

# TACTICAL COMBAT CASUALTY CARE COURSE

## MODULE 11: HYPOTHERMIA PREVENTION



Committee on  
Tactical Combat  
Casualty Care  
(CoTCCC)

**TCCC** TIER 1  
All Service Members

**TCCC** TIER 2  
Combat Lifesaver

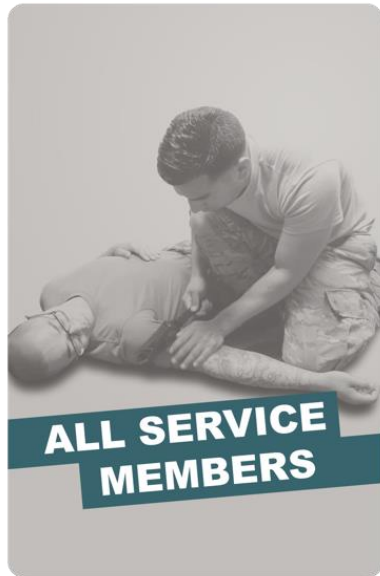
**TCCC** TIER 3  
Medic/Corpsman

**TCCC** TIER 4  
Combat Paramedic/Provider

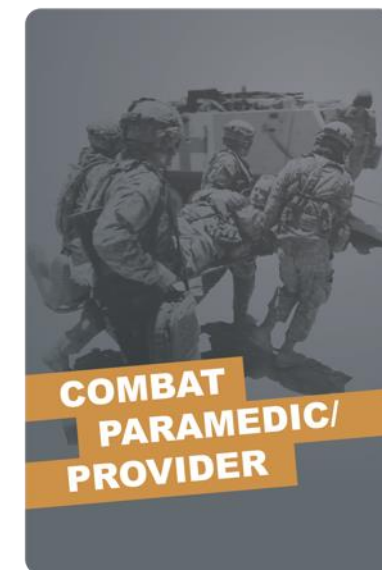
# TACTICAL COMBAT CASUALTY CARE (TCCC) ROLE-BASED TRAINING SPECTRUM

## ROLE 1 CARE

### NONMEDICAL PERSONNEL



### MEDICAL PERSONNEL



◀ **YOU ARE HERE**

**STANDARDIZED JOINT CURRICULUM**

## TERMINAL LEARNING OBJECTIVE

**12** Given a combat or noncombat scenario, perform hypothermia prevention measures on a trauma casualty during Tactical Field Care and Tactical Evacuation Care in accordance with CoTCCC Guidelines

- **69** Identify the progressive strategies, indications, and limitations of hypothermia prevention of a trauma casualty in Tactical Field Care
- **70** Demonstrate active external warming hypothermia prevention measures on a trauma casualty
- **71** Identify passive hypothermia prevention measures on a trauma casualty

## 03 ENABLING LEARNING OBJECTIVES (ELOs)

● = Cognitive ELOs   ● = Performance ELOs

# 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

## HYPOTHERMIA



- Hypothermia is the decrease in body temperature
- Even a small decrease in body temperature can interfere with blood clotting and increase the risk of bleeding to death
- Casualties in shock are unable to generate body heat effectively
- Hypothermia is a problem for casualties with hemorrhagic shock, even with warm, ambient temperatures

### IMPORTANT CONSIDERATIONS:

- A lower body temperature may not be an indicator of hypothermia; it may be due to exposure to a cold environment

## HYPOTHERMIA **PREVENTION**



- Minimize the casualty's exposure to the elements
- Keep protective gear on or with the casualty if feasible
- Replace wet clothing with dry, if possible



You can better **prevent** hypothermia by getting the casualty onto an insulated surface as soon as possible



