

## COMBAT PARAMEDIC/ PROVIDER

# TACTICAL COMBAT CASUALTY CARE COURSE

MODULE 3: CARE UNDER FIRE/THREAT



**TCCC** TIER 1 All Service Members

TCCC TIER 2
Combat Lifesaver

TCCC TIER 3
Combat Medic/Corpsman

**TCCC** TIER 4
Combat Paramedic/Provider



#### Module 3: Care Under Fire/Threat

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

#### **ROLE 1 CARE**

## NONMEDICAL PERSONNEL









**MEDICAL** 

**PERSONNEL** 

YOU ARE HERE

#### STANDARDIZED JOINT CURRICULUM



#### Module 3: Care Under Fire/Threat

#### 1 x TERMINAL LEARNING OBJECTIVE

- 03 Given a combat or noncombat scenario, perform Care Under Fire in accordance with CoTCCC Guidelines.
- **3.1** Describe the role of fire superiority and threat containment and the impact of tactical environment on Tactical Combat Casualty Care.
- **3.2** Describe the actions required before engaging with a casualty, to prevent harm or additional casualties in accordance with CoTCCC Guidelines.
- **3.3** Identify appropriate actions and priorities to treat and move casualties in Care Under Fire.
- 3.4 Identify the importance of early application of limb tourniquets to control life-threatening bleeding.
- **3.5** Demonstrate one-handed tourniquet application to self in Care Under Fire.
- **3.6** Demonstrate two-handed tourniquet application to a casualty in Care Under Fire.
- 3.7 Describe the principles, advantages, and disadvantages of one-person drag/carry or two-person drag/carry in Care Under Fire.
- **3.8** Demonstrate the one-person drags and carries of a casualty in Care Under Fire.
- **3.9** Demonstrate the two-person drags and carries of a casualty in Care Under Fire.

#### 9 x ENABLING LEARNING OBJECTIVES



## Three PHASES of TCCC

FIRE (CUF)
/ THREAT

RETURN FIRE AND TAKE COVER

TACTICAL FIELD CARE (TFC)

WORK UNDER COVER AND CONCEALMENT

TACTICAL EVACUATION CARE (TACEVAC)

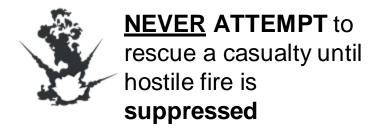
MORE DELIBERATE
ASSESSMENT AND PREEVACUATION PROCEDURES

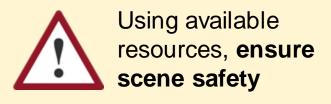




### **CARE UNDER FIRE / THREAT OVERVIEW**

## RETURN FIRE AND TAKE COVER





DIRECT CASUALTY TO REMAIN ENGAGED

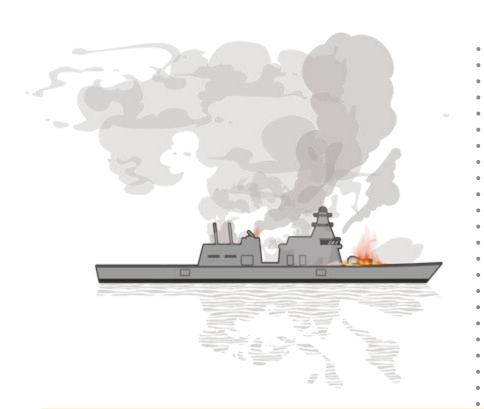
HAVE CASUALTY
MOVE TO COVER
AND APPLY SELF-AID
(if able)

KEEP CASUALTY FROM SUSTAINING ADDITIONAL WOUNDS STOP LIFE-THREATENING EXTERNAL HEMORRAGE (if tactically feasible)

HAVE UNIT
PERSONNEL MOVE
CASUALTY TO
COVER
(if casualty is unable to move)



## **CARE UNDER FIRE / THREAT OVERVIEW**



## **Principles of Threat Containment**

Fundamentally, the principles of TCCC apply whether in ground tactical combat, aboard a sea vessel, at a deployed staging base, or even at home station facilities.

The principle of first suppressing enemy fire, subduing an active shooter, extinguishing a shipboard fire, or reducing life threats prior to rendering medical treatment.

