Department of Health Government of Nunavut	NURSING POLICY, PROCEDURE AND PROTOCOLS Community Health Nursing	
TITLE:	**SECTION:**	**POLICY NUMBER:**
Aerosol-Generating Medical Procedures in Patients with Known or Suspected COVID-19	Infection Control	10-003-06
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APPLIES TO:		
Community Health Centres		

PLEASE NOTE: This is an emerging pandemic involving a novel virus. As new evidence is released, the information contained within this document may change.

1. **BACKGROUND:**

The SARS-CoV-2 virus (COVID-19) currently causing a worldwide pandemic, is transmitted primarily by droplet and contact means. Certain procedures, known as 'aerosol-generating medical procedures' (AGMP), are believed to cause both a higher volume of infectious droplets as well as aerosolization of the virus, increasing risk of transmission.

This policy aims to a) list common or potential activities within the health centre that are considered AGMP; b) provide direction on required personal protective equipment (PPE) when performing or participating in AGMP; c) outline risk reduction and infection control and prevention strategies.

2. **POLICY:**

In the context of the COVID-19 pandemic:

2.1 A risk/benefit analysis should take place prior to performing an AGMP, with the healthcare provider assessing the potential for generating aerosols.

2.2 Airborne, droplet, and contact precautions including N95 mask should be worn when AGMPs are performed or have the potential of being performed.

2.3 AGMP should be performed in (order of preference):

- **2.3.1** Negative pressure room if available, or
- **2.3.2** Isolation room with door closed, or
- **2.3.3** Private room with door closed, or
- **2.3.4** COVID-19 cohort area, where all healthcare providers are wearing PPE

2.4 For emergent procedures where a patient cannot be moved (code blue, acute decompensation) or for AGMP that are brief in duration and transfer is impractical (nebulizer treatment for example):

- **2.4.1** Close curtains or door to patient's room if possible
- **2.4.2** Procedure should be performed with minimal staff in room and most experienced staff
- **2.4.3** All involved personnel don airborne/contact/droplet PPE

2.5 Health centre staff shall apply the risk reduction strategies outlined in 5.0

2.6 Health centre staff shall apply the infection prevention and cleaning strategies after AGMP, as outlined in 6.0

3. **PRINCIPLES:**

3.1 Safety and protection of health centre staff is priority.

3.2 AGMP are high risk for health centre staff and client exposure to respiratory viruses, including COVID-19.

3.3 Individual health centre staff should routinely perform a context specific risk assessment to determine what PPE is necessary.

4. **DEFINITIONS:**

4.1 Risk Assessment: Evaluation of the interaction of the employees, the patient, and patient environment to assess the potential for exposure to an infectious disease.

4.2 Aerosol: Small droplet of moisture that may carry microorganisms. Aerosols may be light enough to remain suspended in the air for short periods of time, allowing inhalation of microorganisms.

4.3: Aerosol-generating Medical Procedures: A procedure with the potential to generate a high volume of respiratory droplets and aerosols.

4.3.1 Common or Potential AGMP in Health Centre Setting:

- **i.** Nebulizer therapy
- **ii.** High-flow oxygen therapy (nasal prongs at >6L/min)
- **iii.** Open airway suctioning (this includes deep suctioning of nasopharynx and trachea; this does not include oral suctioning)
- **iv.** Cardiopulmonary resuscitation (CPR)
  - a. Cardioversion and defibrillation **in the absence of bag-valve mask ventilation (BVM)** are not considered AGMP
  - b. Other procedures associated with CPR including chest compressions **with** intubation and manual ventilation are AGMP
  - c. Chest compressions alone are not considered AGMP
- **v.** Bag-valve Mask Ventilation (BVM)
- **vi.** Non-invasive Ventilation (e.g. CPAP, BiPAP)
- **vii.** Endotracheal intubation and extubation
- **viii.** Induced sputum (refers to inhalation of nebulized saline to liquify/produce airway secretions, this does not include natural coughing to bring up sputum)
- **ix.** Insertion of any advanced airway
- **x.** Needle decompression

