

STANDARD OPERATING PROCEDURE

Subject	Policy / Procedure Information Care and Management of a Patient with Tuberculosis (SOP 012) (This SOP is subject to periodic review and will be amended according to service development needs)
Applicable to	This policy applies to all staff, volunteers and contractors who work for or provide care on behalf of Nottinghamshire Hospice
Date issued	Feb 2022
Next review date	Jan 2027
Lead responsible for Policy	Director of Care
Policy Reviewed by	Infection Prevention and Control Team - Nottingham CityCare Partnership Care Service Team
Notified to	Quality and Safety Group
Authorised by	Board of Trustees
CQC Standard	Safe
Links to other Policies	Infection Prevention and Control Policy
Summary	This document aims to provide a clear understanding of Nottinghamshire Hospices Infection Control Policy.
Target Audience	The policy aimed at all staff, volunteers and contractors who work for or provide care on behalf of Nottinghamshire Hospice

Important Notice: Staff should always refer to the website or the folder on the 'N' drive for the most up to date information. If the review date of this policy or procedure has expired staff should seek advice from their clinical lead or manager regarding the appropriate action to be taken.

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1. Abbreviations, Acronyms and Definitions

Tuberculosis (TB): TB is a curable disease caused by a bacterium called Mycobacterium tuberculosis ('M. tuberculosis' or 'M.Tb'), or other bacterium in the M. tuberculosis complex (that is, M. bovis or M. africanum) It is a Notifiable disease.

Latent TB: Individuals are not infectious to others. Latent Tuberculosis infection is a state of persistent immune response to stimulation by Mycobacterium tuberculosis antigens without evidence of clinically manifested active TB. Only some of the individuals who have latent TB will go on to develop active disease. WHO (2021)

Active TB: If the immune system fails to kill or contain the infection, it can spread within the lungs or other parts of the body and symptoms will develop within a few weeks, months or years . This is known as active TB.

Drug Resistant TB: Drug-resistant TB can occur when bacteria become resistant to one of the first line antimicrobial drugs used to treat TB. This means that the drug can no longer kill the TB bacteria.

Multidrug-resistant TB (MDR TB): Multidrug-resistant TB (MDR TB) is when the TB is resistant to more than one first line antimicrobial drugs used to treat TBV.

2. Purpose

The purpose of this SOP is to support staff in the care and management with an individual with suspected or confirmed Tuberculosis (TB)

3. Introduction

The risk is greatest in those with prolonged, close household exposure to a person with infectious TB. Tuberculosis (TB) is a bacterial infection spread through inhaling tiny droplets from the coughs or sneezes of an infected person. It mainly affects the lungs, but it can affect any part of the body, including the abdomen, glands, bones and nervous system. Laryngeal and Pulmonary TB are the only contagious types of TB , it usually only spreads after prolonged exposure to someone with the illness. If the immune system fails to kill or contain the infection, it can spread within the lungs or other parts of the body and symptoms will develop within a few weeks or months. This is known as active TB.

Some people with pulmonary tuberculosis are highly infectious, particularly those with bacteria which can be seen on simple microscope examination of the sputum, who are termed 'smear positive'. The risk is greatest in those with prolonged, close household exposure to a person with infectious TB.

In most healthy people, the body's natural defence against infection and illness (the immune system) kills the bacteria and there are no symptoms. Sometimes the immune system cannot kill the bacteria, but manages to prevent it spreading in the body. The Individual will not have any symptoms, but the bacteria will remain in their body. This is known as latent TB. People with latent TB are not infectious to others. However latent TB could develop into an active TB disease at a later date; particularly if their immune system becomes weakened.

Resistant forms of TB can occur when there is mis-management or mis-use of the treatment prescribed. This can be related to inappropriate prescribing, individuals who have not completed the treatment course, or those who have been previously treated for TB and develop TB again. This is a major reason why specialists in TB need to be involved in the individual's care and management to minimise the risks of this occurring.