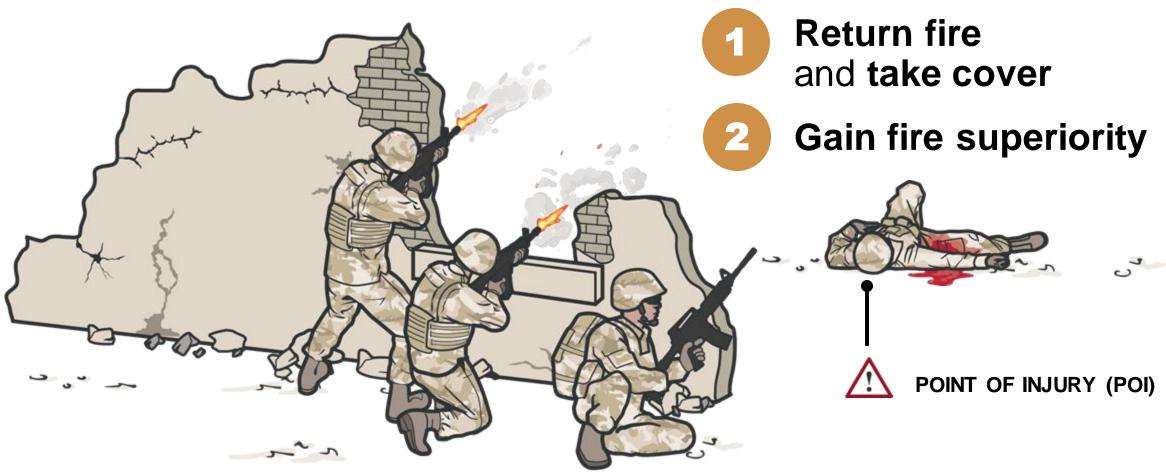


#### **IMPORTANT CONSIDERATION:**

Controlling immediate life-threatening hemorrhage remains the only recommended medical intervention until the threat is suppressed or controlled.



## ROLE OF FIRE SUPERIORITY THREAT CONTAINMENT





## FIRE SUPERIORITY **CASUALTY CARE PRINCIPLES**





**ORDER OF ACTIONS** will be dictated by the tactical situation

**SCENE SAFETY** 

**CASUALTY MOVEMENT** direct casualty to move to cover and apply self-aid

Stop LIFE-THREATENING EXTERNAL **HEMORRHAGE** 

**COMMUNICATE** with casualty and other personnel in the immediate area



## CARE UNDER FIRE / THREAT OVERVIEW OF TREATMENT PRIORITIES AND ACTIONS

- **CASUALTY EXTRACTION** from burning vehicles or buildings (if applicable)
- Apply tourniquet to control LIFE-THREATENING EXTERNAL **HEMORRHAGE** (if tactically feasible)
- **CASUALTY MOVEMENT** Drag or carry based on tactical situation



## **CARE UNDER FIRE / THREAT** TREATMENT PRIORITY – CASUALTY EXTRACTION

**CASUALTIES SHOULD BE EXTRACTED AND MOVED** to places of relative safety



DO WHAT IS NECESSARY TO STOP THE BURNING PROCESS!



STOP LIFE-THREATENING **EXTERNAL HEMORRAGE** (if tactically feasible)

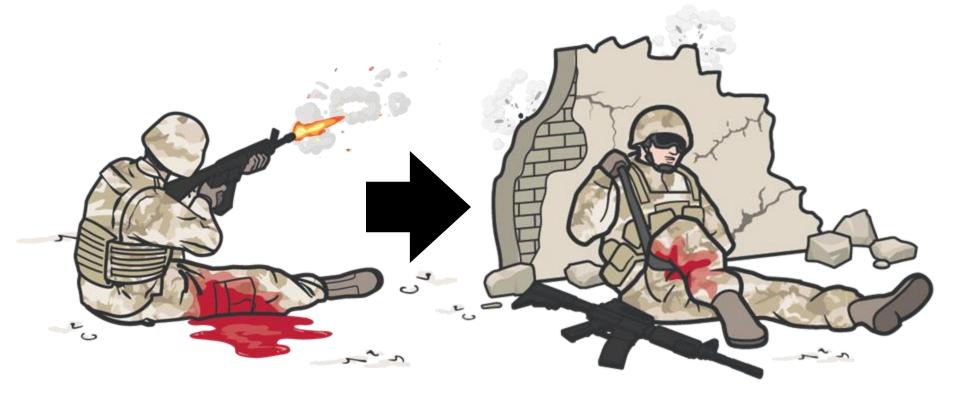




#### **IMPORTANT CONSIDERATION:**

Continuously assess risks and make a plan before moving a casualty

## **CUF / THREAT TREATMENT PRIORITY** CASUALTY SELF-AID WHEN ABLE TO MOVE



**DIRECT** casualty to return fire, if able

Have casualty move to cover and apply self-aid



For life-threatening bleeding, place a tourniquet (TQ) "high and tight" above the wound

