POLICY: 554.88
TITLE: Rx Guidelines

EFFECTIVE: 07/01/2024
REVIEW: 07/2027
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

Rx GUIDELINES

I. AUTHORITY
Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9

II PURPOSE
To serve as a patient treatment standard for EMRs, EMTs, and Paramedics within their scope of practice.

III. PROTOCOL

EPINEPHRINE DRIP CHART

For a concentration of 4 mcg of epinephrine per milliliter solution.
1 mg of 1:1,000 mixed in 250 ml of NS

Mix 1mg of epinephrine 1:1,000 in 250ml = 4 mcg/ml	
1 mcg drip = 15 gtt/min	6 mcg drip = 90 gtt/min
2 mcg drip = 30 gtt/min	7 mcg drip =105 gtt/min
3 mcg drip = 45 gtt/min	8 mcg drip=120 gtt/min
4 mcg drip = 60 gtt/min	9 mcg drip=135 gtt/min
5 mcg drip = 75 gtt/min	10 mcg drip=150 gtt/min

*Based on a micro drip calibration of 60 drops equal to 1.0 milliliter.

LIDOCAINE DRIP CHART

For a concentration of 4 mg of lidocaine per milliliter solution.
1 g mixed in 250 ml of NS.

Mix 1g of lidocaine 1:1,000 in 250ml = 4 mg/ml	
1 mg drip = 15 gtt/min	2 mg drip = 30 gtt/min
3 mg drip = 45 gtt/min	4 mg drip =60 gtt/min

*Based on a micro drip calibration of 60 drops equal to 1.0 milliliter.

INTRANASAL MIDAZOLAM CHART

Patient age	Weight (kg)	Volume in ml (5 mg/ml)	Maximum Dose (mg)
Neonate	3 kg	0.3 ml	0.6 mg
<1 year	6 kg	0.4 ml	1.2 mg
1 year	10 kg	0.5 ml	2.0 mg
2 years	14 kg	0.7 ml	2.8 mg
3 years	16 kg	0.8 ml	3.2 mg
4 years	18 kg	0.9 ml	3.6 mg
5 years	20 kg	1.0 ml	4.0 mg
6 years	22 kg	1.0 ml	4.4 mg
7 years	24 kg	1.1 ml	4.8 mg
8 years	26 kg	1.2 ml	5.2 mg
9 years	28 kg	1.3 ml	5.6 mg
10 years	30 kg	1.4 ml	6.0 mg
11 years	32 kg	1.4 ml	6.4 mg
12 years	34 kg	1.5 ml	6.8 mg
Small teenager	40 kg	1.8 ml	8.0 mg
Adult/large teenager	> 50 kg	2.0 ml	10.0 mg

PEDIATRIC MEDICATION CHARTS

DO NOT EXCEED ADULT TOTALS

c = concentration

	Premie	NB	3 Mos.	6 Mos.	1 Yr	2 Yr	4 Yr	6 Yr	8 Yr	10 Yr	12 Yr
Body Length in cm	≤ 53	54-58	59-65	66-74	75-80	81-86	87-99	100-113	114-132	133-158	159-189
Av. Body Wt kg	< 2.5	2.5 - 4	6	7	10	12	16	20	25	34	41
Act Charcoal c=6.25 g/oz. dose = 1 g/kg	1–2.5 g	2.5-4 g	6 g	7 g	10 g	12 g	16 g	20 g	25 g	34 g	41 g
Adenosine c = 3 mg/ml dose = 0.1 mg/kg	-	0.25–0.4 mg	0.6 mg	0.7 mg	1 mg	1.2 mg	1.6 mg	2.0 mg	2.5 mg	3.4 mg	4.1 mg
Albuterol 1 unit dose (3 ml of 0.083% solution)	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg	2.5 mg
Amiodarone c= 50 mg/ml dose= 5 mg/kg	-	12.5 - 20 mg	30 mg	35 mg	50 mg	60 mg	80 mg	100 mg	125 mg	170 mg	205 mg
Atropine IV c = 0.1 mg/ml dose = 0.02 mg/kg	-	.1 mg	0.12 mg	0.14 mg	0.2 mg	0.24 mg	0.32 mg	0.4 mg	0.5 mg	0.68 mg	0.82 mg
Dextrose (D10) dose = 5 ml/kg	5–12.5 ml	12.5 - 20 ml	30 ml	35 ml	50 ml	60 ml	80 ml	100 ml	125 ml	170 ml	205 ml
Dextrose (D25) dose = 2 ml/kg	2–5 ml	5 - 8 ml	12 ml	14 ml	20 ml	24 ml	-	-	-	-	-
Dextrose (D50) dose = 1 ml/kg	-	-	-	-	-	-	16 ml	20 ml	25 ml	34 ml	41 ml

