Federal Ministry of Health

Urban Health Extension Program
Integrated Refresher Training |IRT|

Module Six

Basic First Aid

Participant`s Manual

Feruary 2017

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Acknowledgement

The preparation and finalization of the integrated refresher training modules for Urban Health Extension Professionals (UHE-ps) has been made possible through a series of consultative meetings and workshops. During this process, the valuable contributions of our partners and program stakeholders have been crucial. This module is meant for UHE-ps in order to improve their attitude, skill and knowledge, which in turn help them provide quality health services to their clients. Therefore, the Federal Ministry of Health (FMOH) acknowledges all organizations for their contributions in the preparation, fine-tuning and finalization of this document.

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Abbreviation

ASK	attitude, skill and knowledge
BLS	basic life support
CAB	circulation, air way and breathing
CBT	competency based training
CPR	cardio-pulmonary resuscitation
ELC	experiential learning cycle
JHU	John Hopkins University
JSI	John Snow Incorporate
IRT	integrated refresher training
HEPHSD	Health Extension and Primary Health Service Directorate
MCI	mass causality incident
PPE	personal protective equipment
SEUHP	Strengthening Ethiopia`s Urban Health Program
START	simple triage and rapid treatment
TOT	training of trainers
WHO	World Health Organization
UHE-P	Urban Health Extension professional
USAID	United States Agency for International Development

Introduction

Urban Health Extension Program was introduced in Ethiopia in 2009, based on lessons learnt from successful implementation of the health extension program in rural areas. The program is designed with the aim of ensuring health equity by creating demand for essential health services through the provision of health information and basic health services at household level, school and youth centers and improving access to health services through referral to health facilities. Subsequent evaluations conducted on the program implementation have shown that, Urban HEP has contributed for increased health service awareness and utilization among urban dwellers. However, there was a wide disparity in implementation of the program and its achievements among cities. Low competency of Urban Health Extension Professionals (UHE-ps) and lack of integrated and continuous training has contributed for the discrepancy in implementation of the program.

Hence, a training need assessment was conducted to identify the competency gaps of UHE-ps when providing basic services. Therefore, considering the type of competencies that the UHE-ps need to have and identified competency gaps, six modules have been identified and developed based on Competency Based Training approach to provide in-service integrated refresher trainings. In addition, the modules were pre-tested and further refined. These modules are: -

Module 1: Social and Behavioral Change and Communication

It encompasses the health communication component to improve the knowledge and skill of UHE-ps to conduct effective health communication and improve UHE-ps attitudes affecting their performance in provision of health communication activities.

Module 2: Reproductive, Maternal, Neonatal, Child Health and Nutrition

The overall purpose of this module is to improve the attitude, knowledge and skills of UHE-ps to carry out quality family planning, maternal, neonatal, child health and nutrition services as well as enhance the UHE-ps understanding of attitudes affecting their performance in provision of family planning, maternal, neonatal, child health and nutrition services.

Module 3: Water, Hygiene and Sanitation

The overall purpose of this module is to improve the knowledge and skills of UHE-ps to carry out quality Water, Sanitation and Hygiene services as well as enhances the UHE-ps understanding of attitudes affecting their performance in provision of Water, Sanitation and Hygiene services.

Module 4: Major Communicable Diseases Prevention and Control

This module prepares Urban Health Extension professionals (UHE-ps) to provide TB/HIV and malaria-related services including reaching vulnerable populations with key TB/HIV prevention messages, HIV/STI counseling and testing (HCT), TB case detection, TB and HIV/AIDS care and support, referrals to services and malaria prevention and control in malarias areas.

Module 5: Non Communicable Diseases Prevention and Control and Mental Health

The Purpose of the module is to enable the participant s (UHEPs) explore and use their Attitude, Skill and knowledge to improve their performances in terms of providing quality health services related to major NCDs and mental health

Module 6: Basic First Aid

The purpose of this module is to improve the knowledge, attitude and skill of UHE-ps to provide quality first aid service and injury management. The module will also consist of transferring information regarding first aid and injury management to household and communities. This module also includes pre hospital cares.

Module Syllabus

Module description: This three-day training module contains theoretical and practical lessons which aimed at improving trainees` competencies in terms of understanding basics of accidents and first aid; preventing accidents/ injuries and managing accidental injuries and other medical emergencies.

Module goal: Enhance the capacity of the trainees (UHE-Ps) by equipping them with enabling [attitude, skill and knowledge (ASK)] on the basics and applications of first aid; and as a result , to help them improve their performances in terms of providing effective first aid services to their communities

Learning objectives: By the end of this training, the participants will be able to:

- Outline basic concept, principles and legal aspects of first aid including prevention of accidents
- show enhanced skills and knowledge to describe and practice Basic Life Support (BLS)
- Demonstrate the improved skills on how to manage injuries and other medical emergencies skills.

Training methods

- ☛ Brainstorming
- ☛ Group work/ discussion
- ☛ Small group work/ discussion
- ☛ Buzz group discussion
- ☛ Questions and answers
- ☛ Mini lecture
- ☛ Demonstration/ re demonstration
- ☛ Guided practice
- ☛ Simulation Video show
- ☛ Illustrations
- ☛ Case study
- ☛ Role play

Training materials and equipment

- Urban Health Extension Program (UHEP) IRT facilitator guide
- UHEP IRT participant manual

- UHEP implementation manual(revised)
- Pre- and post-tests
- Checklist for role-play
- Exercise sheets
- Flip chart and markers
- LCD projector
- Laptop
- First aid kit
- Video
- Mannequin
- Splints
- Personal protective equipment
- Stretcher
- Hardboard

Participant selection criteria: Those who work on the UHEP with position of UHE-ps and UHEP supervisors/coordinator

Module assessment: Assessment of the module (pre-test, post-test, and continuous practical assessments) should be based on attainment of the learning outcomes with reference to the performance criteria indicated in the course objectives.

Time allocated: 3 days

Optimum class size

- Participants: 25–30 trainees per class
- Trainer: two trainers per class and with Public Health background and who have taken TOT

Module outline

Time in minutes	Unit and sessions	Training methods
30	**pre-test and introduction to the module**	
300	**Unit 1: Introduction to First aid, Medico- legal aspects of First aid and injury prevention**	
120	Session 1. Session 1: Introduction to first aid	Mini lecture, brain storming, simulation video,
120	Session 2. Accidents/ injury prevention	Group discussion, mini lecture
60	Session 3. Medico- Legal aspects of first aid	Mini lecture, brain storming, Group work
300	Unit 2. Basic Life Support (BLS)	
60	Session 1. Essentials of BLS	Brain storming, Buzz group discussion Questions and answers, mini- lecture
240	Session 2. Cardio-Pulmonary Resuscitation (CPR)	Demo, mini- lecture, simulation video, guided practice
500	Unit 3: First aid for accidents and common medical emergencies	
90	Session 1: Triage in Mass Causality Incident (MCI)	Brain storming, mini- lecture, Case study, Role play
270	Session 2: First aid for injuries	Demo, mini- lecture, Brain storming, guided practice
140	Session 3: First aid management of common medical emergencies	Demo, mini- lecture, Brain storming, guided practice, Case study

