

### Immunisation: Factsheet UPDATED September 2016 QUARTER

#### **Tower Hamlets Joint Strategic Needs Assessment**

#### **Executive Summary**

This fact sheet covers immunisation programmes for children, young people and adults.

Immunisation is a very effective public health intervention to protect infants through adults from a range of infectious diseases which could seriously compromise their health. There is a national schedule for all the immunisation programmes<sup>1</sup>. In addition, in Tower Hamlets, a BCG vaccination programme is provided for all infants under1 year due to the high level of tuberculosis in the Borough.

The national immunisation programme is mainly delivered through general practice and schools for Tower Hamlets. Any national initiatives to add new vaccinations to the immunisation schedule are implemented locally.

In Tower Hamlets there have generally been high levels of uptake of the childhood immunisation programme over the last few years. The seasonal flu vaccination, for the over 65yrs population, in Tower Hamlets has remained consistently high however improvements to the uptake of the local school immunisation programmes and other adult vaccinations are required.

#### Recommendations

- To improve the uptake of the MMR vaccination amongst the proportion of Somali parents are refusing this vaccination by highlight this situation with NHSE ways of promoting the MMR vaccination to Somali parents resident in Tower Hamlets and other London boroughs. To continue to distribute targeted resources to key stakeholders to GPs/practice nurses/health visitors and children's centres to promote this issue.
- To improve and the coverage levels of the childhood vaccination programme by encouraging GP
  practices and their local Networks to refocus on this programme and to make improvements to their
  programmes,
- To work with the new school vaccination provider, Vaccination UK to improve the uptake of the school immunisations which are currently below the averages in London.
- To improve the uptake of the season flu vaccination in the eligible groups who are under 65yrs by learning from general practices with higher levels of vaccination uptake amongst these groups.
- To continue to support the improvement of the uptake of the pertussis vaccination in pregnant women by improving the access to through the new maternity service and to gather information on the reasons why local women will not have this vaccination.
- To improve the reporting of the vaccination uptakes of Looked After Children who are in the care of Tower Hamlets to be assured they are not being disadvantaged and are receiving all the vaccinations as required on the immunisation schedule.

#### 1. Why do we have immunisations?

Immunisation is one of the most important interventions for protecting individuals and the community from serious infectious diseases which could seriously compromise their health. There is a body of evidence-based

<sup>&</sup>lt;sup>1</sup> Immunisations schedule <u>http://www.nhs.uk/Planners/vaccinations/Pages/Vaccinationchecklist.aspx</u>

information on the efficacy of each of the vaccinations and the impact on the vaccine preventable infectious diseases.<sup>2</sup>

## Childhood Immunisation Programme (0 – 5 years)

The routine childhood immunisation schedule<sup>3</sup> includes vaccinations against: rotavirus, diphtheria, pertussis, polio, tetanus, haemophilius influenza type b, meningitis B and C, measles, mumps, rubella, pneumococcal infection. To be fully effective and prevent the spread of these diseases, 95% of the children within a given population need to get vaccinated (WHO.)

Since 2013 there has been an addition to the 0 -5yrs immunisation schedule to protect against the seasonal flu virus which has been developed as a nasal spray (Fluenz) and is given to 2 – 4yr olds in local general practices.

Currently BCG vaccination is recommended for all babies up to one year in Tower Hamlets who have a parent or grandparent who was born in a country where there is a high rate of TB. Where the rates of TB in an area are above 40 cases per 100,000 then all infants under 1 year should be offered this vaccination which used to be the case for Tower Hamlets however the TB rates are falling and now at 33 cases per 100,000.

Infants born to mothers with a positive Hepatitis B<sup>4</sup> blood test are also vaccinated to be protected from Hepatitis B, via an accelerated vaccination schedule, in their first year of life (this includes 4 vaccinations and a blood test at 12mths) to prevent them developing serious liver disease as an adult.

A new vaccination Meningitis  $B^5$  has been introduced this year (2015) into the infant schedule for all babies born after  $1^{st}$  May 2015.

