# TUBERCULOSIS POLICY – PREVENTION OF TB IN HOSPITALS

## Reference
ICP 15

## Approving Body
Infection Prevention and Control Committee

## Date Approved
13/04/2021

## For publication to external SFH website
Positive confirmation received from the approving body that the content does not risk the safety of patients or the public:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

## Issue Date
30th April 2021

## Version
6.0

## Summary of Changes from Previous Version
Covid-19 pandemic PPE changes

## Supersedes
v5.0, Issued 18th August 2017 to Review Date April 2021 (ext*)

## Document Category
- Clinical

## Consultation Undertaken
- Infection Prevention and Control
- Consultant Microbiologist
- Infection Prevention and Control Committee
- Occupational Health
- Health and Safety Officer
- Heads of Nursing / Matrons
- Respiratory

## Date of Completion of Equality Impact Assessment
12/02/2021

## Date of Environmental Impact Assessment (if applicable)
12/02/2021

## Legal and/or Accreditation Implications
In accordance with Public Health England and NICE guidance

## Target Audience
Trust wide

## Review Date
April 2024

## Sponsor (Position)
Director for Infection Prevention and Control

## Author (Position & Name)
Sally Palmer, Nurse Consultant Infection Prevention and Control

## Lead Division/ Directorate
Diagnostics and Outpatients

## Lead Specialty/ Service/ Department
Infection Prevention and Control Team

## Position of Person able to provide Further Guidance/Information
Infection Prevention and Control Team

## Associated Documents/ Information
Not Applicable

## Date Associated Documents/ Information was reviewed
Not Applicable

Template control: June 2020
## CONTENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>INTRODUCTION</td>
<td>4</td>
</tr>
<tr>
<td>2.0</td>
<td>POLICY STATEMENT</td>
<td>4</td>
</tr>
<tr>
<td>3.0</td>
<td>DEFINITIONS/ ABBREVIATIONS</td>
<td>4</td>
</tr>
<tr>
<td>4.0</td>
<td>ROLES AND RESPONSIBILITIES</td>
<td>5</td>
</tr>
<tr>
<td>5.0</td>
<td>APPROVAL</td>
<td>5</td>
</tr>
<tr>
<td>6.0</td>
<td>DOCUMENT REQUIREMENTS</td>
<td>6-14</td>
</tr>
<tr>
<td>7.0</td>
<td>MONITORING COMPLIANCE AND EFFECTIVENESS</td>
<td>15</td>
</tr>
<tr>
<td>8.0</td>
<td>TRAINING AND IMPLEMENTATION</td>
<td>16</td>
</tr>
<tr>
<td>9.0</td>
<td>IMPACT ASSESSMENTS</td>
<td>16</td>
</tr>
<tr>
<td>10.0</td>
<td>EVIDENCE BASE (Relevant Legislation/ National Guidance) and RELATED SFHFT DOCUMENTS</td>
<td>16</td>
</tr>
<tr>
<td>11.0</td>
<td>KEYWORDS</td>
<td>16</td>
</tr>
<tr>
<td>12.0</td>
<td>APPENDICES</td>
<td></td>
</tr>
<tr>
<td>Appendix A</td>
<td>Occupational Health TB Contact List</td>
<td>17-18</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Equality Impact Assessment</td>
<td>19-20</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Environment Impact Assessment</td>
<td>21</td>
</tr>
</tbody>
</table>
Isolate

- Admit to Respiratory wards, Side Room 1 (if agreed with Respiratory Consultants). when this is not possible, the patient must be nursed in a single room within the admitting ward.
- Submit specimens as requested by Clinicians.
- When Multi Drug Resistant TB (MDR TB) is suspectected/confirmed the patient MUST be nursed in rooms with negative pressure isolation facilities.
- Contact Infection Prevention & Control Team for advice.

