

Tactical Emergency Casualty Care (TECC) Guidelines for Active Bystanders



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PREAMBLE

In environments with real or perceived threat(s), traditional response paradigms that prioritize scene safety before patient care may result in treatment delays that negatively affect patient and rescuer outcomes. *To address this gap, the Tactical Emergency Casualty Care (TECC) guidelines describe patient care standards for persons of all age groups in an all-hazards, high-threat environment.*

The TECC construct consists of three dynamic phases of care:

- 1. Direct Threat
- 2. Indirect Threat
- 3. Evacuation

These phases are intended to correlate directly with the contemporaneous threat level and are not solely geographic in nature.

Paramount considerations to reduce mortality and morbidity throughout all phases of TECC are:

- Immediate access to the injured
- Rapid life-saving interventions at or near the point of injury
- Early extraction of those needing transport to definitive medical care

In addition to treating physical injuries, key principles for addressing the mental health needs of patients, survivors, and responders include:

- Limiting exposure of personnel to the incident
- Providing appropriate early psychological support

The TECC system of care is applied during incidents where operational threats (e.g., active violence, hazardous material, fire, structural instability, etc.) shape the medical response. This system of care is based upon principles, not protocols. While the TECC principles are universal, application of the principles is agency, provider, practitioner, and resource specific.

The TECC guidelines are agnostic to specific commercial products, scope of practice dependent, and require a systems approach that accounts for the totality of the event, including available resources and clinical capabilities. The Committee for Tactical Emergency Casualty Care does not endorse specific training programs or instructors but encourages all end users to appropriately employ these guidelines. The Committee for Tactical Emergency Casualty Care was originally convened to speed the transition of military medical lessons learned from the battlefield to evidencedand best-practiced based operational medical guidance for medical response and treatment of the injured during high risk and atypical civilian operational scenarios.

The Tactical Emergency Casualty Care (TECC) guidelines are a set of best practice recommendations for casualty management during civilian tactical and rescue operations. Based upon the principles of **Tactical Combat Casualty** Care (TCCC), TECC accounts for the differences in the civilian environment, resources, patient population, and scope of practice from the military combat environment of TCCC.



TECC Guidelines for <u>Active Bystanders</u>

- I. In the presence of a direct threat to life, take definitive action towards mitigating that threat, ensuring everyone's safety, and facilitating rescue of injured persons.
 - A. Follow established emergency procedures for the location.
 - B. If no such procedures exist, follow appropriate response for current situation (e.g., *Run. Hide. Fight.* procedure, fire suppression procedures, shelter in place, evacuation, etc.)
- II. Communicate with others immediately involved.
 - A. Tell both injured and uninjured to *move to a <u>safer position</u>* if able and apply self-aid.
 - 1. If unable to self-evacuate, it is appropriate to move them to safer position.
 - B. Provide direction and communicate with others who can assist.
 - C. Ensure 9-1-1 or emergency response system is activated; however, it may be appropriate to delay notification until you are in a safer position.
 - D. Provide psychological support through encouragement, reassurance, and by explaining the care being provided.

Treat severe bleeding in extremities:

- E. Apply immediate direct pressure to the wound to stop or slow bleeding while preparing to use additional bleeding control supplies.
 - 1. Minimally bleeding wounds are not life-threatening and do not need immediate treatment.
 - 2. Use a **tourniquet** or a **pressure dressing** to control severe extremity bleeding.
 - a) If using a tourniquet, apply it as high as possible on the limb, either directly to the skin, or, if unable to fully expose the wound, over the clothes.
 - b) Do not apply over a joint or an open fracture where a bone is protruding through the skin. Also do not apply over wallet, phone, or other bulky item which would prevent the tourniquet applying pressure to the skin and blood vessels.
 - c) For any <u>traumatic amputation –</u> total or partial a tourniquet should be applied regardless of bleeding.
 - d) A tourniquet should not be released or loosened because of pain.
 - e) If the tourniquet is properly applied but bleeding is not controlled, apply a second tourniquet if available,

Active Bystanders— Empowered community members who are present in the event and can assist others. Active bystanders can serve a critical role during the initial moments after complex and dynamic disasters. They may have immediate access to severely injured victims and can provide time-sensitive. life-saving interventions. Active bystanders are the first link in the trauma chain of survival.

Safer Position— The further you can get from the danger area, the safer. If you can't get very far away from the threat, attempt to find cover. Cover is an object that can stop bullets, flying glass, and explosive fragments. Concealment is something that only hides you from view but doesn't stop bullets, flying glass,

and explosive fragments.

Severe Bleeding—

Anytime there is an injury and

- Massive squirting or steady bleeding from the wound.
- Blood pooling on the ground.
- Overlying clothes are soaked with blood.
- Bandages or makeshift bandages used to cover the wound are ineffective and steadily becoming soaked with blood.
- There was prior bleeding, and the injured person is now in shock.

Tourniquet— A

constricting device placed around a limb and tightened to eliminate arterial blood flow past the device. A proven commercial tourniquet is always the first tourniquet choice if available. Improvised tourniquets don't always work and may be difficult to make under stress.

