

SECTION 7: TUBERCULOSIS

Tuberculosis

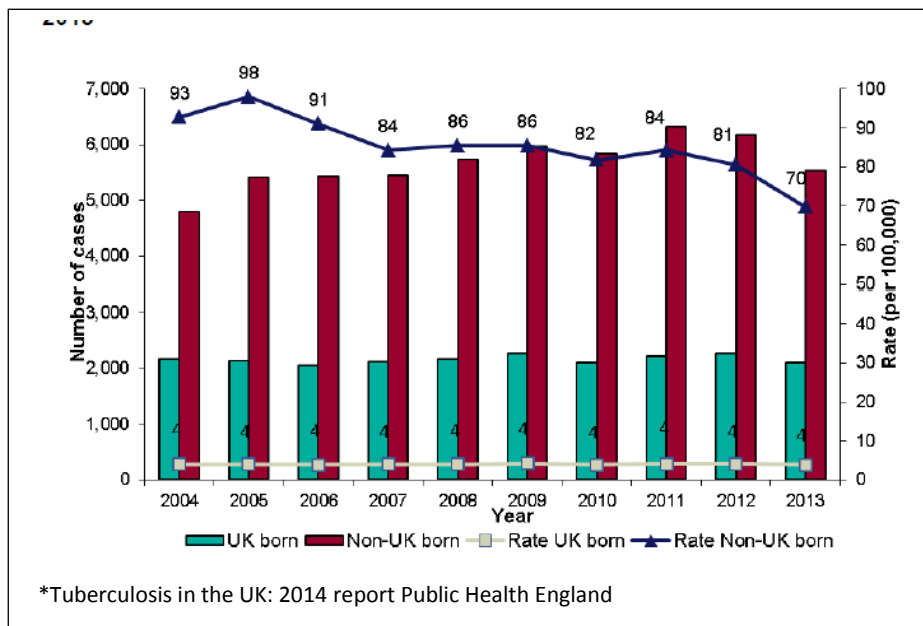
Tuberculosis (TB) is a bacterial infection that usually affects the lungs (pulmonary TB) but can affect other sites in the body including the spine, lymph nodes and central nervous system (extrapulmonary TB). Most cases occur in the developing world. The incidence of TB in the UK is relatively low however there has been a rise in cases in the UK since the 1980s and is now higher than in most other Western countries.

Place of Birth

In 2013, 72% of cases of TB notified were in those who were born outside the UK. The rate of TB amongst the population who were born outside the UK born was 18 times higher than the rate in those born in the UK. This rate at 70 per 100,000 has reduced from a peak of 98 per 100,000 in 2005. The rate has declined by 13.5% between 2012 and 2013, with the number of cases reducing from 6,174 in 2012 to 5,529 in 2013.

In contrast the number and rate of TB cases notified in the population who were born in the UK have not shown any decline in the past decade, with just over 2,000 cases per year and a rate of 4 per 100,000.

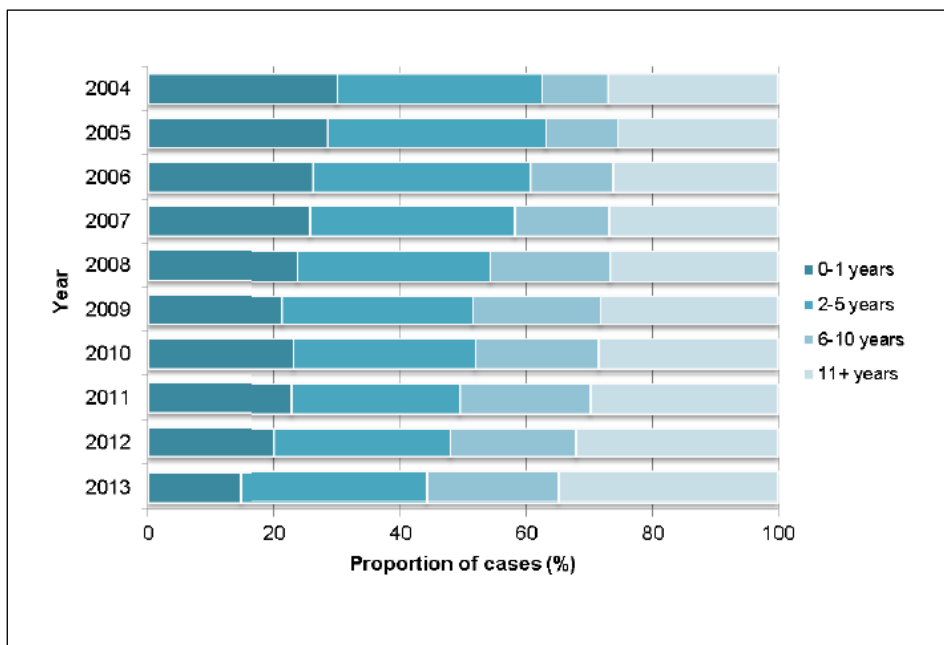
Tuberculosis case reports and rates by place of birth. UK 2004-2013



