

NICU: Atropine

Reference No: MONO-PAEDS/575/23

Presentation:	Injection 600 micrograms/ml										
Indication:	Bradycardia not responding to bag and mask ventilation during elective intubation (see guideline NIC RC 09)										
Dose:	20 micrograms/kg as a single dose										
Route of administration:	IV bolus. Atropine has a low pH and may cause venous irritation and tissue damage in cases of extravasation. If central venous access is unavailable, administer via a large peripheral vein monitoring insertion site closely. Re-site cannula at first signs of inflammation.										
Instructions for preparation:	<ul style="list-style-type: none"> Draw up 1mL of the 600 micrograms/ml injection Dilute to a final volume of 10mL with sodium chloride 0.9% Shake well to mix thoroughly The resulting solution contains 60 micrograms per ml Draw out the volume required from the syringe using the smallest syringe possible 										
	Dose	10 micrograms	20 micrograms	30 micrograms	40 micrograms	50 micrograms	60 micrograms	70 micrograms	80 micrograms	90 micrograms	100 micrograms
	Amount of 60 micrograms per mL diluted solution	0.17mL	0.33mL	0.5mL	0.67mL	0.83mL	1mL	1.17mL	1.33mL	1.5mL	1.67mL
	<ul style="list-style-type: none"> Administer calculated volume as a rapid IV injection; slow injection may result in paradoxical bradycardia. 										
Prescribing	RDH: Prescribe on paper chart QHB: Prescribe on Meditech										
Known compatibility issues	See separate guideline										
Additional Comments:	<p>May cause paradoxical bradycardia if given by slow IV injection. Ventricular fibrillation and tachycardia have occurred rarely. Monitor ECG according to clinical need.</p> <p>Not licensed for use in children < 12 years for intra-operative bradycardia or by IV route for premedication.</p>										

Note: The contents of this monograph should be read in conjunction with information available in the BNFC and Medusa regarding cautions, contraindications etc.

References:

Medusa Paediatric Injectable medicines guide, accessed via: Injectable Medicines Guide - Display - Atropine sulfate - Intravenous - Version 10 - IVGuideDisplayMain.asp (medusaimg.nhs.uk) on 13/10/23

NICU intubation chart, accessed via: opac-retrieve-file.pl (koha-ptfs.co.uk) on 13/10/23

BNFc Atropine sulfate, accessed via: Atropine sulfate | Drugs | BNFC | NICE on 13/10/23 Up to Date Pediatric Drug Information for Atropine (systemic) Accessed 14/11/23

Evelina Paediatric Formulary Accessed 14/11/23

Suitable for printing to guide individual patient management but not for storage Review Due: December 2026

Document control sheet

GUIDELINE NUMBER	CH PH N 48
AREA IN WHICH THIS MONOGRAPH APPLIES	NICU

DIVISIONAL AUTHORISATION	
GROUP	DATE
Paediatric monograph review group	22/12/2023

AUTHORS		
Author	Position	Date
Written by:	Senior Pharmacist Paediatrics	November 2010

If review:

	Position	Date
Reviewed, updated and transferred to new template by:	Amanpreet Bria, Shift Working Clinical Pharmacist	October 2023
Checked by: Name	Carol Bright, Advanced Pharmacist Education & Training Lamia Ahmed, Advanced Women's and Children's Pharmacist	November 2023

Change history:

Changes Reference	Change details	Date
1	Dilution recommendation changed to avoid measurement of volumes <0.2mL which is potentially inaccurate	October 2019
2	Dose increased to 20 micrograms/kg	October 2023
3	Draw up 1mL of 600 micrograms in 1mL and dilute up to 10mL with NaCl 0.9% resulting in 60 micrograms in 1mL solution	October 2023
4	Amount of mLs to draw up dependent on the dose (see Intubation chart on Koha)	October 2023
5	Administration instructions in main body of monograph amended from 'slow IV bolus' to 'rapid IV injection'	November 2023