Ethiopian TVET-System

MEDICAL LABORATORY

Level -III

Based on Apr.2018G.C. Occupational Standard

Module Title: Providing First Aid and Emergency Response

TTLM Code: HLT MLT3 TTLM 0919v1

This module includes the following Learning Guides

LG13: Assess and identify client's condition

LG14: Provide first aid service

LG15: Prepare, evaluate and act in an emergency

LG16: Communicate details of the incident

LG17: Refer client requiring further care

LG18: Evaluate own performance

Instruction Sheet	LG13: Assess and identify client's condition

This learning guide is developed to provide you the necessary information regarding the following **content coverage and topics** –

Assess and identify client's condition

- Definition of terms
- Basic principle of care
- Hazard identification
- Assessment of causality of injury and illness
- Basic principles of emergency care
- Checking vital signs
- History taking
- Safety equipments for emergency
- Options for action in cases of emergency
- Emergency policies and procedures
- OHS procedure and safe work

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Addressed basic principles of first aid
- identified, assessed and minimized *Hazards* in the situation that may pose a risk of injury or illness to self and others are
- Immediate *risk* to self and casualty's health and safety is minimized by controlling any hazard in accordance with work health and safety requirements
- Casualty is assessed and injuries, illnesses and conditions are identified
- Emergency situation is recognized and hazards to health and safety of self and others are identified
- Vital signs and state of consciousness are checked and monitored in accordance with guidelines.
- History of the event is obtained.
- Safety equipment and aids required for emergencies are selected, used, maintained and stored in good order
- Options for action in cases of emergency are identified and evaluated

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 16.
3. Read the information written in the "Information Sheets 1". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the "Self-check 1" in page 8.

5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the “Information Sheet 2”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
9. Accomplish the “Self-check 2” in page 16.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the “Information Sheets 11”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 19.
13. Ask your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 21; However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 3.
15. Read the “Operation Sheet 1 and try to understand the procedures discussed.
16. Do the “LAP test” in page 22 (if you are ready). Request your trainer to evaluate your performance and outputs. Your trainer will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your trainer shall advice you on additional work. But if satisfactory you can proceed to Learning Guide #2

1. Identification of client's condition

1.1. Introduction

First aid is the initial assistance or treatment given to a person who is injured or sudden illness before emergency medical treatment is available. The first-aid provider in the workplace is someone who is trained in the delivery of initial medical emergency procedures, using a limited amount of equipment to perform a primary assessment and intervention while awaiting arrival of emergency medical service personnel. The person who provides this help may be a:

- First aider,
- First responder,
- Policeman or fireman, or
- Paramedic.

1.1.1. The key aims of first aid can be summarized in three key points:

- **Preserve life**: the principal aim of first aid is to save lives.
- **Prevent further harm**: to prevent the condition from worsening or further injury**.**
- **Promote recovery**: first aid also involves trying to start the recovery process from the illness or injury.

Self-Check 1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:(2 **point each**)

1. . Define first aid (3 Point)
2. The key aims of first aid can be

Note: **Satisfactory rating - 5 points & Above Unsatisfactory - below 5 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = ____5___
Rating: __10_____

Name: _____ Date: _____

Information Sheet 2	Hazard identification

2. Hazard identification

Hazard is simply a condition or a set of circumstances that present a potential for harm. Hazards are the main cause of occupational health and safety problems. Therefore, finding ways of eliminating hazards or controlling the risks is the best way to reduce workplace injury and illness.

2.1. Types of hazards in the Laboratory.

- **Biological hazard**: it is due to viruses, bacteria, parasites, fungi and molds. It is also include insects, pests, rodents, mammals and their toxins e.g. lice, bedbugs, fleas, flies, cockroaches, ticks and mites, as well as rats and mice.
- **Chemical hazards***:* This is due to exposure to hazardous chemicals that may lead to damage to body systems.
- **Mechanical hazards***:*It is resulting from unshielded machinery, unsafe structures in the workplace and dangerous tools. It can be caused by exposure to a heavy physical workload, poor working conditions, involving heavy item lifting and moving, or repetitive manual tasks.
- **Psychosocial hazards*:* -** Psychological stress is caused by time and work pressures.

  Psychological stress and work overload have been associated with sleep disturbances, burn-out syndromes, depression, cardiovascular disorders and hypertension.

- **Physical hazards*:***high pitch noise, vibration, ionizing and non-ionizing radiation, electric and electromagnetic fields, extreme cold and heat are some of physical hazards. Ultraviolet radiation and ionizing radiation are known carcinogens

Self-Check 2	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. **Types of hazards in the Laboratory** Advanced treatment
   - **A. Biological hazard**
   - **B. Chemical hazards**
   - **C. Mechanical hazards**
   - **D.** ALL

Note: **Satisfactory rating – 2.5 points points**

Unsatisfactory – below 2

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Information Sheet 3	Assessment of causality of injury and illness

1. Assessment of causality of injury and illness

3.1. Risk

The likelihood, or possibility, that harms (injury, illness, death, damage etc) may occur from exposure to a hazard

3.2. Hazard identification

This process is about finding what could cause harm in work task or area. It is the process of examining each work area and work task for the purpose of identifying all the hazards which are essential in the job.

Work areas include: Machine workshops, laboratories, office areas, stores and transport, maintenance and grounds, and lecture theatres and teaching spaces etc

Work Tasks can include: Audio and visual equipment, industrial equipment, hazardous substances and/or driving a vehicle, dealing with emergency situations, construction.

In order to identify hazards the following are recommended**:**

- Past incidents/accidents are examined to see what happened and whether the incident/accident could occur again.
- Asking workers about hazards they have encountered as part of their work.
- Work areas or work sites be inspected or examined to find out what is happening now.
- Information about equipment and material safety data sheets be reviewed to determine relevant safety precautions.
- thinking what hazardous event could take place here

3.3. Risk Assessment

Is defined as the process of assessing the risks associated with each of the hazards identified so the nature of the risk can be understood. This includes the nature of the harm that may result from the hazard, the severity and the likelihood of this occurring

3.3.1. A risk assessment assists in determining:

- How severe a risk is

- Whether existing control measures are effective

Information Sheet 4	Assessment of causality of injury and illness

action should be taken to control a risk?
- How urgently action needs to be taken.

3.3.2. *A risk assessment should include:*

- Identify factors that may be contributing to the risk,
- Review health and safety information
- Evaluation of how a hazard may cause harm and severity of the harm.
- Determining the likelihood of harm occurring. The level of risk will increase as the likelihood of harm and its severity increases.

4. Assessment of causality of injury and illness

Physical hazards to self and casualty's health and safety

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

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

2.2 Assessment of the casualty's condition

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

2.3 Components of assessment process:

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

2.4 Assessment of the situation /Scene size up/ – An assessment of the scene (current situation of an event) and the surroundings, if it is safe, will provide valuable information to the first responder and will ensure the well-being of the first responder. Ex. Unstable Situation, violent, Hazmat Situation (industry hazardous material) etc. Scene safety in relation to personal protection, casualty and bystander protection is important. If the scene is unsafe, make it safe, Otherwise, **DO NOT ENTER**

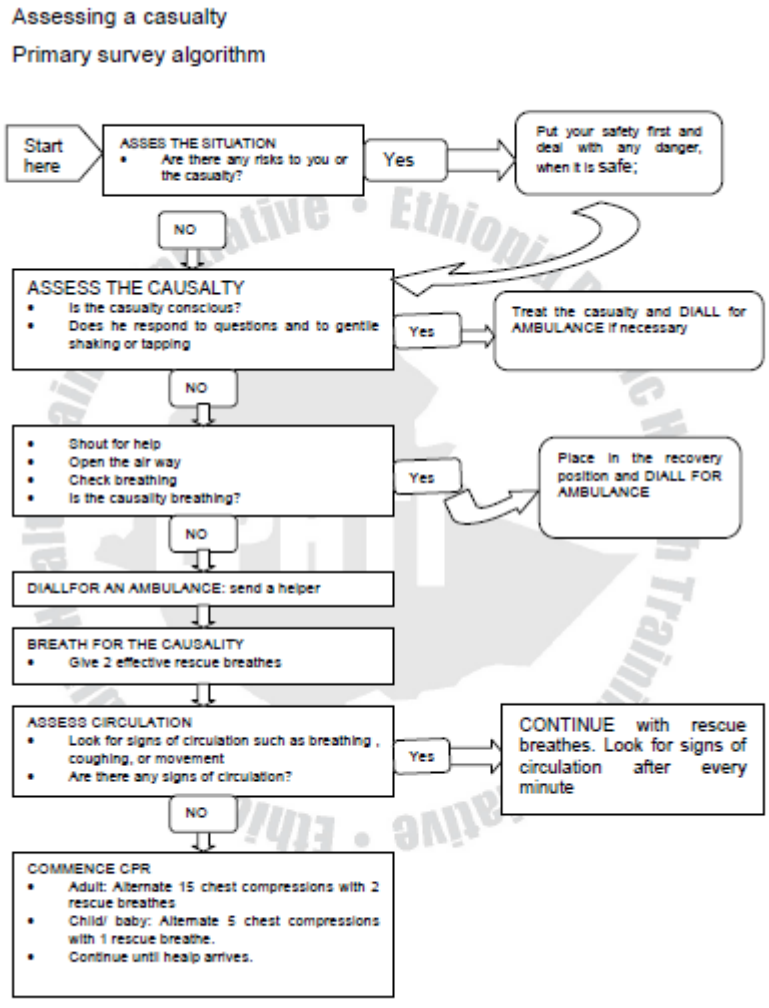

Fig 1 Assessing a casualty Primary survey algorithm

Self-Check 4	Written Test

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

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

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

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

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Information Sheet 5	Basic principles of emergency care

5. General directions to give first aid

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

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

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

Self-Check 5	Written Test

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

1. Among the following which one is not Responsibility of a first –aider (3 point)

   A. Assessment of the situation C. Giving immediate and adequate treatment

   B. Identify the problem D. All of the above

2. Casualties will require more urgent attention than others (4 point)

   A. True B. False

3. List tasks expected from first aider as a general principle of first Aid (5 points)

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

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

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Self-Check 3	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Procedure area limit traffic to authorized staff and patients at all times True False(2 point each)
2. The surgical unit is often divided into four designated areas, which are defined by the activities performed in each True False(2 point each)
3. Unrestricted area is the entrance from the main corridor and is isolated from other areas of the surgical unit. True False(2 point each)
4. Semi restricted area is the peripheral support area of the surgical unit and includes preoperative and recovery True False(2 point each)
5. Restricted area consists of the operating room(s) and scrub sink areas. True False(2 point each)

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**
You can ask your trainer for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Answer

No	
1	True
2	True
3	True
4	True
5	True

Information Sheet 6	Checking vital signs

6. Vital Sign

Vital sign is an outward signs of what is occurring inside the body. They are the key signs that are used to evaluate the patient's condition. The first set of vital signs that you obtain is called the baseline vital sign. You should take vital sign every 5 minutes for unstable patient and every 15 minutes for stable patient.

1.1. Respiration

Breathing is a continuous process in which each breath regularly follows the last with no notable interruption. Breathing normally a spontaneous, automatic process, which occur without conscious thought, visible effort, marked sounds or pain. You will assess breathing by watching the patient chest rise and fall, feeling for air through the mouth and nose during exhalation and listening to the breath sound with a stets scope over each lung. Chest rise and breath sound should be equal on both sides of the chest. When assessing respirations, you must determine the rate, quality (character) and depth of the patients breathing

Rate Table 1. Normal range respiration for different age group

Age	Range, breath per minute
Adult	12 to 20
Children	15 to 30
Infant	25 to 50

1.2. Pulse

The pulse is the pressure wave that occurs as each heart beat causes a surge in the blood circulating through the arteries. The pulse is mostly felt at a pulse point where a major artery lies near the surface and can be pressed gently against a bone or solid organ. To palpate (feel) the pulse, hold together your index and long fingers and place their tip over a pulse point, press gently against the artery until you feel intermittent pulsation

Figure 14 Radial pulse

Figure 16 Carotid pulses

Figure 15 Brachial pulse

Table 2 Normal range for pulse rate

Age	Range beat per minute
Adult	60 to 100
Children	70 to 150
Infant	100 to 160

1.1.4.C Skin condition

The condition of the patient's skin can tell you a lot about the patient's peripheral circulation and perfusion, blood oxygen level and body temperature. When assessing the skin condition, you should evaluate its color, temperature and moisture.

- **Color**
- **Temperature**
- **Moisture**

1.3. Capillary refill

Capillary refill is evaluated to assess the ability of the circulatory system to restore blood to the capillary system

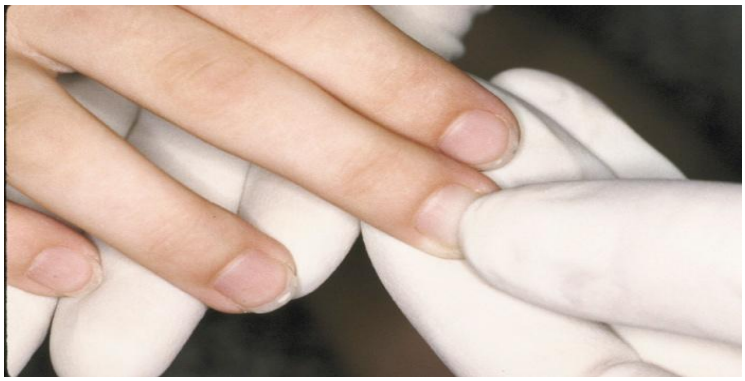

Figure 17 Checking capillary refill

Capillary refill should be prompt and the nail bed color should be pink, with adequate perfusion, the color in the nail bed should be restored to its normal pink within 2 second. Or about the time it takes to say “capillary refill” at a normal rate of speech.

1.4. Blood Pressure

Blood pressure is the pressure of circulating blood against the wall of arteries A drop in blood pressure may indicate: Loss of blood, Loss of vascular tone and Cardiac pumping problem.

Normal blood pressure

Blood pressure level varies with age and gender. The normal ranges for blood pressure

a) Adults: 90 to 140 mm Hg (systolic)/60 to 90 mm Hg (diastolic)

b) Children (1 to 8 years): 80 to 110 mm Hg (systolic)

c) Infants (newborn to age 1 year): 50 to 95 mm Hg (systolic)

1.2 Level of consciousness (LOC)

Level of consciousness (LOC) should also be assessed as a vital sign. AVPU scale is a rapid method of assessing LOC. (See the previous session for detail)

A = Alert and awake

V = Response to verbal stimulus

P = Responsive to pain

U = Unresponsive

1.3. Pupils

The diameter and reactivity to light of the patient's pupil reflect the status of the brain's perfusion, oxygenation and condition.