Time since entry to the UK

In recent years a smaller proportion of cases have been diagnosed with two years of entering the UK, while an increasingly larger proportion of patients have been diagnosed after six years and ten years of entering the UK. In 2013, 15% of cases in those not born in the UK were diagnosed within two years and 44% within five years of entering the UK.

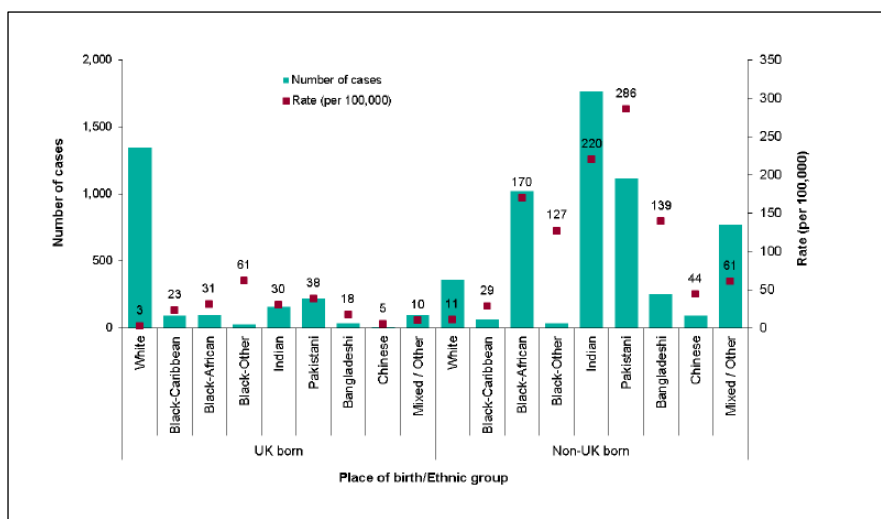
Time between entry to the UK and TB diagnosis for non-UK born tuberculosis cases by year, UK, 2004-2013



Ethnicity

Of those born in the UK the largest numbers of cases were among those who identify as White. The highest rates were in those who identify as Black-Other with a rate of 61 per 100,000 (although very small numbers of cases). In those born outside the UK the largest number of cases were from those who identified as Indian and the highest rate being in those who identify as Pakistani at 286 per 100,000.

Tuberculosis case reports and rates by place of birth and ethnic group UK 2013



In 2013 the majority of cases in children between the ages of 0-14years were born in the UK. The largest proportions of cases in children in this age group were from those who identified as Black African (23%) White (21%) and Pakistanis (17%). The highest rates were in those of Black African and Indian origin. (12 and 11 per 1000,000 respectively)

Social Risk Factors

For those born in the UK, TB disproportionately affects people in urban areas; those disadvantaged social groups including homeless people, prisoners, and alcohol/drug misusers. A higher proportion (9.6%) of those UK born cases had at least one social risk factor with 3.2% reporting drug misuse and 2.9% reporting a history of imprisonment.

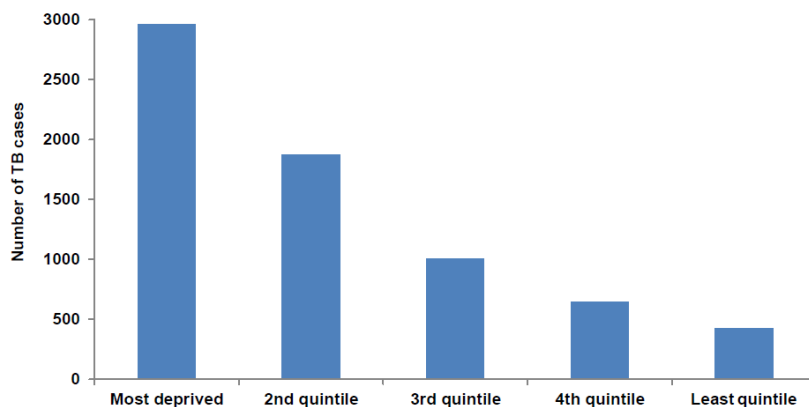
In those not born in the UK there was lower proportion of cases reporting social risk factors compared to those born in the UK with nearly half of cases from this group (47%) being reported in those who were not born in the UK and identified themselves as ethnically White.