Module Schedule

Day and Time			Activity
Day 1	Morning	08.30 am – 10.30 am	Registration, opening introduction to the course and pre-test
		10.30 am – 11.00 am	Tea break
		11.00 am – 12.30 pm	Unit 1: Introduction to First Aid, Medico-legal Aspects of First Aid and Injury Prevention Session 1: Introduction to First Aid
		12.30 pm – 01.30 pm	Lunch
	Afternoon	01.30 pm – 02.00 pm	Session 1: Introduction to First Aid continues
		02.00 pm – 04.00 pm	Session 2: Accidents/Injury Prevention
		04.00 pm – 04.15 pm	Tea break
		04.15 pm – 05.15 pm	Medico-legal aspects of first aid
		05.15 pm – 05.30 pm	Daily evaluation
Day 2	Morning	08.30 am – 09.00 am	Day 1 Recap
		09.00 am - 10.00 am	Unit 2: BLS Session 1: Essentials of BLS
		10.00 am – 10.30 am	Tea break
		10.30 am – 12.30 pm	Session 2: CPR
		12.30 pm- 01.30 pm	Lunch
	Afternoon	01.30 pm – 03.30 pm	Session 2: CPR continues
		03.30 pm – 03.45 pm	Tea break
		03.45 pm – 05.15 pm	Unit 3: First Aid for Accidents and Common Medical Emergencies Session 1: Triage in MCI
		05.15 pm – 05.30 pm	Daily evaluation
Day 3	Morning	08.00 am – 08.30 am	Day 2 Recap
		08.30 am – 10.00 am	Unit 3; Session 2: First aid for injuries
		10.00 am – 10.15 am	Tea break
		10.15 am – 12.30 pm	Session 2: First aid for injuries continues
		12.30 pm- 01.30 pm	Lunch
	Afternoon	01.30 pm – 02. 15 pm	Session 2: First aid for injuries continues
		02. 15 pm – 04.35 am	Session 3: First Aid management of common medical emergencies
		04.35 am – 04.50 am	Tea Break
		04.50 am – 05.45 am	Post test, module evaluation and conclusions

Module Units:

Unit 1: Introduction to First Aid, Medico-legal Aspects of First Aid and Injury Prevention

Session 1: Introduction to First Aid

Session 2: Accident/ Injury Prevention

Session 3: Medico-legal Aspects of First Aid

Unit 2: Basic Life Support

Session 1: Essentials of Basic Life Support

Session 2: Cardio-pulmonary Resuscitation

Unit 3: First Aid for Accidents and Common Medical Emergencies

Session 1: Triage in Mass Casualty Incident

Session 2: First Aid for injuries

Session 3: First Aid management of Common Medical Emergencies

Module Summary

References

Annex

Pre-test, (10 min)

Before starting the module, all participants are expected to take the pre-test. Therefore, you need to make sure that you have completed your pre- test.

Unit 1: Introduction to first aid, Medico-legal aspects of first aid and injury prevention

Unit description: This unit is designed to improve participants` competency in terms of describing the concepts, principles and medico-legal features of first aid and preventing accidents/injuries from happening

Unit objective: To equip the participant with the knowledge and skills needed to portray the basic principles and objectives of first aid including its legal issues and to plan the prevention of accident before it happens

Unit specific objectives: By the end of this training unit, participants will be able to:

- Be familiar with the essentials of first aid.
- Describe major causes of accidents and their prevention
- Identify medico-legal issues relevant to first aid provision.

Time :300 min

Session 1: Introduction to first aid

Session objective: By end of this training session, the participant will be able to describe the concept / definition, purpose and principle of first aid

Time: 120 min

Enabling Objectives: by end of these sub sessions, the participants will be able to:

- Discuss the concept/definition and purpose of first aid.
- Describe the basic principle of first aid.

Enabling objective 1: Discuss the concept/ definition and purpose of first aid.

Enabling objective 2: Describe the basic principle of first aid.

Training method: Brain storming (60 min), Mini lecture and simulated video (60 min)

Your facilitator will ask you the following questions .Thus, you need to respond to the questions. Next he will make a brief presentation on the principles of first aid and show you a video.

Q1.What is first aid?

Q2. What is the importance of first aid

Note

First aid is emergency care given to an injured or suddenly ill person at the scene using skilled application, accepted principles, and readily available materials.

A first aider is a person who takes this action while taking care to keep everyone involved safe and to cause no further harm while doing so.

Purposes of first aid are:

- to preserve life,
- to prevent further injury and
- to promote recovery.

Basic Principles of First Aid

A. How to prepare yourself to give first aid

- Be calm and confident.
- Inform and explain that you are a first aider.
- Be aware of risks.
- Build and maintain trust.
- Help/treat the most serious (life-threatening) conditions first.
- Always follow 3 C.

B. The three "C s" (check, call, and care)

1. Check

a) Is the scene safe? Check for collapsible building, inhalation poisoning, violence, etc.

b) Is it safe for you to approach? Don't forget to wear personal protective equipment, switch off any electric source, consider medico-legal issues and other situations.

c) Is the victim safe from related injuries? If a patient is unresponsive and the scene is unsafe, it is your responsibility to evacuate them immediately.

d) Are bystanders safe? Sometimes bystanders may be totally unaware of dangerous situations. You must inform and help them accordingly.

- If you get hurt trying to help others, you will make matters worse. (The first thing in first aid is "safe to self.")

2. Call

- **Shout for help** (bystanders, family member, police).
- **Call ambulance** (call to 939, 907 and other emergency call numbers).

3. Care

- **Care for life-threatening** conditions; Provide immediate, sufficient, appropriate care based on your ABCD assessment until the ambulance arrive and dispose a patient to health facilities.
- A first aider shall follow the following steps while helping victims or addressing emergency conditions.
    - **Airway** - is the victim's airway open?
    - **Breathing** - look, listen, and feel for breathing.
    - **Circulation** - check for signs of circulation and severe bleeding.
    - **Consciousness** – is the victim responsive?
    - **Deformity-**are there any fractures, dislocations, head, chest, abdominal injuries.

Take-home Assignment: Introduction to First aid

Instruction: Use the information from the presentations, notes, discussions and reference materials to answer the following questions. Finally, check your answers with those given in an Answer- sheet . Obtain the Answer-sheet from your facilitator.

Questions

- **What is first aid?**
- **Why do you need to provide first aid to the victims**
- **What A-S-K elements the first aider needs to know before providing the required first aid?**
- **What are the basic principle of first aid?**

Session 2: Accident/Injury Prevention

Session objective: By end of this training session, the participant will be able to describe the major causes of different accidents and how to prevent them at individual and community levels

Time 120 min

Enabling Objectives: by end of these sub sessions, the participants will be able to:

- List the common causes of accidents at home and working places
- Describe different personal protective equipments.

- Explain how to raise community`s awareness on the prevention of accidents

Enabling Objective 1: List the common causes of accidents at the home and working places

Training method: Group work (40 min).

You will be asked to list the common causes of accidents and how do you prevent them . therefore, you need to work on this in group

Note

Box 1

Common causes of accidents

Do you know that 80 of every100 accidents are the fault of a person involved in the incident? **Unsafe acts** cause four times as many accidents as **un safe condition.** The following are some common causes of accidents.

- ***Taking short cuts:*** Every day we make decisions that we hope will make a job go faster and more efficient. But when we try to save time, we must make sure that we aren't jeopardizing our health or the health of other employees. Short cuts that reduce the safety aren`t short cats but they do increase chance of injury

- ***Beingover-confident:*** Confidenceisagoodthing; overconfidence is too muchofone. Also,idea that something "can'thappentome,"is anattitudethatleadsto reckless behavior such as not following procedures andusing the wrongtools. Such behavior cancauseinjurytoyou ortoafellowworker.

- ***Ignoringsafety procedures:*** Ignoringsafety procedures, intentionally or unintentionallycan endangeryouandothers. Institutionshavesafety policiesinplaceandwearesupposedto observethem. **Casual attitudes about safety can result ina "casualty."**

- ***Startingajob withincompleteinstructions:*** Weknowtodoajobsafelyandcorrectly the first time, we need a complete set of instructions. We'veallseensituationswherean employeemadeamessofataskorassignment becauses/hedidn'thavesufficientor clear instructions. Whenonajob,don'teverbeafraidtoaskquestionsorget explanationsforwhatisuncleartoyou. Howmany timeshaveyouheard,"But I'mafraidtoask"?It'snotdumbtoask; it's dumbnotto.

- ***Poorhousekeeping:*** Ifanoffice or homeis unorganizedordirty,it means we are neglecting our safety and risking accidents.

