GUIDELINE FOR THE CONTROL AND MANAGEMENT OF TUBERCULOSIS (TB)

TARGET AUDIENCE	NHSL WIDE, Acute, Health and Social Care Partnerships
PATIENT GROUP	All in patients and outpatients

Clinical Guidelines Summary

Tuberculosis, which is curable and preventable, is spread from person to person via airborne transmission and can affect a number of tissues and organs of the body Respiratory (i.e. pulmonary) TB is defined as affecting any of the following:

- Lungs
- Pleural cavity
- Mediastinal lymph nodes
- Larynx

Non-pulmonary TB commonly affects:

- Lymph nodes
- Bowel
- Peritoneum
- Meninges
- Kidneys
- Bones & joints

Infection with Mycobacterium tuberculosis complex can either cause disease with signs and symptoms i.e. active (TB) disease or without any signs or symptoms i.e. latent TB infection (LTBi),

People infected with TB bacteria have a 5-10% lifetime risk of falling ill with signs and symptoms i.e. progressing to active TB. However persons with compromised immune systems, such as people living with HIV, malnutrition or diabetes, or smokers, have a much higher risk of progression to active TB.

INTRODUCTION

This guideline has been developed for use in NHS Lanarkshire (NHSL) as part of the National Infection Prevention and Control Manual (NIPCM):

Chapter 1: Standard Infection Control Precautions (SICPS)
Chapter 2: Transmission Based Precautions: (TBPS)
Chapter 3: Healthcare Infection Incidents, Outbreak and data exceedance.
Chapter 4: Infection Control in the Built Environment and Decontamination

Aim, purpose and outcomes

This guideline covers preventing, identifying and managing latent and active tuberculosis (TB) in children, young people and adults. to ensure that patients receive appropriate and timely investigation, care and treatment in line with current national guidelines and best practice.

To ensure that NHS Lanarkshire staff are aware of the need to identify patients at risk of having or who have Tuberculosis (TB), and take early action to involve the health protection team therefore preventing disease progression and transmission of this disease.

To identify, screen and treat those individuals at risk of acquiring TB following close contact with a known case.

Scope

This Guidance is designed to safeguard patients, staff and the wider public from the risk of Tuberculosis. It is aimed at healthcare staff working in NHS Lanarkshire, but particularly:

- Infectious Diseases Consultants
- Respiratory physicians
- General Practitioners
- Respiratory ward staff
- Infectious Diseases Unit Staff
- Infection Prevention & Control Team
- Health Protection Team
- Emergency Departments
- Emergency Receiving Units
- Critical Care Units
- Theatres/Bronchoscopy unit

Principle content

Definition
Tuberculosis (TB) is a bacterial disease caused by infection with the *Mycobacterium tuberculosis* complex organisms (*M. tuberculosis, M. bovis, M. africanum, M. microti*). These may cause respiratory (pulmonary) and / or non-pulmonary tuberculosis.

Description
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Table 1: Summary of key features of active TB

Causative organism	Mycobacterium tuberculosis Mycobacterium bovis Mycobacterium africanum Mycobacterium microti
Clinical manifestation (i.e. active TB)	Early symptoms include: • Fatigue • Weight loss • Night sweats • Fever • Loss of appetite Later disease usually presents with: • Cough (usually productive) • Haemoptysis (coughing up blood) • Chest pain • Hoarseness • Dysphagia (difficulty swallowing)

Incubation period	3-8 weeks (can be up to 12 weeks) Latent phase (where the person is infected but asymptomatic) can last decades
Period of infectivity	Usually after 2 weeks of compliant treatment has been completed, but an individual risk assessment should be undertaken by the Infectious Diseases Consultant or consulting physician using the criteria recommended by NICE using the criteria recommended by NICE.
Transmission mode	Airborne
Reservoirs	Most common source is infected humans Rarely, infected cattle or cats (potentially other companion animals)
Population at risk	Individuals who are: • Immunosuppressed • Homelessness* • Malnourished • History of substance misuse (alcohol or illicit drugs) • Elderly • Immigrants from high prevalence countries • Healthcare workers/Veterinary workers • Or have a history of incarceration to population at risk
Vaccine preventable	Yes. Routine vaccination stopped in 2005 and is now offered only to high risk individuals
Notifiable disease	Yes

