



# TACTICAL COMBAT CASUALTY CARE COURSE

## MODULE 16: BURN TREATMENT



Committee on  
Tactical Combat  
Casualty Care  
(CoTCCC)

**TCCC** TIER 1  
All Service Members

**TCCC** TIER 2  
Combat Lifesaver

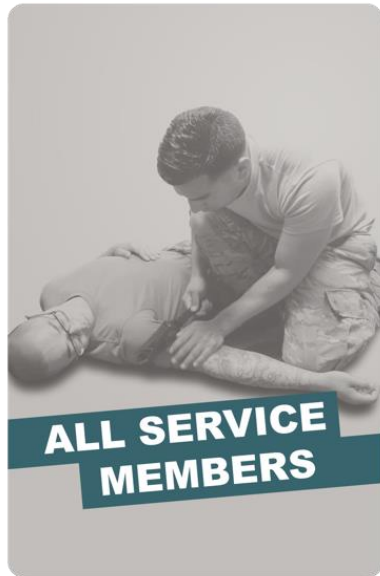
**TCCC** TIER 3  
Medic/Corpsman

**TCCC** TIER 4  
Combat Paramedic/Provider

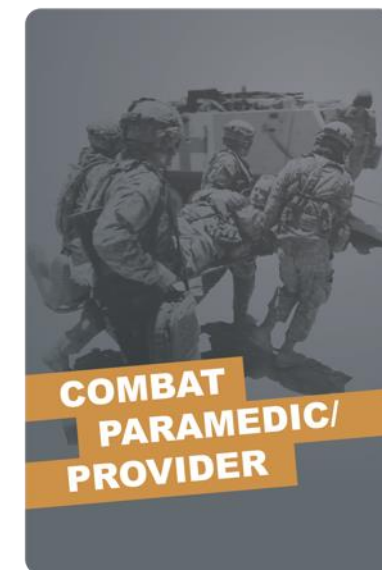
# TACTICAL COMBAT CASUALTY CARE (TCCC) ROLE-BASED TRAINING SPECTRUM

## ROLE 1 CARE

### NONMEDICAL PERSONNEL



### MEDICAL PERSONNEL



◀ **YOU ARE HERE**

**STANDARDIZED JOINT CURRICULUM**

# TERMINAL LEARNING OBJECTIVE

## 18 Given a combat or noncombat scenario, perform assessment and initial treatment of burns during Tactical Field Care in accordance with CoTCCC Guidelines

- **84** Identify the specific scene safety issues and actions required of a trauma casualty with burns, before evaluation and care of the casualty
- **85** Identify the severity of burn in accordance with the conventional burn classification
- **86** Identify how to estimate the body surface area burned using the Rule of Nines
- **87** Demonstrate the application of a dry dressing to a burn casualty in accordance with CoTCCC guidelines
- **88** Demonstrate techniques used to prevent heat loss in a severe burn casualty in accordance with CoTCCC guidelines

## 05 ENABLING LEARNING OBJECTIVES (ELOs)

● = Cognitive ELOs ● = Performance ELOs

# Three PHASES of TCCC

## 1 CARE UNDER FIRE

RETURN FIRE  
AND TAKE COVER

Quick decision-making:

- Consider scene safety
- Identify and control life-threatening bleeding
- Move casualty to safety

## 2 TACTICAL FIELD CARE

COVER AND  
CONCEALMENT

Basic management plan:

- Maintain tactical situational awareness
- Triage casualties as required
- Conduct MARCH PAWS assessment

## 3 TACTICAL EVACUATION CARE

More deliberate assessment and treatment of unrecognized life-threatening injuries

- Pre-evacuation procedures
- Continuation of documentation

**NOTE:** This is covered in more advanced TCCC training!



YOU ARE HERE

# TACTICAL FIELD CARE

## MARCH PAWS

### ***DURING*** LIFE-THREATENING

- M** MASSIVE BLEEDING #1 Priority
- A** AIRWAY
- R** RESPIRATION (*breathing*)
- C** CIRCULATION
- H** HYPOTHERMIA / HEAD INJURIES

