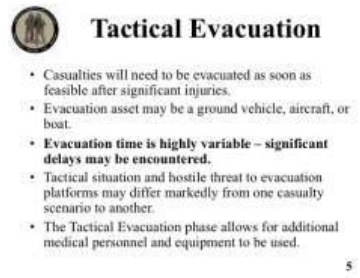
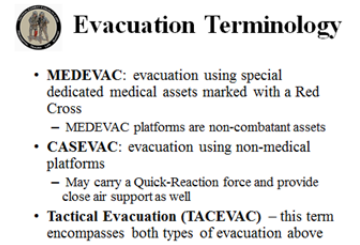
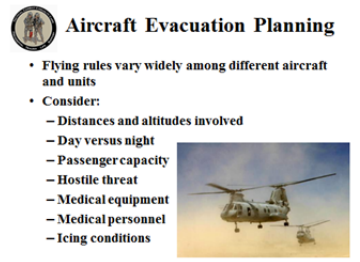
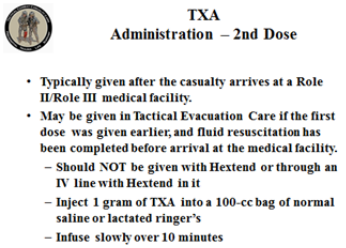
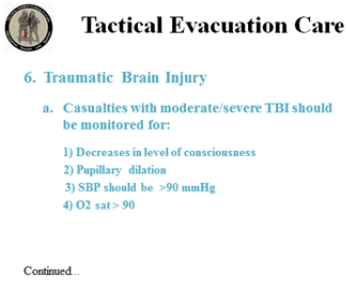
1.	Tactical Combat Casualty Care September 2012  Tactical Evacuation Care	**Tactical Combat Casualty Care** **September 2012** **Tactical Evacuation Care**	The Tactical Evacuation phase of care is that phase in which casualties are moved from the hostile and austere tactical environment in which they were injured to a more secure location capable of providing advanced medical care. The term "Tactical Evacuation" includes both CASEVAC and MEDEVAC as discussed below. This phase may represent the first opportunity to receive additional medical personnel and equipment.
2.	**OBJECTIVES** • **DESCRIBE** the differences between MEDEVAC and CASEVAC • **DESCRIBE** the differences between Tactical Field Care and Tactical Evacuation Care • **DESCRIBE** the additional assets that may be available for airway management, electronic monitoring • **DISCUSS** the indications for and administration of Tranexamic Acid during tactical evacuation	**OBJECTIVES** • **DESCRIBE** the differences between MEDEVAC and CASEVAC • **DESCRIBE** the differences between Tactical Field Care and Tactical Evacuation Care • **DESCRIBE** the additional assets that may be available for airway management and electronic monitoring • **DISCUSS** the indications for and administration of Tranexamic Acid during tactical evacuation	Read text
3.	**OBJECTIVES** • **DISCUSS** the management of moderate/severe TBI during tactical evacuation • **DESCRIBE** additional options that may be available in TEC for fluid resuscitation • **LIST** the indications and administrative controls applicable to giving blood component therapy and fresh whole blood in the field	**OBJECTIVES** • **DISCUSS** the management of moderate/severe TBI during tactical evacuation • **DESCRIBE** additional options that may be available in TEC for fluid resuscitation • **LIST** the indications and administrative controls applicable to giving blood component therapy and fresh whole blood in the field	Read text

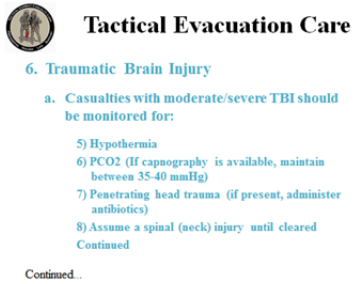
4.		**Tactical Evacuation** •Casualties need evacuation as soon as feasible after significant injuries. •Evacuation asset may be a ground vehicle, aircraft, or boat. •**Evacuation time is highly variable – significant delays may be encountered.** •Tactical situation and hostile threat to evacuation platforms may differ markedly from one casualty scenario to another. •The Tactical Evacuation phase allows for additional medical personnel and equipment to be used.	Casualty movement/evacuation may occur as a separate moving portion of the operation while the main assault force continues tactical operations or the casualties may be evacuated along with the main assault force as it exfiltrates from the main objective. Pre-mission planning should identify medical facilities and capabilities within the area of operations. Transport times to these facilities by various types of vehicles should also be identified. Planning for loading casualties onto mission vehicle assets is important. A single litter patient may occupy space within a tactical vehicle normally occupied by 4 uninjured combatants. Take this into account during planning.
5.		**Evacuation Terminology** •MEDEVAC: evacuation using special dedicated medical assets marked with a Red Cross – MEDEVAC platforms are non-combatant assets •CASEVAC: evacuation using non-medical platforms – May carry a Quick-Reaction force and provide close air support as well •Tactical Evacuation (TACEVAC) – this term encompasses both types of evacuation above	Any platform can be used to evacuate casualties. You must understand the capabilities and limitations of any vehicle you opt to utilize. MEDEVAC vehicles and aircraft are specifically configured for casualty care and designated with a Red Cross. These assets generally minimally armed. They will often NOT evacuate casualties where there is a high threat of hostile fire. CASEVAC assets are combatant platforms – good firepower, good armor, no Red Cross, designed to go into the fight. You will need CASEVAC assets if you have to evacuate casualties from a tactical situation where the threat level is high.
6.		**Aircraft Evacuation Planning** •Flying rules vary widely among different aircraft and units •Consider: –Distances and altitudes involved –Day versus night –Passenger capacity –Hostile threat –Medical equipment –Medical personnel –Icing conditions	In tactical situations where the threat of hostile fire is high, plan to use a CASEVAC asset. However, in general, if the tactical situation will allow for a MEDEVAC asset to be used, it's best to use that asset and save the CASEVAC assets for other contingencies that may arise later. If you use a tactical CASEVAC asset, you may have to make plans to augment the medical capabilities of the asset. Plan to have extra medical personnel and equipment on the CASEVAC asset.

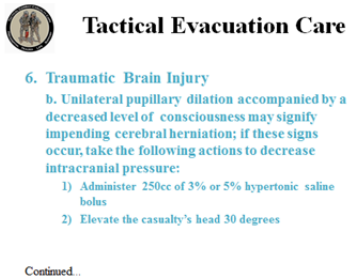
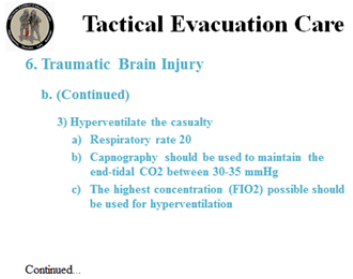
7.	**Aircraft Evacuation Planning** • Ensure that your evacuation plan includes aircraft capable to fly the missions you need • Primary, secondary, tertiary options 	**Aircraft Evacuation Planning** •Ensure that your evacuation plan includes aircraft capable to fly the missions you need •Primary, secondary, tertiary options	Always have a backup plan. Or two. KNOW the flying rules for all of your potential evacuation aircraft.
8.	**CASEVAC vs. MEDEVAC: The Battle of the Ia Drang Valley** • 1st Bn, 7th Cavalry in Vietnam • Surrounded by 2000 NVA - heavy casualties • Called for MEDEVAC • Request refused because landing zone was not secure • Eventual pickup by 229th Assault Helo Squadron after long delay • Soldiers died because of this mistake • Must get this part right 	**CASEVAC vs. MEDEVAC: The Battle of the Ia Drang Valley** •1st Bn, 7th Cavalry in Vietnam •Surrounded by 2000 NVA - heavy casualties •Called for MEDEVAC •Request refused because landing zone was not secure •Eventual pickup by 229th Assault Helo Squadron after long delay •Soldiers died because of this mistake •Must get this part right	Here's an example of how preventable deaths can occur from evacuation delays if you don't understand the difference between a CASEVAC and a MEDEVAC. Soldiers died because of this planning error.
9.	**Ground Vehicle Evacuation** • More prevalent in urban-centric operations in close proximity to a medical facility • May also be organic to unit or designated MEDEVAC assets 	**Ground Vehicle Evacuation** •More prevalent in urban-centric operations in close proximity to a medical facility •May also be organic to unit or designated MEDEVAC assets	Ground evac typically takes too long in Afghanistan. Also, military vehicles are not designed for comfort. There is usually significant noise and vibration in cargo areas, and overland movement generally provides for an extremely rough ride, which may be hard on the casualty.

