7.6 Communicable diseases and health protection

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Public Health England leads the surveillance and management of infectious diseases and environmental threats to health through the provision of specialist health protection, epidemiology and microbiology services across England. For Barking and Dagenham these arrangements are managed by the North East and North Central London Health protection team based in Blackfriars.

The key issues in relation to infectious diseases and/or agents that constituted the highest rates of notifications from LBBD in 2015 included:

- Campylobacter, which is a type of bacterium that causes food poisoning and is the commonest cause of gastrointestinal infections in the UK. There was a significant decrease in these infections reported from LBBD in 2015 compared with 2014. Local acute trusts have moved to a lab-based surveillance system from one dependant on clinicians’ verbal reporting, and the original increase in reported campylobacter infections in 2014 is considered to be due to this new system of reporting which was initiated in 2013.

- Mumps, which is a viral illness and is a vaccine preventable disease (VPD). Mumps is now more common, particularly in young adults who were not fully vaccinated against mumps in childhood and who have not been exposed to naturally occurring illness. There were eleven cases of mumps reported in 2015 and only two of these were confirmed cases.

- Salmonella, which is another common cause of gastrointestinal infections, largely causing food poisoning. Salmonella infections are also related to travel and can be acquired from close contact with pets as well.

- There has been no laboratory confirmed of Measles reported from LBBD in 2015, although 8 possible cases were reported. Measles is a viral illness that can lead to serious complications, and this is also a vaccine preventable disease (VPD).

- There was a national outbreak of Pertussis (whooping cough) in 2013 and a campaign to increase uptake amongst pregnant women subsequently followed. In 2014. There were 7 reported cases of pertussis in 2015, two of these were confirmed.

- Group A streptococci cause a range of infections from sore throat and scarlet fever to life threatening septicaemia. The current national rise in scarlet fever cases was reflected locally with 37 cases of scarlet fever reported in 2014. In 2015 there was a decrease with 19 reported cases. There were also 8 confirmed reports of invasive infections (IGAS) in 2015, which was the same as 2014.

- In 2015 there were 14 reported outbreaks in the borough mainly related to gastroenteritis outbreaks in care homes, two tuberculosis incidents in workplaces,
a hepatitis B incident in a Spa, three cold chain incidents in surgeries, a water incident and a “needlestick” incident in a school.

The Health Protection Team in Public Health England provides outbreak management advice and guidance to care homes and schools, working closely with the Environmental Health team from LBBD, the NHS, and the Directorate of Public Health. If an outbreak is protracted or there are concerns about food safety related to a food outlet or restaurant, or there are concerns regarding hygiene practices in a care home, environmental health officers are able to use legal powers under public health legislation to serve improvement notices, or even enforce the closure of premises that pose a significant public health risk.

**Tuberculosis**

Tuberculosis (TB) is a bacterial infection which primarily affects the lungs but can also spread to different parts of the body including the bones and nervous system. TB is a notifiable disease under the Public Health Acts and Infectious Disease Regulations. Across the world TB remains a major public health problem – it is estimated that one third of the world’s population is infected with latent TB. Sub-Saharan Africa, Asia, Eastern Europe, Russia and Central America are all known to have high rates of TB.

The number of recorded Tuberculosis (TB) cases in Barking and Dagenham in 2014 was 68, a rate of 34.3 per 100,000 population. In 2015 there was a decrease with 42 cases, a rate of 21.2 per 100,000 population which is lower than the overall rate of 26.7 per 100,000 population for London (provisional data for 2015). (based on data from LTBR)

The latest available three years average TB incidence data from PHE Outcome Framework, presented in Figure 7.6.1, indicates that there have not been any changes in incidence of TB in B&D. The incidence rate of TB at B&D stayed almost constant at 35 per 100,000 populations between 2010 to 2014, around 2.6 times higher than the national rate of 13.5 per 100,000 populations. Figure 7.6.1 shows in 2012-14 the incidence rate of TB at B&D was the same as London but London and two statistical neighbouring boroughs (Greenwich and Lewisham) all had a noticeable decline in TB incidence rate, the percentage of reduction for Greenwich, Lewisham and London in the same order was, 11%, 18% and 14%¹.

¹ Public Health England, Outcome Framework 2016, “3.05ii - Incidence of TB: The three-year average number of reported new cases per year (based on case notification) per 100,000 population, [Online] available from: http://www.phoutcomes.info/search/tuber [Last accessed: 13 May 2016]
Figure 7.6.1 Incidence of TB, the three-year average number of reported new cases per year (based on case notification) per 100,000 populations, LBBD, Greenwich, Lewisham, London and England, 2010-12 to 2012-14

Source: PHE-OF

Figure 7.6.2 below also shows three years average incidence rate of TB (per 100,000) in LBBD, London and England for 10 years time period of 2003-05 to 2012-14.

