



Public Health  
England

# TB in the workplace

## Information for all employers



# About Public Health England

Public Health England's mission is to protect and improve the nation's health and to address inequalities through working with national and local government, the NHS, industry and the voluntary and community sector. PHE is an operationally autonomous executive agency of the Department of Health.

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## Executive summary

This document contains the following information for the employer:

### *Risk assessment*

The employer should perform a risk assessment for staff working with individuals at an increased risk of tuberculosis infection.

### *Education*

In high-risk occupations, the employer can provide educational material to staff to prevent the spread of the disease. TB awareness, control measures and screening should be part of the induction process. Follow-up health awareness training can also be provided.

### *Screening*

The employer should consider screening new staff, especially those working in a high risk occupation or with vulnerable people.

### *Protection*

All reasonable steps should be taken to protect staff from acquiring TB including provision of BCG vaccination where appropriate through Occupational Health or via the GP surgery.

### *Advice*

- Staff susceptible to infection: immunocompromised staff may require advice from their GP/Occupational Health.
- Fitness for work and support: for a member of staff with active TB, the employer should seek advice from Occupational Health to determine fitness to work and source additional support.

### *Contact tracing*

Provide appropriate screening of staff who have been in close contact with active TB to detect latent or active infection.

# 1 Background on TB

## 1.1 Description

Tuberculosis (TB) is an infection caused by the bacteria *Mycobacterium tuberculosis*. TB can affect any part of the body, but generally is only passed on from one person to another when it affects the lungs, which is known as pulmonary TB. An individual with infectious TB can spread the TB germ into the air by coughing, singing or sneezing, and anyone nearby can breathe in the germ. However, TB is not easily caught. Close and lengthy contact with an infectious person, such as living in the same household, is required to catch the disease.

## 1.2 TB symptoms

Symptoms of TB are listed below:

- a persistent cough which lasts for three weeks or more
- coughing up blood
- fever / high temperature
- night sweats
- loss of appetite
- unexplained weight loss
- unusual sense of tiredness and being unwell

People with TB don't all have a cough, TB can occur in other parts of the body besides the lungs. Examples of this are swelling of the lymph nodes (glands) in the neck or infection of the spine, which can present as back pain.

## 1.3 Susceptibility to TB

There are some countries where TB is more common. Therefore, being aware of the disease and its signs and symptoms will help early diagnosis and treatment, and help control the spread of TB.

People at increased risk of TB include:

- people from a country where TB is common
- close contacts recently infected with TB bacteria (in the last 2 years)
- very young children and elderly people
- individuals with diabetes
- people on steroids or other drugs that affect the body's immune system, such as chemotherapy for cancer
- people who are HIV-positive
- people living in an overcrowded environment or have poor housing
- people dependent on illegal drugs or alcohol
- people with chronic poor health which makes it difficult for the body to fight bacteria

**TB is not spread by:**

- shaking hands or touch
- sharing food or drink or using the same plates and cutlery
- sharing toilet seats

## 1.4 TB exposure: infection risk and consequences

The risk of infection passing from an infected individual to colleagues, service users, and customers is generally very low. However, it is important to obtain expert advice and assess contacts for screening.

There are three possible outcomes following TB exposure - no infection, latent TB infection and active TB infection – as described below.

### No infection

In people with no infection, the body's defence system (immune system) will remove the bacteria with no long term impact on the person's health. This is what happens most of the time.

### Latent TB

In people with latent TB, the body cannot eliminate the bacteria, and it remains dormant in the body. People with latent TB are generally well and will not have symptoms. They cannot pass the TB germ to other people.

It is possible that the germ may become activated, for example when the person is ill for other reasons. A short course of treatment may be given to people with latent TB infection to reduce the risk of re-activation of TB infection and progression to active TB disease.

### Active TB

People with 'active' TB disease usually show signs and symptoms of illness and feel unwell. A chest x-ray and other tests are needed to diagnose active TB. Active TB requires treatment. An individual with active TB may be infectious before treatment is commenced.

## 1.5 TB diagnosis

A doctor or nurse will arrange the relevant tests. This may involve testing the person's sputum for TB and having a chest X-ray arranged through their GP or after referral to a TB specialist.

