

# **Dire Dawa University**

**Student Service Dean Office** 

First Aid Service Manual

Diredawa Ethiopia 2025

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## 1. Introduction

First aid is the initial assistance or treatment given to an injured or sick individual before professional medical care becomes available, with the materials at hand. Such intervention aims at reducing the pains or situations that threaten the victim until a professional arrives or the sick, individual is brought to a health facility.

The university students encounter accidents (injuries) and sudden illnesses. The nature of both of these episodes may be, different in type and magnitude from place to place, but surely there exists common ground that the students are aware of. Some of these accidents include: animal bite and kick; snake bite; burns (mild and severe); accidents on children; fractures and profuse bleeding due to fight; nose bleeding; eye injury due to foreign objects; eye injury with sharp object; sliding/moving earth; sliding-stone; flood; poisoning etc. On the other hand, some of the main emergency illnesses include; high fever, severe abdominal cramps; obstruction of gut, severe diarrhea and vomiting; epilepsy, etc. If individuals or groups are inflicted by such accidents or emergency illnesses, it is essential that the victims immediately receive first aid treatment by trained first aid workers or immediately moved or sent to health facility before they got into far reaching serious conditions.

First aid treatment is often practiced in university compound areas. The first aid treatment is, however, provided by untrained students and often observed that its side effects out-weigh its expected benefits. Hence, providing first-aid treatment by trained persons enables to prevent and reduce serious consequences that would occur from accidents and emerging illnesses. The amount of material needs for first-aid treatment is small and simple. Hence, it is easy to train first-aid workers and provide the service at any time and any place.

Therefore, it is highly recognized in Ethiopia, that first-aid treatment should be provided by trained manpower. The causes of accidents and illnesses are numerous. It is essential that relevant measures are undertaken to prevent accidents before causing far reaching serious injuries and deaths. And after accidents and emergency

illnesses have occurred, first-aid treatment has to be immediately provided. For this reasons, university focused first-aid treatment extension package has been prepared.

# 2. General Objective:-

The aim of the first-aid treatment extension package is to prevent accidents and emergency illnesses as well as to give first-aid treatment to accident injured and sick students.

# 3. Specific Objectives:-

- 3.1 Educate every student on the causes, signs, symptoms and prevention of accidents and emergency illnesses;
- 3.2 Reduce grave consequences of disability and death that occur to a victimized individual by accident or emergency illness by providing him/her on the spot first-aid treatment;
- 3.3 Hold the accident injury from becoming more threatening and spreading to other parts of the body; and
- 3.4 Create referral system to bring or send an individual affected by emergency illness or accident to the nearby health facility and follow up.

# 4. Strategies:-

- 4.1 Conducting baseline study (survey) to identify the common causes of accidents and emergency illnesses in the area;
- 4.2 Providing continuous and sustained education to each student on common causes and preventive measures of emergency illnesses and accidents;
- 4.3 Mobilizing university, representatives, NGOs, known personalities, elderly, and religious leaders, traditional medicine practitioners etc. to provide education in a collaborated approach;
- 4.4 Training on first-aid selected students from school(s) in to provide first-aid treatment to the school population;

- 4.5 Educating students gathered on public holidays on first-aid;
- 4.6 Mobilizing students who had become before victims of emergency illnesses and accidents to actively participate in educating the public;
- 4.7 Selecting and training volunteer first-aid practitioners from the university residents. These volunteer first-aid practitioners should first get practical field experience according to a program established with their full participation. Motivate these students to also train others;
- 4.8 Collecting resources to be used in first-aid (supplies and others) from available local materials.
- 4.9 Creating referral mechanism for those who have received first-aid but need to go to a nearby health facility and also follow up those victims who need not be referred'.

# 5. Activities:-

Our environment is full of accidents, emergency illnesses and other health problems that have different level of severity and magnitude. The problems can be generally classified into two. These are accidents (deliberate and incidental) and emergency illnesses. The consequences of these health problems could end up in physical disability and death.

However, the physical disability or death can be significantly reduced and/ or prevented by first-aid treatment using locally available materials. These activities can be in principle executed by communities. The health extension worker will have the task of mobilizing, coordinating, educating and training the communities. In order to implement the aforementioned activities it is essential to undertake the following prioritized activities.

✓ Conduct data collection on emergency illnesses and accidents from students and Students Health serves. The data should show the total students of the university by age, and sex; the type of accidents and emergency illnesses; the causes; the

- relationship of accidents and illnesses with the environment; the vulnerable sector of the population etc.
- ✓ Provide education at a public gathering, public holidays, civil societies, schools etc. The focus of the education should be on:-
  - Formulate implementation plan of first-aid with the participation of the communities;
  - Educate the communities on the importance of referring severely sick or injured individual to a nearby health facility;
- Train theoretically and in practices selected volunteer persons from the communities on the implementation of first-aid in line with the package. The lessons will focus on:
  - Providing prioritized training and practice on life saving first-aid activities;
  - Giving detailed training on accidents and related practice sessions of first aid;
  - Giving detailed training on emergency illnesses and related practice sessions of first-aid
- In order to facilitate the referral of individuals who should receive further treatment, create a referral mechanism in consultation with Student Health serves, workers of nearby health facility and donors/NGOs. Introduce the referral mechanism to all stakeholders and also mobilize for materials and other resources to help transport the referred cases.

# 5.1 <u>Life - saving first-aid:-</u>

In order to hold further exacerbation of the pain of an individual affected by accident or emergency illness the following life-saving activities must be executed.

- Go quickly to the accident site and considering the seriousness of the accident, call the victim by name or tap him/her to find out whether the victim is conscious or unconscious;
- 2) Ask any person found nearby to assist you;

- 3) Take the victim to an open place and lay him/her down on the ground where he/she can get fresh air and drive away groups or a crowd that has circled him/her;
- 4) Untie battered shirts and tight dresses and remove ring, necktie, brace let, wrist-watch etc;
- 5) Find out whether the victim is breathing air or not by bringing your ear close to him/her mouth or observing the chest movement;
- 6) If the victim is not breathing lay him down on his/her back and keep his/her head always back down;
- 7) Push down his /her chin to open his/her mouth;
- 8) Remove with clean piece of cloth any foreign objects such as pebbles, earth, blood clot, sputum, and vomit, piece of bone etc. If the tongue has slipped back, put it back to its normal position with care /precaution to avoid blood contact.
- 9) If the victim is still unable to breathe, initiate artificial respiration in the following manner:
  - 9.1 Close the nostrils of the victim with the fingers of one hand and pull back his/her head;
  - 9.2 Push and keep the chin of the victim upward and start to breathe the mouth to mouth to fill the lungs with air. If possible use plastic air pumps;
  - 9.3 Then stop the mouth to mouth respiration and observe the breathing chest movement of the victim;
  - 9.4 Repeat the mouth to mouth breathing 14 to 20 times in one minute;
  - 9.5 Remove foreign objects such as blood clot from the mouth;
  - 9.6 Open the mouth of the victim while laying down On his/her back with his/her head upward; and
  - 9.7 Do mouth to mouth breathing to blow air into the victim's

lungs. If possible use plastic air pump.

# 1: Life-saving First-Aid Mouth to Mouth Breathing.

- 10) Investigate to trace if there is any bleeding and try to control the bleeding by:
  - 10.1 Covering the bleeding area with clean cloth;
  - 10.2 Keeping up right the bleeding area;
  - 10.3 If danger signs such as dizziness, unconsciousness, thirst, and anemia show up, lay down the victim where he/she is with his/her head down and legs up;
  - 10.4 Check the pulse and heartbeat of the victim if he/she is unconscious. If the pulse is not felt and the heart beat stopped put your hands with one on top of the other on the left side of the chest (location of heart) and repeatedly push down and up. Simultaneously, make mouth to mouth breathing to flow air into the lungs (if possible use plastic air pumps). The mouth to mouth respiration should be done only once, after four times heart push.

# 2. Pushing down and up by hands the left side of the Chest.

- 11) Prevention of further accident;
  - move out from the accident area; and
  - put off the fire;
- 12) Bring the victim to the nearby health facility carried by three persons in a stretcher (local bed stretcher) tied with a piece of cloth. Describe to the health workers in the health facility what was given to the victim as a first-aid treatment;

# 3: The victim being transported to the nearby health facility in a stretcher

- 13) If the accident was minor, make frequent follow up visit to the victim and focus on:
  - If the victim knows or not the area;
  - If he/she has breathing problem;
  - If bleeding has not stopped or there is bleeding from the mouth, nose or ears;
  - If there are intermittently occurring conditions such as drowsiness, pain, restlessness, unconsciousness etc.;
     The absence or reduction of physical movement; and
  - Increasing swelling and severe pain.

