

Multnomah County • Clackamas County • Washington County

EMERGENCY MEDICAL SERVICES

PEDIATRIC GUIDE

Length-Based System

Measure from top of head to bottom of feet (inches)
If weight available, go directly to appropriate page



EDITION 12.1

April 2025

APGAR Score

Sign	0	1	2
Appearance:	Blue, Pale	Body Pink, extremities blue	Completely pink
Pulse:	Absent	Slow (less than 100)	Greater than or equal to 100
Grimace:	No response	Grimace	Cough or sneeze
Activity:	Limp	Some flexion	Active motion of extremities
Respirations:	Absent	Slow, irregular	Good, crying

Abnormal Childbirth

General:

1. Transport to nearest appropriate hospital.
2. Give receiving hospital earliest possible notification.
3. Contact OLMC for advice.
4. Transport position: if in third trimester, transport on left side (pillow under right hip, or, if on spineboard, tilt right side of board up 6 inches) to keep uterine pressure off inferior vena cava unless delivery is imminent.

Breech Presentation (buttocks first):

1. If imminent, prepare mother and allow buttocks and trunk to deliver spontaneously, then support the body while the head is delivered.
2. If head not delivered within 3 minutes, suffocation can occur:
 - i. Support the body and have mother try to move/crawl to rotate her pelvis in hopes of encouraging delivery.

Prolapsed Cord:

1. With gloved hand, gently attempt to push baby up the vagina several inches.
2. Do not attempt to push the cord back.

Limb Presentation:

1. The presentation of an arm or leg through the vagina is an indication for immediate transport to the hospital.

Abruptio Placenta:

(Occurs during third trimester when placenta prematurely separates from uterine wall, leading to intrauterine bleeding.)

1. The patient experiences lower abdominal pain and the uterus becomes rigid.
2. Shock may develop without significant vaginal bleeding.

Placenta Previa:

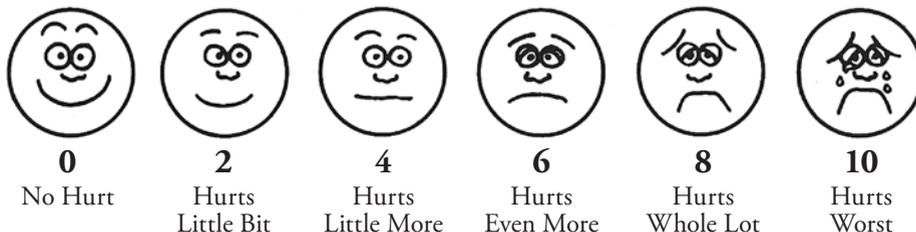
(Occurs when the placenta covers the cervical opening and can result in vaginal bleeding and prevents delivery of the infant through the vagina.)

1. The infant needs to be delivered via C-Section.

Delayed/Stuck Delivery (shoulder dystocia):

1. Attempt having mom crawl or move into the hands/knees position.

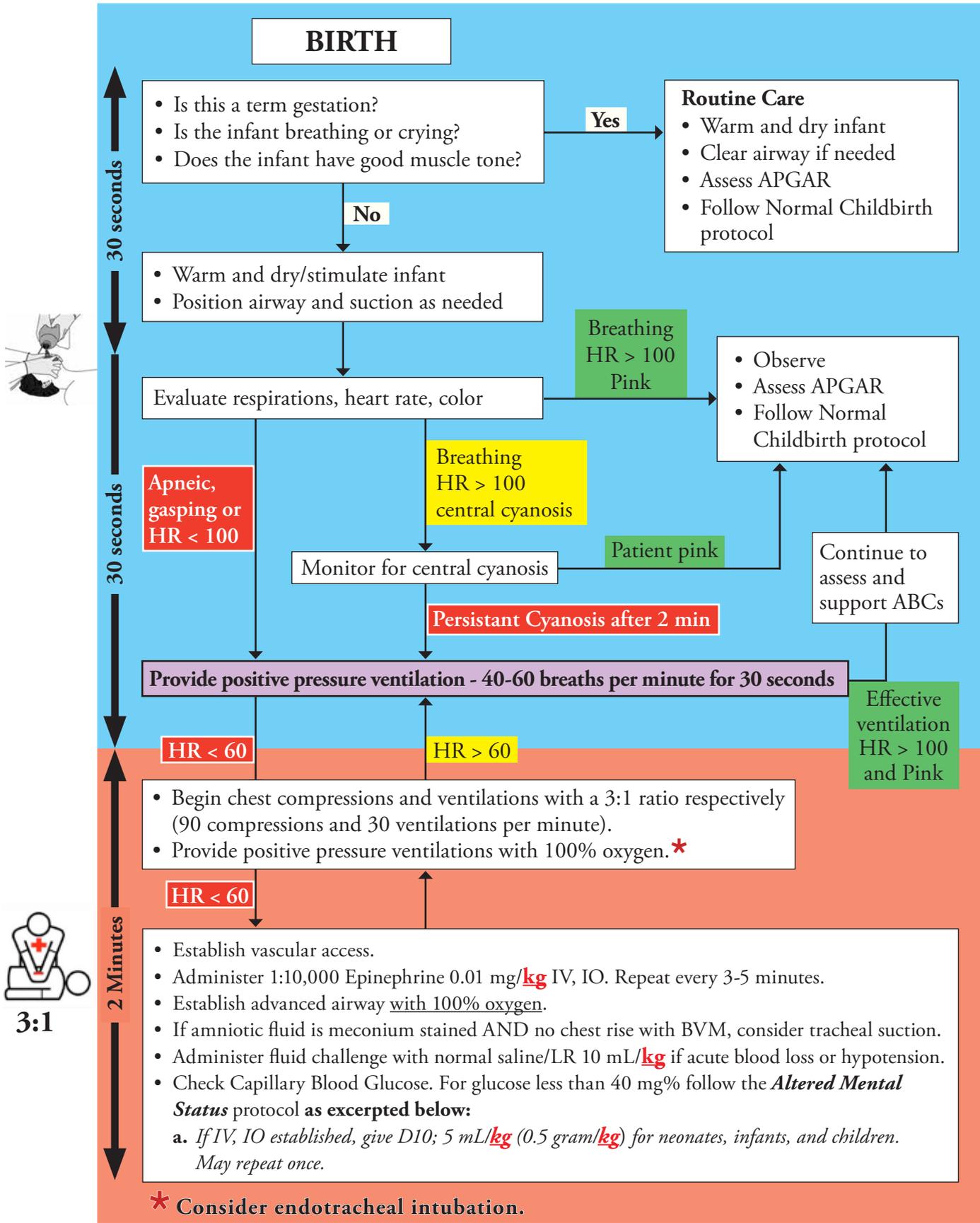
Faces Pain Scale



Poison Control
1-800-222-1222

PEDIATRIC RSI DOSAGE

Medication:		Etomidate	Succinylcholine	Versed	Vecuronium	Ketamine					
Concentration:		2 mg/mL	20 mg/mL	5 mg/mL	1 mg/mL	50 mg/mL					
Dosage:		0.3 mg/kg	2.0 mg/kg < 6 yrs	0.1 mg/kg	0.1 mg/kg	1 mg/kg					
Notes:		Use for long-acting paralysis, hyper K+									
Length/Weight		Max 2.5 mg									
Length	LBS	KG	mg	cc	mg	cc	mg	cc	mg	cc	
16-17.5"	4	2	0.6	0.3	4	0.2	0.1	0.2	0.2	n/a	n/a
18-19.5"	7	3	0.9	0.5	6	0.3	0.1	0.3	0.3	n/a	n/a
20-22.5"	11	5	1.5	0.8	10	0.5	0.1	0.5	0.5	5	0.1
23-25.5"	18	8	2.4	1.2	16	0.8	0.2	0.8	0.8	8	0.2
26-29.5"	22	10	3.0	1.5	20	1.0	0.2	1.0	1.0	10	0.2
30-32.5"	26	12	3.6	1.8	24	1.2	0.2	1.2	1.2	12	0.2
33-35.5"	31	14	4.2	2.1	28	1.4	0.3	1.4	1.4	14	0.3
36-38.5"	33	15	4.5	2.3	30	1.5	0.3	1.5	1.5	15	0.3
39-40.5"	37	17	5.1	2.6	34	1.7	0.3	1.7	1.7	17	0.3
41-43.5"	42	19	5.7	3.0	38	2.0	0.4	1.9	2.0	19	0.4
44-46.5"	48	22	6.6	3.3	33	1.7	0.4	2.2	2.2	22	0.4
47-47.5"	53	24	7.2	3.6	36	1.8	0.5	2.5	2.4	24	0.5
48-49.5"	57	26	7.8	4.0	39	2.0	0.5	2.5	2.6	26	0.5
50-51.5"	64	29	8.7	4.4	44	2.2	0.5	2.5	3.0	29	0.6
52-53.5"	70	32	9.6	4.8	48	2.4	0.5	2.5	3.2	32	0.6
54-58"	84	38	11.4	5.7	57	3.0	0.5	2.5	3.8	38	0.8



