Tuberculosis (TB)
• In 2012-14, the TB incidence rate in Brent was 82.9 per 100,000 of the population. This was significantly above the England average rate (13.5 per 100,000) and London average (35.4 per 100,000).

• Newham (first) Brent (second) had the highest rates of TB across London in 2013.

• In 2014, 74.7% of pulmonary TB cases in Brent were culture confirmed. This was higher than both the England average (72.3%) and London average (73.2%).

• The highest rates of TB in Brent in 2013 were reported amongst the Indian, Black – African and Pakistani ethnic groups and the lowest rates were amongst the Bangladeshi, Chinese and Black-Other groups.

• Brent patients had slightly higher levels of drug resistance than the London average.

• Patients in Brent had shorter delays to diagnosis when compared to elsewhere in London.

• Seven per cent of all TB cases in Brent were associated with social risk factors, including imprisonment, substance misuse and homelessness.

Source: PHE, Brent TB profile, 2013
TB Incidence

TB Incidence Rate for all TB cases and Pulmonary TB (3-year average)

In 2012-14, the TB incidence rate in Brent was 82.9 per 100,000 of the population. This was significantly above the England average rate (13.5 per 100,000) and London average (35.4 per 100,000).

Source: Enhanced Tuberculosis Surveillance system (ETS) and Office for National Statistics
TB Prevalence in London

TB case rate by local authority residence, London, 2013

Source: PHE, Tuberculosis in London, Annual Review
In Brent, the highest concentrations of TB incidence in 2011-13 were reported in parts of Alperton, Wembley Central, Sudbury and Northwick Park. In these areas, the TB incidence rates were reported to be higher than 150 per 100,000 of the population. Wards in the east and south of the borough reported the lowest incidence. In these areas, incidence rates were generally lower than 80 per 100,000 of the population.
In 2014, 74.7% of pulmonary TB cases in Brent were culture confirmed. This was higher than both the England average (72.3%) and London average (73.2%).

Source: Enhanced Tuberculosis Surveillance system (ETS)
# Treatment Completion

## TREATMENT COMPLETED IN 12 MONTHS

<table>
<thead>
<tr>
<th></th>
<th>Brent % (n)</th>
<th>London % (LA range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients (excluding CNS, spine, miliary or cryptic disseminated TB)</td>
<td>87% (237)</td>
<td>86% (73-100%)</td>
</tr>
<tr>
<td>Patients with CNS, spine, miliary or cryptic disseminated TB</td>
<td>57% (17)</td>
<td>49% (0-100%)</td>
</tr>
</tbody>
</table>

Source: TB treatment completion, PHE Brent TB Profile, 2013

## Treatment completion for TB

![Chart showing treatment completion over years]

Source: TB Key Facts, PHE Brent TB Profile, 2013
TB and HIV Occurrence

Proportion of TB cases offered an HIV test

A small proportion of TB cases (generally around 2% to 10%) in the UK are people who are co-infected with HIV. In 2012 and 2013, HIV testing amongst TB patients had excellent coverage in Brent and London generally.

Source: Enhanced Tuberculosis Surveillance System (ETS)
Over half of all TB patients were Indian, most of whom were born in India. The second highest TB rates were among the Black African population – almost half of black African patients were born in Somalia.

Source: TB Key Facts, PHE Brent TB Profile, 2013
Drug Resistance

Brent patients had slightly higher levels of drug resistance than the London average. Findings show that 10% were isoniazid resistant and 3% had multi-drug resistant TB. These findings were based on 176 patients with culture confirmed disease.

Source: TB Key Facts, PHE Brent TB Profile, 2013
Further Analysis

In Brent, more than 90% of those people diagnosed with TB were born abroad with 20% of those having entered the country in the last two years. This suggests that the majority of TB cases reported in Brent were a reactivation of infection acquired in high prevalence countries, in particularly India (PHE, Brent TB Profile, 2013). In 2013, patients in Brent had shorter delays to diagnosis than elsewhere in London. Delays in diagnosis may be due to delays in the time taken for people to seek help for TB symptoms as well as the time taken for medical personnel to diagnose TB. A delay time in the presentation and diagnosis of TB may lead to difficulties concerning its treatment and may also result in an increased risk of TB transmission. Furthermore, delays in presentation may occur due to low levels of symptom awareness exacerbated by high levels of TB related stigma among certain population groups, in particularly under-served populations and new entrants (NICE, 2012).

Social risk factors can contribute to the increased transmission of TB. Evidence suggests that there is a strong correlation between deprivation and TB. Seven per cent of all TB cases in Brent were associated with social risk factors in 2013. Some of the main social risk factors associated with TB include imprisonment, substance misuse and homelessness. People who are homeless are more vulnerable to TB and are at a greater risk of having highly infectious or drug resistant strains of the disease. They are less likely to continue with treatment (Story et al, 2007).

The BCG neonatal programme of vaccination aims to protect new born babies at risk of developing TB. Strong evidence exists to support the use of the BCG in preventing tuberculosis meningitis in children (e.g. Trunz et al, 2006). The Green Book on immunisation recommends that a BCG vaccination is offered to all infants in areas where the rate of TB is 40 cases per 100,000 of the population. Provision of the BCG vaccination varied across London in 2011/12. The average coverage rate across London was 72% ranging from 95% to 24%. Coverage was relatively high in Brent (83%) compared to elsewhere in London. However, due to issues with data quality, it is difficult to fully ascertain the success of the BCG policy across London.
Priorities and Commissioning Intentions

• Improve the uptake of TB screening particularly amongst those groups of people who have moved to Brent from countries where TB is an issue.

• Increase the uptake of periodic TB screening through ‘find and treat’ opportunities and the substance misuse service.

• Ensure that a high quality TB service is offered in Brent particularly as TB rates in Brent are the second highest in the country.

• Undertake more detailed exploratory work with those groups in Brent identified as having the highest prevalence of TB to determine the underlying factors which lead to to higher than average rates of TB.

• Review the data contained in Public Health England’s Tuberculosis in London Annual Review (2014 data) which was released in December 2015 to identify any new data trends.
References and Key Data Sources

PHE, Brent TB profile, 2013: [http://www.lho.org.uk/Download/Public/18465/1/Brent%20TB%20profile%202013.pdf](http://www.lho.org.uk/Download/Public/18465/1/Brent%20TB%20profile%202013.pdf)


Tuberculosis in London, Annual Review (2013 data)

Tuberculosis in London, Annual Review (2014 data)
### Definitions

**Tuberculosis (TB)**

Tuberculosis (TB) is a bacterial infection spread through inhaling tiny droplets from the coughs or sneezes of an infected person. Human TB is caused by infection with bacteria of the *Mycobacterium tuberculosis* complex and may affect any part of the body.

**Pulmonary TB**

Pulmonary TB is the most common form of TB and involves a contagious bacterial infection in the lungs.