CLINICAL PRACTICE GUIDELINE
Guideline coverage includes NICU KEMH, NICU PMH and NETS WA

Resuscitation Medications and Fluids

This document should be read in conjunction with the Disclaimer

Adrenaline

If HR remains < 60/min despite adequate ventilation and > 60 seconds of coordinated cardiac compressions and ventilation give:

DOSE	> 2.0 Kg (> 34 weeks) give 1.0 mL of 1:10,000 solution < 2.0 Kg (≤ 34 weeks) give 0.5 mL of 1:10,000 solution Refer to Neonatology Medication Protocols: Adrenaline
ROUTE	The quickest effective route of administration is via the ETT. This route has been questioned in the latest ILCOR guidelines and where possible the UVC is a preferred route of administration. If initial administration is via ETT, subsequent doses should be given via the UVC. Other routes of administration are not acceptable.

Volume Expansion

This again remains controversial. The local policy is to err on the side of volume expansion with a recommendation that any infant who is not responding to an initial dose of Adrenaline receive a 10 mL/Kg bolus of normal saline via a UVC. This is based on the possibility of covert blood loss and the fact that in a shocked state the circulating volume may be functionally deficient without blood loss.

FLUID	Normal saline is the most convenient and safest volume replacement. When overt blood loss has occurred, O Negative blood is ideal and is available in the recovery/ theatre blood fridge. Volume loading with normal saline should not be delayed. Refer to Neonatology Clinical Guideline
ROUTE	Umbilical venous catheter. **NB**: If a full resuscitation is anticipated a UVC should be prepared prior to the birth.
VOLUME	10 mL/Kg given as bolus over 1-2 minutes. May be repeated.

Naloxone

Naloxone is a second line resuscitation drug that is only indicated under specific circumstances and after other resuscitative measures.
Consider if:

- The mother has received narcotics within 4 hours of delivery.
- The mother is not an illicit user of narcotics.
- There is continued respiratory depression after positive pressure ventilation has restored a normal heart rate and colour. i.e. Should not be administered in the first 5 minutes of life.

DOSE	100 micrograms/Kg Refer Neonatology Medication Protocols: Naloxone
ROUTE	IV. Dose may be repeated. Naloxone has traditionally been given IM but there is no evidence to support efficacy. Infants receiving naloxone should be closely monitored and admitted to the SCN.

Sodium Bicarbonate

Sodium bicarbonate should **not** be given as a first line drug during resuscitation. It may be given if an arrest is going more than 10-15 minutes, or if the infant is not responding to adrenaline and volume.

DOSE	1-2 mmoL/kg of 4.2% solution (8.4% diluted 1:1 with sterile water) Refer to Neonatology Medication Protocols: Sodium Bicarbonate
ROUTE	Umbilical venous catheter.

Related WNHS policies, procedures and guidelines
Neonatology Clinical Guideline – Resuscitation Neonatal Resuscitation Algorithm for the Newborn Resuscitation: Who Attends Births? (KEMH) Neonatology Medication Protocols – Adrenaline Naloxone Sodium Bicarbonate

Document owner:	Neonatology Directorate Management Committee		
Author / Reviewer:	Neonatology Directorate Management Committee		
Date first issued:	October 2013		
Last reviewed:	19th September 2016	Next review date:	19th September 2019
Endorsed by:	Neonatology Directorate Management Committee	Date endorsed:	27th September 2016
Standards Applicable:	NSQHS Standards: 1 Governance, 4 Medication Safety, 7 Blood Products, 9 Clinical Deterioration,		
Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from the WNHS website.			