3–4.9 lbs**1.5–2.4 kgs****16–17.5"****16 - 17.5"**

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	140 bpm	40 – 60 min	50 – 60 mmHg	45 – 50 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 2.5 mm	7.5 – 9.0 cm	Straight 0	N/A

Apneic Oxygenation = 5 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Pink	1.0		Size 1	S1

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	6 French

DEFIBRILLATION 	PEDIATRIC PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	8 Joules

♥ - CARDIAC MEDICATIONS - ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	10 mg	0.2 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	5 mg	0.1 cc
Atropine	Contraindicated in neonates		
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.02 mg	0.2 cc
Lidocaine (IV, IO)	1.5 mg/kg	3 mg	0.15 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	50 mg	0.1 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	0.2 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	0.2 mg	0.07 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	0.4 mg	0.13 cc
Calcium Gluconate	0.5 cc/kg	--	1 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	1 grams	10 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	1.2 mg	0.12 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	2 mg	0.04 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.02 mg	0.02 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.02 mg	0.2 cc
Fentanyl (IV, IO)	1 mcg/kg	2 mcg	0.04 cc
Fentanyl (IM, IN)	2 mcg/kg	4 mcg	0.08 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	10 cc/kg	--	20 cc
Glucagon (IM)	0.02 mg/kg	0.04 mg	0.04 cc
Naloxone (Narcan®)	Contraindicated in neonates		
Ondansetron (Zofran®) (IV, IO, IM)	Contact OLMC (except if in c-spine or chemo) 0.1cc		
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	2 cc
Versed® (IV, IO)	0.1 mg/kg	0.2 mg	0.04 cc
Versed® (IM, IN)	0.3 mg/kg	0.6 mg	0.12 cc

Doses have been rounded for ease of administration

5–7.4 lbs

2.5–3.4 kgs

18–19.5"

18 - 19.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	125 – 140 bpm	40 – 60 min	60 – 70 mmHg	50 – 55 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 2.5 mm	9.0 – 10.5 cm	Straight 0	N/A

Apneic Oxygenation = 5 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Pink	1.0		Size 1	S1 or S2

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	6 French

DEFIBRILLATION 	PEDIATRIC PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	15 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	15 mg	
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	7.5 mg	0.15 cc
Atropine	Contraindicated in neonates		
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.03 mg	0.3 cc
Lidocaine (IV, IO)	1.5 mg/kg	4.5 mg	0.23 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	75 mg	0.15 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	0.3 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	0.3 mg	0.1 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	0.6 mg	0.2 cc
Calcium Gluconate	0.5 cc/kg	--	1.5 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	1.5 grams	15 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	1.8 mg	0.2 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	3 mg	0.06 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.03 mg	0.03 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.032 mg	0.3 cc
Fentanyl (IV, IO)	1 mcg/kg	3 mcg	0.06 cc
Fentanyl (IM, IN)	2 mcg/kg	6 mcg	0.12 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	10 cc/kg	--	30 cc
Glucagon (IM)	0.02 mg/kg	0.06 mg	0.06 cc
Naloxone (Narcan®)	Contraindicated in neonates		
Ondansetron (Zofran®) (IV, IO, IM)	Contact OLMC (except if in c-spine or chemo) 0.15 cc		
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	3 cc
Versed® (IV, IO)	0.1 mg/kg	0.3 mg	0.06 cc
Versed® (IM, IN)	0.3 mg/kg	0.9 mg	0.18 cc

Doses have been rounded for ease of administration

BIRTH

30 seconds
30 seconds
2 Minutes

• Is this a term gestation?
• Is the infant breathing or crying?
• Does the infant have good muscle tone?

Yes

Routine Care

- Warm and dry infant
- Clear airway if needed
- Assess APGAR
- Follow Normal Childbirth protocol

No

• Warm and dry/stimulate infant
• Position airway and suction as needed

Evaluate respirations, heart rate, color

Breathing
HR > 100
Pink

• Observe
• Assess APGAR
• Follow Normal Childbirth protocol

Apneic,
gaspings or
HR < 100

Breathing
HR > 100
central cyanosis

Monitor for central cyanosis

Patient pink

Continue to assess and support ABCs

Persistent Cyanosis after 2 min

Provide positive pressure ventilation - 40-60 breaths per minute for 30 seconds

HR < 60

HR > 60

Effective ventilation
HR > 100
and Pink

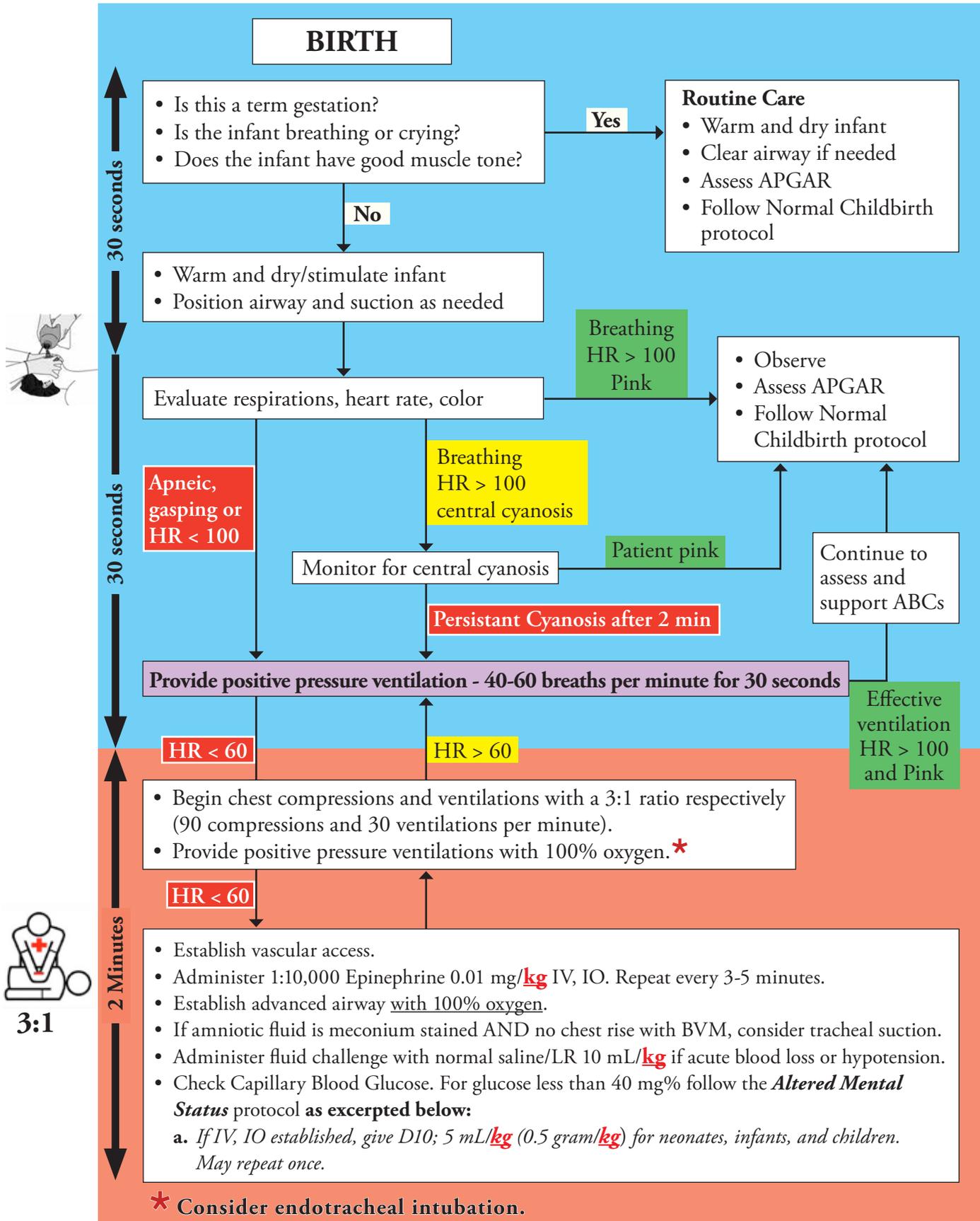
• Begin chest compressions and ventilations with a 3:1 ratio respectively (90 compressions and 30 ventilations per minute).
• Provide positive pressure ventilations with 100% oxygen.*

HR < 60

• Establish vascular access.
• Administer 1:10,000 Epinephrine 0.01 mg/kg IV, IO. Repeat every 3-5 minutes.
• Establish advanced airway with 100% oxygen.
• If amniotic fluid is meconium stained AND no chest rise with BVM, consider tracheal suction.
• Administer fluid challenge with normal saline/LR 10 mL/kg if acute blood loss or hypotension.
• Check Capillary Blood Glucose. For glucose less than 40 mg% follow the **Altered Mental Status** protocol as excerpted below:
a. If IV, IO established, give D10; 5 mL/kg (0.5 gram/kg) for neonates, infants, and children. May repeat once.

