Hillsborough County Fire Rescue STANDING ORDERS AND PROTOCOL

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Subject: PEDIATRIC MEDICATION DOSAGES ("MAGIC NUMBERS")

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PEDIATRIC MEDICATION DOSAGES

Formula:

Patient's Weight (kg) x "Magic Number" = Volume (mL) to be administered

Example:

You have an 11 kg baby in cardiac arrest.

You want to administer Epinephrine 1:10,000. How much (mL) should you give?

Weight = 11 kg; Magic Number = 0.1

Answer:

 $11 \times 0.1 = 1.1 \text{ mL}$

Magic Numbers: ‡

Medication	Dose	Magic Number	Current Packaging
Adenosine 1st Dose	0.1 mg/kg	0.033	6.0 mg in 3 mL
Adenosine 2 nd Dose	0.2 mg/kg	0.067	6.0 mg in 3 mL
Amiodarone	5.0 mg/kg	0.1	300 mg in 3 mL
Atropine (minimum 1.0 mL)	0.02 mg/kg	0.2	1.0 mg in 10 mL
Dextrose 10% (D ₁₀ W)	0.25 gm/kg	2.5	Varies based on pt weight
Dextrose 25% (D ₂₅ W)	0.25 gm/kg	1.0	12.5 gm in 50 mL
Diazepam	0.2 mg/kg	0.04	10 mg in 2 mL
Diphenhydramine – anaphylaxis	1.0 mg/kg	0.02	50 mg in 1 mL
Diphenhydramine – dystonia	0.5 mg/kg	0.01	50 mg in 1 mL
Epinephrine 1:1,000	0.01 mg/kg	0.01	1.0 mg in 1 mL
Epinephrine 1:10,000	0.01 mg/kg	0.1	1.0 mg in 10 mL
Fentanyl	1.0 mcg/kg	0.02	250 mcg in 5 mL
Lidocaine	1.0 mg/kg	0.05	100 mg in 5 mL
Magnesium Sulfate	40 mg/kg	0.08	5.0 gm in 10 mL
Methylprednisolone	1.0 mg/kg	0.016	125 mg in 2 mL
Midazolam	0.2 mg/kg	0.04	10 mg in 2 mL
Morphine Sulfate	0.1 mg/kg	0.1	10 mg in 10 mL
Naloxone	0.1 mg/kg	0.1	2.0 mg in 2 mL
Ondansetron (max 4.0 mg)	0.1 mg/kg	0.05	4.0 gm in 2 mL

How to Mix Pediatric Dextrose:

 $\underline{D_{25}W}$: Push out 25 mL of $D_{50}W$ preloaded syringe and draw up 25 mL of **normal saline (NOT** D_5W).

 $\underline{D_{10}W}$: Draw up 0.5 mL/kg of $D_{50}W$ and 2 mL/kg of **normal saline** into an appropriately sized syringe.

‡ ALL "Magic Numbers" are based on current HCFR protocols and packaging. ANY change in the dose or concentration will make the "Magic Number" inaccurate!