## 1.6 Treatment of TB

TB can be cured provided that the patient takes the full course of medications prescribed by the TB specialist team.

### Active TB

A person diagnosed with active TB will be given treatment lasting at least six months. Active TB can be cured provided that the medication is taken regularly and for the entire course. If complete treatment is not taken, then there is a risk of developing drug-resistant TB, which is much harder to treat. People with drug-resistant TB are likely to be infectious for longer and require prolonged treatment with drugs that have more side-effects than standard treatment. It is therefore crucial that individuals complete their treatment.

To protect public health, treatment for TB in the UK is free for all regardless of their immigration status.

### Admission to hospital

For most people investigation and treatment can all be done in the clinics and community. This includes people with active TB, though some may be advised to stay at home until they are no longer infectious, which is usually after two weeks from start of treatment.

Some people will need to be admitted to hospital for assessment and treatment. This can be because:

- they are severely ill
- they are more likely to infect others than usual, and so need to be isolated
- they have nowhere to live



## 2 Work and TB

If you suspect TB in a staff member, make the individual aware of the possible diagnosis and provide contact with appropriate health providers (occupational health staff, where not available check with GP or local TB services) and advise they seek prompt medical advice.

There are some workplaces where the risk of exposure to TB is higher than in the general population. These include:

- hostels for homeless people and facilities accommodating refugees and asylum seekers
- offenders' healthcare services, where staff work directly with prisoners or those in custody
- health and social care institutions
- educational settings with high proportions of students originating from countries where TB is common

## 3 Screening for TB in employment

Please note that screening would only need to be undertaken in jobs where there is an increased risk. See section 3.4

### 3.1 Employer's legal responsibilities for screening

All workers have a right to work in places where risks to their health and safety are properly controlled. The employers have a moral/legal responsibility to seek advice from Occupational Health/TB clinicians and then decide further actions accordingly.

The following legislations are of relevance:

- The Health and Safety at Work Act 1974
- The Management of Health and Safety at Work Regulations 1999
- Control of Substances Hazardous to Health Regulations 2002
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

- Part 2A Orders are the Regulations of the Public Health Act which include legal powers which may occasionally be needed to enforce actions in order to protect public health

Links to the above websites are available at the end of this document

For further information seek guidance from Occupational Health and the Health and Safety representative in your organisation.

### 3.2 Screening definition

Screening is the assessment of an individual to determine whether they have latent and/or active TB. It entails a risk assessment using one or both of the below:

- a questionnaire about suggestive symptoms (see section 1.2)
- specific tests such as a chest Xray and a skin or a blood test

### 3.3 The importance of screening

Screening in the context of work aims to identify staff who may be infected with TB. This will determine if treatment, adjustment of work duties and/or referral to a specialist is required. In addition, this will also stop onward spread. Work-based screening is also intended to identify staff who may benefit from other preventative measures such as BCG vaccination.

It is important to realise that screening does not completely prevent TB developing in the future and continued vigilance for the symptoms of TB is essential.

### 3.4 When screening is required

When considering whether to screen, it may help to consider the following factors:

#### Employment setting

Employees can be at risk of increased exposure to TB through contact with service users/customers with active TB (see section 2).

#### Personal factors

The employee is born or had a prolonged stay in an area where TB is common. The risk for developing TB is highest during the first five years after arrival in the UK.

People who have an underlying condition (see 1.3)

### 3.5 Screening arrangements

1. If you have access to an occupational health service, appropriate screening can be arranged.
2. Contact the person's GP if you do not have access to a local occupational health service. Ensure that you obtain the individual's consent prior to contacting their GP. Their GP will refer them to their local health services/chest clinics.
3. If the person is not registered with a GP, encourage them to do so and then approach the GP once their consent is obtained.

You can get further advice from the following:

- Association of National Health Occupational Physicians (ANHOPS)  
<http://www.anhops.com/>
- NHS Health at Work Network Board: <http://www.nhshealthatwork.co.uk/>

### 3.6 Screening professional

Screening is routinely carried out by a suitably trained healthcare professional such as an occupational health advisor/TB nurse.

