

ACTION PLAN FOR BURNS

MISSISSIPPI BURN, HAND & RECONSTRUCTION CENTERS

ASSESS

Step 1: Determine the details of the injury



Scan this QR Code to refer a patient

Follow ATLS or ABLIS protocol

Check for other injuries –

TREAT TRAUMAS FIRST

Complete your Patient Surveys:

Primary Survey – Your ABCDEs

Remove anything hot, burning or contaminated from the patient

- A – Airway
- B – Breathing
- C – Circulation
- D – Disability
- E – Exposure

Secondary Survey – Patient details

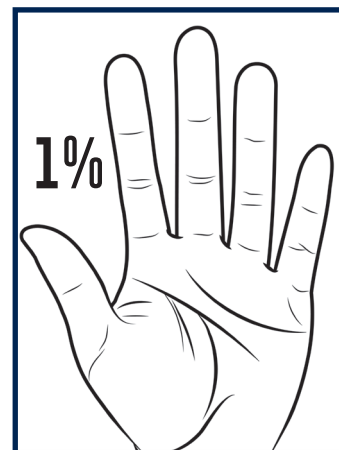
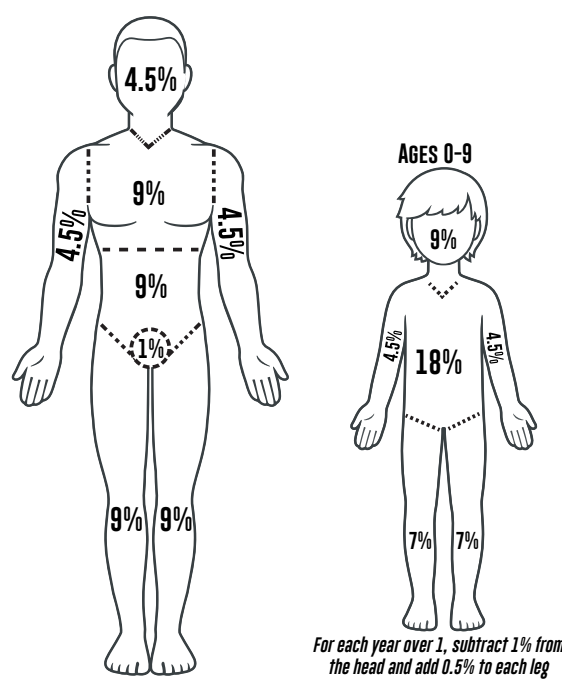
- Complete physical exam
- Labs

Patient history

- What happened?
- Where did it happen?
- How did it happen?
- Treatment so far
- Associated symptoms
- Immunization (tetanus)
- Past medical history
- When did it happen?
- Was the area open or closed? Remember, closed areas may increase chances of an inhalation injury.
- Method:
 - Thermal
 - Electrical
 - Inhalation
- Chemical
- Radiation
- Frostbite
- Medications and allergies
- Is the patient a smoker?
- Most recent meal

Size of injury – Total Body Surface Area (TBSA)

Rule of Nines



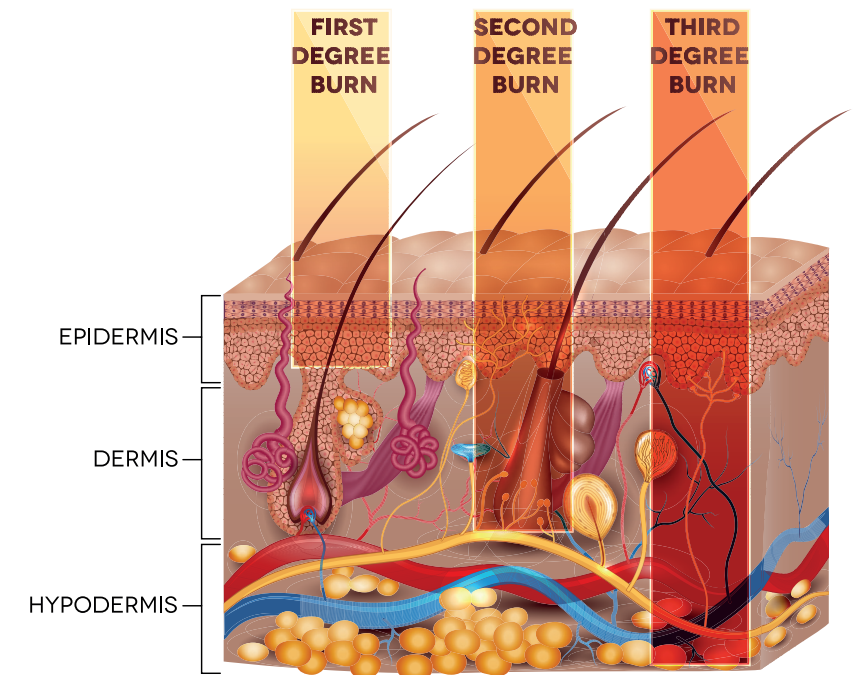
Patient's entire palm surface is equal to approximately 1% TBSA

