



<b>Department:</b>	Respiratory Care Services		
<b>Document:</b>	Multidisciplinary Policy and Procedure		
<b>Title:</b>	Dealing with Open Cases of Tuberculosis		
<b>Applies To:</b>	Respiratory Theparist, Physicians		
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## 1. PURPOSE:

- 1.1 To provide guidance to all Respiratory Care Practitioner for the safe management of patients with active Pulmonary Tuberculosis thereby reducing the risk of transmission to other patients and staff within a Hospital setting.

## 2. DEFINITONS:

- 2.1 **Tuberculosis (TB)-** is caused by bacterium called Mycobacterium Tuberculae. It is contracted by inhaling the bacterium droplets. M. Tuberculosis is carried in airborne particles called nuclei that can be generated when persons who have pulmonary or laryngeal TB disease cough, sneeze, shout. The particles are approximately 1-5um; normal air currents can keep them airborne for prolonged periods and spread them throughout a room or building. M. Tuberculosis is usually transmitted only through air, not by surface contact, usually within 2-12 weeks after initial infection with M. Tuberculosis, the immune response limits additional multiplication of the tubercle bacilli, and immunologic test results for M. Tuberculosis infection become positive.
- 2.2 **Latent TB infection** - occurs when someone is infected with TB, but the disease is inactive and the patient is well. They are not infectious to others.
- 2.3 **Smear Positive Tuberculosis** - refers to sputum sample submitted to the laboratory where there are sufficient numbers of mycobacteria present that they can be seen under the microscope.

## 3. POLICY:

- 3.1 All forms of TB are notifiable; it is responsibility of the RCP who makes the diagnosis (or presumptive diagnosis) to notify the consultant in communicable disease control.
- 3.2 Infection control Team nurse must be informed of all suspected/proven case immediately, for reporting communicable disease to Ministry of Health. Patient should be in the negative pressure single room door closed with displayed precaution notice.
- 3.3 Standard and transmission - based precaution will be used to prevent and/or reduce the number of hospital acquired infection, by preventing and/or controlling the risk of microorganism.
- 3.4 Effective hand hygiene in accordance with 5 moments World Health Organization guidelines. Follow guidance on personal equipment PPE use, cleaning and waste disposal.
- 3.5 Close contacts of sputum smear positive cases that are under the age of 2 years may require prophylactic treatment and should informed consultant pediatrician.
- 3.6 RCP that perform any of the following activities should also be included in the TB screening program.
  - 3.6.1 Intubation and related procedure e.g. manual ventilation.
  - 3.6.2 Airway suctioning, including tracheostomy care and open suctioning with invasive ventilation.
  - 3.6.3 Cardiopulmonary resuscitation.
  - 3.6.4 Bronchoscopy.
  - 3.6.5 Collection of specimens (E.T aspirate)



- 3.7 The following are HCWs who might be included in TB screening program.
  - 3.7.1 Entering patient's rooms or treatments rooms whether a patient is present.
  - 3.7.2 Participating in suspected or confirmed M. Tuberculosis specimen processing.
  - 3.7.3 Installing, maintaining, or replacing environmental controls in areas which persons with TB disease are encountered.
  - 3.7.4 Infants, children, and adolescents exposed to adults in high-risk.
  - 3.7.5 RCPs who serve patients who are at high risk.
  - 3.7.6 RCPs with unprotected exposure to a patient with TB disease before the identification and correct airborne precautions of the patient.

#### **4. PROCEDURE:**

- 4.1 Infection prevention and control precautions for in-patients
  - 4.2.1 Patients with suspected pulmonary TB will be cared for in a single room with the door closed until the diagnosis is made. If sputum samples are reported as Smear positive, the patient will stay in a negative pressure single room until they have had 2 weeks of effective treatment and shown clinical improvement or 3 consecutive AFB samples, as decided in consultation with the TB specialist treating physicians.
  - 4.2.2 Persons at Highest Risk for exposure to infection with Tuberculosis.
- 4.2 Characteristics of a patient with TB disease that increase the risk of infection:
  - 4.2.1 Presence of Cough
  - 4.2.2 Cavitation on Chest Radiograph
  - 4.2.3 Positive Acid - Fast Bacilli (AFB) Sputum Smear Result
  - 4.2.4 Respiratory Tract Disease with Involvement of the Larynx (Substantially Infectious)
  - 4.2.5 Respiratory Tract Disease with Involvement of the Lung Pleura (Exclusively Pleural Involvement is Less Infectious)
  - 4.2.6 Failure to Cover the Mouth and Nose when Coughing
  - 4.2.7 Incorrect, Lack of, or Short Duration of Anti - Tuberculosis Treatment
  - 4.2.8 Undergoing Cough-Inducing or Aerosol - Generating Procedures
- 4.3 Respiratory Protection Protocols:
  - 4.3.1 Respirators (respiratory personal protective devices) are widely used for protection against inhaled toxins.
  - 4.3.2 N95 and other disposable particulate respirators: These respirators are relatively simple, disposable devices are now widely used for protection against occupational tuberculosis. Although they look like surgical masks, these devices are fundamentally different in construction and function.
  - 4.3.3 Training Health Care Workers on respiratory protection, and training patient on respiratory hygiene and cough etiquette.
  - 4.3.4 Attending annual mandatory infection control and prevention updates.

#### **5. MATERIALS AND EQUIPMENT:**

- 5.1 N95 and other disposable particulate respirators

#### **6. RESPONSIBILITIES:**

- 6.1 Respiratory Therapist
- 6.2 Physicians

#### **7. APPENDICES:**

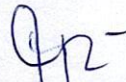
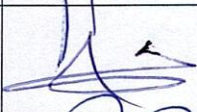
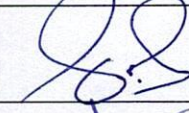

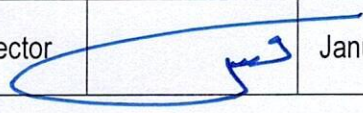
- 7.1 N/A



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## 9. APPROVALS:

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