

Initial Trauma Care

T-01

1. Rinse with water/saline to stop the burn process as needed
2. Remove jewelry and smoldering clothing, cutting around stuck pieces as needed
3. Cover burned area with dry sterile dressing or burn sheet. Attempt to keep blisters intact.
4. Oxygen/airway maintenance appropriate to condition:
 - a. Edema may cause patient's airway to close without warning
 - b. Be prepared to assist ventilation with a BVM
5. Monitor to prevent hypothermia

Fluid Resuscitation (IV Protocol [1-03])

A	Normal Saline/Lactated Ringers 500 mL Bolus
	Peds: 20 mL/kg
	<ul style="list-style-type: none">• Repeat as needed• Monitor for signs of pulmonary congestion

Maintain "Normal" blood pressures:
**Target SBP 90-110 mmHg in adults with
Shock from Thermal/Chemical Burns**

Pain Management

RX-02

per **Closed Space Fire**, consider
Carbon Monoxide & Cyanide

H-04

KEY POINTS:

- Always consider secondary trauma (e.g. internal bleeding) with burns: **If hypotensive on initial presentation, treat as per the Hemorrhagic Shock Guideline [T-03].**
 - Hypotension from burns generally develops later as the fluid shift occurs.
 - Also, consider Cyanide Toxicity [H-06] if persistent, fluid-resistant hypotension with smoke inhalation.
- If hypotensive from extensive burns, fluid resuscitation (with lactated ringers solution) should be titrated to maintain the patient's blood pressure in the *normal* range. Utilization of specific formulas for fluid volume (e.g. Parkland) is no longer recommended.
- If there is *any* concern of Carbon Monoxide [H-03] exposure, treat with 100% O2 via non-rebreather mask.
- Avoid hypothermia:
 - Burn patients lose the ability to thermoregulate.
 - Cover burns with dry dressings and cover the patient with blankets if needed. Increase ambient temperature as able.
 - Never apply ice or cool packs to extensive burns (e.g. >10% BSA)

Critical Burns → transport directly to a burn center if no other associated trauma

- Critical Criteria for a Burn Center:
 - >20% BSA second-degree or >10% BSA third-degree
 - >10% BSA in small children or the elderly
 - Significant (i.e. circumferential or near-complete coverage) of second/third-degree burns to the face, hands, feet or genitalia
 - High-voltage electrical (>600 Volts) burns
 - Significant airway burns
 - I.e. facial burns *plus* smoke inhalation (soot) and/or thermal burns in the nares or oropharynx.
 - Simple smoke inhalation (i.e. no thermal burns) does not require evaluation at specialized burn or trauma centers.
 - Extensive chemical burns or chemical burns with known high-potency/high-morbidity substances (e.g. hydrofluoric acid).
- **Traumatic injuries always take priority over burns** → critical burns with evidence or concern for concomitant traumatic injury (falls, blast injury, etc.) should be transported to the nearest appropriate trauma center for evaluation and stabilization prior to transfer to a more distant burn center.
- Mild to moderate burns (i.e. not critical), not complicated by airway compromise or other traumatic injury may be evaluated at most emergency departments,

Destination: Aeromedical transport to a distant burn center is recommended IF they are willing and able to transport directly.

- **You may bypass local trauma centers.**
- If aeromedical will not transport directly to a burn center, transport by ground to a local trauma center for initial stabilization.