Nearly 60% of those cases with at least one social risk factor were aged between 15 to 44 years and the majority (81%) were male.

Deprivation.

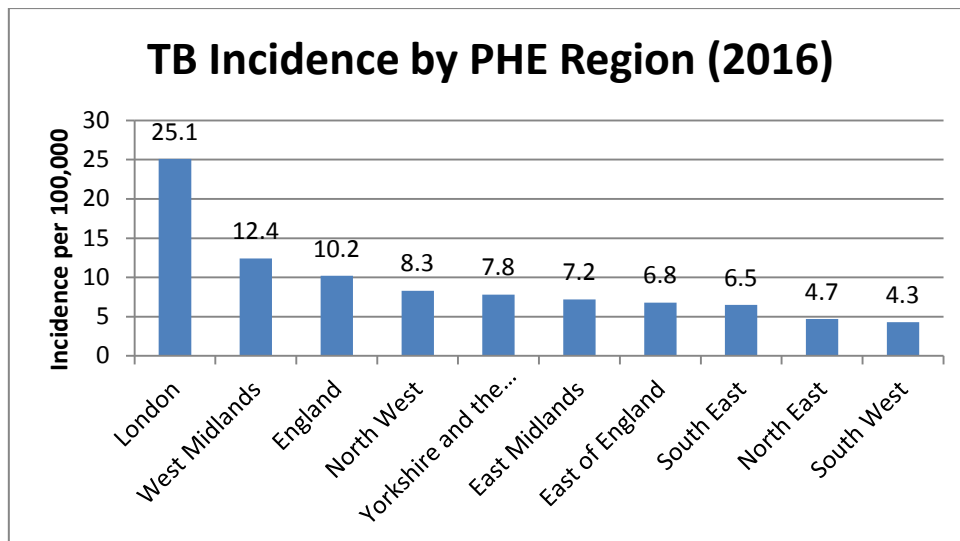
Based on the index of Multiple Deprivation (IMD2010) over 70% of TB cases were resident in areas within the two most deprived quintiles in England

Number of TB case reports by deprivation quintile of area of residence (IMD 2010), UK, 2013