Typical symptoms of TB include:

- A persistent cough that lasts more than 3 weeks and usually brings up phlegm, which may be bloody
- Weight loss
- Night sweats
- High temperature
- Tiredness and fatigue
- Loss of appetite
- Swellings in the neck

Risk factors for TB include:

People with social risk factors such as;

- Homeless people
- People with drug and/or alcohol problems
- Prisoners
- Immigrants from countries where there is a high incidence of TB
- Those who smoke
- Those who are immunocompromised
- Close contacts of patients with TB (if active TB is suspected)

4. Evidence base and interaction with other policies and procedures

<https://www.gov.uk/government/collections/tuberculosis-and-other-mycobacterial-diseases-diagnosis-screening-management-and-data>

<https://www.nice.org.uk/guidance/ng33/chapter/Recommendations#infection-control>

<https://www.who.int/news-room/fact-sheets/detail/tuberculosis>

5. Scope and responsibilities

The Chief Executive is responsible for ensuring:

- That there are arrangements in place to support Infection Prevention and Control, in particular the relevant policies and training to reduce the risk of infections being transmitted.

The Executive Team are responsible for ensuring:

- That staff have access to infection prevention and control policies to support their daily working practice.

The Infection Prevention and Control Lead is responsible for:

- Updating this SOP five yearly or more frequently if changes are required.
- Providing advice and information on care management of those identified with Tuberculosis.

The Manager is responsible for:

- Monitoring staff compliance with infection prevention and control training, either at a face to face session, or by completing the workbook, in accordance with the organisation's statutory and essential training matrix.
- Ensure that clinical staff receive Infection Prevention and Control training every 2 years.
- Ensuring all new starters attend induction where practical sessions on hand hygiene are delivered.
- Ensure that staff are able to order adequate supplies of Personal Protective Equipment.

The Clinician is responsible for:

- Risk assessing to ensure the correct personal protective equipment is worn effectively
- Being aware of own immunity status and informing manager of this.
- Educating patients and carers, when facilitating carers to undertake care procedures, in relation to the correct personal protective clothing and documenting this in the patient record.
- Attending Infection Prevention and Control Training every 2 years.
- Liaising with Specialist clinicians/services as necessary.

6. Equipment required

Personal Protective Equipment

Hand Hygiene facilities

Clinical Waste

7. Procedure

Step	Action	Rationale / outcome	Risk management / additional direction
1.	Establish the Individual's TB status, are they active or latent?	Management depends on the type of TB and if receiving treatment.	If status not established there may pose a risk of cross contamination due to incorrect management.
2.	Refer to the TB Services if not already known	All TB cases should be known to the TB service based at the City Hospital: 0115 9628051, which co-ordinate care and treatment if required.	For effective care there needs to be specialist involvement.
3.	<p>Standard precautions are those which should always be applied when dealing with any patients, including TB patients. These include:</p> <p>Hand washing and antisepsis</p> <ul style="list-style-type: none"> • The use of personal protective equipment (e.g. gloves). If the patient is within the first 2 weeks of treatment for pulmonary TB a fluid resistant surgical face mask should be worn. • Appropriate handling of patient care equipment and soiled clothes • Prevention of accidental needle stick/sharp injuries to healthworkers • Environmental cleaning and spills management • Appropriate handling of clinical waste (e.g. swabs). 	To minimise the risk of cross contamination.	Ineffective infection control precautions puts both staff member and the individual at risk of cross contamination.

Step	Action	Rationale / outcome	Risk management / additional direction
4.	FFP3 masks are to be worn as part of personal protective equipment if the individual is assessed as infectious (Active TB) and you are performing aerosol generating procedures or the individual has a productive cough. Also keep FFP3 if MDR TB	Aerosols are a means of infection transmission.	Fit testing is required prior to staff using a FFP3 masks .
5.	Isolation is not required if in own home or if Individual has Latent TB. If in care home individuals should remain in their own room until two weeks post treatment if active TB	To minimise the risk of cross infection.	Specialist may advised to limited social gatherings and visitors during first two weeks of treatment.
6.	Encourage Cough etiquette.	To minimise the aerosol production.	Advise catch it, bin it, kill it.
7.	Contaminated linen from a individual's own home should be placed directly into the washing machine and washed on the hottest temperature the linen will allow.	To minimise the risk of cross infection.	
8.	If the individual assessed as infectious (Active TB) then clinical waste collection should be available	To ensure correct waste segregation.	Domestic waste can be used if individual has latent TB
9.	All individuals with TB should have a care plan identifying TB status, Specialist services involved in care, infection control precautions including hand hygiene, personal protect equipment and the signs and symptoms of Active TB	To ensure individualised care management and to ensure any changes in TB status identified e.g.latent TB to Active TB.	