#### **Primary School vaccination programme**

An addition to the immunisation schedule which was introduced in the autumn of 2015 is the nasal spray vaccine Fluenz is being rolled out through a primary schools initiative and each year a new age group of children is added to the list to receive this vaccine (2016 : 5yrs – 8yrs). This is initiative will be taking place on a yearly basis as the seasonal flu virus continually changes and therefore a new vaccine is required every year to prevent the spread of this virus.

#### Secondary School vaccination programmes

There are currently three vaccination programmes being delivered in secondary schools:

- HPV (Human papilloma virus) vaccination programme for yr 8 girls to prevent future cervical cancer
- School leavers booster for yr 9 or 10 students to provide further protection from tetanus, diphtheria and polio
- Meningitis ACWY starting to be delivered from September 2015 for yr 10 students to prevent the spread of these infections.

<sup>&</sup>lt;sup>2</sup> <u>https://www.gov.uk/government/collections/immunisation /</u>

<sup>&</sup>lt;sup>3</sup> <u>http://www.nhs.uk/Planners/vaccinations/Pages/Vaccinationchecklist.aspx</u>

<sup>&</sup>lt;sup>4</sup> http://www.nhs.uk/Conditions/vaccinations/Pages/hepatitis-b-vaccine.aspx

<sup>&</sup>lt;sup>5</sup> http://www.nhs.uk/conditions/vaccinations/pages/meningitis-b-vaccine.aspx

### Adult vaccination programmes

There are currently four vaccination programmes for specific sections of the adult population :

- Seasonal flu vaccination for adults 65yrs and over, for adults with long-term health conditions including heart disease, respiratory disorders, diabetes and kidney disorders, for women who are pregnant and for people who work or care for individuals who have long-term health conditions (eg hospital and social care staff)
- Pertussis vaccination for women who are pregnant to prevent their new born babies from catching pertussis (whooping cough) which is a very serious infection for such a young infant.
- Shingles vaccination for people who are over 70yrs to prevent this debilitating disease.
- Pneumococcal vaccination for all adults over 65yrs to protect against this virus which can cause pneumonia in the older people with devastating consequences.

## 2. What is the policy context?

#### Nationally

The immunisation programmes which are currently delivered to the Tower Hamlets population are recommended by the Joint Committee on Vaccination and Immunisation (JCVI<sup>6</sup>) which is the designated body for scheduling the national vaccinations programmes and introducing new vaccines into the schedules as and when required.

There are nationally produced Directly Enhanced Schemes (DES) for GPs to deliver both the childhood and adult vaccination schedules which provides the funding and sets the parameters for delivering this service, to the local GP registered population.

There is a national mandatory system called COVER<sup>7</sup> which collects the quarterly coverage figures for all the childhood vaccinations given across England and Wales. This provides comparative data for this vaccination schedule at a London and national level. During the seasonal flu vaccination period (1<sup>st</sup> October – 31<sup>st</sup> January each year) data is collected on a monthly basis from general practice at a national level to monitor the uptake of this vaccination campaign.

Nationally NHS England is the organisation responsible for the commissioning of the immunisation programme across the country since the changes to the NHS in April 2013 and for providing assurance to the Tower Hamlets Director of Public Health that the standards for this programme are being met.

## Locally

An immunisation Network Improvement Scheme (NIS) has been developed to encourage the 8 Tower Hamlets primary care Networks (coordinated groups of 4-5 GP practices) to improve the uptake of the childhood immunisation. The NIS was implemented in 2010 to provide the encouragement for local practices to increase the coverage levels of the childhood immunisation programme to reach the 95% target recommended by WHO.

<sup>&</sup>lt;sup>6</sup> <u>http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/ab/JCVI/index.htm?ssSourceSiteId=en</u>

<sup>&</sup>lt;sup>7</sup> <u>http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/VaccineCoverageAndCOVER/</u>

## 3. What are the effective interventions?

The NICE guidance PH 21<sup>8</sup> Reducing inequalities in the uptake of immunisations, published in September 2009 which is still current (review December 2015) illustrates the standards which are required to provide a successful childhood immunisation programme.

