Lesson

# 3.12

# Basic First Aid

## Lesson at a Glance

### Aim

To provide standardized training to all non-medical personnel on the principles of First Aid and Medical Incident Response in the field.

### Relevance

- Timely medical emergency response is important for survival and includes immediate First Aid
- First Aid is applicable to our everyday life

**First Aid is essential knowledge for everyday life. It will help you respond to** medical incidents at home, work and travel.

This lesson is for all non-medical staff.

### Learning Outcomes

Learners will:

- Define First Aid
- Explain the actions to take as the first responder to a medical emergency
- Describe key First Aid responses

# Lesson Map

**Duration: 45 minutes total**
20 minutes: presentation
25 minutes: interactive exchange or activity

# The Lesson

## Starting the Lesson

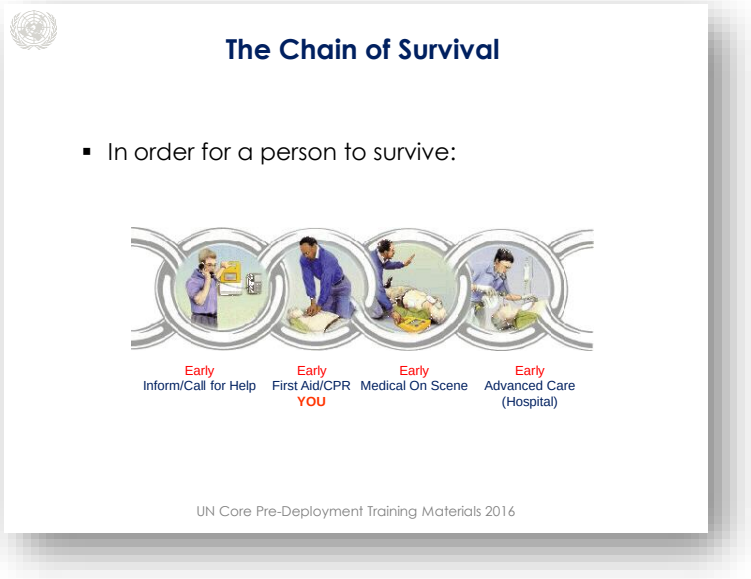
Introduce the following (using the Introductory Slides):

- Lesson Topic
- Aim
- Relevance
- Learning Outcomes
- Lesson Overview

Basic First Aid training is mandatory for pre-deployment training of all Troop and Police Contributing Countries. Personnel should acquire basic First Aid knowledge and skills before deployment. Note that special training is required for CPR and the *Heimlich manoeuver*.

# The Chain of Survival

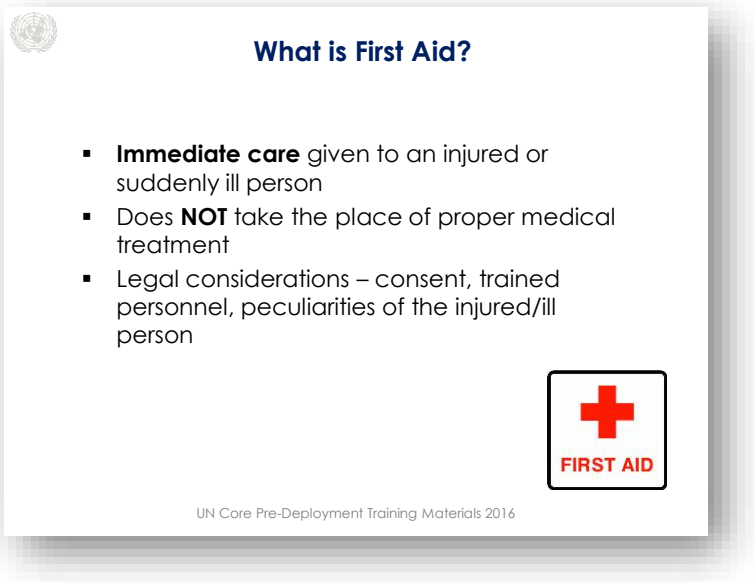
**Slide 1**




**Key Message:** First Aid is important for survival. You have an important role to play in a medical emergency. Immediate First Aid can be provided by the nearest person on-site.

Whether or not you are on duty, you may be confronted by a medical emergency. This may be an accident or illness.

**Slide 2**




**Key Message: First Aid:**

- Is the **immediate care** given to an injured or suddenly ill person
- Does **NOT** take the place of proper medical treatment

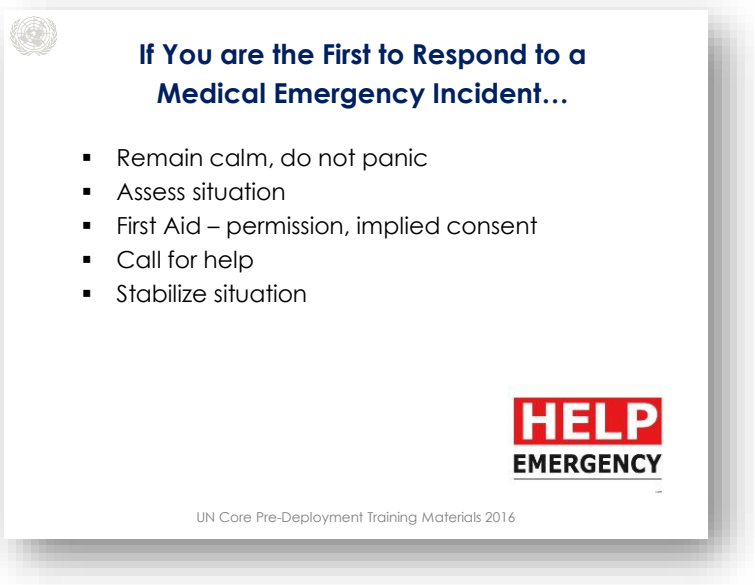
**There are legal considerations in giving First Aid:**

- **Implied consent** to life-saving help of an unresponsive victim in a life-threatening condition
- Only perform First Aid where you have the training
- Consider cultural and religious beliefs of an injured or ill person

*Note that it is preferable to have professional training on Basic First Aid, with certification. This lesson serves as a brief on key elements.*

## First One to Respond to a Medical Emergency

**Slide 3**




**Key Message:** You may be the first person to respond to a medical emergency. You can help with Basic First Aid.

If you are the first to respond to a medical emergency incident:

- Assess the situation
- If you know Basic First Aid you can help
- Ask for permission to help if possible unless the person is unconscious, then use "implied consent"
- Call for help when necessary
- Stabilize the situation before help arrives
- Try to remain calm and do not panic

# Actions before First Aid Response

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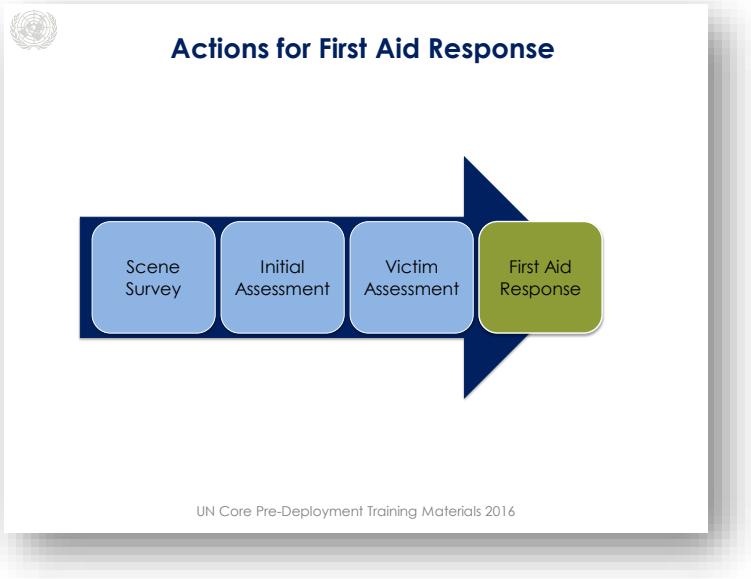
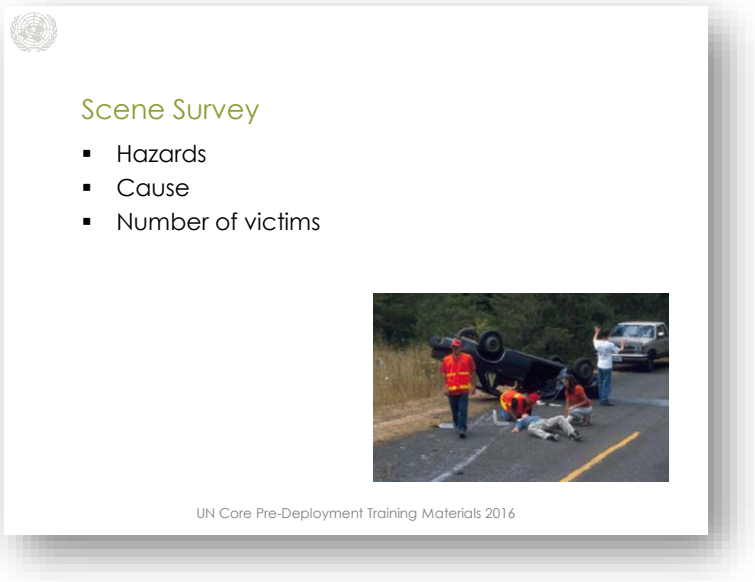



**Key Message:** Actions to take before you respond with First Aid include:

- Scene survey
- Initial assessment
- Victim assessment

**Slide 5**




**Key Message:** It is important to determine what kind of emergency situation you are dealing with for the safety of yourself, victim(s) and others.