The next passages will cover in details about accidents and illnesses; their causes and adverse consequences; the management of first-aid; the referral mechanism to the nearby health facility; the provision of preventive education; and relevant measures to be taken.

#### 5.2. Accidents:

#### 5.2.1. Bone fracture:

What is bone fracture? A fracture is a break, loss of shape, a crack, bending, splinting, or missing position of a bone.

There are two types of bone fractures.

 Closed fracture: closed fractures are those not associated with skin lacerations, and open wounds on the surface of any parts of the body. These types of bone fractures are not exposed to any foreign contaminants.  Open fractures: open fractures are those associated with skin lacerations and wounds followed by bleeding and exposed to immediate foreign objects in the environment that likely precipitate contamination.

Some of the most common causes of bone fractures include: hitting by stick, stone, metal, falling into ditches, holes, deep sloppy/steep area, trees; car accident; gunshot, explosions; and attack by ox etc.

# Signs and symptoms of bone fracture:

Pain	

- Swelling;
- Deformity;
- Unusual mobility;
- Reduced, retarded and/or totally immobile; and
- The following changes will be observed if bone fractures occur in:-

-	Ribs		normal	breat	hing	will	be	hamp	erec	ŀ
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- legs \_\_\_\_\_ limited or complete immobility; and
- Arms limited work.

# Major consequences of bone fracture:

Immediate consequences:

- profuse bleeding;
- unconsciousness;
- Amputation of the arm or the leg; and
- Death.

# Delayed consequences;

- High fever, infection of wound;
- Gangrene;

- Injured leg is amputated, deformed, shortened or paralyzed;
- Sustained pain; and
- Disability.

# **First-aid Treatment:-**

- 1. Go quickly to the accident site and organize 2-3 persons to carry and move the victim.
- 2. Untie battened shirts and tight dresses, and remove wrist watch and ring and maintain an open air way;
- 3. Assess the victim's respiration condition and ensure that he/she doesn't have breathing problem. If the victim is unable to breathe, initiate life-saving mouth to mouth breathing;
- 4. Examine the injured part of the body by removing or cutting the victim's clothing;
- 5. Identify the type of fracture and if it is open, know about the depth of the wound and the intensity of the bleeding;
- 6. If there is wound, wash it with clean water and a piece of cloth and then cover it with clean cloth:
- 7. Treat the bone fracture as follows:-
  - 7.1 Fracture of the arm bone:
    - 7.1.1 Look for an assistant;
    - 7.1.2 Elevate and hold the fractured arm;
    - 7.1.3 Prepare in the following way a splint from wood, ply wood etc. to immobilize the injured arm and the joints on either side of the fractured arm;

The splint must be long enough to reach and immobilize the joints on either side of the fractured arm and its width must be greater than the injured arm by at least 2 cm. on both sides. Wrap the splint with a piece of cloth or paper carton, banana and false-banana leaves;

- 7.1.4 Lay down the splint under the fractured arm including joints on both sides of the injured arm. Ask the assistant to hold carefully splints together with the injured arm;
- 7.1.5 The space between the splint and the skin of the injured arm should be adequately padded with cloth or cotton and tied it with stripes of clothes or other materials to keep it in place.
- 7.1.6 The arm with the splint can be supported by using a triangular cloth /sling. The cloth can be folded and put under the arm. Then, the arm in the folded triangular cloth can be put close to the chest and hang from the neck by strings connected with the close

# 3: Applying arm sling for fractured arm.

- 7.2 Fracture of the leg
  - 7.2.2. Hold carefully the fractured leg straight. If the victim feels severe pain and is stiff, bring it immediately back to where it was without further manipulation; and
  - 7.2.3. Prepare a splint (wood, ply-wood, carton etc.) wrapped with cloth that can immobilize the joints on either side of the fractured leg and the width must be wider than the leg on both side as shown in the picture below.
  - 7.2.4 Lay down the splint under the fractured including joints on leg both sides of the injured leg. Ask the assistant to hold carefully the splint together with the injured leg. The space between the splint and the skin must be adequately padded with cloth or cotton;
  - 7.2.5 Tie the splint and the fractured leg with stripes of clothes or other material to keep it in place;
  - 7.2.6 Keep the fractured leg elevated by putting pillow or padded cloth underneath; and
  - 7.2.7 If wood, ply-wood, and carton are not available in the area, the option is to tie together the injured and healthy leg.

# 4: Immobilizing the injured leg by splinting both the injured and healthy leg

- 7.3 Scalp injury: scalp fracture is different from other fractures because the consequences are brain injury, brain laceration or wound, pressure on the brain and the accumulation and clotting of blood in the brain. Usually, the above consequences are invisible;
  - 7.3.1. If the victim is conscious, let him sit;
  - 7.3.2. Dress the wound with clean cloth;
  - 7.3.3. If the victim is unconscious, make him sleep on his left side and keep the injured side elevated; and
  - 7.3.4. Put clean cloth on the injured part and dress it.

# 5: Dressing of open scalp fracture

- 8 Follow the instruction below to transport carefully the victim in bed, stretcher or vehicle:-
- 8.1 Three bearer persons take up a position on one side and kneel down on one leg. Then they should lift the victim and put him/her on their thighs and place him/her carefully on the stretcher. The bearers should be always on the uninjured side;
- 8.2 The stretcher should be padded with cloth underneath and the victim should be also covered with blanket;
- 8.3 If the injured person is unconscious he/she should sleep leaning to one side. If a fracture of vertebrae is suspected, because of signs such as back pain, leaning forward, leaning side way, immobility of two legs or if the cause of the accident is too serious e.g. falling from high place, car accident, and direct strike with stone, club or metal on the back. It could be assumed that there could exist injury of the spinal cord. Therefore, the victim should sleep on stiff surface or the bed floor must be made of hard carton, iron sheet, or ply-wood. The patient must be made immobile.

#### 6: Moving a badly injured person

9. If the fracture is minor and simple the victim can be transported to a nearby health facility by two persons by holding each others hands and caring him/her in their arms by vehicle, wheel-barrow, pack animal. Check frequently for the bleeding;

- 10. After the injured got treatment from a health facility, make frequent follow up visits to ensure that instructions given by the health workers is strictly applied. If the victim has been given appointment to go back for treatment, make sure that he/she goes and receives the treatment in time. If the victim fails to go to the health facility, visit him/her frequently to follow up and ensure that delayed injury consequences don't exist and also teach the injured person on the importance of going to health facility for checkup follow up; and
- 11. Discuss the cause of the accident with the injured person and his family on how to prevent and/or eliminate similar eventuality in the future.

# What you should never do:-

- Moving carelessly the injured person from the accident site;
- Trying forcefully to bring back broken and dispositioned fractured bone;
- Tying hard the fractured bone on the injured place with small pieces of splints and strings. This type of application stops blood circulation and makes the part below the fractured bone black or gangrened. When you find tied hard fractured bone, loser immediately the tied hard area and restore the blood circulation to prevent gangrene; and
- Weak follow up after the victim got treatment from a health facility or the firstaid worker.

# **Prevention of fractures:-**

- Level or fence holes, ditches etc. that cause accidents;
- Take precaution measures when crossing steep, hilly and mountainous areas;
- Advise children not to climb and play on trees, tables and steep areas;
- Advise children not to jump on vehicles moving along a rood or street and play
  on the street. If possible, prepare off the street a safe playground for the
  children;
- Strictly observe traffic and road regulations; and
- Educate the communities on the potential causes of accidents (e.g. fight, alcoholism etc.) to prevent and/or eliminate accidents.

# 5. 2..2 Sprain and dislocations:

Bone joints are fixed with ligaments, while muscles are also joined with bones by ligaments and tendons. Sprain or dislocation results when an accident occurs on the bone joints and muscles.

# 5.2.2.1. Sprain:

A sprain is an injury to a joint, ligament or muscle and tendon in the region of a joint. It occurs usually as a result of forcing a limb beyond the normal range of movement due to sudden strike, falling, twist etc.

