

IREDELL HEALTH SYSTEM

Naloxone Dosing Guidelines	
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Dept of Emergency Medicine Critical Care Committee P&T Committee	Date: 02/2025 Date: 03/2025 Date: 04/2025

Purpose: To provide guidance on the appropriate administration of naloxone for opioid overdose.

Policy: Criteria for naloxone administration:

- Respiratory Rate (RR) of 10 or below **OR**
- RR trending downward significantly from normal baseline
- **AND** at least one of the following:
 - Signs of inadequate ventilation (O_2 saturation $< 90\%$, hypotensive)
 - Somnolent, difficult to arouse or unarousable (with no other apparent cause)
 - Pinpoint pupils (patients with history of cataract surgery may have impaired pupil response)

Procedure:

- A. For non-life threatening dosing (opioid tolerant* patients and/or non-apneic breathing):
 1. Administer naloxone 0.4 mg (400 mcg) in 10 mL NS for a final concentration 0.04 mg/mL every 2 – 5 minutes
 2. Repeat dose until improvement in RR and mental status sustained
 3. *Opioid tolerant is defined as 60 mg morphine daily or equivalent, for at least 5 days
- B. For **Life threatening emergency or overdose (Imminent risk of death)** – very low RR and/or apneic breathing:
 1. Administer naloxone 0.4 mg (400 mcg), up to 2 mg IV Push
 2. May repeat every 2 – 3 minutes, if needed

C. Naloxone Infusion: standard concentration 4 mg / NS 100 mL (0.04 mg/mL)

<p>Starting Dose: Start dose consistent with 2/3 of naloxone bolus doses needed to sustain normal respirations</p> <p>Example: 40 mcg bolus doses x 3 = 120 mcg (0.12 mg) Initial rate = 80 mcg/hr (0.12 mg/hr).</p>	<p>Titration Guidelines: Titrate to respiratory rate > 10 and improvement in mental status for 4 hours.</p> <p>Increase rate by 25% for any of the following:</p> <ol style="list-style-type: none"> 1. RR of ≤ 7 2. Resp interval of ≥ 15 seconds 3. $PaO_2 < 60$ mmHg with $PaCO_2 > 46$ mmHg 4. $PaCO_2 > 55$ mmHg or arterial blood pH > 7.3 without metabolic acidosis 5. Inadequate response to verbal commands <p>Decrease infusion rate by 25% for any of the following:</p> <ol style="list-style-type: none"> 1. Increase of self reported pain intensity 2. Acute sympathomimetic (nervousness, severe headache, anxiety, vertigo, nausea, vomiting) or psychotomimetic symptoms (confusion, hallucinations) under adequate hemodynamic and metabolic treatment 3. Stable condition lasting 4 hours without any symptoms of overdose
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D. Naloxone Infusion Monitoring

1. Patients requiring a continuous naloxone infusion require continuous cardiac monitoring
2. Vital signs (RR, BP, HR, pulse oximetry, level of sedation, pain) shall be documented every 15 minutes during infusion and 4 hours after infusion has been discontinued.
3. Reassess patient 30 minutes after any rate change.
4. Notify provider for signs/symptoms of withdrawal (nausea, vomiting, sweating, tachycardia, tremor and tachypnoea) or incidence of inadequate response to naloxone.
5. If respiratory depression occurs during infusion, bolus with $\frac{1}{2}$ the initial bolus dose every 3 – 5 minutes until symptoms improve, then increase infusion by $\frac{1}{2}$ the rate.

INITIAL EFFECTIVE DATE: 05/2025

DATES REVISIONS EFFECTIVE:

DATES REVIEWED (no changes):