On injury if the pupil reacts in any of the following ways:

- Become fixed with no reaction to light
- Dilate with light and constrict when light is removed
- React sluggishly
- Become unequal in size

- Become unequal in size when a bright light is introduced into or removed from one eye

Depressed brain function can be produced by the following situation

- Injury to the brain or brain stem
- Trauma or stroke
- Brain tumor
- In adequate oxygen perfusion
- Drugs or toxins (Central nervous system depressant)

Figure 18 Constricted pupil

- P = Pupils
- E = Equal
- A = And

Figure 19 Dilated pupil

Figure 20 unequal size pupil

The letter PEARRL serves as a useful guide in assessing pupil. They stand for the following:

- R = Round
- R = Regular in size
- L = react to Light

Information Sheet 7	History taking

7. History taking

History taking- Is complete history taking may include information gathered from patient/client, family and other care givers

For medical patients the history may be completed prior to the physical examination. History of the casualty can be taken from the casualty himself or herself. If the casualty could not respond or he/she is not conscious, history can be taken from a witness or bystander. Take “SAMPLE” history on: Signs / Symptoms, Allergies, Medications, Pertinent past History, Last Oral Intake, and Event

Initial assessment- After a through observation of the situation and the surroundings, the first aider can proceeds to initial assessment comprising General impression, assessment of responsiveness, and Assessment of **Air way**, **Breathing** and **Circulation** (**A,B** and **C**).

a. General impression – this is performed based on the First Responder’s immediate assessment of the environment and the patient’s chief complaint

Figure: 1. General assessment

b. Assessment of responsiveness by checking if the casualty is **Alert, responding** to Verbal stimuli, responding to pain stimuli or Unresponsive.

The level of responsiveness / consciousness can be expressed as: Full consciousness – able to speak & answer questions normally **Drowsiness**- Easley aroused (awoken) but lapses in to unconsciousness **Stupor** – Can be aroused with difficulty and is aware of painful stimuli Ex- pin prick **Coma** – Cannot be aroused by any stimuli

Figure 2: first aider assess responsivenes of the casulty

c. Assessment of Air way (open the air way, inspect the air way, clear the air way as needed) , Breathing and Circulation)

Figure 3: Air way assessment: open airway by performing head-tilt/chin-lift maneuver

Figure 4: Open airway;perform jaw thrust.

d. Assessment of Breathing

- Look at the effort of breathing.
- Look, listen, and feel for presence of ventilations
- Ventilate as needed

Figure 5: **Assess breathing; look, listen, feel**

e. Assess the Patient's Circulation

- Assess Pulse , Assess for Bleeding and Assess Skin

Figure 6: checking for radial pulse

Figure 7; ***Check for a carotid pulse.***

Figure 8: Checking Brachial pulse

1.2 Physical examination: Complete physical examination form head to toe Techniques of physical examination (inspection, palpation, percussion and auscultation) Vital signs (temperature, pulse rate, respiration, blood pressure)

The First Responder Physical Examination is designed to locate and begin the initial management of the signs and symptoms of illness or injury. The First Responder should complete a physical exam on all patients following the initial assessment. Inspection and palpation /feeling of body parts/ are the two important methods of physical examination in first aid practice.

Inspect and palpate for DOTS (Deformity, Open wound, tenderness and Swelling). Do the physical examination in the sequence of: **Head ▸ Neck ▸ Chest ▸ Abdomen ▸ Pelvic ▸ Extremities**

Figure 9: Assessment of the head

Figure 10: Assessment of the neck

Figure 11; Assessment of the Chest

Figure 12: Assessment of the abdomen

Figure 13: Assessment of the pelvic

Information Sheet 8	Safety equipments for emergency

8. First aid equipment and resources

8.1. Firs Aid Rooms/Areas

A first aid room should be established at the workplace if a risk assessment indicates that it would be difficult to administer appropriate first aid unless a first aid room is provided. If a risk assessment determines that a first aid room is not needed, a rest area within the workplace may be suitable to assist an injured or ill person.

The contents of a first aid room should suit the first aid needs of the workplace. The location and size of the room should allow easy access to emergency services as well as movement of injured people who need to be supported or moved by stretcher or wheelchair.

Eye washes and shower facilities permanently fixed eye wash and shower facilities should be provided in any fixed workplace where there is a risk of serious burns to the eyes or a large area of the face or body.

Emergency Medication workplaces are to establish processes for the management of emergency medication based on their risk assessment and the disclosure of staff and student information example, Adrenaline is required in the event of a first time presentation of anaphylaxis of a previously undiagnosed individual student, staff or visitor.

8.2. Equipment

First-aid equipment must be adequate, should reflect the kinds of injuries that occur, and must be stored in an area where they are readily available for emergency access. It is advisable for the employer to give a specific person the responsibility for choosing the types and amounts of and for maintaining these supplies. Employers must provide and maintain a first aid station in the workplace. A specific example of the minimal contents of a workplace first aid includes:

- oxygen resuscitation/cylinders
- AED

- Thermometers
- auto-injectors
- back boards
- stretchers
- soft bag resuscitator
- first aid kit
- casualty's medication
- analgesic inhalers
- analgesic gas equipment
- resuscitation mask or barrier
- spacer device
- cervical collars
- Personal Protective Equipment
- Relevant texts and documentation,
- first aid principles, policies and procedures
- relevant occupational Health and Safety Act and Regulations
- first aid code of practice/compliance codes
- workplace records and blanks

Communication systems and

equipment

8.3. First-aid kits

Everyone should have a well-stocked first aid kit at work place. For first aid kits in the workplace, there will be legislation which specifies what must be present; this will depend on the size and type of the workplace.

First aid kits should be

- portable and be made of material that will protect the contents from dust, moisture and contamination
- clearly marked in the workplace,
- sufficient indication of the kit's location for those who are unfamiliar
- Kept well-stocked; supplies do expire, and must be replaced periodically.
- Checked regularly for that the kit is stocked, and
- Replaced for any expired items as required

- available at every warehouse and
- Inspected regularly for proper storage and distribution

The number of boxes required should be determined by the employer, taking the following into account:

- The type of injuries that are likely to occur at a workplace
- The nature of the activities performed and
- The number of employees employed at such workplace

Contents of first aid kits should match the types of injuries and illnesses likely to occur in the workplace. Where a risk assessment shows there is a need for extra first aid kits and certain first aid requirements (e.g. first aid rooms and/or first aid personnel) these should be made available. The minimum contents of a first aid box are:

1) Wound cleaner / antiseptic (100ml)
2) Swabs for cleaning wounds
3) Cotton wool for padding (100g)
4) Sterile gauze (minimum quantity 10)
5) 1 pair of forceps (for splinters)
6) 1 pair of scissors (minimum size 100mm)
7) 1 set of safety pins
8) 4 triangular bandages
9) 4 roller bandages (75mm x 5m)
10) 4 roller bandages (100mm x 5m)
11) 1 roll of elastic adhesive (25mm x 3m)
12) 1 Non-allergenic adhesive strip (25mm x 3m)
13) 1 Packet of adhesive dressing strips (minimum quantity 10 assorted sizes)
14) 4 First aid dressing (75mm x 100mm)
15) 4 First aid dressings (150mm x 200mm)
16) 2 Straight splints
17) 2 Pairs large and 2 pairs medium disposable latex gloves
18) 2 CPR mouth pieces or similar devices

N.B. Anything used in the first aid box is replaced immediately. Inspect the box regularly to make sure that the box haven't run out of anything , that nothing has gone past the expiry date and that the box always has the minimum contents in the list above.

There should also be formal first aid register kept close to the first aid box, so that first aider can make a note of incidents where first aid had to be provided. List of the certified first aider(s) could also be kept in or near the first aid box.

Having the correct first aid and emergency procedures are not only, but also it can save lives and prevent minor injuries from becoming worse.

8.5. Design of Kits

First aid kits can be any size, shape or type to suit your workplace, but each kit should be large enough to contain all the necessary items. Kits should also contain a list of the contents for that kit and have a white cross on green background that is prominently displayed on the outside. First aid kits should also be portable and be made of material that will protect the contents from dust, moisture and contamination.

8.6. Maintenance of first Aid kit

People with responsibility for administering first aid (first aiders) should:

- monitor access to first aid kits ensuring any items used are replaced as soon as possible after use undertake regular checks of first aid kits to ensure the kit contains a clean and complete set of the required items
- ensure items are in good working order, have not deteriorated and are within their expiry dates
- report any hazardous situations that have resulted in a person requiring first aid, and

- record first aid treatments

8.4. Automated External Defibrillators

Automated external defibrillators (AEDs) are now widely available, safe, effective, portable, and easy to use. They provide the critical and necessary treatment for sudden cardiac arrest caused by ventricular fibrillation, the uncoordinated beating of the heart leading to collapse and death. Using AEDs as soon as possible after sudden cardiac arrest, within 3-4 minutes, can lead to a 60% survival rate. CPR is of value because it supports the circulation and ventilation of the victim until an electric shock delivered by an AED can restore the fibrillating heart to normal.

All worksites are potential candidates for AED programs because of the possibility of sudden cardiac arrest and the need for timely defibrillation. Each workplace should assess its own requirements for an AED program as part of its first-aid response.

8.7. First-Aid Courses/scope

First-aid courses should be individualized to the needs of the workplace. Some of the noted program elements may be optional for a particular plant or facility. On the other hand, unique conditions at a specific worksite may necessitate the addition of customized elements to a first- aid training program.

8.8. Trained Personnel

Employers must ensure that first aid is provided by trained and knowledgeable workers. Emergency-level first aid training. Standard-level first aid training is a more extensive program that generally includes:

- Emergency Scene Management
- Shock, Unconsciousness, and Fainting
- Choking
- Severe Bleeding
- One Rescuer CPR
- Fractures
- Head and Spinal Injuries
- Joint, Chest Hand Eye Injuries
- Pelvic, abdominal, and crush injuries
- Burns

- Poisoning
- Medical conditions (diabetes, epilepsy, convulsions, and allergies)
- Environmental illnesses and injuries (exposure to heat or cold)
- Artificial respiration
- Automated External Defibrillatio

9. Emergency policies and procedures

As in any situation, people at work can be injured on the job or take ill suddenly, so it's important to have action plan for employees to receive immediate attention if they are injured or taken ill at work.

Whether the injury or the illness is caused by the work they do or not, the person must receive immediate attention and an ambulance should be called in serious cases.

First aid is the provision of immediate care to a victim with an injury of illness before emergency medical treatment is available by a lay person, and performed within a limited skill range. The first- aid provider in the workplace is someone who is trained in the delivery of initial medical emergency procedures, using a limited amount of equipment to perform a primary assessment and intervention while awaiting arrival of emergency medical service personnel.

Basic elements for a first-aid program at the workplace include:

- Identifying and assessing the workplace risks that have potential to cause worker injury or illness
- Designing and implementing a workplace first-aid program that:

  - ✓ Aims to minimize the outcome of accidents or exposures
  - ✓ Complies with OHS requirements relating to first aid
  - ✓ Includes sufficient quantities of appropriate and readily accessible first-aid supplies and first-aid equipment, such as bandages and automated external defibrillators.

- Assigns and trains first-aid providers who:

  1. receive first-aid training suitable to the specific workplace
  2. Receive periodic refresher courses on first-aid skills and knowledge.

The first aider, on approaching a victim should have:

- Put their gloves on

- Checked for danger
- Checked for responsiveness
- Looked at the scene for clues about what has happened
- Gained history on the incident
- Assessed to see how responsive the victim is.

If the victim is unconscious, the first aider should immediately call an ambulance

Operation Sheet 1	History Taking

The techniques used for history taking are:

Step 1: Assess responsiveness of the casualty

Step 2: Talk, listen and reassure the conscious casualty

Step 3: Check safety of casualty and of yourself

Step 4: check for breathing, bleeding and level of consciousness

Step 5 : assess any history of illness Eg: Epilepsy, Diabetes mellitus

Step 6 Assess for history of ingested material E.g. Drug, Alcohol, type of food or fluid

Operation Sheet 2	vital sign

The techniques used for measuring vital sign are:

Step 1: Hand washing

Step 2: Put on disposable glove

Step 3: Collect the necessary equipment

Step 4 Take vital sign

Step 5: Record patient finding

LAP Test	Practical Demonstration

Name: _____

_____

_____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 2 hours.

Task 1: Perform history taking

Task 2: Measure and record vital sign

Instruction Sheet	LG14: Provide first aid service

This learning guide is developed to provide you the necessary information regarding the following **content coverage and topics** –

Identify and respond to infection risks

First aid services

- Communication style in case of emergency
- Using of available resources
- Basic ABC rules and procedures
- Responding causality according to CRC
- First aid procedures
- Obtaining consent in emergency management
- First aid principles and procedures
  - ✓ Respiratory emergencies and artificial respiration
    - ➢ Artificial respiration and management of respiratory accident
  - ✓ Wound care
  - ✓ Bites (Insect, Dog, Snake, Human and Animal)
  - ✓ Dressing of bleeding
  - ✓ Specific injuries
    - ➢ Eye injuries
    - ➢ Head injuries
    - ➢ Scalp injuries
    - ➢ Brain injuries
    - ➢ Face and jaw injuries
    - ➢ Nose injuries
    - ➢ Neck injuries
    - ➢ Open wound of the abdomen
  - ✓ Shock
  - ✓ Bone and joint injuries
    - ➢ Fractures
    - ➢ Specific fractures
    - ➢ Dislocations
    - ➢ Sprain
    - ➢ Strain
  - ✓ Poisoning
  - ✓ Burns
  - ✓ Sudden illness and unconsciousness
    - ➢ Heart attack
    - ➢ Stroke
    - ➢ Fainting

- Convulsion
- Epilepsy

- Operating first aid equipments
- Implementing care according to the organization procedure
- Manual handling techniques
  - ✓ Monitoring and responding of causality
  - ✓ Finalizing causality management

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you **will be able to** –

- Communication style to match the casualty's level of consciousness is adopted
- Available *resources and equipment* are used to make the casualty as comfortable as possible
- Basic ABC rules of life are applied.
- The casualty is responded to in a culturally aware, sensitive and respectful manner
- Relevant first aid procedures are determined and explained to provide comfort
- Consent is sought from casualty prior to applying first aid management
- First aid management is provided in accordance with *established first aid principles and procedures*
- Clinical first aid equipment are correctly operated as required for client management according to manufacturer/supplier's instructions and procedures
- Client care techniques are implemented in accordance with procedures and techniques applicable to health post
- Safe monitoring and responding of causality annual handling techniques are used consistently
- *Casualty's condition* is monitored and responded in accordance with established first aid principles and procedures
- Casualty management is finalized according to casualty's needs and first aid principles

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 16.
3. Read the information written in the "Information Sheets 1". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the "Self-check 1" in page 8.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to "Information Sheet 2". However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.

