

Classification

Opiate Antagonist

Prehospital Indications

Overdose / Poisoning/ Ingestion: suspected opiate overdose with altered mental status and hypoventilation/apnea

Other Common Indications

None

Adult Dose

2-4 mg IN (1mg per nostril or 4mg/0.1mL IN depending on formulation available) or **2mg IM** or **0.8-2mg IV push**

Maximum dose all routes 8mg, titrate to adequate respiratory rate and tidal volume

Pediatric Dose

0.1mg/kg (1mg/mL) IM/IN/IV, dose per *MCG 1309*, or **2-4 mg IN** if using pre-packaged nasal spray (1mg per nostril or 4mg/0.1 mL IN depending on formulation available); excludes newborns

Maximum dose all routes 8mg, titrate to adequate respiratory rate and tidal volume

Mechanism of Action

Competes for and displaces narcotic molecules from opiate receptors in the brain. Reverses the respiratory depression associated with overdose of narcotic agents.

Pharmacokinetics

Onset is < 2 min IV, 2-10min IM; duration is 20-120 min

Contraindications

Hypersensitivity

Interactions

None

Adverse Effects

Nausea and vomiting
Sweating
Tachycardia
Agitation
Hypertension
Abdominal pain
Acute pulmonary edema

Prehospital Considerations

- Give in small increments until the desired narcotic reversal is achieved (respiratory rate 12 and adequate tidal volume).
- Duration of action of some narcotics may exceed that of naloxone; therefore, patient must be closely observed for need for repeat doses.
- Naloxone causes acute withdrawal symptoms and can precipitate acute pulmonary edema when given in large boluses to narcotic addicts. Use only enough to reverse respiratory depression.
- Naloxone is not indicated in cardiac arrest though can be given after ROSC if narcotic overdose suspected.
- Higher dose pre-packaged nasal spray should not be used in the newborn/neonate due to potential risk to precipitate withdrawal.