

# TACTICAL COMBAT CASUALTY CARE COURSE

## MODULE 09: CIRCULATION / HEMORRHAGE CONTROL



Committee on  
Tactical Combat  
Casualty Care  
(CoTCCC)

**TCCC TIER 1**  
All Service Members

**TCCC TIER 2**  
Combat Lifesaver

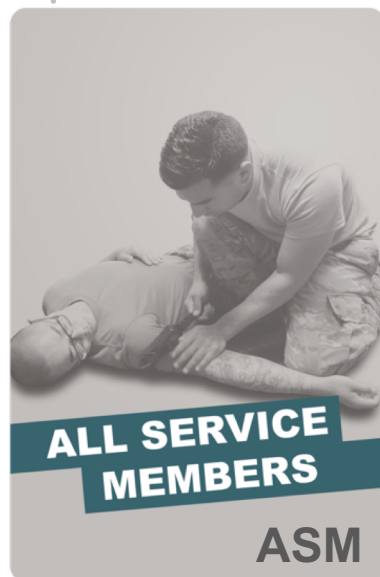
**TCCC TIER 3**  
Combat Medic/Corpsman

**TCCC TIER 4**  
Combat Paramedic/Provider

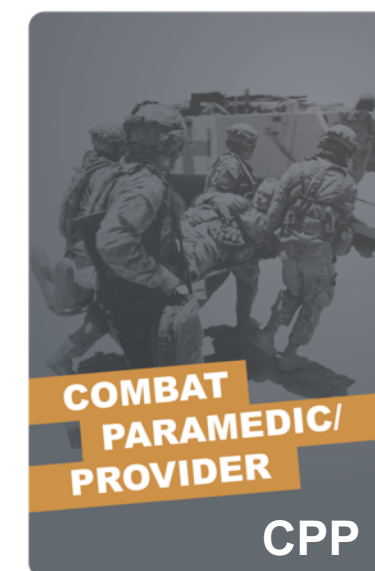
# TACTICAL COMBAT CASUALTY CARE (TCCC) ROLE-BASED TRAINING SPECTRUM

## ROLE 1 CARE

### NONMEDICAL PERSONNEL



### MEDICAL PERSONNEL



◀ **YOU ARE HERE**

STANDARDIZED JOINT CURRICULUM

# TERMINAL LEARNING OBJECTIVE

## 10 Given a combat or noncombat scenario, perform hemorrhage control during Tactical Field Care in accordance with CoTCCC Guidelines

- 59 Identify the principles of wound packing and applying pressure bandages
- 60 Demonstrate wound packing and applying a pressure bandage
- 61 Identify progressive strategies, indications, and limitations of controlling external hemorrhage in Tactical Field Care
- 62 Identify the signs, symptoms, and considerations of a pelvic fracture

## 4 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!**



# 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

# HEMORRHAGE CONTROL IN TFC



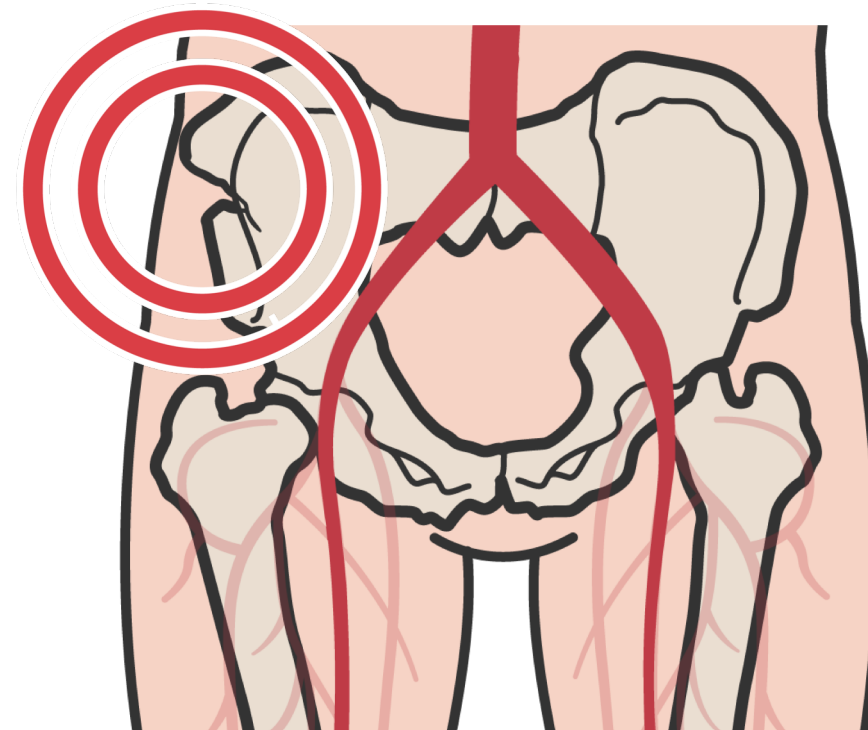
Video can be found on [DeployedMedicine.com](https://www.deployedmedicine.com)

## PELVIC FRACTURES

Pelvic fracture may be **suspected** if the casualty's injuries are a result of blunt force or blast with **ONE OR MORE** of the following:

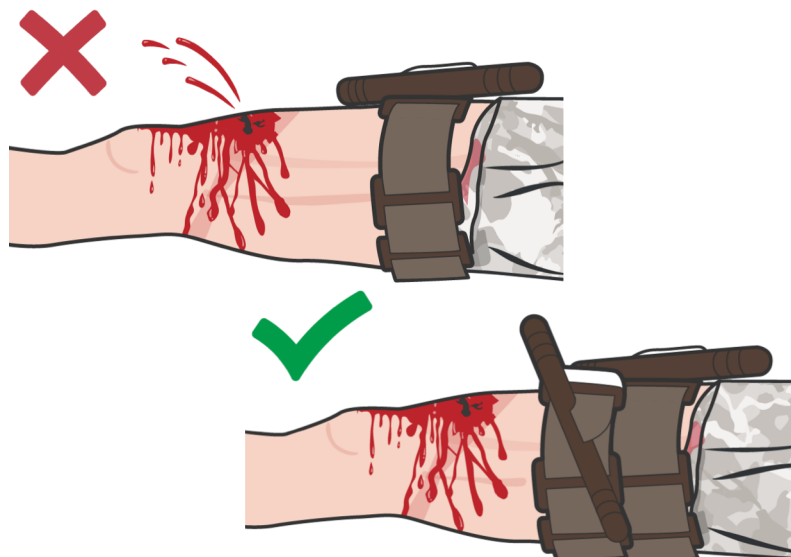
Physical signs suggesting a pelvic fracture:

- **Pelvic pain**
- Major lower limb **amputation** **OR** lower **near amputations**
- Deformities, penetrating injuries, bruising near the pelvis
- **Pelvic instability** or **crepitus** (crinkly or grating feeling or sound under the skin)
- **Unconsciousness** or **shock**



If a pelvic fracture is **suspected**, the casualty **WILL REQUIRE** advanced evaluation by **medical personnel**

## REASSESSMENT



- Reassess all **PREVIOUS** and **CURRENT** hemostatic dressings applied and ensure they are tight and effective
- If **ineffective**, apply a second TQ **side-by-side** with the first
- Reassess all **PREVIOUS** and **CURRENT** hemostatic dressings applied for **effectiveness**
- If you placed a TQ above a casualty's elbow, for instance, you should expect to **find no pulse** at the wrist below if the TQ was properly applied



## STRATEGIES AND LIMITATIONS

### EARLY CONTROL OF SEVERE HEMORRHAGE IS CRITICAL

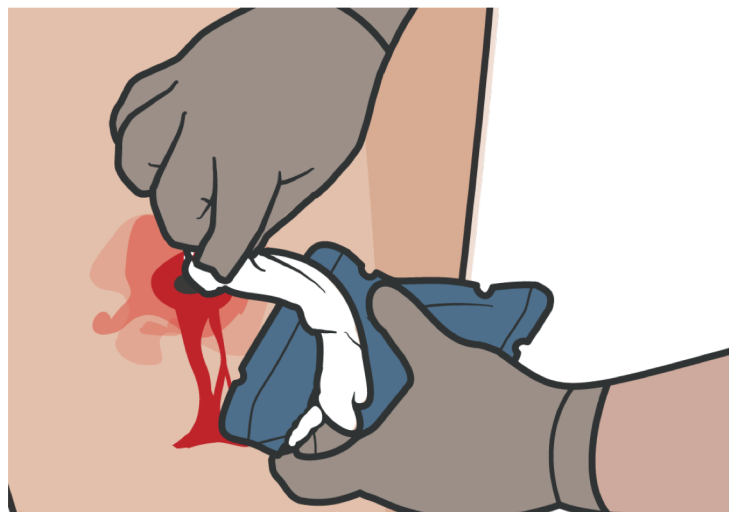
CoTCCC-recommended hemostatic dressings are to be applied **directly to the skin** in **TFC 2-3 inches above the bleeding site**

Casualty's hemorrhage control interventions **must be FREQUENTLY REASSESSED** to ensure continued hemorrhage control

**DO NOT EVER APPLY IT  
AND FORGET IT!**



## WOUND PACKING and PRESSURE DRESSING



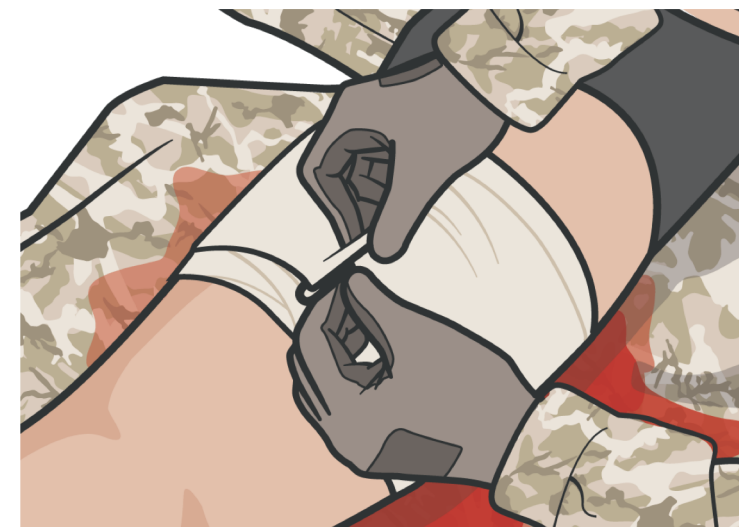
Identify the **exact source** of bleeding

**Pack** the wound



Apply direct pressure for

**3 MINUTES**



**Secure** the bandage

If the bandage has a pressure bar, **pull the bandage TIGHT**, and reverse it back over the top of the pressure bar, **forcing** it **down** onto the pad



# HEMORRHAGE CONTROL

## WOUND PACKING



Identify the **exact source** of bleeding and **APPLY** direct pressure as a **temporary** measure **UNTIL** gauze is placed

Pack the wound **maintaining** **CONSTANT** direct pressure at the source of bleeding within **90 SECONDS** to be effective



**HOLD** direct pressure on the gauze over the wound for at least **3 MINUTES** (this is **necessary**, even with the active ingredient in hemostatic dressings)

When packing a large wound, more than one hemostatic gauze and/or **additional** gauze may be **needed**

Carefully **observe** to determine if bleeding has been **controlled**

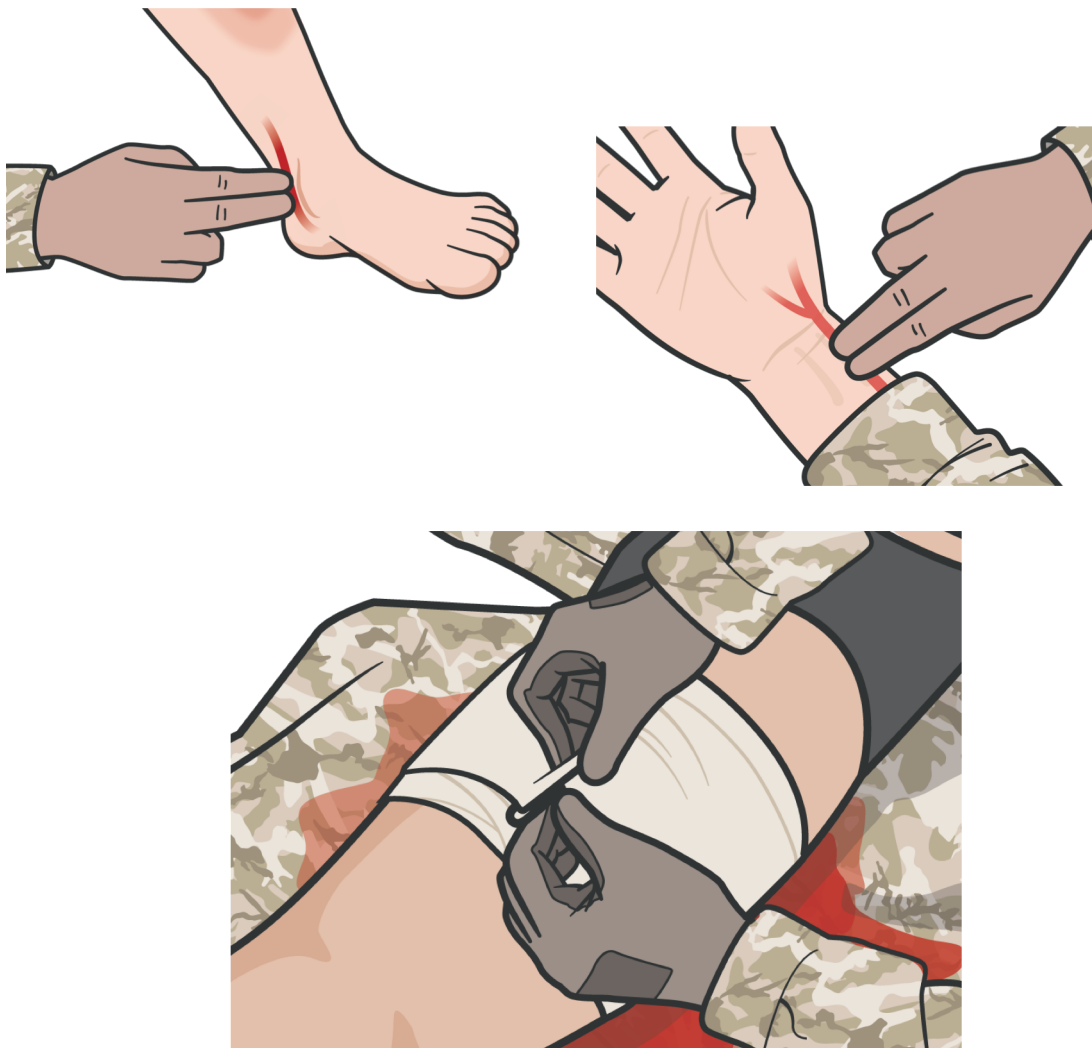


Once you are sure the bleeding has **stopped**, apply a pressure bandage





## PRESSURE BANDAGE **REASSESSMENT**



### Key Points:

Check for **circulation BELOW** the pressure bandage by **feeling for distal pulse** (a pulse below the bandage)

If the **skin BELOW** the pressure bandage becomes **cool** to the touch, **bluish**, or **numb**, or if the **pulse** below the pressure dressing is **no longer present**, the pressure bandage may be **too tight**

If circulation is **BLOCKED** or **STOPPED**, **loosen** and **retie** the bandage

Dressings and bandages should be **reassessed** and checked **routinely** and **EVERY TIME** a **casualty is moved**

## IF THE PRESSURE BANDAGE IS **INEFFECTIVE**



If the pressure bandage or hemostatic dressing is **ineffective**, **APPLY** a hemostatic dressing 2-3 inches **above** the bleeding site

If the pressure bandage is **ineffective AND/OR blood soaked**, **REPLACE** pressure dressing with **hemostatic dressing**

Pack the wound, **maintaining CONSTANT** direct pressure at the source of bleeding within **90 SECONDS** to be effective

# PRESSURE BANDAGE



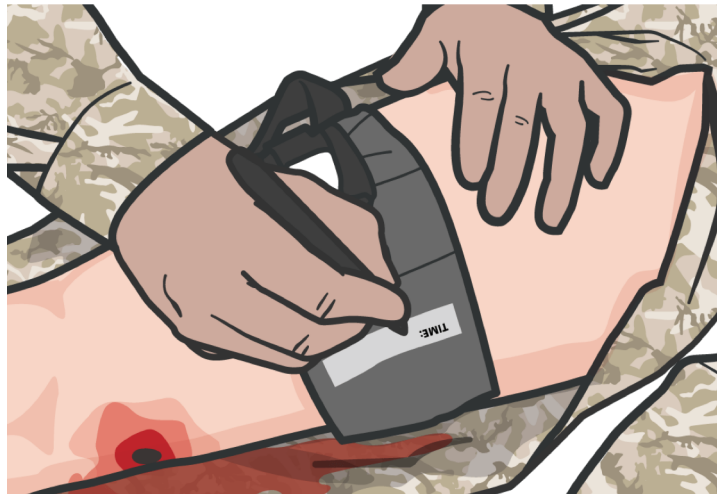
Video can be found on [DeployedMedicine.com](https://www.deployedmedicine.com)

# SKILL STATION

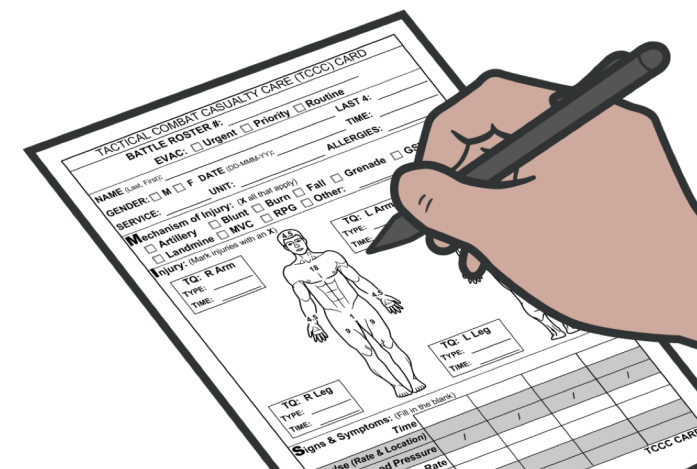
## Circulation/Hemorrhage Control (Skills)

- Wound Packing With Hemostatic Dressing and Pressure Bandage

## SUMMARY



- If not already done, **clearly mark ALL TQs** with the **time** of TQ application and document that on the **DD Form 1380 TCCC Casualty Card**
- Check for radial pulse
- Assess for shock



# CHECK ON LEARNING

- During Circulation in the MARCH PAWS sequence, what interventions should be reassessed?
- What are the signs and symptoms of a pelvic fracture?

# ANY QUESTIONS?