### ***AFTER*** LIFE-THREATENING

- P** PAIN
- A** ANTIBIOTICS
- W** WOUNDS
- S** SPLINTING



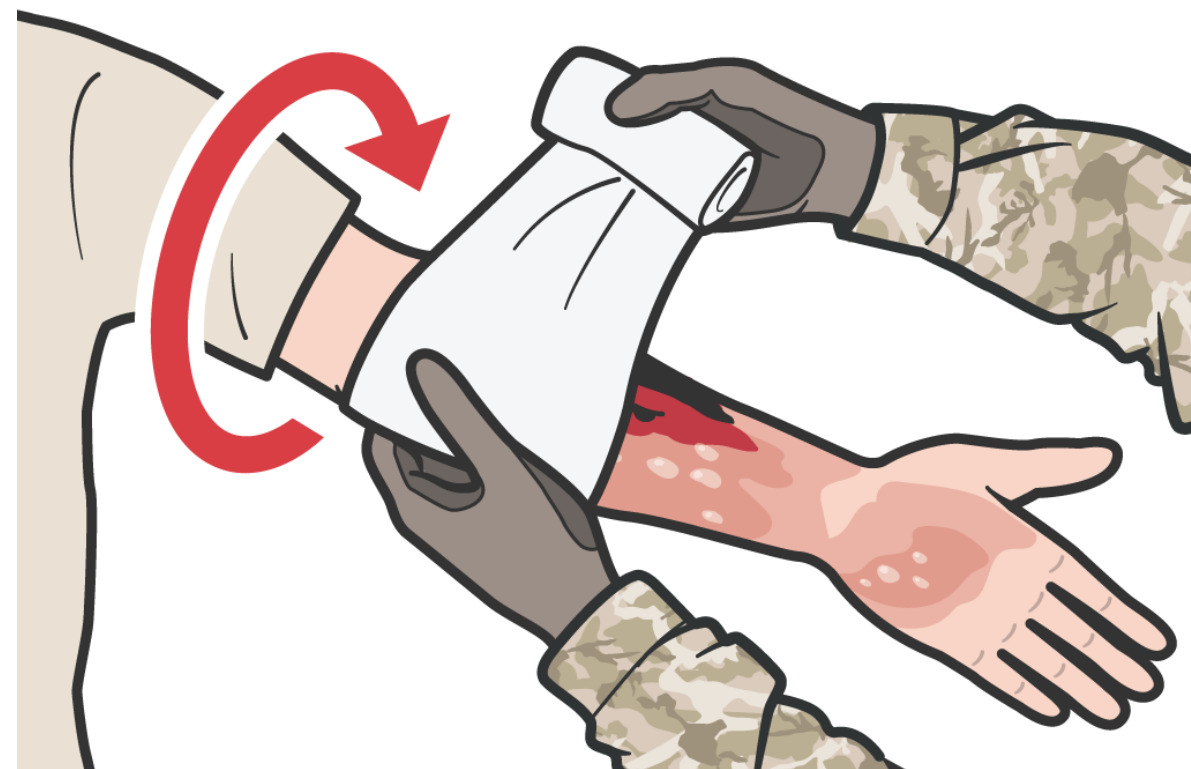
# FOLLOW MARCH PAWS

Address **ALL OTHER** life-threatening injuries using the MARCH PAWS sequence

All trauma treatments can be performed on or through burned skin

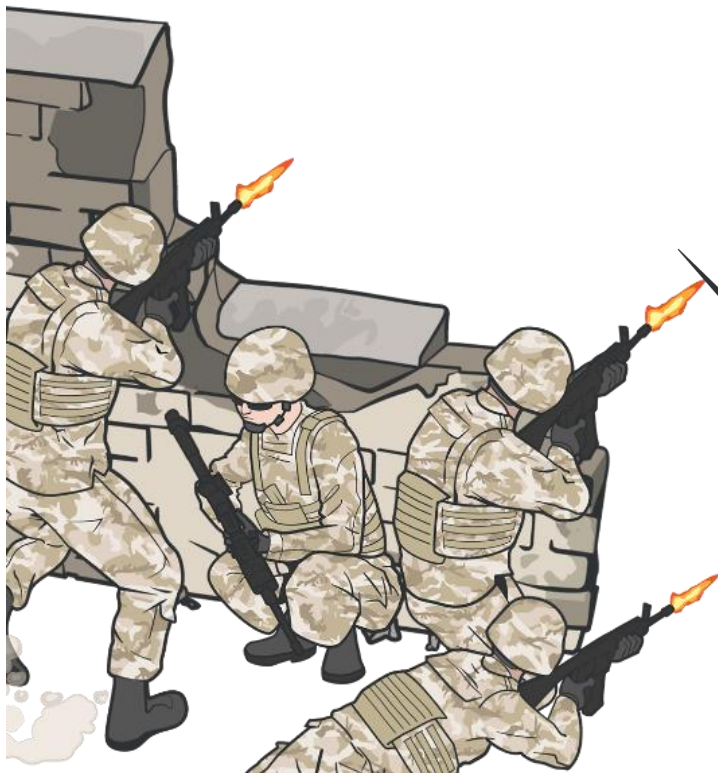
## Remember:

A burned trauma casualty is a trauma casualty first





# POTENTIAL CAUSES



**FIREFIGHTS**



**EXPLOSION**

IED  
VBIED



**VEHICLE/  
AIRCRAFT  
CRASHES**



**ELECTRICAL**

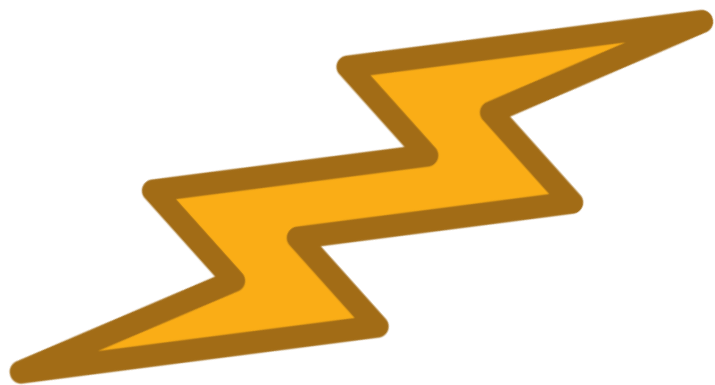


**THERMAL**



**CHEMICAL**

# ELECTRICAL



## IN CASE OF ELECTRICAL INJURY

- Secure the power, if possible; otherwise, remove the casualty from the electrical source using a nonconductive object, such as a wooden stick
- Move the casualty to a safe place





## IN CASE OF THERMAL INJURY

### THERMAL

- Stop the source of the burn
- Cut clothing around the burned area and gently lift away
  - ⚠ If clothing is stuck to the burn, ensure you cut around the clothing and leave it in place
- Be sure to avoid grabbing the burned area while moving/picking up the casualty

