

## Drug Dose List

This document is intended to provide a quick reference. For a full list of drugs, their indications, contraindications and side effects see the Nor-Cal EMS Drug Formulary.

**ALL DRIP rates calculated 60 or 10gtts tubing (as noted)**

**Medication**

**Adult Dosing**

**Pediatric Dosing**

<p><b>Acetaminophine (Tylenol)</b></p> <p><b>Protocols:</b> Pain Fever control</p> <p><b>Indications:</b> Pain or fever control <b>Contraindication:</b> Liver disease/ Hepatitis Alcohol abuse</p>	<p><b>Fever/Pain:</b> 15 mg/kg to max of 1000mg Orally of tablets or elixer.</p> <p><b>Pain:</b> IV/IO 15mg/kg over 20 min</p>	<p><b>See color Coded List</b></p> <p>15 mg/kg Orally not less than 6 months IV not less than 2 years</p>																											
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="padding: 2px;">USING 10 GTTS TUBING</th> </tr> <tr> <th style="padding: 2px;">Patient Weight</th> <th style="padding: 2px;">Total dose mg(ml)</th> <th style="padding: 2px;">gtts/min</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;">40kg</td><td style="padding: 2px;">600 (60ml)</td><td style="padding: 2px;">30</td></tr> <tr><td style="padding: 2px;">45kg</td><td style="padding: 2px;">675 (67.5ml)</td><td style="padding: 2px;">34</td></tr> <tr><td style="padding: 2px;">50kg</td><td style="padding: 2px;">750 (75ml)</td><td style="padding: 2px;">38</td></tr> <tr><td style="padding: 2px;">55kg</td><td style="padding: 2px;">825 (82.5ml)</td><td style="padding: 2px;">41</td></tr> <tr><td style="padding: 2px;">60kg</td><td style="padding: 2px;">900 (90ml)</td><td style="padding: 2px;">45</td></tr> <tr><td style="padding: 2px;">65kg</td><td style="padding: 2px;">975 (97.5ml)</td><td style="padding: 2px;">49</td></tr> <tr><td style="padding: 2px;">70kg +</td><td style="padding: 2px;">1000 (100ml)</td><td style="padding: 2px;">50</td></tr> </tbody> </table>			USING 10 GTTS TUBING			Patient Weight	Total dose mg(ml)	gtts/min	40kg	600 (60ml)	30	45kg	675 (67.5ml)	34	50kg	750 (75ml)	38	55kg	825 (82.5ml)	41	60kg	900 (90ml)	45	65kg	975 (97.5ml)	49	70kg +	1000 (100ml)	50
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<p><b>Activated Charcoal</b></p> <p><b>Protocols:</b> Poisoning / Overdose</p> <p><b>Indications:</b> Toxic ingestion &gt;30min transport <b>Contraindication:</b> Not for use with Acids, Petroleum, Corrosives</p>	<p>1 gm/kg to max of 50 grams.</p>	<p><b>BHPO ONLY</b></p> <p>1 gm/kg to max of 25 grams</p>																											
<p><b>Adenosine (Adenocard)</b></p> <p><b>Protocols:</b> Narrow Complex Tachycardia</p> <p><b>Indications:</b> SVT <b>Contraindication:</b> WPW</p>	<p>6mg Rapid IV push with flush then if necessary 12mg Rapid IV with flush</p>	<p><b>See color Coded List</b></p> <p>0.1 mg/kg (max 6 mg) Rapid IV with Flush then 0.2 mg/kg (max 6 mg) Rapid IV with Flush may repeat x1</p>																											

## Drug Dose List Page 2

<p><b>Amiodarone (Codarone)</b></p> <p><b>Protocols:</b> Wide Complex Tachycardia Narrow Complex Tachycardia ACLS Pulseless</p> <p><b>Indications:</b> Cardiac Dysrhythmia <b>Contraindication:</b> Cardiogenic shock Bradycardia, 2nd or 3rd degree Heart block</p>	<p><b>Pulseless:</b> 300 mg IV then may repeat at 150 mg IV</p> <p><b>With a pulse:</b> 150 mg IV over 10 minutes</p>	<p><b>See color Coded List</b> <b>Pulseless:</b> 5 mg/kg to max of 300mg</p> <p><b>With a pulse: BHPO ONLY</b></p>						
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;"><b>150mg in 50 ml</b></td> <td style="padding: 5px;"><b>150mg in 100ml</b></td> </tr> <tr> <td style="padding: 5px;">10 Gtts tubing over 10 min</td> <td style="padding: 5px;">10 gtts tubing over 10 min</td> </tr> <tr> <td style="padding: 5px;">300 gtts/min</td> <td style="padding: 5px;">600 gtts/min</td> </tr> </table>			<b>150mg in 50 ml</b>	<b>150mg in 100ml</b>	10 Gtts tubing over 10 min	10 gtts tubing over 10 min	300 gtts/min	600 gtts/min
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10 Gtts tubing over 10 min	10 gtts tubing over 10 min							
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<p><b>Aspirin</b></p> <p><b>Protocols:</b> Chest Pain</p> <p><b>Indications:</b> Suspected cardiac chest pain <b>Contraindication:</b> Bleeding disorders, Active GI Bleed</p>	<p>4 (81mg chewable tablets) PO</p>	<p><b>CONTRAINDICATED</b></p>						
<p><b>Atropine</b></p> <p><b>Protocols:</b> Bradycardia WMD Nerve Agent</p> <p><b>Indications:</b> Bradycardia, Organophosphate</p>	<p><b>Bradycardia:</b> 1mg IV every 3-5 minutes Max dose 0.04mg/kg or 3mg</p> <p><b>Organophosphate/ Nerve Agent Exposure:</b> 2-3mg IV repeat until symptoms disappear</p> <p><b>NOTE:</b> <b>Atropine Toxicity=</b> Hot as a Hare, Blind as Bat Dry as a bone, Red as beet, Mad as a hatter</p>	<p><b>See color Coded List</b> <b>Bradycardia:</b> 0.02 mg/kg IV/IO Max total dose 1mg IV/IO</p> <p><b>Organophosphate/ Nerve Agent Exposure:</b> 0.05 mg/kg IV/IO</p>						
<p><b>Beta 2 Bronchodilators</b></p> <p><b>Protocols:</b> Respiratory distress Allergic reaction Crush syndrome</p> <p><b>Indications:</b> Bronchospasm, Allergic reaction Crush injury</p>	<p><b>Respiratory distress:</b> 5mg Nebulized MR to max of 15mg or 6 vials</p> <p><b>Allergy:</b> 5mg Nebulized MR to max of 15mg or 6 vials</p> <p><b>Crush:</b> 5mg Nebulized MR to max of 15mg or 6 vials</p> <p><b>MDI-</b> 4 Puffs = 2.5mg of nebulized</p>	<p><b>See color Coded List</b> <b>Respiratory distress:</b> 5mg Nebulized</p> <p><b>Allergy:</b> 5mg Nebulized</p> <p><b>MDI-</b> 4 Puffs = 2.5mg of nebulized</p>						
	<p>Levalbuterol 0.63mg MR x3 (to max 1.89mg) may combine with Ipratropium x1</p>	<p>Levalbuterol 0.63mg x1</p>						