* Including overcrowded and substandard accommodation

Case definitions
Table 2: Case definitions

Definition	Criteria
Confirmed case	• An individual with a positive laboratory culture confirmed disease due to *M. tuberculosis*, *M. bovis*, or *M. africanum* • **OR** PCR confirmed disease
Probable case	In the absence of culture confirmation, an individual with: • Signs and/or symptoms compatible with tuberculosis **AND** • Treatment with 2 or more anti-tuberculosis drugs **AND** • Microscopic or histological evidence of mycobacterial infection • **OR** positive tuberculin test result
Possible case	In the absence of culture confirmation, an individual with: • Microscopic or histological evidence or mycobacterial infection or positive tuberculin test results • **OR** Signs and/or symptoms compatible with tuberculosis, **AND** • Treatment with 2 or more anti-tuberculosis drugs
Latent TB	An individual in whom an appropriate test e.g. Mantoux or interferon gamma release assay (IGRA), has confirmed is infected with TB, but without symptoms (asymptomatic).
Smear* positive	Acid fast bacilli (AFB) can be seen using a stain in biopsy, washings or on a film of sputum (productive or induced) in at least 1 or more samples obtained ≥24hours apart.
Sputum smear negative	No bacteria can be seen on the staining of 3 samples obtained ≥ 24 hours apart.

*Including induced sputum samples, bronchial washing, bronchoscopy biopsy and gastric a newly identified washings

Risk assessment and diagnosis
Risk assessment

A diagnosis of TB should be considered in **ANY** patient presenting with a combination of symptoms of cough, fatigue, weight loss, night sweats or fever.
Risk assessment of newly identified potential TB case must include assessment for MDR-TB risk factors – previous TB treatment, immuno-compromised, contact with MDR-TB case, travel to relatively higher MDR-TB location/country - https://www.tbfacts.org/drug-resistant-tb/ etc.

Clinicians should consider TB as a likely diagnosis in those patients with the above symptoms and any of the following risk factors:
- Human Immunodeficiency virus (HIV)
- Malnutrition
- Substance misuse
- Immigration from a high risk country i.e. incidence rate of greater than 40/100,000 as per WHO definitions
- Healthcare work

- Veterinary work
- Elderly
- Homelessness
- Contact of a case of TB

Clinicians are encouraged to send samples in these patients even if the clinical suspicion of infection is low.

GPs and Respiratory consultants seeing patients with known chronic lung conditions now presenting with unexplained acute respiratory problems should consider ordering sputum AAFB while assessing other possible causes e.g. lung cancer.

All cases of possible tuberculosis (clinical suspicion) **MUST** be notified to the Consultant in Public Health Medicine (CPHM).

Diagnosis

Active respiratory TB can be diagnosed using:
- Chest X-ray
- AFB smear:
  - serial sputum samples for microscopy & culture (including at least one early morning sample)
  - induced sputum samples (if spontaneous sputum not produced)
  - bronchial washings or biopsy from bronchoscopy
  - gastric washings (in children only)

Active non-pulmonary TB can be diagnosed using:
- lymph node biopsy
- pus aspirated from lymph nodes
- pleural biopsy
- any surgical sample sent for routine culture
- any radiological sample sent for routine culture
- histology sample
- aspiration sample
- post-mortem sample

Non-pulmonary samples should be sent to the laboratory in dry sterile containers for TB microscopy and culture.

