

# Aerosol-generating procedures: Applies to all patients during the COVID19 pandemic

## General Guidance

- Limit aerosol-generating procedures as much as possible
- Aerosol-generating procedures may occur in a regular patient/exam room
- Follow guidance below for room closure after procedure. The space in which the procedure is performed is contaminated with particles in the air until air exchanges have occurred\*
- **See guidance below on requirement for respiratory protection (i.e. N95 respirator, PAPR, CAPR)**

## **HIGHEST RISK** of generating aerosols

**N95 + eye protection/PAPR always required during procedure and for duration of room closure\* after procedure performed**

- Sputum induction
- Endotracheal intubation and extubation
- Bronchoscopy
- Bag mask ventilation
- CPR (Cardiopulmonary resuscitation)
- Any open tracheal suctioning (e.g. nasal, oral, stoma) which could generate a strong cough
- Airway procedures (e.g. nasopharyngeal endoscopy, surgical airway, tracheostomy)
- Esophageal procedures (e.g. Upper GI endoscopy, TEE) in a non-intubated patient

## Medium Risk of aerosol generation

Does not require N95/PAPR or room closure if there is NO clinical suspicion (e.g. fever/new respiratory deterioration) of COVID 19 AND a negative COVID test in the prior 3 days

- Insertion of a gastric tube (e.g. NG, OG) which could generate a strong cough
- Nebulizer treatment which could generate a strong cough
- High flow oxygen delivered via OptiFlow, VapoTherm
- Positive airway pressure therapy (e.g. BPAP, CPAP) when a viral filter is in place
- Dysphagia evaluation
- Esophageal procedures (e.g. Upper GI endoscopy, TEE) in an intubated patient



## Lowest risk of generating aerosols

N95/PAPR and room closure NOT recommended

- Low flow nasal cannula ( $\leq 6\text{L}/\text{min}$ ) or closed face mask (CFM) oxygen
  - Closed circuit mechanical ventilation with no disconnection or breaking of circuit
  - Brief (less than 1 minute) mechanical ventilator circuit interruption
  - Physiologic (non-induced) coughing
  - Nasopharyngeal swab collection
  - Closed tracheal suctioning
  - Thoracentesis and paracentesis
  - CT guided needle biopsies (e.g. lung biopsies)
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**For questions, contact Critical Care in your region.**

**The NICU/Neonatal practice is excluded from these guidelines. For Neonatal guidance please see "Neonatal Action Plan"**

\* Room closure after an aerosol-generating procedure that required an N95/PAPR:

If your area knows its air changes per hour (ACH), close the room for the time (mins.) required for removal at 99.9% efficiency, based on this [table](#). If ACH not known use the general guidance below:

- Up to 2 hours<sup>^</sup> for standard patient, exam, and procedure rooms
- Up to 1 hour<sup>^</sup> for negative air rooms
- Door should remain closed and staff wear N95/PAPR if in room