## CHEMICAL



## IN CASE OF CHEMICAL INJURY

### EXAMPLE:

- White phosphorus

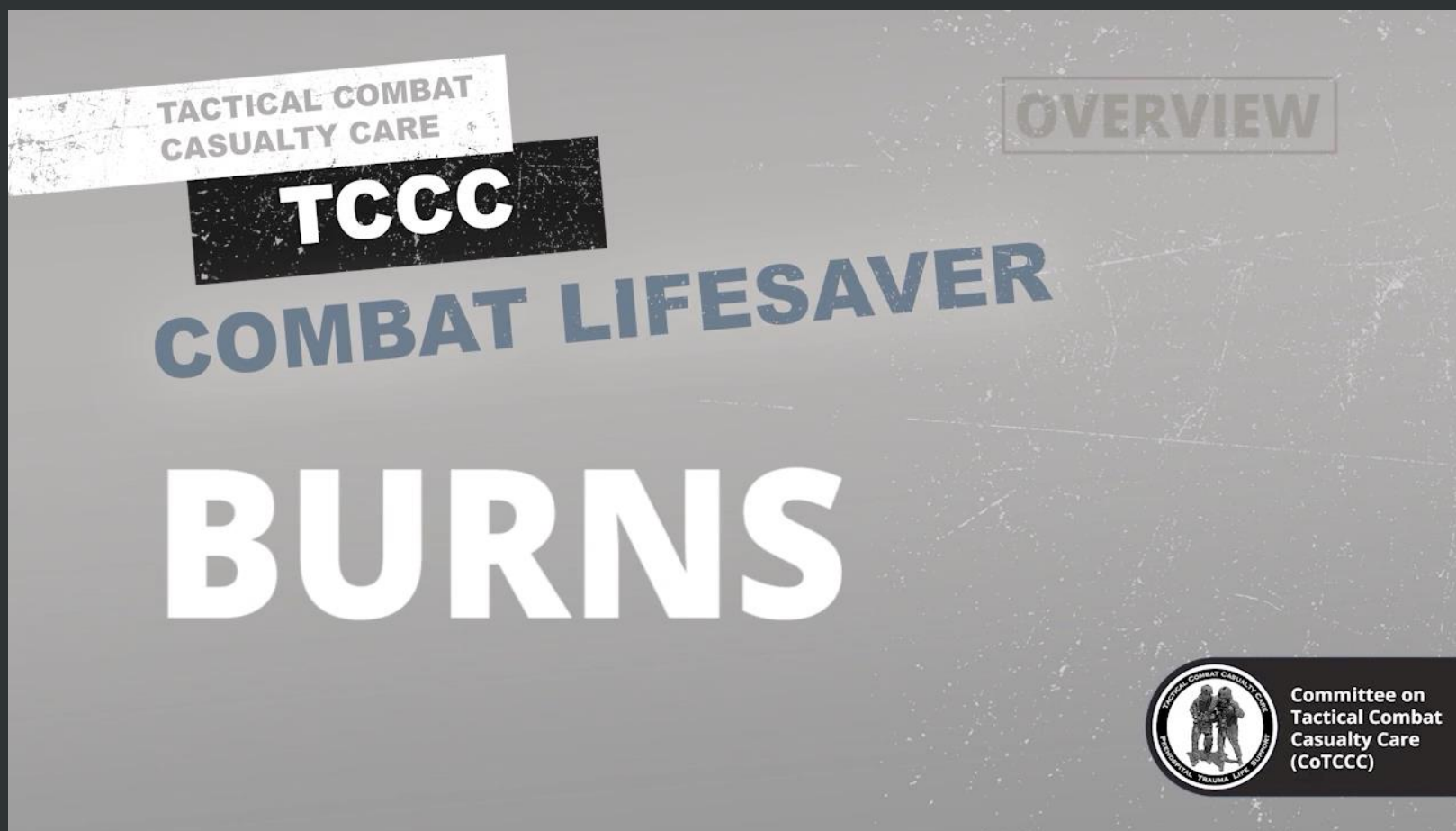
### SOURCE:

- Commonly found in tank rounds, mortar rounds, artillery rounds

### TREATMENTS:

- Submerge the burned area in water
- Apply wet barrier (water-soaked gauze, clothing, mud, etc.) with an occlusive dressing
- Advise medical personnel **immediately**

# OVERVIEW



Video can be found on [DeployedMedicine.com](https://www.deployedmedicine.com)