* Consider endotracheal intubation.





7.5–14.9 lbs

3.5–6.9 kgs

20–22.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	125 bpm	40 – 60 min	70 – 80 mmHg	55 – 60 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.0 mm	10.5 cm	Straight 0	N/A

Apneic Oxygenation = 5 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Pink	1.0		Size 1 or 2	S1 or S2

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	8 French

DEFIBRILLATION 	PEDIATRIC PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	20 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	25 mg	0.5 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	12.5 mg	0.25 cc
Atropine	0.02 mg/kg	0.1 mg	1 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.05 mg	0.5 cc
Lidocaine (IV, IO)	1.5 mg/kg	7.5 mg	0.38 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	125 mg	0.25 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	0.5 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	0.5 mg	0.17 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	1 mg	0.33 cc
Calcium Gluconate	0.5 cc/kg	--	2.5 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	2.5 grams	25 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	3 mg	0.3 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	5 mg	0.1 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.05 mg	0.05 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.05 mg	0.5 cc
Fentanyl (IV, IO)	1 mcg/kg	5 mcg	0.1 cc
Fentanyl (IM, IN)	2 mcg/kg	10 mcg	0.2 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	10 cc/kg	--	50 cc
Glucagon (IM)	0.02 mg/kg	0.1 mg	0.1 cc
Naloxone (Narcan®)	Contraindicated in neonates		
Ondansetron (Zofran®) (IV, IO, IM)	Contact OLMC (except if in c-spine or chemo) 0.25 cc		
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	5 cc
Versed® (IV, IO)	0.1 mg/kg	0.5 mg	0.1 cc
Versed® (IM, IN)	0.3 mg/kg	1.5 mg	0.3 cc

Doses have been rounded for ease of administration

20 - 22.5"

15–21.9 lbs

7–9.9 kgs

23–25.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	120 bpm	24 – 36 min	70 – 90 mmHg	55 – 65 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.0 mm	10.5 cm	Straight 1	N/A

Apneic Oxygenation = 5 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Blue	1.5		Size 1 or 2	S2

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	8 French

DEFIBRILLATION ⚡	PEDIATRIC PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	50 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	40 mg	0.8 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	20 mg	0.4 cc
Atropine	0.02 mg/kg	0.16 mg	1.6 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.08 mg	0.8 cc
Lidocaine (IV, IO)	1.5 mg/kg	12 mg	0.6 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	200 mg	0.4 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	0.8 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	0.8 mg	0.27 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	1.6 mg	0.53 cc
Calcium Gluconate	0.5 cc/kg	--	4 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	4 grams	40 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	4.8 mg	0.48 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	8 mg	0.16 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.08 mg	0.08 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.08 mg	0.8 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	8 mcg	0.16 cc
Fentanyl (IM, IN)	2 mcg/kg	16 mcg	0.32 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	160 cc
Glucagon (IM)	0.02 mg/kg	0.16 mg	0.16 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	0.8 mg	0.8 cc
Ondansetron (Zofran®) (IV, IO, IM)	Contact OLMC (except if in c-spine or chemo)	0.4 cc	
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	8 cc
Versed® (IV, IO)	0.1 mg/kg	0.8 mg	0.16 cc
Versed® (IM, IN)	0.3 mg/kg	2.4 mg	0.48 cc

Doses have been rounded for ease of administration

23 - 25.5"

22–24.9 lbs

10–11.4 kgs

26–29.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	120 bpm	22 – 30 min	70 – 90 mmHg	55 – 65 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.0 – 3.5 mm	12.0 cm	Straight 1	N/A

Apneic Oxygenation = 10 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Blue	1.5		Size 2	S2 or S3

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	8-10 French

DEFIBRILLATION 	PEDIATRIC PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	50 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	50 mg	1 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	25 mg	0.5 cc
Atropine	0.02 mg/kg	0.2 mg	2 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.1 mg	1 cc
Lidocaine (IV, IO)	1.5 mg/kg	15 mg	0.75 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	250 mg	0.5 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	1 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	1 mg	0.33 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	2 mg	0.67 cc
Calcium Gluconate	0.5 cc/kg	--	5 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	5 grams	50 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	6 mg	0.6 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	10 mg	0.2 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.1 mg	0.1 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	10 mcg	0.2 cc
Fentanyl (IM, IN)	2 mcg/kg	20 mcg	0.4 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	200 cc
Glucagon (IM)	0.02 mg/kg	0.2 mg	0.2 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	1 mg	1 cc
Ondansetron (Zofran®) (IV, IO, IM)	Contact OLMC (except if in c-spine or chemo)		0.5 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	10 cc
Versed® (IV, IO)	0.1 mg/kg	1 mg	0.2 cc
Versed® (IM, IN)	0.3 mg/kg	3 mg	0.6 cc

Doses have been rounded for ease of administration

26 - 29.5"

25–28.9 lbs

11.5–13.4 kgs

30–32.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	120 bpm	22–30 min	80 – 100 mmHg	60 – 70 mmHg
INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.0 – 3.5 mm	12.0 cm	Straight 1	N/A
Apneic Oxygenation = 10 liters/min via nasal cannula				
I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Blue	1.5		Size 2	S2 or S3
IO / NG / SUCTION	IO Needle	Suction Catheter		
	EZ-IO 25 mm (blue)	8-10 French		
DEFIBRILLATION 	PEDIATRIC PADS	JOULES	SHOCK AT	
Defibrillation/Cardioversion	✓	4 J/kg	50 Joules	

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	60 mg	1.2 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	30 mg	0.6 cc
Atropine	0.02 mg/kg	0.24 mg	2.4 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.12 mg	1.2 cc
Lidocaine (IV, IO)	1.5 mg/kg	18 mg	0.9 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	300 mg	0.6 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	1.2 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	1.2 mg	0.4 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	2.4 mg	0.8 cc
Calcium Gluconate	0.5 cc/kg	--	6 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	6 grams	60 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	7.2 mg	0.72 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	12 mg	0.24 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.12 mg	0.12 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	12 mcg	0.24 cc
Fentanyl (IM, IN)	2 mcg/kg	24 mcg	0.48 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	240 cc
Glucagon (IM)	0.02 mg/kg	0.24 mg	0.24 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	600 mg	1.2 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	1.2 mg	1.2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	1.2 mg	0.6 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	12 cc
Versed® (IV, IO)	0.1 mg/kg	1.2 mg	0.24 cc
Versed® (IM, IN)	0.3 mg/kg	3.6 mg	0.72 cc

Doses have been rounded for ease of administration

30 - 32.5"

29–32.9 lbs

13.5–14.9 kgs

33–35.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	110 – 120 bpm	22 – 28 min	80 – 100 mmHg	60 – 70 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.5 – 4.0 mm	12.0 – 13.5 cm	Straight 2	Peds 4.0 only

Apneic Oxygenation = 10 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Gray	2.0		Size 2	S3

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	10 French

DEFIBRILLATION 	PEDIATRIC PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	70 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	70 mg	1.4 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	35 mg	0.7 cc
Atropine	0.02 mg/kg	0.28 mg	2.8 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.14 mg	1.4 cc
Lidocaine (IV, IO)	1.5 mg/kg	21 mg	1.1 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	350 mg	0.7 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	1.4 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	1.4 mg	0.47 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	2.8 mg	0.93 cc
Calcium Gluconate	0.5 cc/kg	--	7 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	7 grams	70 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	8.4 mg	0.84 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	14 mg	0.28 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.14 mg	0.14 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	14 mcg	0.28 cc
Fentanyl (IM, IN)	2 mcg/kg	28 mcg	0.56 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	280 cc
Glucagon (IM)	0.02 mg/kg	0.28 mg	0.28 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	700 mg	1.4 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	1.4 mg	1.4 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	1.4 mg	0.7 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	14 cc
Versed® (IV, IO)	0.1 mg/kg	1.4 mg	0.28 cc
Versed® (IM, IN)	0.3 mg/kg	4.2 mg	0.84 cc

Doses have been rounded for ease of administration

33 - 35.5"