Diphenhydramine c = 10 mg/ml dose = 1 mg/kg	1–2.5 mg	2.5 – 4 mg	6 mg	7 mg	10 mg	12 mg	16 mg	20 mg	25 mg	34 mg	41 mg
Epi1:10,000 IV/IO dose = 0.01 mg/kg	0.01-0.025 mg	0.025 – .04 mg	0.06 mg	0.07 mg	0.1 mg	0.12 mg	0.16 mg	0.2 mg	0.25 mg	0.34 mg	0.41 mg
Epi1:1,000 IM dose = 0.01 mg/kg	-	-	0.06 mg	0.07 mg	0.1 mg	0.12 mg	0.16 mg	0.2 mg	0.25 mg	0.34 mg	0.41 mg

TRAUMA TRIAGE CRITERIA

1. Physiologic

- Glasgow Coma Score <14;
- Systolic blood pressure (Adult) < 90;
- Systolic blood pressure (Child 7-14) < 85;
- Systolic blood pressure (Child <6) < 70;
- Resp Rate < 10 or > 30 per min; • Resp Rate Infant <1yo: > 30 per min.

2. Anatomic

- Penetrating injuries to head, neck, torso, & extremities proximal to elbow & knee
- Flail chest
- Two or more proximal long bone fractures
- Crushed, degloved, or mangled extremity
- Amputation proximal to wrist &ankle
- Suspected pelvic fracture
- Open or depressed skull fracture
- Traumatic Paralysis

3. Mechanism of injury

- Falls (Adult) ≥ 20 ft (1 story = 10 ft)
- Falls (Child) ≥ 10 ft or 3X child's height
- High Risk Automobile Crash
  i) Intrusion > 12" at occupant site ii) Ejection from automobile iii) Unrestrained rollover iv) Vehicle telemetry
- Automobile vs. Pedestrian/Bicyclist
  i) Ped/bicyclist thrown or run over
  ii) Significant (> 20 mph) impact
- Motorcycle Crash > 20 mph

4. Special Considerations

- Older adults: age 55
- Anticoagulation or bleeding disorders
- Burns- Refer to burn triage criteria
- Death in same passenger compartment
- Renal disease requiring dialysis
- Pregnancy > 20 weeks with complaint of injury
- EMS provider judgment

Vision, Aphasia, Neglect (VAN) Scale

	Normal	Mild	Moderate	Severe
How weak is the Patient? Raise both arms.	No signs of weakness	Minor Drift	Severe drift- touches or nearly touches the ground	Flaccid or no antigravity

Visual Disturbances	Aphasia	Neglect
Field cut (which side) (4 quadrants)	Expressive (inability to speak or paraphasic errors); do not count slurred words (repeat & name 2 objects)	Forced gaze or inability to track to one side.
Double Vision (ask pt. to look to right then left; evaluate for uneven eyes)	Receptive (not understanding or following commands) i.e., close eyes, make a fist.	Unable to feel both sides at the same time, or unable to identify own arm.
Blind- New Onset	Mixed	Ignoring one side.
None	None	None

*Patient must have weakness and one or more of the V, A, N to be VAN Positive.

