



## Infection report

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### National rotavirus immunisation programme update: preliminary vaccine coverage for England, February 2016 to July 2016

*Preliminary estimates show average rotavirus vaccine coverage in England at six months of age is 94.1% for one dose and 89.7% for two doses, for the period February 2016 to July 2016. These figures show a continuation of the high coverage trends observed since February 2014.*

#### Introduction

This report describes rotavirus vaccine coverage data for the period February 2016 to July 2016, updating previous data reported for the period August 2015 to January 2016 [1].

The rotavirus immunisation programme aims to provide protection against rotavirus infection by providing two doses of Rotarix® vaccine to infants between the ages of six and 24 weeks of age. The first dose of Rotarix® vaccine is offered at two months (approximately eight weeks) of age and the second dose at least four weeks after the first dose.

Further information on the history and epidemiology of the disease, recommendations on supply, storage and use of the vaccine, as well as guidance on contraindications, precautions and adverse reactions can be found in the “Immunisation against infectious disease” book (the [Green Book](#)), chapter 27b [2]. Additional background information for the programme can be found on the [PHE website](#) and in the 2014/15 annual report [3].

#### Methods

General practice (GP) level rotavirus vaccine coverage data are automatically uploaded via participating GP IT suppliers (covering 95% of GP practices in England) to the ImmForm\* website on a monthly basis.

ImmForm data are validated and analysed by PHE to check data completeness, identify and query any anomalous results and describe epidemiological trends.

Monthly data are collected on the following:

- *Denominator:* the number of infants in a GP practice who, in the survey month, reach 25 weeks of age;
- *Numerators:* number of infants in the denominator who received a) a first dose and b) a second dose of Rotarix® from six weeks of age up to 24 weeks of age, including vaccinations given by other healthcare providers.

\* ImmForm is the system used by Public Health England to record vaccine coverage data for some immunisation programmes and to provide vaccine ordering facilities for the NHS

This rotavirus ImmForm collection is a temporary sentinel surveillance programme set up to provide assurance that the vaccine has been well accepted. The routine quarterly COVER (Cover of vaccination evaluated rapidly) reporting scheme assesses vaccine coverage for all children in England aged 12 months up to 5 years of age using data extracted from Child Health Information Systems (CHIS) and includes rotavirus coverage [4]. It is expected that quarterly and annual COVER reporting will replace the sentinel monthly GP reporting within a year.

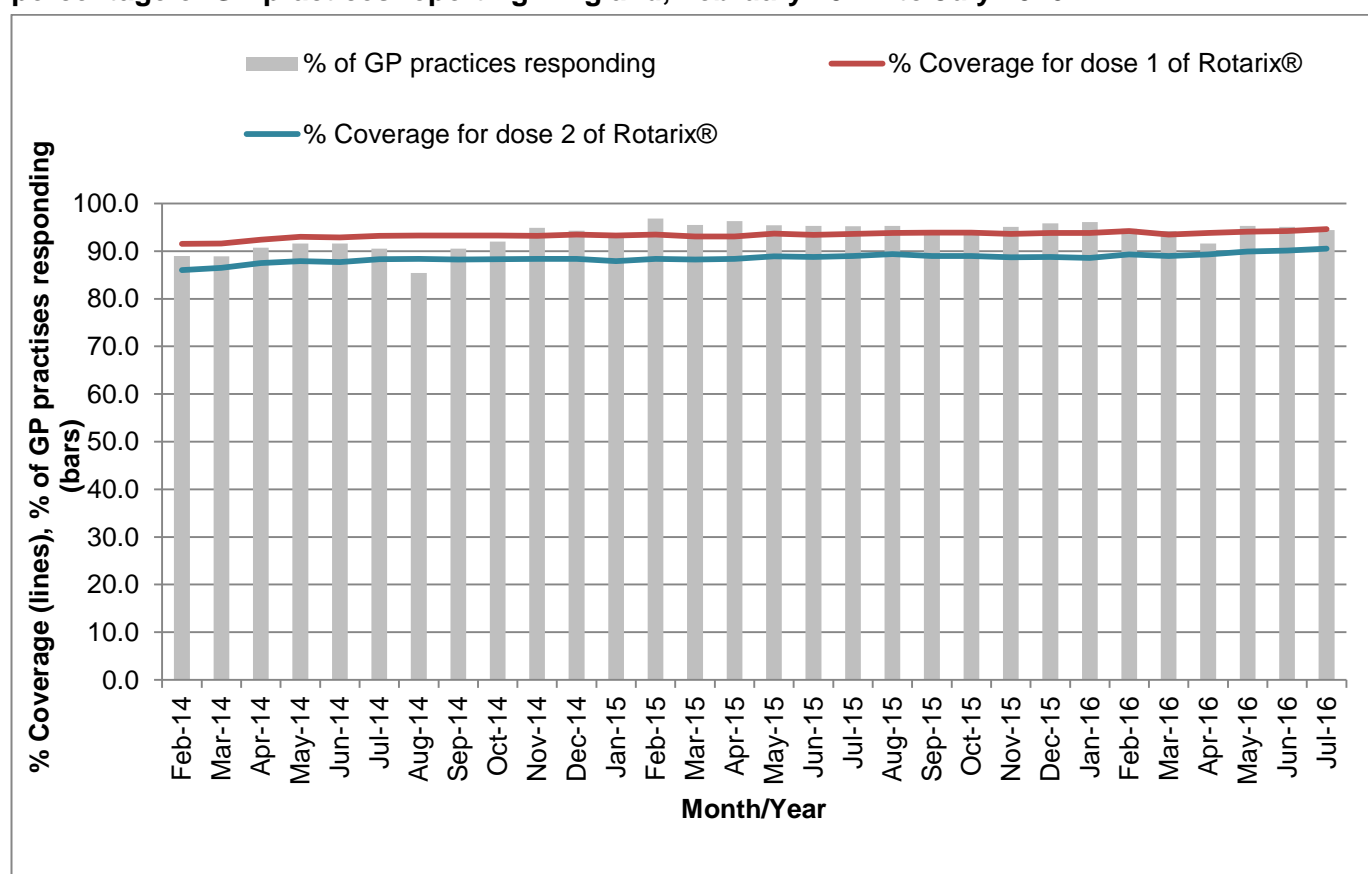
GP data are aggregated by NHS England organisations (Clinical Commissioning Groups (CCGs), Area Teams (ATs) and NHS England Local Teams (LTs)), and by Local Authorities (LAs).

## Results

Between February and July 2016, 94.2%, GP practices responded on average, ranging from 91.6% (April 2016) to 95.3% (May 2016) (Figure 1).

Between February 2016 and July 2016, average vaccine coverage was 94.1% for one dose, ranging from 91.2% (London) to 96.5% (Durham, Darlington and Tees) (see table 1 for monthly figures by AT). Average vaccine coverage was 89.7%, for completed courses, ranging from 84.5% (London) to 93.3% (Durham, Darlington and Tees) (see table 2 for monthly figures by AT). Based on the latest coverage data (July 2016), 56.2% (4048/7200) of GPs achieved at least 95% coverage for completed courses of rotavirus vaccine. Vaccine coverage data by AT and Clinical Commissioning Group (CCG) for the period February 2014 to July 2016 are presented in an [appendix](#) associated with this report.

**Figure 1. Monthly rotavirus coverage at 25 weeks of age for one dose and two doses, and the percentage of GP practices reporting: England, February 2014\* to July 2016**



\*Although the vaccine programme was introduced in July 2013 the first cohort of children aged 25 weeks to be routinely scheduled rotavirus vaccine alongside other primary vaccines at two and three months of age were evaluated from January 2014. However, data are presented from the February evaluation due to data quality issues prior to this.

**Table 1. Monthly rotavirus vaccine coverage for one dose (%) at 25 weeks of age by Area Team: England, February 2016 to July 2016**