# **Signs of Sprain:**

- Pain, swelling, tenderness and heat on the injured side and place;
- · Dysfunctioning and lambing; and
- Fainting due to severe pain.

#### First-aid assistance or treatment:

- 1. Keep the injured part raised;
- 2. Immediately after the accident, apply cold wet pad for 20 to 30 minutes to reduce the victim's pain and protect the skin of the injured part;
- 3. If the injury has lasted for more than 24 hours, soak the injured part in a mild warm water, and add small amount of oil and massage the injured part; and
- 4. Wrap the injured part with stripes of clothes or bandage. If the sprain is on the leg, wrap the leg from end to end and place it on a pillow or padded clothes shown in figure 7 below.

## 7. Wrapping of sprain of the leg.

- 5. If the injured part of the body is an arm, wrap the arm with stripes of clothes or bandage, place it in a triangular cloth and apply sling and keep the arm close to the chest as shown in the picture below.
- 6. Undertake close follow up of the patient to asses the progress of the swelling and pain. If the swelling didn't subside or shows a tendency to increase, bring the patient to the nearby health facility.

## 5.2.2.2. Dislocation:

A dislocation is a displacement of a bone end from the joint. The injury is caused by direct blow, ubrupt pull, or other eventualities. Dislocation can occur together with bone fracture and the injured person should be handled and moved with strict care.

# **Signs of dislocation:**

- Severe pain, swelling and change in position of the injured part are observed;
- Dysfunction of the injured leg or arm;
- Immobility of the injured part of the body; and
- Twisting or bending of the injured part of the body.

## **First-aid assistance or treatment:**

- 1. Carefully support and handle the injured part and remove the victim from the accident site;
- 2. Ensure that the blood vessels around and near the injured part are still in circulation;
- 3. Identify the site of the injured part of the body and the magnitude of the injury;
- 4. Apply a wet pad on the injured part of the body and keep the affected part elevated;

- 5. Wrap the injured part with dry cloth. If the injury is an arm dislocation, keep it tied with the chest or apply sling; or If the injured part is a leg, keep the leg wrapped and elevated and placed on pillow or padded cloth. Then, immediately bring the victim to a nearby health facility;
- 6. Undertake the necessary assessment and follow up to ensure no further signs of physical injury are manifested. Advice and ensure that the victim goes to the health facility on the next appointment date;
- 7. If the victim is not quickly moved to the nearby health facility, try to carefully reduce the dislocation. If the reduction of the dislocation is successful, apply splint and tie the splint and the injured part of the body with stripes of clothes including both ends of joints. If the injured is an arm, apply sling. If the injured part is a leg, put pillow and/or padded cloth underneath and keep it elevated. Advise, educate and provide adequate and relevant information to the victim on the importance of seeking service from nearby health facility. The service received can protect the victim from adverse consequences such as physical disability, paralysis etc. The health extension worker should encourage and motivate the victim to go to a nearby health facility and follow up;
- 8. Don't attempt to reduce the dislocation with force. Such an approach can result in the following adverse consequences: Pain increases and the victim becomes unconscious;
  - Affects the blood circulation and blood vessels;
  - Aggravates the injury of the bone;
  - Brings further strain and laceration to the ligaments and tendons; and
  - Even if the injury heals, the consequence could be one of dysfunction or bending of the injured part of the body.

# **Measures for the Prevention of Dislocation:**

• Put fence around holes and ditches that could be potential causes;

- Take precaution measures when crossing steep hilly and mountainous areas:
- Advise children not to climb and play on trees, tables and steep areas;
- Advise children not to jump on vehicles moving along road or street,
   prepare off the street safe play-ground for children; and
- Observe strictly traffic and road regulations.

# **5.2.3.** Bleeding as an emergency:

Blood, in general, is an essential fluid in the human body that contains water, nutrient elements and minerals. There is about 5 to 6 litres of blood in circulation in an adult.

## **Causes of Bleeding:**

- Stabbing, cutting and incising with sharp object;
- Striking with club, stone and metal and injury by cattle horn;
- Falling down from high place;
- Car accident; and
- Gun shots etc.

# Signs and symptoms

- General weakness, rapid and weak heart beat;
- Pale;
- Cold sweating;
- Thirst and drying of the mouth; and
- Restlessness, unconsciousness, and death in the case of severe bleeding.

#### First-aid measures:

1. If the victim is unconscious, verify such a situation by tapping or calling the name of the victim;

- 2. If the victim is unconscious check his/her breathing status, and if he/she is not breathing initiate artificial respiration with mouth to mouth breathing to blow air into the lungs of the victim;
- 3. Identify the bleeding part of the body, cover it with clean cloth and move the victim from the accident site;
- 4. Remove the cloth and thoroughly check the wound;
- 5. Wear gloves, plastic material or thick cloth on your hand and clean the wound with clean water or with water and soap;
- 6. Stop the bleeding by covering and tying the wound with clean cloth and/or stripes of clothes;
- 7. If the bleeding is from arm or leg, elevate the extremities and check if the bleeding has stopped;
- 8. Loosen the tie and check every five minutes if the bleeding has ceased. Check frequently for the blood circulation of the injured part by checking the tightness of the wrap around the bleeding site. This can be checked by looking at the change of colour, heat, and mobility. If the bleeding area is hard-tied, the signs to observe will be: severe pain, gangrene, cold surface and immobility. Loosen immediately the stripes of clothes used to tie the bleeding site, if such signs are observed;
- 9. Bring the victim to a nearby health facility, if the following signs are present:-
  - The wound is big and deep;
  - The bleeding has not ceased after 10-15 minutes of first-aid assistance to stop the bleeding;
  - Severe and sustained pain;
  - Physical mobility ceases and sign of paralysis is apparent;
  - There are signs of restlessness and unconsciousness;
  - Bleeding starts from nose, mouth, uterus, ears; and

- Other related injuries such as fracture, dislocation etc are present, immediately bring the victim to a nearby health facility.
- 10. If the victim was unable to go to a nearby health facility, check on the following.
- The bleeding has ceased;
- The extremities (arm or leg) are not cold tender;
- No severe pain; and No immobility.

In addition, advise and educate the victim on the consequences of his injury, if he doesn't go and secure assistance from the nearby health facility.

- 11. Discuss with the victim on the causes and preventive measures of his/her injury, after he/she has been cured from the illness or injury and came back home from the health facility; and
- 12. Don't use string to stop bleeding. Tying with string stops the normal blood circulation which may result in gangrene.

## 8: Measures to stop bleeding

#### **Prevention Measures:-**

- Educate and prevent children from playing with sharp objects;
- Clean and properly dispose broken glasses and bottles in places where children cannot reach them;
- Keep away from children weapons, knife, dagger, blade etc;
- Educate the communities on potential accidents and also put fences or level ditches and holes that cause accidents; and
- Observe all traffic and road regulations.

## Nose bleeding:-

Nose bleeds occur due to strong blow on the nose or some other sudden illnesses.

#### First aid measures:-

- 1. Keep the victim in sitting position with head up;
- 2. Advise the victim to clean the blood clot from his nose;
- 3. Pinch the nose firmly for 10 minutes. If the bleeding doesn't stop, pack the nostril with a wad of piece of cloth, leaving part of it out side the nose;
- 4. Wet a piece of cloth with cold water and put it over his/her fore head, and on the back of his/her head. This treatment is useful for a victim with nose bleeds and fever;
- 5. Remove the piece of cloth after one hour and confirm that the bleeding has stopped;
- 6. If the bleeding has not stopped after two trials with the above measure, bring the victim to a nearby health facility; and
- 7. Don't ever use materials that easily disintegrate such as soft paper, toilet paper, and cotton. Don't also use dirty clothes.

#### 5.2.4. Wounds:

Wound is a break in the continuity of the tissue of the body. This can be internal or external. Wound is usually caused by external physical forces. Skin usually prevents organisms from entering the body. Hence, any accident happening to the body results in wound(s). This means, illness precipitating organisms enter the body through the injured skin and create infections.

## **Common Causes of Wounds:**

• Accident with sharp objects such as, knife, dagger, spear etc.

- Sudden attack with stones, club/stick, etc;
- Accident from gunshot, explosives etc;
- Accidents by vehicles and other machineries;
- Falling from elevated places;
- Stabbed with cattle horn; and
- Accident from animals (demotic or wild), dog bite, snake bite etc.

