
N95/PAPR Use for All Aerosol Generating Procedures 4.6.2021 1200

Spectrum Health contact: Steve Mogridge & Brent Petersen *Highlight denotes new content

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Situation

The Centers for Disease Control and Prevention (CDC) guidelines recommend N95 respirators or PAPR be worn by health care workers during aerosol generating procedures (AGPs) in facilities located in areas with moderate to substantial community transmission of COVID-19. Currently, West Michigan is Level E, the highest transmission level. Additionally, concerns have been raised regarding the potential for patients with known COVID-19 exposure to receive a negative test on admission but later become positive during their stay.

Background

Spectrum Health requires standard isolation masks and eye protection for all patient care encounters.

- (UPDATE: Beginning April 6, 2021 eye protection guidance at Spectrum Health is as follows:
 - Based on ongoing discussion and evaluation of CDC guidance, along with our current transmission rates of moderate to high and several variants and mutations in the community, eye protection is moving back to **required**, effective immediately, for all patient encounters. This includes all patient encounters in hospital and ambulatory settings, such as vaccine clinics, ED/urgent care, procedural, inpatient, exam room, or in corridors if providing assistance with ambulation or transport of patients.
 - Eye protection remains required for all COVID-19 positive or COVID-19 suspected patients.
 - Eye protection remains required for all patients receiving an aerosol generating procedure, regardless of COVID-19 status.)

In November, N95 respirators/PAPRs moved from being required only for AGPs for COVID-19 patients, to required for team members with frequent or prolonged close contact during the routine care of COVID-19 patients.

Assessment

With the recommendation from the CDC and sustained high community prevalence, including known circulation of COVID-19 variant strains, the risk for team member contact with a pre-symptomatic COVID-19 patient is possible. These patients may have tested negative but are too early in their disease process to register a positive result. At this time, N95 respirator supply chain has stabilized and COVID-19 testing capacity is robust. In addition to the CDC, the Joint Commission supports N95 respirator/PAPR use for all AGPs, as well as multiple health systems around the country already adopting this recommendation.

Recommendation

Beginning Tuesday December 22, 2020, N95 respirator or PAPR use will be required for the care of patients receiving AGPs regardless of the patient's COVID status. We support the following recommendations:

- All team members providing care for a patient receiving an AGP (Figure A) will don a N95 respirator or PAPR, following [N95 Mask Instructions](#).
- All forms of eye protection are appropriate for use (face shield, goggles, SafeView glasses, safety glasses). *Face shield/goggles remain required for confirmed/suspected COVID-19 patients.
- A lime green colored N95/PAPR Required sign will be placed on the door for all patients receiving an AGP (X24814).
- A room downtime following AGP will not be required. *A room downtime remains required for confirmed/suspected COVID-19 patients per current guidelines.
- Continue current process for placing all patients requiring AGPs in a private room.
- Surgical/procedural areas will continue current process for N95 respirator/PAPR use.

Frequently Asked Questions

Q: Why are all patient facing team members providing direct care for patients being asked to use N95 respirators or PAPRs during AGPs regardless of the patient's COVID-19 status?

A: Our N95 respirator and PAPR supply has stabilized enough to allow inclusion of all patient's receiving AGPs in our recommendations for use. The CDC recently updated recommendations to include this process as well. The expansion will provide an additional layer of protection for staff during this time of sustained substantial community spread.

Q: Is it safe to wear a standard isolation mask during an AGP?

A: Yes, wearing a standard isolation mask is safe and appropriate for patients who do not have COVID-19 (or other infections that require N95 respirators/PAPRs). However, with the current community spread in our area, team members are at a higher risk of coming into contact with a pre-symptomatic COVID-19 patient that has not yet tested positive. Wearing a N95 respirator or PAPR for all AGPs provides an additional layer of protection for staff.

Q: Who is included in this new recommendation?

A: All team members entering the room of any patient receiving an AGP are included. Surgical/procedural areas will continue to follow current guidelines.

Q: Are ventilators considered AGPs?

A: No. There is no evidence to show that aerosols are produced when a patient is ventilated.

Q: Do I need to wear a gown during AGPs on patients with no clinical concern for COVID-19?

A: No, a gown is not necessary during AGPs unless there is concern for blood or body fluid exposure (or if the patient is in Contact isolation, which requires a gown).

Q: Which eye protection can I wear during AGPs on patients with no clinical concern for COVID-19?