8. Read the information written in the “Information Sheet 2”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
9. Accomplish the “Self-check 2” in page 16.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the “Information Sheets 7”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 19.
13. Ask your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 21; However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 3.
15. Read the “Operation Sheet 1 and try to understand the procedures discussed.
16. Do the “LAP test” in page 22 (if you are ready). Request your trainer to evaluate your performance and outputs. Your trainer will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your trainer shall advice you on additional work. But if satisfactory you can proceed to Learning Guide #2.

1. First aid services

1.1. Communication style in case of emergency

The role of first aider depends on gaining and honoring the trust of casualties. Maintaining trust requires attentiveness to body language, quality of listening and finding culturally appropriate ways of communicating that are courteous and clear. It may sometimes be necessary to communicate through verbal and non-verbal communication and you may need to identify issues that may cause conflict or misunderstanding. The first aider also needs to maintain respect for privacy and dignity and pay careful attention to client consent and confidentiality.

Relevant communication media and equipment to conveyed emergency services/relieving personnel.

Communication media and equipment may include:

- mobile phone
- UHF/VHF radio
- flags
- flares
- two-way radio
- email
- electronic equipment

Reports

While waiting for help and if time permits, male a brief written report to accompany the casualty to hospital. This will reduce time spent at the scene for ambulance crew and further assist medical with initial patient management. A report can be written on a space piece of paper and should including the following:

- Date , time, location of incident
- Casualty details-name, address
- Contact person for casualty- family member, friend
- What happened-brief description of injury or illness
- First aid action taken- what you did to help the casualty

- Other health problems- diabetes, epilepsy, asthma, etc.
- Medications/allergies
- When casualty last ate or drank
- Observations of vital signs- conscious state, pulse, breathing, skin state, pupils.

Report -keeping

A record of any first aid treatment given should be kept by the first aider and reported to managers on a regular basis to assist reviewing first aid arrangements. First aid treatment records are subject to requirements under Health Records legislation**.**

Self-Check 1	Written Test

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

1. ……the chance, high or low, that a hazard will cause harm, injury or ill health, or the likelihood, or possibility, which harm(2 point each).
   A. Risk B. Hazard C. Risk Assessment D. Risk control
2. Of the following who is/are at risk of infection (2 point each).
   A. Client
   B. Health worker
   C. Community
   D. All of the above
3. Which of the following is the way for the transmission of nosocomial infections(2 point each).
   A. Invasive procedures have the potential to introduce microorganisms.
   B. Service providers and support staff are constantly performing clinical procedures
   C. Clients receiving services may be harboring microorganisms
   D. ALL

Note: **Satisfactory rating - 16 points** **Unsatisfactory - below 16 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

2. Basic ABC rules and procedures

Basic life support (BLS) is the level of medical care which is used for patients with life-threatening illnesses or injuries until the patient can be given full medical care at a hospital. BLS is generally used in the pre-hospital setting, and can be provided without medical equipment.

Many countries have guidelines on how to provide BLS which are formulated by professional medical bodies in those countries. The guidelines outline algorithms for the management of a number of conditions, such as cardiac arrest, choking and drowning. BLS generally does not include the use of drugs or invasive skills. Basic life support consists of a number of life-saving techniques focused on "***ABC***"s of pre-hospital emergency care:

- ***Airway***: the protection and maintenance of a clear passageway for gases (principally oxygen and carbon dioxide) to pass between the lungs and the atmosphere.
- **Breathing:** inflation and deflation of the lungs (respiration) via the airway
- **Circulation**: providing an adequate blood supply to tissue, especially critical organs, so as to deliver oxygen to all cells and remove metabolic waste, via the perfusion of blood throughout the body.

2.3.1. Respiratory Emergencies

- **Definition:** A respiratory emergency is one in which normal breathing stops or in which breathing is so reduced that oxygen in take is insufficient to support life.

Artificial respiration: is a procedure for using air to flow in toand out of person lungs when natural breathing is inadequate or stops

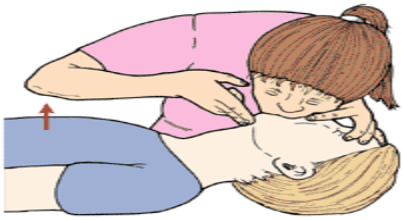

Figure: 1 Mouth to mouth respiration for adult casualty

Cardiopulmonary Resuscitation (CPR) is an emergency procedure that is used on casualties who are unconscious and not breathing. CPR involves chest compressions (pressing down on the chest) and artificial respiration (rescue breathing / mouth to mouth). It has the power to restore blood flow and oxygen to someone suffering cardiac arrest

2.3.2. *Common causes of respiratory failure (problems)*

- Obstruction of the air way by tongue is dropping back
- Inhalation of a small amount of food, smoke, irritation, foreign objects, carbon monoxide, etc.
- Compression of the neck Respiratory disease
- Drowning
- Strangulation and combustible gases

2.3.3. *Signs and symptoms*

- Un able to breath
- Loss of consciousness
- General pallor (paleness)
- Difficulty in breathing and may be no visible breathing

2.3.4. *First Aid management of Respiratory problem procedure*

- Shout for help (depend on the condition)
- Determine the consciousness of the causality by taping the victim on the shoulder and asking loudly “Are you oky!”
- Assess and ensure that patient air way is clear
- Place the patient flat on his back with the head turned to one side
- Remove any thing which is preventing the taking in of air (Remove constraints from the neck)
- Kneel beside the patient’s head place one hand

- Under his neck and the other hand under his lower jaw extend his head and neck gently back ward, this prevents the tongue from falling back in to the throat.

- Place your cheek and ear close to the victim's mouth and Nose
- Look at the victim's chest to see if it rises, falls, and listen and fell for air to be exhaled for about 5 seconds.
- If there is no breathing pinch the victim's nostrils shut with thumb and index finger of your hand that is pressing on the victim's forehead. This action prevents leakage of air when the lungs are inflated through the mouth.
- Take very deep breath and hold it.
- Fit your mouth tightly over the patients open mouth and forcibly in to the lungs
- While carrying out respiration, check the patient's pulse every 2 or 3 minutes to ensure the heart has not stopped.
- Continue the breathing procedure at the rate 12 to 18 breaths per minute until the chest is seen to rise and the patient is breathing for himself or until is certain his is dead.
- Once the patient can breathe by himself/her self-place him/her in what is called the recovery position

Fig 2: External cardiac compression

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

External cardiac compression for an infant

Fig 2 External cardiac compression for an infant

Fig 3 Recovery position

2.4. First aid for wounds

2.4.1. Open wounds:

The skin is cracked open, leaving the underlying tissue exposed to the outside environment, which makes it more vulnerable to bleeding and infections.

2.4.2. Open wounds

Can be classified according to the object that caused the wound. The types of open wounds are:

Types of open wound	Characteristics
Incisions	caused by a clean, sharp-edged object such as a knife, or glass splinter
Lacerations	irregular tear-like wounds caused by some blunt trauma
Abrasions	superficial wounds in which the topmost layer of the skin (the epidermis) is scraped off

Avulsions:	Injuries in which a body structure is forcibly detached from its normal point of insertion.
Puncture wounds	Caused by an object puncturing the skin, such as a splinter, nail or needle.
Penetrating wounds	Caused by an object such as a knife entering and coming out from the skin.

Bites:

- Injuries produced by animal or human bites may cause punctures, laceration or avulsion.
- A. Human bite – The mouth is heavily contaminated
  - Clean the wound with clean H20 and cover it with clean cover
- B. Dog bite – Keep the animal under observation
  - Clean the wound with clean water & soap and clean cover
- C. Snake bites – Lay the casualty down
  - Immobilize the affected part
  - Keep it below the level of the heart
  - Wash the wound with clean H2o
  - Take to hospital

2.4. Stop the bleeding

Put a clean cloth or bandage on the wound, and then press gently on it to apply pressure. It may take 20 to 30 minutes to stop it bleeding. Keep the pressure on the whole time, and don't take it off to check what's happening. Keep the area of the wound raised, if it is possible.

Clean the wound:

This reduces the chance of the wound becoming infected.

- Rinse out the wound with clear water.

- If dirt or debris remains in the wound after washing, use tweezers cleaned with alcohol to remove the particles.

- To clean the area around the wound, use soap and a washcloth
- There's no need to use hydrogen peroxide, iodine or an iodine-containing cleanser.

2.5.2. *Cover the wound:* with a sterile, non-stick dressing

- Cover the wound with a clean dressing and bandage.

- Dressings and bandages can help keep the wound clean and keep harmful bacteria out. A dressing:

  - ✓ done bysterile pad or compress (usually made of gauze or cotton wrapped in gauze)
  - ✓ Should be large enough to totally cover the wound, with a safety margin of about 2.5 cm on all sides beyond the wound.
  - ✓ A bandage is used to secure a dressing in place and to apply pressure to bleeding wounds.

2.5.3. **Closed wounds**:

The skin is intact and the underlying tissue is not directly exposed to the outside world. Even with the skin intact, the damage can reach down to the underlying muscle, internal organs and bones.

The types of **closed wounds** are:

2.5.4. ***Contusions****:*

More commonly known as bruises, caused by a blunt force trauma that damage tissue under the skin.

2.5.5. ***Hematomas****:*

Also called a blood tumor, caused by damage to a blood vessel that in turn causes blood to collect under the skin.

2.5.6. ***Crush injury*****:**

Is an injury that occurs because of pressure from a heavy object onto a body part or from squeezing of a body part between two objects.

2.7. Measures need to be taken in giving first aid to a victim of a closed wound:

2.7.1. Application of direct pressure

Preferably with ice wrapped in a cloth, for several minutes, in order to arrest the bleeding as well as to reduce the swelling.

2.7.2. Elevation of the affected region

Will also support in reducing the pressure as well as the re-absorption process and it should be practiced as and when appropriate

Eye Injuries

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

Signs and symptoms include

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

Precautions

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

3.6.3 Injury of the eye lid

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

3.6.4 Blunt injury of the eye:

- A contusion occurs from direct blow, such as fist, a vehicle accident or explosions that results in black eye. A dry sterile or clean dressing should be applied and the victim should be, transported lying flat and refer.
- Removal of foreign body from the surface of the eye ball
- Pull down the lower lid to determine the object lies on the inner surface
- Lift it gently with the corner of clean handkerchief or tissue paper
- Flash the eye with water
- Apply dry dressing and send to hospital if the object is not removed

3.6.5 Penetrating injuries of the eye:

- Can cause blindness

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

3.Head injury:

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

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

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

Bleeding from the Nose (Epistaxis)

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

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

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

6. Provide transport.

Fig 8: Pinching of the nostril

Abdominal wound:

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

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

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

Shock:

The condition in which the body fails to circulate oxygen-rich blood to all the parts of the body is known as shock. Shock may result from trauma, blood loss, an allergic reaction, severe infection, poisoning, severe burns or other causes. If left untreated, shock can lead to death. Always look for the signals of shock whenever you are giving care.

3.12.1 Sign and symptom of shock:

- Pale or bluish skin /Mucus membrane
- Cold extremities to touch

- Moist and clammy skin
- Rapid and weak pulse
- Rapid and shallow breathing /especially in abdomen & chest injuries)
- Low B/P and may be unresponsive

3.12.2 First aid management of shock

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

2.8. First aid for bone and joint injuries

Bone and Joint Injuries

- Fracture: A fracture is a break or crack in the continuity of bone
- Types of fracture

  1. **Complete fracture-** fracture involves a break across the entire cross-section of the bone and is frequently displaced (removed from normal position)
  2. **Incomplete fracture** – the break occurs through only part of the cross-section of the bone. (eg, greenstick fracture),
  3. **Comminuted fracture** is one that produces several bone fragments.
  4. **Closed fracture (simple fracture)** is one that does not cause a break in the skin.
  5. **Open fracture (compound, or complex, fracture)** is one in which the skin or mucous membrane wound extends to the fractured bone. Can be associated with infection

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

3.16.2 Signs and symptoms of fracture

- Pain, swelling, tenderness and difficulty of moving the injured part
- Abnormal movement in an area to the body
- Protrusion of the broken bone end out of the skin

- Causality may find it difficult or impossible to move the part normally.
- Crepitus or grating sensation of broken bones due to rubbing of bone fragments against each other
- Shortening of the affected extremity, protrusion, deformities and discoloration.

3.16.3 Objectives of First Aid for fracture

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

3.16.4 First Aid Principles of fracture

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

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

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

3.17 Dislocation

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

3.17.1 Signs and symptoms of dislocation

- Swelling

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

3.17.2 First aid measures of dislocation

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

N.B- Never attempt to reduce a dislocation

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

3.18.1 Signs and symptoms of sprain

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

3.18.2 First aid measures of sprain

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

3.19 Strains:

- Strains are injuries to muscles resulting from over stretching

- Commonly strains occur on the back muscles due to improper lifting technique

3.19.1 First aid measures of strain

- Bed rest until there is no pain
- Application of heat, warm,
- Use of a board under the mattress for firm support

Seek medical care for severe back strains.

13 Poisoning:

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

1. Causes of poisoning:

a. Deliberate intake of poisons

b. Accidental intake of poisons

2. **Types of poisons are**:

Household poisons Plant poisons

Food poisoning Drugs poisoning

Alcohol poisoning chemical poisoning

3. General Sign and symptom of poisoning:

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

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

4. General treatment of poisoning

a. If conscious ask the causality quickly what has happened.

b. Do not attempt to induce vomiting

c. If the lips or mouth show signs of burn give water or milk to drink

d. If the causality is unconscious, but breathing normally place in the recovery position.

e. If breathing and heart beat stop begin resuscitation immediately.

f. Remove to hospital immediately.

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

2.10.First aid for burns

A burn is a coagulative necrosis of the surface layers of the body caused by heat.