# Consequences of wound accidents

- Infection;
- Disabilities;
- Infection with pus;
- Septicemia;
- Tetanus;
- · Scar; and
- Death.

## <u>First – aid measures:</u>

- 1. Move the victim from the accident site;
- 2. Put the victim in a comfortable position, and help him/her to be at ease and calm;
- 3. Wash your hands properly and wear gloves and/or cover the hands with plastic material or clean thick cloth;
- 4. Check the wound properly and know the depth, size etc. of the wound;
- 5. Clean out-word the area round the wound with a piece of cloth soaked in warm water. Be careful when you do this, because it may be painful;
- 6. Remove by holding foreign objects present on the surface of the wound. If the foreign object is in the ear, eye, chest and abdomen of the victim, don't ever attempt to take it out;
- 7. Cover and tie the wound with clean cloth and stripes of clothes;

- 8. Support and hold the injured part of the body. If the injury is on the arm hold it with sling. If, on the other hand the injury is on the leg, support and hold it. After the first-aid assistance, wash your hands with soap and water;
- 9. Bring the victim to a nearby health facility;
- 10. If the victim is not brought to a health facility do wash daily the wound with warm water and cover it with clean cloth. Explain to the victim about complications that can occur due to the wound.
- 11. Undertake proper follow up after treatment and check that the victim takes his/her medicines as instructed. In addition, check also that the dressing of the wound is frequently changed and complications don't exist. For example:
  - Infection of the wound;
  - Hostile foul/smell;
  - Severe pain and fever; and
  - Limited or total immobility of the injured part of the body.

#### **Infected wound:**

Infection of a wound is precipitated by negligence in keeping the wound clean and the growth of infective organisms in the wound.

## **Signs observed in infected wound:**

- Increasing pain;
- Redness of the skin around the wound; swelling and feeling of heat;
   and
- Presence of pus and foul/smell.

# First - aid measures:-

1. clean the wound with warm water and cover it with clean cloth;

- 2. Elevate and hold the injured part of the body;
- 3. Bring immediately the victim to nearby health facility;
- 4. If taking the victim to a nearby health facility is impossible;
  - 4.1. Clean the pus on the wound;
  - 4.2. Clean and keep the wound in warm salt water and soap solution for 20 minutes. Repeat this treatment 3-4 times a day;
  - 4.3. Elevate the injured arm or leg and put pillow or padded cloth underneath to reduce the swelling;
  - 4.4. Check the condition of the wound to see the absence of swelling, pain, fever and foul/smell;
  - 4.5. Educate the victim on the importance of going and receiving assistance from a nearby health facility and the consequences of not going there. If the victim fails to get an assistance by a nearby health facility conditions such as septicemia, disability long standing wound, scar etc. can occur;
- 5. Educate the victim on the causes of the wound and prevention measures; and
- 6. Advise the victim to get tetanus toxoid vaccine.

#### **Wound prevention measures:**

- Protect yourself from injuries by sharp objects and properly dispose broken pieces of glasses and tins;
- Maintain your body clean;
- Vaccinate all women of child-bearing age and children with tetanus toxoid to prevent tetanus;
- Avoid using foreign objects such as butter, oil, leaves to remedy wound.

# 5.2.5. Burns of the body:

Fire is an accident that causes frequent great damage to life and properties. Children are the most vulnerable to burn. Burns that occur around the mouth and nose and in general in the face are more dangerous and can cause death.

#### **Causes of burns:**

- Fire, boiled water, steam, boiled oil and milk etc;
- Sun rays;
- Electric and thunder accidents; and
- Different chemicals;

#### Effects/hazards of the burn accident:-

## Immediate effects/hazards: Burns

and wounds of the body;

- Severe pain;
- Oozing and reduction of body fluid from the wound;
- Difficulty in breathing because of suffocation from smoke, severe burns around the throat and face; and
- Drowziness, restlessness and unconsciousness.

# Delayed effects/hazards:

- Infections of the wound, septicemia, and high fever;
- Disability;
- Scar;
- Contracture; and
- Tetanus disease

#### **Classification of burns:**

Burns are usually classified in three levels based on the depth or degree of skin damage. These are:-

- First degree burn;
- Second degree burn, and
- Third degree burn.

# 1st degree burn:

- Redness or discoloration; Mild swelling and pain; and
- Rapid healing.

# 2<sup>nd</sup> degree burn:

- Greater depth than first degree burns;
- Redness and mottled appearance;
- Blisters;
- Severe pain;
- Swelling; and Prone to infection.

# 3<sup>rd</sup> degree burn:

- Deep tissue destruction;
- White or charred appearance;
- No pain and blisters; and
- Complete loss of all layers of skin.

This type of burn results in severe disability and/or death.

## **First-aid measures:**

- 1. If the victim is burning with fire apply cold applications, immerse the burned area in cold water role the burned person on the ground, or cover with water socked thick cloth or blanket and put out the fire. If the accident is of electric source, quickly disconnect at the electric meter or check point, or use rope wooden stick, dried cloth etc. to disconnect;
- 2. Move the victim from the accident place to avoid further injury;

- 3. Loosen and/or remove burned dresses and lay down the victim on his/her back and let him/her breathe fresh air and ensure that no foreign objects have entered and blocked the passage of the respiratory system;
- 4. If the victim is not breathing properly, initiate mouth to mouth artificial respiration;
- 5. Thoroughly check the wound to determine the size, and the degree of burn;

# 6. Measures for 1st degree burn:

- Apply cold water application or submerge the burned area in cold water;
- If the wound is minor and small, clean daily the area with boiled cold water cover it with clean cloth to prevent contact with flies, if the wound located is in a joint, immobilize the joint area until the wound is cured;
- If the wound is from boiled water, chemical (acid), take out his/her dress and cover it with clean cloth.

# 7. 2<sup>nd</sup> and 3<sup>rd</sup> degree burn:-

- cover the wound with clean cloth;
- If the victim is conscious, his/her respiratory parts such as mouth, nose and throat are free from burn injury and give him/her frequently plenty of liquid such as ORS or similar solution (prepare the solution from eight tea spoons of sugar, one spoon salt in one litre of boiled cold water). If the victim is a child below two years old give it one spoon every two minutes and if the child is over two years give it with a cup or glass in small amount every two minutes;
- Advise the victim or his family to get tetanus toxoid vaccine;
- If the victim is unconscious, and has burns face and respiratory organs, him/her down and without giving him/her anything by mouth quickly bring him/her to the nearby health facility.

# 8. Take immediately to a nearby health facility burn victims with the following signs:

• First degree burn with sizeable area;

- 2<sup>nd</sup> and 3<sup>rd</sup> degree burns;
- If the victim is drowsy, restless and has breathing problem;
- If the victim has burns on his face, eye, extremities, joints and around genital organs;
- If the source of the burn is electrical, chemical or thunder;
- If the patient has chronic disease such as epilepsy, diabetes etc.; and
- If the burn accident is on elderly persons or children,

## 9. Follow up and education on preventive measures:

- Educating on the consequences of severe burns and the importance of referring the victim to a nearby health facility;
- Include in the education issues such as using harmful foreign substances on the burned area, frequent touching of the wound, moving joints etc;
   and
- Identify the causes of the burn accident and give education.

## **Measures to prevent burns:**

- Keep away, from children items such as matches, burning lamp and candles;
- Prepare and place stoves and other cooking installations in a safe way.
   e.g. locally made standing stove;
- Keep away from fire inflammable materials and don't come with materials such as nylon close to fire-place;
- Educate smokers not to smoke inside a house and if they smoke give them strict advice to put off the burning left over cigarette;
- See that the thatched house roof edge is short and tightly arranged or properly packed;
- Handle carefully and always away from wind when fetching fire from a neighbor;

- Ensure before sleep that candles, burning lamp, stove are put off (extinguished);
- Advise patients with epilepsy not to sit or come near fire or fire place;
   and
- When burning dirt, wait until all waste is burned and the fire is off. Pour water on the burning place before leaving.

# 5.2.6. Foreign Objects enter into some parts of the body:-

Foreign objects/articles such as dirts, beans/peas, coins, beads broken wood or metal particles, thorn, seeds etc. can suddenly enter some parts of the body such as eyes, ears, nose, throat or upper respiratory system etc. and inflict serious injury.

# 5.2.6.1. Speck of dirt in the eye:

First-aid measures:

- Wash hands with clean water and soap;
- Remove the speck of dirt with clean hand kerchief or using the corner of a piece of cloth;
- If the speck of dirt is not removed by the above 1 and 2 methods, then keep the head sideway tilting the injured eye and flood the eye with clean water or fill a cup with clean water and wash the injured eye;
- If the speck of dirt is not out with the above method, cover the injured eye with clean cloth and bring the victim to a nearby health facility;
- If a foreign object such as a piece of wood, thorn, piece of metal, broken glass, acid chemical etc. is lodged in the eye cover the injured eye and bring the victim immediately and without any attempt to remove the foreign object to nearby health facility; and
- Avoid putting oily substances, such as oil, leaf substance, butter etc. in order to remove the speck or dirt or any foreign particle from the eye.

# 5.2.6.2. Foreign object /particle in the ear:

- If an insect enters the ear, pour into the ear slightly warm water, wait for some time and slant the head of the victim on the injured side, the insect is likely to float in the water and come out; and
- If the foreign object/particle such as beans/ peas, beads, wooden or metal particle etc. has gone deep in to the canal of the ear, bring the victim to a nearby health facility without any attempt to remove the foreign object.

# **5.2.6.3.** Foreign object/particle in the nose:

An attempt to remove a foreign object/particle that entered a nose, may result in blocking the respiratory system, hence don't attempt to remove. However, if the foreign body is visible and not far deep in the nose, the following measures can be undertaken.

- Close the healthy nostril with your finger;
- Then, advise the victim to close his mouth and breathe out through the injured nose; and
- If the victim is a child or the object didn't come out with the above techniques, bring the victim to a nearby health facility.

## 5.2.6.4. <u>Foreign object/particle in the respiratory system:</u>

If foreign objects/particles such as beans/peas, food particles, water or other fluids enter the respiratory system, normal breathing stops and exposes the victim to serious adverse consequences or death.

# **Signs and symptoms:**

- Inability to shout or speak, breathe and becomes restless;
- Requests for assistance by pointing to his throat; and
- Becomes unconscious.

## **Measures of first-aid**

- 1. Bend the victim or if he/she is unconscious lay him/her down on his chest;
- 2. Tap him/her on his back between the two scapulas;
- 3. Observe whether the victim is properly breathing or not;
- 4. If the victim is unable to breathe, open the mouth and if there is any visible foreign object or particle such as a ball of meat or any other object, try to remove it;
- 5. If the above measures/techniques fail lay him/her on his/her back and sit over him with the heel of your lower hand on his stomach between his/her navel and ribs. Then make a rapid and strong upward push. Repeat this technique several times to remove the object/particle. If this technique is unsuccessful, bring the victim to the nearby heath facility.
- 6. If the person is drowned in water initiate immediately mouth to mouth artificial respiration by closing his/her nostrils by your fingers.
- 7. If the victim starts sweating, lay down him/her on his/her side and let the water come out.

# 9: Signs observed in obstructed air way and removal techniques:

# **Preventive Measures:**

- Keep away from children objects/particles such as beans/peas, beads, pieces of
  metal, coins, needles etc. Advise the children not to put into the mouth, nose or
  ear any foreign object or particle.
- Carefully follow up or observe children feeding on cooked corn, or other grains;
- Cover your ears with a piece of cloth to avoid dust during harvest or cutting grass;
- Advise black-smith to cover his/her mouth with a piece of cloth (mask);

# 5.3. <u>Sudden sickness/illness:</u>

Sudden illness is an urgent eventuality that doesn't give time and results in an adverse condition and requires rapid first-aid assistance. Some of the important sudden illnesses include:

Severe diarrhea, vomiting, severe abdominal cramps, obstruction of gut, appendicitis, high fever, poisoning and epilepsy.

# 5.3.1. Sudden severe diarrhea and vomiting:

If someone has over three frequent/subsequent loose stool in a day, it is called diarrhea. When an individual loses much fluid from his body due to diarrhea and vomiting, it is likely that he/she becomes unconscious and/or dies.

# Causes of diarrhea and/or vomiting:

- Food poisoning; and
- Intestinal parasites.

# **Emerging adverse consequences:**

- Depletion of body fluids;
- Unconsciousness;
- Failure of kidneys;
- Malnourishment and dehydration; and
- Death, if untreated in time.

## Signs of dehydration/excessive loss of body fluids:

- Body debilitation or loss of weight;
- Dryness of the mouth or tongue; sunken eye balls, and in children, eye drops dried up, and sunken fontanel;
- Dry and wrinkled skin, and when the skin on the stomach is stretched up with fingers and let down, it remains as wrinkled;
- Drinks fluid but does not urinate or reduced frequency of urinating or reduced amount of urine are observed and; and
- Restless and unconscious.

# First-aid measures:

1. First, ensure that there are no adverse signs that are usually precipitated by diarrhea and vomiting such as:-

- Sunken eye balls, wrinkled skin, restlessness; and unconsciousness; and
- In Children, continuous vomiting after taking fluids, shivering etc.
- 2. Prepare ORS in one litre of boiled cold water. If ORS is not available prepare homemade solution as follows. Mix eight spoon of sugar, with half a spoon salt in one litre (three normal beer bottles) of boiled cold water. If available, add half a glass of orange or banana juice into the solution;
- 3. The ORS or home-made solution is prepared for an adult. Therefore, he/she must take the fluid in small amount every five minutes. If the one litre solution is not finished in24 hours, prepare and give a new/fresh solution in the following day. In addition frequently provide the victim soup, rice-water, gruel /oatmeal (an adult can take daily up to three liters of fluid);
- 4. For children give ORS or a solution mix of eight spoon of sugar and half spoon of salt in one liter of boiled Coldwater or mix of 2xtimes rice flour or corn or wheat or smashed potatoes in one litre of water and boiled for 5-7 minutes. Feed children after it is properly cooled in the following manner.
  - Children 2 months to 2 years old must get 50-100 milliliters (1 or 2 cups), a maximum of 500 milliliters in one day (one spoon every 2 minutes);
  - Children 2-10 years old must get 100-200 milliliters or 2-4 cups of ORS or home-made solution after every diarrhea episode (the child can take up to one liter of the solution);
  - If the victim is over 10 years old, give the fluid until satisfied;
  - If the victim vomits the fluid, wait for about 10 minutes, and give one spoon of the solution every three minutes;
  - Frequently breast feed the victim and add in small amount other supplementary foods such as gruel /oat meals every 10 minutes; and
  - Continue the supplementary feeding for about two weeks after the diarrhea ceased.

# 5. Bring a victim with the following signs and symptoms to a nearby health facility:

• Always vomiting after taking fluids;

- If the adverse signs listed in No.1 are observed;
- If the diarrhea is stained /mixed with blood and the victim has high fever;
- If the vomiting is accompanied with sign such as tenderness and severe cramp of the stomach; and
- If the diarrhea continues for 3 days in children and 4 days in adults without improvement.

# 6. Measures to be taken after first-aid assistance:

- Explain the causes of diarrhea and vomiting;
- Observe on the presence of precipitating factors in the household, such as the
  maintenance of house cleanliness and personal hygiene, water source usage, the
  handling of food and feeding practices. Based on the findings educate the
  household or the community at large demonstrations.

# **Preventive Measures:**

- Educate and demonstrate to the household on the importance of washing hands with soap and water, or with ended or sand and water etc. before eating;
- Feed children supplementary food and milk with cup and spoon or breast-feed instead of bottle feeding;
- Keep children in clean areas and keep them always away from dirty area;
- Don't feed on unclean and unprotected food stuff;
- Use always latrines /toilets; and
- Maintain personal hygiene and clean environment.

# 5.3.2. Obstruction of gut:

The obstruction of the gut has several causes which include: a strangulation of an intestine, tumor in an intestine, constipation etc.

## **Signs and symptoms:-**

• Frequent vomiting;

- Severe abdominal cramps around the umbilicus or below;
   Increased tenderness and bulging of the stomach/belly; and
- The victim doesn't release air or go to toilet.

# **Emerging of adverse consequences:-**

- Reduction of body fluid due to frequent vomiting;
- Gangrene;
- The spread of infection from the gangrenous site to the wider stomach area, also resulting in septicemia and ends in death, if the victim doesn't get proper treatment in time.

