



**COMBAT MEDIC/
CORPSMAN**



TACTICAL COMBAT CASUALTY CARE COURSE

MODULE 3:
CARE UNDER FIRE / THREAT



Committee on
Tactical Combat
Casualty Care
(CoTCCC)

TCCC TIER 1
All Service Members

TCCC TIER 2
Combat Lifesaver

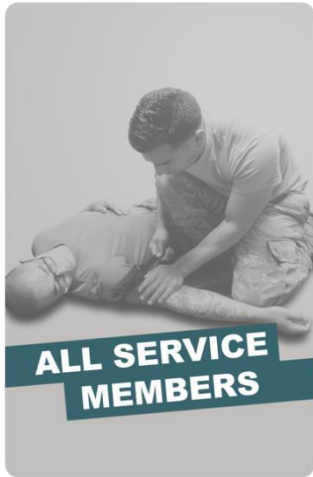
TCCC TIER 3
Combat Medic/Corpsman

TCCC TIER 4
Combat Paramedic/Provider

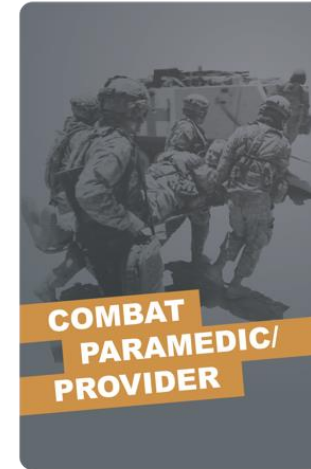
TACTICAL COMBAT CASUALTY CARE ROLE-BASED TRAINING SPECTRUM

ROLE 1 CARE

**NONMEDICAL
PERSONNEL**



**MEDICAL
PERSONNEL**



◀ **YOU ARE HERE**

STANDARDIZED JOINT CURRICULUM

1 x **TERMINAL LEARNING OBJECTIVE**

04 Given a combat or noncombat scenario, perform Care Under Fire in accordance with CoTCCC Guidelines.

- 4.1 Describe the role of fire superiority and threat containment and the impact of tactical environment on Tactical Combat Casualty Care. (CLS T4:E14)
- 4.2 Describe the actions required before engaging with a casualty, to prevent harm or additional casualties in accordance with CoTCCC Guidelines. (ASM T3:E8)
- 4.3 Identify appropriate actions and priorities to treat and move casualties in Care Under Fire. (CLS T4:E16)
- 4.4 Identify the importance of early application of limb tourniquets to control life-threatening bleeding. (CLS T4:E17)
- ⊘ 4.5 Demonstrate one-handed tourniquet application to self in Care Under Fire. (CLS T4:E18)
- ⊘ 4.6 Demonstrate two-handed tourniquet application to a casualty in Care Under Fire. (CLS T4:E19)
- 4.7 Describe the principles, advantages, and disadvantages of one-person drag/carry or two-person drag/carry in Care Under Fire. (CLS T4:E20)
- ⊘ 4.8 Demonstrate the one-person drags and carries of a casualty in Care Under Fire. (CLS T4:E21)
- ⊘ 4.9 Demonstrate the two-person drags and carries of a casualty in Care Under Fire. (CLS T4:E22)

9 x **ENABLING LEARNING OBJECTIVES**

= Terminal Learning Objectives ● = Cognitive ELOs ⊘ = Performance ELOs

Three PHASES of TCCC

1

**CARE UNDER
FIRE (CUF)
/ THREAT**

**RETURN FIRE
AND TAKE COVER**

2

**TACTICAL
FIELD CARE
(TFC)**

**WORK UNDER COVER
AND CONCEALMENT**

3

**TACTICAL
EVACUATION
CARE
(TACEVAC)**

**MORE DELIBERATE
ASSESSMENT AND PRE-
EVACUATION PROCEDURES**



YOU ARE HERE

PHASE 1: CARE UNDER FIRE / THREAT

RETURN FIRE AND TAKE COVER



NEVER ATTEMPT to rescue a casualty until hostile fire is **suppressed**



Using available resources, **ensure scene safety**

DIRECT CASUALTY TO **REMAIN ENGAGED**

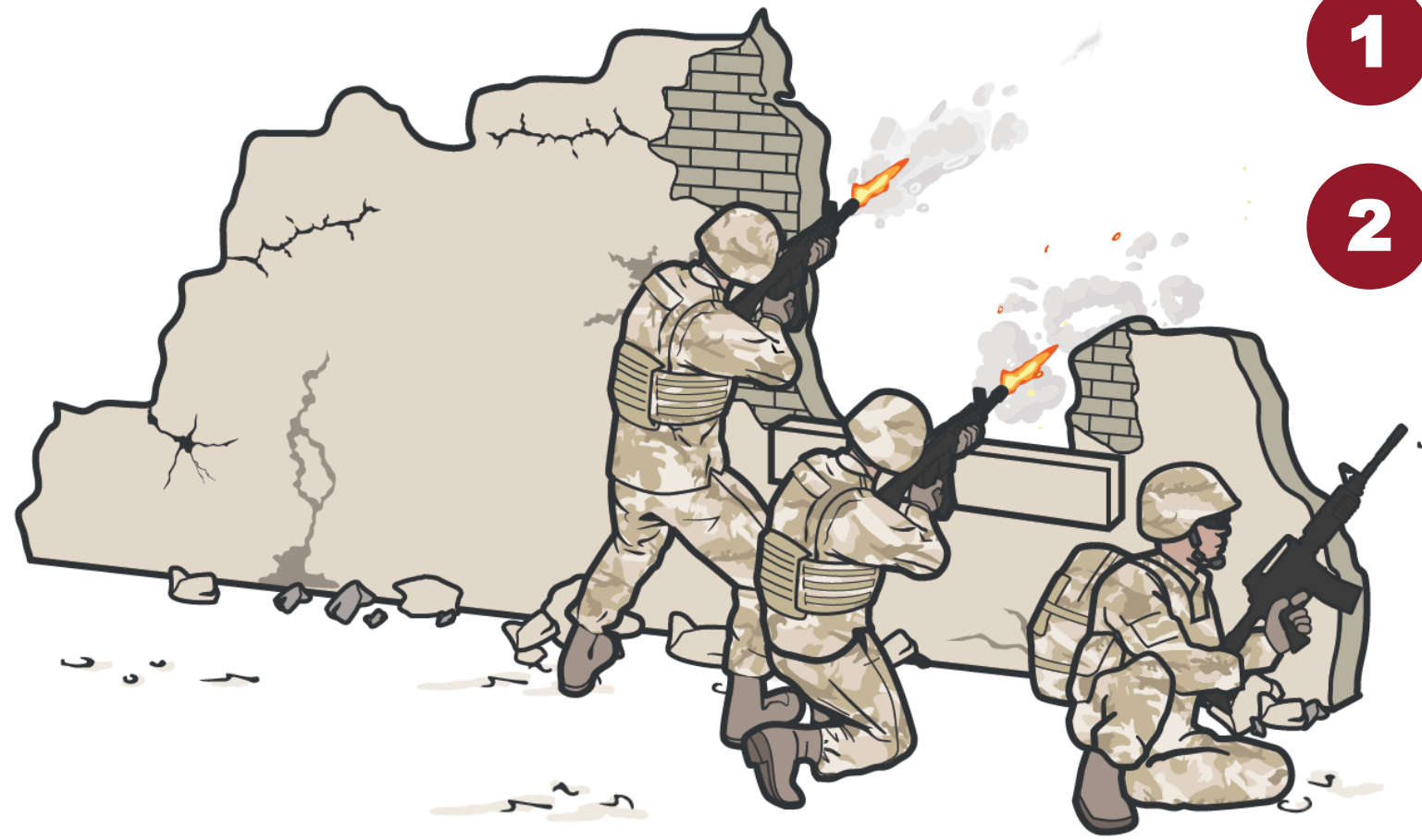
HAVE CASUALTY **MOVE TO COVER AND APPLY SELF-AID**
(if able)