- ***Mentaldistractionsfromwork:*** Bringingoutside problemstoworkcankeepyoufromfocusingon yourjob. This canbehazardous.

- ***Failuretopre-planyourwork:*** Intheofficeorareasofwork,itisimportanttopre-planyour work. First of all, it will reduce unforeseen problems bygivingyou time to solve them. Second,itwillmakethe jobfasterandmoreefficientbecauseyou plannedtheprocessbefore you started.

Accident prevention modalities

Box 2A. Work-related accidents

Everyone can avoid being involved in accidents at work by following these ten simple tips.

- **Always be alert on the job**: Being awake and alert all the time while at work will prevent accidents and will enhance worker performance and may even earn her/him a promotion or salary increase. Most people who become involved with accidents at work are those who are sleepy.
- **Wear the required uniform:** A person who works in a factory has a greater chance of being involved in an accident at work so should be vigilant about the wearing proper uniforms and other protective garments when working.If your work requires you to wear a hardhat helmet, wear it.
- **Listen to and participate in emergency drills:** Some work places conduct emergency drills to make sure their employees know how to avoid accidents in case of emergencies. Some employees take this as another boring drill and don't pay attention. When a real emergency happens they are more likely to get left behind in grave danger.
- **Always ask your supervisor about the risks of doing a certain task**: Many workers are exposed to danger just by doing their job. A worker should always check with her/his supervisor if s/he is unsure about atask or feels that doing that task will expose her/him to danger.
- **Never take a job for which you have not been trained:** It is foolish for someone to take a high-risk job that s/he has not been trained for. Imagine an untrained person doing the job of a fire fighter. Such a person will expose him/herself and others to great danger.
- **Always be on the lookout for potential accidents and report to management**: Some workers are aware of a disaster waiting to happen but do nothing about it and continue to work. If you see a potential cause of accident, like a ceiling or stairway that is about to collapse, report it to the proper authority immediately. Do *not* wait for the accident to happen; it might happen to you!
- **Company owners should post rules that should be observed by their employees** to avoid accidents at work. These posters should highly visible to and understood by workers; illustrations should be included so that people who cannot read know what they mean.
- **Forman emergency team:** This group of workers will be responsible for monitoring potential hazards.
- **Never risk the health and safety of the employees:** Profit may be the motivation of a company but not through exposing workers to hazard. Company owners should prioritize the health and safety of their workers no matter what.
- There are many precautionary measures that both employers and employees can take to prevent accidents at work. However, a worker who follows the safety measures and procedures will most likely be able to avoid accidents.

Box 2 B: Road traffic injuries

- **Distracted driving:** Distracted driving becomes worse every year and has been the leading cause of car accidents for the past decade. Always pay attention to the road while you are driving. That means you **must not use your cell phone** to call or text, and should not eat, read, groom, or talk while behind the wheel. And of course, driving is a **horrible time** to **take a selfie**.
- **Speeding:** Although it can be tempting to push the speed limit when you are in traffic or running late, speeding is the second-most common cause of accidents. Resist the urge and stay within the legal limits.
- **Drunk driving:** Drunk driving is one of the biggest causes of accidents in the U.S. Estimates hover around 300,000 incidents of drunk driving in the U.S. every day, despite the fact that drunk driving accidents are some of the most deadly. If you have had anything to drink, take a taxi or give your keys to a sober friend. It is not worth the risk.
- **Reckless driving:** Changing lanes too quickly, speeding, and being aggressive on the roads can lead to horrible accidents. It is important to take your time and remain calm while driving.
- **Rain:** While you can't always avoid driving in the rain, slick, dangerous road conditions caused by heavy rains should be avoided whenever possible. If visibility is too low to see or the roads are particularly slick, should pull over and wait until the storm passes.
- **Running red lights:** It may seem obvious, but it bears repeating. Red always means stop. Even if it seems like no other cars are coming, you can cause a serious accident by running a red light and you will be breaking the law.
- **Running stop signs:** Just like red lights, stop signs are not optional. Always come to a full stop and wait your turn before passing through a stop sign.
- **Night driving:** Lack of visibility at night makes hazards more difficult. Make sure that you are hyper-alert on the road at night, and use your highbeams when on an abandoned road without streetlights.
- **Wrong-way driving:** Everyone makes mistakes, but lapses in judgment while driving a car can cause horrible accidents. Be aware of signs warning of one-way streets or other important directives, especially in areas unfamiliar to you.
- **Improper turns:** When people don't get in the proper lane to make a turn, use signals properly, or follow traffic signals, accidents happen. Always look for traffic signs and obey the proper right-of-way when you make a turn.
- **Road rage:** When you are angry, your decision-making skills suffer and you may become more aggressive. Stay calm and resist temptation to escalate road incidents.
- **Drugs:** While alcohol is the culprit we usually associate with driving under the influence, drugs, including marijuana, prescription pills, and illegal drugs also cause terrible accidents. **Never** drive if you are under the influence of any drug, prescribed or not.
- **Drowsy driving:** Being tired can diminish your reflexes as badly as a few glasses of alcohol. Don't drive when you are sleepy, and make sure you always get a good night's sleep before getting on the road.
- **Fog:** If you can't see the road or other drivers due to heavy fog, pull over and wait until visibility is better.
- **Curvy roads:** Very curvy roadways can be difficult to maneuver. Take the curves slowly and carefully. It is especially important to respect any posted adjusted speed limits.

- **Animal crossings:** Anyone who has ever heard someone talk about hitting a cow knows that this is a big danger. Take extra caution when you see an animal crossing sign and always use your high beams when traveling in rural, woody areas where wild animals are common.
- **Texting while driving:** Now that cell phones are everywhere, texting while driving is becoming increasingly common. This is very dangerous. In the time it takes to glance at a text, you can get in a horrible crash. **Never text while driving**.
- **Construction sites:** Sometimes the way a construction zone is set up can be confusing. Follow the cones as closely as possible and expect that other drivers may be confused. It is especially important to drive slowly in these areas.

Box 2 C: Home-related safety

- Wipe up spilled water, grease, and other liquids from your kitchen, bathroom, and garage floors as soon as possible to avoid slips.
- Don't put hot tea, coffee, or other hot liquids on a tablecloth that hangs over the side of the table. Someone could trip on the cloth and spill the scalding liquid. Elderly people and children are often at risk of burns from scalding water.
- If an elderly person or someone who is unsteady on his or her feet lives in your home, install grab bars in bathtubs or showers.
- If stair carpeting becomes loose, fix immediately. It's very easy to slip on loose carpeting.
- Do not place throw rugs at the top or bottom of a flight of stairs.
- If you intend to paint basement stairs, add a little sand to the paint for a better grip or install rubber or abrasive treads.
- Carbon monoxide is found in fumes produced any time you burn fuel in cars or trucks, small engines, stoves, lanterns, grills, fireplaces, gas ranges, or furnaces. CO can build up indoors and poison people and animals who breathe it. Make sure that you always ventilate the house during and after use of such materials.
- Take extra caution when you use fire and put it out when done. Keep a fire extinguisher nearby and know how to use it

Enabling objective 2: Describe different personal protective equipments.

Training methods: simulation video (30 min), brain storming (10 min) and mini-lecture (10 min),.

Here you will be asked to watch a video and brainstorm on PPEs .Thus you need to respond accordingly

Box 3. Personal protective equipment (PPE) and use

1. Eyes

Hazards: Chemical or metal splash, dust, projectiles, gas and vapor, radiation.

Options: Safety spectacles, goggles, face screens, face shields, visors

Note

Make sure the eye protection chosen has the right combination of impact/dust/splash/molten metal protection for the task and that it fits the user properly.

2. Head and neck

Hazards: Impact from falling or flying objects, risk of head bumping, hair getting tangled in machinery, chemical drips or splash, climate, or temperature.

Options: Industrial safety helmets, bump caps, hairnets, and firefighters' helmets.