Protect

- The patient must be given respiratory hygiene advice and ensure the patient has tissues, waste disposal and hand hygiene facilities available.
- Request the patient wears a surgical mask when they leave the isolation room.
- Ensure the patient is awaree isolation will continue until at least 2 weeks of treatment has been completed and there has been a clinical improvement
- or
- The patient has 3 consecutive sputum smear negative samples and is asymptomatic

Prevent

- PPE for staff:-
  - non-sterile gloves and apron
  - masks are not required for casual short contact (up to 5 minutes)
  - FFP3 masks to be worn for prolonged close contact
  - FFP3 masks to be worn during aerosol generating procedures i.e. bronchoscopy, sputum induction, nebuliser treatment and where high flow oxygen is used
  - FFP3 masks must be worn AT ALL TIMES when entering a room if MDR TB is suspected/confirmed (refer to section 5.4-5.7)

Follow Trust Covid-19 PPE policy during the Pandemic.
1.0 INTRODUCTION

1.1. Tuberculosis (TB) is an infectious disease caused by the organism Mycobacterium Tuberculosis, incidence in the UK remains high compared with other Western European countries (NICE 2016). It usually presents as a respiratory disease affecting lungs, larynx, pleura or mediastinal lymph nodes. It can also affect bones and joints, the gastrointestinal and renal tracts, the central nervous system or be disseminated through the blood stream. TB can present a health risk to staff if they become infected from patients; staff can also infect patients.

People at an increased risk of developing active TB include:
- People with HIV, diabetes, chronic kidney disease, or silicosis or receiving haemodialysis.
- Children younger than 5 years old
- People with excessive alcohol intake or who are injecting drug users
- People who have had solid organ transplantation
- People who have a haematological malignancy or are receiving chemotherapy
- People who have had a gastrectomy or jejunoileal bypass
- People who are having treatment with anti-tumour necrosis factor alpha or other biologic agents

1.2. Resistance to TB drug treatment can develop, and in some cases multi-drug resistance (MDR TB) develops if patients are not compliant with medication. All patients with TB should have risk assessments for drug resistance and all patients should be tested for HIV (NICE 2011).

1.3. Tuberculosis is a notifiable disease. The medical staff attending the patient have a legal responsibility to notify a case of TB as soon as the diagnosis is made and a decision to commence full treatment is taken.

2.0 POLICY STATEMENT

The purpose of the document is to provide clinical staff with guidelines for management of TB infected patients and to identify strategies for the prevention and of infection to other patients, staff and visitors.

The policy applies to all staff working within Sherwood Forest Hospitals

3.0 DEFINITIONS/ ABBREVIATIONS

<table>
<thead>
<tr>
<th>TB</th>
<th>Tuberculosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH</td>
<td>Occupational Health</td>
</tr>
<tr>
<td>IPCT</td>
<td>Infection, Prevention &amp; Control</td>
</tr>
</tbody>
</table>
4.0 ROLES AND RESPONSIBILITIES

4.1. Roles of the Managers
Heads of Nursing must ensure that resources are available for health care workers to undertake effective standard and isolation precautions pertinent to TB.

4.2. Health care personnel
Have a clinical and ethical responsibility to carry out effective infection prevention and control procedures applicable to the control of TB and to act in a way which minimises risk to the patient.

4.3. The Infection Prevention and Control Team
Is responsible for providing expert advice in accordance with this policy, for supporting staff in its implementation, and assisting with risk assessment where complex decisions are required. The team is responsible for ensuring this policy remains consistent with the evidence-base for safe practice, and for reviewing the policy on a regular basis.

The Infection Prevention and Control team are responsible for contact tracing in the event of a case being identified in the hospital.

4.4. The Occupational Health Department
Is responsible for managing appropriate pre-placement health screening for all staff (TB screen/health check based on risk assessment and relevant NICE guidance) and for managing appropriate contact tracing for staff who are contacts of sputum smear positive pulmonary TB. The aim is to reduce the risk of patients acquiring TB from healthcare workers who are or may become infectious; and to reduce the risk of health care workers acquiring TB through the course of their work.

4.5. Consultant Medical Staff
Are responsible for ensuring their junior staff understand this policy, and adhere to the principles contained in it at all times.

4.6. Role of the Infection Prevention & Control Committee
The Infection Prevention and Control Committee are responsible for approving this document. The Hospital Infection Prevention & Control Committee is responsible for the monitoring of this policy.

5.0 APPROVAL
Following appropriate consultation this policy (v6.0) has been approved by the Trust’s Infection Prevention and Control Committee.
6.0 DOCUMENT REQUIREMENTS

6.1. How is TB Infection Spread?
People who have active infectious (open) pulmonary TB expel small respiratory droplets when coughing and sneezing. These small droplet nuclei, carried by air currents can be inhaled by exposed people and cause infection. Young children with TB are thought to be less infectious than older subjects.