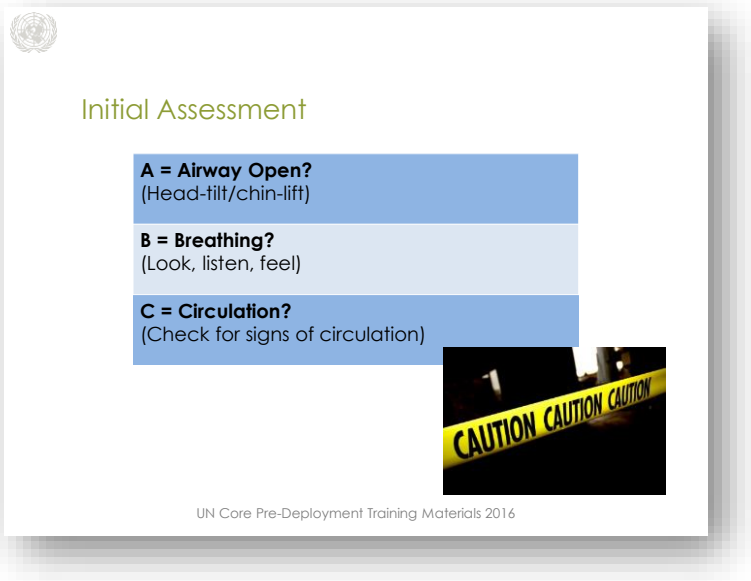
When confronted with an accident or illness, survey the scene. Assess the situation. What are you dealing with? Consider everyone's safety.

Do a quick survey of the scene, looking for three elements:

- **Hazards** dangerous to you, the victim or bystanders
- **Cause** of injury or illness
- **The number of victims**

**This survey should only take a few seconds.**

**Slide 6**




**Key Message:** The step-by-step initial assessment takes less than a minute to complete, unless the person needs first aid. No one should change it.

Visually determine whether there are life threatening or other serious problems that require quick care.

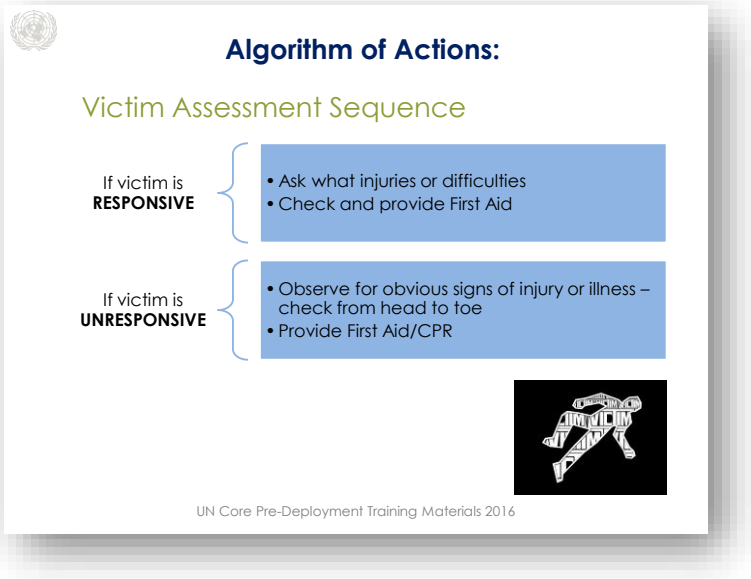
Determine if victim is conscious - by tap and shout. Check for ABC as indicated:

**A** = Airway Open? (Head-tilt/Chin-lift)

**B** = Breathing? (Look, listen, and feel)

**C** = Circulation? (Check for signs of circulation)

**Slide 7**




**Key Message:** The approach to Victim Assessment will be different if the victim is:

- Responsive
- Unresponsive

**If victim is RESPONSIVE:**

- Ask what injuries or difficulties they are experiencing
- Check and provide First Aid for these complaints as well as others that may be involved

**If victim is UNRESPONSIVE (unconscious or incoherent):**

- Observe for obvious signs of injury or illness – check from head to toe
- Provide First Aid/CPR for injuries or illness observed every step of the way

# Key First Aid Responses

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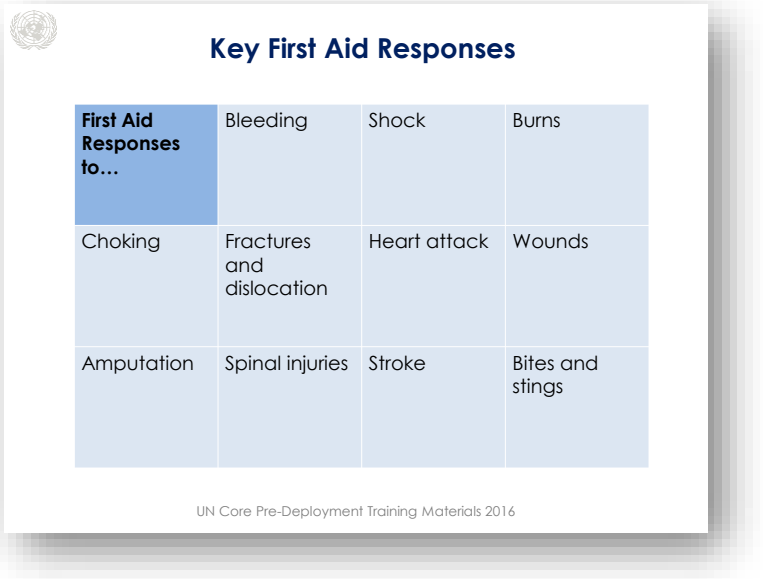


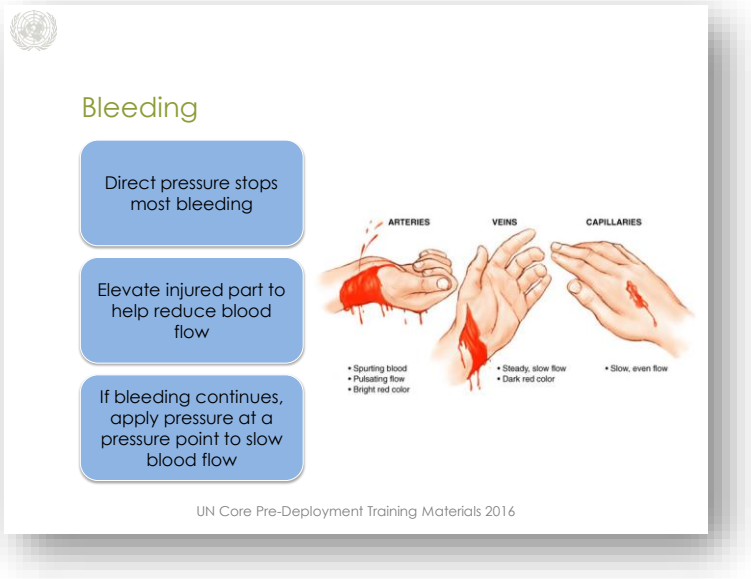

**Key Message:** You are able to respond with First Aid after:

- Scene survey
- Initial assessment
- Victim assessment

You can respond with First Aid to these medical emergencies:

- Bleeding
- Shock
- Burns
- Choking
- Fractures and dislocation
- Heart attack
- Wounds
- Amputation
- Spinal injuries
- Stroke
- Bites and stings

**Slide 9**




**Key Message:** The First Aid response for bleeding involves controlling it. There are different control methods for external and internal bleeding.

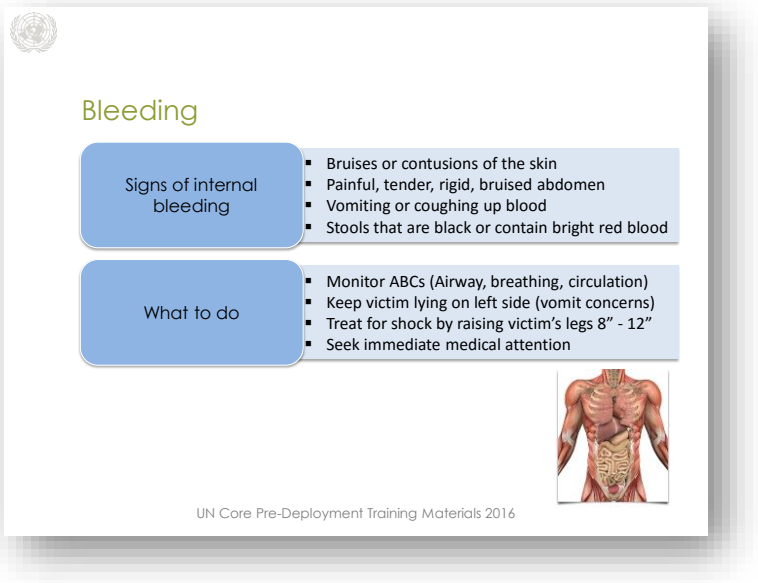
**Control methods for external bleeding:**

1. Apply pressure. Direct pressure stops most bleeding.
   - Wear medical exam gloves (if possible)
   - Place a sterile gauze pad or a clean cloth over wound

2. Elevate injured part to help reduce blood flow.
   - Combine with direct pressure over the wound: this allows you to attend to other injuries or victims

3. If bleeding continues, apply pressure at a pressure point to slow blood flow. Pressure point locations:
   - Brachial - top of elbow
   - Femoral - inside upper thigh

