

Document Details		
Title		Infection Prevention and Control Management of Pulmonary Tuberculosis Policy
Trust Ref No		762-86939
Local Ref (optional)		
Main points the document covers		This policy provides guidance on the management of patients with pulmonary tuberculosis
Who is the document aimed at?		Clinical Staff
Author		Deputy Director of Nursing, Quality and Infection Prevention and Control
Approval process		
Who has been consulted in the development of this policy?		This policy has been developed by the IPC team in consultation with appropriate senior Operations and Quality managers, Specialist Nurses, Medicine Management, Prison Healthcare and Public Health England
Approved by (Committee/Director)		IPC Committee – notified to Quality and Safety Committee
Approval Date		22 January 2024
Initial Equality Impact Screening		Yes
Full Equality Impact Assessment		N/A
Lead Director		Director of Nursing, Clinical Performance, Workforce and IPC
Category		Clinical
Sub Category		Infection Prevention and Control
Review date		January 2027
Distribution		
Who the policy will be distributed to		IPC Committee members and IPC Operational Group members
Method		Electronically to IPC Operational Group members and available to all staff via the Trust website
Document Links		
Required by CQC		Yes
Key Words		Tuberculosis. TB. BCG. Prison. MDR-TB. Isolation
Amendments History		
No	Date	Amendment
1	February 2020	Updated following change of guidance and inclusion of policy on a page.
2	December 2023	Reviewed and shortened

Contents

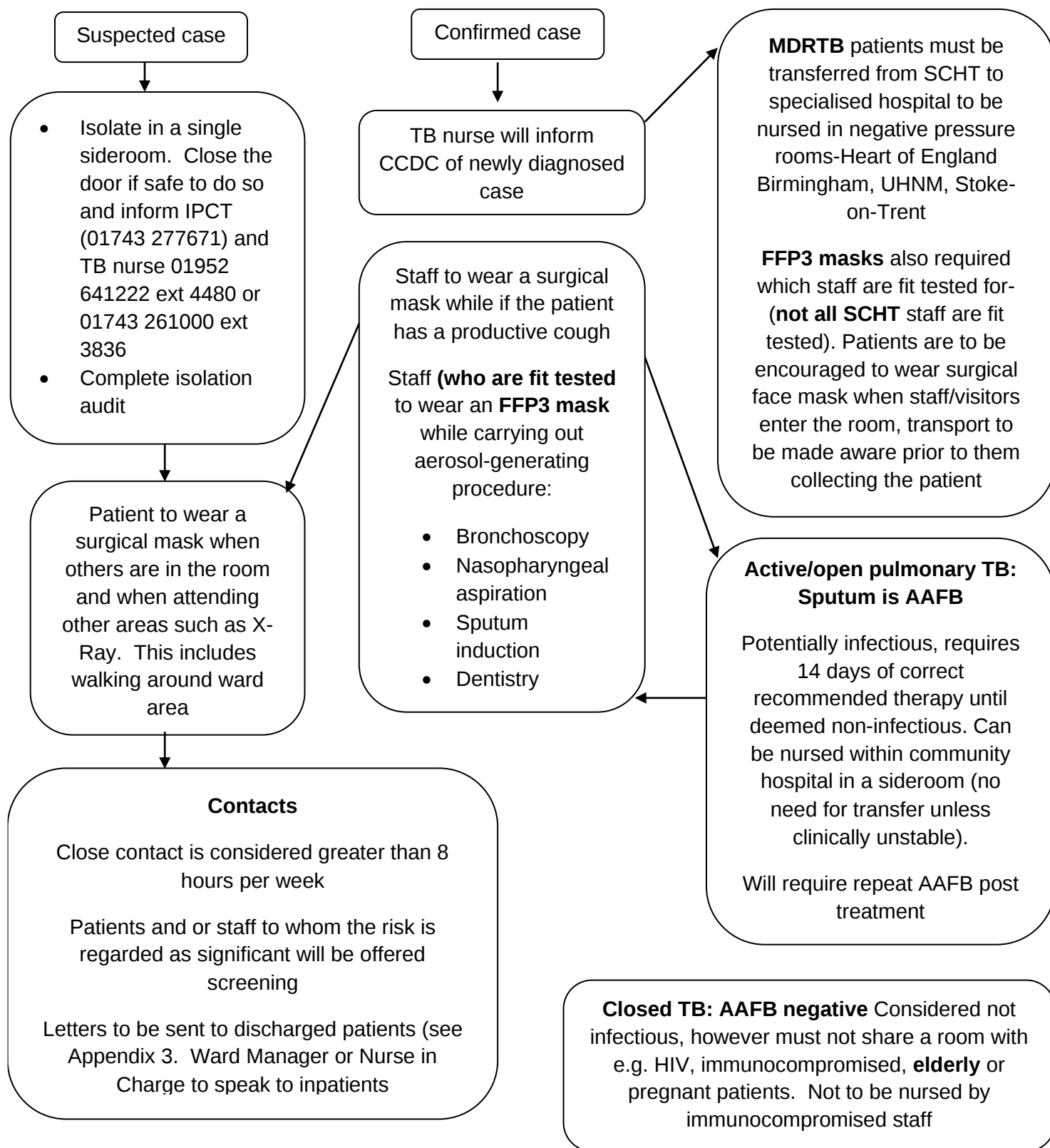
	Policy on a Page	1
1	Introduction.....	2
2	Purpose	2
3	Definitions	2
4	Duties	3
4.1	Responsibility for Infection Prevention and Control (IPC) outside the immediate scope of this policy.....	3
5	How the Disease Spreads	3
6	Acquisition of TB.....	3
7	Symptoms of TB	4
8	Diagnosis	4
9	Microbiological Samples.....	4
10	Active/Open and Closed TB.....	4
11	Non-Pulmonary TB	5
12	Multi-Drug Resistant TB (MDR-TB).....	5
13	Bacillus Calmette-Guerin (BCG) Vaccination	5
14	Outbreaks.....	5
15	Contact Tracing	6
15.1	Contact Tracing: Cases in Community Hospital In-patients.....	6
15.2	Contact Tracing: Cases in Community.....	6
15.3	Contact Tracing of Staff in Community Hospitals and Community Teams.....	6
16	Transfer of Patients to a Community Hospital	7
17	Treatment	7
18	Hand Hygiene.....	7
19	Cough Etiquette.....	7
20	Duration of Precautions	7
21	Care of Patients in Inpatient Areas with Open/active Pulmonary TB.....	7
21.1	Airborne Isolation Precautions	7
21.2	Personal Protective Equipment (PPE)	8
21.3	Patient Masks	8
21.4	Aerosol-generating Procedures	8
21.5	Crockery and Utensils.....	8
21.6	Linen	8
21.7	Environmental and Equipment Decontamination	8
21.8	Waste	9
21.9	Visitors.....	9
22	Care of Patients in their Own Home	9
22.1	Waste	9
22.2	Linen	9