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)

ROLE OF FIRE SUPERIORITY THREAT CONTAINMENT



- 1** Return fire and take cover
- 2** Gain fire superiority



POINT OF INJURY (POI)

FIRE SUPERIORITY CASUALTY CARE PRINCIPLES



- ORDER OF ACTIONS will be dictated by the situation
- SCENE SAFETY
- CASUALTY MOVEMENT direct casualty to move to cover and apply self-aid
- Stop LIFE-THREATENING EXTERNAL HEMORRHAGE
- PROPER COMMUNICATION with casualty and other personnel in the immediate area

CARE UNDER FIRE / THREAT

TREATMENT PRIORITIES AND ACTIONS

1

CASUALTY EXTRACTION

.....

2

Apply tourniquet to control **LIFE-THREATENING EXTERNAL HEMORRHAGE**

.....

3

CASUALTY MOVEMENT

Drag or carry based on **tactical situation**



CARE UNDER FIRE / THREAT

TREATMENT PRIORITIES AND ACTIONS (CONT.)

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

CASUALTY SELF-AID WHEN ABLE TO MOVE



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

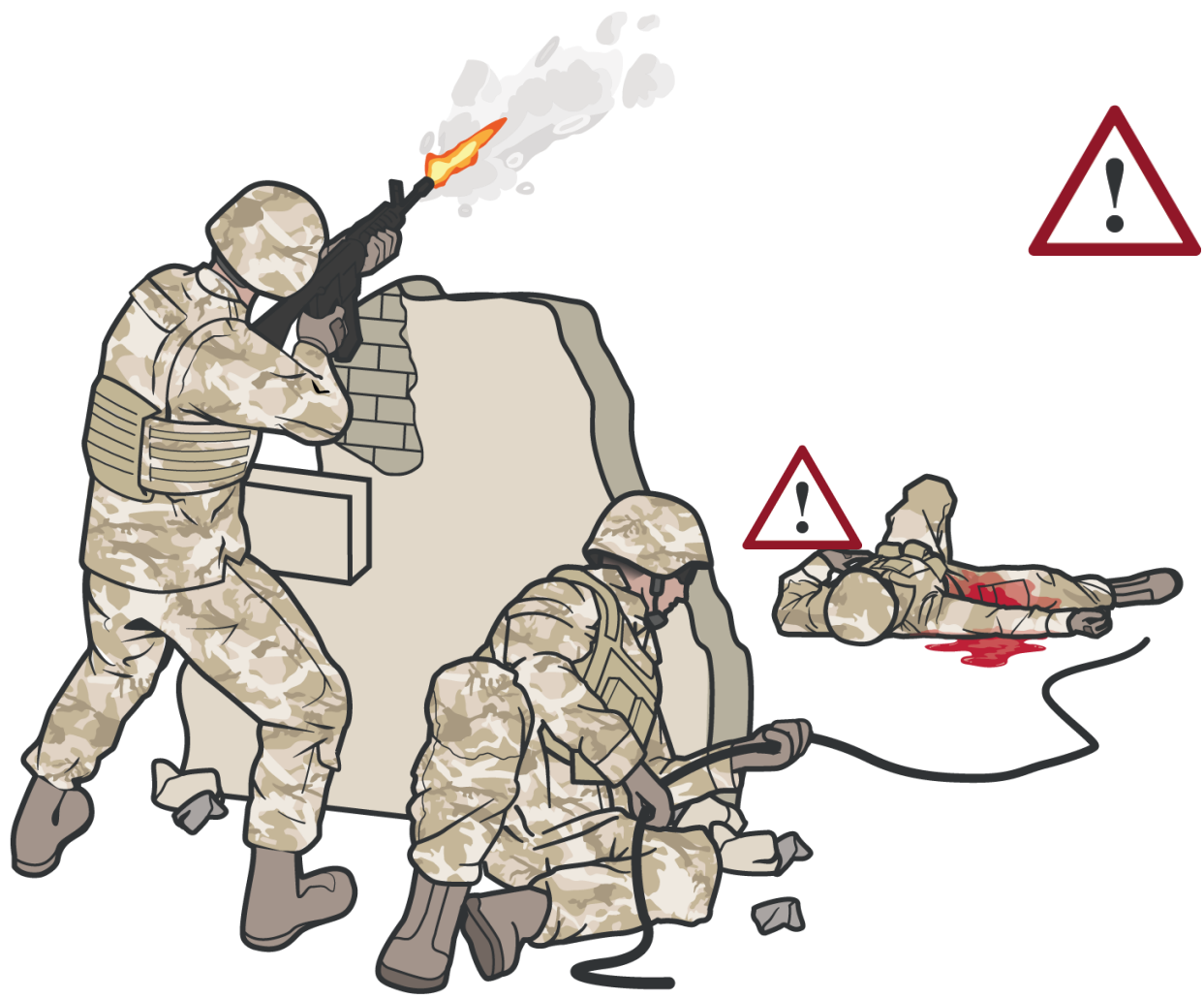


Have casualty **move to cover** and **apply self-aid**



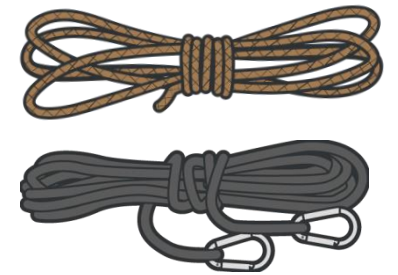
For life-threatening bleeding, place a tourniquet (TQ) "high and tight" above the wound

