (98.1)	97.2 (97.3)	93.0 (93.8)	93.6 (94.5)	95.3 (96.4)
England (Total)	151	95.7 (95.8)	94.5 (94.6)	88.6 (88.5)	88.4 (88.4)	92.8 (92.7)
<i>English Area Teams</i>						
Q44	4	95.8 (96.7)	95.8 (95.9)	90.2 (91.0)	90.6 (91.7)	93.2 (93.5)
Q45	6	97.5 (97.9)	95.7 (96.0)	92.8 (93.6)	93.6 (94.2)	96.3 (96.3)
Q46	10	97.1 (97.1)	96.4 (96.6)	92.2 (92.1)	91.4 (92.2)	93.5 (93.0)
Q47	5	96.0 (96.7)	96.3 (96.2)	87.9 (87.5)	83.9 (83.9)	93.0 (93.7)
Q48	4	97.5 (96.8)	97.1 (97.0)	91.6 (91.1)	90.7 (91.1)	95.7 (95.3)
Q49	7	98.0 (98.4)	97.3 (98.0)	94.1 (94.5)	95.0 (95.0)	96.3 (95.6)
Q50	5	96.6 (96.9)	95.7 (95.8)	91.6 (92.4)	92.4 (93.1)	94.0 (93.5)
Q51	5	96.6 (96.9)	95.2 (95.3)	90.9 (90.0)	91.1 (90.7)	95.4 (95.1)
Q52	5	97.6 (97.0)	97.1 (96.8)	93.3 (93.0)	93.4 (93.0)	96.4 (95.8)
Q53	4	97.7 (97.3)	96.8 (96.5)	94.4 (93.8)	95.3 (94.9)	92.9 (92.5)
Q54	8	96.1 (96.2)	95.2 (94.9)	87.9 (88.4)	88.0 (88.6)	92.3 (92.3)
Q55	4	97.5 (97.6)	96.2 (96.1)	92.1 (91.6)	92.0 (91.6)	95.9 (95.8)
Q56	5	95.8 (96.3)	94.1 (94.2)	89.7 (89.8)	90.7 (90.8)	93.4 (93.1)
Q57	5	97.1 (97.4)	95.4 (95.9)	92.2 (92.8)	93.5 (93.8)	95.3 (96.2)
Q58	5	96.5 (96.2)	95.4 (95.4)	91.8 (91.5)	92.9 (92.5)	95.3 (94.6)
Q59	3	96.4 (96.8)	96.2 (96.0)	91.0 (91.0)	91.4 (91.6)	93.5 (93.3)
Q60	5	97.7 (98.0)	96.0 (96.5)	92.5 (92.5)	93.5 (93.2)	95.6 (96.0)
Q64	4	96.6 (96.7)	95.3 (95.5)	91.4 (91.7)	92.3 (92.6)	94.4 (93.9)
Q65	4	97.7 (97.8)	96.7 (96.8)	92.4 (91.5)	91.5 (91.8)	93.6 (95.0)
Q66	4	97.1 (96.9)	96.4 (95.5)	92.3 (91.4)	93.0 (92.3)	94.1 (93.6)
Q67	3	94.5 (95.2)	93.0 (93.3)	81.1 (80.2)	82.3 (81.0)	92.4 (92.9)
Q68	5	92.6 (91.9)	89.3 (89.8)	82.9 (82.7)	83.8 (83.4)	88.9 (88.5)
Q69	4	96.5 (95.8)	95.7 (95.1)	90.0 (89.5)	89.4 (89.3)	94.1 (93.1)
Q70	6	96.3 (96.6)	96.0 (95.0)	91.6 (90.7)	91.8 (91.3)	94.0 (93.1)
Q71	31	92.3 (92.8)	90.5 (91.2)	80.1 (80.5)	77.0 (78.0)	87.5 (88.0)

* See table 1a for key to Area Team organisational code.

3b. Completed primary immunisations and boosters at five years by former Strategic Health Authority, England: January to March 2015 (October to December 2014)