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

3.14.1 Types of burn

- **Dry burn** – burn caused by flames, lighted cigarettes and hot electric equipment
- **Scalds** - Burns caused by wet heat such as steam, hot 0H2o, or fat produced scalds
- **Cold burn** - burn due to contact with substances such as liquid oxygen & liquid nitrogen.
- **Chemical burns** - Caused by acid or alkalis chemicals
- **Electric burn** - Eclectic current and lightning generate heat and can cause bun.
- **Radiation burn** - Sun rays and light reflected from bright surface.
- **Classification of Burn**- Classified according to the area and depth of the injury
- **Superficial burn / 1st degree burn/** - Involves only the outer layer of the skin

Sign and symptom- Redness, swelling & tenderness

Treatment - Immerse in cold H20

Remove any rings watches and coverings from the injured site

- Dress with clean dressing

Fig 9: superficial burn

Fig 10: superficial burn

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

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

First aid measure - Lay the causality down and check ABC

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

- Do not break blisters

Fig 11: Partial thickness burn

Fig 12: Partial thickness burn

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

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

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

Fig 13: Full-thickness Burns

Fig 14: Full-thickness Burns

First aid measure- Lay the causality down and checks ABC

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

2.1.1 Sudden illness and unconsciousness

Shock:

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

3.12.1 Sign and symptom of shock:

- Pale or bluish skin /Mucus membrane

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

3.12.2 First aid management of shock

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

Self-Check 2	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

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

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

   A. True B. False

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

   A. True B. False

3. The aim of CPR is to compress the heart b/n sternum and the back bone (spine) thus literally squeezing blood out of it.

   A. True B. False

4. Application of Tourniquet is not dangerous of it should be used, use only for sever life-threatening hemorrhage that can't checked by other means

   A. True B. False

5. Bleeding from the nose, ear canal or mouth is not an indicator of **intracranial bleeding** (

   A. True B. False

6. Describe how you will do mouth to mouth respiration (2Point)
7. Mention the steps of CPR (2Point)
8. List sign and symptom of Shock (2Point)

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

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

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

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

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Operating first aid equipments

1.6. First aid equipment and resources

1.7.2. First Aid Rooms/Areas

A first aid room should be established at the workplace if a risk assessment indicates that it would be difficult to administer appropriate first aid unless a first aid room is provided. If a risk assessment

determines that a first aid room is not needed, a rest area within the workplace may be suitable to assist an injured or ill person.

The contents of a first aid room should suit the first aid needs of the workplace. The location and size of the room should allow easy access to emergency services as well as movement of injured people who need to be supported or moved by stretcher or wheelchair.

Eye washes and shower facilities permanently fixed eye wash and shower facilities should be provided in any fixed workplace where there is a risk of serious burns to the eyes or a large area of the face or body.

Emergency Medication workplaces are to establish processes for the management of emergency medication based on their risk assessment and the disclosure of staff and student information example, Adrenaline is required in the event of a first time presentation of anaphylaxis of a previously undiagnosed individual student, staff or visitor.

1.7.3. Equipment

First-aid equipment must be adequate, should reflect the kinds of injuries that occur, and must be stored in an area where they are readily available for emergency access. It is advisable for the employer to give a specific person the responsibility for choosing the types and amounts of and for maintaining these supplies. Employers must provide and maintain a first aid station in the workplace. A specific example of the minimal contents of a workplace first aid includes:

- oxygen resuscitation/cylinders
- AED
- Thermometers
- auto-injectors
- back boards
- stretchers
- soft bag resuscitator
- first aid kit
- casualty's medication
- analgesic inhalers
- analgesic gas equipment
- resuscitation mask or barrier
- spacer device
- cervical collars
- Personal Protective Equipment
- Relevant texts and documentation,
- first aid principles, policies and procedures
- relevant occupational Health and Safety Act and Regulations
- first aid code of practice/compliance codes
- workplace records and blanks

Communication systems and
equipment

1.7.2. First-aid kits

Everyone should have a well-stocked first aid kit at work place. For first aid kits in the workplace, there will be legislation which specifies what must be present; this will depend on the size and type of the workplace.

First aid kits should be

- portable and be made of material that will protect the contents from dust, moisture and contamination

- clearly marked in the workplace,
- sufficient indication of the kit's location for those who are unfamiliar

- Kept well-stocked; supplies do expire, and must be replaced periodically.
- Checked regularly for that the kit is stocked, and
- Replaced for any expired items as required,
- available at every warehouse and
- Inspected regularly for proper storage and distribution

The number of boxes required should be determined by the employer, taking the following into account:

- The type of injuries that are likely to occur at a workplace
- The nature of the activities performed and
- The number of employees employed at such workplace

Contents of first aid kits should match the types of injuries and illnesses likely to occur in the workplace. Where a risk assessment shows there is a need for extra first aid kits and certain first aid requirements (e.g. first aid rooms and/or first aid personnel) these should be made available. The minimum contents of a first aid box are:

19) Wound cleaner / antiseptic (100ml)
20) Swabs for cleaning wounds
21) Cotton wool for padding (100g)
22) Sterile gauze (minimum quantity 10)
23) 1 pair of forceps (for splinters)
24) 1 pair of scissors (minimum size 100mm)
25) 1 set of safety pins
26) 4 triangular bandages
27) 4 roller bandages (75mm x 5m)
28) 4 roller bandages (100mm x 5m)
29) 1 roll of elastic adhesive (25mm x 3m)
30) 1 Non-allergenic adhesive strip (25mm x 3m)
31) 1 Packet of adhesive dressing strips (minimum quantity 10 assorted sizes)
32) 4 First aid dressing (75mm x 100mm)
33) 4 First aid dressings (150mm x 200mm)
34) 2 Straight splints

35) 2 Pairs large and 2 pairs medium disposable latex gloves

- 36) 2 CPR mouth pieces or similar devices

N.B. Anything used in the first aid box is replaced immediately. Inspect the box regularly to make sure that the box haven't run out of anything , that nothing has gone past the expiry date and that the box always has the minimum contents in the list above.

There should also be formal first aid register kept close to the first aid box, so that first aider can make a note of incidents where first aid had to be provided. List of the certified first aider(s) could also be kept in or near the first aid box.

Having the correct first aid and emergency procedures are not only, but also it can save lives and prevent minor injuries from becoming worse.

1.7.3. Design of Kits

First aid kits can be any size, shape or type to suit your workplace, but each kit should be large enough to contain all the necessary items. Kits should also contain a list of the contents for that kit and have a white cross on green background that is prominently displayed on the outside. First aid kits should also be portable and be made of material that will protect the contents from dust, moisture and contamination.

1.7.4. Maintenance of first Aid kit

People with responsibility for administering first aid (first aiders) should:

- monitor access to first aid kits ensuring any items used are replaced as soon as possible after use undertake regular checks of first aid kits to ensure the kit contains a clean and complete set of the required items

ensure items are in good working order, have not deteriorated and are within their expiry dates

report any hazardous situations that have resulted in a person requiring first aid, and record first aid treatments

1.7.5. Automated External Defibrillators

Automated external defibrillators (AEDs) are now widely available, safe, effective, portable, and easy to use. They provide the critical and necessary treatment for sudden cardiac arrest caused by ventricular fibrillation, the uncoordinated beating of the heart leading to collapse and death. Using AEDs as soon as possible after sudden cardiac arrest, within 3-4 minutes, can lead to a 60% survival rate. CPR is of value because it supports the circulation and ventilation of the victim until an electric shock delivered by an AED can restore the fibrillating heart to normal.

All worksites are potential candidates for AED programs because of the possibility of sudden cardiac arrest and the need for timely defibrillation. Each workplace should assess its own requirements for an AED program as part of its first-aid response.

1.7.6. First-Aid Courses/scope

First-aid courses should be individualized to the needs of the workplace. Some of the noted program elements may be optional for a particular plant or facility. On the other hand, unique conditions at a specific worksite may necessitate the addition of customized elements to a first- aid training program.

1.7.7. Trained Personnel

Employers must ensure that first aid is provided by trained and knowledgeable workers. Emergency-level first aid training. Standard-level first aid training is a more extensive program that generally includes:

- Emergency Scene Management

- Shock, Unconsciousness, and Fainting
- Choking
- Severe Bleeding
- One Rescuer CPR
- Fractures
- Head and Spinal Injuries
- Joint, Chest Hand Eye Injuries
- Pelvic, abdominal, and crush injuries
- Burns
- Poisoning
- Medical conditions (diabetes, epilepsy, convulsions, and allergies)
- Environmental illnesses and injuries (exposure to heat or cold)

Self-Check 3	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1) List Contents of First Aid Kit.
2) What is the use of AED?
3) Discuss First aid Room.
4) First aid training is appropriate for whom?

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Score = _____
Rating: _____

Name: _____ Date: _____

8. Manual handling techniques

. INTRODUCTION

1.1 MANUAL HANDLING

Manual handling is defined as: “any activity requiring a person to lift, lower, push, pull, carry, throw, move, restrain, hold or otherwise handle any animate, or inanimate, objects.

This includes a wide range of activities.

Manual handling is an integral part of a personal career’s role. Some of the tasks that involve manual handling include:

Your role as a personal career

Your job description and written job routine for each client set out your specific duties and how they should be done to ensure the health and safety of both you and your client.

Your job description will set out what tasks should and should not be undertaken. Generally, your role as a personal career should not include any heavy lifting, any activity that involves climbing over one meter high, or activities that should be done by a person with specialized training. These activities could include administering injections or changing dressings where there is a risk of infection or injury to both you and the client.

A service plan is generally prepared after a thorough assessment of the client's needs and their home environment. It might specify, for example, that a particular transfer be performed by two people rather than one. This could be because a personal career has not had enough training to do the task unassisted, the correct equipment for a one person transfer is not available, or the client is prone to spasm during transfers and precautions need to be taken.

These restrictions are not intended to intrude on a client's right to direct their own care or manage their household. They are designed to comply with the legal requirements that exist to keep both of you safe and free of injury. The impact of even a minor accident on someone with a high level spinal cord injury could lead to a medical emergency and severely affect their future quality of life. Similarly, the impact of an injury you incur on the job can affect both your ability to work and your leisure activities and relationships

Domestic tasks

Your employer has a responsibility to minimize the risk of potential injury from manual handling so that you can continue to work and enjoy your family and social activities. Employers are obliged to identify manual handling risks and minimize them by redesigning the task, providing appropriate equipment, and providing information and training. As an employee you are responsible for following procedures, using any safety equipment provided and reporting any manual handling risks immediately.

Looking after yourself while working as a personal career means taking a risk management approach to manual handling. You need to assess the risk involved in each task and minimize that risk by using your knowledge to complete the task as safely as possible

1.2MANUAL HANDLING RIGHTS AND RESPONSIBILITIES

Occupational health and safety (OH&S) is a two-way street – both employers and employees have certain rights and responsibilities under the law. As a personal carer, you have the right to a safe workplace – but that comes with a responsibility to identify and report hazards that exist in your client's home. The service provider then has a responsibility to ensure any hazard is eliminated or minimized.

EMPLOYER RESPONSIBILITIES

Employers must ensure the health and welfare of all their employees by providing:

□ □ A safe workplace environment free of risks to health, with safe entrances and exits
□ □ Safe work systems and procedures
□ □ Procedures for safe handling, storage and maintenance of equipment and chemicals
□ □ Information, instruction, training and supervision for all employees
□ □ A process for consulting with employees, involving them in decisions and informing them of decisions that may affect their health and safety
□ □ Processes for identifying hazards, assessing risks, and eliminating or controlling risks
□ □ Processes for regular review of risk control measures
□ □ Personal protective equipment where necessary
□ □ Amenities including toilets and eating areas in a safe and hygienic condition
□ □ Emergency procedures and first aid facilities.

Employers must also ensure that people other than employees who are on the worksite are not

Exposed to risks to their health and safety arising from the employer's work systems or Environments.

Employee responsibilities

Each employee is responsible for:

□ □ Taking reasonable care of the health and safety of others in the workplace

□ □ Cooperating with employers in their efforts to comply with OH&S requirements such as following procedures and participating in hazard identification and reporting

□ □ Using equipment properly in order to provide for the health and safety of other people in the workplace

□ □ Not obstructing attempts to reduce risks or provide aid to injured workers, and not disrupting a workplace by creating health or safety fears

□ □ Not refusing a reasonable request for assistance to prevent a risk to safety or health

1.2.2Client responsibilities

Your client also has OH&S responsibilities because their home is your workplace.

Clients are responsible for:

- Maintaining their home in a reasonable condition so it does not pose a health or safety risk to personal careers or other service providers
- Cooperating with service providers and personal careers in their efforts to comply with OH&S requirements
- Not directing personal careers to undertake unsafe practices during personal care routines
- Supplying or arranging the supply of any equipment, including personal protective equipment that is their responsibility under the terms of their service agreement
- Not obstructing the efforts of the service provider or personal cares to reduce risks or provide care to not obstructing the efforts of the service provider or personal cares to reduce risks or provide care to injured workers
- Not refusing a reasonable request for assistance to prevent a risk to the health or safety of personal cares, other health professionals in their home, or themselves
- □Respecting the right of a personal care to refuse to perform a task that poses a risk to the health or safety of either party.Injured workers not refusing a reasonable request for assistance

to prevent a risk to the health or safety of personal cares, other health professionals in their home, or themselves

- Respecting the right of a personal care to refuse to perform a task that poses a risk to the health or safety of either party.

This means that all clients and personal careers have a responsibility to:

- Identify hazards
- Address them where it's reasonable to do so
- Report hazards, injuries or illnesses
- Work in a safe manner.

Duty of care

The personal care service provider has a duty of care to both clients and personal careers. They are responsible for ensuring that your workplace is safe and you have the knowledge and resources to perform your duties in a safe manner.

Some strategies for doing this could include:

- Providing induction and ongoing training for all personal careers
- Having an occupational therapist or other qualified person assess any risks in the client's home, identify safe work practices and resolve problems
- Providing or organizing personal protective equipment or manual handlingequipment such as hoists etc
- Having policies that clearly set out the rights and responsibilities of each party, such as a no lift policy and a smoke free workplace policy
- Having procedures in place to identify safe methods of working and how to deal with a potential hazard or actual injury or illness

1.3MANUAL HANDLING CODES OF PRACTICE

This Code explains how the Health and Safety in Employment (HSE) Act 1992 applies to manual handling tasks. It describes one way of meeting the requirements of the Act with respect to manual handling. It follows the logical sequence of identify, assess and control to prevent manual handling causing harm to employees.