22.3	Equipment Decontamination.....	9
23	Care of Patients in Prisons	9
23.1	Transfer of Patients/Prisoners with TB.....	10
23.2	TB Outbreaks in prison	10
24	Other Sources of Advice:.....	10
25	Consultation.....	10
25.1	Approval Process	11
26	Dissemination and Implementation.....	11
26.1	Advice.....	11
26.2	Training	11
27	Monitoring Compliance.....	11
28	References	12
29	Associated Documents	12
	Appendix 1 – List of useful contacts	13
	Appendix 2 – Risk assessment and infection control for drug-resistant TB	14
	Appendix 3 – Proforma In-patient letter.....	15
	Appendix 4 – Proforma Letter to Staff	16

Policy on a page

TB within a Community Hospital

This is only to be used as a summary. See full policy for detailed advice



All healthcare professionals will have vaccination status verified at the start of employment to SCHT

TB in organs other than the lungs or latent TB is rarely infectious to others

1 Introduction

Human tuberculosis (TB) is caused by infection with bacteria of the *Mycobacterium tuberculosis* complex (*M. Tuberculosis*, *M. bovis* or *M. africanum*) and may affect almost any part of the body. The most common form of TB is pulmonary TB which accounts for almost 60% of all TB cases in the UK.

2 Purpose

The purpose of the policy is to provide infection prevention and control advice on the management of tuberculosis within the healthcare setting. The principles contained within this policy reflect best practice and should be adopted by all staff working in a clinical environment. This policy applies to all services directly provided by Shropshire Community Health Trust (SCHT) and all clinical staff should familiarise themselves with the contents of this policy.

3 Definitions

Term / Abbreviation	Explanation / Definition
AAFB	Acid Alcohol Fast Bacilli
BCG	Bacillus Calmette-Guerin
CCDC	Consultant in Communicable Disease Control
CCR	Clinical Case Review
Closed Pulmonary TB	AAFB are not seen in the sputum
DOT	Direct Observational Therapy
FFP3	Filtering Face Piece
HIV	Human Immunodeficiency Virus
IPC	Infection Prevention and Control
Latent TB	The immune system builds a defensive barrier round the infection; however the TB bacteria are not destroyed and remain dormant.
Mantoux Test	A tuberculin skin test used prior to BCG immunisation
MDR-TB	Multi-Drug Resistant Tuberculosis
NICE	National Institute for Health and Clinical Excellence
Open/ Active Pulmonary TB	The sputum specimen contains the acid alcohol-fast bacilli (AAFB).
PAS	Publicly Available Specification
PIR	Post Infection Review
PPE	Personal Protective Equipment
RCA	Root Cause Analysis
SaTH	Shrewsbury and Telford Hospitals
SCHT	Shropshire Community Health Trust
TB	Tuberculosis
Trust	Shropshire Community Health Trust
UKHSA	UK Health Security Agency

4 Duties

4.1 Responsibility for Infection Prevention and Control (IPC) outside the immediate scope of this policy

For duties and responsibilities for IPC practices outside the specific scope of this policy, please refer to the IPC Arrangements and Responsibilities Policy on the Staff Zone [SCHI Staff Zone \(shropcom.nhs.uk\)](https://shropcom.nhs.uk).

