

## MANCHESTER JOINT STRATEGIC NEEDS ASSESSMENT 2015/16

### CHILDREN AND YOUNG PEOPLE (STARTING WELL AND DEVELOPING WELL)

#### CHAPTER: Immunisation Programmes

##### Why is this important?

Childhood vaccination continues to have a historical place - on a par with the provision of clean water and safe sanitation - as one of our society's most fundamental tools in the battle for better public health. Without vaccination, epidemics of largely forgotten diseases, such as polio and diphtheria, would occur again and impact most on our most deprived communities, worsening existing health inequalities.

Despite the undoubted success of our national vaccination programme in children and young people, vaccine-preventable diseases, such as measles, whooping cough and TB, do still occur. These diseases are ready to resurge should our guard on vaccination slip, as the measles outbreaks in Greater Manchester (GM) in recent years have illustrated.

In order to do this, we need to protect whole communities from infectious disease through vaccinating as many children as we possible can to also protect the people who cannot be or have not been vaccinated. This is called herd immunity or community wide immunity.

Vaccination, as well as a necessity to protect public health, is also a national NHS right, the NHS Constitution providing 'the right to receive the vaccinations (recommended by the national vaccination expert advisory committee)'.

##### The Manchester Picture

Details of vaccination coverage for children under the age of 5 in Manchester are given in Appendix A (provided by the NHS England (NHSE) Screening and Immunisation Team).

Table 1 shows a disappointing fall in vaccine coverage. Manchester currently does not achieve international targets for vaccination, and performs less well than is the norm for England, or for Greater Manchester (GM), overall. None of the three Clinical Commissioning groups (CCGs) perform consistently better than the others (Table 2).

In part, this fall fits a national picture of lower vaccination coverage, but this is only a part explanation. Mainly, the fall is due to the difficulties of maintaining the immunisation promotion project. In order to address this in Manchester, a

specific project was introduced in 2011 to increase vaccination coverage rates of 0-5 year olds in Manchester. This project, whilst highly successful, was not sustainable in the longer term due to high staffing costs and has now been recommissioned from the Child Health Department, Central Manchester Foundation Trust (CMFT). More information about the outcomes of this project can be found at [http://www.researchgate.net/publication/255822105 Adopting active patient management principles Improving immunisation uptake in Manchester](http://www.researchgate.net/publication/255822105_Adopting_active_patient_management_principles_Improving_immunisation_uptake_in_Manchester).

We expect to see an increase in vaccination coverage in Q3 2015/16, but it may take further time to improve vaccination rates to the previously satisfactory levels.

The most recent uptake of HPV vaccination (Human Papilloma Virus vaccine), given to girls in secondary schools to prevent future cervical, and other, cancers is shown in Appendix B (provided by the NHSE Screening and Immunisation Team).

In 2013/14, a disappointing fall in completed vaccinations was seen, with only 77% of girls completing all three doses against the target of 90%. However, a national change in policy has now occurred, with only two doses of vaccine now being required to complete the vaccination course. In 2013/14, 86% of girls in Manchester schools received two doses of vaccine.

BCG (TB) vaccination has, for many years, been offered to all children in Manchester. Children are vaccinated usually when they are a few weeks old in community clinics. Uptake in the first year of life has been between 80% and 85%, although this has been found to be higher in children at most risk (essentially those children born in to black and minority ethnic (BME) families).

The latest vaccination coverage data, for a range of vaccines, can be obtained from: <https://www.gov.uk/government/collections/vaccine-uptake>

### **What would we like to achieve?**

The goal for Manchester, and all other parts of the country, must be to achieve vaccination coverage levels that protect as many individuals as possible, and that achieve effective herd immunity.

In light of those goals, we aspire to meet the World Health Organisation (WHO) international targets for immunisation. The aspiration is:

- 95% completion of primary vaccination in young children (those up to age two)
- 90% completion of booster vaccination for pre-school children (those up to the age of five)
- 90% completion of HPV vaccination for girls in secondary school

The policy for BCG vaccination is currently under active review. The aim is to move vaccination from community services to maternity services, enabling vaccination of children within the first few days of life, when babies are particularly vulnerable, not, as is the case at present, in the first few weeks of life.