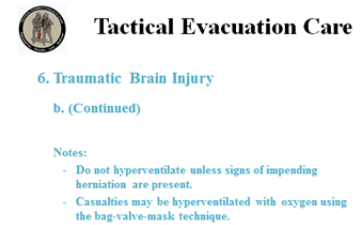
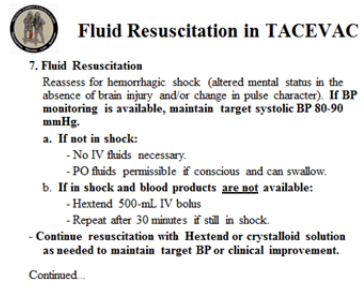
10.	**Tactical Evacuation Care** • TCCC guidelines for care are largely the same in TACEVAC as for Tactical Field Care. • There are some changes that reflect the additional medical equipment and personnel that may be present in the TEC setting. • This section will focus on those differences. 	**Tactical Evacuation Care** •TCCC guidelines for care are largely the same in TACEVAC as for Tactical Field Care. •There are some changes that reflect the additional medical equipment and personnel that may be present in the TEC setting. •This section will focus on those differences.	The Tactical Evacuation phase of care may represent the first opportunity within the tactical operation to bring additional medical equipment and personnel to bear. Additional medical personnel should arrive with the evacuation asset. This is important because: -The unit's medic or corpsman may be among its casualties -The unit's medic or corpsman may be dehydrated, hypothermic, or otherwise debilitated -The unit's medic or corpsman may need to continue on the unit's mission and not get on the evacuation platform -There may not have been a medic or corpsman at the casualty scene
11.	**Airway in TACEVAC** • Additional Options for Airway Management – Supraglottic airway – Endotracheal Intubation • Confirm ETT placement with CO2 monitoring • These airways are advanced skills not taught in basic TCCC course 	**Airway in TACEVAC** •Additional Options for Airway Management **–Supraglottic Airway** –Endotracheal Intubation (ETT) •Confirm ETT placement with CO2 monitoring •These airways are advanced skills not taught in basic TCCC course	The Nasopharyngeal Airway adjunct was described in the Tactical Field Care section. Once a casualty has been secured aboard an evacuation platform, a wider variety of more definitive airway adjuncts and personnel trained to use them may be available, although the NPA should suffice for most patients. Endotracheal intubation may offer a better airway option for selected patients in the Tactical Evacuation setting. Don't attempt advanced airways unless you have been trained on them and are proficient in their use.
12.	**Breathing in TACEVAC** • Watch for tension pneumothorax as casualties with a chest wound ascend into the lower pressure at altitude. • Pulse ox readings will become lower as casualty ascends unless supplemental oxygen is added. • Chest tube placement may be considered if a casualty with suspected tension pneumo fails to respond to needle decompression	**Breathing in TACEVAC** •Watch for tension pneumothorax as casualties with a chest wound ascend to the lower pressure at altitude. •Pulse ox readings will become lower as casualty ascends unless supplemental oxygen is added. •Chest tube placement may be considered if a casualty with suspected tension pneumo fails to respond to needle decompression	Consider tension pneumothorax in casualties with penetrating chest injuries and progressive respiratory distress. Decompress with a needle thoracostomy. Although chest tubes may be considered by trained personnel in long or delayed evacuations, they are considerably more difficult and invasive procedures, and there is no evidence that they are more effective than needle decompressions for relieving tension pneumothorax.

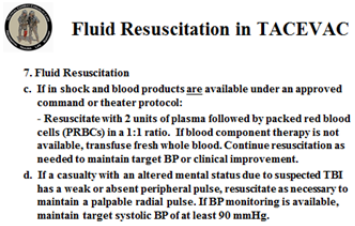
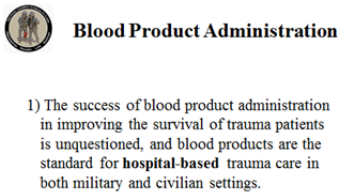
13.	**Supplemental Oxygen in Tactical Evacuation Care** Most casualties do not need supplemental oxygen, but have oxygen available and use for: – Casualties in shock – Low oxygen sat on pulse ox – Unconscious casualties – Casualties with TBI (maintain oxygen saturation > 90%) – Chest wound casualties 	**Supplemental Oxygen in Tactical Evacuation Care** Most casualties do not need supplemental oxygen, but have oxygen available and use for: –Casualties in shock –Low oxygen sat on pulse ox –Unconscious casualties –Casualties with TBI (maintain oxygen saturation > 90%) –Chest wound casualties	Oxygen should be pre-positioned on evacuation assets. Oxygen generators or concentrators are preferred over compressed gas cylinders because of the reduced explosive hazard.
14.	**Tranexamic Acid (TXA)** **5. Tranexamic Acid (TXA)** **If a casualty is anticipated to need significant blood transfusion (for example: presents with hemorrhagic shock, one or more major amputations, penetrating torso trauma, or evidence of severe bleeding)** **– Administer 1 gram of tranexamic acid (TXA) in 100 cc Normal Saline or Lactated Ringer's as soon as possible but NOT later than 3 hours after injury.** **– Begin second infusion of 1 gm TXA after Hextend or other fluid treatment.** * Note: Per the Assistant Secretary of Defense for Health Affairs memo dated 4 November 2011, use of TXA outside of fixed medical facilities is limited to the Special Operations community.	**5. Tranexamic Acid (TXA)** **If a casualty is anticipated to need significant blood transfusion (for example: presents with hemorrhagic shock, one or more major amputations, penetrating torso trauma, or evidence of severe bleeding)** **–Administer 1 gram of tranexamic acid (TXA) in 100 cc Normal Saline or Lactated Ringer's as soon as possible but NOT later than 3 hours after injury.** **–Begin second infusion of 1 gm TXA after Hextend or other fluid treatment.** * Note: Per the Assistant Secretary of Defense for Health Affairs memo dated 4 November 2011, use of TXA outside of fixed medical facilities is limited to the Special Operations community.	If the casualty meets the criteria for treatment with TXA, and it has not already been given, then give the first dose in Tactical Evacuation Care. Note that **TXA should not be initiated if more than three hours have passed** since the casualty was injured.

15.		**TXA** **Administration – 2nd Dose** •Typically given after the casualty arrives at a Role II/Role III medical facility. •May be given in Tactical Evacuation Care if the first dose was given earlier, and fluid resuscitation has been completed before arrival at the medical facility. –Should NOT be given with Hextend or through an IV line with Hextend in it –Inject 1 gram of TXA into a 100-cc bag of normal saline or lactated ringer's –Infuse slowly over 10 minutes	Remember that rapid IV push of TXA may cause hypotension. If there is a new-onset drop in BP during the infusion – SLOW DOWN the TXA infusion.
16.		**Tactical Evacuation Care** **6. Traumatic Brain Injury** **a. Casualties with moderate/severe TBI should be monitored for:** **1) Decreases in level of consciousness** **2) Pupillary dilation** **3) SBP should be >90 mmHg** **4) O2 sat > 90** Continued…	Read text Unilateral pupillary dilitation accompanied by a decrease in the level of consciousness may indicate that intracranial pressure is rising and that cerebral herniation is imminent. Casualties with moderate/severe TBI should be watched closely for these signs. Hypotension and hypoxemia may worsen outcomes for casualties with moderate/severe TBI. These conditions should be watched for and prevented or corrected as quickly as possible.

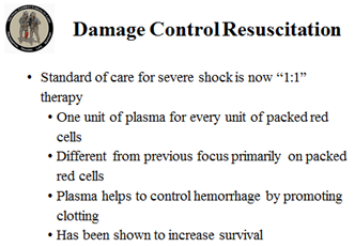
17.		**Tactical Evacuation Care** **6. Traumatic Brain Injury** **a. Casualties with moderate/severe TBI should be monitored for:** **5) Hypothermia** **6) PCO2 (If capnography is available, maintain between 35-40 mmHg)** **7) Penetrating head trauma (if present, administer antibiotics)** **8) Assume a spinal (neck) injury until cleared** Continued…	Read text Hypothermia may result in coagulation defects that may be associated with increased mortality in trauma victims with moderate to severe brain injury. It, too, should be prevented or corrected as quickly as possible in these patients. Hypercapnia (elevated level of CO2 in the blood) contributes to an increase in cerebral blood flow which in turn contributes to elevation of the intracranial pressure (ICP). Elevated ICP must be avoided as this may lead to cerebral herniation. It is important, then, to keep CO2 from rising in casualties with injured brains. On the other hand, hypocapnia leads to cerebral vasoconstriction and decreased cerebral blood flow, which can also be bad for the casualty in that it reduces the amount of oxygen supplied to the brain. It is important, then, to maintain normal CO2 levels in casualties with injured brains (unless signs of cerebral herniation appear – more on that just ahead). Capnography should be used to monitor the casualty's end-tidal CO2 to make sure that respiration remains adequate to keep the blood level of CO2 in the normal range. With respect to wound infection, a penetrating injury to the brain is the same as a penetrating injury to any other tissue. Early administration of an antibiotic may help prevent infection. If an injury to the head is severe enough to cause brain injury, then there was enough energy involved to cause injury to the cervical spine as well. Therefore, in cases of moderate/severe TBI, cervical spine fracture should be presumed, and appropriate precautions taken, until the spine is cleared for injury.

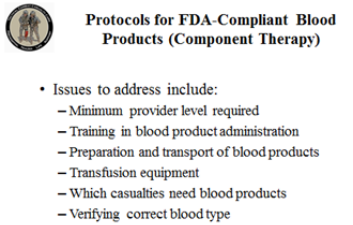
18.		**Tactical Evacuation Care** **6. Traumatic Brain Injury** **b. Unilateral pupillary dilation accompanied by a decreased level of consciousness may signify impending cerebral herniation; if these signs occur, take the following actions to decrease intracranial pressure:** **1) Administer 250cc of 3% or 5% hypertonic saline bolus** **2) Elevate the casualty's head 30 degrees** Continued…	Read text Rising ICP may lead to cerebral herniation. When signs of herniation are present in a brain-injured casualty, rapid reduction is the ICP is needed. Hypertonic saline may help decrease ICP and improve cerebral perfusion pressure and brain tissue oxygen levels. Elevation of the casualty's head may help reduce ICP.
19.		**Tactical Evacuation Care** **6. Traumatic Brain Injury** **b. (Continued)** **3) Hyperventilate the casualty** **a) Respiratory rate 20** **b) Capnography should be used to maintain the end-tidal CO2 between 30-35 mmHg** **c) The highest concentration (FIO2) possible should be used for hyperventilation** Continued…	Read text Hyperventilation leads to reduced levels of CO2 in the blood which, in turn, can contribute to cerebral vasoconstriction and lowered ICP. Therefore, hyperventilation can be used as a temporary measure to lower ICP in brain-injured casualties exhibiting signs of cerebral herniation. If capnography is available, it should be used to monitor end-tidal CO2 levels. The target range for CO2 is slightly lower than normal. Hyperoxia also contributes to cerebral vasoconstriction which will reduce cerebral blood flow which may help reduce elevated ICP. However, because of the increased amount of oxygen carried by the blood when hyperoxic, it will improve cerebral tissue oxygenation even while reducing cerebral blood flow. If oxygen is available, the highest concentration that can be delivered should be delivered.

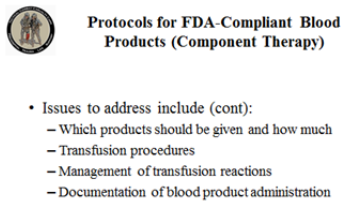
20.		**Tactical Evacuation Care** **6. Traumatic Brain Injury** **b. (Continued)** **Notes:** - **Do not hyperventilate unless signs of impending herniation are present.** - **Casualties may be hyperventilated with oxygen using the bag-valve-mask technique.**	Read text The hypercarbia and cerebral vasoconstriction that result from hyperventilation may be harmful to a brain-injured casualty who is not herniating. These casualties need to maintain their cerebral perfusion. Accordingly, hyperventilation should only be used in casualties who display signs of cerebral herniation, and who need emergent reduction in ICP.
21.		**Fluid Resuscitation in TACEVAC** **7. Fluid Resuscitation** Reassess for hemorrhagic shock (altered mental status in the absence of brain injury and/or change in pulse character). **If BP monitoring is available, maintain target systolic BP 80-90 mmHg.** **a. If not in shock:** - No IV fluids necessary. - PO fluids permissible if conscious and can swallow. **b. If in shock and blood products <u>are not</u> available:** - Hextend 500-mL IV bolus - Repeat after 30 minutes if still in shock. **- Continue resuscitation with Hextend or crystalloid solution as needed to maintain target BP or clinical improvement.** Continued…	Read text

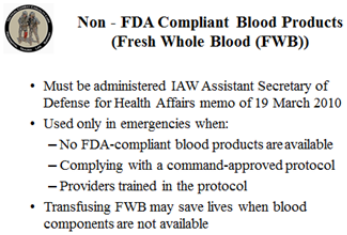
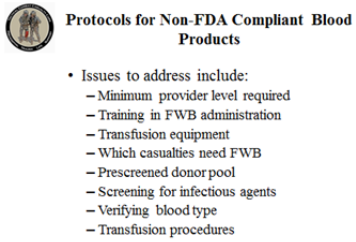
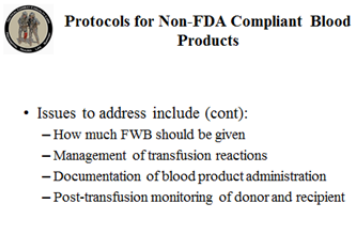
22.		**Fluid Resuscitation in TACEVAC** **7. Fluid Resuscitation** **c. If in shock and blood products <u>are</u> available under an approved command or theater protocol:** **- Resuscitate with 2 units of plasma followed by packed red blood cells (PRBCs) in a 1:1 ratio. If blood component therapy is not available, transfuse fresh whole blood. Continue resuscitation as needed to maintain target BP or clinical improvement.** **d. If a casualty with an altered mental status due to suspected TBI has a weak or absent peripheral pulse, resuscitate as necessary to maintain a palpable radial pulse. If BP monitoring is available, maintain target systolic BP of at least 90 mmHg.**	Concerns about "popping the clot" and diluting blood clotting factors remain as factors when resuscitating casualties with uncontrolled (torso) hemorrhage. In TBI casualties, the need to maintain adequate perfusion to the brain takes precedence over concerns about "popping the clot."
23.		**Blood Product Administration** 1) The success of blood product administration in improving the survival of trauma patients is unquestioned, and blood products are the standard for **hospital-based** trauma care in both military and civilian settings.	Giving blood products is part of the standard of care for trauma patients in military and civilian hospitals, and has been for a long time. This practice clearly contributes to increased survival rates.

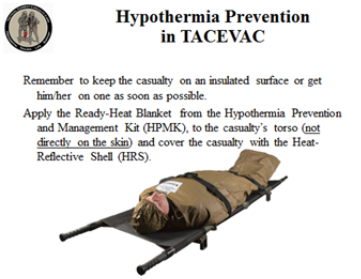
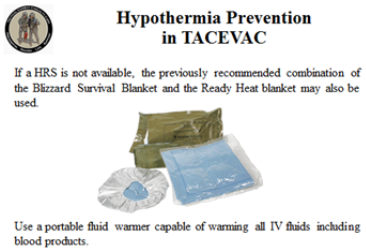
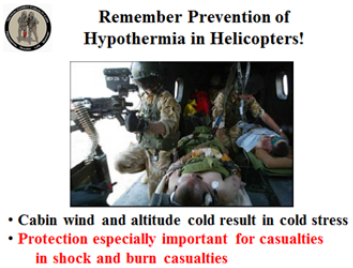
24.	**Blood Product Administration** 2) The additional benefit gained from starting blood products in the **prehospital** phase has not yet been established in the medical literature, but the Defense Health Board has agreed that this therapy may be beneficial in the prehospital setting if blood products are available.	**Blood Product Administration** 2) The additional benefit gained from starting blood products in the **prehospital** phase has not yet been established in the medical literature, but the Defense Health Board has agreed that this therapy may be beneficial in the prehospital setting if blood products are available.	The consensus of expert opinion favors giving blood products in the prehospital setting. In other words, it is reasonable to expect that blood products will benefit the trauma patient if given when the patient's need arises, regardless of the setting.
25.	**Blood Product Administration** 3) Blood product administration should be initiated if feasible for any casualty who meets protocol criteria ***and is still enroute to the medical treatment facility***. There is no minimum transport time below which blood product therapy should not be initiated if protocol criteria are met. Casualties who have absent radial pulse and/or decreased mental status due to hemorrhagic shock in the prehospital setting have a very high mortality rate and are in need of blood products as soon as possible.	**Blood Product Administration** 3) Blood product administration should be initiated if feasible for any casualty who meets protocol criteria ***and is still enroute to the medical treatment facility*.** There is no minimum transport time below which blood product therapy should not be initiated if protocol criteria are met. Casualties who have absent radial pulse and/or decreased mental status due to hemorrhagic shock in the prehospital setting have a very high mortality rate and are in need of blood products as soon as possible.	Blood products should be available during TACEVAC if logistically feasible. Blood product therapy should be initiated during transport if indicated by the casualty's clinical condition as delineated in an approved protocol. If a trauma victim clearly needs blood products, give them right away even if a Level II or III facility is close by. **Remember, though, that giving blood products, like any other resuscitation fluid, does not take precedence over controlling any life-threatening bleeding that can be controlled.**
26.	**Blood Transfusion Protocols** • Transfusion of blood products **should not be attempted in the absence of a theater- or command-approved protocol.** • Blood products should be transfused **only by providers that have been appropriately trained** in the governing protocol.	**Blood Transfusion Protocols** •Transfusion of blood products **should not be attempted in the absence of a theater- or command-approved protocol.** •Blood products should be transfused **only by providers that have been appropriately trained** in the governing protocol.	The maintenance, transport, and administration of blood products is a complex practice. It should be carried out only in strict compliance with formal protocol. Compliance with such a protocol requires a great deal of training and careful preparation.

