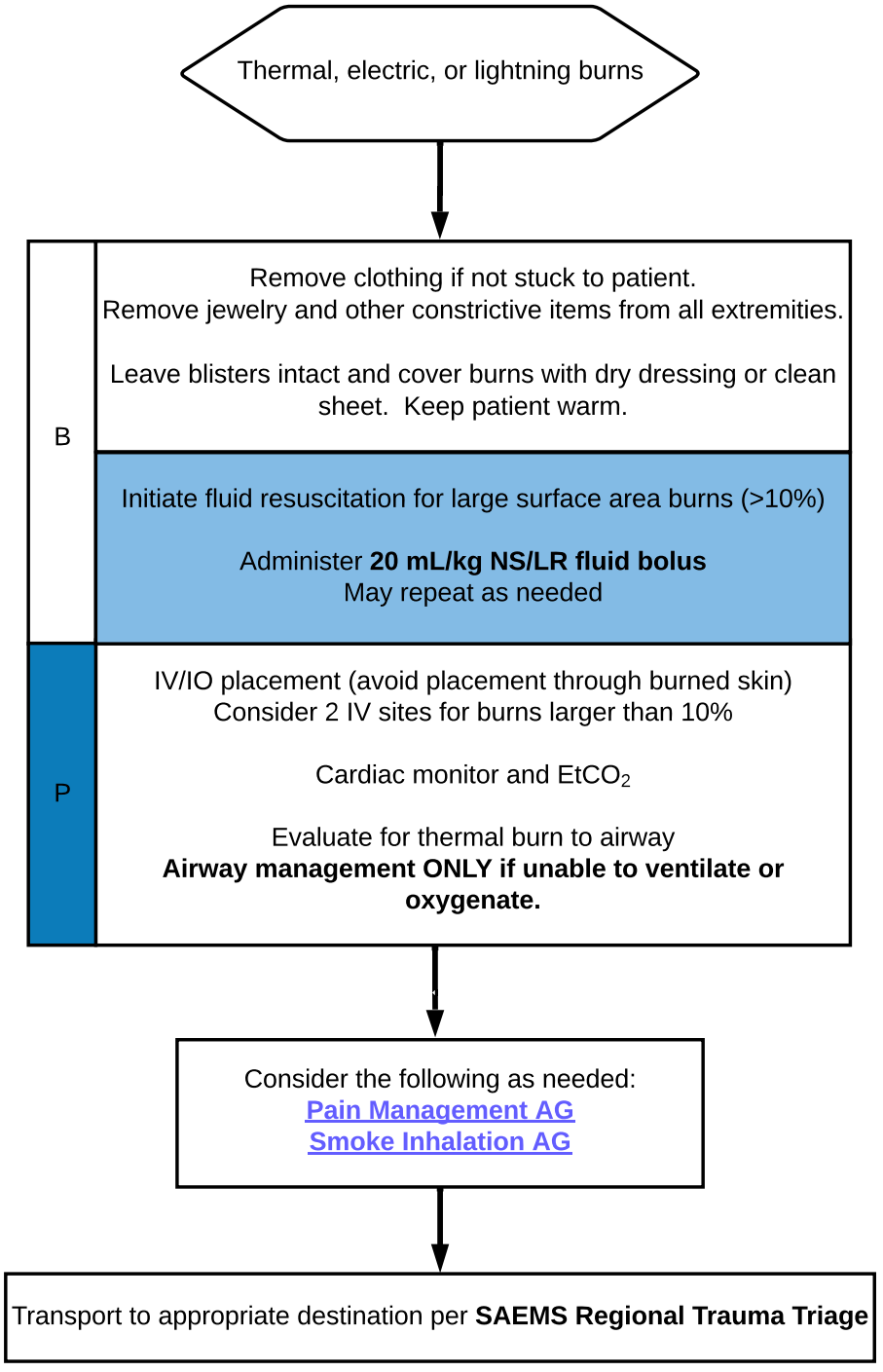
Burn Administrative Guideline

History	Signs and Symptoms	Differential
• Type of exposure • Time of injury • Other trauma • Airway/inhalation injury	• Burns • Pain and swelling • Hypotension/shock • Airway compromise/distress could be indicated by hoarseness/wheezing	• Superficial (1stDegree) red, painful (Don't include in TBSA) • Partial Thickness (2nd Degree) blistering • Full Thickness (3rd Degree) painless/charred or leathery skin • Thermal injury, including chemical or electrical • Radiation injury • Blast injury



Education/Pearls:

Critical or serious burns require often complex management and should be transported directly to a burn center, when available. These burns are defined as:

- Partial thickness burns ≥ 10% total body surface area (TBSA)
- Full thickness burn ≥ 5% TBSA
- Significant burns that involve the face, hands, feet genitalia, perineum, or major joints
- Electrical burns, including lightning injury
- Inhalational burn injury
- Significant burn injury in patients with pre-existing medical disorders that could complicate management, prolong recovery, or affect mortality, such as: diabetes, cardiac disease, pulmonary disorders, pregnancy, cirrhosis, morbid obesity, immunosuppression, bleeding disorders

Burn patients are often trauma patients; evaluate for multisystem trauma and consider whether a patient meets trauma criteria. These patients are prone to **hypo**thermia due to losing protective skin layers - never apply ice or cool the burn, which may further damage tissue and contribute to hypothermia. Instead, maintain normal body temperature. In evaluating burn patients,

- Circumferential burns to extremities are dangerous due to potential vascular compromise secondary to soft tissue swelling.
- Evaluate the possibility of abuse with burn injuries in the elderly or pediatric patients.
- Do not administer IM pain injections through burned skin.

