

POLICY/PROCEDURE TITLE: Aerosol Generating Procedure Precautions	
– Inpatient	
ENTITY: ☐ CMHC ☐ CMMC	
☑ BRIDGTON HOSPITAL	☑ RUMFORD HOSPITAL
☐ BOLSTER HEIGHTS	☐ RUMFORD COMMUNITY HOME
CATEGORY:	ORIGINATION DATE: 9/24/2020
Clinical Staff	
OWNER GROUP:	PUBLICATION DATE: 3/21/2022
Infection Control	

SCOPE

This policy applies to all Central Maine Healthcare Corporation facilities, practices, entities, and services ("CMHC") and all CMHC team members.

PURPOSE

The PURPOSE of this policy is to minimize exposure to infectious droplet particles during the COVID-19 pandemic that may become aerosolized during the performance of specific patient procedures.

STATEMENT OF POLICY

- 1. Aerosol Generating Procedures (AGPs) performed on patients with known or suspected COVID-19 shall be performed using AGP Precautions in a negative pressure room, when available, with appropriate air exchanges, and all appropriate PPE used: gowns, gloves, N95/PAPR/CAPR respirators, and eye protection.
- 2. All patients admitted as CMH inpatients shall be tested on admission.
- 3. All patients admitted for surgical/non-surgical procedures requiring anesthesia performed within the hospital shall be tested within a 96-hour window.
- 4. All Patients who are asymptomatic and have a negative COVID-19 test will require team members performing AGP's wear a respirator and face shield/safety eye protection as a protective measure. Negative pressure or monitoring of air clearance is not required.
- 5. Patients admitted as CMH inpatients who may be at potential risk of infection, including those who have not had a COVID-19 test performed, results are still pending, or have not been interpreted at the time of AGP, will have the procedure

- performed under **AGP Precautions**, including a negative pressure room (when possible), clearance time allowed for appropriate air exchanges, and use of gowns, gloves, respirator, and face shield/safety eye protection by all HCP entering the room.
- 6. Inpatients who have recovered from COVID-19, had their infection status resolved, and NRI (Novel Respiratory Infection) Precautions discontinued per Infection Prevention, do not require AGP Precautions for procedure.
- 7. Whenever possible, AGP Precautions shall be initiated in an AIIR (Airborne Infection Isolation Room: Negative Pressure). Since it is not always possible to anticipate the need for an AGP, lifesaving care should not be delayed in order to transfer a patient to a negative pressure room. If a negative pressure room is not available, AGPs may be performed in a standard patient room with the door closed.
- 8. To reduce exposure from AGP's, minimize the use of procedures or techniques that might produce infectious aerosol when feasible.
 - a. Nebulizers, fitted with a bacterial/viral filter and one-way valve negate the need for AGP Precautions.
- 9. Minimize the number of people in the operating or procedure room to reduce exposures. Limit traffic to essential personnel only in the room while an AGP is taking place.
- 10. All HCP entering the room during, or immediately after, an AGP performed under NRI or AGP Precautions shall wear Personal Protective Equipment consisting of gown, gloves, eye protection and respirator and allow for clearance time. In the OR, gowns, in addition to other required PPE, are worn only by those within 6' of the patient's head.
- 11. Door shall remain closed, with consideration to overall patient safety, during AGP/NRI Precautions and time required for air to circulate and clear 99% of aerosolized particles. This number is based on air exchanges of the room.
- 12. Standard Precautions and Infection Prevention protocols shall be used in addition to precautions outlined in this policy for all patients, i.e. hand hygiene, disinfection of equipment.

DEFINITIONS

Aerosol Generating Procedure (AGP): Procedures performed on patients that are more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, talking or breathing. Aerosols are smaller than droplets and may remain suspended in the air for longer periods of time. When inhaled by unprotected persons, they are a potential for disease transmission.

Procedures determined to be aerosol generating for the application of this policy include:

- Endotracheal intubation or extubation
- Non-invasive ventilation (CPAP/BiPAP)
- Nebulizer treatments without bacterial/viral filters and one-way valves
- Open suctioning

- Bronchoscopies
- Administration of high flow oxygen (>15 L)
- Chest Compressions
- Sputum inductions (discouraged procedure)
- Tracheostomy changes
- Manual ventilation (manual ventilation bag mask prior to intubation)
- Disconnecting patient from a ventilator
- Mechanical In-Exsufflator (MIE)

NRI: Novel Respiratory Infections

NRI Precautions: A combination of Droplet, Airborne, and Contact Precautions used for patients with COVID-19, in which a negative pressure room with a minimum of 12 air exchanges (ACH) are recommended and respirator, eye protection, gown, and gloves are necessary to enter the patient's room.