# Drug Dose List Page 3

<p><b>Calcium Chloride</b></p> <p><b>Protocols:</b> Poisoning Crush syndrome Suspected hyperkalemia w/ wide complex</p> <p><b>Indications:</b> Bronchospasm, allergic reaction, crush injury</p>	<p><b>Poisoning:</b> 1-4 Grams IV BHPO</p> <p><b>Crush syndrome:</b> 1 Gram IV/IO BHPO</p> <p><b>Wide complex tach with suspected hyperkalemia:</b> 1 Gram IV/IO</p>	<p><b>BHPO ONLY</b></p> <p><b>Poisoning:</b> 20mg/kg</p>
<p><b>Dextrose</b></p> <p><b>Protocols:</b> ALOC</p> <p><b>Indications:</b> Symptomatic hypoglycemia</p>	<p><b>Hypoglycemia:</b></p> <p><b>Oral:</b> 75-100 Grams, Patient able to swallow</p> <p><b>D-10%:</b> 12.5Grams IV/IO; MR until BG greater than 75mg/dl.</p>	<p><b>See color Coded List</b></p> <p><b>Dextrose 10%:</b> 5ml/kg IV/IO</p> <p><b>NOTE: dose is volume/kg dose not mg</b></p>
<p><b>Diazepam (Valium)</b></p> <p><b>Protocols:</b> Seizure Behavioral emergency</p> <p><b>Indications:</b> Seizure, Anxiety</p> <p><b>Contraindication:</b> Hypotension Respiratory depression, Head injury Alcohol / Drug intoxication</p>	<p><b>Seizure:</b> 2.5-10mg IV/IO slow IVP, MR x1 Max dose of 20mg</p> <p><b>IM Dose:</b> 10mg deep IM, MRx1 Max dose of 20mg</p>	<p><b>See color Coded List</b></p> <p><b>Seizure:</b> 0.2 mg/kg IV/IO/IM</p> <p><b>Rectal dose:</b> 0.5mg/kg rectally</p> <p><b>MAX DOSE:</b> Under 5 yrs: 5mg Children over 5yrs: 10mg</p>
<p><b>Diphenhydramine (Benadryl)</b></p> <p><b>Protocols:</b> Allergic reaction Nausea/ Vomiting</p> <p><b>Indications:</b> Allergic reaction, N/V</p> <p><b>Contraindication:</b> Acute asthma attack</p>	<p><b>Oral:</b> 50mg PO</p> <p><b>IV/IO/IM:</b> 1mg/kg IV/IO to max of 50mg</p>	<p><b>See color Coded List</b></p> <p><b>Oral greater than 1 yr old:</b> 12.5mg elixer</p> <p><b>Oral 15-30 kg:</b> 25mg elixer</p> <p><b>IV/IO/IM:</b> 1mg/kg IV/IO to max of 25mg</p>

# Drug Dose List Page 4

<p><b>Dopamine</b></p> <p><b>Protocols:</b>            Bradycardia            Non Traumatic Shock            ROSC</p> <p><b>Indications:</b> Hypotension post Push dose Epi  <b>Contraindication:</b> Tachyarrhythmia, VF, VT            Hypovolemia</p>	<p><b>Dose 400mg in 250ml (1600mcg/ml):</b>            5, 10 , 15 or 20mcg/kg/minute</p>	<p><b>BHPO</b></p>
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USING 60gtts TUBING				
Patient Weight	5 mcg/kg/min	10 mcg/kg/min	15 mcg/kg/min	20mcg/kg/min
40kg	8	15	23	30
45kg	8	17	25	34
50kg	9	19	28	38
55kg	0	21	31	41
60kg	11	23	34	45
65kg	12	24	37	49
70kg	13	26	39	53
75kg	14	28	42	56
80kg	15	30	45	60
85kg	16	32	48	64
90kg	17	34	51	68
95kg	18	36	53	71
100kg	19	38	56	75
105kg	20	39	59	79
110kg	21	41	62	83