Initial samples should be sent to the local microbiology laboratory for culture or rapid molecular diagnostic testing which will be undertaken at University Hospital Hairmyres. Confirmatory testing will be arranged for all positive samples or complex samples at the Scottish Mycobacterial Reference Laboratory (SMRL) in Edinburgh.

Patients diagnosed with non-pulmonary TB should also have a chest x-ray to confirm or exclude respiratory TB infection.

Latent TB is usually diagnosed using a Tuberculin skin test (Mantoux test). An interferon-gamma release assay (IGRA) blood test may also be used depending on the individual risk criteria and test results. Further investigations may be offered to aid diagnosis e.g. chest x-ray and referral to a TB specialist.

Multi-drug resistant TB and extensively drug resistant TB

Globally, there has been an emergence of strains of TB which are multi-drug resistant (MDR-TB) and extensively drug resistant (XDR-TB). This provides further challenges in treating and controlling cases of TB.
FFP3 Mask must be worn by clinical staff until multi drug resistant TB has been ruled out.

The possibility of drug resistant TB should be considered if there is:

- history of incomplete or non-compliant treatment
- contact with an individual with known drug resistant TB
- disease probably acquired in country with high incidence of drug resistance - https://www.tbfacts.org/drug-resistant-tb/
- immune-compromise
- disease not responding to treatment

Post mortem diagnosis may also be made. Post mortem samples should be sent for TB microscopy & culture in a dry sterile container (no formalin, where possible).

Laboratory reporting and public health notification

TB is a notifiable disease under the Public Health (Scotland) Act 2010. Registered medical practitioners are required to report TB based on **clinical suspicion** and is not dependent only on laboratory confirmation.

Notification of active TB must be made within 24 hours of diagnosis (clinical or laboratory) to allow appropriate assessment & contact tracing to be arranged. Laboratories must also report any smear positive or culture positive samples to the CPHM.
Notification should be made by telephone in the first instance to the TB service via the Health Protection Team Tel: 01698 752952 (Mon-Fri 09:00 – 17:00). Out of Hours contact the duty Consultant in Public Health Medicine via UHM switchboard TEL: 01236 748 748

The Health Protection Team (HPT) monitors the incidence of TB through formal surveillance systems. All cases reported must be followed by written notification using part A of the Enhanced Surveillance of Mycobacterial Infections (ESMI) form in Scotland. Part B (treatment) and Part C (completion of treatment) of the ESMI form will also be completed during follow up and review of the patient.
To prevent further transmission of the disease, the HPT will undertake contact tracing. This will identify those who have been significantly exposed to the case of TB, assess their risk of acquiring the infection, and through further testing, identify any symptomatic (active) and asymptomatic (latent) infections.

Overall the risk of the contacts of a case developing TB is low. While the highest risk is amongst household members of cases with active pulmonary TB, it is important to find the

source of the infection in a case of active non-pulmonary TB, especially if that active non-pulmonary case is a child. In NHS Lanarkshire health board we would therefore screen **ALL** household contacts of an active case of TB irrespective of the site of infection, except in rare cases where the epidemiological risk assessment indicates otherwise.

Treatment of TB

The treatment of patients with TB should be referred to, and managed by a physician (or paediatric physician) with expertise and experience in managing this disease without delay. However the clinician making the initial diagnosis could commence standard treatment in patients who have clinical signs and symptoms consistent with TB without waiting for laboratory confirmation.

Most individuals with TB can be managed in the community. Hospital admission is usually not necessary and should be avoided unless there is an overriding medical or social reason. The '**standard recommended regimen**' for TB is Rifinah a combined drug treatment comprising of isoniazide (for 6 months) and rifampicin (for 6 months), pyrazinamide (for first 2 months of treatment) and ethambutol (for first 2 months of treatment).