The key NICE recommendations included:

- making the immunisation services accessible, for example, by extending clinic times and making sure clinics are 'child-friendly'
- having a routine call and recall programme for each of the vaccinations
- providing parents and young people with tailored information and support and an opportunity to discuss any concerns
- opportunistically checking children and young people's immunisation status during health appointments or when they join nurseries, playgroups, schools and further education colleges offering advice and/or vaccinations if required.
- ensuring all babies born to hepatitis B-positive mothers receive the recommended vaccinations on time and the blood test at 12 months to monitor the infection levels of the infant.

## 4. What is the local picture?

## Vaccine preventable childhood infectious disease rates

The numbers individuals contracting vaccine preventable infections have remained low in Tower Hamlets for April 2014 to March 2015. However in Tower Hamlets from April to July 2015 there was a sudden increase in measles cases (25 in 3 months compared to 14 cases per year). This small outbreak reaffirmed the importance of reaching high levels of vaccination coverage to prevent such outbreaks. Analysis of this particular increase highlighted that a disproportionate number of the measles cases came from the Somali community and confirmed a lower uptake of the MMR vaccination (which prevents measles) amongst this community than in the rest of the population (70% compared to 90%)

## **Current Immunisation Coverage Levels in Tower Hamlets**

## **Childhood Immunisation Programme**

The childhood immunisation programme in Tower Hamlets has been very successful over the past number of years as shown on the graphs below. For each year group one of the key vaccinations have been used to demonstrate the coverage levels of the childhood immunisation programme:

## Figure 1 :1<sup>st</sup> year vaccination coverage using the 3<sup>rd</sup> DTaP/IPV/Hib vacine

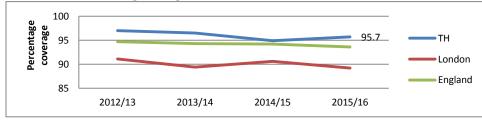


Figure 1 highlights that the 1<sup>st</sup> year vaccination programme continues to remain above the England and London averages

<sup>&</sup>lt;sup>8</sup> <u>http://www.nice.org.uk/guidance/ph21</u>

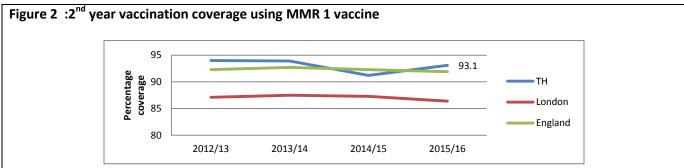


Figure 2 highlights that Tower Hamlets has remained above the England and London averages for the 1<sup>st</sup> MMR vaccination however there apart from a drop to 91.2% at the end of 2014/15.

## Figure 3 :5 year vaccination coverage using the MMR 2 vaccine

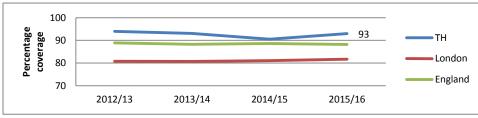


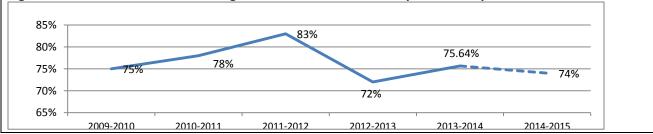
Figure 3 demonstrates that in previous years Tower Hamlets coverage levels for 5 year olds have remained higher than England and London despite a slight drop in 2014/15.

The Hepatitis B accelerated vaccination programme for babies born to mothers with positive Hepatitis B blood test indicates that a majority of the infants requiring this schedule received a full course of the vaccines. At the end of the year 2014/15 100% (27) of 1yr olds had received their 3<sup>rd</sup> injection and 98% (30) of 2yr olds had received their 4<sup>th</sup> and final injection.

All the statistics highlighted in this section have been taken from the GP registers but this does not include any children 0-5yrs who are living in Tower Hamlets but are not registered with a GP. Currently there is not accurate information on the immunisation uptake for the Looked After Children who are under Tower Hamlets responsibility.