Note

- Some safety helmets incorporate or can be fitted with specially-designed eye or hearing protection
- Don't forget neck protection
- Replace head protection if it is damaged

3. Ears

Hazards: The combination of sound level and duration of exposure, very high-level sounds are a hazard even with short duration.

Options: Earplugs, earmuffs, semi-insert/canal caps.

Note

- Provide the right hearing protectors for the type of work, and make sure workers know how to fit them.
- Choose protectors that reduce noise to an acceptable level, while allowing for safety and communication.

4. Hands and arms

Hazards: Abrasion, temperature extremes, cuts and punctures, impact, chemicals, electric shock, radiation, vibration, biological agents, and prolonged immersion in water.

Options: Gloves, gloves with a cuff, gauntlets, sleeves that cover part or all of the arm

Note

- Avoid gloves when operating machines such as bench drills where the gloves might get caught
- Some materials are quickly penetrated by chemicals; take care in selection
- Barrier creams are unreliable and are no substitute for proper PPE
- Wearing gloves for long periods can make the skin hot and sweaty, leading to skin problems. Using separate cotton inner gloves can help prevent this

5. Feet and legs

Hazards: Wet, hot and cold conditions, electrostatic build-up, slipping, cuts and punctures, falling objects, heavy loads, metal and chemical splash, vehicles.

Options: Safety boots and shoes with protective toecaps and penetration-resistant, mid-sole wellington boots, and specific footwear, e.g., foundry and chainsaw boots.

Note

- Footwear can have a variety of sole patterns and materials to help prevent slips in different conditions, including oil. There are chemical-resistant soles, as well as anti-static, electrically conductive, and thermally insulating.
- Appropriate footwear should be selected for the risks identified.

6. Lungs

Hazards: Oxygen-deficient atmospheres, dusts, gases, and vapors.

Options: respiratory protective equipment

- Some respirators rely on filtering contaminants from workplace air. These include simple filtering face pieces and respirators and power-assisted respirators.
- Make sure it fits properly, e.g., for tight-fitting respirators (filtering face pieces, half and full masks).

- There are types of breathing apparatus that give an independent supply of breathable air, e.g. fresh-air hose, compressed airline, and self-contained breathing apparatus.

Note:

- The correct type of respiratory filter must be used as each is effective for a limited range of substances.
- Filters have a limited life. Where there is a shortage of oxygen or any danger of losing consciousness due to exposure to high levels of harmful fumes, only use breathing apparatus. Never use a filtering cartridge.
- You will need to use breathing apparatus in a confined space or if there is a chance of an oxygen deficiency in the work area.

7. Whole body

Hazards: Heat, chemical or metal splash, spray from pressure leaks or spray guns, contaminated dust, impact or penetration, excessive wear or entanglement of own clothing.

Options: Conventional or disposable overalls, boiler suits, aprons, chemical suits.

Note

- The choice of materials includes flame-retardant, anti-static, chain mail, chemically impermeable, and high-visibility
- Don't forget other protection, like safety harnesses or life jackets

Enabling Objective 3: Explain how to raise community`s awareness on the prevention of accidents

Training methods: group work (30 min)

Your facilitator will ask you to form four smaller groups and work on the following questions

How do you aware the community on the prevention of accidents and emergencies? Why do you do this?

where are the right places to organize such events?

Session 3: Medico-legal aspects of first aid

Session objective: By end of this training session, the participant will be able to explain the responsibility and accountability of the first aider as well as the legal issues connected to the first aid practices

Time 60 min

Enabling Objectives: by end of these sub sessions, the participants will be able to:

- Explain the responsibility and accountability of the first aiders.
- Describe the medico-legal issues of the country that are relevant to first aid practice

Enabling Objective 1: Explain the responsibility and accountability of the first aiders.

Training method: Brainstorm (20 min)**;** mini-lecture (5 min)

Your facilitator will ask you the following questions .Thus, you need to respond to the questions. Next he will make a brief presentation on the responsibility and accountability of the first aiders.

Question: What are the responsibilities and accountabilities of the first-aider?

Note

Box 4: Responsibilities of the first aider

- Give direct or indirect help for the victim. Direct means applying first aid knowledge's and skills; *indirect* means asking for someone's help.
- Don't practice skills that you have not been trained to provide.
- Support the victims until they reach health facilities or qualified personnel arrive.
- Ask victims who are conscious, mentally fit, and old enough to understand for their permission before helping.
- Avoid delay and further injuries.
- Report legal issues to authorities.

Enabling Objective 2: Describe the medico-legal issues of the country that are relevant to first aid practices.

Training method: Group work (25 min), mini-lecture (10 min)

You will be asked to discuss on first aid- related medico- legal issues. you need to divide your selves in to two groups and work on it. Followed, your facilitator will make a brief presentation on Medico-legal Issues of First Aid

Note

Box 5: Medico-legal Issues of First Aid

Ethiopia is one of the countries that accepts and practices the "Good Samaritan law."

"Good Samaritan law" offers legal protection to people who give reasonable assistance to those who are, or who they believe to be, injured, ill, in peril, or otherwise incapacitated. The protection is intended to reduce bystanders' hesitation to assist for fear of being sued or prosecuted for unintentional injury or wrongful death.

An individual who aids someone in need of emergency medical care shall not be held liable for negligence for what s/he does or fails to do so unless there is gross negligence, indicating wanton and willful misconduct.

- First aid is not forced on conscious adult who refused such help.
- A casualty is not abandoned.
- A common sense approach is used in giving first aid.

Give the help you would hope to receive if you are in similar circumstance.

Box 6: Ethiopian law on legal issues of first aid

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Unit Two: Basic Life Support

Unit description: This unit is designed to improve participants` knowledge and skills in terms of explaining and practicing life saving measures in the event of an accident

Unit objectives: To equip the participant with the knowledge and skills needed to provide BLS for the patients in emergency situations

Unit specific objectives: By the end of this training unit, participants will be able to:

- Be familiar with and explain the essentials of BLS.
- Demonstrate the provision of BLS, including CPR.

Time :300 min

Session 1: Essentials of BLS

Session objective: By end of this training session, the participant will be able to understand the concept and principles of BLS and the steps to be followed while doing initial assessment in emergency situations

Time 60 min

Enabling Objectives: by end of these sub sessions, the participants will be able to

- Explain BLS
- list the key steps of initial assessment in an emergency.

Enabling objective 1: Explain BLS

Enabling objective 2: list the key steps of initial assessment in an emergency

Training methods: Brainstorming , mini-lecture , buzz group discussion, Q&A (60 min)

In order to do this activities, You will be asked to brain storm on BLS and list the key steps of initial assessment in an emergency. Then, your facilitator will make a brief presentation on how to carry out initial assessment in an emergency.

Note:

- **BLS** is an initial assessment and management of sick or injured patients. It can be provided by trained non-medical or medical workers until definitive medical treatment can be accessed.
- **BLS** can be done anywhere, anytime, by anyone who is trained to do so. Most of the time it doesn't need special equipment.

- **CPR** is a skill that includes artificial respiration to provide oxygen to the lungs and artificial circulation to maintain blood flow through the body to give a person a chance for survival.

- Key initial assessment of an emergency patient involves **C**irculation, **A**irways, and **B**reathing (**CAB**).

    - **C=Circulation:** Check for central pulse on the carotid and femoral. If central pulse is available, check for peripheral pulse on the arms. Carotid artery palpation has been found inaccurate in both untrained and health care workers so absence of spontaneous breathing is also considered a sign of cardiac arrest.

    - **A=Airway:** Unconscious patients may die due to airway obstruction. Simply opening the airways using manual maneuvers and proper positioning can save a life.

    - **B=Breathing:** Following an opening of the airway, check if the patient is breathing adequately. Look and listen for chest movement. *A patient can survive only 4-6 min without breathing*

- To save life during cardiac arrest (patient with no pulse, unresponsive, and not breathing),being **CPR** immediately (Unit 2, session 2).

