

Saint Francis Memorial Hospital

Bothin Burn Center

900 Hyde Street San Francisco, California 94109
 Intensive Care Unit (415) 353-6255
 Fax Number (415-353-6258)

Burn Assessment and Management

Conduct Initial Assessment and Interventions

- Airway, Breathing, Oxygenization
- Full Monitoring
- IV Access
- Pain Control/Anxiolysis
- Monitor Urine Output
- Photograph Burns
- Lund and Browder
- Fluorescein Exam
- Obtain Height and Weight
- Cleanse Wounds
- Apply Appropriate Dressings
- Rewarm Patient
- Labs and Chest X-Ray
- kg = lbs/2.2046
- F = C x 1.8 + 32

Calculate Percent of Total Burn Surface Area

- Use Lund and Browder chart
- Calculate only second and third degree burns

Area	Child 1 year	Child 4 years	Child 10 years	Child 14 years	Child 18 years	Adult	2nd*	3rd*	TBSA
Head	19	17	16	11	9	7			
Neck	7	7	7	7	7	7			
Anterior trunk	18	18	18	18	18	18			
Posterior trunk	18	18	18	18	18	18			
Right arm	9	9	9	9	9	9			
Left arm	9	9	9	9	9	9			
Right leg	9	9	9	9	9	9			
Left leg	9	9	9	9	9	9			
Right hand	1	1	1	1	1	1			
Left hand	1	1	1	1	1	1			
Right foot	1	1	1	1	1	1			
Left foot	1	1	1	1	1	1			
Right thigh	1	1	1	1	1	1			
Left thigh	1	1	1	1	1	1			
Right calf	1	1	1	1	1	1			
Left calf	1	1	1	1	1	1			
Right ankle	1	1	1	1	1	1			
Left ankle	1	1	1	1	1	1			
Right toe	1	1	1	1	1	1			
Left toe	1	1	1	1	1	1			



*Second degree burns are now more often designated as superficial partial thickness or deep partial thickness burns, and third degree burns are designated as full thickness burns.

Fluid Infusion Rate

½ over first 8 hours
 ½ over next 16 hours

Manage Fluid Resuscitation (>20% TBSA)

Adults (> 14 yo or > 40 kg)
 • 2ml x kg x % TBSA (LR)
 Titrate to urine output of .5-1ml/kg/hour.

Pediatrics (< 14 yo or <40 kg)
 • 3ml x kg x % TBSA (LR)
Pediatrics (< 10kg)
 • 3ml x kg x % TBSA (D5LR)
 Titrate to urine output of 1-1.5ml/kg/hour.

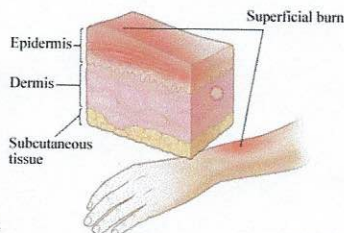
Inhalation/Electrical

• 4ml x kg x % TBSA
 Titrate to appropriate age.

Burn Depth and Classification

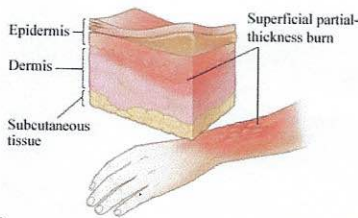
First Degree Burns (Superficial)

Superficial burns affect only the epidermis, or outer layer of skin. The burn site is red, painful, dry, and with no blisters. Mild sunburn is an example. Heals in 3-5 days.



Second-Degree Burns (Partial Thickness)

Partial thickness burns involve the epidermis and part of the dermis layer of skin. The burn site appears red, blistered, moist, and may be swollen and painful. Heals in 10-14 days.



Third-Degree Burns (Full Thickness Burns)

Full thickness burns destroy the outer layer of skin (epidermis) and the entire layer beneath (the dermis). May appear tan, leathery, charred or white. Requires surgery.