## TCCC

## CARE UNDER FIRE / THREAT TREATMENT PRIORITY – HEMORRHAGE CONTROL





Direct casualty to apply their own tourniquet from JFAK, if able

Use CoTCCC-recommended limb tourniquets

Apply the tourniquet over the uniform clearly proximal to the bleeding site(s)

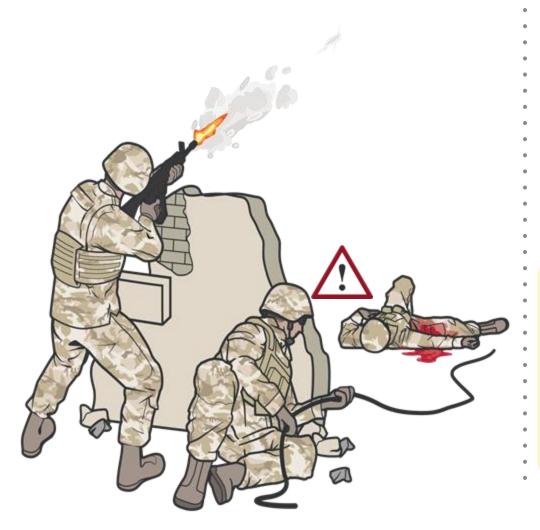
If the site is not readily apparent, place the tourniquet "high and tight" on the injured limb

#### **IMPORTANT CONSIDERATION:**

Continuously assess risks and make a plan before moving a casualty



## IF CASUALTY IS UNABLE TO MOVE



#### IF CASUALTY IS UNABLE TO MOVE to

COVER, when tactically feasible (ideally, after fire superiority has been obtained), devise and execute a plan to get them out of the kill zone



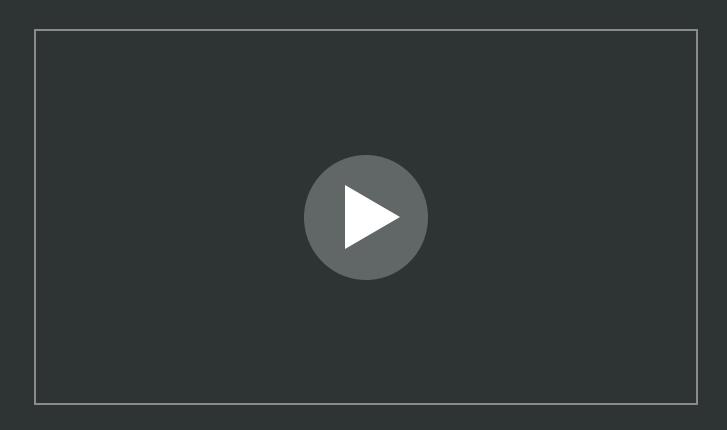
#### **IMPORTANT CONSIDERATION**



Consider using items such as rope and dragging straps to avoid making responders leave cover to care for the casualty



