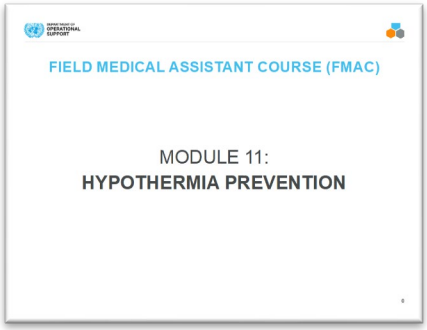
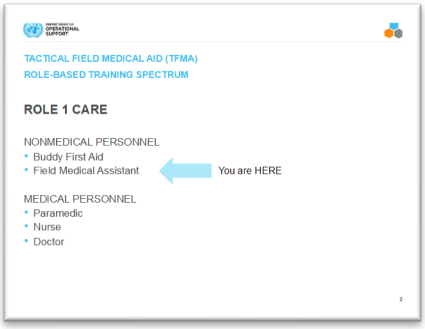
MODULE 11
HYPOTHERMIA PREVENTION

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES



Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

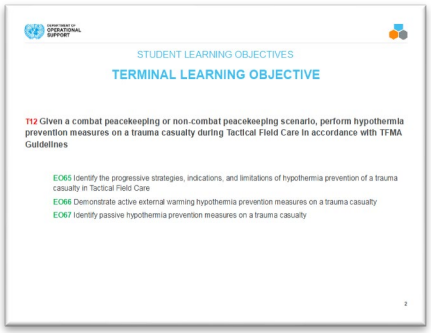
You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

The Combat Medic role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

SLIDE 3 – TLO/ELO

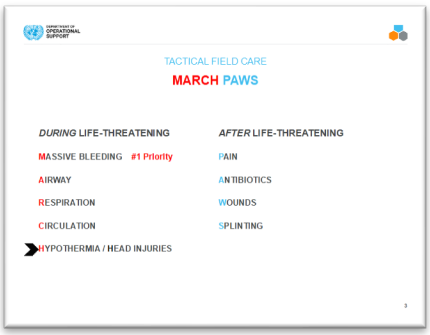


The hypothermia module has two cognitive learning objectives and one performance learning objective. The cognitive learning objectives are to identify the progressive strategies, indications, and limitations of hypothermia prevention of a trauma casualty in Tactical Field Care, and to identify passive hypothermia prevention measures on a trauma casualty.

The performance learning objective is to demonstrate active external warming hypothermia prevention measures on a trauma casualty.

The critical aspects are to recognize that hypothermia will be a problem, know the possible steps to prevent and treat it, and then be able to perform the necessary skills to successfully prevent and/or treat a casualty who is hypothermic or who is at risk of hypothermia.

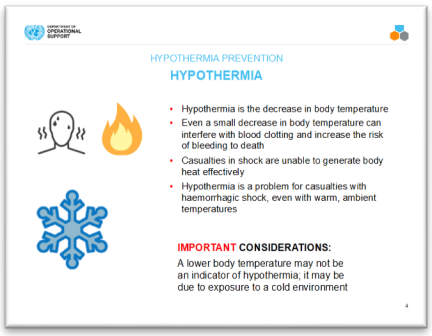
SLIDE 4 – MARCH PAWS



Hypothermia prevention and management is the "**H**" in the MARCH PAWS sequence, as are head injuries.

Remember, you are now in the Tactical Field Care phase of care, and so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as hypothermia.

SLIDE 5 – HYPOTHERMIA

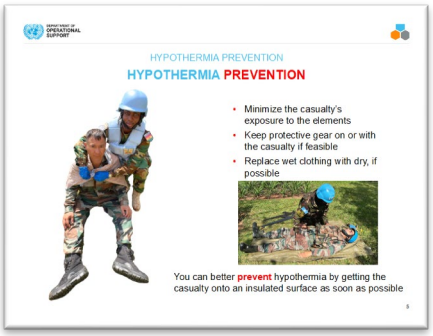


Hypothermia is the decrease in body temperature. Even a small decrease can interfere with blood clotting and increase the risk of bleeding to death.

Casualties in shock are unable to generate body heat effectively.

Hypothermia is a problem for casualties with hemorrhagic shock even with warm ambient temperatures, as hypothermia is not always a body temperature lower than normal due to exposure to a cold environment.

SLIDE 6 – HYPOTHERMIA PREVENTION



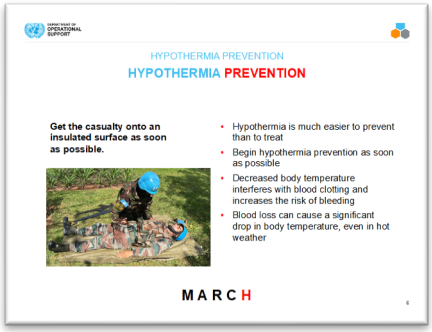
Hypothermia prevention will decrease the effects of heat loss and decrease deaths from uncontrolled hemorrhage. Prevention of hypothermia should start as soon as possible after wounding.

If hypothermia **is not prevented**, the potential exists that the casualty may bleed to death from an otherwise survivable wounding. Blood loss can lead to hypothermia, so you must control bleeding and prevent hypothermia through passive or active measures.

The sooner hypothermia is prevented, **the less impact** it will have on bleeding and shock.

Casualties in shock are unable to generate body heat effectively. It is important to minimize the casualty's exposure to the elements. Wet clothes and helicopter evacuations increase body heat loss, so replace wet clothing with dry if possible. Get the casualty onto an insulated surface as soon as possible. Keep in mind temperature changes throughout the day into the night, altitude, wind, etc.

SLIDE 7 – HYPOTHERMIA PREVENTION (CONT.)

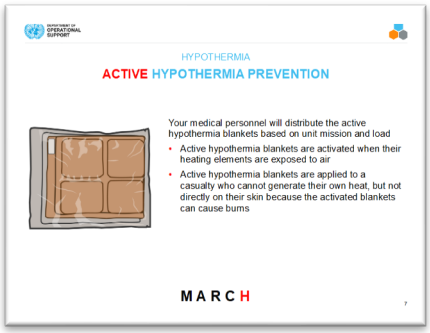


Hypothermia is much easier to prevent than to treat! Begin hypothermia prevention as soon as possible. Decreased body temperature interferes with blood clotting and increases the risk of bleeding.

Blood loss can cause a significant drop in body temperature, even in hot weather.

You must be proactive, assume that every casualty will become hypothermic, and use all the techniques you will learn in this module to prevent it. If they are already hypothermic, then be even more aggressive and treat it as if the casualty's life depends on it.

SLIDE 8 – ACTIVE HYPOTHERMIA BLANKETS



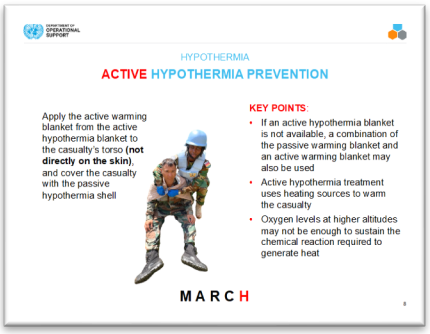
Your medical personnel will distribute the active hypothermia blankets based on unit mission and load.

Active hypothermia blankets are activated when their heating elements are exposed to air, and can produce temperatures reaching **40°C for up to 8 hours**.

Active hypothermia blankets are applied to a casualty who cannot generate their own heat, but not directly on their skin, because the activated blankets can cause burns.

Continue to reassess to determine if additional methods are needed to prevent or treat hypothermia.

SLIDE 9 – ACTIVE HYPOTHERMIA MANAGEMENT

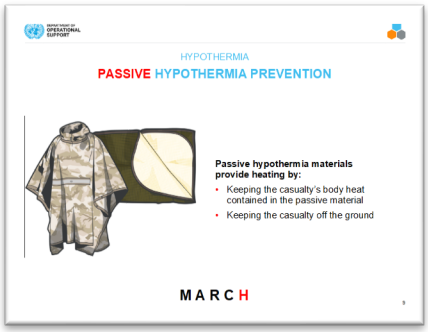


REMEMBER: Apply the active warming blanket from the active hypothermia materials to the casualty's torso, **not directly on the skin**, and cover the casualty with the passive hypothermia shell.

THE KEY POINTS ARE: 1) If an active hypothermia device is not available, a combination of the passive warming blanket and an active warming blanket may also be used. 2) Active hypothermia treatment uses heating sources such as the ready-heat blanket to warm the casualty. This requires a chemical reaction with oxygen, so at higher altitudes there may not be enough oxygen to sustain the chemical reaction required to generate heat.

You must determine based on the environmental conditions whether your casualty needs both the outer shell and the heating blanket or whether it is sufficient to just keep them covered with the shell, because it is already hot outside.

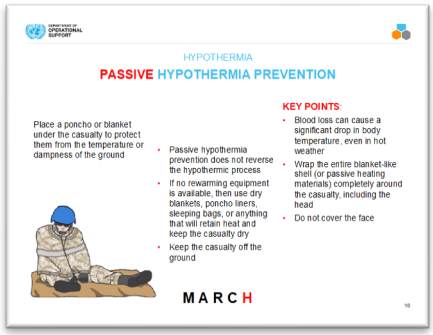
SLIDE 10 – PASSIVE HYPOTHERMIA MATERIAL



Passive hypothermia blankets provide heating passively by keeping the casualty's body heat contained in the passive blanket, and keeping the casualty off the ground.

The heat reflective shell will help to retain the heat produced by the ready-heat blanket. It has an incorporated hood and Velcro closures down each side to allow exposure of an arm or a leg. Such exposure allows the medic to attend to IVs and TQs.

SLIDE 11 – PASSIVE HYPOTHERMIA MANAGEMENT

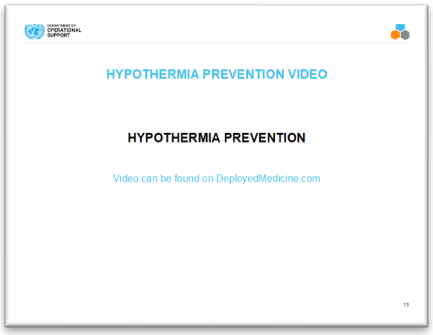


Passive hypothermia strategies will keep the casualty from getting colder, but essentially will not warm the casualty. Do not place the casualty on the cold/wet/damp ground; place a blanket or poncho underneath. **Passive hypothermia prevention WILL NOT reverse the hypothermic process.**

If no rewarming equipment is available, then use dry blankets, poncho liners, sleeping bags, or anything that will retain heat and keep the casualty dry, and keep the casualty off the ground.

Key points to remember are that blood loss can cause a significant drop in body temperature, even in hot weather. It is also important to wrap the entire blanket-like shell (or passive heating materials) completely around the casualty, including the head, but do not cover the face. Any exposed areas can lead to heat loss and worsening hypothermia.

SLIDE 12 – HYPOTHERMIA PREVENTION (VIDEO)



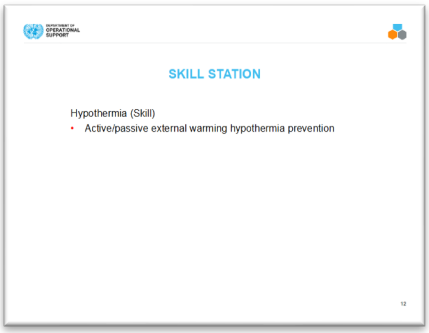
Play video.

Remember, hypothermia is not just about keeping the casualty warm; it may also save their life.

You must minimize exposure to the elements by keeping their protective gear on and keep them dry and on an insulated surface.

Use the ready-heat blanket and cover them with a heat-reflective shell if you have it. If you have nothing else, use anything that will retain heat and keep them dry.

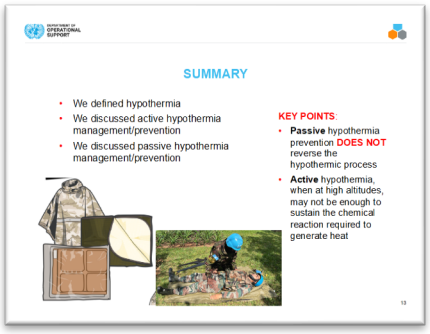
SLIDE 13 – SKILL STATION



In the skills station we will practice the active and passive hypothermia prevention skills.

This will include the use of the passive hypothermia prevention with the blanket-like shell and the use of an active warming blanket. Alternatives will also be discussed and demonstrated in case active heating blankets are not available.

SLIDE 14 – SUMMARY



In summary, you should now be able to define hypothermia and discuss active and passive hypothermia prevention and management.

Passive hypothermia prevention includes using ponchos and keeping them off the ground, but it DOES NOT reverse the hypothermic process.

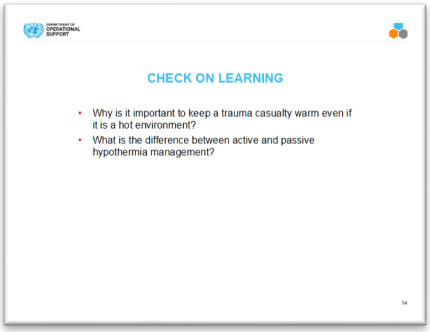
Active hypothermia, such as warming blankets, may still not be enough to sustain the chemical reaction required to generate heat when at high altitudes.

Hypothermia is not about it being cold outside, but about not letting the casualty get cold, as even a small decrease in body temperature can worsen bleeding and lead to death.

You will have to decide which active and passive warming measures to use depending on the situation. Warm environments might not require as much active warming as colder environments. The active blankets should not be placed directly on the skin as they can cause burns. Don't forget that transport, particularly in aircraft, can lessen the effectiveness of all the hypothermia measures.

Above all else, remember that hypothermia is easier to prevent than treat, so don't let your casualty get cold!

SLIDE 15 – CHECK ON LEARNING

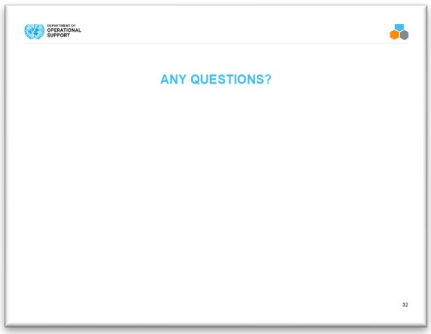


Ask questions of the learners referring to key concepts from the module.

Now for a check on learning.

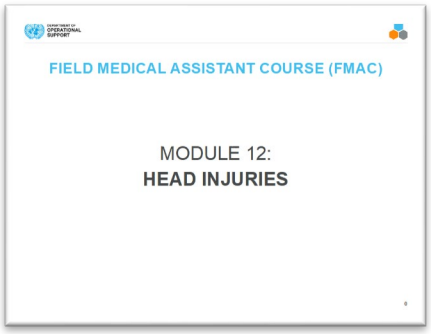
1. Why is it important to keep a trauma casualty warm even in a hot environment?
   - Even a small decrease in body temperature can interfere with blood clotting and increase the risk of bleeding to death.
   - Casualties in shock are unable to generate body heat effectively.
2. What is the difference between active and passive hypothermia management?
   - Active hypothermia treatment uses heating sources to warm the casualty.