IF CASUALTY IS UNABLE TO MOVE



IF CASUALTY IS UNABLE TO MOVE to cover, when **tactically feasible** (ideally, fire has been **SUPPRESSED** and fire superiority has been **gained**), devise and execute a plan to get them out of the kill zone

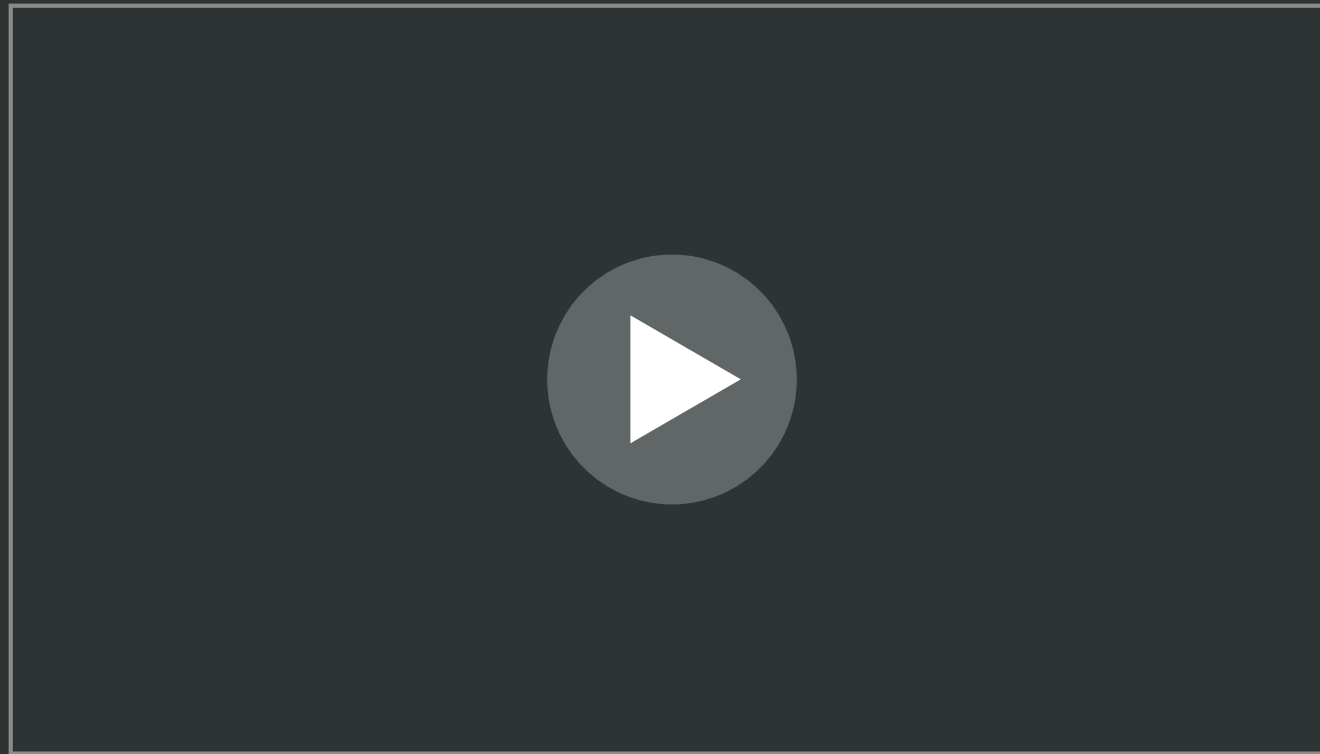
Consider using items such as **rope and dragging straps** to avoid making responders leave cover to care for the casualty





