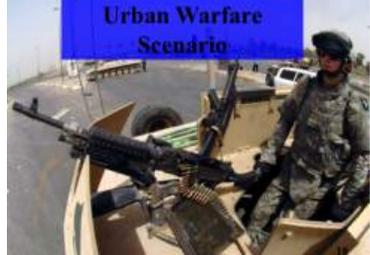


<p>Tactical Combat Casualty Care August 2011</p>  <p>TCCC Scenarios</p>	<p>Tactical Combat Casualty Care August 2011</p> <p>TCCC Scenarios</p>	<p>We've talked about the basics. Now we're going to look at some more scenarios.</p>
<p> Tactical Casualty Scenarios</p> <ul style="list-style-type: none"> <li>• If the basic TCCC combat trauma management plan doesn't work for the specific tactical situation, then for combat medics, corpsmen, and PJs – <b>it doesn't work.</b></li> <li>• <i>There are no rigid guidelines for combat tactics – THINK ON YOUR FEET.</i></li> <li>• Scenario-based planning is critical for success in TCCC</li> <li>• Examples to follow:</li> </ul> 	<p><b>Tactical Casualty Scenarios</b></p> <ul style="list-style-type: none"> <li>•If the basic TCCC combat trauma management plan doesn't work for the specific tactical situation, then for combat medics, corpsmen, and PJs – <b>it doesn't work.</b></li> <li>•<i>There are no rigid guidelines for combat tactics – THINK ON YOUR FEET.</i></li> <li>•Scenario-based planning is critical for success in TCCC</li> <li>•Examples to follow:</li> </ul>	<p>Read text</p>
<p> SEAL Casualty - Afghanistan</p> <ul style="list-style-type: none"> <li>• August 2002</li> <li>• Somewhere in Afghanistan</li> <li>• SEAL element on direct action mission</li> <li>• Story of the casualty as described by the first responder – NOT a corpsman</li> </ul> 	<p><b>SEAL Casualty - Afghanistan</b></p> <ul style="list-style-type: none"> <li>•August 2002</li> <li>•Somewhere in Afghanistan</li> <li>•SEAL element on direct action mission</li> <li>•Story of the casualty as described by the first responder – NOT a corpsman</li> </ul>	<p>This is a real story that dramatically illustrates the difficulty of trauma care on the battlefield.</p>
<p> SEAL Casualty - Afghanistan</p> <p>"There were four people in my team, two had been shot. Myself and the other uninjured teammate low crawled to the downed men. The man I came to was lying on his back, conscious, with his left leg pinned awkwardly beneath him. He was alert and oriented to person, place, time, and event. At that point I radioed C2 (mission control) to notify them of the downed man."</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>"There were four people in my team, two had been shot. Myself and the other uninjured teammate low crawled to the downed men. The man I came to was lying on his back, conscious, with his left leg pinned awkwardly beneath him. He was alert and oriented to person, place, time, and event. At that point I radioed C2 (mission control) to notify them of the downed man."</p>	<p>Read text</p>

 <p><b>SEAL Casualty - Afghanistan</b></p> <p>“Upon closer inspection, his knee was as big as a basketball and his femur had broken. The patient was in extreme pain and did not allow me to do a sweep of his injured leg. He would literally shove me or grab me whenever I touched his leg or wounds. I needed to find the entrance and exit wound and stop any possible arterial bleeding.”</p> <p>5</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“Upon closer inspection, his knee was as big as a basketball and his femur had broken. The patient was in extreme pain and did not allow me to do a sweep of his injured leg. He would literally shove me or grab me whenever I touched his leg or wounds. I needed to find the entrance and exit wound and stop any possible arterial bleeding.”</p>	<p>Read text</p>
 <p><b>SEAL Casualty - Afghanistan</b></p> <p>“But there was zero illumination and he was lying in a wet irrigation ditch. So I couldn’t see blood and I couldn’t feel for blood.”</p>  <p>6</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“But there was zero illumination and he was lying in a wet irrigation ditch. So I couldn’t see blood and I couldn’t feel for blood.”</p>	<p>Picture yourself in this situation. You’ve got a casualty who is badly hurt and you can’t see a thing.</p>
 <p><b>SEAL Casualty - Afghanistan</b></p> <p>“We were also in danger because our position was in an open field (where the firefight had been) and I had to provide security for him and myself. So, I couldn’t afford to turn on any kind of light to examine his wounds. I told him to point to where he felt the pain. He had to sort through his pains.”</p> <p>7</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“We were also in danger because our position was in an open field (where the firefight had been) and I had to provide security for him and myself. So, I couldn’t afford to turn on any kind of light to examine his wounds. I told him to point to where he felt the pain. He had to sort through his pains.”</p>	<p>Read text</p>
 <p><b>SEAL Casualty - Afghanistan</b></p> <p>“He had extreme pain in his knee and where his femur had been shattered as well as a hematoma at the site of the entrance wound (interior and upper left thigh). Finally, he pointed to his exit wound (anterior and upper left thigh). Again, I had no way of telling how much blood he had lost. But I did know that he was nonambulatory.”</p> <p>8</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“He had extreme pain in his knee and where his femur had been shattered as well as a hematoma at the site of the entrance wound (interior and upper left thigh). Finally, he pointed to his exit wound (anterior and upper left thigh). Again, I had no way of telling how much blood he had lost. But I did know that he was nonambulatory.”</p>	<p>Read text</p>

<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“So I called C2 again. I gave him the disposition of the patient as well as a request for casevac, a Corpsman, and additional personnel to secure my position and assist in moving the patient to the helicopter. I thought about moving the two of us to some concealment 25 meters away, but we were both really low in a shallow irrigation ditch. I felt safer there than trying to drag or carry a screaming man to concealment.”</p> <p>9</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“So I called C2 again. I gave him the disposition of the patient as well as a request for casevac, a Corpsman, and additional personnel to secure my position and assist in moving the patient to the helicopter. I thought about moving the two of us to some concealment 25 meters away, but we were both really low in a shallow irrigation ditch. I felt safer there than trying to drag or carry a screaming man to concealment.”</p>	<p>C2 = Command and Control</p>
<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“Between providing security and spending a lot of time on the radio I didn’t get to treat the patient as much as I wanted to. I had given him a Kerlix bandage to hold against his exit wound. When he frantically told me that he was feeling a lot of blood, I went back to trying to treat him. I couldn’t elevate his leg. To move it would mean he’d scream in pain, which wasn’t tactical.”</p> <p>10</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“Between providing security and spending a lot of time on the radio I didn’t get to treat the patient as much as I wanted to. I had given him a Kerlix bandage to hold against his exit wound. When he frantically told me that he was feeling a lot of blood, I went back to trying to treat him. I couldn’t elevate his leg. To move it would mean he’d scream in pain, which wasn’t tactical.”</p>	<p>Read text</p>
<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“There was just no way he would allow me to apply a pressure dressing to the exit wound even if I could locate it and pack it with Kerlix. So, I decided to put a tourniquet on him.”</p> 	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“There was just no way he would allow me to apply a pressure dressing to the exit wound even if I could locate it and pack it with Kerlix. So, I decided to put a tourniquet on him.”</p>	<p>Read text</p>
<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“His wounds were just low enough on his leg to get the tourniquet an inch or so above the site. I had a cravat and a wooden dowel with 550 cord (parachute cord) attached to it to use as a tourniquet. I told him to expect a lot of pain as I would be tightening the cravat down.”</p> <p>12</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“His wounds were just low enough on his leg to get the tourniquet an inch or so above the site. I had a cravat and a wooden dowel with 550 cord (parachute cord) attached to it to use as a tourniquet. I told him to expect a lot of pain as I would be tightening the cravat down.”</p>	<p>Note the makeshift tourniquet. When we first started the war in Afghanistan, most U.S. forces were not deploying with issued tourniquets.</p>

<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“At this point he feared for his life so he agreed. Once I got it tightened I had trouble securing it. The 550 cord was hard to get underneath the tightened cravat.”</p>  <p>13</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“At this point he feared for his life so he agreed. Once I got it tightened I had trouble securing it. The 550 cord was hard to get underneath the tightened cravat.”</p>	<p>You need to be able to get a tourniquet on a wounded teammate with zero illumination.</p>
<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“After over 5 minutes, the Corpsman arrived along with a CASEVAC bird and a security force. Moving the patient was very hard. Four of us struggled to move him and his gear 25 meters to the bird. The patient was over 200 pounds alone and we were moving over very uneven terrain.”</p> <p>14</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“After over 5 minutes, the Corpsman arrived along with a CASEVAC bird and a security force. Moving the patient was very hard. Four of us struggled to move him and his gear 25 meters to the bird. The patient was over 200 pounds alone and we were moving over very uneven terrain.”</p>	<p>Read text</p>