SLIDE 16 – QUESTIONS



MODULE 12
HEAD INJURIES

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES

Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

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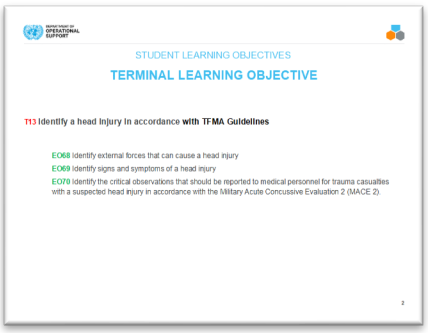
Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

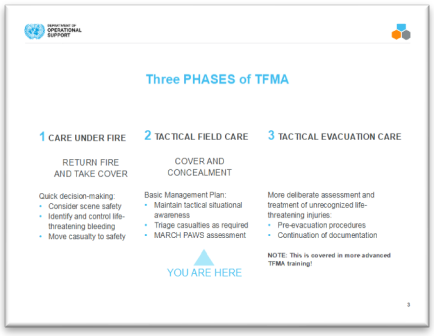
SLIDE 3 – TLO/ELO



The head injuries model has **three cognitive learning objectives**. These learning objectives are to identify the external forces that can cause a head injury, identify the signs and symptoms of a head injury, and identify the critical observations that should be reported to medical personnel for trauma casualties with a suspected head injury, in accordance with the Military Acute Concussive Evaluation 2.

The critical aspects are to be able to recognize whether a head injury has possibly occurred, know what signs or symptoms to look for, and then collect key information that will help medical personnel evaluate and treat a casualty with a head injury.

SLIDE 4 – THREE PHASES OF TFMA

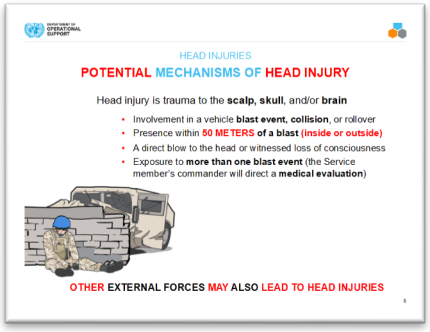


Remember, you are now in the Tactical Field Care phase of care, and so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as head injuries.

SLIDE 5 – MARCH PAWS

Head injuries are the "**H**" in the MARCH PAWS sequence as head Injuries.

SLIDE 6 – POTENTIAL MECHANISMS OF HEAD INJURY

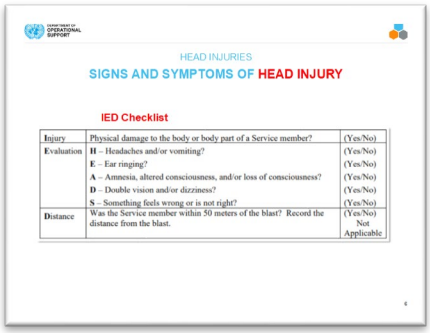


Head injury is trauma to the **SCALP, SKULL, and/or BRAIN**.

- Head injury can be caused by:
- Involvement in a vehicle blast event, collision, or rollover
- Presence within 50 METERS of a blast (inside or outside)
- A direct blow to the head or a witnessed loss of consciousness
- Exposure to more than one blast event. In these cases, the UN member's commander will direct a medical evaluation if deemed necessary.

Other external forces may also lead to head injuries.

SLIDE 7 – SIGNS AND SYMPTOMS OF HEAD INJURY



The IED checklist is an important tool for gathering information and identifying signs and symptoms of a head injury.

I stands for **I**njury, and refers to physical damage to the body or body part of a UN member.

E stands for **E**valuation, and includes the acronym HEADS, which asks if the casualty has any of the

following:

H – Headaches and/or vomiting?

E – Ear ringing?

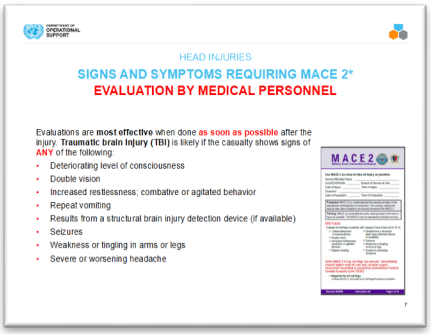
A – Amnesia, altered consciousness, and/or loss of consciousness?

D – Double vision and/or dizziness?

S – Something feels wrong or is not right?

D stands for **D**istance, and asks whether the UN member was within 50 meters of the blast. It is also important to record the approximate distance from the blast.

SLIDE 8 – SIGNS AND SYMPTOMS THAT REQUIRE MACE 2 EVALUATION BY MEDICAL PERSONNEL



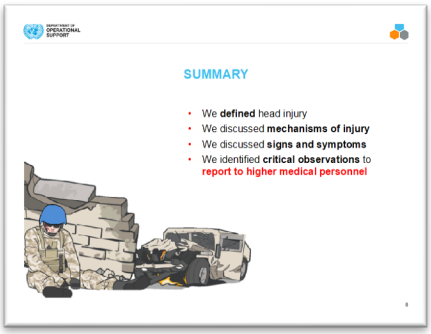
It is important to identify the critical observations that should be reported to medical personnel for trauma casualties with a suspected head injury, in accordance with the Military Acute Concussive Evaluation 2 (MACE 2).

Evaluations are most effective when done as soon as possible after the injury. Traumatic brain injury (TBI) is likely if the casualty shows signs of **ANY** of the following:

- A deteriorating level of consciousness
- Double vision
- Increased restlessness; combative or agitated behaviour
- Repeated vomiting
- Results from a structural brain injury detection device (if available)
- Seizures
- Weakness or tingling in the arms or legs
- Severe or worsening headache

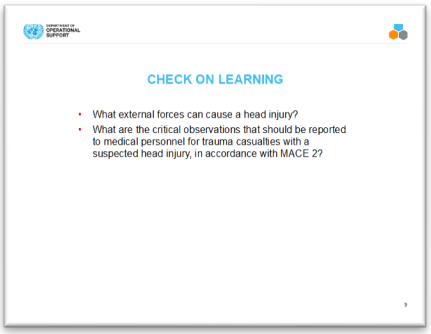
If any of these signs or symptoms are present, report them immediately upon arrival of medical personnel.

SLIDE 9 – SUMMARY



In summary, you should now be able to define what constitutes a head injury, understand its mechanisms of injury, know how to use the IED checklist to identify the signs and symptoms of head injury, and be able to identify the critical observations that require immediate reporting to higher medical personnel.

SLIDE 10 – CHECK ON LEARNING



Ask questions of the learners referring to key concepts from the module.

Now for a check on learning.

1. What external forces can cause a head injury?

- Involvement in a vehicle blast event, collision, or rollover
- Presence within 50 METERS of a blast (inside or outside)
- A direct blow to the head or witnessed loss of consciousness
- Exposure to more than one blast event (the UN member's commander will direct a medical evaluation)

2. What are the critical observations that should be reported to medical personnel for trauma casualties with a suspected head injury, in accordance with the Military Acute Concussive Evaluation 2 (MACE 2)?

- Deteriorating level of consciousness
- Double vision
- Increased restlessness; combative or agitated behaviour
- Repeat vomiting
- Results from a structural brain injury detection device (if available)
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- Weakness or tingling in arms or legs
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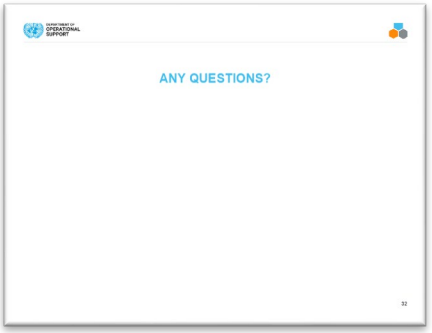
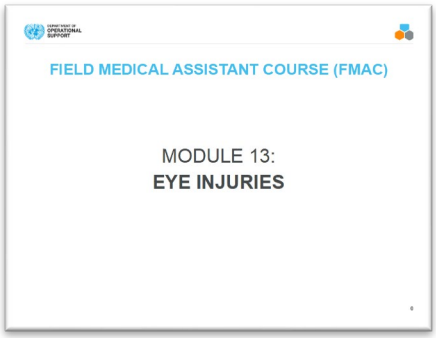
SLIDE 11 – QUESTIONS



MODULE 13
EYE INJURIES

SLIDE 1 – TITLE SLIDE



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Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

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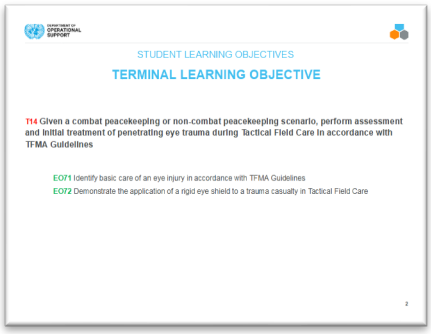
SLIDE 3 – TLO/ELO

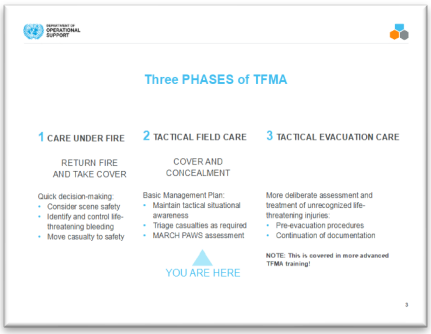


The eye injury module has **one cognitive learning objective and one performance learning**.

The cognitive learning objective is to identify the basic care of an eye injury, and the performance learning objective is to demonstrate the application of a rigid eye shield to a trauma casualty.

The critical aspects are to recognize eye injuries and the steps to treat them, and then to place a rigid eye shield on a trauma casualty.

SLIDE 4 – THREE PHASES OF TFMA



Remember, you are now in the Tactical Field Care phase of care, and so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as head and eye injuries.

SLIDE 5 – MARCH PAWS

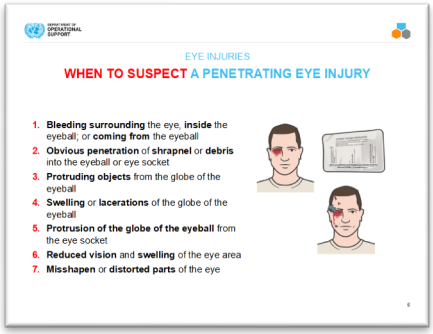
Eye injuries are part of the "H" in the MARCH PAWS sequence, as they can be considered head injuries.

Remember, you are now in the Tactical Field Care phase of care, and so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as eye injuries.

SLIDE 6 – EYE INJURIES OVERVIEW (VIDEO)

Play video.

SLIDE 7 – WHEN TO SUSPECT A PENETRATING EYE INJURY

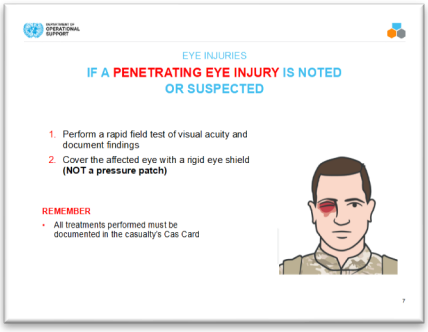


Eyesight is one of our most important senses. Damage to an eye can be irreversible if not treated correctly as early as possible.

The following signs should make you suspect a penetrating eye injury:

1. Bleeding surrounding the eye, inside the eyeball, or coming from the eyeball
2. Obvious penetration of shrapnel or debris into the eyeball or eye socket
3. Protruding objects from the globe of the eyeball
4. Swelling or lacerations of the globe of the eyeball
5. Protrusion of the globe of the eyeball from the eye socket
6. Reduced vision and swelling of the eye area
7. Misshapen or distorted parts of the eye from normal

SLIDE 8 – IF PENETRATING EYE INJURY IS NOTED OR SUSPECTED



If a penetrating eye injury is noted or suspected, three steps must be taken:

1. Perform a rapid field test of visual acuity and document findings

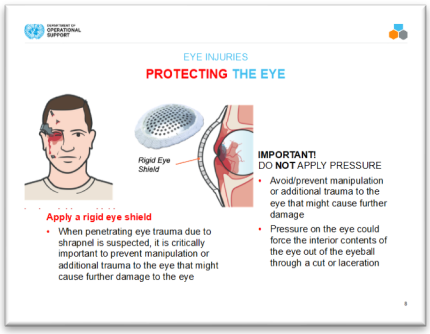
   Rapid visual acuity testing includes the ability to read print, count fingers, identity hand motion, and sense light perception.

2. Cover the affected eye with a rigid eye shield, **NOT a pressure patch**

   A pressure dressing could result in permanent loss of vision. Place a rigid eye shield on only one eye, unless both eyes are injured. Covering both eyes turns an otherwise ambulatory casualty into a litter casualty. Tactical eyewear is always a good way to prevent eye issues and can be used for protection if no eye shield is available.

Remember: Document all findings and treatments on the Casualty Card.

SLIDE 9 – PROTECTING THE EYE



Protect the eye with a SHIELD, not a patch.

A rigid shield will protect the eye from pressure. Avoid/prevent manipulation or additional trauma to the eye that might cause further damage.

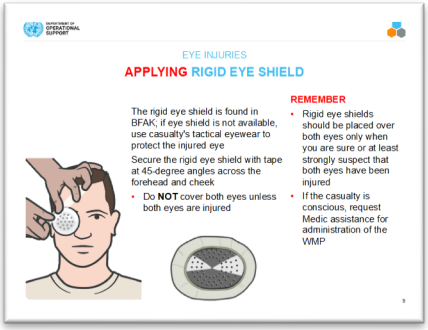
Pressure could force the interior contents of the eye to come out of the eyeball.

Pressure dressings are not part of the care of an eye injured in combat and may result in an avoidable permanent loss of vision.

For protruding or impaled objects extending past the eye shield, cut a hole in it to allow the object to fit through, and secure it in place.

If the eye shield cannot be applied around the impaled object, then use an improvised eye shield to avoid pressure on the eye.

SLIDE 10 – APPLYING THE RIGID EYE SHIELD



When penetrating eye trauma due to shrapnel is suspected, it is critically important to prevent manipulation or additional trauma to the eye that might cause further damage to the eye.

This is accomplished by taping a rigid shield over the eye. **DO NOT apply pressure to the eye.**

Secure the rigid eye shield with tape at **45-degree** angles across the forehead and cheek.

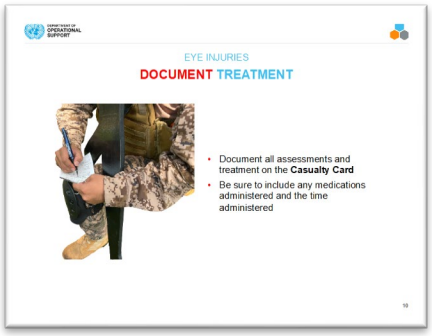
Rigid eye shields should be placed over both eyes only when you are sure or at least strongly suspect that both eyes have been injured. When only one eye has been injured, do not place a shield over the uninjured eye to prevent eye movement. Movement has not been shown to worsen the outcome for the injured eye. Blindness, resulting from placing eye shields over both eyes unnecessarily, makes an otherwise ambulatory casualty a litter casualty and is psychologically stressful.