MASSIVE BLEEDING
in CARE UNDER FIRE

CARE UNDER FIRE OVERVIEW

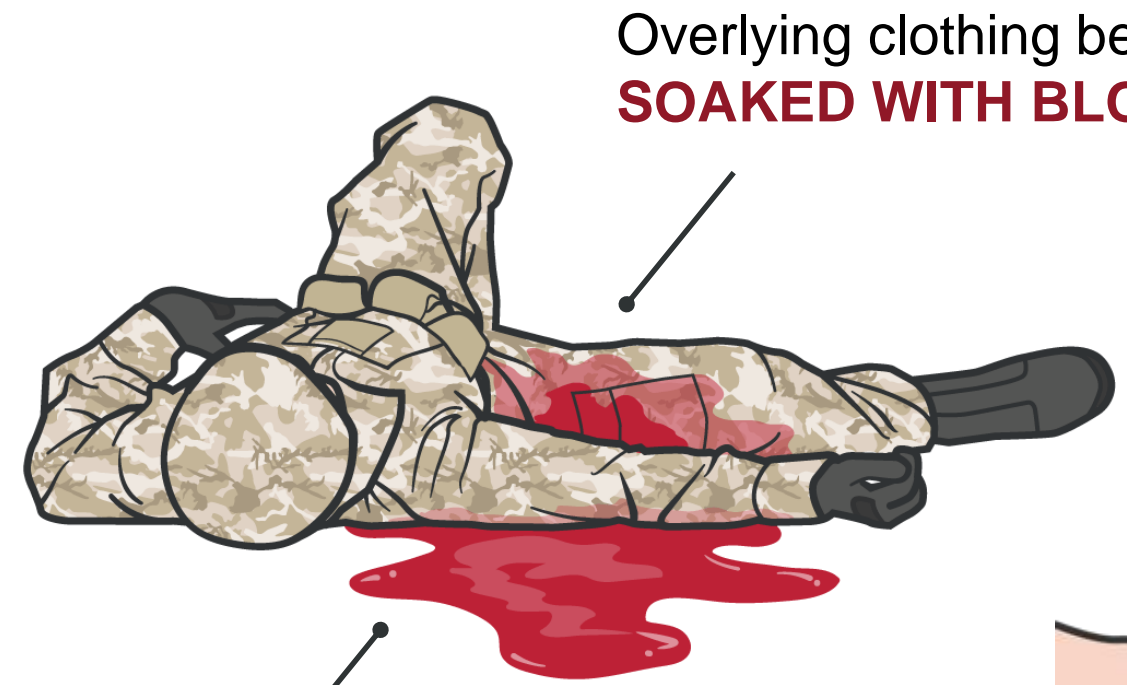


Video can be found on deployedmedicine.com

IDENTIFY LIFE-THREATENING BLEEDING VISUAL BLOOD SWEEP



Traumatic
AMPUTATION of
the arm or leg



BRIGHT RED BLOOD
pooling on the ground

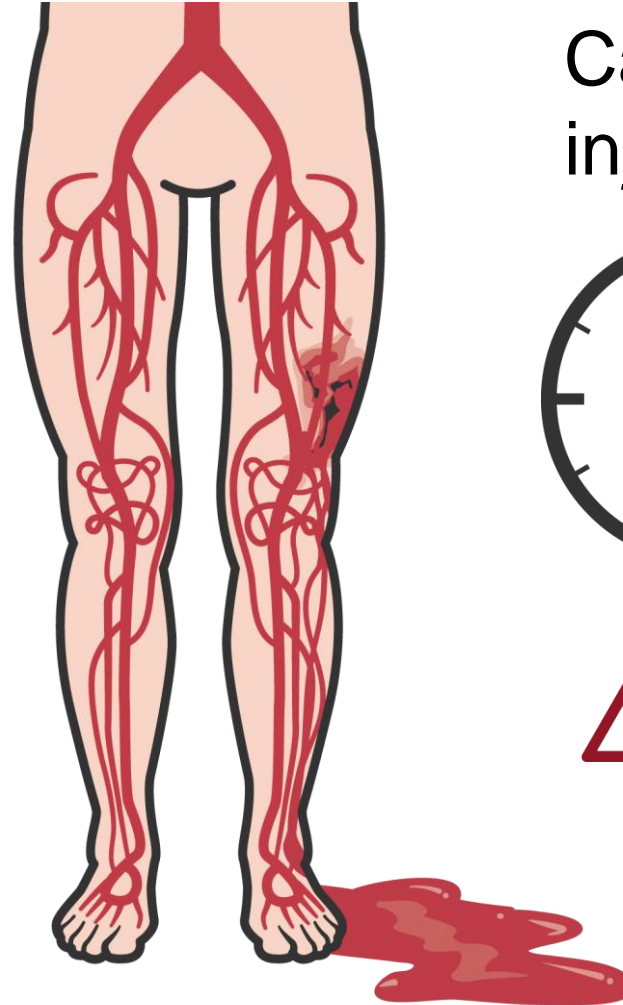
Overlying clothing becoming
SOAKED WITH BLOOD



PULSING or
STEADY BLEEDING
from the wound

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



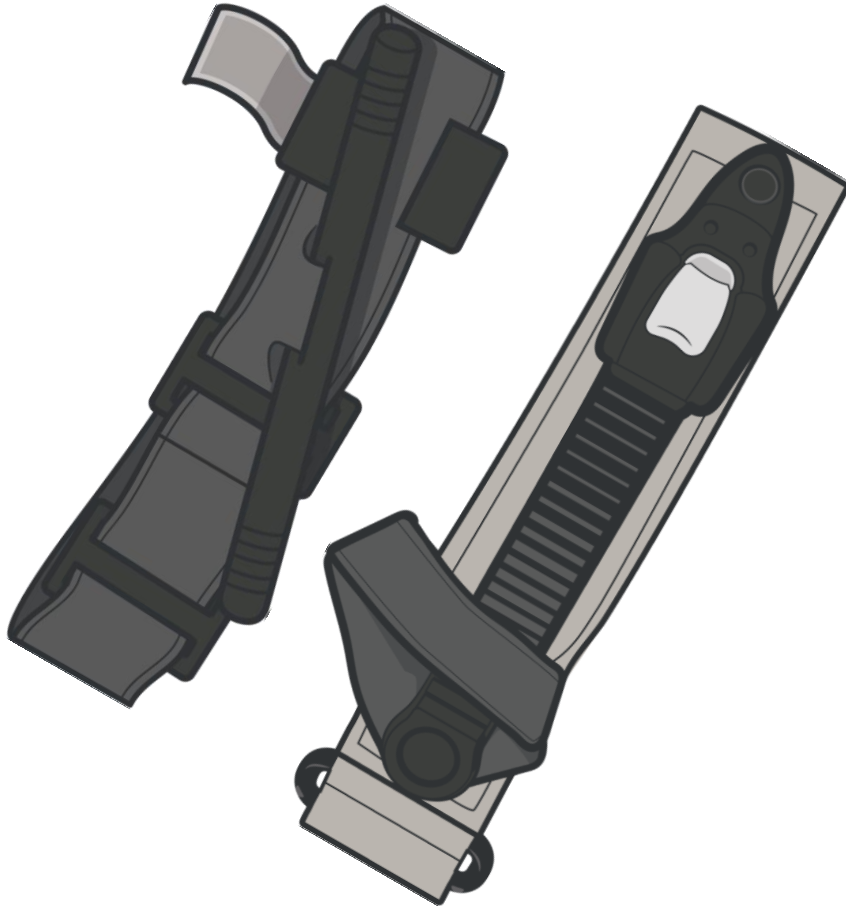
**THREE
MINUTES**
or less



**LIFE-THREATENING BLEED
SUSPECTED, TREAT IT!**

TOURNIQUET APPLICATION

CRITICAL POINTS



- TQ used to control massive or life-threatening 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
- **Always** use the **casualty's TQ first**

KNOW WHERE TO FIND A TOURNIQUET

QUICK ACCESS IS KEY!

