

# **COMBAT PARAMEDIC/PROVIDER** TACTICAL COMBAT CASUALTY CARE

# MODULE 19 **FRACTURES** Skill Instructions





Committee on Tactical Combat Casualty Care (CoTCCC)





#### MALLEABLE SPLINT INSTRUCTION

TASK: Apply a malleable splint to a fractured extremity

- **CONDITION:** Given a Tactical Field Care scenario where the casualty and responder are in combat gear, the casualty has an extremity fracture, and you have malleable splinting materials
- **STANDARD:** Apply an effective malleable splint following all steps and meeting all performance measures without causing further injury to the casualty
- **EQUIPMENT:** Malleable splinting materials (e.g., SAM<sup>®</sup> Splint or other malleable aluminum foam splint, clothing/padding materials, cravats, strips of cloth or elastic bandages, tape)

# PERFORMANCE MEASURES: step-by-step instructions

**NOTE:** Consider body substance isolation.

*NOTE:* If a Combat Lifesaver (CLS) is available, direct them to assist.

**1** Identify the location of the fracture and place the extremity in a neutral position or position of function.

**NOTE:** Direct the CLS or other first responder to manually stabilize the fracture site (without gross movement), when appropriate.

2 Assess pulse, motor, and sensory (PMS) function distal to fracture.

3 Remove jewelry, watch, clothing, and/or boots as the situation dictates.

- 4 Ensure that any open injuries are bandaged and bleeding has been controlled.
- 5 Select the proper splinting material (e.g., SAM Splint or other malleable aluminum foam splint, padding materials, and material to secure the splint to the extremity).

6 Using the uninjured extremity on the opposite side of the casualty, measure and fold a malleable splint so that it encompasses the joint above and the joint below the fracture site.

**NOTE:** Malleable splints are made rigid by introducing curves, particularly along the long axis of the splint, when molding the desired shape. Techniques (gutter splints, sugar tongs, etc.) vary based on location of fracture.

*NOTE:* It may be necessary to use two malleable splints, interlocked for stability, in some situations.

7 Apply the formed malleable splint(s) to the injured extremity with the limb in a position of function (a normal resting position), avoiding gross movement if possible.

8 Lightly pad all gaps within the splint, filling voids and protecting bony prominences, to increase comfort.

9 Tie cravats or cloth strips (and ensure that knots are tied over splinting material) or wrap elastic bandages around the splint to secure it in place.

**NOTE:** When using cravats, one must be placed proximal and the other distal to the fracture (if possible), understanding that in the case of a very proximal or distal fracture, this might not be possible.

**10** Tuck in the ends of the cravats so that they will not get caught on obstacles during movement.

**11** Ensure the joints above and below the fracture are immobilized in the splint, whenever possible.

**12** Secure the entire injured extremity (when appropriate). For example, a sling and



# COMBAT PARAMEDIC/PROVIDER TACTICAL COMBAT CASUALTY CARE SKILL INSTRUCTIONS



swathe may be indicated to keep an arm fracture stabilized during transport.

*NOTE:* During movement, litter straps may keep the extremity from moving, but ensure the straps do not apply pressure directly on the fracture site.

**13** Reassess PMS (if PMS is no longer palpable, loosen the splint, reposition, and reapply the splint).

14 Administer pain medications as needed and antibiotics for any open fracture(s).

**15** Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.

#### **RIGID SPLINT INSTRUCTION**

**TASK:** Apply a rigid splint to a fractured extremity

- **CONDITION:** Given a Tactical Field Care scenario where the casualty and responder are in combat gear, the casualty has an extremity fracture, and you have rigid splinting materials
- **STANDARD:** Apply an effective rigid splint following all steps and meeting all performance measures without causing further injury to the casualty
- **EQUIPMENT:** Rigid splinting materials (rigid poles, boards or folded cardboard, and cravats or other strips of cloth and padding materials, elastic bandages and tape)

## PERFORMANCE MEASURES: step-by-step instructions

**NOTE:** Consider body substance isolation.

**NOTE:** If a Combat Lifesaver (CLS) is available, direct them to assist.

 Identify the location of the fracture and place the extremity in a neutral position or position of function.

*NOTE:* Direct the CLS or other first responder to manually stabilize the fracture site (without gross movement), when appropriate.

- **16** Assess pulse, motor, and sensory (PMS) function distal to fracture.
- **17** Remove jewelry, watch, clothing, and/or boots as the situation dictates.
- 18 Ensure that any open injuries are bandaged and bleeding has been controlled.
- **19** Select the proper splinting material (e.g., boards, rigid poles, folded cardboard, padding materials, and material to secure the splint to the extremity).
- 20 Measure and shape the splint(s) on the uninjured extremity.

21 Apply the splint(s) to the injured extremity with the limb in a position of function (a normal resting position), avoiding gross movement, if possible.

22 Lightly pad all gaps within the splint, filling voids and protecting bony prominences, to increase comfort.

**23** Tie cravats or cloth strips (and ensure that knots are tied over splinting material, not directly over injured site) or wrap elastic bandages around the splint to secure it in place.

**NOTE:** When using cravats, one must be placed proximal and the other distal to the fracture (if possible), understanding that in the case of a very proximal or distal fracture, this might not be possible.

**24** Tuck in the ends of the cravats so that they will not get caught on obstacles during movement.



### COMBAT PARAMEDIC/PROVIDER TACTICAL COMBAT CASUALTY CARE SKILL INSTRUCTIONS



**25** Ensure the joints above and below the fracture are immobilized in the splint whenever possible.

26 Secure the entire injured extremity (when appropriate). For example, a sling and swathe may be indicated to keep an arm fracture stabilized during transport.

*NOTE:* During movement, litter straps may keep the extremity from moving, but ensure the straps do not apply pressure directly on the fracture site.

**27** Reassess PMS (if PMS is no longer palpable, loosen the splint, reposition, and reapply the splint).

28 Administer pain medications as needed and antibiotics for any open fracture(s).

29 Document all findings and treatments on a DD Form 1380 TCCC Casualty Card and attach it to the casualty.

Developed by the JOINT TRAUMA SYSTEM A Combat Support Division of the