If no rigid eye shield is available, **tactical eyewear** may be used to protect the eyes from further trauma.

SLIDE 11 – DOCUMENT TREATMENT

Document all assessments and treatment on the Casualty Card.

Be sure to include any medications administered and the time administered.



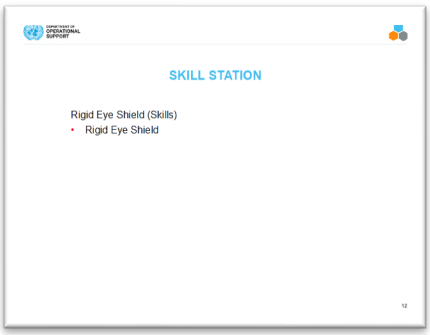
SLIDE 12 – APPLYING THE RIGID EYE SHIELD

Play video.

SLIDE 13 – SKILL STATION

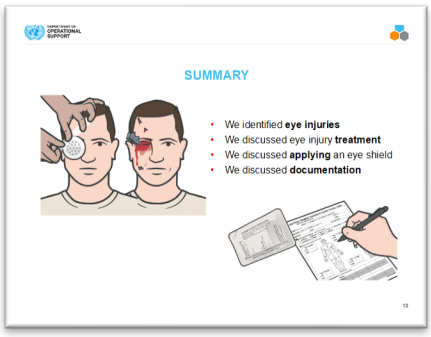
At this time we will break into skill stations to practice the following skills:

- Rigid Eye Shield

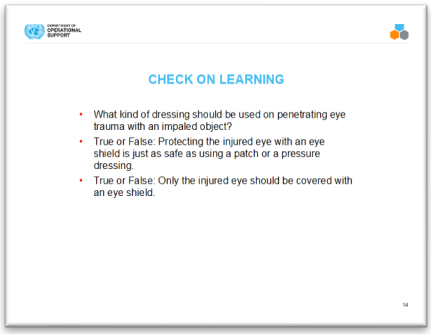


SLIDE 14 – SUMMARY

In this module, we discussed basic care of an eye injury. We addressed how to recognize an eye injury, steps to treat it, application of a rigid eye shield to a trauma casualty, and proper documentation.



SLIDE 15 – CHECK ON LEARNING

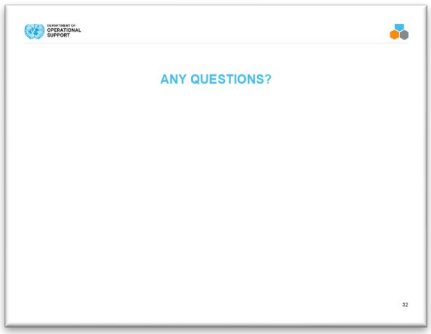


Ask questions of the learners referring to key concepts from the module.

Now for a check on learning.

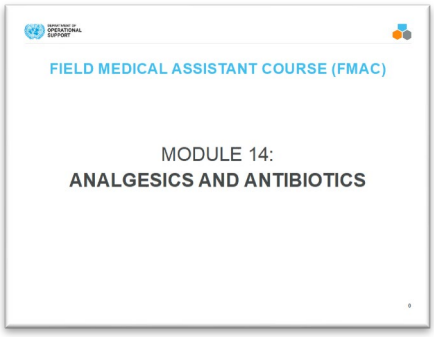
1. What kind of dressing should be used on penetrating eye trauma with an impaled object?
    - For protruding/impaled objects extending past the eye shield, cut a hole in it to allow the object to fit through. If you cannot cut the eye shield, place a bulky dressing around the penetrating object.
2. True or False: Protecting the injured eye with an eye shield is just as safe as using a patch or a pressure dressing?
    - False
3. True or False: Only the injured eye should be covered with an eye shield?
    - True

SLIDE 16 – QUESTIONS

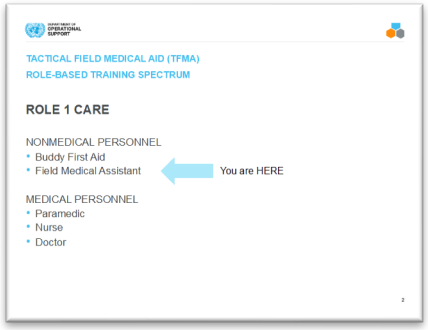


MODULE 14
ANALGESIA AND ANTIBIOTIC ADMINISTRATION

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES



Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

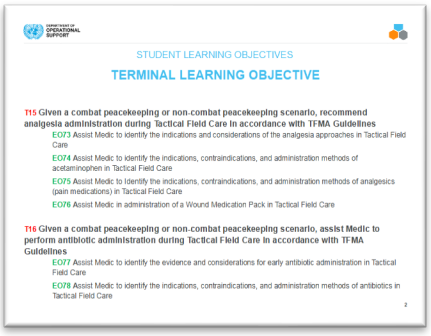
You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

The Combat Medic role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

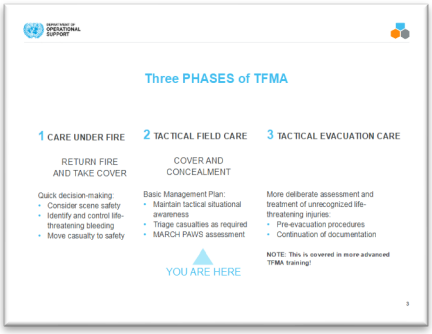
SLIDE 3 – TLO/ELO



The Wound Medication Pack (WMP) module has four cognitive learning objectives and one performance learning objective. The cognitive learning objectives are to identify the indications, contraindications, and administration methods of acetaminophen, analgesics, and antibiotics in Tactical Field Care (TFC), the indications and considerations of the analgesia approaches, and the evidence and considerations for early antibiotic administration. The performance learning objective is to demonstrate the administration of a combat wound medication pack to a trauma casualty.

The critical aspects are to recognize when analgesia or antibiotic administration is indicated, whether the casualty can take the WMP, when to administer the WMP, and then to demonstrate how the WMP is administered to a trauma casualty.

SLIDE 4 – THREE PHASES OF TFMA

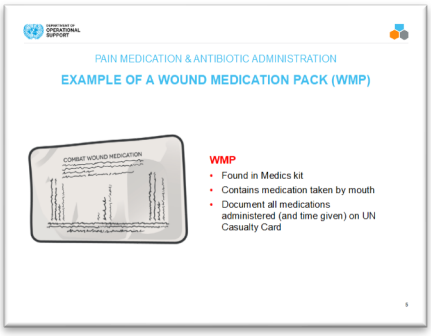


Remember, you are now in the TFC phase of care, so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire (CUF) phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications, including the use of the combat wound medication pack, if indicated.

SLIDE 5 – MARCH PAWS

Wound Medication Pack is both the “P” (pain) and the “A” (antibiotics) in the MARCH PAWS sequence.

SLIDE 6 – EXAMPLE OF A WOUND MEDICATION PACK (WMP)

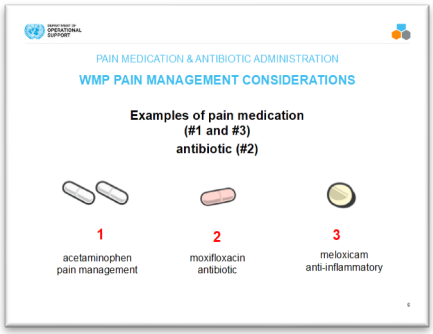


The WMP is a prepackaged pill pack containing TFMA recommend medications for use in casualty care. The WMP can be found in the Medic's Kit.

Contains medication taken by mouth

Document all medications administered (and time given) on UN Casualty Card

SLIDE 7 – WMP PAIN MANAGEMENT CONSIDERATIONS



The WMP contains the following components:

1. Two 650mg caplets of acetaminophen (total 1,300mg) in extended-release form
2. One 400mg tablet of moxifloxacin
3. One 15mg tablet of meloxicam

Each of the three medications in these dosages is contained in a blister pack.

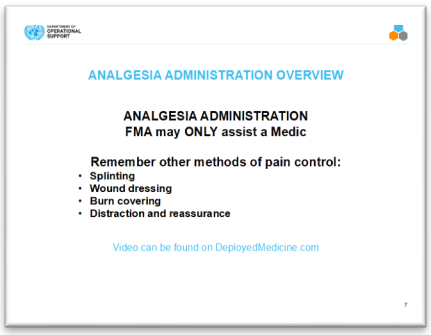
Note: The popular nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen, naproxen, and aspirin interfere with platelet function and blood clotting and can significantly increase the risk of bleeding in combat casualties.

Tylenol and meloxicam do not alter platelet function and are safe and effective for use in combat casualties.

Meloxicam does not alter platelet function and is the preferred NSAID for personnel who may see combat in the next 7–10 days.

SLIDE 8 – ANALGESIA ADMINISTRATION VIDEO

Play video



ANALGESIA ADMINISTRATION - FMA may ONLY assist a Medic

Remember other methods of pain control:

Splinting

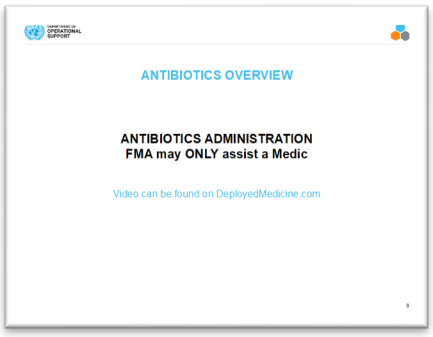
Wound dressing

Burn covering

Distraction and reassurance

SLIDE 9 – ANTIBIOTICS OVERVIEW VIDEO

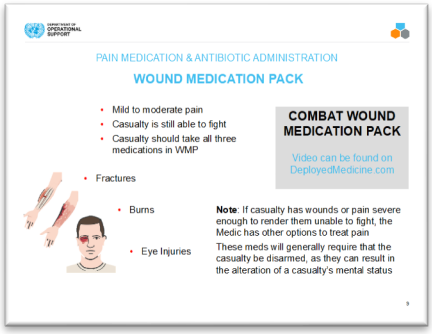
Play video



ANTIBIOTIC ADMINISTRATION - FMA may ONLY assist a Medic

SLIDE 10 – WOUND MEDICATION PACK

Play video



The WMP is found in the Medic's Kit. It contains the medications for pain and antibiotics that can be taken by mouth.

Take the WMP as soon as possible after life-threatening conditions have been addressed.

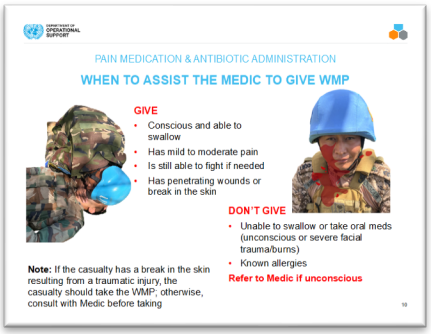
Document all medications administered and time given on the Cas Card.

Pain is common with battlefield injuries. Some injuries and levels of pain can be treated safely by using pain medications (also known as analgesics) in the WMP. These include fractures, burns, and eye injuries.

For pain relief on the battlefield of **mild to moderate** pain that will not keep the casualty out of the fight, ensure they take their WMP. The casualty should take **all three medications** in the WMP. This can give significant pain relief and will not alter the casualty's mental status. This is a good option when the casualty's pain and wounds are not severe enough to keep them out of the fight.

NOTE: If the casualty has wounds or pain severe enough to render them unable to fight, then medical personnel have other options for more effective pain relief. Giving these meds will generally require that the casualty be disarmed because the meds can alter the casualty's mental status.

SLIDE 11 – WHEN TO ASSIST THE MEDIC TO GIVE WMP



GIVE the WMP when the casualty:

- Is **conscious** and able to swallow?
- Has **mild to moderate** pain?
- Is still **able to fight** if needed?
- Has any **penetrating wounds** or break of the skin?

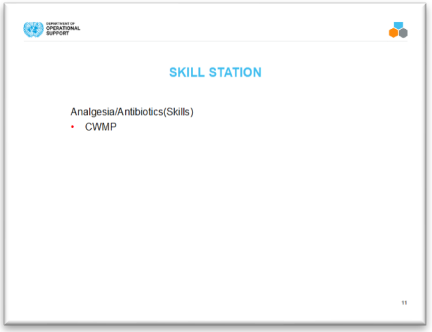
DON'T GIVE if the casualty:

- Is **unable** to swallow or take oral meds, such as when the casualty is unconscious or has severe facial trauma or burns
- Has known **allergies** to the medications

If the casualty is **unconscious**, refer them to medical personnel as soon as possible.

Note: If the casualty has a break in the skin in a traumatic injury, they should take the WMP. Otherwise, consult with medical personnel before giving it.

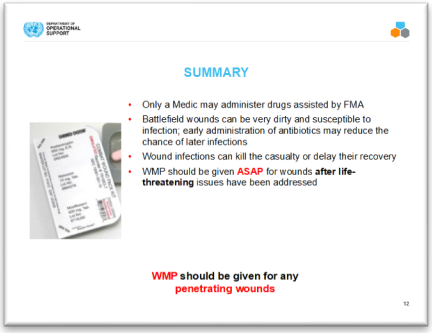
SLIDE 12 – SKILL STATION



At this time we will break into skill stations to practice the following skill:

- Wound Medication Pack

SLIDE 13 – SUMMARY



Only a Medic may administer drugs assisted by FMA

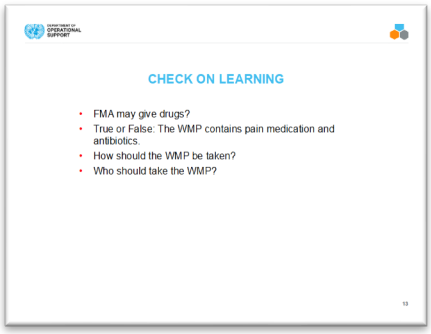
Battlefield wounds are often dirty and susceptible to infection. Early administration of antibiotics from the WMP may reduce the chance of later infections.

Wound infections can kill the casualty or delay their recovery.

The WMP should be given **ASAP** for wounds after **life-threatening** issues have been addressed.

Remember: The WMP should be given for any penetrating wounds.

SLIDE 14 – CHECK ON LEARNING



Ask questions of the learners referring to key concepts from the module.

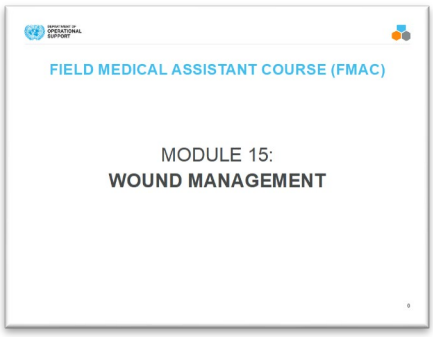
Now for a check on learning.

