

Appendix 2

Extract from report to the Manchester Health and Wellbeing Board – 20 September 2023

Part Two : Update on Tuberculosis

1.0 Background

- 1.1. Tuberculosis (TB) is a bacterial infection spread through inhaling tiny droplets from the coughs or sneezes of an infected person. It mainly affects the lungs (Pulmonary TB) but can also develop in areas outside the lungs, including the abdomen, glands, bones and nervous system (Extrapulmonary TB).
- 1.2. Symptoms of TB include a persistent cough that lasts more than 3 weeks and usually brings up phlegm, which may be bloody, weight loss, night sweats, high temperature, tiredness and fatigue, loss of appetite and swellings in the neck. In some cases, symptoms might not develop until months or even years after the initial infection.
- 1.3. If the person has symptoms, it's called active TB. Sometimes the infection does not cause any symptoms but the bacteria will remain in the body. This is known as latent TB. People with latent TB are not infectious to others but latent TB can develop into an active TB disease at a later date, particularly if the immune system becomes weakened.

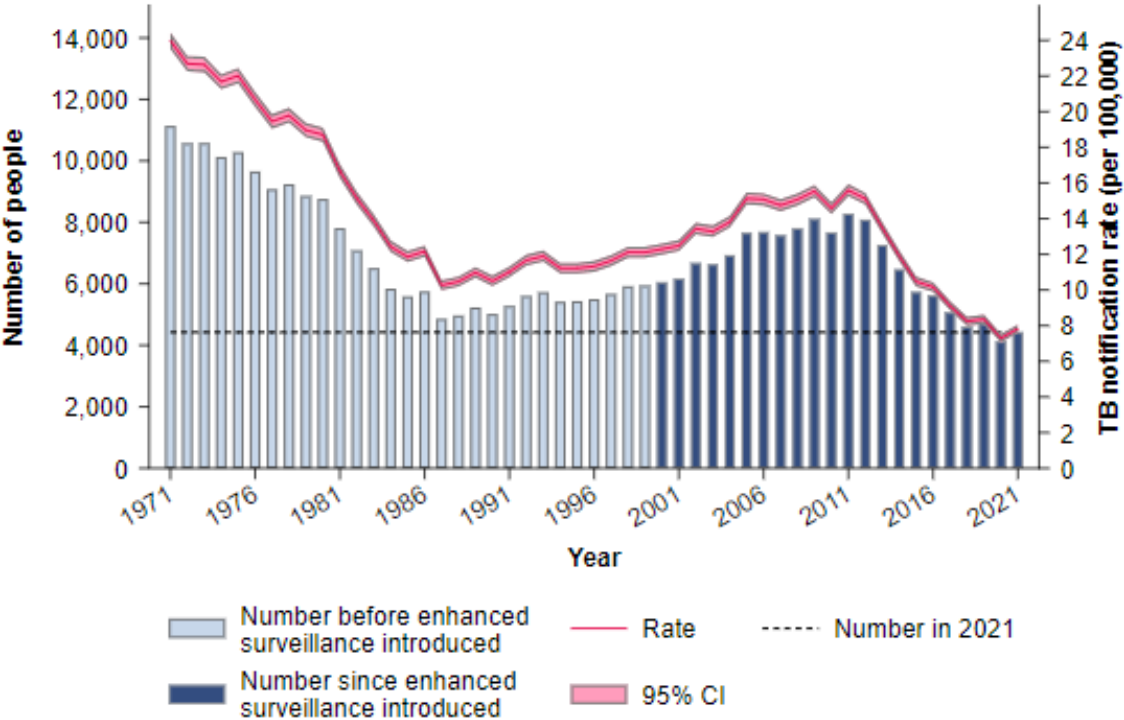
2.0 TB treatment and notification

- 2.1. TB is a potentially serious condition but, in most cases, a six-month course of treatment with the right antibiotics will cure it. TB can become resistant very easily and drug resistant TB can be very difficult to treat. For that reason, only experienced personnel should manage these patients. A Consultant Respiratory Physician must manage all adult patients with TB and a Consultant Respiratory Paediatrician must manage all patients less than 16 years of age.
- 2.2. Parts of the world with high rates of TB include Africa (particularly sub-Saharan and west Africa), South Asia, Russia, China, South America and the western Pacific region.
- 2.3. All new cases of TB must be notified to the UK Health Security Agency (UKHSA) on a web-based surveillance system. Although the incidence of TB is low nationally, it is higher in England than many other comparable countries and as it is concentrated in urban areas. There are pockets of very high incidence in some parts of our cities, including areas in Manchester. TB is a disease of inequality. In 2019, national rates of TB were 5 times higher in the most deprived decile compared with the least deprived decile.

