



TACTICAL COMBAT CASUALTY CARE COURSE

MODULE 02: MEDICAL EQUIPMENT



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











▼ YOU ARE HERE

STANDARDIZED JOINT CURRICULUM





1 x TERMINAL LEARNING OBJECTIVES

- 03 Describe the use of individual medical equipment components in accordance with CoTCCC Guidelines.
- **3.1** Describe the use of a first aid kit in accordance with Service policy. (ASM T2)
- **3.2** Identify the contents of an individual Joint First Aid Kit (JFAK), and/or other Service-specific first aid kits. (ASM T2:E6)
- **3.3** Describe the general maintenance and resupply procedures for trauma materials in a first aid kit in accordance with Service guidelines. (ASM T2:E7)
- **3.4** Identify the contents of a combat lifesaver kit and/or other Service-specific first aid kits. (CLS T3:E12)
- **3.5** Describe the use of components of a combat lifesaver kit in accordance with Service policy. (CLS T3:E13)
- 3.6 Identify the contents of a medic/corpsman aid bag and/or other Service-specific first aid kits.
- 3.7 Describe the use of a medic/corpsman aid bag, in accordance with Service policy.

7 x ENABLING LEARNING OBJECTIVES







FIRST AID KITS WHAT DO I TAKE?



INDIVIDUAL
Joint First Aid Kit (JFAK)



COMBAT LIFESAVER BAG CLS Bag



Unit Standard Operating Procedures (SOPs) and individual responder capabilities/scope of care will determine what is carried in the First Aid Kits.





MEDICAL SUPPLIES YOU WILL NEED TO PROVIDE AID AND SAVE LIVES



INDIVIDUALJoint First Aid Kit (JFAK)



COMBAT LIFESAVER BAG CLS Bag



COMBAT MEDIC/ CORPSMAN AID BAG CMC Aid Bag





JFAK CONTENT AND CAPABILITIES



Items included in this kit will be able to treat the following:

- Tourniquet, hemostatic gauze, and pressure bandages
- Nasopharyngeal airway
- Chest seal and NDC 10-14 Gauge 3.25" Needle Catheter (Service Specific)
- C

- Combat wound medication pack
- Combat wound medication pack
- Gauze and rigid eye shield
- S

Other: DD Form 1380 and a marker

JFAK





COMBAT LIFESAVER BAG CONTENT AND CAPABILITIES

Items included in this kit will be able to treat the following:



BUDDY AIDCombat Lifesaver Bag

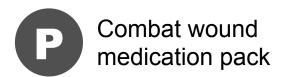
Tourniquets, hemostatic gauze, and pressure bandages



Vented Chest Seal, Bag Valve Mask, and NDC 10-14 Gauge 3.25" Needle Catheter

Gauze and Elastic bandage

Active/Passive Hypothermia Kits/Blankets and MACE2



Combat wound medication pack

Gauze and rigid eye shield

Splinting material, cravats, and elastic wraps

Other: DD Form 1380 and MEDEVAC Card





COMBAT MEDIC/CORPSMAN CONTENT AND CAPABILITIES



ADVANCED TCCC CARE

Medic/Corpsman Aid Bag

 \triangle

Stock this bag in accordance with your SOPs/Protocols

Items included in this kit will be able to treat the following:

- Tourniquet, hemostatic gauze, pressure bandage, junctional tourniquet, X-stat, and wound closure device
- Nasopharyngeal airway, extraglottic airway, cricothyroidotomy kits, and suction devices
- Bag Valve Mask, vented chest seals, NDC 10-14 Gauge 3.25" Needle Catheter
- Pelvic compression devices, Intravenous (IV) and Intraosseous (IO) access kits, IV fluids, EldonCard™, tranexamic acid (TXA), blood products, and Calcium
- Active/Passive Hypothermia Kits/Blankets, IV fluid warmers, and MACE2





COMBAT MEDIC/CORPSMAN CONTENT AND CAPABILITIES (cont.)



