OPERATIONAL GUIDELINES: Fluid Resuscitation for Burn Patients in Emergency Department Adults/Pediatrics

OBJECTIVE:

Provide guidelines describing the appropriate fluid resuscitation for the adult and pediatric burn patients in the Emergency Department.

GUIDELINES:

All trauma cases – including patients with burn injuries – should be treated by initially following the guidelines for Advanced Trauma Life Support (ATLS) to ensure that life-threatening injuries are addressed immediately. ABCDs first! After addressing the ABCDs of life support, focus turns to burn injuries. Fluid replacement is crucial in the first 24 hours.

Patients who will need fluid resuscitation are those who have greater than 20% TBSA. First degree burns DO NOT count as part of the burn calculation.

DO NOT bolus patient unless suspected trauma. Instead increase fluids by 1/3. Do not administer Diprivan during resuscitation phase.

Procedure:

- 1. Patients who arrive to the ED will be assessed rapidly for an accurate TBSA.
- 2. Adult patients 14-older with 20% or greater TBSA will receive 500 LR/hr
- 3. Children age 6-13 with 20% or greater will receive 250 LR/hr
- 4. 5 years old and younger with 20% or greater will receive 125 LR/hr
- 5. Children under the age of 5 will also receive D5LR maintenance fluid
 - a. 4ml/hour for each kg up to 10 kg
 - b. 2ml/hour for each kg from 11-20 kg
 - c. 1 ml/hour for each kg > 20kg
- 6. Fluids should be adjusted to UOP.
 - a. Adults and older children (≥ 14 years old) 0.5 ml / kg / hour (30-50 ml / hour)
 - b. Children (<14 years old) 1 ml / kg / hour
 - c. Electrical injuries regardless of age 75-100 ml/hr
- 7. Patients who are less than 20% can consider maintenance fluids.