5 How the Disease Spreads

TB is caused by bacteria from the *Mycobacterium tuberculosis* complex. Infection can be spread when bacteria from an individual with pulmonary TB are released into the air through coughing, and then inhaled by others. Primary infection can occur at any age. The disease is a slowly progressive chronic infection, the lungs being the most common site (pulmonary TB), but lymph nodes, kidneys, spine and other joints, meninges and other internal organs may be infected (non-pulmonary TB). Some other mycobacteria particularly *M. avium*, *M. intracellulare* and *M. malmoense* cause infection in nodes and the lung and can also disseminate to other organs but these are environmental organisms that do not appear to spread between humans directly. Following the initial infection, the bacterium may be destroyed by the immune system or may lie dormant in the body, causing no symptoms, which is known as latent TB. It does not cause illness and is not infectious; however, it can reactivate into active infection at a later date. Therefore, TB may develop between two months to several years after the initial contact and it is possible that immuno-compromised patients could experience reactivated TB. If untreated the disease prognosis includes chronic weakening of the lungs, damage to other organs and is potentially fatal.

Whilst the initial site of TB infection is almost always in the lungs, bacteria can spread through the bloodstream and lymphatic system to affect any part of the body. Apart from the lungs, the most common sites for TB infection are:

- Lymph glands in the neck and elsewhere
- Bones (especially the spine)
- Abdomen
- Kidneys
- Brain (known as TB meningitis)
- The initial infection may:
 - Be eliminated
 - Remain latent – where the individual has no symptoms but the TB bacteria remain in the body
 - Progress to active TB over the following weeks or months.

TB can be particularly infectious for immuno-suppressed patients and those with blood diseases. Not all forms of tuberculosis are infectious. Those with TB in organs other than the lungs and those with latent tuberculosis are rarely infectious to others.

6 Acquisition of TB

Anyone can acquire TB but those at particular risk include:

- Close contacts of infectious cases

Those who have lived in, travelled to or received visitors from areas where TB is still common e.g. Bangladesh, China, DR of Congo, India, Indonesia, Nigeria, Pakistan and the Philippines

- Those who live in ethnic minority communities originating from places where TB is common.

- Those with immune systems weakened by Human Immunodeficiency Virus (HIV) infection or other medical problems.
- The very young and the elderly, whose immune systems are less robust.
- Those with chronic poor health and nutrition because of lifestyle problems such as homelessness, drug abuse or alcoholism
- Those living in poor or crowded housing conditions, including those living in hostels and prison.

7 Symptoms of TB

TB can affect many sites in the body. There can be a wide range of symptoms, some of which are not specific to TB and can mimic a number of other illnesses which may delay diagnosis. In the early stages the patient may be asymptomatic but symptoms soon develop and may be systemic or respiratory. Any patient with a cough productive of blood or sputum, which has not responded to antibiotic treatment after 3 weeks, requires further investigation.

Symptoms suggestive of pulmonary TB include the following:

- Persistent cough – initially dry and non-productive but may become productive
- The sputum may be blood-streaked
- Haemoptysis (coughing blood) occurs in a small minority of patients
- Night sweats
- Fever – especially late in the afternoon or evening
- Weight loss of over 3kgs over a 6 week period or less
- Malaise
- Chest pain or chest tightness – uncommon and often non-specific
- Shortness of breath – usually only occurs in later stages

8 Diagnosis

The diagnosis of tuberculosis is often made clinically based on the patient's signs and symptoms, and chest x-ray appearance. However, laboratory confirmation of the diagnosis is essential.

9 Microbiological Samples

Three deep cough sputum samples (ideally 5ml or greater) from the lower respiratory tract should be collected at intervals of 8–24 hours, including at least one early morning sample, and be sent for TB microscopy and culture for suspected respiratory TB. The request form should specify that TB is suspected. Samples should preferably be collected before treatment starts or failing that, within 7 days of starting treatment.

10 Active/Open and Closed TB

The diagnosis of TB is often made clinically on the patient's signs and symptoms and appearance on chest x-ray but laboratory confirmation of the diagnosis is essential. Patients are said to have 'active or open' pulmonary TB disease if, on laboratory testing, their sputum is found to contain the characteristic acid alcohol-fast bacilli (AAFB). This means that the patient is potentially infectious to others until they have undergone 14 days of anti-tuberculosis therapy after which they are considered to be non-infectious. Sputum may be tested again for AAFB after a few weeks of treatment to make sure they are no longer smear positive.