## **CARE UNDER FIRE / THREAT OVERVIEW**







## M ASSIVE HEMORRHAGE

in CARE UNDER FIRE





## IDENTIFY LIFE-THREATENING BLEEDING **VISUAL BLOOD SWEEP**



Traumatic **AMPUTATION** of the **ARM** or **LEG** 

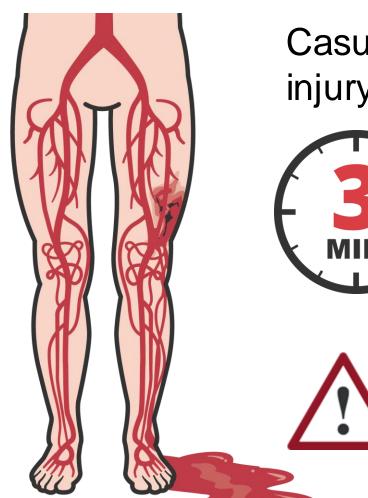




### TIME TO BLEED OUT

How long does it take to **BLEED TO DEATH** from a **MAJOR ARTERY?** 





Casualties with such an injury can bleed to death in

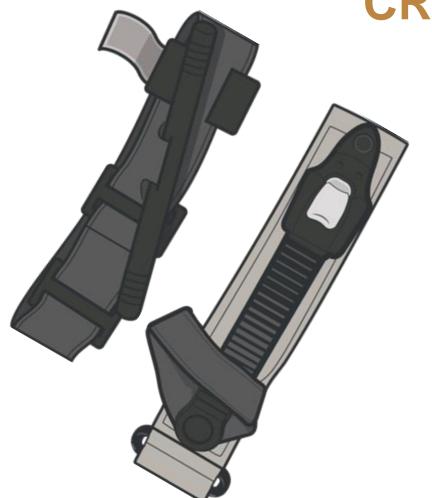


LIFE-THREATENING **BLEED** SUSPECTED,



## **TOURNIQUET APPLICATION**

**CRITICAL POINTS** 



- TQs are used to control massive or lifethreatening hemorrhage on extremities
- TQs are **effective** and can be applied quickly
- TQs are the most important lifesaving item in the JFAK and should be kept near the top of your Aid Bag
- Some TQs tighten using a windlass device, while others use a ratchet device
- Always use the casualty's TQ first





## **KNOW WHERE TO FIND A TOURNIQUET**

#### **QUICK ACCESS IS KEY!**

**DO NOT** leave your TQ at the bottom of your pack!

#### CASUALTY'S JFAK FIRST

- When helping a casualty, use the **TQ** in the casualty's JFAK first
- If the casualty is **missing** their **TQ**, then use the next available option
- As a CPP, you're expected to have immediate access to medical equipment





## INDIVIDUAL

Joint First Aid Kit (JFAK)



## SELF-APPLICATION, ONE-HANDED TOURNIQUET



#### **ONE-HANDED APPLICATION**

The one-handed application is normally used to apply a *CoTCCC-recommended* windlass or ratchet TQ to the **upper extremity** 

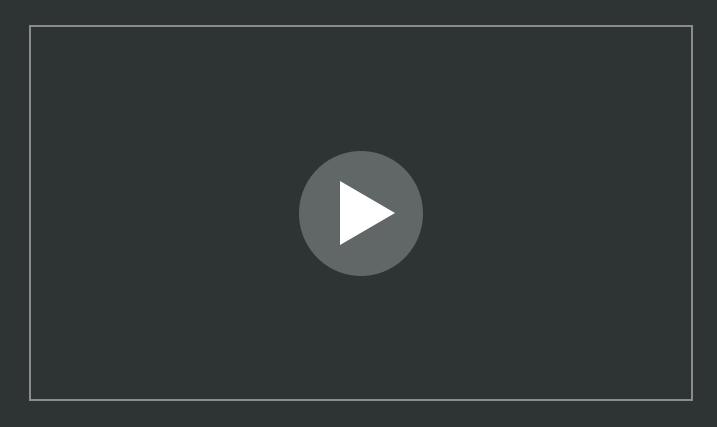
#### **WINDLASS** and **RATCHET TQs**

Use the **windlass or ratchet** TQ from the JFAK

They are **effective** and can be **applied quickly** 

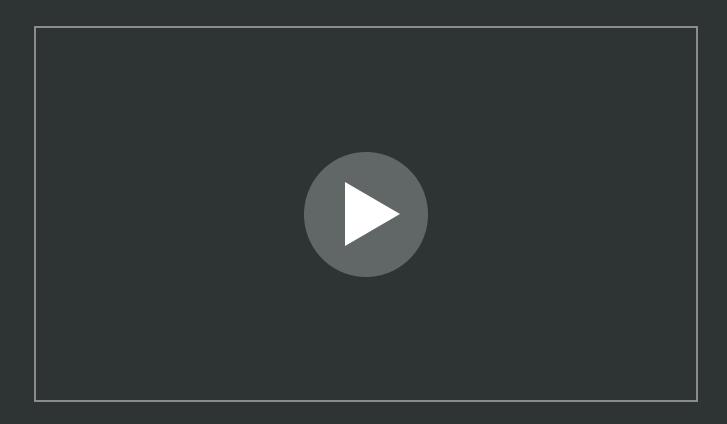


# ONE-HANDED WINDLASS TOURNIQUET APPLICATION





# ONE-HANDED RATCHET TOURNIQUET APPLICATION





## CASUALTY SUPPORT WHEN UNRESPONSIVE OR UNABLE TO MOVE



**EXERCISE CAUTION** in approaching the casualty to avoid creating additional casualties

- Conduct a VISUAL BLOOD SWEEP, looking for major bleeding
- If extremity bleeding is observed, apply a hasty "high and tight" TQ using the two-handed method