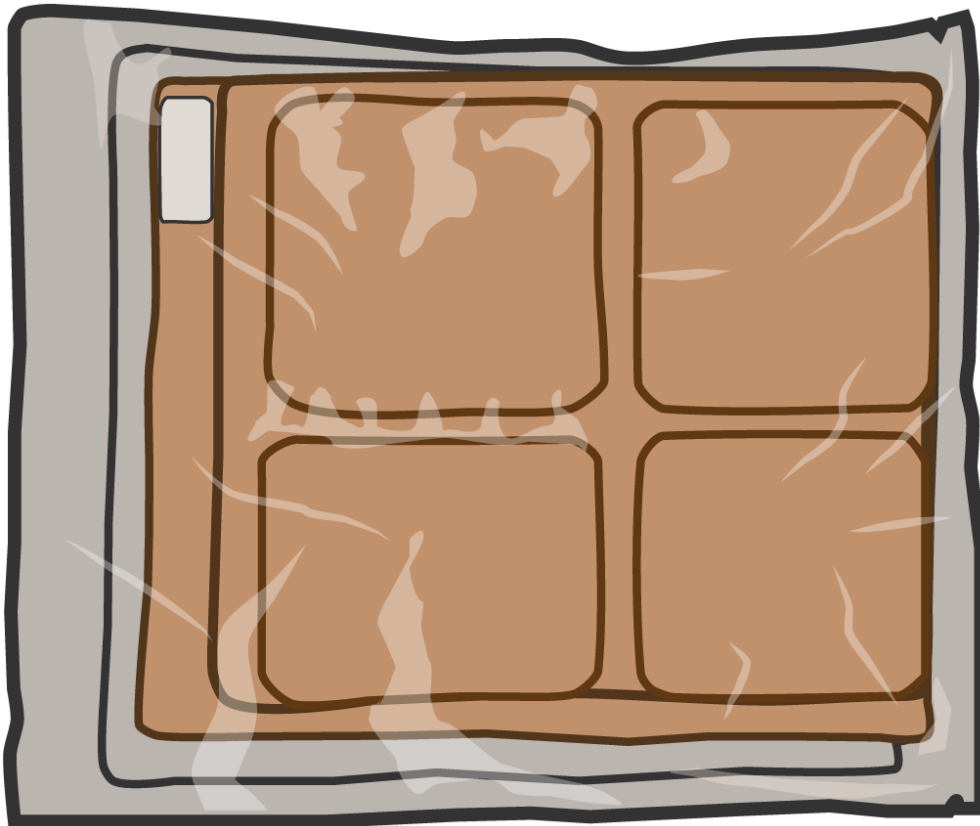
# HYPOTHERMIA PREVENTION

**Get the casualty onto an insulated surface as soon as possible.**

- Hypothermia is much easier to prevent than to treat
- Begin hypothermia prevention as soon as possible
- Decreased body temperature interferes with blood clotting and increases the risk of bleeding
- Blood loss can cause a significant drop in body temperature, even in hot weather



# ACTIVE HYPOTHERMIA BLANKETS



Your medical personnel will distribute the active hypothermia blankets based on unit mission and load

- Active hypothermia blankets are activated when their heating elements are exposed to air
- Active hypothermia blankets are applied to a casualty who cannot generate their own heat, but not directly on their skin because the activated blankets can cause burns

**M A R C H**



## ACTIVE HYPOTHERMIA MANAGEMENT



Apply the active warming blanket from the active hypothermia blanket to the casualty's torso **(not directly on the skin)** and cover the casualty with the passive hypothermia shell

### KEY POINTS:

If an active hypothermia blanket is not available, a combination of the passive warming blanket and an active warming blanket may also be used

Active hypothermia treatment uses heating sources to warm the casualty

Oxygen levels at higher altitudes may not be enough to sustain the chemical reaction required to generate heat

# PASSIVE HYPOTHERMIA MATERIAL



**Passive hypothermia materials provide heating by:**

- Keeping the casualty's body heat contained in the passive material
- Keeping the casualty off the ground

**M A R C H**

## PASSIVE HYPOTHERMIA MANAGEMENT

Place a poncho or blanket under the casualty to protect them from the temperature or dampness of the ground



Passive hypothermia prevention does not reverse the hypothermic process

If no rewarming equipment is available, then use dry blankets, poncho liners, sleeping bags, or anything that will retain heat and keep the casualty dry

Keep the casualty off the ground

### KEY POINTS:

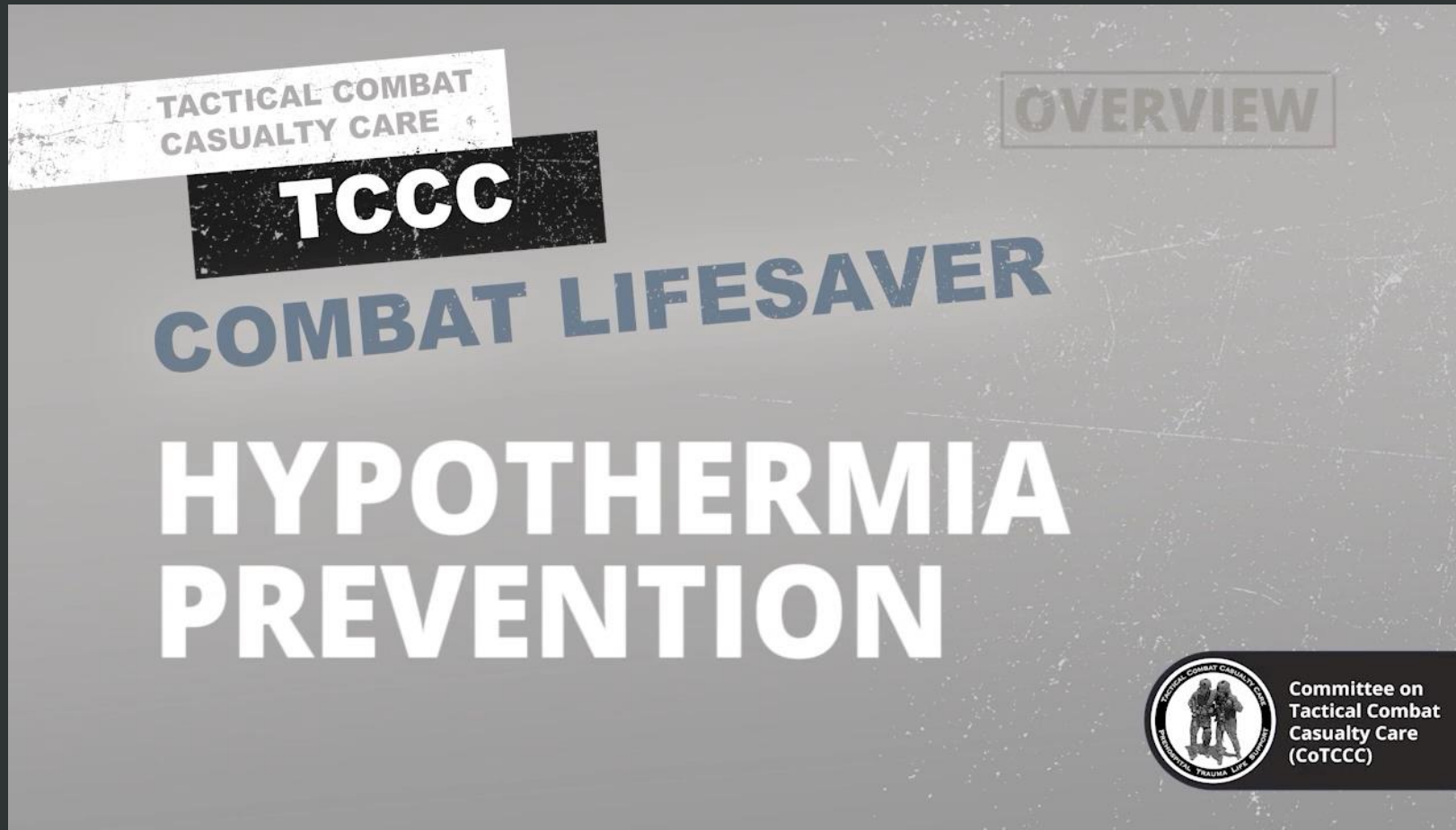
Blood loss can cause a significant drop in body temperature, even in hot weather