33–35.9 lbs

15–16.4 kgs

36–38.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	110 bpm	20 – 26 min	90 – 110 mmHg	65 – 75 mmHg
INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.5 – 4.0 mm	13.5 cm	Straight 2	Peds 4.0 ET only
Apneic Oxygenation = 10 liters/min via nasal cannula				
I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Gray	2.0		Size 2	S3
IO / NG / SUCTION	IO Needle	Suction Catheter		
	EZ-IO 25 mm (blue)	10 French		
DEFIBRILLATION 	ADULT PADS	JOULES	SHOCK AT	
Defibrillation/Cardioversion	✓	4 J/kg	70 Joules	

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	75 mg	1.5 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	37.5 mg	0.75 cc
Atropine	0.02 mg/kg	0.3 mg	3 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.15 mg	1.5 cc
Lidocaine (IV, IO)	1.5 mg/kg	22.5 mg	1.1 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	375 mg	0.75 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	1.5 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	1.5 mg	0.5 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	3 mg	1 cc
Calcium Gluconate	0.5 cc/kg	--	7.5 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	7.5 grams	75 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	9 mg	0.9 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	15 mg	0.3 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.15 mg	0.15 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	15 mcg	0.3 cc
Fentanyl (IM, IN)	2 mcg/kg	30 mcg	0.6 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	300 cc
Glucagon (IM)	0.02 mg/kg	0.3 mg	0.3 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	750 mg	1.5 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	1.5 mg	1.5 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	1.5 mg	0.75 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	15 cc
Versed® (IV, IO)	0.1 mg/kg	1.5 mg	0.3 cc
Versed® (IM, IN)	0.3 mg/kg	4.5 mg	0.9 cc

Doses have been rounded for ease of administration

36 - 38.5"

36–39.9 lbs

16.5–18.4 kgs

39–40.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	110 – 110 bpm	20 – 26 min	90 – 110 mmHg	65 – 75 mmHg
INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 3.5 – 4.0 mm	13.5 – 15.0 cm	Straight 2	Peds 4.0 ET only
Apneic Oxygenation = 10 liters/min via nasal cannula				
I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Gray	2.0		Size 2	S3
IO / NG / SUCTION	IO Needle	Suction Catheter		
	EZ-IO 25 mm (blue)	10 French		
DEFIBRILLATION 		ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion		✓	4 J/kg	70 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	85 mg	1.7 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	42.5 mg	0.85 cc
Atropine	0.02 mg/kg	0.34 mg	3.4 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.17 mg	1.7 cc
Lidocaine (IV, IO)	1.5 mg/kg	25.5 mg	1.3 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	425 mg	0.85 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	1.7 mcg/kg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	1.7 mg	0.57 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	3.4 mg	1.13 cc
Calcium Gluconate	0.5 cc/kg	--	8.5 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	8.5 grams	85 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	17 mg	0.34 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.17 mg	0.17 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	17 mcg	0.34 cc
Fentanyl (IM, IN)	2 mcg/kg	34 mcg	0.68 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	340 cc
Glucagon (IM)	0.02 mg/kg	0.34 mg	0.34 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	850 mg	1.7 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	1.7 mg	1.7 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	1.7 mg	0.85 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	17 cc
Versed® (IV, IO)	0.1 mg/kg	1.7 mg	0.34 cc
Versed® (IM, IN)	0.3 mg/kg	5.1 mg	1 cc

Doses have been rounded for ease of administration

39 - 40.5"

40–43.9 lbs

18.5–19.9 kgs

41–43.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	100 bpm	20 – 26 min	90 – 110 mmHg	65 – 75 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 4.0 – 4.5 mm	15.0 – 16.5 cm	Straight 2	Peds

Apneic Oxygenation = 10 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Gray	2.0		Size 2	S3

IO / NG / SUCTION	IO Needle	Suction Catheter
	EZ-IO 25 mm (blue)	10 French

DEFIBRILLATION ⚡	ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	100 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	95 mg	2 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	47.5 mg	0.95 cc
Atropine	0.02 mg/kg	0.38 mg	3.8 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.19 mg	2 cc
Lidocaine (IV, IO)	1.5 mg/kg	28.5 mg	1.4 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	475 mg	1 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	1.9 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	1.9 mg	0.63 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	3.8 mg	1.27 cc
Calcium Gluconate	0.5 cc/kg	--	9.5 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	9.5 grams	95 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	19 mg	0.38 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.19 mg	0.2 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	19 mcg	0.38 cc
Fentanyl (IM, IN)	2 mcg/kg	38 mcg	0.76 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	380 cc
Glucagon (IM)	0.02 mg/kg	0.38 mg	0.38 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	950 mg	1.9 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	0.1 mg/kg	1.9 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	1.9 mg	1 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	19 cc
Versed® (IV, IO)	0.1 mg/kg	1.9 mg	0.38 cc
Versed® (IM, IN)	0.3 mg/kg	5.7 mg	1.14 cc

Doses have been rounded for ease of administration

41 - 43.5"

44–49.9 lbs

20–22.9 kgs

44–46.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	100 bpm	20 – 24 min	90 – 110 mmHg	65 – 75 mmHg
INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 4.5 – 5.0 mm	16.5 cm	Straight 2	Peds
Apneic Oxygenation = 10 liters/min via nasal cannula				
I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Gray	2.0		Size 2	S3
IO / NG / SUCTION	IO Needle	NG Tube	Suction Catheter	
	EZ-IO 25 mm (blue)	12 French	10 French	
DEFIBRILLATION 	ADULT PADS	JOULES	SHOCK AT	
Defibrillation/Cardioversion	✓	4 J/kg	100 Joules	

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	110 mg	2.2 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	55 mg	1.1 cc
Atropine	0.02 mg/kg	0.44 mg	4.4 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.22 mg	2.2 cc
Lidocaine (IV, IO)	1.5 mg/kg	33 mg	1.65 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	550 mg	1.1 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	2.2 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	2.2 mg	0.73 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	4.4 mg	1.47 cc
Calcium Gluconate	10 cc	--	10 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	11 grams	110 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	22 mg	0.44 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.22 mg	0.22 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Epinephrine for croup 1:1,000 nebulized	1 mg	--	1 cc + 4 cc NS
Fentanyl (IV, IO)	1 mcg/kg	22 mcg	0.44 cc
Fentanyl (IM, IN)	2 mcg/kg	44 mcg	0.88 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	440 cc
Glucagon (IM)	0.02 mg/kg	0.44 mg	0.44 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	1100 mg	2.2 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	2 mg	2 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	2.2 mg	1.1 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	22 cc
Versed® (IV, IO)	0.1 mg/kg	2.2 mg	0.44 cc
Versed® (IM, IN)	0.3 mg/kg	6.6 mg	1.32 cc

Doses have been rounded for ease of administration

44 - 46.5"

50–54.9 lbs

23–24.9 kgs

47–47.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	90 – 100 bpm	20 – 24 min	90 – 110 mmHg	65 – 75 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 4.5 – 5.0 mm	16.5 – 18.0 cm	Straight 2	Peds

Apneic Oxygenation = 10 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Gray	2.0		Size 2	S3

IO / NG / SUCTION	IO Needle	NG Tube	Suction Catheter
	EZ-IO 25 mm (blue)	12 French	10 French

DEFIBRILLATION 	ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	100 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	120 mg	2.4 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	60 mg	1.2 cc
Atropine	0.02 mg/kg	0.48 mg	4.8 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.24 mg	2.4 cc
Lidocaine (IV, IO)	1.5 mg/kg	36 mg	1.8 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	600 mg	1.2 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	2.4 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	2.4 mg	0.8 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	4.8 mg	1.6 cc
Calcium Gluconate	10 cc	--	10 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	12 grams	120 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	24 mg	0.48 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.24 mg	0.24 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Fentanyl (IV, IO)	1 mcg/kg	24 mcg	0.48 cc
Fentanyl (IM, IN)	2 mcg/kg	48 mcg	0.96 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	480 cc
Glucagon (IM)	0.02 mg/kg	0.48 mg	0.48 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	1200 mg	2.4 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	2 mg	2 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	2.4 mg	1.2 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	24 cc
Versed® (IV, IO)	0.1 mg/kg	2.4 mg	0.48 cc
Versed® (IM, IN)	0.3 mg/kg	7.2 mg	1.44 cc

Doses have been rounded for ease of administration

47 - 47.5"

55–60.9 lbs

25–27.9 kgs

48–49.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	90 bpm	18 – 22 min	90 – 110 mmHg	65 – 75 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 5.0 – 5.5 mm	18.0 cm	Straight 2 –3	Peds

Apneic Oxygenation = 15 liters/min via nasal cannula

I-GEL AIRWAY	VIDEO LARYNGOSCOPE	McGrath	GlideScope
White	2.5	Size 2 or 3	S3

IO / NG / SUCTION	IO Needle	NG Tube	Suction Catheter
	EZ-IO 25 mm (blue)	18 French	10 French