Former English SHAs	PCT/ HB †	Primary		Booster		
		DTaP/IPV /Hib3 %	MMR1%	MMR2 %	DTaP/ IPV %	Hib/ MenC
North East	12	97.7 (98.1)	96.5 (97.0)	93.4 (93.9)	94.3 (94.4)	96.4 (95.9)
North West	24	96.8 (97.0)	96.5 (96.6)	91.1 (91.1)	90.0 (90.6)	93.8 (93.7)
Yorkshire and Humber	14	97.0 (96.9)	96.2 (96.1)	92.3 (92.2)	92.6 (92.5)	95.5 (95.0)
East Midlands	9	97.1 (97.2)	96.1 (96.1)	91.9 (91.3)	92.3 (92.1)	94.9 (94.6)
West Midlands	17	96.9 (96.9)	95.8 (95.7)	90.8 (90.9)	91.3 (91.4)	93.3 (93.3)
East of England	13	96.3 (96.5)	94.8 (95.1)	90.9 (91.1)	92.0 (92.0)	94.6 (94.6)
London	31	92.3 (92.8)	90.5 (91.2)	80.1 (80.5)	77.0 (78.0)	87.5 (88.0)
South Central	9	96.4 (95.8)	95.9 (94.9)	90.7 (89.9)	90.4 (90.1)	93.8 (92.6)
SE Coast	8	93.4 (93.2)	90.8 (91.2)	82.2 (81.7)	83.2 (82.5)	90.3 (90.3)
South West	14	97.1 (97.2)	96.0 (95.9)	92.1 (91.6)	92.3 (92.3)	94.2 (94.4)

† Primary Care Trusts/health boards

Neonatal hepatitis B vaccine coverage in England: January to March 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 January and March 2014), and coverage of four doses of vaccine in infants who reached two years of age (i.e. those born between January and March 2013) are presented by Area Team in table 4a below. Table 4b shows coverage by SHA for historical comparison.

PHE received 12 month coverage and 24 month coverage returns for 132 (87%) and 133 (88%) former PCTs respectively, compared to 138 reporting both 12 and 24 month data in the previous quarter. 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. Twelve 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 decreased by 1% to 84% when compared to the last quarter and coverage of four doses at 24 months remained at 72% [5].

**Table 4a. Neonatal hepatitis B coverage in England by English Area Team:
January to March 2015 (October to December 2014)**

Area Team (AT code)	PCT returns with 12 month data	12 month deno- minator	Coverage at 12 months	PCT returns with 24 month data	24 month deno- minator	Coverage at 24 months
Q44	3 of 4	5	100 (100)	3 of 4	2	100 (100)
Q45	6 of 6	3	67 (100)	6 of 6	5	100 (100)
Q46	8 of 10	79	80 (70)	8 of 10	107	35 (44)
Q47	2 of 5	6	67 (-)	2 of 5	0	- (-)
Q48	3 of 4	7	100 (33)	3 of 4	11	73 (78)
Q49	7 of 7	7	100 (100)	7 of 7	5	100 (100)
Q50	5 of 5	7	57 (71)	5 of 5	2	100 (100)
Q51	4 of 5	13	100 (100)	4 of 5	7	100 (92)
Q52	5 of 5	29	100 (97)	5 of 5	29	90 (76)
Q53	3 of 4	16	100 (100)	3 of 4	12	100 (88)
Q54	7 of 8	13	38 (70)	7 of 8	15	33(52)
Q55	4 of 4	10	100 (100)	4 of 4	10	100 (75)
Q56	4 of 5	5	100 (100)	4 of 5	9	89 (91)
Q57	4 of 5	4	75 (100)	5 of 5	7	86 (94)
Q58	5 of 5	31	94 (100)	5 of 5	18	94 (93)
Q59	2 of 3	8	25 (33)	2 of 3	7	29 (58)
Q60	5 of 5	4	100(100)	5 of 5	11	100 (67)
Q64	4 of 4	7	57 (83)	4 of 4	5	80 (83)
Q65	4 of 4	3	100 (78)	4 of 4	5	80 (-)
Q66	4 of 4	0	- (100)	4 of 4	2	100 (100)
Q67	3 of 3	6	100 (13)	3 of 3	9	100 (75)
Q68	3 of 5	8	88 (82)	3 of 5	12	92 (76)
Q69	4 of 4	26	96 (96)	4 of 4	28	75 (79)
Q70	5 of 6	14	79 (100)	5 of 6	10	100 (100)
Q71	28 of 31	188	83 (85)	28 of 31	179	79 (75)
England	132 of 151	499	84 (85)	132 of 151	507	72 (72)

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

Table 4b. Neonatal hepatitis B coverage in England by former Strategic Health Authority: January to March 2015

English SHAs	PCT returns with 12 month data	12 month denominator	Coverage at 12 months	PCT returns with 24 month data	24 month denominator	Coverage at 24 months
North East	12 of 12	10	90	12 of 12	10	100
North West	17 of 24	79	81	17 of 24	120	39
Yorkshire and Humber	13 of 14	48	94	13 of 14	55	92
East Midlands	8 of 9	30	73	8 of 9	21	76
West Midlands	15 of 17	33	76	15 of 17	38	74
East of England	11 of 13	23	96	12 of 13	30	90
London	28 of 31	188	83	28 of 31	179	79
South Central	8 of 9	40	98	8 of 9	35	80
SE Coast	6 of 8	14	93	6 of 8	21	95
South West	14 of 14	16	63	14 of 14	15	87
England	132 of 151	499	84	133 of 151	507	72

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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