Sepsis Screen

Patient should be presumed to be septic if the patient meets two or more of the following criteria, with no other identifiable cause;

1. **Temperature > 100.4° or < 96°**
2. **Heart rate > 90**
3. **Respiratory rate > 20**

FIBRINOLYTIC CHECKLIST

Date_____PCR#_____Receiving Facility_____Patient Name

DOB_____Medic Unit_____If ANY of the following is checked YES, fibrinolysis MAY be contraindicated:

		YES	NO
1.	Chest pain lasting greater than 12 hours	( )	( )
2.	Systolic BP greater than 180 mmHg	( )	( )
3.	Diastolic BP greater than 100 mmHg	( )	( )
4.	Age younger than 35 if male or 40 if female	( )	( )
5.	History of stroke, TIA, brain tumor, A-V malformation or other CNS disease	( )	( )
6.	Internal bleeding in past 2-4 weeks	( )	( )
7.	Surgery or trauma in past 6 weeks, including laser eye surgery	( )	( )
8.	Closed head/facial trauma past 3 months	( )	( )
9.	Bleeding or clotting problems or on anticoagulants	( )	( )
10.	Pregnant female	( )	( )
11.	Terminal illness	( )	( )
12.	Serious systemic disease, including liver or kidney disease	( )	( )
13.	Previous hypersensitivity to reteplase	( )	( )

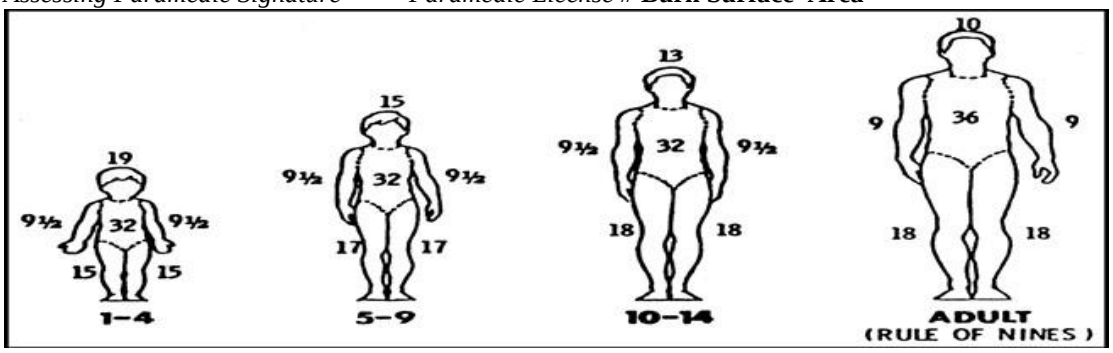
High Risk?

If any of the following are checked YES, consider transport to PCI facility:

		YES	NO
1.	Heart rate greater than or equal to 100 bpm AND SBP less than 100 mmHg	( )	( )
2.	Pulmonary edema (rales)	( )	( )
3.	Signs of shock (cool, clammy)	( )	( )

4. Contraindications to fibrinolytic therapy ( ) ( )

Assessing Paramedic Signature *Paramedic License #* **Burn Surface Area**



Rate based on a single micro infusion set, with drip calibration of 60 drops equal to 1.0 milliliter.

Rate based on a single macro infusion set drip, with calibration of 10 drops equal to 1.0 milliliter.

Rate based on two macro infusion sets, with drip calibration of 10 drops equal to 1.0 milliliter. Both IVs should be infusing at the prescribed drip rate.