ADVANCED TCCC CARE

Medic/Corpsman Aid Bag



Stock this bag in accordance with your **SOP/Protocols**

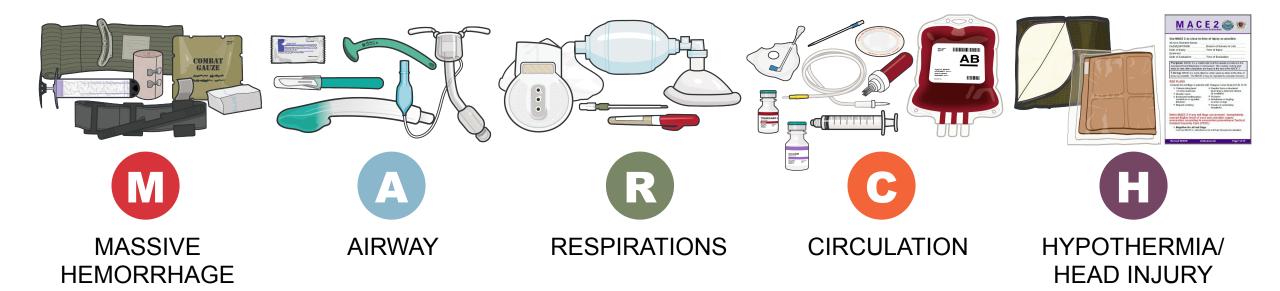
Items included in this kit will be able to treat the following:

- Pain medications, extra combat wound medication packs
- Antibiotics, extra combat wound medication packs
- Gauze, elastic wrap, rigid eye shields
- Malleable splints, rigid splints, cravats, and elastic wraps

Other: DD Form 1380, MEDEVAC Card, Mission/Unit specific equipment





















SPLINTING

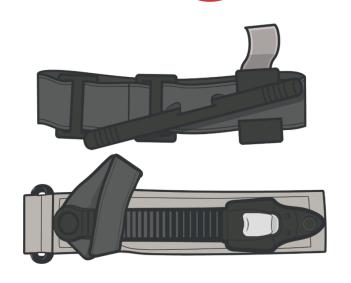
PAIN A

ANTIBIOTICS





MASSIVE HEMORRHAGE EQUIPMENT



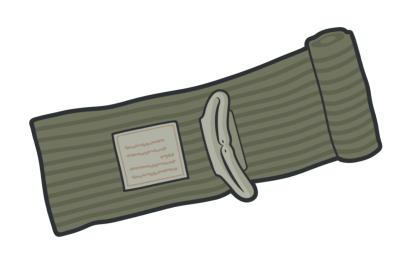
TOURNIQUET

CoTCCC-recommended and is used to control massive or severe hemorrhage of an extremity



HEMOSTATIC GAUZE

CoTCCC-recommended gauze, contains a chemical that bonds to another chemical in blood and causes clots to form at the source of bleeding



PRESSURE BANDAGE

Elastic bandage used as a pressure dressing and/or standard dressing

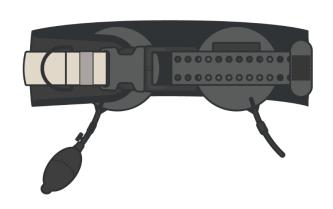


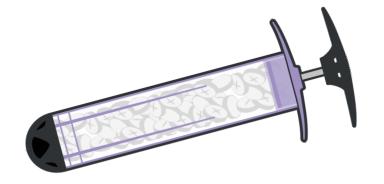


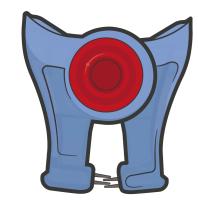


MASSIVE HEMORRHAGE EQUIPMENT

(cont.)