DEFIBRILLATION 	ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	125 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	130 mg	2.6 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	65 mg	1.3 cc
Atropine	0.02 mg/kg	0.5 mg	5 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.26 mg	2.6 cc
Lidocaine (IV, IO)	1.5 mg/kg	39 mg	1.95 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	650 mg	1.3 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	2.6 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	2.6 mg	0.87 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	5.2 mg	1.73 cc
Calcium Gluconate	10 cc	--	10 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	13 grams	130 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	26 mg	0.52 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.26 mg	0.26 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Fentanyl (IV, IO)	1 mcg/kg	26 mcg	0.52 cc
Fentanyl (IM, IN)	2 mcg/kg	52 mcg	1 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	520 cc
Glucagon (IM)	0.02 mg/kg	0.52 mg	0.52 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	1300 mg	2.6 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	2 mg	2 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	2.6 mg	1.3 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	26 cc
Versed® (IV, IO)	0.1 mg/kg	2.6 mg	0.52 cc
Versed® (IM, IN)	0.3 mg/kg	7.8 mg	1.56 cc

Doses have been rounded for ease of administration

48 - 49.5"

61–65.9 lbs

28–29.9 kgs

50–51.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	90 bpm	18 – 22 min	90 – 110 mmHg	65 – 75 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 5.0 – 5.5 mm	18.0 cm	Straight 2 – 3	Peds

Apneic Oxygenation = 15 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
White	2.5		Size 2 or 3	S3

IO / NG / SUCTION	IO Needle	NG Tube	Suction Catheter
	EZ-IO 25 mm (blue)	18 French	10 French

DEFIBRILLATION ⚡	ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	125 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	145 mg	3 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	72.5 mg	1.45 cc
Atropine	0.02 mg/kg	0.5 mg	5 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.29 mg	3 cc
Lidocaine (IV, IO)	1.5 mg/kg	43.5 mg	2.18 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	725 mg	1.45 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	2.9 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	2.9 mg	0.97 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	5.8 mg	1.93 cc
Calcium Gluconate	10 cc	--	10 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	14.5 grams	145 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	29 mg	0.58 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.29 mg	0.3 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Fentanyl (IV, IO)	1 mcg/kg	29 mcg	0.58 cc
Fentanyl (IM, IN)	2 mcg/kg	58 mcg	1.16 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	580 cc
Glucagon (IM)	0.02 mg/kg	0.58 mg	0.58 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	1450 mg	2.9 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	2 mg	2 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	2.9 mg	1.45 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	29 cc
Versed® (IV, IO)	0.1 mg/kg	2.9 mg	0.58 cc
Versed® (IM, IN)	0.3 mg/kg	8.7 mg	1.74 cc

Doses have been rounded for ease of administration

50 - 51.5"

66–76.9 lbs

30–34.9 kgs

52–53.5"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	90 bpm	18 – 22 min	100 – 120 mmHg	70 – 80 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 5.5 – 6.0 mm	18.0 cm	Straight 2 – 3	Adult 6.0 ETT

Apneic Oxygenation = 15 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
White	2.5		Size 2 or 3	S3

IO / NG / SUCTION	IO Needle	NG Tube	Suction Catheter
	EZ-IO 25 mm (blue)	14 French	10 French

DEFIBRILLATION ⚡	ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	150 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	160 mg	3.2 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	80 mg	1.6 cc
Atropine	0.02 mg/kg	0.5 mg	5 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.32 mg	3.2 cc
Lidocaine (IV, IO)	1.5 mg/kg	48 mg	2.4 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	800 mg	1.6 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	3.2 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	3.2 mg	1.07 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	6.4 mg	2.13 cc
Calcium Gluconate	10 cc	--	10 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	16 grams	160 cc
Dexamethasone (IV, IO, IM, PO)	0.6 mg/kg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	32 mg	0.64 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.3 mg	0.3 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Fentanyl (IV, IO)	1 mcg/kg	32 mcg	0.64 cc
Fentanyl (IM, IN)	2 mcg/kg	64 mcg	1.28 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	640 cc
Glucagon (IM)	0.02 mg/kg	0.64 mg	0.64 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	1600 mg	3.2 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	2 mg	2 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	3.2 mg	1.6 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	32 cc
Versed® (IV, IO)	0.1 mg/kg	3.2 mg	0.64 cc
Versed® (IM, IN)	10 mg	10 mg	2 cc

Doses have been rounded for ease of administration

52 - 53.5"

77–88 lbs

35–40 kgs

54–58"

VITAL SIGNS:	Heart Rate	Respirations	SBP	MAP
	85 bpm	16 – 22 min	100 – 120 mmHg	70 – 80 mmHg

INTUBATION	ET Size	ET Depth	Laryngoscope Blade	Bougie
	Cuffed 6.0 – 6.5 mm	19.5 cm	Straight 3	Adult

Apneic Oxygenation = 15 liters/min via nasal cannula

I-GEL AIRWAY		VIDEO LARYNGOSCOPE	McGrath	GlideScope
Yellow	3.0		Size 3	S3

IO / NG / SUCTION	IO Needle	NG Tube	Suction Catheter
	EZ-IO 25 mm (blue)	18 French	12 French

DEFIBRILLATION 	ADULT PADS	JOULES	SHOCK AT
Defibrillation/Cardioversion	✓	4 J/kg	175 Joules

♥ – CARDIAC MEDICATIONS – ♥

	DOSAGE	Patient Dose	Volume
Amiodarone (VF/Pulseless VT)	5 mg/kg	190 mg	3.8 cc
Amiodarone-2nd Dose or VT w/pulses (IV, IO)	2.5 mg/kg	95 mg	2 cc
Atropine	0.02 mg/kg	0.5 mg	5 cc
Epinephrine 1:10,000 (IV, IO)	0.01 mg/kg	0.38 mg	3.8 cc
Lidocaine (IV, IO)	1.5 mg/kg	57 mg	2.85 cc
Magnesium Sulfate (IV, IO)	25 mg/kg, 1–2 min	950 mg	2 cc
Norepinephrine drip (MUST use IV pump)	0.1 mcg/kg/min	3.8 mcg/min	--

MEDICATIONS

	DOSAGE	Patient Dose	Volume
Adenosine—First Dose (IV, IO)	0.1 mg/kg	3.8 mg	1.27 cc
Adenosine—2nd/3rd Dose (IV, IO)	0.2 mg/kg	7.6 mg	2.53 cc
Calcium Gluconate	10 cc	--	10 cc
D10% (1 part D50 to 4 parts NS) (IV, IO, PO)	5 mL/kg	19 grams	190 cc
Dexamethasone (IV, IO, IM, PO)	10 mg	10 mg	1 cc
Diphenhydramine (Benadryl) (IV, IO, IM)	1 mg/kg	38 mg	0.76 cc
Epinephrine 1:1,000 (Anaphylaxis/Asthma - IM)	0.01 mg/kg	0.4 mg	0.4 cc
Epinephrine 1:10,000 (Anaphylaxis—IV, IO q 3-5 min. Total MAX 0.5 mg)	0.01 mg/kg	0.1 mg	1 cc
Fentanyl (IV, IO)	1 mcg/kg	38 mcg	0.76 cc
Fentanyl (IM, IN)	2 mcg/kg	76 mcg	1.52 cc
<i>Fentanyl intervals: IV, IO: repeat q 3-5 min. IM, IN: repeat q 15 min. MAX total for all routes 4 micrograms/kg.</i>			
Fluid Challenge (IV, IO)	20 cc/kg	--	760 cc
Glucagon (IM)	0.02 mg/kg	0.76 mg	0.76 cc
Magnesium Sulfate (Asthma - IV, IO)	50 mg/kg slowly	1900 mg	3.8 cc
Naloxone (Narcan®) (IV, IO, IM, IN)	2 mg	2 mg	2 cc
Ondansetron (Zofran®) (IV, IO, IM) or PO: one 4 mg tab	0.1 mg/kg slowly	3.8 mg	2 cc
Sodium Bicarbonate (IV, IO)	Contact OLMC	--	38 cc
Versed® (IV, IO)	0.1 mg/kg	3.8 mg	0.76 cc
Versed® (IM, IN)	10 mg	10 mg	2 cc

Doses have been rounded for ease of administration

Hydroxocobalamin (Cyanokit)

Cyanide poisoning or smoke inhalation with suspected cyanide poisoning due to the presence of coma, persistent hypotension or cardiorespiratory arrest.

Follow Mixing Instructions on Box

Soluset

1. **Draw** up correct dose into appropriate sized syringe by using chart.
2. **Put** medication into Soluset drip chamber and add NS or LR to **equal** 100 ml.
3. **Infuse** solution wide open.

- OR -

Slow IV, IO push over 15 minutes

1. **Draw** up correct dose into appropriate sized syringe by using chart.
2. **Administer** medication via slow IV, IO push over 15 minutes.

