Monterey County EMS System Policy

Protocol Number: TP-1
Effective Date: 7/1/2019
Review Date: 6/30/2022

BURNS - PEDIATRIC

BLS CARE

Stop the burning process with sterile water

Routine Medical Care. It is especially important to assess for respiratory involvement.

Continued re-assessment of respiratory function is crucial.

Titrate oxygen to maintain pulse oximetry of 94% or higher.

Expose and examine the patient for all burned areas. Do not remove clothing, jewelry or tarlike substances if adhered to the burn area.

Estimate the severity of the burns using the "rule of 9's".

Protect against hypothermia.

Thermal Burns:

First degree burns (superficial partial thickness): Skin red, dry and painful. ***Do not include in TBSA.***

May use gauze moistened with sterile water.

Second degree (partial thickness): Skin red, blistered, weepy, swollen and painful.

TBSA less than 10%: gauze moistened with sterile water.

TBSA greater than 10%: cover wound with dry sterile dressing.

Third degree (full thickness): Skin whitish, brown, charred, with minimal to no pain.

Cover wound with dry sterile dressing or burn sheet.

Fourth degree (severe full thickness): Burns extend through the subcutaneous fatty tissue and often into bone tissue.

Cover wound with dry sterile dressing or burn sheet.

Maintain patient body temperature with sheets, blankets and/or ambient temperature to prevent hypothermia.

Chemical Burns:

Remember to protect self. Consider HazMat team involvement. Consider Chemtrec (800) 424-9300.

Attempt to locate Material Safety Data Sheet (MSDS).

Remove chemical by appropriate means.

Liquid chemical burns: flush immediately with copious amounts of water for 10 minutes.

Dry chemical burns: Brush powder off skin, then flush with copious amounts of water or saline.

Try to identify the chemical if it is safe to do so.

Electrical Burns:

Protect self. Assure that it is safe to approach and contact the patient.

Assess for contact wounds.

ALS CARE

Routine Medical Care

Assess for inhalation injury.

Unless contraindicated by spinal motion restriction, elevate the patient's head to 45 degrees to help minimize facial and airway edema and prevent aspiration.

Vascular access – IV or IO

Start a large bore IV/IO for burns greater than 20% TBSA. Avoid starting IV/ in the burned area if possible.

IV/IO fluid will be Normal Saline (NS)

- Fluid resuscitation should only be initiated if patient has greater than approximately 20% TBSA second and third degree burns.

IV/IO NS fluid rate:

5 years and younger: 125 ml NS per hour

6 – 13 years old: 250 ml NS per hour**.**

Pain Control: refer to Protocol MP-3 (Pain Control – Pediatric)

Albuterol 2.5mg by nebulizer if signs of bronchospasm are present; may repeat one time for continued signs of bronchospasm.

Destination Determination:

Burn injuries that should be referred to a Burn Center include the following. Do not include first degree burns in calculation of total body surface area (TBSA):

- Partial thickness burns greater than 10% total TBSA
- Burns that involve the face, hands, feet, genitalia, perineum, or major joints
- Third degree burns in any age group

- Electrical burns, including lightening injury
- Chemical burns
- Inhalation injury
- Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.

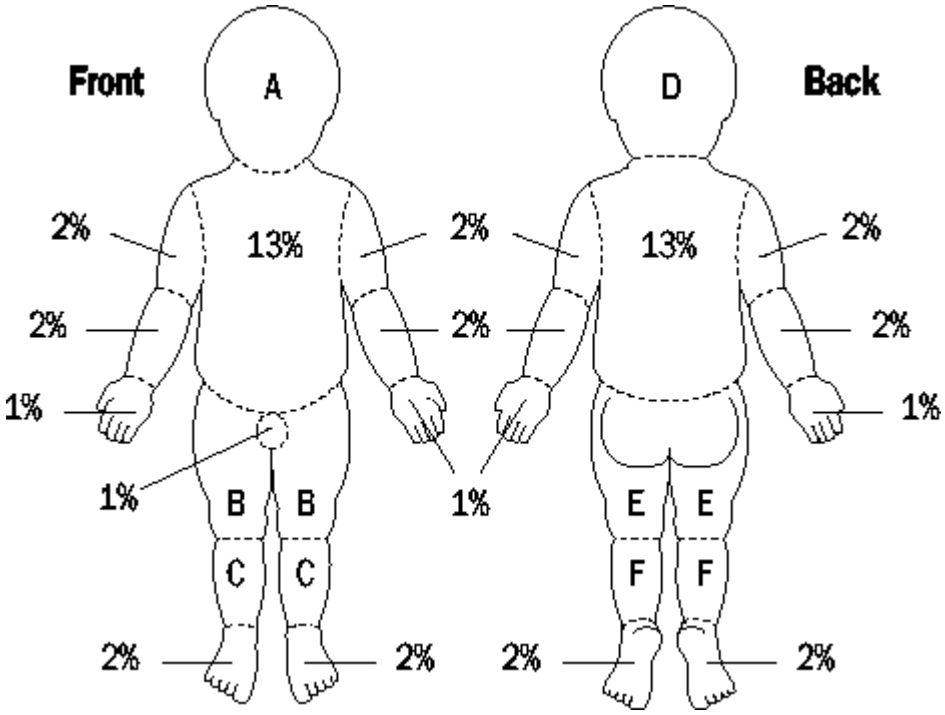
Any patients with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, transport to the closest Trauma Center.

NOTES:

Burns do not bleed. If there is bleeding, identify and treat the cause.

Do NOT use ice on burned areas.

PEDIATRIC RULE OF 9'S



Relative percentage of total body surface area (TBSA) affected by growth

AREA	NEONATE	1 YEAR	5 YEARS	10 YEARS	15 YEARS
A/D = 1/2 OF HEAD	9 ½ % TBSA	8 ½% TBSA	6 ½% TBSA	5 ½% TBSA	4 ½% TBSA
B/E = 1/2 OF ONE THIGH	2 ¾% TBSA	3 ¼% TBSA	4% TBSA	4 ½% TBSA	4 ½% TBSA
C/F = 1/2 OF ONE LEG	2 ½% TBSA	2 ½% TBSA	2 ¾% TBSA	3% TBSA	3 1/4% TBSA