Policy Statement
Aerosol Therapy will be provided by Covenant Health staff in accordance with current medication administration policies.

Applicability
All Covenant Health Employees

Principles
• The seven rights of medication administration (right patient, reason, time, dose, medication, route and documentation) are followed.

• Respiratory therapists are responsible for administering aerosolized medication to ventilated patients.

• Respiratory therapists or nurses may administer aerosolized medications to patients who are not ventilated.

• Patients receiving aerosol therapy will have heart rate and oxygen saturation monitoring.

• The individual administering the medication will do an assessment of the patient, pre and post medication when the medication is given the first time, with dose adjustments, and daily. This assessment includes auscultation of breath sounds, work of breathing, air entry, oxygen therapy requirement, and oxygen saturation monitoring. The assessment is modified if the patient is unstable, or does not tolerate handling.

• Particular attention should be paid to mouth care for patients on steroid aerosol therapy as this therapy may alter normal mouth flora and make the patient susceptible to infection.

• MDI adapters, mouthpieces, nebulizers, and spacers should be changed or cleaned weekly. Nebulizers are cleaned between use by rinsing with sterile water and allowing to air-dry.

• The individual administering the medication will document it on the medication record.

Equipment
MDI:
- Metered dose inhaler
- Infant spacing device

NEBULIZED:
- Medication
- Medication nebulizer
- 1 mL and 3 mL syringes
- Aerosol face mask
- Oxygen flow meter
- Oxygen Tubing
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Action</th>
<th>Rationale</th>
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<tbody>
<tr>
<td>1.</td>
<td>Perform hand hygiene and gather equipment.</td>
<td>Pre-assessment determines the need for aerosol therapy and provides a baseline status to assess treatment effectiveness.</td>
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<td>2.</td>
<td>Perform a pre-medication assessment of the patient including air entry, breath sounds, oxygen requirements and non-invasive monitoring parameters.</td>
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<td>3.</td>
<td>Check medication using the seven rights of medication administration. Prepare medication and saline for use in side stream nebulizer.</td>
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<td>4.</td>
<td>Prepare equipment and deliver medication.</td>
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<tr>
<td><strong>Metered Dose Inhaler</strong></td>
<td>• Attach aerochamber to mask. Shake MDI canister for at least 30 seconds. • Place the mask end of the spacing device over the patient’s face and press down on the MDI canister. • Hold the mask over the patient’s face for 5-6 breaths and then remove.</td>
<td>Shaking mixes the mediation with the propellant gas. The spacing device acts as a reservoir for the medication.</td>
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<tr>
<td><strong>Side Stream Nebulizer</strong></td>
<td>• Attach one end of oxygen tubing to blended oxygen source and other end to the bottom of the nebulizer. • Inject medication and saline into nebulizer through the top port. • Keeping the nebulizer upright, attach it to the face mask. • Adjust gas flow to 8 L/min and observe for a visible mist. • Hold the mask in an upright position to the infant’s face until the mixture is gone.</td>
<td>The total volume should be at least 3 mL to deliver the medication. Check for leaks or cracks in the nebulizer if no mist is produced.</td>
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<td>5.</td>
<td>Observe the infant’s tolerance during treatment and after medication administration.</td>
<td>Observation may detect side effects of a particular medication.</td>
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<td>6.</td>
<td>Perform a post-medication assessment of the patient after approximately 10 minutes.</td>
<td>This assessment helps to give an objective evaluation of the therapy.</td>
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<td>7.</td>
<td>Administer mouth care to the infant if indicated.</td>
<td>Steroid therapy may alter normal flora.</td>
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Related Documents
Adapted with permission from Stollery Children's Policy and Procedure Manual:
http://www.intranet2.capitalhealth.ca/nicu/pages/policiesprocedures/policiesprocedures_new.htm
Aerosol Therapy Policy, March 2008
Aerosol Therapy Procedure, March 2008
Standard Medication Nebulizers, Carefusion.com

RELATED POLICIES AND PROCEDURES
Medication Administration

Revisions
March 2015

Signing

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GAIL CAMERON
SENIOR DIRECTOR OPERATIONS
MATERNAL, NEONATAL & CHILD HEALTH PROGRAMS
COVENANT HEALTH
GREY NUNS & MISERICORDIA HOSPITALS

May, 2015
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