NALOXONE

Trade Name	Naloxone injection USP (DBL)
Class	Opiate antagonist.
Mechanism of Action	Direct competition for CNS opiate receptor sites.
Indications	Respiratory depression due to opiate analgesics.
Contraindications	DO NOT GIVE to infant of opiate-dependent mother.
Dilution	Not usually required, only if necessary for dose accuracy.
Supplied As	400 microgram/mL (clear, colourless solution)
Dosage	100 microgram/kg/dose (0.25mL/kg/dose).
Interval	Repeat dose not usually required with the IM dose. A late repeat dose may be necessary (more frequently in past with low dose given IV) as half-life may be shorter than that of the opiate. T1/2 1 hour
Administration	**IM is preferable**. Note: the effect will be delayed if perfusion is compromised. Can also be given IV, SC or via ET.
Compatible With	**Solution:** 0.9% sodium chloride, dextrose 5%, lactated Ringer's, water for injection **Terminal Y-site:** Acyclovir*, adrenaline, amikacin, aminophylline*, amiodarone, atropine, benzylpenicillin, azithromycin, caffeine, calcium chloride, calcium gluconate,cefazolin*, cefotaxime, ceftazidime, cefuroxime,dobutamine, dopamine, erythromycin, fentanyl, fluconazole,folic acid, furosemide,ganciclovir, gentamicin, glucagon, glycopyrrolate, heparin, hydrocortisone, indometacin*, insulin, lidocaine, magnesium*, methylprednisolone, metoclopramide, metronidazole, midazolam, milrinone, morphine, noradrenaline, pancuronium, phenobarbital, piperacillin/tazobactam, potassium chloride, potassium phosphate, propranolol, pyridoxine, ranitidine, salbutamol, sodium bicarbonate, sodium valproate, ticarcillin, tobramycin, trimethoprim/sulfamethoxazole*, vancomycin, vasopressin, voriconazole *there are variable reports of compatibility of naloxone with these medicines – monitor for any sign of precipitation in the line

Incompatible With	Amphotericin B, diazepam, diazoxide, phenytoin, thiopental Avoid use in combination with preparations containing bisulfite or metabisulphite There is no information on compatibility with Lipid solutions
Monitoring	Post administration: as respiratory depression may recur, observe respirations for 6 hours
Stability	Discard ampoule immediately after use.
Storage	Room temperature (below 25°C); protect from light.
Adverse Reactions	Acute withdrawal reaction (tachycardia, tachypnoea, hypertension, vomiting, tremors, seizures) if mother narcotic-dependent.
Metabolism	Following parenteral administration Naloxone is rapidly distributed in the body. It is metabolised in the liver, primarily by glucuronide conjugation and excreted in the urine. In one study the serum half-life in adults ranged from 30 to 81 minutes (mean 64 ± 12 minutes). In a neonatal study the mean plasma half-life was observed to be 3.1 ± 0.5hours. (Medsafe Data Sheet)
Comments	Do not give naloxone to a flat shocked baby **RESUSCITATE AND VENTILATE first**. Full resuscitation, especially establishment of an airway, should always take priority over administration of Naloxone Naloxone can be given to improve respiratory effort after resuscitation if a mother has been given pethidine / opiate within 3-4 hours of birth and the baby's main problem is respiratory depression. Each mL contains 8.6mg of sodium chloride: and 2.0mg of methylhydroxybenzoate and propylhydroxybenzoate as preservatives in a ratio of 9 to 1. pH is adjusted to 3.5 + 0.5 with hydrochloric acid. Onset of action 3-4 minutes IM. Duration of effect >24 hours due to depot effect. Ref. RCPCH
References	1. Young T.E. et al. Neofax 2000; 128. + Neofax in www.micromedexsolutions.com 2. www.medsafe.govt.nz 3. RCPCH Medicines for children 1999 4. NZHPA Notes on Injectable Drugs www.noids.nz 5. Trissel IV Compatibility in www.micromedexsolutions.com
Updated By	Jan Klimek Nov 2001. P Schmidt and B Robertshawe August 2005 A Lynn, B Robertshawe Nov 2012 (re-order profile) A Lynn, B Robertshawe October 2021 (update compatibilities)