## **First-aid measures:**

- 1. Find out if the victim is unable to defecate and also has additional signs and symptoms such as severe cramps, vomiting; tenderness and bulging of the stomach etc.;
- 2. Lay down the victim on one side;
- 3. Don't feed the victim by mouth;
- 4. Rapidly, bring the victim to a nearby health facility;
- 5. Educate the household or the community at large, the causes precipitating abdominal cramps and obstruction of a gut and the importance of immediate intervention /treatment; and
- 6. Strictly avoid harmful traditional practices that injure the victim such as massaging the abdomen, burning the skin, treating with harmful traditional medicines.

## 5.3.3. Appendicitis:

#### **Signs and symptoms:**

- The main sign is a steady pain that gets worse and worse. The pain often starts around the navel and later shifts to the lower right side;
- Frequent vomiting;
- Fever; and

- Because of the severe pain the victim begins to limp on the right leg when he/she walks or bend and walk
- 10: Sign of appendicitis the abdominal pain start in or around the navel and moves quickly to the lower right side of the abdomen.

The lower right side of the abdomen:

# **Emerging adverse consequences of appendicitis:**

- Reduction of body fluid due to frequent vomiting and high fever;
- The rupture of the appendix makes the infection spread to the remaining parts of abdomen;
- Creates septicemia; and
- If the victim is not treated he/she is likely to die.

# **First-aid Measures:**

- 1. Identify the signs and symptoms;
- 2. Let the victim lay down as convenient to him/her;
- 3. Don't give food or fluid by mouth;
- 4. Bring quickly the victim to a nearby health facility; and
- 5. Undertake the following precautionary measures: Identify and follow up the causes of the problem;
  - Educate the households on harmful traditional practices;
  - Educate and inform the house holds not to do or give: alcohol drinks, herbal medicines, burning fumigation etc. These harmful practices not only affect the health of the victim, but also delay the treatment of victim by professionals in nearby health facility.

## 5.3.4. High fever:

When an individual's body temperature is too hot than normal (above 37.5 °c) he/she has a fever. Fever itself is not an illness, but a sign of many different illnesses.

### Diseases that precipitate fevers:-

- Yellow fever:
- Typhus, relapsing fever etc;
- Typhoid;
- Meningitis;
- Influenza; and
- Malaria

### **Emerging adverse consequences:-**

- Mental confusion, unconsciousness;
- Reduction of body fluid;
- Convulsion; and
- High fever precipitates brain damage, paralysis, low blood pressure, dysfunction of kidneys, inability to hear, speak, and liver damage.

### First-aid Measures:-

- 1. Cover with or put light dress on the victim. If the victim is a child, cover it with light cloth and carry it in your arms;
- 2. In order to replace fluids lost by profuse sweating give frequently the victim, soup, gruel oatmeal, if the victim is a child, give frequently breastmilk;
- 3. Put cloth soaked in lukewarm water on his chest, face and abdomen to bring down the fever;
- 4. Ask or ensure perhaps the presence of convulsion, chillness, vomiting, diarrhea, meningitis etc;

- 5. If the area is malarious and the fever has lasted for at least two days, give the victim malaria treatment according to the guidelines on malaria case treatment (refer to the malaria prevention and control extension package).
- 6. If the victim has not improved three days after he/she got the malaria treatment and if he/she has signs and symptoms such as vomiting, diarrhea, meningitis, jaundiced eyes, convulsion, inability to breathe, rapid and intermittent breathing, dyspnea, no urination after drinks, mental confusion, unconscious etc. and if the locality is not malarious and the cause of the fever is unknown, bring the victim immediately to a nearby health facility for treatment. If the victim is a child and has not improved with first-aid treatment, take him rapidly to a nearby health facility;
- 7. Consult the professional staff in the health facility to find out whether the cause of the fever is or not an infectious disease;
- 8. Assess if similar illness is observed in the same community; follow if and register if the number of cases is rising. Then report and solicit support from the nearby health facility; and
- 9. Give health education on the causes and preventive measures of the illness.

#### **Preventive measures:**

- Malaria: clear and level all mosquito breeding places such as water collections, ditches etc:
- Undertake insecticide residual house spraying; and
- Advise households to use insecticide treated nets.

### **Typhus and relapsing fever:**

- Keep cloths clean, cut the hair and take a bath at least once a week;
- Boil cloths in hot water to destroy lice (refer to personal hygiene extension package); and
- Keep the house hold and its compound clean.

#### Typhoid:

- Use only latrine /toilet;
- Wash hands with soap and water after using toilet; and
- Feed on cooked food and protect the food stuff at home from being spoiled.

## Meningitis:-

- Avoid living in crowd;
- Residence /houses must have windows and the windows must be kept open;
- Let air come through windows and doors in prisons, schools and in public meeting places;
- If the disease exists in the community report to the nearby health facility and in the meantime under take a survey or assessment of the situation; and
- If the number of sick people increases, advise the community to stop gathering and in the meantime solicit and organize for vaccination programme.

## Flu and/or common cold

- Advise or educate people to cover their mouths when sneezing or coughing;
- Open windows and doors of residence houses to let in fresh air and properly circulate;
- Educate the households to stop harmful traditional practices such as cutting the uvula burning the skin and fumigation.

#### 5.3.5. Unconsciousness:

An individual is unconscious when he/she is unable to recognize his/her environment, not alert to noise and illness threatening conditions or unable to respond. Important causes of unconsciousness include:• Sudden injury by stick/club, metal and stone and car accident;

- Drunkenness;
- Poisoning;
- Illnesses that affect the brain such as high blood pressure, diabetes, meningitis, malaria and epilepsy;
- Heart attack;

- Decrease of body fluid due to profuse bleeding, severe diarrhea, frequent vomiting, massive body burn etc;
- Malnutrition, hypoglycemia etc;
- When any part in the respiratory system is blocked by foreign object/particle (hiccup, hang, chocked etc); and
- Heat stroke.

#### **Emerging adverse consequences:**

- Unable to recognize oneself and his/her environment; and
- Death.

#### First-aid measures:

- 1. Determine if the victim is able to respond by calling his/her name, by strongly moving his chest or by pinching him/her;
- 2. If the victim is unconscious untie or loosen tight dresses, necktie, rope/string etc.;
- 3. Move the victim to an open air place and also drive away people surrounding the victim;
- 4. Find out if the victim is breathing. If the victim is not breathing, then lay him/her down on his/her back and initiate artificial mouth to mouth breathing to blow air into his lungs;
- 5. Get two assistants and the three of you must kneel down, elevate and move the victim into a stretcher or a bed and let him sleep on his/her side. Clean frequently his/her mouth to get rid of vomitus or other dirt. Put pad between the victim and the bed/stretcher;
- 6. If the victim had diarrhea and vomiting that would likely deplete body fluid, let him/her sleep with legs raised and head down;
- 7. Don't feed or give fluid to the victim by mouth;
- 8. Quickly bring the victim to a nearby health facility; and

9. Consult the health facility and find out about the cause, and make sure that there is no similar illness in the community. In addition educate the communities about the illness and follow up the progress.

### **Prevention measures:**

- Accident prevention measures: put fence around ditches, holes etc., playing in traffic free areas, and respect traffic and road regulations;
- Educate people with high blood pressure, diabetes and epilepsy to regularly check with medical professional, to take their drugs regularly, and to receive useful advice from professionals;
- Advise motor cycle drivers to wear helmets for protection from accident;
- Educate the communities to receive in time treatment for illnesses such as meningitis, malaria etc.; and
- Replace body fluid reduced because of frequent vomiting and severe diarrhea.

## 5.3.6. Epilepsy:

Epilepsy is a chronic disease usually of unknown cause characterized by repeated convulsions;

### **Causes of Epilepsy:**

- Damage to the brain during accident;
- Mental illness; and
- The cause is unknown.

### **Signs and Symptoms:**

- Unconsciousness;
- Convulsion;
- Foaming at the mouth;
- Only the white part of the eye ball becomes visible; and

- When the convulsion subsides, the victim gradually becomes conscious. The victim is weak and dizzy for sometime.

### **Emerging adverse consequences**

- Depletion of oxygen in brain, dysfunction and retardation of the brain;
- The victim incurs head damage, wound, body burns etc. during the attack; and
- Perhaps death.