4.3.2 Potential procedures in the health centre setting that are NOT considered AGMP:

- **i.** Defibrillation or cardioversion WITHOUT airway manipulation, or BVM
- **ii.** Chest compressions WITHOUT airway manipulation, or BVM
- **iii.** Collection of nasopharyngeal or throat swab
- **iv.** Coughing, oral suctioning, oral hygiene
- **v.** Vaginal delivery
- **vi.** NG/OG tube insertion
- **vii.** Chest physiotherapy
- **viii.** Non-rebreather mask with or without filter ≤ 15L/min
- **ix.** Any procedure done with regional anesthesia
- **x.** Intranasal medication

5. Risk Reduction strategies for Aerosol-generating medical procedures

5.1 Ensure proper signage is posted for areas that AGMP are to be performed

5.2 Follow Policy 07-035-00 *Community Health Centre Protected Code Blue During the COVID-19 Pandemic*

5.3 Use a metered dose inhaler (MDI) with spacer as first line, for inhaled medications

5.4 During the COVID-19 pandemic, nebulized treatments are only to be performed under direction and consultation with Physician or Nurse Practitioner

5.5 Use of Personal Protective Equipment as per Policy 10-003-01 – 10-003-05 inclusive

5.6 Use viral filter with BVM if available

5.7 Use 2-person 4-hand technique for BVM to create a better seal around the mouth and nose

5.8 When possible, close the door to room that AGMPs are being performed

5.9 Keep windows closed; air can be blown back into the hallway

5.10 Limit the number of people present during AGMP

5.11 Consider duration of airborne precautions following AGMP:

- **5.11.1** Negative pressure rom – 45 minutes
- **5.11.2** Private or isolation room with door closed – 4 hours
- **5.11.3** Large non-private room – 6 hours

6. Infection Prevention and cleaning after AGMP

6.1 Clean shared equipment as per routine practice prior to use on other patients

6.2 Linen, lab specimens, dishes, garbage are handled with routine precautions

6.3 Clean surfaces that are visibly soiled and disinfect high touch surface areas if patient to remain in room.

6.4 Once patient has left room, terminal cleaning of room is required – note 5.11

7. Documentation:

7.1 Document as per policy 06-008-00 and 06-008-01 and include:

- **7.1.1** Indication of AGMP
- **7.1.2** Precautions
- **7.1.3** Patient consent and education as indicated

8. Related Policies, Protocols and Legislation:

Department of Health, Qikiqtani General Hospital. April 2020. *Airborne Generating Medical Procedures in Patients with Known or Suspected COVID-19.*

Government of Nunavut, Department of Health. Infection Prevention and Control Manual
https://www.gov.nu.ca/health/ information/infection-prevention-and-control

Government of Nunavut, Department of Health. Housekeeping Procedure Manual
https://www.gov.nu.ca/health/information/housekeeping-procedures-manual

Community Health Manual Policy 10-003-01	Infection Control Guidelines
Community Health Manual Policy 10-003-02	Airborne Precautions
Community Health Manual Policy 10-003-03	Droplet Precautions
Community Health Manual Policy 10-003-04	Contact Precautions
Community Health Manual Policy 10-003-05	Precautionary Measures for Microorganisms

Community Health Manual Policy 07-035-00 Community Health Centre Protected Code Blue During the COVID-19 Pandemic

9. REFERENCES:

The Ottawa Hospital, Department of Critical Care. COVID-19 quick reference guide. Retrieved from https://www.covidottawa.com/

Approved By:	Date: June 22, 2020
Ruby Brown, Deputy Minister – Department of Health	
Approved By: Monique Skinner Digitally signed by Monique Skinner DN: cn=Monique Skinner, o=Government of Nunavut, ou=Operations, email=mskinner@gov.nu.ca, c=CA Date: 2020.06.22 08:23:27 -06'00'	Date:
Monique Skinner, Chief Nursing Officer	
Approved By:	Date:
Francois de Wet, Chief of Staff	