



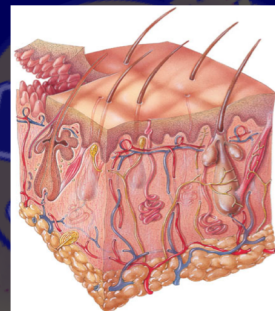
Emergency Medical Responder

## BURNS



## The Skin

- Functions include:
  - Protecting the body
  - Providing info on the environment
  - Regulating temperature

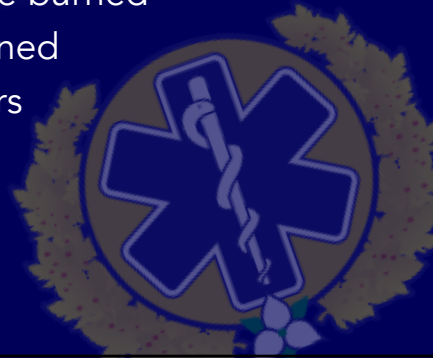


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The severity of a burn depends on

- 1) Depth of the burn
- 2) Extent of the body surface burned
- 3) Which body part was burned
- 4) Other complicating factors



## SEVERITY

TABLE 22-1  
DETERMINING SEVERITY OF BURNS

Severity of Burn	Adults	Infants and Children
critical	Full-thickness burns involving the hands, feet, face, or genitals Burns associated with respiratory injury Full-thickness burns covering more than 10 percent of body surface area (BSA) Partial-thickness burns to more than 30 percent of BSA Burns complicated by painful, swollen, deformed extremity Burns encompassing any body part (for example, arm, leg, or chest)	Any full-thickness burn greater than 10 percent of BSA Any partial-thickness burn greater than 20 percent BSA Burns involving the hands, feet, face, airway, or genitals
moderate	Full-thickness burns of 2–10 percent of BSA (excluding hands, feet, face, genitals, and upper airway) Partial-thickness burns of 15–30 percent of BSA Superficial burns to more than 50 percent of BSA	Partial-thickness burns to 10–20 percent of BSA
minor	Full-thickness burns of less than 2 percent of BSA Partial-thickness burns to less than 15 percent of BSA	Partial-thickness burns of less than 10 percent of BSA

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Burns are more critical when located in the following areas:

- Face – injury to eyes, can compromise breathing
- Feet & hands – loss of function
- Genitals – impairment of genitourinary functions
- Burns that encircle a body part – possible blood vessel and nerve damage, decreased circulation
- Burns that encircle the chest – possible inadequate breathing



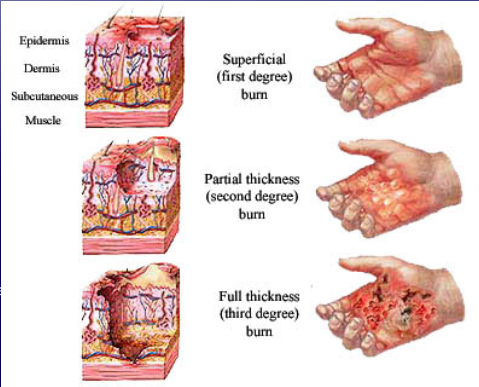
### Complicating Factors of Burns

- Some patients react more severely to burns
  - 1) Heart disease patients
  - 2) Diabetics
  - 3) Those already injured
  - 4) Very young or over 55




## Degree of burns

- **Superficial**
  - Outer layer of the skin affected
  - Signs and Symptoms include:
    - Pain
    - Redness
    - Tenderness
    - Swelling
- **Partial Thickness**
  - First and second layer affected
  - Signs and symptoms include:
    - Pain
    - Raw skin
    - Redness
    - Blisters are likely
- **Full Thickness**
  - All layers of skin affected
  - May also affect muscle and bone
  - Signs and symptoms include:
    - Pale
    - Waxy Skin
    - Charred
    - Limited to no pain

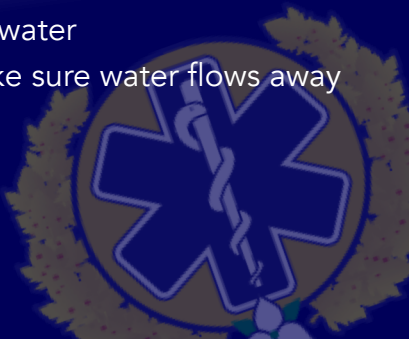


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## Chemical burns

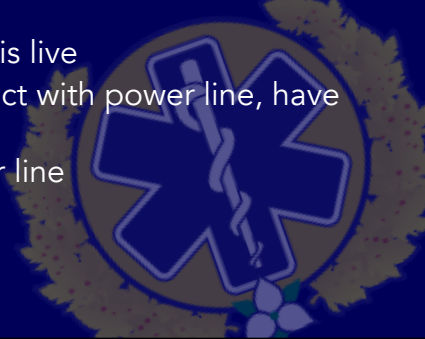
- 1) Remember scene safety
- 2) Immediately flush burns with water
- 3) If impacting eyes, flush with water
- 4) To avoid contamination, make sure water flows away from injury





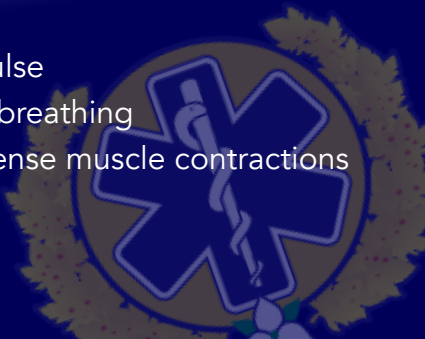
## Electrical Burns

- 1) If lines are down or power pole has weakened, notify rescue personnel of danger
- 2) If soles of your feet tingle when you enter area, go no further
- 3) Assume downed power line is live
- 4) If patient's vehicle is in contact with power line, have patient stay in vehicle
- 5) Never try to remove a power line



- The signs and symptoms of an electrical shock may include:

- 1) Altered mental status
- 2) Obvious severe burns
- 3) Weak, irregular, or absent pulse
- 4) Shallow, irregular, or absent breathing
- 5) Multiple fractures due to intense muscle contractions





- Patients hit by lightning generally sustain injuries in the following areas:

- 1) Nervous system
- 2) The senses
- 3) The skin
- 4) The heart
- 5) The vascular system

