

Burn Care Guidelines for Nicklaus Children's Health System UCCs

Burn Type

Burn Type	"Degree"	Anatomy Involved	Gross Appearance	Sensation	Healing Time	Prognosis
Superficial	1st degree	Epidermis only	Red, dry	Painful	5-10 days	Heals without scarring
Superficial - Partial -Thickness	2nd degree	Upper dermis	Blisters, or weeping and wet blanching	Painful, hypersensitive	14 - 21 days	Usually not scarring
Deep Partial-Thickness	2nd degree	Deep dermis	Yellow or white, dry, non-blanching	Decreased sensation	21 days - 2 months	Contracture, may scar
Full Thickness	3rd degree	Into subcutaneous fat	White to brown, firm, leather-like	Non-painful	More than 2 months	Contractures and scarring

Superficial Partial-Thickness



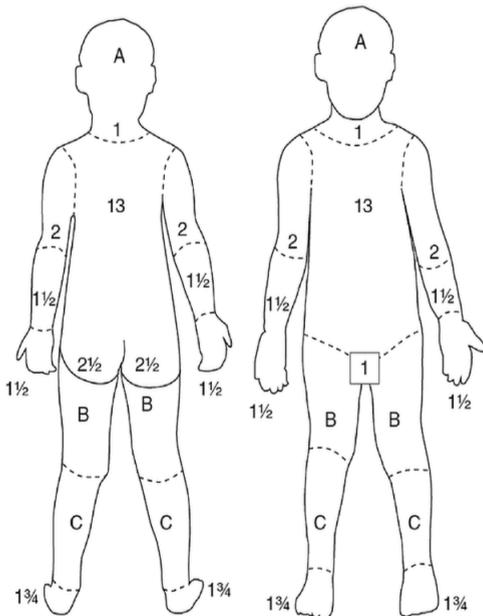
Deep Partial-Thickness



Full-Thickness



Estimating the Percentage of Surface Area Affected



Area	0-1 y	1 y	5 y	10 y	15 y	Adult
A = half of head	9½	8½	6½	5½	4½	3½
B = half of 1 thigh	2¾	3¼	4	4½	4½	4¾
C = half of 1 lower leg	2½	2½	2¾	3	3¼	3½

American College of Surgeons Burn Severity Assessment in Children

Severity	Partial-Thickness	Full-Thickness
Minor	< 10% TBSA	< 2% TBSA
Moderate	10%-20% TBSA	> 2% and < 10% TBSA
Severe	> 20% TBSA or special areas	10% TBSA or special areas

Special areas include hands, feet, face, genitalia and perineum

Recommended Tetanus Prophylaxis in Burn Wound Management

Previous Tetanus Toxoid Doses	Administer Tetanus Toxoid-Containing Vaccine ^a	Administer Human Tetanus Immune Globulin ^b
< 3 doses or unknown	Yes ^c	Yes
≥ 3 doses	Only if last dose given ≥ 5 years ago ^d	No

^aThe preferred vaccine preparation depends upon the age of the patient and vaccination history:

- Children aged < 7 years: administer DTaP.
- Underimmunized children aged ≥ 7 and < 11 years who have not received Tdap previously: Administer Tdap. Children who received Tdap between age 7 and 11 years do not require re-vaccination at age 11 years.
- Children aged ≥ 11 years: A single dose of Tdap is preferred to Td for all individuals in this age group who have not previously received Tdap. Pregnant women should receive Tdap during each pregnancy.
- Td is preferred to DT for patients who received Tdap previously and when Tdap is not available.

^b250 units Intramuscularly at a different site than tetanus toxoid; intravenous immune globulin should be administered if human tetanus immune globulin is not available.

^cThe vaccine series should be continued through completion as necessary.

^dBooster doses given more frequently than every 5 years are not needed and can increase adverse effects.

From Pickering LK, the Commission on Infectious Disease, the American Academy of Pediatrics. *Red Book: 2012 Report of The Committee on Infectious Disease*. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2012. Copyright © 2012, American Academy of Pediatrics. Reproduced with permission.

Abbreviations: DT, diphtheria, tetanus; DTap, diphtheria, tetanus, acellular pertussis; Td, Tetanus, diphtheria; Tdap, tetanus, diphtheria, acellular pertussis.

1st degree Burns

- A) Management at the UCC is appropriate*
- B) The burn should be gently cleaned with antiseptic soap, unscented "Baby Shampoo", Cetaphil or Sterile Water
- C) Local Treatment with Bacitracin or Vaseline, continued at home
(Recommendations are to avoid the use of Silvadene)
- D) Avoid sun exposure and recommend SPF 30 or greater sunscreen after the burn is healed
- E) Confirm Tetanus Immunization status before discharge
- F) Document the mechanism of burn and address any concern about possible child abuse (I am not/I am suspicious)

Partial Thickness / 2nd degree Burns < 10% TBSA

- A) Management at the UCC is appropriate unless advanced pain control or sedation is required at an ED level*
- B) The burn should be gently cleaned with antiseptic soap, Cetaphil, unscented "Baby Shampoo", Sterile Water
- C) Wound cleaning and dressing may require IM Morphine
- D) Local Treatment with Bacitracin or Vaseline, continued at home
(Recommendations are to avoid the use of Silvadene)
- E) Cover wound with Telfa and wrap with Kerlex dressing
- F) Follow-up in Surgical Fast-Track in 24 hours
- G) Confirm Tetanus Immunization status before discharge
- H) If any suspicion of burn related inhalation injury, start supplemental oxygen via non-rebreather mask
- I) Document the mechanism of burn and address any concern about possible child abuse (I am not/I am suspicious)

Full Thickness / 3rd Degree and Partial Thickness burns > 10% of TBSA

- A) Initially stabilize, per NCH Burn Transfer Pathway, and arrange for transfer to either ED or Burn Center*
- B) Cover wound with Telfa and loosely wrap with Kerlex dressing
- C) Confirm Tetanus Immunization status before discharge
- D) If any suspicion of burn related inhalation injury, start supplemental oxygen via non-rebreather mask
- E) Document the mechanism of burn and address any concern about possible child abuse (I am not/I am suspicious)

***Patients should be referred to the appropriate higher level of burn care if there is any concern about the severity of burn or the complexity of burn care.**

Urgent Care Center

- A) Superficial (1st degree) less than 10% TBSA
- B) All Partial-Thickness/Full-Thickness Burns should be referred for care as below.

Surgical Fast-Track

- A) Hours of operation are 8 AM - 4 PM (Monday - Friday) after 4 PM patient should be referred to other higher level of care
- B) Surgical Fast-Track visits do not require an appointment for care
- C) Patients must have a prescription to be evaluated in Surgical Fast-Track
 1. Prescription request should include "Surgical Fast-Track for burn care, debridement, evaluation
 2. Prescription request should have the diagnosis of "burn"

Nicklaus Children's Hospital Emergency Department

Patients can be referred for follow-up appointments, with visits after 4 PM, to the ED

- 1) Consultation with either Pediatric Surgery or Plastic Surgery will be obtained
- 2) Partial Thickness burns to the hands, feet, extremities after discussion with the Emergency Department

Burn Center

- A) Burns with TBSA \geq 10%
- B) Full thickness burns $>$ 2% TBSA
- C) Any Deep Partial Thickness burns that involve the face, hand, feet or across joints
- D) All burns that involve the perineum or genitalia
- E) Burns that occur in patients with complex medical conditions, including pregnancy
- F) Any burn associated with inhalation injury