Drug/Protocol	Dose
Adenosine Tachycardia-Narrow Complex	Elevate arm, 12 mg IVP RAPID (1-3 sec), followed by a 10 ml RAPID bolus with saline syringe in tubing port above injection port. Repeat 12 mg dose in 1-2 minutes if needed.
Albuterol Allergic Reaction Asthma/COPD	2.5 mg by nebulizer; set O2 flow rate at 8 LPM. *Ipratropium in initial treatment only
Amiodarone Post-Resuscitation **(MC)**	Maintenance infusion at 1 mg/min.—If patient received bolus of Amiodarone. **Preparation:** 150 mg in 250 ml of D5W with macro drip (10gtts/ml) at rate of 16 gtts/min.
Tachycardia-Wide Complex	150 mg IV/IO Infusion over 10 minutes. **Preparation:** 150 mg in 100 ml D5W/macro tubing rate of 100 gtts/min.
Ventricular Fibrillation / Pulseless Ventricular Tachycardia	300 mg IV/IO. Consider repeating 150 mg IV/IO in 3-5 minutes. *Disregard the packaging suggestion that amiodarone must be diluted.*
Aspirin Acute Coronary Syndrome Congestive Heart Failure	81 mg chewable (baby). Give 4 tablets PO (324 mg).
Atropine Bradycardia	0.5 mg IV/IO q 3 minutes with a maximum dose of 3 mg
Etiology of Arrest Overdose / Toxic Ingestion: Organophosphate Poisoning	2 mg IV/IO q 5 minutes until symptoms relieved
Calcium Chloride Asystole/PEA Ventricular Fibrillation	1 g IV/IO q 10 minutes
Crush Injury **(MC)**	1 g slow IV/IO
Dextrose 50% Diabetic Emergency	25 g IV/IO Glucagon should be given BEFORE giving Dextrose 50% IO route
Etiology of Arrest	25 g IV/IO
Diltiazem Tachycardia-Narrow Complex	10 mg IV/IO slow over 2 minutes. Repeat 10 mg dose in 5 minutes if needed. **Preparation:** Inject 10 ml of NS into 100 mg vial (10 mg/ml concentration). Gently shake the vial until the medication is dissolved. ***Do NOT administer Diltiazem and Metoprolol to the same patient.**
Diphenhydramine Allergic Reaction	50 mg IM/IV/IO
Dopamine Bradycardia Post Resuscitation Sepsis Shock-Medical Shock-Trauma	5-20 mcg/kg/min titrate to SBP of 90 **Preparation:** 400 mg in 250 ml D5W/mini drip set. See Dopamine Conversion Table on final page.
Epinephrine 1:1000 Allergic Reaction Asthma/COPD	0.3 mg IM

The notation: **(MC),** next to any protocol denotes the need for medical control orders prior to medication administration.

Drug/Protocol	Dose
Epinephrine 1:10,000 Asystole/PEA Ventricular Fibrillation	1 mg IV/IO q 3 - 5 minutes
Allergic Reaction (Anaphylaxis)	1-4 mcg/min IV infusion. **Preparation:** 1.0 mg in 250 ml D5W/mini drip at a rate of 15 - 60 gtts/min
Bradycardia	2–10 mcg/min IV infusion. Titrate to effect. **Preparation:** 1.0 mg in 250 ml D5W/mini drip at a rate of 30 – 150 gtts/min.
Fentanyl Pain Management	1 mcg/kg IV/IM/IN q 5 minutes. Maximum 3 mcg/kg. **Preparation (IV Only):** Dilute Fentanyl 100 mcg / 2 ml with 8 ml of NS to yield a 10 mcg/ml concentration.
Fluid-D5W	**Various:** Used for mixing medication infusions **Diabetic Emergency-Hypoglycemia:** 250 ml/hr
Fluid-Normal Saline	**Various:** KVO for IV access **Burn:** 500 ml bolus, then per Medical Control **Child Birth (Mother):** 125 ml/hr **Diabetic Emergency-DKA:** Bolus 250 ml **Obstetrical Emergencies:** KVO **Etiology of Arrest:** Bolus 250 ml if hypovolemia is suspected **Sepsis:** Fluid Bolus 250 ml to maximum of 1000 ml **Shock- Medical:** Fluid Bolus 250 ml **Shock- Trauma:** Fluid Bolus 250 ml to Systolic BP of 80 mmHg **Syncope:** Fluid Bolus 250 ml to maximum of 1000 ml
Glucagon Diabetic Emergency	1 mg IM/IN
Glucose (Oral) Diabetic Emergency	15 g may be repeated in 10 minutes
Ipratropium Asthma/COPD	500 mcg by nebulizer (only administer with first albuterol treatment)
Ketamine Agitated / Combative Patient Head Injury Psychiatric Transport Restraint Procedure	2 mg/kg IN/IV or 2 - 4 mg/kg IM may be repeated in 10 minutes
Adult Airway Breathing	2 mg/kg slow IN/IV or 4 mg/kg IM
Advanced Airway Confirmation/Mgmt	1 mg/kg IN/IV, repeat PRN if Ketamine was used prior for Ketamine Assisted Ventilations, otherwise administer Midazolam.

The notation **(MC)** next to any protocol denotes the need for medical control orders prior to medication administration.

