

## IREDELL HEALTH SYSTEM

<b>Intra-Nasal Administration of Fentanyl and Versed for Pediatric Patients in the Emergency Department (ED)</b>	
Pharmacy Department	
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Approved by: Pharmacy & Therapeutics Committee	

**Purpose:** To utilize intra-nasal (IN) fentanyl and midazolam for the pediatric population, without IV access, for minor procedures of short duration.

**Background:** The IN route of medication administration has been shown to be extremely effective in rapidly treating pain in the pediatric population. Medication deposited on the highly vascular nasal mucosa may be rapidly absorbed into the bloodstream and cerebral spinal fluid (CSF), achieving therapeutic drug levels more quickly and predictably than oral medications while avoiding needles.

**Indication:** 1) the stable pediatric patient, who requires pain therapy for moderate to severe pain and who does not have IV access; 2) the pediatric patient who requires minimal sedation

**Patient Population:** Pediatrics (3 months - 16 years of age)  
 Infants < 3 months or < 52 weeks post-conceptual age will not be sedated in the ED for procedures; anesthesia will be consulted.

**Contraindications:** Known hypersensitivity to fentanyl and/or midazolam, altered conscious state, epistaxis, current Upper Respiratory Tract Infection (URTI) or nasal infection/obstruction

**Policy:**

- **Initial triage evaluation:** Obtain weight in kilograms (kg), vital signs, NPO status

	<b>Fentanyl (pain therapy)</b>	<b>Midazolam (minimal sedation)</b>
<b>Appropriate intra-nasal dosing</b>	1 - 2 mcg/kg Maximum of 100 mcg per dose Use 100 mcg/2 mL product	0.1 - 0.5 mg/kg Maximum of 10 mg per dose Use 5 mg/mL – 2 mL product
	Onset of action: 2 – 5 minutes Duration: 30 – 60 minutes	Onset of action: 10 – 15 minutes Duration: 60 minutes
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>• Pain scale before and after dose</li> <li>• Vitals signs after dose</li> <li>• Cardiac monitoring during and after dose</li> <li>• Oxygen saturation at least 45 – 60 minutes after dose</li> </ul>	

- **Administration**
  1. Draw up appropriate dose, including medication to account for the “dead space” within the Mucosal Atomization Device (MAD). DO NOT USE same MAD for any additional doses.
  2. Attach MAD to syringe.
  3. Divide dose evenly between nares.
  4. With patient sitting at approximately 45 degrees or with head to one side, insert device loosely into the nostril. Do not direct MAD horizontally along the nasal floor.
  5. Infuse over 15 seconds through MAD to each nare.

\*Ideal volume for intranasal medication: 0.25 – 0.3 mL per nare. Absolute maximum: 1 mL per nare.