

Burns (108)

Adults	Pediatrics (13 years and under)
Public Safety First Aid Procedures: Only	Public Safety First Aid Procedures: Only
<ul style="list-style-type: none"> Stop the burning process if safe to do so Remove burned clothing/jewelry unless melted to the skin Support ABC's and administer oxygen if signs of respiratory distress 	<ul style="list-style-type: none"> Stop the burning process if safe to do so Remove burned clothing/jewelry unless melted to the skin Support ABC's and administer oxygen if signs of respiratory distress
BLS Procedures: EMT's and Paramedics start here	BLS Procedures: EMT's and Paramedics start here
<ul style="list-style-type: none"> Primary assessment and ABC's Oxygen only if SpO2 <94% or if in respiratory distress or concern of CO toxicity Thermal burn >10% TBSA? Stop the burning process and cover with dry sterile dressing Chemical burn? Don appropriate PPE determine chemical agent via labeling or SDS, if unable to identify brush off dry chemical, blot excess liquid chemical. Wash with copious amounts of water, apply sterile dressing Check for associated injuries, treat shock as needed, do not apply ice or creams to burned areas. Transport to burn center or closest appropriate facility or ALS rendezvous 	<ul style="list-style-type: none"> Primary assessment and ABC's Oxygen only if SpO2 <94% or if in respiratory distress or concern for CO toxicity Thermal burn >10% TBSA? Stop the burning process and cover with dry sterile dressing Chemical burn? Don appropriate PPE determine chemical agent via labeling or SDS, if unable to identify brush off dry chemical, blot excess liquid chemical. Wash with copious amounts of water, apply sterile dressing Check for associated injuries, treat shock as needed, do not apply ice or creams to burned areas. Transport to burn center or closest appropriate facility or ALS rendezvous
ALS Prior to Base Hospital Contact: Paramedic only	ALS Prior to Base Hospital Contact: Paramedic only
<ul style="list-style-type: none"> Respiratory compromise or stridor? ET Intubation administer Midazolam after airway is secured. <ul style="list-style-type: none"> Adult 1 mg Midazolam slow IVP may repeat in 1 mg increments to max of 5 mg. Normal Saline follow Parkland Formula (see chart below) Hypoperfusion? Shock/Hypoperfusion Protocol (124) Pain management: Ketamine: 15mg in 100mL N.S. infused over 5 minutes, may repeat one time in 15 minutes or 25mg IN, (after drawing up medication add NS to increase volume to 1mL total volume) may repeat one time in 15 minutes or 15mg IM – 	<ul style="list-style-type: none"> Respiratory compromise or stridor? Supraglottic airway insertion, administer Midazolam after airway is secure <ul style="list-style-type: none"> Pediatrics 0.2 mg/kg Midazolam slow IVP may repeat in 0.2 mg/kg increments to max dose of 5 mg Normal Saline follow Parkland Formula (see chart below) Hypoperfusion? Shock/Hypoperfusion Protocol (124) Pain management: Ketamine 0.5mg/kg IN, (after drawing up medication add NS to increase volume

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<p>do not dilute. Repeat in 15 minutes prn X 1, maximum total dose 30mg.</p> <ul style="list-style-type: none"> • OR Fentanyl: Adult 50 mcg slow IV/IM/IO/IN may repeat in 50 mcg increments to max of 200 mcg. • OR Morphine: Adult 5mg IV/IO/IM, may repeat in 5mg increments to a max of 20mg 	<p>to 1mL total volume) not to exceed adult dose; may repeat one time in 15 minutes. OR 0.2mg/kg IM (do not dilute). Single max dose of 15mg IM. Repeat in 15 minutes prn x1, maximum 2 total doses.</p> <ul style="list-style-type: none"> • OR Fentanyl: 1 mcg/kg slow IV/IM/IN/IO 50 mcg max single dose. 3 mcg/kg max dose. • OR Morphine: 0.02mg/kg, may repeat to max of 10 mg.
Base Hospital Contact Required	Base Hospital Contact Required