DON'T 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 CMC, you're expected to have immediate access to medical equipment



INDIVIDUAL Joint First Aid Kit (JFAK)

SELF-APPLICATION, ONE-HANDED TOURNIQUET



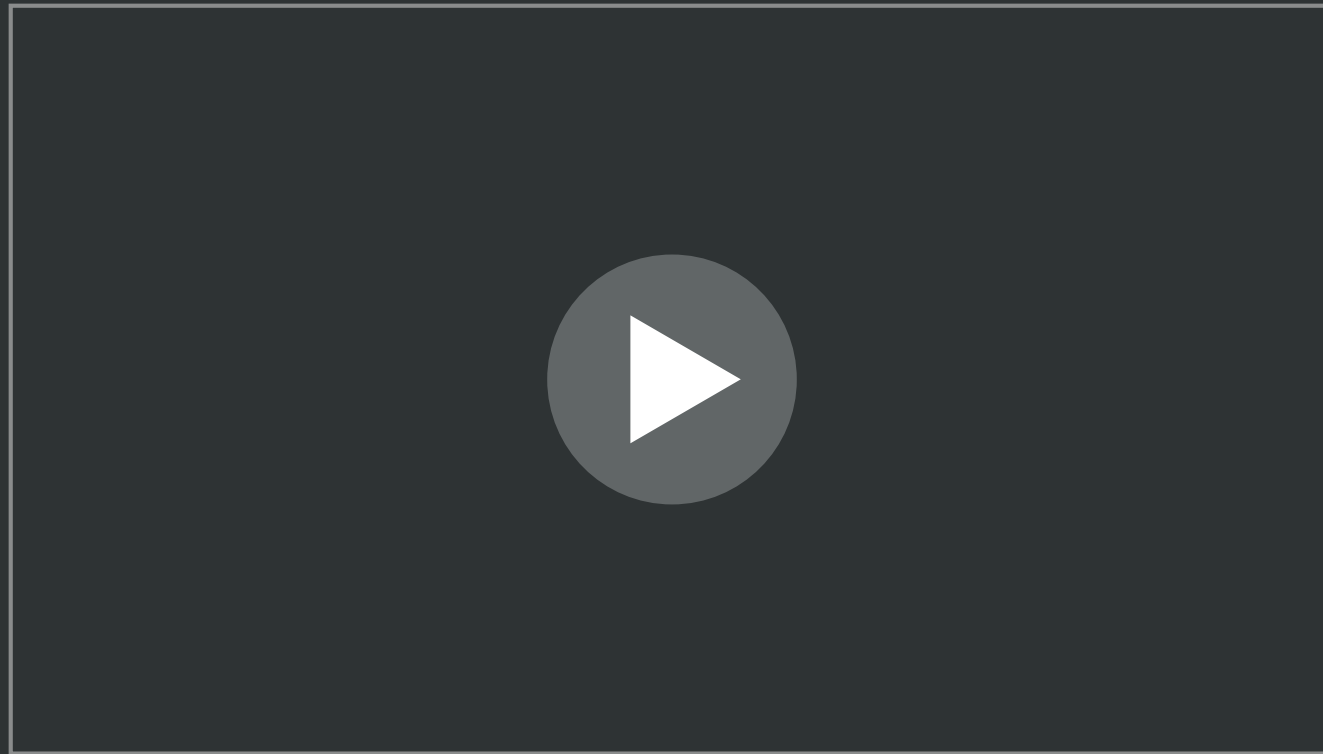
ONE-HANDED APPLICATION

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

WINDLASS and RATCHET TQs

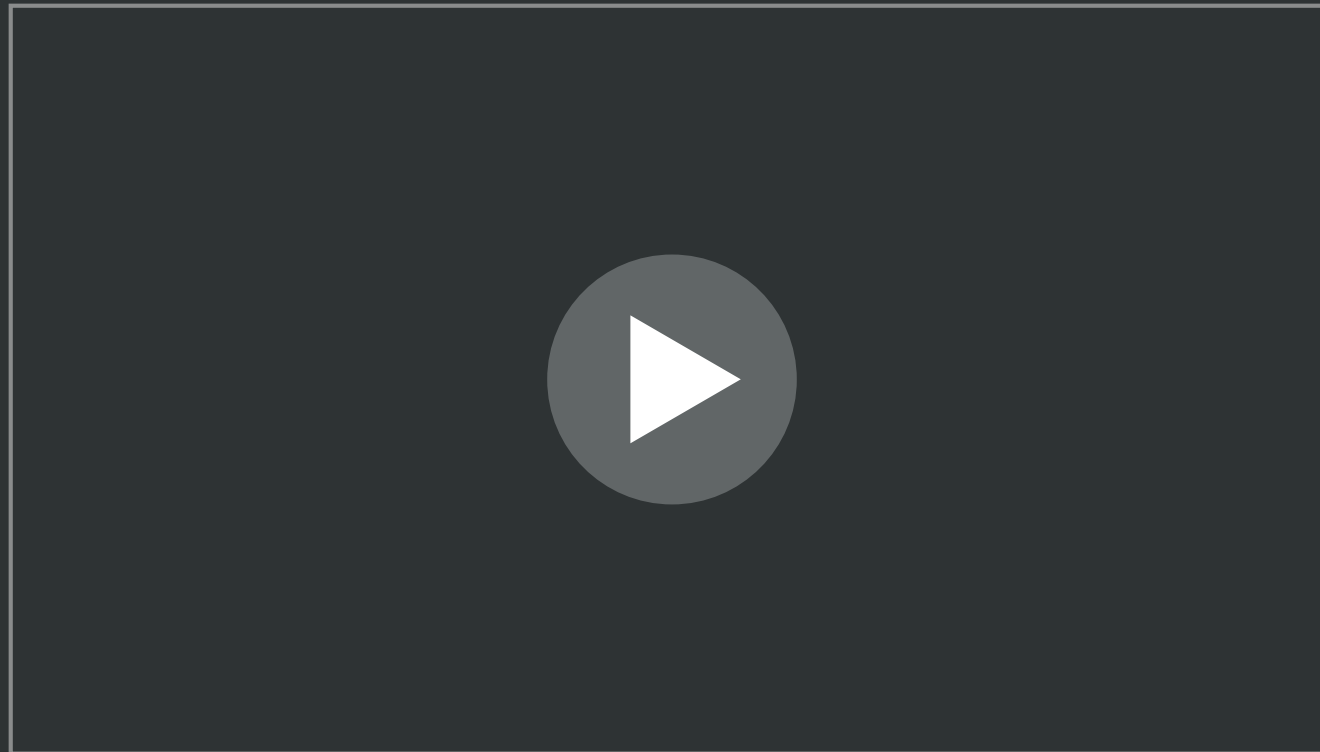
- Use the **windlass or ratchet** TQ from the JFAK
- They are **effective** and can be **applied quickly**