Patients with open/active pulmonary TB if requiring hospital inpatient treatment should be transferred to the acute hospital. Whilst awaiting transfer they must be cared for in a

sideroom, with airborne respiratory precautions and with the door closed. Ward staff or the clinical team must inform the IPC Team when a patient with suspected TB is identified. No aerosol generating procedures should be undertaken whilst in the community hospital.

Patients with 'closed' pulmonary TB (when AAFB are not seen in the sputum) are considered non-infectious when admitted to a ward.

Consideration should be given to moving staff who are immunocompromised to a different working area e.g. not having direct contact with the TB patient. Individual advice should be sought from the TB Nurse Specialist, or Occupational Health.

Patients with TB who are themselves immuno-compromised are likely to produce abnormally high numbers of tubercle bacillus and be especially infectious.

11 Non-Pulmonary TB

Those with TB in organs other than the lungs or with latent TB are rarely infectious to others.

12 Multi-Drug Resistant TB (MDR-TB)

Some TB bacteria become resistant to antibiotics through natural mutations and resistance can develop to more than one drug. Therefore, antibiotics are given in combination and must be taken correctly. Multi-drug Resistant TB (MDR-TB) is defined as high-level resistance to the drugs isoniazid and rifampicin, with or without additional drug resistance. Patients with MDR-TB remain infectious for longer, have a higher death rate and a lower cure rate. They require individual, complex regimens with reserve drugs which are more toxic and more expensive.

The risk assessment will be carried out by the specialist Tb team.

13 Bacillus Calmette-Guerin (BCG) Vaccination

In the past BCG vaccination was offered universally to all adolescents around the age of 11 or 12. This programme was discontinued in 2005. The BCG immunisation programme is now a risk-based programme, the key part being a neonatal programme targeted at protecting those children most at risk of exposure to TB.

It is recommended that all healthcare workers who have contact with patients or clinical specimens are vaccinated. This is a routine service offered by the Occupational Health Department. All healthcare workers employed by SHT will have had their vaccination status verified prior to starting work. All healthcare workers who do not have adequate evidence of BCG vaccination or its characteristic scar and are Mantoux test negative will be offered vaccination.

If the skin test is positive without having received BCG vaccination, further investigation and referral to the TB service is required.

14 Outbreaks

Outbreaks of TB may occur within in-patient areas especially amongst immuno-compromised patients, prisoners or children. There is potential risk of an outbreak if a member of staff contracts TB from a patient or is a source of the infection. Contacts and cases in the community mean that the Consultant in Communicable Disease Control, Chest Physicians and TB Nurse Specialists are of pivotal importance in such outbreaks.

All patients are assessed by the TB nurse specialist, using the appropriate nursing assessment forms, which the TB Nurse Specialists retain.

Contacts in the community with tuberculosis are not uncommon and the Consultant in Communicable Disease Control (CCDC) must be notified of newly diagnosed cases of clinical tuberculosis at any site by telephone (0844 225 3560 option 2). This is undertaken by the TB Nurse Specialists, who can be contacted on 01952 641222 ext. 4480 or 01743 261000 ext. 3836 or email any queries to sath.tbsservice@nhs.net.

Refer to the contact list in Appendix 1.

15 Contact Tracing

Contact tracing will be initiated by IPC Team, SaTH TB Nurse Specialists, Consultant Microbiologists, Public Health England and Occupational Health Department as soon as the diagnosis is made or the SCHAT is informed.

A meeting will be set up which must include:

- IPC Team
- SaTH TB Nurse Specialists
- Consultant Microbiologists
- UK HSA
- Occupational Health Department
- Communications Team
- Ward Manager/ Healthcare Facility Manager

Contacts may be screened with a chest x-ray, skin test (Mantoux test) or blood tests.

Those with close contact with the patient for greater than 8 hours per week may be at risk. Contact tracing starts with those with closest contact, family and household contacts. This will be carried out by the chest department nearest to where the contacts live, having been informed by the TB Nurse Specialist. Wider contact tracing may be required if there are positive findings in the initial contact group, in cases of MDR-TB or if an outbreak is suspected.

15.1 Contact Tracing: Cases in Community Hospital In-patients

Following diagnosis of TB in a hospital in-patient, a risk assessment should be undertaken by the IPC Team and TB specialist nurse who should consider:

- The degree of infectivity of the index case
- The length of time before the infectious patient was isolated
- Whether other patients are unusually susceptible to infection
- The proximity of contact.

Contact tracing and testing should be carried out only for patients and/or staff for whom the risk is regarded as significant.

In-Patients on the ward will be spoken to by the ward manager or person in charge.

Patients who have been discharged into the community or other healthcare facility will be written to with copies sent to their GP and the healthcare facility contacted.

Please see Appendix 3 and 4 for proforma sample letters

15.2 Contact Tracing: Cases in Community

Contact tracing and testing should be carried out only for patients and/or staff for whom the risk is regarded as significant.

