REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME
naloxone

Effective Date: Dec 2011

Revised Date: Dec 2022

CLASSIFICATION	OTHER NAMES	PAGE
Narcotic antagonist	**Narcan**	1 of 2

ADMINISTRATION POLICY:

IV Infusion – Administration restricted to nurses experienced in ED/CARDIAC ROOM/ICU/PACU
Intraosseus (IO) – Administration restricted to nurses experienced in ED/CARDIAC ROOM/ICU/PACU
IV Bolus – May be administered by a nurse
Intramuscular (IM) – May be administered by a nurse
Subcutaneous – May be administered by a nurse

RECONSTITUTION/DILUTION/ADMINISTRATION:

Available as: 0.4 mg/mL ampoule and 10 mL multidose vial, 1 mg/mL vial

IV Bolus: Administer over 30 to 60 seconds
For doses greater than 0.4 mg: Administer undiluted
For doses (0.1 to 0.4 mg): Add 0.4 mg (1 mL of 0.4 mg/mL) to 3 mL normal saline
Final Volume: 4 mL Final Concentration: 0.1 mg/mL
For doses (0.02 to 0.08 mg): Add 0.4 mg (1 mL of 0.4 mg/mL) to 9 mL normal saline
Final Volume: 10 mL Final Concentration: 0.04 mg/mL

IM/Subcutaneous: May administer undiluted only if unable to obtain IV access.

IV Infusion: Pump Library:

Drug Library	**Dose Rate**	**Short Name**	**Care Unit**
Yes	mg/h	nalox4	Critical Care
Drug	**Diluent**	**Final Volume (VTBI)**	**Final Concentration**
4 mg (10 mL of 0.4 mg/mL)	100 mL NS	110 mL	0.036 mg/mL
Clinical Advisory: High Alert			
Soft Low Dose Limit: 0.1 mg/h	Soft High Dose Limit: 3 mg/h		

DOSAGE:

Treatment of opioid overdose:

IV bolus/IM/Subcutaneous: 0.4 mg to 2 mg repeating every 2 to 3 minutes until respiratory rate is greater than 10 per minute
For overdoses suspected to be due to high potency opioids the following titration protocol is recommended:
0.4 mg, 0.4 mg, 2 mg, 10 mg administered at 2 to 3-minute intervals until adequate response obtained.

IV continuous: 0.1 to 3 mg/hour, titrate to response

Reversal of opioid induced respiratory depression:

IV bolus/IM/Subcutaneous: 0.04 to 0.4 mg over 30 seconds at 2 to 3-minute intervals until respiratory rate is greater than 10 breaths/minute

IV Continuous: 0.1 to 0.4 mg/hour, titrate to patient response

(dosage continued)

REGIONAL ADULT PARENTERAL DRUG MONOGRAPH		
GENERIC NAME **naloxone**		

Effective Date: Dec 2011 **Revised Date:** Dec 2022	CLASSIFICATION **Narcotic antagonist**	OTHER NAMES **Narcan**	PAGE 2 of 2

Dosage (continued):

Reversal of pruritis:
IV Bolus: 0.02 or 0.04 mg over 2 to 3 minutes every 2 to 4 hours as needed

Maximum Single Dose: Reversal of respiratory depression: 0.4 mg
Treatment of opioid overdose: may titrate up to 15 mg (when using protocol above)
Maximum Daily Dose Titrate to response (reversal of respiratory depression)
Maximum Rate: IV bolus: over 30 seconds
IV continuous: 3 mg/hour
Maximum concentration: IV bolus: 1 mg/mL

STABILITY/COMPATIBILITY:

Stability of Final Admixture: 24 hours at room temperature

Compatibility: Compatible with normal saline or D5W

PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:
Adverse reactions are related to reversing dependency and precipitating withdrawal. Withdrawal symptoms are the result of sympathetic excess. Adverse events occur secondarily to reversal (withdrawal) of opioid analgesia and sedation.

- May precipitate acute withdrawal symptoms in opioid dependent patients
- Nausea and vomiting with large doses
- Hypertension, pulmonary edema, arrhythmias (secondary to release of catecholamines with the return of pain)

ADDITIONAL NOTES AND NURSING CONSIDERATIONS:

- In the absence of a narcotic agent the drug has no effects
- Onset of action: Within 30 seconds to 2 minutes (IV). Duration of action: is variable and may be as short as 45 minutes or as long as 3 to 4 hours, and is partially dependent on the amount, type and route of opioid being reversed.
- During continuous infusion, monitor:
  - Level of consciousness every hour
  - Respiratory rate every hour and notify physician if respiratory rate is less than or equal to 10 per minute during the infusion
  - Blood pressure and heart rate every hour while naloxone infusion to minimize risk of hypertension and tachycardia
  - Continuous oxygen saturation monitoring
- After discontinuation of an opioid, closely monitor for rebound narcotic overdose symptoms, taking in consideration the elimination time of the opioid. The duration of action of some opioids exceeds the duration of action of naloxone. This is especially important in opioids with a long half-life like methadone or with unknown opioid overdoses where there is a suspicion of ingestion of a high potency or long acting opioid.

Partial opioid agonist and mixed opioid agonist/antagonist overdose: i.e. buprenorphine, pentazocine Reversal may be incomplete and larger or repeat doses of naloxone may be required.