<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“We wanted to do a three-man carry with two men under his arms and one under his legs. But again, his leg was flopping around at the thigh and couldn’t be used to lift him.”</p> 	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“We wanted to do a three-man carry with two men under his arms and one under his legs. But again, his leg was flopping around at the thigh and couldn’t be used to lift him.”</p>	<p>Experienced combat medical personnel say that moving the casualty is typically the biggest challenge in TCCC.</p>
<p> <b>SEAL Casualty - Afghanistan</b></p> <p>“The bird, (a Task Force 160 MH-60) had a 50-cal sniper rifle strapped down, which made it hard for us to get him in. It took us minutes to get him 25 meters into the bird. The Corpsman went with my patient as well as the other downed man in my team and I went back to the op.”</p> <p>16</p>	<p><b>SEAL Casualty - Afghanistan</b></p> <p>“The bird, (a Task Force 160 MH-60) had a 50-cal sniper rifle strapped down, which made it hard for us to get him in. It took us minutes to get him 25 meters into the bird. The Corpsman went with my patient as well as the other downed man in my team and I went back to the op.”</p>	<p>Was the tourniquet a good move?                  Absolutely – probably saved the casualty’s life.</p> <p>Would a pressure dressing have been a good idea if tolerated by the patient?                  NO – won’t necessarily stop a big bleeder.</p>

 <p><b>Scenario Discussions – Suggested Format</b></p> <ul style="list-style-type: none"> <li>• Break up into groups of six</li> <li>• Present the background for the scenario on the screen.</li> <li>• The Instructor will lead the group’s discussion through to the end of the scenario.</li> <li>• 10 minutes per scenario</li> <li>• Stop after 10 minutes and present next scenario on screen</li> </ul> <p>17</p>	<p><b>Scenario Discussions – Suggested Format</b></p> <ul style="list-style-type: none"> <li>•Break up into groups of six</li> <li>•Present the background for the scenario on the screen.</li> <li>•The Instructor will lead the group’s discussion through to the end of the scenario.</li> <li>•10 minutes per scenario</li> <li>•Stop after 10 minutes and present next scenario on screen</li> </ul>	<p>Here’s is a suggested format for the scenario discussions Get the class talking and thinking on these!</p>
 <p><b>Urban Warfare Scenario</b></p>	<p><b>Urban Warfare Scenario</b></p>	<p>Now let’s look at a scenario in urban warfare operations</p>
 <p><b>Real-World Scenario</b></p> <ul style="list-style-type: none"> <li>• High-threat urban environment</li> <li>• 16-man Ranger team</li> <li>• 70-foot fast rope insertion for building assault</li> <li>• One man misses rope and falls</li> <li>• Unconscious on the ground</li> <li>• Bleeding from mouth and ears</li> <li>• Unit taking sporadic fire from all directions from hostile crowds</li> </ul> <p>19</p>	<p><b>Real-World Scenario</b></p> <ul style="list-style-type: none"> <li>•High-threat urban environment</li> <li>•16-man Ranger team</li> <li>•70-foot fast rope insertion for building assault</li> <li>•One man misses rope and falls</li> <li>•Unconscious on the ground</li> <li>•Bleeding from mouth and ears</li> <li>•Unit taking sporadic fire from all directions from hostile crowds</li> </ul>	<p>Anybody recognize this casualty? First Ranger casualty in Mogadishu</p> <p>Has everyone here seen “Blackhawk Down?”</p>
 <p><b>The Battle of Mogadishu</b></p> <ul style="list-style-type: none"> <li>• Somalia – Oct 1993</li> <li>• US casualties 18 dead, 73 wounded</li> <li>• Estimated Somali casualties 350 dead, 500 wounded</li> <li>• Battle 15 hours in length</li> </ul> <p>20</p>	<p><b>The Battle of Mogadishu</b></p> <ul style="list-style-type: none"> <li>•Somalia – Oct 1993</li> <li>•US casualties 18 dead, 73 wounded</li> <li>•Estimated Somali casualties 350 dead, 500 wounded</li> <li>•Battle 15 hours in length</li> </ul>	<p>At the time, it was the biggest battle involving U.S. forces since Vietnam</p>

 <p><b>Mogadishu Complicating Factors</b></p> <ul style="list-style-type: none"> <li>• Helo CASEVAC not possible because of crowds, narrow streets and RPGs</li> <li>• Vehicle CASEVAC not possible initially because of ambushes, roadblocks, and RPGs</li> <li>• Gunfire support problems             <ul style="list-style-type: none"> <li>– Somali crowds included non-combatants</li> <li>– Somalis able to take cover in buildings</li> <li>– RPG threat to helo fire-support gunships</li> </ul> </li> </ul> <p>21</p>	<p><b>Mogadishu Complicating Factors</b></p> <ul style="list-style-type: none"> <li>• Helo CASEVAC not possible because of crowds, narrow streets and RPGs</li> <li>• Vehicle CASEVAC not possible initially because of ambushes, roadblocks, and RPGs</li> <li>• Gunfire support problems             <ul style="list-style-type: none"> <li>– Somali crowds included non-combatants</li> <li>– Somalis able to take cover in buildings</li> <li>– RPG threat to helo fire-support gunships</li> </ul> </li> </ul>	<p>We talked about factors that make evacuation by helicopter hard. Be sure that you add narrow streets and RPG fire to that list. There were LOTS of U.S. helos over Mogadishu, but we were not able to evac the casualties with them for these reasons.</p>
 <p><b>Care Under Fire</b></p> <ul style="list-style-type: none"> <li>• Return fire?</li> <li>• Move patient to cover right away or wait for long board?</li> <li>• How should he be moved?</li> <li>• Intubation?</li> <li>• IV fluids?</li> <li>• Urgency for evacuation?</li> </ul> <p>22</p>	<p><b>Care Under Fire</b></p> <ul style="list-style-type: none"> <li>• Return fire?</li> <li>• Move patient to cover right away or wait for long board?</li> <li>• How should he be moved?</li> <li>• Intubation?</li> <li>• IV fluids?</li> <li>• Urgency for evacuation?</li> </ul>	<p>Should the medic return fire or care for casualty? Reasonable to have medic or corpsman to attend casualty in this scenario</p> <p>Why? Total suppression of hostile fire not possible Large crowd – can’t kill everybody Lots of other guns Critically injured patient</p> <p>Does that break our rule about shooting first and treating later? Yes - but that’s OK – it’s the right answer for this particular situation.</p> <p>What’s next? Move patient to cover right away or wait for long board immobilization? Is he at risk for a spinal cord injury if moved? Yes Also very much at risk of getting shot Probably DO want to get him to cover immediately – cover available at side of road</p> <p>How do you want to move him? Carefully!! Cradle head with forearms to stabilize neck and drag</p> <p>Does he need to be intubated? No Chin-lift/jaw-thrust and NP airway</p> <p>Does he need IV fluids? Only needs fluid resuscitation if internal bleeding and hypovolemic shock</p>

		<p>Check radial pulse – give fluids if pulse weak</p> <p>Urgency for evacuation?</p> <p>Little that can be done at FST (forward surgical team) for the head injury</p> <p>Possible ruptured spleen or other internal bleeding may be bigger issue acutely</p> <p>Tactical commander in Mogadishu split force rather than wait 30 minutes</p> <p>Does he need antibiotics or analgesia?</p> <p>No – no open wound noted</p> <p>Already unconscious</p> <p>Outcome</p> <p>Ranger survived his injuries.</p> <p>End of scenario</p>
<p> <b>Mogadishu Scenario 2</b> <b>Helo Hit by RPG Round</b></p>  <p>23</p>	<p><b>Mogadishu Scenario 2</b> <b>Helo Hit by RPG Round</b></p>	<p>Second real-world scenario from Mogadishu</p> <p>Very different tactical situation</p>
<p> <b>Mogadishu Scenario 2</b> <b>Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>• Hostile and well-armed (AK-47s, RPG) crowds in an urban environment</li> <li>• Building assault to capture members of a hostile clan</li> <li>• Blackhawk helicopter trying to cover helo crash site</li> <li>• Flying at 300 foot altitude</li> </ul> <p>24</p>	<p><b>Mogadishu Scenario 2</b> <b>Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>•Hostile and well-armed (AK-47s, RPG) crowds in an urban environment</li> <li>•Building assault to capture members of a hostile clan</li> <li>•Blackhawk helicopter trying to cover helo crash site</li> <li>•Flying at 300 foot altitude</li> </ul>	<p>Read text</p>

 <p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>• Left door gunner with 6 barrel M-134 minigun (4000 rpm)</li> <li>• Hit in hand by ground fire</li> <li>• Another crew member takes over mini-gun</li> <li>• RPG round impacts under right door gunner</li> </ul> <p>25</p>	<p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>•Left door gunner with 6 barrel M-134 minigun (4000 rpm)</li> <li>•Hit in hand by ground fire</li> <li>•Another crew member takes over mini-gun</li> <li>•RPG round impacts under right door gunner</li> </ul>	<p>Read text</p>
 <p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>• Windshields all blown out</li> <li>• Smoke filling aircraft</li> <li>• Right minigun not functioning</li> <li>• Left minigun without a gunner and firing uncontrolled</li> <li>• Pilot: <ul style="list-style-type: none"> <li>–Transiently unconscious - now becoming alert</li> </ul> </li> </ul> <p>26</p>	<p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>•Windshields all blown out</li> <li>•Smoke filling aircraft</li> <li>•Right minigun not functioning</li> <li>•Left minigun without a gunner and firing uncontrolled</li> <li>•Pilot: <ul style="list-style-type: none"> <li>–Transiently unconscious - now becoming alert</li> </ul> </li> </ul>	<p>Read text</p>
 <p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>• Co-pilot <ul style="list-style-type: none"> <li>–Unconscious - lying forward on helo's controls</li> </ul> </li> <li>• Crew Member <ul style="list-style-type: none"> <li>–Leg blown off</li> <li>–Lying in puddle of his own blood</li> <li>–Femoral bleeding</li> </ul> </li> </ul> <p>27</p>	<p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>•Co-pilot <ul style="list-style-type: none"> <li>–Unconscious - lying forward on helo's controls</li> </ul> </li> <li>•Crew Member <ul style="list-style-type: none"> <li>–Leg blown off</li> <li>–Lying in puddle of his own blood</li> <li>–Femoral bleeding</li> </ul> </li> </ul>	<p>Read text</p>

 <p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>• YOU are the person providing care in the helo.</li> <li>• What do you do first?</li> </ul> <p>28</p>	<p><b>Mogadishu Scenario 2 Helo Hit by RPG Round</b></p> <ul style="list-style-type: none"> <li>•YOU are the person providing care in the helo.</li> <li>•What do you do first?</li> </ul>	<p>What are your options for first actions?          Casualty with femoral bleeding          Unconscious co-pilot          Semi-conscious pilot          Stop the uncontrolled min-gun from firing</p> <p>Who gets treated first?          Take care of the pilot first          Want to get him back flying the aircraft          Most important thing about medical care in an aircraft is to try to keep the aircraft in the air          Stimulate pilot by shaking          Smelling salts if available</p> <p>What's next?          Casualty with the femoral bleeder is next          Needs a tourniquet          He should be able to provide self-care if conscious          The individual in Mogadishu treated himself          Used an improvised tourniquet          Survived</p> <p>What can you do for the unconscious co-pilot?          Get him off the controls          Supine position and establish airway with NPA          Check for external bleeding – none seen</p> <p>Next action?          Check casualty with injured hand          Stop any severe bleeding</p> <p>What else?          Radio for help          Prepare for impact if crash landing anticipated          After impact – security for weapons and ordnance</p> <p>End of scenario</p>
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 <p><b>Military Operations in Urban Terrain</b></p>	<p><b>Military Operations in Urban Terrain</b></p>	<p>Now let's look at a few scenarios that are representative of the kind that we are seeing in Iraq and Afghanistan at present</p>
 <p><b>MOUT Scenario 1</b></p> <ul style="list-style-type: none"> <li>• A U.S. ground element is moving on a high-value target in an urban environment</li> <li>• The first two men in a 8-man patrol are shot by an individual with an automatic weapon while moving down a hallway in a building.</li> <li>• The attacker follows this burst with a grenade.</li> </ul> <p>30</p>	<p><b>MOUT Scenario 1</b></p> <ul style="list-style-type: none"> <li>•A U.S. ground element is moving on a high-value target in an urban environment</li> <li>•The first two men in a 8-man patrol are shot by an individual with an automatic weapon while moving down a hallway in a building.</li> <li>•The attacker follows this burst with a grenade.</li> </ul>	<p>Read text</p>
 <p><b>MOUT Scenario 1</b></p> <ul style="list-style-type: none"> <li>• One casualty is shot in the abdomen but conscious.</li> <li>• The second casualty is shot in the shoulder with severe external bleeding.</li> <li>• The third person is unconscious from the grenade blast.</li> <li>• The attacker withdraws around a corner.</li> </ul> <p>31</p>	<p><b>MOUT Scenario 1</b></p> <ul style="list-style-type: none"> <li>•One casualty is shot in the abdomen but conscious.</li> <li>•The second casualty is shot in the shoulder with severe external bleeding.</li> <li>•The third person is unconscious from the grenade blast.</li> <li>•The attacker withdraws around a corner.</li> </ul>	<p>Read text</p>
 <p><b>MOUT Scenario 1</b></p> <ul style="list-style-type: none"> <li>• YOU are the person providing medical care.</li> <li>• What do you do?</li> </ul> <p>32</p>	<p><b>MOUT Scenario 1</b></p> <ul style="list-style-type: none"> <li>•YOU are the person providing medical care.</li> <li>•What do you do?</li> </ul>	<p>What are the tactical considerations here?                  How many other hostiles in are in house?                  All pursue hostile – leave casualties for later?                  All withdraw to care for casualties?                  Set security and treat casualties there?                  Split force – have some pursue and others treat?                  Split force most often chosen as the best option from previous groups.</p> <p>Who gets treated first?                  Casualty with Shoulder Injury                  Most important to treat immediately – could bleed to death quickly</p>

		<p>Stop bleeding with Combat Gauze dressing Apply with direct pressure for 3 minutes</p> <p>Airway Management? OK - conscious</p> <p>IV? No – not in shock if take care of bleeding without delay</p> <p>Combat pill pack? Yes</p> <p>Fentanyl? Careful - may go into shock later from shoulder wound</p> <p>What next? Unconscious Casualty with Blast Injury Airway Management? Chin-lift/jaw thrust NP airway</p> <p>Check for other injuries Find major bleeding in back of thigh from shrapnel wound Apply tourniquet</p> <p>IV fluids? Check radial pulse – strong – not unconscious from hemorrhage No need for fluids – may make blast lung worse Unconscious from blast</p> <p>Pulse ox monitoring Must prevent hypoxia in TBI casualties</p> <p>Combat pill pack? No – needs IV antibiotics – unconscious – medical personnel administer when feasible</p> <p>Needs oxygen in CASEVAC phase</p> <p>Next? Abdominal Wound Casualty Airway Management? OK - conscious</p>