6.2. Latent TB
The presence of dormant live bacilli, which can live in the lungs or other parts of the body without causing active disease, is referred to as latent TB. Latent TB cases are not infectious to others. People who have been exposed to TB and who have strongly positive Mantoux skin tests (disproportionate to their BCG status) and/or positive interferon gamma blood tests and who have no clinical signs or symptoms of disease and a normal chest X-ray, may be regarded as having latent TB.

6.3. Infectious Pulmonary TB

6.3.1. Primary TB occurs following exposure to another individual with active pulmonary TB. Clinical disease occurs within a few months of exposure.

6.3.2. Latent TB may reactivate and cause active TB disease this is called post – primary TB. It can occur many years after initial exposure and is more likely to occur if the patient becomes immune suppressed (e.g. Anti Tumour Necrosis Factor, TNF, therapy). If reactivation occurs in the lungs it may be infectious

6.3.3. Pulmonary TB may be sputum smear positive or negative for Acid and Alcohol Fast Bacilli (AAFB). The highest risk of transmission occurs when patients are smear positive.

6.3.4. TB is generally a sub-acute illness with patients being unwell for several weeks or months prior to diagnosis
Common symptoms include;
- Fevers
- Night Sweats
- Weight loss
- Malaise
- Cough
- Haemoptysis
CXR may show upper lobe infiltrates, cavitating lesions or pleural effusion

6.4. Identification of Patients
Clinicians need to ask three questions:

1. Does the patient have tuberculosis?
   - Suspected: Clinical signs and symptoms or radiological changes suggestive of tuberculosis.
   - Confirmed: Clinical signs and symptoms suggestive of TB, AAFB smear positive and/or culture positive.

2. If so, is the patient likely to be infectious?
   - High risk of transmission Sputum smear positive.
   - Low risk of transmission Sputum smear negative, culture positive or cultures awaited
   - Minimal risk of transmission Extra-pulmonary disease.
3. Is the patient likely to have drug resistant disease?

**Suspected:**
- Previous treatment.
- Contact with known resistant case.
- Acquisition in areas with high resistance rates (Africa, Former USSR and Eastern Europe, India, China)
- HIV positive patient.
- Failure of clinical response.
- Prolonged culture positive while on treatment.

**Confirmed:**
Laboratory confirmation of drug resistance.

Where a child is admitted to hospital with suspected active TB any visitors to the child should be assessed for symptoms of infectious TB and kept separate from other people until they have been excluded as a source of infection.

6.5. Non Infectious TB

Patients are usually considered non-infectious within 2 weeks if compliant with treatment and if fevers settle, even though Bacilli may still be found in sputum (excluding MDR TB cases).

6.6. Multi-Drug Resistant TB (MDR TB)

MDR TB is defined as resistance to both rifampicin and isoniazid with or without additional drug resistances. Primary resistance can occur in people who have contracted TB from someone who is already infected with a drug resistant strain, without ever having a prior treatment history.

Resistance can also develop due to inadequate drug treatment being prescribed and as a result of non-compliance with treatment.

Treatment failure is defined when cultures are positive after 4 months of treatment. These cases have a high chance of developing drug resistance. Resistance can develop to a single drug e.g. to Isoniazid.

6.7. Risk Factors for Developing MDR TB

- HIV positive people.
- Previous TB treatment especially if prolonged, incomplete or non-compliant. Treatment failure (patient remains smear positive and symptomatic after 4 months of compliant treatment)
- Contact with a known case of drug-resistant TB
- Birth in a foreign country where there is a high incidence of TB
- Residence in London
- Age profile, with highest rates between 25-44 years and male gender
- Homeless people or living in hostels
- Substance misuse
- Contact with prison

Although drug resistance can prolong the period of infectiousness to others as well as compromising the effectiveness of treatment, MDR TB is not more infectious than drug sensitive TB (Pratt et al 2007). MDR TB is rare in the UK making up less than 1% of cases.
6.8. Extensively Resistant TB
Extensively drug-resistant (XDR) TB is defined as resistance to at least; rifampicin, isoniazid, quinolones and aminoglycosides. Successful treatment depends on the sensitivities for the remaining second and third line agents. XDR TB is very rare in the UK.

6.9. Extra-Pulmonary TB
TB can affect nearly every organ. Common forms of extra-pulmonary TB are Lymph node TB, Gastro-intestinal TB, Spinal TB and Joint TB.