3.0 TB incidence and epidemiology in England, 2021

- 3.1 In 2021, TB incidence was 7.8 per 100,000 - below the World Health Organisation threshold for a low incidence country (less than or equal to 10 per 100,000 population).
- 3.2 Nationally, TB incidence has decreased overall since 2011 but the rate of decline is slowing, and England is not currently on target to achieve the plan of reducing TB incidence by 90% from 2015 to 2035 (see figure 1 below).

Figure 1 - Number of TB notifications and TB notifications rate per 100,00, England, 1971-2021



- 3.3 TB incidence is not evenly distributed across the country and is concentrated in large urban areas. The disease disproportionately affects the most deprived populations, including groups at risk of exclusion and other health inequalities, and people born outside the UK.
- 3.4 Infectious pulmonary TB is more common in men, people with a history of imprisonment and people with a history of drug and alcohol misuse. Social risk factors (e.g. drug or alcohol misuse and history of imprisonment) in people with TB were more common in the UK-born population compared with the non-UK-born population. In contrast, homelessness, asylum seeker status and mental health needs were more common in the non-UK-born population with TB than in the UK-born population with TB.
- 3.5 The long-term effect of the global coronavirus (COVID-19) pandemic on TB incidence is difficult to determine but recent patterns mirror those seen in other countries.

4.0 Epidemiology of Tuberculosis (TB) in Manchester

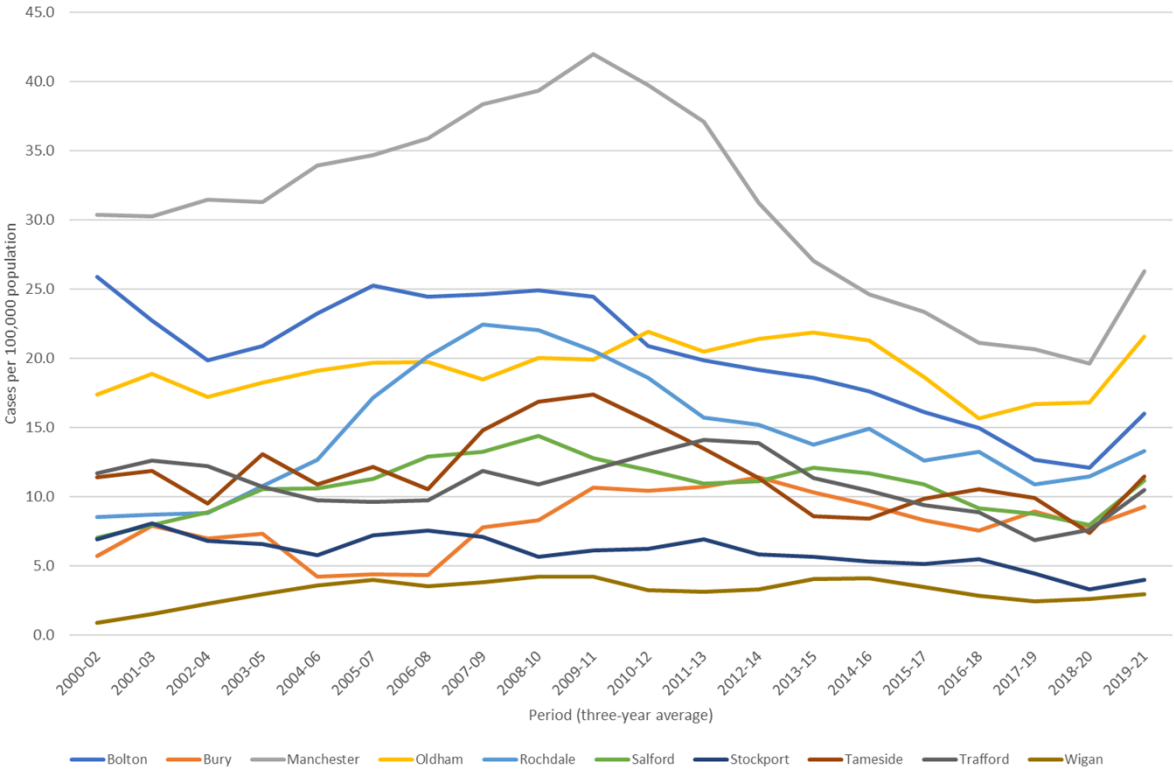
- 4.1 The latest local epidemiological summary is based on published data up to the end of 2021 (Data published: November 2022) from the Enhanced Tuberculosis Surveillance (ETS) 2022. More information is available through the TB Strategy Monitoring Indicators tool:
<http://fingertips.phe.org.uk/profile/tb-monitoring>
- 4.2 Table 1 shows the three-year average numbers of TB case notifications and rates by local authority in Greater Manchester, 2019-2021. The average annual rate per 100,000 population in Greater Manchester was 9.5. Among upper tier local authorities, the highest rates were in Manchester at 21.0 per 100,000 population; and in Oldham at 16.8 per 100,000 population. The areas with the lowest rates were Wigan and Stockport.

