



Federal Ministry of Health

Urban Health Extension Program Integrated Refresher Training |IRT|

Module Six

Basic First Aid



Facilitator's Guide

February 2017



Federal Ministry of Health

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Integrated Refresher Training

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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.

FMOH is grateful to all partners involved and in particular USAID/JSI/SEUHP, JHU CCP, World Vision, Challenge TB, UNICEF, for the technical support provided to develop this Integrated Refresher Training (IRT) module in a harmonized approach.

Special acknowledgement is made by the FMOH to team of experts from the government and nongovernmental organizations who tirelessly involved in the entire processes of producing the module.

The FMOH also acknowledges the joint leadership of the Health Extension and Primary Health Services Directorate (HEPHSD) and John Snow Incorporate (JSI) -Strengthening Ethiopia's Urban Health Program (SEUHP) for mobilizing resource and coordinating the development of the training module.

FMOH acknowledges JSI-SEUHP for providing financial support to organize a series of workshops and consultative meetings as well as to print the final version of all training modules.

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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 malarial areas.

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

The Purpose of the module is to enable the participants (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 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, 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
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
08.30 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

Appendices

- ☛ **Appendix 1: Pre/Post Test**
- ☛ **Appendix 2: Daily Course Evaluation Form**
- ☛ **Appendix 3: End-course Evaluation Form**

Pre-test, (10 min)

Before starting the module the facilitator has to administer the pre-test. Therefore, he/she needs to have the print-out of pre-test questions and make sure that all participants have taken the test.

At the end of the day, the facilitator needs to provide the participants with “take-home -assignments as needed . All participants are required to complete daily evaluation forms as well.

Unit I: 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 objectives: 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 I: 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 I: Discuss the concept/ definition and purpose of first aid.

Training method: Brain storming (60 min)

- Write the following questions on the flipchart:

Q1. What is first aid?

Q2. What is the importance of first aid

- Give the participants a few minutes to memorize.
- **Ask** the audience to reflect on the questions; write their responses on the flipchart.

- Based on their reflection, ask the following questions:
- As a professional, why do you bother to know the concept and importance of first aid?

Conclude this activity by providing the participant handout on the definition and purpose of first aid.

Facilitator's note 1

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.

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

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

- present the basic principles of first aid.
- Tell participants that they will watch a video demonstration on the basic principles of first aid, including the three C's.
- Ask if participants have any questions before you start the video. If there are no additional questions, start the video.
- Show the video and tell the participants to follow the instructions given in the video.
- At the end of the video, provoke a short discussion. If participants are not clear about the basic principles, rewind the video and show the relevant portions again.
- Instruct the participants to refer to their participant's manual on the basic first aid principle .

Facilitator's note 2 : Any first aider needs to know the following Basic Principles of First Aid before providing the first aid.

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)

I. 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.

SESSION SUMMARY

Ask if there are questions. Invite some of the trainees to summarize the session based on the following discussion points:

- Explain the key purposes of first aid.
- Describe the basic principles of first aid

EVALUATION (Optional)

Participants must be able to describe the meaning of first aid and the reason why they need to do it. Competency will be measured after the participant correctly answer the assignment questions and scoring at least 70% on the session test.

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?**

Answers

Facilitator notes 1 and 2 can be used as answer-sheet for the trainees. Thus, the facilitator needs to print these notes and provide them to the trainees when required

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).

- Divided the participants into 4 small groups
- Write the following question on the flipchart:

Question: What are the common causes of accidents and how do you prevent them ?

- Ask the groups to discuss on the above question and present their work to the plenary.
- Based on their presentation, ask the following questions:
 - Why do you need to know all these?
 - As a professional (UHE-P) what is your role in preventing such accidents and how do you do it?