All patients with extra-pulmonary TB should be referred for site specific investigation and have a chest X-ray and if possible a sputum specimen to exclude or confirm the presence of concomitant pulmonary TB.

Most non-respiratory forms of TB have a lower risk of transmission than respiratory disease. Transmission can however occur following direct contact with infected body fluid e.g. open leg ulcer or from wound ooze from an excised neck gland. Isolation is not usually required unless aerosols are generated during wound irrigation.

6.10. Pulmonary TB Investigations
If TB is suspected patients should also have the following investigations performed;
- Posterior-anterior chest X-ray. A thorax CT scan should be considered if Pulmonary TB is suspected.
- At least 3 sputum samples (one early morning for 3 days) for AAFB microscopy and mycobacterial culture.
- Adults who are unable to provide sputum sample should have bronchoscopy with BAL sent for AAFB smear and culture.
- For children who are unable to provide sputum sample 3 gastric lavages or 3 samples of induced sputum for AAFB microscopy and mycobacterial culture, preferably one morning sample.
- Rapid diagnostic nucleic acid amplification tests (NAAT) should be requested in certain circumstances – please refer the NICE guidelines 2016
- Treatment may be started while waiting for test results on clinical grounds and prior to obtaining a specimen provided that a specimen is sent within one week of starting treatment.

Rapid diagnostic tests can be carried out if there is a risk of MDR TB. The laboratory can perform sputum smear tests every day. Sputum/tissue culture is continued for 12 weeks.

Weight loss and a persistent cough (over 4 weeks) may be the only signs of active disease. Any patient with these symptoms that is not responding to antibiotics should be investigated for TB. Advice should be sought from Microbiology or Respiratory Physicians.

6.11. Patient Isolation
- 6.11.1. The number of visit and duration of visits a person with TB makes to an outpatient department while they are still infectious should be minimised. The person should be seen at times or places away from other people.

- 6.11.2. On identification of any hospitalised patients with suspected or confirmed TB a decision will be made about appropriate placement, based on a risk assessment, by the Infection Prevention and Control Team and the Respiratory Consultant.
Patients with suspected or confirmed Pulmonary Tuberculosis (caused by M.TB complex), or extra-pulmonary TB when MDR TB is suspected or pulmonary involvement hasn’t been excluded, need to be assessed for transmission risk by a Respiratory Consultant/ Paediatrician and IPC Team to determine appropriate placement.

Waiting time for isolation must be kept to a minimum. This may involve prioritising their care above other patients.

It is recommended people with suspected infectious or confirmed pulmonary TB should not be admitted to a ward containing people who are immuno-compromised.

High risk patients, and patients admitted non-electively with suspected pulmonary TB who have not yet been assessed by a respiratory physician, should be managed within a side room

Respiratory Team must be informed within 24 hours of admission. Whilst the highest risk of transmission occurs with smear positive patients, smear negative patients with pulmonary TB may present a risk to certain patient groups.

- **6.11.3.** The number of visit and duration of visits a person with TB makes to an outpatient department while they are still infectious should be minimised. The person should be seen at times or places away from other people.

- **6.11.4.** Except for MDR TB, patients should be considered infectious until two weeks of appropriate anti-tuberculosis drug therapy have been completed, and be showing clinical improvement e.g. free from fever for a week and/or cough resolving.

- **6.11.5.** If the patient has 3 consecutive sputum (induced sputum or gastric lavage) smear negative samples and is asymptomatic as outlined above he/she will not need to be isolated.

- **6.11.6.** A patient who has suspected or confirmed MDR TB must be isolated immediately in a single room (on the isolation ward) with the door closed, until transfer to a specialist centre with facilities for isolation in a negative pressure room can be arranged. This should be arranged without delay.
6.12. In- Patient Isolation Flowchart

TB culture positive but sputum smear negative for AAFB, asymptomatic patient fully compliant with TB treatment.

