



EMS System for Metropolitan Oklahoma City and Tulsa 2022 Medical Control Board Treatment Protocols



Approved 9/8/21, Effective 1/17/22, replaces all prior versions

TREATMENT PRIORITIES

1. Thermal Burn
 - Stop burning process
 - Flood with water only if flames not extinguished; smoldering present; significant heat being dissipated
 - Determine possibility of smoke/toxic inhalation
2. Chemical Burn
 - Brush off dry chemicals
 - Flush with water for minimum of 15 minutes
3. Electrical Burn
 - Evaluate airway and cardiac status
4. Do not delay transport for on scene IV fluids or medication

10L - BURNS ADULT & PEDIATRIC

| |
|------------------------------|
| EMERGENCY MEDICAL DISPATCHER |
| EMERGENCY MEDICAL RESPONDER |
| EMT |
| EMT-INTERMEDIATE 85 |
| ADVANCED EMT |
| PARAMEDIC |

EMD

IF PT CLOTHES ARE BURNING OR SMOLDERING, DOUSE THEM WITH WATER IMMEDIATELY.
IF WATER IS NOT AVAILABLE, THEN ROLL PT ON THE GROUND OR SMOTHER THE FIRE
DO NOT TOUCH ANYTHING OR PICK UP DEBRIS

| | |
|--|------------|
| EMR | EMT |
| <p>TRAUMA AND HYPOVOLEMIC SHOCK SUPPORTIVE CARE STOP THE BURNING PROCESS SPINAL "STABILIZATION" - DO NOT APPLY SPINAL "TRACTION" DURING IMMOBILIZATION (IF EXPLOSIVE MOI & if applicable) STABILIZE IMPALED OBJECTS (IF EXPLOSIVE MOI) O₂ VIA NC, NRB, OR BVM AS APPROPRIATE FOR RESPIRATORY SYMPTOMS COVER BURNED AREA WITH BURN DRESSING (if equipped) THEN APPLY DRY SHEET APPLY CARDIAC MONITOR (if equipped)</p> <p>EMT OR HIGHER LICENSE: FOR RESPIRATORY SYMPTOMS, MEASURE END – TIDAL CO₂ & MONITOR WAVEFORM CAPNOGRAPHY (if equipped, ** Mandatory use if pt intubated) PLACE SUPRAGLOTTIC AIRWAY IF INDICATED & ONLY IF BVM VENTILATIONS INEFFECTIVE.</p> | |

| | |
|--|-------------|
| EMT-I85 | AEMT |
| <p>ADULT: INTUBATE IF INDICATED</p> <p>IV/ IO ACCESS IF INDICATED ADULT: IV NS; FOR MAJOR THERMAL BURNS, 500 mL BOLUS IF NO SIGNS OF PULMONARY EDEMA PEDIATRIC: IV NS 20 mL/kg BOLUS IF NO SIGNS OF PULMONARY EDEMA SEE WEIGHT BASED FLUID RESUSCITATION TABLE TO AVOID EXCESSIVE FLUID</p> | |

| |
|---|
| PARAMEDIC |
| <p>ADULT: MEDICATION ASSISTED INTUBATION IF INDICATED</p> <p>ANALGESIA (IF REQUIRED) FOR OPIATE USE, ADULT MUST HAVE SYS BP ≥ 100 mmHg; PEDIATRIC MUST HAVE SYS BP ≥ (70 + 2x age in years) mmHg</p> <p>ADULT: FENTANYL 1 mcg/kg SLOW IVP/IM/IN, MAXIMUM DOSE 100 mcg. MAY REPEAT EVERY 10 MINUTES TO MAXIMUM CUMULATIVE DOSE OF 3 mcg/kg or 250 mcg WHICHEVER IS LESSER.</p> <p>OR</p> <p>ADULT: MORPHINE SULFATE 2 - 4 mg SLOW IVP, MAY REPEAT 2 - 4 mg EVERY 5 MINUTES TO A TOTAL OF 10 mg.</p> <p>OR</p> <p>ADULT: HYDROMORPHONE 0.5 - 1 mg SLOW IVP, MAY REPEAT EVERY 10 MINUTES TO MAXIMUM CUMULATIVE DOSE OF 2 mg.</p> <p>PEDIATRIC: FENTANYL 1 mcg/kg SLOW IVP/IM/IN, MAXIMUM DOSE 50 mcg</p> <p>OLMCP CONSULT IF FURTHER ANALGESIA REQUIRED</p> <p>CONTINUOUS ASSESSMENT & TREATMENT PER APPLICABLE PROTOCOL(S)</p> |



EMS System for Metropolitan Oklahoma City and Tulsa 2022 Medical Control Board Treatment Protocols