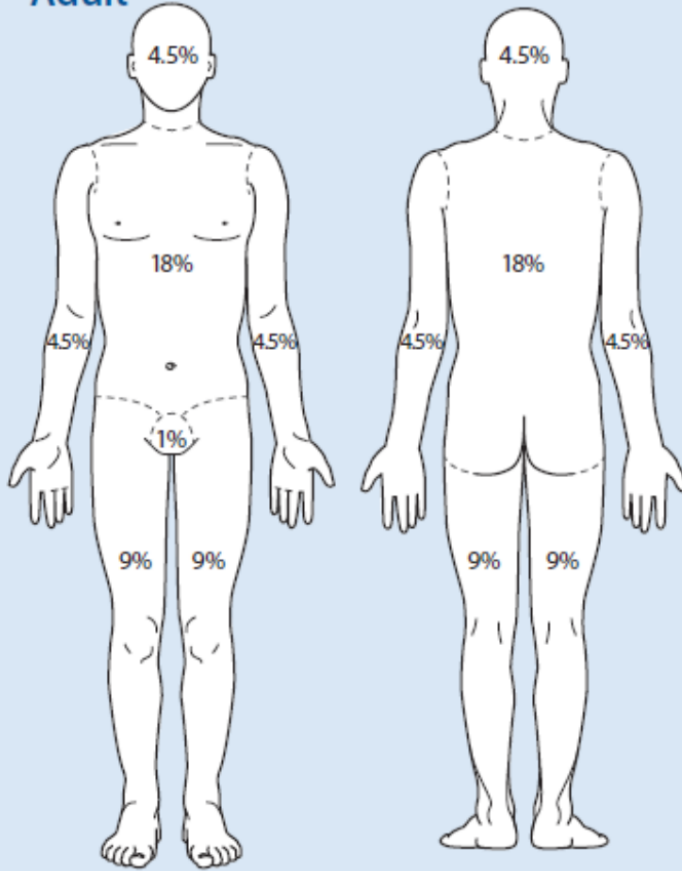
T-05
THERMAL BURNS

**** also see ** Corrosive Agents/
Chemical Burns [H-05]
Electrical Burns [T-06]**

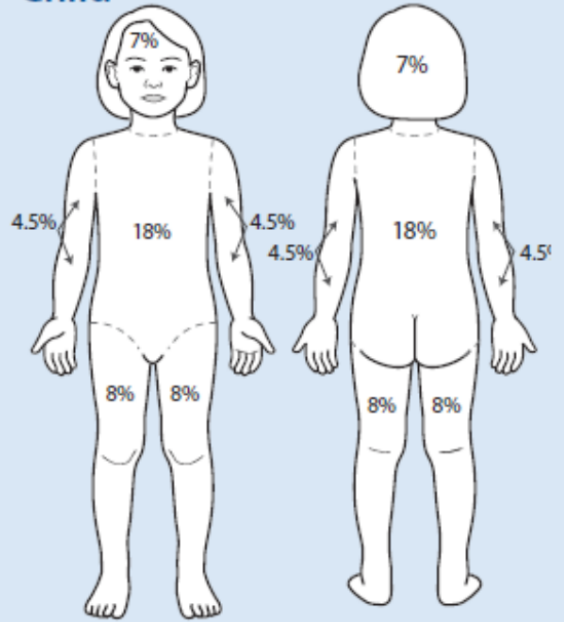
First Responder
EMT
AEMT
Paramedic

Body Surface Area (BSA%)

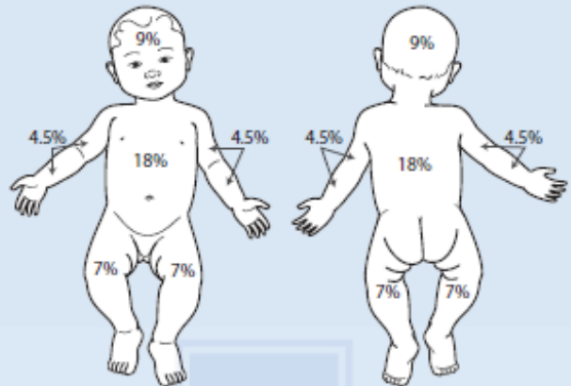
Adult



Child



Infant



Rule of Palm

Use the size of the patient's hand, including fingers, as 1%

T-05
THERMAL BURNS

**** also see ** Corrosive Agents/
Chemical Burns [H-05]
Electrical Burns [T-06]**



Pediatric Burns

- Keep warm!
- Utilize age-specific diagram (*above*) to estimate BSA%
- Fluid replacement (LR) if >20% BSA:
 - < 5 yo = 125 mL/hr
 - 6 - 13 yo = 250 mL
 - > 13 yo = 500mL/hr

QI Review Parameters:

1.