Infusion Rate Calculations: General Rules for Units

Drug Group	Examples	Units
Inotropes	Dopamine Adrenaline Noradrenaline Milrinone	mcg/kg/min
Vasopressin	Argipressin/Vasopressin	units/kg/hr
Sedation	Morphine Midazolam Clonidine	mcg/kg/hr
Prostin	Dinoprostone	nanograms/kg/min
Diuretics	Furosemide	mg/kg/hr

Infusion Rate Calculations: mcg/kg/hr

What does 1ml/hr of the infusion equal in mcg/kg/hr?

Convert the total dose of drug added to the syringe to micrograms (mcg)

Divide this by patient's weight (in kg)

Divide by total volume in syringe

You can then multiply this by the rate of the infusion (mls/hr) to get the dose (in mcg/kg/hr) being delivered How do I calculate the rate in mls/hr of the infusion to deliver **X** mcg/kg/hr?

Multiply the specified dose (in mcg/kg/ hr) by patient's weight (in kg)

Divide this number by the drug dose in the syringe (must be in mcg)

Multiply this by total volume in syringe

This calculated number will be the rate required in mls/hr to provide an infusion at a rate of *X* mcg/kg/hr

Infusion Rate Calculations: mcg/kg/min

What does 1ml/hr of the infusion equal in mcg/kg/min?

Convert the total dose of drug added to the syringe to micrograms (mcg)

Divide this by patient's weight (in kg)

Divide this number by 60

Divide by total volume in syringe

You can then multiply this by the rate of the infusion (mls/hr) to get the dose (in mcg/kg/ min) being delivered How do I calculate the rate in mls/hr of the infusion to deliver **X** mcg/kg/min?

Multiply the specified dose (in mcg/kg/ min) by patient's weight (in kg)

Multiply this number by 60

Divide this number by the drug dose in the syringe (must be in mcg)

Multiply this by total volume in syringe

This calculated number will be the rate required in mls/hr to provide an infusion at a rate of X mcg/kg/min