### 3.7 Actions after a positive TB results

#### Active TB of lungs

In most work scenarios, if a person is diagnosed with TB of the lungs, the employee is infectious. The individual will be kept off work until they are non-infectious, which is usually after having two weeks of TB treatment as outlined in the referral pathway.

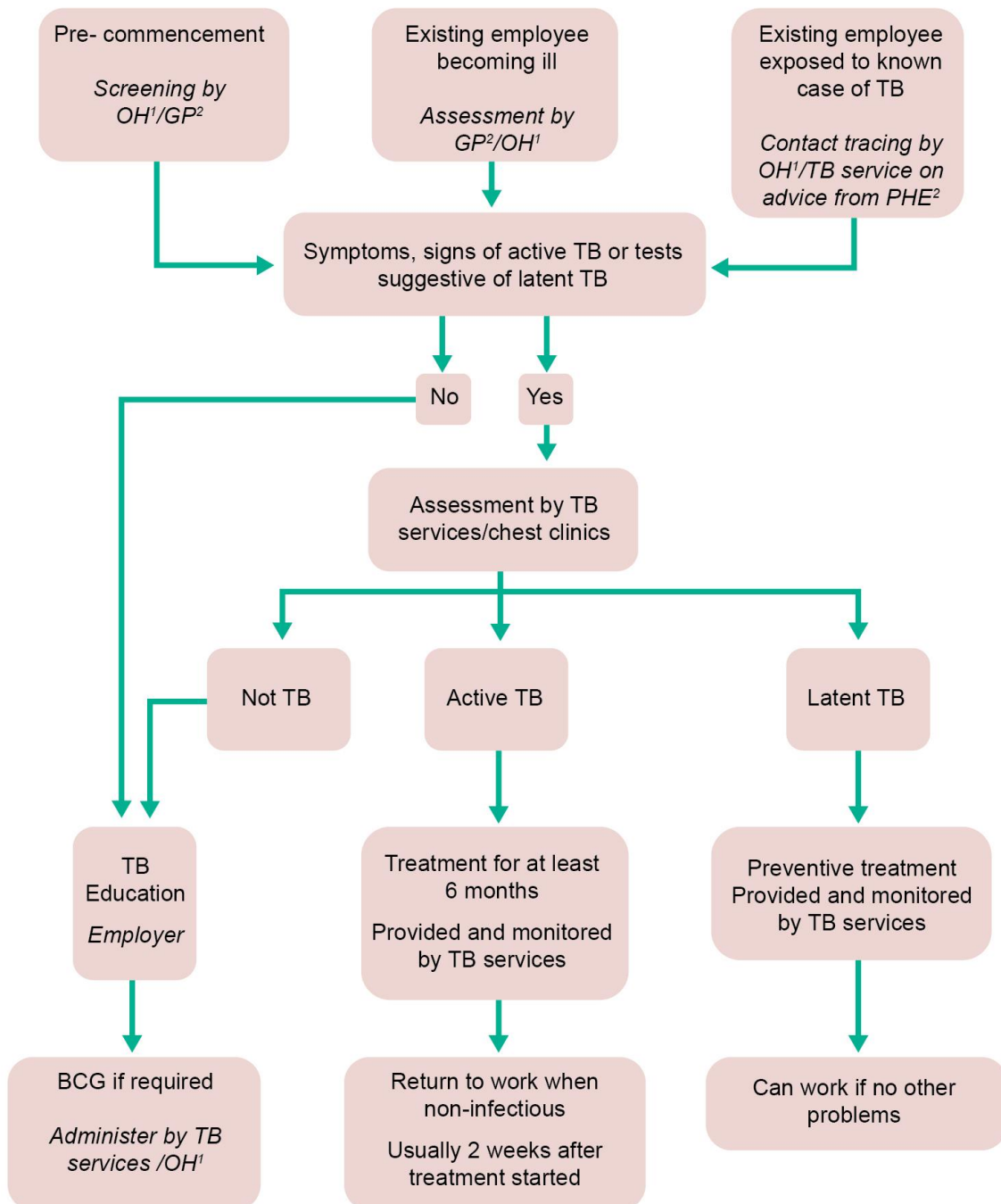
#### Non-respiratory TB

Individuals with TB affecting organs other than lungs are not infectious; therefore, if there are no other symptoms that could impact on work, these employees can stay at work/study.