Pressure Dressing— An elastic dressing that is wrapped around the limb over a shallow, unpacked, or packed deep bleeding wound.



adjacent to the first tourniquet (closer to the torso if possible).

- f) Perform <u>wound packing</u> with gauze or <u>hemostatic</u> <u>agent</u>, if available, prior to application of a pressure dressing. Other available materials can be used for wound packing if gauze or a hemostatic agent is not available. Then, properly apply the pressure dressing directly over the wound to generate constant direct pressure.
- 3. For severe bleeding in anatomic junctional areas where a tourniquet or pressure dressing cannot be used:
 - a) If available, pack the wound with hemostatic agent and apply direct pressure as per manufacturer's directions, then apply an appropriate dressing.
 - b) If no hemostatic agent is available, pack the wound with gauze and apply direct pressure to control bleeding, followed by an appropriate dressing.
- 4. For severe bleeding, when neither a tourniquet nor packing materials are available, apply pressure directly on the wound.
- III. Airway management:
 - A. Ensure an open and clear airway on all patients. In an unconscious individual, manually clear the airway of any obvious foreign material.
 - B. Allow awake and alert injured person(s) to assume position of comfort, including sitting up. Do not force an awake and alert patient to lie down.
 - C. Unconscious injured person(s) should be placed in the <u>recovery position</u> to maintain an open airway.
 - D. Cardiopulmonary resuscitation (CPR) within a high threat environment for victims of blast or penetrating injury who have no pulse, no breathing, and no other signs of life will not be successful and should not be attempted.
- IV. Breathing support:
 - A. All potential open and/or sucking torso wounds (above the umbilicus (belly button) to the shoulders, front or back), should be treated by immediately applying a <u>non-occlusive (vented) seal</u> to cover the defect. If none is available, leave the wound open.
 - B. Monitor the injured person for the potential development of a **tension pneumothorax**.

Traumatic Amputation— The complete or partial removal of a limb by injury.

Wound Packing— Pushing plain or specially treated gauze as deep as possible into a severely bleeding wound to put pressure directly on the deep blood vessels that are the source of bleeding.

Hemostatic Agent— A commercially available product treated with special substances that accelerate the clotting to stop bleeding in wounds.

Recovery Position—

position an unconscious but breathing injured person(s) is/are placed in to help keep their airway open and allow blood and vomit to drain from their mouth. Generally, the injured person(s) is rolled on to their side with top leg in contact with the ground and bent at the hip and knee.

Non-occlusive (vented)

Chest Seal— Synthetic material placed over a torso wound to prevent air passage into the chest and allow air to vent out of the chest.



- 1. If tension pneumothorax is suspected, attempt to decompress the pressure building up by removing the chest seal and **<u>burping</u>** the wound.
- V. Prevent hypothermia:
 - A. Protect injured person from exposure to the elements.
 - B. Wet outer garments should be removed and the person dried.
 - C. Place the injured person in a position that limits heat loss to the ground if possible.
 - D. Cover the injured person with a commercial warming device, dry blankets, coats, sleeping bags, or anything that will retain heat and keep the injured person dry.
- VI. Burns:
 - A. Stop the burning process.
 - B. Cover the burned area with dry, clean (sterile if available) dressings and initiate measures to prevent hypothermia.
 - C. Prioritize actions to prevent hypothermia for all large burns.
- VII. Pain Control (analgesia)
 - A. Provide pain control if possible. Adequate pain control can reduce physiologic stress, may decrease post-traumatic stress, and may help to prevent chronic pain syndromes.
 - B. Interventions such as ice, elevation, and immobilization (to decrease movement of an injured extremity) should be considered.
 - C. Avoid the use of non-steroidal anti-inflammatory medications (e.g., aspirin, ibuprofen, naproxen) in the trauma patient as these medications interfere with the body's ability to form blood clots and may make bleeding worsen. Acetaminophen, in regularly used doses, can provide effective pain control if person is not vomiting and is able to take the medication.

VIII. Monitor mental status for **<u>shock</u>**:

- A. An injured person who can't follow simple commands is either in shock or has a head injury. To assess, ask a victim to "show me two fingers" or "squeeze my hand.")
- B. In an injured person without obvious head injury, altered mental status PLUS weak or absent peripheral pulses are the best field indicators of traumatic shock.

Tension Pneumothorax—

A type of collapsed lung and life-threatening problem where more and more air escapes from the lung, but is trapped within the chest, further collapsing the injured lung. It will manifest as increasing anxiety and increasing difficulty breathing/breathlessness in a patient who has injury to the upper torso. These patients need to be evacuated to a higher level of care as soon as possible.

Burping— The act of removing a chest seal and manipulating the skin around the wound to allow a potential tension pneumothorax to be relieved.

Shock— A state of inadequate blood flow preventing proper brain and vital organ function.



- IX. Prepare injured person(s) for movement:
 - A. Consider environmental factors for safe and expeditious evacuation.
 - B. Common items can be used to evacuate casualties, such as sheets, chairs, blankets, and lightweight tables.
- X. Documentation of Care:
 - A. Communicate any interventions to the personnel that are evacuating the injured to the next level of care.