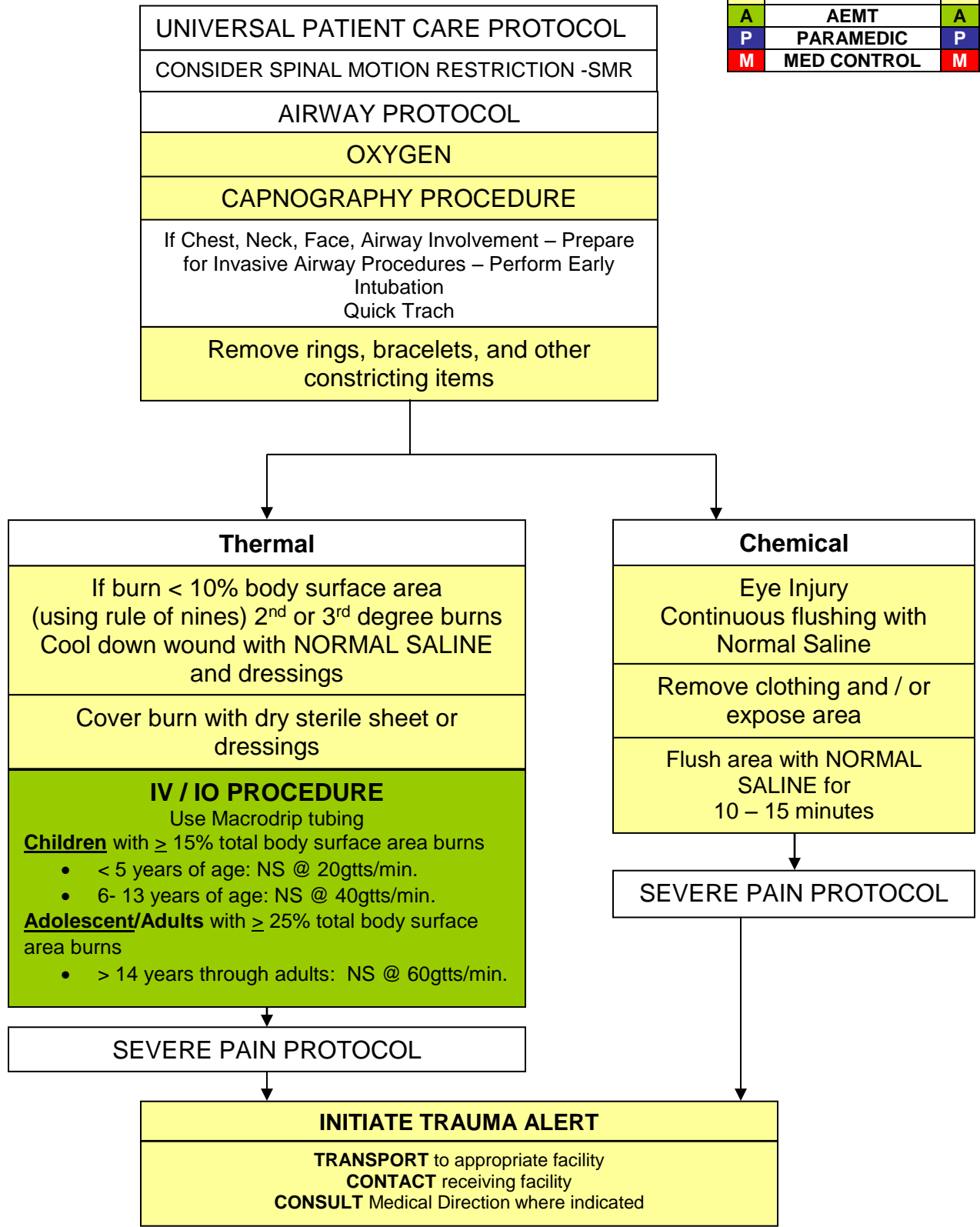




Section 11: Pediatric Trauma Protocols

PEDS TRAUMA: BURNS

E	EMT	E
A	AEMT	A
P	PARAMEDIC	P
M	MED CONTROL	M





Section 11: Pediatric Trauma Protocols

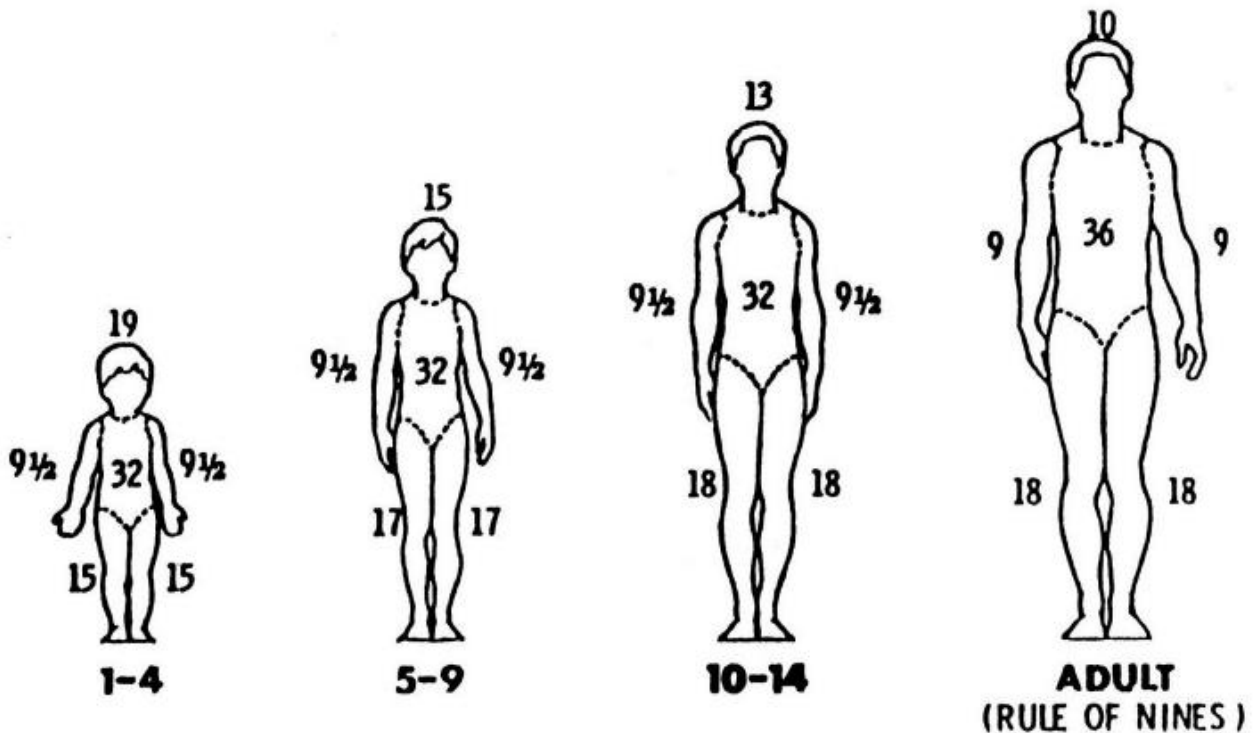
PEDS TRAUMA: BURNS-Cont.

RULE OF NINES

1% is equal to the surface of the palm of the patient's hand. If unsure of %, describe injured area.

MAJOR BURN CRITERIA

- 2° and 3° burns less than 10% surface area
- Burns of the face, hands feet genitalia
- Electrical shock with burn injury
- Burn with inhalation injury any burn with potential functional or cosmetic impairment





Section 11: Pediatric Trauma Protocols

PEDS TRAUMA: BURNS-Cont.

