

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
Combat Medic/Corpsman

TCCC TIER 4
Combat Paramedic/Provider

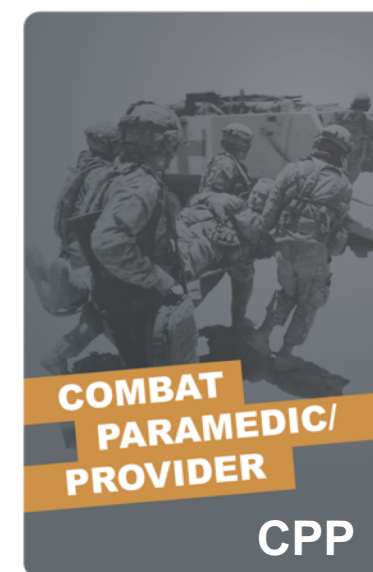
TACTICAL COMBAT CASUALTY CARE (TCCC) ROLE-BASED TRAINING SPECTRUM

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

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

5 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



YOU ARE HERE

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!

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

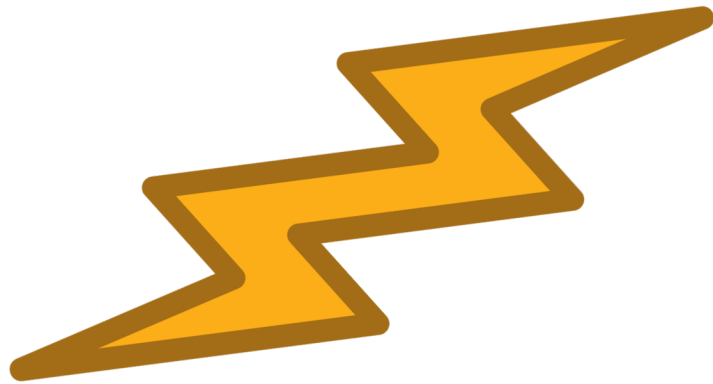


THERMAL



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



IN CASE OF **CHEMICAL** INJURY

CHEMICAL

EXAMPLE