Non-compliance with drug treatment is the most important cause of treatment failure. All patients should be risk assessed to consider how well it is anticipated they can/will adhere to treatment.
If poor compliance is anticipated, for example due to lifestyle, undeserved population or mental health issues, patients should be managed using Directly Observed Treatment, Short course (DOTS). This ensures that a healthcare professional or other suitable person observes that the medication is swallowed.
In a smaller proportion of cases, non-compliance, drug resistance or the type of diseased tissue (site of the TB infection) could mean a modified regime becomes necessary for treatment. This modified regime could mean additional drugs, different combination of drugs or modified duration of drug treatment.

Management of contacts and screening

Overall the risk of contacts of a case developing TB is low.
Close contacts are people who have had **prolonged** and **frequent/intense** contact with a person with infectious TB.
These could include:

- 'Household contacts' – those who share a bedroom, kitchen, bathroom or sitting room with the index case
- Boyfriends, girlfriends and other close intimate contacts friends.
- Sharing a dormitory, flat or hospital ward with the index case.
- Sharing a kitchen in a hall of residence
  In a minority of circumstances, co-workers, although they are more usually classed as 'social contacts' may be classed as close contacts, following risk assessment.

Other contacts (e.g. work, school) are not usually considered close contacts, but will be individually risk assessed by the TB nurse specialists/Health Protection Team. This will include consideration of:

- degree of infectivity of the index case
- the length of time the index case was in contact with others
- the health status/susceptibility to infection of the contact, and
- the proximity of contact

Timescales for screening

Screening will be offered to close contacts of a person with active respiratory TB **6-8 weeks** after last exposure to the index case. Contacts of a person with non – respiratory TB will be risk assessed by TB nurse specialists/Health Protection Team to deem if screening is required. However symptomatic or immunosuppressed contacts, neonates, children or where the index case has had a long history of untreated infection, should be assessed for **active TB** within 48 hours. Further screening for latent TB infection should be carried out as per NICE guidance.

Screening Methods

In the tuberculosis NICE guidance issued in 2016, chest x-ray, Mantoux and IGRA tests are the recommended primary methods for screening TB close contacts for active and latent infections.
Chest x-ray and sputum AFB is the preferred method for screening symptomatic close contacts for active TB while Mantoux and IGRA tests screen for latent TB infection (LTBi) in asymptomatic close contacts.

Mantoux testing is generally used, by staff who have received specific instruction and training in the administration and interpretation of the test, in children (including neonates) and adults <65 years. A positive Mantoux test detects previous exposure to a broad range of mycobacterium, including environmental and vaccine types hence it is not specific to mycobacterium tuberculosis complex.

Interferon-gamma release assay (IGRA) is a blood test, which also detects previous exposure, but specifically to mycobacterium tuberculosis complex. Like the Mantoux test, it is used for detecting latent TB infections and not active TB infections, in children (including neonates) and adults <65 years.

Vaccination

Bacillus Calmette-Guerin (BCG) is a live attenuated vaccine which meta-analyses have shown to be 70 to 80% effective against the most severe forms of the disease, such as TB meningitis in children. It is less effective in preventing respiratory disease, which is the more common form in adults. Protection has been shown to last for 10 to 15 years. Data on duration of protection after this time are limited, but protection may wane with time.
The aim of vaccination is to prevent those who are at increased risk of developing TB from becoming infected. Following decline in the number of cases of TB in the UK, routine immunisation against TB was stopped in 2005, and is now offered on a risk assessment basis.

Vaccination of neonates who are most at risk of acquiring infection is a key part of the national prevention strategy. This includes babies:

- born or have one or more parent or grandparent who were born in a country with a high incidence of TB
- living in areas of the UK with a high incidence of TB
- travelled to a high incidence country for more than three months
- with a family history of TB within the last 5 years

BCG Vaccination should be carried out in line with The Green Book: Chapter 32.
BCG may be offered to eligible individuals following a tuberculin skin test (Mantoux test) as part of contact screening:

- Mantoux test positive - does not need vaccination; strongly positive should be followed up to exclude previous active, or latent TB disease
- Mantoux test negative - likely to need BCG vaccination