Conclude this activity by providing a handout on common causes of accidents (Box 1)

Facilitator's note: The facilitator needs to refer to the following information box (Box 1) for the common causes of accidents and how to prevent them (Box 2)

Box 1**Common causes of accidents**

Do you know that 80 of every 100 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 cuts but they do increase chance of injury
- **Being over-confident:** Confidence is a good thing; overconfidence is too much of one. Also, idea that something "can't happen to me," is an attitude that leads to reckless behavior such as not following procedures and using the wrong tools. Such behavior can cause injury to you or to a fellow worker.
- **Ignoring safety procedures:** Ignoring safety procedures, intentionally or unintentionally can endanger you and others. Institutions have safety policies in place and we are supposed to observe them. **Casual attitudes about safety can result in a "casualty."**
- **Starting a job within complete instructions:** We know to do a job safely and correctly the first time, we need a complete set of instructions. We've all seen situations where an employee made a mess of a task or assignment because he didn't have sufficient or clear instructions. When on a job, don't ever be afraid to ask questions or get explanations for what is unclear to you. How many times have you heard, "But I'm afraid to ask"? It's not dumb to ask; it's dumb not to.
- **Poor housekeeping:** If an office or home is unorganized or dirty, it means we are neglecting our safety and risking accidents.
- **Mental distractions from work:** Bringing outside problems to work can keep you from focusing on your job. This can be hazardous.
- **Failure to pre-plan your work:** In the office or areas of work, it is important to pre-plan your work. First of all, it will reduce unforeseen problems by giving you time to solve them. Second, it will make the job faster and more efficient because you planned the process before 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 a task 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 be highly visible to and understood by workers; illustrations should be included so that people who cannot read know what they mean.
- **Form an 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.

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- **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),.

- Invite the participants to watch the video carefully and take note
- Brain storm on what they have watched
 - Make your presentation on personal protective equipments

- Conclude this activity by providing a handout on personal protective equipments (Box 3).

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)

- Divide the participants in to 4 smaller groups
- Ask 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?

- Ask the groups to present their work to the audience
- conclude this activity by inviting someone from the participants to summarize the entire activity

SESSION SUMMARY

Invite the participants to ask questions pertinent to session 2. Facilitate discussions and wrap up the session by adding your own remarks.

EVALUATION (Optional)

Participants must be able to describe the major causes of accidents and how to prevent them. Competency will be measured after the participant correctly answer the assignment questions and scoring at least 70% on the session test.

Take-home Reading Assignment:

Provide the printouts of those notes to the participants and remind them to read in private during their leisure time in the evening . instruct them that they will be discussing what they have read in the following recap session

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 practices

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

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

- Write the following question on the flipchart:

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

- Give the participants a few minutes to answer.
- Write their responses on the flipchart.

Conclude activity by providing a mini lecture on the responsibilities of the first aider based on the information in Box 4 (see box 4, below).

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)

- Divide participants in two groups.
- Instruct each group to discuss the general and country- specific first aid- related medico- legal issues
- Ask both groups to present their responses to the audience.
- make a brief lecture on the medico- legal issues of first aid based on the information in box 5 and 6 (see box 5 and 6 below)

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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2) ራሳቸው በማናቸውም ሁኔታ ወይም ዘዴ ይሁን በተገጂው ላይ ጉዳት አደርሰው በተራ ቁጥር 1 ላይ የተጠቀሰውን ጥፋት ያጠፋ ከሆነ 575(2)ሀ እንዲሁም

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SESSION SUMMARY

Invite the participants to ask questions pertinent to session 3. Facilitate the discussions and wrap up the session by adding your own opinion if required.

Take-home Reading Assignment:

Provide the printouts of those notes (box 5 and 6) to the participants and remind them to read “Good Samaritan law.” in private during their leisure time. Instruct them that they will be discussing what they have read in the following recap session

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

Training methods: Brainstorming (20 min) and mini-lecture (10 min)

- Guide a **brainstorming** session using the following steps:
 - o Write the following question on the flipchart:

Question:What do you understand about BLS?

- Give the participants some minutes to reflect on the question.
- Write their responses on the flipchart
- Based on their reflection, probe by asking more questions:
 - How long can a patient survive without breathing?

- why you need to know about BLS?
- Conclude the brainstorming session by giving a brief lecture based on the following information in Facilitator`s note

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

Training methods: Buzz group discussion (10 min) Questions and answers (10 min) and mini-lecture (10 min)

- o Instruct the participants to be in pair and discuss about initial assessment in an emergency
- o Next, ask some of the participants to explain what they have discussed in buzz group
- o Finally, summarize the session by giving a brief lecture using the following notes as a resource.

Facilitator`s 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 **Circulation, Airways, and Breathing (CAB)**.
 - o **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.
 - o **A=Airway:** Unconscious patients may die due to airway obstruction. Simply opening the airways using manual maneuvers and proper positioning can save a life.
 - o **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).

- Instruct participants to watch the video carefully and encourage them to take notes on what they have observed
- Repeat the video if the participants are not clear with some parts of the show
- Ask them what the steps are? and write their responses on a flipchart
- Wrap up the session by summarizing the show

Enabling objective 2: Demonstrate how to perform effective CPR

Training method: Demonstration and guided practice (170 min)

Step 1

- Explain to the group when, how and why to apply CPR
- Clearly demonstrate the steps of CPR using mannequins.
- Ask the participants if they have questions on the procedure and repeat the procedure as required.

Step 2

- Divide the participants in to 2 smaller groups; instruct them to practice the
- steps as a group (at least for 15 min) and to re-demonstrate the CPR as an individual
- Remind the participants that everyone in the room needs to re-demonstrate (5 min each).
- Distribute the CPR checklist (Checklist 1) for each participant
(25 per individual, based on the size of the trainees)
- NB: Every participant should re-demonstrate the procedure of CPR while the rest of the participants observe the performance of the demonstrator using a check list. An observer is required to complete about 25 checklists based on the size of the trainees. the observers also have to put total points out of 13.
- Make sure each participant practices and re-demonstrates the steps of CPR
- Conclude the session by highlighting the points using the 'facilitator`s note' on CPR

Check list I: BLS- Observation Checklist

Name of participant _____ Name of evaluator _____

S. No	Item	Done = 1	Partially done = 0.5
1	Checks unresponsiveness by touching mannequin and speaking loudly		
2	Calls for help or indicates help should be called		
3	Opens airway using head-tilt/chin-lift		
4	Checks breathing for at least 5 seconds		
5	Attempts at least two breaths such that chest rises at least once but not more than twice		
6	Checks carotid pulse for at least 5 seconds		
7	Locates compression position by feeling or baring chest and looking		
8	Gives at least 13 but not more than 17 compressions		
9	Opens airway using head-tilt/chin-lift		
10	Attempts at least two breaths such that chest rises at least once but not more than twice		
11	Repeats cycles at least two more times		
12	Opens airway between every set of compressions using head-tilt/chin lift. Attempts breaths with at least one chest rise between every set of compressions		
13	Locates compression position between every set of compressions		

Source: R. T. Brennan et al., 1996

Facilitator's 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.

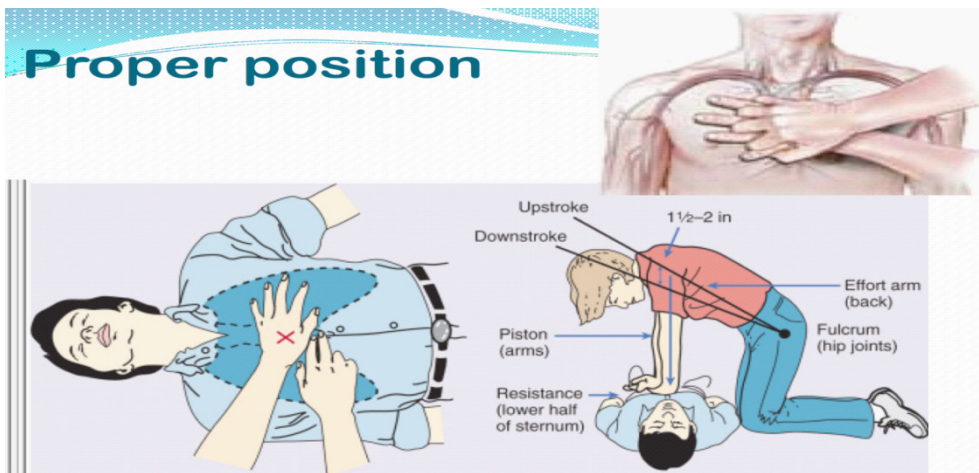


Fig 1: How to do CPR

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 for a 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.

