CARE UNDER FIRE

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
1 Tactical Combat Casualty Care February 2009 Care Under Fire	Tactical Combat Casualty Care February 2009 Care Under Fire	First phase of TCCC is Care Under Fire.
2 Objectives DESCRIBE the role of fire superiority in the management of combat trauma. DEMONSTRATE techniques that can be used to quickly move casualties to cover while the unit is engaged in a firefight EXPLAIN the rationale for early use of a tournique to control life-threatening extremity bleeding during Care Under Fire.	 Objectives DESCRIBE the role of fire superiority in the management of combat trauma. DEMONSTRATE techniques that can be used to quickly move casualties to cover while the unit is engaged in a firefight EXPLAIN the rationale for early use of a tourniquet to control life-threatening extremity bleeding during Care Under Fire. 	
3 Objectives • DEMONSTRATE the appropriate application of the Combat Application Tourniquet to the arm and leg • EXPLAIN why immobilization of the cervical spine is not a critical need in combat casualties with penetrating trauma to the neek.	 Objectives DEMONSTRATE the appropriate application of the Combat Application Tourniquet to the arm and leg EXPLAIN why immobilization of the cervical spine is not a critical need in combat casualties with penetrating trauma to the neck. 	
 Care Under Fire Guidelines Return fire and take cover. Direct or expect casuality to remain engaged as a combatant if appropriate. Direct casuality to move to cover and apply self-aid if able. Direct casuality from sustaining additional wounds. 	 Care Under Fire Guidelines Return fire and take cover. Direct or expect casualty to remain engaged as a combatant if appropriate. Direct casualty to move to cover and apply self-aid if able. Try to keep the casualty from sustaining additional wounds. 	Read the CUF guidelines. Note that the guidelines shown here will be published in the SEVENTH Edition of the PHTLS Manual. These guidelines are different from those in the Sixth Edition of PHTLS, which is the edition currently in publication.

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5 Airway management is generally best deferred until the Tactical Field Care phase. 6. Stop Uf-chreatening external hemorrhage if tactically feasible: - Direct casually to control hemorrhage by self- aid if able. - Use a CoTCCC-recommended tourniquet for homorrhage that is anatomically amenable to tourniquet application. - Apply the tourniquet proximal to the bleeding site, over the uniform, tighten, and move the casualty to cover.	 Care Under Fire Guidelines 5. Airway management is generally best deferred until the Tactical Field Care phase. 6. Stop life-threatening external hemorrhage if tactically feasible: Direct casualty to control hemorrhage by self-aid if able. Use a CoTCCC-recommended tourniquet for hemorrhage that is anatomically amenable to tourniquet application. Apply the tourniquet proximal to the bleeding site, over the uniform, tighten, and move the casualty to cover. 	
6 Care Under Fire Prosecuting the mission and caring for the casualties may be in direct conflict. What's best for the casualty may NOT be what's best for the mission. When there is conflict – which takes precedence? Scenario dependent Consider the following example	 Care Under Fire Prosecuting the mission and caring for the casualties may be in direct conflict. What's best for the casualty may NOT be what's best for the mission. When there is conflict – which takes precedence? Scenario dependent Consider the following example 	
7		The scenario described here was Special Ops. The PRINCIPLES discussed apply to all combat units. Go over each slide – draw the audience in.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
8 Provide the second s	 Raid on Entebbe by VADM Bill McRaven 27 June 1976 Air France Flight 139 hijacked Flown to Entebbe (Uganda) 106 hostages held in Old Terminal at airport 7 terrorists guarding hostages 100 Ugandan troops perimeter security Israeli commando rescue 	One of the most famous hostage situations in history.
9 Raid on Entebbe by VADM Bill McRaven Rescue 4 July 1976 • Exit from C-130 in a Mercedes and 2 Land Rovers • Dressed as Ugandan soldiers • Shot the Ugandan soldiers • Assaulted the terminal through 3 doors	 Raid on Entebbe by VADM Bill McRaven Rescue 4 July 1976 Exit from C-130 in a Mercedes and 2 Land Rovers Dressed as Ugandan soldiers Shot the Ugandan sentry Assaulted the terminal through 3 doors 	The tactics used were genius. DECEPTION, SURPRISE, and VIOLENCE
10	Raid on Entebbe by VADM Bill McRaven	Here's what the layout looked like. Black arrows show the entry paths of the Israeli commandos.
11 With a state of the state o	 Raid on Entebbe by VADM Bill McRaven LTC Netanyahu – the ground commander – shot in chest at the beginning of the assault What should the corpsman or medic do? Disengage from the assault? Start an IV? Immediate needle decompression of chest? 	Imagine YOU are the combat medic on this operation. What would you do now? Ask several people in the audience what THEY would do. Note that this LTC Netanyahu was the brother of the future Prime Minister of Israel.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
12 Raid on Entebbe by VADM Bill McRaven As previously ordered, the three assault elements disregarded Netanyahu and stormed the building." "At this point in the operation, there wasn't time to attend to the wounded."	Raid on Entebbe by VADM Bill McRaven As previously ordered, the three assault elements disregarded Netanyahu and stormed the building." "At this point in the operation, there wasn't time to attend to the wounded."	NO medical care at the moment. Have to establish control of the tactical situation first.
13 Do seconds really matter in combat?	Do seconds really matter in combat?	LTC Netanyahu died from his wounds. The assault phase of the operation took 90 seconds. Did the 90-second treatment delay affect his chances of survival? Probably not. Would a 90-second delay in continuing the assault phase of the operation have made a difference? Absolutely.
 Ma'a lot Rescue Attempt by VADM Bill McRaven 15 May 1974 3 PLO terrorists take 105 hostages Schoolchildren and teachers When assault commenced, terrorists began killing hostages 22 children killed, 56 wounded The difference between a dramatic success and a disaster may be measured in seconds. 	 Ma'a lot Rescue Attempt by VADM Bill McRaven 15 May 1974 3 PLO terrorists take 105 hostages Schoolchildren and teachers When assault commenced, terrorists began killing hostages 22 children killed, 56 wounded The difference between a dramatic success and a disaster may be measured in seconds. 	Look what even a momentary delay can mean to a hostage rescue operation OR OTHER TACTICAL ENGAGEMENTS
 15 Care Under Fire If the firefight is ongoing - don't try to treat your casualty in the Kill Zone! Suppression of enemy fire and moving casualties to cover are the major concerns. 	 Care Under Fire If the firefight is ongoing - don't try to treat your casualty in the Kill Zone! Suppression of enemy fire and moving casualties to cover are the major concerns 	Not every casualty scenario is a hostage rescue, but these basic principles apply.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
 16 Care Under Fire Suppression of hostile fire will minimize the risk of both new casualties and additional injuries to the existing casualties. The firepower contributed by medical personnel and the casualties themselves may be essential to tactical fire superiority. The best medicine on the battlefield is fire superiority. 	 Care Under Fire Suppression of hostile fire will minimize the risk of both new casualties and additional injuries to the existing casualties. The firepower contributed by medical personnel and the casualties themselves may be essential to tactical fire superiority. The best medicine on the battlefield is fire superiority. 	Sustaining a minor wound in a firefight does not mean that you should disengage from the fight.
17 THE MOST DANGEROUS PLACE	The most dangerous place	Moving casualties during Care Under Fire is both difficult and dangerous. HAVE A PLAN AND REHEARSE IT!
 18 Woving Casualties in CUF If a casualty is able to move to cover, he should do so avoid exposing others to enemy fire. If casualty is unable to move and unresponsive, the casualty is likely beyond help and moving him while under fire may not be worth the risk. If a casualty is responsive but can't move, a rescue plan should be devised if tactically feasible. Next sequence of slides shows the hazards of moving casualties before hostile fire is suppressed. 	 Moving Casualties in CUF If a casualty is able to move to cover, he should do so to avoid exposing others to enemy fire. If casualty is unable to move and unresponsive, the casualty is likely beyond help and moving him while under fire may not be worth the risk. If a casualty is responsive but can't move, a rescue plan should be devised if tactically feasible. Next sequence of slides shows the hazards of moving casualties before hostile fire is suppressed. 	Unit members should be TRAINED to move themselves to point of first cover if able. Don't put two people at risk if avoidable.
19 The second se	While under fire and without a weapon, Gunnery Sgt. Ryan P. Shane runs to Sgt. Lonnie Wells, to pull him to safety during USMC combat operations in Fallujah.	Here is a dramatic example of casualty movement during Care Under Fire Read text

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
20 Provide the second	Gunnery Sgt Shane attempts to pull a fatally wounded Sgt Wells to cover.	Read text
21 J) Auditr' Latic care in help.	Another Marine comes to help.	Read text
22 Desary Set Share Fellip is in the neuro for-	Gunnery Sgt. Shane (left) is hit by enemy fire.	Read text
23 The set of the set	The unidentified Marine heads for cover after Gunnery Sgt Shane, on ground at left, was hit by insurgent sniper fire.	Read text

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
24	Casualty Movement	DON'T FORGET COVERING FIRE!
 b) Casualty Movement Rescue Plan Consider the following: a. Location of nearest cover b. How best to move him to the cover The risk to the rescuers Weight of casualty and rescuer Distance to be covered Use suppression fire to best advantage! Recover weapon if possible 	 Rescue Plan If you must move a casualty under fire, consider the following: Location of nearest cover How best to move him to the cover The risk to the rescuers Weight of casualty and rescuer Distance to be covered Use suppression fire to best advantage! Recover weapon if possible 	If possible, let the casualty know what you plan.
25 Types of Carries for Care Under Fire • One-person drag with/without line • Two-person drag with/without line • SEAL Team Three Carry • Hawes Carry	 Types of Carries for Care Under Fire One-person drag with/without line Two-person drag with/without line SEAL Team Three Carry Hawes Carry 	
26 One-Person Drag	One-Person Drag	 Have other Instructors or students demonstrate Advantages No equipment required Only one rescuer exposed to fire Disadvantages Relatively slow Not optimal body position for dragging the casualty
27 Two-Person Drag	Two-Person Drag	 Have other Instructors or students demonstrate Advantage Can get casualty to cover faster than with one-person drag Disadvantage Exposes two rescuers to hostile fire instead of one

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
28	Video: Two-Person Drag	Play video
Video: Two-Person Drag		 Advantage Can get casualty to cover faster than with one-person drag Disadvantage Exposes two rescuers to hostile fire instead on one
One-Person Drag Using Line	Drag Using Line	demonstrate
		 Advantage of using lines Easier to drag casualty than when line is not used Can shoot while dragging <u>Faster</u> than dragging without lines
30 Two-Person Drag Using Lines	Two-Person Drag Using Lines	Have other Instructors or students demonstrate
		 Advantage can shoot while dragging faster than dragging without lines faster movement of the casualty to cover Disadvantage exposes two rescuers to hostile fire instead of one
31 SEAL Team Three Carry	SEAL Team Three Carry	Have other Instructors or students demonstrate
		 Advantage May be useful in situations where drags do not work well Less painful for casualty than dragging Disadvantages Exposes two rescuers to hostile fire May be slower than dragging May be difficult in kit and with unconscious casualty.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
32	SEAL Team Three Carry (2)	Arms around shoulders of both rescuers
SEAL Team Three Carry (2)		Casualty uses arms to hold onto rescuers if able.
		Rescuers hold casualty's arms around necks if casualty not able to.
-		Both rescuers grab casualty's web belt
		Lift and go
33 Hawes Carry	Hawes Carry	Have other Instructors or students demonstrate
		 Advantages may be useful in situations where a drag is not a good option works much better than outdated fireman's carry lifting done with legs Disadvantages Hard to accomplish with rescuer and/or casualty's kit in place Difficult when rescuer is small and casualty is large Often slower than dragging High profiles for both rescuer and casualty
34 Casualty Drags and Carries Practical	Casualty Drags and Carries Practical	For practical exercise: Break up into groups of 6 or less students per instructor Use skill sheets in the TCCC curriculum that apply to each practical exercise

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
35	The Number One	If you can only do ONE thing for the
The Number One Medical Priority	Medical Priority	casualty – stop him from bleeding to death.
 critical. Extremity hemorrhage is the most frequent cause of preventable battlefield deaths. Over 2500 deaths occurred in Vietnam as a result of hemorrhage from extremity wounds. Injury to a major vessel can quickly lead to shock and death. Only <u>lic-threatening</u> Meeding warrants intervention during Care Under Fire. 	 Early control of severe hemorrhage is critical. Extremity hemorrhage is the most frequent cause of preventable battlefield deaths. Over 2500 deaths occurred in Vietnam as a result of hemorrhage from extremity wounds. Injury to a major vessel can quickly lead to shock and death. Only life-threatening bleeding warrants intervention during Care Under Fire. 	Do not treat minor bleeding during Care Under Fire.
 36 Question How long does it take to bleed to death from a complete femoral artery and vein disruption? Answer: Casualties with such an injury can bleed to death in as little as 3 minutes 	 Question How long does it take to bleed to death from a complete femoral artery and vein disruption? Answer: Casualties with such an injury can bleed to death in as little as 3 minutes 	10% of animals in lab studies died within 3 minutes without hemorrhage control measures
37 Image: State of the sta	Femoral Artery Bleeding	Click on picture to replay video

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
38 Care Under Fire The need for immediate access to a tourniquet in such situations makes it clear that all personnel on combat missions should have a CoTCCC-recommended tourniquet readily available at a standard location on their battle gear and be trained in its use. - Casualties should be able to easily and quickly reach their <u>own</u> tourniquet.	 Care Under Fire The need for immediate access to a tourniquet in such situations makes it clear that all personnel on combat missions should have a Combat Application Tourniquet readily available at a standard location on their battle gear and be trained in its use. Casualties should be able to easily and quickly reach their own tourniquet. 	DO NOT bury your tourniquet at the bottom of your pack.
39 Care Under Fire Where a tourniquet can be applied, it is the <i>first</i> choice for hemorrhage control in Care Under Fire.	Care Under Fire Where a tourniquet can be applied, it is the first choice for hemorrhage control in Care Under Fire.	Forget about direct pressure, pressure dressings or anything else if you have severe extremity bleeding in the Care Under Fire phase. Go directly to a tourniquet.
40 A Survivable Wound Did not have an effective tourniquet applied- bled to death from a leg wound Example 1 of the second s	A Survivable Wound Did not have an effective tourniquet applied - bled to death from a leg wound	The medic in this Army unit was killed in the battle in which this soldier was wounded. Others in the unit attempted to control the bleeding from this soldier's wound just below his left knee. These improvised tourniquets were ineffective, and the Soldier bled to death. DON"T LET THIS HAPPEN TO YOUR BUDDIES!
 41 Tourniquet Application Apply without delay if indicated Both the casualty and the medic are in grave danger while a tourniquet is being applied in this phase. The decision regarding the relative risk of further injury versus that of bleeding to death must be made by the person rendering care. 	 Tourniquet Application Apply without delay if indicated Both the casualty and the medic are in grave danger while a tourniquet is being applied in this phase. The decision regarding the relative risk of further injury versus that of bleeding to death must be made by the person rendering care. 	Don't use tourniquets for minor bleeding.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
 42 Tourniquet Application Non-life-threatening bleeding should be <u>ignored</u> until the Tactical Field Care phase. Apply the tourniquet just above above bleeding site. Tighten until bleeding is controlled. May need a second tourniquet applied just above the first to control bleeding. Don't put a tourniquet directly over the knee or elbow. Don't put a tourniquet directly over a holster or a cargo pocket that contains bulky items. 	 Tourniquet Application Non-life-threatening bleeding should be ignored until the Tactical Field Care phase. Apply the tourniquet just above bleeding site. Tighten until bleeding is controlled. May need a second tourniquet applied just above the first to control bleeding. Don't put a tourniquet directly over the knee or elbow. Don't put a tourniquet directly over a holster or a cargo pocket that contains bulky items. 	Here are some key points about applying a tourniquet.
<text><text><image/><image/><text></text></text></text>	Anatomy of a C-A-T TM The Combat Application Tourniquet TM (C-A-T TM) (Patent Pending) is a small and lightweight one-handed tourniquet that completely occludes arterial blood flow in an extremity.	 The C-A-TTM uses a Self-Adhering Band and a Friction Adaptor Buckle to fit a wide range of extremities combined with a one-handed windlass system. The windlass uses a free moving internal band to provide true circumferential pressure to an extremity. The Windlass Rod is then locked in place (this requires only one hand) with the Windlass ClipTM. The C-A-TTM also has a Hook-and-Loop Windlass StrapTM for further securing of the windlass during patient transport.
44 Combat Application Tourniquet (*) (Pat. Pending) Free CA-17 ^{rg} is Delivered in Its One-Handed Configuration - Free-running end of the Self-Adhering Band passed through the buckle forming a loog for the arm to pass through. This is the recommended carrying configuration and the self-Adhering and the arm to pass through. This is the recommended carrying configuration (*)	 Combat Application Tourniquet ® The C-A-T[™] is Delivered in Its One-Handed Configuration Free-running end of the Self-Adhering Band passed through the buckle forming a loop for the arm to pass through. This is the recommended carrying configuration 	

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
45 One-Handed Application to Arm Figure 2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	One-Handed Application to Arm Step 1: Insert the wounded extremity through the loop of the Self-Adhering Band.	Have another instructor demonstrate putting on the tourniquet while going over the slides.
46 One-Handed Application to Arm Figure 2: Pull the Self-Adhering Band tight and securely fasten it back on itself.	One-Handed Application to Arm Step 2: Pull the Self-Adhering Band tight and securely fasten it back on itself.	Be sure to take up all the slack and pull it as tight as possible.
47 One-Handed Application to Arm Figure 2 (1) Step 3: Adhere the Band around the arm. Do not adhere the band past the clip.	One-Handed Application to Arm Step 3: Adhere the Band around the arm. Do not adhere the band past the clip.	
48 One-Handed Application to Arm Figure 2 (1) Step 4: Twist the Windlass Rod until bleeding has stopped.	One-Handed Application to Arm Step 4: Twist the Windlass Rod until bleeding has stopped.	
49 One-Handed Application to Arm Figure 2 (19) Step 5: Lock the Windlass Rod in place with the Windlass Clip TM .	One-Handed Application to Arm Step 5: Lock the Windlass Rod in place with the Windlass Clip [™] .	The Windlass Clip keeps the rod from spinning and causing the tourniquet to loosen.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
50 One-Handed Application to Arm	One-Handed Application to Arm Hemorrhage is now controlled.	Just this simple sequence of steps could have saved 2500 lives in Vietnam.
51 One-Handed Application to Arm Figure 2015 Step 6: Adhere the Self-Adhering Band over the Windlass Rod – for small extremities, continue adhering the band around the extremity.	One-Handed Application to Arm Step 6: Adhere the Self-Adhering Band over the Windlass Rod – for small extremities, continue adhering the band around the extremity.	
52 One-Handed Application to Arm Figure 1	One-Handed Application to Arm Step 7: Secure the Windlass Rod and Self-Adhering Band with the Windlass Strap – grasp the Windlass Strap and pull it tight, adhering it to the opposite hook on the Windlass Clip	The tourniquet has now been successfully applied.
53 Combat Application Tourniquet® Arm Application C-A-Tourniquet Arm Application	Combat Application Tourniquet® Arm Application	Play video This video shows self-application to arm.
54 Combat Application Tourniquet ® Leg Application	Combat Application Tourniquet ® Leg Application	Play video This video shows self-application to leg.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
55 Other Tourniquets • SOF Tactical Tourniquet • Emergency Military Tourniquet Very State St	Other Tourniquets SOF Tactical Tourniquet Emergency Military Tourniquet 	These tourniquets were also found to be effective and recommended in a study by the U.S. Army Institute of Surgical Research. The SOF Tactical Tourniquet may work better for individuals with very large thighs. The EMT tourniquet is more often found in Emergency Departments.
 56 Fourniquets - Kragh et al Journal of Trauma 2008 Event of Trauma 2	 Tourniquets – Kragh et al Journal of Trauma 2008 Combat Support Hospital in Baghdad 232 patients with tourniquets on 309 limbs CAT was the best field tourniquet No amputations from tourniquet use Approximately 3% transient nerve palsies 	Remember at the start of the GWOT, we were still losing casualties to extremity hemorrhage. We're doing much better now This study documented 232 LIVES SAVED in this ONE hospital in a ONE- YEAR period. MINIMAL complications from tourniquet use.
57 Tourniquets – Kragh et al Annals of Surgery 2009 Interpret Sing Hospital, Baghdad, 2006 Courniquets are saving lives on the battlefield Better survival when tourniquets were applied BFORE casualties went into shock Bistimated 31, Incess saved in this study by applying tourniquets <u>prehospital</u> rather than in the ED	 Tourniquets – Kragh et al Annals of Surgery 2009 Ibn Sina Hospital, Baghdad, 2006 Tourniquets are saving lives on the battlefield Better survival when tourniquets were applied BEFORE casualties went into shock Estimated 31 lives saved in this study by applying tourniquets prehospital rather than in the ED 	Follow-up to previous tourniquet study Most important – apply tourniquets ASAP when needed Survival improved if shock prevented

