

Paediatric age & weight based parameters

PATIENT NAME DATE

Enter patient Age

Use estimated weight

Patient weight (kg)

Estimated weight if >1yr,
= 3 x age(yrs) +7
Arch Dis Child 2007;92:412-415

Choose age and press "calculate"
If weight known, first select "No" in "Use estimated weight" box
then directly enter true weight. Press calculate to refresh
NOTE: These are approximate values : (use clinical judgement)

Respiratory & CVS parameters

Airway and intubation

Central lines, tubes and drains

Heart rate (b.p.m)*

Systolic BP**

Diastolic BP

Resp Rate (b.p.m)

* Heart rate & Resp rate: mean (2nd - 98th centile)
Ref:Harriet lane Handbook 12th Edition 1991
**BP : mean (10th to 90th centile)
Reference: J Peds 2009 155(2),157

Endotracheal Tube size

Length oral tube at lips

Length nasal tube (nose)

Laryngeal Mask (LMA):

Confirm correct endotracheal tube position clinically in all cases
Uncuffed nasal endotracheal tubes preferable below 10 yrs
Approximate Endotracheal tube size = (age / 4) + 4mm
For Croup use 0.5 to 1 endotracheal tube size smaller
Oral tube length = (age/2) + 12cm, Nasal length = (age/2)+15cm

Central venous line*

Nasogastric tube

Urine catheter

Chest drain

* Femoral lines preferable to neck lines in children
Length of CVL varies according to site of insertion
Confirm CVL is venous by transducing lines:
(especially in cyanotic heart disease)

Infusion calculator: to work out milligrams of drug to add to a syringe

Final volume of syringe in ML

Enter desired mcg/kg/min at 1 ml/hr

NOTE: this does not apply to drugs that require NEAT infusion without dilution.

Calculation for infusion rates

Glucose calculator: how much 50% glucose to add to IV saline/glucose infusion bag for a desired glucose concentration

Size of current saline/glucose infusion bag(ml)

% Glucose in saline bag at Start

% Glucose needed

NOTE: We recommend 0.9% saline + 5% glucose as standard intravenous maintenance fluids for children with acute critical illness
This is due to risk of hyponatraemia with hypotonic solutions (including 0.45% saline) Check electrolytes daily for all children on IV maintenance fluid

www.strs.nhs.uk
Phone: 0207 1884500