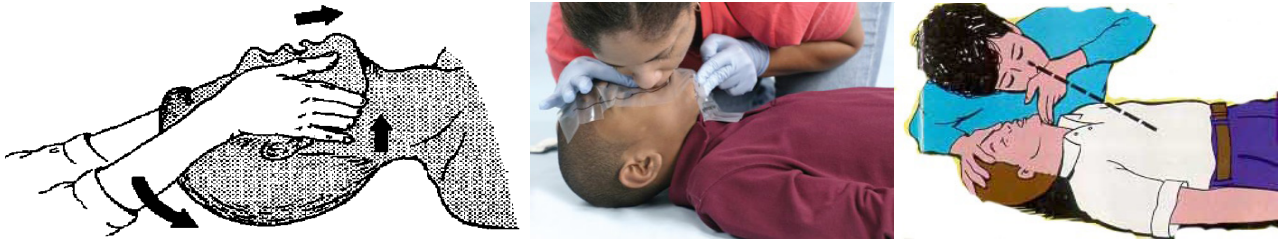


Fig 2: How to give artificial breathing

SESSION SUMMARY

Invite the participants to ask questions pertinent to the session. Facilitate discussions and wrap up the session by adding your own remarks.

EVALUATION (Optional)

Participants must be able to demonstrate the CPR procedures. Competency will be measured after the participant has completed her CPR demonstration. She should score at least an average of 70% from all checklists that have been completed by peer participant.

Take-home Reading Assignment:

Provide the printouts of those notes (BLS and CPR) to the participants and remind them to read in private during their leisure time. Instruct them that they will be discussing the key points in the following recap session.

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 I: 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 I: Discuss the concept of triage

Training method: Brainstorming (15 min) and mini-lecture (15 minutes).

- Write the following questions on the flipchart:

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

- Give the participants few minutes to reflect on the question
- Write their responses on the flipchart
- Conclude this activity by explaining the points in boxes 7 and 8 below.

Facilitator`s 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

Enabling objective 2: practice triaging.

Training methods: Case studies (20 min), and role playing (40 min).

Task 1: Case study:

- Divide the participants into 8 groups of 3 to 4 members.
- Distribute the following case study I as triage exercise sheet.
- Ask the participants to identify the triage classification of each case and provide reasons using the SMART algorithm (algorithm I)

- Ask a member from each group to present the triage classification of their case to the plenary and explain how they used the START algorithm, while other participants will reflect on what has been presented