**Slide 10**




**Key Message:** Internal bleeding is not easy to detect. It still requires a First Aid response.

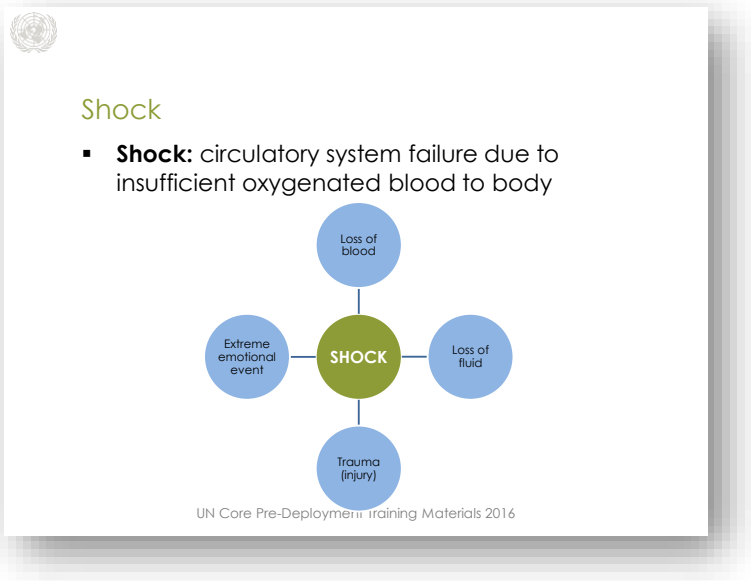
**Signs of internal bleeding are:**

- Bruises of the skin
- Painful, tender, rigid, bruised abdomen
- Vomiting or coughing up blood
- Stools that are black or contain bright red blood

**Control methods for internal bleeding:**

- Monitor ABC's - Airway, Breathing, Circulation
- Keep the victim laid on the left side; this will help prevent expulsion of vomit from stomach or allow the vomit to drain and prevent the victim from inhaling vomit
- Treat for shock by raising the victim's legs 8" – 12"
- Seek immediate medical attention

**Slide 11**

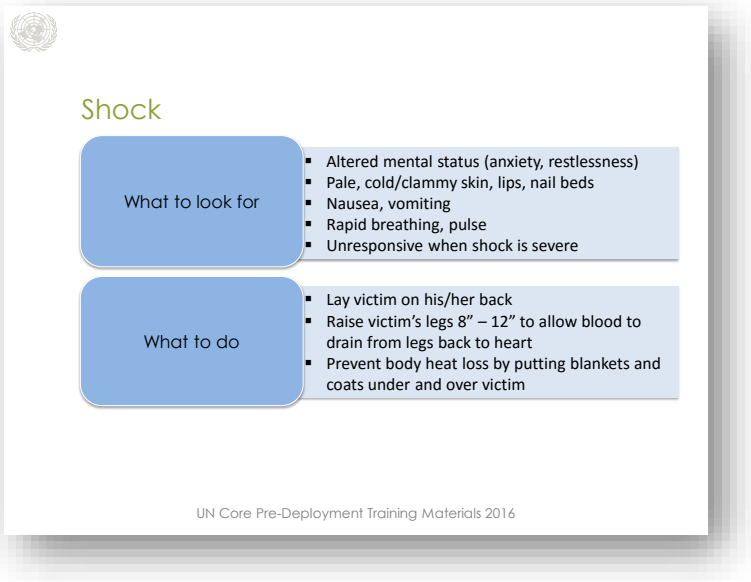



**Key Message:** Shock is circulatory system failure, when the body cannot get enough oxygen or blood to every part.

Shock can result from:

- Loss of blood because of uncontrolled bleeding or other circulatory problem
- Loss of fluid due to dehydration or excessive sweating
- Trauma, injury
- An extreme emotional event

**Slide 12**




**Key Message:** Shock requires a First Aid response.

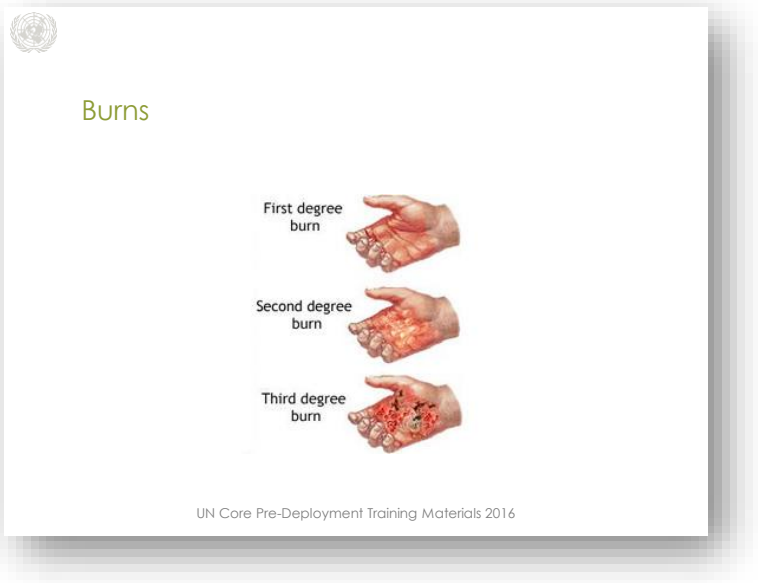
**What to look for:**

- Altered mental status (anxiety and restlessness)
- Pale, cold and clammy skin, lips and nail beds
- Nausea and vomiting
- Rapid breathing and pulse
- Unresponsiveness when shock is severe

**What to do:**

- Lay the victim on his or her back
- Raise the victim's legs 8" – 12" to allow the blood to drain from the legs back to the heart
- Prevent body heat loss by putting blankets and coats under and over the victim

**Slide 13**




**Key Message:** There are three kinds of burns. Each affects the layers of the skin differently. This can be seen in the resulting thickness to the skin. Each requires different actions for treatment.

**First-degree "superficial" burns:**

- Damage is only to the skin's outer layer, epidermis
- Symptoms include redness, mild swelling, tenderness and pain
- First-degree burns usually heal without scarring

**Actions:**

- **Immerse in cold water 10 to 45 minutes or use cold, wet cloths**
- Cold stops burn progression
- Other liquids work too.
- Use aloe, moisturizer lotion

**Second-degree "partial thickness" burns:**

- Damage is to epidermis and upper regions of dermis
- Symptoms include blisters, swelling, weeping of fluids and severe pain

**Actions:**

- **Immerse in cold water or wet pack**
- **Give aspirin or ibuprofen**
- **Do not break blisters**
- Consider getting medical attention

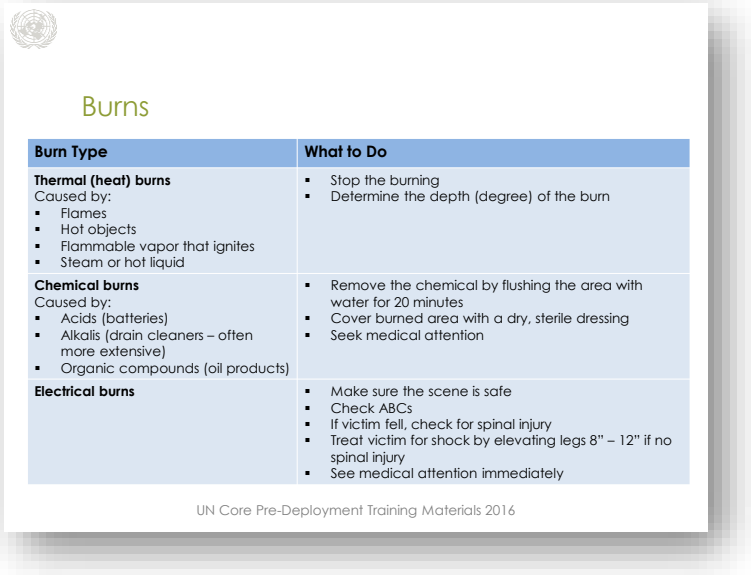
**Third-degree "full thickness" burns:**

- Third-degree burns are severe. They penetrate all the skin layers, into underlying fat and muscle.
- Symptoms include: the burned area appearing gray-white, cherry red or black. There may be no initial swelling or pain because the burn has destroyed nerve endings.

**Actions:**

- Usually it is not necessary to apply cold to areas of third degree burns
- Do not apply ointments
- Apply sterile, non-stick dressings – not plastic
- Check ABC's – Airways, Breathing, Circulation
- Treat for shock
- Get medical help

**Slide 14**




**Key Message:** Burn injuries can be:

- Thermal, or heat burns
- Chemical burns
- Electrical burns

**Thermal or Heat Burns**

**Causes:**
- Flames
- Hot objects
- Flammable vapor that ignites
- Steam or hot liquid

**Actions:**
- Stop the burning
- Remove victim from burn source
- If open flame, smother with blanket, coat or similar item, or have the victim roll on ground
- Determine the depth (degree) of the burn

**Chemical burns**

**Causes:**
Causes are caustic or corrosive substances touching skin:
- Acids – for example, batteries
- Alkalis (often more extensive burns) – for example, drain cleaners
- Organic compounds – for example, oil products.