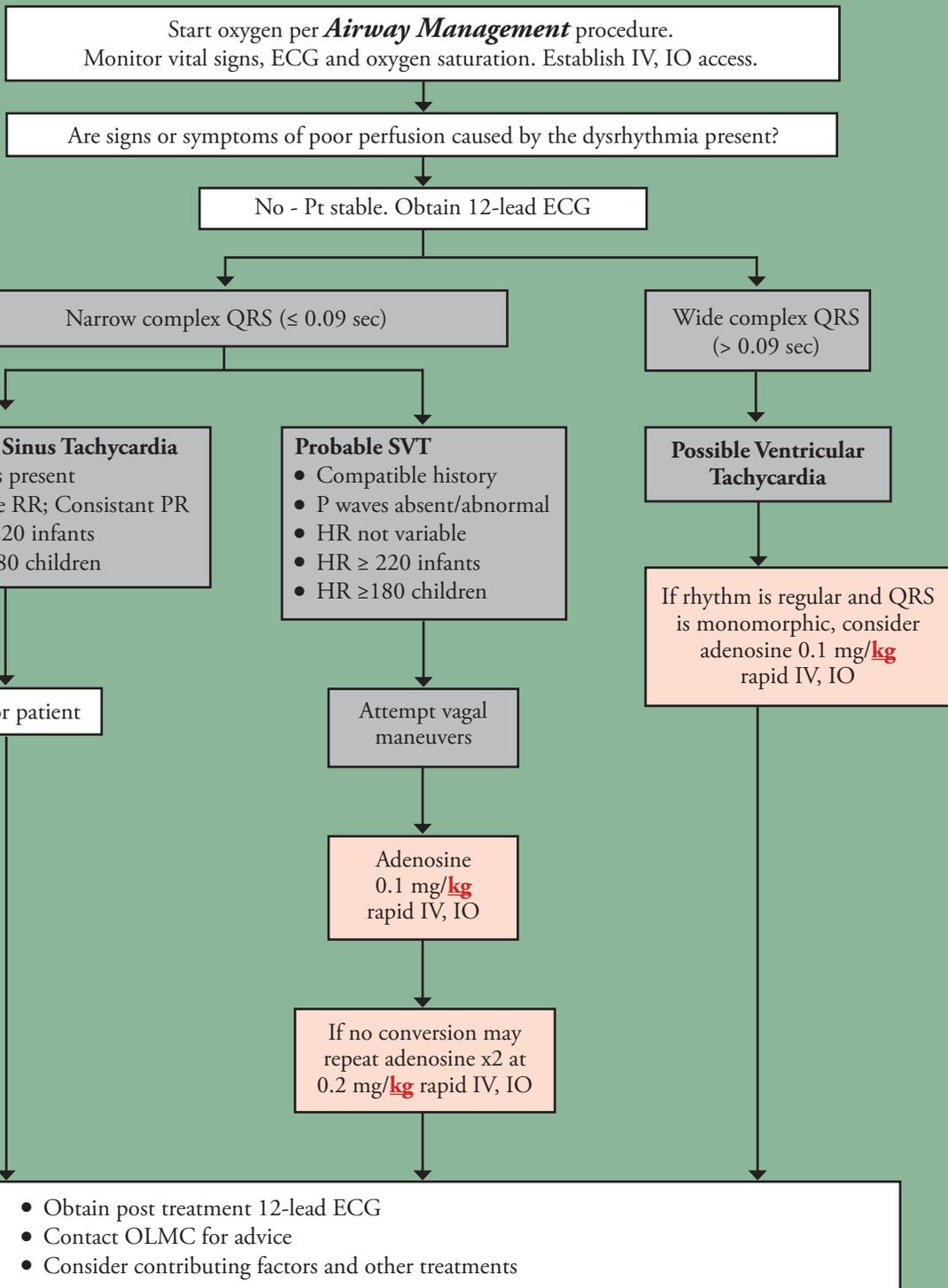
IV Infusion Dosing				
Concentration:		25 mg/mL		
Dosage:		70 mg/kg		
max dose 2500 mg		max 100 mL		
Length	LBS	KG	mg	mL
16-17.5"	4	2	140	5.6
18-19.5"	7	3	210	8.4
20-22.5"	11	5	350	14
23-25.5"	18	8	560	22.4
26-29.5"	22	10	700	28
30-32.5"	26	12	840	33.6
33-35.5"	31	14	980	39.2
36-38.5"	33	15	1050	42
39-40.5"	37	17	1190	47.6
41-43.5"	42	19	1330	53.2
44-46.5"	48	22	1540	61.6
47-47.5"	53	24	1680	67.2
48-49.5"	57	26	1820	72.8
50-51.5"	64	29	2030	81.2
52-53.5"	70	32	2240	89.6
54-58"	84	38	2500	100

Side Effects/ Special Notes:

- A. The most frequently occurring side effects are chromaturia (red-colored urine) and erythema (skin redness) which occur in nearly all patients.
- B. Obtain SpCO, if available, before administration of Cyanokit since the latter will interfere with the carboxyhemoglobin monitor.

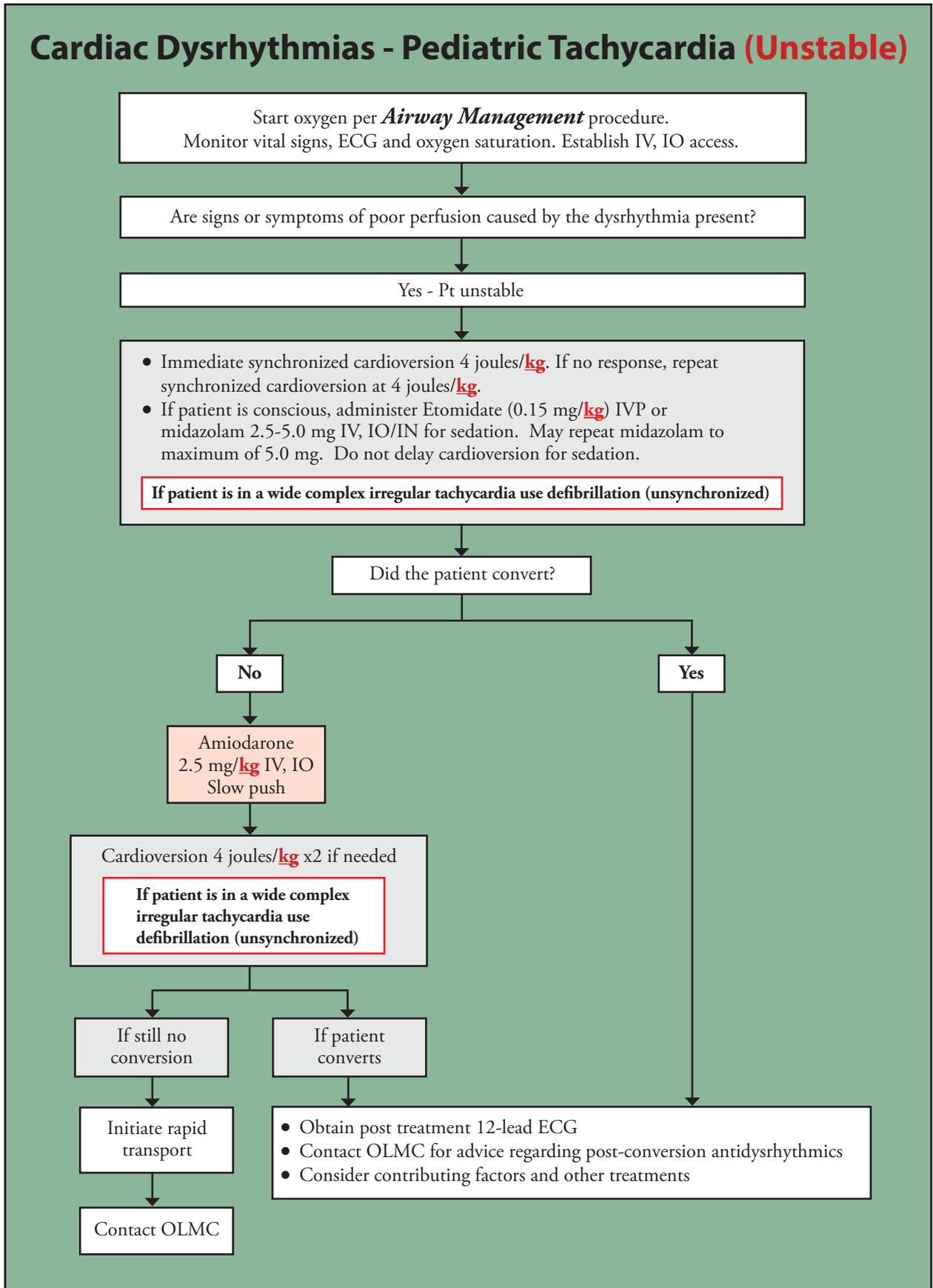
Do not administer sodium thiosulfate in the same IV line.