A: All forms of eye protection (face shield, goggles, SafeView glasses, safety glasses) are appropriate for use during AGPs on these patients. Face shield or goggles remain required for patients with

suspected or confirmed COVID-19.

Q: Do these patients need to be in a private room with the door closed?

A: As per our current guidelines, all patients receiving AGPs should be placed in a private room. For patients with no clinical concern for COVID-19, the door may be left open if necessary for patient monitoring (ex. Bedside pulse oximeter).

Q: How will patients receiving AGP be identified?

A: Respiratory Therapy will place a lime green sign on the door reading “N95/PAPR Required” during an intermittent AGP or when a continuous AGP is initiated. The sign will be removed when the AGP is complete. This is a similar process that is used for Enhanced Droplet Precautions for influenza patients. Respiratory will have a stash of these signs, but all units should order signs to be kept on the unit as well (X24814). Once the sign is removed, staff may resume wearing standard isolation masks.

Q: Is there any room downtime required after AGPs on patients with no clinical suspicion for COVID-19?

A: No, there is no required room downtime after AGP completion on these patients. Once the AGP is completed, team members may wear standard isolation masks while caring for these patients.

Q: Should I remove my N95 respirator/PAPR when leaving a patient’s room who is receiving an AGP?

A: N95 respirators or PAPRs may be worn continuously following [Extended Use Guidelines](#). Please store in a clean bag or box after doffing. N95 respirator should be used for one shift, and then discarded.

Q: Are visitors restricted during AGPs? Should they wear a N95 respirator?

A: The patient may have a visitor(s) as appropriate per the Access Management guidelines. The visitor should wear a standard isolation mask.

Q: Where can I find more information on N95 respirator and PAPR use, including fit testing questions?

A: Please see the following for more information: [N95 Mask Instructions and FAQs](#), [N95 Toolkit](#), [PAPR Guide](#)

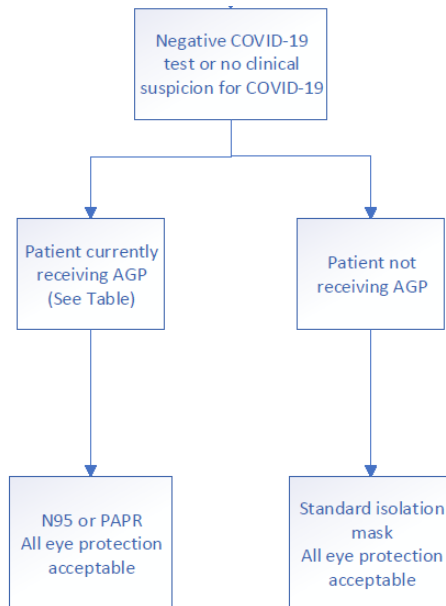
Q: Do we still need to follow this process for patients who have previously had COVID-19 and have been cleared from Severe Respiratory Precautions?

A: Yes. Currently we do not have a way to easily identify these patients. To avoid confusion and create consistency, these patients are included in this process.

Q: Why are surgical/procedural areas exempt from this new process?

A: Surgical/procedural areas already have processes that are acceptable. AGPs like extubation are quick procedures and these areas have much higher air turnover rates than patient rooms. Only the team member performing the procedure in that surgical space requires a N95 respirator or PAPR.

***Figure A:**



Treatment/Device	Considered Aerosol Generating Procedure?
Bag Valve Mask Ventilation – Filter	No
Bag Valve Mask Ventilation – No Filter or Code Response	Yes
BiPAP/CPAP	Yes
Code Response- In Room	Yes
Extubation	Yes
High Flow Oxygen delivered in any form: cannula, mask, trach	Yes
Intrapulmonary Percussive Ventilation (IPV)	Yes
Intubation	Yes
Metered Dose Inhaler	No
Nebulizer- Continuous, including Veletri	Yes
Nebulizer- Intermittent Small Volume	Yes
Non-Invasive Positive Pressure Ventilation	Yes
Non-Rebreather Mask	No
Open suctioning of artificial airway	Yes
Oscillator or JET Vent	Yes
Regular O2 mask with wall O2	No
Trach- Heat and Moisture Exchanger (HME)	No
Trach- Trach collar or T-piece	Yes
Ventilator- Conventional	No
Ventilator- Home	No
Ventilator- Prone patient	No
Ventilator- Transport	No
Venturi Mask	No