# Drug Dose List Page 5

<b>Epinephrine</b>  <b>Protocols:</b> Pulseless CPR Allergic reaction Respiratory distress broncospasm Respiratory distress Stridor Non traumatic shock <b>Indications:</b> Hypotension post Push dose Epi <b>Contraindication:</b> Tachyarrythmia, VF, VT, Hypovolemia	<b>Pulseless: 1mg 1:10,000 q 5minutes</b>  <b>Allergic reaction EMT:</b> 0.3mg IM  <b>Allergic reaction ALS:</b> 0.3-0.5mg IM <b>Anaphylaxis:</b> push dose 50mcg bolus IV may repeat 5-10mcg every 1-5 min <b>Stridor:</b> 1mg 1:1000 with saline to make 5cc <b>Shock:</b> Push Dose: 5-10mcg q 5 minutes Drip: 1mg into 250ml bag 2-10mcg/min	<b>See color Coded list</b>  <b>Pulseless:</b> 0.01mg/kg 1:10,000 q 5 min IV/IO  <b>Subq dose:</b> 0.01mg/kg 1:1,000 Max 0.3mg  <b>Stridor:</b> 1mg 1:1000 with saline to make 5cc Nebulized  <b>Shock:</b> Push Dose: 5-10mcg q 5 minutes
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**PUSH DOSE How to mix: (1mcg/ml)**

1. Prepare a 10ml syringe with 9ml of saline.
2. Draw 1ml of Epinephrine 1:10,000 into same syringe-mix
3. Label syringe Epi 10mcg/ml

**OR**

1. Take Epinephrine 1:10,000 concentration (1 mg/10 ml) and waste 9 ml of Epinephrine
2. In same syringe draw 9 ml of saline from the patient's IV bag & shake well
3. Label syringe Epi 10mcg/ml

Epi Drip:

USING 60 gtts TUBING		
Desired Dose	1mg in 250 ml (4mcg/cc)	
mcg/min	ml/min	gtts/min (ml/hr)
1	0.25	15
2	0.5	30
3	0.75	45
4	1	60
5	1.25	75
6	1.5	90
7	1.75	105
8	2	120
9	2.25	135
10	2.5	150

<b>Fentanyl</b>  <b>Protocols:</b> Pain management   <b>Indications:</b> Moderate to severe pain <b>Contraindication:</b> Hypotension, Respiratory depression, GCS less than 14	<b>Pain: IV/IO 25-50 mcg</b> MR every 5 minutes Total Max dose 200mcg or 20mg total opioid  IN: 50mcg Half dose into each nare MR every 5 minutes Total Max dose 200mcg or 20mg total opioid	<b>See color Coded List</b>  Initial dosing should be IN: <b>IN:</b> 1mcg/kg max 50 mcg; half into each nare  <b>IV/IO</b> 0.5-1 mcg/kg MR every 5 minutes max single dose 50 mcg Total max dose 100mcg
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# Drug Dose List Page 6

<p><b>Glucagon</b></p> <p><b>Protocols:</b> ALOC Poisoning/Overdose Allergic reaction</p> <p><b>Indications:</b> Hypoglycemia</p>	<p><b>Hypoglycemia:</b> 1 mg (1 unit) IM</p> <p><b>Beta Blocker OD:</b> 1mg IV/IO</p> <p><b>Allergic reaction not responsive to other treatment (on Beta Blockers):</b> 1mg slow IV/IO</p>	<p><b>See color Coded List</b></p> <p><b>Hypoglycemia:</b> 0.1 mg/kg max of 1 mg IM</p>
<p><b>Ibuprofen (Advil)</b></p> <p><b>Protocols:</b> Sepsis / Fever control</p> <p><b>Indications:</b> Fever</p> <p><b>Contraindication:</b> Actively bleeding, Renal Disease/Kidney transplant, Pregnant, less than 6 months old</p>	<p><b>Fever:</b> 400-600mg Orally</p>	<p><b>See color Coded List</b></p> <p><b>Fever (Older than 6 months):</b> 10mg/kg</p>
<p><b>Ipratropium (Atrovent)</b></p> <p><b>Protocols:</b> Respiratory distress Allergic reaction</p> <p><b>Indications:</b> Bronchospasm, Allergic reaction</p>	<p><b>Respiratory Distress:</b> 500mcg mixed with 5mg of Albuterol</p> <p style="text-align: center;"><b>DO NOT REPEAT Atrovent</b></p>	<p><b>See color Coded List</b></p> <p><b>Respiratory Distress:</b> 500mcg mixed with 5mg of Albuterol DO NOT REPEAT Atrovent</p>
<p><b>Ketamine</b></p> <p><b>Protocols:</b> Pain management</p> <p><b>Indications:</b> Acute pain due to trauma/burn, <b>Contraindication:</b> non EMS initiated opioid use GCS less than 15, suspected drug/etoh use, Age less than 15, pregnancy</p>	<p><b>Pain:</b> 0.15 mg/kg to max 30mg over 5 min mixed in 50ml or 100ml bag May repeat x3 to Total max dose of 100mg</p> <p><b>MUST USE ETCo2</b></p>	<p><b>CONTRAINDICATED</b></p>

Dose in 50 ml	Dose in 100ml
10 Gtts tubing over 5 min	10 gtts tubing over 5 min
100 gtts/min	200 gtts/min