# SEVERITY OF BURN

**BURNS ARE CLASSIFIED BY THE DEPTH OF THE WOUND**



## SUPERFICIAL

### 1<sup>ST</sup>-DEGREE BURNS

are just like a sunburn, with a reddened appearance of the skin



## PARTIAL THICKNESS

### 2<sup>ND</sup>-DEGREE BURNS

will also have blisters



## FULL THICKNESS

### 3<sup>RD</sup>-DEGREE BURNS

may appear dry, stiff, and leathery, and/or can also be white, brown, or black

# RULE OF NINES

## Rule of Nines

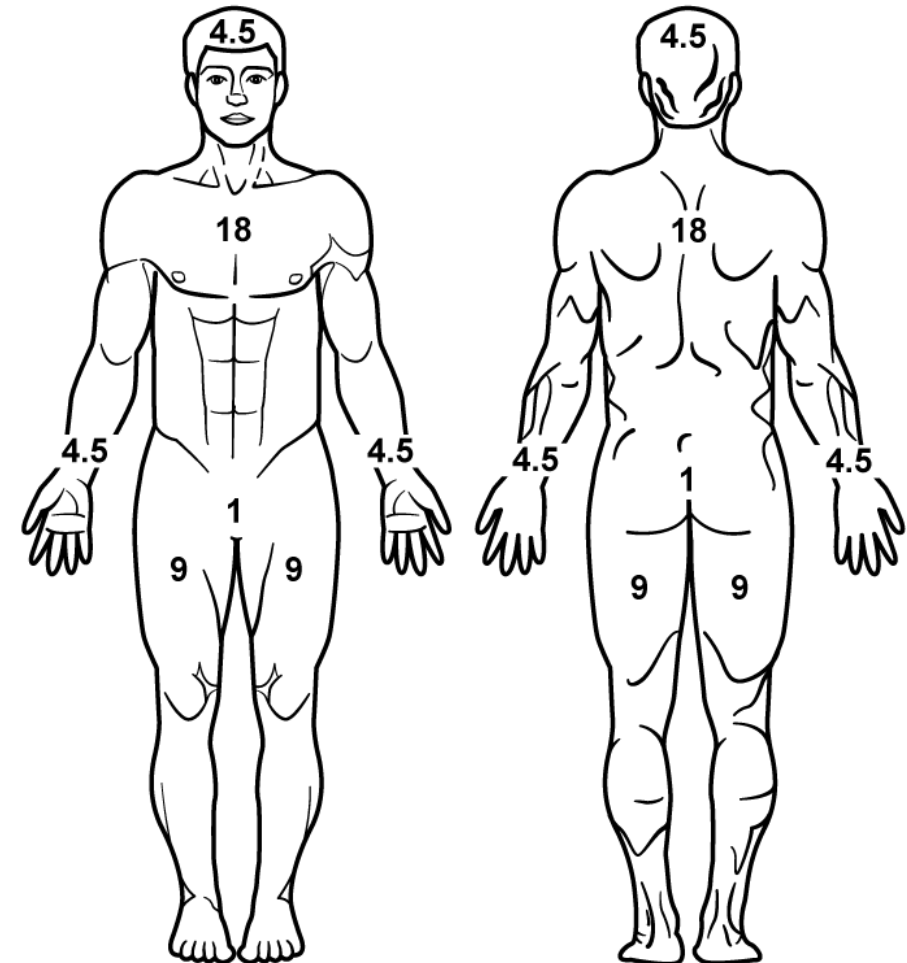
**11** areas that **each** have **9% body surface area** (head, arms, front and backs of legs, and front and back of the torso having **TWO 9% areas**)

- Palm size represents ~1%
- Estimate/round up to nearest 10

If half of the front or rear area is **burned**, the area would be **half** of the **area value**

## ESTIMATION EXAMPLE

- Half of the front upper/lower leg is **4.5%**
- Half of the front upper/lower torso is **9%**



# BURN CARE



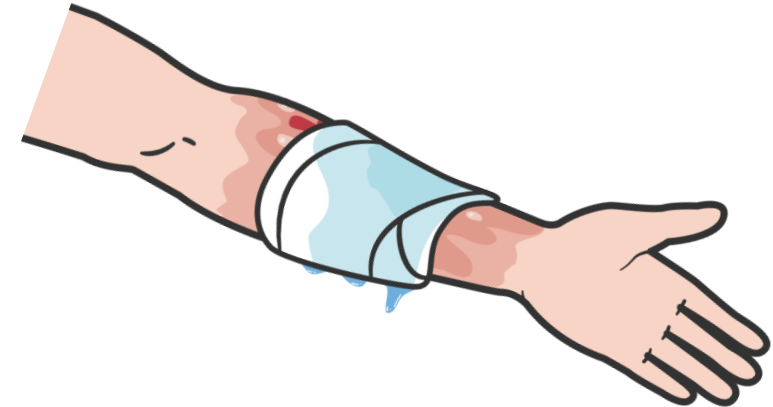
## REMOVE

watches and jewelry from burned area



## COVER

the burn area with dry, sterile dressings



## COVER

burns from **white phosphorus** with **wet** dressing

# BURN CARE + HYPOTHERMIA PREVENTION



## Passive Warming Supplies



For **extensive burns (>20%)**, consider using **active** warming supplies to cover the burned areas and prevent hypothermia

- Burn patients are particularly susceptible to hypothermia
- Extra emphasis should be placed on barrier heat loss prevention methods

## Facial Burns:

- Facial burns, especially those that occur in closed spaces, may be associated with inhalation injury
- These casualties should be monitored closely for potential airway issues
- **DO NOT** place NPA in casualty with signs of inhalation burns