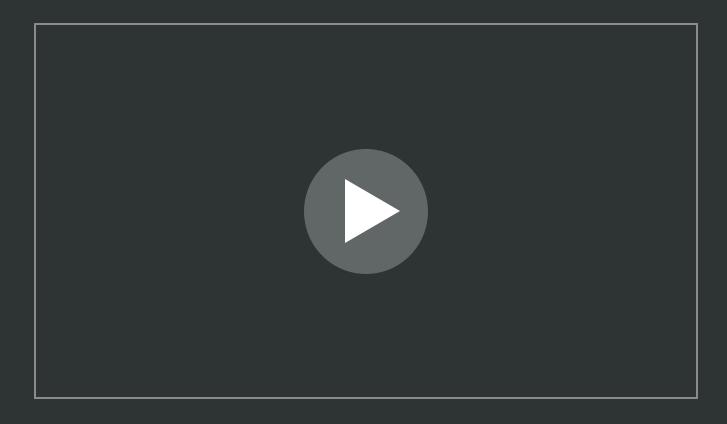


#### **IMPORTANT CONSIDERATION:**

When helping a casualty, use the TQ in the casualty's JFAK first

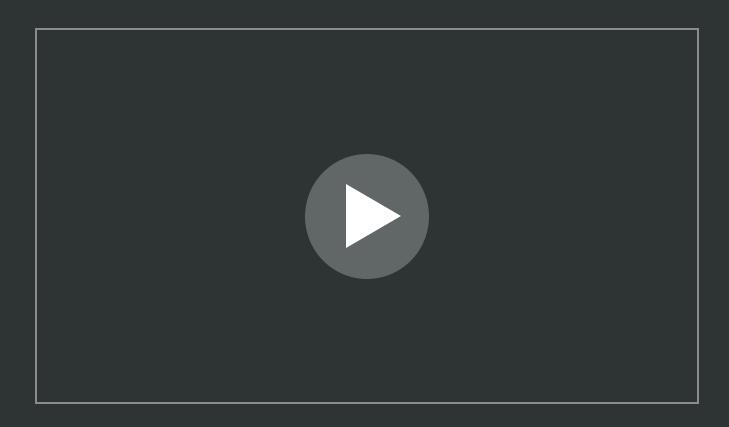


# TWO-HANDED WINDLASS TOURNIQUET APPLICATION





# TWO-HANDED RATCHET TOURNIQUET APPLICATION





### **SKILL STATION**

### **CUF Tourniquet Skills**



One-Handed (Windlass)
TQ Application in CUF



One-Handed (Ratchet)
TQ Application in CUF



Two-Handed (Windlass)
TQ Application in CUF



Two-Handed (Ratchet) TQ Application in CUF



## DRAGS AND CARRIES CRITICAL OBJECTIVES

- If you must move in CUF, quickly develop a casualty movement rescue plan
- From the point of injury, you must move the casualty to the **closest position** of cover
- Once bleeding is controlled, move the casualty to cover using a one or twoperson drag/carry
- When moving casualties, **spinal injuries** are **NOT** a priority during CUF

One-person drags	Two-person carries
Advantages: Only one person exposed to enemy fire	Advantages: They are useful in situations where drags do not work well and are quicker than most one-person carries
Disadvantages: They are difficult to perform, and the rescuer can tire quickly	Disadvantages: Gives the rescuer a higher silhouette and are harder to accomplish with the added weight of rescuer's and/or the casualty's equipment