# Drug Dose List Page 7

<p><b>Ketorlac</b></p> <p><b>Protocols:</b> Pain management</p> <p><b>Indications:</b> Moderate to severe pain <b>Contraindication:</b> Renal disease, GI Bleed, Less than 2 yrs old, Steriod use, Preganancy, Asthma, Anti-Coagulation meds</p>	<p><b>Pain:</b> 0.5 mg/kg max of 30mg IM, IN, IV/IO</p> <p>Over 65 y/o <b>BHPO</b></p>	<p><b>See color Coded List</b></p> <p><b>Pain: patient greater than 2 years old:</b> 0.5mg/kg max of 15mg IM IN, IV/IO</p>
<p><b>Lidocaine (Xylocaine)</b></p> <p><b>Protocols:</b> Wide Complex Tachycardia Narrow Complex Tachycardia ACLS Pulseless IO training</p> <p><b>Indications:</b> Cardiac Dysrthmia, IO <b>Contraindication:</b> Supraventricular dysrthmia, Bradycardia, 2nd or 3rd degree Heart block</p>	<p><b>VF/VT:</b> 1.5 mg/kg IV/IO MR 0.75 mg/kg Max total dose: 3 mg/kg</p> <p><b>Infusion 1gm in 250cc (4mg/ml):</b> 2-4 mg/min</p> <p><b>IO pain management:</b> 0.5mg/kg (wait 60 sec before flushed with saline) Max dose: 50mg</p> <p><b>RSI pretreatment in acute head injury:</b>1mg/kg</p>	<p><b>See color Coded List</b></p> <p><b>VF/VT:</b> 1 mg/kg to max of 100mg x1 further per <b>BHPO</b></p> <p><b>IO pain management:</b> 0.5mg/kg (wait 60 sec before flushed with saline) Max dose: 20mg</p>
<p><b>Lorazepam (Ativan)</b></p> <p><b>Protocols:</b> Behavioral emergency</p> <p><b>Indications:</b> Anxiety, Sedation <b>Contraindication:</b> Respiratory depression, NO other Benzodiazepine or opiate by EMS</p>	<p><b>Anxiety/Sedation:</b> 1mg IV/IO</p>	<p><b>BHPO ONLY</b></p>
<p><b>Magnesium sulfate 50%</b></p> <p><b>Protocols:</b> Obstetric Emergencies Wide Complex Tachycardia</p> <p><b>Indications:</b> Eclampsia, Torsades de Pointes <b>Contraindication:</b> Respiratory depression, Heart Blocks, Recent MI, Hypotension, Fluid overload, Digitalis use, Dialysis patients</p>	<p><b>Torsades de Pointes:</b> 1-2 gm IV/IO over 1-2 min</p> <p><b>Eclampsia:</b> 4 gms over 20 minutes further via <b>BHPO</b></p> <p><b>Respiratory:</b> BHPO</p>	<p><b>BHPO ONLY</b></p>

USING 60 gtts TUBING		
Total Dose	50cc bag gtts/min (ml/hr)	100cc bag gtts/min (ml/Hr)
4 gms (40cc) <small>(50cc bag)</small>	120	
4 gms (80cc) <small>(100cc bag)</small>		240

# Drug Dose List Page 8

<p><b>Midazolam (Versed)</b>  <b>Protocols:</b>                  Seizure                  Behavioral emergency</p> <p><b>Indications:</b> Seizure, Anxiety  <b>Contraindication:</b> Hypotension, Shock                  Narrow angle glaucoma (relative)</p>	<p><b>Seizure:</b>  <b>IM</b> 10mg  <b>IN:</b> 0.2mg/kg max 10mg dose MR x1  <b>IV/IO:</b> 5mg slow IVP, MR every 2 min to stop seizure Max dose 10mg                  Total max dose 20mg</p> <p><b>Cardioversion/pacing:</b> 0.5mg increments IV or IO to a max dose of 5mg</p> <p><b>Anxiety/Behavioral:</b> 1-2mg IV/IO max dose 2mg  <b>IM/IN:</b> 2-5mg max dose 5mg  <b>MR every 20-30 min max total dose 15mg</b></p> <p><b>Pain-IV/IO:</b> 1mg may repeat x1 after 5 min</p>	<p><b>See color Coded List</b></p> <p>Seizure:                  IV/IN 0.2 mg/kg                  PR 0.3 mg/kg</p>
<p><b>Morphine</b></p> <p><b>Protocols:</b>                  Pain Management                  Chest Pain</p> <p><b>Indications:</b> Pain, Cardiac Chest Pain  <b>Contraindication:</b> Hypotension                  Respiratory depression,                  Head Injury</p>	<p><b>Pain:</b> 2-5mg IV increments every 5-10 MR as needed  <b>IM:</b> 5-10mg every 5-10 minutes                  Max Total dose 20mg</p> <p><b>Chest Pain:</b> 2mg increments every 5-10 min                  Max Total dose 20mg</p>	<p><b>See color Coded List</b></p> <p>0.1 mg/kg IV/IO MR every 5-10 minutes                  max single dose 2.5 mg  <b>IM:</b> 0.1mg/kg                  Total max dose 10mg</p>
<p><b>Naloxone (Narcan)</b>  <b>Protocols:</b>                  ALOC</p> <p><b>Indications:</b> Suspected narcotic                  Respiratory depression  <b>Contraindication:</b> Do not give to intubated patients</p>	<p><b>IV:</b> 0.5-2mg SIVP                  Max dose 4mg</p> <p><b>IM/IN:</b> 2mg                  Max dose 4mg</p>	<p><b>See color Coded List</b></p> <p><b>IM/IN/IV/IO:</b> 0.1 mg/kg Max 4mg</p>
<p><b>Nitroglycerin (tab or spray)</b></p> <p><b>Protocols:</b>                  Chest Pain                  Respiratory distress (Pulmonary Edema)</p> <p><b>Indications:</b> Cardiac chest pain / angina,                  Respiratory distress (CHF/Pulmonary edema)  <b>Contraindication:</b> Intracranial pressure,                  Hypotension, Erectile dysfunction drugs</p>	<p><b>Chest Pain:</b>                  SL: 0.4mg MR every 5 minutes                  Max of 4 doses (1.6mg)</p> <p><b>Respiratory distress (CHF/Pulmonary Edema):</b>                  SBP greater than 200: 1.2mg SL                  SBP 150-200: 0.8mg SL                  SBP 100-150: 0.4mg SL                  MR every 5 min if SBP remains &gt;100</p>	<p style="text-align: center; color: red;"><b>CONTRAINDICATED</b></p>



