



# **Midwifery III**

**NTQF Level III**

## **Learning guide - 17**

<b>Unit of Competence</b>	<b>Providing Basic First aid and Emergency Care</b>
<b>Module Title:</b>	<b>Providing Basic First aid and Emergency Care</b>
<b>LG Code:</b>	<b>HLT MDW3 LO 3 LG 17</b>
<b>Module Code</b>	<b>HLT MDW3 M05 0219</b>
<b>TTLM Code:</b>	<b>HLT MDW 3 M LO3 TTLM, 09 2019 V1</b>

### **Lo 3: Provide First Aid**

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<b>Instruction Sheet</b>	<b>Learning Guide # 3</b>
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This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Introduction to first aid and accident prevention
- Physical hazards to self and casualty's health and safety
- Principles First Aid
- Monitoring and responding to casualty's condition
- Managing accidental injuries and referrals

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, **upon completion of this Learning Guide, you will be able to:**

- Describe Introduction to first aid and accident prevention
- Identify and control physical hazards to self and casualty's health and safety are
- Monitor Casualty's condition and responded to in accordance with the effective First Aid principles
- Manage and transfer Accidental injuries safely

### **Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information "Sheet 1, Sheet 2, Sheet 3 and Sheet 4 respectively in page No 3, 7, 11 and 34
4. Accomplish the "Self-check 1, Self-check 2, and Self-check 3 respectively in page No 5, 9 12 and 32
5. Do the "LAP test" in page 35
6. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Your trainer will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your trainer shall advice you on additional work. But if satisfactory you can proceed to Learning Guide #18.

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## Information Sheet 1

## Introduction to first aid and accident prevention

### 1.1. Introduction to first aid and accident prevention

**First aid** is the initial assistance / support or treatment given to an injured or accidentally ill person using whatever materials or equipment available at the time before he / she reaches to a health facility.

**1.2 Why first aid?** The major reasons for providing first aid service are to sustain (preserve) life, prevent worsening of the problem (prevent complication), Promote healing and Recovery, and minimize or avoid casualty suffering

### 1.3 Why to give first aid? The 3’P’s

1. to preserve life
2. to promote recovery
3. to prevent aggravation and complication

Aim of first aid

- a. To restore breathing
- b. To control bleeding
- c. To prevent and treat shock
- d. To splint fractures
- e. To evaluate and treat any other conditions like burn drowning poisoning etc
- f. To arrange for transport.

First aid training

1. Help for others
2. Self Help
3. Preparation for disaster

### 1.4 General directions for giving first aid

#### A. Urgent care

In case of serious injury or sudden illness while help is being summoned give immediate attention to the following first aid priorities

- 1) Effect a prompt rescue (for example, remove an accident victim from water from a fire, or from a garage or room containing carbon monoxide, smoke, or noxious fumes,)
- 2) Ensure that the victim has an open air way and give m-to m or m-to-n artificial respiration if necessary.



- 3) Control sever bleeding
- 4) Give first aid for poisoning, or ingestion of harmful chemicals

**B. Additional first aid directions**

Once emergency measure has been taken:-

1. Do not move a victim unless it is necessary for safety reasons
2. Protect the victim from unnecessary manipulation and disturbance
3. Avoid or over come chilling by using blankets or covers if available
4. Determine the injuries and cause of sudden illness

**Self-Check 1****Written Test**

**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define first aid (3 Point)
2. Describe reasons why first aid is given (4 Point)
3. What are the values of first aid? (3Point)
4. What are the general directions to be followed while giving first aid? (3 Point)
5. In the case of occurrence of an injury to a victim if the condition is still active, remove the cause or the victim from the cause. (2 Point)

A. True

B. False

**Note: Satisfactory rating - 10 points Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers.



## Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

### Short Answer Questions

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## Information Sheet 2

## Physical hazards to self and casualty's health and safety

### 2.1. Physical hazards to self and casualty's health and safety

In the management (mgt) of casualty, as a general principle, the first aider has to consider the following tasks as his or her responsibility.

- Assessment of the situation and casualty
- Reaching to diagnosis for each casualty
- Giving immediate & adequate treatment based on priority matrix
- Arrangement for transport according to the seriousness of the condition
- Prevent cross infection
- Provision of psychological and emotional support

### 2.2 Assessment of the casualty's condition

- This involves assessment of the overall situation and the general condition of the casualty. During the process of assessment the following principles has to be considered:
- be calm and confident
- Talk, listen & reassure the conscious casualty
- Check safety of casualty and of yourself
- Check for breathing, bleeding and level of consciousness
- Get others to help / (Emergency Medical Staff)EMS/

### 2.3 Components of assessment process:

- Assessment of the situation and safety / scene size up/
- Initial assessment
- Physical examination
- Vital sign
- Focused History taking
- Ongoing assessment