ONE-HANDED WINDLASS TOURNIQUET APPLICATION



Video can be found on deployedmedicine.com

ONE-HANDED RATCHET TOURNIQUET APPLICATION



Video can be found on deployedmedicine.com

CASUALTY SUPPORT WHEN UNRESPONSIVE OR UNABLE TO MOVE

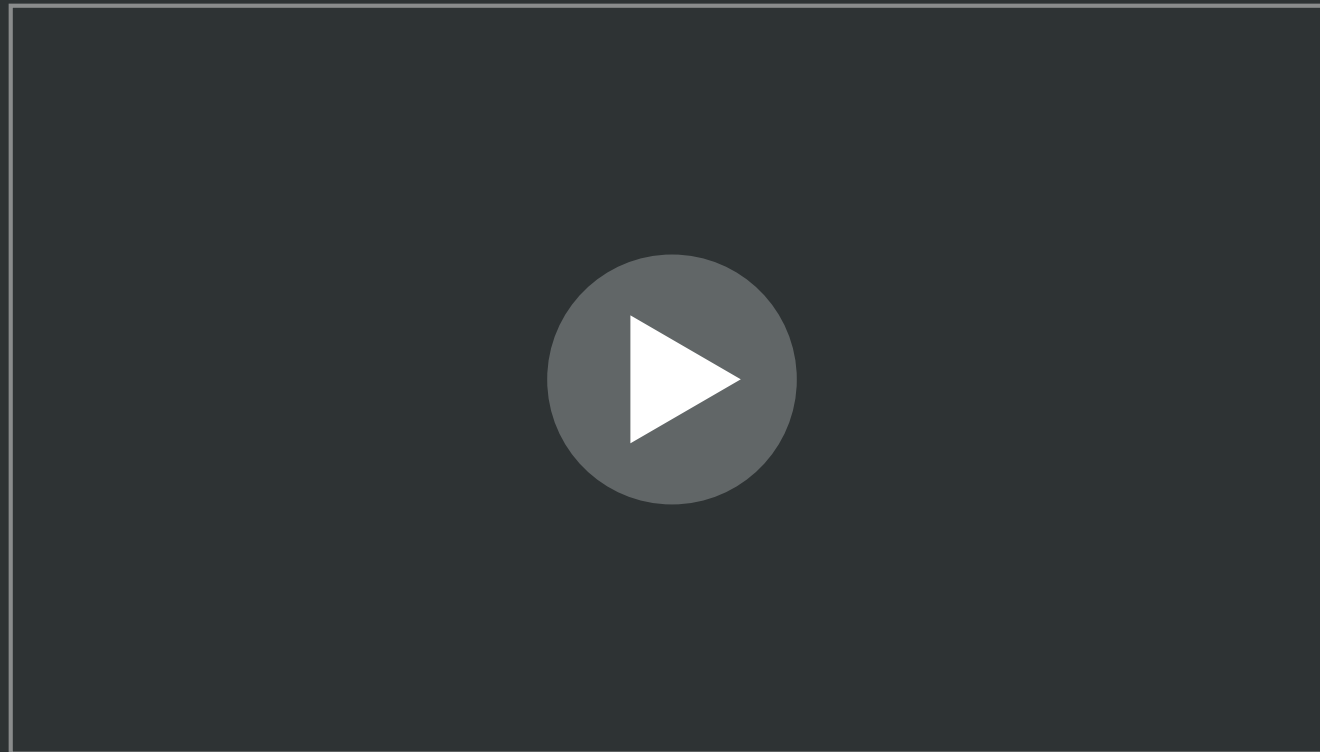


- EXERCISE CAUTION in approaching the casualty to avoid creating additional casualties
- Conduct a **VISUAL BLOOD SWEEP**, looking for major bleeding
- If extremity bleeding is observed, apply a hasty "high and tight" TQ using the two-handed method



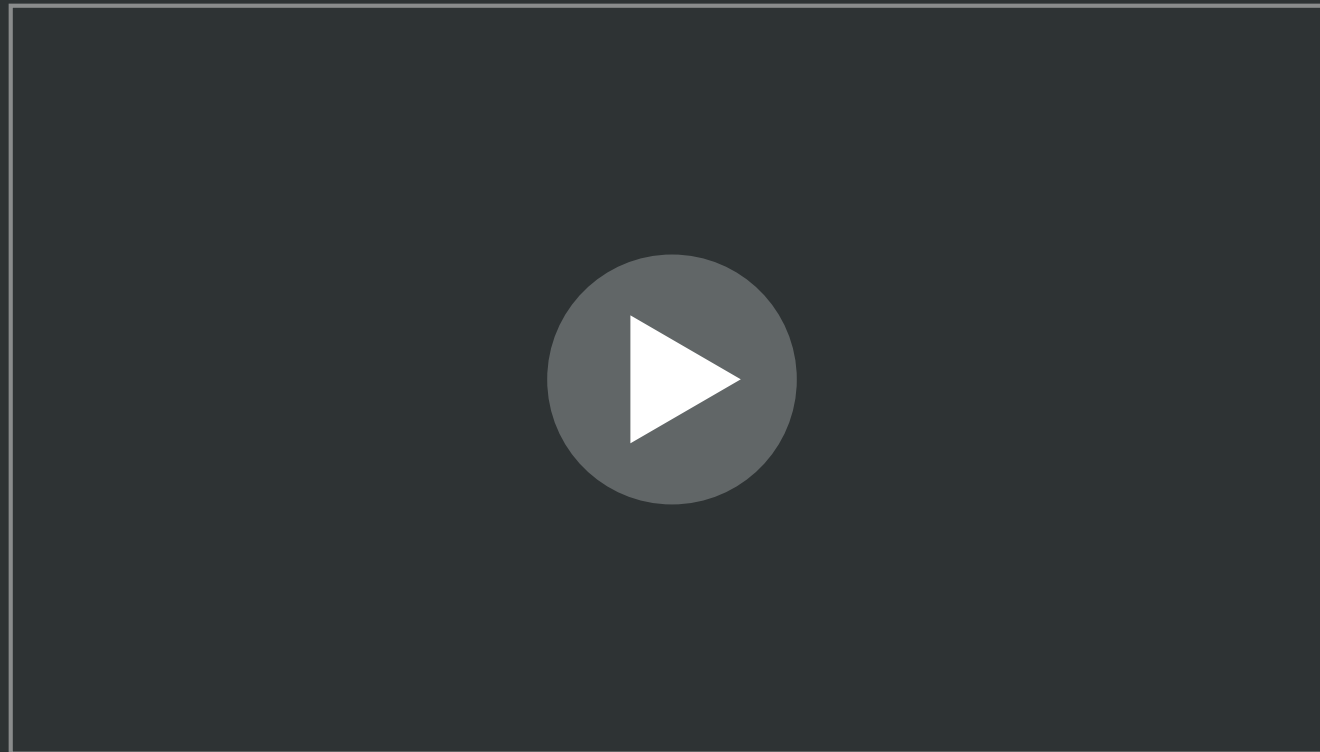
IMPORTANT CONSIDERATION:
When helping a casualty, use the TQ in the **casualty's JFAK first**

TWO-HANDED WINDLASS TOURNIQUET APPLICATION



Video can be found on deployedmedicine.com

TWO-HANDED RATCHET TOURNIQUET APPLICATION



Video can be found on deployedmedicine.com

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 two-person drag/carry
- When moving casualties, spinal injuries are not a priority during CUF



ONE-PERSON DRAGS AND CARRIES



SUPPORT CARRY
Used only for a conscious casualty



PACK-STRAP CARRY
Best option for moderate distances,
with unconscious casualty

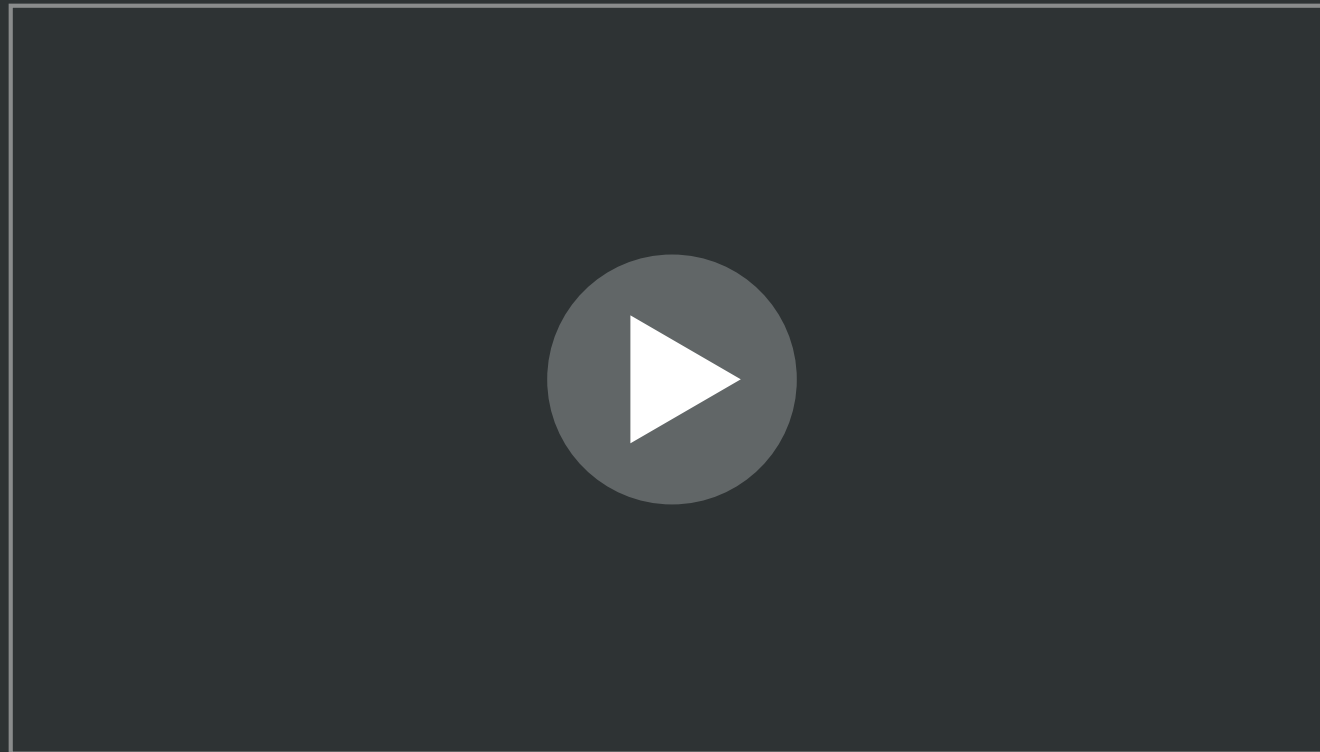


KIT OR ARM DRAG
Grab the **complete kit** or use the body armor **drag handle**, no additional equipment is required



NECK DRAG
Best option for limiting the casualty
and rescuer from enemy fire exposure