### **What do we need to do to achieve this?**

High vaccination coverage is achieved primarily by a strong and effective 'call-recall' system, supported by good quality information for parents and a safe vaccination delivery system. The Immunisation Promotion Project, which was provided by Manchester City Council (MCC), acted to strengthen call-recall in Manchester in order to mitigate the effects of the very high level of population mobility locally. Its success needs to be repeated.<sup>1</sup>

For HPV vaccination, the new two-dose vaccine schedule for Y8/Y9 girls should make the 90% target much more achievable, requiring less than a 5% improvement from previous performance on the part of the school health service who delivers this vaccine programme.

BCG vaccination will be focused on children who are in the at-risk groups just after they are born, rather than offering vaccination to all children at a later age in community clinics, many of whom are not at increased risk.

### **What are we currently doing?**

The responsibility for commissioning vaccination programmes lies with the NHSE Screening and Immunisation Team (SIT), working with partners, particularly CCGs given their primary care role. The SIT provide information to, and visit, general practices, provide training for immunisers, answer clinical enquiries, and facilitate a range of meetings across GM to encourage best practice, including for school health services.

The highly successful Immunisation Promotion Project has now been recommissioned from the CMFT Child Health Dept. This should lead to a sustainable and long-term resurgence in vaccination coverage in the under 5s in Manchester, starting in Q3 2015/16.

A process for implementing a change in BCG policy is currently underway, led by the NHSE Screening and Immunisation Team. A temporary partial shortage of BCG vaccine in 2015 has delayed implementation however.

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<sup>1</sup> Perrett K, Gowland A. How to improve vaccination coverage in young children. *Vaccines in Practice* 2012; 5(3),1.

### **Community and Stakeholder Views**

There is a great deal of contact between the NHSE Screening and Immunisation Team and health professionals working in the community, such as GP practice nurses and school nurses. This provides a strong link to community concerns, and would, for example, help identify a 'scare' at an early stage.

### **References and Links**

The 'Green Book' is the UK's national vaccination policy guide, providing has the latest information on vaccination as well as giving a great amount of background information on our national vaccination programme.

<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

Readers who want further information about vaccination aimed at the general public will find a wealth of information on the NHS Choices website, including a table of all the vaccines that children are routinely offered.

<http://www.nhs.uk/conditions/vaccinations/pages/vaccination-schedule-age-checklist.aspx>

### **Other JSNA Topics that this links to**

Tuberculosis.

**Date first version completed:** 17<sup>th</sup> November 2015

**Date of latest revision:**

## **APPENDIX A: Vaccination coverage in under 5s (Report provided by NHS Executive Screening and Immunisation Team)**

### **Manchester Childhood Immunisations- 0-5 years (Q1 2015/16)**

This report presents quarterly coverage data for children in Manchester 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. This report includes uptake data for the periods Q1 2012/13 through to Q1 2015/16, to aid trend analysis.

### **Cover of Vaccination Evaluated Rapidly (COVER)**

Information on childhood immunisation coverage at ages one, two and five years is collected through the UK COVER collection by Public Health England. These aggregated data are collected from Child Health Information Services (CHIS) which are computerised systems storing clinical records supporting health promotion and prevention activities for children, including immunisation.