JUNCTIONAL TOURNIQUET

Designed to stop massive hemorrhage from large vessel injuries of the groin or axilla that are too proximal for a limb tourniquet to be used effectively

XSTAT 30 (LARGE) XSTAT 12 (SMALL)

Designed to inject an expandable agent into the wound cavity to create an internal source of pressure at the bleeding site

WOUND CLOSURE DEVICE

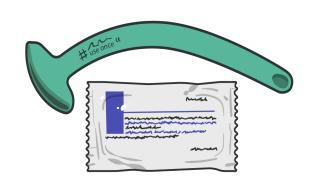
The device seals the edges of a wound closed to mitigate further blood loss until the wound can be surgically repaired

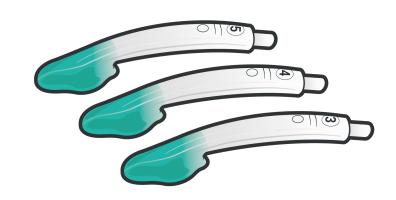


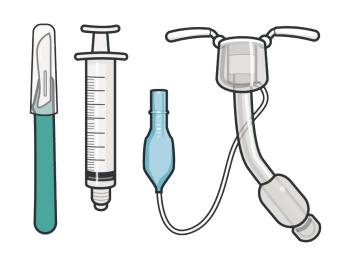




AIRWAY CONTROL EQUIPMENT







NASOPHARYNGEAL AIRWAY (NPA)

Nonsterile rubber tube-shaped device inserted into the casualty's nostril

EXTRAGLOTTIC AIRWAY (**EGA**)

Used to establish an airway for oxygenation and ventilation without entering the trachea

CRICOTHYROIDOTOMY KIT

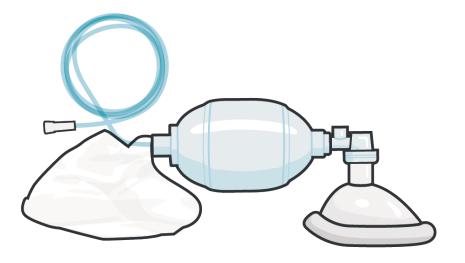
An advanced surgical airway used when other airway adjuncts have failed, as well as an airway obstruction or pending airway obstruction

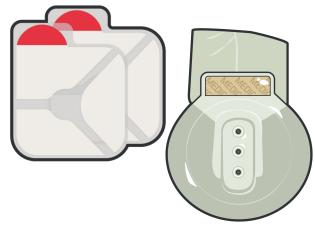


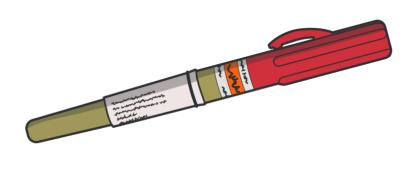




RESPIRATION SUPPORT EQUIPMENT







BAG VALVE MASK (BVM)

Provides positive pressure ventilations to a patient who is inadequately breathing or not breathing at all

VENTED CHEST SEAL

Vented and adhesive chest seal for treating penetrating chest wounds

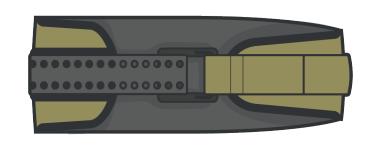
10-14 GAUGE 3.25" NEEDLE CATHETER

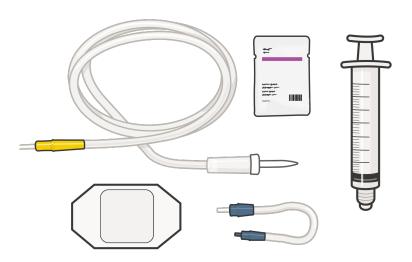
Catheter-over-needle device inserted into the chest to **treat tension pneumothorax**





CIRCULATION (cont.)



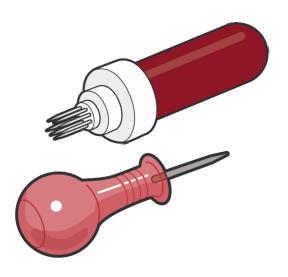




Designed to compress a pelvis fracture, providing stability and preventing ongoing hemorrhage