# School Immunisation programme

The HPV programme for girls aged 12 -13 years has been organised in local secondary schools since 2008. This vaccination was measured on the 3<sup>rd</sup> injection the final injection which completed this vaccination schedule. In September 2014 this schedule was change from three injections to two. The annual measurement of coverage levels takes place on 30<sup>th</sup> September by measuring the previous academic year in which the vaccination is being delivered.



#### Figure 4 3rd HPV vaccination coverage in Tower Hamlets since Sept 2010 – Sept 2014

Figure 4 indicates that there was a significant drop in the coverage levels for the completion of the 3<sup>rd</sup> HPV vaccination from September 2012 until September 2013.

The new schedule of 2 HPV vaccinations since September 2014 was measured in September 2015 and indicated that 74% of the eligible girls received two HPV vaccinations.

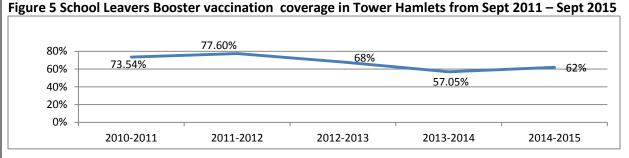


Figure 5 is indicating that the school leavers booster vaccination coverage levels are starting to improve in Tower Hamlets in 2015.

The Meningitis C vaccination which was given for the first time for the academic year 2014 in secondary schools in Tower Hamlets to the yr 10 students reported a 49.6% uptake in September 2015. This is being replaced by the Men ACWY in September 2015 due to the recent rise in the Meningitis W virus which has very serious consequences on health.

## Adult vaccination programme

The national target of 75% coverage has been set for the over 65yrs population and Tower Hamlets reached 74% coverage of this vaccination for the winter period of2015 /16 and was the top borough in London for the delivery of this vaccination. For 2015/16 for the under 65yrs with long term conditions Tower Hamlet reached 56.7% which was above the national average and 49.4% .for pregnant women which again exceeded the national averages.

Coverage levels for the pneumococcal vaccination programme for 31<sup>st</sup> March 2015 indicated that 72% of those over 65yrs have received this vaccination.

The coverage level of shingle vaccination which is given at 70yrs for April 2016 was 38%

The pertussis vaccination which is given to women who are pregnant from 16 -32wks reached 70% in Tower Hamlets for July 2016.

#### 5. What is being done locally to address this issue?

In Tower Hamlets a multidisciplinary committee meets on a quarterly basis to monitor and oversee the range of immunisation programmes being implemented locally. Any reported problems with immunisation programme are escalated to NHS England who is now the responsible organisation for commissioning this programme.

#### Childhood Immunisation Programme

The significant progress which was been made in the childhood immunisation programme in Tower Hamlets over the last few years has been due to the implementation of the GP Network Improvement Scheme which

took the steps required to improve the organisation and delivery of this vaccination service . This process was described in a BMJ paper<sup>9</sup> which was published in 2011.

There have been some fluctuations in the childhood immunisation coverage levels in Tower Hamlets however this programme is still remaining above the London averages. As well as being reviewed in the Tower Hamlets Immunisation meeting, this programme is being monitored at the quarterly meetings held by Tower Hamlets Community Commissioning Groups (CCG).

A small section of the population in Tower Hamlets, mainly from Somalia, has been continually resistant vaccinating their 1yr olds with the 1<sup>st</sup> MMR vaccination. Recently this was highlighted again with sudden increase in measles cases in Tower Hamlets (April 2015). Investigation into this incident highlighted a disproportionate number of cases came from the Somali community. Specific work with this community has taken place as a result of this incident.

General practices are continuing to be responsible for delivering the seasonal flu vaccine(Fluenz) to all children aged 2 – 4yrs during the seasonal flu period. This is measured at the end of January each year and for January 2016:

	2yrs	3yrs	4yrs
Tower Hamlets 2015	31.2%	37.5%	26.5%
Tower Hamlets 2016	30.1%	34%	28.5%
London 15/16	26.5%	28.8%	21.8%

## Figure 6: Seasonal flu vaccine coverage for children aged 2 -4yrs for 2015 and 2016

# **School Immunisation Programme**

The school immunisation programme is to be delivered by an organisation called Vaccination UK from September 2016 who have been commissioned by NHS England to run this programme in Tower Hamlets. Representatives from this service will be attending the quarterly Tower Hamlets Immunisation meeting to present reports to monitor the coverage of the vaccinations which are being delivered in the school setting.