#### First-aid measures:

- 1. Move or push the victim from potentially dangerous site to prevent him/her from further accident or injury while in convulsion;
- 2. Remove nearby objects to avoid further accident;
- 3. Loosen tight dress, necktie, belt etc.;
- 4. Lay him/her on his/her side, to prevent the biting of his/her tongue, insert ball point or splint of wood wrapped by stripes of cloth in between his/her teeth;
- 5. Clean fluid or saliva coming out through the victim's mouth;
- 6. Keep him laid down on his/her side until jerking is over. When the jerking is over, bring him/her immediately to a nearby heath facility;
- 7. Understand the cause of the sudden illness, and if the victim was already on drugs, advise and educate him/her to take the medicine regularly. Also keep record of the victim and follow him/her and advise him/her not to come near fire, or to stay always where there are people; and
- 8. Advise the victim to refrain from crossing deep rivers or climb high trees.

### 5.3.7. Poisoning

A poison is any foreign substance (solid, liquid, or gas) that tends to impair health or cause death when introduced in to the body or on to the skin surface.

### **Modes of poisoning**

- By eating or drinking;
- In haling;
- Contact, and
- By injecting or biting

## **Emerging adverse consequences:**

- Blockage of the respiratory system and gasping;
- Laceration or damage of stomach and throat;
- Perhaps death, if the victim doesn't receive immediate treatment.

#### First – aid measures:

- 1. Identify the poison and the mode of poisoning;
- 2. If the poison is a burning substance such as acid, kerosene, bleaches/detergents etc. undertake the following interventions:
  - Give water or milk frequently to the victim;
  - Don't make him/her vomit; and
  - Quickly bring him/her to a nearby health facility
- 3. If the poison is not a burning substance such as medicine, insecticide etc. undertake the following measures:
  - Drink him/her luke water;
  - Initiate vomiting by putting into his/her mouth objects such as spoon or wood wrapped with stripes of cloths and touching his/her throat; and
  - Bring the victim to a nearby health facility; mean while continue to give him/her water or milk.
- 4. If the victim is unconscious undertake the next interventions:
  - Move the victim from the accident site;

- Clean with clean cloth the left over poison from the victim's mouth;
- If the victim's cloth is stained with the poison, undress the victim and wash and dry the victim with water soaked cloth;
- Don't give any substance by mouth;
- Lay down the victim on one side and bring him/her to a nearby health facility, and
- If left over poison or the container is available, bring it to the health facility;
- 5. Identify and prevent the causes of poisoning.

#### **Prevention of poisoning:**

- Keep away from children poisoning substances such as medicines, alcohol, chemicals, insecticide, soap, bleaches/detergents, and spoiled food stuff. If possible, keep such substances locked in a cupboard;
- Understand carefully how prescribed or ordered medicines must be properly taken. Don't mix topical medicines with those taken by mouth. Always, throw away spoiled medicines;
- Dispose or burn wastes that can potentially cause poisoning; and
- Maintain clean environment and personal hygiene and always properly store and prepare food stuff.

#### 5.3.8. Snake bite:

There are two types of snake species. These are poisonous or nonpoisonous. When a poisonous snake bites, the poison enters the body of the victim and gradually spreads into the body through the blood circulation or any other vehicle and eventually kills the victim. In addition, signs and symptoms such as pain, swelling, nausea and vomiting, jerking are evident. When a poisonous snake bites, it leaves behind two marks of fangs and small marks made by the teeth.

#### **First-aid measures:**

- 1. Advise the victim not to move, give him/her help as well as encouragement;
- 2. Tie a cloth around the limb, just above the bite;

- 3. Clean thoroughly the wound with soap and water;
- 4. Tie a cloth soaked in coldwater on the wound;
- 5. Keep and hold straight the bitten leg or arm, if possible put and tie it on straight wood or ply-wood; and
- 6. Quickly take the victim in stretcher or bed to a nearby health facility. If the tie is tight, loosen it every 20 minutes while traveling to health facility.

### **Preventive Measures:**

• Wear boots to prevent snake bite. Inspect and clear foreign objects from shoes and cloths before wearing. Don't travel in the night and walk carefully. Clear areas harboring snakes such as holes, ditches, grasses from your compound or yard.

## 5.4 Preparedness for transport and referral mechanism:

- 5.4.1. Under take an assessment on the following:
  - Study the available government, NGOs and private health facilities (health posts, health centers, hospitals) in the area. Also include their locations, distance, services provided and convenience for transport. List the facilities in relation to an order where a victim must go first for treatment;
- 5.4.2. Identify supplies and materials such as stretcher/bed (or materials to make the stretcher or bed); clean cloth etc., transport animals such as horse, mule, and donkey; cart and car available in the area. These materials and supplies must be ready or solicited by discussing with the kebele council, communities, NGOs and civil societies;
- 5.4.3. Inform every household about a referral mechanism; and
- 5.4.4. Educate the house holds about the transport methods and the care needed when victim is inflicted by accident or sudden illness.

### 5.5 Training for first – aid:

5.5.1. Select from the community volunteer exemplory persons that have good reputation by the community;

- 5.5.2. Train the selected volunteer potential first-aiders on the nature of accidents and sudden illnesses, their causes, adverse consequences, and their relationship with the environments;
- 5.5.3. Explain in details the essential activities to be urgently undertaken in life saving first-aid measures. Also make sure that the aiders know very well the measures that must be undertaken in any accident or sudden illness;
- 5.5.4. Conduct repeated practical training supported by available demonstration models or role play (simulating /fake patients from among themselves);
- 5.5.5. Train the aiders on the preventive measures of accidents and sudden illnesses using examples such as clean environment and proper practice of personal hygiene, handling and preparation of food; construction and proper utilization of toilets/latrine; measures to eliminate insects and cocroaches; identify and eliminate accident prone places etc. Also make field visits of such places for practical training demonstration and exchange of experiences;
- 5.5.6. Train the aiders before they leave for their assignment, how and whom to contact when they come across some problems, and also how they must refer victims/patients.; and
- 5.5.7. Each trainee first-aider must prepare a full list of first-aid supplies and materials when he/she reaches home and also he/she must show this to others in the community (Annex 3).

# **Expected outputs/Results:**

- 6.1 Increased awareness of each house hold on the important causes of accidents and sudden illnesses, signs and symptoms and adverse consequences;
- 6.2 The households would have obtained adequate knowledge on the first-aid measures given for different accidents and sudden illnesses;
- 6.3 A household would easily identify and apply the necessary first-aid measures for injured or ill individuals in an emergency situation because of there increased first-aid treatment awareness, knowledge and skill;

- 6.4 Increased number of referred victims to a nearby health facility by applying coordinated and properly managed referral mechanism; and
- 6.5 Reduced number of injured or sudden illness victims in the community.

  Also reduced number of disabilities and death as a result of accidents or sudden illnesses.

# 7. Communication Methods to Disseminate Health Messages Information

### 7.1 Communication places:

- Private residences (household level);
- Public places: markets, religious places, etc.;
- Schools;
- Social meetings, and  $\square$  Health facilities.

#### 7.2 Information communication methods:

- By going house to house (visits) and public meeting places;
- One to one dialogue;
- Group meetings (discussions);
- Posters, leaflets, films, mass media (available in the area): Radio, television etc.;
- Drama and short plays;
- Train vetran victims to train others; and
- Prepare and demonstrate first-aid materials and supplies and prevention measures.

### 7.3 Information / Messages for dissemination:

 Based on the baseline study findings, disseminate information on the causes of accidents and sudden illnesses prevailing in the area, signs and symptoms of injuries and illnesses, adverse consequences and their relationship with the environment;

- The prioritized first-aid measures applied for different types of accident injuries and illnesses;
- The importance of going to a nearby health facility for further assistance, the adverse consequences expected by not going to health facility, the need for serious care in transporting the victims and subsequent follow up;
- Preventive measures of each specific accident injury or sudden illness;
   and
- The adverse impact of harmful traditional practices on first-aid assistance and their adverse consequences on the victims.

# 8. **Monitoring and evaluation:**

# 8.1 Monitoring:

- Number of persons trained in first-aid measures by sex and age;
- Number of place where training was provided, teaching materials, and communication methods used;
- Number of meetings conducted in the community;
- Number of trained first-aiders at household and kebele levels by sex;
- Number of activities by type, conducted to prevent and eliminate causes of accidents and sudden illnesses; and
- Recording and handling of data on supplies and materials for the use of first-aid by type and number; recording transport facilities, such as pack animals, carts, vehicles etc.; keeping on the number and type of support provided by government, nongovernments organizations etc. in the area.