Population vaccination coverage is a key indicator included in the Public Health Outcomes Framework (PHOF) (Indicator 3.3) 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

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 and Area Teams

Please visit the [COVER webpage](#) or contact the COVER team on [cover@phe.gov.uk](mailto:cover@phe.gov.uk) for more information

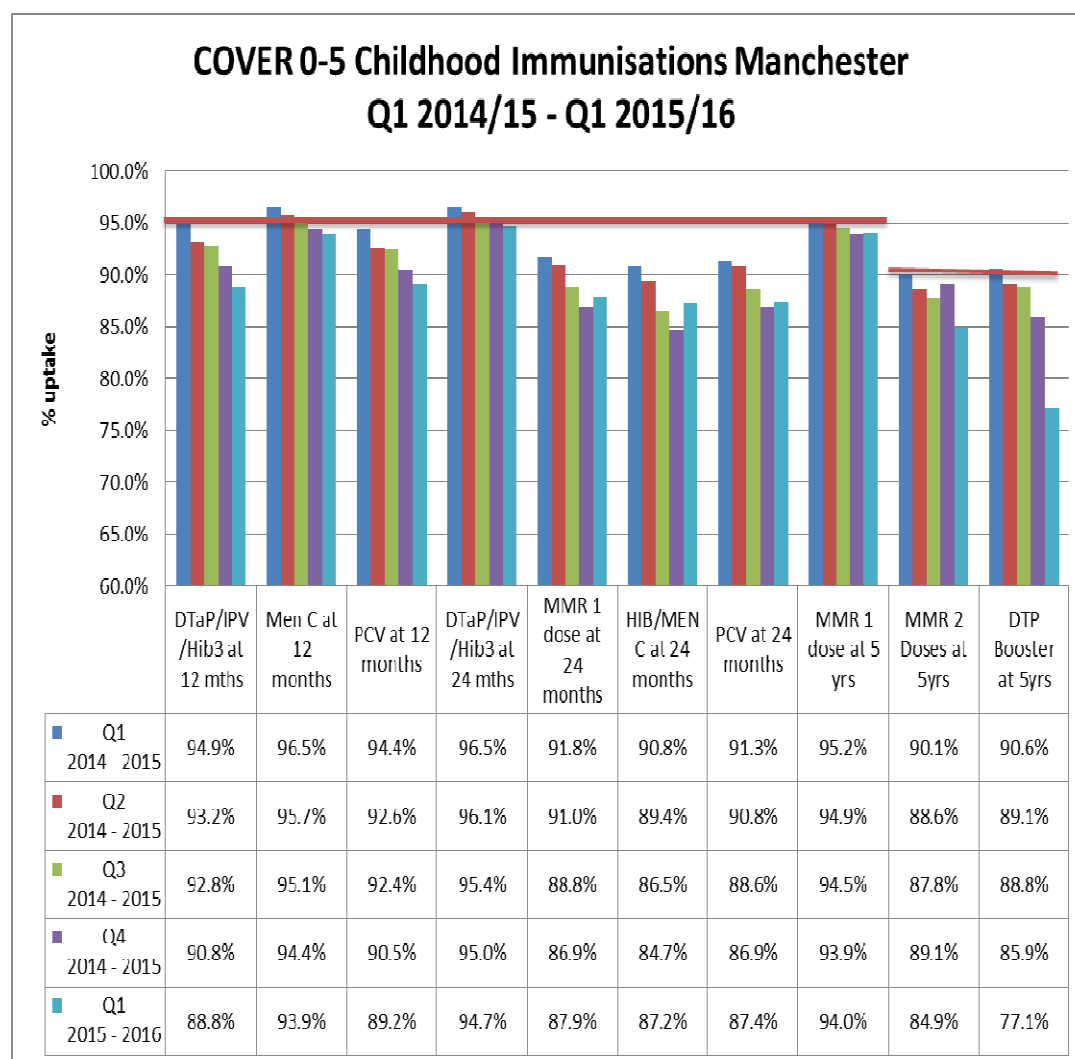
The latest information on the national vaccination programme is contained in the 'Green Book'.