**Actions:**
- Remove the chemical by flushing the area with water
    - Brush dry powder chemicals from the skin before flushing
    - Take precautions to protect yourself from exposure to the chemical
- Remove the victim's contaminated clothing and jewelry while flushing with water
- Flush for 20 minutes all chemical burns – skins, eyes
- Cover the burned area with a dry, sterile dressing
- Seek medical attention

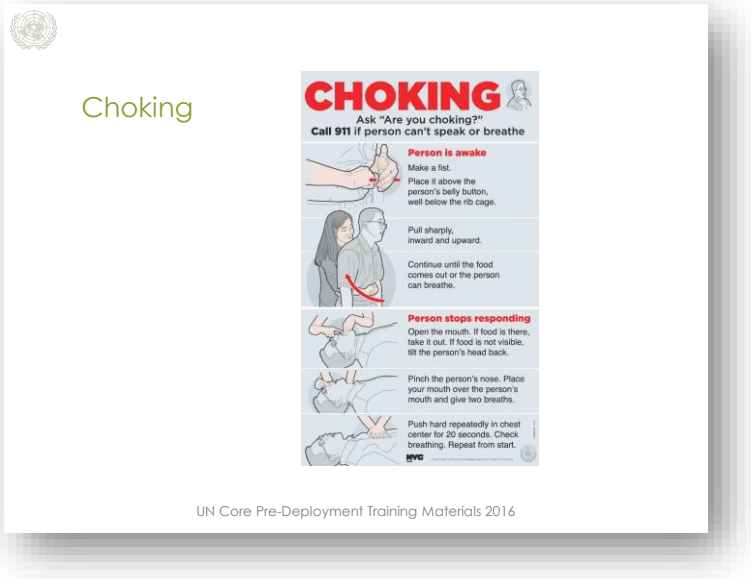
**Electrical Burns**

**Causes:**
Contact with live electrical wires and current.

**Actions:**
- Make sure the scene is safe: Unplug, disconnect or turn off the power. If that is impossible, call the power company or Emergency Medical Services (EMS) for help.
    - Do not contact high voltage wires
    - Consider all wires live
    - Do not handle downed lines
    - Do not come in contact with a person if an electrical source is live
- Check ABCs – Airway, Breathing, Circulation
- If the victim fell, check for a spinal injury

- Treat the victim for shock by raising the legs 8" – 12", if you do not suspect a spinal injury
- Seek medical attention immediately

**Slide 15**




**Key Message:** Choking is caused by an obstruction in the airway. Perform Heimlich manoeuver, if you have proper training. Always stay calm.

**Signs and symptoms:**

- Person is not able to breath or talk due to obstruction, choking sign given, distressed, and panic.
- Hands wrapped around the neck is universal sign for choking

**General Precaution:**

- If someone is coughing, leave the person alone; do not perform the Heimlich manoeuver
- Keep eyes on that person
- Ask the person if he or she needs help

**Actions**

**Conscious victim:**

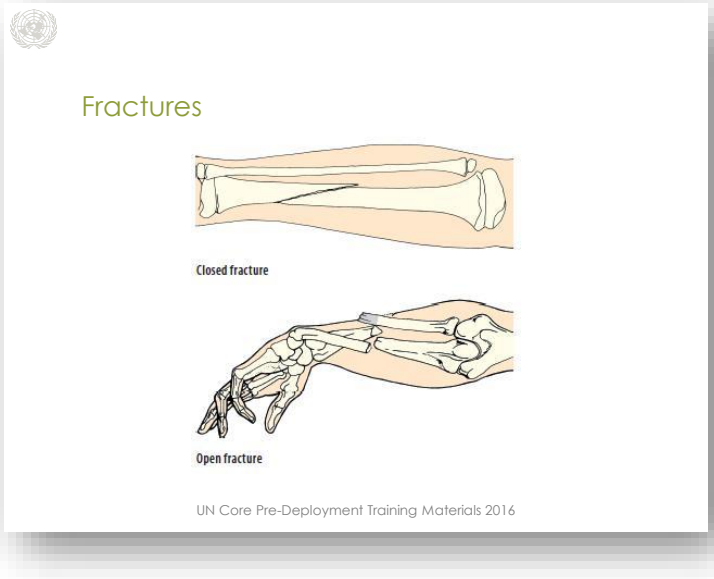
- Approach from behind and wrap arms around the victim's waist
- Place one fist just above the victim's navel with the thumb side against the abdomen
- Second hand over the fist
- Press into the victim's abdomen with one upward thrust
- Repeat thrust if necessary
- Make swift thrust in and up to pop out the obstruction

- Continue until a) the obstruction is out or b) the victim collapses
- Have someone call for help

**Unconscious victim:**

- Ask someone to dial the emergency number for help
- Lower victim to floor on back or left side and perform Heimlich manoeuver
- Open airway with tongue-jaw lift
- Look inside mouth – if you cannot see anything, do not do a finger sweep
- Try to give two full rescue breaths
- If the breaths don't go in, reposition the head, give another breath
- Perform abdominal thrusts
- Continue until successful or help arrives

**Slide 16**




**Key Message:** A **fracture** is when a bone has been broken.

There are two categories of fractures or breaks:

**Closed or simple fracture:**

- The skin is intact and no wound exists anywhere near the fracture site

**Open or compound fracture:**

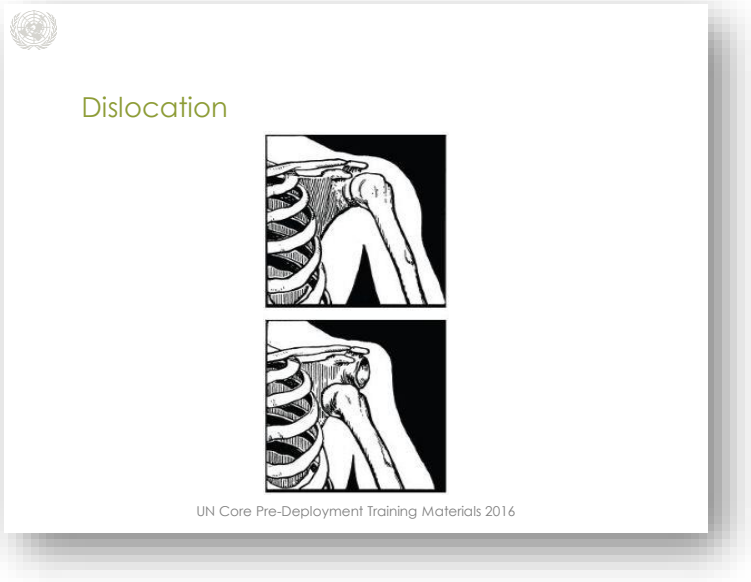
- Skin over the fracture is damaged or broken
- A wound may result from bone protruding through the skin
- The bone may not be visible in the wound

**General signs and symptoms:**

- Tender to touch

- Swelling
- An abnormal shape to the skin from when bones break
- Open wounds break the skin
- A grating sensation caused by broken bones rubbing together; do not move the injured limb to try to detect a fracture
- Loss of use
- The **history of the injury can suggest a fracture**
- The victim may feel a bone snap and along with others may hear it

**Slide 17**

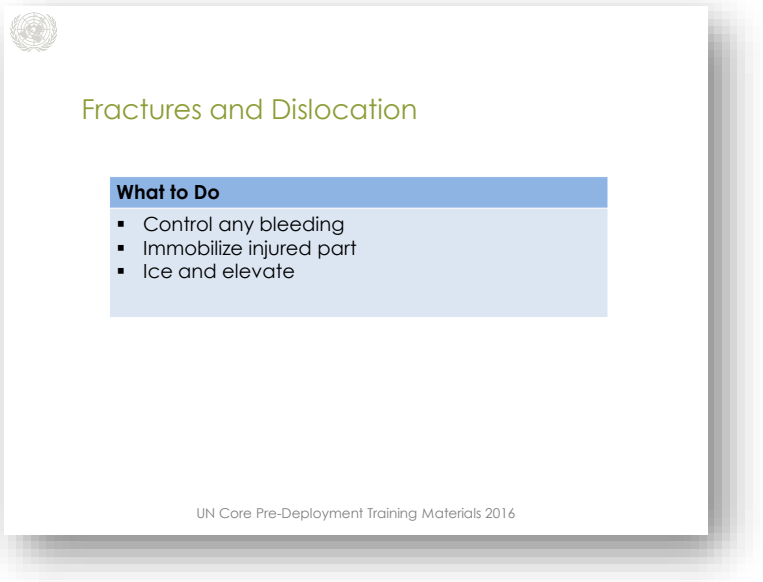



**Key Message: Dislocation** is where a bone has been displaced from its normal position at a joint.

**Signs and symptoms (not all may be present):**

- Pain
- Swelling
- Deformity of the injured area (when compared with the uninjured side of the body)
- Loss of normal function of the injured part
- Discolouration of the skin (in other words, blueness) or bruising
- A wound if it is an open fracture
- Altered sensation – for example, 'pins and needles' – if a nerve is under pressure
- A grating sensation if injured bone ends are rubbing together
- Patient may have heard/felt the bone break

**Slide 18**




**Key Message:** DO NOT move the patient or any injured part unnecessarily.

**How You Can Help**

**Control any bleeding:**

- If a wound is present, check for any significant bleeding; if bleeding, apply direct pressure around any exposed bones.
- Apply padding around the wound or above and below the wound. Apply a clean dressing loosely over the injured part.

**Immobilise the injured part:**

- Reduce the pain and the risk of further injury by supporting and immobilising the injured area. Usually this simply means supporting the injured part in a comfortable position.
- Place a rigid material **(splint)** next to the injury and tie or tape it in place. Secure the splint above and below the injury.
- **DO NOT** increase damage by straightening an injury.
- **DO NOT** secure the splint too tight. If toes or fingers become pale, cold or numb, loosen the splint immediately.

**Ice and elevate:**

- Place ice or a cold pack on the injury for 20 minutes every three to four hours to limit swelling and pain. Use a barrier, such as a thin towel between the ice or cold pack and the skin to prevent cold injury to the skin.
- Raise the injury above the heart, if possible, to reduce swelling.

**Make the patient comfortable:**

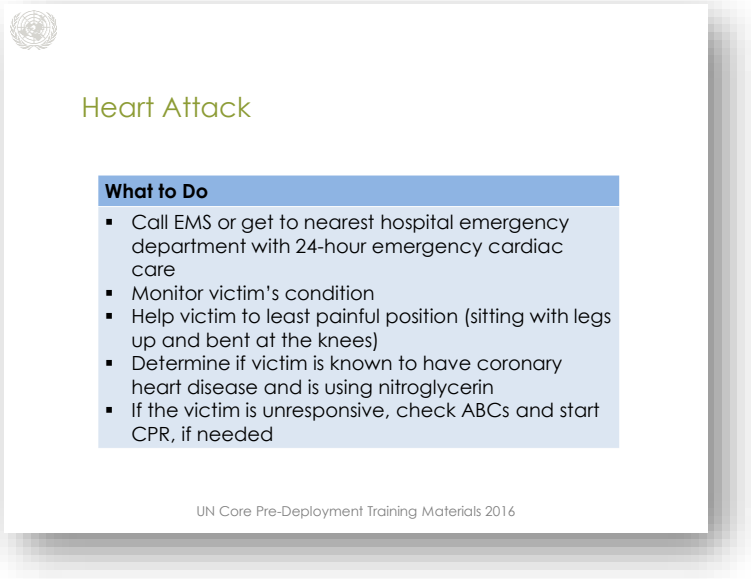
- Help the patient into the position of greatest comfort without any unnecessary movement. Use blankets, pillows or clothing for general comfort and support.