1. FMA may give drugs?
    - False
2. True or False – The WMP contains pain medication and antibiotics.
    - True
3. How should the WMP be taken?
    - The entire WMP should be taken orally.
4. Who should take the WMP?
    - Casualties who have a break in the skin and/or are in pain

SLIDE 15 – QUESTIONS

MODULE 15
WOUND MANAGEMENT

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES

Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

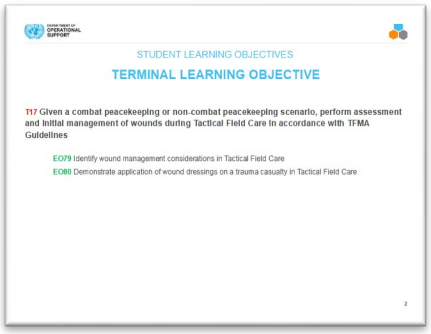
You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

The Combat Medic role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

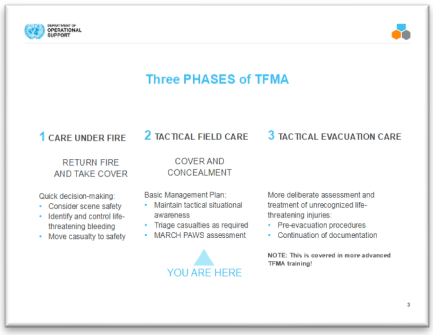
SLIDE 3 – TLO/ELO



The wound management module has **one cognitive learning objective** and **one performance learning objective**. The cognitive learning objective is to identify wound management considerations, and the performance learning objective is to demonstrate application of wound dressings on a trauma casualty.

The critical aspects are to recognize non-life-threatening wounds, know the steps to treat them and when in the treatment sequence they should be addressed, and then to demonstrate how to apply wound dressings to those injuries.

SLIDE 4 – THREE PHASES OF TFMA

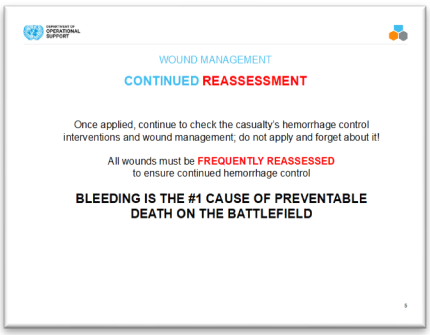


Remember, you are now in the Tactical Field Care phase of care, so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as wound management.

SLIDE 5 – MARCH PAWS

Wound management is the "**W**" in the MARCH PAWS sequence.

SLIDE 6 – CONTINUED REASSESSMENT

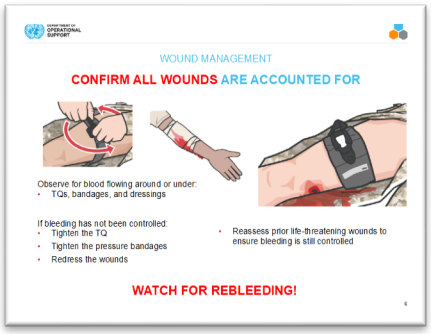


Once the casualty's hemorrhage has been **controlled**, continue to check control interventions and wound management. All wounds must be **FREQUENTLY REASSESSED** to ensure continued hemorrhage control.

DO NOT EVER APPLY IT AND FORGET IT!

REMEMBER: BLEEDING IS THE #1 CAUSE OF PREVENTABLE DEATHS ON THE BATTLEFIELD.

SLIDE 7 – CONFIRM ALL WOUNDS ARE ACCOUNTED FOR



Confirm **all wounds** have been addressed.

Reassess for re-bleeding under gauze or bandages to ensure bleeding is controlled.

Look for blood flowing around or under TQs, bandages, and dressings.

If the bleeding has not been controlled, tighten the tourniquet or pressure bandage for that wound if possible, and redress any wounds as necessary.

Also, check other wounds to make sure that:

- Fractures are splinted
- All wounds are wrapped
- Eye injuries are shielded
- Open chest wounds are accounted for

SLIDE 8 – TREAT FOR RE-BLEEDING

Always monitor wounds, and **FREQUENTLY REASSESS** to ensure hemorrhage has been controlled.

Pack any wounds that **continue to bleed** with new hemostatic dressing.

Once the dressing has been applied with pressure for **3 minutes**, carefully observe for blood continuing to flow from under the gauze to determine if bleeding has been controlled.

Once you are sure the bleeding has stopped, apply a new pressure bandage over the hemostatic dressing.

ALWAYS REASSESS TREATMENT to make sure bleeding remains controlled.

SLIDE 9 – DRESSINGS AND BANDAGES FOR MINOR WOUNDS

Dress any previously **untreated wounds** by applying (or packing) gauze with direct pressure.

Non-life-threatening bleeding usually does not need a hemostatic dressing.

If no dressings or gauze are available, use a clean, dry cloth, such as torn clothing or cravats.

Minor wounds include minor lacerations and abrasions, such as road rash.

Other wounds that may need to be dressed include major wounds that are no longer bleeding, such as:

- Amputation stumps
- Gunshot wounds that required a tourniquet
- Major lacerations
- Shrapnel wounds, possibly with shrapnel still in place
- Impaled objects

SLIDE 10 – REASSESS APPLIED BANDAGES

Continuously reassess all applied pressure bandages for:

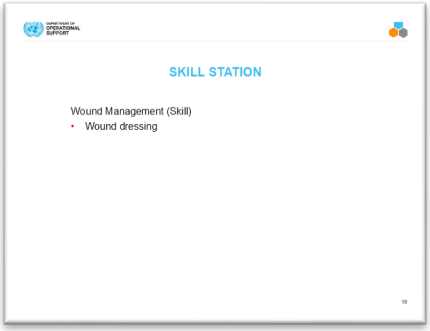
- Increased pain
- Skin colour
- Loss of the pulse

If any of these develop, it might indicate an emergency!

In this case, ensure the applied bandage isn't too tight, and loosen it as needed while keeping the bleeding controlled.

Most importantly, **DO NOT EVER APPLY IT AND FORGET IT!**

SLIDE 11 – SKILL STATION



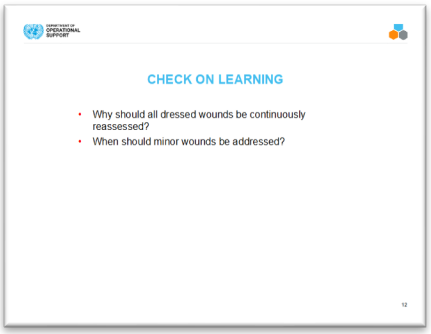
At this time we will break into skill stations to practice the following skills:

- Wound dressing

SLIDE 12 – SUMMARY

In this module, we addressed key considerations in wound management and the application of wound dressings on a trauma casualty. We discussed how to recognize non-life-threatening wounds, what steps to take to treat them, when in the treatment sequence they should be addressed, and how to apply wound dressings to those injuries.

SLIDE 13 – CHECK ON LEARNING



Ask questions of the learners referring to key concepts from the module.

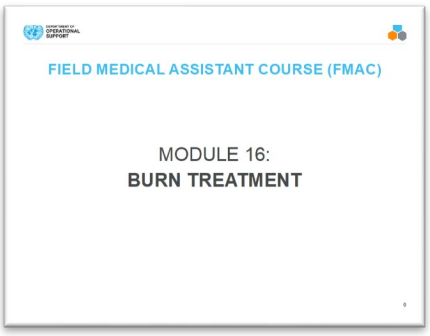
Now for a check on learning.

1. Why should all dressed wounds be continuously reassessed?
    - To ensure continued hemorrhage control
2. When should minor wounds be addressed?
    - During the “Wounds” portion of the MARCH PAWS sequence

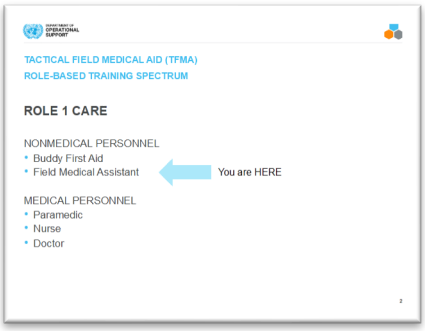
SLIDE 14 – QUESTIONS

MODULE 16
BURN TREATMENT

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES



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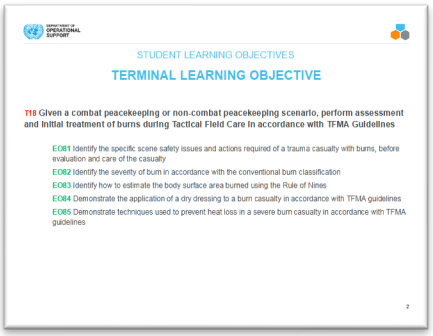
Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

SLIDE 3 – TLO/ELO



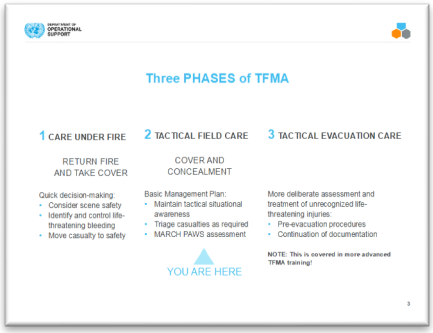
The burn module has t**hree cognitive learning objectives** and two performance learning objectives.

The cognitive learning objectives are to identify the scene safety issues associated with burn scenarios and any actions required to secure the scene, identify the severity of the burns. and estimate the percentage of the body surface involved in the burn.

The performance learning objectives are to demonstrate how to apply a burn dressing and techniques to prevent heat loss (hypothermia) in a burn trauma casualty.

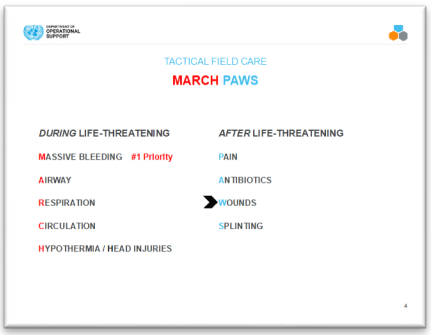
The critical aspects are to recognize safety concerns in burn scenarios, know the types of burns by severity and know how to estimate body surface area affected by a burn, and then to apply burn dressing(s) and perform the necessary skills to successfully prevent heat loss (hypothermia) in a burn trauma casualty.

SLIDE 4 – THREE PHASES OF TFMA



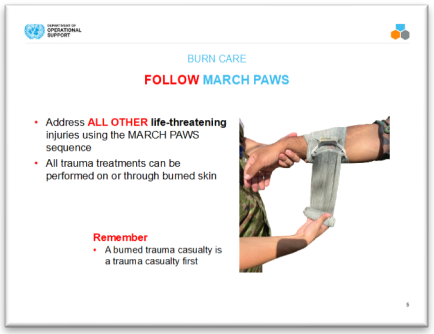
Remember, you are now in the Tactical Field Care (TFC) phase of care, so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire (CUF) phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as burns.

SLIDE 5 – MARCH PAWS



Burns are part of the "**W**" in the MARCH PAWS sequence which stands for wounds.

SLIDE 6 – FOLLOW MARCH PAWS

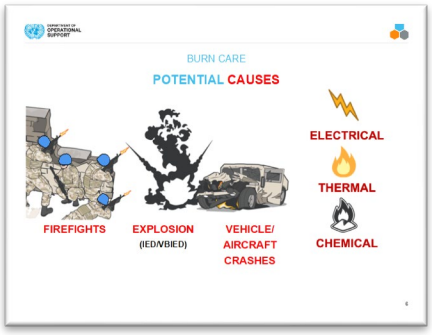


A burned casualty is still a **trauma casualty**.

You **must** address all other **life-threatening injuries** using the MARCH PAWS sequence first.

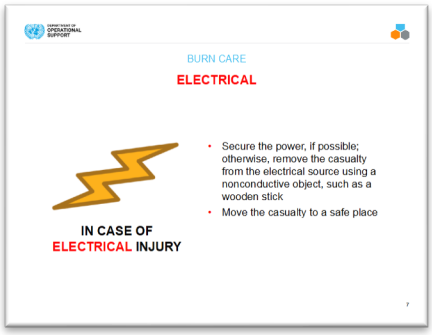
Remember, all trauma treatments can be performed on or through burned skin.

SLIDE 7 – POTENTIAL CAUSES



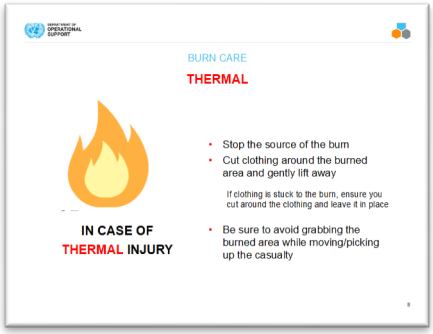
Burns can happen during firefights, explosions, or vehicle or aircraft crashes, or from exposure to electrical, thermal, or chemical events.

SLIDE 8 – ELECTRICAL



In an electrical injury, the **first thing** to do is to secure the power, if possible.
Otherwise, remove the casualty from the electrical source using a **nonconductive object**, such as a wooden stick. Then, move the casualty to a safe place.

SLIDE 9 – THERMAL



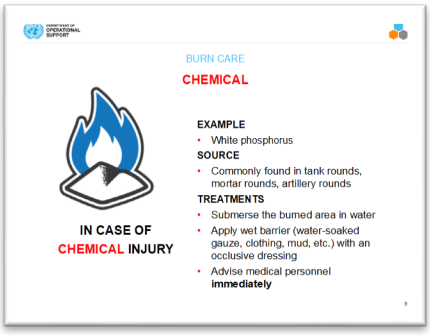
In a thermal injury, such as flames and flashes, the first step is to **stop the source of the burning**.

This may entail smothering the flames or removing the casualty from the heat source, but always remember to protect yourself from getting burned while doing this.

Then, to assess and manage the burn, cut the clothing from around the burned area and gently lift it away. If the clothing is stuck to the burn, **cut around the edges** of the clothing that has adhered to the skin and leave it in place. **Do not pull it off** the burn. Let medical personnel address removal of any remaining/attached materials when they assume care of the casualty.

Be sure to avoid grabbing or further damaging burned areas by manipulating them during casualty movements.

SLIDE 10 – CHEMICAL



Chemical burns can be caused by many different types of chemicals present in vehicles, machinery, and even some weapons.

An example of a chemical weapon **is white phosphorus**. It is commonly found in tank, mortar, and artillery rounds.

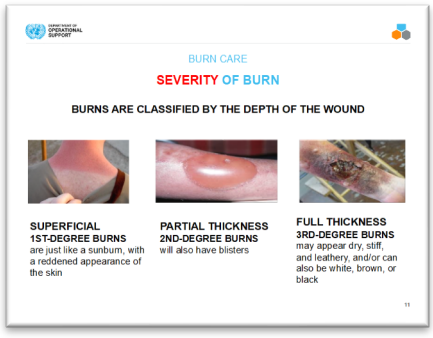
To prevent continued burning from the chemical, **submerse the affected area in water**, if possible.

If submersion is not possible, the dressing must be wet, which can be done by applying a wet barrier, such as water-soaked gauze, clothing, or mud, and covering with an occlusive dressing. Submersing the affected area removes the oxygen supply that causes the burning. Advise medical personnel immediately in the case of a chemical burn.

SLIDE 11 – BURNS OVERVIEW (VIDEO)

Play video.