# Drug Dose List Page 9

<p><b>Nitroglycerin (2% Paste)</b></p> <p><b>Protocols:</b> Chest Pain Respiratory distress (Pulmonary Edema)</p> <p><b>Indications:</b> Cardiac chest pain / angina, Respiratory distress (CHF/Pulmonary Edema) <b>Contraindication:</b> Intracranial pressure, Hypotension, Erectile dysfunction drugs</p>	<p>Chest Pain: 1" Transdermally to Chest</p> <p><b>Respiratory distress (CHF/Pulmonary Edema):</b> 1" Transdermally to Chest</p>	<p><b>CONTRAIDICATED</b></p>										
<p><b>Ondansetron (Zofran)</b></p> <p><b>Protocols:</b> Routine medical care</p> <p><b>Indications:</b> Nausea/Vomiting</p> <p><b>Contraindication:</b> Caution with prolonged QT, BHPO if pregnant</p>	<p>IV/IO/IM: 4mg SIVP may repeat every 15min MR to Max dose of 12mg</p> <p>Orally: 4mg ODT may repeat every 15min</p>	<p style="color: red;">See color Coded List</p> <p>IM/IV/IO: 0.15 mg/kg Max 4mg Repeat <b>BHPO</b> only</p> <p>Orally only if &gt; 20kg: 4mg ODT</p>										
<p><b>Oxytocin (Pitocin)</b></p> <p><b>Protocols:</b> Pregnancy complications / Field delivery</p> <p><b>Indications:</b> Control of postpartum hemorrhage <b>Contraindication:</b> Previous C-section, Prior to delievery of baby/placenta</p>	<p>IV/IO: 20-40 Milliunits per minute</p> <p>Mix 10 units in a 500ml bag (20 milliunits/ml)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2" style="text-align: center;">USING 60 gtts TUBING</th> </tr> <tr> <th style="width: 50%;"></th> <th style="text-align: center; font-size: small;">500cc bag</th> </tr> <tr> <th style="text-align: center;">Total Dose</th> <th style="text-align: center;">gtts/min (ml/hr)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">20 milliunits/min</td> <td style="text-align: center;">60</td> </tr> <tr> <td style="text-align: center;">40 milliunits/min</td> <td style="text-align: center;">120</td> </tr> </tbody> </table>	USING 60 gtts TUBING			500cc bag	Total Dose	gtts/min (ml/hr)	20 milliunits/min	60	40 milliunits/min	120	<p><b>CONTRAIDICATED</b></p>
USING 60 gtts TUBING												
	500cc bag											
Total Dose	gtts/min (ml/hr)											
20 milliunits/min	60											
40 milliunits/min	120											
<p><b>Sodium Bicarbonate</b></p> <p><b>Protocols:</b> Pulseless arrest Crush Syndrome Tricyclic Overdose</p> <p><b>Indications:</b> Acid base imbalance, Tricyclic OD, Crush injury <b>Contraindication:</b> None if life threatening</p>	<p>Wide complex tach with suspected <b>Hyperkalemia:</b> 1 meq/kg IV/IO</p> <p><b>Crush Syndrome BHPO ONLY:</b> 1 meq/kg in 1 Liter bagIV/IO</p> <p><b>TCA OD ventricular arrythmia / Hypotensive:</b> 1 meq/kg slow IV/IO</p>	<p style="color: red;">BHPO ONLY</p> <p style="color: red;">See color Coded List</p>										

# Drug Dose List Page 10

<p><b>Tranexamic Acid (TXA)</b></p> <p><b>Protocols:</b> Trauma, OB/GYN</p> <p><b>Indications:</b> Trauma-uncontrolled bleeding, Hypotension, SBP less than 90mmhg</p> <p><b>Contraindication:</b> 3 hours or more post injury Age less than 15, isolated head injury, spinal shock</p>	<p>IV: 1 gram mixed into 100ml bag NS/D5w over 10 minutes</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2" style="padding: 2px;">USING 10 gtts TUBING</th> </tr> <tr> <th style="padding: 2px;">Total Dose</th> <th style="padding: 2px;">100cc bag gtts/min</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">1 Gram</td> <td style="padding: 2px;">100</td> </tr> </tbody> </table>	USING 10 gtts TUBING		Total Dose	100cc bag gtts/min	1 Gram	100	<p><b>CONTRAIDICATED</b></p>
USING 10 gtts TUBING								
Total Dose	100cc bag gtts/min							
1 Gram	100							
<p><b>Verapamil</b></p> <p><b>Protocols:</b> Trauma</p> <p><b>Indications:</b> Second line after adenosine Symptomatic Atrial Fibrillation/ Flutter</p> <p><b>Contraindication:</b> WPW, sick sinus syndrome, Wide complex tachycardia, Beta blockers, Heart Failure or Heart Blocks</p>	<p><b>BHPO:</b></p> <p>Pretreat with : Calcium 1 gm IV/IO over 5-10 min then 2.5-5 mg slow IV/IO over 1-2 minutes</p> <p><b>Patient greater than 70yrs:</b> administer 2-4mg slow IV/IO over 3-4 minutes</p>	<p><b>CONTRAIDICATED</b></p>						

