

# 2016 Medications for Neonatal Resuscitation Program Canadian Adaptation

Medication	Concentration	Preparation	Dose/Route	Weight/Dose	Rate
Epinephrine <b>ET</b>	0.1 mg/mL <sup>1</sup> (1:10,000)	Draw up in a <b>3 mL syringe</b> and label “for ET”	0.1 mg/kg (1 mL/kg) <sup>2</sup> via ET  Maximum 0.3 mg (3 ml) per dose	1kg = 0.1 mg (1 mL) 2kg = 0.2 mg (2 mL) ≥ 3kg = 0.3 mg (3 mL)	Rapidly <b>Do not follow with a flush</b> <i>First dose may be given via ET while UVC inserted</i>
Epinephrine <b>UVC*/ IV/ IO<sup>3</sup></b>  <b>*preferred route</b>	0.1 mg/mL <sup>1</sup> (1:10,000)	Draw up in a <b>1 mL syringe</b> and label “for IV/UVC”	<b>0.01 mg/kg (0.1 mL/kg) via IV<sup>2</sup></b>	1kg = 0.01 mg (0.1 mL) 2kg = 0.02 mg (0.2 mL) 3kg = 0.03 mg (0.3 mL) 4kg = 0.04 mg (0.4 mL)	Rapidly Follow with up to 0.5-1 mL 0.9% NaCl flush
Volume Expanders <sup>4</sup>	0.9% NaCl ( <i>normal saline</i> )  O-negative PRBC	40 mL (Prepare 2 x 20 mL syringes and label)	10 mL/kg by <b>IV/IO route</b>	1kg = 10 mL 2kg = 20 mL 3kg = 30 mL 4kg = 40 mL	Over 5 to 10 minutes
Naloxone	No longer recommended	“ There is insufficient evidence to evaluate the safety and efficacy of this practice” (NRP textbook, 7 <sup>th</sup> edition – pg. 257)			
Sodium Bicarbonate	No longer recommended	“There is currently no evidence to support this routine practice” (NRP textbook, 7 <sup>th</sup> edition – pg. 221)			

<sup>1</sup> As of May 2016, the Institute for Safe Medication Practices (ISMP) Canada has eliminated the epinephrine ratio: [https://www.ismp-canada.org/download/safetyBulletins/2016/ISMPCSB2016-02\\_ChangesInExpressionStrength.pdf](https://www.ismp-canada.org/download/safetyBulletins/2016/ISMPCSB2016-02_ChangesInExpressionStrength.pdf)

<sup>2</sup> As of September 22, 2016 the ISMP warned against volumetric dosing for epinephrine <http://www.ismp.org/newsletters/acutecare/showarticle.aspx?id=1148>

<sup>3</sup>UVC continues to be the preferred route of emergency vascular access, but Intraosseous(IO) access can be used as an alternative if UVC insertion is not possible

<sup>4</sup> Ringers Lactate is no longer included in the 7<sup>th</sup> edition