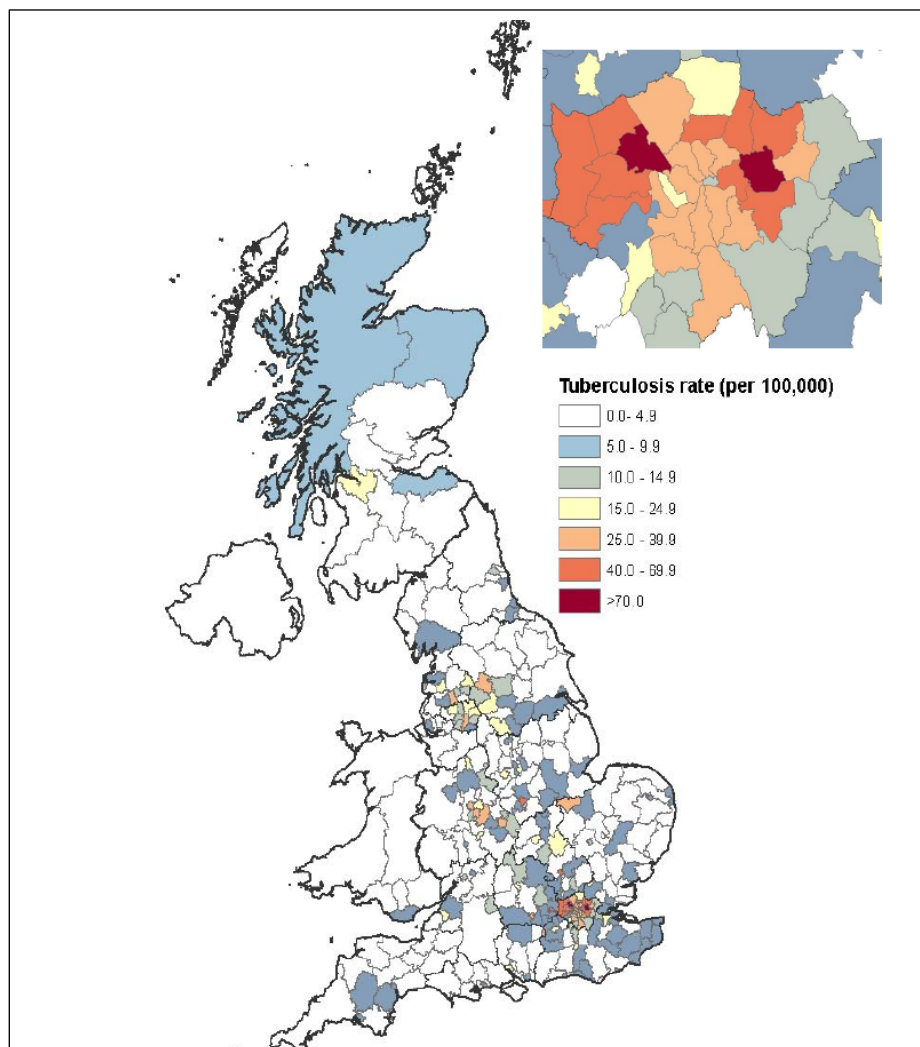


Geographical Distribution.

London and the London Boroughs account for the highest proportion of cases in the UK with 37.5% with a rate of 35.5 per 100,000. The West Midlands accounts for the next highest proportion of cases at 12.4% with a rate of 17.3 per 100,000. The main burden of disease remains concentrated in large urban areas.

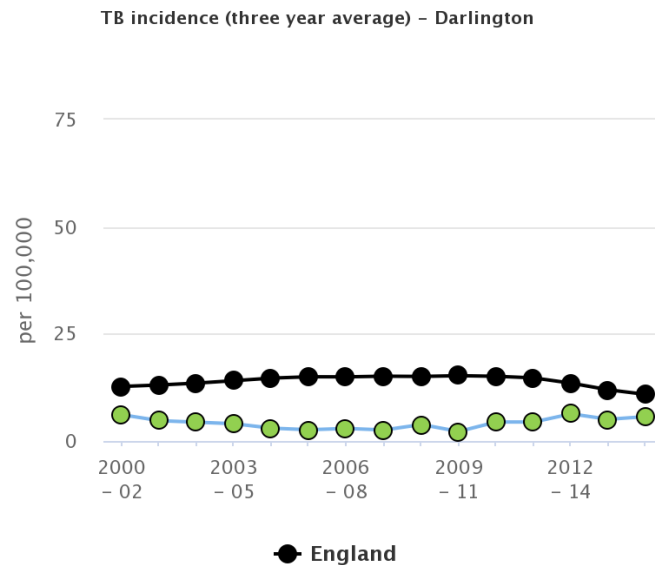


Three-year average Tuberculosis rates by local authority (England) health board (Scotland and Wales) and country (Northern Ireland) UK 2011-2013.



Darlington

In Darlington, the incidence of TB is low compared to England with an incidence of 5.7 per 100,000. These represent 18 new cases. Darlington is statistically similar to the North East regional average of 5.3 per 100,000. Darlington and the North East remains a low incidence area.



Treatment

Effective antibiotic treatment exists but multidrug-resistant TB (MDR-TB) is a growing problem that threatens rising incidence and poorer outcomes for patients. TB was declared a global public health emergency by the World Health Organisation (WHO) in 1993. In 2015, PHE produced a Collaborative TB Strategy for England 2015-2020 with the aim of achieving a year-on-year decrease in incidence, a reduction in health inequalities and ultimately, the elimination of TB as a public health problem in England.

TB has been identified as a priority and indicators of TB incidence and TB treatment outcomes are included in the Public Health Outcomes Framework (PHOF).

Key Messages

- Overall numbers of TB cases in the UK have declined to 11.6% in the past two years, due to a small decline in numbers and rates in the non-UK born population.
- Overall numbers and rates in the UK born population have not declined in the past decade, although rates in the UK born population under 15 years have reduced in the past five years.

- As in previous years, almost three quarters of TB cases (73%) occurred among people born outside the UK; only 15% of these were recent migrants (diagnosed within two years of entering the UK).
- TB remains concentrated in the most deprived populations. In 2013, 70% of cases were resident in the 40% most deprived areas, nearly half (44%) of cases were not in employment and 10% had at least one social risk factor (history of alcohol or drug misuse, homelessness or imprisonment).
- Darlington and the North East of England remain low prevalence areas.