Patients who have been discharged into the community or other healthcare facility will be written to with copies sent to their GP and the healthcare facility contacted.

15.3 Contact Tracing of Staff in Community Hospitals and Community Teams

Contact tracing and testing should be carried out only for staff for whom the risk is regarded as significant.

Staff will be written to by the SaTH TB Nurses advising any action that needs to be taken.

Occupational Health Staff and IPC Team will visit the ward to provide advice and support for staff and to deliver letters.

16 Transfer of Patients to a Community Hospital

Any patient transferred who is suspected of having TB must be isolated in a side room until it has been confirmed on review of the medication chart that the patient has received 14 days continuous medication and their degree of infectivity established.

17 Treatment

TB is completely curable if the correct drugs are taken for the correct length of time; several antibiotics in combination need to be taken over a number of months to prevent resistance developing. The great majority of TB bacteria are sensitive to the antibiotics used (rifampicin, isoniazid, pyrazinamide and ethambutol). A minority of patients have multi drug resistant TB (MDR-TB), being resistant to one of these antibiotics and making it more difficult to treat. TB bacteria grow very slowly and divide only occasionally, so treatment usually has to be continued for six months to ensure all active and dormant bacteria are destroyed. In a small number of people the disease can return (relapse) if all the TB bacteria have not been destroyed, despite treatment. This is more likely if the course of treatment has been interrupted, not completed or otherwise not followed. It is also possible to be re-infected with TB.

All patients undergo an enhanced case management assessment. Non-compliance with treatment e.g. taking the treatment intermittently or not completing a full course of treatment, contributes to the development of antibiotic resistance. All healthcare staff should encourage compliance with treatment and treatment should be supervised if necessary by Direct Observational Therapy (DOT).

18 Hand Hygiene

Staff must wash their hands after patient contact, after removing masks (if used), gloves and aprons before leaving the room. Refer to SCHAT's Standard Infection Control Precautions: Hand Hygiene and Personal Protective Equipment Policy.

19 Cough Etiquette

To prevent the spread of respiratory illnesses it is essential that staff, patients and visitors adhere to the good cough etiquette of 'Catch it, Bin it, Kill it', which involves the following:

- Always carry tissues
- Use clean tissues to cover your mouth and nose when you cough and sneeze
- Bin tissues after one use
- Wash your hands with soap and water or apply an alcohol based gel

20 Duration of Precautions

These precautions may be discontinued after 14 days of continuous documented anti-TB treatment, unless a resistant strain is suspected i.e. no response to treatment or after discussion with the Chest Physician or the IPC team.

21 Care of Patients in Inpatient Areas with Open/active Pulmonary TB

The following precautions should be implemented when a patient is known or suspected to have open/active pulmonary TB.

21.1 Airborne Isolation Precautions

Airborne isolation precautions in a single room with the door kept closed must be commenced whilst investigations or transfer elsewhere is completed. If the patient requires inpatient care for TB, the patient should be transferred to the acute hospital. If 3 consecutive sputum specimens are negative, the patient is usually deemed to pose a significantly lower infection risk. They may then be moved from the single room to an open bay, provided there are no HIV-positive or other patients with major immunosuppression on the same ward.

Sputum smear-positive TB patients without risk factors for MDR-TB should be cared for in single room source isolation until they have completed two weeks of the standard treatment regimen or they are discharged from hospital.

21.2 Personal Protective Equipment (PPE)

Whilst the patient is nursed in isolation, staff and visitors do not need to wear masks unless MDR-TB is suspected or aerosol-generating procedures are performed; in such cases an FFP3 mask should be worn during contact whilst the patient is considered infectious. However:

- Disposable plastic aprons must be worn for close patient contact and discarded into an orange bag before leaving the room
- Gloves should be worn for handling specimens, sputum, and body fluids
- Thorough hand decontamination must be performed

Aerosol generating procedures should not be carried out in a community hospital. If these are required, the patient should be transferred to an appropriate setting.

21.3 Patient Masks

In-patients with smear-positive respiratory TB should be asked (with explanation) to wear a surgical mask if the patient has a frequent, productive cough (and if not clinically contraindicated) whenever they leave their room to attend appointments until they have completed two weeks' drug treatment.

If the patient has a frequent productive cough, and if not clinically contraindicated, it is sensible to ask the patient to wear a conventional surgical mask when other people are in the room or when the patient is to go to another department (e.g. radiology) or ward. The patient may leave the room for short periods if willing to wear a mask and keep away from other patients. Explain to the patient why this is necessary.

If the patient is from a prison with guards constantly present, then the guards are required to wear a FFP3 mask. If the patient is smear positive, correct fitting of the mask by a trained person is necessary. This should be arranged by the prison service prior to admission if TB is suspected.