- White phosphorus

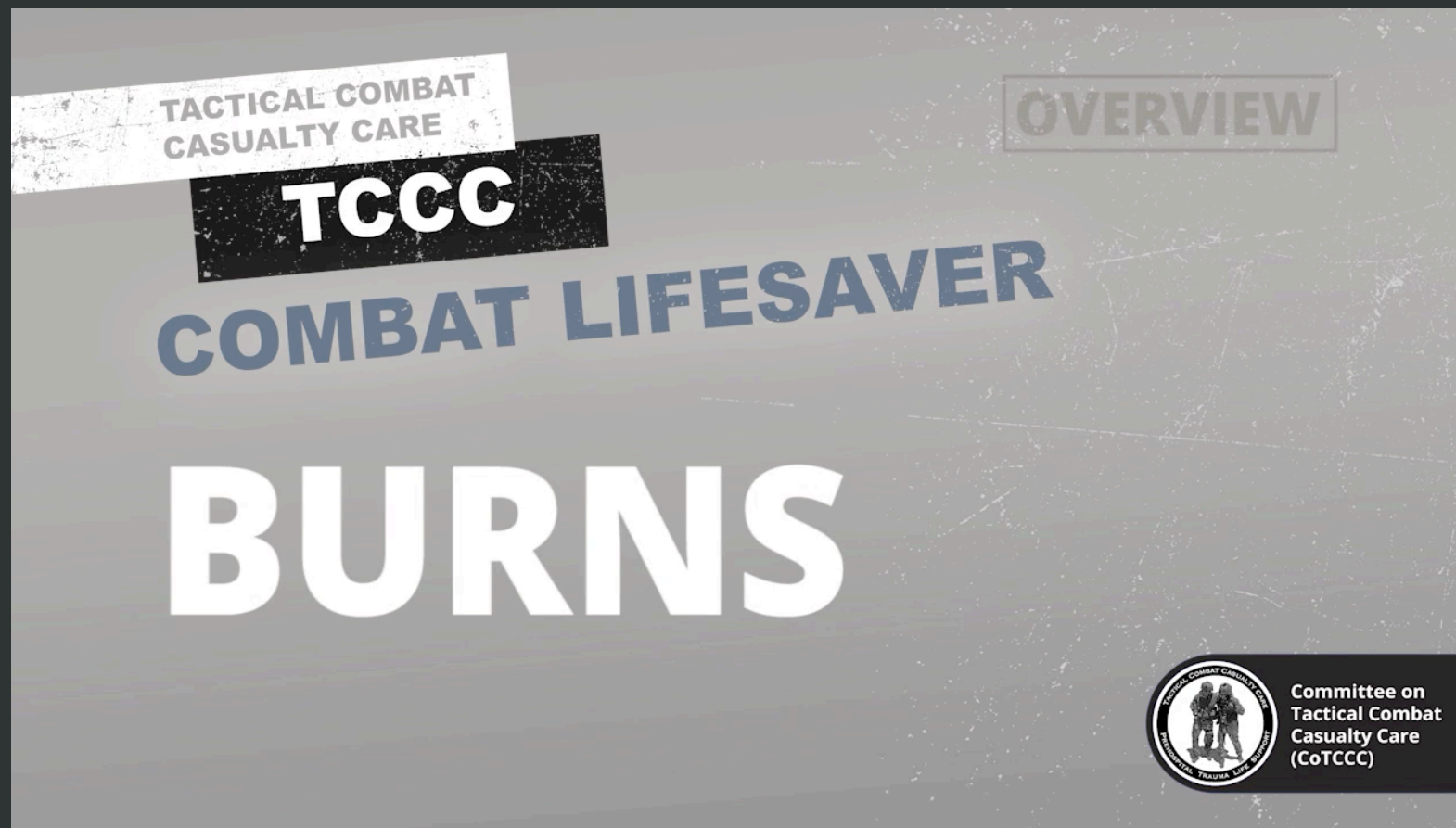
SOURCE

- 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

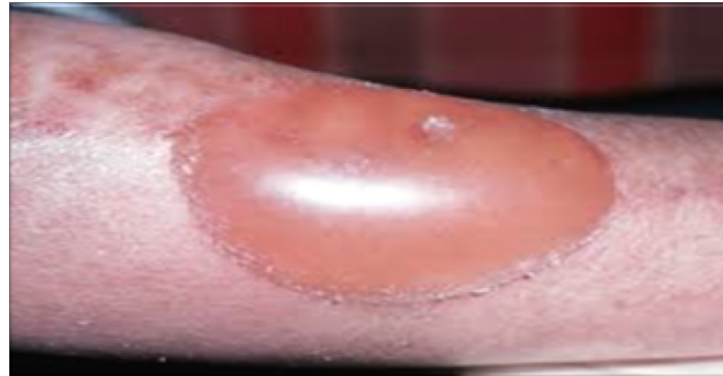
BURNS ARE CLASSIFIED BY THE DEPTH OF THE WOUND



SUPERFICIAL

1ST-DEGREE BURNS

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



PARTIAL THICKNESS

2ND-DEGREE BURNS

will also have blisters



FULL THICKNESS

3RD-DEGREE BURNS

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

RULE OF NINES

Rule of Nines

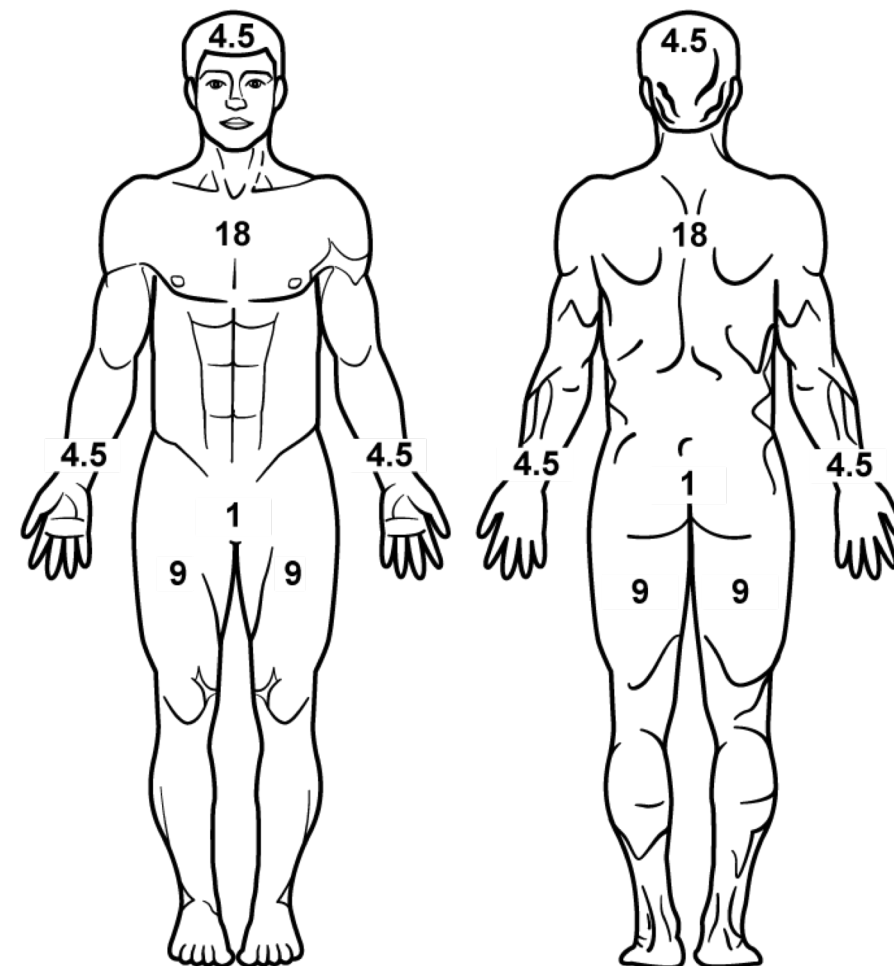
11 areas that **each** have **9% body surface area** (head, arms, front and backs of legs, and front and back of the torso having **TWO 9% areas**)