**2.4 Assessment of the situation /Scene size up/** – An assessment of the scene (current situation of an event) and the surroundings, if it is safe, will provide valuable information to the first



responder and will ensure the well-being of the first responder. Ex. Unstable Situation, violent, Hazmat Situation (industry hazardous material) etc. Scene safety in relation to personal protection, casualty and bystander protection is important. If the scene is unsafe, make it safe, Otherwise, **DO NOT ENTER**

#### Assessing a casualty

##### Primary survey algorithm

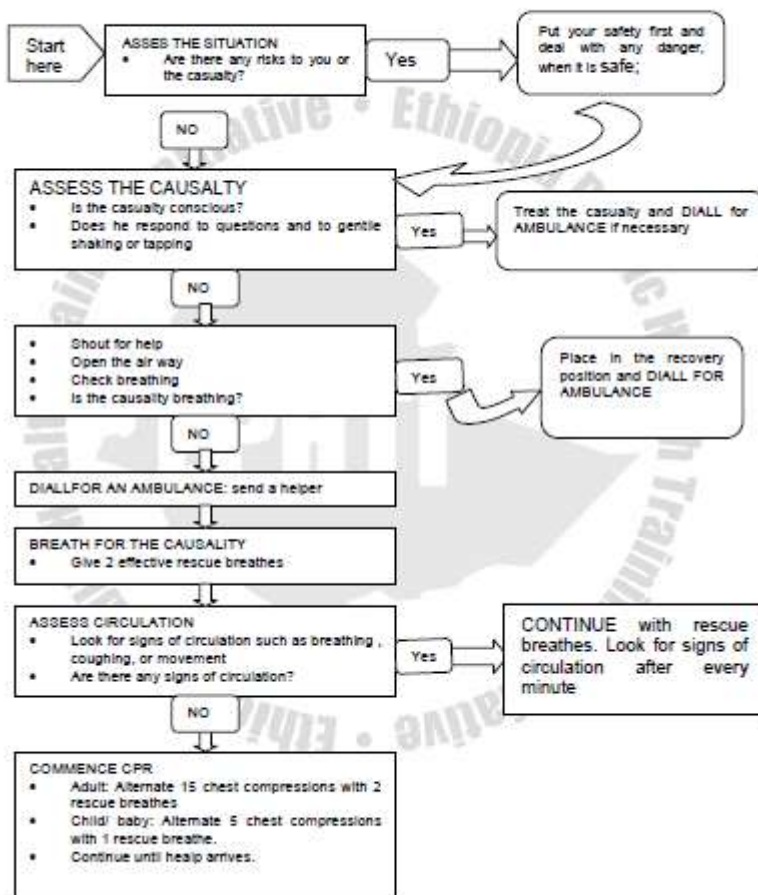


Fig 1 Assessing a casualty Primary survey algorithm

Self-Check 2	Written Test
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe method of assessment of the casualty's condition (5 Point)
2. List the causality Components of assessment process (5 Point)
3. List method of assessment of the situation /Scene size up (5 Point)

**Note:** Satisfactory rating - 10 points Unsatisfactory - below 10 points

You can ask you teacher for the copy of the correct answers.

### **Answer Sheet**

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Score = \_\_\_\_\_  
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Name: \_\_\_\_\_

### Short Answer Questions

1. \_\_\_\_\_  
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<b>Information Sheet 3</b>	Principles First Aid
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### 3.1 General directions to give first aid

- Responsibility of a first -aider in the management of casualty:
  - Assessment of the situation
  - Identify the problem
  - Giving immediate and adequate treatment, bearing in mind that
- A casualty may have more than one injury and that some
- Casualties will require more urgent attention than others (to give priority).
  - Arrangement for the transport of casualty according to the
- seriousness of his/her condition without delay accompanied
- With brief written report.
  - Prevent cross infection

General principle, the first aider has to consider the following tasks as his or her responsibility.

- Assessment of the situation and casualty
- Reaching to diagnosis for each casualty
- Giving immediate & adequate treatment based on priority matrix
- Arrangement for transport according to the seriousness of the condition
- Prevent cross infection
- Provision of psychological and emotional support

<b>Self-Check 3</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Among the following which one is not Responsibility of a first –aider (3 point)
  - A. Assessment of the situation
  - B. Identify the problem
  - C. Giving immediate and adequate treatment
  - D. All of the above
2. Casualties will require more urgent attention than others (4 point )
  - A. True
  - B. False
3. List tasks expected from first aider as a general principle of first Aid (5 points)

**Note: Satisfactory rating - 8 points Unsatisfactory - below 8 points**

You can ask you teacher for the copy of the correct answers.

**Answer Sheet**

Score = \_\_\_\_\_

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Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Short Answer Questions

1. \_\_\_\_\_

2. \_\_\_\_\_

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#### Information Sheet 4

Managing accidental injuries and referrals

### 3.1 Artificial respiration:

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It is a procedure for making air to flow in to and out of a person's lungs when individual's natural breathing is inadequate or ceased

The purpose of artificial respiration is to maintain open air way and restore breathing

Artificial respiration should always be continued until the victim begins to breathe by him/her self.

### **3.2 Mouth to mouth /Mouth to nose/ method of artificial respiration:**

The decision to perform mouth to mouth respiration by First Responders is a personal choice.

Whenever possible, a barrier device should be used to prevent cross infection.

- ❖ Determine consciousness of the victim
- ❖ Tilt the victims head back so that chin is pointing up ward.
- ❖ Look at the victim's chest if it moves for 5 seconds
- ❖ If no breathing – Pinch the victim's nostril
  - Open your mouth wide
  - Take a deep breach
  - Seal your mouth tightly around the victim's
  - Initially give 4 quick full breaths

Look, listen & feel for exhalation of air and check for the pulse for at least 5 but not more than 10 seconds. If no pulse & breath, do cardio pulmonary resuscitation (CPR) If there is pulse and no breath, provide at least one breath every 5 seconds or 12 /minute for adults and this provides sufficient air.



Figure: 1 Mouth to mouth respiration for adult casualty

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**3.3 External cardiac massage or cardio pulmonary resuscitation (CPR):** The aim of CPR is to compress the heart b/n sternum and the back bone (spine) thus literally squeezing blood out of it.

**Steps-** Lay the casualty on a firm flat surface

- Kneel close to the side at right angles to him and alongside his/her chest.
- Press the lower third of the sternum with the heels of your hands
- Check the carotid pulse every few minutes
- Chest compression – ventilation 30: 2, for 5 cycles



**Fig 2:** External cardiac compression

**Reassessment has to be done** after 5 cycles of compressions and 6 cycle of ventilations (30:2) and check for the return of carotid pulse and spontaneous breathing

**According to the finding of the reassessment (after 2 minutes):**

If there is pulse- place in the recovery position and monitor vital signs until Emergency Medical staff (EMS) arrives.

If there is pulse but no breathing- continue rescue breathing every 5- 6 seconds (10-12 breaths). Recheck pulse every 2 minutes, if no pulse or breathing- continue CPR 30:2 until provider arrives.

**Repeat A– B- C to 5 cycle of compression and 6 cycles of breathing. (150:12)**

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**For children**, enough pressure is obtained by using the heel of only one hand. **For babies**, use only two fingers. When the casualty starts to breath by himself, put him in a recovery position.

External cardiac compression for an infant



Fig 2 External cardiac compression for an infant

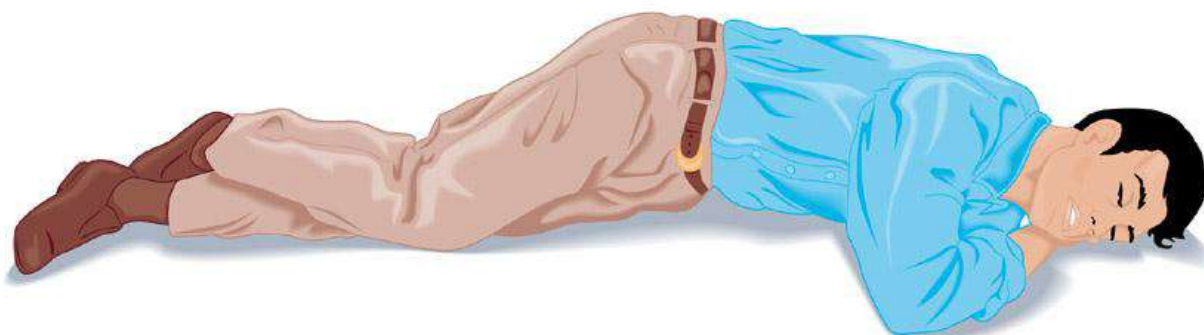


Fig 3 Recovery position

### 3.4 Wounds and bleeding:

It is a break in the continuity of the tissue of the body either internal or external

#### Classification of wounds:

**Open wound** – a break in the skin or the mucus membrane

**Close wound** – involves injury to underlying tissues without a break in the skin or mucous membrane.

### 3.5 Bleeding Emergency:

Depending on the degree of damage of the body part in an injury, there could be massive / heavy / bleeding from the vascular system that can cause life in threatening.

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This massive bleeding can be **external** (bleeding is from external body part or internal (bleeding is from the internal body part).