SLIDE 12 – SEVERITY OF BURN



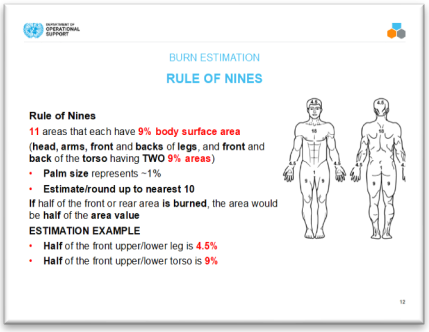
Burns range in severity. Here are visuals to help identify the severity of the burn, based on its depth.

Superficial, or **first-degree burns**, will appear reddened like a sunburn.

Partial thickness, or **second-degree burns**, will also appear reddened but may also have blisters.

Full thickness, or **third-degree burns**, will be dry, stiff, leathery, and variable in color.

SLIDE 13 – RULE OF NINES



On the Casualty Card the percentage of coverage on the casualty's body will need to be documented. The Rule of Nines will help with the estimation. The graphic here shows the approximation for each area of the body:

Eleven areas each have 9% body surface area (head, arms, front and back of legs, and front and back of the torso having two 9% areas each).

General guidelines are that the size of the palm of the hand represents approximately 1% of the burned area. When estimating, it is easiest to round up to the nearest 10. If half of the front or rear area is burned, the area would be half of the area value.

For example, if half of the front upper leg or front lower leg is burned, it would be half of 9%, or 4.5%. If half of the front torso is burned, say either the upper or lower part of the front torso, then it would be half of 18%, or 9%. Remember, the higher the percentage burned, the higher the chance for hypothermia.

SLIDE 14 – BURN CARE

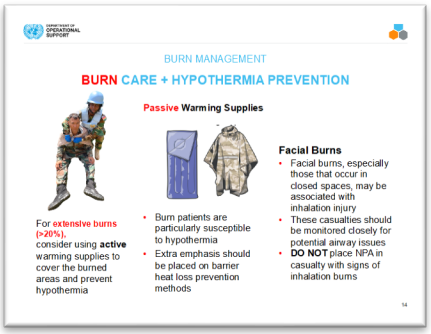
All TFMA procedures can be performed on or through burned skin in a burn casualty.

Remove all watches and jewelry from the burned area so they don't cause constriction when swelling occurs.

Cover the burned area with a dry, sterile dressing, if possible. For **white phosphorus** only, cover the area with a wet dressing.

REMEMBER: Treat the casualty first, not the burn.

SLIDE 15 – BURN CARE + HYPOTHERMIA PREVENTION



Be mindful of burns along with massive bleeding. **Ensure bleeding is controlled.**

Burn patients are particularly susceptible to hypothermia. Extra emphasis should be placed on barrier heat loss prevention methods. Keep casualties **off the ground** and onto an insulated surface as soon as possible.

For **extensive burns**, those with **>20%** of the area burned, consider placing the casualty in the Heat Reflective Shield (HRS) to cover the burned areas and prevent hypothermia.

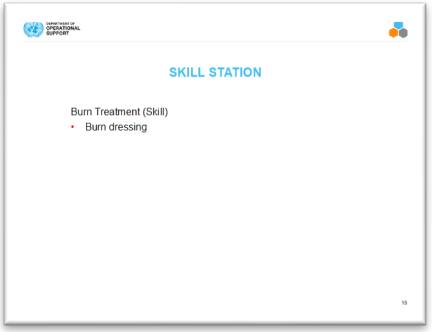
Regardless of ambient temperature in the environment, actively prevent/manage hypothermia for burn patients using these methods.

Facial burns, especially those that occur in closed spaces, may be associated with inhalation injury. These casualties should be monitored closely for potential airway issues. DO NOT place an NPA in a casualty with signs of inhalation burns. Notify medical personnel as soon as possible if an inhalation injury is suspected.

Analgesia may be administered to treat burn pain. Antibiotic therapy is not indicated solely for burns but should be given to prevent infection in penetrating wounds.

Be mindful of warm weather and cool weather interventions. The addition of blood loss can cause the body's temperature to drop even when it is hot outside. Never cover a tourniquet; keep it visible so medical personnel can easily see it.

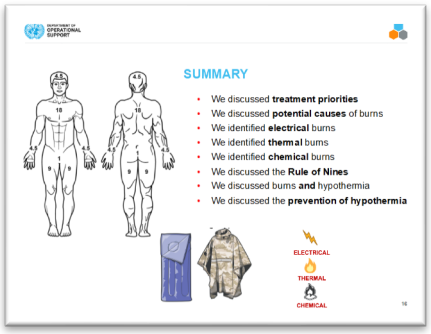
SLIDE 16 – SKILL STATION



At this time, we will break into skill stations to practice the following skills:

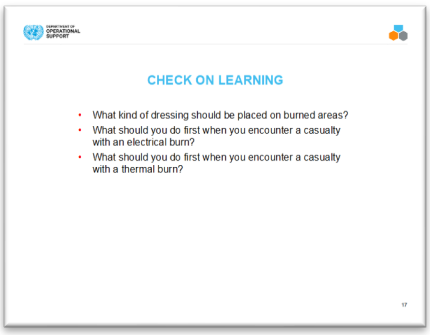
- Burn dressing

SLIDE 17 – SUMMARY



In this module, we discussed burn care. We identified the safety concerns in burn scenarios and actions required to secure the scene. We addressed how to know the types of burns by severity and how to estimate the body surface area affected by a burn. We also demonstrated application of a burn dressing and techniques to prevent heat loss in a burn trauma casualty.

SLIDE 18 – CHECK ON LEARNING



Ask questions of the learners referring to key concepts from the module.

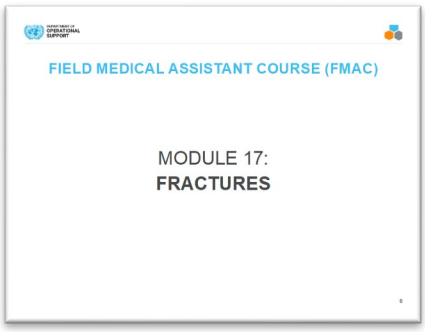
Now for a check on learning.

1. What kind of dressing should be placed on burned areas?
    - A dry sterile dressing
2. What should you do first when you encounter a casualty with an electrical burn?
    - Secure the power, if possible; otherwise, remove the casualty from the electrical source using a nonconductive object, such as a wooden stick.
3. What should you do first when you encounter a casualty with a thermal burn?
    - Stop the source of the burn

SLIDE 19 – QUESTIONS

MODULE 17
FRACTURES

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES

Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

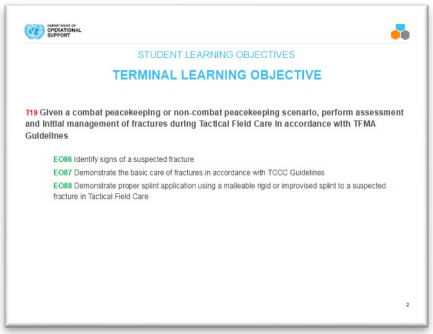
You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

The Combat Medic role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

SLIDE 3 – TLO/ELO

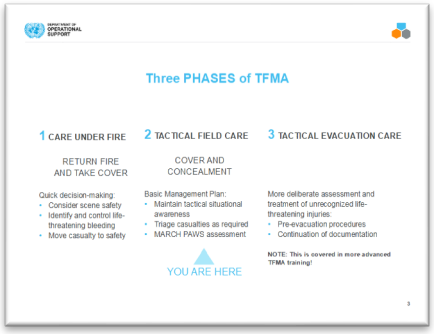


The fractures model has one cognitive learning objective and two performance learning objectives.

The cognitive learning objective is to identify the signs of a suspected fracture, and the performance learning objectives are to demonstrate the basic care of fractures and proper splint application using a malleable rigid or improvised splint to a suspected fracture on a trauma casualty.

The critical aspects are to recognize fractures and how to treat them, and then to perform the necessary skills to successfully care for a fracture in a trauma casualty by applying an appropriate splint.

SLIDE 4 – THREE PHASES OF TCCC



Remember, you are now in the Tactical Field Care (TFC) phase of care, so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire (CUF) phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications such as fractures.

SLIDE 5 – MARCH PAWS

Fractures are the "**S**" in the MARCH PAWS sequence, which stands for splinting.

SLIDE 6 – ASSESS FOR A FRACTURE

Fractures can be **open** or **closed**.

Closed fractures have no open wound (break in skin).

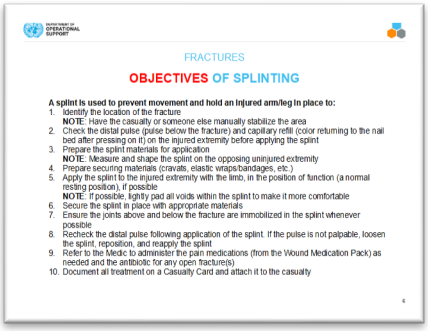
Open fractures have an open wound of the skin, sometimes with protruding bone, and this type of fracture is a major threat for serious infection.

The warning signs of a fracture are:

- Significant pain and swelling

- An audible or perceived “snap”
- Different length or shape of the casualty’s limb
- Loss of pulse or sensation in the injured arm or leg
- Crepitus, which is hearing a crackling or popping sound under the skin when the area is moved

SLIDE 7 – OBJECTIVES OF SPLINTING

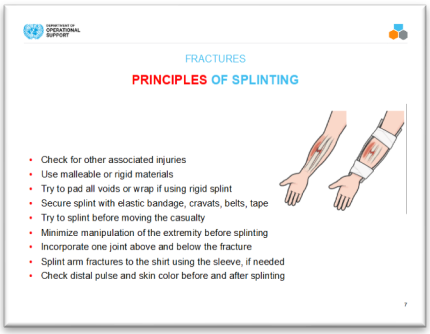


Splints are used to prevent movement and hold an injured arm or leg in place:

1. Identify the location of the fracture.
   NOTE: Have the casualty or someone else manually stabilize the area.
2. Check the **distal pulse** (pulse below the fracture) and capillary refill (color returning to the nail bed after pressing on it) on the injured extremity before applying the splint.
3. Prepare the splint materials for application.
   NOTE: Measure and shape the splint on the opposing uninjured extremity.
4. Prepare securing materials (cravats, elastic wraps/bandages, etc.)
5. Apply the splint to the injured extremity with the limb, in the position of function (a normal resting position), if possible.
   NOTE: If possible, lightly pad all voids within the splint to make it more comfortable.
6. Secure the splint in place with appropriate materials.
7. Ensure the joints above and below the fracture are immobilized in the splint whenever possible.
8. Recheck the distal pulse after applying the splint. If the pulse is not palpable, loosen the splint, reposition, and reapply the splint.
9. Document all treatment on a Casualty Card and attach it to the casualty.

Remember, if a wound is present near a fracture, it must be properly dressed before the splint is applied.

SLIDE 8 – PRINCIPLES OF SPLINTING

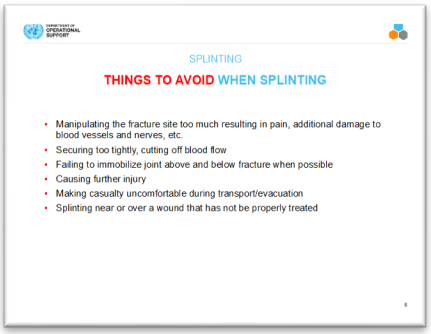


Splinting can be accomplished with rigid or malleable materials found in the BFAK/ UNTP or improvised.

The joint above and below the fracture site should be immobilized with the splint.

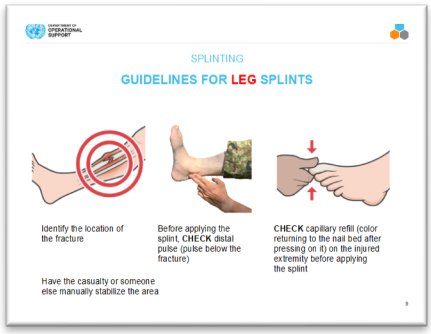
It is critical to check pulses distal to the fracture before and after splinting.

SLIDE 9 – THINGS TO AVOID WHEN SPLINTING



- Manipulating the fracture site too much, resulting in pain, additional damage to blood vessels and nerves, etc.
- Securing too tightly and cutting off blood flow
- Failing to immobilize the joint above and below the fracture when possible
- Causing further injury
- Making the casualty uncomfortable during transport/evacuation
- Splinting near or over a wound that has not been properly treated

SLIDE 10 – GUIDELINES FOR LEG SPLINTS

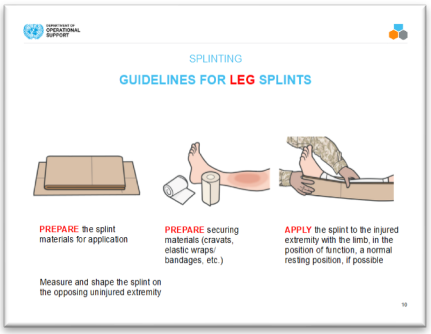


Be mindful of cravat placement. Do not apply a cravat on the fracture site, as the pressure from the cravat could cause additional injury to the fracture site.

Do not place the ends of the splint against the groin, as this could interfere with blood circulation. Use extra padding for joints or sensitive areas, such as the groin.

First, Identify the location of the fracture. Then, before applying the splint, CHECK the distal pulse, which is the pulse below the fracture. Also, CHECK capillary refill on the injured extremity. This can be done by seeing the colour returning to the nail bed after pressing on it.

SLIDE 11 – GUIDELINES FOR LEG SPLINTS (CONTINUED)



APPLY the splint to the injured extremity with the limb in the position of function or a normal resting position if possible.

SLIDE 12 – GUIDELINES FOR LEG SPLINTS (CONTINUED)

SECURE the splint in place with appropriate materials.

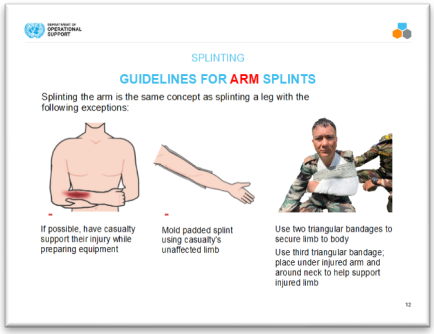
ENSURE the joints above and below the fracture are immobilized in the splint whenever possible.

RECHECK the distal pulse after applying the splint.

Watch for signs of poor circulation, including coolness, numbness, or lack of a pulse. Ensure the ends of the rigid objects are not interfering with blood circulation.

If there are any signs of poor circulation, loosen the splint, reposition, and reapply.

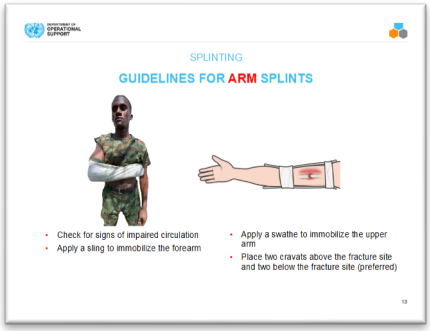
SLIDE 13 – GUIDELINES FOR ARM SPLINTS



Movement or manipulation of a fractured extremity results in increased pain:

- If possible, have the casualty support their injured arm while preparing the equipment
- Mold the padded splint using the casualty's unaffected limb to avoid unnecessary manipulation
- Use triangular bandages to immobilize the fracture and secure the limb to the body to minimize unnecessary movement during transport.