Cardiac Dysrhythmias - Pediatric Tachycardia (Stable)



Cardiac Dysrhythmias - Pediatric Tachycardia (Unstable)

Tachy



Cardiac Dysrhythmias - Pediatric Bradycardia

BRADYCARDIA WITH A PULSE

Start oxygen per *Airway Management* procedure.
 Monitor vital signs, ECG and oxygen saturation. Establish IV, IO access.
 Support ABCs

Bradycardia causing cardiorespiratory compromise or poor perfusion?

No - Pt stable

Yes - Pt unstable

- Continue to support ABCs as needed.
- Monitor patient.
- Consider OLMC contact.

- Start CPR if despite oxygenation and ventilation patient's heart rate is < 60 bpm with poor perfusion.
- Reassess after 2 minutes of CPR.

No

Persistent symptomatic bradycardia?

Yes

- Give 1:10,000 epinephrine 0.01 mg/kg IV, IO. Repeat epinephrine every 3-5 minutes.
- If increased vagal tone or AV block, consider Atropine 0.02 mg/kg IV, IO. Minimum single dose 0.1 mg, maximum single dose 0.5 mg. Maximum total dose 1 mg.
- Consider pacing per *Transcutaneous Pacing* procedure.
- If capture is achieved and patient is uncomfortable, consider Midazolam 0.1mg/kg IV, IO to a maximum of 2.5 mg.
- If capture is not achieved, try repositioning pads.
- Goal of therapy is to improve perfusion.

Specific Precautions:

A. Most pediatric bradycardia is due to hypoxia. Oxygenate and ventilate aggressively.

Abbreviated Flow Charts

Pediatric Tachycardia			
UNSTABLE	STABLE		
<ol style="list-style-type: none"> 1. Synchronized Cardioversion 4 J/kg 2. Amiodarone 2.5 mg/kg IV, IO 3. Cardioversion 4 J/kg 	<table border="0"> <tr> <td style="vertical-align: top;"> Wide Regular <ol style="list-style-type: none"> 1. Consider Adenosine </td> <td style="vertical-align: top;"> Narrow Regular <ol style="list-style-type: none"> 1. Vagal Maneuvers 2. Adenosine - 3 total doses </td> </tr> </table>	Wide Regular <ol style="list-style-type: none"> 1. Consider Adenosine 	Narrow Regular <ol style="list-style-type: none"> 1. Vagal Maneuvers 2. Adenosine - 3 total doses
Wide Regular <ol style="list-style-type: none"> 1. Consider Adenosine 	Narrow Regular <ol style="list-style-type: none"> 1. Vagal Maneuvers 2. Adenosine - 3 total doses 		

Pediatric Bradycardia
UNSTABLE
<ol style="list-style-type: none"> 1. CPR if HR < 60 2. Epinephrine 3. Atropine 4. Transcutaneous Pacing

Neonatal Resuscitation
<ol style="list-style-type: none"> 1. Warm, Dry & Stimulate Patient 2. Position & Suction Airway 3. BVM (PPV) if HR <100, CPR if HR <60 4. Consider intubation 5. Epinephrine every 3-5 minutes 6. Fluid Challenge 10 mL/kg 7. If SpO₂ < 90% after 5 min, provide supplemental oxygen to maintain SpO₂ 90-95% 8. CBG

DISCLAIMERS:

Doses have been rounded for ease of administration.

All electrical therapy has been rounded for efficacy of action within the parameters of the electrical therapy devices.

CPR Ratio



NRP
3:1 ratio < 24 hours old



Pediatric
15:2 ratio ≥ 24 hours old

Cardiac Arrest Algorithm

Ventricular Fibrillation & Pulseless V-Tach

1. Epinephrine -AND- Amiodarone
2. Amiodarone
3. Epinephrine
4. Lidocaine
5. Epinephrine
6. Lidocaine
7. Epinephrine
8. Magnesium Sulfate
9. Epinephrine
10. Sodium Bicarbonate, **only** if suspected Sodium Channel Blocker overdose or hyperkalemia or hypermagnesemia

Reversible Causes

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypoglycemia
- Hyper-/ hypokalemia
- Hypothermia
- Tension pneumothorax
- Tamponade (cardiac)
- Toxins
- Thrombosis, coronary (ACS)
- Thrombosis, pulmonary (embolism)

Asystole

Epinephrine every 3-5 minutes

PEA

Epinephrine every 3-5 minutes

Glasgow Coma Score

Motor	< 1 Year	
6 – Obeys Command	Normal Spontaneous Movement	
5 – Localizes Pain	Localizes Pain	
4 – Withdrawal	Withdrawal	
3 – Flexion to Pain	Abnormal Flexion	
2 – Extension to Pain	Extension	
1 – None	None	
Verbal	2-5 Years	< 2 Year
5 – Oriented	Appropriate Words	Smiles/Cries Appropriately
4 – Confused	Inappropriate Words	Cries
3 – Inappropriate Words	Cries/Screams	Inappropriate Crying
2 – Incomprehensible Sounds	Grunts	Grunts
1 – None	None	None
Eyes	< 1 Year	
4 – Spontaneously	Spontaneously	
3 – To Speech	To Shout	
2 – To Pain	To Pain	
1 – None	None	

Respiratory Distress: Pediatric Patients

(Summary of Protocol 10.160)

Upper Airway

Diagnosis	Treatment
1. Foreign Body Airway Obstruction	Remove FBAO
2. Croup	Dexamethasone
3. Stridor	Nebulized epinephrine
4. Anaphylaxis	See Anaphylaxis protocol
5. Epiglottitis and Laryngeal Edema	Supportive care

Lower Airway (also see guide below)

Diagnosis	Treatment
1. Asthma	DuoNeb → Epinephrine → Dexamethasone → Mag Sulfate
2. Acute Bronchiolitis	Nasal suctioning → albuterol → epinephrine

Resp

BRUE (Brief Resolved Unexplained Event)

1. An episode characterized by some combination of apnea, change in color or muscle tone, and choking or gagging. Transport via ALS to an ED capable of treating critically ill infants.

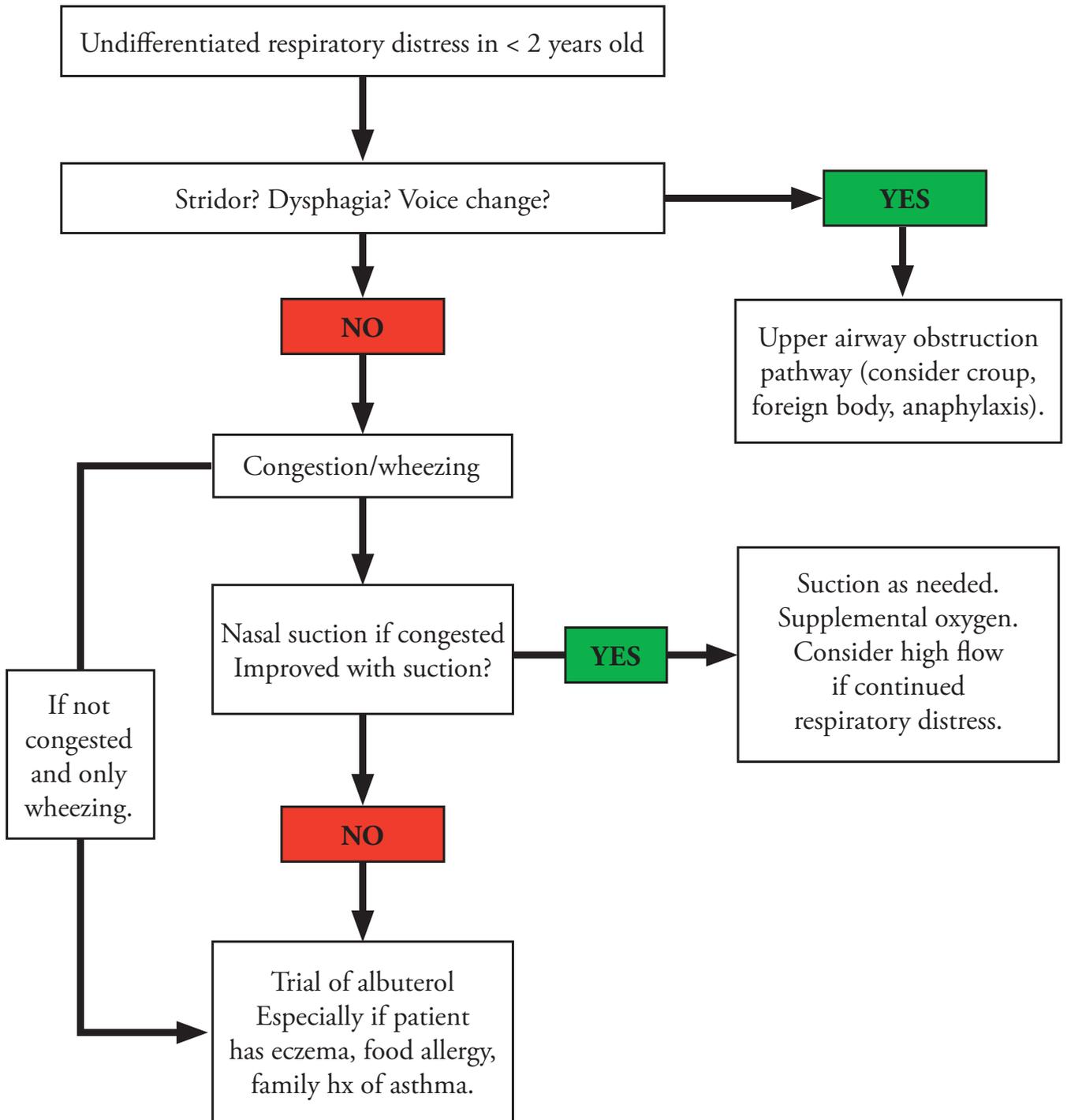
Severe respiratory distress (see Infant Respiratory Distress Assessment Guide below)