108 BURNS

Special Considerations

1. Burns associated with respiratory compromise (bronchial swelling & spasm) or respiratory stridor (laryngeal & tracheal swelling and spasm) warrant aggressive airway control and ventilation if possible. If respiratory stridor exists, the higher the pitch of stridor – the smaller the airway opening. ET Intubation is indicated prior to complete airway occlusion. If airway occlusion occurs, refer to airway obstruction protocol.
2. Only one type of pain medication may be given to any patient. Ketamine should be first line medication for hypotensive patients or patients at risk of respiratory depression. Fentanyl and Morphine sulfate for pain control is contraindicated in patients with hypoperfusion or respiratory compromise or potential for deterioration of blood pressure or respiratory status. Fentanyl or Morphine sulfate for pain control may be given to patients with respiratory compromise once the airway is secured by ET intubation.
3. Hypoperfusion associated with large body surface thermal burns is common but not usually seen in the first twelve hours. If hypoperfusion exists, consider underlying trauma
4. Interstitial swelling and circumferential extremity burns may cause problems with infusion of IV fluids. Whenever possible establish an IV in an unaffected or least affected extremity. If no options are available an IV may be established in a burned extremity though the IV bag may need to be pressurized (blood pump or BP cuff) to maintain IV flow. Use only amount of pressure needed to maintain flow.
5. With chemical burns, consider the Hazardous Materials emergency potential and personnel safety, appropriate PPE should be used. Patients that are contaminated with hazardous chemicals must be decontaminated prior to unprotected personnel access or standard means of transport.

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6. Burns without trauma may be transported to any designated burn receiving facility. Burns with trauma should be transported to a trauma center.
7. Burns to large body surface areas should be cooled initially to stop burning process and then wrapped in dry, sterile dressing to prevent hypothermia.
8. If patient is experiencing nausea/vomiting from analgesia administration, refer to nausea/vomiting protocol for treatment.
9. Ketamine Analgesia Table:

Contraindications	Caution	Side Effects
Age < 4 years	Likelihood of respiratory depression and undesired pressor effects are increased by too rapid IV administration	Tachycardia
GCS 14 or less		Increased salivation
Known or suspected alcohol or drug intoxication		Laryngospasm, occurs mostly at higher doses
Known or suspected pregnancy		Nausea/Vomiting

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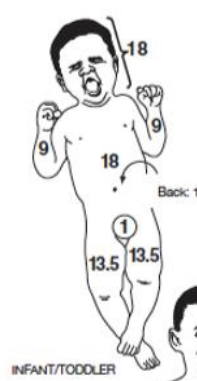
PEDIATRIC AND ADULT BURN CARE

Parkland Formula Fluid Resuscitation	
Use For TBSA%	Peds greater or equal to 10% Adult greater or equal to 15%
First 24 Hours	4 mL/kg per % TBSA burn Give 1/2 total volume in 1st 8 hrs & second 1/2 of the total volume over next 16 hrs
Next 24 Hours	0.3-1 mL/kg per %TBSA burn (Colloid infusion of 5% Albumin)

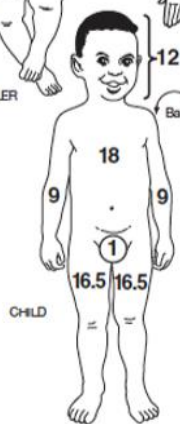


Scattered Burns
Patient's Palm
+ Fingers =
1% TBSA

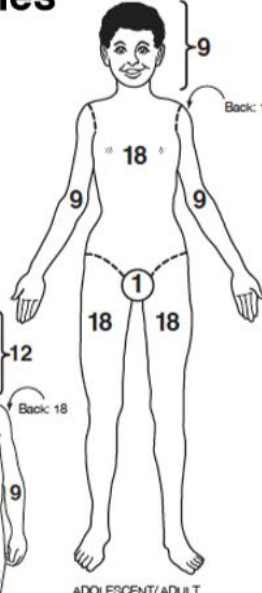
Rule of Nines



INFANT/TODDLER



CHILD



ADOLESCENT/ADULT

Note: The surface of the patient's palm equals 1% of his/her body surface area.

Lactated Ringer's is the preferred fluid for burn resuscitation, though Normal Saline may be used initially