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PARTNERS INFECTION CONTROL GUIDANCE ON RESPIRATORY PROTECTION AND USE OF AIRBORNE INFECTION ISOLATION ROOMS (AIIRs) DURING AEROSOL-GENERATING PROCEDURES DURING COVID-19 RESPONSE

This guidance replaces the Partners Infection Control List of Aerosol Generating Procedures and provides additional guidance on use of Airborne Infection Isolation Rooms.

This guidance describes current recommendations for respiratory protection (N95 respirator or PAPR) and the utilization of Airborne Infection Isolation Rooms (AIIR, “negative pressure” rooms) for patients undergoing aerosol-generating procedures (AGP) or who are anticipated to need AGP.

Aerosol-Generating Procedures (AGP):

- Airway Surgeries (e.g., ENT, thoracic, transsphenoidal surgeries)
- Intubation
- Extubation
- Chest Compressions
- Nebulization
- High flow oxygen, including nasal canula, at > 15L
- Non-invasive positive pressure ventilation (e.g. CPAP, BIPAP)
- Oscillatory ventilation
- Bronchoscopy
- Sputum induction
- Open suctioning of tracheostomy
- Tracheostomy change
- Manual ventilation (e.g. manual bag-mask ventilation before intubation)
- Disconnecting patient from ventilator
- Upper endoscopy (including transesophageal echocardiogram)
- Lower endoscopy
- Chest physical therapy
- Venturi mask with cool aerosol humidification
- Mechanical In-Exsufflator (MIE)
- Ventilator circuit manipulation

Use of N95 Respirators or PAPRs

An N95 or PAPR is required during all aerosol-generating procedure in patients with known or suspected respiratory illness (i.e., COVID-19, CoV-Risk, CoV-Exposed, other respiratory viruses), whether the procedure is performed in an airborne infection isolation room (AIIR) or not.


Nasopharyngeal swabs are not considered aerosol generating procedures; however, CDC and Partners guidance requires wearing an N95 respirator during swabbing and keeping the room door closed (negative pressure not required).

An N95 or PAPR is required in the following situations even if there is no known respiratory infection. See: Partners Guidance of Peri-Procedure Respiratory Protection
- Airway Surgeries (e.g., ENT, thoracic, transsphenoidal surgeries)
- Intubation and Extubation
- Chest Compressions

Note. The following are not considered aerosol-generating:
- Nonrebreather, face mask, or face tent up to 15L
- Humidified trach mask up to 20L with in-line suction
- Routine trach care (e.g., replacing trach mask, changing trach dressing)
- Routine Venturi mask without humidification
- Coughing
- Suctioning of oropharynx
- Proning is not inherently aerosol-generating but aerosols are possible if the endotracheal tube becomes disconnected during the proning process

Prioritization of AIIRs
AIIR’s should be prioritized when there is a shortage of AIIR rooms. Prioritization of AIIRs is based on patient risk of COVID 19 infection. See grid below for priority levels. If uncertainty exists regarding prioritization of patients for AIIR, interdisciplinary discussion is encouraged.

Note: It is not always possible to anticipate the need for an AGP; lifesaving care (e.g. intubation, chest compressions) should not be delayed in order to transfer a patient to an AIIR.

<table>
<thead>
<tr>
<th>1st priority</th>
<th>2nd priority</th>
<th>3rd priority</th>
<th>4th priority</th>
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<tbody>
<tr>
<td>COVID 19 confirmed</td>
<td>CoV-Risk (PUI)</td>
<td>CoV-Exposed</td>
<td>Other Resp Viral Infection</td>
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</tbody>
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TB, varicella, and measles patients require an AIIR and are not included in this guidance.

References: