




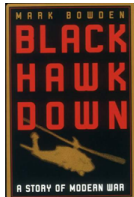

























<p>1.</p>	<p>Tactical Combat Casualty Care for Medical Personnel August 2017 (Based on TCCC-MP Guidelines 170131)</p>  <p>Tactical Field Care #3</p>	<p>Tactical Combat Casualty Care for Medical Personnel</p> <p>August 2017</p> <p>(Based on TCCC-MP Guidelines 170131)</p> <p>Tactical Field Care #3</p>	<p>We will continue with Tactical Field Care</p>
<p>2.</p>	 <p>OBJECTIVES</p> <ul style="list-style-type: none"> • DESCRIBE the rationale for early antibiotic intervention in combat casualties. • DISCUSS the management of burns in TFC. • EXPLAIN why cardiopulmonary resuscitation is not generally used for cardiac arrest in battlefield trauma care. • DESCRIBE the procedure for documenting TCCC care with the TCCC Casualty Card. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> • DESCRIBE the rationale for early antibiotic intervention in combat casualties. • DISCUSS the management of burns in TFC. • EXPLAIN why cardiopulmonary resuscitation is not generally used for cardiac arrest in battlefield trauma care. • DESCRIBE the procedure for documenting TCCC care with the TCCC Casualty Card. 	<p>Read the text.</p>
<p>3.</p>	 <p>OBJECTIVES</p> <ul style="list-style-type: none"> • DESCRIBE the three ISAF categories for evacuation priority • LIST the nine items in a MEDEVAC request • DISCUSS the rules of thumb for calling for Tactical Evacuation and the importance of careful calculation of the risk/benefit ratio prior to initiating the call • DESCRIBE the appropriate procedures for providing trauma care for wounded hostile combatants. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> • DESCRIBE the three ISAF categories for evacuation priority • LIST the nine items in a MEDEVAC request • DISCUSS the rules of thumb for calling for Tactical Evacuation and the importance of careful calculation of the risk/benefit ratio prior to initiating the call • DESCRIBE the appropriate procedures for providing trauma care for wounded hostile combatants. 	<p>Read the text.</p>

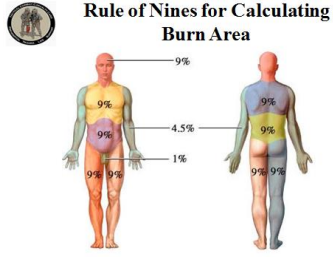



<p>4.</p>	 <p>Tactical Field Care Guidelines</p> <p>11. Antibiotics: recommended for all open combat wounds:</p> <ol style="list-style-type: none"> If able to take PO meds: <ul style="list-style-type: none"> - Moxifloxacin (from the CWMP), 400 mg PO one a day If unable to take PO (shock, unconsciousness): <ul style="list-style-type: none"> - Ertapenem, 1 g IV/IM once a day 	<p>Tactical Field Care Guidelines</p> <p>11. Antibiotics: recommended for all open combat wounds:</p> <ol style="list-style-type: none"> If able to take PO meds: <ul style="list-style-type: none"> - Moxifloxacin (from the CWMP), 400 mg PO one a day If unable to take PO (shock, unconsciousness): <ul style="list-style-type: none"> - Ertapenem, 1 g IV/IM once a day 	<p>Read the guideline.</p> <p>You should also irrigate wounds with clean water, if possible, since this also reduces the chance of infection.</p>
<p>5.</p>	 <p>Outcomes: <u>Without</u> Battlefield Antibiotics</p> <ul style="list-style-type: none"> • Mogadishu 1993 • Casualties: 58 • Wound Infections: 16 • Infection rate: 28% • Time from wounding to Level II care – 15 hrs <p><i>Mabry et al J Trauma 2000</i></p> 	<p>Outcomes: <u>Without</u> Battlefield Antibiotics</p> <ul style="list-style-type: none"> • Mogadishu 1993 • Casualties: 58 • Wound Infections: 16 • Infection rate: 28% • Time from wounding to Level II care – 15 hrs. 	<p>Why bother giving antibiotics?</p> <p>Why not just wait until they get to the hospital?</p> <p>ANTIBIOTICS MUST BE GIVEN EARLY TO PREVENT WOUND INFECTIONS.</p> <p>WOUND INFECTIONS CAN KILL THE CASUALTY OR DELAY HIS RECOVERY.</p> <p>Let's look at three examples. Here's the first:</p>
<p>6.</p>	 <p>Outcomes: <u>With</u> Battlefield Antibiotics</p> <p>Tarpey – AMEDD J 2005:</p> <ul style="list-style-type: none"> -32 casualties with open wounds -All received battlefield antibiotics -<u>None</u> developed wound infections -Used TCCC recommendations modified by availability: <ul style="list-style-type: none"> • Levofloxacin for an oral antibiotic • IV cefazolin for extremity injuries • IV ceftriaxone for abdominal injuries. 	<p>Outcomes: <u>With</u> Battlefield Antibiotics</p> <p>Tarpey – AMEDD J 2005:</p> <ul style="list-style-type: none"> -32 casualties with open wounds -All received battlefield antibiotics -<u>None</u> developed wound infections -Used TCCC recommendations modified by availability: <ul style="list-style-type: none"> • Levofloxacin for an oral antibiotic • IV cefazolin for extremity injuries • IV ceftriaxone for abdominal injuries. 	<p>This is a huge improvement over the wound infection rate seen in Mogadishu.</p>



<p>7.</p>	 <p>Outcomes: With Battlefield Antibiotics</p> <ul style="list-style-type: none"> • MSG Ted Westmoreland • Special Operations Medical Association presentation 2004 • Multiple casualty scenario involving 19 Ranger and Special Forces WIA as well as 30 Iraqi WIA • 11-hour delay to hospital care • Battlefield antibiotics given • No wound infections developed in this group. 	<p>Outcomes: <u>With</u> Battlefield Antibiotics</p> <ul style="list-style-type: none"> • MSG Ted Westmoreland • Special Operations Medical Association presentation 2004 • Multiple casualty scenario involving 19 Ranger and Special Forces WIA as well as 30 Iraqi WIA • 11-hour delay to hospital care • Battlefield antibiotics given • No wound infections developed in this group. 	<p><u>USE battlefield antibiotics!</u></p>
<p>8.</p>	 <p>Battlefield Antibiotics</p>  <p>Recommended for all open wounds on the battlefield!</p>	<p>Battlefield Antibiotics</p> <p>Recommended for all open wounds on the battlefield!</p>	<p>Even wounds much less severe than this warrant antibiotic coverage.</p>
<p>9.</p>	 <p>Battlefield Antibiotics</p> <p>If casualty can take PO meds</p> <ul style="list-style-type: none"> • Moxifloxacin 400 mg, one tablet daily <ul style="list-style-type: none"> – Broad spectrum – kills most bacteria – Few side effects – Take <u>as soon as possible</u> after life-threatening conditions have been addressed – Delays in antibiotic administration increase the risk of wound infections 	<p>Battlefield Antibiotics</p> <p>If casualty can take PO meds:</p> <ul style="list-style-type: none"> • Moxifloxacin 400 mg, one tablet daily <ul style="list-style-type: none"> – Broad spectrum – kills most bacteria – Few side effects – Take <u>as soon as possible</u> after life-threatening conditions have been addressed – Delays in antibiotic administration increase the risk of wound infections 	<p>Moxifloxacin was chosen after a careful review of available choices, and confirmed by multiple subsequent reviews.</p> <p>(NOTE: If you want to read about why moxifloxacin is the best choice for oral antibiotic in TCCC, this paper spells it out: O’Connor – Military Medicine, 2003.)</p>






<p>10.</p>	 <p>Combat Wound Medication Pack</p>  <p>In the event of open combat wounds swallow all four pills with water. Mobic 15mg Tylenol ER 650mg, 2 caplets Moxifloxacin 400mg</p>  <p>Pain Management and Infection Control For Combat Casualties "Just Got Easier To Swallow"</p>	<p>Combat Wound Medication Pack</p> <p>Mobic 15mg Tylenol ER 650mg, 2 caplets Moxifloxacin 400mg Blister pack NSN: 6505016529652</p>	<p>These meds should be carried by EVERYONE in the unit not allergic to any of them, and self-administered as soon as possible after sustaining a wound.</p> <p>The Combat Wound Medication Pack contains the following components: Moxifloxacin 400 mg tablet (one), Meloxicam 15 mg tablet (one), and acetaminophen 1300 mg in extended release form (650mg caplet x 2); each of the three medications (in unit dosages) is contained in a blister pack.</p>
<p>11.</p>	 <p>Battlefield Antibiotics</p> <ul style="list-style-type: none"> Casualties who cannot take PO meds: <ul style="list-style-type: none"> Ertapenem 1 gm IV/IM once a day <ul style="list-style-type: none"> IV requires a 30-minute infusion time. (1 gram vial of ertapenem in 10ml of 0.9% saline. Shake well to dissolve and immediately transfer to 50ml of 0.9% saline.) IM should be diluted with lidocaine. (1 gm vial ertapenem with 3.2cc lidocaine <u>without</u> epinephrine) 	<p>Battlefield Antibiotics</p> <ul style="list-style-type: none"> Casualties who cannot take PO meds: <ul style="list-style-type: none"> Ertapenem 1 gm IV/IM once a day <ul style="list-style-type: none"> IV requires a 30-minute infusion time. (1-gram vial of ertapenem in 10ml of 0.9% saline. Shake well to dissolve and immediately transfer to 50ml of 0.9% saline.) IM should be diluted with lidocaine. (1 gm vial ertapenem with 3.2cc lidocaine <u>without</u> epinephrine) 	<p>For IV use – Reconstitute the contents of a 1-gram vial of ertapenem in 10ml of 0.9% saline. Shake well to dissolve and immediately transfer to 50ml of 0.9% saline. Infuse that volume over 30 minutes.</p> <p>For IM use – Reconstitute the contents of a 1-gram vial of ertapenem with 3.2ml of 1% lidocaine injection (WITHOUT EPINEPHRINE). Shake well to dissolve and administer into a deep muscle mass (gluteal, lateral thigh). The reconstituted solution should be used within 1 hour after preparation.</p>







<p>12.</p>	 <p>Medication Allergies</p> <ul style="list-style-type: none"> • Screen your units for drug allergies! • Patients with allergies to aspirin or other non-steroidal anti-inflammatory drugs should not use Mobic. • Allergic reactions to acetaminophen are uncommon. • Patients with allergies to flouroquinolones, penicillins, and cephalosporins may need alternate antibiotics which should be selected by unit medical personnel during the pre-deployment phase. Check with your unit physician if unsure. 	<p>Medication Allergies</p> <ul style="list-style-type: none"> • Screen your units for drug allergies! • Patients with allergies to aspirin or other non-steroidal anti-inflammatory drugs should not use Mobic. • Allergic reactions to acetaminophen are uncommon. • Patients with allergies to flouroquinolones, penicillins, and cephalosporins may need alternate antibiotics which should be selected by unit medical personnel during the pre-deployment phase. Check with your unit physician if unsure. 	<p>Mobic should not be given to those who have experienced trouble breathing, hives or other allergic-type reactions after taking aspirin or other NSAIDs.</p> <p>Severe, rarely fatal, reactions have been reported in these patients.</p> <p>There are many classes of antibiotics. Individuals with known medication allergies should be identified as they may require a different class of antibiotic. Moxifloxacin (Avelox[®]) is a member of the flouroquinolone class. It is contraindicated in persons who have known allergic reactions to other flouroquinolones like Cipro[®]. Ertapenem (Invanz[®]) is a member of the carbapenem family of the beta lactam class of antibiotics. It is contraindicated in persons with known anaphylactic reactions to other beta lactams including penicillins and cephalosporins. Furthermore, since ertapenem is reconstituted with lidocaine for IM injection, it cannot be given to persons with known hypersensitivity to lidocaine.</p>
<p>13.</p>	 <p>IV Meds Practical</p> <ul style="list-style-type: none"> • TXA • Ketamine 	<p>IV Meds Practical</p> <ul style="list-style-type: none"> • TXA • Ketamine 	<p>TXA Skill Sheet</p> <p>Ketamine Skill Sheet</p>
<p>14.</p>	 <p>Tactical Field Care Guidelines</p> <p>12. Inspect and dress known wounds. 13. Check for additional wounds.</p> 	<p>Tactical Field Care Guidelines</p> <p>12. Inspect and dress known wounds. 13. Check for additional wounds.</p>	<p>Read the guidelines.</p> <p>Expose wounded areas by using trauma shears to cut away the casualty's clothing. It's too easy to cut the casualty if you use a knife for this.</p>