INTRAVENOUS (IV) ACCESS KIT

The necessary supplies to establish intravenous access



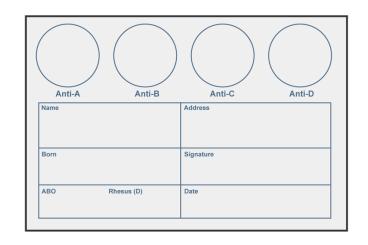
INTRAOSSEOUS (IO) ACCESS EQUIPMENT

Equipment necessary to establish sternal, humeral, or tibial intraosseous access

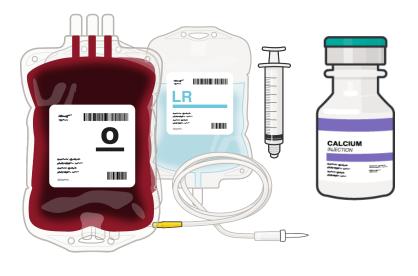




CIRCULATION







ELDONCARDTM

A card used to determine blood type

TXA

Tranexamic acid – to help the casualty's blood clotting process

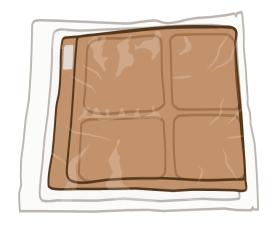
BLOOD PRODUCTS, IV FLUIDS, and Calcium

Blood products and fluids – to replace casualty losses due to hemorrhage





HYPOTHERMIA AND HEAD INJURY





ACTIVE

PASSIVE

ACTIVE/PASSIVE HYPOTHERMIA KITS/BLANKETS

Used to prevent and manage hypothermia

MILITARY ACUTE CONCUSSION EVALUATION (MACE 2)

MACE2

Time of Injury:

□ Seizures

□ Results from a structural

 Weakness or tingling in arms or legs

Severe or worsening

brain injury detection device

Purpose: MACE 2 is a multimodal tool that assists providers in the assessment and diagnosis of concusion. The scoring, coding and steps to take after completion are found at the end of the MACE 2. Timing: MACE 2 is most effective when used as close to the time of injury as possible. The MACE 2 may be repeated to evaluate recovery.

RED FLAGS

Evaluate for red flags in patients with Glasgow Coma Scale (GCS) 13-1

Defer MACE 2 if any red flags are present. Immediately consult higher level of care and consider urgent evacuation according to evacuation precedence/Tactic:

Service Member Name:

Deteriorating level

□ Double vision

Repeat vomiting

of consciousness

combative or agitated

Negative for all red flags

Examiner: _____ Date of Evaluation:

Used to identify **possible traumatic brain injury** (TBI)

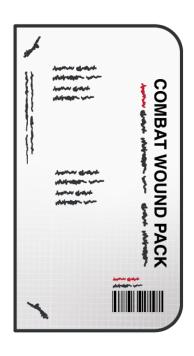


NOTE: DD Form 1380 is also used in AVPU (alert, verbal, pain, unresponsive) assessment as part of head injury documentation





COMBAT WOUND PACK





Moxifloxacin 400 mg tablet once daily



Meloxicam 15 mg tablet once daily



Acetaminophen x2 500mg tablet every 8 hours





For pain not controlled by the CWMP, other pain medications that can be administered by many different routes are available.



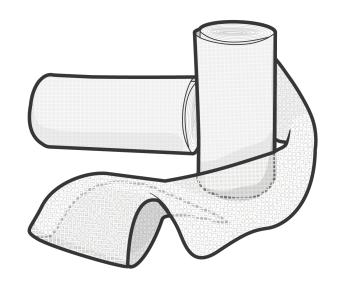
ANTIBIOTICS

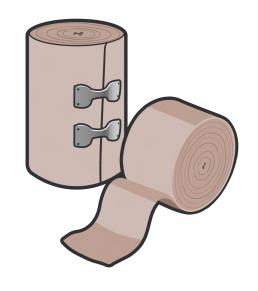
If time and situation allow, IV antibiotics can be administered, if indicated.

