NEONATAL PREMEDICATION FOR INTUBATION

I. PURPOSE
   A. The purpose of this policy is to define the patient population that is appropriate for Neonatal pre-medication for intubation and process delineation.

II. SCOPE
   1. This guideline applies to all members of the Indiana University Lifeline Critical Care Transport team.

III. EXCEPTIONS
   A. Patients in which the delay for medication administration could place them at risk.
   B. Neonates with moderate to severe hypotonia.
   C. Do not give paralytics if:
      1. Unable to bag-mask ventilate
      2. Pierre Robin Syndrome
      3. Neck mass, cystic hygroma
      4. Airway malformations
      5. TEF
      6. Other contraindications

IV. DEFINITIONS
   Endotracheal intubation attempt: An attempt defined as placement of the laryngoscope pass the gum/teeth

   Neonatal Pre-medications for Intubation: The administration of medications prior to non-emergent endotracheal intubation procedure

V. PROCEDURES
   1. Patient identified needing non-emergent endotracheal intubation with IV access in place.
   2. Prior to administration of protocol medications- Team Time out performed and completed medication check.
3. Medications dosage and administration: With IV access in place
   1. Atropine 0.02mg/kg IV push once given over 15 seconds followed by 1ml of 0.9% normal saline IV push. (one dose).
      i. Consider if warranted in patients with tachyarrhythmia’s.
   2. Fentanyl 2 MCG/KG IV over 3 minutes, followed by 1ml of 0.9%NS flush ALSO administered over 3 minutes. (2 doses max).
   3. Rocuronium 1mg/kg IV push. (2 doses max).

4. Rapid administration of Fentanyl may cause respiratory depression, hypotension, bradycardia, flushing and chest wall rigidity preventing effective ventilation. Treatment for chest wall rigidity is administration of a paralytic. If this occurs, please notify the control physician, once patient stabilized.

5. ETT placement confirmed using at least three objective measures. Definitive confirmation obtained via chest x-ray if warranted.

6. All intubated patients will have continuous capnography attempted post intubation.

7. Airway management via mechanical ventilator is the expectation for all patients with an artificial airway. Ventilator checks will be completed and documented at least every 15 minutes.

8. A blood gas, preferably arterial, will be obtained 10 minutes after placing the patient on the ventilator.

9. Document capnography or reason not monitored in charting for every intubated patient transported.

10. Document number of endotracheal attempts for this procedure.

11. Document time, tube size, depth of insertion, complications, securing device, lowest oxygen saturation during the procedure, and methods of confirmation of ETT placement.

VI. CROSS REFERENCES
   NICU Clinical Guideline on Premedication for Endotracheal Intubation

VII. REFERENCES/CITATIONS
# IX. FORMS/APPENDICES

**Endotracheal Intubation (Table) NRP 7th Edition**

<table>
<thead>
<tr>
<th>Gestational Age (weeks)</th>
<th>Weight (kg)</th>
<th>ETT Size</th>
<th>Depth of Insertion* (cm tip to lip)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 28</td>
<td>&lt; 1</td>
<td>2.5</td>
<td>6-7</td>
</tr>
<tr>
<td>28-34</td>
<td>1-2</td>
<td>3</td>
<td>7-8</td>
</tr>
<tr>
<td>34-38</td>
<td>2-3</td>
<td>3.5</td>
<td>8-9</td>
</tr>
<tr>
<td>&gt;38</td>
<td>&gt;3</td>
<td>3.5-4</td>
<td>9-10</td>
</tr>
</tbody>
</table>

*Depth of insertion (cm) = 6 + weight (in kg)