

Moving Forward: Personal Protective Equipment (PPE) in the Ambulatory Setting:

Virtual encounters will continue to be a staple of safe and appropriate care of Veterans during the COVID-19 pandemic. Given the expected duration of the pandemic, expanding in-person care is essential for needs that cannot be accomplished virtually.

Maintaining an environment of safety will include multiple layers of protection including pre-screening patients prior to visits or procedures, maintaining appropriate physical distance, limiting the number of people in the facility, screening for persons with symptoms at entry points, hand hygiene, environmental disinfection, and source control via face coverings for patients and staff.

The following table provides guidance on minimum recommended PPE based on type of patient interaction and likelihood of the patient being infected with COVID-19.

This guidance may be applied to clinical and non-clinical staff and depends on the following assumptions:

- Sufficient supply of PPE is available to meet the recommended minimums
- Benefits of face-to-face care outweigh potential harms, when considered with potential risks of delaying in-person care
- Preparation for use of respirators (i.e., fit testing), such as N95 or PAPRs, is prioritized for those participating in aerosol-generating procedures, and for staff in areas where sudden change of status necessitating cardiopulmonary resuscitation is likely (e.g., inpatient setting, cardiac procedures)
- Standard Precautions are followed in addition to the following guidance

Table 1: Minimum Recommended PPE and Room Downtime

COVID Status	Type of Patient Encounter	Patient Minimum Covering:	Staff Minimum Recommended PPE (in addition to Standard Precautions):	Minimum Room Downtime Between Patients	Additional Notes
<p>Low Risk:</p> <p>No COVID-19 signs or symptoms (Screen Negative) and</p> <p>No recent positive COVID-19 testing, not a Person Under Investigation (PUI) and not suspected of having COVID-19 infection</p>	<ul style="list-style-type: none"> No physical contact Patient masked 	<ul style="list-style-type: none"> Mask or cloth face covering 	<ul style="list-style-type: none"> Face Mask 	<ul style="list-style-type: none"> No minimum downtime 	In non-clinical areas, cloth face covering may be used by staff for source control; adding face shield adds additional protection
	<ul style="list-style-type: none"> Physical Contact Patient masked 	<ul style="list-style-type: none"> Mask or cloth face covering 	<ul style="list-style-type: none"> Face Mask Eye Protection (optional) Gloves (optional) 	<ul style="list-style-type: none"> No minimum downtime 	Consider eye protection based on exam, such as for examination of mucus membranes
	<ul style="list-style-type: none"> Physical Contact No Aerosol-Generating Procedure* Patient unmasked 	<ul style="list-style-type: none"> Mask or cloth face covering except as needed for exam 	<ul style="list-style-type: none"> Face Mask Eye Protection Gloves 	<ul style="list-style-type: none"> No minimum downtime 	* Includes examination and minor manipulation of oral or nasal mucosae that may produce occasional cough or sneeze, without active generation of aerosols.
	<ul style="list-style-type: none"> Aerosol-generating Procedure 	<ul style="list-style-type: none"> Mask or cloth face covering except as needed for exam 	<p>Test negative within 48 hrs[§]:</p> <ul style="list-style-type: none"> Face Mask Eye Protection Gown Gloves <p>Unknown, or testing >48 hrs:</p> <ul style="list-style-type: none"> Respirator (N95 or higher) or PAPR Eye Protection Gloves Gown 	<ul style="list-style-type: none"> No minimum downtime[§] 	<p>§Testing is not required: local risk assessment may determine testing, preferred use of Airborne Infection Isolation Room (AIIR), and/or increased room downtime, to be appropriate based upon prevalence of COVID-19 in the community or other Veteran or procedural factors. Testing within 48 hours of procedure is ideal, however within 72 hours of procedure is acceptable if needed because of local testing logistics.</p> <p>For a positive test in a low risk patient, follow guidance as for high risk patient with positive testing, below.</p>

