Guidance for Use of Personal Protective Equipment PPE for Aerosol Generating Procedures

The following table provides guidance for determining the appropriate PPE and room criteria required for Aerosol Transmissible Diseases (ATDs) when performing Aerosol Generating Procedures (AGP). A PAPR is required for AGP for patients requiring airborne precautions.

<table>
<thead>
<tr>
<th>Type of Procedure</th>
<th>Airborne transmitted infections2 (e.g. TB, measles, varicella)</th>
<th>Has signs/symptoms consistent with COVID-19 and undergoing evaluation, COVID-19 exposed, or confirmed (Novel respiratory isolation)3</th>
<th>Asymptomatic with COVID-19 status unknown and/or test pending</th>
<th>Droplet transmitted infections4 that are part of the ATD Standard (e.g. influenza, adenovirus) excludes RSV, rhinovirus, parainfluenza, human metapneumovirus</th>
<th>All Others5 (Including patients with negative COVID tests)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE</td>
<td>Room criteria</td>
<td>PPE</td>
<td>Room criteria1</td>
<td>PPE</td>
<td>Room criteria</td>
</tr>
</tbody>
</table>

Aerosol Generating Procedures (AGP) include but are not limited to:

- Intubation procedure
- Non-invasive ventilation (BiPAP/CPAP)
- Manual Ventilation
- High frequency ventilation
- Tracheostomy/Laryngostoma with open suction, procedure/manipulation, ventilator disconnects3
- High Flow Nasal Cannula
- Other high risk procedures that should be considered AGPs: TEE, endoscopy, Venturi mask

For ALL COVID-19 testing: not an AGP, wear N95 w/eye protection (or PAPR), gloves, gown for collection.

Intubation procedure: PAPR and refer to isolation table

- N95 with face shield (or PAPR), gown, gloves
- Airborne isolation room
- N95 with face shield (or PAPR), gown, gloves
- Surgical mask with eye protection, refer to isolation table
- N95 with face shield (or PAPR), gown, gloves4
- Private patient room preferred
- Surgical mask with eye protection, refer to isolation table
- N95 with eye protection (or PAPR), gown, gloves4
- Private patient room preferred
- Surgical mask, refer to isolation table

PPE for Aerosol Generating Procedures

- PAPR or N95
- Surgical mask
- Gown
- Gloves
- Face shield (or PAPR)

For ALL COVID-19 testing: not an AGP, wear N95 w/eye protection (or PAPR), gloves, gown for collection.

Intubation procedure: PAPR and refer to isolation table

- N95 with face shield (or PAPR), gown, gloves
- Airborne isolation room
- N95 with face shield (or PAPR), gown, gloves
- Surgical mask with eye protection, refer to isolation table
- N95 with face shield (or PAPR), gown, gloves4
- Private patient room preferred
- Surgical mask with eye protection, refer to isolation table
- N95 with eye protection (or PAPR), gown, gloves4
- Private patient room preferred
- Surgical mask, refer to isolation table

2) Per Cal-OSHA regulation Title 8, Section 5199, (g) (3) (B)
3) Novel Respiratory Isolation Precautions N95/face shield (or PAPR), gown, gloves for all patients irrespective of AGP status. If patient receiving a continuous AGP or has a tracheostomy/laryngostoma in place patient in an airborne isolation room; otherwise private patient room indicated. Continue patient on Novel Respiratory Isolation if there are ongoing clinical concerns for COVID-19 even if COVID-19 testing is negative.
4) When AGP performed place ‘Aerosol Generating Procedure in Progress’ sign, wear N95 and depending on the category either eye protection vs face shield as outlined above (or PAPR), gowns, gloves when entering the room. For patients receiving discrete AGPs place ‘Aerosol Generating Procedure is in Progress’ sign and wear N95 and depending on the category either eye protection vs face shield as outlined above (or PAPR) during the procedure and when entering the room until >99% air changes achieved (if this is not known, then assume 1 hr). If risk for splash/splashing face shield is preferred type of eye protection.
5) Other i) Droplet transmitted infections not included in ATD Standards (e.g. RSV, rhinovirus, parainfluenza, human metapneumovirus), ii) negative respiratory viral evaluation AND no ongoing concern for COVID-19, OR iii) no concern for respiratory infection

There are exceptions to the above guidance for required use of PAPR. In the following exemptions an N95 may be worn in place of a PAPR. A) Emergency Patient Care that does not allow sufficient time to put on a PAPR, B) PAPR equipment interferes with the medical devices necessary to complete the required procedures or C) Call (415-885-3538) to report other potential exemptions for review and consideration.

Please contact the Medical Center Safety Office at MedicalCenterSafety@ucsf.edu or 415-885-3538 with any questions or concerns.

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