<p>15.</p>	 <p>Tactical Field Care Guidelines</p> <p>14. Burns</p> <p>a. Facial burns, especially those that occur in closed spaces, may be associated with inhalation injury. Aggressively monitor airway status and oxygen saturation in such patients and consider early surgical airway for respiratory distress or oxygen desaturation.</p> <p>b. Estimate total body surface area (TBSA) burned to the nearest 10% using the Rule of Nines.</p> 	<p>Tactical Field Care Guidelines</p> <p>14. Burns</p> <p>a. Facial burns, especially those that occur in closed spaces, may be associated with inhalation injury. Aggressively monitor airway status and oxygen saturation in such patients and consider early surgical airway for respiratory distress or oxygen desaturation.</p> <p>b. Estimate total body surface area (TBSA) burned to the nearest 10% using the Rule of Nines.</p>	<p>Read the guideline. (Note: The Rule of Nines is explained on the third slide following.)</p>
<p>16.</p>	 <p>Degrees of Burns</p> <p>Superficial burn "First Degree" </p> <p>Partial thickness burn "Second degree" </p>	<p>Degrees of Burns</p> <p>Superficial burn - "First Degree"</p> <p>Partial thickness burn - "Second degree"</p>	<p>Here are some examples of different degrees of burns</p>
<p>17.</p>	 <p>Degrees of Burns</p> <p>Full-thickness burn "Third degree" </p> <p>Deep(subdermal) burn "Fourth-degree" </p>	<p>Degrees of Burns</p> <p>Full-thickness burn - "Third degree"</p> <p>Deep (subdermal) burn - "Fourth-degree"</p>	<p>Here are more examples of different degrees of burns</p>



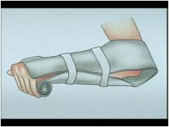
<p>18.</p>	 <p>Rule of Nines for Calculating Burn Area</p>	<p>Rule of Nines for Calculating Burn Area</p>	<p>Do not count superficial (first degree) burns in calculating TBSA burned.</p>
<p>19.</p>	 <p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <p>c. Cover the burn area with dry, sterile dressings. For extensive burns (>20%), consider placing the casualty in the Heat Reflective Shell or Blizzard Survival Blanket from the Hypothermia Prevention Kit in order to both cover the burned areas and prevent hypothermia.</p> 	<p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <p>c. Cover the burn area with dry, sterile dressings. For extensive burns (>20%), consider placing the casualty in the HRS or the Blizzard Survival Blanket in the Hypothermia Prevention Kit in order to both cover the burned areas and prevent hypothermia.</p>	<p>Read the guideline.</p>
<p>20.</p>	 <p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <p>d. Fluid resuscitation (USAISR Rule of Ten)</p> <ul style="list-style-type: none"> • If burns are greater than 20% of TBSA, fluid resuscitation should be initiated as soon as IV/IO access is established. Resuscitation should be initiated with Lactated Ringer's, normal saline, or Hextend. If Hextend is used, no more than 1000 ml should be given, followed by Lactated Ringer's or normal saline as needed. 	<p>Tactical Field Care Guidelines</p> <p>16. Burns (cont)</p> <p>d. Fluid resuscitation (USAISR Rule of Ten)</p> <ul style="list-style-type: none"> – If burns are greater than 20% of TBSA, fluid resuscitation should be initiated as soon as IV/IO access is established. Resuscitation should be initiated with Lactated Ringer's, normal saline, or Hextend. If Hextend is used, no more than 1000 ml should be given, followed by Lactated Ringer's or normal saline as needed. 	<p>Read the guideline.</p>







<p>21.</p>	 <p>Tactical Field Care Guidelines</p> <p>14. Burns</p> <p>d. Fluid resuscitation (USAISR Rule of Ten) (cont)</p> <ul style="list-style-type: none"> • Initial IV/IO fluid rate is calculated as %TBSA x 10ml/hr for adults weighing 40-80 kg. • For every 10 kg ABOVE 80 kg, increase initial rate by 100 ml/hr. • If hemorrhagic shock is also present, resuscitation for hemorrhagic shock takes precedence over resuscitation for burn shock. Administer IV/IO fluids per the TCCC Guidelines in Section (6). 	<p>Tactical Field Care Guidelines</p> <p>14. Burns</p> <p>d. Fluid resuscitation (USAISR Rule of Ten) (cont)</p> <ul style="list-style-type: none"> • Initial IV/IO fluid rate is calculated as %TBSA x 10ml/hr for adults weighing 40-80 kg. • For every 10 kg ABOVE 80 kg, increase initial rate by 100 ml/hr. • If hemorrhagic shock is also present, resuscitation for hemorrhagic shock takes precedence over resuscitation for burn shock. Administer IV/IO fluids per the TCCC Guidelines in Section (6). 	<p>Read the guideline.</p>
<p>22.</p>	 <p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <ul style="list-style-type: none"> e. Analgesia in accordance with TCCC Guidelines in Section (10) may be administered to treat burn pain. f. Prehospital antibiotic therapy is not indicated solely for burns, but antibiotics should be given per TCCC guidelines in Section (11) if indicated to prevent infection in penetrating wounds. 	<p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <ul style="list-style-type: none"> e. Analgesia in accordance with TCCC Guidelines in Section 13 may be administered to treat burn pain. f. Prehospital antibiotic therapy is not indicated solely for burns, but antibiotics should be given per TCCC guidelines in Section 15 if indicated to prevent infection in penetrating wounds. 	<p>Read the guidelines.</p>






<p>23.</p>	 <p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <ul style="list-style-type: none"> g. All TCCC interventions can be performed on or through burned skin in a burn casualty. h. Burn patients are particularly susceptible to hypothermia. Extra emphasis should be placed on barrier heat loss prevention methods. 	<p>Tactical Field Care Guidelines</p> <p>14. Burns (cont)</p> <ul style="list-style-type: none"> g. All TCCC interventions can be performed on or through burned skin in a burn casualty. h. Burn patients are particularly susceptible to hypothermia. Extra emphasis should be placed on barrier heat loss prevention methods. 	<p>Read the guidelines.</p>
<p>24.</p>	 <p>Burns in Tactical Field Care</p> <p><i>These casualties are "Trauma casualties with burns" - not the other way around.</i></p> <p><i>US Army ISR Burn Center</i></p> 	<p>Burns in Tactical Field Care</p> <p><i>These casualties are "Trauma casualties with burns" - not the other way around.</i></p> <p><i>US Army ISR Burn Center</i></p>	<p>Read the text.</p>
<p>25.</p>	 <p>Tactical Field Care Guidelines</p> <p>15. Splint fractures and recheck pulses.</p> 	<p>Tactical Field Care Guidelines</p> <p>15. Splint fractures and recheck pulse.</p>	<p>Read the guideline.</p>







<p>26.</p>	<p> Fractures: Open or Closed</p> <ul style="list-style-type: none"> • <u>Open Fracture</u> – associated with an overlying skin wound • <u>Closed Fracture</u> – no overlying skin wound <p>Open fracture  Closed fracture </p>	<p>Fractures: Open or Closed</p> <ul style="list-style-type: none"> • <u>Open Fracture</u> – associated with an overlying skin wound • <u>Closed Fracture</u> – no overlying skin wound 	<p>Open fractures present a major threat of serious infection.</p>
<p>27.</p>	<p> Clues to a Closed Fracture</p> <ul style="list-style-type: none"> • Trauma with significant pain AND • Marked swelling • Audible or perceived snap • Different length or shape of limb • Loss of pulse or sensation distally • Crepitus (“crunchy” sound) 	<p>Clues to a Closed Fracture</p> <ul style="list-style-type: none"> • Trauma with significant pain AND • Marked swelling • Audible or perceived snap • Different length or shape of limb • Loss of pulse or sensation distally • Crepitus (“crunchy” sound) 	<p>What are the warning signs that an arm or leg might be fractured?</p>
<p>28.</p>	<p> Splinting Objectives</p> <ul style="list-style-type: none"> • Prevent further injury • Protect blood vessels and nerves <ul style="list-style-type: none"> - Check pulse before and after splinting • Make casualty more comfortable 	<p>Splinting Objectives</p> <ul style="list-style-type: none"> • Prevent further injury • Protect blood vessels and nerves <ul style="list-style-type: none"> - Check pulse before and after splinting • Make casualty more comfortable 	<p>Why do we take the time to splint fractures?</p>





<p>29.</p>	 <p>Principles of Splinting</p> <ul style="list-style-type: none"> • <u>Check for other injuries</u> • Use rigid or bulky materials • Try to pad or wrap if using rigid splint • Secure splint with ace wrap, cravats, belts, duct tape • Try to splint before moving casualty 	<p>Principles of Splinting</p> <ul style="list-style-type: none"> • <u>Check for other injuries</u> • Use rigid or bulky materials • Try to pad or wrap if using a rigid splint • Secure splint with ace wrap, cravats, belts, duct tape • Try to splint before moving the casualty 	<p>Here are some of the things that you want to do when splinting a fracture.</p>
<p>30.</p>	 <p>Principles of Splinting</p> <ul style="list-style-type: none"> • Minimize manipulation of the extremity before splinting. • Incorporate the joint above and below. • Arm fractures can be splinted to the shirt using a sleeve. • Consider traction splinting for mid-shaft femur fractures. • Check a distal pulse and skin color before and after splinting. 	<p>Principles of Splinting</p> <ul style="list-style-type: none"> • Minimize manipulation of the extremity before splinting. • Incorporate the joint above and below. • Arm fractures can be splinted to the shirt using a sleeve. • Consider traction splinting for mid-shaft femur fractures. • Check a distal pulse and skin color before and after splinting. 	<p>And here are a few more of the things that you want to do when splinting a fracture.</p> <p>The splint shown here is a traction splint.</p>
<p>31.</p>	 <p>Things to Avoid in Splinting</p> <ul style="list-style-type: none"> • Manipulating the fracture too much and damaging blood vessels or nerves • Wrapping the splint too tight and cutting off circulation below the splint 	<p>Things to Avoid in Splinting</p> <ul style="list-style-type: none"> • Manipulating the fracture too much and damaging blood vessels or nerves • Wrapping the splint too tight and cutting off circulation below the splint 	<p>You can do harm with splinting as well.</p>







<p>32.</p>	 <p>Commercial Splints</p>	<p>Commercial Splints</p>	<p>A pneumatic splint and a flexible type splint are shown here.</p>
<p>33.</p>	 <p>Field-Expedient Splint Materials</p> <ul style="list-style-type: none"> • Shirt sleeves/safety pins • Weapons • Boards • Boxes • Tree limbs • ThermoRest pad 	<p>Field-Expedient Splint Materials</p> <ul style="list-style-type: none"> • Shirt sleeves/safety pins • Weapons • Boards • Boxes • Tree limbs • ThermoRest pad 	<p>Remember to pad rigid splints.</p> <p>If you use a weapon as a splint – don’t forget to unload and safe it first!</p>
<p>34.</p>	 <p>Don't Forget!</p> <p>Pulse, motor and sensory checks before and after splinting!</p>	<p>Don't Forget!</p> <p>Pulse, motor and sensory checks before and after splinting!</p>	<p>The most important aspect of splinting is to splint in a way that does not harm the nerves or blood vessels to the extremity. Check for this by assessing circulation and motor and sensory status before and after splinting.</p>



<p>35.</p>	 <p>Splinting Practical</p> 	<p>Splinting Practical</p>	
<p>36.</p>	 <p>Tactical Field Care Guidelines</p> <p>16. Communication</p> <p>a. Communicate with the casualty if possible. Encourage, reassure and explain care</p> 	<p>Tactical Field Care Guidelines</p> <p>16. Communication</p> <p>a. Communicate with the casualty if possible. Encourage, reassure and explain care</p>	<p>Read the guideline.</p>
<p>37.</p>	 <p>Tactical Field Care Guidelines</p> <p>16. Communication (cont)</p> <p>b. Communicate with tactical leadership as soon as possible and throughout casualty treatment as needed. Provide leadership with casualty status and evacuation requirements to assist with coordination of evacuation assets.</p> 	<p>Tactical Field Care Guidelines</p> <p>16. Communication (cont)</p> <p>b. Communicate with tactical leadership as soon as possible and throughout casualty treatment as needed. Provide leadership with casualty status and evacuation requirements to assist with coordination of evacuation assets.</p>	<p>Read the guideline.</p>




<p>38.</p>	 <p>Tactical Field Care Guidelines</p> <p>16. Communication (cont)</p> <p>c. Communicate with the evacuation system (the Patient Evacuation Coordination Cell) to arrange for TACEVAC. Communicate with medical providers on the evacuation asset if possible and relay mechanism of injury, injuries sustained, signs/symptoms, and treatments rendered. Provide additional information as appropriate.</p>	<p>Tactical Field Care Guidelines</p> <p>16. Communication (cont)</p> <p>c. Communicate with the evacuation system (the Patient Evacuation Coordination Cell) to arrange for TACEVAC. Communicate with medical providers on the evacuation asset if possible and relay mechanism of injury, injuries sustained, signs/symptoms, and treatments rendered. Provide additional information as appropriate.</p>	<p>Read the guideline.</p> <p>Don't wait until the end of TFC to begin communicating. Talk to your patient throughout treatment. Talk to leadership throughout the TFC process.</p>
<p>39.</p>	 <p>Talk to the Casualty</p> <ul style="list-style-type: none"> • Encourage, reassure and explain care. • Talking with the casualty helps assess his mental status. • Talking through procedures helps maintain your own confidence and the casualty's confidence in you. 	<p>Talk to the Casualty</p> <ul style="list-style-type: none"> • Encourage, reassure and explain care. • Talking with the casualty helps assess his mental status. • Talking through procedures helps maintain your own confidence and the casualty's confidence in you. 	<p>Read the text.</p>
<p>40.</p>	 <p>Talk to Leadership</p> <ul style="list-style-type: none"> • Communicate with tactical leadership ASAP and throughout the treatment process. • Provide the casualty's status and evacuation requirements. • Develop unit-level casualty reports and rehearse them frequently. • Initiate the MEDEVAC request. 	<p>Talk to Leadership</p> <ul style="list-style-type: none"> • Communicate with tactical leadership ASAP and throughout the treatment process. • Provide the casualty's status and evacuation requirements. • Develop unit-level casualty reports and rehearse them frequently. • Initiate the MEDEVAC request. 	<p>Don't delay in communicating casualty status to leadership. Tactical leadership needs facts and requirements to better coordinate evacuation.</p>



<p>41.</p>	 <p>Tactical Casualty Information</p> <p>Tactical Data</p> <ul style="list-style-type: none"> • Threat Identification • Casualty Identification • Casualty Location • Casualty Weapon Systems • Can casualty shoot, move, communicate? • Does casualty need assistance? • C2 notification <p>Medical Data</p> <ul style="list-style-type: none"> • Injuries? • Conscious/Unconscious? • Treatment rendered / required? • Get Medic to Casualty OR Casualty to Medic? • Evacuation requirements? • Triage for multiple casualties? • Casualty evac category? • Need more Class VIII? 	 <p>Tactical Casualty Information</p> <p>Tactical Data</p> <ul style="list-style-type: none"> • Threat Identification • Casualty Identification • Casualty Location • Casualty Weapon Systems • Can casualty shoot, move, communicate? • Does casualty need assistance? • C2 notification <p>Medical Data</p> <ul style="list-style-type: none"> • Injuries? • Conscious/Unconscious? • Treatment rendered / required? • Get Medic to Casualty OR Casualty to Medic? • Evacuation requirements? • Triage for multiple casualties? • Casualty evac category? • Need more Class VIII? 	<p>From the tactical perspective, leaders need to know how casualties were inflicted, who is down as a casualty, and whether the casualties can still fight. Has the enemy threat been eliminated? Are weapons systems down or fields of fire not covered because the unit has taken casualties? Is it necessary to have others fill in the casualties' fighting positions or to move the casualties?</p> <p>From a medical perspective, medics need to know the injuries sustained; the mental and physical status of each casualty, treatments rendered, and treatments needed. Does the medic need to triage multiple casualties? Should the medic move to a casualty or should the casualty be moved to the medic? Are there enough Class VIII medical supplies? Does the unit need to break out litters or extraction equipment?</p>
<p>42.</p>	 <p>Communicate with Evac System</p> <ul style="list-style-type: none"> • Evacuation Request (9-Line MEDEVAC) • MIST Report 	<p>Communicate with Evac System</p> <ul style="list-style-type: none"> • Evacuation Request (9-Line MEDEVAC) • MIST Report 	<p>Communicate your evacuation request through your theater's established communications systems. Here are two examples in wide use.</p>
<p>43.</p>	  <p>9-Line Evacuation Request</p> <p>Required if you need to have a casualty evacuated by another unit.</p>	<p>9-Line Evacuation Request</p> <p>Required if you want an evacuation from another unit</p>	<p>Read the text.</p>



<p>44.</p>	 <p>9-Line Evacuation Request</p> <ul style="list-style-type: none"> • Request for resources through tactical aircraft channels. • <u>NOT</u> a direct medical communication with medical providers • Significance <ul style="list-style-type: none"> – Determines tactical resource allocation – DOES NOT convey much useful medical information 	<p>9-Line Evacuation Request</p> <ul style="list-style-type: none"> • Request for resources through tactical aircraft channels. • <u>NOT</u> a direct medical communication with medical providers • Significance <ul style="list-style-type: none"> – Determines tactical resource allocation – DOES NOT convey much useful medical information 	<p>Read the text.</p> <p>This helps explain why you are sending what you send on the 9-line request.</p>
<p>45.</p>	 <p>9-Line Evacuation Request</p> <p>Line 1: Pickup location</p> <p>Line 2: Radio frequency, call sign and suffix</p> <p>Line 3: Number of patients by precedence (evacuation category)</p> <ul style="list-style-type: none"> A – Urgent B – Urgent-Surgical C – Priority D – Routine E – Convenience 	<p>9-Line Evacuation Request</p> <p>Line 1: Pickup location</p> <p>Line 2: Radio frequency, call sign and suffix</p> <p>Line 3: Number of casualties by precedence (evacuation category)</p> <ul style="list-style-type: none"> A – Urgent B – Urgent-Surgical C – Priority D – Routine E – Convenience 	<p>Line 1: The location of the pick-up site or HLZ. Use 8 or 10-digit military grid reference system or pre-coordinated HLZ names.</p> <p>Line 2: YOUR operating frequency and callsign. This is the frequency the evacuation vehicle will use to talk to your unit when inbound.</p> <p>Line 3: this is the number of patients in categories of urgency. Each casualty’s evacuation category is determined by the medic or senior person present based on injuries and medical status.</p> <p>We’ll discuss placing casualties in evacuation categories in a few moments.</p>
<p>46.</p>	 <p>9-Line Evacuation Request</p> <p>Line 4: Special equipment required</p> <ul style="list-style-type: none"> A – None B – Hoist C – Extraction equipment D – Ventilator <p>* Blood</p> 	<p>9-Line Evacuation Request</p> <p>Line 4: Special equipment required</p> <ul style="list-style-type: none"> A – None B – Hoist C – Extraction equipment D – Ventilator <p>* Blood</p>	<p>In Line 4, you provide any special equipment needed and any extraction requirements. This includes hoist or specialized extraction equipment as well as things like ventilators.</p> <p>Though not part of the formal MEDEVAC request, it has become common practice to request blood if needed.</p>






<p>47.</p>	 <p>9-Line Evacuation Request</p> <p>Line 5: Number of casualties by type L – Number of litter patient A – Number of ambulatory patients</p> <p>Line 6: Security at pickup site N – No enemy troops in area P – Possible enemy troops in area (approach with caution) E – Enemy troops in area (approach with caution) X – Enemy troops in area (armed escort required)</p> 	<p>9-Line Evacuation Request</p> <p>Line 5: Number of casualties by type L – Number of litter patient A – Number of ambulatory patients</p> <p>Line 6: Security at pickup site N – No enemy troops in area P – Possible enemy troops in area (approach with caution) E – Enemy troops in area (approach with caution) X – Enemy troops in area (armed escort required)</p>	<p>Line 5: Number of litter or ambulatory. Said as L-#, A-#.</p> <p>Line 6 tells evacuation control about the enemy situation near the evacuation point, and whether escort is needed.</p> <p>Often, lines 1-5 and/or 6 are enough information to initiate a MEDEVAC depending upon pre-planning and coordination between tactical and evacuation units.</p>
<p>48.</p>	 <p>9-Line Evacuation Request</p> <p>Line 7: Method of marking pickup site A – Panels B – Pyrotechnic signal C – Smoke signal D – None E – Other - specify</p> <p>Line 8: Casualty's nationality and status A – US military B – US civilian C – Non-US Military D – Non-US civilian E – Enemy prisoner of war</p> 	<p>9-Line Evacuation Request</p> <p>Line 7: Method of marking pickup site A – Panels B – Pyrotechnic signal C – Smoke signal D – None E – Other - specify</p> <p>Line 8: Casualty's nationality and status A – US military B – US civilian C – Non-US Military D – Non-US civilian E – Enemy prisoner of war</p>	<p>Line 7 tells the evacuation asset how you will mark the pick-up site; whether VS-17 panels, pyro, or smoke. In recent years, night vision has allowed better night evacuations. For these, IR lighting has been commonly used.</p> <p>Line 8 indicates the nationality of patients. If mixed, each brevity letter is followed by the appropriate number of casualties in that category.</p> <p>For Line 8, theater commanders can re-designate the brevity codes. For instance, in Afghanistan, the brevity A was for all ISAF/coalition forces and not just US military.</p>
<p>49.</p>	 <p>9-Line Evacuation Request</p> <p>Line 9 (Wartime): CBRN Contamination C – Chemical B – Biological R – Radiological N – Nuclear</p> <p>Line 9 (Peactime): Terrain Description</p> 	<p>9-Line Evacuation Request</p> <p>Line 9 (Wartime): CBRN Contamination C – Chemical B – Biological R – Radiological N – Nuclear</p> <p>Line 9 (Peactime): Terrain Description</p>	<p>Line 9 gives different information depending on whether the evacuation is during wartime or peace. However, this has become dependent on the overall combat situation. In a deployed setting in which CBRN is not considered a high threat AND when evacuations frequently occur in rugged terrain, the terrain description has been used more often. The terrain description should include details of terrain features in and around the proposed pick-up site.</p>






<p>50.</p>	 <p>MIST Report</p> <ul style="list-style-type: none"> • Conveys additional evacuation information that may be required by theater commanders. • A MIST report is supplemental to a MEDEVAC request, and should be sent as soon as possible. • MEDEVAC missions should not be delayed while waiting for MIST information. • MIST information helps the receiving MTF better prepare for the specific casualties inbound. 	<p>MIST Report</p> <ul style="list-style-type: none"> • Conveys additional evacuation information that may be required by theater commanders. • A MIST report is supplemental to a MEDEVAC request, and should be sent as soon as possible. • MEDEVAC missions should not be delayed while waiting for MIST information. • MIST information helps the receiving MTF better prepare for the specific casualties inbound. 	<p>MIST reporting was instituted as a standard part of the MEDEVAC request during Operation Enduring Freedom in Afghanistan. Though not a formal part of the NATO and US standard MEDEVAC request, MIST reporting has become a norm in combat theaters. The MIST transmits medical information to the receiving treatment facility and to the evacuation platform.</p>
<p>51.</p>	 <p>MIST Report</p> <ul style="list-style-type: none"> • M: Mechanism of injury • I: Injury type(s) • S: Signs & Symptoms • T: Treatment 	<p>MIST Report</p> <ul style="list-style-type: none"> • M: Mechanism of injury • I: Injury type(s) • S: Signs & Symptoms • T: Treatment 	<p>M: A brief description of the mechanism of injury. For example: IED, GSW, Blast, Rollover, Fall</p> <p>I: A brief description of the injuries sustained starting with the most serious first. Highlight life-threatening injuries. Example: bilateral lower extremity amputations.</p> <p>S: Vital signs or significant symptoms. For instance, BP 90/Palp and difficulty breathing.</p> <p>T: Treatments rendered. For example, tourniquets applied with bleeding controlled; ketamine 50mg IM.</p>


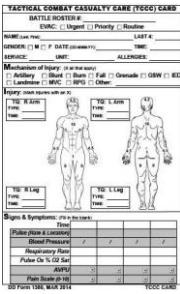



<p>52.</p>	 <p>Tactical Field Care Guidelines</p> <p>18. Cardiopulmonary resuscitation (CPR)</p> <p>Resuscitation on the battlefield for victims of blast or penetrating trauma who have no pulse, no ventilations, and no other signs of life will not be successful and should not be attempted. However, casualties 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. The procedure is the same as described in section 3 above.</p>	<p>Tactical Field Care Guidelines</p> <p>17. Cardiopulmonary resuscitation (CPR)</p> <p>a. 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. However, 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. The procedure is the same as described in section 3 above.</p>	<p>Read the guideline.</p>
<p>53.</p>	 <p>CPR</p>  <p><u>NO</u> battlefield CPR</p>	<p><u>NO</u> battlefield CPR</p>	<p>Why not???</p>




<p>54.</p>	 <p>CPR in Civilian Trauma</p> <ul style="list-style-type: none"> • This is a series of 138 trauma patients with prehospital cardiac arrest and in whom resuscitation was attempted. • There were <u>no</u> survivors. • The authors recommended that trauma patients in cardiopulmonary arrest not be transported emergently to a trauma center even in a civilian setting due to large economic cost of treatment without a significant chance for survival. <p><i>Rosemurgy et al. J Trauma 1993</i></p>	<p>CPR in Civilian Trauma</p> <ul style="list-style-type: none"> • This is a series of 138 trauma patients with prehospital cardiac arrest and in whom resuscitation was attempted. • There were <u>no</u> survivors. • The authors recommended that trauma patients in cardiopulmonary arrest not be transported emergently to a trauma center even in a civilian setting due to large economic cost of treatment without a significant chance for survival. <p><i>Rosemurgy et al. J Trauma 1993</i></p>	<p>CPR for trauma patients in cardiac arrest DOES NOT WORK!</p> <p>CPR may work SOMETIMES for cardiac patients without trauma – but not for trauma patients.</p>
<p>55.</p>	 <p>The Cost of Attempting CPR on the Battlefield</p> <ul style="list-style-type: none"> • CPR performers may get killed • Mission gets delayed • Casualty stays dead 	<p>The Cost of Attempting CPR on the Battlefield</p> <ul style="list-style-type: none"> • CPR performers may get killed • Mission gets delayed • Casualty stays dead 	<p>In combat, futile attempts at CPR may interfere with caring for casualties who have a chance to survive and may interfere with the unit's ongoing mission.</p>





<p>56.</p>	 <p>CPR on the Battlefield (Ranger Airfield Operation in Grenada)</p> <ul style="list-style-type: none"> • Airfield seizure operation. • A Ranger was shot in the head by a sniper. • Casualty had no pulse or respirations. • CPR attempts were unsuccessful. • The operation was delayed while CPR was performed. • Ranger PA finally intervened: “Stop CPR and move out!” 	<p>CPR on the Battlefield (Ranger Airfield Operation in Grenada)</p> <ul style="list-style-type: none"> • Airfield seizure operation • A Ranger was shot in the head by a sniper. • Casualty had no pulse or respirations. • CPR attempts were unsuccessful. • The operation was delayed while CPR was performed • Ranger PA finally intervened: “Stop CPR and move out!” 	<p>Here is a real-world example.</p> <p>A very large-scale operation could have been compromised by a tactical medicine mistake.</p>
<p>57.</p>	 <p>CPR in Tactical Settings</p> <p>Only in the case of cardiac arrest due to:</p> <ul style="list-style-type: none"> – Hypothermia – Near drowning – Electrocutation – Other non-traumatic causes <p>should CPR be considered prior to the Tactical Evacuation Care phase.</p>	<p>CPR in Tactical Settings</p> <p>Only in the case of cardiac arrest due to:</p> <ul style="list-style-type: none"> – Hypothermia – Near drowning – Electrocutation – Other non-traumatic causes <p>should CPR be considered prior to the Tactical Evacuation Care phase.</p>	<p>There are some notable exceptions to the rule about CPR on the battlefield.</p> <p>Individuals with these disorders have a better chance of survival than those with cardiac arrest due to trauma.</p> <p>Myocardial infarction is not on this list because it is pretty rare for combat troops to have heart attacks in the middle of an op.</p>




<p>58.</p>	 <p>Traumatic Cardiac Arrest in TCCC</p> <ul style="list-style-type: none"> • Mounted IED attack in March 2011 • Casualty unconscious from closed head trauma • Lost vital signs prehospital • CPR on arrival at hospital • Bilateral needle decompression done in ER • Rush of air from left-sided tension pneumothorax • Return of vital signs – life saved • This procedure is routinely performed by Emergency Medicine physicians and Trauma Surgeons for trauma victims who lose their pulse and heart rate in the hospital Emergency Department. 	<p>Traumatic Cardiac Arrest in TCCC</p> <ul style="list-style-type: none"> • Mounted IED attack in March 2011 • Casualty unconscious from closed head trauma • Lost vital signs prehospital • CPR on arrival at hospital • Bilateral needle decompression done in ER • Rush of air from left-sided tension pneumothorax • Return of vital signs – life saved • This procedure is routinely performed by Emergency Medicine physicians and Trauma Surgeons for trauma victims who lose their pulse and heart rate in the hospital Emergency Department. 	<p>Though CPR for a combat casualty on the battlefield is contraindicated, bilateral needle decompression is not. This should be done before attempts at resuscitation are discontinued in any casualty who suffered polytrauma or torso trauma and lost vital signs. It is done to rule out tension pneumothorax. It could save a life if tension pneumothorax is present, and no harm will be done if it is not.</p>
<p>59.</p>	 <p>Questions?</p> 	<p>Questions?</p>	
<p>60.</p>	 <p>Tactical Field Care Guidelines</p> <p>18. Documentation of Care</p> <p>a. Document clinical assessments, treatments rendered, and changes in the casualty's status on a TCCC Casualty Card (DD Form 1380). Forward this information with the casualty to the next level of care.</p> 	<p>Tactical Field Care Guidelines</p> <p>18. Documentation of Care:</p> <p>a. Document clinical assessments, treatments rendered, and changes in the casualty's status on a TCCC Casualty Card (DD Form 1380). Forward this information with the casualty to the next level of care.</p>	<p>Read the guideline.</p>




<p>61.</p>	 <p>TCCC Card</p> <ul style="list-style-type: none"> • Designed by combat medics • Used in combat since 2002 • Replaced old DD Form 1380 • Only essential information • Can be used by the receiving hospital to document injuries sustained and field treatments rendered • Heavy-duty waterproof or laminated paper 	<p>TCCC Casualty Card</p> <ul style="list-style-type: none"> • Designed by combat medics • Used in combat since 2002 • Replaced old DD Form 1380 • Only essential information • Can be used by the receiving hospital to document injuries sustained and field treatments rendered • Heavy-duty waterproof or laminated paper 	<p>Medical documentation may be difficult to accomplish in tactical settings.</p> <p>It is so important to the casualty’s subsequent care that every effort should be made.</p>
<p>62.</p>	 <p>Kotwal et al - 2011</p> <p><small>ORIGINAL ARTICLE</small></p> <p>Eliminating Preventable Death on the Battlefield</p> <p><small>Baris S. Kotwal, MD, MPH; Harold E. Montgomery, NEMT; Bari M. Kotwal, MS; Howard B. Champion, FRCS; Frank E. Butler Jr, MD; Robert L. Mabry, MD; Jeffrey S. Cain, MD; Lane H. Blackburne, MD; Kirby R. Stocker, MS, RN; John R. Haiscomb, MD</small></p> <ul style="list-style-type: none"> • In order to know if we are doing the right thing, we must first know what we did. • This paper was made possible by the Ranger TCCC Card. 	<p>Kotwal et al – 2011</p> <p>Eliminating Preventable Death on the Battlefield</p> <ul style="list-style-type: none"> • In order to know if we are doing the right thing, we must first know what we did. • This paper was made possible by the Ranger TCCC Card. 	<p>This paper appeared in the Archives of Surgery in December 2011. It documents prehospital battlefield trauma care and examines outcomes. It could not have been written without data from TCCC Casualty Cards.</p>
<p>63.</p>	 <p>TCCC Card</p> <ul style="list-style-type: none"> • This card is based on the principles of TCCC. • It addresses the initial lifesaving care provided at the point of wounding. • It should be filled out by <i>whoever</i> is caring for the casualty. • Its format is simple with a circle or “X” in the appropriate block. 	<p>TCCC Casualty Card</p> <ul style="list-style-type: none"> • This card is based on the principles of TCCC. • It addresses the initial lifesaving care provided at the point of wounding. • Filled out by <i>whoever</i> is caring for the casualty. • Its format is simple with a circle or “X” in the appropriate block. 	<p>Read the guideline.</p>







<p>64.</p>	 <p>TCCC Casualty Card Front</p> 	<p>TCCC Card Front</p>	<p>This is the front of the TCCC Casualty Card.</p> <p>The individual's name and allergies should already be filled in.</p> <p>This should be done when the card is placed in the individual's IFAK.</p>
<p>65.</p>	 <p>TCCC Casualty Card Back</p> 	<p>TCCC Card Back</p>	<p>And this is the back of the TCCC Card.</p>
<p>66.</p>	 <p>Instructions</p> <ul style="list-style-type: none"> • A TCCC Card should be kept in each Individual First Aid Kit. • Use an indelible marker to fill it out. • When used, attach it to the casualty's belt loop, or place it in their upper left sleeve, or the left trouser cargo pocket. • Include as much information as you can. 	<p>Instructions</p> <ul style="list-style-type: none"> • A TCCC Card should be kept in each Individual First Aid Kit. • Use an indelible marker to fill it out. • When used, attach it to the casualty's belt loop, or place it in their upper left sleeve, or the left trouser cargo pocket. • Include as much information as you can. 	<p>Read the text.</p>







<p>67.</p>	 <p>Documentation</p> <ul style="list-style-type: none"> Record each intervention in each category. If you are not sure what to do, the card will prompt you where to go next. Simply circle the intervention you performed. Explain any action you want clarified in the remarks area. 	<p>Documentation</p> <ul style="list-style-type: none"> Record each intervention in each category. If you are not sure what to do, the card will prompt you where to go next. Simply circle the intervention you performed. Explain any action you want clarified in the remarks area. 	<p>Read the text.</p>
<p>68.</p>	 <p>Documentation</p> <ul style="list-style-type: none"> The card does not imply that every casualty needs all of these interventions. You may not be able to perform all of the interventions that the casualty needs. The next person caring for the casualty can add to the interventions performed. This card can be filled out in less than two minutes. It is important that we document the care given to the casualty. 	<p>Documentation</p> <ul style="list-style-type: none"> The card does not imply that every casualty needs all the interventions listed. You may not be able to perform all the interventions that the casualty needs. The next person caring for the casualty can add to the interventions performed. This card can be filled out in less than two minutes. It is important that we document the care given to the casualty. 	<p>Read the text.</p>
<p>69.</p>	 <p>TCCC Card Abbreviations</p> <ul style="list-style-type: none"> DTG = Date-Time Group (e.g. – 160010Oct2009) NBC = Nuclear, Biological, Chemical TQ = Tourniquet GSW = Gunshot Wound MVA = Motor Vehicle Accident AVPU = Alert, Verbal stimulus, Painful stimulus, Unresponsive Cric = Cricothyroidotomy NeedleD = Needle decompression IV = Intravenous IO = Intraosseous NS = Normal Saline LR = Lactated Ringers ABX = Antibiotics 	<p>TCCC Card Abbreviations</p> <ul style="list-style-type: none"> DTG = Date-Time Group (e.g. – 160010Oct2009) NBC = Nuclear, Biological, Chemical TQ = Tourniquet GSW = Gunshot Wound MVA = Motor Vehicle Accident AVPU = Alert, Verbal stimulus, Painful stimulus, Unresponsive Cric = Cricothyroidotomy NeedleD = Needle decompression IV = Intravenous IO = Intraosseous NS = Normal Saline LR = Lactated Ringers ABX = Antibiotics 	<p>Review the abbreviations.</p>







<p>70.</p>	 <p>TCCC After Action Report</p> <ul style="list-style-type: none"> This electronic AAR is intended to be completed when the first responder returns to base. Somewhat more complete than the TCCC Casualty Card TCCC AAR should be submitted to the Joint Theater Trauma System Director within 72 hours of casualty evacuation Both the TCCC Casualty Card and the TCCC AAR are required by USFOR-A FRAGO 13-139 	<p>TCCC After Action Report</p> <ul style="list-style-type: none"> This electronic AAR is intended to be completed when the first responder returns to base. It is more complete than the TCCC Casualty Card. It should be submitted to the Joint Theater Trauma System Director within 72 hours of casualty evacuation. Both the TCCC Casualty Card and the TCCC AAR are required for optimal patient care documentation. 	<p>Read the text.</p>
<p>71.</p>	 <p>TCCC After-Action Report</p> 	<p>TCCC After-Action Report</p>	<p>This is the format of the TCCC AAR.</p>
<p>72.</p>		<p>Questions?</p>	





<p>73.</p>	 <p>Tactical Field Care Guidelines</p> <p>19. Prepare for Evacuation</p> <ol style="list-style-type: none"> a. Complete and secure the TCCC Card (DD 1380) to the casualty. b. Secure all loose ends of bandages and wraps. c. Secure hypothermia prevention wraps/blankets/straps. d. Secure litter straps as required. Consider additional padding for long evacuations. 	<p>Tactical Field Care Guidelines</p> <p>19. Prepare for Evacuation</p> <ol style="list-style-type: none"> a. Complete and secure the TCCC Card (DD 1380) to the casualty. b. Secure all loose ends of bandages and wraps. c. Secure hypothermia prevention wraps/blankets/straps. d. Secure litter straps as required. Consider additional padding for long evacuations. 	<p>These are things you should do to get the casualty ready to board the evacuation platform.</p> <p>Read the guidelines.</p>
<p>74.</p>	 <p>Tactical Field Care Guidelines</p> <p>19. Prepare for Evacuation (cont)</p> <ol style="list-style-type: none"> e. Provide instructions to ambulatory patients as needed. f. Stage casualties for evacuation in accordance with unit standard operating procedures. g. Maintain security at the evacuation point in accordance with unit standard operating procedures. 	<p>Tactical Field Care Guidelines</p> <p>19. Prepare for Evacuation (cont)</p> <ol style="list-style-type: none"> e. Provide instructions to ambulatory patients as needed. f. Stage casualties for evacuation in accordance with unit standard operating procedures. g. Maintain security at the evacuation point in accordance with unit standard operating procedures. 	<p>Read the guidelines.</p>
<p>75.</p>	 <p>Tactical Field Care Guidelines</p> <p>19. Prepare for Evacuation (cont)</p> <ol style="list-style-type: none"> e. Provide instructions to ambulatory patients as needed. f. Stage casualties for evacuation in accordance with unit standard operating procedures. g. Maintain security at the evacuation point in accordance with unit standard operating procedures. 	<p>Secure Loose Ends</p> <ul style="list-style-type: none"> • Secure all loose ends of bandages, wraps and hypothermia prevention materials. • Consider padding for long evacuations. 	<p>Secure all loose ends of bandages, medical equipment and hypothermia prevention materials. You need to prevent dressings and other medical items from being blown around by rotor wash or becoming entangled with other equipment. Loose materials can catch on everything from tree limbs to body armor of litter bearers to parts of aircraft or vehicles. Any snag like this can cause delays in evacuation or even further injury to patients or providers.</p> <p>Blankets and foil-based hypothermia materials are especially susceptible to being caught in the wind.</p>




<p>76.</p>	 <p>Package the Casualty</p> <ul style="list-style-type: none"> Secure the casualty's weapons/equipment as required. 	<p>Package the Casualty</p> <ul style="list-style-type: none"> Secure the casualty's weapons/equipment as required. 	<p>Secure the casualty's weapon and equipment in accordance with unit SOP or mission requirements.</p> <p>Clear and render safe any weapons evacuated with the casualty.</p> <p>Do not evacuate explosives with the casualty if possible.</p> <p>Keep in mind that receiving medical personnel may not be familiar with the equipment or have a way to secure it.</p>
<p>77.</p>	 <p>Prep for Evacuation</p> <ul style="list-style-type: none"> Evacuation equipment should be prepped by unit personnel while treatment continues. 	<p>Prep for Evacuation</p> <ul style="list-style-type: none"> Evacuation equipment should be prepped by unit personnel while treatment continues. 	<p>Coordinate activities to save time.</p> <p>Other unit members can prepare litters and evacuation equipment while you provide treatment.</p> <p>Do not delay getting casualties onto litters.</p> <p>You can better prevent hypothermia by getting casualties off of the ground.</p> <p>If tactical situation developments demand a rapid movement of casualties, it is easier to move them if they're already on litters.</p>
<p>78.</p>	 <p>Prep for Evacuation</p> <p>Casualty movement in TFC may be better accomplished using litters.</p> 	<p>Prep for Evacuation</p> <p>Casualty movement in TFC may be better accomplished using litters.</p>	<p>Remember that we used carries and drags in Care Under Fire. We did it that way to get the casualty to cover as quickly as possible.</p> <p>Now we have time to use litters.</p> <p>Litters are usually better for moving a casualty a long distance.</p> <p>Casualties do NOT have to be placed supine on a litter. The litter exists only to facilitate casualty movement. The casualty can be placed in the best position that facilitates their care and comfort. The casualty must, however, be secured to litter prior to movement.</p>





<p>79.</p>	 <p>Litter Selection</p> <ul style="list-style-type: none"> • Selection is based on the mission and the unit type. • Rigid litters work better than pole-less or improvised. • Consider terrain and obstacles in the operating area. 	<p>Litter Selection</p> <ul style="list-style-type: none"> • Selection is based on the mission and the unit type. • Rigid litters work better than pole-less or improvised. • Consider terrain and obstacles in the operating area. 	<p>The unit should plan for ahead of time for how it will move casualties in the operating environment. Unit members should be trained on the chosen equipment.</p>
<p>80.</p>	 <p>Be Prepared for the Operating Environment</p> 	<p>Be Prepared for the Operating Environment</p>	<p>A pole-less litter is great as a contingency item in a rucksack, but will not be as efficient as a poled litter in carrying a casualty.</p> <p>A Skedco is a great tool for moving over land on snow, but can literally become a runaway sled if control is lost.</p>
<p>81.</p>	 <p>Evacuation Equipment</p> <ul style="list-style-type: none"> • All unit members should know how to open and set up litters and rehearse their use during pre-mission training. • All unit members should know who will carry litters and/or where litters are located on vehicles. 	<p>Evacuation Equipment</p> <ul style="list-style-type: none"> • All unit members should know how to open and set up litters and rehearse their use during pre-mission training. • All unit members should know who will carry litters and/or where litters are located on vehicles. 	<p>Read the text.</p>







<p>82.</p>	 <p>Package the Casualty</p> <ul style="list-style-type: none"> Secure litter straps. <ul style="list-style-type: none"> Know your litter! Does it have attached straps or does it need supplementary strapping?  <p><small>Patient Securing Strap NSN: 6530-00-784-4205</small></p>	<p>Package the Casualty</p> <ul style="list-style-type: none"> Secure litter straps. <ul style="list-style-type: none"> Know your litter! Does it have attached straps or does it need supplementary strapping? 	<p>Read the text.</p>
<p>83.</p>	 <p>Package the Casualty</p> 	<p>Package the Casualty</p>	<p>Hypothermia prevention equipment should be tucked and secured beneath the casualty and litter straps. Loose edges can be caught up in wind or rotor wash or snagged on objects in the helicopter as the casualty is loaded aboard.</p>
<p>84.</p>	 <p>Walking Wounded</p> <ul style="list-style-type: none"> Provide instructions or assistance to ambulatory patients as needed. Depending on the nature of their injuries, they may be able to assist with carrying litters or providing security. Best to guide disoriented or visually impaired casualties hand-to-shoulder to the evacuation platform. Instruct them on repeatedly checking their own wounds and dressings to ensure that bleeding remains controlled. 	<p>Walking Wounded</p> <ul style="list-style-type: none"> Provide instructions or assistance to ambulatory patients as needed. Depending on the nature of their injuries, they may be able to assist with carrying litters or providing security. Best to guide disoriented or visually impaired casualties hand-to-shoulder to the evacuation platform. Instruct them on repeatedly checking their own wounds and dressings to ensure that bleeding remains controlled. 	<p>Read the text.</p>






<p>85.</p>	 <p>Stage Casualties for Evac</p> <ul style="list-style-type: none"> • Be prepared for the arrival of the evacuation platform. • Stage the casualties in the loading sequence of the evacuation platform. 	<p>Stage Casualties for Evac</p> <ul style="list-style-type: none"> • Be prepared for the arrival of the evacuation platform. • Stage the casualties in the loading sequence of the evacuation platform. 	<p>Many units use tagging or color-coded chemlights to identify casualty evacuation categories.</p>
<p>86.</p>	 <p>Instructions from Platform Crew</p> <p>Take direction from the crew of the evacuation platform on approaching the platform, loading casualties, and turnover with receiving medics.</p> 	<p>Instructions from Platform Crew</p> <p>Take direction from the crew of the evacuation platform on approaching the platform, loading casualties, and turnover with receiving medics.</p>	<p>Read the text.</p>
<p>87.</p>	 <p>SECURITY</p> <p>Maintain security at the evacuation point in accordance with unit SOP.</p> 	<p>SECURITY</p> <p>Maintain security at the evacuation point in accordance with unit SOP.</p>	<p>Read the text.</p>







<p>88.</p>	 <p>Litter Carry Video</p> <ul style="list-style-type: none"> • Secure the casualty on the litter. • Bring his weapons. • Maintain security.  <p><small>Courtesy 75th Ranger Regiment</small></p>	<p>Litter Carry Video</p> <ul style="list-style-type: none"> • Secure the casualty on the litter. • Bring his weapons. • Maintain security. 	<p>Click on the photo to play the video. Remember - Don't let the casualty fall off the litter!</p>
<p>89.</p>		<p>Questions?</p>	
<p>90.</p>	 <p>JTS-Recommended Standard Evacuation Categories</p> <ul style="list-style-type: none"> • Specifies three categories for casualty evacuation: <ul style="list-style-type: none"> • A - Urgent • B - Priority • C - Routine 	<p>JTS-Recommended Standard Evacuation Categories</p> <ul style="list-style-type: none"> • Specifies three categories for casualty evacuation: <ul style="list-style-type: none"> • A - Urgent • B - Priority • C - Routine 	<p>You need to know the category for each casualty when calling on the radio for MEDEVAC/CASEVAC.</p>




<p>91.</p>	 <p>JTS-Recommended Standard Evacuation Categories</p> <ul style="list-style-type: none"> • CAT A – Urgent (denotes a critical, life-threatening injury) <ul style="list-style-type: none"> – Significant injuries from a dismounted IED attack – Gunshot wound or penetrating shrapnel to chest, abdomen or pelvis – Any casualty with ongoing airway difficulty – Any casualty with ongoing respiratory difficulty – Unconscious casualty 	<p>JTS-Recommended Standard Evacuation Categories</p> <p>CAT A – Urgent (denotes a critical, life-threatening injury)</p> <ul style="list-style-type: none"> – Significant injuries from a dismounted IED attack – Gunshot wound or penetrating shrapnel to chest, abdomen or pelvis – Any casualty with ongoing airway difficulty – Any casualty with ongoing respiratory difficulty – Unconscious casualty 	<p>Casualties with these injuries would be considered Urgent.</p>
<p>92.</p>	 <p>JTS-Recommended Standard Evacuation Categories</p> <ul style="list-style-type: none"> • CAT A – Urgent (continued) <ul style="list-style-type: none"> – Casualty with known or suspected spinal injury – Casualty in shock – Casualty with bleeding that is difficult to control – Moderate/Severe TBI – Burns greater than 20% Total Body Surface Area 	<p>JTS-Recommended Standard Evacuation Categories</p> <p>CAT A – Urgent (continued)</p> <ul style="list-style-type: none"> – Casualty with known or suspected spinal injury – Casualty in shock – Casualty with bleeding that is difficult to control – Moderate/Severe TBI – Burns greater than 20% Total Body Surface Area 	<p>More examples of injuries in the Urgent category.</p>
<p>93.</p>	 <p>JTS-Recommended Standard Evacuation Categories</p> <ul style="list-style-type: none"> • CAT B – Priority (serious injury) <ul style="list-style-type: none"> – Isolated, open extremity fracture with bleeding controlled – Any casualty with a tourniquet in place – Penetrating or other serious eye injury – Significant soft tissue injury without major bleeding – Extremity injury with absent distal pulses – Burns 10-20% Total Body Surface Area 	<p>JTS-Recommended Standard Evacuation Categories</p> <p>CAT B – Priority (serious injury)</p> <ul style="list-style-type: none"> – Isolated, open extremity fracture with bleeding controlled – Any casualty with a tourniquet in place – Penetrating or other serious eye injury – Significant soft tissue injury without major bleeding – Extremity injury with absent distal pulses – Burns 10-20% Total Body Surface Area 	<p>Casualties with these injuries would be categorized Priority.</p>






<p>94.</p>	 <p>JTS-Recommended Standard Evacuation Categories</p> <ul style="list-style-type: none"> • CAT C – Routine (mild to moderate injury) <ul style="list-style-type: none"> – Concussion (mild TBI) – Gunshot wound to extremity - bleeding controlled without tourniquet – Minor soft tissue shrapnel injury – Closed fracture with intact distal pulses – Burns < 10% Total Body Surface Area 	<p>JTS-Recommended Standard Evacuation Categories</p> <p>CAT C – Routine (mild to moderate injury)</p> <ul style="list-style-type: none"> – Concussion (mild TBI) – Gunshot wound to extremity - bleeding controlled without tourniquet – Minor soft tissue shrapnel injury – Closed fracture with intact distal pulses – Burns < 10% Total Body Surface Area 	<p>These injuries would be assigned an evacuation category of Routine.</p>
<p>95.</p>	 <p>Tactical Evacuation: Nine Rules of Thumb</p> 	<p>Tactical Evacuation: Nine Rules of Thumb</p>	<p>Here’s something that is particular to TCCC.</p> <p>If you have a casualty – how do you know how delays to evac will impact on him/her?</p> <p>These slides will help in that respect.</p>
<p>96.</p>	 <p>TACEVAC 9 Rules of Thumb: Assumptions</p> <ul style="list-style-type: none"> • These Rules of Thumb are designed to help the corpsman or medic determine the true urgency for evacuation. • They assume that the decision is being made at 15-30 minutes after wounding. • They also assume that care is being rendered per the TCCC guidelines. • These considerations are most important when there are tactical constraints on evacuation: <ul style="list-style-type: none"> – Interferes with mission – High risk for team – High risk for TACEVAC platform 	<p>TACEVAC 9 Rules of Thumb: Assumptions</p> <ul style="list-style-type: none"> • These Rules of Thumb are designed to help the corpsman or medic determine the true urgency for evacuation. • They assume that the decision is being made at 15-30 minutes after wounding. • They also assume that care is being rendered per the TCCC guidelines. • These considerations are most important when there are tactical constraints on evacuation: <ul style="list-style-type: none"> – Interferes with mission – High risk for team – High risk for TACEVAC platform 	<p>Why not just evacuate all casualties immediately?</p> <p>That may be OK for some situations, but other scenarios may have tactical constraints that must be factored in. In such a situation, these Rules of Thumb can help you decide when to evacuate.</p>

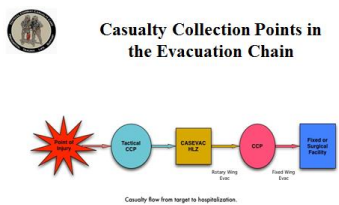
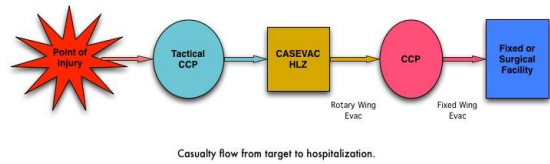

97.	 <p>TACEVAC Rule of Thumb #1</p> <p>Soft tissue injuries are common and may look bad, but usually don't kill unless associated with shock.</p> 	<p>TACEVAC Rule of Thumb #1</p> <p>Soft tissue injuries are common and may look bad, but usually don't kill unless associated with shock.</p>	<p>Casualties do not die acutely from soft tissue wounds alone unless associated with severe bleeding or airway problems.</p>
98.	 <p>TACEVAC Rule of Thumb #2</p> <p>Bleeding from most extremity wounds should be controllable with a tourniquet or hemostatic dressing. Evacuation delays should not increase mortality if bleeding is fully controlled.</p> 	<p>TACEVAC Rule of Thumb #2</p> <p>Bleeding from most extremity wounds should be controllable with a tourniquet or hemostatic dressing. Evacuation delays should not increase mortality if bleeding is fully controlled.</p>	<p>BUT – long delays to evacuation may cause a limb to be lost if a tourniquet is in place.</p> <p>Two hours does not seem to be a problem for limbs with tourniquets. As you move past four to six hours, the risk to limb survival increases.</p>
99.	 <p>TACEVAC Rule of Thumb #3</p> <p>Casualties who are in shock should be evacuated as soon as possible.</p>  <p>Gunshot wound to the abdomen</p>	<p>TACEVAC Rule of Thumb #3</p> <p>Casualties who are in shock should be evacuated as soon as possible.</p>	<p>This GSW to the torso is an example of a wound that causes internal, non-compressible bleeding.</p> <p>There is nothing that the combat medic/corpsman/PJ can do to stop internal bleeding. TXA may help, but even so, shock is nothing to sit on in the field.</p>




<p>100.</p>	<p> TACEVAC Rule of Thumb #4</p> <p>Casualties with penetrating wounds of the chest who have respiratory distress unrelieved by needle decompression of the chest should be evacuated as soon as possible.</p> 	<p>TACEVAC Rule of Thumb #4</p> <p>Casualties with penetrating wounds of the chest who have respiratory distress unrelieved by needle decompression of the chest should be evacuated as soon as possible.</p>	<p>Usually when you do needle decompression, casualties with a tension pneumo WILL get better.</p> <p>If they don't, their main problem may be a large HEMOthorax (blood in the chest).</p> <p>Needle decompression will not help that. Chest tubes may not, either.</p>
<p>101.</p>	<p> TACEVAC Rule of Thumb #5</p> <p>Casualties with blunt or penetrating trauma of the face associated with airway difficulty should have an immediate airway established and be evacuated as soon as possible.</p> <p>REMEMBER to let the casualty sit up and lean forward if that helps him or her to breathe better!</p> 	<p>TACEVAC Rule of Thumb #5</p> <p>Casualties with blunt or penetrating trauma of the face associated with airway difficulty should have an immediate airway established, and should be evacuated as soon as possible.</p> <p>REMEMBER to let the casualty sit up and lean forward if that helps him or her to breathe better!</p>	<p>You can make these casualties much worse if you force them to lie on their backs!</p>
<p>102.</p>	<p> TACEVAC Rule of Thumb #6</p> <p>Casualties with blunt or penetrating wounds of the head where there is obvious massive brain damage and unconsciousness are unlikely to survive with or without emergent evacuation.</p>	<p>TACEVAC Rule of Thumb #6</p> <p>Casualties with blunt or penetrating wounds of the head where there is obvious massive brain damage and unconsciousness are unlikely to survive with or without emergent evacuation.</p>	<p>There are some casualties you can't help.</p>




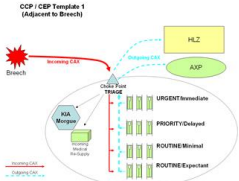
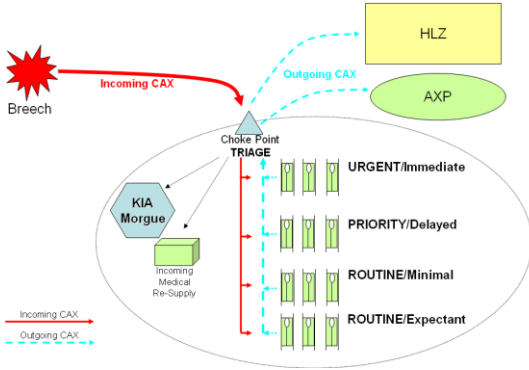
<p>103.</p>	<p> TACEVAC Rule of Thumb #7</p> <p>Casualties with blunt or penetrating wounds to the head - where the skull has been penetrated but the casualty is conscious - should be evacuated emergently.</p> 	<p>TACEVAC Rule of Thumb #7</p> <p>Casualties with blunt or penetrating wounds to the head - where the skull has been penetrated but the casualty is conscious - should be evacuated emergently.</p>	<p>Some trauma to the head IS survivable, especially shrapnel injuries.</p>
<p>104.</p>	<p> TACEVAC Rule of Thumb #8</p> <p>Casualties with penetrating wounds of the chest or abdomen who are not in shock at their 15-minute evaluation have a moderate risk of developing late shock from slowly bleeding internal injuries. They should be carefully monitored and evacuated as feasible.</p> 	<p>TACEVAC Rule of Thumb #8</p> <p>Casualties with penetrating wounds of the chest or abdomen who are not in shock at their 15-minute evaluation have a moderate risk of developing late shock from slowly bleeding internal injuries. They should be carefully monitored and evacuated as feasible.</p>	<p>This photo shows a 7.62mm entrance wound. This single GSW to the torso proved fatal.</p> <p>The casualties who will die from internal bleeding do not always succumb in the first 15-30 minutes.</p>
<p>105.</p>	<p> TACEVAC Rule of Thumb #9</p> <p>Casualties with TBI who display “red flag” signs - witnessed loss of consciousness, altered mental status, unequal pupils, seizures, repeated vomiting, visual disturbance, worsening headache, unilateral weakness, disorientation, or abnormal speech – require urgent evacuation to a medical treatment facility.</p> 	<p>TACEVAC Rule of Thumb #9</p> <p>Casualties with TBI who display “red flag” signs - witnessed loss of consciousness, altered mental status, unequal pupils, seizures, repeated vomiting, visual disturbance, worsening headache, unilateral weakness, disorientation, or abnormal speech – require urgent evacuation to a medical treatment facility.</p>	<p>Read the text.</p>




<p>106.</p>		<p>Questions?</p>	
<p>107.</p>	 <p>Further Elements of Tactical Field Care</p> <ul style="list-style-type: none"> • Reassess regularly. • Minimize removal of uniform and protective gear, but get the job done. • Replace body armor after care, or at least keep it with the casualty. He or she may need it again if there is additional contact. 	<p>Further Elements of Tactical Field Care</p> <ul style="list-style-type: none"> • Reassess regularly. • Minimize removal of uniform and protective gear, but get the job done. • Replace body armor after care, or at least keep it with the casualty. He or she may need it again if there is additional contact. 	<p>A few final points...</p>
<p>108.</p>	 <p>Summary of Key Points</p> <ul style="list-style-type: none"> • Still in hazardous environment • Limited medical resources • Hemorrhage control • Airway management • Breathing • Transition from tourniquet to another form of hemorrhage control when appropriate • For hemorrhagic shock, resuscitate with blood products per the TCCC Guidelines when they are available 	<p>Summary of Key Points</p> <ul style="list-style-type: none"> • Still in a hazardous environment • Limited medical resources • Hemorrhage control • Airway management • Breathing • Transition from tourniquet to another form of hemorrhage control when appropriate • For hemorrhagic shock, resuscitate with blood products per the TCCC Guidelines when they are available 	<p>TFC takes place in a hazardous environment.</p> <p>The enemy may be close, and medical care may be far away.</p> <p>There is more time here than in Care Under Fire, but still, you should do only those aspects of care that are really important.</p> <p>Remember that your unit may have to move quickly at short notice.</p>





<p>109.</p>	 <p>Summary of Key Points</p> <ul style="list-style-type: none"> • Hypotensive resuscitation with Hextend for hemorrhagic shock when blood products are not available • Hypothermia prevention • Shield and antibiotics for penetrating eye injuries • Pain control • Antibiotics • Reassure casualties • No CPR • Documentation of care 	<p>Summary of Key Points</p> <ul style="list-style-type: none"> • Hypotensive resuscitation with Hextend for hemorrhagic shock when blood products are not available • Hypothermia prevention • Shield and antibiotics for penetrating eye injuries • Pain control • Antibiotics • Reassure casualties • No CPR • Documentation of care 	<p>Review these elements of TFC.</p>
<p>110.</p>	 <p>Questions?</p>  <p>Wear your body armor!</p>	<p>Questions?</p> <p>Wear your body armor!</p>	
<p>111.</p>	 <p>Casualty Collection Point Operations</p>  <p><small>This section adapted from: Kotwal, R., Montgomery, H. (2011). TCCC Casualty Response Planning. In N. McSwain, J. Salamon, P. Pons, B. Butler & S. Givner. (Eds.), PHTLS Prehospital Trauma Life Support, Military Version, Seventh Edition (pp. 719-735). St. Louis: Elsevier.</small></p>	<p>Casualty Collection Point Operations</p>	<p>This information on CCP operations was extracted from the chapter on TCCC Casualty Response Planning by Kotwal and Montgomery in the military version of the Prehospital Life Support Manual.</p>




<p>112.</p>	 <p>Casualty Collection Points in the Evacuation Chain</p> <p>Casualty flow from target to hospitalization.</p>	 <p>Casualty Collection Points in the Evacuation Chain</p> <p>Casualty flow from target to hospitalization.</p>	<p>If possible, casualty flow should be planned from the point of injury all the way back to a fixed medical facility in CONUS. Tactical medics should understand the casualty flow up two levels above themselves at a minimum, including patient regulating, casualty accountability, and hospitalization requirements. For example, a platoon medic should have a good understanding of where a casualty goes after leaving the tactical CCP or battalion aid station.</p> <p>There are several questions that need to be answered in order to establish the tactical casualty flow:</p> <ul style="list-style-type: none"> To where will the unit’s casualties be evacuated? Will evacuation be conducted by ground or air (or water) assets to a casualty collection point? How will evacuation be conducted to casualty transload points? What are the distances and times of travel? Will expected casualties be able to make it that far? If not, what parts of the plan need to be corrected? Who will evacuate the casualties? Will medical assets be properly positioned to ensure continuity of care?
<p>113.</p>	 <p>CCP Site Selection</p> <ul style="list-style-type: none"> • Should be reasonably close to the fight. • Located near areas where casualties are likely to occur. • Must provide cover and concealment from the enemy. • Inside a building or on hardstand (an exclusive CCP building limits confusion). • Should have access to evacuation routes (foot, vehicle, aircraft). • Proximal to “Lines of Drift” or paths across terrain that are the most likely to be used when going from one place to another. 	<p>CCP Site Selection</p> <ul style="list-style-type: none"> • Should be reasonably close to the fight • Located near areas where casualties are likely to occur • Must provide cover and concealment from the enemy • Inside a building or on hardstand (an exclusive CCP building limits confusion) • Should have access to evacuation routes (foot, vehicle, aircraft) • Proximal to “Lines of Drift” or paths across terrain that are the most likely to be used when going from one place to another. 	<p>This is a checklist for selecting a good location for a tactical CCP. “Lines of Drift” are paths of least resistance that offer the greatest ease while taking into account obstacles and modes of transit to the objective.</p>




<p>114.</p>	 <p>CCP Site Selection</p> <ul style="list-style-type: none"> • Should be reasonably close to the fight. • Located near areas where casualties are likely to occur. • Must provide cover and concealment from the enemy. • Inside a building or on hardstand (an exclusive CCP building limits confusion). • Should have access to evacuation routes (foot, vehicle, aircraft). • Proximal to "Lines of Drift" or paths across terrain that are the most likely to be used when going from one place to another. 	<p>CCP Site Selection</p> <ul style="list-style-type: none"> • Adjacent to Tactical Choke Points (breaches, HLZ's, etc...) • Avoid natural or enemy choke points • Choose an area providing passive security (inside the perimeter) • Good drainage • Accessible to evacuation assets • Expandable if casualty load increases 	<p>Read the text.</p>
<p>115.</p>	 <p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • Typically, a First Sergeant (1SG) or Platoon Sergeant (PSG), or equivalent, is given responsibility for casualty flow and everything outside the CCP: <ul style="list-style-type: none"> – Provides for CCP structure and organization (color coded with chemlights) – Maintains command & control and battlefield situational awareness – Controls aid & litter teams, and provides security <p>(continued)</p>	<p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • Typically, a First Sergeant (1SG) or Platoon Sergeant (PSG), or equivalent, is given responsibility for casualty flow and everything outside the CCP: <ul style="list-style-type: none"> – Provides for CCP structure and organization (color coded with chemlights) – Maintains command & control and battlefield situational awareness – Controls aid & litter teams, and provides security 	<p>Read the text.</p>
<p>116.</p>	 <p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • First Sergeant (1SG), Platoon Sergeant (PSG) or equivalent: <ul style="list-style-type: none"> – Strips, bags, tags, organizes, and maintains casualties' tactical gear outside of treatment area – Accountable for tracking casualties and equipment into and out of CCP and reports to higher command – Moves casualties through CCP entrance/exit choke point which should be marked with an IR chemlight 	<p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • First Sergeant (1SG), Platoon Sergeant (PSG) or equivalent: <ul style="list-style-type: none"> – Strips, bags, tags, organizes, and maintains casualties' tactical gear outside of treatment area – Accountable for tracking casualties and equipment into and out of CCP and reports to higher command – Moves casualties through CCP entrance/exit choke point which should be marked with an IR chemlight 	<p>Read the text.</p>




<p>117.</p>	 <p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • Medical personnel are responsible for everything inside the CCP <ul style="list-style-type: none"> – Triage officer sorts and organizes casualties at choke point into appropriate treatment categories – Medical officers and medics organize medical equipment and supplies and treat casualties – EMTs, First Responders, and Aid & Litter Teams assist with treatment and packaging of casualties 	<p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • Medical personnel are responsible for everything inside the CCP <ul style="list-style-type: none"> – Triage officer sorts and organizes casualties at choke point into appropriate treatment categories – Medical officers and medics organize medical equipment and supplies and treat casualties – EMTs, First Responders, and Aid & Litter Teams assist with treatment and packaging of casualties 	<p>Read the text.</p>
<p>118.</p>	 <p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • Casualties with minor injuries should remain with original element or assist with CCP security if possible • Those killed in action should remain with original element 	<p>CCP Operational Guidelines</p> <ul style="list-style-type: none"> • Casualties with minor injuries should remain with their original elements or assist with CCP security if possible. • Those killed in action should remain with their original element 	<p>Read the text.</p>
<p>119.</p>	 <p>CCP Operational Guidelines</p> 	<p>CCP Operational Guidelines</p> <p>CCP / CEP Template 1 (Adjacent to Breach)</p> 	<p>This is a typical configuration of a CCP receiving casualties from a nearby encounter with hostile forces.</p>




<p>120.</p>		<p>Questions?</p>	
<p>121.</p>		<p>Management of Wounded Hostile Combatants</p>	<p>When you are taking care of casualties who were recently fighting for the other side, there are a few additional things to remember.</p>
<p>122.</p>	 <p>Objective</p> <ul style="list-style-type: none"> • DESCRIBE the considerations in rendering trauma care to wounded hostile combatants. 	<p>Objective</p> <ul style="list-style-type: none"> • DESCRIBE the considerations in rendering trauma care to wounded hostile combatants. 	<p>Read the text.</p>




<p>123.</p>	 <p>Care for Wounded Hostile Combatants</p> <ul style="list-style-type: none"> • No medical care during Care Under Fire • Though wounded, enemy personnel may still act as hostile combatants <ul style="list-style-type: none"> –May employ any weapons or detonate any ordnance they are carrying • Enemy casualties are <i>hostile combatants</i> until they: <ul style="list-style-type: none"> –Indicate surrender –Drop all weapons –Are proven to no longer pose a threat 	<p>Care for Wounded Hostile Combatants</p> <ul style="list-style-type: none"> • No medical care during Care Under Fire • Though wounded, enemy personnel may still act as hostile combatants <ul style="list-style-type: none"> –May employ any weapons or detonate any ordnance they are carrying • Enemy casualties are <i>hostile combatants</i> until they: <ul style="list-style-type: none"> –Indicate surrender –Drop all weapons –Are proven to no longer pose a threat 	<p>Remember that wounded hostile combatants still represent a lethal threat.</p>
<p>124.</p>	 <p>Care for Wounded Hostile Combatants</p> <ul style="list-style-type: none"> • Combat medical personnel should not attempt to provide medical care until sure that the wounded hostile combatant has been rendered safe by other members of the unit. • Restrain with flex cuffs or other devices if not already done. • Search for weapons and/or ordnance. • Silence to prevent communication with other hostile combatants. 	<p>Care for Wounded Hostile Combatants</p> <ul style="list-style-type: none"> • Combat medical personnel should not attempt to provide medical care until sure that the wounded hostile combatant has been rendered safe by other members of the unit. • Restrain with flex cuffs or other devices if not already done. • Search for weapons and/or ordnance. • Silence to prevent communication with other hostile combatants. 	<p>These are just VERY BASIC prisoner handling guidelines.</p>
<p>125.</p>	 <p>Care for Wounded Hostile Combatants</p> <ul style="list-style-type: none"> • Segregate from other captured hostile combatants. • Safeguard from further injury. • Care as per TFC guidelines for U.S. forces after the steps above are accomplished. • Speed to the rear as medically and tactically feasible 	<p>Care for Wounded Hostile Combatants</p> <ul style="list-style-type: none"> • Segregate from other captured hostile combatants. • Safeguard from further injury. • Care as per TFC guidelines for U.S. forces after the steps above are accomplished. • Speed to the rear as medically and tactically feasible 	<p>Once the hostile combatants have been searched and secured, the care provided should be the same as for U.S. and coalition forces in accordance with the Geneva Convention.</p>