Suspected or confirmed smear positive pulmonary TB from one or more of 3 samples, no risk for MDR TB

Sputum TB smear positive with risk factors for MDR TB

PrioritY: Isolate with the door closed

Isolate with door closed

Isolate with the door closed ideally in side room 1 on respiratory wards

Must be cared for in side room 1

6.13. Practice Recommendations

6.13.1. Isolation
- The patient should be isolated, based on the risk assessment.
- The patient should wear a mask if tolerated during the Covid-19 pandemic.
- Teach patients to cover the mouth and turn away from others when coughing.
- Provide a clinical waste bag for patient to dispose of tissues safely.
- Place an isolation card on the door of the room, maintaining confidentiality.
- Restrict visitors who have not been previously in close contact except family members who have already had exposure.
- Do not allow other patients to visit.
- Ensure effective communications between clinical teams, infection control and domestic staff.
- Pregnant staff should avoid contact with confirmed/suspected TB cases.

6.13.2. Sputum Specimen collection
- Collect sputum specimens, introduced sputum or gastric lavage for AAFB in a universal container. A 5ml sample of sputum (not saliva) should be obtained, avoiding external contamination of the container. Secure the lid safely.
- Ensure that the correct details are entered on the request form.
- Staff should not be present in the room while the patient is producing a sputum specimen.
- Ensure that the specimen is placed in the appropriate plastic bag, with the request form in the separate compartment. Specimens should be transported in a rigid container to the laboratory promptly. Leaking specimens will be rejected.
- Do not send AAFB sputum samples by post.
- Deal with spills in line with the Trust decontamination and Disinfection Policy.
Follow Trust Covid-19 PPE policy during the Pandemic.

6.13.3. Mask, eye and face protection
- Masks are not routinely recommended for casual short contact with TB cases (NICE 2006). Masks should only be worn based on the infection risks to staff or other patients. Follow the trust Covid-19 PPE policy during the pandemic.
- Wear a Surgical mask only for prolonged close contact e.g. 1:1 sessions with the infectious patient if the patient is unable to control coughs and is not compliant with covering his/her mouth. Follow the trust Covid-19 PPE policy during the pandemic.
- Staff should wear EN 149 FFP3 respirator when they are with a patient during aerosol generating procedures ie bronchoscopy, sputum induction or nebuliser treatment. Follow the trust Covid-19 PPE policy during the pandemic.
- Staff and visitors should wear EN 149 FFP3 respirator if there is a risk that the patient has MDR TB and for confirmed cases while the person is thought to be infectious. Follow the trust Covid-19 PPE policy during the pandemic.
- Ensure that masks are well fitted. Follow the trust Covid-19 PPE policy during the pandemic.
- Do not re-use masks. Follow the trust Covid-19 PPE policy during the pandemic.
- In-patients with suspected infectious or confirmed pulmonary or laryngeal TB must wear a mask when leaving the isolation room. They must remain in isolation until they have completed two weeks of treatment and are unlikely to be rifampicin resistant or have a negative rifampicin resistance on NAAT or culture. Follow the trust Covid-19 PPE policy during the pandemic.

6.13.4. Hand Hygiene
- Perform hand hygiene using alcohol gel on entry and exit from the isolation area and following patient contact.
- Hand hygiene should be performed upon doffing of PPE to prevent contamination of oneself and others.
- Provide hand hygiene advice to the patient and family.
- If hands come into contact with sputum or other body fluids and contaminated items wash the hands.

6.13.5. Gloves (non-sterile)
- Wear gloves only when touching blood or body fluids or sputum contaminated items and specimens. Follow the trust Covid-19 PPE policy during the pandemic.
- Care should be taken when cleaning up sputum or exudates from wounds.
- Put on clean gloves just before touching mucous membranes or non-intact skin.
- Change gloves between procedures on the same patient after contact with material that may contain high numbers of Bacilli.
- Remove gloves (single use item) promptly after use and wash hands. Gloves should be disposed of as clinical waste.

6.13.6. Apron/ gown
- Wear a disposable plastic apron for procedures where there is a risk of contamination of clothing from splashing.
- Wear a long sleeve gown where there is a risk of aerosolisation.
- Remove the apron on completion of tasks and dispose of after use as clinical waste.
6.13.7. Patient transport
- Patients should not be transferred to other units or hospitals unnecessarily. If transfer is necessary e.g. for chest X-ray the receiving department must be informed of the infectious state of the patient in advance, to prevent exposure to susceptible patients in waiting areas.
- Inform ambulance staff prior to patient transfer.
- Infectious patients should not share vehicles with other patients.

6.13.8. Care of Patient equipment
- The patient should have dedicated equipment for their use, this includes spirometers and nebulisers.
- Wear gloves and aprons to handle equipment soiled with sputum or other body fluids–decontaminate the equipment as per guidance in the disinfectant policy. Follow the trust Covid-19 PPE policy during the pandemic.
- If the equipment is single use then dispose of it as clinical waste.
- Re-usable equipment must be decontaminated prior to re-use on other patients.

6.13.9. Environment
- Daily enhanced cleaning of the isolation area should be performed by the domestic staff using dedicated colour coded equipment.
- A terminal clean of the room and equipment will be required at the end of the isolation period and prior to occupation by another patient using a 1000 ppm available chlorine solution.

6.13.10. Linen
- Gloves and aprons must be worn when handling used linen, which must be disposed of as infected linen in an alginate (dissolvable) bag inside the room. The bag should be placed in a white plastic bag outside the room and sent to the laundry. Follow the trust Covid-19 PPE policy during the pandemic.
- Personal clothing must not be hand sluiced by health care workers.
- Provide infection control advice to family members taking home soiled clothing for washing


6.14.1. Patient Contacts
If a patient on an open ward is diagnosed as having smear positive TB, a risk assessment will need to be carried out to establish the infection risks to other patients, staff, family and carers. The ward manager is responsible for ensuring that the Infection Prevention and Control Team (IPCT) are notified of all hospital in-patient cases. The IPCT team will, in turn, discuss the case with the TB Specialist Nurse and the Consultant in Communicable Disease Control (CCDC).

The Infection Prevention and Control Nurse (IPCN) will visit the ward area and collect the infected patient's case personal details, details of admission, and a list of all patient hospital contacts. Assessments and actions will depend on the following:
- Proximity of the contacts.
- Length of time exposed e.g. cumulative of 8 hours or more before isolation.
- If other patients exposed to infection are known to be unusually susceptible to infection e.g. HIV positive or immunocompromised due to other pathology.
- Known IV drug users in contact with the index case who do not know their HIV immune status may also need to be considered to be immunocompromised.
- Patients in wards may need to be treated as close contacts, similar to household or family if they share, lounge, dining and activity rooms for prolonged periods and if the index case was coughing.
- If the index case is suspected or confirmed as having MDR TB then more stringent contact tracing will need to be carried out.
- Details of patients who have been discharged from hospital will need to be included if the index case has been an in-patient for some time.
- During the Covid-19 pandemic all patients should be a minimum of 2 metres apart and should all be wearing masks if tolerated at all times.

An incident meeting to discuss the case should be convened with representatives from Public Health England, TB Key Workers, IPC team, Microbiologists, Occupational Health, Respiratory Physician and any other relevant persons or agency. Patients who have been in contact with an infectious TB case will need to be informed and an entry made in their notes by the doctor and the patients’ GP informed. Family contacts will be contacted by the TB Nurse who will arrange for screening.

### 6.14.2. Staff Contacts
- It is the responsibility of the ward/departmental manager to maintain an accurate record of staff (including locum and agency staff) who have had significant exposure to any suspected or confirmed case of pulmonary TB without the correct PPE. Follow the trust Covid-19 PPE policy during the pandemic. This list will be required in the event of contact tracing and should be forwarded to the Occupational Health Department on the advice of the Infection Prevention and Control Team. The relevant form can be located on the Occupational Health intranet site.

The significance and degree of infectious risks to staff should be discussed at the incident meeting which should be attended by an Occupational Health Representative. If a member of staff reports suspicious symptoms, the individual must be referred to the Occupational Health Department as soon as possible. The Occupational Health Practitioner, after taking a full clinical history, will take appropriate action including any necessary investigations.

The decision on the staff member’s fitness for work, or advice on restricted duties, will be a clinical one based on the clinical findings and the areas where he/she works. Should the clinical findings and/or investigation indicate or confirm TB infection then referral to the Lead Clinician for TB will be arranged for follow up and management.

A decision on when the individual is fit to return to work with patients will be made in conjunction with the Lead Clinician for TB. The member of staff’s General Practitioner will be kept informed of the outcome. If the clinical findings and/or investigation indicate or confirm TB. This will be the decision of the OH Consultant Physician

### 6.15. Treatment for Infectious TB Patient Cases
Tuberculosis control is based on early identification of infection and by ensuring that patients comply with treatment. Treatment should be in discussion with the TB/Respiratory Physician and Consultant Microbiologist.
Non adherence should be reported immediately to the clinician in charge of the patient, as drug omissions can quickly lead to the development of resistance with potential high risks of transmission of MDR TB to staff, other patients and visitors. Patients should be aware that non adherence may result in an extension of treatment course. For those patients considered to be at risk of non-adherence with treatment on discharge from hospital, the use of directly observed therapy (DOTS) should be discussed with the clinician and TB key worker at the earliest opportunity.

