
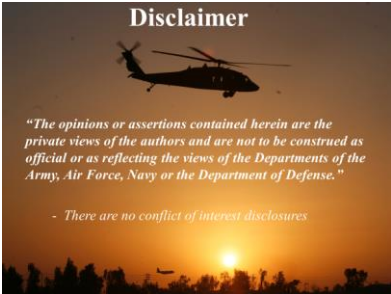




























<p>1.</p>	<p>Tactical Combat Casualty Care for Medical Personnel August 2018 (Based on TCCC-MP Guidelines 180801)</p>  <p>Tactical Field Care 3c Communication, Evacuation Priorities and CPR in Tactical Field Care</p>	<p>Tactical Combat Casualty Care for Medical Personnel August 2017 (Based on TCCC-MP Guidelines 170131) Tactical Field Care 3c Communication, Evacuation Priorities and CPR</p>	<p>Next, we will discuss communication, evacuation priorities, and CPR in TFC.</p>
<p>2.</p>	<p>Disclaimer</p>  <p><i>"The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the Departments of the Army, Air Force, Navy or the Department of Defense."</i></p> <p>- There are no conflict of interest disclosures.</p>	<p>Disclaimer</p> <p><i>"The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the Departments of the Army, Air Force, Navy or the Department of Defense."</i></p> <p>- There are no conflict of interest disclosures.</p>	<p>Read the text.</p>
<p>3.</p>	 <p>LEARNING OBJECTIVES</p> <p><u>Terminal Learning Objective</u></p> <ul style="list-style-type: none"> Communicate combat casualty care items effectively in Tactical Field Care. <p><u>Enabling Learning Objectives</u></p> <ul style="list-style-type: none"> Identify the importance and techniques of communication with a casualty in Tactical Field Care. Identify the importance and techniques of communicating casualty information with unit tactical leadership. 	<p>LEARNING OBJECTIVES</p> <p><u>Terminal Learning Objective</u></p> <ul style="list-style-type: none"> Communicate combat casualty care items effectively in Tactical Field Care. <p><u>Enabling Learning Objectives</u></p> <ul style="list-style-type: none"> Identify the importance and techniques of communication with a casualty in Tactical Field Care. Identify the importance and techniques of communicating casualty information with unit tactical leadership. 	<p>Read the text.</p>





<p>4.</p>	 <p>LEARNING OBJECTIVES</p> <p><u>Enabling Learning Objectives</u></p> <ul style="list-style-type: none"> Identify the importance and techniques of communicating casualty information with evacuation assets or receiving facilities. Identify the relevant tactical and casualty data involved in communicating casualty information. Identify the evacuation urgencies recommended in the TCCC TACEVAC “Nine Rules of Thumb” and the JTS evacuation guidelines Identify the information requirements and format of the 9-Line MEDEVAC Request. 	<p>LEARNING OBJECTIVES</p> <p><u>Enabling Learning Objectives</u></p> <ul style="list-style-type: none"> Identify the importance and techniques of communicating casualty information with evacuation assets or receiving facilities. Identify the relevant tactical and casualty data involved in communicating casualty information. Identify the evacuation urgencies recommended in the TCCC TACEVAC “Nine Rules of Thumb” and the JTS evacuation guidelines Identify the information requirements and format of the 9-Line MEDEVAC Request. 	<p>Read the text.</p>
<p>5.</p>	 <p>LEARNING OBJECTIVES</p> <p><u>Terminal Learning Objective</u></p> <ul style="list-style-type: none"> Describe cardiopulmonary resuscitation (CPR) considerations in Tactical Field Care. <p><u>Enabling Learning Objectives</u></p> <ul style="list-style-type: none"> Identify considerations for cardiopulmonary resuscitation in tactical field care. Describe why cardiopulmonary resuscitation is not generally used for traumatic cardiac arrest in battlefield trauma care. Identify the conditions in which CPR should be considered in tactical field care. 	<p>LEARNING OBJECTIVES</p> <p><u>Terminal Learning Objective</u></p> <ul style="list-style-type: none"> Describe cardiopulmonary resuscitation (CPR) considerations in Tactical Field Care. <p><u>Enabling Learning Objectives</u></p> <ul style="list-style-type: none"> Identify considerations for cardiopulmonary resuscitation in tactical field care. Describe why cardiopulmonary resuscitation is not generally used for traumatic cardiac arrest in battlefield trauma care. Identify the conditions in which CPR should be considered in tactical field care. 	<p>Read the text.</p>
<p>6.</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>7.</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>8.</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>9.</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>10.</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.</p> <p>Tactical leadership needs facts and requirements to better coordinate evacuation.</p>				
<p>11.</p>	 <p>Tactical Casualty Information</p> <table border="0"> <tr> <td> <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 </td> <td> <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? </td> </tr> </table>	<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> <table border="0"> <tr> <td> <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 </td> <td> <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? </td> </tr> </table>	<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>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? 						
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<p>12.</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>13.</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>14.</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>15.</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>16.</p>	 <p>9-Line Evacuation Request</p> <p>Line 4: Special equipment required A – None B – Hoist C – Extraction equipment D – Ventilator * Blood</p> 	<p>9-Line Evacuation Request</p> <p>Line 4: Special equipment required</p> <p>A – None B – Hoist C – Extraction equipment D – Ventilator * 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>17.</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 patients 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>18.</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>19.</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>20.</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>21.</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>22.</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>23.</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>
<p>24.</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>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>





<p>25.</p>	<p> TACEVAC Rule of Thumb #2 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 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. 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>
<p>26.</p>	<p> TACEVAC Rule of Thumb #3 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 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. 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>27.</p>	<p> TACEVAC Rule of Thumb #4 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 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. If they don't, their main problem may be a large HEMOthorax (blood in the chest). Needle decompression will not help that. Chest tubes may not, either.</p>



<p>28.</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>29.</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>30.</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>31.</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>32.</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>33.</p>	<p> JTS-Recommended Standard Evacuation Categories</p> <p>Specifies three categories for casualty evacuation:</p> <ul style="list-style-type: none"> A - Urgent B - Priority C - Routine 	<p>JTS-Recommended Standard Evacuation Categories</p> <p>Specifies three categories for casualty evacuation:</p> <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>34.</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>35.</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>36.</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>37.</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>38.</p>		<p>Questions?</p>	
<p>39.</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 5.a. above.</p>	<p>Read the guideline.</p>

<p>40.</p>	 <p>CPR</p>  <p><u>NO</u> battlefield CPR</p>	<p><u>NO</u> battlefield CPR</p>	<p>Why not???</p>
<p>41.</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>42.</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>43.</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>44.</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>45.</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>46.</p>	 <p>Questions?</p> 	<p>Questions?</p>	