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		<p>IV fluids?                  No, not at present – not in shock                  Saline lock a good idea when time permits                  May go into shock later</p> <p>Combat pill pack?                  Yes – casualty can self-administer                  Abdominal wound should have IV antibiotics – but not the first priority at this point</p> <p>End of scenario</p>
<p> <b>MOUT Scenario 2</b></p>  <p>33</p>	<p><b>MOUT Scenario 2</b></p>	
<p> <b>MOUT Scenario 2</b></p> <p><b>SCENARIO HISTORY:</b> While on patrol in the city of Tal Afar your platoon receives effective direct small arms fire. A 22-year-old unit member falls to the ground and begins screaming, holding his right leg. The platoon, including you, reacts to the ongoing contact by returning fire.</p> <p>34</p>	<p><b>MOUT Scenario 2</b></p> <p><b>SCENARIO HISTORY:</b> While on patrol in the city of Tal Afar your platoon receives effective direct small arms fire. A 22-year-old unit member falls to the ground and begins screaming, holding his right leg. The platoon, including you, reacts to the ongoing contact by returning fire.</p>	<p>Read text</p>
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		<p>No. Still in Care Under Fire phase Priorities are to get to cover and return fire if possible</p> <p>Scenario continues. Casualty has moved behind a vehicle. All hostiles are eliminated or have retreated. The platoon establishes a secure perimeter. Platoon leader tells you that you have only one casualty, and that you have a few minutes to work on him before the platoon will have to move.</p> <p>What phase are you in now? Tactical Field Care</p> <p>Your casualty is alert, still in severe pain, and clutching his right leg. There is blood all over his leg and hands, and a tourniquet is in place on his right thigh. What is your first concern? Control of life-threatening bleeding.</p> <p>What next? You check the tourniquet. It is positioned correctly. The bleeding has been controlled.</p> <p>You search quickly for any other life-threatening bleeding, and find none.</p> <p>Should you disarm the casualty? No. He is alert and wants to stay in the fight.</p> <p>Next concern? Airway is patent. Casualty is conscious and talking – airway is OK.</p> <p>Next? Breathing. Breathing is rapid from pain and the situation, but not labored.</p> <p>What next?</p>
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		<p>Check for shock. Mental status is normal. Radial pulse is strong.</p> <p>Next? Assess for other wounds. You discover a large bruise on his chest and RUQ overlying the liver. You check his body armor and find corresponding damage compatible with a bullet strike.</p> <p>Should you start a saline lock? Only if you think he is in significant danger of going into shock later.</p> <p>Does the casualty need IV fluids at this point? No – not in shock. Conserve limited IV fluids until they are really needed.</p> <p>Next? Prevent hypothermia. Ready Heat Blanket Heat Reflective Shell</p> <p>Next? Inspect and dress his wound. Reassess</p> <p>Platoon leader tells you the unit will move in 10 minutes to a CASEVAC location. No enemy contact is expected. CASEVAC should take about 45-60 minutes.</p> <p>Should you try to remove the tourniquet and replace with Combat Gauze. No – less than two hours tourniquet time anticipated. Leave it on.</p> <p>Casualty has taken his own Combat Pill Pack. He is in significant pain. Should you give him further analgesia? Mobic and Tylenol were taken 15 minutes ago.</p>
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		<p>Casualty is not in shock - fentanyl lozenge may be a good option here.                  May withhold if there is a chance of more hostile contact and casualty wants to stay in the fight.</p> <p>What else?                  Reassure                  Document care</p> <p>You have now moved to the CASEVAC site. The platoon establishes security. You check the patient and notice that he is confused and breathing rapidly. You check his thigh wound and find that his tourniquet has become loose and the dressing is soaked with blood.</p> <p>What next?                  Re-tighten first tourniquet. Use a second CAT if needed.</p> <p>Casualty becomes unconscious from shock. What next?                  Establish IV access if not done before.                  Administer 1 gm TXA in 100cc NS slow IV push over 10 minutes (SOF units only)(&lt;3 hr after injury)                  Infuse 500cc bolus of Hextend.</p> <p>What next?                  Nasopharyngeal airway - casualty is unconscious.                  Recovery position                  Transport ASAP</p> <p>End of scenario</p>
 <p>Questions?</p>	<p>Questions?</p>	

 <p><b>MOUT Scenario 3</b></p>  <p>37</p>	<p><b>MOUT Scenario 3</b></p>	