COVID Status	Type of Patient Encounter	Patient Minimum Covering:	Staff Minimum Recommended PPE (in addition to Standard Precautions):	Minimum Room Downtime Between Patients	Additional Notes															
<p>High Risk:</p> <p>COVID-19 signs or symptoms (Screen Positive)</p> <p>or</p> <p>Veteran has a positive COVID test, is a person under investigation (PUI) or is suspected of having COVID-19 infection despite a negative test</p>	<ul style="list-style-type: none"> No physical contact Patient masked 	<ul style="list-style-type: none"> Mask or cloth face covering 	<ul style="list-style-type: none"> Face Mask Eye Protection 	<ul style="list-style-type: none"> No minimum downtime 	<p>Postpone if face-to-face needs not urgent. Telehealth recommended.</p>															
	<ul style="list-style-type: none"> Physical contact Patient masked 	<ul style="list-style-type: none"> Mask or cloth face covering 	<ul style="list-style-type: none"> Face Mask OR Respirator*** Eye Protection Gown Gloves 	<ul style="list-style-type: none"> No minimum downtime 	<p>Postpone if face-to-face needs not urgent. Telehealth recommended.</p> <p>***CDC recommends use of respirator, and lists face mask as an acceptable alternative</p>															
	<ul style="list-style-type: none"> Physical Contact No Aerosol-Generating Procedure* Patient unmasked 	<ul style="list-style-type: none"> Mask or cloth face covering except as needed for exam 	<ul style="list-style-type: none"> Face Mask OR Respirator*** Eye Protection Gown Gloves 	<ul style="list-style-type: none"> No minimum downtime. If significant coughing, can consider downtime as per #4 below 	<p>Postpone if face-to-face needs not urgent.</p> <p>* Includes examination and minor manipulation of oral or nasal mucosae that may produce occasional cough or sneeze, without active generation of aerosols.</p> <p>For COVID-19 testing via NP swab, use AGP precautions</p> <p>***CDC recommends use of respirator, and lists face mask as an acceptable alternative</p>															
	<ul style="list-style-type: none"> Aerosol-generating Procedure 	<ul style="list-style-type: none"> Mask or cloth face covering except as needed for exam 	<p>Test negative within 48 hrs[^]§:</p> <ul style="list-style-type: none"> Face Mask Eye Protection Gown Gloves <p>Positive Test, Unknown, or testing >48 hrs[‡]:</p> <ul style="list-style-type: none"> Respirator (N95 or higher) or PAPR Eye Protection Gloves Gown 	<ul style="list-style-type: none"> No minimum downtime[§] <table border="1"> <thead> <tr> <th>Air Change Per hr</th> <th>Time</th> </tr> </thead> <tbody> <tr><td>4</td><td>69 min</td></tr> <tr><td>6</td><td>46 min</td></tr> <tr><td>8</td><td>35 min</td></tr> <tr><td>10</td><td>28 min</td></tr> <tr><td>12</td><td>23 min</td></tr> <tr><td>15</td><td>18 min</td></tr> <tr><td>20</td><td>14 min</td></tr> </tbody> </table>	Air Change Per hr	Time	4	69 min	6	46 min	8	35 min	10	28 min	12	23 min	15	18 min	20	14 min
Air Change Per hr	Time																			
4	69 min																			
6	46 min																			
8	35 min																			
10	28 min																			
12	23 min																			
15	18 min																			
20	14 min																			

**Table 2: Aerosol-Generating Procedures as Defined by Expert Groups
Various Organizations’ List of Aerosol-Generating Procedures from IDSA**

There is neither expert consensus, nor sufficient supporting data, to create a definitive and comprehensive list of AGPs for healthcare settings. National Program Offices may issue additional guidance, and additional guidance will be provided in the Guidance for Resumption of Elective Procedures.

Original Source: <https://www.idsociety.org/globalassets/idsa/practice-guidelines/covid-19/infection-prevention/table-3.pdf#Table3>

Organization	CDC (COVID-19 guidance) ¹	CDC (Seasonal influenza guidance) ²	WHO (COVID-19 guidance) ³	WHO (Epidemic and pandemic - prone acute respiratory diseases) ⁴
Procedures listed	Open suctioning of airways, sputum induction, cardiopulmonary resuscitation, endotracheal intubation and extubation, non-invasive ventilation (e.g., BiPAP, CPAP), bronchoscopy, manual ventilation	Bronchoscopy, sputum induction, elective intubation and extubation, autopsies, cardiopulmonary resuscitation, emergent intubation and open suctioning of airways	Tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy	Aspiration of respiratory tract, intubation, resuscitation, bronchoscopy, autopsy

References Accessed on April 16, 2020

- Centers for Disease Control and Prevention. Health care Infection Prevention and Control FAQs for COVID-19. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-faq.html>.
- Centers for Disease Control and Prevention. Prevention Strategies for Seasonal Influenza in Health care Settings. Available at: <https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>.
- World Health Organization. Advice on the use of masks in the context of COVID-19. Available at: [https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-health-care-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-health-care-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak).
- World Health Organization. Epidemic- and pandemic-prone acute respiratory diseases - Infection prevention and control in health care. Available at: <https://www.who.int/csr/resources/publications/aidememoireepidemicpandemic/en/>.