Area Team	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016
Cheshire, Warrington and Wirral (Q44)	96.4	95.3	96.1	96.0	95.8	97.0
Durham, Darlington and Tees (Q45)	96.2	95.9	96.5	95.9	97.4	97.2
Greater Manchester (Q46)	94.0	91.7	93.0	93.5	92.2	94.4
Lancashire (Q47)	95.0	94.2	95.5	95.6	95.2	95.5
Merseyside (Q48)	93.6	91.4	92.7	94.8	94.7	95.2
Cumbria, Northumberland, Tyne and Wear (Q49)	96.6	96.0	94.4	95.3	95.8	95.7
N Yorkshire and Humber (Q50)	96.6	96.0	95.6	95.4	96.3	97.0
S Yorkshire and Bassetlaw (Q51)	96.3	95.4	95.7	96.0	96.1	95.7
W Yorkshire (Q52)	95.2	94.4	94.4	94.4	95.3	95.2
Arden, Herefordshire and Worcestershire (Q53)	94.9	94.3	93.8	95.6	94.6	96.2
Birmingham and Black Country (Q54)	92.5	92.1	93.6	93.3	94.6	94.0
Derbyshire and Notts. (Q55)	95.3	95.3	96.5	96.8	95.8	96.1
East Anglia (Q56)	94.5	93.9	94.1	95.2	95.5	94.9
Essex (Q57)	95.1	94.6	94.4	95.3	95.3	95.2
Hertfordshire and the S Midlands (Q58)	94.9	94.6	95.7	95.2	95.1	95.5
Leicestershire and Lincolnshire (Q59)	95.9	94.1	95.1	95.1	95.5	95.2
Shropshire and Staffordshire (Q60)	96.6	94.8	95.1	94.6	93.3	95.0
Bath, Gloucestershire, Swindon and Wiltshire (Q64)	95.7	93.9	95.2	94.7	94.7	96.6
Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	94.3	93.1	93.2	94.3	94.3	92.7
Devon, Cornwall and Scilly Isles (Q66)	93.0	92.5	93.3	93.7	92.1	94.0
Kent and Medway (Q67)	95.9	94.9	94.5	94.5	95.8	95.0
Surrey and Sussex (Q68)	93.3	93.6	94.2	94.1	94.1	95.3
Thames Valley (Q69)	94.5	93.8	94.9	95.0	95.5	94.6
Wessex (Q70)	95.0	94.8	95.7	94.8	94.9	95.0
London (Q71)	91.4	90.9	90.4	91.1	91.4	92.0
<b>ENGLAND</b>	<b>94.2</b>	<b>93.5</b>	<b>93.8</b>	<b>94.1</b>	<b>94.2</b>	<b>94.6</b>
<b>Monthly reported denominator</b>	49,998	54,308	48,801	51,505	49,670	50,579

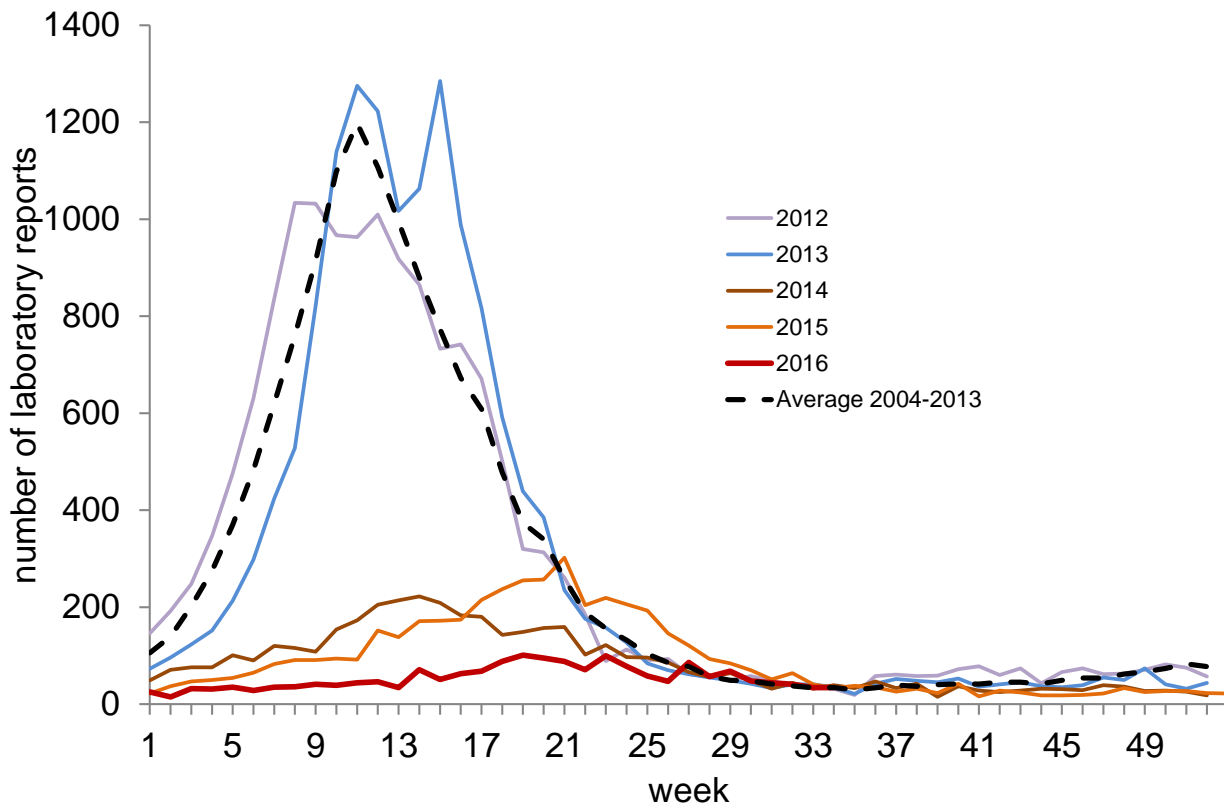
**Table 2. Monthly rotavirus vaccine coverage for two doses (%) at 25 weeks of age by Area Team: England, February 2016 to July 2016**