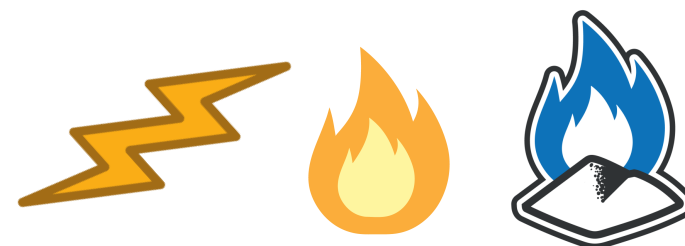
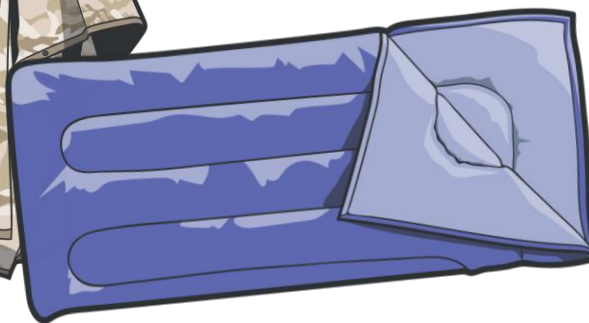
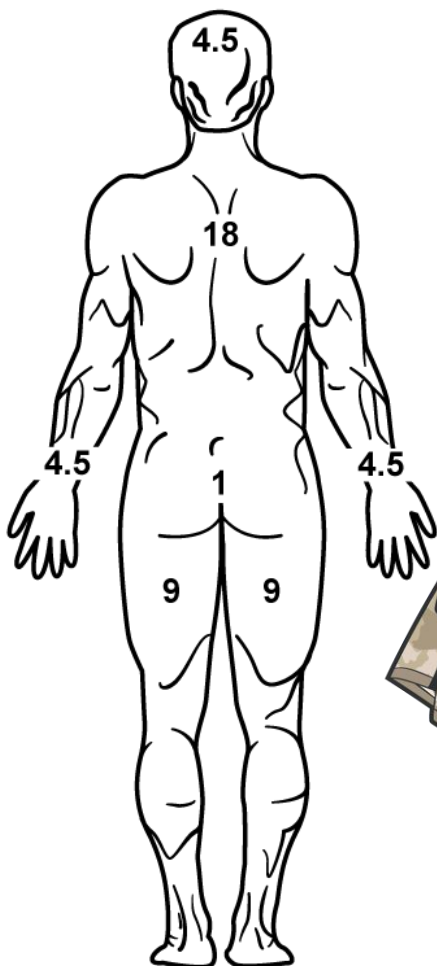
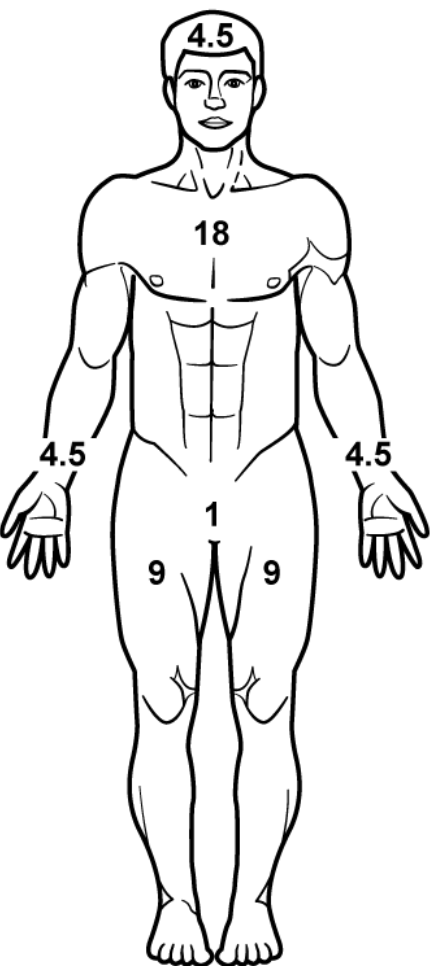


# SKILL STATION

Burn Treatment (Skill)

■ Burn Dressing

# SUMMARY



- We discussed **treatment priorities**
- We discussed **potential causes** of burns
- We identified **electrical** burns
- We identified **thermal** burns
- We identified **chemical** burns
- We discussed the **Rule of Nines**
- We discussed burns **and** hypothermia
- We discussed the **prevention of hypothermia**

# CHECK ON LEARNING

- What kind of dressing should be placed on burned areas?
- What should you do first when you encounter a casualty with an electrical burn?
- What should you do first when you encounter a casualty with a thermal burn?

# ANY QUESTIONS?