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
58 What is the individual putting on this tourniquet doing wrong?	INSTRUCTIONAL POINTS What is the individual putting on this tourniquet doing wrong?	INSTRUCTOR NOTES Answer – NOTHING Expected answer from audience – has no protective latex gloves on. Would not stop to put on gloves during Care Under Fire. US forces screened for HIV, Hep B. Different story caring for Wounded Hostile Combatants in Tactical Field Care. Enemy soldiers more likely to have infectious diseases.
59 Examples of Extremity Wounds That Do NOT Need a Tourniquet Use a tourniquet ONLY for severe bleeding	Examples of Extremity Wounds That Do NOT Need a Tourniquet Use a tourniquet ONLY for severe bleeding	Both wounds are not life threatening - bleeding is minimal. A tourniquet should <u>not be used</u> on these two wounds and other wounds like them where the bleeding is not severe.
60 Tourniquets The Six Common Mistakes • Not using one when you should • Using one when you shouldn't • Putting it on foo proximal • Not taking it off when you could • Taking it off when you shouldn't • Not making it tight enough – should eliminate the distal pulse!	 Tourniquets The Six Common Mistakes Not using one when you should Using one when you shouldn't Putting it on too proximal Not taking it off when you could Taking it off when you shouldn't Not making it tight enough – should eliminate the distal pulse! 	These are common mistakes made by first responders applying tourniquets.
61 Questions?	Questions?	

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
62 Tourniquet Practical	Tourniquet Practical	For practical exercise: Break up into groups of 6 or less students per instructor Use skill sheets in the TCCC curriculum that apply to each practical excercise
 63 Former source of the second s	 Hemorrhage Control Some wounds are located in places that a tourniquet cannot be applied, such as: Neck, axilla (armpit), groin The use of a hemostatic agent (e.g., Combat Gauze) is generally not tactically feasible in CUF because of the requirement to hold direct pressure for 3 minutes. Casualty should get to cover and use direct pressure as initial selfaid for these wounds. 	Get to cover and hold direct pressure over the bleeding. Self-aid is critical here.
 64 Mirway - Cover in TFC Sinceptate management of the airway is anticipated while in the Care Under Fire pass. Ono't take time to establish an airway while under fire. Ono't take time to establish an airway while under fire. Orbor take time to ever. Orbor take time to ever. Chara take take take take take take take tak	 Airway – Defer to TFC No immediate management of the airway is anticipated while in the Care Under Fire phase. Don't take time to establish an airway while under fire. Defer airway management until you have moved casualty to cover. Combat deaths from compromised airways are relatively infrequent. If casualty has no airway in the Care Under Fire phase, chances for survival are minimal. 	We will address airway in the Tactical Field Care phase of care.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
65 C-Spine Stabilization Penetrating head and neck wounds do not require C-spine stabilization. - Gunshot wounds (GSW), shrapnel - In penetrating trauma, the spinal cord is either already compromised or is in relatively less danger than would be the case with blunt trauma.	 C-Spine Stabilization Penetrating head and neck wounds do not require C-spine stabilization. Gunshot wounds (GSW), shrapnel In penetrating trauma, the spinal cord is either already compromised or is in relatively less danger than would be the case with blunt trauma. 	In studies from the Vietnam conflict, of those casualties with penetrating neck trauma, only 1.4% would have benefited from C-spine stabilization. C-spine stabilization takes 5-6 minutes even for experienced medical providers. This is too much time to spend in the Care Under Fire Phase for an intervention that is not proven to be necessary
 66 C-Spine Stabilization Blunt trauma is different! Head and neck injuries due to falls, fast-roping injuries, or motor vehicle accidents may require C-spine stabilization. Apply only if the danger of hostile fire does not constitute a greater threat. 	 C-Spine Stabilization Blunt trauma is different! Head and neck injuries due to falls, fast-roping injuries, or motor vehicle accidents may require C-spine stabilization. Apply only if the danger of hostile fire does not constitute a greater threat. 	Do not provide C-spine stabilization if the danger of hostile fire constitutes a greater threat in the judgment of the medic.
67 Summary of Key Points A Return fire and take cover! Direct or expect casually to remain engaged as a combatant if appropriate. Direct casually to move to cover if able. Try to keep the casually from sustaining additional wounds. A irway management is generally best deferred until the Tactical Field Care phase.	 Summary of Key Points Return fire and take cover! Direct or expect casualty to remain engaged as a combatant if appropriate. Direct casualty to move to cover if able. Try to keep the casualty from sustaining additional wounds. Airway management is generally best deferred until the Tactical Field Care phase. 	Ask questions to cover key points