# IFT/Speciality Drug Dose List Page 11

<p><b>Heparin infusion</b></p>     <p><b>Indications:</b> continuation for IFT with MD Order</p>	<p><b>BHPO for IFT Only:</b></p> <p>Concentration not to exceed 100units/ml                  Infusion not to exceed 1600 units/hr</p> <p>Continue at constant rate with no regulation preformed during transport.</p> <p>D/C per BHPO</p>	CONTRAIDICATED
<p><b>Nitroglycerine infusion</b></p>     <p><b>Indications:</b> Cardiac Chest Pain / Angina                  Respiratory distress (CHF/Pulmonary Edema)</p> <p><b>Contraindication:</b> Intracranial pressure                  Hypotension, Erectile dysfunction drugs</p>	<p><b>BHPO for IFT Only:</b></p> <p>Titrate 5-10 mcg/min according to parameters established by BHPO.</p>	CONTRAIDICATED

USING 60 gtts TUBING and PUMP		
Dose ordered	50mg/250ml	25mg/250ml
mcg/min	gtts/min (ml/hr)	gtts/min (ml/hr)
5	1.5	3
10	3	6
15	4.5	9
20	6	12
30	9	18
40	12	24
50	15	30

## IFT/Speciality Drug Dose List Page 12

<p><b>Potassium Chloride Infusion</b></p> <p><b>Indications:</b> continuation for IFT with MD Order</p>	<p><b>BHPO for IFT Only:</b></p> <p>Concentration not to exceed 40 meq/1000ml Infusion not to exceed 10 meq/hr</p> <p>Continue at constant rate with no regulation preformed during transport.</p>	<p><b>CONTRAIDICATED</b></p>
<p><b>Pralidoxime chloride</b></p> <p><b>Indications:</b> Nerve Agent exposure SLUDGEM</p>	<p><b>BHPO:</b></p> <p>Auto injector IM into large muscle area</p>	<p><b>CONTRAIDICATED</b></p>

## Pediatric Color Coded list

less than Length 59.5 cm		3.5-5 kg (Average 4.0kg)		0-3 months old	
Acetaminophen	NONE	Ibuprofen	NONE	VITAL SIGNS	
Activated Charcoal -	NONE	Ipratropium Bromide	Nebulized 500 mcg	BP SYSTOLIC	70(+/-25)
Adenosine	IV 0.3mg repeat dose 0.6mg	Ketamine	NONE	Heart Rate	120-150
Amiodarone	20mg	Ketorlac	NONE	Respirations	24-48
Aspirin	NONE	Lidocaine	IV/IO 4mg IO for Pain 2mg	AIRWAY EQUIPMENT	
Atropine	0.08mg	Lorazepam	NONE		Igel size 1
Beta 2 Bronchodilator	2.5mg nebulized	Magnesium	NONE	DEFIBRILLATION	
Calcium	80mg	Midazolam	IV/IO/IN 0.8 mg PR 1.2mg		8J, 16J
Dextrose 10%	20ml	Morphine	IV/IO/IM 0.4mg		
Diazepam	IV/IO/IN 0.8mg PR 2 mg	Naloxone	IV/IO/IM/IN 0.4mg	NORMAL SALINE	
Diphenhydramine	IV 4mg PO None	Nitroglycerine	NONE		80ml
Dopamine	NONE	Ondansetron	0.6mg		
Epinepherine	IV/IM 0.04 mg	Oxytocin	NONE		
	Stridor 1mg via neb	Sodium Bicarbonate	BHPO		
Fentanyl	IV 2-4 mcg IN 4mcg	Tranexamic acid	NONE		
Glucagon	IM 0.4mg	Verapamil	NONE		

Length 59.5 cm - 66.5		6-7 kg (Average 6.5g)		3-6 months old	
Acetaminophen	NONE	Ibuprofen	NONE	VITAL SIGNS	
Activated Charcoal -	NONE	Ipratropium Bromide	Nebulized 500 mcg	BP SYSTOLIC	85(+/-25)
Adenosine	IV 0.65 mg repeat dose 1.3mg	Ketamine	NONE	Heart Rate	120-125
Amiodarone	32.5mg	Ketorlac	NONE	Respirations	24-48
Aspirin	NONE	Lidocaine	IV/IO 6.5 mg IO for Pain 2mg	AIRWAY EQUIPMENT	
Atropine	0.13mg	Lorazepam	NONE		Igel size 1.5
Beta 2 Bronchodilator	2.5mg nebulized	Magnesium	NONE	DEFIBRILLATION	
Calcium	BHPO 130mg	Midazolam	IV/IO/IN 1.3 mg PR 1.95mg		13J, 26J
Dextrose	10% 32.5ml	Morphine	IV/IO/IM 0.65mg		
Diazepam	IV/IO/IN 1.3 mg PR 3.25mg	Naloxone	IV/IO/IM/IN 0.65mg	NORMAL SALINE	
Diphenhydramine	IV 6.5mg PO None	Nitroglycerine	NONE		130 ml
Dopamine	NONE	Ondansetron	1 mg		
Epinepherine	IV/IM 0.07 mg	Oxytocin	NONE		
	Stridor 1mg via neb	Sodium Bicarbonate	BHPO		
Fentanyl	IV 2-4 mcg IN 6.5mcg	Tranexamic acid	NONE		
Glucagon	IM 0.65mg	Verapamil	NONE		