The Code is a statement of preferred practice but also provides practical guidance on the control

of manual handling tasks. Although the Code represents current preferred practice, employers do not have to follow the suggestions given in it. If they choose, they may use other methods to meet the

requirements of the HSE Act. The methods chosen must be at least as effective as the ones in the Code.

The Code is for use by employers, managers, health and safety advisers, health and safety Representatives, consultants and designers. It encourages employers and employees to adopt aCo-operative approach to prevent harm from manual handling.

1.3.1What advantages are there to implementing this Code?

If this Code is followed by employers an overall reduction in the number and severity of serious Back injuries and other musculoskeletal disorders may be expected. As well, it is reasonable to Believe that:

- removing risk factors for serious back injuries from manual handling tasks may reduce the incidence, delay the onset, or reduce the severity of an episode of acute low back pain
- preventing recurrent attacks of acute low back pain will prevent more serious persistent conditions from developing
- controlling the hazards posed by manual handling tasks, with the intention of bringing them within the reach of everyone in an organization (including people with a disability or with acute low back pain) makes a lot of economic sense to employers

1.3.2The appropriate design of manual handling tasks has additional benefits

- ✓ Insight into how to optimize the efficiency and performance of the work
- ✓ reduced injury costs
- ✓ Fewer absences from work and less disruption
- ✓ increased flexibility in work arrangements
- ✓ The retention of skilled employees
- ✓ Safer work, which leads to better morale

1.3.3After using this Code you should be able to:

1. Know when to use this Code and how it fits with the legislation.
2. Use the Manual Handling Hazard Control Record to:
    a. identify aspects of manual handling tasks that may make them hazardous
    b. assess the significance of these hazards
    c. find control measures suitable for the tasks and devise action and evaluation plans.
3. Know where to look for further help – for example, how to manage episodes of acute low back pain experienced by employees

1.4 MANUAL HANDLING THREE STEPS PROCESS

1.4.1 Promote patient independence

Where possible, patient independence should be promoted as this will assist to facilitate patient independence, nurses should have knowledge of normal movement and body mechanics.

For example, normal healthy people when rolling over in bed move their body turn their head and push off with their leg. This translates to rolling as follows:

- Lifts the arm and place it over the body in the direction of the roll
- Bend the leg up on the same side as the arm, or bend both legs up
- Push on the knee (the handle) and shoulder in the direction of the roll

1.4.2 Assess

Patient assessment is a critical part of manual handling risk assessment and an important nursing skill. The patient assessment in the patient care plan and update it is needed. It should be used in conjunction with the risk assessment checklist when conducting risk assessments on patient-handling activities.

1.4.3 Plan

Manual handling plans should be specific to the unit, detailing available equipment options. In a unit where there is low turnover of patients and patient dependencylevels are fairly constant (such as in nursing homes and residential care centers), a manual handling plan (instructions) should be developed for each patient.

For patients undergoing rehabilitation and in acute care, the plan should be constantly reviewed as the patient improves.

A checklist for setting out patient manual handling plans lists information that should be included in the patient care plan. The checklist can also be used for detailing risk control strategies in conjunction with the risk assessment

BASIC PRINCIPLES OF SAFE MANUAL HANDLING

- ❖ Stretch before and after the activity the same as warming up and cooling down for aerobics, a workout or sport.
- ❖ Prepare the surrounding environment make sure there is adequate space, a clear path and all obstacles are removed.
- ❖ Size up the load so you know how much weight you are moving. For example have a look inside the box, or read the outside label about the contents and weight, or gently push the load with your hand or foot.
- ❖ Know your own limits. Do not try to lift, push, pull or man oeuvre what you know is too much for you. Ask for assistance, use a lifting aid or reduce the load and perform multiple lifts.
- ❖ Plan the lift. Use your mental checklist before and during the lift – ready, brace, lift.

- Face the load and position yourself in the direction that the load is to be moved to minimize turning. If you need to turn, turn with your feet not your back.
- Maintain a wide base of support, with your feet about shoulder width apart.
- Knees and hips should do the bending. Use a semi-squat position and adjust working heights where possible.
- Use your strongest muscles your thighs and bend your knees not your back.
- Brace your spine before lifting by tightening your abdominals. When tightening the abdominals, remember to maintain normal breathing patterns.
- Take a firm hold of the load.
- Keep your back straight in a neutral position and maintain the normal curves in your back.
- Do not work across the client s midline stand on the side you are working.
- Keep the weight close to your body hold the object as close to you as possible.
- Do not over reach either above shoulder height or away from your body. Instead build a bridge – put your knee on the bed to get closer to the client.
- Do not twist your body while manual handling never ever! Change direction using your legs rather than bending or twisting your spine.
- Place the load down by reversing these steps.

Avoid quick jerky movements

- □ □Wear suitable footwear comfortable, firm fitting shoes with non-slip soles and no high heelsor platforms.

Remember – do's

- pushing not lifting
- back in neutral position
- hips flexed
- knees bent

-don'ts

- Lifting too much
- back over extended
- carrying item away from your body
- twisting while lifting
- Pull or push when possible instead of lifting pushing is less strenuous than pulling.

Self-Check 3	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1) List basic principles of safe manual handling

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Score = _____
Rating: _____

Name: _____ Date: _____

Referral of casualty

- After the required first aid service is provided, according to the condition of the casualty and degree of the injury referral should be considered. During the referral of casualty, written document / profile that explains about the casualty's Age and Sex, Chief Complaint, Responsiveness, Airway and breathing status, Circulation status, Physical findings, SAMPLE history and Interventions provided is mandatory to enable the health care providers provide quick and comprehensive management

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

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

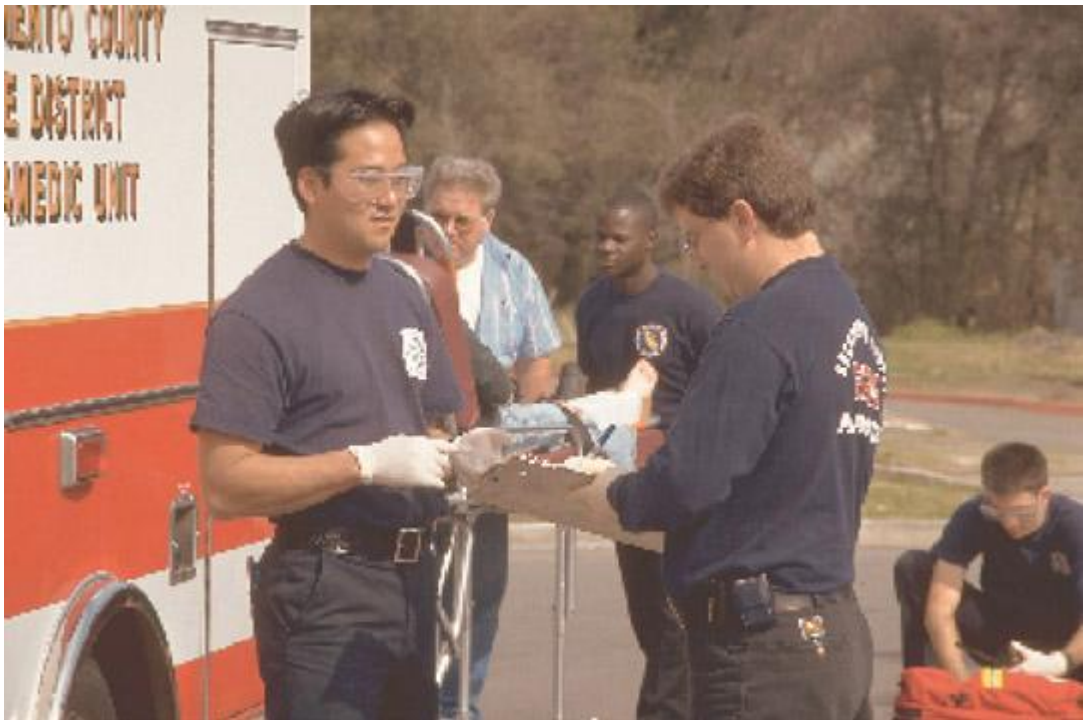

Figure 15: Hand off Report

Operation Sheet	CPR

The steps of CPR involves

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

Step 2: shout for help/ call for help

Step 3: Lay the causality on a firm flat surface

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

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

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

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

Step 8: Open your mouth wide.

Step 9: Take a deep breath.

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

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

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

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

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

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

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

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

Step 18: Repeat the blowing cycle.

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

LAP Test	Practical Demonstration

Name: _____

_____

_____ Date: _____

Time started: _____ Time finished: _____

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

1. Provide artificial respiration
2. Perform pulmonary resuscitation (CPR)
3. Mange bleeding due to cut on the hand
4. Provide care for the patient having shock
5. Provide care for the patient with burn
6. Provide care for the patient having fracture

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**

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

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. Given appropriately response to situations that pose an infection risk in accordance with the policies and procedures of the organization

1.1. Response to infection risks

To successfully identify and respond to infection risks we must understand and follow safe work practices that prevent the transmission of infections.

As a health worker it is also your responsibility to follow recommended procedures in your workplace and take adequate precautions to protect yourself from injury and infection.

Risk management is the process of making health care safer for the patient, staff and visitors by identifying hazards in the workplace and taking action to minimize their harm wherever possible. There are a number of steps in the risk management process:

- ***identifying the hazard***
- ***assessing the risks***
- ***using control measures.***

Identifying a hazard

- A hazard is anything with the potential to cause harm to you, the patients, your co-workers or visitors to the work area. In the sterilization setting this includes chemicals, sharps such as needles, soiled instruments, power, water, steam, noise, and heat.
- In developing procedures or buying new equipment, identify these risks early so that work practices can be developed that ensure the hazard is eliminated as much as possible. Regular safety inspections and audits can help identify and manage hazards.
- All employees, patients, volunteers, contractors and visitors that enter the work place have a responsibility to behave in a safe and responsible manner and report any hazards or near accidents.

Assessing the risks

- It is important to assess the risks associated with each hazard to determine how it can be eliminated.
  - ✓ Is there a high risk of injury or is the hazard a result of a combination of unusual circumstances that may never re-occur?
- Budgets are limited in health care settings, so it is important to look at all the options for dealing with a hazard. You should also document the process to seek additional support for action.

Control measures

- The more serious the consequence, the more urgent it is for the risk to be dealt with and eliminated immediately. If the risk cannot be eliminated it may be possible to circumvent the risk of injury by changing practice. The last alternative is to use some form of personal protection when exposed to the hazard.
- When deciding on control measures this should be a team effort so that management and staff work together. The control measures should not impose another risk.

Monitoring control measures

Once control measures have been implemented it is important to monitor and re-evaluate practice to ensure compliance with new practice

Self-Check 3	Written Test

***Instructions**: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page*

3. The first step in risk management process is
   1. Identifying the hazard
   2. Assessing the risks
   3. Using control measures
   4. None of the above

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Answer

_____

_____

_____

_____

Information Sheet 4	Follow ***procedure for risk control*** and risk containment for specific risks

2.1. *Procedures for risk control*

Strategies to identify risks

Strategies for identifying risks vary. Risk identification can be proactive or reactive. The following contains information about proactive and reactive strategies that can help management and workers identify hazards that present risks to health and safety.

Proactive strategies

- A proactive strategy is one carried out to prevent an accident or incident; for example, implementing processes to identify hazards and risks. Two examples are a job safety analysis (JSA) and an audit.
- A JSA contains information about how a job should be carried out, types of risks and control measures.
- Providers should carry out regular internal audits to check that the control measures for infection and other risks are being implemented. External bodies such as state and territory WHS authorities can also carry out audits to check that safety controls are appropriate.

Reactive strategies

- A reactive approach to risk identification involves reviewing accidents and incidents through measures such as report forms and data, as well as establishing consultation processes such as workplace health and safety committees (HSCs).
- Incident and accident report forms are filled out after any incident or accident. Data from these forms is used by HSCs, WHS officers and managers to identify hazards.
- Committees, team meetings and other forums give staff the chance to discuss infection control risks and provide suggestions for policy and procedure improvements.

Carrying out a risk assessment

Once a hazard has been identified, you need to conduct an assessment of the risk of injury, harm or damage. An example of a risk is the likelihood of a hazard resulting in an injury or disease, together with the seriousness of the injury or disease.

The five steps in carrying out a risk assessment are shown here.

Risk assessment steps

1. Evaluate the likelihood of an injury or illness occurring and the likely severity of any injury or illness
2. Review health and safety information relevant to the hazard such as incident reports, SDSs, results of workplace monitoring and inspections and supplier information
3. Identify factors that contribute to the risk such as the physical layout of the workplace, the knowledge, skills and experience of workers, and existing work practices
4. Identify actions necessary to eliminate or control the risk
5. Complete any relevant records

Self-Check 4	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page

1. A proactive strategy is one carried out to prevent an accident or incident. True False(2 point each)
2. A reactive approach to risk identification involves reviewing accidents and incidents through measures. True False(2 point each)
3.

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Information Sheet 5	***Protocols are followed for care following exposure to blood or other body fluids as required***

2.2. *Protocols for care of blood borne exposures*

Definition*: Blood borne Pathogen Exposure - a percutaneous injury (e.g., a needle stick or cut with a sharp object) or contact of mucous membrane or non-intact skin (e.g., exposed skin that is chapped, abraded, or afflicted with dermatitis) with blood, tissue, or other body fluids that are potentially infectious. In addition to blood and body fluids containing visible blood- semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid are also considered potentially infectious. Urine or gastric contents without visible blood are not considered potentially infectious.*

Blood is the most infectious body fluid for the transmission of HIV, HBV and HCV. If the exposure incident involved a body fluid capable of transmitting any of the viruses (HIV, HBV or HCV

Exposure to blood or body substances may be defined as direct contact with blood or other body substances through broken skin, mucous membranes (eyes, nose or mouth) or needle stick injury

Health care workers (HCW) are at risk of acquiring infection through occupational exposure. Hospital employees can also transmit infections to patients and other employees. Thus, an employee's health programme must be in place to prevent and manage infections in hospital staff

Occupational injuries may be divided into:

a) Percutaneous exposure (from needles, instruments, bone fragments, human bite which penetrates the skin layer, etc.);
b) Exposure via broken skin (exposed skin that is chapped, abraded, or afflicted with dermatitis etc.) with blood, tissue, or other body fluids that are potentially infectious; and
c) Exposure via mucous membranes including the eye

Specific post-exposure policies must be developed, and compliance ensured for a number of infectious diseases for example: human immunodeficiency virus (HIV), viral hepatitis, severe acute respiratory syndrome (SARS), varicella, rubella and tuberculosis. Health care workers with infections should report their illnesses/incident to staff clinics for further evaluation and management

Hepatitis B virus (HBV), hepatitis C virus (HCV) and the human immunodeficiency virus (HIV) constitute well-recognized occupational risks for healthcare workers (HCWs). Avoiding occupational blood exposure by the adherence to principles of standard precautions through the use of appropriate work practices and personal protective equipment is a cornerstone for preventing transmission of these blood-borne pathogens (BBP) in the health-care setting.

In general, the risk of viral transmission after a percutaneous injury is highest for HBV, followed by HCV and HIV.

Occupational exposure is serious and every effort should be taken to prevent its occurrence. However, accidents may still happen and if so, risk assessment and counseling constitutes the basis of post exposure management. Appropriate post exposure prophylaxis (PEP) should be provided using a case-by-case evaluation approach.

Each healthcare institution should have personnel responsible for the Sharps Prevention Program

Types of exposure

1. Percutaneous Injury

- Puncture or laceration of the skin that penetrates into or below the dermis.
- For the purposes of this protocol, a percutaneous exposure to blood/body fluids which has one or more of the following factors present will be defined as a more severe exposure .

- Deep percutaneous injury
- Visible blood present on the device associated with the exposure
- Exposure from a procedure which involved a needle placed directly into the Source's vein or artery
- Large-bore hollow needle

- A percutaneous exposure which has none of the above characteristics will be defined as a less severe exposure (e.g., superficial injury, no visible blood present on device associated with the exposure, procedure from which exposure resulted did not involve a needle being placed directly into the Source's vein or artery, solid needle

2. Mucous Membrane and Non-intact Skin Exposures

a. Mucous Membrane Exposure: When blood/body fluids come into contact with mucous membranes (e.g., eyes, oral cavity)
b. Non-intact Skin Exposure: When blood/body fluids come into contact with an open wound or exposed skin that is chapped, abraded or non-intact because of dermatitis

A larger volume of blood/body fluid is associated with increased transmission risk for mucous membrane and non-intact skin exposures. For the purposes of this protocol, a mucous membrane or non-intact skin exposure involving a major splash of blood/body fluids will be defined as a large volume exposure. Exposures involving lesser amounts (e.g., only a few drops of fluid) will be defined as a small volume exposure.

3. **Human Bites**: Human bites may occur in both occupational and non-occupational settings. The person bitten has a potential percutaneous exposure and the person who was the biter has a potential mucous membrane exposure. Therefore, an individual who bites may be both the Source and Exposed in bite incidents.
   a. As HBV is present in saliva at concentrations 1,000 to 10,000 times less than in blood , for the purposes of post-exposure prophylaxis, generally only exposures to saliva containing visible blood would be considered for HBV PEP (such as deep bites associated with bleeding in the mouth of the biter)
4. **Exposures to Blood/Body Fluids Obtained Through Cuts, Nosebleeds, Physical Assaults, Sports Injuries**
5. **Consensual Sex** (Serodiscordant Partners) HBV and/or HIV PEP should be considered for the following unprotected (e.g., condom breakage) sexual exposures where the Source is known to be positive for the respective viruses

For example

The route of transmission for hepatitis B virus is through body substances such as blood and blood products, saliva, cerebrospinal fluid, peritoneal, pleural, pericardial and synovial fluid, amniotic fluid, semen and vaginal secretions and any other body fluid containing blood**.**

The risk of a health care worker acquiring HIV after a needle stick or other "sharps" injury is less than 0.5%.

Risk reduction must be undertaken for all blood borne pathogens, including:

- adherence to standard precautions using personal protective equipment
- appropriate use of safety devices and a needle disposal system to limit sharps exposure.
- Training for health care workers in safe sharps practice should be ongoing.
- Information on preventive measures must be provided to all staff with potential exposure to blood and blood products.
- Policies which are in keeping with the local and national guidelines must include
  - screening of patients
  - disposal of sharps and wastes
  - protective clothing
  - managing inoculation accidents

- sterilization and disinfection.
- Hospital policy must include measures to obtain serological testing of source patients promptly where necessary, usually with the patient's informed consent.
- Post exposure prophylaxis should be started as per local or national guidelines.
- In case of hepatitis B, immunization is the best way of preventing transmission to health care staff.
  - All HCWs at risk must be vaccinated.
  - Staff infected with blood-borne pathogens may transmit these infections to patients and require careful evaluation with respect to their duties. This status should not be used as cause for discrimination
- If a staff member has been exposed to **Tuberculosis** (TB) they should report to the Infection Control Practitioner or the Staff Health Nurse depending on the hospital protocol for health care worker exposures.
- Health care workers in close respiratory contact with cases such as **meningococcal meningitis** should receive chemoprophylaxis with ciprofloxacin or an effective alternative agent. Close respiratory contact with the patient includes mouth-to-mouth contact, sharing of drink containers or cigarettes

Sharp injuries Needle

- stick injuries are the most common of sharps injuries, although other contaminated sharp instruments may also cause injuries.
- The majority of reported NIs involved hollow-bore needles (55-62%), and recapping was the most common behavior associated with NI. Overall, more than half of percutaneous injuries involving hollow-bore needles were potentially preventable through safer work practices or technologies.
- HCWs should prevent skin penetrating injuries by wearing appropriate clothing, shoes and personal protective equipment (PPE) where required. As a break in the skin can allow direct contact with blood and body substances these should be protected by keeping open wounds covered e.g. with a waterproof dressing or with appropriate clothing.
- Skin penetrating injuries can introduce infectious agents directly into the blood stream, e.g. tetanus and blood borne viruses such as hepatitis B, hepatitis C and HIV. It is very important that skin penetrating injuries are minimized e.g. through safe handling and disposal of sharps
- All health care workers with potential exposure should be vaccinated.
  - For other personnel, the risk of hepatitis B, hepatitis C and HIV infection should be assessed and appropriate immunization or chemo prophylactic steps taken.
  - Immediate treatment of such injuries should encourage
    - washing thoroughly with running water and an antiseptic solution.
    - Consult the infection control team for further advice.
- An incident reporting system should be in place. It should not be seen as punitive/disciplinary; active support by managers should encourage prompt and accurate reporting.

Exposures for which PEP is indicated

- Break in the skin by a sharp object (including hollow-bore, solid-bore, and cutting needles or broken glassware) that is contaminated with blood, visibly bloody fluid, or other potentially infectious material, or sharp objects had been in the source patient's blood vessel.
- Bite from a patient with visible bleeding (in the mouth) and which causes bleeding in the exposed worker.
- Splash of blood, visibly bloody fluid, or other potentially infectious material to a mucosal surface (mouth, nose, or eyes).

Remember, Health care workers should have immediate access to post exposure prophylaxis (PEP) , 24 hours a day, 7 days a week to be freely dispensed by any hospital (private or public), regardless of

the location or type of work they do. The minimum care following potential exposure to HIV should be risk assessment and, if deemed necessary, the first dose of PEP medication

General procedures

First Aid – when an exposure incident occurs, implement first aid

1. Following any exposure, the wound should be washed immediately and thoroughly with soap and water, flush the eyes with running water immediately following a bodily fluid splash. Alcohol, hydrogen peroxide, Betadine or other chemical cleansers are best avoided. Wound should not be squeezed or sucked.
2. For mucosal contact e.g. spillage into the conjunctivae, the exposed area should be immediately flushed with plenty of clean running water.
3. The exposed HCW is responsible for reporting the exposure incident to his/her supervisor and should then seek immediate medical advice for proper wound care and post-exposure management.
    - The following information should be recorded in the exposed worker's confidential medical record:
        i. details about the source patient (e.g. name, NRIC No, diagnosis and any relevant information)
        ii. date, time and place of the exposure
        iii. details of the procedure being performed
        iv. use of protective equipment at the time of the exposure
        v. the type, severity, and amount of fluid to which the worker was exposed
4. The health care worker should be tested for HIV antibody, HCV, HBV antigen and antibody
5. The source patient's blood (if available) should be tested for HIV, HCV & HBV

Reporting

- All institutions should have a mechanism in place for reporting and managing of sharp injuries and mucosal exposure in the occupational setting. HCWs must know the reporting process to facilitate quick and smooth flow so as to allow the attending physician to evaluate the risk of exposure and provide prompt appropriate post exposure treatment
- In addition, a surveillance system of exposure events should be available to avoid similar incidents from occurring in the future.

Counseling

Until the risk of infection is ruled out, advice should be given to the exposed staff to refrain from donating blood, plasma, organs, tissue or semen. The use of condom during sexual intercourse should also be advised. A place for psycho-social support is clearly indicated

In general

Healthcare workers should practice the following:

- Follow safe work practices at all times
- Be familiar with employer's written departmental policies
- Know the potential health and safety hazards of the job and protective measures by participating in appropriate occupational health and safety training programs
- Use personal protective equipment (PPE) as trained and report any changes in personal medical condition that would require a change in status as to wearing PPE
- Know how to report unsafe working conditions
- Report any work-related injury or illness to supervisor
- Participate in accident and injury investigations
- Know what to do in an emergency – Participate in health and safety committees (when available) can be an important way to improve conditions on the job such as: – Provide a forum for employees and management to work together to solve health and safety problems

- Help prevent injury and illness on the job i.e. conduct regular walk-a-round inspections to identify potential health and safety hazards
- Increase awareness of health and safety issues among employees, supervisors, and managers i.e. analyze injury data, accident reports and report trends
- Develop strategies to make the work environment safe and healthy

Self-Check 5	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Blood is the most infectious body fluid for the transmission of (2 point each)
   A. HIV B. HBV C. HCV D. ALL
   B.
2. Puncture or laceration of the skin that penetrates into or below the dermis is(2 point each)
   A. Mucous Membrane exposure
   B. Human bites
   C. Non-intact Skin Exposures
   D. Percutaneous Injury
3. Risk reduction must be undertaken for all blood borne pathogens, including(2 point each)
   A. Post exposure prophylaxis should be started
   B. adherence to standard precautions using personal protective equipment
   C. appropriate use of safety devices and a needle disposal system
   D. ALL

4. In general healthcare workers should practice (2 point each)
   A. Follow safe work practices at all times
   B. Be familiar with employer's written departmental policies
   C. Report any work-related injury or illness to supervisor
   D. Participate in accident and injury investigations
   E. ALL
   F.

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Information Sheet 6	*Appropriate signs are placed when and where appropriate*

Appropriate signs are placed when and where appropriate

DANGER SIGN

- Used where an immediate hazard exists

CAUTION SIGN

- Used to warn against potential hazards or to caution against unsafe practices

SAFETY INSTRUCTION SIGNS

- Used where there is a need for general instruction and suggestions relative to safety measures

ACCIDENT PREVENTION TAGS

DANGER TAG

- Placed only where an immediate hazard exists

CAUTION TAG

- Used to warn against potential hazards or to caution against unsafe practices

OUT OF ORDER TAG

- Used to identify pieces of or equipment that are out of order

Flammable chemicals

Corrosive chemicals

Explosive chemicals

Summary of universal hazardous symbols

60

Summary of …

Explosive (**E**) corrosive (C) Dangerous for Environment irritant Harmful

Very toxic (**T+**) Toxic extremely flammable highly flammable oxidizing agent(O)

61

Self-Check 5	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

4. This picture is a sign for

   1. Biohazard
   2. Cytotoxic
   3. Biological item
   4. Waste

5. This picture is a sign for

   1. Irritant
   2. Cytotoxic
   3. Biological item
   4. Waste

6. This picture is a sign for

   1. Toxic
   2. Cytotoxic
   3. Biological item
   4. Waste

Information Sheet 7	remove ***Spills*** in accordance with the policies and procedures of the organization

2.3. *Spills removal*

Basic Principles:

- Spills of blood or body substances are to be dealt with as soon as possible. Isolate or restrict access to the area if there is an unavoidable delay.
- Standard precautions apply – assume all blood and body substances are potentially infectious and cover cuts, maintain hand hygiene and use appropriate PPE.
- Cover the spill, where applicable, to prevent the generation of splashes and aerosols from the spilled substance - o e.g. granular formulation such as vomit control o use a scraper and pan to remove the absorbed material
- after removing the bulk of the spill, clean the area thoroughly, rinse and dry.
- clean non-disposable cleaning equipment thoroughly after use, rinse and store dry.

Small Spills: e.g. spots or drops of blood and other small spills up to 10cm diameter. - wipe the area immediately with paper toweling - clean with warm water and detergent followed by rinsing - dry the area (as wet areas attract contaminants) - a sanitiser (e.g. alcohol wipe) can be used on the area after cleaning.

Large Spills: e.g. greater than 10 cm diameter.

Wet area – e.g. bathroom with a floor drain –

- wash carefully into the sewerage system using copious amounts of water, taking care to avoid splashes - clean the area with mop and bucket of warm water and detergent
- clean the bucket and mop thoroughly after use using warm soapy water and store dry.
- Carpet - contain and clean with warm water and detergent - do not use disinfectant.

Equipment

- Equipment (mop, bucket and cleaning agents) is to be readily available in a location known to all. Prepare for a range of likely occurrences at your location considering:
  - the nature of the spill (e.g. sputum, vomit, faeces, urine, blood or laboratory culture)
  - the germs most likely to be involved in these different types of spills (e.g. gastrointestinal germs associated with spills of vomit and diarrhoea)
  - the size of the spill
  - the type of surface (e.g. carpet or impervious flooring)
  - the location e.g. whether the spill occurs in a contained area such as a toilet cubicle or in a high traffic area such as a hallway or while in a public place such as on an excursion.

A portable 'spills kit' can be made up to manage likely spills for the area/activity e.g.

- a large (10 L) reusable plastic container or bucket with fitted lid, containing the following items
  - leak proof bags and containers for disposal of waste material
  - roll(s) of paper towel to contain and cover a spill
  - a designated, sturdy scraper and pan for spills (similar to a 'pooper scooper'/dust pan)
  - sachets of a granular formulation containing 10,000 ppm available chlorine or equivalent (each sachet should contain sufficient granules to cover a 10-cm diameter spill) e.g. vomit control - disposable latex, vinyl or nitrile gloves suitable for cleaning - eye protection (disposable or reusable)
  - a plastic apron

- a respiratory protective device such as a disposable P2 respirator (for protection against inhalation of powder from the disinfectant granules, or aerosols, which may be generated from high-risk spills during the cleaning process).

Self-Check 6	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Spills of blood or body substances are to be dealt with as soon as possible True False(2 point each)
2. **Small Spills** wipe the area immediately True False(2 point each)
3. Equipment (mop, bucket and cleaning agents) is to be readily available in a location known to all True False(2 point each)

Operation Sheet 3	Prepare tools and equipment for identification and measuring Muda.

