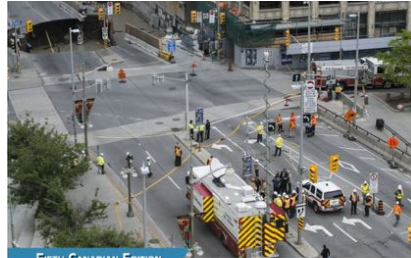


# Emergency Medical Responder: A Skills Approach

Fifth Canadian Edition



FIFTH CANADIAN EDITION

## EMERGENCY MEDICAL RESPONDER

A SKILLS APPROACH

MEETS PARAMEDIC ASSOCIATION OF CANADA'S  
NATIONAL OCCUPATIONAL COMPETENCY PROFILE



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22 - 1

## Chapter 22

### Burn Emergencies

## Objectives (1 of 2)

- Describe the three severities of burns and their relationship to the depth of burn and body surface area.
- List the areas of the body to which burns are considered more critical.
- Outline the steps in the emergency care of burns.



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22 - 2

## Objectives (2 of 2)

- Establish the relationship between airway management and patients with burns and describe the treatment for inhalation injuries.
- Describe the emergency medical care for a patient with chemical burns and for one with electrical burns.
- Demonstrate a caring attitude toward the patient and family when dealing with burns, while giving priority to the interests of the patient.

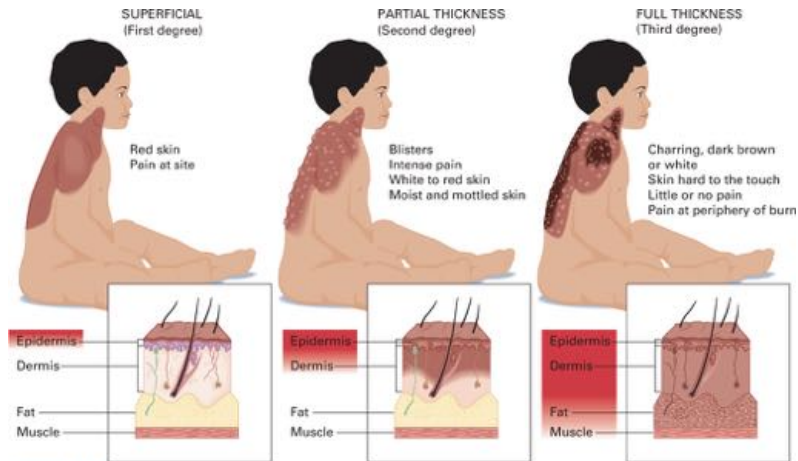
## The Severity of a Burn Depends on:

- Depth of the burn
- Extent of the body surface burned
- Which body part was burned
- Other complicating factors

**Table 22–1 Determining Severity of Burns**

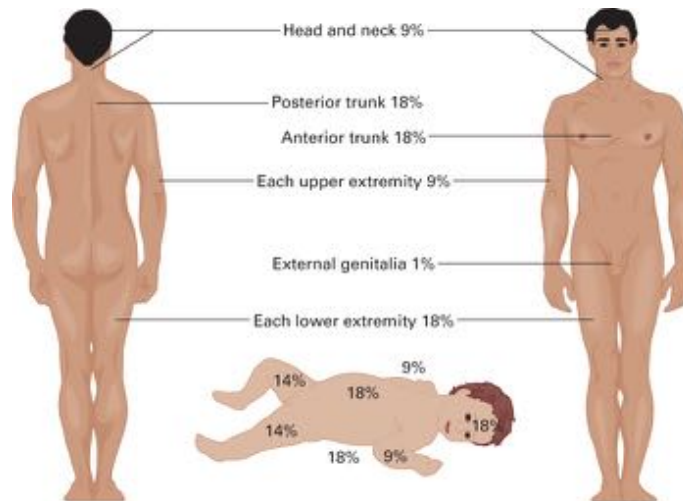
Severity of Burn	Adults	Infants and Children
Critical	Full-thickness burns involving the hands, feet, face, or genitals Burns associated with respiratory injury Full-thickness burns covering more than 10 percent of body surface area (BSA) Partial-thickness burns to more than 30 percent of BSA Burns complicated 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

**Figure 22–1 Classification of Burns by Depth**



**Figure 22–1** Classification of burns by depth.

## Figure 22–5 The Rule of Nines



**Figure 22–5** The rule of nines.

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## Critical Burns

- Face – can damage eyes, compromise breathing
- Feet & hands – lead to loss of function
- Genitals – can impair 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



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22 - 8

## Complicating Factors of Burns

### Some patients react more severely to burns

- Heart disease patients
- Diabetics
- Those already injured
- Very young or over 55

## Emergency Medical Care of Burns

- Stop the burning process
- Perform Primary Assessment
- Determine the severity of the burns during the secondary survey
- Cover the burns
- Keep the patient warm

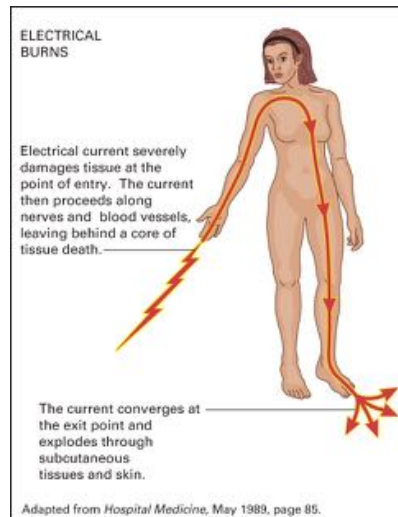
## Chemical Burns

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

## Scene Safety with Electrical Shock

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

## Electrical Burns



**Figure 22-12** Look for an entry burn and an exit burn.

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## Signs and Symptoms of Electrical Shock

- Altered mental status
- Obvious severe burns
- Weak, irregular, or absent pulse
- Shallow, irregular, or absent breathing
- Multiple fractures due to intense muscle contractions



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22 - 14

## **Areas Injured by Lightning Strike**

- Nervous system
- The senses
- The skin
- The heart
- The vascular system