Table 1 - Three-year average numbers of TB case notifications and rates by local authority: Greater Manchester, 2019 to 2021

Local authority	Average annual no. of people	Average annual rate per 100,000	95% CI (Lower)	95% CI (Upper)
Bolton	35	12.0	9.8	14.6
Bury	13	7.0	5.0	9.5
Manchester	117	21.0	18.9	23.4
Oldham	40	16.8	14.0	20.1
Rochdale	19	8.7	6.6	11.2
Salford	23	8.7	6.7	11.0
Stockport	6	2.0	1.2	3.2
Tameside	19	8.4	6.3	10.8
Trafford	19	7.9	5.9	10.2
Wigan	7	2.2	1.4	3.4
Greater Manchester	298	9.5	7.6	11.7

- 4.3 TB incidence in Manchester has decreased overall since 2009-2011 but the rate of decline started slowing in 2016-18 and then started to increase from 2018-20 (see top line on the graph in figure 2 below). There is a similar uptick in TB incidence in most areas in Greater Manchester from 2018-20.

Figure 2 - TB incidence rate per 100,000 population, Greater Manchester, 2000-02 to 2019-21 (three-year average)



5.0 National Co-ordination of TB work

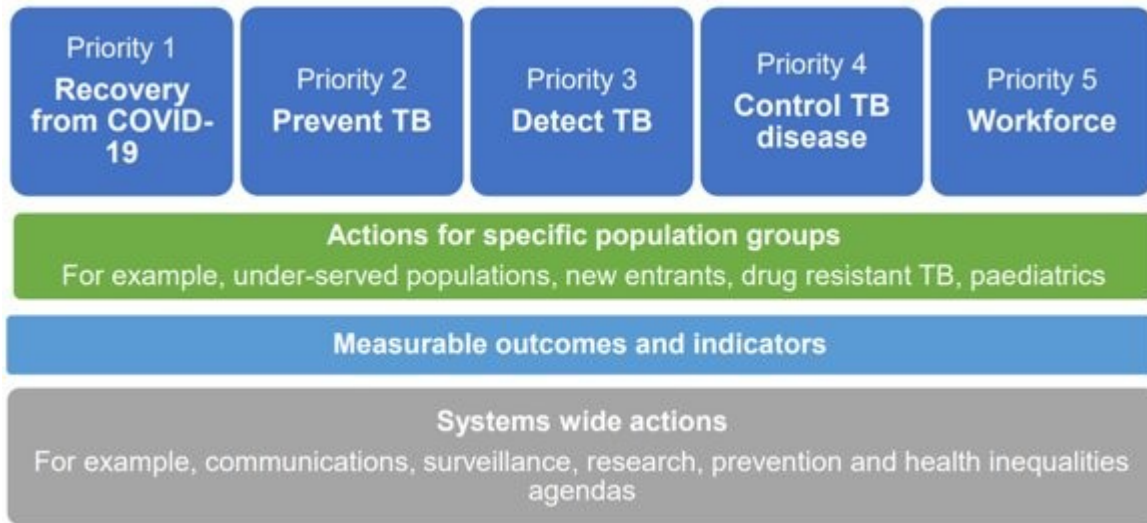
5.1 **National Action Plan** - For the UK to meet its commitment to achieve the World Health Organisation target of eliminating TB by 2035, a year-on-year reduction in people with TB disease is required, as well as addressing health inequalities that put people at risk of developing active TB disease.