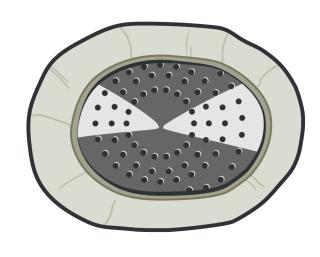




W WOUND MANAGEMENT







GAUZE

Gauze rolls used to **stop minor bleeding** or as **bulky material** for wound packing

ELASTIC WRAP

Stretchable cloth like wrap used to hold medical different types of medical intervention equipment in place

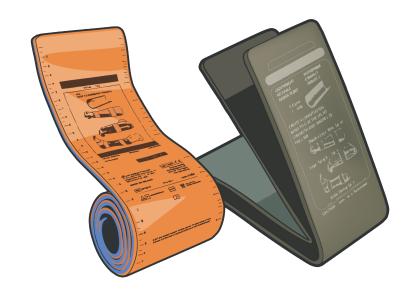
RIGID EYE SHIELD

A shield that provides domed **protection** of the **eye WITHOUT** applying pressure





SPLINTS





Semi-rigid material used to immobilize an injured limb



RIGID SPLINTING

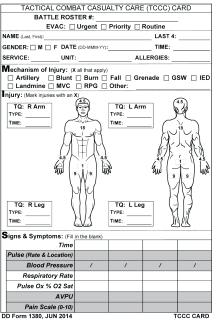
Rigid splinting material that stabilizes the limb and protects the injury





DOCUMENTATION/MEDEVAC

FRONT



BACK

F		C: Urgent P at apply, and fill in the bla			
	1 4	Туре			
	_	y			
	• –	□CRIC □ET-Tub	_		
		-D □ Chest-Tube [_		
	_OZNeedle				T
C:		Name	Volume	Route	Time
	Fluid				
	Blood Product				
ME		Name	Dose	Route	Time
	Analgesic (e.g., Ketamine, Fentanyl,				
Į.	Morphine) Antibiotic				
	(e.g., Moxifloxacin, Ertapenem)				
	Other (e.g., TXA)				
		t-Pill-Pack □ Eye- a-Prevention Type:	Shield (□L) □S	plint
ЮТ					
iner	RESPONDER				
	E (Last, First):			LAST 4:	

DD Form 1380 TCCC CARD

DoD-approved standard for documenting **ALL** assessment and treatment provided to casualties before **evacuation** or handoff to other **medical personnel**

MEDE	VAC REQUEST FORM	GTA 08-01-004
LINE	ITEM	EVACUATION REQUEST MESSAGE
1	Location of Pickup Site.	
2	Radio Frequ., Call Sign, & Suffix.	
3	No. of Patients by Precedence.	
4	Special Equipment Required.	
5	Number of Patients by Type.	
6	Security of Pickup Site (Wartime).	
6	Number and Type of Wound, Injury, or Illness (Peacetime).	
7	Method of Marking Pickup Site.	
8	Patient Nationality and Status.	
9	NBC Contamination (Wartime).	
9	Terrain Description (Peacetime).	

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AUG 2002 (This supersedes GTA 08-01-004 MAY 1997) DISTRIBUTION: US ARMY TRAINING SUPPORT CENTERS (TSCs)
HEADQUARTERS, DEPARTMENT OF THE ARMY

9-LINE MEDEVAC (ARMY Example)

Call procedure that is divided into nine lines of information for evacuation crews





MAINTENANCE AND RESUPPLY



REMEMBER:

Regularly inspect your JFAK, CLS bag, CMC bag, and other Service-specific medical kits

