

**Class**

Opioid Antagonist, Antidote

**Pharmacologic Properties**

Naloxone is a competitive opioid receptor antagonist and non-opioid centrally acting analgesics. The drug antagonizes the effects of opiates by competing at the same receptor sites, reversing the effects of respiratory depression. Onset of action is 1-2 minutes; the duration of action is 30-120 minutes.

**Indications**

- Naloxone is indicated for the reversal of narcotic intoxication with respiratory depression [Protocol 15](#), [Protocol 15P](#).
- Altered mental status (unknown cause) or CO Poisoning with respiratory depression [Protocol 25](#).

**Contraindications**

- Known hypersensitivity

**Precautions**

- Use caution during administration as patient may become agitated or violent as level of consciousness increases
- Should be administered cautiously to persons who are known or suspected to be physically dependent on opiates, including newborns of dependent mothers – may precipitate acute withdrawal
- Naloxone has a relatively short half-life compared to many narcotics, monitor closely for the need to repeat dose
- Naloxone is not effective against a respiratory depression due to non-opioid drugs
- Patients who become responsive secondary to naloxone administration are not authorized to refuse medical care and/or transport since all such patients are considered medically incapacitated

**Side Effects/Adverse Reactions**

- Tremor, Agitation, Belligerence, Pupillary dilation, Seizures, Sweating, Hypertension, Hypotension, Ventricular tachycardia, Pulmonary edema, Ventricular fibrillation, Nausea and Vomiting

**Dosage and Administration**

**Adult**

- Pre-packaged 4 mg nasal spray (4 mg/0.1 mL single dose)
  - May repeat every 2 to 3 minutes in alternating nostrils as needed to improve respiratory drive to a self-sustainable level.
- In the event the pre-packaged nasal spray is not available, administer 1 mg IN via MAD
  - Do not administer more than 1 mL per nostril per single dose.
  - Make sure to alternate nostrils when repeating administration as needed.
  - May repeat every 2 to 3 minutes in alternating nostrils as needed to improve respiratory drive to a self-sustainable level.
- 0.5 mg slow IV/IO or IM.
  - May be repeated as needed to improve respiratory drive to a self-sustainable level.

**Pediatric**

- Pre-packaged 4 mg nasal spray (4 mg/0.1 mL single dose)
  - May repeat every 2 to 3 minutes in alternating nostrils as needed to improve respiratory drive to a self-sustainable level.
- In the event the pre-packaged nasal spray is not available, administer 1 mg IN via MAD
  - Do not administer more than 0.5 mL per nostril. Administer 0.5 mL in each nostril to give a total of 1 mg.
  - Make sure to alternate nostrils when repeating administration as needed.
  - May repeat every 2 to 3 minutes in alternating nostrils as needed to improve respiratory drive to a self-sustainable level.
- 0.1 mg/kg slow IV/IO or IM (Max total dose of 2 mg).
  - May be repeated as needed to improve respiratory drive to a self-sustainable level.