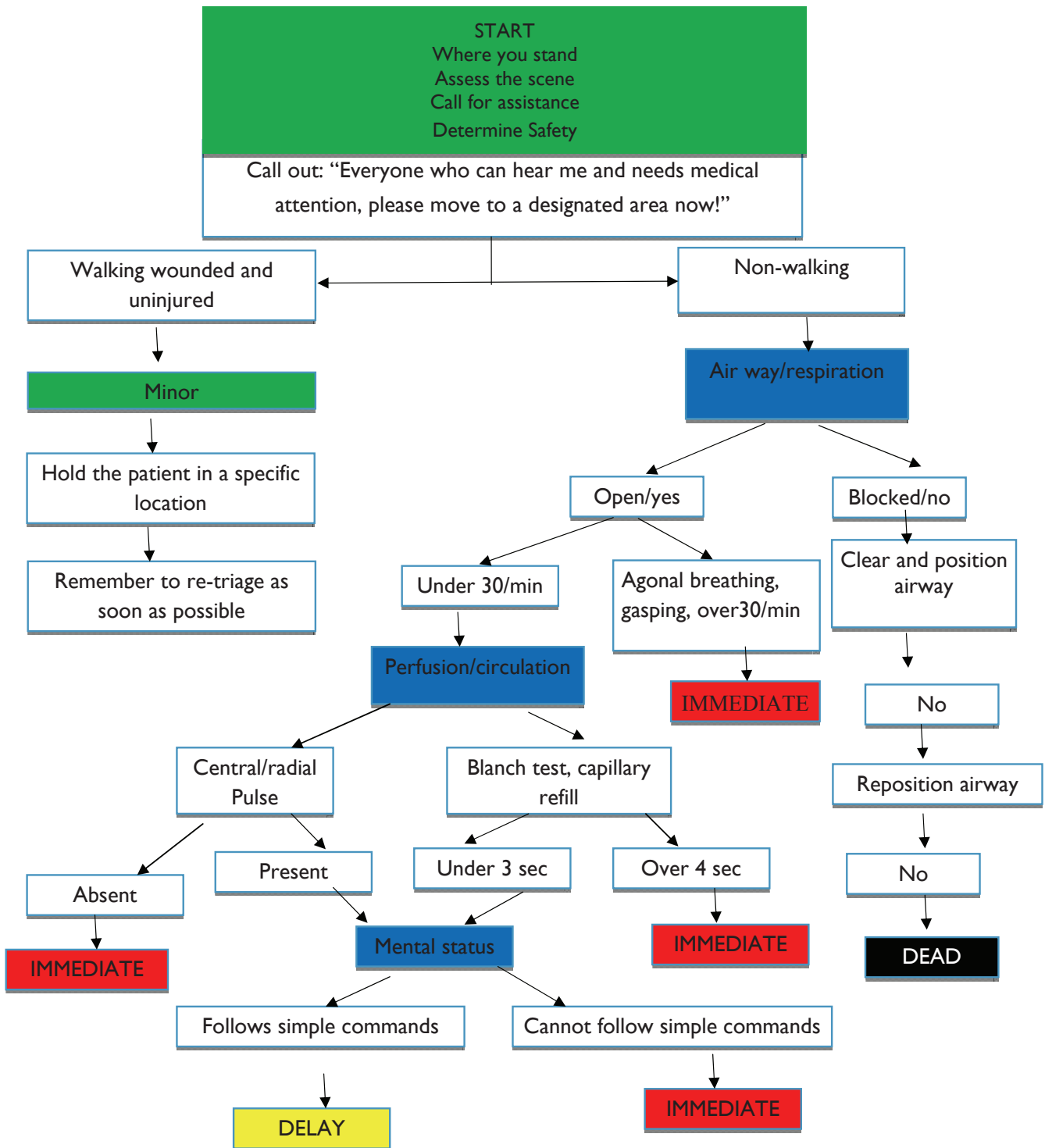
Case study 1: Cases for practicing the START algorithm

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	Respirations: under 30 Pulse (radial): present Mental status: awake & oriented	Immediate Delayed Minor Dead/dying	
2	Truck passenger: Upset but no apparent complaints, elderly man	Respirations: under 30 Pulse (radial): present Mental status: awake & oriented	Immediate Delayed Minor Dead/dying	
3	Minibus driver: blood from ears, facial fracture, skull laceration, unconscious	Respirations: under 30 Pulse (radial): none Mental status: unconscious	Immediate Delayed Minor Dead/dying	
4	Minibus passenger: major skull fracture with eye socket hanging out.	Respirations: none after head tilt Pulse (radial): none Mental status: unconscious	Immediate Delayed Minor Dead/dying	
5	Minibus passenger: child in back seat with seat belt on, answers questions but whimpers	Respirations: under 30 Pulse (radial): present Mental status: awake & oriented	Immediate Delayed Minor Dead/dying	
6	Minibus passenger: Infant properly restrained in car seat, crying & whimpering	Respirations: under 30 Pulse (radial): present Mental status: awake & oriented	Immediate Delayed Minor Dead/dying	
7	Adult #1: curbside, shook up, grabbing neck	Respirations: under 30 Pulse (radial): present Mental status: awake & oriented	Immediate Delayed Minor Dead/dying	
8	Adult # 2: curbside. No apparent complaints	Respirations: under 30 Pulse (radial): present Mental 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