Drip Rate Based on Surface Area Burned (2°& 3°) and Body Weight

Wt kg	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
9%	15	30	45	45	60	75	90	100	100	100	20	25	25	30	30
9.5%	15	30	45	45	60	75	90	100	100	100	20	25	25	30	30
10%	15	30	45	45	100	100	90	100	100	20	25	25	30	30	30
15%	15	45	60	75	100	100	25	25	30	30	30	45	45	45	45
17%	30	45	60	90	100	20	25	30	30	45	45	45	45	45	60
18%	30	45	60	90	100	25	30	30	30	45	45	45	60	60	60
19%	30	45	75	100	100	25	30	30	30	45	45	45	60	60	60
24%	30	45	90	20	25	30	30	45	45	45	45	60	60	75	75
24.5%	30	45	90	20	25	30	30	45	45	45	60	60	60	75	75
28%	45	75	100	25	30	45	45	45	60	60	60	75	75	75	90
30%	45	75	100	25	30	45	45	45	60	60	60	75	75	90	90
32%	45	75	20	30	30	45	45	45	60	60	75	75	90	90	100
36%	45	90	25	30	45	45	60	60	60	75	75	90	90	100	100
37%	45	90	25	30	45	45	60	60	60	75	75	90	100	100	100
38%	45	100	25	30	45	45	60	60	75	75	75	90	100	100	100
39%	45	100	25	30	45	45	60	60	75	75	90	90	100	100	100
41.5%	45	100	25	45	45	60	60	75	75	90	90	100	100	60	60
45%	60	100	30	45	45	60	60	75	75	90	100	100	60	60	60
46%	60	100	30	45	45	60	60	75	75	90	100	100	60	60	60
47%	60	100	30	45	45	60	75	75	90	90	100	100	60	60	60
49%	60	20	30	45	45	60	75	75	90	100	100	60	60	60	75
51%	60	20	30	45	45	60	75	75	90	100	100	60	60	60	75
54%	60	25	30	45	60	60	75	90	100	100	60	60	60	75	75
54.5%	60	25	30	45	60	75	75	90	100	100	60	60	60	75	75
56.5%	75	25	45	45	60	75	75	90	100	100	60	60	75	75	90
58.5%	75	25	45	45	60	75	75	90	100	60	60	60	75	75	90
62%	75	25	45	45	60	75	90	100	100	60	60	75	75	90	90
63%	75	30	45	45	60	75	90	100	100	60	60	75	75	90	100
64%	75	30	45	45	60	75	90	100	60	60	60	75	75	100	100
66%	90	30	45	45	75	75	90	100	60	60	75	75	90	100	100
68%	90	30	45	60	75	75	100	100	60	60	75	75	90	100	100
71%	90	30	45	60	75	90	100	100	60	60	75	90	90	100	100
71.5%	90	30	45	60	75	90	100	100	60	75	90	90	90	100	100
75.5%	100	30	45	60	75	90	100	60	60	75	90	90	100	100	100
81%	100	30	45	60	75	100	100	60	75	75	90	100	100	100	120
82%	100	30	45	75	90	100	100	60	75	75	90	100	100	100	120
90.5%	100	45	60	75	90	100	60	75	75	90	100	100	100	120	150
91%	100	45	60	75	90	100	60	75	75	90	100	100	100	120	150
100%	20	45	60	90	100	60	60	75	90	100	100	100	120	150	150