Session 2: Cardio Pulmonary Resuscitation

Session objective: By end of this training session, the participant will be able to demonstrate the provision of CPR for a patient who stops breathing

Time 240 min

Enabling Objectives: by end of these sub sessions, the participants will be able to

- Recognize the steps of effective CPR.
- Demonstrate how to perform effective CPR

Enabling objective 1: Recognize the steps of effective CPR.

Training method: Video show (60 min) and brain storming (10 min).

Here you are required to watch the video and brain storm on what you have seen. you need to follow your facilitator`s instruction

Enabling objective 2: Demonstrate how to perform effective CPR

Training method: Demonstration and guided practice (170 min)

Here your facilitator will demonstrate the procedure of CPR and ask you to re-demonstrate. you need to do it in group.

Note

Cardio pulmonary resuscitation

- **Definition:** CPR is a skill that includes artificial respiration to provide oxygen to the lungs and artificial

circulation to maintain blood flow through the body to give a person a chance for survival.

- **How to perform CPR:** The resuscitator needs to follow the following steps to do effective CPR (see Fig 1 and 2, below)

  Circulation

  - Press the heels of the hands on the center of the chest.
  - Depress and release the chest rhythmically (give time to chest recoil).
  - The pressure and release phases should take the same time.
  - Give compressions at a rate of 100 per min.
  - Give 30 compressions to 2 breaths whether with **one** or **two** rescuers.
  - Count compressions out loud.
  - Depress the chest 3.8 – 5cm depth
  - After every 5 cycle/2min; check for spontaneous breathing and circulation for 5 seconds
  - Don't stop until you've completed 5 cycles.

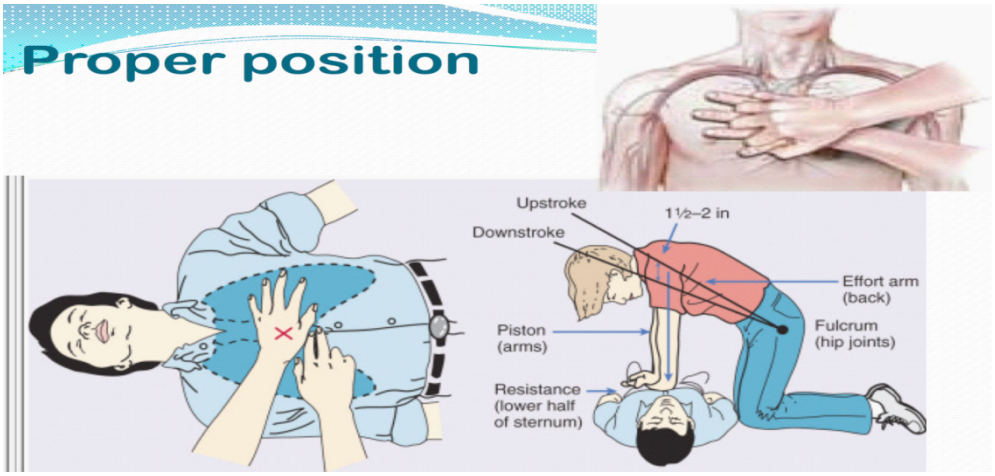


Fig 1: How to do CPR

Airway and breathing : Steps to give artificial breathing:

- Position the person(tilt head and lift the chin)
- Remove any obvious obstructions over the face or constriction around the neck. Open the airway and remove any debris in the mouth or the throat.
- Put protective material like gauze, mask on the mouth of the person.
- Open your mouth wide, take a deep breath, pinch the nostrils together with your fingers and seal your

lips around the mouth. (For mouth-to-nose, close the victim's mouth with your thumb and seal your lips around his/her nose. Close the nasal opening when providing mouth-to-mouth).

- Looking along the chest, blow into the casualty's lungs until you see the chest rise to maximum expansion.

N. B. If the person's chest fails to rise, first assume the airway isn't fully open. Adjust the position of the head and jaw and try again. If there is still no ventilation, the airway may be blocked and you will have to check foreign body in the mouth. If not, start CPR immediately.

- Remove your mouth well away from the person's to let him/her breathe out. Watch the chest fall and take in fresh air. Repeat inflation.

- Check the person's pulse to make sure the heart is beating.

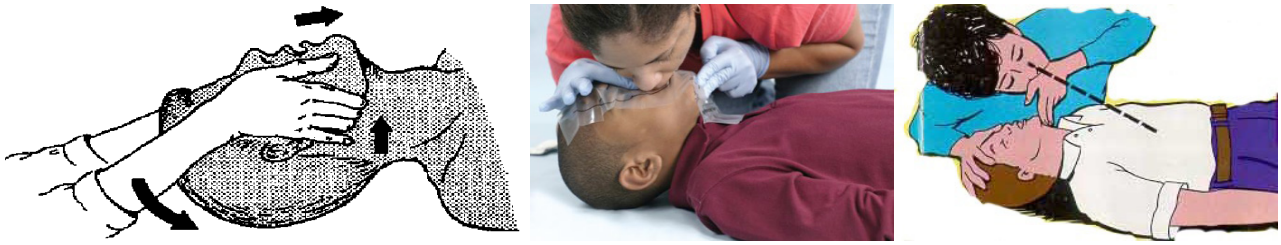


Fig 2: How to give artificial breathing

Unit Three: First Aid for Accidents and Common Medical Emergencies

Unit description: This unit is designed to improve participants` competencies that are needed for managing injuries and other major causes of medical emergencies

Unit objectives: To equip the participant with the basic and enabling knowledge and skills to exhibit their understanding and ability to manage common accidental-injuries and other medical emergencies.

Unit specific objectives: By the end of this training unit, participants will be able to :

- show their skills how to carry out triage in mass causality situations
- demonstrate their ability on how to manage common injuries
- Illustrate the skill needed to handle major medical emergencies.

Time :500 min

Session 1: Triage in MCI

Session objective: By end of this training session, the participant will be able to illustrate the required understanding and techniques to perform triage in a MCI.

Time 90 min

Enabling Objectives: by end of these sub sessions, the participants will be able to

- Discuss the concept of triage
- practice triaging.

Enabling objective 1: Discuss the concept of triage

Enabling objective 2: practice triaging.

Training method: Brainstorming (15 min) and mini-lecture (15 minutes), case studies (20 min), and role playing (40 min).

You will asked to discuss in plenary about the MCI based on the following question and practice how to do triage for those who require immediate care . Refer to the case study given below (case study 1). Next, your facilitator will assist you to do a role-play on the Primary Survey

Question 1: From your experience, what do you understand about a mass causality incident? and how do you manage it if occurred?

Note:

Box 7: Concept of a Triage

Triage is a system of making a rapid assessment of each patient and assigning a priority rating on the basis of clinical need and urgency. The goal of triage is to do the greatest good for the greatest number. People who are in greatest need should therefore be treated first. It is not helpful to spend huge amounts of time and resources on individuals whose needs exceed the services available, especially if it is at the expense of other patients who could be helped with the skills and resources available locally.

Triage is essentially based on urgency (the victim's status), and, secondly, on likelihood of survival. Triage is conducted using the internationally accepted color code system:

- Green: Victims whose injuries are so minor that they can be managed by self-help or volunteer assistance.
- Yellow: Victims whose injuries require medical care but can be somewhat delayed.
- Red: Victims whose injuries demand urgent medical attention, after resuscitation, or, as soon as practicable. Requires immediate stabilization care.
- Black: Victims dead.

Box 8: Protection during mass casualty incidents

- Evaluate every situation before acting
- Perform quick incident scene survey
- Determine scene hazards
- Use appropriate PPE
- Remain in appropriate zone

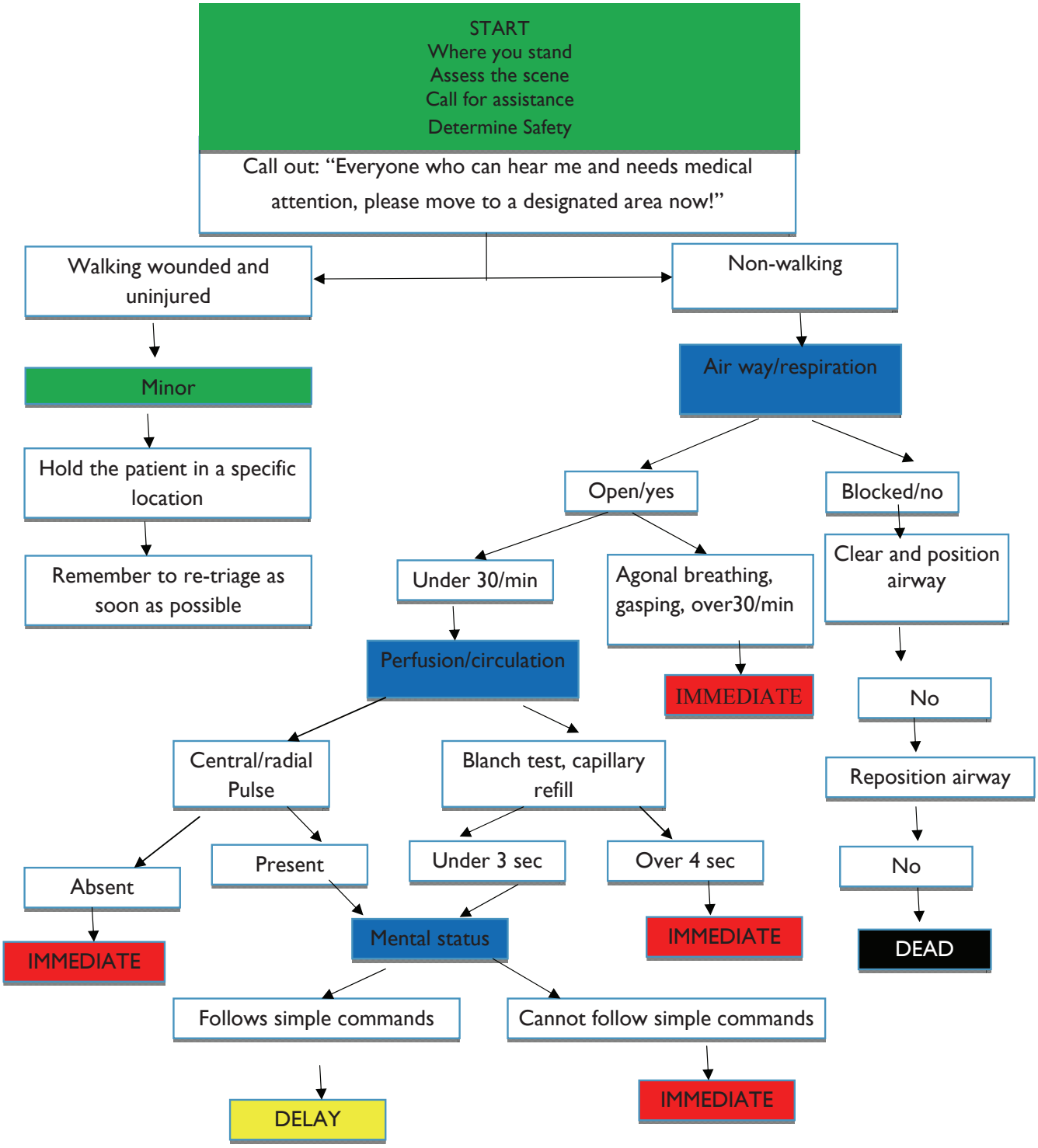
Case study 1: Cases for practicing the START algorithm

Directions: you arrive at a scene of a road traffic accident and see victims trapped inside a minibus that collided into the side of a truck. A smaller car with moderate damage is stalled to the side of the intersection. You started to triage. You see two injured victims standing in the side of the road near the small car; two adults inside the truck and two adults, a child, and an infant inside the minivan. **Select the triage category and give your reason for selecting it for each victim in the table below.**

Victim	Type of injury	Pertinent Info.	Triage Category	Reason
1	Truck driver: neck & shoulder pain, elderly, history of cardiac illness	**R**espirations: under 30 **P**ulse (radial): present **M**ental status: awake &oriented	Immediate Delayed Minor Dead/dying	
2	Truck passenger: Upset but no apparent complaints, elderly man	**R**espirations: under 30 **P**ulse (radial): present **M**ental status: awake &oriented	Immediate Delayed Minor Dead/dying	
3	Minibus driver: blood from ears, facial fracture, skull laceration, unconscious	**R**espirations: under 30 **P**ulse (radial): none **M**ental status: unconscious	Immediate Delayed Minor Dead/dying	
4	Minibus passenger: major skull fracture with eye socket hanging out.	**R**espirations: none after head tilt **P**ulse (radial): none **M**ental status: unconscious	Immediate Delayed Minor Dead/dying	
5	Minibus passenger: child in back seat with seat belt on, answers questions but whimpers	**R**espirations: under 30 **P**ulse (radial): present **M**ental status: awake &oriented	Immediate Delayed Minor Dead/dying	
6	Minibus passenger: Infant properly restrained in car seat, crying & whimpering	**R**espirations: under 30 **P**ulse (radial): present **M**ental status: awake &oriented	Immediate Delayed Minor Dead/dying	
7	Adult #1: curbside, shook up, grabbing neck	**R**espirations: under 30 **P**ulse (radial): present **M**ental status: awake &oriented	Immediate Delayed Minor Dead/dying	
8	Adult # 2: curbside. No apparent complaints	**R**espirations: under 30 **P**ulse (radial): present **M**ental status: awake &oriented	Immediate Delayed Minor Dead/dying	

Source: Ministry of Health and Population and WHO. 2006. *A Mass Casualty Management Trainers' Manual*. http://apps.searo.who.int/PDS_DOCS/B0149.pdf

Algorism 1: The START (Simple Triage and Rapid Treatment) Algorithm



Case scenario for role play

There had been a car accident which resulted in several injuries to the occupants. The profiles of 5 cases are:

- A Driver of the vehicle: a 32-year-old man, who is unconscious and has shallow respirations.
- An occupant #1: a 29- year- old pregnant woman of 28 gestation week with fractured wrist.
- An occupant #2: a 60-year-old man gasping for air.
- An occupant #3: an 8-year-old boy with a cut on his hand and crying loudly.

- An occupant #4: a 50-year-old man with pale, cold skin and weak pulse.

Hint: What should be done first as part of triaging and primary survey?

Note

Box 9: The Primary Survey

The primary survey of the victim may include the following (refer to Unit 2, Sessions 1 and 2);

Airway, **B**reathing, **C**irculation, **D**isability or neurologic damage and **E**xpose the patient

Purpose is to identify and treat life-threatening injuries such as; airway obstruction, – breathing difficulties and severe external or internal hemorrhage.

Remember:

Assess – RPM: Respiration, **P**erfusion, and **M**ental status

Act/Tag – IDMD: Immediate, **D**elayed, **M**inor and **D**ead

Session 2: First Aid for injuries

Session objective: By end of this training session, the participants will be able to show the required understanding and ability how to manage the common injuries at their level

Time 270 min

Enabling Objectives: by end of these sub sessions, the participants will be able to

- Demonstrate techniques to stop external bleeding.
- Assess and provide basic management for a patient with fracture
- Describe first aid management of a burn.
- Demonstrate techniques of safe transportation of an injured person.

Enabling objective 1: Demonstrate techniques to stop external bleeding.

Training method: Demonstration (15 min) and guided practice (45 min).