Drug/Protocol	Dose
Lidocaine 2% Intraosseous – (EZ IO)	2.5 ml IO, for conscious patient receiving IO only
Magnesium Sulfate Asthma/COPD **(MC)**	2 g IV infusion over 10 minutes **Preparation:** 2 g in 100 ml of D5W/macro drip at 100 gtts/min.
OB Emergencies	4 g IV infusion over 10 minutes **Preparation:** 4 g in 100 ml of D5W/macro drip at 100 gtts/min.
Tachycardia-Wide Complex	1 g IV infusion over 10 minutes **Preparation:** 1 g in 100 ml of D5W/macro drip at 100 gtts/min.
Etiology of Arrest	2 g IV/IO
Methylprednisolone Asthma/COPD Allergic Reaction	125 mg IV/IM/IO
Metoprolol Tachycardia-Narrow Complex	5 mg IVP q 5 min. Maximum dose of 15 mg. ***Do NOT administer Metoprolol and Diltiazem to the same patient**
Midazolam Advanced Airway Confirmation Management	5 mg IN/IV repeat q 2 minutes as needed for effective sedation, maximum dose of 20 mg via standing orders.
Agitated / Combative Patient Psychiatric Transport Restraint Procedure	5 mg IN/IM/IV. Maximum dose of 10 mg via standing orders. If Ketamine is unavailable, Midazolam maximum dose via standing orders is 20 mg. Midazolam 2.5 mg IN/IV may be given via standing order for the presence of emergence following Ketamine administration
External Pacing Procedure	2.5 mg IN/IV. Maximum dose of 2.5 mg via standing orders.
Pain Management **(MC)**	2.5 mg IN/IV is typical dose for pain refractory to Fentanyl
Sedation Facilitated Intubation Procedure	**Sedation Facilitated Intubation:** 5 mg IN/IV q 2 minutes as needed for effective sedation, maximum dose of 10 mg via standing orders.
Seizure	2.5 mg IN/IV or 5 mg IM. IN/IV dose may be repeated q 2 minutes until termination of seizure. Maximum of 10 mg via standing orders.
Naloxone Altered Mental Status Etiology of Arrest Overdose/Toxic Ingestion	0.5 - 2 mg IN/IM/IV
Nicardipine Stroke/t-PA Drip & Ship **(MC)**	Initial infusion rate of 2 mg/hr PRN for SBP >180-200 or DBP >105 Initial Infusion rate of 5 mg/hr PRN for SBP >200 Titrate to maintain above BP parameters by increasing the dose by 2.5 mg/hr as often as every 15 minutes to a maximum dose of 15 mg/hr.
Nitroglycerin Acute Coronary Syndrome Congestive Heart Failure	1 spray SL q 3 minutes as long as SBP > 100. Apply 1" paste after 3 doses of SL NTG.

The notation **(MC)** next to any protocol denotes the need for medical control orders prior to medication administration.

Drug/Protocol	Dose
Nitroglycerin IV (Tridil) Acute Coronary Syndromes *(CCT Only)*	5 mcg/min infusion Titrate to desired effect by increasing the dose by 5 mcg/min every 3-5 minutes up to 20 mcg/min. At 20 mcg/min, the dose can be increased by 10 mcg/min, but doses beyond 20 mcg/min are rare and typically do not deliver any additional results/benefits. Mix 50 mg of Nitroglycerin IV (Tridil) in 250 ml D5W, yielding a concentration of 200 mcg/ml. Infusion pump should be utilized.
Congestive Heart Failure *(CCT Only)*	50 mcg/min infusion Titrate to desired effect by increasing the dose by 5 mcg/min every 3-5 minutes. Mix 50 mg of Nitroglycerin IV (Tridil) in 250 ml D5W, yielding a concentration of 200 mcg/ml. Infusion pump should be utilized.
Ondansetron Abdominal Pain / GI Problem	4 mg IV/IM. May repeat in 10 minutes if necessary.
Oxygen CORE Airway Protocols Etiology of Arrest	1-6 liters/min via nasal cannula 6-15 liters/min via NRB mask 15 liters via BVM
Oxymetazoline HCL 0.05% Epistaxis	2-4 sprays in affected nare
Nasotracheal Intubation	2-4 sprays in each nostril before attempting nasal intubation
Sodium Bicarbonate Crush Injury	Infusion X 2 **Preparation:** Each infusion includes 50 mEq of Sodium Bicarb in 1000 ml of normal saline—Wide Open
Crush Injury **(MC)**	Bolus100 mEq IV/IO (if available)
Etiology of Arrest	50 mEq IV/IO, may repeat 25 mEq in 10 minutes
Overdose (Tricyclics) **(MC)**	50 mEq, may repeat 25 mEq in 10 minutes if signs/symptoms persist
Tachycardia-Wide Complex	1 mEq/kg IV/IO
Sodium Nitroprusside (MC) *(CCT Only)*	0.25 mcg/kg/min infusion Titrate to desired effect by increasing the dose by 1 mcg/kg/min up to a maximum dose of 10 mcg/kg/min. Mix 50mg of Sodium Nitroprusside (Nipride) in 250 ml D5W, yielding a concentration of 200 mcg/ml. Infusion pump should be utilized.

The notation **(MC)** next to any protocol denotes the need for medical control orders prior to medication administration.

2	4	5	6	6	7	8	9
4	7	9	10	12	13	15	17
6	12	14	16	18	20	23	25
8	15	18	21	24	27	30	33
10	19	22	26	30	34	37	41
12	22	27	31	36	40	45	49
14	26	31	37	42	47	52	58
16	30	36	42	48	54	60	66
18	34	40	47	54	61	68	74
20	37	45	52	60	67	75	82

The notation **(MC)** next to any protocol denotes the need for medical control orders prior to medication administration.