



TACTICAL COMBAT CASUALTY CARE COURSE

MODULE 22: Cardiopulmonary Resuscitation in Tactical Field Care



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



STANDARDIZED JOINT CURRICULUM



1 x TERMINAL LEARNING OBJECTIVES

- 25 Describe cardiopulmonary resuscitation (CPR) in Tactical Field Care.
- **25.1** Identify the conditions of and considerations for cardiopulmonary resuscitation in Tactical Field Care.
 - 25.2 Demonstrate bilateral Needle Decompression of the Chest in Tactical Field Care .

2 x ENABLING LEARNING OBJECTIVES





CARDIOPULMONARY RESUSCITATION IN THE PREHOSPITAL SETTING

BATTLEFIELD CONSIDERATIONS:

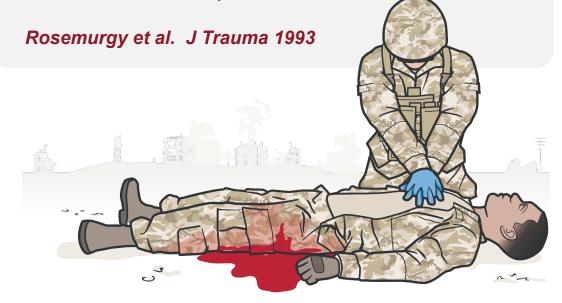
- Delays in getting casualty to definitive care
- Responder risk performing CPR in hostile environment
- Taking limited resources away from other casualties while performing CPR

Resuscitation on the battlefield for victims of blast or penetrating trauma who have no pulse, no ventilations, and no other signs of life will not be successful and should not be attempted.

TCCC Guidelines (5 Nov 2020)

138 trauma patients with prehospital cardiac arrest where resuscitation was attempted - No survivors

Recommendation: **CPR not be attempted** for patients with prehospital traumatic cardiac arrest (large economic costs and uniformly unsuccessful results)



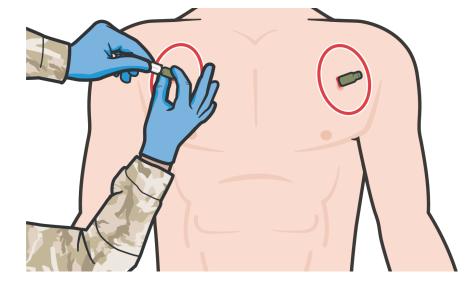




NON-HYPOVOLEMIC CARDIAC ARREST IN A TRAUMA CASUALTY

Tension pneumothorax can cause cardiac arrest in trauma casualties

- Retrospective civilian prehospital studies indicate needle decompression of the chest (NDC) restored cardiac output
- Anecdotal military cases report return of pulses with NDC
- Armed Forces Medical Examiner data: pneumothoraces may have played a role in fatalities from recent conflicts



Perform **bilateral NDC** in casualties with no pulses or respirations in Tactical Field Care

...casualties with torso trauma or polytrauma who have no pulse or respirations during TFC should have bilateral needle decompression performed to ensure they do not have a tension pneumothorax prior to discontinuation of care.

TCCC Guidelines (5 Nov 2020)





CONSIDERATIONS FOR CARDIOPULMONARY RESUSCITATION

Cardiac arrest in the absence of blast or penetrating trauma may warrant consideration for initiation of CPR:

Hypothermia

Near drowning

Electrocution

Non-traumatic cardiac arrest

In Tactical Evacuation Phase (if casualty does not have obviously fatal wounds and will arrive at a surgical facility soon)

REMINDER: Disadvantages to CPR in TFC:

Responder risk in hostile environment

Taking limited resources away from other casualties



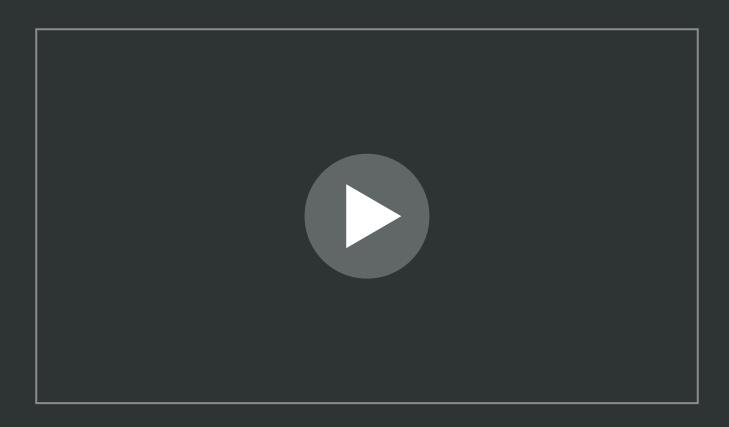


CPR should not be done at the expense of compromising the mission or denying lifesaving care to other casualties





BILATERAL NEEDLE DECOMPRESSION OF THE CHEST (VIDEO)



Video can be found on deployedmedicine.com





CARDIOPULMONARY RESUSCITATION IN TACTICAL FIELD CARE



Bilateral Needle Decompression of the Chest







SUMMARY

- No CPR for casualties with blast or penetrating trauma and no signs of life (pulses or respirations)
- Bilateral needle decompressions for casualties with no pulses or respirations
- Consider CPR in non-traumatic cardiac arrest if it won't compromise the mission or put others at risk





CHECK ON LEARNING



Should you initiate CPR for a casualty with blast or penetrating trauma who has no pulse, respirations or signs of life?



When should you perform a bilateral needle decompression of the chest?

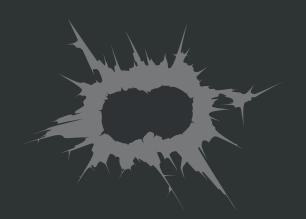


In what circumstance might you consider CPR in the Tactical Field Care phase?





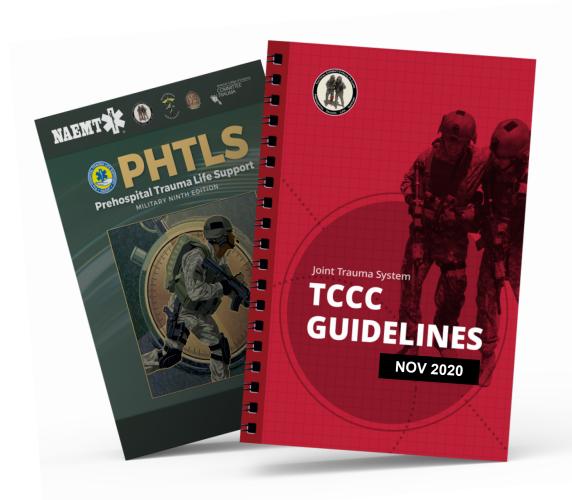








REFERENCES



TCCC: Guidelines

by JTS/CoTCCC

Updated regularly – latest edition dated 5 November 2020

These guidelines are the result of decisions made by the Committee on Tactical Combat Casualty Care as they explore evidence-based research regarding best practices

PHTLS: Military Edition, Chapter 25

by NAEMT

Prehospital Trauma Life Support, Military Ninth Edition