BCG may also be offered, following risk assessment, to:

- children up to the age of 6 years with a parent or grandparent who was born in a country where TB incidence >40 per 100,000
- children between 6 and 16 years who are Tuberculin negative AND with a parent or grandparent was born in a country where TB incidence >40 per 100,000
- previously unvaccinated, tuberculin negative children up to 16years of age who were born or lived in a country with an incidence of >40cases per 100,000 for a ≥3 months
- those planning to travel or reside in an areas of high incidence for a period of ≥3 months

In-patient management (infection control)

Clinical staff should liaise with the hospital Infection Prevention and Control Team (IPCT) to discuss appropriate infection control measures for each patient with suspected or known TB on admission. These measures should take into consideration current clinical status (smear positive/negative), risk of MDR-TB and type of clinical intervention required.

The assessment of risk for MDR/XDR TB should occur within 24 hours of admission. In the time while waiting for that risk assessment, avoid all non-urgent entry without appropriate Personal Protective Equipment (PPE) into the newly admitted patient's room; if urgent or necessary then FFP3 mask should be worn. Patients with a past history of MDR-TB must be risk assessed on **each** admission.

While infection control is an effective means of reducing exposure in healthcare settings, the primary measures to reduce exposure in healthcare settings are: early diagnosis; early isolation and early commencement of therapy.

Consider de-escalating isolation after 2 weeks of treatment, taking into account the risks and benefits, if:

- the person is showing tolerance to the prescribed treatment
- there is agreement to adhere to treatment
- there is resolution of cough
- there is definite clinical improvement on treatment; for example, remaining afebrile for a week
- there are not immunocompromised people, such as transplant recipients, people with HIV and those on anti-tumour necrosis factor alpha or other biologics, in the same accommodation
- the person's initial smear grade was not high; for example, 2 or less
- there is not extensive pulmonary involvement, including cavitation
- and there is no laryngeal TB

N.B. National Infection prevention and Control Manual

Tuberculosis and Health Care Workers

All NHS employees must complete pre-employment screening/checks to confirm their TB status and vaccination history prior to taking up their role. The risk of TB for a new healthcare worker who is HIV positive at the time of recruitment should be assessed as part of pre-employment health screening.
Certain staff are more likely than others to come into contact with someone with TB. These include staff who work with:

- clinical materials in the laboratory
- the elderly in care homes
- patients with known risk factors for TB e.g.
    - prisoners
    - homeless people
    - asylum seekers or refugees (from high incidence countries)

Individuals with TB signs or symptoms MUST not work directly with patients until they have been screened.
If there is no evidence of prior screening or previous BCG immunisation, any member of staff transferring within the NHS board should be treated as a new employee for risk assessment purposes.

Healthcare worker exposure

Healthcare staff should practise Standard Infection Control Precautions (SICPs) when carrying out any care or procedure with patients. This includes the appropriate use of personal protective equipment (PPE).

If a patient is suspected to have TB, healthcare staff should use appropriate measures, including PPE where indicated, in line with Table 3 and Chapter 2: National Infection Prevention & Control Manual (Transmission Based Precautions).
Healthcare staff involved in the care of a smear positive TB patient, without appropriate PPE, should be referred for assessment by SALUS Occupational Health & Safety.

Aerosol Generating Procedures

The following procedures (AGPs) would be considered significant exposure when carried out on a patient later identified to have infectious TB, without using appropriate PPE:

1. Intubation, extubation and related procedures, for example manual ventilation and open suctioning.
2. Bronchoscopy
3. Non-invasive ventilation (NIV) e.g. Bilevel Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure (CPAP) Ventilation
4. Induced sputum
5. Cardiopulmonary resuscitation.
6. High Frequency Oscillatory Ventilation (HFOV).
7. Surgery and post mortem procedures in which high-speed devices are used.
8. Some Dental procedures (e.g. drilling)