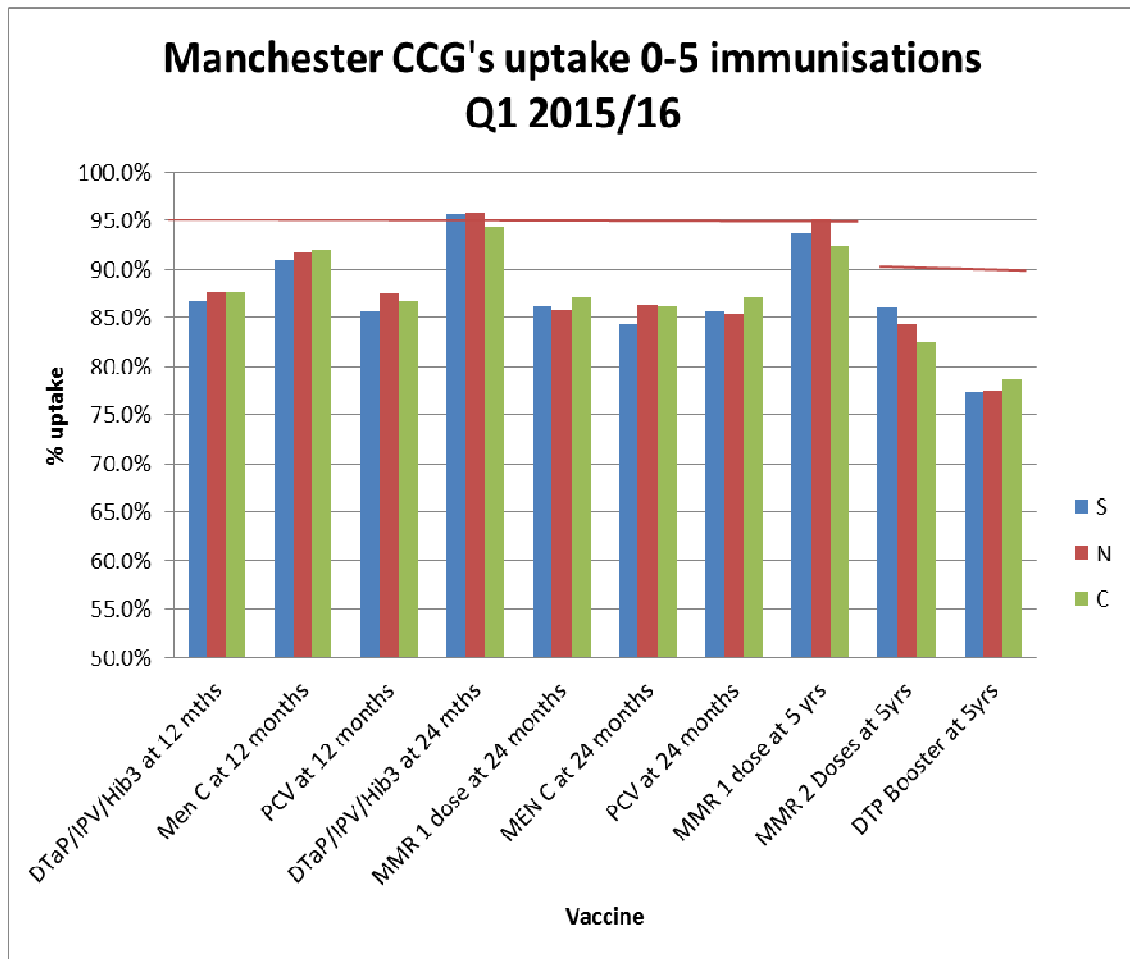
<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

**Table 1 COVER data for Manchester**

Children are routinely scheduled for three "primary" immunisations against each of the following diseases: diphtheria, tetanus, pertussis (whooping cough), polio, haemophilus influenza B (Hib) and Meningitis C. These are given in a series of immunisations from the age of 2 months. A single dose of MMR (Measles Mumps and Rubella) is offered from 13 months of age. The national programme aims to immunise 95% of children against these diseases by the age of two. 2.

A single vaccine (Pediace® vaccine) is now used to protect children aged 1 against diphtheria, tetanus, polio, pertussis and Hib (summarised as DTaP/IPV/Hib in the chart below). This is known as the '5 in 1' vaccine.