Area Team	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016
Cheshire, Warrington and Wirral (Q44)	91.7	90.9	92.5	91.7	91.6	93.5
Durham, Darlington and Tees (Q45)	92.8	92.0	93.5	92.9	94.6	94.1
Greater Manchester (Q46)	87.2	85.7	87.7	88.0	88.1	90.0
Lancashire (Q47)	91.0	89.8	91.8	92.1	92.2	91.9
Merseyside (Q48)	86.9	86.2	86.5	90.2	89.5	90.6
Cumbria, Northumberland, Tyne and Wear (Q49)	93.2	92.9	90.5	91.5	92.7	92.9
N Yorkshire and Humber (Q50)	92.8	92.3	93.2	92.5	92.7	92.7
S Yorkshire and Bassetlaw (Q51)	92.4	92.5	93.0	92.9	93.0	92.3
W Yorkshire (Q52)	90.8	90.6	90.6	91.2	92.5	92.4
Arden, Herefordshire and Worcestershire (Q53)	90.0	90.1	89.6	91.6	90.5	92.2
Birmingham and Black Country (Q54)	86.0	86.9	88.1	88.4	89.7	89.5
Derbyshire and Notts. (Q55)	91.2	90.9	92.5	94.0	92.4	92.7
East Anglia (Q56)	91.5	91.2	91.6	92.1	93.2	92.5
Essex (Q57)	91.5	91.5	92.1	93.4	92.2	92.4
Hertfordshire and the S Midlands (Q58)	91.7	91.5	92.7	92.4	93.3	92.5
Leicestershire and Lincolnshire (Q59)	93.1	91.7	92.3	92.9	93.2	92.2
Shropshire and Staffordshire (Q60)	92.4	91.1	92.4	91.2	89.5	91.3
Bath, Gloucestershire, Swindon and Wiltshire (Q64)	92.1	91.1	91.9	92.3	92.4	94.6
Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	91.5	89.5	90.0	90.4	90.3	89.2
Devon, Cornwall and Scilly Isles (Q66)	88.0	88.7	88.2	89.5	88.1	89.0
Kent and Medway (Q67)	89.8	90.2	89.9	90.5	90.7	90.9
Surrey and Sussex (Q68)	88.0	89.6	90.0	90.2	91.0	92.0
Thames Valley (Q69)	89.3	88.9	88.9	90.8	90.2	89.6
Wessex (Q70)	91.3	92.0	92.3	91.6	91.7	91.9
London (Q71)	84.3	84.1	83.5	84.6	85.1	85.6
<b>ENGLAND</b>	<b>89.3</b>	<b>89.0</b>	<b>89.3</b>	<b>89.9</b>	<b>90.1</b>	<b>90.5</b>
Monthly reported denominator	49,998	54,308	48,801	51,505	49,670	50,579

## Conclusions

These figures show a continuation of the high coverage trends observed since February 2014. Comparison of weekly mean laboratory reports of rotavirus (England and Wales) for 2004-2013 with the years following introduction of the vaccine (2014-2016) show a marked reduction in rotavirus activity which is associated with the introduction of the oral vaccine in July 2013 (Figure 2) [5].

**Figure 2. Weekly rotavirus laboratory reports compared to weekly mean reports (2004-2013), England and Wales**



## References

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