NB. Saline instilled/nebulised into lungs to facilitate expectoration; salbutamol nebulisation does not meet this threshold

Roles and responsibilities

Who	Roles & Responsibilities
NHS Board	• To implement this guidance across NHS Board
Hospital Management Teams	• Support the HCWs, HPT and the IPCT in following this guidance. • Cascade new policies to clinical staff after approval by the Infection Control Committee (ICC)
Infection Prevention & Control Team and Health Protection Team	• Keep this guidance up to date. • Engage with staff to support implementation of IPC precautions described in this guidance as required. • Review national guidance • Provide education opportunities on this guidance.
Microbiology/ Laboratory staff	• To provide laboratory testing, clinical support and interpretation of results for clinical staff, HPT and the IPCT. • To liaise with appropriate reference laboratories to coordinate additional specimen investigation. • In the absence of an onsite IPCN contact the ward and HPT to advise of a positive smear or culture result.
Senior Charge Nurse (Ward Manager)	• To provide clinical and managerial leadership within the clinical area & act as role models in relation to infection prevention and control. • To ensure implementation and ongoing compliance with Standard Infection Control Precautions (SICPs) and Transmission Based Precautions (TBP) and take appropriate action to address any area of non-compliance. • To report any difficulty in accessing or providing sufficient resource to achieve this. • Recognise and report to the HPT/IPCT any incidences of clinical conditions where the signs/symptoms are suggestive of an outbreak.
Health Care Workers (HCWs) and Clinicians.	• To ensure implementation and ongoing compliance with Standard Infection Control Precautions (SICPs) and Transmission Based Precautions (TBP). • Be alert to any patient developing symptoms of respiratory infection that may be suggestive of Tuberculosis • Prompt recognition and appropriate management and treatment of patients displaying symptoms of Tuberculosis. • Isolate the patient. • Inform a member of the Infection Prevention & Control Team (IPCT) if this guideline cannot be followed and inform their clinical lead or line manager.
PSSD	• To provide support services including domestic services to NHS Lanarkshire to maintain the cleanliness and safety of premises in line with local/national guidance.
SALUS occupational health & safety	• To provide specialist advice and support to clinical teams and the IPCT in relation to staff health and other matters of health & safety.

Who	Roles & Responsibilities
Communications Department	• To lead on the development and dissemination of media statements and other key information to NHS Lanarkshire and external agencies • To take the lead on public communication.

Standard Infection Control Precautions (SICPs) / Transmission Based Precautions (TBPs)
(refer also to the National Infection Prevention & Control Manual)

STANDARD INFECTION CONTROL PRECAUTIONS (SICPs) & TRANSMISSION BASED PRECATIONS (TBPs)			
	Non-pulmonary TB	**Respiratory TB (suspected or currently smear positive)**	**Multi-drug resistant TB (suspected or confirmed)**
Patient placement	Isolation not required unless risk assessment demonstrates otherwise i.e. draining of TB lesions	Single room (door kept closed) – preferably negative pressure or with external air venting UNTIL: 2 weeks compliant treatment completed and risk assessed against NICE 2016 criteria	Single room with negative pressure
Respiratory PPE	Not required	FFP3 masks required: • for all aerosol generating procedures (AGPs) • until patient has been risk assessed for MDR TB	FFP3 masks for all contacts by staff Visitors should wear masks – where possible use Fluid Resistant Surgical Masks for FRSMs
Hand hygiene	Hand hygiene should be carried out before and after each episodes of direct patient contact and after contact with the patient's environment, including before and after use of PPE. Hand Rub can be used if hands are visibly clean. Refer to Hand Hygiene Policy.		
	Non-pulmonary TB	**Respiratory TB (suspected or currently smear positive)**	**Multi-drug resistant TB (suspected or confirmed)**
Cough hygiene	As per SICPs	Encourage patient to cover mouth and nose with disposable tissue when coughing. The patient should be asked to wear a surgical mask if leaving their room within the first 2 weeks of treatment, or if considered still infectious	Encourage patient to cover mouth & nose with disposable tissue when coughing. The patient should be asked to wear a surgical mask if leaving their room within the first 2 weeks of treatment, or if