27.		**Damage Control Resuscitation**
		
		• Standard of care for severe shock is now 1:1" therapy
		  • One unit of plasma for every unit of packed red cells
		  • Different from previous focus primarily on packed red cells
		  • Plasma helps to control hemorrhage by promoting clotting
		  • Has been shown to increase survival
			Read text

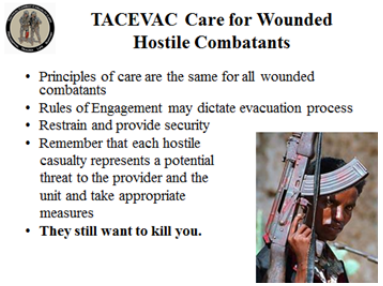
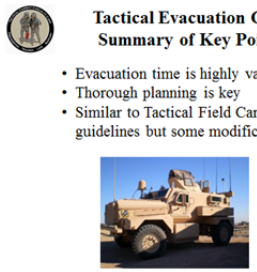
28.		**Protocols for FDA-Compliant Blood Products (Component Therapy)**
		
		• Issues to address include:
		  – Minimum provider level required
		  – Training in blood product administration
		  – Preparation and transport of blood products
		  – Transfusion equipment
		  – Which casualties need blood products
		  – Verifying correct blood type
			Protocols for giving blood components like Packed Red Blood Cells and Plasma have to meet criteria spelled out by the FDA.

29.		**Protocols for FDA-Compliant Blood Products (Component Therapy)**
		
		• Issues to address include (cont):
		  – Which products should be given and how much
		  – Transfusion procedures
		  – Management of transfusion reactions
		  – Documentation of blood product administration
			Read text

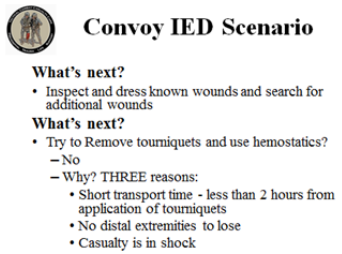
30.		**Non - FDA Compliant Blood Products (Fresh Whole Blood (FWB))** • Must be administered IAW Assistant Secretary of Defense for Health Affairs memo of 19 March 2010 • Used only in emergencies when: – No FDA-compliant blood products are available –Complying with a command-approved protocol – Providers trained in the protocol • Transfusing FWB may save lives when blood components are not available	Transfusing FWB in the field may save a casualty's life when PRBCs and plasma are not available. FWB must also be given under protocol by appropriately trained providers.
31.		**Protocols for Non-FDA Compliant Blood Products** •Issues to address include: –Minimum provider level required –Training in FWB administration –Transfusion equipment –Which casualties need FWB –Prescreened donor pool –Screening for infectious agents –Verifying blood type –Transfusion procedures	Protocols for transfusing FWB are also complex and also require careful preparation and extensive training.
32.		**Protocols for Non-FDA Compliant Blood Products** •Issues to address include (cont): –How much FWB should be given –Management of transfusion reactions –Documentation of blood product administration –Post-transfusion monitoring of donor and recipient	Note that post-transfusion monitoring of donors for infectious diseases is an additional consideration when transfusing FWB in prehospital settings.

33.		**Hypothermia Prevention in TACEVAC** Remember to keep the casualty on an insulated surface or get him/her on one as soon as possible. Apply the Ready-Heat Blanket from the Hypothermia Prevention and Management Kit (HPMK), to the casualty's torso (not directly on the skin) and cover the casualty with the Heat-Reflective Shell (HRS).	Read text
34.		**Hypothermia Prevention in TACEVAC** If a HRS is not available, the previously recommended combination of the Blizzard Survival Blanket and the Ready Heat blanket may also be used. Use a portable fluid warmer capable of warming all IV fluids including blood products.	Read text
35.		**Remember Prevention of Hypothermia in Helicopters!** **• Cabin wind and altitude cold result in cold stress** **• Protection especially important for casualties in shock and burn casualties**	Imagine how cold these casualties are. It is always cold at altitude in helos, but much worse in winters. **Medics and corpsmen in helicopters in winter – bring chemical hand warmers to maintain manual dexterity!**

