



COMBAT MEDIC/CORPSMAN
TACTICAL COMBAT CASUALTY CARE

MODULE 22:
CPR IN
TACTICAL FIELD
CARE (TFC)
SKILL INSTRUCTIONS

03 MAR 2021



**Committee on
Tactical Combat
Casualty Care
(CoTCCC)**

BILATERAL NEEDLE DECOMPRESSION OF THE CHEST (NDC) INSTRUCTION

TASK:	Perform bilateral NDC
CONDITION:	Given a casualty in the Tactical Field Care phase with significant torso trauma or polytrauma with no pulse or respirations
STANDARD:	Perform a bilateral NDC in 3 minutes or less without causing further injury to the casualty
EQUIPMENT:	Combat Lifesaver (CLS)/medic aid bag, exam gloves, 14- or 10-gauge, 3.25 in. needle/catheter unit, alcohol or povidone-iodine pad, and sharps container

PERFORMANCE MEASURES: step-by-step instructions

NOTE: Consider body substance isolation.

NOTE: If a CLS is available, direct them to assist.

- 01** Assess the casualty for signs of torso trauma or polytrauma with no pulse or respirations.
- 02** Identify insertion sites for bilateral NDC.

NOTE: Either of two sites can be used on each side of the chest, whichever one is more accessible:

 - (a) Fifth intercostal space (ICS) in the anterior axillary line.
 - (b) Second ICS in the midclavicular line (MCL).

NOTE: If the second ICS at the MCL site is used, **do not** insert the needle medial to the nipple line.
- 03** Secure a 14-gauge or a 10-gauge, 3.25 in. needle/catheter unit.

NOTE: Remove the Luer lock cap from the needle catheter (if applicable).
- 04** If available, use an antiseptic solution or a pad to clean the site.
- 05** Insert the needle/catheter just over the top of the lower rib at the insertion site, at a 90-degree angle (perpendicular) to the chest wall, advancing it to the hub.
- 06** Leave the needle catheter in place for 5–10 seconds to allow decompression to occur; then remove the needle, leaving the catheter in place.
- 07** Assess for successful needle decompression. Signs of success include:
 - (a) An obvious hissing sound is heard as air escapes from the chest when NDC is performed.

NOTE: This may be difficult to appreciate in high-noise environments.
 - (b) A casualty with no vital signs has a return of consciousness and/or pulses.
 - (c) Hemoglobin oxygen saturation increases to 90% or greater.
- 08** If the first NDC is unsuccessful, then perform a second NDC on the opposite side of the chest using a new 14-gauge or 10-gauge, 3.25 in. needle/catheter unit, repeating steps 2–7.
- 09** If the casualty is responsive to NDC with return of vital signs, place them in a position of comfort, or the recovery position with injured side down, to aid respiratory efforts, and continue MARCH-PAWS (Massive hemorrhage, Airway, Respirations, Circulation, Head injury/Hypothermia, Pain treatment, Antibiotics, Wound(s) treatment, and Splinting) trauma assessment and treatment.
- 10** If bilateral NDC is not successful, consider discontinuing care.
- 11** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach to the casualty.

Developed by the

JOINT TRAUMA SYSTEM

A Combat Support Division of the



DEFENSE HEALTH AGENCY