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



Facilitator`s 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: **R**espiration, **P**erfusion, and **M**ental status

Act/Tag – IDMD: **I**mmEDIATE, **D**elayed, **M**inor and **D**eAD

Facilitator`s note**Triage Assessment Exercise Answer sheet**

Victim	Triage category	Reason
1	Delayed	No abnormalities according to criteria.
2	Delayed	No abnormalities according to criteria.
3	Immediate	No radial pulse
4	Dead/dying	No respiration after head tilt
5	Delayed	No abnormalities according to criteria.
6	Delayed	No abnormalities according to criteria.
7	Delayed	No abnormalities according to criteria.
8	Minor	Self-extricated. No complaints.

Task 2: Role play:

- Assign the case and the roles on the day before the role-play takes place.
- Explain that the purpose of the role play is to practice triaging and a primary survey (box 9)
- Divide the participants in to groups based on the following roles: two participants act as UHE-ps, five cases as injured victims of an accident, and five others uninjured ones. The rest pretend the passersby and observers.
- provide them with the following case scenario
- The observers use the role-play checklist to provide feedback.
- Ask the groups to perform the play
- After the role play, have a debriefing with those who pretended the care givers (UHE-Ps) and observers by asking the Following questions?

Care givers

- What did you do well to address issues related to the primary survey and triaging?

- o In your presentation how did you manage to demonstrate your enabling attitude? How best were you exhibited your understanding about primary survey and triaging
- o If you were given a chance to repeat this any other time, what would you change and how? Why would the changes be useful to improve your job performance?

Observers

- o Ask the observers to give the performers a feedback. Remind them to use their learning on how to give constructive feedback.
- Summarize this activity by highlighting the most important steps in triage and the primary survey.

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?

Facilitator’s note

Checklist for role play

Action	Done	Not done	Remark
Protection and assessment			
Assess the scene			
Determine scene hazards			
Use appropriate PPE			
Remain in appropriate zone			
Call for assistance			
Determine safety			
Alertness and confidence			
Triage and assessment			
Checking respiration			
Checking perfusion			
Checking mental status			
Assigning the appropriate triage badge			
Primary survey			
Air way			
Breathing			
Circulation			
Disability and neurologic damage			
Exposure of the patient			

SESSION SUMMARY

Invite the participants to ask questions pertinent to the session. Facilitate discussions and wrap up the session by adding your own remarks

Take-home Reading Assignment:

Provide the printouts of the triage algorithm to the participants and remind them to read in private during their leisure time. Instruct them that they will be discussing the key points of triaging in the following recap session

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 I: Demonstrate techniques to stop external bleeding.

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

- Explain briefly what external bleeding is, and purpose of stopping it.
- Demonstrate techniques how to stop external bleeding.
- Give participants time to observe and practice. Make sure each of them re-demonstrates the techniques to stop external bleeding.
- Conclude this session by recapping the points in boxes I0 and I1 below.

Facilitator`s 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)

Step 1: Brain storming

- Write the following question on the flipchart:
 - **Define and list types of fracture.**
 - **Describe signs and symptoms of fracture**
 - **How would you manage a patient with fracture?**
- Give the participants few minutes to reflect on the question
- Write their responses on the flipchart
- Conclude this activity by briefing the points in box 12 below

Facilitator`s 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

Step 2: Demonstration and guided practice

- Demonstrate techniques of assessment and basic management of fractures using mannequins.
- Give participants time to observe and practice. Make sure each re-demonstrates the techniques of assessment and basic management of fractures.
- At the end of the demonstration, distribute handouts on the management of fractures (box 13).

Facilitator's note

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.