- 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



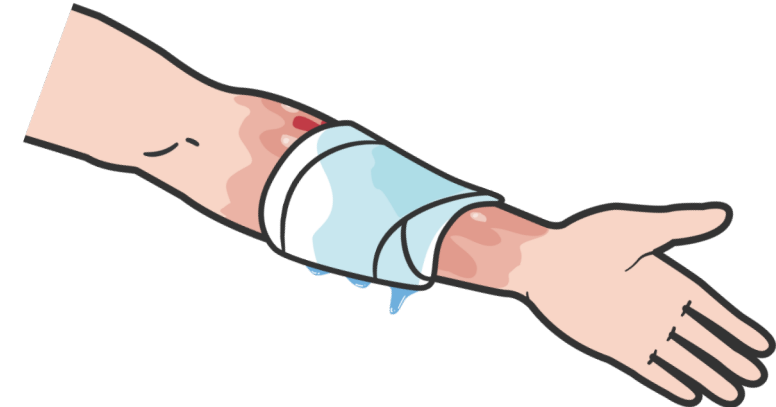
REMOVE

watches and jewelry from
burned area



COVER

the burn area with dry,
sterile dressings



COVER

burns from **white phosphorus**
with **wet** dressings

BURN CARE + HYPOTHERMIA PREVENTION



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

Passive Warming Supplies



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

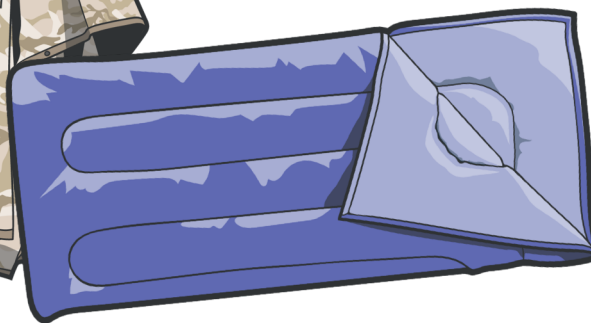
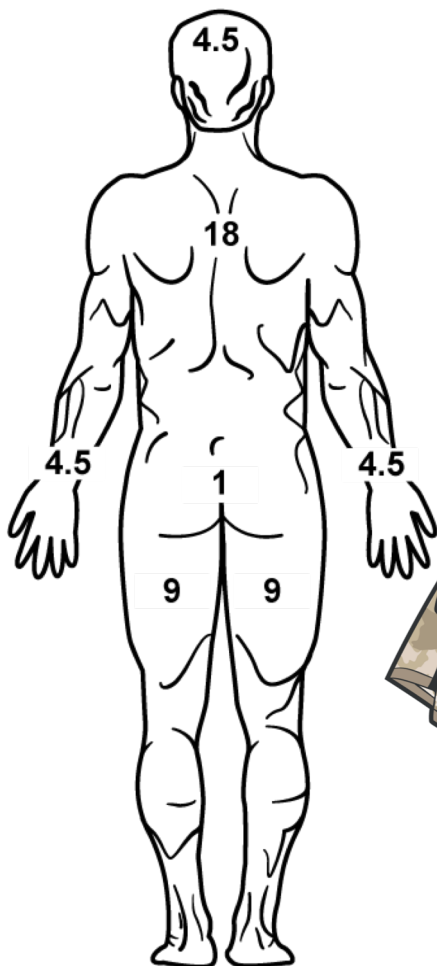
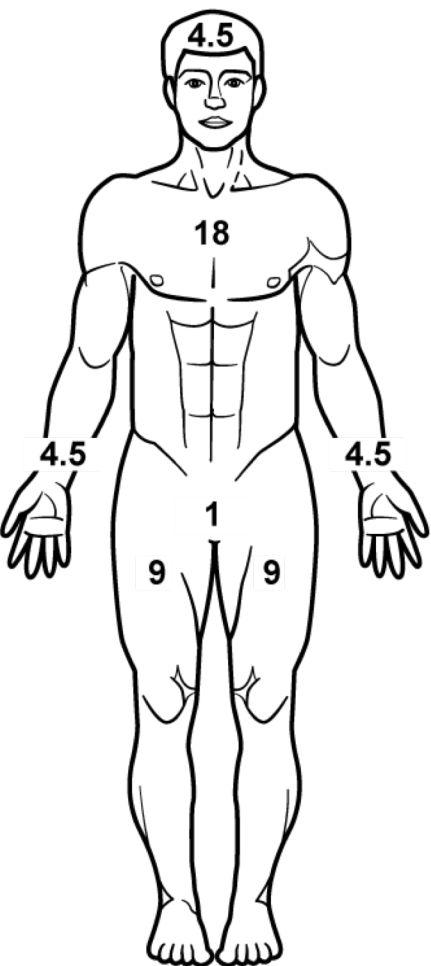
DO NOT place NPA in casualty with signs of inhalation burns

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?