Method considerations

- THERMAL BURNS
 - Temperature
 - Dermal thickness
- ELECTRICAL BURNS
 - Voltage source
 - Amperage of current
 - Tissue resistance
- CHEMICAL BURNS
 - Duration of contact
 - Concentration of chemical
- Duration of contact
- Duration of contact
- Pathway of current
- Quantity of chemical
- Temperature of chemical

Location of injury

- Identify contact points
- Concerns specific to locations:
 - Extremity considerations
 - Compartment syndrome
 - Loss of function/feeling
- Neck/Chest
 - Compartment syndrome
 - Swelling could affect airway



Depth of injury

- SUPERFICIAL (First Degree)
 - Dry, red, easily blanching, sometimes painful
 - Example: Sunburn
 - NOT counted in calculations of total burn surface area (TBSA)
- SUPERFICIAL PARTIAL THICKNESS (Second Degree)
 - Moist, red, blanching, blisters, very painful
 - Counted in calculations of total burn surface area (TBSA)
- DEEP PARTIAL THICKNESS (Second Degree)
 - Drier, more pale, less blanching, less pain
 - Counted in calculations of total burn surface area (TBSA)
- FULL THICKNESS (Third Degree)
 - Dry, leathery texture, variable color (white, brown, black), loss of pin-prick sensation
 - Counted in calculations of total burn surface area (TBSA)

CARE

Step 2: Initiate treatment of the patient



Scan this QR Code to add us as a contact

Fluid resuscitation – Parkland Formula

- The formula
 - 2-4 cc of Lactated Ringers x %TBSA x weight (kg)
- How much?
 - Adults – 2 cc/kg/hr
 - Children < 14 – 3 cc/kg/hr
 - Electrical – 4 cc/kg/hr
- Urine output goals
 - Adults = 0.5-0.7 cc/kg/hr
 - Children = 0.7-1.4 cc/kg/hr

Always check with the burn team if you have fluid questions.

- The schedule – First 24 hours
 - Give first half in first 8 hours.
 - Titrate to achieve goal urine output. (Chart below)
 - Then, give the remainder over the next 16 hours.

Pre-Hospital fluid protocol

- ≤ 5 years – 125 cc/hr
- 6-13 years – 250 cc/hr
- > 13 years – 500 cc/hr

Calculate fluid from the time of injury

TITRATION LEVELS

- Adult > 30-50 cc/hr
- Child > 1 cc/kg/hr
- Electrical > 75-100 cc/hr

SOURCE: AMERICAN BURN ASSOCIATION'S ADVANCED BURN LIFE SUPPORT COURSE PROVIDER MANUAL

Other considerations

- Remove all clothing & jewelry
- Maintain patient's temperature
- Keep patient covered
- Warm room
- Warm IV fluids
- Do not wrap with a dry dressing
- Do not use ice or cold water soaks
- Compartment syndrome
- Young or elderly patients have thinner skin and can receive a more severe injury

Injury site preparation and treatment

- First, cool the wound
- Clean the wound of soot, debris, etc.
- Avoid use of silver sulfadiazine
- Cover wound with Xeroform or polysporin/nonstick dressing prior to transfer

TRANSFER

Step 3: Send the patient for specialized care if:

Note: These guidelines are based on criteria established by the American Burn Association. They are intended to be used to aid in clinical decision making.

1. Partial thickness burns \geq 20% Total Body Surface Area (TBSA) in patients aged 10 – 50 years old.
2. Partial thickness burns \geq 10% TBSA in children under 10 or adults over 50 years old.
3. Full-thickness burns \geq 5% TBSA in patients of any age.
4. Patients with partial or full-thickness burns of the hands, feet, face, eyes, ears, perineum, and/or major joints.
5. Patients with high-voltage electrical injuries, including lightning injuries.
6. Patients with significant burns from caustic chemicals.
7. Patients with burns complicated by multiple trauma in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be treated initially in a trauma center until stable before being transferred to a burn center. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.
8. Patients with burns who suffer inhalation injury.
9. Patients with significant ongoing medical disorders that could complicate management, prolong recovery, or affect mortality.
10. Hospitals without qualified personnel or equipment for the care of children should transfer children with burns to a burn center with these capabilities.
11. Burn injury in patients who will require special social/emotional and/or long-term rehabilitative support, including cases involving suspected child abuse, substance abuse, etc.

WHEN IN DOUBT, REMEMBER: WE ARE A PHONE CALL AWAY!



MISSISSIPPI
BURN, HAND & RECONSTRUCTION
CENTERS

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PATIENT PRIORITY LINE

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