21.4 Aerosol-generating Procedures

Aerosol-generating procedures such as bronchoscopy, nasopharyngeal aspiration, sputum induction and procedures undertaken in dentistry should be performed in an appropriately engineered and ventilated area for:

- All patients in whom TB is considered a possible diagnosis, in any setting
- All patients on an HIV ward (if applicable) regardless of whether a diagnosis of TB has been considered

21.5 Crockery and Utensils

Spread of pulmonary TB is by droplets from person to person. Therefore, there is no need for disposable crockery or utensils. The use of disposables can reinforce ignorance and illogical rituals. Body fluid spills on to trays and other items in the room should be dealt with as for spillages in any other situation.

21.6 Linen

Infected linen should be placed in a red alginate bag in a clear laundry bag.

21.7 Environmental and Equipment Decontamination

Ensure the isolation room, bed space and patient care equipment is cleaned with chlorine dioxide (Tristel) daily and when soiled. The isolation room and ward environment should not be cluttered as this inhibits effective cleaning.

Terminal cleaning of a bed space bay or ward area after the discharge, transfer or death of a patient should be thorough, using the SCHAT Bed Space and Terminal Cleaning Tool. This can be downloaded from the IPC page of the SCHAT staff website – <https://staffzone.shropcom.nhs.uk/smii/s00cont.asp?shid=61>. Curtains around the bedside must be changed. Terminal cleaning of mattresses should be carried out according to manufacturer's instructions.

21.8 Waste

Disposal of urine and faeces do not require special precautions and should be dealt with in the usual way. All clinical waste should be disposed of in orange infectious waste bags.

21.9 Visitors

Visitors should be discouraged from sitting on beds and they only need to wear an apron, gloves and a surgical mask (if the patient is coughing) if performing, or helping to perform, personal care. They must make sure their hands are washed with soap and water on arrival to and departure from the ward, before assisting and following any personal and nutritional care. Visitors with TB symptoms should not enter the healthcare facility and if they do, be asked to return home.

22 Care of Patients in their Own Home

TB is only spread through prolonged contact with an infectious patient i.e. someone in close contact for more than 8 hours cumulatively, so most staff who have attended the patient with TB are not at particular risk. However the same standard precautions apply as above, with the exception of the following:

22.1 Waste

To be double bagged and disposed of in the domestic waste stream in the patient's home.

22.2 Linen

To be washed in the patient's own washing machine following manufacturer's washing instructions.

22.3 Equipment Decontamination

To be decontaminated using a liquid detergent solution or detergent wipes.

23 Care of Patients in Prisons

The same standard precautions apply. In addition, healthcare workers providing care for prisoners should be aware of the signs and symptoms of active TB and awareness of these signs and symptoms should be promoted amongst prisoners and prison staff.

Prisoners should be screened for TB by:

- A health questionnaire on each entry to the prison system
- Those with signs and symptoms of active TB should have a chest X-ray, and three sputum samples taken in 24 hours for TB microscopy, including a morning sputum sample

All prisoners receiving treatment for active or latent TB should receive DOT. Any investigations required should be undertaken within the prison where possible.

The prisoner should be isolated in an adequately ventilated cell or room and retained on Medical Hold until:

- Is smear negative and chest x-ray not suggestive of active TB or,
- Has had a negative risk assessment for MDR-TB and has received treatment for two weeks

Prison service staff and others who have regular contact with prisoners e.g. probation officers, education staff and social workers should have pre- and on-employment screening at the same level as for healthcare workers with patient contact.

23.1 Transfer of Patients/Prisoners with TB

Staff who are immunocompromised or have HIV infection are at greater risk of any infection and should not care for patients with infectious TB. Escorts are unlikely to be in close contact with the patient for longer than 8 hours continuously and therefore should not be at risk. However, whilst in a vehicle they are in an enclosed environment and the following precautions are advised:

- Leave vehicle windows open for good ventilation
- Sit alongside the patient rather than facing them
- A surgical face mask should be worn by the patient (or staff if the patient refuses) if they are coughing, suspected of being infectious or within 2 weeks of commencing treatment for confirmed TB. (Surgical face masks should be worn for the length of time specified by the manufacturer).
- If the patient is confirmed or suspected of having MDR-TB, FFP3 masks should be worn by the escort staff
- Only escorts who have had a BCG vaccination or established TB immunity should attend

Staff must inform the receiving department of the infectious state of the patient in advance, to prevent exposure to susceptible patients and to ensure that suitable isolation facilities are available. Ambulance staff must be made aware prior to patient transfer that the infectious patient should not share a vehicle with other patients.

Where possible, any prisoner with symptoms suggestive of TB or who has started treatment for TB less than 2 weeks should not be transferred to another prison until investigations are completed. If a patient is moved before they have completed 2 weeks of treatment the receiving prison must be advised that the prisoner is still infectious.

However, there may be circumstances when the prisoner must be transferred from an establishment regardless of diagnosis, as decided by the Prison Governor.