6.16. Management of non-compliant Patient

Patients who are non-compliant with treatment for infectious TB are likely to fall into one of the following 3 categories:

- Patients who have capacity to consent to treatment (as defined by the Mental health Capacity Act section 3) but who refuse to comply with treatment for whatever reason may need to have compulsory admission and detention to hospital to ensure that they are closely monitored under sections 37 and 38 of the Public Health Act. Compulsory medical examination can also be required under section 35 of that Act. Compulsory treatment is not allowed under the Public Health Act.

- Patients who do not have capacity to consent to treatment as defined by the Mental Capacity Act, Section 3, can usually be treated, if necessary by admission to hospital under the common law doctrine of necessity e.g. that they lack capacity to consent and that it is in their best interests that treatment should be given. Any such treatment must be in conformity with the principles of the Mental Health Capacity Act and take account of the safeguards provided by that Act, such as the need to refer to an independent Mental Capacity Advocate in certain circumstances, or to consult with a Lasting Power of Attorney with health and welfare powers if one has been.

- Patients who refuse treatment for infectious TB due to mental disorder may in some cases be detained under the Mental Health Act 1983 though any such detention must be because the patient meets the criteria for detention under that Act and is being detained either for assessment under Section 3. The Mental Health Act does not provide a power for compulsory treatment of a physical condition. If the patient is incapable of consent to treatment for TB due to their mental disorder treatment can be provided according to above.

- Patients who are thought not to be adhering to treatment may need to have compulsory admission to hospital after discussion with social services with a view to enforcing child protection measures.

6.17. Transfer

If patients need to be transferred to other healthcare facilities the TB Nurse and IPCT must be informed in advance. The receiving unit must be informed of the infectious state of the patient to ensure that suitable isolation facilities are available.

Patients who are due to be discharged home should have their discharge planned with the TB Nurse and Consultant Respiratory Physician/Consultant Respiratory Paediatrician to ensure that appropriate arrangements for monitoring are in place. An assessment of the risk of infection to others will need to be made e.g. if a family member is HIV positive. In this case the patient should not be discharged until:

- He/she has had 2 weeks of treatment.
- Showing clinical improvement e.g. free from fever for a week and/or cough resolved completely.
- Sputum is AAFB smear negative from 3 consecutive specimens over a 14- day period.
### 7.0 MONITORING COMPLIANCE AND EFFECTIVENESS

<table>
<thead>
<tr>
<th>Minimum Requirement to be Monitored</th>
<th>Responsible Individual</th>
<th>Process for Monitoring e.g. Audit</th>
<th>Frequency of Monitoring</th>
<th>Responsible Individual or Committee/Group for Review of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Standard Precautions</td>
<td>IPCT</td>
<td>Audit</td>
<td>Weekly</td>
<td>IPCC</td>
</tr>
<tr>
<td>Hand hygiene compliance</td>
<td>IPCT</td>
<td>Audit</td>
<td>Weekly</td>
<td>IPCC</td>
</tr>
<tr>
<td>Clinical practice and environmental standards</td>
<td>IPCT</td>
<td>Audit</td>
<td>Monthly</td>
<td>IPCC</td>
</tr>
</tbody>
</table>
8.0 TRAINING AND IMPLEMENTATION

There is no specific training requirement in relation to this policy. If required, further assistance can be sought from senior colleagues and/or the Infection Prevention and Control Team.

