Practice Update Aerosol Generating Medical Procedures (AGMP) With Suspect or Confirmed COVID-19 Patients

These recommendations reflect the most recent guidance issued by Ontario Health (March 30, 2020) and the Chief Medical Officer of Health Directive #5 (March 31, 2020). Also, information that has been provided by Public Health Ontario (April 6 and April 10, 2020)

The first line, of defense to decrease the risk of transmission of COVID-19 is the elimination and/or substitution of non-essential and/or high-risk clinical activities/procedures to decrease risk of transmission between patients and healthcare workers (or vis versa).

Based on information from the literature, this updated AGMP list is based on the Toronto Region Hospital Operations Committee and will be adopted with some modifications that have been discussed with physicians to clarify what oxygen level will be considered high flow the below information should be followed.

High Risk Aerosol-Generating Medical Procedures

- Intubation/laryngeal mask airway and to continue while on ventilator
- Extubation
- Code Blue (CPR/cardioversion/defibrillation are not considered high risk AGMPs, however, procedures associated with CPR, such as emergent intubation and manual ventilation are high risk AGMP's)
- Non-invasive ventilation (e.g., CPAP, BiPAP) (suggest avoiding where possible) – this does not include neonates
- Manual bag-valve ventilation
- High-flow oxygen
    - Over 6 L/min nasal prongs (if over 6L/min needed via nasal prongs, recommendation to change to a face mask)
    - Over 15L/min via Venturi or non-rebreather masks.
- Open suctioning (e.g. "deep" insertion for naso-pharyngeal or tracheal suctioning, not inclusive of oral suction) (suggest avoid where possible)
- Bronchoscopy (suggest avoid where possible)
- Induced sputum (e.g. inhalation of nebulized saline solution to liquefy and produce airway secretions, not natural coughing to bring up sputum) (suggest avoid where possible)
- Large volume nebulizers for humidity (suggest avoid where possible)
- Autopsy
- Nasopharyngoscopy
- Oral, pharyngeal, transsphenoidal and airway surgeries (including thoracic surgery and tracheostomy insertion) (tracheostomy should be avoided if possible).
- Gastroscopy (based on the fact that deep suctioning occurs during the procedure on most occasions)
- High frequency oscillation ventilation (suggest avoid where possible)
- Needle thoracostomy
- Laparoscopic Surgery (based on pressure that is being expelled during the procedure)
- Surgical procedures requiring cauterization.

Not Considered Aerosol-Generating Medical Procedures

- Collection of nasopharyngeal or throat swab
- Ventilator circuit disconnect
- Chest tube removal or insertion (unless in setting or emergent insertion for ruptured lung/pneumothorax)

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- Coughing
- Oral suctioning
- Oral hygiene
- Colonoscopy
- ERCP
- Cardiac stress tests
- Caesarian section or vaginal delivery done under neuraxial anesthesia or vaginal delivery
- Any procedure done with regional anesthesia
- Electroconvulsive Therapy (ECT)
- Transesophageal Echocardiogram (TEE)
- NG tube insertion
- Chest physiotherapy

Signage

For patients that an AGMP is being performed; signage shall be posted on the door to ensure all staff entering the room will be wearing the appropriate PPE.

Personal Protective Equipment AGMP

- Gown
- Gloves
- Face protection
  - Safety glasses or goggles
  - Shield
- N-95 fit tested, seal checked respirator

- Head protection – disposable Bouffant