

MAGIC Recommendations for Facility and Provider Teams on COVID-19 Management 3.31.20

To: Community SNF/LTC/ALF partners

From: Minnesota Association of Geriatric Inspired Clinicians, Clinical Practice Alliance Committee (CPAC)

Focus: **Aerosol-Generating Procedures (AGPs) Precautions and Recommendations**

The Covid-19 virus is transmitted via respiratory droplets and fomites, so aerosol-generating procedures are associated with a high risk of transmission. These procedures must be avoided with patients who have confirmed or suspected Covid-19. If it must be performed for a chronic condition, it should be completed very cautiously for the safety of staff and other residents. The following CPAC guidelines are intended to ensure safe, and effective care of patients with confirmed or suspected Covid-19 and keep staff who care for these patients safe.

Significant risks of Covid-19 transmission include the following AGPs:

- Nebulizers
- High flow oxygen
- CPAP/BiPAP
- Open suctioning of airways
- Sputum induction

The following guidelines are for Covid-19 Positive or Suspected:

Oxygen	<ul style="list-style-type: none"> • Concern for increased aerosolization above 6 L/min • Non-rebreather masks represent the “most closed” system for increased levels of supplemental oxygen and should be favored • Venturi masks, aerosol masks and high flow nasal cannula have high-risk aerosolization and should be avoided • Non-invasive positive pressure ventilation (NIPPV) is very high-risk of aerosolization.
Nebulizer	<ul style="list-style-type: none"> • Nebulized therapies should be AVOIDED <ul style="list-style-type: none"> ○ Nebulized bronchodilators are NOT recommended for Covid-19 patients ○ HFA and MDI therapies should be favored over nebulizers <ul style="list-style-type: none"> ▪ Of note, there are shortages of inhalers (ie: albuterol MDI) ○ Other nebulized therapies should NOT be routinely considered in Covid-19 patients • Utilize an AeroChamber if the patient has cognitive impairment, or difficulty with proper inhaler technique • <u>Self-Administration:</u> <ul style="list-style-type: none"> ○ IF the patient MUST receive a nebulizer for an underlying condition, staff can assist to set up the nebulizer and leave the room prior to self-administration ○ Staff should not re-enter the room for 2-3 hours if able; if they do need to enter, PPE must be worn
Nocturnal CPAP/BiPAP	<ul style="list-style-type: none"> • CPAP/BiPAP have high levels of aerosolization • Provider to order a brief trial without PAP to assess if needed during the crisis • If able to stop PAP therapies, consider the following:

	<ul style="list-style-type: none"> ○ Ensure HOB increased to 30 degrees ○ Nasal cannula oxygen if cyclic desaturations are <80% ● If unable to stop PAP therapies: <ul style="list-style-type: none"> ○ Follow strict precautions identified below ○ Contact the medical director for further instruction
Airway Clearance Therapies	<ul style="list-style-type: none"> ● Aerobika valves used with a neb should be avoided ● Acapella valves and incentive spirometers are acceptable
General aerosol-producing guidelines	<ul style="list-style-type: none"> ● Avoid open suctioning and any cough inducing procedures whenever possible ● Patients with aerosol-generating procedures should be in a single-room and the door to the hallway should be kept shut at all times

IF the patient MUST receive an AGP, staff should follow these strict precautions:

- The number of staff present during the procedure should be limited to only those essential for patient care and procedure support. Visitors should not be present for the procedure.
- Hand hygiene before entering and when leaving room
- Airborne precautions with N95 mask + eye protection (goggles or face shield), and contact precautions (gown, gloves). Door should remain closed.
- Upon set-up of nebulizer, staff should maintain a safe distance (6 feet or greater), possibly outside the door.
- Patients do not need to be transferred to a higher level of care solely for the purpose of providing nebulizer treatment

Post-procedure requirements

- Clean and disinfect procedure room surfaces promptly
- Virus has been shown to stay airborne for up to 3 hours after aerosolizing, wear appropriate PPE if entering room within 3-hour time period

Storage of inhalers and nebulizer medication

- Facilities should review infection control prevention measures as it pertains to storage of inhalers in the med cart and possible contamination
- Consider keeping inhalers, AeroChambers, or nebulizer parts in patient rooms or cleaning and properly storing before putting back in the med cart

References:

Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings

<https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>

Preparing for COVID-19: Long-term Care Facilities, Nursing Homes <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-in-long-term-care-facilities.html>

Interim Statement on Infection Prevention and Control for the Administration of Nebulized Medication to Patients with Suspected or Confirmed COVID-19 <https://www.health.state.mn.us/diseases/coronavirus/hcp/aerosol.pdf>

UWHC Guidelines for Aerosol-Producing Procedures and Respiratory Support Options



Photo displaying aerosol spread from a nebulizer:

