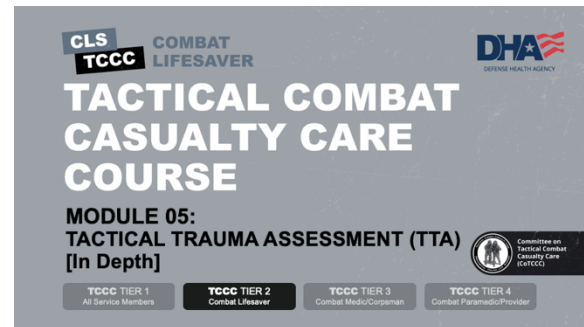


## MODULE 05 – TACTICAL TRAUMA ASSESSMENT

### SLIDE 1 – TITLE SLIDE

This module is an overview of tactical trauma assessment (TTA). The skills practice will take place near the end of the course after you have learned ALL of the skills.



### SLIDE 2 – TCCC ROLES

Tactical Combat Casualty Care is broken up into four roles of care. The most basic is taught to All Service Members (ASM), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

You are in the Combat Lifesaver (CLS) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.



The Combat Medic/Corpsman (CMC) role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, Combat Paramedic/Provider (CPP) is for Combat paramedics and advanced providers, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a CLS is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

### SLIDE 3 – TLO/ELO

The Tactical Trauma Assessment (TTA) module has three cognitive learning objectives and five performance learning objectives. The cognitive learning objectives are to identify the:

1. Common causes of altered mental status in combat or noncombat environments
2. Importance of disarming and securing communications equipment of a casualty with altered mental status
3. Importance and techniques of communicating with a casualty in TFC

The performance learning objectives are to demonstrate:

STUDENT LEARNING OBJECTIVES

**TERMINAL LEARNING OBJECTIVE**

06 Given a combat or noncombat scenario, perform a Tactical Trauma Assessment (TTA) in accordance with CoTCCC Guidelines.

- 29 Demonstrate the techniques used to assess a casualty for responsiveness.
- 30 Identify the common causes of altered mental status in combat or noncombat environments
- 31 Identify the importance of disarming and securing communications equipment of a casualty with altered mental status
- 32 Identify the importance and techniques of communicating with a casualty in TFC
- 33 Demonstrate communicating with a casualty in TFC
- 34 Demonstrate application of body substance isolation (BSI) in TFC
- 35 Demonstrate a TTA in the proper order using the MARCH PAWS sequence in accordance with CoTCCC Guidelines
- 36 Demonstrate the appropriate actions and interventions used during a casualty assessment to render aid to the casualty in accordance with CoTCCC Guidelines

**8 ENABLING LEARNING OBJECTIVES (ELOs)**

● Cognitive ELOs ● Performance ELOs

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1. Techniques used to assess a casualty for responsiveness
2. Communication with a casualty in Tactical Field Care
3. Application of body substance isolation (BSI) in TFC
4. TTA in the proper order using the MARCH PAWS sequence in accordance with CoTCCC guidelines
5. Appropriate actions and interventions used during a casualty assessment to render aid to the casualty in accordance with CoTCCC Guidelines.

The critical aspects are to identify the importance of and demonstrate the systematic approach for assessment and interventions in providing lifesaving care to a casualty following the MARCH PAWS sequence in accordance with the CoTCCC guidelines.

## SLIDE 4 – MARCH PAWS

A full tactical trauma assessment should follow the MARCH PAWS sequence.

- **M**assive bleeding
- **A**irway
- **R**espiration/breathing
- **C**irculation
- **H**ypothermia/**H**ead injuries
- **P**ain
- **A**ntibiotics
- **W**ounds
- **S**plinting

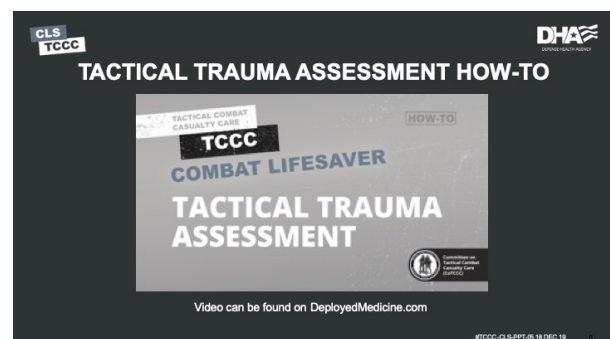


We will cover the interventions and procedures of MARCH PAWS in more detail in later modules.

## SLIDE 5 – TACTICAL TRAUMA ASSESSMENT HOW-TO (VIDEO)

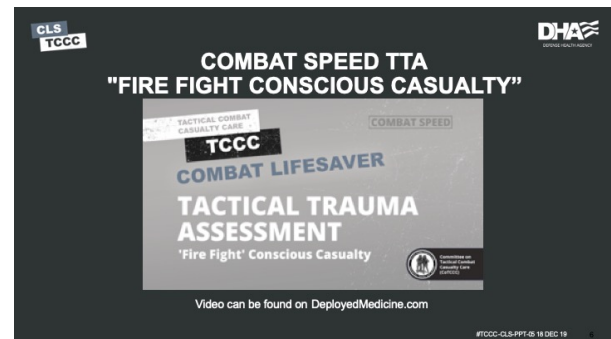
*Play video*

Pay attention to this video. You will be expected to perform a full TTA upon completion of this training.



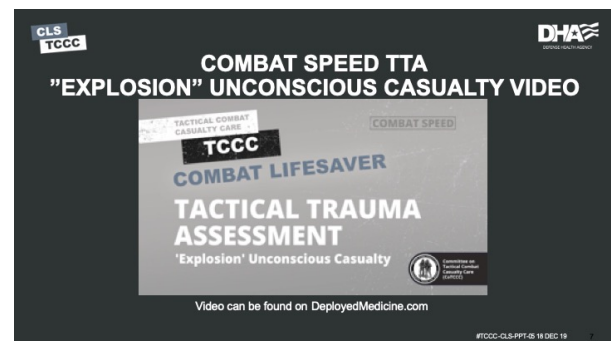
## SLIDE 6 – COMBAT SPEED TTA "FIRE FIGHT CONSCIOUS CASUALTY" (VIDEO)

*Play video*



## SLIDE 7 – COMBAT SPEED TTA "EXPLOSION" UNCONSCIOUS CASUALTY (VIDEO)

*Play video*



## SLIDE 8 – BODY SUBSTANCE ISOLATION (BSI)

Whenever possible, the responder/CLS should don latex-free gloves as a BSI precaution.

Gloves are provided in the JFAK and CLS bags.



Whenever possible, the responder should don **latex-free** gloves as a precaution

## SLIDE 9 – CASUALTY BLOOD SWEEP

Your initial casualty evaluation should be a rapid head-to-toe check for any unrecognized life-threatening bleeding (a blood sweep).

This blood sweep should include a visual and hands-on (palpation) inspection of the front and back of the casualty from head to toe, including neck, armpits, groin, etc.

CLS  
TCCC

### CASUALTY BLOOD SWEEP

Your initial casualty evaluation should be a rapid head-to-toe check for any unrecognized life-threatening bleeding

- Check the neck, axillary (armpit), inguinal (groin)
- Check the legs, arms, abdomen, chest (in raking motion) and back



DHA  
DEFENSE HEALTH AGENCY

## SLIDE 10 – QUICKLY IDENTIFY MASSIVE, LIFE-THREATENING BLEEDING

This blood sweep is a systematic way to ensure rapid identification of any unrecognized life-threatening bleeding.

CLS  
TCCC

### MASSIVE BLEEDING

#### QUICKLY IDENTIFY

#### MASSIVE, LIFE-THREATENING BLEEDING

**BRIGHT RED BLOOD** is pulsing or spurting, or there is steady bleeding from the wound



Overlying clothing or ineffective bandaging is becoming **SOAKED WITH BLOOD**



**BRIGHT RED BLOOD** is pooling on the ground



**AMPUTATION** of the arm or leg



**IMPORTANT!** Casualties with severe injuries can bleed to death in **as little as 3 minutes**



**MARCH**

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## SLIDE 11 – HEMORRHAGE CONTROL

If you identify life-threatening bleeding that was missed in the Care Under Fire phase, immediately apply a tourniquet or hemostatic dressing, and/or pressure dressing.

If a tourniquet was previously applied but bleeding is not controlled, apply a second tourniquet side-by-side with the original tourniquet, preferably higher on the injured limb, if possible, to control the bleeding. This is the “**M**” of MARCH PAWS.

CLS  
TCCC

### MASSIVE HEMORRHAGE CONTROL IN TFC

#### HEMORRHAGE CONTROL

Assess for other sources of hemorrhage and control all life-threatening bleeding



If not already done, where appropriate, use a CoTCCC-recommended limb tourniquet (TQ) to control life-threatening external hemorrhage, applying it 2-3 inches above the source of bleeding, directly on the skin



Reassess CUF interventions, and if bleeding is not controlled with the first TQ, apply a second TQ side-by-side with the first

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## SLIDE 12 – IDENTIFYING OBSTRUCTED AIRWAY

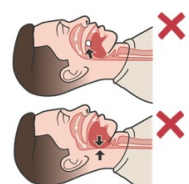
Evaluate the casualty's airway and ensure the airway is open. **LOOK** (for rise and fall of the chest), **LISTEN** (for sounds of breathing), and **FEEL** (breath on your cheek) for indications of trouble breathing, snoring or gurgling sounds, visible objects obstructing the airway, and any severe trauma to the face.

**Do not do a blind finger sweep.**

CLS  
TCCC

### AIRWAY MANAGEMENT

#### IDENTIFYING OBSTRUCTED AIRWAY



**IMPORTANT!** Remove any visible objects, but do not perform a blind finger sweep

**MARCH**

#### SIGNS AND SYMPTOMS AIRWAY MAY BE BLOCKED:

- Casualty is in distress and indicates they can't breathe properly
- Casualty is making snoring or gurgling sounds
- Visible blood or foreign objects are present in the airway
- Maxillofacial trauma (severe trauma to the face) is observed

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## SPEAKER NOTES

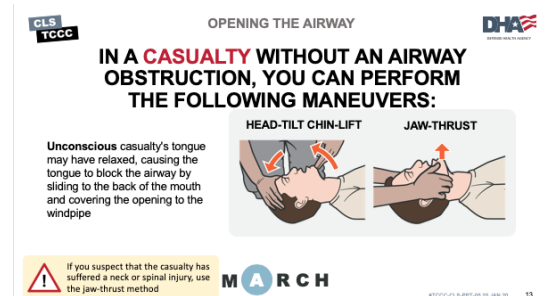
### SLIDE 13 – IN A CASUALTY WITHOUT AN AIRWAY OBSTRUCTION, YOU CAN PERFORM THE FOLLOWING MANEUVERS TO OPEN THE AIRWAY

If a casualty is unconscious, the tongue may have relaxed, causing an airway blockage. Use the head-tilt chin-lift or jaw-thrust method to open the airway.

**Important note:** If a neck or spinal injury is suspected, use the jaw-thrust method to open the airway.

This is the first “A” of MARCH PAWS.

**NOTE:** Once the airway has been opened using one of these maneuvers, the casualty may require repeated/continued maneuvers to maintain an open airway.

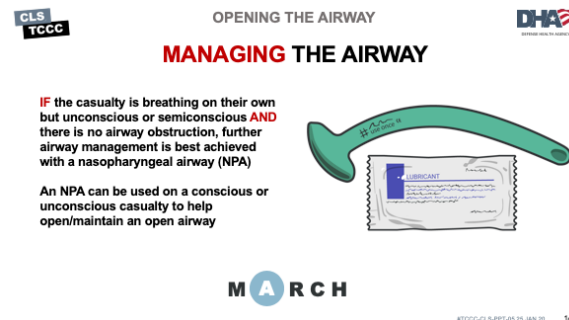


### SLIDE 14 – MANAGING THE AIRWAY

If the casualty is unconscious or semiconscious but breathing on their own AND you do not identify an airway obstruction, you may be able to better support airway management through the use of a nasopharyngeal airway (NPA). This can help open/maintain a conscious or unconscious casualty's airway.

Note any clear fluid coming from the nose or ears. This may be cerebrospinal fluid, which indicates a possible skull fracture. Do not attempt to place an NPA if clear fluid is coming from the nose or ears.

If airway maneuvers and nasopharyngeal airway are ineffective at opening or maintaining an open airway, notify medical personnel.



### SLIDE 15 – MANAGEMENT/RECOVERY POSITION

If the casualty is **conscious**, allow them to assume any position that best protects the airway and allows them to breath easily, including sitting up.

Place an **unconscious casualty** in the recovery position. If an NPA was inserted into the right nostril, place the casualty on their right side, if possible.





## SLIDE 16 – RESPIRATIONS

**LOOK** (for rise and fall of the chest), **LISTEN** (for sounds of breathing), and **FEEL** (breath on your cheek) for indications of trouble breathing (as noted for airway previously).

Respiration rate (breaths per minute) and quality (shallow, labored, etc.) should be noted.

Indications of respiratory distress include:

- Breathing that is progressively difficult
- Decreased breathing sounds
- Distended neck veins
- Opposed to “progressive” respiratory distress
- Hunched over; they need to be in the “position of comfort”
- Agitation due to a lack of oxygen
- High pulse

This is the “R” of MARCH PAWS.

## SLIDE 17 – LIFE-THREATENING CHEST INJURY

Common causes of chest injuries include gunshot, stab, or shrapnel wounds to chest and blunt-force trauma.

**Note** obvious signs of penetrating trauma, bruising, swelling, crackling/popping (on palpation), or other deformities of the chest. **Check** the casualty’s respiration and ability to breathe. All open and/or sucking chest wounds should be treated by immediately applying a vented chest seal to cover the defect.

For respiratory distress not resolved by a chest seal or in a casualty with known or suspected chest or back trauma without an open and/or sucking chest wound, consider a tension pneumothorax, and perform a needle decompression of the chest.

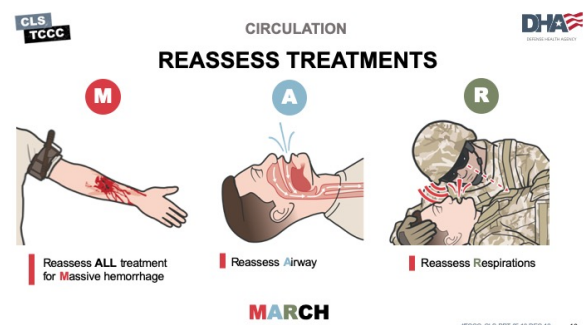
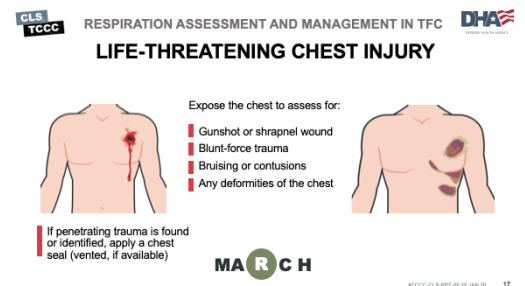
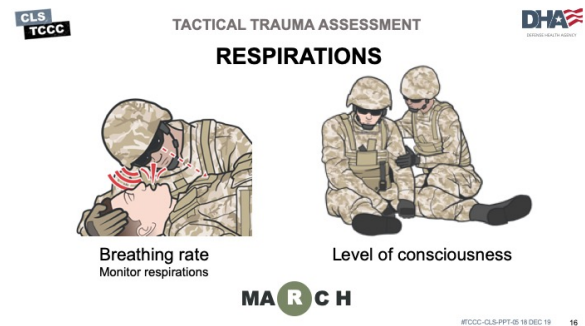
Injuries to the chest are very serious and can be life-threatening. The casualty’s condition can change quickly with a chest injury.

## SLIDE 18 – REASSESS TREATMENTS

This is the “C” in MARCH PAWS. The casualty should be reassessed for life-threatening hemorrhage (including effectiveness of prior interventions-TQs, pressure bandages, etc.).

Is there an obvious pelvic or femur fracture? If so, a medic should be informed immediately. Assess the radial pulse.

If the pulse is absent or weak, shock should be suspected and a medic should be informed immediately.



## SLIDE 19 – GENERAL INDICATOR OF SHOCK

The CLS should be familiar with the signs/symptoms of shock. In the combat environment, shock is assumed to be due to blood loss.

If untreated, shock could lead to death. If shock is suspected, a medic should be informed immediately.

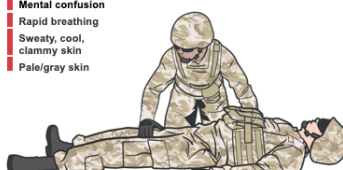
CLS  
TCCC

CIRCULATION

**GENERAL INDICATOR OF SHOCK**

SIGNS AND SYMPTOMS OF SHOCK INCLUDE:

- Mental confusion
- Rapid breathing
- Sweaty, cool, clammy skin
- Pale/gray skin
- Weak or absent radial pulse
- Nausea
- Excessive thirst
- Previous severe bleeding



**MARCH**

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## SLIDE 20 – HYPOTHERMIA PREVENTION

Prevent hypothermia by minimizing the casualty's exposure to the elements and applying active hypothermia prevention measures, when possible.

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. Make sure you assess for hemorrhagic shock and ensure bleeding is controlled.

CLS  
TCCC

HYPOTHERMIA

**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

**REMEMBER:**

Hypothermia is an issue even in hot environments and must be prevented



**MARCH**

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## SLIDE 21 – IF A PENETRATING EYE INJURY IS NOTED OR SUSPECTED

Perform rapid field test of visual acuity (e.g., read Meals Ready to Eat (MRE) label, or name tag).

If the casualty has any penetrating injuries, they should take the antibiotic in the Combat Wound Medication Pack (CWMP). Cover eye with rigid shield, not pressure patch. **Do not** cover both eyes unless both are injured and you are sure the casualty will not return to the fight.



CLS  
TCCC

EYE INJURIES

**IF A PENETRATING EYE INJURY IS NOTED OR SUSPECTED**

Do not cover both eyes unless both eyes are injured

In the absence of an eye shield, consider the use of tactical eye wear

**MARCH**

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## SLIDE 22 – COMBAT WOUND MEDICATION PACK

The CWMP contains drugs for mild to moderate pain (meloxicam and acetaminophen) and an antibiotic specific for penetrating wounds (moxifloxacin).

A CWMP can give significant pain relief for mild to moderate pain and will not alter the casualty's mental status. It also includes antibiotics for preventing/treating infections after traumatic injuries, such as penetrating wounds, eye injuries, and burns.

This is the "P" and "A" of MARCH PAWS.

CLS  
TCCC

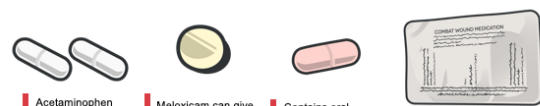
PENETRATING INJURIES

**COMBAT WOUND MEDICATION PACK (CWMP)**

Acetaminophen is used for pain management

Meloxicam can give significant pain relief and will not alter the casualty's mental status

Contains oral antibiotic medication moxifloxacin



**Remember:**

Found in JFAK

Document all medications administered (and time given) on DD Form 1380

**MARCH PAWS**

**MARCH PAWS**

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## SLIDE 23 – INSPECT AND ADDRESS ALL KNOWN WOUNDS

This is the “**W**” in MARCH PAWS.

All other wounds (burns, fractures, other soft tissue wounds, etc.) should be addressed with splinting, dressings, etc. as appropriate. This will be covered in more detail in a later module.

**Note:** Reassess pulses after all dressings are placed to ensure that they are not too tight. Do not ever apply one and forget it!

CLS  
TCCC

TACTICAL FIELD CARE GUIDELINES


**INSPECT AND ADDRESS KNOWN WOUNDS**

Dress all known wounds and then assess all applied bandages for:

- Increased pain
- Skin discoloration
- Irregular pulse

If any of these conditions are found, they might indicate an emergency!

Ensure the applied bandage isn't too tight; loosen as needed while keeping the bleeding controlled



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

**MARCH PAWS**

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## SLIDE 24 – BURN CARE

**Stop the burning process** by extracting the casualty from the source, and cover the burned areas with dry, sterile dressings.


If the burn is caused by **white phosphorus**, submerge the affected area in water, if possible; otherwise, the dressing must be wet. Advise medical personnel immediately.

Remember to prioritize assessing MARCH before addressing burns. This is part of the “**W**” of MARCH PAWS.

CLS  
TCCC

SECONDARY INJURIES

**BURN CARE**



**EXTRACT**  
Extract from burning vehicle, building, or area  
**STOP THE BURNING PROCESS**

**COVER**  
Cover the burn area with dry, sterile dressings for general burns

**WHITE PHOSPHORUS = WET DRESSING**  
Eliminate wound contact with oxygen

**Be sure to assess MARCH before burn care**

#TCCC-CLS-PPT-05 25 JAN 20 24

## SLIDE 25 – ASSESS FOR A FRACTURE

Assess for **any fractures**, and if present, splint the fracture using whatever materials are available, making sure to immobilize the joint above and the joint below the fracture.


Check pulse(s) before and after applying splints. Treat open fractures with meds (for pain and to prevent infection) with meds from the CWMP.

This is the “**S**” of MARCH PAWS.

CLS  
TCCC

SECONDARY INJURIES

**ASSESS FOR A FRACTURE**



**CLOSED FRACTURE**      **OPEN FRACTURE**

**WARNING SIGNS OF A FRACTURE:**

- Significant pain and swelling
- An audible or perceived “snap”
- Different length or shape of limb
- Loss of pulse or sensation in the injured arm or leg (check pulse before and after treatment)
- Crepitus (hearing a crackling or popping sound under the skin)

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## SLIDE 26 – COMMUNICATION AND DOCUMENTATION

**Communicate with the casualty** by reassuring them and telling them about procedures being performed.

**Communicate with medical personnel** and your **tactical leadership**, and relay casualty status and evacuation needs.

CLS  
TCCC

TACTICAL FIELD CARE

**COMMUNICATION**



Communicate with the casualty and if possible

- Encourage
- Reassure
- Explain care each step of the way

Communicate with tactical leadership as soon as possible with status and evacuation requirements throughout casualty treatment as needed

**COMMUNICATE WITH EVACUATION AND MEDICAL ASSETS**

- Communicate with the evacuation system to coordinate TACEVAC/MEDEVAC using the 9-Line MEDEVAC request
- Keep the casualty's DD Form 1380 up to date

TACTICAL COMBAT CASUALTY CARE (TCCC) CARD

BATTLE POSITION # \_\_\_\_\_

NAME (Last, First, Middle) \_\_\_\_\_

DATE OF BIRTH (MM/DD/YYYY) \_\_\_\_\_

SERVICE (Branch, Unit) \_\_\_\_\_

ALLERGIES \_\_\_\_\_

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## SLIDE 27 – PHASE 3: TACTICAL EVACUATION CARE

**Document all assessment and care** on a DD Form 1380 TCCC card. Every Service member will carry their own DD Form 1380 in their JFAK. If possible, use a permanent marker (such as a Sharpie) to make entries on the card. When rendering care or assisting medical personnel, include as much information as you can on the card.

This is the official record of the care provided and should go with the casualty when care is handed off to a medic or at the time of evacuation.

Communication includes the **MIST report** and **9-line MEDEVAC request**.

CLS TCCC TACTICAL EVACUATION

**PHASE 3: TACTICAL EVACUATION CARE**

**CASUALTY MONITORING**  
Continue to reassess and monitor casualty

**EVAC REQUEST**  
Use 9-Line format

**CASUALTY PREP**  
Secure items  
Prep litter  
Prep evac equipment  
Pack casualty

**COMPLETE MIST REPORT**  
M Mechanism of injury  
I Injuries  
S Symptoms  
T Treatment

(litter transport)

**PRE-EVAC PROCEDURES**  
Complete DD Form 1380

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## SLIDE 28 – SKILL STATION

At this time we will break for a trainer-led demonstration on TTA.

CLS TCCC

**TRAINER LED DEMONSTRATION**

Tactical Trauma Assessment

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## SLIDE 29 – SUMMARY

In this module, we discussed the TTA. We identified the common causes of altered mental status in combat or noncombat environments, the importance of disarming and securing the communications equipment of a casualty with altered mental status, and techniques for communicating with a casualty in TFC. We also demonstrated techniques for assessing a casualty for responsiveness, applying body substance isolation, conducting a TTA in the proper order using the MARCH PAWS sequence, and using appropriate actions and interventions in a casualty assessment to render aid in accordance with CoTCCC Guidelines.

CLS TCCC TACTICAL TRAUMA ASSESSMENT

**SUMMARY**

- We defined Tactical Trauma Assessment
- We discussed assessing the casualty using MARCH PAWS
- We discussed proper communication and documentation

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## SLIDE 30 – CHECK ON LEARNING

Ask questions of the learners referring to key concepts from the module.

Now for a check on learning:

- In which phase of care is the TTA performed?  
- TFC
- What mnemonic is used to prioritize care in the TTA?

CLS TCCC

**CHECK ON LEARNING**

- During which phase of care is the Tactical Trauma Assessment performed?
- What mnemonic is used to prioritize care during the Tactical Trauma Assessment?
- What is a blood sweep?

#TCCC-CLS-PPT-08 19 DEC 19 30

- MARCH PAWS

3. What is a blood sweep?
  - A blood sweep is your initial casualty evaluation. It should be a rapid head-to-toe check for any unrecognized life-threatening bleeding.

## SLIDE 31 – QUESTIONS