<p>126.</p>		<p><i>QUESTIONS?</i></p>	
<p>127.</p>	 <p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Recap from Care Under Fire: • Your last medical decision during Care Under Fire: <ul style="list-style-type: none"> – Placed tourniquet on left stump • You moved the casualty behind cover and returned fire. • You provided an update to your mission commander. 	<p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Recap from Care Under Fire: • Your last medical decision during Care Under Fire: <ul style="list-style-type: none"> – Placed tourniquet on left stump • You moved the casualty behind cover and returned fire. • You provided an update to your mission commander. 	<p>OK – let’s go back to our scenario that we started in Care Under Fire.</p> <p>Your element was in a five-vehicle convoy moving through a small Iraqi village when a command-detonated IED exploded under the second vehicle. The person next to you sustained bilateral mid-thigh amputations.</p> <p>He had heavy arterial bleeding from the left stump, and the right stump was only mildly oozing blood.</p> <p>Read text in this slide.</p>
<p>128.</p>	 <p>Convoy IED Scenario</p> <p>Assumptions in discussing TFC in this scenario:</p> <ul style="list-style-type: none"> • Effective hostile fire has been suppressed. • Team Leader has established a security perimeter. • Pre-designated HLZ for helicopter evacuation is 15 minutes away. • Flying time to the hospital is 30 minutes. • Ground evacuation time is 3 hours. • Enemy threat to helicopter at HLZ estimated to be minimal. 	<p>Convoy IED Scenario</p> <p>Assumptions in discussing TFC in this scenario:</p> <ul style="list-style-type: none"> • Effective hostile fire has been suppressed. • Team Leader has directed that the unit will move. • Pre-designated HLZ for helicopter evacuation is 15 minutes away. • Flying time to the hospital is 30 minutes. • Ground evacuation time is 3 hours. • Enemy threat to helicopter at HLZ estimated to be minimal. 	<p>Read the text.</p> <p>HLZ = helicopter landing zone</p>

<p>129.</p>	 <p>Convoy IED Scenario</p> <p>Next decision (Command Element)?</p> <ul style="list-style-type: none"> • How to evacuate the casualty? <ul style="list-style-type: none"> – Helicopter <ul style="list-style-type: none"> • Longer time delay for ground evacuation. • Enemy threat at the HLZ is acceptable. 	<p>Convoy IED Scenario</p> <p>Next decision (Command Element)?</p> <ul style="list-style-type: none"> • How to evacuate casualty? <ul style="list-style-type: none"> – Helicopter <ul style="list-style-type: none"> • Longer time delay for ground evacuation • Enemy threat at HLZ acceptable 	<p>Next decision?</p> <p>CASEVAC by air is chosen because it is significantly faster than ground CASEVAC in this scenario.</p>
<p>130.</p>	 <p>Convoy IED Scenario</p> <p>Next decision (Command Element)?</p> <ul style="list-style-type: none"> • Load first and treat enroute to the HLZ or treat first and load after? <ul style="list-style-type: none"> – Load and Go – Why? <ul style="list-style-type: none"> • You can continue treatment enroute. • Avoids potential second attack at ambush site. 	<p>Convoy IED Scenario</p> <p>Next decision (Command Element)?</p> <ul style="list-style-type: none"> • Load first and treat enroute to the HLZ or treat first and load after? <ul style="list-style-type: none"> – Load and Go – Why? <ul style="list-style-type: none"> • You can continue treatment enroute • Avoids potential second attack at the ambush site. 	<p>Read the text.</p> <p>Get the unit off the X – the enemy now knows where you are.</p>
<p>131.</p>	 <p>Convoy IED Scenario</p> <p>Casualty is still conscious and has no neck or back pain.</p> <p>Next decision?</p> <ul style="list-style-type: none"> – Do you need spinal immobilization? <ul style="list-style-type: none"> – No <ul style="list-style-type: none"> • Not needed unless casualty has neck or back pain <ul style="list-style-type: none"> – Why? <ul style="list-style-type: none"> – There is little expectation of a spinal fracture in the absence of neck or back pain in a conscious casualty. – Speed is critical. – NOTE: Casualties who are unconscious from blast trauma should have spinal immobilization if feasible. 	<p>Convoy IED Scenario</p> <p>Casualty is still conscious and has no neck or back pain.</p> <p>Next decision?</p> <ul style="list-style-type: none"> – Do you need spinal immobilization? <ul style="list-style-type: none"> – No <ul style="list-style-type: none"> • Not needed unless casualty has neck or back pain <ul style="list-style-type: none"> – Why? <ul style="list-style-type: none"> – There is little expectation of a spinal fracture in the absence of neck or back pain in a conscious casualty – Speed is critical. – NOTE: Casualties who are unconscious from blast trauma should have spinal immobilization if feasible. 	<p>Read the text.</p>

<p>132.</p>	 <p>Convoy IED Scenario</p> <p>Ten minutes later, you and the casualty are in a vehicle enroute to HLZ. Next action?</p> <ul style="list-style-type: none"> • Reassess the casualty. <ul style="list-style-type: none"> – Casualty is now unconscious. – No bleeding from first tourniquet site. – The other stump is bleeding severely. 	<p>Convoy IED Scenario</p> <p>Ten minutes later, you and the casualty are in a vehicle enroute to HLZ.</p> <p>Next action?</p> <ul style="list-style-type: none"> • Reassess the casualty. <ul style="list-style-type: none"> – Casualty is now unconscious. – No bleeding from first tourniquet site. – The other stump is bleeding severely. 	<p>Read the text.</p>
<p>133.</p>	 <p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Next action? <ul style="list-style-type: none"> – Place a tourniquet on the 2nd stump. • Next action? <ul style="list-style-type: none"> – Remove any weapons or ordnance that the casualty may be carrying. • Next action? <ul style="list-style-type: none"> – Place a nasopharyngeal airway. • Next action? <ul style="list-style-type: none"> – Make sure he's not bleeding heavily elsewhere. – Check for other trauma. 	<p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Next action? <ul style="list-style-type: none"> – Place tourniquet on 2nd stump • Next action? <ul style="list-style-type: none"> – Remove any weapons or ordnance that the casualty may be carrying. • Next action? <ul style="list-style-type: none"> – Place nasopharyngeal airway • Next action? <ul style="list-style-type: none"> – Make sure he's not bleeding heavily elsewhere – Check for other trauma 	<p>Read text</p>
<p>134.</p>	 <p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Next action? <ul style="list-style-type: none"> – Establish IV access - need to give TXA and then resuscitate for shock • Next action? <ul style="list-style-type: none"> – Administer 1 gram of tranexamic acid (TXA) in 100 cc NS or LR – Infuse slowly over 10 minutes 	<p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Next action? <ul style="list-style-type: none"> – Pelvic binder – Establish IV access - need to give TXA and then resuscitate for shock • Next action? <ul style="list-style-type: none"> – Administer 1 gram of tranexamic acid (TXA) in 100 cc NS or LR – Infuse slowly over 10 minutes 	<p>Read the text.</p>

<p>135.</p>	 <p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Next action? <ul style="list-style-type: none"> – Begin fluid resuscitation – your convoy carries cold-stored, type O, low-titer whole blood. • Next actions? <ul style="list-style-type: none"> – Hypothermia prevention – IV antibiotics – Pulse ox monitoring – Continue to reassess the casualty. 	<p>Convoy IED Scenario</p> <ul style="list-style-type: none"> • Next action? <ul style="list-style-type: none"> – Begin fluid resuscitation – your convoy carries cold-stored, type O, low-titer whole blood. • Next actions <ul style="list-style-type: none"> – Hypothermia prevention – IV antibiotics – Pulse ox monitoring – Continue to reassess casualty. 	<p>Read the text.</p>
<p>136.</p>	 <p>Convoy IED Scenario</p> <p><u>What is your 9-line?</u> Line 1: Grid NS 12345678 Line 2: 38.90, Convoy 6 Line 3: 1 Urgent Line 4: Whole blood, oxygen, advanced airway Line 5: 1 litter Line 6: Secure Line 7: VS-17 (Orange Panel) Line 8: U.S. Military Line 9: Flat field</p> <p><small>* Some individuals recommend adding a tenth line: the casualty's vital signs</small></p>	<p>Convoy IED Scenario</p> <p><u>What is your 9-line?</u></p> <p>Line 1: Grid NS 12345678 Line 2: 38.90, Convoy 6 Line 3: 1 Urgent Line 4: Whole blood, oxygen, advanced airway Line 5: 1 litter Line 6: Secure Line 7: VS-17 (Orange Panel) Line 8: U.S. Military Line 9: Flat field</p> <p>* Some individuals recommend adding a tenth line: the casualty's vital signs</p>	<p>Line 1: Pickup location Line 2: Radio frequency, call sign and suffix Line 3: Number of casualties by precedence (evacuation) category Line 4: Special equipment required Line 5: Number of casualties by type (ambulatory vs. litter) Line 6: Security of pickup site (wartime) or number/type Line 7: Method of marking pickup site Line 8: Casualty's nationality and status Line 9: Terrain description at Landing Site; NBC contamination if applicable</p>
<p>137.</p>	 <p>Convoy IED Scenario</p> <p>Your convoy has now arrived at the HLZ.</p> <p>Next steps?</p> <ul style="list-style-type: none"> • Continue to reassess the casualty and prepare for helo transfer. <ul style="list-style-type: none"> – Ensure the casualty has no remaining weapons or comms gear before loading him on the helo. – Secure the casualty's personal effects per unit SOP. – Document casualty status and treatment. 	<p>Convoy IED Scenario</p> <p>Your convoy has now arrived at the HLZ</p> <p>Next steps?</p> <ul style="list-style-type: none"> • Continue to reassess the casualty and prepare for helo transfer. <ul style="list-style-type: none"> – Ensure the casualty has no remaining weapons or comms gear before loading him on the helo. – Secure the casualty's personal effects per unit SOP. – Document casualty status and treatment 	<p>At this point, the Flight Medic assumes care of the casualty. The Convoy IED Scenario will continue in TACEVAC.</p>

<p>138.</p>	<p> Remember</p> <ul style="list-style-type: none"> • The TCCC guidelines are not a rigid protocol. • The tactical environment may require some modifications to the guidelines. • Think on your feet! 	<p>Remember</p> <ul style="list-style-type: none"> • The TCCC guidelines are not a rigid protocol. • The tactical environment may require some modifications to the guidelines. • Think on your feet! 	<p>Every tactical scenario will have some features that are unique and may require some change to your plan.</p>
<p>139.</p>	<p>Questions?</p> 	<p>Questions?</p>	