SLIDE 14 – GUIDELINES FOR ARM SPLINTS (CONTINUED)



Place the rigid objects so that one is on each side of the injured arm or forearm.

When possible, position the rigid objects so that the joint above the fracture and the joint below the fracture will be immobilized.

Apply padding between the arm and the splints.

Secure the splints with cravats, strips of cloth, or other securing materials.

If possible, place two cravats above the fracture site and two below the fracture site.

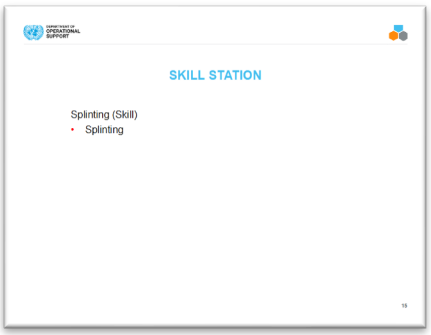
SLIDE 15 – SPLINTING AN ARM (VIDEO)

Play video.

SLIDE 16 – SKILL STATION

At this time, we will break into skill stations to practice the following skills:

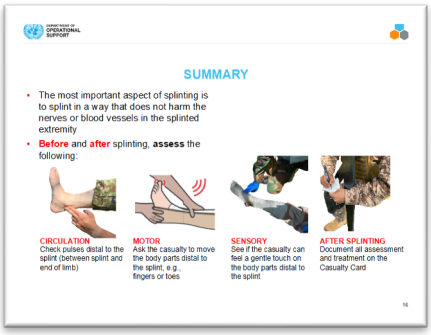
- Splinting



SLIDE 17 – SUMMARY

The most important aspect of splinting is to splint in a way that does not harm the nerves or blood vessels in the splinted extremity.
Before and after splinting, assess the following:

1. **Circulation**: check the pulses distal to the splint (between the splint and the end of the arm or leg).
2. **Motor**: ask the casualty to move the body parts distal to the splint, e.g., the fingers or toes.
3. **Sensory**: see if the casualty can feel a gentle touch on the body parts distal to the splint.



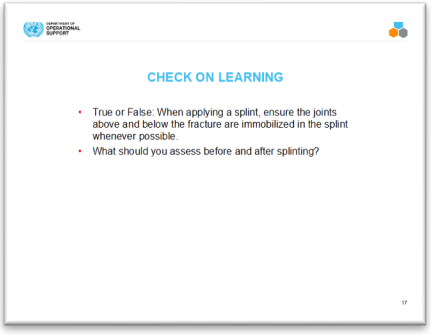
After splinting, make sure to document all assessment and treatment on the Casualty Card.

SLIDE 18 – CHECK ON LEARNING

Ask questions of the learners referring to key concepts from the module.

Now for a check on learning.

1. True or False: When applying a splint, ensure the joints above and below the fracture are immobilized in the splint whenever possible.
    - True

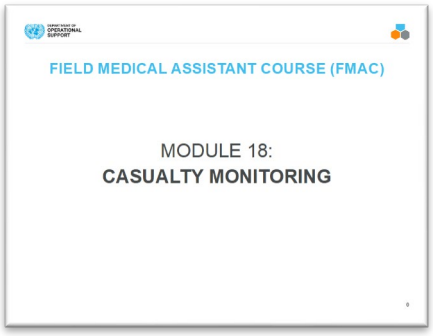


2. What should you assess before and after splinting?
    - Circulation – pulse check
    - Motor – movement
    - Sensory – feeling

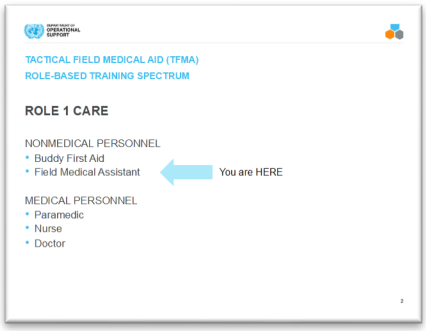
SLIDE 19 – QUESTIONS

MODULE 18
CASUALTY MONITORING

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES



Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

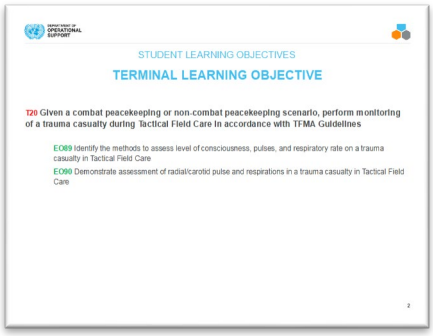
You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

The Combat Medic role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

SLIDE 3 – TLO/ELO



The casualty monitoring module has **one cognitive learning objective** and **one performance learning objective.**

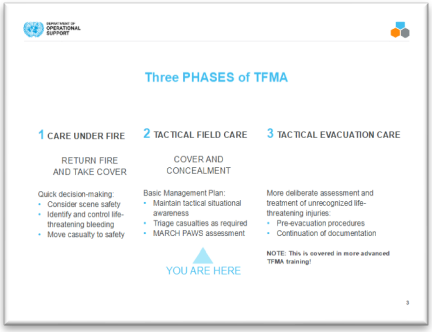
The cognitive learning objective is to identify the methods to assess level of consciousness, pulses, and respiratory rate of a trauma casualty.

The performance learning objective is to demonstrate the assessment of radial and/or carotid pulse and respirations in a trauma casualty.

The critical aspects are to recognize when and how to monitor a trauma casualty, and then to perform the necessary skills to assess the pulse rate, respiratory rate, and level of consciousness of the casualty.

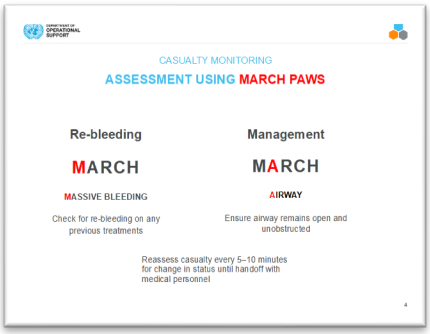
The critical aspects are to recognize when and how to monitor a trauma casualty, and then to perform the necessary skills to assess the pulse rate, respiratory rate, and level of consciousness of the casualty.

SLIDE 4 – THREE PHASES OF TFMA



Remember, you are now in the Tactical Field Care (TFC) phase of care, and so the focus has shifted from immediate life-threatening hemorrhage control while still under enemy fire in the Care Under Fire (CUF) phase, to the reassessment of all previous interventions, followed by the prevention and treatment of other injuries and complications. Casualty monitoring is an important part of this phase.

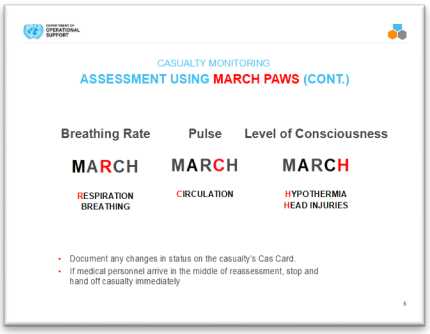
SLIDE 5 – ASSESSMENT USING MARCH PAWS



After your initial casualty assessment and performing any treatments that were indicated, continue to monitor your casualty and reassess their status **every 5 to 10 minutes** until you have handed off the casualty to medical personnel.

During your reassessments, follow the same MARCH PAWS process to guide your assessment, starting with reassessing and massive bleeding issues/interventions, and then looking at their airway status.

SLIDE 6 – ASSESSMENT USING MARCH PAWS (CONTINUED)



Next, evaluate for any changes in respiratory status, look for any signs or symptoms of shock, and check for ongoing issues with hypothermia or head injuries by monitoring the casualty's respiratory rate, pulses, and level of consciousness.

SLIDE 7 – LEVEL OF CONSCIOUSNESS

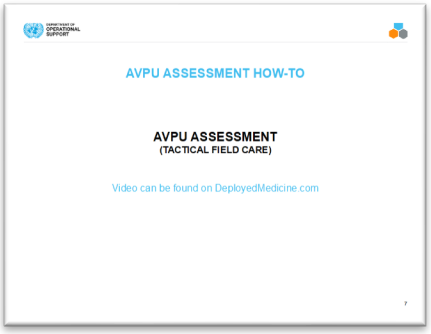
The level of consciousness is best expressed by addressing the casualty's response using the AVPU acronym as a guide.

AVPU stands for:

- Alert
- Verbal
- Pain
- Unconscious

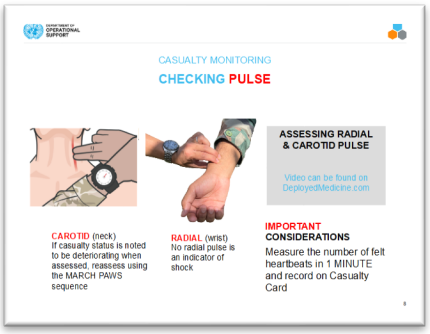
A casualty who is awake and conversing with you appropriately is "alert." If they are not fully alert and appropriate, but can still respond to your verbal commands (like asking them to raise their hand or move their toes), they are "verbal." If they do not respond to verbal commands, but respond to pain when performing assessments/procedures or withdraw from you when you rub their breastbone with your knuckles, they are "pain." And if they do not respond to painful stimuli, then they are "unconscious." Documenting the timing on any AVPU assessments and any changes in status helps medical personnel better understand the casualty's situation.

SLIDE 8 – AVPU ASSESSMENT HOW-TO



Play video.

SLIDE 9 – CHECKING PULSE



Play video.

Assessing a casualty's circulation status is done by checking for pulses.

Depending on the casualty and their injuries, you can check the casualty's pulse at either the carotid artery (neck) or radial artery (wrist).

You should use your index and/or middle fingers, **NOT your thumb**, to check pulses.

The absence of a radial pulse is an indication that the casualty is in shock.

Document pulse rates and locations, with the time taken, on the Casualty Card.

SLIDE 10 – CHECKING RESPIRATIONS

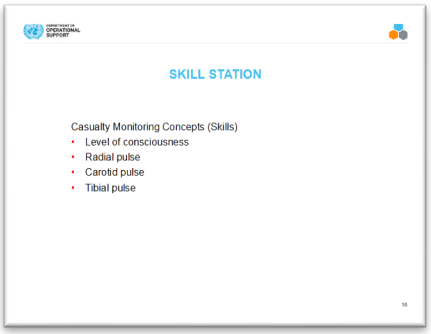
Another sign to monitor is the casualty's respiratory status. This involves checking the rate and the quality of the respirations.

By **looking, listening**, and **feeling** for breaths on your cheek, you can determine the respiratory rate (documented in number of breaths/minute) and the respiratory effort – shallow breaths, difficulties moving air in and out, loss of air movement on one side of the chest, etc.

Document the rate, respiratory effort, and time you assessed them on the Casualty Card.

If the casualty's respiratory status begins to change, reassess their status using the same approach you used in the tactical trauma assessment. You may need to insert a nasopharyngeal airway, place a chest seal, or perform a needle decompression of the chest if a tension pneumothorax is present.

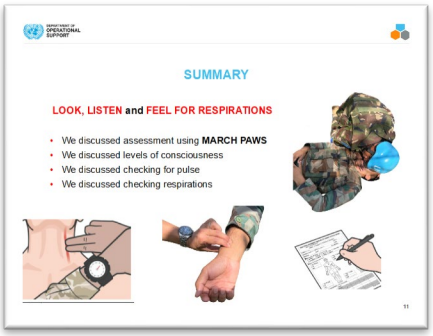
SLIDE 11 – SKILL STATION



During the skill station, you'll have the chance to practice checking pulses and respiratory rates on one another, and documenting them on a Casualty Card.

SLIDE 12 – SUMMARY

There are videos on checking AVPU status, performing pulse checks, and measuring the respiratory rate for additional information.

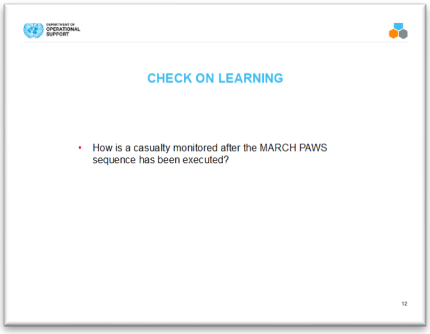


SLIDE 13 – CHECK ON LEARNING

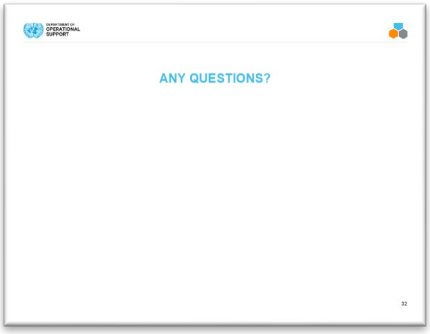
Ask questions of the learners referring to key concepts from the module.

Now for a check on learning.

1. How is a casualty monitored after the MARCH PAWS sequence has been executed?
    - Monitor for changes in level of consciousness
    - Monitor pulse
    - Monitor respiratory distress
    - Reassess all previous interventions



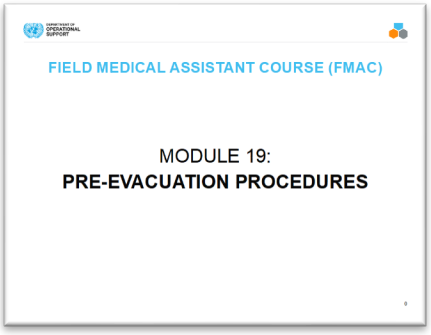
SLIDE 14 – QUESTIONS



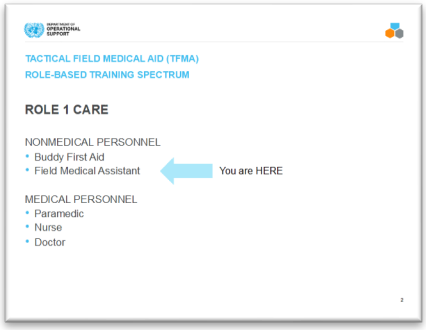
MODULE 19

PRE-EVACUATION PROCEDURES, COMMUNICATION, AND DOCUMENTATION

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES



Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

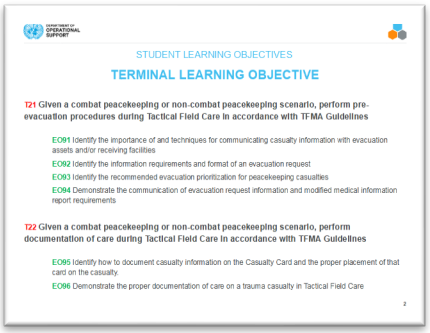
You are in the Field Medical Assistant (FMA) role. This teaches you more advanced care to treat the most common causes of death on the battlefield, and to recognize, prevent, and communicate with medical personnel the life-threatening complications of these injuries.