1. Treat same as Mild-Moderate respiratory distress.
2. Prepare for BVM and intubation for apnea, EtCO₂ > 55, or inability to maintain SpO₂ > 85%.

INFANT RESPIRATORY DISTRESS ASSESSMENT GUIDE			
	MILD	MODERATE	SEVERE
Respiratory Rate ≤ 2 months 2-12 months 1-2 years	≤ 60 ≤ 50 ≤ 40	61-69 51-59 41-44	≥ 70 ≥ 60 ≥ 45
Retractions	Subcostal or intercostal	2 of: subcostal, intercostal, substernal retractions, OR nasal flaring	3 of: subcostal, intercostal, substernal, suprasternal, supraclavicular retractions, OR nasal flaring OR head bobbing
Dyspnea	1 of: difficulty feeding, decreased vocalization, or agitation	2 of: difficulty feeding, decreased vocalization, or agitation	Stops feeding, no vocalization OR drowsy and confused
Auscultation	End-expiratory wheeze only	Expiratory wheeze only	Inspiratory and expiratory wheezing OR diminished breath sounds OR both

Treatment of Acute Bronchiolitis (<2 years old)

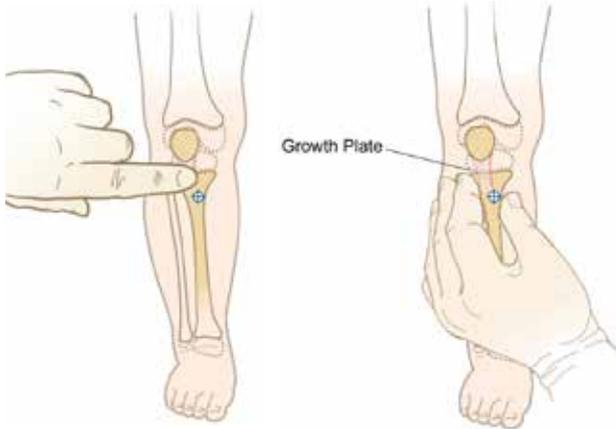
Bronchiolitis



Pediatric Intraosseous

Pediatric Proximal Tibia

One finger width distal from patella;
one finger width medial



Pediatric Distal Femur

One finger width proximal from patella;
one finger width medial



NOTE: Distal femur IO site is preferred
for children < 6 years old

Pain Management

(Conscious or semi-conscious patients only)

1. **0.5 mg/kg 2% lidocaine**
(do not exceed 50 mg)
2. Push **SLOWLY** (over 120 seconds)
3. **Wait** approximately 30-60 seconds
4. **Perform "power" flush** with normal saline

Lidocaine for Pain Management

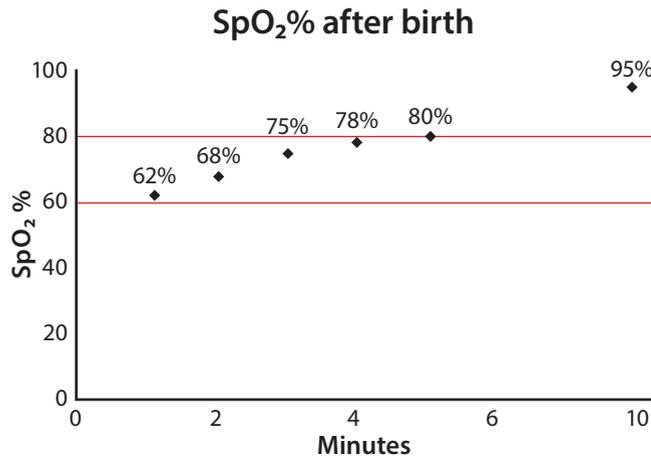
Concentration:		20 mg/mL		
Dosage:		0.5 mg/kg		
max dose 50 mg		max 2.5 mL		
Length	LBS	KG	mg	mL
16-17.5"	4	2	1.0	0.1
18-19.5"	7	3	1.5	0.1
20-22.5"	11	5	2.5	0.2
23-25.5"	18	8	4.0	0.2
26-29.5"	22	10	5.0	0.3
30-32.5"	26	12	6.0	0.3
33-35.5"	31	14	7.0	0.4
36-38.5"	33	15	7.5	0.4
39-40.5"	37	17	8.5	0.4
41-43.5"	42	19	9.5	0.5
44-46.5"	48	22	11.0	0.6
47-47.5"	53	24	12.0	0.6
48-49.5"	57	26	13.0	0.7
50-51.5"	64	29	14.5	0.7
52-53.5"	70	32	16.0	0.8
54-58"	84	38	19.0	1.0

Doses have been rounded for ease of administration

Notes

Notes

Expected oxygen saturation of full term newborn



Target Oxygen Saturation Table

1 minute	60% - 65%
2 minute	65% - 70%
3 minute	70% - 75%
4 minute	75% - 80%
5 minute	80% - 85%
10 minute	85% - 95%

Pediatric Guide Dosage Calculated Using these Concentrations:

Adenosine, 3 mg/mL	Glucagon, 1 mg/mL
Amiodarone, 50 mg/mL	Hydroxocobalamin, 25 mg/mL
Atropine, 0.1 mg/mL	Ketamine, 50 mg/mL
Calcium Gluconate, 10% (0.465 mg/mL)	Lidocaine 2%, 20 mg/mL
Dexamethasone, 10 mg/mL	Magnesium Sulfate 50%, 500 mg/mL
Dextrose 50%, 0.5 g/mL	Midazolam, 5 mg/mL
Dextrose 10%, 0.1 g/mL	Naloxone, 1 mg/mL
Diphenhydramine, 50 mg/mL	Norepinephrine, 4 mg/1,000 mL
Epinephrine, 1:1,000, 1 mg/mL	Ondansetron, 2 mg/mL
Epinephrine, 1:10,000, 0.1 mg/mL	Sodium Bicarb, 1 mEq/1 mL
Etomidate, 2 mg/mL	Succinylcholine, 20 mg/mL
Fentanyl, 50 mcg/mL	Vecuronium, 1 mg/mL

Pediatric Acetaminophen and Ibuprofen Dosages

Medication:			Ibuprofen		Acetaminophen	
Concentration:			100 mg/5 mL		160 mg/5 mL	
Dosage:			10 mg/kg		15 mg/kg	
Notes: Length/Weight			Max dose 600 mg PO only		Max dose 1000 mg PO only	
Length	LBS	KG	mg	cc	mg	cc
16-17.5"	4	2	20	1.0	30	0.9
18-19.5"	7	3	30	1.5	45	1.4
20-22.5"	11	5	50	2.5	75	2.3
23-25.5"	18	8	80	4.0	120	3.7
26-29.5"	22	10	100	5.0	150	4.7
30-32.5"	26	12	120	6.0	180	5.6
33-35.5"	31	14	140	7.0	210	6.6
36-38.5"	33	15	150	7.5	225	7.0
39-40.5"	37	17	170	8.5	255	8.0
41-43.5"	42	19	190	9.5	285	9.0
44-46.5"	48	22	220	11.0	330	10.3
47-47.5"	53	24	240	12.0	360	11.3
48-49.5"	57	26	260	13.0	390	12.2
50-51.5"	64	29	290	14.5	435	13.6
52-53.5"	70	32	320	16.0	480	15.0
54-58"	84	38	380	19.0	570	17.8

Doses have been rounded for ease of administration