Drip Rate Based on Surface Area Burned (2°& 3°) and Body Weight															
Wt kg	**80**	**85**	**90**	**95**	**100**	**105**	**110**	**115**	**120**	**125**	**130**	**135**	**140**	**145**	**150**
9%	30	45	45	45	45	45	45	45	45	45	45	45	60	60	60
9.5%	30	45	45	45	45	45	45	45	45	45	45	45	60	60	60
10%	30	45	45	45	45	45	45	45	45	45	45	60	60	60	60
15%	45	45	60	60	60	60	75	75	75	75	75	75	90	90	90
17%	60	60	60	60	75	75	75	75	75	90	90	90	100	100	100
18%	60	60	60	75	75	75	75	75	90	90	100	100	100	100	100
19%	60	60	75	75	75	75	90	90	90	90	100	100	100	100	100
24%	75	90	90	90	100	100	100	100	60	60	60	60	60	60	75
24.5%	75	90	90	90	100	100	100	100	60	60	60	60	60	60	75
28%	90	100	100	100	100	100	100	100	60	75	75	75	75	75	75
30%	100	100	100	100	60	60	60	60	75	75	75	75	75	90	90
32%	100	100	60	60	60	60	60	75	75	75	75	90	90	100	100
36%	60	60	60	60	75	75	75	75	90	90	90	100	100	100	100
37%	60	60	60	60	75	75	75	90	90	100	100	100	100	100	100
38%	60	60	60	75	75	75	75	90	90	100	100	100	100	100	100
39%	60	60	60	75	75	75	90	90	100	100	100	100	100	100	100
41.5%	60	60	75	75	75	90	90	100	100	100	100	100	100	120	120
45%	75	75	75	90	90	100	100	100	100	100	100	120	120	120	150
46%	75	75	75	90	100	100	100	100	100	100	120	120	120	120	150
47%	75	75	75	90	100	100	100	100	100	100	120	120	120	150	150
49%	75	75	90	100	100	100	100	100	100	120	120	120	150	150	150
51%	75	90	100	100	100	100	100	100	120	120	120	150	150	150	150
54%	90	100	100	100	100	100	100	120	120	150	150	150	150	150	150
54.5%	90	100	100	100	100	100	120	120	120	150	150	150	150	150	150
56.5%	90	100	100	100	100	100	120	120	150	150	150	150	150	150	150
58.5%	100	100	100	100	100	120	120	120	150	150	150	150	150	150	150
62%	100	100	100	100	120	120	150	150	150	150	150	150	150	150	150
63%	100	100	100	120	120	120	150	150	150	150	150	150	150	150	150
64%	100	100	100	120	120	120	150	150	150	150	150	150	150	150	WO
66%	100	100	100	120	120	150	150	150	150	150	150	150	150	150	WO
68%	100	100	120	120	150	150	150	150	150	150	150	150	150	WO	WO
71%	100	120	120	120	150	150	150	150	150	150	150	WO	WO	WO	WO
71.5%	100	120	120	150	150	150	150	150	150	150	150	WO	WO	WO	WO
75.5%	120	120	150	150	150	150	150	150	150	150	WO	WO	WO	WO	WO
81%	120	150	150	150	150	150	150	150	WO	WO	WO	WO	WO	WO	WO
82%	120	150	150	150	150	150	150	150	WO	WO	WO	WO	WO	WO	WO
90.5%	150	150	150	150	150	150	WO	WO	WO	WO	WO	WO	WO	WO	WO
91%	150	150	150	150	150	150	WO	WO	WO	WO	WO	WO	WO	WO	WO
100%	150	150	150	150	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO

ABBREVIATIONS

ALS:	Advanced Life Support
BLS:	Basic Life Support
BVM:	Bag Valve Mask
CHF:	Congestive Heart Failure
CNS:	Central Nervous System
CPAP:	Continuous Positive Airway Pressure
CWI:	Cold Water Immersion
D10:	Dextrose 10%
dL:	deciliter
ETI:	Endotracheal Intubation
GCS:	Glascow Coma Score
G:	Grams
HP-CPR:	High performance Cardiopulmonary Resuscitation
IM:	Intramuscular
IN:	Intranasal
IO:	Intraosseous
IV:	Intravenous
IVP:	Intravenous Push
J:	Joules
kg:	kilograms
mcg:	micrograms
mEq:	milliequivalent
mg:	milligrams
mL:	milliliters
NG:	Nasogastric
NS:	Normal Saline
NTG:	Nitroglycerin
ROSC:	Return of Spontaneous Circulation
ODT:	Oral Disintegrating Tablet
SBP:	Systolic Blood Pressure
SGA:	Supraglottic Airway
TCP:	Transcutaneous Pacing