 <p><b>MOUT Scenario 3</b></p> <p><b>SCENARIO HISTORY:</b> While on patrol in the city of Mosul, an infantry platoon comes under small arms fire. The point man is hit and falls to the ground. The platoon reacts to the contact, rapidly eliminating the ambushing hostiles. There are no other casualties. The platoon leader tells you take care of the casualty while the others establish a secure perimeter.</p> <p>38</p>	<p><b>MOUT Scenario 3</b></p> <p><b>SCENARIO HISTORY:</b> While on patrol in the city of Mosul, an infantry platoon comes under small arms fire. The point man is hit and falls to the ground. The platoon reacts to the contact, rapidly eliminating the ambushing hostiles. There are no other casualties. The platoon leader tells you take care of the casualty while the others establish a secure perimeter.</p>	<p>Read text</p>
 <p><b>MOUT Scenario 3</b></p> <ul style="list-style-type: none"> <li>• You move to the casualty, and quickly assess for life-threatening conditions:             <ul style="list-style-type: none"> <li>– GSW                 <ul style="list-style-type: none"> <li>• Entrance at right upper back</li> <li>• Exit in right armpit</li> </ul> </li> <li>– Heavy, pulsatile bleeding from the exit wound                 <ul style="list-style-type: none"> <li>• Breathing OK, though a little fast</li> </ul> </li> <li>– No other wounds</li> </ul> </li> <li>• YOU are the person providing medical care.</li> <li>• What do you do?</li> </ul> <p>39</p>	<p><b>MOUT Scenario 3</b></p> <ul style="list-style-type: none"> <li>• You move to the casualty, and quickly assess for life-threatening conditions:             <ul style="list-style-type: none"> <li>– GSW</li> </ul> </li> <li>• Entrance at right upper back</li> <li>• Exit in right armpit             <ul style="list-style-type: none"> <li>– Heavy, pulsatile bleeding from the exit wound</li> </ul> </li> <li>• Breathing OK, though a little fast             <ul style="list-style-type: none"> <li>– No other wounds</li> </ul> </li> <li>• YOU are the person providing medical care.</li> <li>• What do you do?</li> </ul>	<p>It has been about 4 minutes since the casualty was wounded. What is your immediate concern? Life threatening hemorrhage from the wound in the armpit (axilla)</p> <p>What phase of care are you in? TFC</p> <p>As the first responder caring for this casualty, what do you do next? Expose the wound. Push a Combat Gauze bandage into the wound. Hold direct pressure for a minimum of 3 minutes.</p> <p>What do you do while holding pressure? Talk to the casualty Checks both airway and mental status External bleeding appears controlled but casualty is drowsy.</p> <p>What next? Check for other sources of bleeding</p>

		<p>None found Check left radial pulse. It is not palpable.</p> <p>What next? Check breathing Slightly fast but not obviously labored</p> <p>Should you treat for a tension pneumothorax here? Yes – have a chest wound, rapid breathing, and shock Needle decompression of right chest done No hiss of escaping air. No improvement</p> <p>What next? Start an IV. In shock: TXA 1gm slow IV push over 10 minutes (SOF units only) Hextend 500cc started.</p> <p>Ten minutes pass. Hextend bolus is going in. External bleeding is controlled by the Combat Gauze. Casualty is now unconscious and does not respond to deep pain. There is no reading for O2 sat displayed on the pulse ox Carotid pulse is not palpable. His breathing has stopped. Arrival of MEDEVAC helicopter is anticipated to take at least an hour.</p> <p>What next? Consider bilateral needle decompression of possible tension pneumo Done No improvement Airway is rechecked and opened Second person confirms no pulse or breathing</p>
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		<p>What next? CPR? No</p> <p>Why not? <u>It won't help.</u> Individuals in cardiac arrest have little chance of surviving more than 10 minutes without advanced medical care, even in the absence of trauma. Inform platoon leader that the casualty has died. Cause of death likely to have been internal hemorrhage from the GSW. Decision now is how and when to transport your teammate's body off the battlefield. Document the injuries and the care rendered.</p> <p>End of scenario</p>
	<p>Questions?</p>	
 <p>MOUT Scenario 4</p> 	<p>MOUT Scenario 4</p>	

 <p><b>MOUT Scenario 4</b></p> <p><b>SCENARIO HISTORY:</b> You are riding with a squad in the back of a cargo Humvee. When you stop at an intersection, a lone attacker fires an RPG at your vehicle. It is poorly aimed, and strikes the ground beside the Humvee. The vehicle sustains moderate damage and is not able to move. Everyone scrambles out of the vehicle. The last person out is complaining of chest pain and shortness of breath. You and the others are uninjured.</p> <p>42</p>	<p><b>MOUT Scenario 4</b></p> <p><b>SCENARIO HISTORY:</b> You are riding with a squad in the back of a cargo Humvee. When you stop at an intersection, a lone attacker fires an RPG at your vehicle. It is poorly aimed, and strikes the ground beside the Humvee. The vehicle sustains moderate damage and is not able to move. Everyone scrambles out of the vehicle. The last person out is complaining of chest pain and shortness of breath. You and the others are uninjured.</p>	<p>Read text</p>