#### **Indicators:**

- Measures taken to prevent accidents:
- Prepare disposal sites of accident causes such as sharp objects, broken pieces of glasses;

- Fenced ditches and holes;
- Maintaining clean environment and clearing of weeds and grasses;
- Prepared play ground for children that is off the road and hilly/steep places;
- Proper installation of fire places such as stoves etc. to prevent fire accidents; and
- Maintaining good personal hygiene and filling and leveling of mosquito breading sites to prevent sudden illnesses.
  - Each house hold prepares and keeps first-aid assistance material and supplies;
  - Identify and prepare stretchers /beds, pack animals etc.;
  - Increased number of trained first-aiders:
  - Increased number of victim who received first-aid and referred to nearby health facilitys);
  - Reduction of number of disabilities and deaths used to happen due to lack of proper health service in the area; and
  - Reduction of adverse consequences of harmful traditional practices related to accidents and sudden illness.

### 8.2 Evaluation:

- Prepare detailed report on activities performed, achievements, problems and constraints etc. on the following manner:-
- Detailed performed activities;
- Resources used to perform the activities;
  - Number of manpower by sex, age and type of profession;
  - Amount of materials and supplies; and Amount of fund and source.
- Measures taken and methods used to implement the plan, and used communication methods;
- The report on the activities performed or the expected output must comprehensively cover strengths and weaknesses; encountered problems,

comments made or measures applied to solve the problems/constraints etc. (see annex 2). Submit the monthly, quarterly and annual activity reports to kebele council and woreda health office; 

Woreda Health Office Activities: Monitors the proper implementation of planned activities; Conducts supportive supervision once in three months jointly with the kebele council; and Compiles and submits activity reports every 3 months to the regional health bureau. Regional Health Bureau and Federal Ministry of Health activities: Prepare activity report and follow up formats for the implementation of the extension package; Regional health bureau compiles the reports of the Woreda health offices and submits an activity report every three months to the Federal Ministry of Health; Review meetings on the progress of the implementation of the extension package will be conducted twice a year at the regional level and once a year at the federal level; Report on the comments and recommendations raised and agreed in the review meetings will be prepared and distributed to the regional health bureaus. Similarity, reports from the regional health bureaus will be distributed to the woreda health offices. 1.1. No. of deaths in the household last year: male Female Reason Average income of the household \_\_\_\_\_ annual income 1.2. 1.3. Source of income of the household Information on accident: 2.1. Did accident occur in the past year in the household?

No

2

a) Yes

2.2. If	the	answer to 2.1 is "yes"
2.2.1.	Wł	nat was the cause of the accident?
	a)	Falling from high or steep place
	b)	Car accident
	c)	Strong hit /blow with club/stick, metal, or stone
	d)	Conflict/fight
	e)	Burn
	f)	Drown in water
	g)	Other
2.2.2.	Tyı	pe of injury a) fracture
		b) sprain or strain
		c) Bleeding
		d) Other
2.2.3.	Im	mediate or delayed adverse consequences after the accident:
		a) Paralysis
		b) Disability (leg or arm)
		c) Wound
		d) Blindness
		e) Other
		f) None
2.3. A	ccid	ent precipitating factors in the area:
		a) hole or ditch

b) Hilly or steep place

		c) Pieces of broken bottles	
		d) Pieces of metals	
		e) Violation of traffic and/or road regulation	
		f) Playing in the street or hill places	
		g) Other	
		h) None	
	2.4.	Were preventive measures undertaken?	
		A/ Yes b/ Noc/ Don't know	
		If "yes" mention some	_ If
	" N	No," why?	
3.	Inf	Formation on sudden illnesses:	
	3.1.	what are the common sudden illnesses in the area?	
		a) Feverb) Diarrhea and vomiting	
		c) Abdominal pain/cramps d) poisoning	
		e) Snake bite or scorpion	
		f) Other	
	3.2.	Was there a sick person last year in the house hold?	
		a) Yesb) No c) Don't know	
		If the answer to 3.2 is "yes"	
	3.2	2.1. What were the signs and symptoms?	
		a) fever and shivering	
		b) diarrhea and vomiting	

c)	abdominal pain/cramp
d)	Unconsciousness
e)	Other
3.2.2. W	nat were the causes in the area or household?
a)	Water collections and swampy /marshy area
b)	Presence of domestic wastes and open deification
c)	Eating with out washing hands
d)	Poor personal hygiene
e)	Other
f)	none
3.2.3. W	nat were the preventive measures undertaken?
	a) Clear and level water collections
	b) Clean the area
	c) taking frequent bath and washing cloths
	d) Washing hands after using toilet/latrine
	e) other
	f) none
If the answer is "n	none", why?
4. Information	on on education and training:
4.1. Are th	nere members of the household who took training on first-aid:
a)	YesNo
c)	Don't know

If there are trained members of the household total number

4.2.

	Male		Female	
4.3.	Mode of educ	cation		
1.0.				
	a)	Usage of p	osters	
	b)	Verbal, dia	logue	
		c)	Film	
4.4.	Other teachin	g materials	in the are	ea:
	a) manu	scripts		
	b) Poster	rs		
	c) Tape	recorder		
	d) Telev	ision and ra	dio	
	e) Other			
Inf	ormation on mo	ode of trave	l/transpor	t
5.1.	Available mo	de of transp	ort/trave	in the area:
	a) Mule /hor	·se	b)	Donkey
	c) cart		d)	car
	e) people ca	rry the sick	in stretcl	ner
	f) Other			
	•			
5.2.	Availability o	of a health f	acility in	the area:
	a) yes		b) no	
	c) Don't know			

How far is the health facility:

a) In kilometers

5.

5.3.

	b) Hours (if traveled on foot)
6.	Presence of traditional medicine practitioners:
	a) Bone seater/fixer b) Herbal medicine practitioner:
<b>c</b> ) քս	ting foreign substances/objects such as butter etc on wound:
d) ot	er:
Ánno	
	First-Aid Extension Package Activity Implementation Monthly Report Format
Stati	on /Kebele: Name Woreda
	Region
1.	Education and Training:
	No. of persons who received education on accidents and sudden
	illnesses male Female
	Total
	<ul> <li>Number of trained pers</li> </ul>
	Male Female Total
	Detailed list of communication methods used and resources utilized:
	• Financial expenditures on education and training:
	Amount: in Birr
	Sources of the fund
	• Support and contributions of government and non-governmental
	organizations, civil organizations and kebele council:
	• Achievement gained and problems encountered in the implementation of
	education and training activities:

2.	Information on people wh	o received first-aid:		
	Date of reporting: from	to		
	• Male F	emale	Total	
	• Type of accident or illne	ess:		
	• Cause of the injury or il	lness:		
	• Adverse consequences:			
	• Where the first-aiders tr	rained?		
	Yes • Achievements gained:	No		
	• Problems:			
3.	Number of injured or sick p	persons sent to health	facility during the month:	
	• Male	Female	Total	
	• Type of illness or accide	ent:		
	• First –aid:			
	No. received			
	No. not received	l		
4.	Measures undertaken to prevent accidents and sudden illnesses:			
5.	Achievements gained compared with planned activities:			
6.	Comments given to solve pr	roblems encountered	during implementation:	
	Date of submission of the re	eport		
	Name of the reporting person	n	Signatur	:e
Annex 3	3.			
<u>L</u>	ist of Supplies and Materials	s for first – aid		

- 1. Prepare a rectangular box 15x20x30 cm. made of wood or metal.
- 2. Washed rolled cotton cloth

3. Four washed rectangular small pieces of cotton cloth
4. Triangular piece of cloth (sling) to be used for arm fracture
5. Cotton roll or other clean cloth
6. New blade, scissors or sharp object
7. Alcohol, sablon or Givi for cleaning the wound
8. Tensoplast
9. ORS
10. Bandages
11. Gloves
12
13. First-aid kit
14. Plastic mask
15
16. Tongue- depressors
17. Battery
18. Soap
19. Thermometer
20. Terniquet
21. Rope (thick and long)
22. Matches
23. Lantern
24. Spoon
25. Dressing set
26. Blade
Bibliography:

- Health Education Department: Health Education Team for School and organizations Ministry of Health. First-Aid Training Manual. Addis Ababa, 1983 E.C.
- Ministry of Health. Manual on Maternal and Child Health Care.
   Ethiopia, 1995.