Two new vaccines are currently being introduced to the immunization schedule in schools (September 2015); the MEN ACWY in secondary schools and Flunez the seasonal flu nasal spray in all primary schools.

Vaccination UK is responsible for supporting the delivery of the seasonal flu vaccinations to children in the special schools in Tower Hamlets which takes place in early autumn.

# Adult Immunisation Programme

The seasonal influenza vaccination campaign takes place between September and end of January of each year. The seasonal flu vaccination programme in Tower Hamlets is monitored regular during the three month period (October – January). Public Health circulates reports to the practices highlighting how well the individual practices are progressing against this vaccination.

The pneumococcal vaccination for the over 65yrs continues to remain around the 70% mark in Tower Hamlets.

<sup>&</sup>lt;sup>9</sup> http://www.bmj.com/content/343/bmj.d5703

During each seasonal flu campaign period practices are reminded to offer this vaccination to anyone who may be attending to have the seasonal flu injection and has not previously had this vaccination.

The shingles vaccination was only started in September 2014 for individuals over 70yrs. More data will need to be collected and compared nationally to understand how this vaccination programme is progressing in Tower Hamlets.

The pertussis vaccination for pregnant women was introduced across the country in September 2012. In Tower Hamlets data for this vaccination programme is collected on a monthly basis with reports being circulated by Public Health to the key stakeholders on a routine basis. There has been one infant death in Tower Hamlets in 2014 due to the pertussis infection (whopping cough).

6. What evidence is there that we are making a difference?

The collection of coverage data on each of the vaccinations being delivered indicates how well Tower Hamlets is performing on the immunisation programme. The data is extracted directly from the GP systems for both the childhood (0-5yrs) and adult programmes. The school immunisation figures are received as quarterly reports from the provider of the service and confirmed by the yearly published figures from NHSE national reporting system.

#### **Childhood Immunisation Programme**

The evidence for the improvements which have taken place in the Tower Hamlets childhood immunisation Programme can be demonstrated from the local immunisation dashboards and from the National COVER data reporting<sup>10</sup> which tracks the uptake of each vaccine given within the childhood schedule on a yearly basis throughout the country. The 2013/14 statistics are now available<sup>11</sup>. The BMJ paper<sup>12</sup> provides the narrative to the changes which were made in Tower Hamlets to improve the uptake of the childhood immunisation programme.

The BCG for infants under 1 year is continuing to reach a high level of uptake as demonstrated on the locally produced immunisation dashboards. The Hepatitis B accelerated vaccination programme which is reported quarterly on the COVER data reporting is continuing to have high levels of completion.

In Tower Hamlets (2015) data from general practices confirmed that children from the Somali community had a lower MMR vaccination coverage level than the rest of the Tower Hamlets population (70% for MMR1 compared to 92%) Following an intensive 3 months initiative the vaccination rates rose to 75% in this community.

#### **School Immunisation Programme**

The HPV vaccination data is recorded on the national Immform data base which can be used to monitor the programme on a yearly basis. Quarterly reports are produced by the provider to monitor the progress of the vaccination programmes being delivered by this service and are scrutinised at the quarterly Tower Hamlets Immunisation meetings.

It is recognised that the Tower Hamlets school health service has been through a series of reorganisations and this could account for the dips in some of the school immunisation programme in the last two years. This is

<sup>&</sup>lt;sup>10</sup> https://www.gov.uk/government/collections/vaccine-uptake

<sup>&</sup>lt;sup>11</sup> <u>http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/immunisation/nhs-immunisation-statistics-england-2010-11</u>

<sup>&</sup>lt;sup>12</sup> http://www.bmj.com/content/343/bmj.d5703

being closely monitored by the Tower Hamlets Immunisation meeting and within the quarterly contract monitoring meetings.