## **ONE-PERSON DRAGS AND CARRIES**



#### KIT OR ARM DRAG

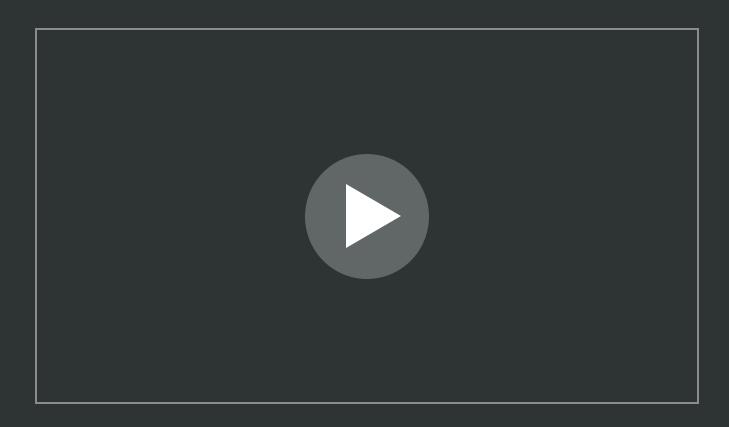
Grab the complete kit or use the body armor drag handle, no additional equipment is required



and rescuer from enemy fire exposure



## ONE-PERSON CASUALTY DRAG/CARRY





### TWO-PERSON DRAGS AND CARRIES



#### **TWO-PERSON** SUPPORTING CARRY

Can be used in transporting both conscious and unconscious casualties

#### KIT OR ARM DRAG

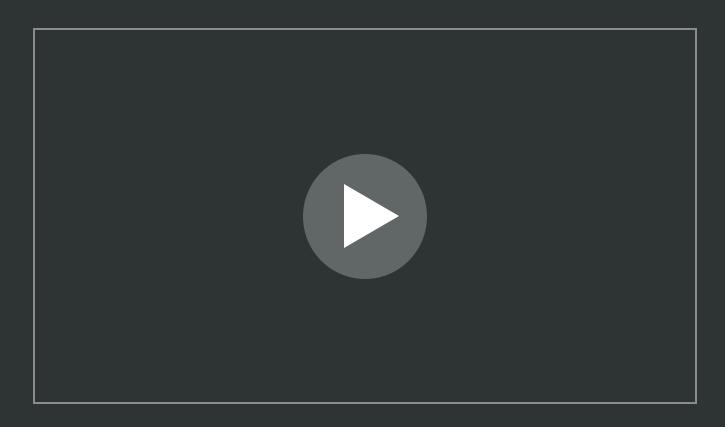
Can cause injury to either the rescuer or casualty; keep safety in mind

#### **FORE AND AFT CARRY**

Exposes both rescuers and casualty to hostile fire



## TWO-PERSON CASUALTY DRAG/CARRY





## **SKILL STATION**

**Drag/Carry Skills** 



One-Person Drag/Carry



Two-Person Drag/Carry



## **SUMMARY**

### **Knowledge Topics**

- What is Care Under Fire / Threat?
- The importance of fire superiority
- Casualty Treatment Priorities in CUF
- Massive Hemorrhage Control in CUF
- Advantages and disadvantages of one- and two-person drag/carry methods

### **Skills and Abilities**

- One-Person Drag/Carry
- Two-Person Drag/Carry



## CHECK ON LEARNING

- (?) What is CUF / THREAT?
- (?) What are the signs of life-threatening bleeding?
- How long does it take to bleed to death from a complete femoral artery and vein disruption?
- What are the advantages and disadvantages of one-person drags?
- What are the advantages and disadvantages of two-person carries?

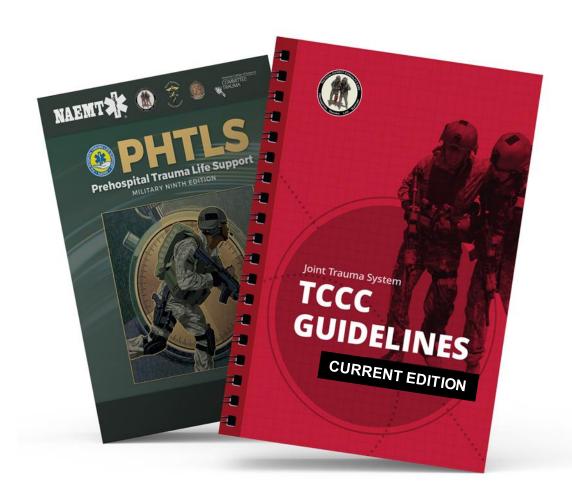








### REFERENCES



#### **TCCC:** Guidelines

by JTS/CoTCCC

These guidelines, updated regularly, are the result of decisions made by CoTCCC in exploring evidence-based research on best practices.

#### **PHTLS: Military Edition**

by NAEMT

Prehospital Trauma Life Support (PHTLS), Military Edition, teaches and reinforces the principles of rapidly assessing a trauma patient using an orderly approach.