### 3.5.1 First aid for severe external bleeding:

1. Use barrier / glove/ as can as possible to prevent cross infection like, HIV, syphilis and other diseases which can be transmitted by direct contact or contact with body fluids.
2. Application of direct pressure using thick pad
3. Elevation of the part
4. Pressure on the supplying artery (Pressure point technique) use it for short duration of time. Usually this pressure is applied on **brachial artery (upper arm)** and **Femoral artery (lower extremity)**
5. Application of Tourniquet, it is dangerous of it should be used, use only for sever life-threatening hemorrhage that can't checked by other means



Fig 4: External blood loss



Fig 5: Internal bleeding



Fig 6: Finger tip pressure



Fig 7: Elevated extremity



Fig 6: Pressure point, brachial



Fig 7: Pressure point, Femoral

### 3.5.2 Bleeding from the Nose (Epistaxis)

**Epitasis or nose bleeding** is a common emergency problem. The blood you see may be only a small part of the total blood that may pass down through the throat in to the stomach as the patient swallows. Then patient may become nauseated and start vomiting. Possible causes of bleeding from the nose are facial injuries, sinusitis, infections, dried or cracked nasal mucosa, or other abnormalities such as high blood pressure

Most non traumatic nasal bleeding may occur from sites in the septum and this type of bleeding can be effectively handled by pinching the nostrils together

1. Have patient sit and lean forward with head tilted forward.
2. Apply direct pressure for at least 15 minutes by pinching nostrils together.
3. Keep the patient calm and quiet.
4. Apply ice over the nose.
5. Maintain pressure until bleeding is controlled.
6. Provide transport.



Fig 8: Pinching of the nostril

### 3.6 Specific injuries

#### 3.6.1 Head injury:

- Do not try to clean scalp wound
- Control /Check bleeding
- Place sterile dressing
- Apply bandage to secure dressing

Bleeding from the nose, ear canal or mouth is indicator of **intracranial bleeding** or **skull fracture**. The primary measure for head injury is immediate referral.

- Sit with the head well for ward
- Loosen any tight clothing around the neck & chest
- Advise to breathe through the mouth & to pinch the nose
- Tell the casualty to spit out any blood in the mouth
- Release the pressure after 10 minutes
- Do not let the casualty raise the head
- Advise not to blow the nose (avoid exertion)
- If after 30 minutes the bleeding persists seek medical care.



### 3.6.2 Eye Injuries

Foreign objects are often blown or rubbed in to the eyes causing irritating and scratching the surface of the eye.

#### Signs and symptoms include

- Redness of the eye
- Burning sensation
- Pain, headache
- Over production of tears
- Swelling and wound
- Presence of foreign body

#### Precautions

- Keep the victim from rubbing his eye
- Wash your hands thoroughly before examining the victim's eye.
- Do not attempt to remove a foreign object by inserting a match stick tooth pick, or any other instrument
- Refer the victim if something is embedded in the eye; or if something is thought to be embedded but cannot be located.

### 3.6.3 Injury of the eye lid

- Stop hemorrhage by gently applying direct pressure
- Clean the wound and apply a sterile or clean dressing seek medical help without delay
- Bruises above and below the eye should be treated by immediate cold application to lessen bleeding and swelling

### 3.6.4 Blunt injury of the eye:

- A contusion occurs from direct blow, such as fist, a vehicle accident or explosions that results in black eye. A dry sterile or clean dressing should be applied and the victim should be, transported lying flat and refer.
- Removal of foreign body from the surface of the eye ball



- Pull down the lower lid to determine the object lies on the inner surface
- Lift it gently with the corner of clean handkerchief or tissue paper
- Flush the eye with water
- Apply dry dressing and send to hospital if the object is not removed

### **3.6.5 Penetrating injuries of the eye:**

- Can cause blindness
- Don't try to remove the objects or to wash the eye
- Cover the eyes with a sterile or clean dressing to avoid movements of the affected eye
- Keep and transport the victim by stretcher

### **3.7 Removing of foreign objects:**

- Remove any superficially embedded objects safely.
- Deep embedded foreign objects should be left for removal by health professionals.

### **3.8 Choking (ingested & inhaled objects):**

- Foreign body (Pieces of food, bone, any other solid or liquid) Substance may enter into the wind pipe. Do not try to hook the foreign body out with your fingers; this may push it further down.

#### **The first aid measure for choking is:**

- For babies & small children hold the baby upside down & smack(cuff) him firmly b/n his shoulder blades
- For children- lie the child face down over your knee or arm and smack them sharply between their shoulder blades
- For adults- Stand behind Causality and grasp them around the chest just under the chest bone (Sternum). Give a sharp bear hug.