Figure 7.6.2 Indicator 3.05ii - Incidence of TB, three years average incidence rate of TB (per 100,000), LBBD, London and England, 2003-05 to 2012-14

Source: PHE-OF
Figure 7.6.2 TB rates for North East London residents - 2002 -2014

Source: PHE

Figure 7.6.3 TB rates LBBD compared with London and England 2002-2014

Source: PHE
Numbers and rates were highest among those aged 30-39 years old, with a median age of 34.

The most common countries of birth for case in 2014 were the UK, Pakistan and Somalia.

In 2014, 44% of UK born patients were white. Of non-UK born patients 25% were black African, 16% white and 16% Pakistani.

In 2014, 9% of non-UK born cases were diagnosed within 2 years of entry to the UK and 18% in 2-5 years.

A similar proportion of patients completed treatment by 12 months than the London average. Three deaths were reported, two in individuals aged 20-39 years.

Social risk factors were present in only 4% of the Barking and Dagenham residents with TB, below the percentage for London.
The Director of Public Health introduced a universal BCG vaccination policy in 2009. At the time when this policy was introduced, the known TB rates in LBBD were just below 40/100,000. There was a TB incident in a local primary school in late 2008, where an unusually large number of children were found to be exposed to TB when screened. The Director of Public Health, with advice from the former Health Protection Agency (now part of Public Health England) introduced universal BCG vaccination in LBBD. Since April 2009, all babies born in LBBD are given the BCG vaccination at birth. This is in line with the policy in the neighbouring boroughs of Newham, Redbridge and Waltham Forest, and an example of an informed public health decision making based on epidemiological data and population needs.

45% of the patients diagnosed with TB in North East London in 2013 had pulmonary involvement. A small number of TB cases in LBBD were infectious and there were public health implications in three instances, where contact tracing exercises were undertaken in order to offer screening tests to those who were exposed. When TB notification exercises are undertaken, these are planned and implemented collaboratively with the Directors responsible for Public Health, Housing, and of Environmental Protection at LBBD, the TB specialist team at Barking, Havering and Redbridge University Hospitals NHS Trust, and the Health Protection Team in Public Health England. As there are identified resources for dealing with outbreaks and incidents, there can be a prompt and efficient response. Media statements are prepared with comments from the Director of Public Health and the communication teams from PHE and LBBD which work collaboratively to field media enquiries. Public Health England have a 24/7 service that is able to respond to calls from those who are being offered screening, as well as worried members of the public.

**Latent TB testing in primary care**

The Collaborative TB Strategy for England 2015−2020\(^2\) recommends Latent TB infection (LTBI) testing and treatment for 16 to 35 year olds who recently arrived in England from high incidence countries, where TB incidence is 150 per 100,000 population or over. New NHS funding has been made available to support its implementation nationally.

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**Recommendations for Commissioners**

Roll out as targeted testing for 16 to 35 year olds who recently arrived in England from high incidence countries registering with a GP Practice. Assuming 5% of all new patients 16+ across all 40 Barking and Dagenham GP practices will need a LTBI testing. There needs to be awareness raising amongst primary care professionals of issues around infectious diseases, such as the provision of advice on Malaria prophylaxis and diagnosis of tuberculosis.

There is a national recommendation that everyone who is diagnosed with tuberculosis also receives an HIV test, and partners should ensure that this is happening locally.

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Seasonal flu

Each year, the borough prepares for the unpredictability of seasonal flu. For most healthy people, seasonal flu is an unpleasant but usually self-limiting disease with recovery usually within a week. However, older people, pregnant women and those with underlying disease, particularly chronic respiratory or cardiac disease, or those who are immune-suppressed, are at particular risk of severe illness if they catch flu. The risk of serious illness or death from seasonal flu has been estimated to be more than 15 times higher for people in clinical risk groups than healthy people.

Table 7.6.1 shows the seasonal Flu Vaccine uptake amongst GP patients for 1st of September 2015 to 31st of January 2016 (compared to 2014/15 data). Each year, seasonal flu is a pressure that the NHS and the Council face during the winter. The Government publishes a seasonal flu plan every year, setting out the requirements on the NHS and its partners to prepare for flu, including vaccination requirements. Groups eligible for vaccination continue to be extended beyond the original provision for people over the age of 65 years. The most recent group to benefit from the vaccine has been children aged 2, 3 and 4 years and school years 1 and 2.