 <p><b>MOUT Scenario 4</b></p> <ul style="list-style-type: none"> <li>• Security is set</li> <li>• No further hostile fire</li> <li>• YOU are the person providing medical care.</li> <li>• What do you do?</li> </ul>  <p>43</p>	<p><b>MOUT Scenario 4</b></p> <ul style="list-style-type: none"> <li>•Security is set</li> <li>•No further hostile fire</li> <li>•YOU are the person providing medical care.</li> <li>•What do you do?</li> </ul>	<p>What phase are you in? Tactical Field Care</p> <p>You examine the casualty and find: She is alert, but in great pain Shrapnel wound in her right lateral chest - no exit wound Entrance wound is a sucking chest wound Her right thumb is missing and the wound is oozing a little blood. No major external bleeding</p> <p>What next? Cover the chest wound with an occlusive dressing. Apply the dressing at end-expiration. Have her breathe all the way out and put it on before she breathes in again. This makes the casualty a little more comfortable.</p> <p>What next? Thumb wound.</p> <p>What do you do for the thumb wound? Bleeding only minimally – just dress it.</p> <p>You are worried about internal bleeding from the chest wound. What are you going to do about it? Monitor for changes in radial pulse strength and mental status</p>

		<p>Casualty is alert and now breathing OK Radial pulse is strong. O2 sat is 95% (this is slightly low, but still OK)</p> <p>Should you start a saline lock? Good idea – at risk for going into shock</p> <p>Would you give IV fluids now? No. IV fluids are not needed right now. Not in shock.</p> <p>What next? Look for other wounds. You find none.</p> <p>What next? Hypothermia prevention.</p> <p>Casualty says that her pain is very severe. What else do you want to do for the casualty? Can you give her a fentanyl lozenge? With caution She's alert with good O2 sat and breathing well. Not in shock. BUT – has a chest injury Know where your Narcan is if you give fentanyl Monitor oxygen saturation and breathing carefully</p> <p>What's next? Antibiotics. Have her take her Combat Pill Pack with moxifloxacin</p> <p>Casualty is stable. What steps do you take now? Communicate status to squad leader. Begin TACEVAC preparations. Document care on TCCC Casualty Card</p> <p>You are 8 miles from a CSH. Helicopter will not be available for an hour. By ground vehicle, the trip will take</p>
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		<p>35 minutes. A mounted patrol is dispatched to take your casualty to the CSH. It has now been about 40 minutes since the RPG attack. You are enroute to the CSH.</p> <p>The casualty tells you she's having increasing trouble breathing. What do you do?</p> <p>Assess her airway. It is clear. Breathing is rapid and labored. The dressing on the chest wound is secure. Her O2 sat has dropped to 80%</p> <p>What next?</p> <p>Diagnosis? Presumed tension pneumothorax. What are you going to do about it? Lift one side of the occlusive dressing for a few seconds. There is a rush of air from the wound The casualty's respiratory distress is relieved. O2 sat goes up to 94% Good job! Replace the dressing and continue to monitor. Repeat this maneuver as necessary for recurrence of labored breathing.</p> <p>End of scenario</p>
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 <p><b>Tactical Combat Casualty Care</b></p> <ul style="list-style-type: none"> <li>• Casualty scenarios on the battlefield usually entail both medical and tactical problems.</li> <li>• Emergency actions must address both.</li> <li>• <b>Medical personnel should be involved in mission planning.</b></li> </ul> <p>45</p>	<p><b>Tactical Combat Casualty Care</b></p> <ul style="list-style-type: none"> <li>• <b>Casualty scenarios on the battlefield usually entail both medical and tactical problems.</b></li> <li>• <b>Emergency actions must address both.</b></li> <li>• <b>Medical personnel should be involved in mission planning.</b></li> </ul>	<p>Summary                  Good tactical medicine HAS to be a combination of good tactics and good medicine.                  Bring your leadership into the medical plan.                  Combat leaders must understand combat medicine.</p>
 <p><b>Scenario-Based Planning</b></p> <ul style="list-style-type: none"> <li>• The TCCC guidelines for combat trauma scenarios are advisory rather than directive in nature.</li> <li>• Rarely does an actual tactical situation exactly reflect the conditions described in planning scenarios.</li> <li>• <b>Unit medics/corpsmen/PJs will typically need to modify the medical care plan to optimize it for that scenario.</b></li> </ul> <p>46</p>	<p><b>Scenario-Based Planning</b></p> <ul style="list-style-type: none"> <li>• <b>The TCCC guidelines for combat trauma scenarios are advisory rather than directive in nature.</b></li> <li>• <b>Rarely does an actual tactical situation exactly reflect the conditions described in planning scenarios.</b></li> <li>• <b>Unit medics/corpsmen/PJs will typically need to modify the medical care plan to optimize it for that scenario.</b></li> </ul>	<p>Read text</p>
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 <p><b>The End</b></p>	<p><b>The End</b></p>	