### **3.9 Bites:**

- Injuries produced by animal or human bites may cause punctures, laceration or avulsion.
- A. Human bite – The mouth is heavily contaminated
  - Clean the wound with clean H2O and cover it with clean cover

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- B. Dog bite – Keep the animal under observation
  - Clean the wound with clean water & soap and clean cover
- C. Snake bites – Lay the casualty down
  - Immobilize the affected part
  - Keep it below the level of the heart
  - Wash the wound with clean H<sub>2</sub>O
  - Take to hospital

### **3.10 Wounds of the chest:**

#### **Penetrating chest & back wounds**

- Seal the opening with the palm immediately.
- Put in a half sitting position with the head & shoulder supported
- Gently cover the wound with a sterile unmediated dressing as soon as possible
- If possible form air tight seal.
- Take to hospital immediately
- Don't try to remove deeply embedded foreign body

### **3.11 Abdominal wound:**

- Control bleeding
- Place in a half sitting position with the knee bent up
- Apply dressing & secure with bandage and Keep NPO
- Remove to hospital immediately

If part of the intestine is protruded through the wound (eviscerated wound):

- Control bleeding
- Cover with a damp sterile dressing or clean cloth and secured with a loose bandage
- Support the wound while coughing or vomiting
- Take to hospital immediately



### **3.12 Shock:**

- It is a condition resulting from a depressed state of many vital body functions due to decreased tissue perfusion that could threaten life as a result of severe pain (Neurogenic shock), electric burn (electric shock), massive bleeding (hemorrhagic shock), massive fluid loss (hypovolemic shock), hypersensitivity reaction (anaphylactic shock) , etc.

#### **3.12.1 Sign and symptom of shock:**

- Pale or bluish skin /Mucus membrane
- Cold extremities to touch
- Moist and clammy skin
- Rapid and weak pulse
- Rapid and shallow breathing /especially in abdomen & chest injuries)
- Low B/P and may be unresponsive

#### **3.12.2 First aid management of shock**

- Body positioning /lying down to improve circulation
- Keep the head lower and turned on the side
- Body positing depends on the site & type of injury
- E.g. If the injury is on the neck & spine, do not move the victim until he is
- Prepared for transport
- Keep the causality warm
- Loosen any tight clothing /assists breathing/
- Don't give fluid by mouth /moisten the lips/
- Call for ambulance or refer.

### **3.13 Poisoning:**

It refers to any substance that if taken in to the body in sufficient quantity can cause temporary or permanent damage.

#### **1. Causes of poisoning:**

- a. Deliberate intake of poisons

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b. Accidental intake of poisons

## 2. Types of poisons are:

Household poisons Plant poisons

Food poisoning Drugs poisoning

Alcohol poisoning chemical poisoning

## 3. General Sign and symptom of poisoning:

Vary according to or depending on the nature of the poison and the method of entry into the body (through the mouth, through the lung by inhalation, by injection and by absorption through the skin).

- Presence of container near the causality known to hold the type of poison
- Delirious and may have convulsion
- Sign and symptom of asphyxia
- Signs of burn around the causality's mouth after contact with corrosive poisoning.

## 4. General treatment of poisoning

- a. If conscious ask the causality quickly what has happened.
- b. Do not attempt to induce vomiting
- c. If the lips or mouth show signs of burn give water or milk to drink
- d. If the causality is unconscious, but breathing normally place in the recovery position.
- e. If breathing and heart beat stop begin resuscitation immediately.
- f. Remove to hospital immediately.

Take care not to contaminate yourself with any poison that may be around the causality's mouth.

**3.14 Burns:** It is an injury to body tissue caused by heat, chemicals or radiation.

### 3.14.1 Types of burn

- **Dry burn** – burn caused by flames, lighted cigarettes and hot electric equipment
- **Scalds** - Burns caused by wet heat such as steam, hot  $H_2O$ , or fat produced scalds
- **Cold burn** - burn due to contact with substances such as liquid oxygen & liquid nitrogen.
- **Chemical burns** - Caused by acid or alkalis chemicals
- **Electric burn** - Eclectic current and lightning generate heat and can cause burn.





- **Radiation burn** - Sun rays and light reflected from bright surface.
- **Classification of Burn**- Classified according to the area and depth of the injury
- **Superficial burn / 1st degree burn/** - Involves only the outer layer of the skin

Sign and symptom- Redness, swelling & tenderness

**Treatment** - Immerse in cold H<sub>2</sub>O

Remove any rings watches and coverings from the injured site

- Dress with clean dressing



Fig 9: superficial burn



Fig 10: superficial burn

**Intermediate burn / 2nd degree burn/** - involves the formation of blister

Sign and symptom - Swollen & red. It can be infected

**First aid measure** - Lay the causality down and check ABC

- Protect the burn area from contact
- Remove any ring watch etc
- Don not removes any thing that is sticking to a burn
- Cover the area with sterile dressing
- Do not apply any ointment/ lotion
- Do not break blisters



Fig 11: Partial thickness burn



Fig 12: Partial thickness burn



**Deep burn / 3rd degree burn/** -Involves all layers of the skin

**Sign and symptom-** The skin appears pale, waxy or charred

- Relatively pain free b/s damaged nerves
- Deep burn always require medical attention



Fig 13: Full-thickness Burns



Fig 14: Full-thickness Burns

**First aid measure-** Lay the causality down and checks ABC

- Protect the burn area form contact
- Remove any ring watch etc
- Don not removes any thing that is sticking to a burn
- Cover the area with sterile dressing
- Do not apply any ointment/ lotion
- Do not break blisters
- Rinse irrigate chemical burn with clean water

**3.15 Bandages:** - are strips of woven material used to hold a wound dressing or splint in place.

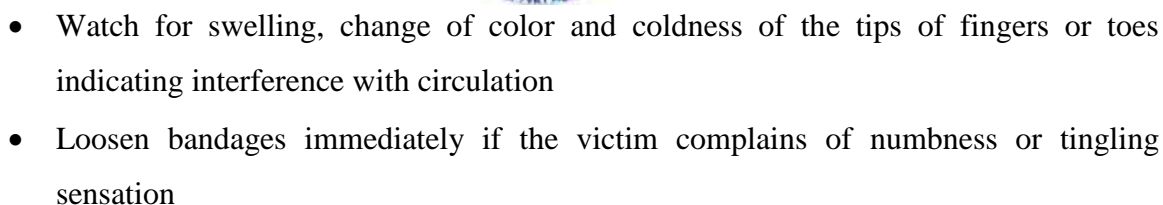
It helps to immobilize, support and protect an injured part of the body.

### 3.15.1 Types of bandages

1. Elastic bandage
2. Gauze bandages
3. Triangular bandages ( for scalp, foot or any large areas and for sling)
4. Adhesive strip bandages ( for small wounds following through cleaning)

### 3.15.2 General principles of application of bandages

- A bandage should be not too lose or too tight
- Ensure that circulation is not interfered
- Leave the victim finger tips and toes exposed



## Arm sling

- ### 3.16 Bone and Joint Injuries

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**5. Open fracture (compound, or complex, fracture)** is one in which the skin or mucous membrane wound extends to the fractured bone. Can be associated with infection

**3.16.1 Causes of fracture:** Most of the causes are motor accidents, falling accidents, pathological, recreational or sport activities

**3.16.2 Signs and symptoms of fracture**

- Pain, swelling, tenderness and difficulty of moving the injured part
- Abnormal movement in an area to the body
- Protrusion of the broken bone end out of the skin
- Causality may find it difficult or impossible to move the part normally.
- Crepitus or grating sensation of broken bones due to rubbing of bone fragments against each other
- Shortening of the affected extremity, protrusion, deformities and discoloration.

**3.16.3 Objectives of First Aid for fracture**

1. To provide all necessary first aid care
2. To keep the broken bone ends and the adjacent joints from moving
3. To give care for shock

**3.16.4 First Aid Principles of fracture**

- Do not move the causality unless it is absolutely necessary to avoid further injury
- Follow
  - A- Clear air way
  - B. Check for breathing
  - C. Circulatory assessment (Check pulse)
- Control bleeding in open fracture
- Prevent movements of injured part and the adjacent joint.
- Elevate involved extremities if possible without disturbing the suspected fracture
- If a fragment of bone is protrude, cover the entire wound with sterile dressing
- Don't replace any bone fragment.
- Do not wash, or do not insert your fingers in to the wound.

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- Apply splint (are devices applied to the arms, legs or trunk to immobilize the injured part when a fracture is suspected) and transport immediately.
- Use arm sling for arm fracture

**N.B** splints should be well padded, rigid, and long enough to go along side the joint above and below the fracture.

- Splints protect against further injury
- They have to be wide enough to fit the limb comfortably

### **3.17 Dislocation**

- Is a displacement of a bone end from the joint particularly at the shoulder, elbow, fingers or thumb usually as a result of a fall or direct blow
- Unless proper care is given, a dislocation may occur repeatedly

#### **3.17.1 Signs and symptoms of dislocation**

- Swelling
- Obvious deformity
- Pain upon movement
- Tenderness to touch
- Discoloration

#### **3.17.2 First aid measures of dislocation**

- Splint and Immobilize the affected joint
- Apply a sling if possible
- Elevate the affected part if a limb is involved
- Never attempt to reduce a dislocation
- Seek medical help

**N.B- Never attempt to reduce a dislocation**

**3.18 Sprain** – is an injury to ligament, muscle or tendon in the region of the joint as a result of sudden wrenched or torn of these structures. Commonly occurs on ankle, knee, wrist and finger.