23.2 TB Outbreaks in prison

In the event of an outbreak in a prison this policy will be used in conjunction with the prison contingency plan policy.

24 Other Sources of Advice:

- Consultant Chest Physician
- Consultant in Communicable Disease Control (CCDC)
- Consultant Microbiologist/Infection Control
- Director of Public Health
- Infection Prevention and Control Team (IPCT)
- UKHSA
- TB Nurse Specialist

Note. Please refer to appendix 1 for list of contact numbers

25 Consultation

This policy has been developed by the IPC team in consultation with appropriate clinical services managers, advisors/specialists (e.g., Medical Advisor, Specialist Nurses, Medicine Management), PHE and IPC Operational Group members.

A total of three weeks consultation period was allowed and comments incorporated as appropriate.

25.1 Approval Process

The IPC Committee members will approve this policy and its approval will be notified to the Quality and Safety Committee.

26 Dissemination and Implementation

This policy will be disseminated by the following methods:

- Managers informed via Datix who then confirm they have disseminated to staff as appropriate
- Staff – via Team Brief and Inform
- Awareness raising by the IPC team
- Published to the Staff Zone of the Trust website

The web version of this policy is the only version that is maintained. Any printed copies should therefore be viewed as 'uncontrolled' and as such, may not necessarily contain the latest updates and amendments. When superseded by another version, it will be archived for evidence in the electronic document library.

26.1 Advice

Individual Services' IPC Link staff act as a resource, role model and are a link between the IPC team and their own clinical area and should be contacted in the first instance if appropriate.

Further advice is readily available from the IPC team or the Consultant Microbiologist.

26.2 Training

Managers and service leads must ensure that all staff are familiar with this policy through IPC induction and update undertaken in their area of practice.

In accordance with the Trust's mandatory training policy and procedure the IPC team will support/deliver training associated with this policy. IPC training detailed in the core mandatory training programme includes Standard Infection Control Precautions and details regarding key IPC policies. Other staff may require additional role specific essential IPC training, as identified between staff, their managers and / or the IPC team as appropriate. The systems for planning, advertising and ensuring staff undertake training are detailed in the Mandatory Training Policy and procedure. Staff who fail to undertake training will be followed up according to the policy.

Further training needs may be identified through other management routes, including Clinical Case Review (CCR), Root Cause Analysis (RCA) and Post Infection review (PIR), following an incident/infection outbreak or following audit findings. Additional ad hoc targeted training sessions may be provided by the IPC team.

27 Monitoring Compliance

Compliance with this policy will be monitored as follows:

- Hand hygiene will be audited in accordance with the Hand Hygiene Policy and via peer Hand Washing Assessments
- Cleaning standards within Community Hospitals will be monitored in accordance with the Publicly Available Specification (PAS) 5748 framework
- Environmental and patient equipment cleaning will be monitored as part of local routine cleanliness audits
- Audited locally using the audits undertaken by the IPC team and by staff as self- audits as part of the IPC audit programme

- Additional periodic auditing and self-audits by clinical teams
- The IPC Operational Group will monitor compliance of the cleanliness audit scores and the IPC team audit programme

Numbers of staff undertaking IPC training, which includes Standard Infection Control Precautions, will be monitored by the Organisational Development and Workforce Department

As appropriate the IPC team will support Services' Leads to undertake IPC CCRs/RCAs/PIRs. Managers and Services' Leads will monitor subsequent service improvement plans and report to the IPC Operational Group.

Knowledge gained from CCR/RCA/PIR and IPC audits will be shared with relevant staff groups using a variety of methods such as reports, posters, group sessions and individual feedback.

The IPC team will monitor IPC related incidents reported on the Trust incident reporting system and, liaising with the Head of Governance and Risk, advise on appropriate remedial actions to be taken.

28 References

Centres for Disease Control (1990) Guidelines for preventing the transmission of tuberculosis in health-care settings, with special focus on HIV-related issues. Morbidity and Mortality Weekly Report 39 (RR-17): 1-29.

Department of Health (2007). Tuberculosis prevention and treatment: a toolkit for planning, commissioning and delivering high-quality services in England. Department of Health, London.

Department of Health (2010). The Health and Social Care Act 2008 Code of Practice for the NHS on the Prevention and Control of Healthcare Associated Infections and related guidance.

National Institute for Health and Clinical Excellence (2011). Tuberculosis: Clinical diagnosis and management of tuberculosis, and measures for its prevention and control, (updated 2016). NICE, London.

National Institute for Health and Clinical Excellence (2016) Tuberculosis Guideline NG33. Available at: [nice.org.uk/guidance/ng33](https://www.nice.org.uk/guidance/ng33)

Public Health England (2013) Tuberculosis in the UK report. PHE, London.

Public Health England (2013) Tuberculosis: The Green Book, Chapter 32. PHE, London <https://www.gov.uk/government/publications/tuberculosis-the-green-book-chapter-32>

Public Health England (2013) Management of Tuberculosis in Prisons: Guidance for prison healthcare teams. PHE, London.