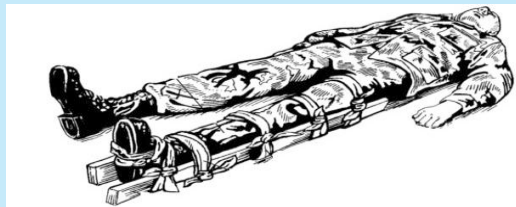


Fig 3 Applying a splint to the leg

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

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

- Write the following question on the flipchart:

Question: How would you approach a patient with burn?

- Give participants few minutes to reflection the question.
- Write their responses on the flipchart.
- Conclude this activity recapping the key points in the box 14, First Aid Management of Burn
- **Next, demonstrate** techniques of assessment and basic first aid of a burn using the mannequins.

Give participants time to observe and practice. Make sure each re-demonstrates the techniques of assessment and basic first aid of a burn.

Facilitator`s 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)

- Explain briefly the purpose of safe transportation.
- Demonstrate techniques of safe transportation of an injured patient.
- Give participants time to observe and practice.

- Make sure each re-demonstrates the techniques of safe transportation of an injured patient.
- The instructor can use the pictures below as visual aids (Fig. 4 through 8)



Fig 4: Transportation of injured patient by using a blanket



Fig 5: Transportation of injured patient by one person

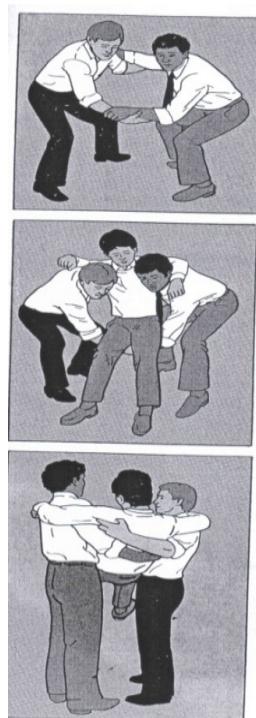




Fig 6: Transportation of injured patient by two people



Fig 7: Transportation of injured patient by three people

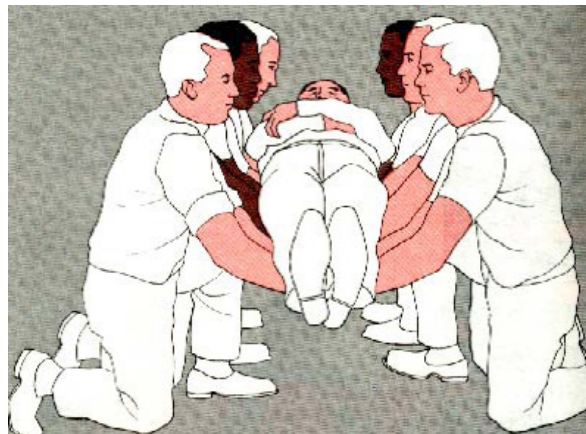


Figure 8: Transportation of injured patients by six people

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).

- Explain briefly what a choking is, and why they need to manage it.
- Demonstrate techniques of first aid management for a choking person.
- Give participants time to observe and practice.
- Make sure each re-demonstrates the techniques of first aid management of a choking person.
- Conclude this activity by highlighting the points in box 15 (First aid management of choking) and by showing Fig. 9

Facilitator's 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 choking 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 choking 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)

- Divide the participants in to small groups of 4 or 5 members.
- Ask the participants to read the case of Alemitu from their participant's manual.

- Give them an adequate time to understand the case.
- Tell them to discuss on the following questions
 - ☛ What are the routes through which poisons may get to the body?
 - ☛ What are the signs and symptoms of poisoning?
 - ☛ How do you manage this patient?
- Ask a volunteer from each group to present their discussion to the plenary.
- explain the routes through which poisons may get to the body, the signs and symptoms of poisoning, and the pre-referral management of poisoning using the table below (table 16)

Facilitator`s note**Box 16: First aid management of poisoning****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)

- Divide the participants in to small groups of 4 or 5 members.