<u>Electrical Burns</u>:

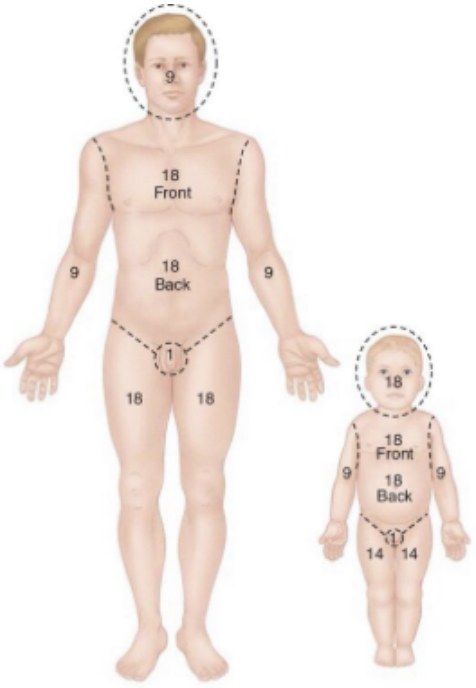
- DO NOT contact patient until the source of the electrical shock is disconnected..
- Cardiac Monitor: anticipate cardiac arrhythmias including VT, VF, atrial fibrillation and/or heart blocks.

<u>Lightning Strikes</u>: Lightning strikes generate unique injuries that require appropriate interventions. They can cause hearing difficulty, cardiac arrhythmias, and deep burns that may not be visible externally. They may coincide with additional physical trauma (e.g. falls or being thrown by event). Utilize **reverse triage** for multiple victims:

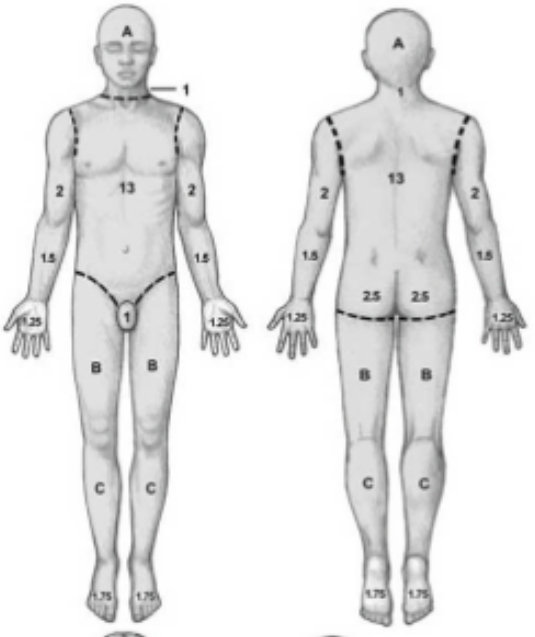
- Initiate treatment on apneic or pulseless patients first, then proceed to address the less-injured.
- Patients may experience cardiac arrest and/or be in extremis from both a medical (dysrhythmia) and traumatic cause. Prioritize correction of any life-threatening dysrhythmia (e.g. defibrillate VF and initiate CPR) and also initiate transport to a trauma center with ongoing high-quality resuscitation.

Burn Surface Area Reference Guide

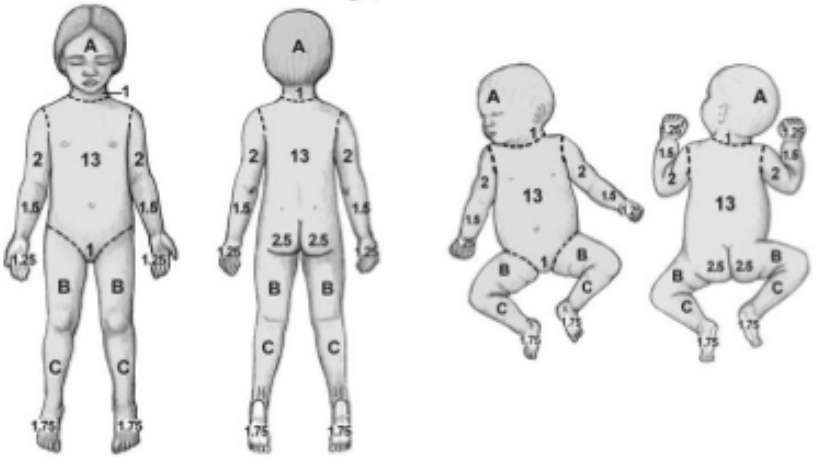
Rule of Nines



Lund and Browder Charts for area of body burnt



Burnt area	%
Head	
Neck	
Trunk (front)	
Trunk (back	
Arm (right)	
Arm (left)	
Hand (right)	
Hand (left)	
Buttock (right)	
Buttock (left)	
Genitals	
Leg (right)	
Leg (left)	
Feet (right)	
Feet (left)	
Total burn area	



Age (years)	Under 1	2–4	5–9	10–14	15	Adult
A — ½ of head	9½	8½	6½	5½	4½	3½
B — ½ of one thigh	2¼	3¼	4	4½	4½	4¾
C — ½ of one leg	2½	2½	2¾	3	3¾	3

Remote Primary Health Clinic Manuals. Burns. 2014. Available from: https://rphcm.allette.com.au/publication/cpm/Burns.htm