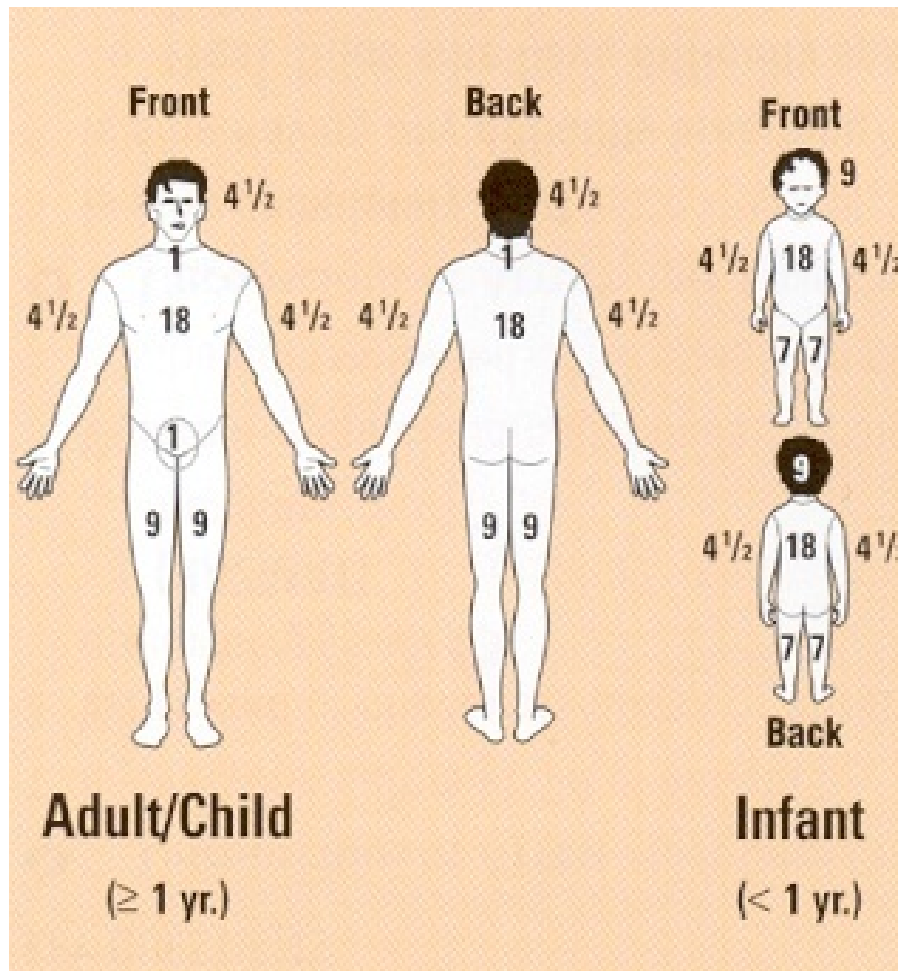
EMS SECTION

Approved 9/8/21, Effective 1/17/22, replaces all prior versions

PROTOCOL 10L: Burns - Adult & Pediatric, cont,

% Body Surface Area (BSA) Estimation Chart

Count only Second and Third Degree Burns when calculating estimated %BSA



An alternate method of calculating %BSA involvement is to use the size of the patient's entire hand equal to 1% of their BSA. This is a useful method when calculating smaller burn areas.



EMS System for Metropolitan Oklahoma City and Tulsa 2022 Medical Control Board Treatment Protocols



Approved 9/8/21, Effective 1/17/22, replaces all prior versions

| Wt (Kg) | Burn Surface Area % | | | | | | | | | | | | |
|------------|---------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| 2 | 10 | 15 | 15 | 20 | 20 | 25 | 25 | 30 | 30 | 35 | 35 | 40 | 40 |
| 4 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| 6 | 30 | 40 | 45 | 50 | 60 | 70 | 75 | 80 | 90 | 100 | 105 | 115 | 120 |
| 8 | 40 | 50 | 60 | 60 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
| 10 | 50 | 65 | 75 | 75 | 100 | 115 | 125 | 135 | 150 | 165 | 175 | 190 | 200 |
| 12 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 |
| 15 | 75 | 100 | 115 | 130 | 150 | 170 | 190 | 210 | 225 | 250 | 280 | 285 | 300 |
| 17 | 85 | 110 | 130 | 150 | 170 | 190 | 215 | 235 | 255 | 275 | 300 | 320 | 340 |
| 20 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 325 | 350 | 375 | 400 |
| 22 | 110 | 140 | 165 | 200 | 220 | 250 | 275 | 300 | 330 | 360 | 385 | 415 | 440 |
| 25 | 125 | 160 | 190 | 220 | 250 | 280 | 315 | 350 | 375 | 400 | 440 | 470 | 500 |
| 27 | 135 | 170 | 200 | 240 | 270 | 300 | 340 | 370 | 405 | 440 | 470 | 500 | 540 |
| 30 | 150 | 190 | 225 | 260 | 300 | 340 | 375 | 410 | 450 | 490 | 525 | 560 | 600 |
| 35 | 175 | 220 | 260 | 300 | 350 | 400 | 440 | 480 | 525 | 570 | 610 | 660 | 700 |
| 40 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
| 50 | 250 | 315 | 375 | 440 | 500 | 560 | 625 | 690 | 750 | 810 | 875 | 940 | 1000 |
| 60 | 300 | 375 | 450 | 525 | 600 | 675 | 750 | 825 | 900 | 975 | 1050 | 1125 | 1200 |
| 70 | 350 | 450 | 525 | 620 | 700 | 800 | 875 | 1000 | 1050 | 1150 | 1225 | 1325 | 1400 |
| 75 | 375 | 500 | 550 | 650 | 750 | 850 | 950 | 1050 | 1150 | 1200 | 1300 | 1400 | 1500 |
| 100 | 500 | 625 | 750 | 875 | 1000 | 1125 | 1250 | 1375 | 1500 | 1625 | 1750 | 1875 | 2000 |

Fluid resuscitation for 2nd and 3rd degree burns totalling greater than 20% BSA

Milliliters of fluid to be given during first hour based on Parkland Formula

$$\text{4mL} \times \text{kg} \times \text{BSA}\% = \text{Total Fluid over 24 Hrs}$$

Half of total should be given over the first 8 Hrs