5.2 To help address this, the UK Health Security Agency and NHS England jointly launched the TB action plan for England (2021 to 2026) in July 2021. This action plan is a road map for COVID-19 recovery of TB services and has 5 priority areas:

- recovery from COVID-19 pandemic – understanding and reporting the impact and learning from the pandemic
- prevent TB
- detect TB
- control TB disease
- workforce

5.3 The action plan aims to achieve these objectives through system wide actions involving close partnership working between the UK Health Security Agency with NHS and local authorities.

Figure 3 - TB Strategy for England: Priorities, Actions and Outcomes



6.0 Local plans and arrangements

- 6.1 The North West TB Control Board, chaired by the UK Health Security Agency, provides strategic leadership towards achieving TB elimination at a regional level. Sub-regional representation on the group comes from NHS commissioners, NHS providers, microbiology, field epidemiology and includes local authority public health representation. Manchester City Council's Assistant Director of Public Health (Health Protection Lead) represents Greater Manchester Directors of Public Health on the Board.
- 6.2 The Greater Manchester TB Collaborative leads the development and implementation of a multi-agency TB Control Strategy for GM based on the National TB Action Plan 2021-26. The Collaborative is responsible for providing assurance on the implementation of the GM TB action plan 2021-26, developing and implementing the GM TB control strategy 2022-2025, promoting service improvements that result in reductions in GM TB incidence and providing strategic oversight and direction on the commissioning, quality assurance and performance management of GM TB services. The GM TB Collaborative is accountable to the GM ICS (Population Health Board) and reports to the NW TB Control Board. The Collaborative reports quarterly progress against TB control metrics as outlined in the GM TB control strategy. Manchester City Council's Assistant Director of Public Health (Health Protection Lead) represents Greater Manchester Directors of Public Health on the GM TB Collaborative.
- 6.3 The Manchester Health Protection Board, chaired by the Director of Public Health, has responsibility for overseeing TB work at a local level. There have been several focussed discussions on TB at the Health Protection Board over the last 12 months, given the complexity of the work and the risks and issues associated with the current situation, described in more detail in section 3.69-3.81 of this paper. Manchester City Council's Assistant Director of Public Health (Health Protection Lead) shares information from the NW TB Control Board, the GM TB Collaborative, and local Manchester Health Protection

Steering Group. The Manchester Health Protection Board reports to this Health and Wellbeing Board.

- 6.4 As part of the Greater Manchester Health Protection Reform work, a workstream to share learning and further develop joint work on TB is being implemented. Support is being provided from the Local Government Association's National Sector Led Improvement Team and work is currently underway to map existing TB services and processes with all 10 local authorities and their partners. Manchester City Council's Assistant Director of Public Health (Health Protection Lead) is the lead for this workstream, supported by colleagues from within the Manchester Department of Public Health, other GM local authorities and colleagues from NHS Greater Manchester Integrated Care and UK Health Security Agency.
- 6.5 Learning from other areas of the country will help us to progress our work in Manchester and we are also keen to share what we have learned and influence work at a national level. Team members from the Manchester Department of Public Health are presenting our local work at the National TB Nurses and Allied Health Professionals Conference 2023 on 29th September and are contributing to a national toolkit on TB that is being developed.

