

Emergency drugs etc for child of age: Term Expected Wt around: 3.5 Kg

Acceptable Systolic BP	60-105	mmhg
Acceptable Heart Rate	110-170	bpm
Acceptable Respiratory Rate	25-60	bpm

Read important instructions on page 3

Adrenaline dose	0.4	mls of 1:10,000.
Fluid bolus	70	mls of normal saline
Glucose / Dextrose (25%)	4	mls
DC Shock	14	Joules

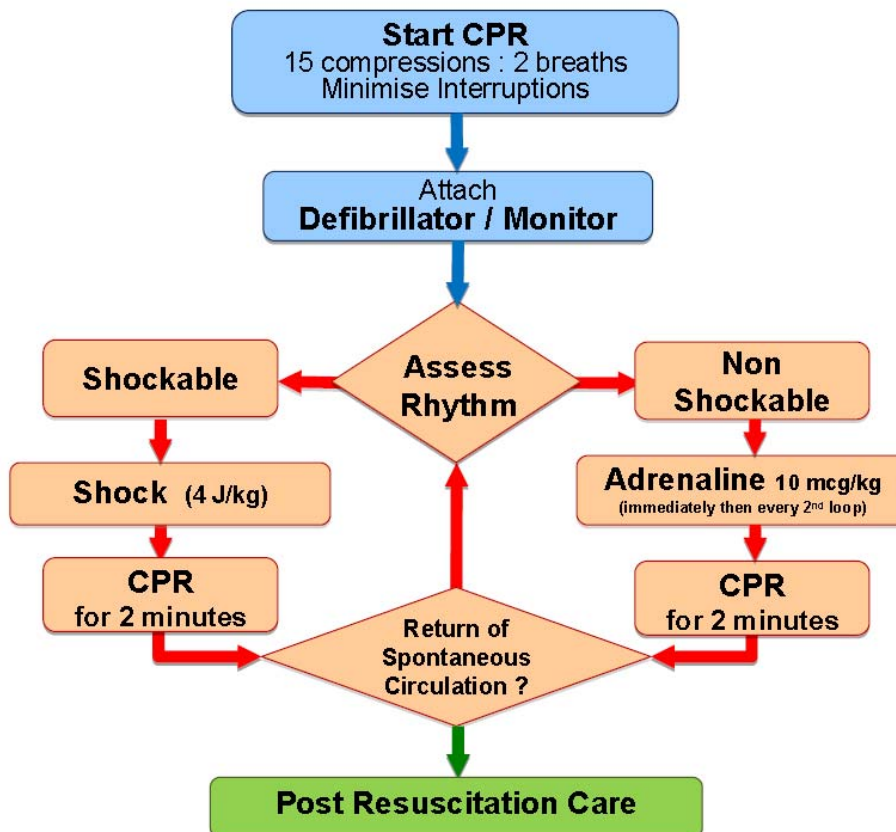
ET tube size	3.0/3.5	internal diameter (use 0.5 smaller if cuffed tube)
ET tube length	9 / 11	cm to lip / nose

Ketamine	3.5	mg (Intubation Dose – 1mg/kg) May be repeated.
Atropine	0.15	mg (Intubation Dose – 0.02mg/kg)
Diazepam	0.75	mg (0.2mg/kg) Beware respiratory depression
Propofol	?avoid	mg (dose varies with age). Beware cardiovascular depression. Titrate dose
Thiopentone	8 - 15	mg (2.5-5.0mg/kg) Beware cardiovascular depression. Titrate dose
Suxamethonium	10	mg (dose varies with age)
Pancuronium	0.4	mg (0.1mg/kg)
Vecuronum	0.4	mg (0.1mg/kg)
Fentanyl	10	mcg (2mcg/kg) Beware respiratory depression. Titrate dose
Morphine	0.4	mg (0.1mg/kg) Beware respiratory depression. Titrate dose
Midazolam	0.4	mg (0.1mg/kg) Beware respiratory depression.
Benzylpenicillin	175	mg (50mg/kg)
Cefotaxime	175	mg (50mg/kg)
Mannitol	0.9	g (0.25g /kg) = 7.2mls of 12.5%, or 4.5mls of 20%

Dopamine or Dobutamine:

To make an infusion where 1ml/hr = 5mcg/kg/min add 50mg of the drug to 50mls of Normal Saline.

Advanced Life Support for Infants and Children



During CPR

Airway adjuncts (LMA / ETT)
Oxygen
Waveform capnography
IV / IO access
Plan actions before interrupting compressions
(e.g. charge manual defibrillator to 4 J/kg)
Drugs
Shockable
* Adrenaline 10 mcg/kg after 2nd shock
(then every 2nd loop)
* Amiodarone 5mg/kg after 3rd shock
Non Shockable
* Adrenaline 10 mcg/kg immediately
(then every 2nd loop)

Consider and Correct

Hypoxia
Hypovolaemia
Hyper / hypokalaemia / metabolic disorders
Hypothermia / hyperthermia
Tension pneumothorax
Tamponade
Toxins
Thrombosis (pulmonary / coronary)

Post Resuscitation Care

Re-evaluate ABCDE
12 lead ECG
Treat precipitating causes
Re-evaluate oxygenation and ventilation
Temperature control (cool)

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For child of age: Term **Expected Wt around: 3.5 Kg**

Shock **14** Joules

Adrenaline **0.4** mls of 1:10,000.

Fluid Bolus **70** mls of normal saline

Important

This tool is designed to be a readily available guide to endotracheal tube sizes and positions, and to doses of drugs and other therapies.

It is not a recipe book - it is important that you think carefully if “standard” doses of drugs are appropriate for any individual patient, especially acutely unstable ones.

For systolic blood pressure, heart and respiratory rate – look at trends as well as absolute numbers. HR and RR ranges are from rounded 5th centile in

Bonafide CP, Brady PW, Keren R, Conway PH, Marsolo K, Daymont C. (2013). Development of heart and respiratory rate percentile curves for hospitalized children. Pediatrics, 131 (4), e1150-e1157).

Do not just blindly follow the doses given here – think first.

Information presented here comes from several sources, particularly Drug Doses by Frank Shann. The algorithm comes from the Australian Resuscitation Council <http://www.resus.org.au>

Doses have been rounded where sensible to do so, and minimum and maximum doses applied to some drugs.

Doses may need to be modified if drugs are used in combination.

DC shock energy has been rounded to figures commonly found on defibrillators. 4j/kg

For Morphine, Fentanyl, Thiopentone and Propofol it is important to titrate the dose for its desired effect. Be very cautious of hypotension in sick children and respiratory depression if not ventilated. Be careful in patients with haemodynamic compromise - cardiac failure, pulmonary hypertension, septic shock. Correct hypovolaemia first. Have vasopressors available (eg metaraminol 5-10 mcg/kg). Be careful of propofol in infants <1 year of age dosing is more complex.

Propofol is based on approximately: 1-5yo: 2.5-3.5mg/kg, 5-10yo: 2-3 mg/kg, >10: 1.5-2.5 mg/kg

Suxamethonium is based on 3mg/kg for newborn, 2mg/kg child, 1mg/kg adult.

I've done my best to ensure this information is accurate and cross checked doses with other experts but it is your responsibility to verify doses etc before using this tool.

Comments and suggestions welcome

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