

# Minor Burn Care

## FAST FACTS

**Blisters may form several days following the initial injury.**

**Keeping the burned area clean, moist with antibiotic ointment and dressed reduces pain.**

**Burns that heal within 14 days leave minimal scarring.**

## WHEN TO REFER

Refer patients to the Emergency Department when:

- Deep partial thickness to full thickness burn
- Burns to hands, feet, genitalia
- Burn is over a joint
- Concern for dehydration
- Concern for infection
- Burns larger than 10% TBSA
- Infants whose burns are >5% TBSA
- Decrease function/ROM to area involved
- Concern for abuse

The ED will consult with the plastic surgeon on call as needed.

A minor burn is defined as a first-degree or a partial thickness superficial burn that can be treated with local wound care and does not require hospitalization or advanced medical care. Major burns require urgent medical care in a wound care center or emergency department.

## ASSESSMENT

Perform a standard health history and physical exam (HPE) with the goal of determining the location and depth of burn, which determines treatment course.

### Minor Burns

- **Superficial (1st degree):** Burn affects epidermis only. Epidermis is dry and red; blanches. Example: sunburn.
- **Superficial partial thickness (2nd degree):** Blisters are evident. Once removed, the wound bed is moist, red, weeping. Burn site blanches on palpation and is painful to the touch.

### Major Burns (3rd degree)

- **Deep partial thickness:** Blisters are evident. Once unroofed, the wound bed appears to be white, wet or waxy-dry. Compared to superficial partial thickness burns, blanching is reduced and child experiences less or no pain when wound is touched.
- **Full thickness:** Burn is waxy-white to leathery-dry and inelastic; does not blanch; pain is absent.

## HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS

- Deep partial thickness to full thickness burn
- Burns to hands, feet or genitalia
- Burn is over a joint
- Concern for dehydration
- Concern for infection
- Burns larger than 10% TBSA (Note: For TBSA calculation, use Shriner's modified Lund Brower diagram found here —[http://trauma.pemcincinnati.com/wp-content/uploads/2021/01/CCHMC-Thermal-Burns\\_Jan2021.pdf](http://trauma.pemcincinnati.com/wp-content/uploads/2021/01/CCHMC-Thermal-Burns_Jan2021.pdf).)
- Decreased function/range of motion (ROM) to the area involved
- Circumferential burns (may lead to contractures and may require casting for prevention)
- Concerns for possible child abuse (may need to involve CPS)

## MANAGEMENT/TREATMENT

Burns can be treated in the primary care setting if they are superficial to superficial partial thickness.

**For superficial burns,** apply moisturizer (Aquaphor) or aloe vera to the area. The burn will heal without burn team involvement.

**For superficial partial thickness burns,** clean the area with soap and water daily. Apply antibiotic ointment and non-stick gauze at least daily.

**For more information, contact the Division of Plastic Surgery at 513-636-7181.**

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

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**Patient Presents**

**Standard Workup**

- Location of burn
- Depth of burn

**HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS**

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For TBSA calculation, use Shriner's modified Lund Brower diagram found here—[http://trauma.pemcincinnati.com/wp-content/uploads/2021/01/CCHMC-Thermal-Burns\\_Jan2021.pdf](http://trauma.pemcincinnati.com/wp-content/uploads/2021/01/CCHMC-Thermal-Burns_Jan2021.pdf).

**Yes**

**Any Red Flags?**

**No**

**Refer to Emergency Department**

**Manage burn in the primary care setting**

**Superficial**

- Apply moisturizer (Aquafor) or aloe vera

**Superficial partial thickness**

- Clean with soap and water daily
- Apply antibiotic ointment and non-stick gauze (Adaptic or Xeroform)

**Dressing change instructions**

- Gather supplies: soap, soft washcloth, warm and soapy washcloth, towel, antibiotic ointment, non-stick gauze (Adaptic), gauze wrap, tubular dressing, scissors
- Remove the old dressing. Moisten with lukewarm water first if areas adhere to the wound.
- Clean the area with warm, soapy water and washcloth to gently remove drainage or old antibiotic ointment
- Rinse the area with water and pat dry
- Apply antibiotic ointment to the non-stick gauze and place to the burn
- Wrap the area with gauze roll
- Secure the dressing with the tubular dressing or tape
- Change dressing at least daily

**VISUAL REFERENCE TO BURN SEVERITY**

**Superficial**



**Moderate**



**Severe**



Photos are sourced from *Total Burn Care* by David N. Herndon, MD, FACS.

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.