### Summary for Manchester

The rates for all COVER vaccinations in **Manchester** for Q1 2015/16 reported at 12 months, 24 months and 5 years were lower than England and GM for all vaccinations. No vaccinations met National targets. None of the three CCGs perform consistently better than the others.

However, four out of ten vaccines have showed a slight increase this quarter. Child health report they have recently included the non-resident population into the cover stats report, increasing the denominator and ultimately the number of children immunised.

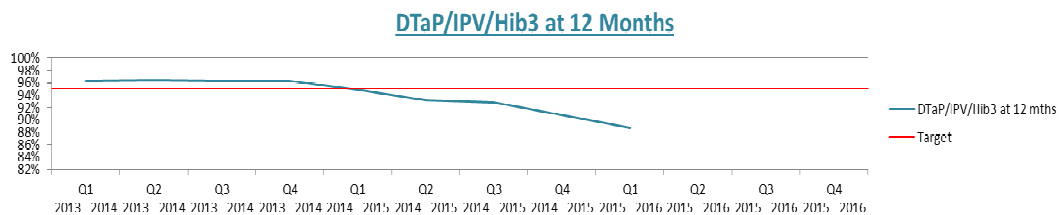
The work been carried out on the data in Manchester Child Health is not expecting any significant improvement until Q3 2015/16.

### COVER Evaluation at 12 months

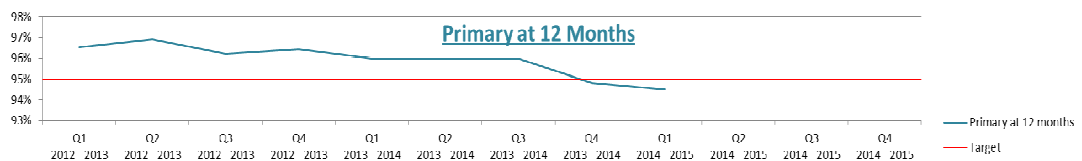
- Coverage in **Manchester** of DTaP/IPV/Hibx3, PCV x2 and Men C evaluated at 12 months of age decreased by 2%, 1.3% and 0.5% respectively from Q4 2014/15.
- No vaccines reported at 12 months met the national targets.

- 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.
- 12 month old children evaluated in the current quarter are the fourth cohort to have been routinely offered two doses of rotavirus vaccine. Data was not available this quarter for rotavirus.
- 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. Monthly coverage data for children in England born April to June 2014 (12 month cohort in this report) were evaluated at just over 25 weeks between October and December 2014 and monthly vaccine coverage for two doses of rotavirus vaccine was 88.4%. Manchester did report and achieved 82.5%

**Table 2 Q1 2013/14 - Q1 2015/16 DTaP/IPV/Hib3 at 12 months in Manchester**



**Table 3 Q1 2015/16 DTaP/IPV/Hib3 at 12 month in GM**

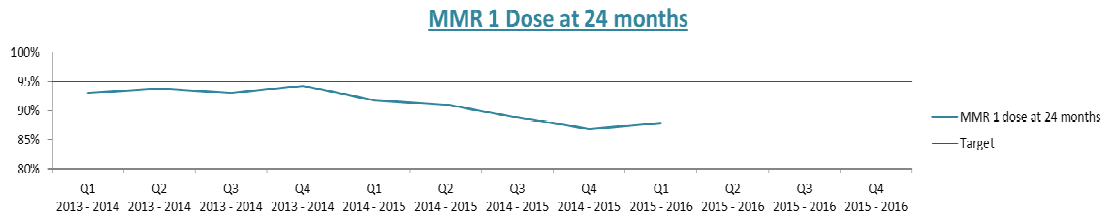


### Evaluation at 24 months

- Coverage in **Manchester** rose in Manchester last quarter for 3 out of 4 vaccines reported at 24 months. Only DTaP/IPV//Hibx3 fell. Hib/ MenC rose 2.5% from Q4 2014/15  
Coverage in England rose remained similar to the previous quarter for all vaccinations reported at 24 months from Q4 2014/15
- 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%
- In **Manchester** no vaccines reported at 24 months met the national target of 95%.