- Place generous padding around the injured area and in the nearby hollows of the body, using soft towels, clothing, pillows or blankets, etc.
- In a remote area, or where medical care is likely to be delayed for an hour or more, the first aider may use simple immobilisation techniques to reduce pain and spasm. In such cases, it is the first aider's responsibility to monitor the circulation in any affected limb to ensure that the immobilisation has not stopped blood flow or affected the nerve supply to an extremity.

**Seek medical help if any of the following is true:**

- The injury has forced a joint beyond its normal range of motion and now the joint won't work.
- A strong force, such as a fall, placed great stress on a bone, especially if a snap was heard.
- The joint or limb looks crooked or bowed.
- You have reason to believe a bone is broken.

**Slide 19**




**Key Message:** A heart attack usually occurs when one of the coronary arteries is blocked by an obstruction or a spasm.

**Signs and symptoms:**

- Pressure in chest, fullness, squeezing or pain lasting more than a few minutes or which goes away and comes back.
- Pain spreading to shoulders, neck, or arms.
- Chest discomfort with lightheadedness, fainting, sweating, nausea or short breath .

**Actions:**

- Call EMS or get to the nearest hospital emergency department with emergency cardiac care.
- Monitor victim's condition.
- Help the victim to the least painful position, usually sitting with legs up and bent at the knees. Loosen clothing around the neck and midriff.
- Find out if the victim has coronary heart disease and is using nitroglycerin.
- If the victim is unresponsive, check ABCs – Airways, Breathing, Circulation - and start CPR if needed.

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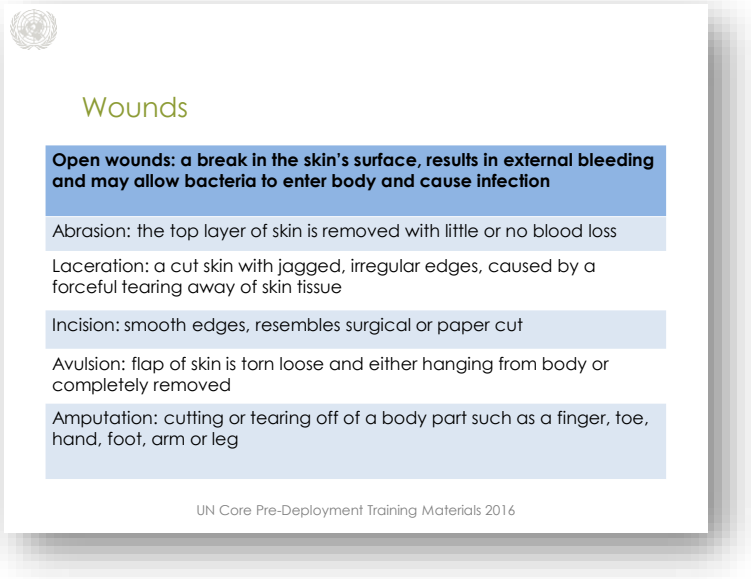



**Key Message:** An **open wound** is a break in the skin's surface that results in external bleeding and may allow bacteria to enter the body that can cause infection.

- **Abrasion:** The top layer of skin is removed with little or no blood loss – a scrape
- **Laceration:** A cut skin with jagged, irregular edges and caused by a forceful tearing away of skin tissue
- **Incisions:** Smooth edges and resemble a surgical or paper cut
- **Punctures:** Deep, narrow wounds such as a stab wound from a nail or a knife in the skin and underlying organs
- **Avulsion:** Flap of skin is torn loose and is either hanging from the body or completely removed
- **Amputation:** Cutting or tearing off of a body part such as a finger, toe, hand, foot, arm or leg

**Actions:**

- Wear gloves (if possible) and expose wound
- Control bleeding
- Clean wounds
- To prevent infection:
    - Wash shallow wound gently with soap and water

    - Wash or flush with water, from the center out
- If the wound is severe, clean only after bleeding has stopped

**Care of wounds:**
- Remove small objects that do not flush out by irrigation with sterile tweezers
- If bleeding restarts, apply direct pressure
- Use roller bandages or tape dressing to the body
- Keep dressings dry and clean
- Change dressing daily or more often if wet or dirty

**Signs of wound infection:**
- Swelling and redness around the wound
- A sensation of warmth
- Throbbing pain
- **Fever or chills**
- **Swollen lymph nodes**
- **Red streaks**

Tetanus is a serious bacterial infection affecting the nervous system and causing muscles in the body to tighten. It is also called lockjaw. Red streaks are a symptom. **Tetanus or lockjaw should receive injection in first 72 hours.**

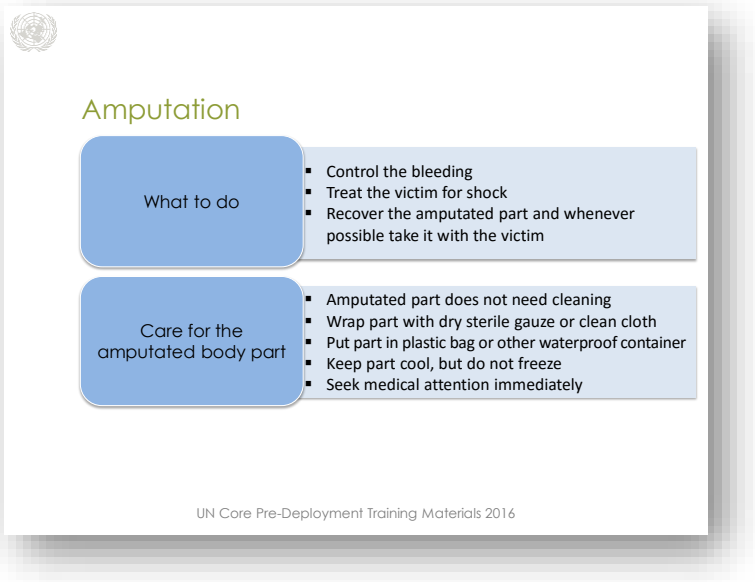
**Dressings and Bandages**

**Purpose of dressing:**
- Control bleeding
- Prevent infection and contamination
- Absorb blood and fluid drainage
- Protect the wound from further injury

**Use of bandage:**
- Hold a dressing in place over an open wound
- Pressure over dressing to control bleeding
- Prevent or reduce swelling
- Provide support and stability
- Should be clean but need not be sterile

**What to do:**
- Always wear gloves (if possible)
- Use a dressing large enough to extend beyond the wound's edges
- Cover the dressing with bandages

**Slide 21**




**Key Message:** You may confront a medical emergency where part of the body has been amputated. Know what to do.

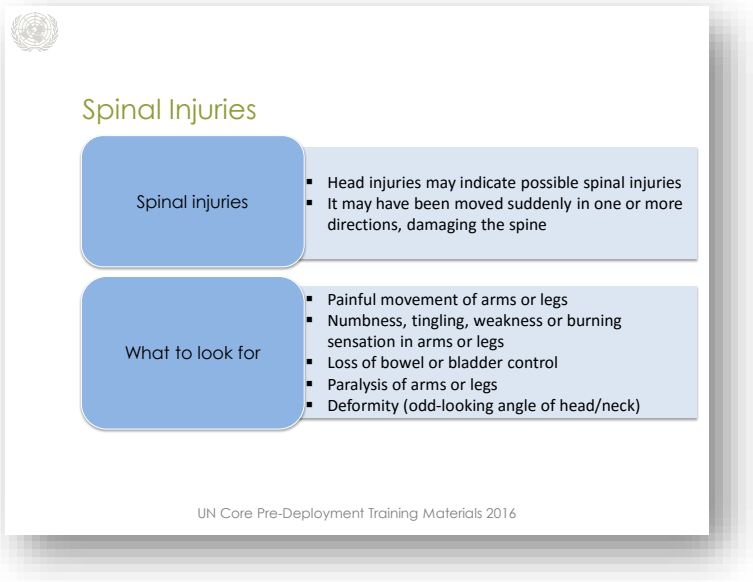
**What to do:**

- Control the bleeding
- Treat the victim for shock
- Recover the amputated part and whenever possible take it with the victim

**Care for the amputated body part:**

- Amputated part does not need cleaning
- Wrap amputated part with a dry sterile gauze or other clean cloth
- Put wrapped amputated part in plastic bag or other waterproof container
- Keep amputated part cool, but do not freeze
- Seek medical attention immediately

**Slide 22**




**Key Message:** Head injuries may indicate that there are possible spinal injuries. The spine may have been moved suddenly in one or more directions, damaging it.

**What to look for:**

- Painful movement of the arms or legs
- Numbness, tingling, weakness or burning sensation in the arms or legs
- Loss of bowel or bladder control
- Paralysis of the arms or legs
- Deformity (odd-looking angle of the victim's head and neck)

**What to do:**

- Stabilize victim against any movement
- Check ABCs

**Unresponsive victim:**

- Look for cuts, bruise and deformities
- Test response by pinching the victim's hand and bare foot
- If no reaction, assume the victim may have spinal damage

**Responsive victim:**

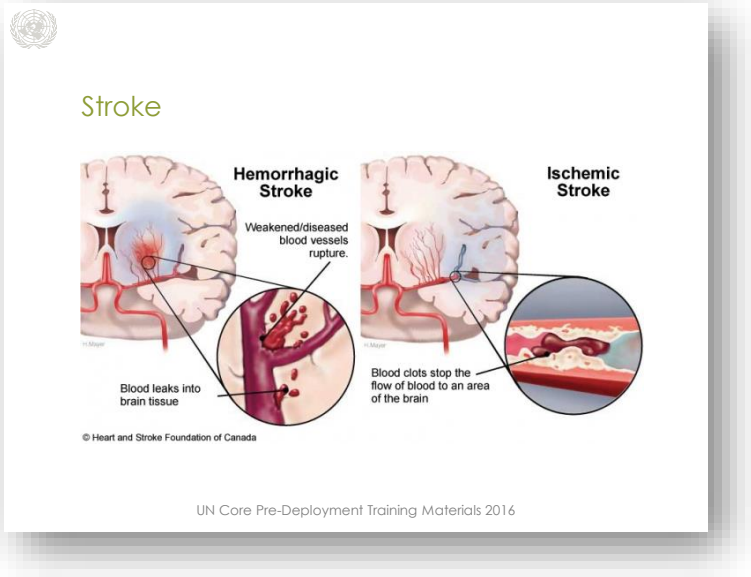
Upper extremity checks:

- Victim wiggles fingers
- Victim feels rescuer squeeze fingers
- Victim squeezes rescuer's hand

Lower extremity checks:

- Victim wiggles toes
- Victim feels rescuer squeezes toes
- Victim pushes foot against rescuer's hand

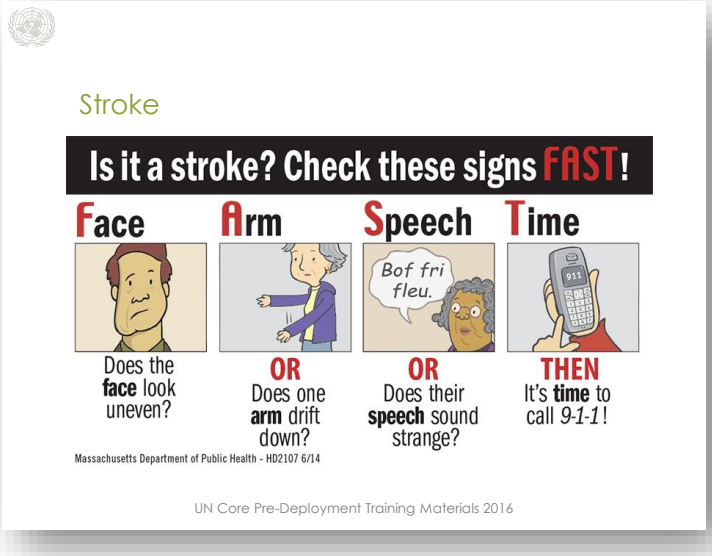
**Slide 23**




**Key Message:** A **stroke** is tissue damage to part of the brain because of disruption in blood supply. The affected area of the brain is deprived of oxygen.

A stroke occurs when there is bleeding into your brain or when normal blood flow to your brain is blocked. Within minutes of being deprived of essential nutrients, brain cells start dying — a process that may continue over the next several hours.

**Slide 24**




**Key Message:** Seek immediate medical assistance. A stroke is a true emergency. The sooner treatment is given, the more likely it is that damage can be minimized. Every moment counts.

In the event of a possible stroke, use FAST to help remember warning signs:

- **Face.** Does the face droop on one side while trying to smile?
- **Arms.** Is one arm lower when trying to raise both arms?
- **Speech.** Can a simple sentence be repeated? Is speech slurred or strange?
- **Time.** During a stroke every minute counts. If you observe any of these signs, call 911 or your local emergency number immediately.

Other signs and symptoms of a stroke include:

- Weakness or numbness on one side of the body, including either leg
- Dimness, blurring or loss of vision, particularly in one eye
- Severe headache — a bolt out of the blue — with no apparent cause
- Unexplained dizziness, unsteadiness or a sudden fall, especially if accompanied by any of the other signs or symptoms

**First Aid:**

- If you suspect stroke, call emergency medical help
- Reassure the patient
- Lay the patient down with head and shoulders slightly elevated
- If patient is not breathing well do a CPR
- Place the patient on the left side if breathing or not responsive
- Keep the chin slightly extended

**Steps To avoid:**

- Never give a suspected stroke victim anything to eat or drink
- Do not permit the victim to move

**Prevention:**

- Do regular checkups for BP
- Eat food with less salt
- Exercise regularly
- Eat a balanced, healthy diet
- Take the BP pills regularly

*Recall content from the lesson on health. The focus was on precautions to take to protect one's self. The content below focuses on what to do when a bite or sting has occurred.*

**Slide 25**


**Key Message:** Remember, a **vector** is an organism that carries a disease from one source to another. Vectors play an essential role in transmission of many infectious diseases. Many vectors are bloodsucking insects.

**Signs:**

- Usual reactions are localized pain, itching and swelling
- An allergic reaction threatens life
- The stinger and venom sack are in the skin

**Actions:**

- Ask the victim if he or she has had reactions to bites and stings before.
- Check the sting site to see if the stinger and venom sac are in the skin. Bees are the only stinging insects that leave their stingers and venom sacs behind.
- Scrape the stinger and venom sac away with a hard object such as a long fingernail, credit card, scissor edge or knife blade.
- Wash the sting site with soap and water to prevent infection.
- Apply an ice pack over the sting site to slow absorption of the venom and relieve pain. Since bee venom is acidic, a paste made of baking soda and water can help.
- Seek medical attention if necessary.

**Tick bites**

**Signs:**

- Ticks can remain embedded for days without the victim realizing
- Most tick bites are harmless, although ticks can carry serious diseases
- Symptoms usually begin 3 to 12 days after a tick bites

**Actions:**

- The best way to remove a tick is with fine-pointed tweezers. Grab as closely to the skin as possible and pull straight back, using steady but gentle force.
- Wash the bite site with soap and water. Apply rubbing alcohol to further disinfect the area.
- Apply an ice pack to reduce pain.
- Calamine lotion may provide relief from itching.
- Keep the area clean.
- Continue to watch the bite site for about one month for a rash.
    - If rash appears, see a doctor
    - Also watch for other signs such as fever, muscle aches, sensitivity to bright light and paralysis that begins with leg weakness

## Summary

**First Aid:**

- **First Aid:** Immediate care given to an injured or suddenly ill person. It does NOT take the place of proper medical treatment.

**Actions to take as the first responder to a medical emergency:**

- If you are the first to respond to a medical emergency incident:
  - Assess the situation
  - Ask for permission to help if possible; if person is unconscious, then use "implied consent"
  - Call for help when necessary
  - Stabilize the situation before help arrives
  - Try to remain calm and do not panic
- Actions to take before you respond with First Aid include:
  - Scene survey
  - Initial assessment
  - Victim assessment

**Key First Aid responses:**

- First Aid can be applied to:
  - Bleeding
  - Shock
  - Burns
  - Choking
  - Fractures and dislocation
  - Heart attack
  - Wounds
  - Amputation
  - Spinal injuries
  - Stroke
  - Bites and stings

## Evaluation

**Notes on Use:** Types of learning evaluation questions are:

1) Fill in the blank/sentence completion
2) Narrative
3) True-False

Combine in different ways for pre-assessment and post-assessment. Each evaluation type covers different content. No sub-set covers all learning outcomes. Make sure you include learning evaluation questions for each learning outcome when you combine them.

Three main uses of evaluation questions are: a) informally ask the whole group, b) semi-formally assign to small groups or c) formally give to individuals for written responses. Other suggestions for evaluating learning follow the table.

| **Evaluation Questions for Lesson 3.12** | |
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| **Questions** | **Answers** |
| **Fill-in-the-Blanks** | |
| 1. First aid is _____. | Immediate care given to an injured or suddenly ill person - by those at the scene, as they call and wait for medical help. |
| 2. Initial assessment in the algorithm of basic first aid responses is to be written down. _____ should change it. | No-one.<br>Initial assessment follows standard steps. Medical personnel need that information when they arrive and response. Save them having to ask – write it down. |
| 3. Scene survey involves ____ elements, to be done in a few seconds. | **Three**<br>• **hazards** dangerous to you, victim(s), others – consider safety first<br>• **cause –** mechanism of injury or illness<br>• **number of victims** |
| 4. A-B-C in basic field first aid refers to: _____, _____ and _____. What does each involve? | **A – Airway Open:** head-tilt, chin-lift<br>**B – Breathing:** look, listen, feel<br>**C – Circulation:** check for signs of circulation |
| **Narrative**<br>*Note: Frame narrative evaluations as questions, requests or directions* | |
| 1. Explain why basic field first aid is so useful. | • timely medical emergency response can save lives – including |

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| | your own<br>• immediate first aid is applicable to everyday life – accidents can happen anytime, to anyone<br>• be prepared to respond to medical incidents at home, work and travel |
| 2. Early response to medical incidents and emergencies follows a "chain of survival". What are four key links in the chain? | 1. Inform / call for help<br>2. First aid / CPR – <u>you</u><br>3. Medical on scene<br>4. Advanced care – hospital |
| 3. What legal considerations apply in "implied consent"? | An unresponsive victim in a life-threatening is assumed to want life-saving help.<br>• Implication: they would say "Yes" to a query about life-saving assistance.<br>• Respondents to a medical emergency will not be sued or liable if anything negative happens. But make sure to only handle first aid emergencies for which you are trained. |
| 4. HELP – Emergency! You are the first to respond to a medical emergency. What are the five steps you need to take? | 1. Assess the situation – rapidly, but carefully. Check if medical personnel are on scene, work with them.<br>2. Ask for permission to help unless person is unconscious, then use "implied consent".<br>3. Call for help when necessary – be cautious, call for help if you suspect a serious injury or can observe shock.<br>4. Stabilize the situation before help arrives.<br>5. Try to remain calm, do not panic – reassure others. |
| 5. What is the "algorithm of actions for first aid response"? Name the four actions. | 1. Scene survey<br>2. Initial assessment<br>3. Victim assessment<br>4. First-aid response |
| 6. What are the two main goals of initial assessment, and what does each involve? | 1. Visually determine if there are life-threatening or other serious problems that require quick care.<br>- breathing<br>- bleeding<br>- shock |

