

NALOXONE (Narcan)

EMSAC FEBRUARY 2026

ACTION: **Narcotic Opioid** Antagonist

- Rapidly binds and blocks opioid receptors in the brain and central nervous system
~~Antagonizes effects of opiate narcotic agents by competing at the receptor site resulting in reversal of respiratory depression associated with opiate overdoses.~~

INDICATIONS:

- Altered ~~M~~ mental ~~S~~ status and/or respiratory depression in the presence of suspected narcotic overdose, or coma of unknown etiology

CONTRAINDICATIONS:

- Allergy to medication ~~Patients with hypersensitivity to the drug.~~
- Neonate ~~in the setting of~~ with suspected opioid ~~ate~~ dependence

POTENTIAL SIDE EFFECTS:

- May precipitate withdrawal in chronic narcotic users including: nausea, vomiting, diaphoresis, agitation (see 2.18 Opioid Withdrawal)
- Pulmonary complications: aspiration pneumonia and pulmonary edema
 - ~~Rapid administration can cause projectile vomiting.~~
 - ~~Patients may become agitated or violent after drug is administered.~~

ADULT DOSE/ROUTE:

- ⇒ IVP/IM/IO: 0.4mg - 2mg, may repeat in 5 min for continued respiratory depression (max cumulative dose 10 mg)
- ⇒ Intranasal (IN): 2mg via mucosal atomizer device (MAD), may repeat in 5 min for continued respiratory depression (max dose 4mg)
- ⇒ Nebulized: For patients spontaneously breathing (≥ 6 breaths/minute), responsive to light tactile stimuli --2 mg diluted in 3mL of normal saline via standard face mask nebulizer. Mask may be removed once symptoms improve.

PEDIATRIC DOSE/ROUTE:

- ⇒ DO NOT GIVE to NEONATES with suspected opioid dependence may consider in acute opioid induced respiratory depression
- ⇒ Less than 20 kg: 0.1 mg/kg IV/IM/IO, may repeat in 5 min for continued respiratory depression (max single dose 2mg; max cumulative dose 6mg)
- ⇒ Greater than 20 kg: 2 mg IN via MAD or IVP/ IM/ IO, may repeat in 5 min for continued respiratory depression (max cumulative dose 6mg)

NOTES:

- ~~Doses of Naloxone smaller than 2 mg may be given if it is suspected that the patient may have taken a combination of heroin and cocaine ("speedball").~~
- Patients with altered mental status secondary to an opioid overdose may become agitated or violent following naloxone administration due to opioid withdrawal therefore the goal is to use the lowest dose as possible to avoid precipitating severe withdrawal. Be prepared for this potential scenario and take the appropriate measures in advance to ensure and maintain scene safety.
- Clinical opioid reversal effect of naloxone is limited and may end within a 30 minutes-1hour whereas opioids often have a duration of 4 hours or longer. Therefore, patients may have return of respiratory depression as the effects of naloxone wear off.
- ~~Because Naloxone is a short-acting narcotic antagonist, repeat doses may have to be given if the patient's LOC and respiratory status start to diminish again.~~
- High-potency opioids (e.g. carfentanil, synthetic opioids etc.) may require higher doses of naloxone. Contact Base Hospital, to request additional doses above the max cumulative doses outlined. ~~may be indicated for some opiate overdoses (Buprenorphine, Suboxone, and Darvocet).~~

Effective: xx/xx/xx
Supersedes: 2/3/20