

Clarification on the Guidance for High-Risk or Aerosol-Generating Procedures

Key Principles:

1. All patients receive standard precautions. This is a longstanding practice that is unchanged.
2. Patients with known COVID or who are PUIs require the use of eye protection and contact precautions at all times. For respiratory protection, droplet isolation is used unless there is a procedure (listed below) that may have a risk of aerosol formation or a defined high-risk unit.
3. Patients who have been tested for COVID, and in whom it has been ruled out, as well as COVID positive patients who have completed the necessary isolation period, receive standard precautions at all times after documented verification by ID or infection prevention.
4. Patients of unknown status (not COVID or PUI, but not tested) who are undergoing potential aerosol-generating procedures will be treated with the same PPE as a COVID patient for that procedure.

Definition of a High-Risk Unit:

A unit is determined to be high-risk, requiring airborne, contact, and eye protection for all staff providing direct patient care using the following criteria:

- The unit has a high frequency or high percentage of PUI/COVID+ patients
- The level of acuity of the patients in the unit -i.e., high risk for aerosol-generating procedures
- The unit is determined to be an at-risk zone based on infectious disease, infection prevention, and local leadership evaluation.

Definition of Aerosol-Generating Procedure:

For the purpose of this guidance, aerosol-generating procedures are patient care procedures that are high risk for production of airborne transmissible particles that can remain suspended in the air, travel over a distance and may cause airborne transmission of infection if inhaled. Therefore, if there is a possibility of aerosolization of a disease transmissible from this procedure, these high-risk procedures require airborne precautions. For protection from COVID-19, contact and eye protections are added to airborne precautions.

Airborne, Contact + Eye Protection Requirement:

The following precautions are required when performing or present during these high-risk procedures:

- Negative pressure room, if available, otherwise, a private room with door closed. This does not include the operating rooms, which are always in positive pressure.
- Due to the shortage of PAPR/CAPR components, the use of these respirators should be prioritized for intubation, extubation, surgery on the airways and bronchoscopy of patients with potential for airborne transmission including COVID-19.
- Eye protection such as full-face shield or goggles when using N95 mask. To facilitate reuse of N95 mask, full-face shield must be used to provide a barrier for the mask.
- Gown and gloves
- Room clearance after a high-risk procedure is required to allow time for aerosolized particles in the room to be cleared. The time needed to clear the room is dependent upon the room's air

exchanges. In general, the following clearance times must be followed (if any question check with engineering):

- 20 minutes for OR rooms
- 25 minutes for Procedure rooms
- 45 minutes for all other rooms

Patient Population and Patient Locations:

The precautions for high-risk procedure identified in this guidance applies to any of the following:

- The procedures identified in the table below
- Patients who have not been excluded from having COVID or have not completed the required isolation period)
- All locations (inpatient or outpatient) where these high-risk procedures are performed

List of Aerosol-Generating or High-Risk Procedures:

The table below identifies the procedures that are high-risk in ALL locations and require Airborne + Contact + Eye Protection as described above.

Specialty	Procedures Possibly at Risk	PPE Recommendations
IR		
	Lung biopsy	N95 mask, gloves, eye protection & gown
	Lung ablation	
	Bronchial artery embolization	
PULM/ICU		
	Intubated patients	N95 mask, gloves, eye protection & gown
	High flow nasal cannula	
All Units		
	High COVID percentage in the unit - defined above	N95 mask, gloves, eye protection & gown
Laparoscopy		
	CO2 insufflation without smoke capture system	N95 mask, gloves, eye protection & gown
	Smoke plume without smoke capture system	
GI		
	Lower GI endoscopy	N95 mask, gloves, eye protection & gown
	All upper GI endoscopies	
H&NS		
	Nasal packing	N95 mask, gloves, eye protection & gown
	foreign body management in the nose or airway	

Specialty	Procedures Possibly at Risk	PPE Recommendations
	Middle ear surgery	CAPR/PAPR or N95 mask, gloves & gown
	Mastoidectomy	
	Repair of CSF leaks	
	Powered instrumentation in mucosal head and neck surgery	
	Cochlear Implants	
	Tracheotomy	
	Nasal endoscopy	
	Upper Airway surgery	
Other procedures		
	Intubation	CAPR/PAPR or N95 mask, gloves & gown
	Extubation	
	BiPAP	N95 mask, gloves, eye protection & gown
	CPAP	
	Nebulization	
	Sputum induction	
	Bronchoscopy	
	Autopsy	
	CPR	
	Open suctioning	
CAPR/PAPR is preferred. N95 if not available		
CAPR/PAPR can be used. N95 preferred to preserve CAPR/PAPRs for highest risk procedures		