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### **3.18.1 Signs and symptoms of sprain**

- Swelling
- Tenderness
- pain up on motion
- Discoloration
- Actually, it is difficult to differentiate a sprain from a closed fracture without an X - ray.
- First aid measure: - Rest and support the injured part
- Elevate the injured part
- Apply cold compress
- Support with bandage and seek medical care

### **3.18.2 First aid measures of sprain**

- If ankle or knee is affected, advise the victim not to walk
- Raise the affected limb to prevent swelling
- Apply cold wet pad
- Splint/bandage simply
- If swelling and pain persists seek medical attention.

### **3.19 Strains:**

- Strains are injuries to muscles resulting from over stretching
- Commonly strains occur on the back muscles due to improper lifting technique

#### **3.19.1 First aid measures of strain**

- Bed rest until there is no pain
- Application of heat, warm,
- Use of a board under the mattress for firm support
- Seek medical care for severe back strains.

### **3.20 Referral of casualty**

- After the required first aid service is provided, according to the condition of the casualty and degree of the injury referral should be considered. During the referral of casualty,

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written document / profile that explains about the casualty's Age and Sex, Chief Complaint, Responsiveness, Airway and breathing status, Circulation status, Physical findings, SAMPLE history and Interventions provided is mandatory to enable the health care providers provide quick and comprehensive management

### 3.20.1 The profile of Hand off Report has to contain the followings:

- Age and Sex
- Chief Complaint
- Airway and breathing status
- Circulation status
- Responsiveness
- Physical findings
- SAMPLE history
- Interventions provided

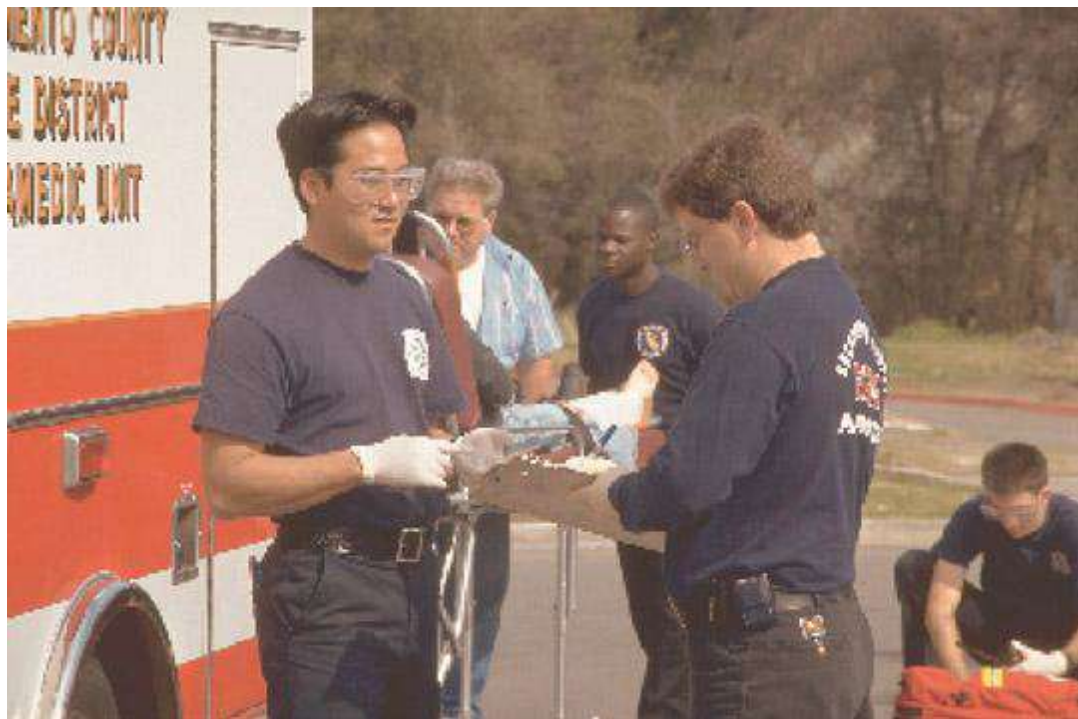


Figure 15: Hand off Report

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Self-Check -4	Written Test
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