## Pediatric Color Coded list

Length 66.5 - 74 cm			8-9 kg (Average 8.5 kg)			7-10 months old	
Acetaminophen	PO only	120mg	Ibuprofen		NONE	VITAL SIGNS	
Activated Charcoal -		NONE	Ipratropium Bromide	Nebulized	500 mcg	BP SYSTOLIC	92(+/-30)
Adenosine	IV	0.85 mg repeat dose 1.7mg	Ketamine		NONE	Heart Rate	120
Amiodarone		42.5 mg	Ketorlac		NONE	Respirations	24-32
Aspirin		NONE	Lidocaine	IV/IO 8mg	IO for Pain 4mg	AIRWAY EQUIPMENT	
Atropine		0.17 mg	Lorazepam		NONE		Igel size 1.5
Beta 2 Bronchodilator		2.5mg nebulized	Magnesium		NONE	DEFIBRILLATION	
Calcium		BHPO 170 mg	Midazolam	IV/IO/IN 1.7 mg	PR 2.5 mg		17J, 34J
Dextrose 10%		42.5 ml	Morphine	IV/IO/IM	0.8 mg		
Diazepam	IV/IO/IN	1.7 mg PR 4.25 mg	Naloxone	IV/IO/IM/IN	0.8mg	NORMAL SALINE	
Diphenhydramine	IV 4mg	PO None	Nitroglycerine		NONE		170 ml
Dopamine		NONE	Ondansetron		1.2 mg		
Epinephrine		IV/IM 0.04 mg	Oxytocin		NONE		
		Stridor 1mg via neb	Sodium Bicarbonate		BHPO		
Fentanyl	IV	2-4 mcg	Tranexamic acid		NONE		
Glucagon		IM 0.8 mg	Verapamil		NONE		

Length 74-84.5 cm			10-11 kg (Average 10.5 kg)			11-18 months old	
Acetaminophen	PO only	150mg	Ibuprofen		100 mg	VITAL SIGNS	
Activated Charcoal		BHPO 10gm	Ipratropium Bromide	Nebulized	500 mcg	BP SYSTOLIC	96(+/-30)
Adenosine	IV	1 mg repeat dose 2 mg	Ketamine		NONE	Heart Rate	115-120
Amiodarone		52.5 mg	Ketorlac		NONE	Respirations	22-30
Aspirin		NONE	Lidocaine	IV/IO 10mg	IO for Pain 5mg	AIRWAY EQUIPMENT	
Atropine		0.21 mg	Lorazepam		NONE		Igel size 1.5-2
Beta 2 Bronchodilator		2.5mg nebulized	Magnesium		NONE	DEFIBRILLATION	
Calcium		BHPO 210 mg	Midazolam	IV/IO/IN 2.1 mg	PR 3 mg		20J, 40J
Dextrose 10%		52.5 ml	Morphine	IV/IO/IM	1 mg		
Diazepam	IV/IO/IN	2.1 mg PR 5 mg	Naloxone	IV/IO/IM/IN	1 mg	NORMAL SALINE	
Diphenhydramine	IV 10mg	PO 12.5mg	Nitroglycerine		NONE		210 ml
Dopamine		NONE	Ondansetron		1.5 mg		
Epinephrine		IV/IM 0.1 mg	Oxytocin		NONE		
		Stridor 1mg via neb	Sodium Bicarbonate		BHPO		
Fentanyl	IV	5-10 mcg	Tranexamic acid		NONE		
Glucagon		IM 1 mg	Verapamil		NONE		

## Pediatric Color Coded list

Length 84.5-97.5 cm	12-14 kg (Average 13 kg)	19-35 months old
Acetaminophen PO 195 mg	Ibuprofen 130 mg	VITAL SIGNS
Activated Charcoal BHPO 13 gm	Ipratropium Bromide Nebulized 500 mcg	BP SYSTOLIC 100 (+/-30)
Adenosine IV 1.3 mg repeat dose 2.6 mg	Ketamine NONE	Heart Rate 110-115
Amiodarone 65 mg	Ketorlac 6.5 mg	Respirations 20-28
Aspirin NONE	Lidocaine IV/IO 13 mg IO for Pain 6.5 mg	AIRWAY EQUIPMENT
Atropine 0.25 mg	Lorazepam NONE	Igel size 2
Beta 2 Bronchodilator 2.5mg nebulized	Magnesium NONE	DEFIBRILLATION
Calcium BHPO 260 mg	Midazolam IV/IO/IN 2.6 mg PR 4 mg	30J, 50J
Dextrose 10% 65 ml	Morphine IV/IO/IM 1.3 mg	
Diazepam IV/IO/IN 2.6 mg PR 6.5 mg	Naloxone IV/IO/IM/IN 1.3 mg	NORMAL SALINE
Diphenhydramine IV 13 mg PO 12.5mg	Nitroglycerine NONE	260 ml
Dopamine NONE	Ondansetron 2 mg	
Epinephrine IV/IM 0.13 mg	Oxytocin NONE	
Stridor 1mg via neb	Sodium Bicarbonate BHPO	
Fentanyl IV 6.5-13 mcg IN 13 mcg	Tranexamic acid NONE	
Glucagon IM 1 mg	Verapamil NONE	

Length 97.5-110 cm	15-18 kg (Average 16.5 kg)	3-4 years old
Acetaminophen PO or IV(20 min) 247 mg	Ibuprofen 165 mg	VITAL SIGNS
Activated Charcoal BHPO 16 gm	Ipratropium Bromide Nebulized 500 mcg	BP SYSTOLIC 100 (+/-30)
Adenosine IV 1.6 mg repeat dose 3.2 mg	Ketamine NONE	Heart Rate 100-115
Amiodarone 82.5 mg	Ketorlac 8.5 mg	Respirations 20-26
Aspirin NONE	Lidocaine IV/IO 16 mg IO for Pain 8.5 mg	AIRWAY EQUIPMENT
Atropine 0.33 mg	Lorazepam NONE	Igel size 2
Beta 2 Bronchodilator 2.5mg nebulized	Magnesium NONE	DEFIBRILLATION
Calcium BHPO 330 mg	Midazolam IV/IO/IN 3.3 mg PR 5 mg	30J, 70J
Dextrose 82.5 ml	Morphine IV/IO/IM 1.6 mg	
Diazepam IV/IO/IN 3.3mg PR 8.25 mg	Naloxone IV/IO/IM/IN 1.6 mg	NORMAL SALINE
Diphenhydramine IV 16 mg PO 12.5mg	Nitroglycerine NONE	330 ml
Dopamine NONE	Ondansetron 2.5 mg	
Epinephrine IV/IM 0.16 mg	Oxytocin NONE	
Stridor 1mg via neb	Sodium Bicarbonate BHPO	
Fentanyl IV 8- 16 mcg IN 16 mcg	Tranexamic acid NONE	
Glucagon IM 1 mg	Verapamil NONE	