Department of Health 2004.

29 Associated Documents

This policy should be read in conjunction with the Trust's:

- Bed Space and Terminal Cleaning Tool
- Cleaning and Disinfection Policy
- Isolation Checklist
- Isolation Policy
- Linen and Laundry Policy
- Outbreak Management Policy
- Standard Infection Control Precautions: Hand Hygiene and Personal Protective Equipment Policy

Appendix 1 – List of useful contacts

- Consultant in Communicable Disease Control (CCDC) – (0844 225 3560 option 2)
- Infection Prevention and Control Team (in hours) – 01743 730510
- Consultant Microbiologist - Royal Shrewsbury Hospital via switchboard (including out of hours) – 01743 261000
- Occupational Health Department (SCHAT staff) – 01743 283280
- TB Nurse Specialist – Princess Royal Hospital 01952 641222 ext. 4480
– Royal Shrewsbury Hospital 01743 261000 ext. 3836
- UKHSA

Appendix 2 – Risk assessment and infection control for drug-resistant TB

For more details, see NICE guideline, <https://www.nice.org.uk/guidance/ng33>

Countries which have high rates of TB – known as high-risk countries

WHO defines the thirty highest TB burden countries as:

The twenty countries with the highest absolute burden of disease (estimated number of new TB cases per year):

- Bangladesh,
- Brazil
- China
- Democratic People's Republic of Korea
- Democratic Republic of Congo
- Ethiopia
- India
- Indonesia
- Kenya
- Mozambique
- Myanmar
- Nigeria
- Pakistan
- Papua New Guinea
- Philippines
- Russian Federation, South Africa
- Thailand
- The United Republic of Tanzania
- Vietnam

The ten countries with the highest incidence rates (estimated number of new TB cases /100,000), and at least 10,000 estimated new TB cases per year:

- Angola
- Cambodia
- Central African Republic
- Congo
- Lesotho
- Liberia
- Namibia
- Sierra Leone
- Zambia
- Zimbabwe

Name and address of hospital

Mr/Mrs Inpatient
Address

Date

Dear Mr/Mrs

We are sorry to inform you that unfortunately you may have been in contact with a person with tuberculosis (TB) during your recent stay at Community Hospital in MONTH/YEAR.

The chances of you having picked up the infection are extremely low. **Prolonged close contact** is usually necessary for the infection to be passed on.

Whenever we have a case of tuberculosis we routinely trace those people who have been in contact with the case in accordance with national guidelines. We screen a large number of contacts of TB cases and very seldom pick up any other cases outside the immediate family of the first case.

At this time we feel it is not necessary to offer you screening for TB as the risk is minimal. What we do is inform and advise you of the signs and symptoms of TB, and if you feel you need to be seen, or would like more information, then please telephone us on **01952 641222 ext 4480**.

The combination of signs and symptoms to look out for are:

- A persistent cough for more than a month, sometimes you may cough up blood.
- Fever
- Night Sweats
- Unexplained weight loss
- Feeling generally unwell
- Swollen glands

For your reassurance, it is important to note that TB is very rare in Shropshire. It is also curable. TB has a long incubation period and symptoms may present many months or even years after exposure.

If you have any queries regarding this letter, you can either take the letter and discuss it with your own family doctor, or contact us on the above number.

Yours sincerely

Tim Wilde
TB Clinical Nurse Specialist

Appendix 4 – Proforma Letter to Staff

Name and address of hospital

Date

Dear Colleague

We are sorry to inform you that unfortunately you may have been in contact with a person with tuberculosis (TB) whilst on duty at Community Hospital; the chances of you having picked up the infection are extremely low. **Prolonged close contact** is usually necessary for the infection to be passed on.

Whenever we have a case of tuberculosis we routinely trace those people who have been in contact with the case in accordance with national guidelines. We screen a large number of contacts of TB cases and very seldom pick up any other cases outside the immediate family of the first case.

At this time we feel it is not necessary to offer you screening for TB as the risk is minimal. What we do is inform and advise you of the signs and symptoms of TB, and if you feel you need to be seen due to an existing medical condition you have been diagnosed with i.e. Diabetes, renal disease or are immunocompromised or would like more information, then please telephone us on **01952 641222 ext 4480/01743 261000 ext 3836**.

The combination of signs and symptoms to look out for are:

- A persistent cough for more than a month, sometimes you may cough up blood.
- Fever
- Night Sweats
- Unexplained weight loss
- Feeling generally unwell
- Swollen glands

For your reassurance, it is important to note that TB is very rare in Shropshire. It is also curable. TB has a long incubation period and symptoms may present many months or even years after exposure.

If you have any queries regarding this letter, you can either take the letter and discuss it with your own family doctor, or contact us on the above number.

Yours sincerely

Tim Wilde
TB Clinical Nurse Specialist