Your facilitator will show how to manage external bleeding. Follow the procedure strictly

Note

Box 10: Management of external bleeding: First-aid measures

- Wear gloves. Identify the bleeding part of the body, cover it with clean cloth, and move the victim from the accident site.
- Remove the cloth and thoroughly check the wound.
- Clean the wound with clean water or with water and soap.
- Stop the bleeding by covering and compressing the wound with clean cloth and/or strips of clothes.
- If the bleeding is from arm or leg, elevate the extremities and check if the bleeding has stopped.
- Every five minutes, loosen the tie and check 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. If the wrap is too tight, the signs to observe will be: severe pain, color change, cold surface, and immobility.
- Bring the victim to a nearby health facility.

Box 11: First aid management of nose bleeding

- Keep the victim in sitting position and leaning forward.
- Advise the victim to clean the blood clot from his/her nose.
- Pinch the nose firmly for 10 minutes. If ice is available, you can pinch the nose with ice pack.
- Instruct the victim not to talk until the bleeding stops.
- If bleeding does not stop within 10 minutes, pinch the nose for another 10 minutes.
- If bleeding has not stopped after two trials with above measure, bring victim to a nearby health facility.
- Don't ever use materials that easily disintegrate such as soft paper, toilet paper, or cotton.

Enabling objective 2: Assess and provide basic management for a patient with fracture

.**Training methods**: Brainstorming (15 min), demonstration (15 min), and guided practice (60 min)

You will be asked to discuss about fracture based on the following question. Then, your facilitator will show how to manage different fractures. You need to re-demonstrate the procedure

- **Define and list types of fracture.**
- **Describe signs and symptoms of fracture**
- **How would you manage a patient with fracture?**

Note

Box 12: Types and sign and symptoms of fractures

Types of fracture

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: are not associated with skin lacerations or open wounds on the surface of any part of the body. These fractures are not exposed to any foreign contaminants.
- Open fractures: are associated with skin lacerations and wounds followed by bleeding and exposure to immediate foreign objects in the environment that likely precipitate contamination.

Signs and symptoms of fractures : Signs and symptoms of fractures include:

- Pain
- Swelling
- Deformity
- Unusual mobility
- Totally immobile

Box 13: Management of fractures

Fracture of the arm bone

- Look for an assistant.
- Elevate and hold the fractured arm.
- Prepare a splint from wood, plywood, carton, etc.
- 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.
- Lay down the splint under the fractured arm including joints on both sides of the injured arm. Ask the assistant to carefully hold the splints together with the injured arm.
- The space between the splint and the skin of the injured arm should be adequately padded with cloth or cotton and tied with strips of cloth or other materials to keep it in place.
- 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 hung from the neck by strings connected to the cloth (see fig 2).

Fig 2: Applying arm sling for fractured arm

Fracture of the leg

- Look for an assistant.
- Carefully hold the fractured leg straight. If the victim feels severe pain and is stiff, bring it immediately back to where it was without further manipulation.
- Prepare a splint.
- Lay down the splint under the fractured leg including joints on both sides of the injured leg. Ask the assistant to carefully hold the splint together with the injured leg. The space between the splint and the skin must be adequately padded with cloth or cotton.
- Tie the splint and the fractured leg with strips of cloth or other material to keep it in place.
- Keep the fractured leg elevated by putting pillow or padded cloth underneath.
- If wood, ply-wood, and carton are not available, tie the injured to the healthy leg.

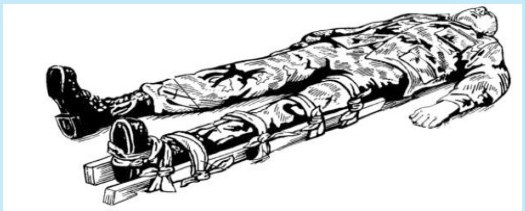


Fig 3 Applying a splint to the leg

Enabling objective 3: Describe first aid management of a burn.

Training method: Brainstorming (15 min) demonstration (15 min), and guided practice (30 min).

Your facilitator will write the following question on the flipchart and he asks you to respond to the questions

Question: How would you approach a patient with burn?

Note

Box 14: First-aid management of burn

- If a person is on fire, apply cold applications, immerse the burning area in cold water, role the burned person on the ground, or cover with water soaked 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 by using rope, wooden stick, dry cloth, etc.
- Move the person from accident site to avoid further injury.
- Loosen and/or remove burned garment and lay person on his/her back and let him/her breathe fresh air. Ensure that no foreign objects have entered and blocked the airway.
- If the person is not breathing properly, initiate mouth-to-mouth artificial respiration.
- To cool the burned area, immerse the burned body part in cool water for 30 minutes, soaked piece of cloth can also be used.
- Cover the wound with clean piece of cloth.
- Transfer the patient to a nearby health facility.

Notes:

- Avoid touching the wound with bare hand or dirty cloth
- Do not try to forcefully remove clothes from the wound
- Do not try to clean severe burn wounds
- Do not try to rupture blister wounds
- Do not apply anything to the wound except water

Enabling objective 4: Demonstrate techniques of safe transportation of an injured person (60 min)

Your facilitator will demonstrate how to transport an injured person (Fig. 4 through 8). Attend the procedure carefully

Fig 4: Transportation of injured patient by using a blanket

Fig 5:Transportation of injured patient by one person

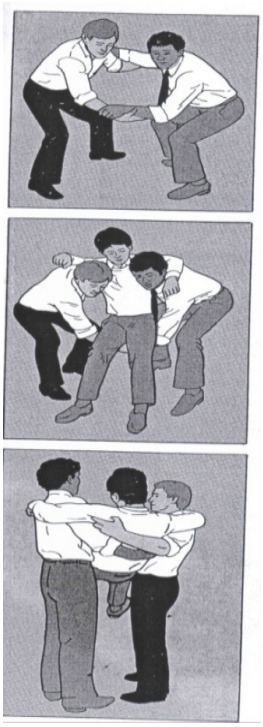


Fig 6:Transportation of injured patient by two people

Fig 7: Transportation of injured patient by three people

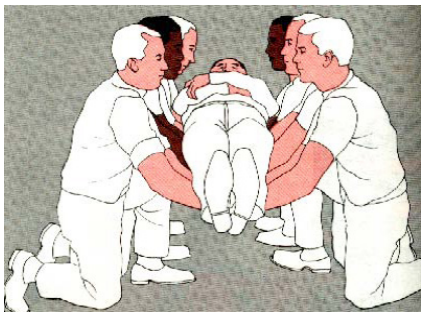


Figure 8: Transportation of injured patients by six people

Session 3: First aid management of common medical emergencies

Session objective: By end of this training session, the participant will be able to apply their improved knowledge and skills to manage common medical emergencies.

Time: 140

Enabling Objectives: by end of these sub sessions, the participants will be able to

- Demonstrate techniques of first aid management of a choking person
- Describe the signs and symptoms of poisoning, and explain how to give life-support care to someone who is poisoned.
- Explain how to give life-support care to someone who is seizing (epileptic patient)

Enabling objective 1: Demonstrate techniques of first aid management of a choking person

Training method: Demonstration (15 min) and guided practice (45 min).

You will be asked to re-demonstrate how to care for choking person

Note

Box 15: First aid management of choking

- Remove debris or foreign body from the person's mouth.
- Encourage the person to bend over with the head lower than the lungs.
- Slap the casualty smartly between shoulder blades with the heel of the palm up to 4 times. Each slap should be hard enough to remove the obstruction.
- Check the mouth if the obstruction has been dislodged.
- If not, perform abdominal thrust.

Abdominal thrust technique:

- apply a series of thrusts to the upper abdomen in an attempt to force air out of the chocking casualty.
- Stand behind the person and put one arm around the abdomen, clench your fist and place it thumb inward in the center of the upper abdomen, between the navel and the breast bone.
- Grasp your fist with your other hand.
- Pull both hands towards you with a quick upward and inward thrust.