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
 68 Summary of Key Points • Stop life-threatening external hemorrhage if tactically feasible. • Direct casualty to control hemorrhage by self-aid if able. • Use a CoTCCC-recommended tourniquet for hemorrhage that is anatomically amenable to tourniquet application. • Apply the tourniquet proximal to the bleeding site, over the uniform, tighten, and move the casualty to cover. 	 Summary of Key Points Stop life-threatening external hemorrhage if tactically feasible. Direct casualty to control hemorrhage by self-aid if able. Use a CoTCCC-recommended tourniquet for hemorrhage that is anatomically amenable to tourniquet application. Apply the tourniquet proximal to the bleeding site, over the uniform, tighten, and move the casualty to cover. 	Ask questions to emphasize
69 Questions?	Questions?	
 50 Scenario Based Planning If the basic TCCC combat trauma management plan for Care Under Fire doesn't work for your specific tactical situation – then it doesn't work. Scenario-based planning is critical for success. Incorporate likely casualty scenarios into unit mission planning! The following is one example. 	 Scenario Based Planning If the basic TCCC combat trauma management plan for Care Under Fire doesn't work for your specific tactical situation – then it doesn't work. Scenario-based planning is critical for success. Incorporate likely casualty scenarios into unit mission planning! The following is one example. 	The TCCC guidelines are not a rigid protocol. Nothing in combat is. Think on your feet!
71 Convoy IED Scenario	Convoy IED Scenario	Explain to students that this scenario starts here in CUF and is continued throughout the course at the end of TFC and TE. Let's take a scenario that's very common in Iraq and Afghanistan. Does everyone know what IED stands for? Improvised Explosive Device Very common cause of injury in Iraq.

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
 72 Convoy IED Scenario Your element is in a five vehicle convoy moving through a small Iraqi village. Command-detonated IED explodes under second vehicle. Moderate sniper fire Rest of the convoy is suppressing sniper fire 	 Convoy IED Scenario Your element is in a five vehicle convoy moving through a small Iraqi village. Command-detonated IED explodes under second vehicle. Moderate sniper fire Rest of the convoy is suppressing sniper fire 	Read text in action sequence
 73 Convoy IED Scenario You are a medic in the disabled vehicle Person next to you has bilateral mid-thigh amputations Heavy arterial bleeding from the left stump Right stump only has mild oozing of blood 	 Convoy IED Scenario You are a medic in the disabled vehicle Person next to you has bilateral mid-thigh amputations Heavy arterial bleeding from the left stump Right stump only has mild oozing of blood 	Read text in action sequence
 74 Convoy IED Scenario Casualty is conscious and in moderate pain Vehicle is not on fire and is right side up You are uninjured and able to assist 	 Convoy IED Scenario Casualty is conscious and in moderate pain Vehicle is not on fire and is right side up You are uninjured and able to assist 	Read text in action sequence
75 First decision: • Return fire or treat casuality? • Treat immediate threat to life • Why? • Rest of convoy providing suppressive fire • Treatment is effective and QUICK • First action? • Tourniquet on stump with arterial bleed	 Convoy IED Scenario First decision: Return fire or treat casualty? Treat immediate threat to life Why? Rest of convoy providing suppressive fire Treatment is effective and QUICK First action? Tourniquet on stump with arterial bleed 	Read text in action sequence Ask individuals in audience to answer questions

SLIDE	INSTRUCTIONAL POINTS	INSTRUCTOR NOTES
 76 Convoy IED Scenario Next action? 1 Tourniquet on second stump? Not until Tactical Field Care Phase Not bleeding right now Next actions? Drag casualty out of vehicle and move to best cover Return fire if needed Communicate info to team leader 	 Convoy IED Scenario Next action? Tourniquet on second stump? Not until Tactical Field Care Phase Not bleeding right now Next actions? Drag casualty out of vehicle and move to best cover Return fire if needed Communicate info to team leader 	Read text in action sequence Ask individuals in audience to answer questions
77 Questions?	Questions?	