1. Discuss and plan to prepare tools and equipment for Muda identification.
2. Prepare tools and equipment for Muda identification.

LAP Test	Practical Demonstration

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, workshop, tools and materials you are required to perform the following tasks.

Task 1: Identify and prepare tools and equipment for measuring and identification of Muda.

Instruction Sheet 3	LG15: Prepare, evaluate and act in an emergency

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

Emergency respond

- Option for action in emergency situation
- Occupational health and safety procedures
- Victim and other individual remove from danger/hazard
- Documenting and Reporting Assessed potential hazards

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Options for action in cases of emergency and group control strategies for evacuation are identified
- OHS procedures and policies are correctly implemented
- Clients and other individuals are removed from danger.
- Assessed and evaluated potential hazards are reported and documented

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 16.
3. Read the information written in the "Information Sheets 1". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the "Self-check 1" in page 8.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to "Information Sheet 2". However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the "Information Sheet 2". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
9. Accomplish the "Self-check 2" in page 16.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the "Information Sheets 4". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
12. Accomplish the "Self-check 3" in page 19.

13. Ask your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 21; However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 3.

Information Sheet-1	Option for action in emergency situation

1. Option for action in emergency situation

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

1.3 Why to give first aid? The 3'P's

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

Aim of first aid

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

First aid training

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

1.4 General directions for giving first aid

A. Urgent care

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

1) Effect a prompt rescue (for example, remove an accident victim from water from a fire, or from a garage or room containing carbon monoxide, smoke, or noxious fumes,)
2) Ensure that the victim has an open air way and give m-to m or m-to-n artificial respiration if necessary.
3) Control sever bleeding
4) Give first aid for poisoning, or ingestion of harmful chemicals

B. Additional first aid directions

Once emergency measure has been taken:-

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

self-Check 1	Written Test

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

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

A. True B. False

Note: **Satisfactory rating - 16 points** **Unsatisfactory - below 16 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

2. Occupational health and safety procedures

2.1. Introduction to Occupational Health and Safety (OHS)

***What is* Occupational health and safety (OHS)?**

- A cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment
- Promotes physical, mental and social well-being of workers
- Represents a dynamic equilibrium between the worker and his occupational environment

2.2. The purpose of an OHS program:

- To prevent injuries and occupational diseases
- To deal effectively with any accidents or incidents that occur
- To foster a safe and healthy work environment

- ***As secondary effects**:*
  - *Protect co-workers, family members, employers, customers, suppliers, nearby communities and other members of the public who are impacted by the workplace environment*
  - *Reduce medical care, sick leave and disability benefit cost*

An effective OHS program will:

- *Identify hazards in the workplace/job hazard analysis*
- *Eliminate or minimize the potential for injuries, disease or loss of life/control hazards*
- *Limit financial losses resulting from injuries and disease*
- *Be monitored to ensure that it meets its goals requirements*

Management responsibilities

- *Ensure the health and safety of workers present at the work place*
  - *Develop written safe work procedures*
- *Establish OHS policies and program*
- *Provide specific direction and delegate authority to those responsible for health and safety*
- *Provide workers with the information, instruction, training, and supervision necessary to protect their health and safety*
- *Provide and maintain protective equipment, devices, and clothing, and ensure that they are used*
  - *Ensure training & implementation of OHS*
  - *Identify potential hazards through regular inspections and either eliminate or control the hazards without delay*
  - *Remedy any workplace conditions that are hazardous to worker health or safety.*
- *Making sure that equipment is kept in safe working order*
- *Making sure that dangerous chemicals are properly labeled and stored*
- *Making sure that workers perform their duties, as required by the legislation*
  - *Record keeping*
  - *Ensure resources (staffing and funding)*

Supervisory Responsibility

- *A supervisor is a person who instructs, directs and controls workers in the performance of their*

duties

- *Responsibility includes:*
  - *Ensure written emergency procedures*
  - *Displayed in an obvious place*
  - *Review with staff and practice*
  - *Revise when new hazards and procedures are used*

Workers responsibility

- *Take care of their own safety, as well as the safety of others who might be affected by what they do or fail to do*
- *Learn and follow safe work procedures.*
- *Be alert to hazards, and report hazards or problems to the supervisor or employer.*
- *Use the protective clothing, devices, and equipment provided.*
- *Perform work in a safe manner*

National OHS Program

All health facilities should:

- *Have a written health and safety manual*
- *Perform a risk assessment of the workplace*
- *Monitor and keep occupational health and medical surveillance records*
- *Appoint health and safety representatives*
- *Hold regular safety committee meetings*
- *Report and keep a log of all accidents at work place*
- *Provide training on health and safety*

Laboratory Hazards

- *Laboratory workers may be exposed to a variety of workplace hazards in the course of performing their functions*
- *The type and degree of exposure is dependent upon the type of laboratory and its location.*

Types of laboratory hazards

Hazard

- *Any situation, condition or thing that may be dangerous to the safety or health of workers*
- *A Hazard is a threat. A future source of danger. It has the potential to cause harm to:*
  - *People-injury, disease, death*
  - *Property and equipment-damage*
  - *Environment-pollution*

Workplace injury and accidents

- ***Safety hazards*** *can cause immediate accidents and injuries*
- *Slips, trips and falls may also occur in laboratories, especially those with slippery floor surfaces*
- *Hazard contributed from machinery, protruding and moving parts*
  - *vibrating and rotating tools*
- *Safety hazards can result in burns, cuts, broken bones, electric shock, or death.*
  - *Falling hazards associated with slips, trips and falls*
- *Cuts from broken glassware, including capillary tubes and specimen vials*
- *Cuts from sharp instruments including scalpels, scissors and medical instruments*
- *Injuries due to malfunction of instruments in lab*
- *physical injury if compressed gas cylinders explosion*
-

3. ***Perform laboratory work safely***

SAFETY IN THE LABORATORY

- ***Laboratory safety*** *is a process that keeps the laboratory as protected as possible from exposure to human blood and body fluids and other hazards.*
- *Laboratory safe work practice protects:*

- *laboratory workers*
- *Other persons(like visitors, patients)*
- *Cleaning staff*
- *Medical staff*
- *The work results*
- *Outside environment*

Purpose of safe laboratory practice is to prevent:

- *Adverse health effects from exposure to chemicals*
- *Exposure to organisms, diseases, etc. in laboratories*
- *Laboratory equipment hazards - if not maintained properly*
- *Laboratory work results from errors*

When to review laboratory safety guideline:

- *New employees*
- *New procedures*
- *A change in procedures*
- *New equipment*

General safety Procedures or Rules

- *Laboratory coats must be worn at all times*
- *Laboratory coats must be fully buttoned.*
- *Laboratory coats must not be worn outside of the laboratory*
- *Do not put objects in mouth (like pens, pencils, or pipettes).*
- *Develop the habit of frequent hand washing*
- *Never eat, smoke, drink, chew gum, apply cosmetics, or adjust contact lenses while in the laboratory.*
- *Never pipette by mouth, rather, use pipetting bulbs.*
- *Develop the habit of keeping hands away from the mouth, nose, and eyes to prevent self-inoculation with infectious agents*
- *Wear gloves when working with biologic specimens or hazardous chemicals. Change gloves when contaminated*
- *Wear goggles and masks or face shields when splashing or spattering of chemicals or specimens may occur*
- *Never store food or beverages in refrigerators containing chemicals, microorganisms, or clinical specimens*
- *Keep work areas free of chemicals, dirty glassware, and contaminated articles such as paper towels or lint-free tissues.*
- *Decontaminate equipment before leaving the work area with a freshly made 1:10 dilution of household bleach.*
- *Clean up spills immediately and properly.*
- *Store chemicals properly*

Standard Operating Procedures (SOPs)

- *Provide **detailed step-by-step instructions** for carrying out a laboratory activity in a safe manner and achieving accurate and reliable laboratory results*
- *Used in the laboratory and written copies should be available at the work area or bench*

Importance of SOPs

- *Provide written standardized techniques for use in the laboratory*
- *Provide laboratory staff with instruction on how to consistently perform tests to an acceptable standard to ensure conformity in pre-analytical, analytical and post-analysis steps*
- *Avoid the performance of a test being changed by new staff and avoid shortcuts*
- *Maintain and improve the quality of laboratory services*
- *Improve the reliability of test results for clinical and epidemiological interpretation*
- *Promote safe laboratory practice*

Self-Check 2	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. *What is* Occupational health and safety (OHS)?
2. *What is* the purpose of an OHS program

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**
You can ask your trainer for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Self-Check 3	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1.When Do We Wash Our Hands?

A. Immediately after arriving and leaving work
B. Before and after examining a client/patient
C. After touching contaminated instruments or items
D. After exposure to mucous membranes, blood, body fluids, secretions
E. ALL

2. In which two situations that alcoholhand rub alone is not sufficient

A. When hands are visibly soiled and after contact with a patient with known cases
B. When hands are not visibly soiled and before contact with a patient with known cases
C. When hands are visibly soiled and before contact with a patient with known cases
D. None of the above

3. Alcohol-based hand rubs provide several advantages compared with hand washing with soap and water because they:

A. Require less time
B. Act faster
C. Are more accessible than sinks
D. Are more effective for standard hand washing than soap
E. Can provide improved skin condition
F. ALL

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Score = _____
Rating: _____

Name: _____ Date: _____

_____

_____

_____

_____

Information Sheet 4	Documenting and Reporting Assessed potential hazards

Documenting and Reporting Assessed potential hazards

Follow workplace procedures for reporting symptoms and injuries to self and or others

Staffs are responsible for reporting any injuries, discomfort or near miss injuries to themselves or others in the workplace. Documented account of the injury shall be required to assess the task and manage the risk to avoid further injuries. In addition, for the staff concerned, documentation shall be required for any work cover claim.

Self-Check 4	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Why Documenting and Reporting Assessed potential hazards

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Instruction Sheet	LG16: Communicate details of the incident

This learning guide is developed to provide you the necessary information regarding the following **content coverage and topics** –

Communicate details of the incident

- first aid assistance
- Ambulance support and/or appropriate medical assistance
- observation and management of causality during ambulance service
- communication style and level of consciousness
- management of causality in line with the procedure
- maintaining confidentiality of records

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you **will be able to** –

- First aid assistance is sought from others in a timely manner and as appropriate
- Ambulance support and/or appropriate medical assistance are/is requested according to circumstances
- Observation of casualty's condition and management activities accurately are conveyed to ambulance services/relieving personnel
- A communication style is adopted to match the casualty's level of consciousness
- Details of casualty's physical condition, changes in condition, management and responses are accurately assessed and reported to management in line with established procedures
- Confidentiality of records and information is maintained in line with privacy principles and statutory and/or organization policies

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 16.
3. Read the information written in the "Information Sheets 1". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the "Self-check 1" in page 8.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to "Information Sheet 2". However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the "Information Sheet 2". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.

9. Accomplish the “Self-check 2” in page 16.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the “Information Sheets 6”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 19.
13. Ask your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 21; However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 3.

Information Sheet-1	first aid assistance

1. first aid assistance

Responsibility of emergency care provider in the management of causality includes
The order for giving emergency care (First Aid) is based on the following directions

- Look at the general situation quickly
  - ✓ How obvious is the injury or illness Nature of illness or chief complaint
  - ✓ Gather information from the patient
  - ✓ Determine the possible extent of injuries in trauma patient
  - ✓ Be calm, take charge and be confident

- Obtaining Consent
  - ✓ Introduce self.
  - ✓ Ask patient's name.
  - ✓ Obtain consent.
    - check for breathing, bleeding
    - Recognition of any change of level of consciousness is important

Self-Check 1	

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

1. What responsibility of emergency care provider?

Note: **Satisfactory rating - 16 points** **Unsatisfactory - below 16 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Information Sheet 2	Ambulance support and/or appropriate medical assistance

1. Ambulance support and/or appropriate medical assistance

Introduction

Ambulance is a standardized vehicle for emergency management or move from the scene to health facilities for definitive care. It is designed in such a way to deliver emergency (particularly life threatening injuries or acute illness). The size of the ambulance and the interior content (medical and non medical equipment) may vary from country to country. In Ethiopia, the types of vehicle used for ambulance and its speed, warning light, siren, right-of-way etc are determined by federal road and transport authority. However, the apparatus utilized and the personnel involved are determined by federal ministry of health. The operation of the ambulance is complete with the involvement of different stake holders. Ambulance mainly serves in the pre-hospital care and covers emergency care from the scene of accident to the health facility level. This service will fill the gaps that the country faces and can minimizes the associated morbidity and mortality in relation to injuries and other medical emergencies.

Ambulance Operation

Today's ambulances are stocked with standard medical supplies depending on the country standard

Personnel

Every ambulance must be staffed with at least one EMT and one driver. Both are responsible in taking the stretcher towards patient, transferring andmoving the patient to the ambulance. Having accomplished the loading mission, the paramedic attends the patient and the driver drives to the required area.

Safety precautions

- The final part of the preparation phase is review safety precautions. These precautions, which include standard traffic safety rules and regulations, should be followed on each call. Check safety devices such as seat belt are in proper working order.
    - Portable oxygen tanks must always be secured by fixed clasps or housing. Oxygen cylinder must be handled carefully because their contents are under pressure and can support burning. Check the cylinder is labeled for medical oxygen. Check pressure regulator is firmly attached before you transport the cylinder. Do not handle a cylinder by neck. Cylinder should be secured with mounting brackets when they are stored on the ambulance. Oxygen cylinder in use must be secured well to prevent the tank from falling and to prevent damage to the valve gauge and other damage in the ambulance. Never attempt to secure a tank to a stretcher or bench, it may become projectile if the ambulance involved in motor vehicle crash.
    - Fire extinguishers must be in place
    - Torch

BSI (body substance isolation)

BSI precautions requires that all health care workers including the first responder use protective equipment to prevent possible exposure to blood and certain body fluids of patients. This assumes that all patients in all settings are potentially infected with human immune deficiency virus, hepatitis B virus (HBV) and other blood borne **pathogens (**microorganismwhich causes a disease).

Exposure can take place in the following ways

1. The patient's blood is splashed or sprayed in to your eyes, nose, mouth or in to an open sore or cut
2. You have blood from the infected patient on your hands and then touch your own eyes ,nose ,mouth or open sore or cut
3. A needle that was used to inject the patient breaks your skin.
4. Broken glass at a motor vehicle crash or other incident that is covered with blood from an infected patient penetrates your glove and skin.