- Ask the participants to read the case of Bekele in their participant`s manual
- Give them an adequate to understand the case.
- Tell them to discuss on the following questions
 - ☛ 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?
- Ask a volunteer from each group to present their discussion in the plenary.
- Explain the signs and symptoms of a seizure and its first aid management using the table below (table 17)

Facilitator`s 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

Case study of Alemitu

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.

Discussion questions:

1. What are the routes through which poisons enter the body?
2. What are the signs and symptoms of poisoning?
3. How do you manage this patient?

Case study of Bekele

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

Discussion questions:

1. What do you think is Bekele's problem?
2. What will you do to encounter his problem?
3. What would you advise him and his family members?

Module Summary

Ask if there are questions on the entire module. Invite the participants to answer. Encourage more discussion referring back to the module goal. Provide them with the following take-home questions which they could do at any point of time after this course. Then, give them a post- test (Appendix 1) followed by the overall module evaluation (Appendix 3). compare both pre and post- test results of the participants

Tip: Remember that the pre and post- tests are not usually assess the skill of the participants as most of the questions are often designed to evaluate the knowledge domain of the trainees. However, there are a lot of opportunities for the trainees to be assessed during the course of the training

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.

Answers

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.

References

- Non-Communicable Diseases, Emergency Care and Mental Health; Part I 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

Appendices

Appendix I: Post-test,

Instruction: Answer the following questions by choosing the best answer from the given multiple choices

1. Which is the first priority to approach emergency patients?

- A. Call
- B. Check safety
- C. ABC assessment
- D. Move patient to hospital

2. Which one is true about the objective of first aid?

- A. Preserve life
- B. Prevent further injury
- C. Promote recovery
- D. All

3. When do you start CPR?

- A. If no central pulse
- B. If no breathing
- C. If a patient can't talk
- D. A and B

4. How do you stop external bleeding?

- A. Direct pressure
- B. Elevate
- C. Head tilt
- D. A and B

5. Which is immediate first aid for choking?

- A. Abdominal thrust
- B. Head tilt
- C. Jaw thrust
- D. Direct compression

6. As a first aider, which is important for fractured patients?

- A. Call ambulance
- B. Immobilize
- C. Check ABC
- D. All

Answers for the pre/post-test questions

1. B, 2. D, 3. A, 4. D, 5. A, 6. D

Appendix 2:A check-list for daily evaluation

- How useful is this training to help you reflect on your current knowledge and experience to identify how you can improve what you do in your work?

Very useful Useful Partially useful Not useful

- How useful is this training to help you identify how to re-orient your attitudes to better do your job?

Very useful Useful Partially useful Not useful

- How useful is this training to help you identify and analyse broader social factors that may affect different clients and groups you are meant to reach?

Very useful Useful Partially useful Not useful

- How useful is this training to help you expand knowledge and identify how to use it with different clients and groups you are meant to train?

Very useful Useful Partially useful Not useful

- How useful is this training to help you improve your skills to apply CBT approach in providing services to your clients?

Very useful useful Partially useful Not useful

- How relevant are the methods in addressing ASK and ELC?

Very relevant relevant Partially relevant Not relevant

- other comment _____

Appendix 3:A check-list for end-course evaluation

- How useful is this training to help you reflect on your current knowledge and experience to identify how you can improve what you do in your work?

Very useful Useful Partially useful Not useful

- How useful is this training to help you identify how to re-orient your attitudes to better do your job?

Very useful Useful Partially useful Not useful

- How useful is this training to help you identify and analyse broader social factors that may affect different clients and groups you are meant to reach?

Very useful Useful Partially useful Not useful

- How useful is this training to help you expand knowledge and identify how to use it with different clients and groups you are meant to train?

Very useful Useful Partially useful Not useful

- How useful is this training to help you improve your skills to apply CBT approach in providing services to your clients?

Very useful useful Partially useful Not useful

- How relevant are the methods in addressing ASK and ELC?

Very relevant relevant Partially relevant Not relevant

- other comment _____

Basic First Aid

Facilitator's Guide