BURN (THERMAL, ELECTRICAL, CHEMICAL) – ADULT/ADOLESCENT

ALS STANDING ORDERS:

1. For any burn injury occurring in an enclosed space or with heavy smoke generated at the site:
   - ► *High flow oxygen by mask as tolerated (Pulse oximetry may be inaccurate with smoke inhalation).*
2. Apply cooling measures if burn still "hot".
3. For wheezing or suspected smoke inhalation:
   - ► *Albuterol, Continuous nebulization of 6.0 mL (5 mg) concentration as tolerated.*
4. For pain:
   - ► *Morphine sulfate 5 mg (or 4 mg carpuject) IV, may repeat once.*
5. For blood pressure ≤ 90 or signs of shock
   - ► *Establish IV access in non-burned area of skin*
   - ► *Infuse 250 mL Normal Saline bolus, may repeat up to maximum 1 liter to maintain adequate perfusion*.
6. Contact Base Hospital for Burn Unit destination if any of the following major burn criteria are met:

   Mechanism of Injury:
   - Suspected inhalation injury (patients burned in an enclosed space, patients with facial burns, hoarseness, dyspnea, soot in mouth, carbonaceous sputum, singed nasal hairs).
   - High voltage/electric burns (including lightning injury).
   - Chemical burns (including acids and bases).

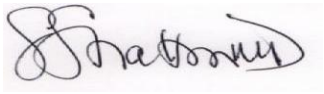
   Physiological alteration:
   - Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
   - Circumferential burns.
   - Patients with a pre-existing medical condition that may complicate management or prolong recovery (*e.g.* diabetes, renal failure, cardiac or pulmonary disease).

   Total Burn Surface Area (TBSA):
   - Second or third degree burns >10% total body surface area (TBSA) in any age group.

GUIDELINES:

Suspected carbon monoxide poisoning (closed space burn, smoke inhalation, chemical fires):
Pulse oximetry O_2 saturation will be inaccurate due to inability of pulse oximeter to differentiate between carbon monoxide and oxygen molecule.

Chemical burns:
- → Brush away any remaining dry chemical.
- → Irrigate burn wound and surrounding skin with copious and continuous water or saline flush to dilute and remove as much residual chemical as possible.
  - NOTE: Some chemicals are activated by water and might worsen the burn or create hazardous fumes; e.g., sodium, phosphorus, acetyl bromide, aluminum carbide, silicon tetrachloride.



Electrical Burns:

→ Electrical burns may often appear insignificant while causing marked muscle and soft tissue damage. Cardiac irritability may occur with electrical burns.

→ High voltage, greater than 110 volt, alternating current burn victims should be transported with ALS escort and cardiac rhythm monitoring.