Aerosol-Generating Procedures (AGPs):

**Note:** This information is subject to change based on new research and evidence.

Background: Aerosol-generating procedures (AGPs) are procedures performed on patients that are more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, vomiting, talking, or breathing. This is a list of procedures that may produce aerosolized respiratory secretions. Procedures that produce aerosolized particles from other secretions, skin or tissue are not included as they cannot transmit viable SARS-CoV-2 virus particles.

Staff should don the appropriate PPE with the anticipation of exposure to aerosols, use judicious judgement to evaluate procedures and reference policy NMHC HS 04.0210 Respiratory Protection Program for additional information. There may be other APGs performed in your area; please contact Infection Prevention if unsure whether a procedure is an AGP.

- Intubation and extubation
- Airway exchange
- Non-invasive ventilation, exchange and removal of an artificial airway
- Tracheotomy, bedside tracheostomy, and tracheostomy and laryngectomy care
- Cardiopulmonary resuscitation (CPR) and ambu resuscitation
- Mechanical ventilation when there is no viral filter or when there is a disconnection in the closed circuit > 1 minute
- Manual ventilation before intubation
- Non-bronchoscopic bronchoalveolar lavage (NB-BAL)
- Suctioning an open tracheostomy
- Nasopharyngeal suctioning
- Autopsy
- Pulmonary function test (PFT)
- Non-invasive ventilation:
  - Continuous positive airway pressure (CPAP)
  - Bi-level positive airway pressure (BiPAP)
  - Average Volume Assure Pressure Support (AVAP)
  - Variable Positive Airway Pressure (VPAP)
  - High-flow nasal cannula (≥ 15 LPM)
- Breathalyzers
- Ventilation Perfusion (V/Q) Scan
- Respiratory therapy procedures:
  - Nebulizer treatments (no risk if in-line) – for example: albuterol, Duoneb®, 3% saline, methacholine challenge
  - Metaneb®
  - Oscillatory PEP Devices i.e. Aerobika®
  - Sputum induction
  - Respiratory vest – percussion therapy
- Speech therapy:
  - Videofluoroscopic swallow study (VFSS)/Modified Barium Swallow Study (MBSS)
- Dysphagia evaluation and treatment
  - Clinical Swallow Evaluations (CSE) & Dysphagia Treatment
  - Dysphagia Meal Assistance with Nursing & SLP
- Endoscopic or bronchoscopic examination of throat, trachea, lungs, upper GI tract, sinus- may include:
  - Laryngoscopy
  - Bronchoscopy
  - Transesophageal echocardiogram (TEE)
  - Esophagogastroduodenoscopy (EGD)
  - Upper GI endoscopy, including endoscopic retrograde cholangiopancreatography (ERCP)
- Surgical procedures:
  - Transection of airway
  - Laryngeal procedures
- Obstetrics and Neonatology
  - Obstetrics 2nd stage of labor through delivery
  - Neonatal L&D emergency response
Procedures Not Treated As Aerosol-Generating Procedures (AGPs):

**Note:** This information is subject to change based on new research and evidence.

- Basic dental examinations and fluoride administration, panoramic radiographs, intraoral radiographs, cephalometric radiographs, Cone Beam radiographs and photographs
- Breathalyzer with Intox TestSafe Mouth Piece when adequate lip seal can be performed
- Chest tube insertion/removal
- Closed circuit mechanical ventilation (includes patients’ own device) with a viral filter in place without circuit disconnection, or with brief (<1 min) disconnection with the ventilator in standby
- Closed in-line tracheal suctioning
- Closed face mask (e.g. Simple mask, Non-rebreather, OxyMask) or trach collar with oxygen flow rates of <15L/min
- Coughing and/or sneezing
- H. pylori breath test
- Hyperventilation
- Incentive Spirometry
- Inhalers with Spacers
- Metered Dose Inhaler (MDI)
- Nasal or oral bulb syringe suctioning in non-intubated patients or mushroom adapter - Infants
- Nasal, nasopharyngeal or oropharyngeal swab collection
- Nasogastric tube (NGT) or Dobhoff placement or removal
- OPA removal in PACU
- Oxygen “blow-by”
- Oropharyngeal suctioning
- Physiologic (non-induced) coughing
- Practices which induce or include physiologic heavy breathing (e.g. cardiac stress testing, induced exercise during PT/OT, pulmonary rehabilitation)
- Resting Metabolic Rate Machine
- Saliva COVID-19 Test
- Threshold PEP device
- Unheated high flow nasal cannula (green)
- Visual ENT Exam
- Vomiting
- Wound care/ lavage

**References:**

- World Health Organization. Infection prevention and control during health care for probable or confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection. (2019)