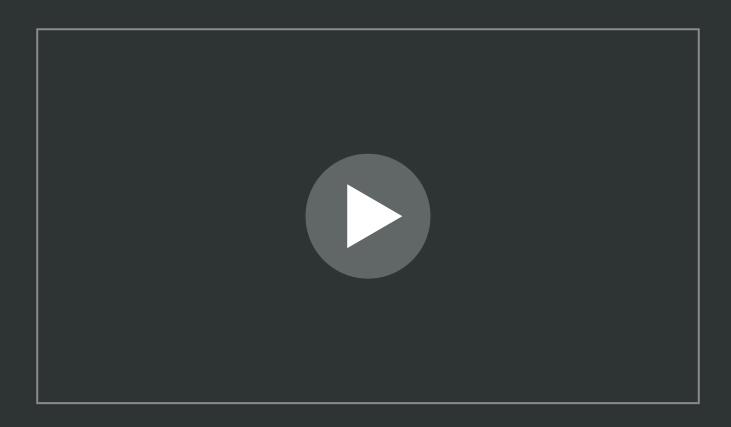


ALL training events and missions





CAT QUICK LAUNCH CONFIGURATION VIDEO



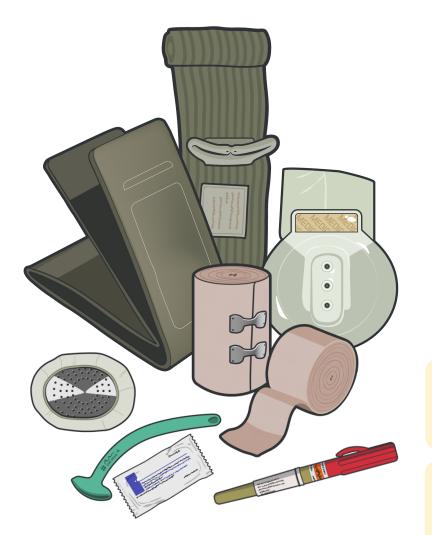
Video can be found on deployedmedicine.com





MAINTENANCE AND RESUPPLY





- Check to be sure all required equipment is in your Service specific kits and bags
- Check seals and wrappers
 REPLACE items with broken or unsealed wrappers
- Check expiration dates
 REPLACE if expired or the expiration date DOES NOT exceed your expected deployment timeframe



DO NOT USE EQUIPMENT THAT IS NOT COTCCC APPROVED



DO NOT DEPLOY WITH MISSING, PREVIOUSLY USED FOR TRAINING, OR EXPIRED EQUIPMENT





OTHER CONSIDERATIONS



- TRAIN on the equipment you will use
 - PREPARE for mass casualties by triaging and staging your medical equipment
- **EVENLY DISTRIBUTE** equipment amongst the unit
 - **TRAIN** with a completely stocked CMC bag to help simulate the deployed environment





OTHER CONSIDERATIONS



Beware of **UNAPPROVED EQUIPMENT**



Beware of **FAKE EQUIPMENT**



Check unit-specific evacuation equipment





SUMMARY

- Know the basic contents of **JFAKs**, **CLS** bags, and **CMC** bags
- Understand how the equipment in each kit and bag supports delivery of TCCC
- Maintain and as needed, replace equipment before deploying
- Describe proper usage and implementation of DD 1380 TCCC Card and 9-Line MEDEVAC Card

TRAIN, TRAIN, TRAIN!!!

Check your durable (non-disposable) equipment to make sure that it works after repeated training





CHECK ON LEARNING



What type of tourniquet found in the CMC Aid Bag is used to control massive hemorrhage in the axilla that is too proximal for effective limb tourniquet application?

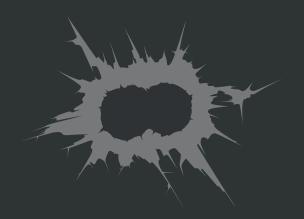


When should you inspect your JFAK, CLS bag, CMC bag and other Service-specific medical kits?





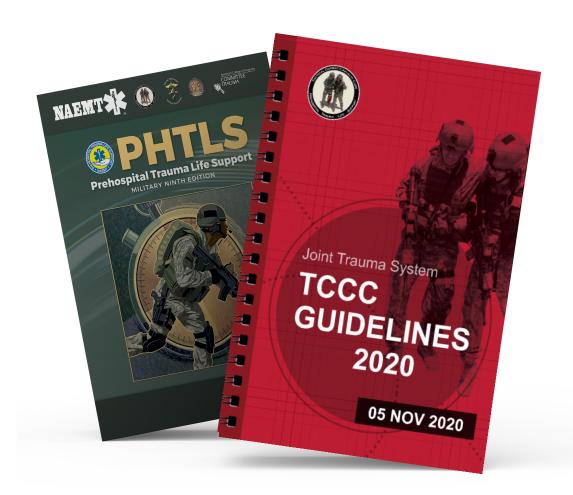








REFERENCES



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.