**Part 1: Say true if the statement is correct and False if it was Wrong. Each question had 1 point**

- Artificial Respiration is a procedure for making air to flow in to and out of a person's lungs when individual's natural breathing is inadequate or ceased  
A. True B. False
- The decision to perform mouth to mouth respiration by First Responders is a personal choice.  
A. True B. False
- The aim of CPR is to compress the heart b/n sternum and the back bone (spine) thus literally squeezing blood out of it.  
A. True B. False
- Application of Tourniquet is not dangerous if it should be used, use only for severe life-threatening hemorrhage that can't be checked by other means  
A. True B. False
- Bleeding from the nose, ear canal or mouth is not an indicator of **intracranial bleeding** (  
A. True B. False
- Describe how you will do mouth to mouth respiration (2Point)
- Mention the steps of CPR (2Point)
- List signs and symptoms of Shock (2Point)

**Part II: Matching: Instruction: Match Column –A- with Column -B- (Each had 2 point)**

**Column A**

**Column B**

- |                        |   |
|------------------------|---|
| 9. ___ Dry burn        | A. Caused by contact with substances    |
| 10. ___ Scalds         | B. Caused by Sun rays and light         |
| 11. ___ Cold burn      | C. Caused by electric heat              |
| 12. ___ Chemical burns | D. Caused by acid or alkalis chemicals  |
| 13. ___ Electric burn  | E. caused by flames, lighted cigarettes |
| 14. ___ Radiation burn | F. caused by wet heat such as steam     |

**Note: Satisfactory rating - 14 points Unsatisfactory - below 14 points**

You can ask your teacher for the copy of the correct answers.

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## Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

### Short Answer Questions

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_



<b>Operation Sheet</b>	<b>CPR</b>
------------------------	------------

### **The steps of CPR involves**

Step 1: Determine consciousness by tapping the victim on shoulder and asking loudly "Are you OK"?

Step 2: shout for help/ call for help

Step 3: Lay the casualty on a firm flat surface

Step 4: Kneel close to the side at right angles to him and alongside his/her chest.

Step 5: Tilt the victim's head back so that his/her chin is pointing upward. In this case the two procedures can be applied, i.e. head tilt- neck lift and head tilt and chin lift.

Step 6: Place your cheek and ear close to the victim's mouth and nose. Look at the victim's chest to see if it rises and falls; listen and feel for air to be exhaled for about 5 seconds.

Step 7: If there is no breathing, pinch the victim's nostrils shut with the thumb and index finger of your hand i.e. pressing on the victim's forehead

Step 8: Open your mouth wide.

Step 9: Take a deep breath.

Step 10: Seal your mouth tightly around the victim's mouth and with your mouth forming a wide open circle and blow into the victim's mouth

Step 11: Initially give four quick full breaths without allowing the lungs to fully deflate (empty) between each breath.

Step 12: Maintain the head tilt and again look, listen, and feel for exhalation of air and check the pulse for at least 5 seconds but not more than 10 seconds. If no pulse and breath, do cardiopulmonary resuscitation (CPR). Compression – ventilation 30: 2, for 5 cycles

Step 13: If there is pulse and no breath, provide at least one breath every 5 seconds or 12 per minute for adults and this provides sufficient air.

Step 14: If the airway is clear only moderate resistance to blowing will be felt

Step 15: Watch the victim's chest to see when it rises.

Step 16: Stop blowing when the victim's chest is expanded and check for exhalation

Step 17: Watch the chest to see that it falls.

Step 18: Repeat the blowing cycle.

Step 19: For the mouth -to -nose method maintain the backward head –tilt position with the hand on the victim's forehead and use your other hand to close the victim's mouth

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<b>LAP Test</b>	<b>Practical Demonstration</b>
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Name: \_\_\_\_\_ Date: \_\_\_\_\_

Time started: \_\_\_\_\_ Time finished: \_\_\_\_\_

**Instructions:** Given necessary templates, tools and materials you are required to perform the following tasks within 4 hours.

1. Provide artificial respiration
2. Perform pulmonary resuscitation (CPR)
3. Manage bleeding due to cut on the hand
4. Manage Choking caused by inhaled objects
5. Provide care for the patient having shock
6. Provide care for the patient with burn
7. Provide care for the patient having fracture



## List of Reference Materials

1. First aid manual, Emergency procedures for everyone, at home, at work, at leisure, 8th edition
2. The Federal democratic republic of Ethiopia Minister of health, First Aid learning module Addis Abeba, Ethiopia 2014
3. First Aid and Accident Prevention Lecture Note for Health Science Students the Carter Center, the Ethiopia Ministry of Health, and the Ethiopia Ministry of Education
4. Galmessa A., First aid and Accident prevention, Lecture notes for health Science students, Haramaya University, Ethiopia, Sept. 2006.
5. Ethiopian Red Cross Society, First Aid Training Additional Presentation, Adama-March 2009
6. Federal Democratic Republic of Ethiopia Ministry of Health, Non-Communicable Diseases Emergency Case and Mental Health Blended Learning Module for Health Extension Program.

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