Infection Control Guidelines on the Management of Critical Adults with COVID-19

March 26, 2020


Guideline Scope:
These guidelines supplement the Ministry of Health Policy Infection Prevention and Control for Novel Coronavirus (COVID-19) to provide recommendations to support clinicians managing critically ill adults with COVID-19 in the intensive care unit (ICU). The target users of these guidelines are frontline clinicians, allied health professionals and policymakers involved in the care of patients with COVID-19 in the ICU.

Guidelines:
1. For healthcare workers performing aerosol-generating procedures* on patients with COVID-19 in the ICU, we recommend using fitted respirator masks (N95 respirators, FFP2 or equivalent), as opposed to surgical/medical masks, in addition to other personal protective equipment (i.e. gloves, gown and eye protection, such as face shield or safety goggles).
   
   *Aerosol-generating procedures in the ICU include: endotracheal intubation, bronchoscopy, open suctioning, administration of nebulized treatment, manual ventilation before intubation, physical pruning of the patient, disconnecting the patient from the ventilator, non-invasive positive pressure ventilation, tracheostomy, and cardiopulmonary resuscitation.

2. We recommend performing aerosol-generating procedures on ICU patients with COVID-19 in a negative pressure room.

3. For healthcare workers providing usual care for non-ventilated COVID-19 patients, we suggest using surgical/medical masks, as opposed to respirator masks, in addition to other personal protective equipment (i.e. gloves, gown and eye protection, such as a face shield or safety goggles).
4. For healthcare workers who are performing non-aerosol-generating procedures on mechanically ventilated (closed circuit) patients with COVID-19, we suggest using surgical masks or fitted respirator masks (N95 respirators, FFP2 or equivalent), in addition to other personal protective equipment (i.e. gloves, gown and eye protection, such as a face shield or safety goggles).

5. For healthcare workers performing endotracheal intubation on patients with COVID-19, we suggest using video-guided laryngoscopy, over direct laryngoscopy, if available.

6. For COVID-19 patients requiring endotracheal intubation, we recommend that endotracheal intubation be performed by the healthcare worker who is most experienced with airway management in order to minimize the number of attempts and risk of transmission.

7. Diligent hand hygiene is essential to preventing the spread of COVID-19 and other respiratory illnesses. Wash your hands with plain soap and warm water for 20-30 seconds or use an alcohol-based hand sanitizer.

For list of COVID-19 guidance and resource materials, see Ministry of Health Policy *Infection Prevention and Control for Novel Coronavirus (COVID-19)* – Appendix A.

**Selection and Use of Personal Protective Equipment (PPE):**
- Use of Surgical/Procedural Masks: See Ministry of Health Policy *Infection Prevention and Control for Novel Coronavirus (COVID-19).*

Note: highest risk of contamination is doffing. High-risk areas include inner hands, glove area, face and scrubs.

**References:**