## Latent TB

TB cannot be transmitted to contacts and should be referred to a specialist team for further investigation.

### Referral pathway for TB in the workplace



<sup>1</sup>OH: Occupational Health where available

<sup>2</sup>GP: General Practitioner, if not registered yet, encourage staff to register as soon as possible

<sup>3</sup>PHE: Public Health England

### 3.8 Impact on employment after positive TB screen

Most employees diagnosed with either active or latent TB can return to work/education. Short term impact on work or study while being treated for TB is usually minimal. Most individuals can return to work after two weeks of TB treatment. Employees may require appropriate support/adjustments to their work depending on the symptoms of TB or side-effects of the medications. There is usually no long term impact on ability to work.

A person on TB treatment will be asked to attend hospital appointments regularly so that their progress can be monitored.

## 4 Employee with possible active TB

### 4.1 Occupational Health support for staff with TB

When a member of staff is diagnosed with TB and is started on treatment it is important to adhere to the treatment plan. Occupational Health departments can help by:

- assessing fitness to work and risk to other colleagues and customers
- recommending adjustments to duties that will enable staff to return to work and attend medical appointments
- monitoring side-effects
- educating managers and colleagues regarding working with a diagnosed colleague
- using this as an opportunity to remind other workers of the importance of reporting suspicious symptoms promptly

### 4.2 Maintaining staff confidentiality

Occupational Health staff will do their utmost to preserve confidentiality within the limits of professional guidance. If a person is diagnosed with active TB, then the treating clinician will notify Public Health England. Notification of TB is not the responsibility of the employer. Depending on the circumstances of the individual case, the Public Health England local health protection team, may contact the employer to advise on the need and extent for contact tracing (section 5).

Confidentiality of the patient will be maintained, but the employer will need to know the identity and diagnosis of the patient to organise contact tracing. In this case the staff will be informed about the incident but not the identity of the employee. The employer would also be informed whether the employee is fit/unfit for work or work with restrictions but clinical details will not be provided.

## 5 Contact tracing at work

### 5.1 Active TB diagnosis

Public health legislation requires people with TB, employers and institutions to give information to help to identify close contacts who may require screening.

### 5.2 Contact tracing

Contact tracing helps to identify those who have been in contact with the individual diagnosed with TB and assess whether or not they should be screened for TB.

For all cases of TB, whether infectious or non-infectious, household contacts will be routinely screened for the infection. Colleagues with significant prolonged and close contact ( $\geq 8$  hours) with a case of infectious TB of the lungs will require screening. Early diagnosis and treatment will prevent spread of TB.

### 5.3 Workplace tracing in detail

If staff have been exposed to an active case of TB (for example, an infected colleague or customer), Occupational Health will liaise with the local health protection team and local TB clinic to decide who will require screening. Contact details of the staff and other people exposed will be obtained.

Staff invited for screening must comply with the screening requirements and attend appointments so that appropriate action can be taken promptly.

## 6 Useful Websites

1. ANHOPS - Association of National Health Occupational Physicians -  
<http://www.anhops.com/>
2. Public Health England – Tuberculosis  
<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Tuberculosis/>
3. National Knowledge Service – TB  
<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Tuberculosis/NationalKnowledgeServiceTB/>
4. TB Alert <http://www.tbalert.org/>
5. NHS Health at Work Network Board: <http://www.nhshealthatwork.co.uk/>
6. Health and Safety at Work Act 1974:  
<http://www.legislation.gov.uk/ukpga/1974/37>
7. The Management of Health and Safety at Work Regulations 1999  
<http://www.legislation.gov.uk/uksi/1999/3242/contents/made>
8. Control of Substances Hazardous to Health Regulations 2002  
<http://www.hse.gov.uk/coshh/>
9. RIDDOR - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013  
<http://www.hse.gov.uk/riddor/>
10. Part 2A Orders: The Regulations of the Public Health Act  
<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HealthProtectionRegulations/Part2Orders>