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| | - burn<br>- choking<br>- heart attack<br>- fractures<br>2. Determine if victim is conscious – by tap and shout. Check for ABC:<br>- A – Airway open? Head-tilt, chin-lift<br>- B – Breathing? Look, listen, feel<br>- C – Circulation? Check for signs of blood circulation, a pulse |
| 7. Explain how to do victim assessment in medical emergencies: a) if victim is responsive; b) if victim is not responsive – unconscious or incoherent. | **Victim is responsive:**<br>• ask what injuries or difficulties they are experiencing<br>• check, provide first aid for these and any other complaints<br><br>**Victim is not responsive – unconscious or incoherent**<br>• check from head to toe to find any obvious signs of injury or illness<br>• provide first aid, CPR for injuries or illnesses observed, at every step of the way |
| **True – False** | |
| 1. When trained people apply basic field first aid techniques, they can take the place of proper medical treatment. | **False**<br>• Medical doctors and personnel at a scene can respond professionally – but injured people still require professional medical treatment. |
| 2. Before you apply basic field first aid techniques, consider the _____ and _____ religious beliefs of an injured or ill person. | Cultural beliefs<br>Religious beliefs<br><br>Respect these, while saving life and more serious injury. |
| 3. Only perform first aid for which you have _____. | Training<br>(Not a medical or emergency kit – training.) |
| 4. Scene survey with its three elements should only take a few seconds. | **True.**<br>Scene survey is a rapid scan to assess:<br>• hazards dangerous to you, victim, others<br>• cause – mechanism of injury or illness<br>• number of victims |
| 5. A step-by-step initial assessment | **False** |

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| takes five to ten minutes to complete. | Initial assessment should take less than a minute to complete – unless the person needs first aid. No-one should change the assessment once made and noted.<br><br>Minutes can make a difference in basic field first aid. Learn the elements of initial assessment by heard so you can do it quickly. |
| 6. Basic field first aid is mandatory for all Troop Contributing Countries. | **True**<br>The UN encourages all peacekeepers to take First Aid courses, and learn as possible about first aid and medical incident response. For TCCs, the training is compulsory, not optional. Contingent members should get basic first aid knowledge and skills before deployment. |

**More ways to evaluate learning**

**Evaluation through Demonstration**

Lesson 3.12 covers important information for all peacekeepers. Even more important, all deployed need to be able to *apply and demonstrate* field knowledge. As possible, use demonstrations as well as knowledge questions to evaluate learning.

**Evaluation on Key First Aid Responses**

The lesson gives first key responses to eleven medical emergencies. Evaluate them one by one, with the whole group, small groups or individual assessments. Lesson coverage has been divided into sub-sections, in case you want to assign each part to a different individual, pair, triad or group. If using whole group or small teams, make sure every participants has required basic knowledge. Accurate responses are important. For each (or sub-sections), ask participants to explain:

**a) Signs: what to look for**
**b) Steps: what to do**

1. Bleeding
   1.1 External bleeding
   1.2 Internal bleeding
2. Shock
3. Burns
   3.1 First degree burns – superficial
   3.2 Second degree burns -

4. Choking
   4.1 Conscious victim
   4.2 Unconscious victim
5. Fractures
6. Heart attack
7. Wounds
8. Amputation
9. Spinal injuries
10. Stroke
11. Bites and Stings

Highlights of each medical emergency are in the last evaluation section, for rapid reference. Expand with details from the lessons. Use the examples of different learning evaluation questions in this and other units to evaluate specifics of the responses to eleven medical emergencies.

**Evaluating Knowledge of Eleven Serious Medical Emergencies**

| **Medical emergency** | **What to look for and what to do** |
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| | |
| **1. Bleeding** | |
| **1.1 External bleeding** | **Control methods for external bleeding**:<br><br>Direct pressure stops most bleeding.<br>• Wear medical exam gloves – if possible (keep some in your medical or first aid kit)<br>• Place a sterile gauze pad or a clean cloth over wound<br><br>Elevate injured part to help reduce blood flow.<br>• Combine with direct pressure over the wound: this allows you to attend to other injuries or victims.<br><br>If bleeding continues, apply pressure at a pressure point to slow blood flow. Pressure point locations:<br>• Brachial - top of elbow<br>• Femoral - inside upper thigh) |
| **1.2 Internal bleeding** | **Control Methods For Internal Bleeding:**<br><br>**Signs** of internal bleeding:<br>• Bruises of the skin<br>• Painful, tender, rigid, bruised abdomen<br>• Vomiting or coughing up blood<br>• Stools that are black or contain bright |

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| | red blood<br><br>**Steps** to take:<br>For severe internal bleeding:<br>• Monitor ABC's - Airway, Breathing, Circulation.<br>• Keep the victim laid on the left side. This will help prevent expulsion of vomit from stomach, or allow the vomit to drain and prevent the victim from inhaling vomit.<br>• Treat for shock by raising the victim's legs 8" – 12".<br>• Seek immediate medical attention. |
| **2. Shock** | **Shock**<br>Shock is circulatory system failure, when the body can't get enough oxygen or blood to every part. It can result from:<br>• Loss of blood because of uncontrolled bleeding or other circulatory problem<br>• Loss of fluid due to dehydration or excessive sweating<br>• Trauma, injury<br>• An extreme emotional event<br><br>**Signs** of shock<br>• altered mental state – anxiety, restlessness, disorientation<br>• pale, cold, clammy skin, lips and nail beds<br>• nausea and vomiting<br>• rapid breathing and pulse<br>• unresponsive in severe shock<br><br>**Steps**<br>• lay victim on his or her back<br>• raise victim's legs 8-12 inches so blood can drain from legs back to the heart<br>• prevent body heat loss – put blankets and coats under and over the victim |
| **3. Burns** | |
| **3.1 First-degree burns - superficial** | **First-degree burns - Superficial**<br>• Damage is only to the skin's outer layer, epidermis.<br>• Symptoms include redness, mild swelling, tenderness, and pain. |

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| | • First-degree burns usually heal without scarring.<br><br>**Actions**<br>• Immerse in cold water 10 to 45 minutes or use cold, wet cloths.<br>• Cold stops burn progression.<br>• Other liquids work too.<br>• Use aloe, moisturizer lotion. |
| **3.2 Second degree burns – partial thickness** | **Second-degree burns - Partial Thickness**<br>• Damage is to epidermis and upper regions of dermis.<br>• Symptoms include blisters, swelling, weeping of fluids, and severe pain.<br><br>**Actions**<br>• **Immerse in cold water/wet pack.**<br>• **Give aspirin or ibuprofen.**<br>• **Do not break blisters.**<br>• Get medical attention. |
| **3.3 Third degree burns – full thickness** | **Third-degree burns - Full Thickness**<br>• Third-degree burns are severe. They penetrate all the skin layers, into underlying fat and muscle.<br>• Symptoms include: the burned area appears gray-white, cherry red, or black; there is no initial swelling or pain, the burn has destroyed nerve endings.<br><br>**Actions**<br>• Usually it is not necessary to apply cold to areas of third degree burns.<br>• Do not apply ointments.<br>• Apply sterile, non-stick dressings – not plastic.<br>• Check ABC's – Airways, Breathing, Circulation<br>• Treat for shock.<br>• Get medical help. |
| **3.4 Different types of burns** | **Thermal or heat burns**<br><br>**Causes**<br>• Flames<br>• Hot objects<br>• Flammable vapor that ignites<br>• Steam or hot liquid |

**Actions**

- Stop the burning
- Remove victim from burn source
- If open flame, smother with blanket, coat or similar item, or have the victim roll on ground.
- Determine the depth (degree) of the burn

**Chemical burns**

**Causes: caustic or corrosive substances touching skin:**

- Acids - batteries
- Alkalis - drain cleaners- often more extensive burns
- Organic compounds - oil products.

**Actions**

- Remove the chemical by flushing the area with water.
  - Brush dry powder chemicals from the skin before flushing.
  - Take precautions to protect yourself from exposure to the chemical.
- Remove the victim's contaminated clothing and jewelry while flushing with water
- Flush for 20 minutes all chemical burns – skins, eyes.
- Cover the burned area with a dry, sterile dressing.
- Seek medical attention.