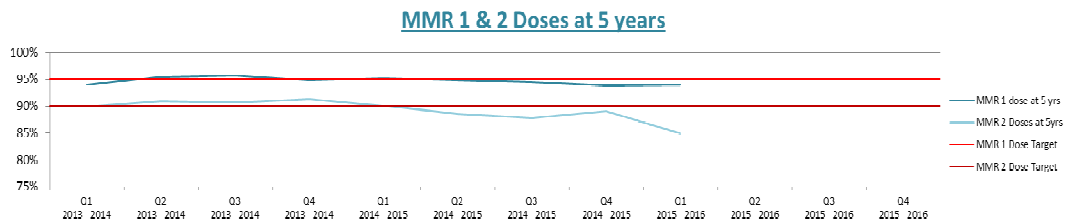
**Table 4 MMR 1 Q1 2015/16 at 24 months in Manchester**



**COVER Evaluation at 5 years**

- Coverage in Manchester increased 0.1% for MMR x1 reported at 5 years. The DTP booster fell 8.8% and MMRx2 doses fell 4.2%.
- Across England coverage of MMR1 rose by 0.2%, MMR2 fell 0.1% and DTP booster fell 0.7% from Q4 2014/15
- No vaccinations given at 5 years met the National targets.

**Table 7 MMR 1 & 2 at 5 years in Manchester**



**APPENDIX B: HPV vaccination data (report provided by NHS Executive Screening and Immunisation Team)**

**HPV uptake Greater Manchester 2013/14** (Please note 2013/14 uptake is based on the previous schedule of 3 doses)

<b>Table A Annual HPV vaccine coverage in England : 2013-14</b>							
<b>HPV coverage data of first, second and third dose for the routine cohort at 31 August 2014, by PCT and Area Team</b>							
<b>Cohort 11, School Year 8 Girls (12-13 year olds)</b>							
<b>National and Area Team</b>	<b>Total No. of girls in Cohort 11</b>	<b>Doses given 1st September 2013 to 31st August 2014</b>					
		<b>Dose one</b>		<b>Dose one and two</b>		<b>All three doses</b>	
		<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
<b>England</b>	<b>284777</b>	<b>259479</b>	<b>91.1</b>	<b>255641</b>	<b>89.8</b>	<b>246918</b>	<b>86.7</b>
<b>GREATER MANCHESTER</b>	<b>15307</b>	<b>13992</b>	<b>91.4</b>	<b>13817</b>	<b>90.3</b>	<b>13331</b>	<b>87.1</b>
ASHTON, LEIGH AND WIGAN PCT	1750	1559	89.1	1529	87.4	1493	85.3
BOLTON PCT	1743	1638	94.0	1638	94.0	1619	92.9
BURY PCT	1136	1009	88.8	998	87.9	932	82.0
HEYWOOD, MIDDLETON AND ROCHDALE PCT	1138	1043	91.7	1032	90.7	998	87.7
MANCHESTER PCT	2526	2267	89.7	2188	86.6	1969	77.9
OLDHAM PCT	1483	1422	95.9	1415	95.4	1384	93.3

SALFORD PCT	1110	933	84.1	919	82.8	900	81.1
STOCKPORT PCT	1557	1473	94.6	1461	93.8	1431	91.9
TAMESIDE AND GLOSSOP PCT	1431	1374	96.0	1369	95.7	1356	94.8
TRAFFORD PCT	1433	1274	88.9	1268	88.5	1249	87.2

Target = 90%

Manchester achieved 77.9 % uptake of 3 doses in 2013/14.

Historical data for 3 doses

	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
Manchester	82.8	82.6	83.6	77.9

The 2014/15 annual data is currently being collated.

This is data on a 2 dose schedule. In Manchester girls were offered one vaccine in year 8 and will receive their second dose in year 9.

School Nurses & Immunisation Team colleagues from across Greater Manchester have been meeting at Piccadilly Place to discuss best practice and improving uptake of HPV vaccine along