Burns

Initial Trauma Care – Special Considerations:
- Assess depth of burn
- Consider Transport to Burn Center. Burn injuries that may be sent directly to a burn center include:
  - Partial thickness burns greater than 10% total body surface area (TBSA).
  - Burns that involve the face, genitalia, or perineum. Circumferential burns of the hands, feet or major joints.
  - Third degree burns of more than 1% size in any age group.
  - Major Electrical burns, including lightning injury.
  - Major Chemical burns.
  - Inhalation injury.
  - Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
1. Assess extent of burns using Rule of Nine’s or use patient’s palmar surface = 1%. Note location of burns.
2. Titrate supplemental oxygen to lowest level to maintain pulse ox greater than 93%17 (if severe underlying lung disease goal is 88-92%). Do not withhold oxygen if you do not have the ability to assess O2 saturations.
3. IV/IO: may need to start IV/IO through burned tissue if no other access sites.
   a. **Minor Burn:** If IV needed for pain management.
   b. **Moderate or Severe Burn:** Large bore catheter IV. Calculate Parkland formula: $4 \times \text{kg} \times \%\text{BSA} = \text{1st half given during first 8 hrs.}$ Contact Medical Control if unsure.
4. Assess EKG: treat all dysrhythmias per appropriate Protocol
5. **Consider Pain Management.**

Thermal
6. Remove burned clothing, jewelry, belts, shoes, etc. Do not pull away clothing that is stuck to underlying skin.
7. **WOUND CARE:**
   - Cool with water or saline if burn occurred within last 15 minutes. Do not overcool or use ice.
   - Cover BSA **less than** 10% with sterile saline soaked dressings or dry dressing.
   - Cover BSA **greater than** 10% with dry sterile dressings.
8. Open sterile sheet/burn pads on stretcher before placing patient for transport. Cover patient with dry, sterile sheets and blanket to maintain body warmth.

Inhalation

17 Cyanotic Heart Disease pulse ox goal 75-85%
### Level Burns

9. Assess for the presence of stridor, wheezing, carbonaceous sputum, cough, hoarseness, singed nasal or facial hair, dyspnea, or facial burns.

10. **Oxygen via non-rebreather mask or BVM.**
   - Humidify oxygen if able.

11. **LEVEL Burns**

### Electrical/Lighting

1. Establish scene safety. Shut off/remove electrical source.
2. Immobilization/splint if any fall or loss of consciousness.
4. Assess neurovascular function of all extremities
5. EKG monitoring. Treat dysrhythmias per appropriate Protocol.

### Chemical

1. Irrigate burn with copious amounts of water or saline unless a contraindication exists, i.e., sodium metals, dry chemicals (especially alkaline). Brush off as much of the agent as possible before irrigating.
2. If burn occurred in an industrial setting, bring in MSDS sheets if possible.