In 2015/16, there was a slight decrease in uptake in all groups from 2014/15. In the 65 years and over population 66.9% received flu vaccine; 47.3% of the at risk population (aged 6 months to 65 years but excluding pregnant women) received flu vaccine. Although these levels are below the national target of 75%, the achievement for people in at risk groups was greater than London and England. For the aged 65 years and over the uptake was similar to London but lower than England.

Table 7.6.1 Seasonal Flu Vaccine uptake amongst GP patients 1 September 2015 to 31 January 2016 (compared to 2014/15 data)

<table>
<thead>
<tr>
<th>Area</th>
<th>65+ 14/15</th>
<th>65+ 15/16</th>
<th>clinical risk groups 14/15</th>
<th>clinical risk groups 15/16</th>
<th>pregnant women 14/15</th>
<th>Pregnant women 15/16</th>
<th>2 Year olds 14/15</th>
<th>2 Year olds 15/16</th>
<th>3 Year olds 14/15</th>
<th>3 Year olds 15/16</th>
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<tr>
<td>B&amp;D</td>
<td>68.6</td>
<td>66.9</td>
<td>55.6</td>
<td>47.3</td>
<td>43.3</td>
<td>42.8</td>
<td>36.5</td>
<td>26.5</td>
<td>39.1</td>
<td>31.1</td>
<td>27.7</td>
<td>21.7</td>
</tr>
<tr>
<td>London</td>
<td>69.2</td>
<td>66.4</td>
<td>49.8</td>
<td>43.7</td>
<td>39.9</td>
<td>38.6</td>
<td>30.3</td>
<td>26.3</td>
<td>32.7</td>
<td>28.3</td>
<td>23.6</td>
<td>21</td>
</tr>
<tr>
<td>England</td>
<td>72.7</td>
<td>71</td>
<td>50.3</td>
<td>45.1</td>
<td>44.1</td>
<td>42.3</td>
<td>38.5</td>
<td>35.4</td>
<td>41.3</td>
<td>37.7</td>
<td>32.9</td>
<td>30</td>
</tr>
</tbody>
</table>

An important group for vaccination are healthcare workers; however, nationally it has been extraordinarily difficult to achieve high rates of vaccination in this group. Data for Barking, Havering and Redbridge University Hospitals NHS Trust for the flu vaccine programme 2015 to 2016 season shows that 47% of front line health care workers were vaccinated, below the national uptake of 50.6% and well below the seasonal influenza vaccine uptake by the highest performing trusts of 83.5%, with 6.8% of all trusts (18/263) achieving vaccine uptake rates of 75% or more.

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Strategic objectives

The objective of the seasonal flu programme is to minimise the health impact of seasonal flu through effective monitoring, prevention and treatment, including:

- Vaccinating at least 75% of those at greatest risk with the seasonal flu vaccine before the virus starts to circulate;
- Monitoring flu activity, severity of the disease in risk groups, vaccine uptake and impact on the NHS;
- Offering antiviral medicines to patients in at-risk groups for the treatment of flu in line with NICE guidance;\(^5\)
- Ensuring the NHS is well prepared.

Flu activity varies from year to year and is largely unpredictable. Planning for the flu season needs to prepare for a range of possibilities including the need to respond quickly to modify the plans. Locally, response to seasonal flu each winter should be appropriate to the known risks. The seasonal flu vaccination programme is based on an assessment of the cost effectiveness of the use of vaccine for specific risk groups, and any changes are decided nationally.

Recommendations for Commissioners

Proactive local planning is key to ensuring the robust delivery of a Seasonal Flu Programme. This includes the development of a local Action Plan, ensuring continuity of care in delivering this primary health programme, in an attempt to reduce health inequalities.

Collaborative work with the Clinical Commissioning Group is crucial, ensuring a multi-faceted approach across the borough. GP Practices need to be encouraged to engage a proactive programme of local service planning, ensuring an accessible seasonal flu clinic schedule is available to their local population. Opportunistic vaccination also needs to be encouraged within the entire practice skill mix.

The local Clinical Commissioning Groups should consider action that they can take in commissioning from Barking, Havering and Redbridge University Hospitals NHS Trust to increase the uptake of flu vaccine by healthcare workers.

Engaging community leaders and residents is key to ensuring understanding of the benefits of flu immunisation and the support of community groups, thereby giving confidence to local people to access flu immunisation.