**Chemical burns**

**Causes**

Causes are caustic or corrosive substances touching skin:

- Acids - batteries
- Alkalis - drain cleaners- often more extensive burns
- Organic compounds - oil products. )

**Actions**

| | |
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| | • Remove the chemical by flushing the area with water.<br>- Brush dry powder chemicals from the skin before flushing.<br>- Take precautions to protect yourself from exposure to the chemical.<br>• Remove victim's contaminated clothing and jewelry while flushing with water<br>• Flush for 20 minutes all chemical burns – skins, eyes.<br>• Cover burned area with a dry, sterile dressing.<br>• Seek medical attention.<br><br>**Electrical Burns**<br><br>**Causes:** contact with live electrical wires and current<br><br>**Actions**<br>• Make sure the scene is safe: Unplug, disconnect, or turn off the power. If that is impossible, call the Power Company or emergency medical services for help.<br>– Do not contact high voltage wires.<br>– Consider all wires live<br>– Do not handle downed lines.<br>– Do not come touch a if an electrical source is live.<br>• Check ABCs. (Airway Breathing Circulation)<br>• If the victim fell, check for a spinal injury.<br>• Treat the victim for shock by raising the legs 8" – 12", if you don't suspect a spinal injury.<br>• Seek medical attention immediately. |
| **4. Choking** | **Actions**<br>• Perform **Heimlich Manoeuvre,** if you have proper training.<br>• Always stay calm, help others stay calm. |
| **4.1 Conscious victim** | **Conscious Victim:**<br>• Approach from behind and wrap arms around the victim's waist. |

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| | • Place one fist just above the victim's navel with the thumb side against the abdomen.<br>• Second hand over the fist.<br>• Press into the victim's abdomen with one upward thrust<br>• Repeat thrust if necessary.<br>• Make swift thrust in and up, to pop out the obstruction.<br>• Continue until a) the obstruction is out or b) the victim collapses.<br>• Have someone call for help. |
| **4.2 Unconscious victim** | **Unconscious Victim:**<br>• Ask someone to call 9-911 for help.<br>• Lower victim to floor on back or left side and perform Heimlich Maneuver.<br>• Open airway with tongue-jaw lift.<br>• Look inside mouth – if you cannot see anything, do not do a finger sweep.<br>• Try to give two full rescue breaths.<br>• If the breaths don't go in, reposition the head. Give another breath.<br>• Perform abdominal thrusts.<br>• Continue until successful or help arrives. |
| **5. Fractures** | Fractures<br><br>There are two categories of fractures or breaks:<br><br>Closed or simple fracture<br>• The skin is intact and no wound exists anywhere near the fracture site.<br><br>Open or compound) fracture<br>• Skin over the fracture is damaged or broken.<br>• A wound may result from bone protruding through the skin.<br>• Bones may not be visible in wounds.<br><br>General signs and Symptoms:<br>• Tenderness to touch.<br>• Swelling.<br>• An abnormal shape from deformities that may occur when bones break.<br>• Open wounds break the skin.<br>• A grating sensation caused by broken bones rubbing together<br>- Person can feel it, sometimes |

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| | hear it<br>- Do not move the injured limb to try to detect it<br>• Loss of use.<br><br>Additional signs and symptoms:<br>• Injury history can suggest a fracture.<br>• Victim may feel a bone snap: others may hear it.<br><br>**Steps** |
| **6. Heart attack** | **Signs**<br>• pressure in chest, fullness, squeezing or pain lasting more than a few minutes or which goes away and comes back<br>• pain spreading to shoulders, neck, or arms<br>• chest discomfort with light-headedness, fainting, sweating, nausea or short breaths<br><br>**Actions**<br>• Call EMS or get to the nearest hospital emergency department with 24-emergency cardiac care.<br>• Monitor victim's condition.<br>• Help the victim to the least painful position, usually sitting with legs up and bent at the knees. Loosen clothing around the neck and midriff.<br>• Find out if the victim has coronary heart disease and is using nitroglycerin.<br>• If the victim is unresponsive, check ABCs – Airways, Breathing, Circulation - and start CPR if needed. |
| **7. Wounds** | **Signs:**<br>*Note: you may want to evaluate knowledge of the following different kinds of open wounds:*<br>• abrasion<br>• laceration<br>• punctures<br>• avulsion<br>• amputation<br><br>**Actions** |

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| | • Always wear gloves (if possible) and expose wound. (Keep gloves in your medical and first aid kits.)<br>• Control bleeding.<br>• Clean wounds:<br>- To prevent infection;<br>- Wash shallow wound gently with soap and water;<br>- Wash from the center out / Irrigate with water.<br>• Severe wound?<br>- Clean only after bleeding has stopped<br><br>**Wounds Care:**<br>• Remove small objects that do not flush out by irrigation with sterile tweezers.<br>• If bleeding restarts, apply direct pressure.<br>• Use roller bandages or tape dressing to the body.<br>• Keep dressings dry and clean.<br>• Change dressing daily, more often is wet or dirty.<br><br>**Signs of Wound Infection:**<br>• Swelling, and redness around the wound<br>• A sensation of warmth<br>• Throbbing pain<br>• **Fever or chills**<br>• **Swollen lymph nodes**<br>• **Red streaks**. **Tetanus or lock jaw should receive injection in first 72 hours.**<br><br>**Dressing and Bandages:**<br>• pressure over dressing to control bleeding<br>• prevent or reduce welling<br>• provide support and stability<br>• should be clean, does not need to be sterile<br>• use a dressing large enough to extend beyond the wound's edges<br>• Cover the dressing with bandages |
| **8. Amputation** | **Steps**<br>• control the bleeding |

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| | • treat the victim for shock<br>• recover the amputated part and whenever possible take it with the victim<br>**Care for amputated body part**<br>• amputated part does not need cleaning<br>• wrap amputated part with a dry sterile gauze or other clean cloth<br>• Put wrapped amputated part in plastic bag or other waterproof container<br>• Keep amputated part cool, but do not freeze<br>• Seek medical attention immediately |
| **9. Spinal injuries** | **Signs**<br>• head injuries may indicate possible spinal injuries – be cautious<br>• accidents may cause the spine to move suddenly in one or more directions, causing damage<br>• look for painful movement of arms and legs<br>• numbness, tingling, weakness or burning sensation in arms or legs<br>• loss or bowel or bladder control<br>• paralysis of the arms or legs<br>• deformity - odd looking angle of the victim's head and neck<br><br>**Steps**<br>• stabilize victim against any movement<br>• check ABCs<br><br>**Unresponsive victim**<br>• look for cuts, bruises, and deformities<br>• test response by pinching victim's hand, and bare foot<br>• if no reaction, assume victim may have spinal damage<br><br>**Responsive victim**<br>• **check upper extremities**<br>- victim wiggles fingers<br>- victim feels rescuer squeeze fingers<br>- if victim squeezes rescuer's hand<br>• **check lower extremities**<br>- victim wiggles toes |

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| | - victim feels rescuer squeeze foot<br>- victim pushes foot against rescuer's hand |
| **10. Stroke** | **Signs**<br>• weakness or numbing of face, arm, leg – usually on the side of the body<br>• blurred or decreased vision, especially in one eye<br>• problems speaking or understanding<br>• unexplained severe headache<br>• dizziness, unsteadiness or sudden fall<br><br>**Steps**<br>• with strokes, "time is brain" – act quickly<br>• |
| **11. Bites and Stings** | **Insect Stings and Bites**<br><br>**Signs of insect bites**<br>• Check the sting site to see if a stinger and venom sac are in the skin.<br>• Bees are the only stinging insects that leave their stingers and venom sacs behind.<br><br>**Steps**<br>• Scrape the stinger and venom sac away with a hard object such as a long fingernail, credit card, scissor edge, or knife blade.<br>• Usual reactions are localized pain, itching, and swelling.<br>• An allergic reaction threatens life.<br>• Actions<br>• Ask the victim if he/she has had reactions to bites and stings before.<br>• Wash the sting site with soap and water to prevent infection.<br>• Apply an ice pack over the sting site to slow absorption of the venom and relieve pain.<br>• Since bee venom is acidic, a paste made of baking soda and water can help.<br>• Seek medical attention if necessary.<br><br>**Tick bites**<br><br>**Signs**<br>• Tick can remain embedded for days without the victim realizing.<br>• Most tick bites are harmless, although ticks |

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| | can carry serious diseases.<br>• Symptoms usually begin 3 to 12 days after a tick bites.<br><br>**Steps for Tick Bites**<br>• The best way to remove a tick is with fine-pointed tweezers. Grab as closely to the skin as possible and pull straight back, using steady but gentle force.<br>• Wash the bite site with soap and water.<br>• Apply rubbing alcohol to further disinfect the area.<br>• Apply an ice pack to reduce pain.<br>• Calamine lotion may provide relief from itching.<br>• Keep the area clean.<br>• Continue to watch the bite site for about one month for a rash.<br>• If rash appears, see a doctor.<br>• Also watch for other signs such as fever, muscle aches, sensitivity to bright light, and paralysis that begins with leg weakness. |

## Reference Materials

Below are materials which are a) referenced in this lesson, and b) required reading for instructor preparations:

- Charter of the United Nations
- United Nations Peacekeeping Operations Principles and Guidelines (also known as the Capstone Doctrine)
- United Nations Field Security Handbook, January 2006
- Basic Security in the Field: Staff Safety, Health and Welfare (ST/SGB/2003/19). United Nations, 9 December 2003
- DPKO/DFS Medical Guidelines for Peacekeeping Operations: Prophylaxis, Diagnosis and Treatment of Malaria, 2003

## Additional Resources

**UN Information**

The website for UN peacekeeping: http://www.un.org/en/peacekeeping/

**UN Documents**

UN documents can be found on: http://www.un.org/en/documents/index.html
(Search by document symbol, e.g. A/63/100)

**DPKO and DFS Guidance**

The repository for all official DPKO and DFS guidance is the Policy and Practice Database: ppdb.un.org (only accessible from the UN network). Official peacekeeping guidance documents are also accessible through the Peacekeeping Resource Hub: http://research.un.org/en/peacekeeping-community

Instructors are encouraged to check for the latest guidance.

**UN Films**

UN films can be found on YouTube: https://www.youtube.com/user/unitednations

**Additional Information**

The PIP provides information on the mission and the local context:

http://peacekeepingresourcehub.unlb.org

**Additional Training Resources**

Basic and Advanced Security in the Field (B/ASITF) online Course.
https://dss.un.org

Where Peacekeeping Training Institutes do not have sufficient IT facilities, it is sufficient that eligible personnel are informed of their obligation to complete *B/ASITF upon arrival in mission*.