STANDARD INFECTION CONTROL PRECAUTIONS (SICPs) & TRANSMISSION BASED PRECATIONS (TBPs)			
		FRMs for staff in these situations (are not effective therefore it is not advised to be worn	considered still infectious
Body spill fluids	Contact with small volumes of blood (including inoculation injury) is considered low risk. Refer to National Infection Prevent & Control Manual		
Equipment	• Use single-use items if possible. • Where possible allocate equipment for individual patient use e.g. commodes etc.		
Equipment & Environmental cleaning	• Daily environmental and equipment cleaning must be undertaken with solution of 1,000ppm available Chlorine releasing agent. • Dedicated equipment – clean as above after each use.		
Linen	• Used linen to be disposed of in a red alginate bag as per local laundry policy • Patient and/or relative should receive the patient laundry leaflet • All patient laundry should be placed into a patient clothing alginate bag • Clean linen should not be stored within the isolation room • Used linen to be disposed of in a red alginate bags as per local laundry policy • Patient and/or relative should receive the patient laundry leaflet • All patient laundry should be placed into a patient clothing alginate bag • Clean linen should not be stored within the isolation room		
Waste	• To be disposed of using the clinical waste stream within the isolation room		
Discontinuing TBPs	Patient isolation precautions should remain in place until: a) patient has had a minimum of 14 days of appropriate anti-TB therapy, and b) risk assessment is carried out by the clinical team in conjunction with the IPCT following 14 days of treatment. This should record the decision on whether to continue or stop isolation precautions, or c) patient has converted smear-negative		
Last offices	As per TBPs		

STANDARD INFECTION CONTROL PRECAUTIONS (SICPs) & TRANSMISSION BASED PRECATIONS (TBPs)			
	Appendix 12 – Key Infections from HSE Guidance “Controlling the risks of infection at work from Human Remains”.		
	Non-pulmonary TB	**Respiratory TB (suspected or currently smear positive)**	**Multi-drug resistant TB (suspected or confirmed)**
Visitors	No restrictions on visitors.	Visitors to children with TB, who meet the definition of a close contact, must be kept away from other patients until screened and excluded as a source of infection	Strictly limit visitors to minimum. Visitors should wear masks (see PPE above)

Communication plan

The Control and Management of Tuberculosis Guidance will be distributed as follows:

- Staff Brief
- Hospital and Health and Social Care Partnership Hygiene Meetings
- The guidance will be available on the TB page and the Infection Prevention and Control Page on Firstport.
- NHSL public website.

References

NICE (2016) Guidance for preventing, identifying and managing latent and active tuberculosis (TB) in children, young people and adults
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Enhanced Surveillance of Mycobacterial Infections in Scotland: 2019 Tuberculosis Annual Report for Scotland. Published Oct 2019.
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HPN (2009) *Tuberculosis: Clinical diagnosis and management of tuberculosis, and measures for its prevention and control in Scotland*
https://www.hps.scot.nhs.uk/resourcedocument.aspx?id=764

National Infection Prevention and Control Manual (NIPCM)
http://www.nipcm.scot.nhs.uk/

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CONSULTATION AND DISTRIBUTION RECORD	
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CHANGE RECORD			
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28/04/2014	Public Health	Content revised & updated. New template applied	1.1
01/12/2016	Consultant in Public Health Medicine	Content updated	2.0
03/11/2017	Consultant in Public Health Medicine	Review and revision	2.1
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08/01/2019	Governance Review Group	Updated to reflect changes from LICC	4
29/03/2021	Governance Review Group	Updated to incorporate national guidance	5
14-06-2023	Infection Prevention and Control	The review date has been extended in line with NHSL guidance:	5
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