ONE PERSON CASUALTY DRAG/CARRY



Video can be found on deployedmedicine.com

TWO-PERSON DRAGS AND CARRIES



TWO-PERSON SUPPORTING CARRY

Can be used in transporting both conscious and unconscious casualties



KIT OR ARM DRAG

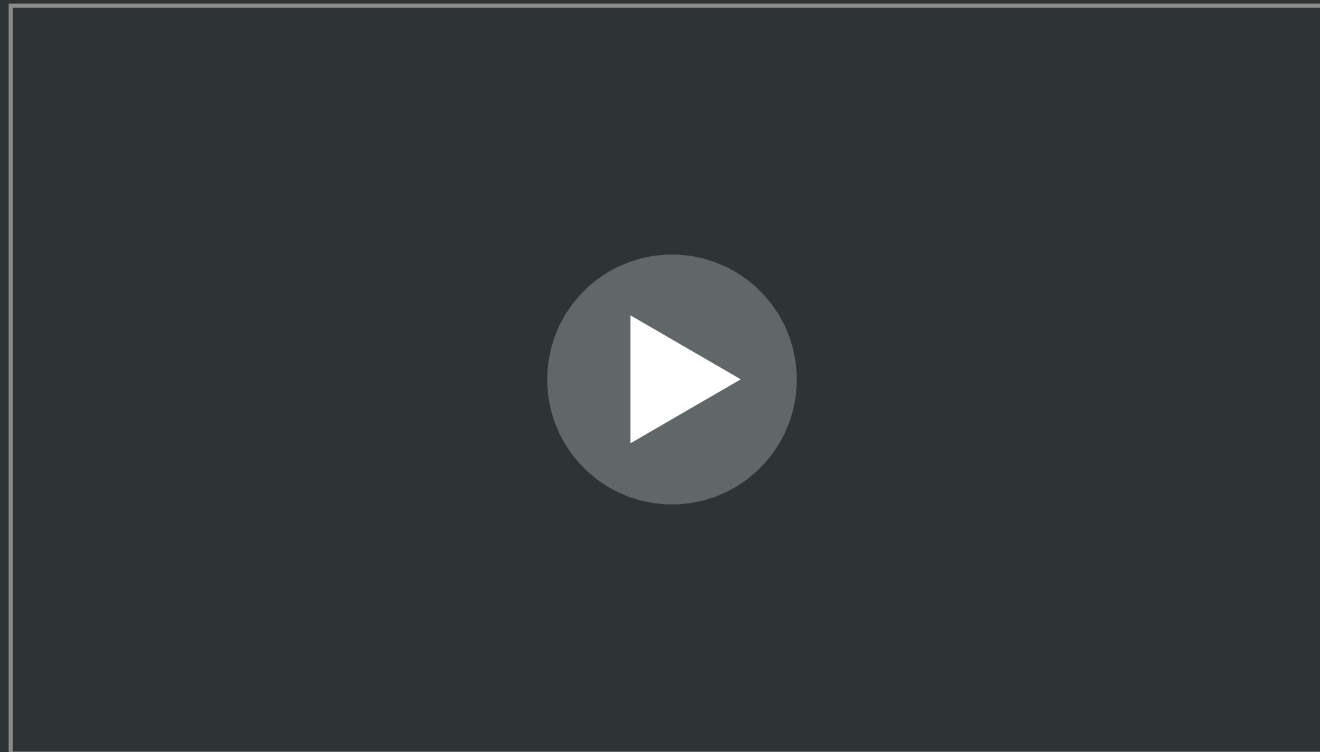
Can cause injury to either the rescuer or casualty; keep safety in mind



FORE AND AFT CARRY

Exposes both rescuers and casualty to hostile fire



TWO PERSON CASUALTY DRAG/CARRY



Video can be found on deployedmedicine.com

SKILL STATION

Drag/Carry Skills

-  One-person Drag/Carry
-  Two-person Drag/Carry

SUMMARY

What is **CARE UNDER FIRE?**

The importance of **FIRE SUPERIORITY**

Casualty **TREATMENT PRIORITIES** in CUF

MASSIVE HEMORRHAGE CONTROL in CUF

CASUALTY MOVEMENT in CUF,
including the advantages and disadvantages of
one- and two-person drag/carry methods

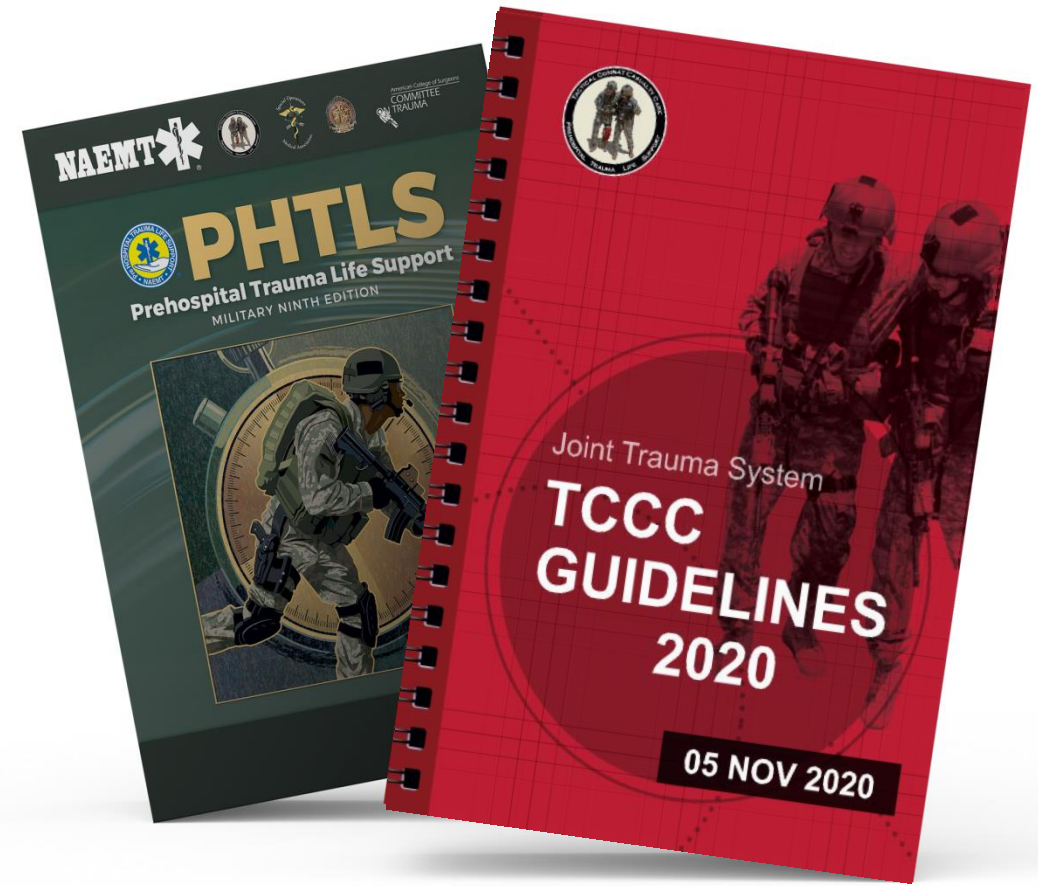
CHECK ON LEARNING

- ✓ What is CUF?
- ✓ 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?



ANY QUESTIONS?

REFERENCES



TCCC: Guidelines

by JTS/CoTCCC

The latest edition is dated 05 November 2020. 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.