36.	CPR in Tactical Evacuation Care 18. CPR in TACEVAC Care a. Casualties with torso trauma or polytrauma who have no pulse or respirations during TACEVAC should have bilateral needle decompression performed to ensure they do not have a tension pneumothorax. The procedure is the same as described in section 2 above.	**CPR in Tactical Evacuation Care** **18. CPR in TACEVAC Care** **a. Casualties with torso trauma or polytrauma who have no pulse or respirations during TACEVAC should have bilateral needle decompression performed to ensure they do not have a tension pneumothorax. The procedure is the same as described in section 2 above.**	As in Tactical Field Care, when a polytrauma or torso trauma victim loses signs of life during resuscitation, bilateral needle decompression of the chest should be performed, if feasible, to rule out tension pneumothorax.
37.	CPR in Tactical Evacuation Care 18. CPR in TACEVAC Care b. CPR may be attempted during this phase of care if the casualty does not have obviously fatal wounds and will be arriving at a facility with a surgical capability within a short period of time. CPR should not be done at the expense of compromising the mission or denying lifesaving care to other casualties.	**CPR in Tactical Evacuation Care** **18. CPR in TACEVAC Care** **b. CPR may be attempted during this phase of care if the casualty does not have obviously fatal wounds and will be arriving at a facility with a surgical capability within a short period of time. CPR should not be done at the expense of compromising the mission or denying lifesaving care to other casualties.**	CPR may be considered during TACEVAC if it is tactically and practically feasible, and surgical care is not far away.
38.	TACEVAC CARE - Hoisting  • Rigid Litters Only When Hoisting! • Check and double-check rigging	**TACEVAC CARE - Hoisting** • Rigid Litters Only When Hoisting! • Check and double-check rigging	Stokes or basket-type litters should be used for hoisting casualties into helos. **Secure the casualty – check and double-check rigging.**

39.		**Questions?**	
40.		**TACEVAC Care for Wounded Hostile Combatants** •Principles of care are the same for all wounded combatants •Rules of Engagement may dictate evacuation process •Restrain and provide security •Remember that each hostile casualty represents a potential threat to the provider and the unit and take appropriate measures •They still want to kill you.	Talked about this in TFC. **Maintain proper prisoner handling procedures.**
41.		**Tactical Evacuation Care Summary of Key Points** •Evacuation time is highly variable •Thorough planning is key •Similar to Tactical Field Care guidelines but some modifications	Read text

42.	 **Convoy IED Scenario** **Recap from TFC** The last medical interventions during TFC were: – Placed tourniquet on both bleeding stumps – Disarmed – Placed NPA – Established IV – Administered 1 gm TXA and 500 ml Hextend® – IV antibiotics – Provided hypothermia prevention • Your helo has now arrived at the HLZ	**Convoy IED Scenario** **Recap from TFC** The last medical interventions during TFC were: – Placed tourniquet on both bleeding stumps – Disarmed – Placed NPA – Established IV – Administered 1 gm TXA and 500 ml Hextend® – IV antibiotics – Provided hypothermia prevention •Your helo has now arrived at the HLZ	Read text Remember that TXA is currently limited to Spec Ops units.
43.	 **Convoy IED Scenario** **What's Next?** • Casualty is now conscious but is confused • Reassess casualty for ABCs – NPA still in place – Tourniquets in place, no significant bleeding • Attach electronic monitoring to casualty – Heart rate 140; systolic BP 70 – O2 sat = 90%	**Convoy IED Scenario** **What's Next?** • Casualty is now conscious but is confused • Reassess casualty for ABCs – NPA still in place – Tourniquets in place, no significant bleeding • Attach electronic monitoring to casualty – Heart rate 140; systolic BP 70 – O2 sat = 90%	Read text
44.	 **Convoy IED Scenario** **What's next?** • Supplemental Oxygen – Why? • Casualty is still in shock **What's next?** • Administer Plasma:PRBCs in 1:1 ratio if available • If blood products not available, 2nd bolus of Hextend® 500ml – Why? • Casualty is still in shock	**Convoy IED Scenario** **What's next?** • Supplemental Oxygen – Why? •Casualty is still in shock **What's next?** • Administer Plasma:PRBCs in 1:1 ratio if available • If blood products not available, 2nd bolus of Hextend® 500ml – Why? • Casualty is still in shock	Read text

45.		**Convoy IED Scenario** **What's next?** • Inspect and dress known wounds and search for additional wounds **What's next?** • Try to Remove tourniquets and use hemostatics? –No –Why? THREE reasons: • Short transport time - less than 2 hours from application of tourniquets • No distal extremities to lose • Casualty is in shock	Read text
46.		**Questions/Comments?**	