The best way to prevent exposure is to follow all BSI precautions with each patient.

Universal precaution

You will not be able to tell whether a patient's body fluid has contained blood. Therefore it is recommended that all health care workers including the EMT to use universal precautions, based on the assumption that all patients are potential carriers of blood borne pathogens. **Universal precautions**are protective measures that have traditionally been developed by the center of disease control (CDC) for use in dealing with objects , blood, body fluid or other potential exposure risk of communicable disease. These **universal precautions** includes :-

1. Always wear gloves when handling patients and changing gloves after contact with each patient. Wash your hands immediately after removing gloves
2. Always protective eye wear or face shield when you anticipate that blood or body fluids my splash. Wear a gown or apron if you anticipate splashes of blood or other body fluids such as those that occur with child birth and major trauma.
3. Wash your hands and other skin surface immediately and thoroughly if they become contaminated with blood and other body fluids. Change contaminated cloths and wash exposed skin thoroughly.
4. Do not recaps, cut, or bend use needles. Place them directly in a puncture resistant container designed for sharps.
5. Even though saliva has not been proven to transmit HIV you should use face shield , pocket mask , or other airway accessory if the patient needs resuscitation

Standard precaution

Formerly called universal precaution is body substance isolation guidelines to be used in all patient treatment situations. These precautions consider all blood and **OPIM** (Other Potentially Infectious Material) to be contaminated. In most emergency situations, you can not readily identify precisely a body fluid present to evaluate whether it may be infectious. Therefore, **Occupational safety and Health administration (OSHA)**the federal regulatory compliance agency that develops, publishes, and enforces guidelines concerning safety in the work place recommends using standard precaution with everybody fluids.

If exposure occurs

Even when you follow safety guidelines and standard precautions, when giving care in an emergency, unexpected exposure can occur. If so, you need to take immediate action such as ,

- ✓ If blood or OPIM splashes in your eyes or other mucus membranes, flush the area with running water for 20 minutes if possible.
- ✓ Immediately wash any exposed area well with soap, using antibacterial or antimicrobial soap if possible.
- ✓ Treat any scabs and soars gently when cleaning your skin.
- ✓ Report the exposure to your supervisor as soon as possible.
- ✓ Save any potentially contaminated object for testing purpose.
- ✓ Seek medical care as soon as possible.

Recommended immunization and tests

First responders are generally recommended to be immunized against hepatitis B virus as well as tetanus, a common infection that may enter the body through any broken skin. First responders should ensure they have had a tetanus booster within the last 10 years.

Self-Check 2	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. **What Ambulance** is
2. Immunizations such as tetanus prophylaxis, hepatitis B virus and tuberculin testing is recommended for emergency medical care providers. (L.O 2.5)
   A. true B. false

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**
You can ask your trainer for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Information Sheet 3	observation and management of causality during ambulance service

1. observation and management of causality during ambulance service

Duty to act

Duty to act is individual's responsibility to provide patient care and is a legal task given for you that originate from your professional role. So that you must proceed promptly to scene and render emergency medical care within the limits of your training and available equipment.

Standard of care

Level of care you are expected to give for your patient. It is the manner in which you must act or behave. To comply with standard of care you should meet two basic criteria.

1. You must treat the patient to the best of your ability.
2. You must provide care that reasonable, prudent person with similar training provide care under similar circumstance.

Crime to scene operation

Many emergency medical situation are also crime scene ,so that you should consider certain guiding points in mind.

1.Protect yourself. Be sure the scene is un safe before you try to enter.
2.If you determine that the scene is un safe, wait until the law enforcement personnel communicates you signal of safe.
3. Your first priority is patient care. Nothing except your safety should enter fare with that effort.
.
4. Move the patient only if necessary, such as for rapid transportation, for administration of CPR , or for treatment of severe shock.
5. Touch what you need touch to gain access to the patient.
6. Preserve the crime scene for further investigation. Don't move furniture unless it interferes to provide care. If you move only move to the limit of space you need.
7. Be careful to put your equipment. If you put on top of it you may distort evidence.
8. keep non-essential personnel such as curious neighbors away from the scene.
9. At end write a short report about the incident and make sketch of the scene that show how and where you found the patient. This may help you if you required recalling the incident at some time.

Self-Check 2	Written Test

Instructions: Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Write the two criteria of standard care
2. Describe at least five points in case of crime scene operation

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**
You can ask your trainer for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Information Sheet 4	communication style and level of consciousness

1. **communication style and level of consciousness**

1. Introduction

The role of first aider depends on gaining and honoring the trust of casualties. Maintaining trust requires attentiveness to body language, quality of listening and finding culturally appropriate ways of communicating that are courteous and clear. It may sometimes be necessary to communicate through verbal and non-verbal communication and you may need to identify issues that may cause conflict or misunderstanding. The first aider also needs to maintain respect for privacy and dignity and pay careful attention to client consent and confidentiality.

Relevant communication media and equipment to conveyed emergency services/relieving personnel.

Communication media and equipment may include:

- mobile phone
- UHF/VHF radio
- flags
- flares
- two-way radio
- email
- electronic equipment

Self-Check 2	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Write the Communication media and equipment

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**
You can ask your trainer for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet 6	maintaining confidentiality of records

2. **maintaining confidentiality of records**

Confidentiality

As a first responder you will learn about things that generally considered privet issue. You may get such an information through history taking, physical examination or observation. In this case you will have an ethical responsibility to respect patients right to privacy. Patient right of privacy is legally protected. As a general rule don't talk about specific patient private issue at all with others not involved in the patients care. Violation of confidentiality can damagepublic trust up on your profession and liable you for legal elements**.**

Self-Check 2	Written Test

Instructions*:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. Write the purpose of confidentiality

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Instruction Sheet	LG17: Refer client requiring further care

This learning guide is developed to provide you the necessary information regarding the following **content coverage and topics** –

Refer client requiring further care

- Client history recording
- Documentation of referral procedure
- providing information during referral
- Maintain client care during referral
- maintaining client confidentiality at all time

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you **will be able to** –

- documente Relevant client history according to Health post standard guidelines.
- Ensured Documentation for referral procedures
- conveye Appropriate information to individuals involved in referral facilitate understanding and optimal care.
- Maintain client care until responsibility is taken over by staff of the receiving health institutions during referral.

Client confidentiality is maintained at all times and levels

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 16.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” in page 8.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the “Information Sheet 2”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
9. Accomplish the “Self-check 2” in page 16.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).

11. Read the information written in the “Information Sheets 3”. Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 19.
13. Ask your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 21; However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 3.
15. Read the “Operation Sheet 1 and try to understand the procedures discussed.
16. Do the “LAP test” in page 22 (if you are ready). Request your trainer to evaluate your performance and outputs. Your trainer will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your trainer shall advice you on additional work. But if satisfactory you can proceed to Learning Guide #2.

Information Sheet-1	Client history recording

1. Client history recording

History taking- Is complete history taking may include information gathered from patient/client, family and other care givers

For medical patients the history may be completed prior to the physical examination. History of the casualty can be taken from the casualty himself or herself. If the casualty could not respond or he/she is not conscious, history can be taken from a witness or bystander. Take "SAMPLE" history on: Signs / Symptoms, Allergies, Medications, Pertinent past History, Last Oral Intake, and Event

Contaminated zones are for objects and waste that is waiting for decontamination sterilization or disposal

The contaminated zone boundaries should be clearly defined, because this has implications for surface management and for the placement of equipment.

Instruments placed into the contaminated zone for a treatment session but not used during the session must be regarded as contaminated. For this reason, all bulk supplies such as opened boxes of gloves, cotton rolls or gauze must be stored outside the contaminated zone and protected from contamination from splashes and aerosols.

An example of this zone is a linen skip, in which used linen is stored while awaiting decontamination in the laundry.

If there is any possibility that any item **may** have been contaminated, it should be treated as if it **has** been contaminated.

Self-Check 1	Written Test

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

1. complete history taking may include

Note: **Satisfactory rating - 10 points** **Unsatisfactory - below 5 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Information Sheet 2	Documentation of referral procedure

2. Documentation of referral procedure

After the required first aid service is provided, according to the condition of the casualty and degree of the injury referral should be considered. During the referral of casualty written document / profile that explains about the casualty's Age and Sex, Chief Complaint, Responsiveness, Airway and breathing status, Circulation status, Physical findings, SAMPLE history and Interventions provided is mandatory to enable the health care providers provide quick and comprehensive management

2.1. The profile of Hand off Report has to contain the followings:

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

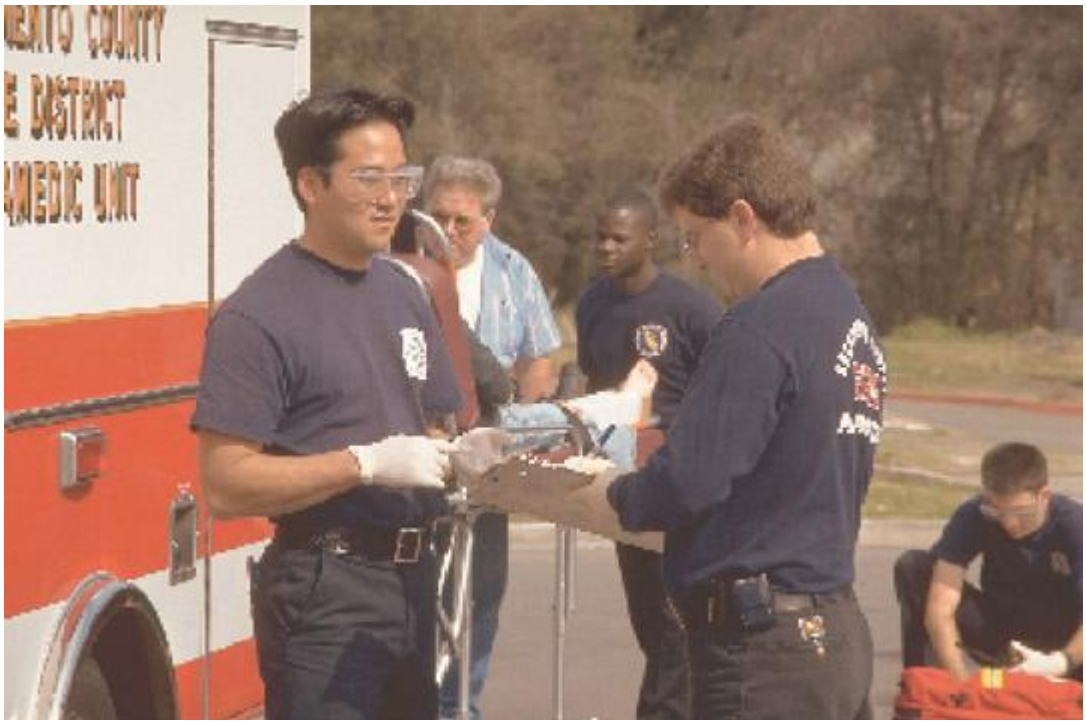

Figure 15: Hand off Report

Self-Check 2	Written Test

***Instructions**:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page.

1. profile of Hand off Report has to contain

Note: **Satisfactory rating - 12 points** **Unsatisfactory – below 12 points**

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

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Information Sheet 3	maintaining client confidentiality at all time

3. maintaining client confidentiality at all time

Confidentiality

As a first responder you will learn about things that generally considered privet issue. You may get such an information through history taking, physical examination or observation. In this case you will have an ethical responsibility to respect patients right to privacy. Patient right of privacy is legally protected. As a general rule don't talk about specific patient private issue at all with others not involved in the patients care. Violation of confidentiality can damagepublic trust up on your profession and liable you for legal elements**.**

Self-Check 3	Written Test

Instructions*:* Answer all the questions listed below. Illustrations may be necessary to aid some explanations/answers. Write your answers in the sheet provided in the next page:

1. Write the purpose of confidentiality

Note: **Satisfactory rating - 09 points** **Unsatisfactory - below 09 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

Instruction Sheet	LG18: Evaluate own performance

This learning guide is developed to provide you the necessary information regarding the following **content coverage and topics** –

Evaluate own performance

- obtaining feedback from ***clinical expert***
- Recognizing psychological impacts on rescuers
- debriefing/evaluation to improve future response

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you **will be able to** –

- Feedback is sought from *appropriate clinical expert*
- recognize the possible psychological impacts on rescuers involved in critical incidents
- Participation is done in debriefing/evaluation to improve future response and address individual needs

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 16.
3. Read the information written in the "Information Sheets 1". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
4. Accomplish the "Self-check 1" in page 8.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to "Information Sheet 2". However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the "Information Sheet 2". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
9. Accomplish the "Self-check 2" in page 16.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the "Information Sheets3". Try to understand what are being discussed. Ask your trainer for assistance if you have hard time understanding them.
12. Accomplish the "Self-check 3" in page 19.

13. Ask your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
14. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 21; However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Information sheet 3.
15. Read the “Operation Sheet 1 and try to understand the procedures discussed.
16. Do the “LAP test” in page 22 (if you are ready). Request your trainer to evaluate your performance and outputs. Your trainer will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your trainer shall advice you on additional work. But if satisfactory you can proceed to Learning Guide #2.

Information Sheet-1	obtaining feedback from *clinical expert*

1. obtaining feedback from *clinical expert*

- A good pre hospital care report documents the care that was provided and the patient's condition on arrival at the scene. It also documents any changes in the patient condition upon arrival at the hospital. The information in the report also proves that you have provided proper care. Pre hospital care report also provides valuable administrative information. For example it is used to evaluate response time, equipment usage and other area of administrative responsibility

- There are two types of report forms. The first type is traditional written form with check boxes and a narrative section. Fill it in completely. Narrative section of form describes what you see and what you do. Include significant negative findings and important observations about the scene. Do not record your conclusion about the incident. Also avoid radio codes. Use only standard abbreviations.

Self-Check 1	Written Test

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

1. What is the way of collecting feedback from *clinical expert*

Note: **Satisfactory rating - 16 points** **Unsatisfactory - below 16 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

List of Reference Materials

1. First aid manual, Emergency procedures for everyone, at home, at work, at leisure, 8th edition
2. The Federal democratic republic of Ethiopia Minster of health , First Aid learning module Addis Abeba, Ethiopia 2014
3. First Aid and Accident Prevention Lecture Note for Health Science Students the Carter Center, the Ethiopia Ministry of Health, and the Ethiopia Ministry of Education
4. *Emergency Care and Ambulance serviceTraining Module One* (2010)