Figure 9: Abdominal compression for chocking individual

NB: For pregnant women and obese individuals, compress chest instead of abdominal thrust.

Technique: Stand behind the person, wrap your arms around them, place your hands at the base of the breast bone and quickly pull inward and upward. Repeat until the object is dislodged.

Enabling objective 2: Describe the signs and symptoms of poisoning, and explain how to give life-support care to someone who is poisoned.

Training method: Case study (40 min)

You will be divided into small groups of 4 or 5 members. Your facilitator then ask you to respond to the following question. you need to refer to Alemitu`s case below

Note

Box 16: First aid management of poising

For a conscious victims

- Give enough water to drink
- Keep person warm.
- Induce vomiting **(do not induce vomiting** if the patient is unconscious, or takes petrol/ kerosene, strong acid
- Water and milk are universal antidotes.
- Activated charcoal 1gm/kg (if available).
- Remove contaminated clothing.

For an unconscious victim

- Call/shout for help.
- Maintain ABC.
- Keep samples (bottles, box, cup, etc.)
- Don't give fluids and don't induce vomiting.
- If the victim is vomiting, position him/her and turn the head so that vomit drains out of the mouth – recovery position.
- Remove contaminated clothing

poisoning through inhalation

- Move the patient to fresh air to help rid his/her lungs of gas.
- Give mouth-to-mouth respiration and cardiac massage if necessary.
- Take care that his/her breath does not contaminate your breathing by turning your mouth

poisoning through injection (snake bites)

- Calm the victim
- Apply a firm but not tight cord just above the bite. This must be removed within 15 minutes or when you have the medical assistance.
- Wipe the wound of venom that may have spilled from the fang at the time of biting.

Enabling objective 3: Explain how to give life-support care to someone who is seizing (epileptic patient)

Training method: case study (40 min)

You will be divided into small groups of 4 or 5 members. Your facilitator then ask you to reflect on the following

question. you need to refer to Bekele`s case below

- What do you think is Bekele`s problem
- What will you do to encounter his problem and,
- What would you advise Bekele and his family member?

Case study of Alemit

Alemu, a 24-year-old female, consumed a non-specific quantity of pesticide and you were called to assess her. She was in coma and had excessive secretions from mouth. On examination, she smelled of organophosphate and was in severe respiratory distress. Respiratory rate was 30/min and irregular. Her heart rate was 50/min.

Case study of Bekele

While you are making a home visit, you find a fallen young guy who isshaking and rigid. He starts clenching/grinding his teeth. His eyes start rolling up.

Discussion questions:

Note

Box 17: Seizure: definition and management

Seizure is an episode of abnormal neurogenic function caused by an electrical discharge of brain neurons. Highest incidence of seizure is in early childhood and late adulthood. It is characterized by teeth clenching/grinding, tongue biting, eyelid fluttering, eyes rolling up, falling down, convulsion, drooling, shaking, stiffening, and rigidity

First aid management of seizure

- **S**tay calm
- **T**ime the seizure
- **O**n one side
- **P**rotect the head
- **N**othing in mouth
- **L**oosen ties/shirts
- **A**rea clear
- **S**tay with the person until seizure stops

Potentially dangerous responses to seizure

- Don't restrain person
- Don't put anything in the person's mouth
- Don't try to hold down or restrain the person
- Don't attempt to give oral anti-seizure medication

Don't keep the person on back face-up

Module Summary

Towards the end of this module, Your facilitator will invite you to work on the following questions individually which you could do at any point of time after this course. This can help you summarize the whole module. Eventually, you will be given a post- test before quitting

Basic First Aid assignment sheet (Take-home assignment)

Directions: using the information from the **Basic First Aid Participant Manual ,** let the participants answer the following questions and remind them to check their answers with that of the "Participants` manual"

1. What are the major cause of accidents?
2. Describe different PPE.
3. Describe 3 C's of first aid.
4. What are the basic principles of first aid?
5. List the basic principle of effective CPR.
6. Describe the signs and symptoms of fracture.
7. Describe first aid management of burn.

References

- Non-Communicable Diseases, Emergency Care and Mental Health; Part 1 Chronic diseases and emergencies; Blended Learning Module for the Health Extension Program; Federal Democratic Republic of Ethiopia Ministry of Health.

- Urban Health Extension Professional Participants` Manual, Federal Democratic Republic of Ethiopia, Ministry of Health

- Urban Health Extension Program Revised Implementation Manual, Federal Democratic Republic of Ethiopia, Ministry of Health

Annex

Answers to Basic First Aid assignment (take-home assignment)

1. The following are the common causes of accidents: taking shortcuts, being over-confident, ignoring safety procedures, starting a job with incomplete instructions, poor housekeeping, mental distractions, and failure to pre-plan one's work.

2. The following items are PPE

- **Eyes**: safety spectacles, goggles, face screens, face shields, visors.
- **Head and neck**: industrial safety helmets, bump caps, hairnets, and firefighters' helmets.
- **Ears:** earplugs, earmuffs, semi-insert/canal caps.
- **Hands and arms:** gloves, gloves with a cuff, gauntlets, and sleeves that cover part or all of the arm.
- **Feet and legs:** safety boots and shoes with protective toecaps, penetration-resistant, mid-sole wellington boots, and specific footwear, e.g. foundry boots and chainsaw boots.
- **Lungs – respiratory protective equipment**
- **Whole body:** Conventional or disposable overalls, boiler suits, aprons, chemical suits.

3. The 3 C's of first aid are: check, call, and care

Check

- Is the scene safe? Check any collapsible building, inhalational poisoning, violence, and other dangers.
- Is it safe for you to approach? Don't forget to use PPE, switch off electric source if any, consider medico-legal issues, and other situations.
- Is the victim safe from related injuries? If a person is unresponsive and the scene unsafe, it is our responsibility to evacuate them immediately.

- Are bystanders safe? Sometimes bystanders may be unaware of dangerous situations. It is yours responsibility to make them calm and help accordingly.
  - If you get hurt trying to help others, you may make matters worse. The first thing in first aid is "safe to self."

Call

- **Shout for help** (bystanders, family member, police).
- **Call for ambulance** (call to 939, 907, and other emergency call numbers).

Care

- **Care for life-threatening** conditions: provide immediate, sufficient, appropriate care based on your CAB assessment until the ambulance arrives and dispose a patient to health facilities.
- A first aider shall follow the following approaches when helping people or addressing emergency conditions.
  - **Airway** - is the victim's airway open?
  - **Breathing** - look, listen, and feel for breathing.
  - **Circulation** - check for signs of circulation, severe bleeding.
  - **Consciousness** – is the person responsive?
  - **Deformity-**is there any fracture, dislocation, head, chest, abdominal injury?

4. The basic principle of first aid are:

- Be calm and confident.
- Inform and explain that you are first aider.
- Be aware of risks.
- Build and maintain trust.
- Help/treat the most serious (life threatening) conditions first.
- Always follow 3 Cs.

5. The basic principles of effective CPR are:

- 30 compressions and 2 breaths.
- 100 per minute.
- Push hard: 3.8 – 5 cm depth.

- Allow time to recoil.
- Don't interrupt.

6. Signs and symptoms of fractures include: pain, swelling, deformity, and unusual or total immobility.

7. First aid management of burn include:

- If a person is on fire, apply cold applications, immerse the burning area in cold water, role the burned person on the ground, or cover with water soaked 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 by using rope, wooden stick, dry cloth, etc.
- Move the person from accident site to avoid further injury.
- Loosen and/or remove burned garment and lay person on his/her back and let him/her breathe fresh air. Ensure that no foreign objects have entered and blocked the airway.
- If the person is not breathing properly, initiate mouth-to-mouth artificial respiration.
- To cool the burned area, immerse the burned body part in cool water for 30 minutes, soaked piece of cloth can also be used.
- Cover the wound with clean piece of cloth.
- Transfer the patient to a nearby health facility.

Basic First Aid

Participant`s Manual