The Combat Medic role includes much more advanced and invasive care requiring significantly more medical knowledge and skills.

Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

SLIDE 3 – TLO/ELO



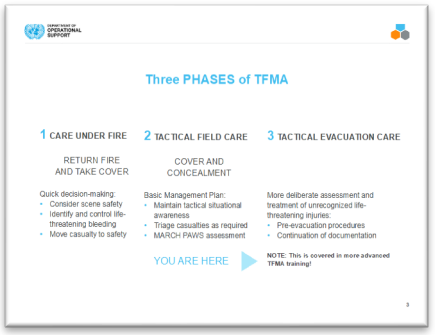
The pre-evacuation procedures module has **four cognitive learning objectives** and **two performance learning objectives**.

The cognitive learning objectives are to identify the importance of and techniques for communicating casualty information, identify the information requirements and format of an evacuation request (4- line), identify the recommended evacuation prioritization for combat casualties, and identify how to document casualty information on the Cas card.

The performance learning objectives are to demonstrate the communication of evacuation request information and modified medical information report and demonstrate the proper documentation of care on a trauma casualty.

The critical aspects are to understand the importance of communication and know the information requirements for evacuation prioritization, evacuation requests, and casualty care documentation. Also, it is necessary to demonstrate the skills needed to successfully document casualty care and communicate an evacuation request.

SLIDE 4 – THREE PHASES OF TFMA



Pre-evacuation procedures bridge both Tactical Field Care (TFC) and Tactical Evacuation Care.

Immediate life-threatening hemorrhage control followed by the prevention and treatment of other injuries and complications have all been completed before most pre-evacuation procedures are initiated, although some of the communication and documentation may be ongoing during the TFC phase.

SLIDE 5 – COMMUNICATION

Communicate with the casualty **throughout care**.

Being physically wounded may generate significant anxiety and fear above and beyond the psychological trauma of combat.

Talk frankly with the casualty about their injuries. Offer reassurance by describing the treatments being rendered. Emphasize that everything possible is being done on their behalf and that they will be well taken care of. These steps will help to counter their anxiety.

Be honest about the injuries sustained but maintain a positive attitude about rescue and treatment. Talking with the casualty helps assess their mental status, while talking through procedures helps maintain your own confidence and the casualty's confidence in you.

Communicate **with tactical leadership ASAP** and throughout casualty treatment. Tactical leadership needs to understand the impact to the mission.

For example, tactical leadership may need to know:

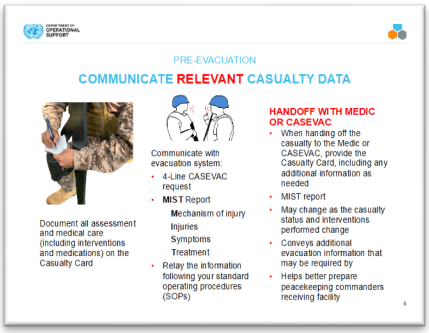
- How many casualties were inflicted?
- Who is down as a casualty?
- Can the casualty still fight?
- Has the enemy threat been eliminated?
- Are weapons systems down or fields of fire not covered because the unit has taken casualties?
- Is it necessary to have others fill in the casualties' fighting positions or to move the casualties?

Communicate with the evacuation coordination cell to arrange for CASEVAC. Communicate with medical providers about details of the casualty's injuries. This includes 4-line communication and ongoing **MIST** reports.

Medical leadership may need to know:

- What injuries were sustained
- The mental and physical status of each casualty
- Treatments rendered and treatments needed
- Does the medic need to triage multiple casualties?
- Should the medic move to a casualty, or should the casualty be moved to the medic?
- Does the unit need to break out litters or extraction equipment?

SLIDE 6 – COMMUNICATE RELEVANT CASUALTY DATA



Medical documentation may be difficult to accomplish in tactical prehospital settings, but it is important to the casualty's **subsequent care** that every effort be made to document the care provided by first responders and medics throughout the trauma care continuum, from point of wounding/injury to definitive care at the hospital.

Communication is also important, as the injured casualty may impact the success of the mission or change the tactical landscape.

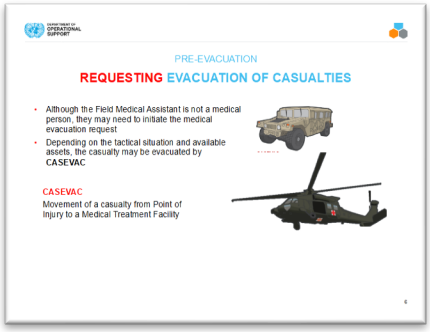
A **Casualty Card** is provided in each Buddy First Aid Kit (BFAK). Based on the principles of TFMA, the card provides an easy way to document initial lifesaving care provided at the point of wounding. The card also serves as a prompt to remind first responders of the assessment and treatment steps of the MARCH sequence.

The Casualty Card is relatively self-explanatory, but there might be some acronyms or sections that are intuitive to someone who hasn't filled one out before. So, we'll watch this video on the subject to familiarize ourselves with the form, and then we'll practice filling one out with each casualty as we go through the rest of the skills training. This information about the casualty informs the medical evacuation request and can be collected simultaneously with the other required information.

MIST stands for **M**echanism of injury, **I**njuries, **S**igns and **S**ymptoms and **T**reatment. MIST reporting has become a norm in operational theatres. The MIST transmits medical information to the receiving treatment facility and to the evacuation platform. A MIST report conveys additional evacuation information that may be required by theatre commanders.

MIST information helps the receiving medical treatment facility better prepare for specific inbound casualties. Transitioning casualty care to another medical team is best accomplished with an oral discussion of the casualty's status, along with the written documentation on the Casualty Card. But in cases where an oral hand-off isn't a viable option, the written information may be the only way receiving medical personnel will know what you have done to help the casualty and what the next steps should be to provide the best care going forward.

SLIDE 7 – REQUESTING EVACUATION OF CASUALTIES



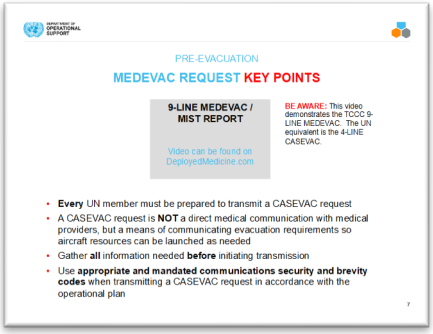
Every UN member should **be able to initiate** a medical evacuation request.

Depending on the situation, transport will be dispatched **Cas**ualty **Evac**uation (CASEVAC)

Bespoke medical evacuation platforms are marked with a **red cross** and **cannot** be used for nonmedical missions.

Communicate with the evacuation system to arrange for CASEVAC. Communicate with medical providers on the evacuation asset if possible and relay mechanism of injury, injuries sustained, signs/symptoms, and treatments rendered. Provide additional information as appropriate.

SLIDE 8 – MEDEVAC REQUEST KEY POINTS



Play video.

Before initiating an evacuation, collect all of the information you will need, and when calling in, be sure to follow all appropriate communication protocols and guidance.

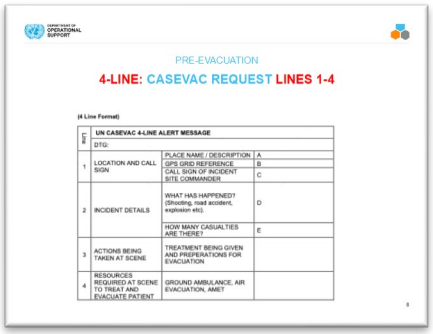
Remember that when you request a medical evacuation, you aren't directly coordinating with medical providers, but are explaining your evacuation requirements with someone who coordinates air asset movements.

Although they still require some general information about the status of the casualty, much of the information that they need to coordinate evacuation is not clinical and relates to logistical and operational issues.

SLIDE 9 – 4-LINE: CASEVAC REQUEST LINES 1–4

The standard CASEVAC request has **4 lines**.

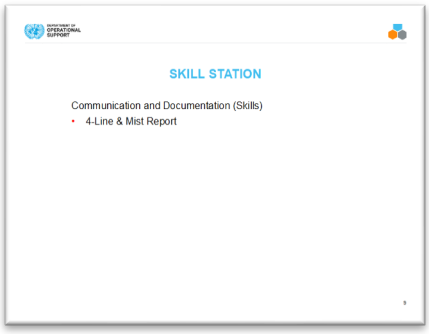
Using a **phonetic alphabet** and following your unit's normal communications procedures, call in your grid location, your radio frequency and call sign, the number of casualties that you have by precedence, litters, and how many will be ambulatory.



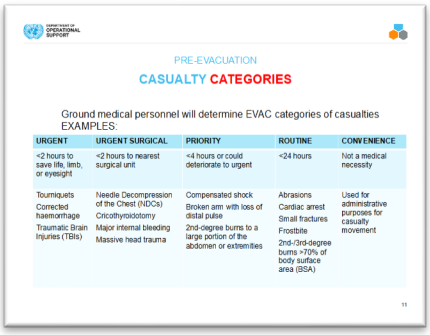
SLIDE 10 – SKILL STATION

At this time, we will break into skill stations to practice the following skills:

- 4-Line and MIST Report



SLIDE 11 – CASUALTY CATEGORIES

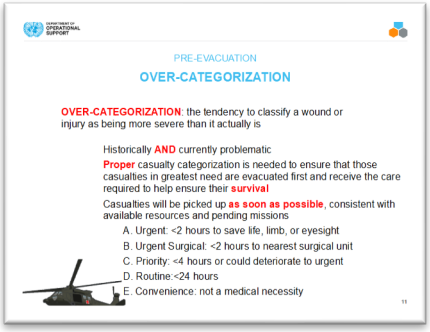


SLIDE 12 – OVER-CATEGORIZATION

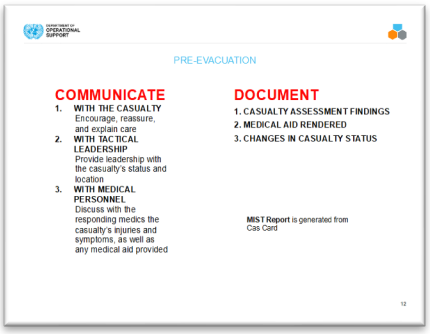
It is important to **accurately categorize casualties** for CASEVAC to ensure that the limited evacuation resources are used as efficiently as possible.

Over-categorization is a tendency to categorize a wound or injury as being more severe than it actually is. This has been and is currently a problem on the battlefield.

Proper categorization helps triage casualties in the order of greatest need and avoid sending evacuation assets to a casualty who has less severe injuries while a more seriously injured casualty has a delayed evacuation.



SLIDE 13 – COMMUNICATE AND DOCUMENT

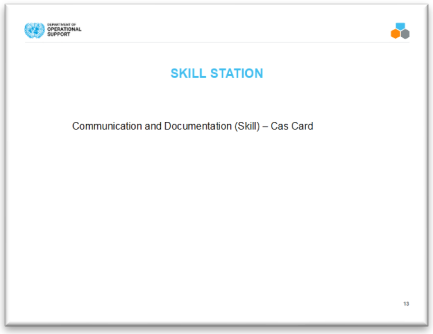


In summary, during the TFC phase, we must continue to communicate with the casualty and with tactical leadership, and to initiate evacuation.

Every member of the unit must be prepared to perform any of these communication requirements.

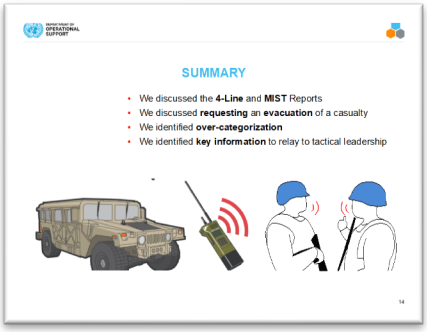
It is **important** that all TFMA actions and information are documented for each casualty so that the next provider in the continuum of casualty care knows what interventions have been performed, including tourniquet times, medications administered, etc.

SLIDE 14 – SKILL STATION



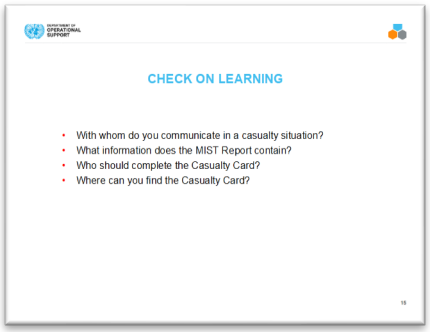
During the skill station for this module you will all be given a scenario that requires you to fill out a Casualty Card, documenting the casualty's injuries and treatment. Afterwards, using this information and additional information from the scenario, you will need to prepare a MIST report and then call in a 4-line CASEVAC request.

SLIDE 15 – SUMMARY



In this module we highlighted the importance of and techniques for communicating casualty information. We demonstrated how to communicate evacuation request information and a modified medical information report along with how to properly document care on a trauma casualty. We discussed the information requirements and format of an evacuation request (4-line), the recommended evacuation prioritization for combat casualties, and documentation of casualty information on the Casualty Card.

SLIDE 16 – CHECK ON LEARNING



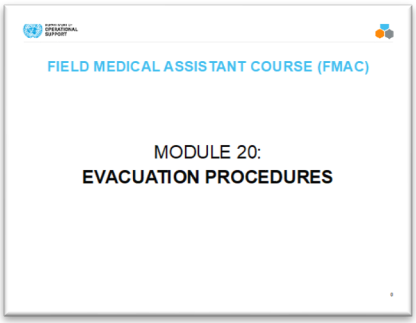
Ask questions of the learners referring to key concepts from the module.
Now for a check on learning.

1. With whom do you communicate in a casualty situation?
    - The casualty
    - The tactical leader
    - Medical personnel upon arrival
2. What information does the MIST report contain?
    - Mechanism of injury
    - Injuries
    - Symptoms
    - Treatment
3. Who should complete the Casualty Card?
    - The card should be filled out by whomever provides care to the casualty.
4. Where can you find the Casualty Card?
    - In the casualty's BFAK

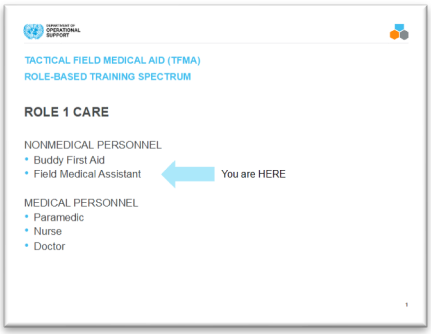
SLIDE 17 – QUESTIONS

MODULE 20
EVACUATION PROCEDURES

SLIDE 1 – TITLE SLIDE



SLIDE 2 – TFMA ROLES



Tactical Field Medical Aid is broken up into two roles of care. The most basic taught is the UN Buddy First Aid Course (BFAC), which is designed to instruct in the absolute basics of hemorrhage control and to recognize more serious injuries.