# Pediatric Color Coded list

Length 110-122 cm	19-22 kg (Average 20.75 kg)	5-6 years old
Acetaminophen PO or IV(20 min) 300 mg	Ibuprofen 200 mg	VITAL SIGNS
Activated Charcoal BHPO 20 gm	Ipratropium Bromide Nebulized 500 mcg	BP SYSTOLIC 100 (+/-15)
Adenosine IV 2 mg repeat dose 4 mg	Ketamine NONE	Heart Rate 100
Amiodarone 100 mg	Ketorlac 10 mg	Respirations 20-24
Aspirin NONE	Lidocaine IV/IO 20 mg IO for Pain 10 mg	AIRWAY EQUIPMENT
Atropine 0.4 mg	Lorazepam NONE	Igel size 2
Beta 2 Bronchodilator 2.5mg nebulized	Magnesium NONE	DEFIBRILLATION
Calcium BHPO 400 mg	Midazolam IV/IO/IN 4 mg PR 6 mg	40J, 85J
Dextrose 100 ml	Morphine IV/IO/IM 2 mg	
Diazepam IV/IO/IN 4mg PR 10 mg	Naloxone IV/IO/IM/IN 2 mg	NORMAL SALINE
Diphenhydramine IV 20 mg PO 25 mg	Nitroglycerine NONE	410 ml
Dopamine NONE	Ondansetron 3 mg	
Epinephrine IV/IM 0.2 mg	Oxytocin NONE	
Stridor 1mg via neb	Sodium Bicarbonate BHPO	
Fentanyl IV 10-20 mcg IN 20 mcg	Tranexamic acid NONE	
Glucagon IM 1 mg	Verapamil NONE	

Length 122-137 cm	24-30 kg (Average 27 kg)	7-9 years old
Acetaminophen PO or IV(20 min) 405 mg	Ibuprofen 270 mg	VITAL SIGNS
Activated Charcoal BHPO 27 gm	Ipratropium Bromide Nebulized 500 mcg	BP SYSTOLIC 105 (+/-15)
Adenosine IV 2.7 mg repeat dose 5.4 mg	Ketamine NONE	Heart Rate 90
Amiodarone 135 mg	Ketorlac 13 mg	Respirations 18-22
Aspirin NONE	Lidocaine IV/IO 27 mg IO for Pain 13 mg	AIRWAY EQUIPMENT
Atropine 0.5 mg	Lorazepam NONE	Igel size 2-2.5
Beta 2 Bronchodilator 2.5mg nebulized	Magnesium NONE	DEFIBRILLATION
Calcium BHPO 540 mg	Midazolam IV/IO/IN 5 mg PR 8 mg	50J, 100J
Dextrose 135 ml	Morphine IV/IO/IM 2.5 mg	
Diazepam IV/IO/IN 5.4 mg PR 13.5 mg	Naloxone IV/IO/IM/IN 2 mg	NORMAL SALINE
Diphenhydramine IV 25 mg PO 25 mg	Nitroglycerine NONE	540 ml
Dopamine NONE	Ondansetron 4 mg	
Epinephrine IV/IM 0.27 mg	Oxytocin NONE	
Stridor 1mg via neb	Sodium Bicarbonate BHPO	
Fentanyl IV 13-25 mcg IN 25 mcg	Tranexamic acid NONE	
Glucagon IM 1 mg	Verapamil NONE	



## Pediatric Color Coded list

Length 137-150 cm	32-40 kg (Average 36 kg)	10-12 years old
Acetaminophen PO or IV(20 min) 540 mg	Ibuprofen 360 mg	VITAL SIGNS
Activated Charcoal BHPO 36 gm	Ipratropium Bromide Nebulized 500 mcg	BP SYSTOLIC 115 (+/-20)
Adenosine IV 3.6 mg repeat dose 7.2 mg	Ketamine NONE	Heart Rate 85-90
Amiodarone 180 mg	Ketorlac 18 mg	Respirations 16-22
Aspirin NONE	Lidocaine IV/IO 36 mg IO for Pain 18 mg	AIRWAY EQUIPMENT
Atropine 0.7 mg	Lorazepam NONE	Igel size 2.5-3
Beta 2 Bronchodilator 2.5mg nebulized	Magnesium NONE	DEFIBRILLATION
Calcium BHPO 720 mg	Midazolam IV/IO/IN 5 mg PR 10 mg	60J, 150J
Dextrose 180 ml	Morphine IV/IO/IM 2.5 mg	
Diazepam IV/IO/IN 7.2 mg PR 18 mg	Naloxone IV/IO/IM/IN 2 mg	NORMAL SALINE
Diphenhydramine IV 25 mg PO 25 mg	Nitroglycerine NONE	720 ml
Dopamine NONE	Ondansetron 4 mg	
Epinephrine IV/IM 0.3 mg	Oxytocin NONE	
Stridor 1mg via neb	Sodium Bicarbonate BHPO	
Fentanyl IV 25 mcg IN 25 mcg	Tranexamic acid NONE	
Glucagon IM 1 mg	Verapamil NONE	