



## Corporate Standard Operating Procedure

### Aerosol Generating Respiratory Procedures

**Purpose Statement:** TOH is committed to the prevention of transmission of infectious agents transmitted during aerosol generating respiratory procedures. These measures are designed to prevent or limit exposure to droplets and aerosols during respiratory procedures that generate these particles.

**Scope:** All Staff and visitors must follow this SOP while providing care to patients at TOH.

#### Alerts:

- ❖ This policy does not apply to the Neonatal Intensive Care Unit or the Special Care Nursery.

#### Definitions:

**Aerosol:** Small droplet of moisture that may carry microorganisms. Aerosols may be light enough to remain suspended in the air for short periods of time, allowing inhalation of microorganisms.

**Aerosol generating respiratory procedure:** A procedure with the potential to generate a high volume of respiratory droplets and aerosols. The procedure may propel droplets over a radius of two meters.

**Risk assessment:** Evaluation of the interaction of the employees, the patient, and patient environment to assess the potential for exposure to an infectious disease.

**Staff:** All individuals in any of the following relationships to TOH: permanent or temporary, full-time, part-time, casual or contract employees, trainees and volunteers, including but not limited to physicians, residents, interns, researchers, students, and any other individuals who perform work or supply services at TOH.

#### Equipment Required:

- Aerosol generating procedure sign # 414231
- Disinfectant wipes (prevention wipes) # 220940
- Mask with attached visor with elastics #222255
- **or**
- Mask with visor with ties # 220335

The following supplies are acceptable alternatives for face protection:

- Surgical mask # 220380 **and**
- Goggles # 260130 or face shield # 790985

For sputum induction and diagnostic bronchoscopy:

- N95 respirator with goggles or face shield
  - 3M 1870 Plus #222278
  - 3M 1860R #222265
  - 3M 1860S #222240
  - 3M 8210 #222280

## Roles and Responsibilities

### i. Management shall:

- Be familiar with all aspects of this SOP
- Support and enforce this SOP
- Ensure that equipment and materials listed in this SOP are appropriate, easily accessible, and in sufficient quantity.

### ii. Staff shall:

- Follow the SOP
- When within two (2) meters of **any** patient receiving an aerosol generating respiratory procedure perform measures, and practices outlined in the SOP
- Use equipment provided and as directed, in accordance with this SOP, and the Routine Practice SOP
- Report the absence of equipment to their supervisor/manager
- Report the defect or malfunction of equipment to their supervisor/manager

## Procedure:

1. Personal Protective Equipment (PPE) **must** be used by all employees during the following aerosol generating respiratory procedures where transmission of organisms has been documented:
  - Endotracheal intubation, including during cardio-pulmonary resuscitation
  - Extubation
  - Tracheotomy
  - Cardio-pulmonary resuscitation
  - Open airway suctioning
  - Bronchoscopy (N95 respirator required for diagnostic bronchoscopy when pulmonary tuberculosis is in the differential diagnosis)
  - Sputum induction (N95 respirator always required)
  - Non-invasive positive pressure ventilation
  - High flow oxygen therapy
  - Collection of aspirate
  - Autopsy
2. Prior to any procedure, the health care provider must assess the potential for generating aerosols or droplets and must use the appropriate protection as outlined.
3. For the following procedures, the need for PPE should be determined by risk assessment:
  - Nebulized therapies
  - Surgery
  - High-frequency oscillatory ventilation
  - Tracheostomy and tracheostomy care
  - Chest physiotherapy
  - Tube and needle thoracostomy
  - Breaches to the integrity of a mechanical ventilation system
4. Initiation of Aerosol-Generating Respiratory Procedures
  - Aerosol generating respiratory procedures prevention measures can be instituted by any regulated health care professional.
  - The procedure must be performed by an experienced HCP.
  - When possible, avoid initiation of aerosol generating respiratory procedures. Carefully assess the benefit of the procedure versus the potential occupational risk.

5. Patient Placement
  - i. Special room accommodation not required.
    - If patient in a private room, the door can be left open
    - If patient in a ward room, draw the side curtains for the duration of the aerosol generating respiratory procedure
  - ii. Patient on additional precautions:
    - A private room is preferred for a patient on Droplet Precautions receiving an aerosol generating respiratory procedure
    - For patients requiring other additional precautions, follow the patient placement guidelines for the respective policy e.g., a patient on Airborne Precautions requires an Airborne Infection Isolation Room
6. Signage
  - Patient in private room: Place an Aerosol Generating Respiratory Procedure Precautions sign at the entry to the room
  - Patient in ward room: Affix the Aerosol Generating Respiratory Procedure Precautions sign on the pulled curtain belonging to patient
  - Remove the sign upon completion of the aerosol generating respiratory procedure
7. Hand Hygiene: Perform hand hygiene according to the 4 moments of hand hygiene. Refer to Hand Hygiene SOP.
8. Personal Protective Equipment (PPE)
  - i. When within 2 meters of a patient receiving an aerosol generating respiratory procedure, wear the appropriate PPE:
    - Mask with visor
    - Gown and gloves when it is anticipated that skin or clothing will be in contact with the patient or the patient soiled environment.
  - ii. For the following procedures an N95 respirator and eye protection are required:
    - Sputum induction
    - Bronchoscopy (N95 respirator is required for diagnostic bronchoscopy when TB is in the differential diagnosis)
    - Autopsy examination
  - iii. When the patient is on additional precautions, put on additional PPE according to the appropriate precautions:
    - Airborne precautions: N95 respirator and eye protection
    - Contact Precautions: Mask with visor, gloves, and assess need for gown
9. Visitors or caregivers should be discouraged from being present in the room during the aerosol generating respiratory procedure. If they must be present, then they must wear a mask with visor prior to entering the room/bed space.
10. Clean shared patient equipment as per Routine Practices prior to use on other patients.
11. For Linen, Lab Specimens, Dishes and Garbage: handle items according to Routine Practices.
12. After completion of the aerosol generating respiratory procedure, clean surfaces that are visibly soiled with disinfectant wipes.
13. The nurse or regulated health care professional will provide patient teaching and explain to the patient and/or visitors precautions related to the aerosol generating respiratory procedures.

14. The nurse or regulated health care professional documents in EPIC:

- Date, time and reason aerosol generating respiratory procedure measures were initiated and discontinued.
- Patient teaching.

**Related Documents:**

- Hand Hygiene
- Routine Practices
- Droplet Precautions
- Airborne Precautions
- Table of Clinical Syndromes and Conditions with Level of Precautions Required
- Cleaning of Shared Patient-care Equipment in Inpatient Areas

**Related tools/forms etc.:**

None

**Regulatory or legislative references:**

- [Ontario Ministry of Health and Long-Term Care, PIDAC. Best Practices for Prevention of Transmission of Acute Respiratory Infection. March, 2013.](#)
- [Ontario Ministry of Health and Long-Term Care, PIDAC. Routine Practices and Additional Precautions in All Health Care Settings. November, 2012](#)
- College of Respiratory Therapists of Ontario. Infection Prevention and Control: Best Practice Guidelines. September 2016
- <https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en>