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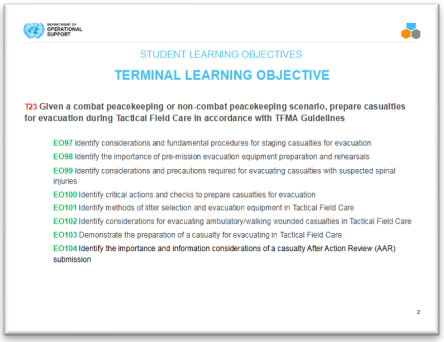
Finally, the last role, is Medical Professionals such as Paramedics, Nurses and Doctors, to provide the most sophisticated care to keep our wounded warriors alive and get them to definitive care.

Your role as a FMA is to treat the most common causes of death on the battlefield, which are massive hemorrhage and airway/respiratory problems. Also, you are given the skills to prevent complications and treat other associated but not immediately life-threatening injuries.

SLIDE 3 – TLO/ELO



Evacuation procedures module has seven cognitive learning objectives and one performance learning objectives.

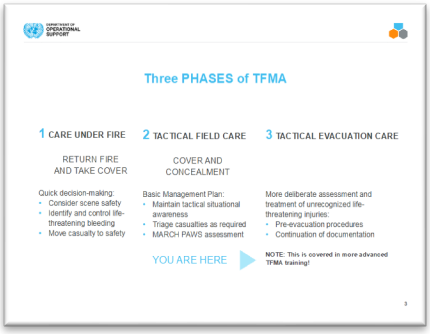
The cognitive learning objectives are to identify considerations and fundamental procedures for staging casualties, identify the importance of pre-mission evacuation equipment preparation, identify considerations and precautions required for evacuating casualties with suspected spinal injuries, identify critical actions and checks to prepare casualties for evacuation, identify methods of litter selection and evacuation equipment, identify considerations for evacuating ambulatory/walking wounded casualties and identify the importance and information considerations of a casualty After Action Review (AAR) submission.

The performance learning objective is to demonstrate the preparation of a casualty for evacuating in Tactical Field Care.

The critical aspects are to be able to recognize considerations for staging casualties, prepare equipment and litters for evacuation, prepare casualties for evacuation including suspected spinal injuries and ambulatory casualties, and understand the information needed in a casualty after-action report.

Additionally, it is important to be able to perform the necessary skills in order to prepare a casualty for evacuation.

SLIDE 4 – THREE PHASES OF TFMA



Evacuation procedures are part of the Casualty Evacuation (CASEVAC) phase, after immediate life-threatening hemorrhage control followed by the prevention and treatment of other injuries and complications have already been addressed.

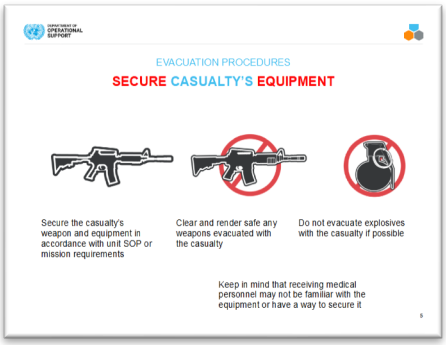
SLIDE 5 – IMPORTANT ACTIONS (IN THIS MODULE)

Along with **requesting medical evacuation**, several actions must be taken to better prepare the casualty for evacuation.

These include **securing the casualty's weapons** and **equipment** in accordance with unit standard operating procedure (SOP) or mission requirements, selecting a litter that meets the casualty's needs and mission profile, preparing any

equipment that might need to go with the casualty during their evacuation, and then actually preparing the casualty for evacuation.

SLIDE 6 – SECURE CASUALTY'S EQUIPMENT



Casualties are often unable to secure their own weapons because of the nature of their injuries or an altered mental status, and it is important to secure their weapon and equipment in accordance with unit SOP or mission requirements.

The weapon should be evacuated with the casualty. Be sure to **clear it** and render it safe when preparing for movement.

DO NOT evacuate **explosives** with the casualty.

Keep in mind that the medical personnel receiving the casualty may not be familiar with the equipment or have a way of securing it.

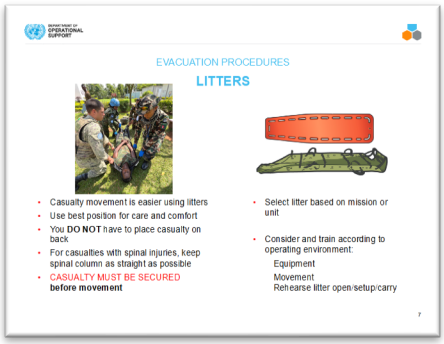
SLIDE 7 – EVAC EQUIPMENT

Essential evacuation equipment (e.g., litters, packaging materials, Bag Valve Masks) should be prepared by other unit personnel while treatment continues, coordinating with the casualty treatment team to save time.

For example, other unit members can prepare litters while treatment is being provided.

Do not delay getting casualties onto litters. You can better prevent hypothermia by getting casualties off the ground.

SLIDE 8 – LITTERS



Casualty movement in TFC may be better accomplished using litters due to the tactical situation and the need to move casualties rapidly. The litter exists only to facilitate casualty movement, and the casualty can be placed in the best position that facilitates their care and comfort.

Casualties **DO NOT** have to be placed on their backs on a litter.

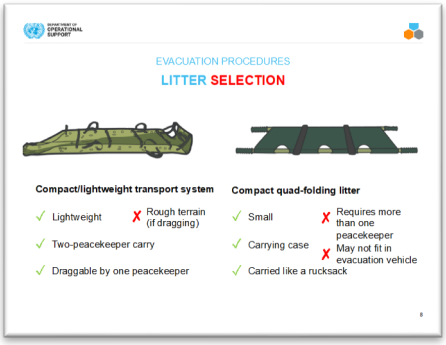
It is easier to move them if they're already on litter however, they must be secured to the litter before movement.

Litters are also usually better for moving casualties' long distances.

All unit members should know how to **open** and **set up** litters and rehearse their use during pre-mission training.

All unit members should know who will carry litters and/or where litters are located on vehicles.

SLIDE 9 – LITTER SELECTION



Selecting the proper litter is dependent on several different factors – 1) the evacuation platform, 2) the terrain at the location of pick-up, 3) the casualty's injuries, and 4) the availability of different types of litters.

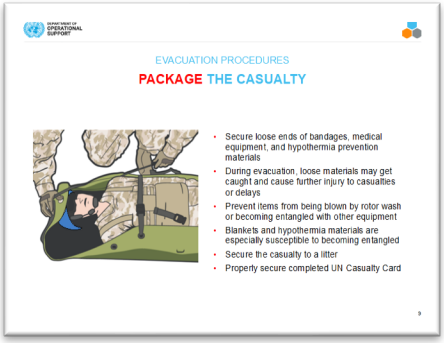
For example, two of the more common litters often used are the quad-folding litter and lightweight flexible stretchers (like the Skedco).

Each of them has **advantages** and **disadvantages**, and may be the proper litter depending on the situation.

For example, the flexible litters can be moved using a one-person drag (terrain permitting) but are more difficult to carry longer distances than a quad-folding litter.

Each unit will have litters that have been proven to support **their mission profile**, and it is important to be aware of the limitations and advantages of each litter at your disposal before being deployed in a situation where you will require them.

SLIDE 10 – PACKAGE THE CASUALTY



Remember, when preparing a casualty for evacuation, you need to anticipate the environmental factors that could prevent them from remaining stable, like extreme noises, vibrations, high winds from propeller wash, and exposure to cold environments from either altitude or low ambient temperatures.

Develop a plan to mitigate each of those potential threats when preparing your casualty.

Secure all loose ends of bandages, medical equipment, and hypothermia prevention materials.

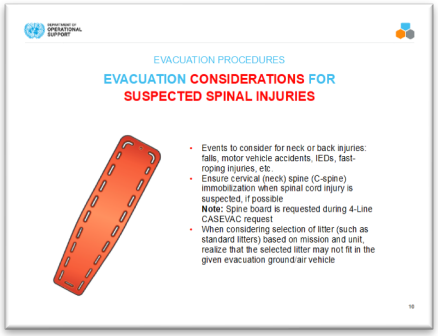
You need to **prevent** dressings and other medical items from being blown around by rotor wash or becoming entangled with other equipment.

Loose materials can catch on everything, from tree limbs to body armor of litter bearers to parts of aircraft or vehicles. Any snag like this can cause delays in evacuation or even further injury to patients or providers. Blankets and foil-based hypothermia materials are especially susceptible to being caught in the wind.

Package the casualty. Hypothermia prevention equipment should be tucked and secured beneath the casualty and litter straps. Loose edges can be caught up in wind or rotor wash or snagged on objects in the helicopter as the casualty is loaded aboard.

Remember, **DO NOT** cover a tourniquet. Keep the UN Casualty Card attached to the casualty.

SLIDE 11 – EVACUATION CONSIDERATIONS FOR SUSPECTED SPINAL INJURIES

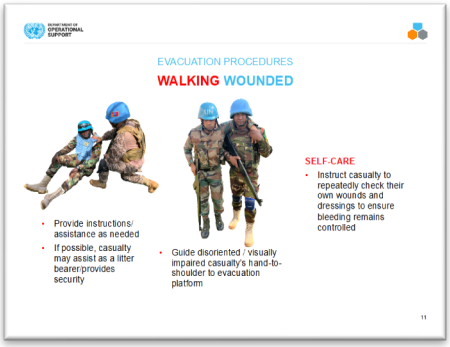


As previously mentioned, you should expect a **spinal injury** in certain situations, like fast-roping falls or being near a significant blast.

In those cases, when tactically feasible, ensure the C-spine is immobilized and the casualty is kept straight during evacuation.

Keep the litter type and evacuation platform in mind and ensure the evacuation ground/air vehicle can accommodate the selected litter.

SLIDE 12 – WALKING WOUNDED



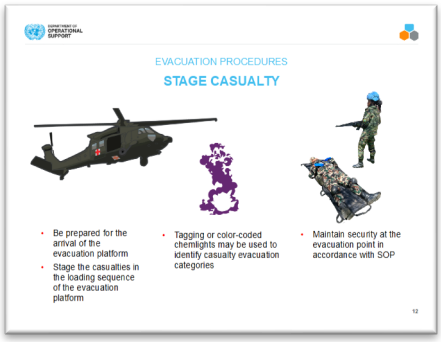
Not all casualties require a litter for evacuation.

For those casualties who are still **ambulatory**, provide instructions or assistance as needed. Depending on the nature of their injuries, they may be able to assist with carrying litters or providing security.

It is best to guide disoriented or visually impaired casualties by having them place their hand on the shoulder of the casualty in front of them or a nonmedical attendant as they move to the evacuation platform.

Instruct them on repeatedly checking their own wounds and dressings to ensure that bleeding remains controlled throughout the evacuation process.

SLIDE 13 – STAGE CASUALTIES



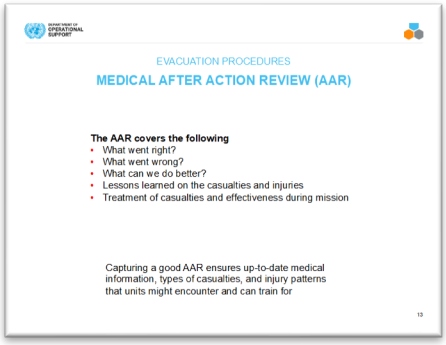
Of particular importance when moving more than one casualty is the process of staging the casualties.

Based on the guidance from the medical evacuation personnel, certain casualties have priority and may need to be loaded last, so that they are the first ones off-loaded at the destination.

If not given specific guidance, place the casualty that seems to be the **most serious** in a position where they are **loaded last**, and have casualties who may be less severely injured loaded prior to them.

You may also need to assist in marking the landing zone, providing security or assisting in marshalling the aircraft or litter bearer teams.

SLIDE 14 – MEDICAL AFTER-ACTION REVIEW (AAR)



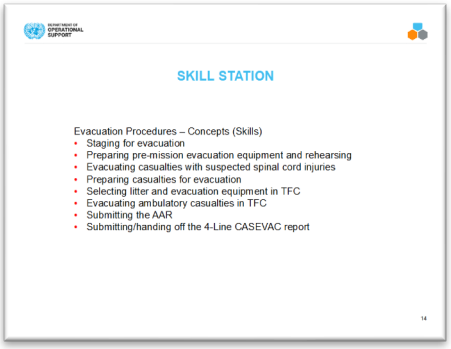
Documentation of TFMA is critically important.

TFMA documentation should be accomplished using the UN Casualty Card (found in the UNTP) at the time treatment is rendered whenever possible.

If care cannot be documented using the UN Casualty Card at the point of care by the first responder or FMA, it should be documented using the TFMA AAR as soon as possible (within 72 hours) after treatment.

The nonmedical first responder or FMA should follow up with supporting unit medical personnel to complete and submit the TFMA AAR.

SLIDE 15 – SKILL STATION



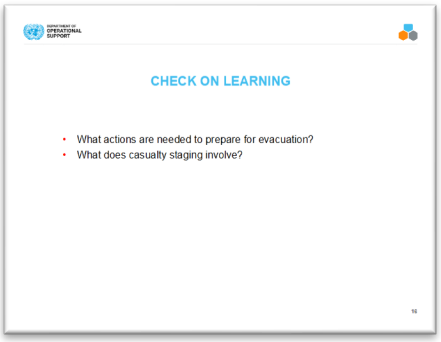
In the skill station on Evacuation Procedures, you will begiven scenarios that require you to make some decisions on preparing your casualties for evacuation, allow you to call in the evacuation assets, and then stage and load the casualties onto an evacuation platform, using all of the information you just learned.

SLIDE 16 – SUMMARY

In this module, we reviewed preparing a casualty for evacuation in Tactical Field Care. We discussed considerations and fundamental procedures for staging casualties, the importance of preparing pre-mission evacuation equipment, considerations and precautions for evacuating casualties with suspected spinal injuries, critical actions and checks to prepare casualties for evacuation, methods of litter selection and evacuation equipment, considerations for evacuating ambulatory or walking wounded casualties, and considerations for submitting a casualty After Action Review.

SLIDE 17 – CHECK ON LEARNING

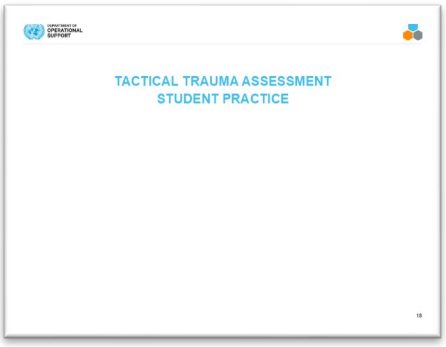
Ask questions of the learners referring to key concepts from the module.
Now for a check on learning.



1. What actions are needed to prepare for evacuation?
    - Secure casualty's equipment
    - Prepare evacuation equipment
    - Select and prepare a litter
    - Package the casualty for evacuation
2. What does casualty staging involve?
    - Be prepared for the arrival of the evacuation platform
    - Stage the casualties in the loading sequence of the evacuation platform
    - Use unit-specific tagging or color-coded chem-lights to identify casualty evacuation categories
    - Maintain security at the evacuation point in accordance with SOP

SLIDE 18 – QUESTIONS

SLIDE 19 – TACTICAL TRAUMA ASSESSMENT – STUDENT PRACTICE



At this time, we will break into our skill stations for the Tactical Trauma Assessment - Student Practice.