Standard Precautions: The minimum infection prevention practices that apply to all patient care, regardless of suspected or confirmed infection status of the patient, in any setting where health care is delivered – it includes the use of: hand hygiene and appropriate personal protective equipment whenever exposure to patients' body fluids is anticipated.

HCP: Health Care Personnel

CDC: Centers for Disease Control and Prevention

PROCEDURE/PROCESS

Performing an AGP Procedure on a patient with NRI Precautions, person under investigation for COVID, or COVID status pending or unknown:

- 1. Place patient in a private room with the door closed. Negative pressure rooms are preferred, but may not always be available.
- **2.** Don gown, gloves, N95 respirator or PAPR/CAPR, and face shield or other eye protection prior to procedure.
- **3.** Prior to initiating procedure, place AGP signage on the outside of the door, using a dry-erase market to document:
 - Date and time of procedure
- **4.** Determine # of air exchanges documented for the specific patient room. *This number can be found over the door or can be obtained from the Facilities department.*
- **5.** Calculate and mark the time required for removal of 99% efficiency and mark the date and time when it will be safe to enter the room without either an N95 respirator or PAPR/CAPR, precaution gowns, and safety eye protection.
- **6.** When time has expired, remove the signage from the door, wipe the sign clean with a disinfectant wipe to remove all ink.

AGP IN COVID NEGATIVE PATIENT:

- 1. Confirm testing for COVID has been performed prior to initiating AGP.
- 2. Confirm with nurse that patient has been screened for development of any <u>NEW</u> symptoms such as fever, chills, cough, sore throat, shortness of breath, fatigue,

- achiness, headache, loss of taste or smell, congestion/runny nose, nausea, vomiting or diarrhea.
- 3. Refer those screening positive for NEW symptoms to their provider for clearance prior to initiation of the AGP.
- 4. Place patient in a private room. Door may remain open.
- 5. Don respirator and eye protection/face shield when performing any AGP or entering the room with an AGP sign in place.
- 6. Place signage outside of the room, to alert other HCP that AGP is taking place, marking air exchanges and clearance times with "N/A" (Not Applicable).
- **7.** Remove signage immediately after procedure is completed, or if the patient is on a continuous AGP such as BIPAP, CPAP, or High flow oxygen, leave the sign in place.

SPECIAL CONSIDERATIONS

- "Limitations of using this (COVID-19) testing strategy include obtaining negative results in patients during their incubation period who later become infectious and false negative test results, depending on the test method used." CDC
- Limitations also include availability of COVID-19 laboratory testing supplies
- "There is neither expert consensus, nor sufficient supporting data, to create a definitive and comprehensive list of AGP's for healthcare settings." CDC
- CMH policies reflect that not all AGP's have been determined to pose the same risk of transmission and the decision to include AGPs was made on a risk assessed basis.

DISCLAIMER STATEMENTS

Extenuating circumstances may necessitate deviation from the terms of a policy. It is understood that emergent situations may occur, which require immediate resolution. Where applicable, appropriate documentation should be created to support the necessity for such deviations.

CROSS REFERENCES

PPE Conservation Guidance (Intranet: COVID-19 Team Member Updates)

REFERENCES AND SOURCES OF EVIDENCE

- Tran, Cimon, Severn, et al. Aerosol Generating Procedures and Risk of Transmission of Acute Respiratory Infections to Healthcare Workers: A Systematic Review. www.plosone.org April 2012, Volume 7, Issue 4
- Massachusetts General Hospital Policy: Infection Control Guidelines for Aerosol-Generating Procedures, Version 5.0, August 26, 2020. The General Hospital Corporation.
- Centers for Disease Control and Prevention: HCW Clinical Questions about COVID-19:
 Questions & Answers, updated August 4, 2020 https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html
- Minnesota Department of Health: Aerosol-Generating Procedures and Patients with Suspected or Confirmed COVID-19. 6/18/20.

- American Thoracic Society, SARS-CoV-2 Transmission and the Risk of Aerosol Generating Procedures. Public Health Information Series: June 30, 2020
- The Joint Commission. Aerosol Generating Procedure Sign
- The Joint Commission Position Statement (revised June 22, 2020): preventing
 Nosocomial COVID-19 Infections as Organizations Resume Regular Care Delivery

REVIEW/APPROVAL SUMMARY

SUPERSEDES:	
REVIEW/REVISION DATES 4/26/21, 3/10/22	
APPROVAL BODY(IES): Operations Council,	APPROVAL DATE: 3/21/2022
Policy Review Council, Infection Prevention	
Committee, Medical Branch of Incident	
Command	