Wrap the entire blanket-like shell (or passive heating materials) completely around the casualty, including the head.

Do not cover the face



# HYPOTHERMIA PREVENTION VIDEO



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

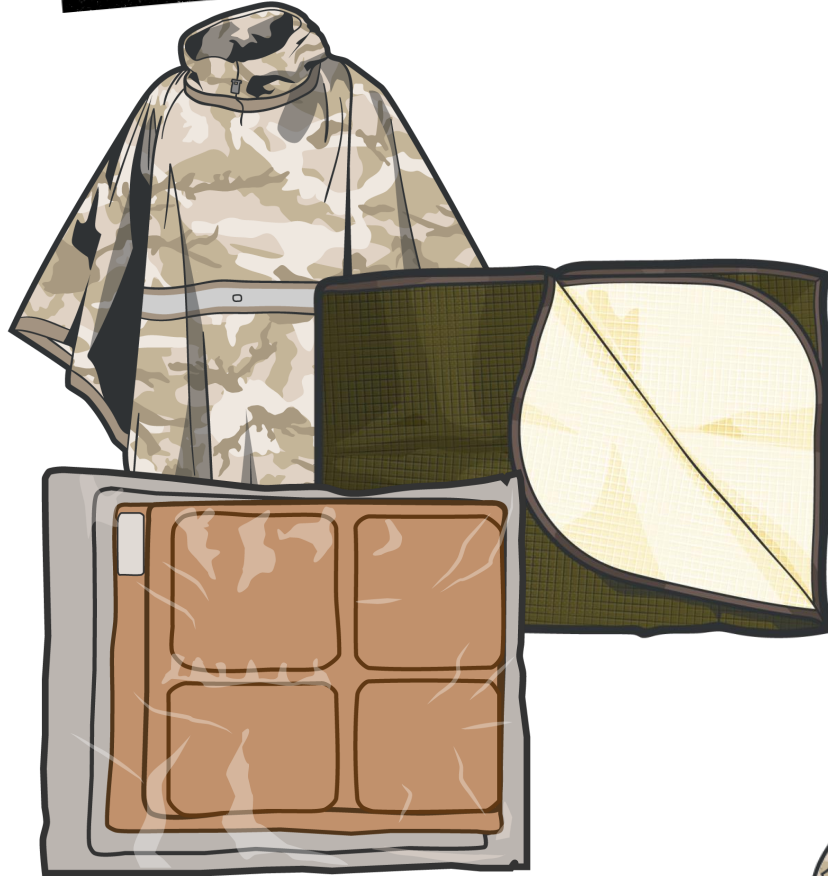
# SKILL STATION

## Hypothermia (Skill)

- Active/passive external warming hypothermia prevention



## SUMMARY



- We defined hypothermia
- We discussed active hypothermia management/prevention
- We discussed passive hypothermia management/prevention



### KEY POINTS:

**Passive** hypothermia prevention **DOES NOT** reverse the hypothermic process

**Active** hypothermia, when at high altitudes, may not be enough to sustain the chemical reaction required to generate heat



# CHECK ON LEARNING

- Why is it important to keep a trauma casualty warm even if it is a hot environment?
- What is the difference between active and passive hypothermia management?

**ANY QUESTIONS?**