7.0 TB Service Provision across Greater Manchester

- 7.1 Each locality within GM has health professionals who can care and treat a person with latent or active Tuberculosis and each locality has a specific TB consultant. Some areas have a full-time dedicated TB nurse, others may have a part time TB nurse who works in other areas of respiratory medicine or infectious diseases. Table 2 below shows the TB service provision in Manchester from Manchester University NHS Foundation Trust (MFT).
- 7.2 Any cases of multi drug resistant TB are cared for by a specialist centre such as North Manchester General Hospital Infectious Diseases Unit or the Manchester Royal Infirmary. Every person who has been identified with TB disease is notified to UK Health Security Agency.
- 7.3 Some patients require more intensive support through treatment with treatment option such as directly observed therapy. In such cases, the TB nurse will visit the patient three times per week and observe the patient taking the treatment.
- 7.4 In addition to screening and treatment as part of local TB outbreaks, the TB services across MFT have been heavily involved with a large scale TB screening programme for Afghan refugees and with providing TB screening and treatment for residents of a hotel housing asylum seekers in the area.

Table 2 - TB Service Provision in Manchester from Manchester University NHS Foundation Trust

TB Service Provision in Manchester from Manchester University NHS Foundation Trust	
North Manchester	<ul style="list-style-type: none"> • Team based at North Manchester General Hospital. • Dedicated infectious diseases unit with 6 negative pressure rooms. • Team of 6 TB nurses. • Dedicated paediatric infectious disease consultant also based here
Central Manchester	<ul style="list-style-type: none"> • Team based at Manchester Royal Infirmary. Part of Respiratory Medicine. • Two consultants and team of 6 nurses. • Facility to care for multi drug resistant TB patients. Hospital has capacity for 2 negative pressure rooms • Royal Manchester Children’s Hospital provides TB care to children across the GM footprint. Two Paediatric constants with a special interest in TB based here.
South Manchester	<ul style="list-style-type: none"> • Team based at Wythenshawe Hospital. Part of Infectious Diseases Unit. • Team of infectious disease physicians and infectious disease nurses who care for people with TB

7.5 There is strong collaborative working between key organisations and teams involved in TB prevention, detection, and control in Manchester. Manchester City Council’s Department of Public Health Team works closely with other teams in the Council, such as Housing, Education, Communications, and the No Recourse to Public Funds Team, as well as UK Health Security Agency, MFT TB Team and NHS Commissioners amongst others.

8.0 Delivery of National TB Programmes in Manchester and Greater Manchester

8.1 There are two national TB programmes - National Latent TB infection screening programme in high incidence areas and BCG vaccination programme.

Latent TB Infection Screening Programme

8.2 The Latent TB Infection (LTBI) programme aims to reduce TB by testing and treating latent TB in migrants aged 16 to 35 years who have arrived in England from countries with a high TB incidence (≥ 150 per 100,000 population or sub-Saharan Africa) within the last 5 years and had been living in that country for 6 months or longer. This has been extended to enable people who were unable to access an LTBI test in 2020 due to the COVID-19 pandemic.

8.3 The LTBI programme is funded by NHS England and implemented locally by ICSs. The delivery model of the LTBI programme is locally determined. There are three models:

1. TB services: Use Flag 4 data (GP registrations of new migrants), filtered for programme eligibility, to invite people in for a test. TB services are based in either secondary or community care.
2. Primary care: New registrations that meet the programme eligibility are offered the LTBI test
3. Dual/hybrid model: A combination of TB services and primary care delivery

8.4 In Manchester, delivery model 1 is used and the programme is run by the TB service at MFT.

3-year LTBI programme plan: Manchester, Bolton and Oldham, 2022-2025

8.5 Manchester, Bolton and Oldham within Greater Manchester ICP are three of the identified high TB burden areas in England able to receive additional funding from NHS England (NHSE) for the provision of an LTBI testing and treatment programme.

8.6 Funding for the national LTBI testing and treatment programme has been confirmed until 2024/25. The NHSE LTBI programme budget is sufficient to fund only 26% of the total number of eligible new registrations, as indicated in Flag 4 data for TB high burden areas.

8.7 Table 3 below is the proposed GM 3 year plan for the LTBI service, including the figure (column three) for 26% of Flag 4 data annual average number.