### Adult Immunisation programmes

National statistics for the seasonal flu vaccination programme for the over 65yrs population have demonstrated that Tower Hamlets has continued to exceed the nationally set targets for this annual vaccination programme<sup>13</sup>. National statistics for the seasonal flu vaccination programme for the under 65yrs and for pregnant women have continued to demonstrate that Tower Hamlets has remained above the London and national averages.

The national statistics continues to record the coverage levels for the pneumococcal vaccination for the over 65yrs population and for the newly introduce shingles vaccination for the over 70yrs which can be monitored on a yearly basis to track the success of these vaccination programmes.

**Impact on indicators** 

PHOF Health Protection indicator : 3.03: Population vaccination coverage - for details on each of the vaccinations under the Public Health Outcome Framework go to the following link: <u>http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000043</u>

7. What is the perspective of the public?

Large sections of the Tower Hamlets population participate in the local immunisation programme.

Work with parents from the Tower Hamlets Somali community during the summer of 2015 indicated that due to the increase in autism amongst their children there is a sustained belief by some parents from this community that the MMR vaccination is a cause of this condition. This stems from the media publicity in the late 90's for a flawed piece of research associating the MMR vaccination with autism which has since been discredited and resulted in the author having been struck off the medical register.

#### 8. What more do we need to know?

- How to improve coverage levels for the secondary school vaccinations
- How to improve the uptake of the seasonal flu vaccination amongst those under 65yrs women who are considered to be at risk from the seasonal flu virus
- How to improve the seasonal flu vaccine uptake in children
- How to improve the pertussis vaccination uptake amongst women who are pregnant.

9. What are the priorities for improvement?				
Current State	<b>Evidence for Effective Intervention</b>	Recommendations		
A proportion of Somali	Local work with GP practices to	To highlight this situation with NHSE		
parents are refusing the MMR vaccination for their infants	highlight the registered children with an outstanding MMR vaccination. Working with the Somali parents in their own language has indicated that	to see if a programme of work can be developed across London to promote the MMR vaccination to Somali parents.		
	this can increase parents confidence in			

<sup>&</sup>lt;sup>13</sup> <u>http://www.england.nhs.uk/south/wp-content/uploads/sites/6/2014/08/phe-nat-flu-prog-slides-14-15.pdf</u>

	giving their infants the MMR vaccination.	To widely distribute targeted resources to promote this issue to key stakeholders.
To maintain and improve the levels of the 0 -5yrs childhood immunisation programme is still failing to reach herd immunity levels (95%)	NICE Guidance <sup>14</sup> which recommends a range of approaches for a successful immunisation programme.	To encourage GP practices and their local Networks to refocus on this programme to produce recovery plans with the improvements required and monitor the implementation of these at the CCG contract meetings
The school vaccination programme is currently below the average coverage levels for London.	Learning from other London boroughs exceeding in this area and use information to progress the programme in Tower Hamlets	To work closely with the provider of school vaccinations to monitor and improve the uptake of these vaccinations
The uptake of the season flu vaccination for eligible population who are under 65yrs needs to be increased		This proves to be a difficult problem not just in Tower Hamlets but throughout London and other parts of the country. Learning from local practices successfully delivering to this age group and circulating good practice guidance.
The uptake of the pertussis vaccination for pregnant women has started to improve.		This vaccination needs to be closely monitored to ensure the improvements continue.
The reporting of the vaccination uptake of Looked After Children in the care of Tower Hamlets needs to be improved.	Learn from other areas which have good levels of uptake amongst this cohort of children.	Robust reporting needs to be organised to receive regular reports from the LAC team who oversee the health of these children to ensure they are achieving levels of immunisation at the same level as the local Tower Hamlets population.

Contacts		
	NAME	CONTACT DETAILS
UPDATED BY	Luise Dawson	Luise.dawson@towerhamlets.gov.uk
SIGNED OFF BY	Esther Trenchard-Mabere	Esther.Trenchard- Mabere@towerhamlets.gov.uk
Stakeholders	i	

<sup>&</sup>lt;sup>14</sup> <u>http://www.nice.org.uk/guidance/ph21</u>