9.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at Appendix B
- This document has been subject to an Environmental Impact Assessment, see completed form at Appendix C

10.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Evidence Base:
- NICE (2016) *Tuberculosis NG 33*
- Pratt R; Grange, J; Williams V; (2005) *Tuberculosis: A foundation for Nursing and healthcare practice* Hodder Arnold

Related SFHFT Documents:

11.0 KEYWORDS
Infectious Disease, Covid-19, Isolation, Precautions, PPE.

12.0 APPENDICES

*Appendix A* – Occupational Health TB Contact List
*Appendix B* – Equality Impact Assessment Form
*Appendix C* – Environmental Impact Assessment Form
### Appendix A – Occupational Health TB Contact List

#### OCCUPATIONAL HEALTH (OH) TB CONTACT LIST

*To be completed by the Ward/Departmental Manager*

*Form to be returned to Occupational Health Department: sfh-tr.occupational.health@nhs.net*

**WARD/DEPARTMENT:** ……………………………………………………………………………………………

<table>
<thead>
<tr>
<th>Name of patient</th>
<th>………………………………………………………………………………………………………………………</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Diagnosis</td>
<td>……. Date of Admission ........................................</td>
</tr>
<tr>
<td>Date treatment commenced</td>
<td>.........................</td>
</tr>
</tbody>
</table>

**OH follow up will be required for the following staff:**
A list of staff within coughing distance of the patient (about six feet). This will need to be broken down into two groups; ‘close’ contact or ‘casual’ contacts.

**Close contacts:**
Relatively few occupational exposures are defined as close contacts. Close contacts are staff undertaking: mouth-to-mouth resuscitation; prolonged care of a high dependency patient (more than eight hours cumulative); chest physiotherapy; or sputum induction procedures. It is only close contacts who may need additional OH screening, which could be tuberculin skin testing (a Mantoux test), an interferon gamma release assay (IGRA) blood test and/or a chest x-ray.

**Casual contacts:**
Most occupational exposures in health care are casual and will not need additional screening.

**List ALL STAFF who have had close contact**

<table>
<thead>
<tr>
<th>FULL NAME</th>
<th>DATE OF BIRTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
List ALL STAFF who have had casual contact

<table>
<thead>
<tr>
<th>FULL NAME</th>
<th>DATE OF BIRTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: Tuberculosis Policy – Prevention of TB in Hospitals
New or existing service/policy/procedure: Existing
Date of Assessment: 12/02/2021

For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)

<table>
<thead>
<tr>
<th>Protected Characteristic</th>
<th>a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups’ experience? For example, are there any known health inequality or access issues to consider?</th>
<th>b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?</th>
<th>c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race and Ethnicity</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Gender</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Age</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Religion</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Disability</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Sexuality</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Pregnancy and Maternity</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Gender Reassignment</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Marriage and Civil Partnership</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What consultation with protected characteristic groups including patient groups have you carried out?</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What data or information did you use in support of this EqIA?</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Level of Impact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of Responsible Person undertaking this assessment:</td>
<td>Francesca Green</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature:</td>
<td>FCGreen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td>12/02/2021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C – ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of an environmental impact assessment is to identify the environmental impact, assess the significance of the consequences and, if required, reduce and mitigate the effect by either, a) amend the policy b) implement mitigating actions.

<table>
<thead>
<tr>
<th>Area of impact</th>
<th>Environmental Risk/Impacts to consider</th>
<th>Yes/No</th>
<th>Action Taken (where necessary)</th>
</tr>
</thead>
</table>
| Waste and materials | • Is the policy encouraging using more materials/supplies?   
   • Is the policy likely to increase the waste produced?  
   • Does the policy fail to utilise opportunities for introduction/replacement of materials that can be recycled? | Yes | Trust Waste Management Policy |
| Soil/Land | • Is the policy likely to promote the use of substances dangerous to the land if released? (e.g. lubricants, liquid chemicals)  
   • Does the policy fail to consider the need to provide adequate containment for these substances? (For example bunded containers, etc.) | No |  |
| Water | • Is the policy likely to result in an increase of water usage? (estimate quantities)  
   • Is the policy likely to result in water being polluted? (e.g. dangerous chemicals being introduced in the water)  
   • Does the policy fail to include a mitigating procedure? (e.g. modify procedure to prevent water from being polluted; polluted water containment for adequate disposal) | No |  |
| Air | • Is the policy likely to result in the introduction of procedures and equipment with resulting emissions to air? (For example use of a furnaces; combustion of fuels, emission or particles to the atmosphere, etc.)  
   • Does the policy fail to include a procedure to mitigate the effects?  
   • Does the policy fail to require compliance with the limits of emission imposed by the relevant regulations? | No |  |
| Energy | • Does the policy result in an increase in energy consumption levels in the Trust? (estimate quantities) | No |  |
| Nuisances | • Would the policy result in the creation of nuisances such as noise or odour (for staff, patients, visitors, neighbours and other relevant stakeholders)? | No |  |