PEARLS and KEY POINTS

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none">Type of exposure (heat, gas, chemical)Inhalation injuryTime of injuryPast medical historyMedicationsOther traumaLoss of consciousnessTetanus / immunization status	<ul style="list-style-type: none">Burns, pain, swellingDizzinessLoss of consciousnessHypotension / shockAirway compromise / distressSinged facial or nasal hairHoarseness / wheezing	<ul style="list-style-type: none">Superficial (1°) red and painfulPartial thickness (2°) superficial partial thickness, deep partial thickness, blisteringFull thickness (3°) painless and charred or leathery skinChemicalThermalElectricalRadiation

- Exam: Mental Status, HEENT, Neck, Heart, Lungs, Abdomen, Extremities, Back, Neuro
- Early intubation is required in significant inhalation injuries.**
- Critical Burns: >25% body surface area (BSA); full thickness burns >10% BSA; partial thickness superficial partial thickness, deep partial thickness and full thickness burns to face, eyes, hand or feet; electrical burns; respiratory burns; deep chemical burns; burns with extremes of age or chronic disease; and burns with associated major traumatic injury. These burns may require hospital admission or transfer to a burn center.
- Potential CO exposure should be treated with 100% oxygen.
- Circumferential burns to extremities are dangerous due to potential vascular compromise partial thickness to soft tissue swelling.
- Burn patients are prone to hypothermia – Never apply ice or cool burns that involve >10% body surface area.
- Do not overlook the possibility of multiple system trauma.
- Do not overlook the possibility of abuse with the elderly patients and burn injuries.
- See appendix for rule of nines.



Section 11: Pediatric Trauma Protocols

PEDS TRAUMA: BURNS-Cont.

1. **Thermal (dry and moist):**
 - a. Stop burning process: i.e. remove patient from heat source, cool skin, remove clothing
 - b. If patient starts to shiver or skin is cool, stop cooling process.
 - c. Estimate extent (%) and depth of burn (see chart). Determine seriousness (see chart) of burn, contact Medical Control and transport accordingly.
Cover burn areas with sterile dressing.
2. **Radiation Burns:**
 - a. Treat as thermal burns except when burn is contaminated with radioactive source, then treat as chemical burn.
 - b. Wear appropriate protective clothing when dealing with contamination.
 - c. Contact HAZ MAT TEAM for assistance in contamination cases.
3. **Chemical Burns:**
 - a. Wear appropriate protective clothing and respirators.
 - b. Remove patient from contaminated area to decontamination site (NOT SQUAD).
 - c. Determine chemicals involved; contact appropriate agency for chemical information.
 - d. Remove patient's clothing and flush skin.
 - e. Leave contaminated clothes at scene. Cover patient over and under before loading into squad.
 - f. Patient should be transported by personnel not involved in decontamination process.
 - g. Determine severity (see chart), contact Medical Control and transport accordingly.
 - h. Relay type of substance involved to Medical Control.
4. **Electrical Burns:**
 - a. Shut down electrical source; do not attempt to remove patient until electricity is **CONFIRMED** to be shut off.
 - b. Assess for visible entrance and exit wounds and treat as thermal burns.
 - c. Assess for internal injury, i.e., vascular damage, tissue damage, fractures, and treat accordingly.
 - d. Determine severity of burn, contact Medical Control and transport accordingly.
5. **Inhalation Burns:**
 - a. Always suspect inhalation burns when the patient is found in closed smoky environment and / or exhibits any of the following: burns to face / neck, singed nasal hairs, cough and / or stridor, soot in sputum.
 - b. Provide oxygen therapy, contact Medical Control and transport.
 - Handle patients gently to avoid further damage of the patient's skin.
 - If the patient is exposed to a chemical, whenever possible, get the name of the chemical, and document it on the patient run report. **DO NOT** transport any hazardous materials with the patient.
 - Look for signs of dehydration and shock.
 - Initiate early intubation for symptomatic patients with inhalation burns.
 - Patients with major burns should be transported to the MetroHealth Medical Regional Burn Center.
 - Patients with unstable airway or who are rapidly deteriorating should be transported to the closest appropriate facility.
 - Patients with large surface burns lose the ability to regulate their body temperature. Avoid heat loss by covering the patient.