NALOXONE

Read in conjunction with Disclaimer

HIGH RISK Medication

Formulary: Restricted Requires Neonatologist or relevant specialist review within 24 hours of initiation	
Presentation	**Ampoule:** 400 microg/1 mL
Drug Class	Opioid antagonist
Indication	• Birth - newborn infants with respiratory depression secondary to maternal opioid administration *(see special considerations).* • Reversal of opioid effects (opioid induced respiratory depression, narcotic overdose, chest wall rigidity during intubation following narcotic administration).
Special Considerations	**Do not give to newborn infants of opioid-tolerant mothers due to risk of withdrawal syndrome and seizures.** • Not routinely used in neonatal resuscitation. Establish and maintain adequate respiration before administration of naloxone to a newborn infant. • May result in acute abstinence syndrome, manifested as convulsions, excessive crying, and hyperactive reflexes. Opioid withdrawal may be life-threatening in neonates. Recurrence of respiratory and/or CNS depression may occur following an initial improvement in symptoms. • Larger than necessary dosage of naloxone may result in significant reversal of analgesia and increase in blood pressure; too rapid reversal may induce nausea, vomiting, sweating or circulatory stress.
Monitoring	• The duration of action of naloxone is short and subsequent observation of the neonate should be conducted. • Continuous cardiorespiratory monitoring is required. • Resuscitation facilities must be readily available. • Assess respiratory effort and neurologic status. Monitor patient for 24 hours for relapse. • Signs/symptoms of acute opioid withdrawal may occur as naloxone is metabolized; hence, patients should be continuously monitored for at least 2 hours after the last dose is given. Signs and symptoms of withdrawal in neonates include seizures, excessive crying, hyperactive reflexes, increased blood pressure, tachycardia. • Monitor blood pressure and ECG, and the development of pulmonary oedema in patients with pre-existing cardiac disease or use of medications having adverse cardiovascular effects.
Compatibility	**Fluids:** Sodium Chloride 0.9%, glucose 5%
Incompatibility	Incompatible with solutions that contain bisulfites or sulfites, alkaline solutions (e.g. sodium bicarbonate) and calcium folinate

Side Effects	• Abrupt reversal of opioid depression may result in nausea, vomiting, sweating, tremulousness, tachycardia, hypertension, seizures, ventricular tachycardia and fibrillation, pulmonary oedema, and cardiac arrest. • Naloxone administered to babies whose mothers are known or suspected to be addicted to opioids may precipitate an acute withdrawal syndrome (tachycardia, tachypnoea, hypertension, tremors, vomiting and seizures).
Storage & Stability	Store at room temperature, below 25°C. Protect from light.

INTRAVENOUS

Presentation (for IV use)	**Ampoule:** 400 microg/1 mL
Dosage	**Birth - newborn infants with respiratory depression secondary to maternal opioid administration** *(see special considerations)* 100 microg/kg, repeat every 2 to 3 minutes if required
	Reversal of opioid effects (opioid induced respiratory depression, narcotic overdose, chest wall rigidity during intubation following narcotic administration) 10 to 100 microg/kg, repeat every 2 to 3 minutes if required
Preparation	Use undiluted
Administration	**IV push (preferred):** Inject over 30 seconds, repeat at 2 to 3 minute intervals if required.

INTRAMUSCULAR

Presentation (for IM use)	**Ampoule**: 400 microg/1 mL
Dosage	**Birth - newborn infants with respiratory depression secondary to maternal opioid administration** *(see special considerations)* 100 microg/kg, repeat every 2 to 3 minutes if required
	Reversal of opioid effects (opioid induced respiratory depression, narcotic overdose, chest wall rigidity during intubation following narcotic administration) 10 to 100 microg/kg, repeat every 2 to 3 minutes if required
Preparation	Use undiluted
Administration	Administer as per Medication Administration guideline

Related Policies, Procedures, and Guidelines

Clinical Practice Guidelines:

Intubation

Neonatal Abstinence Syndrome

CAHS Pharmaceutical and Medicines Management Guidelines:

Medication Administration

References

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