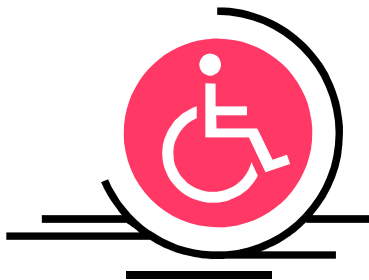


Disaster Safety Education



Procedures and Tools for First Aid

Procedures and Tools for First Aid

Background

During a disaster, there will definitely be victims, because an event is still not considered disaster if there are no victims, such as deaths, damage to property, social structure, infrastructure or environmental damage. Sometimes the number of victims is not the direct result of the disaster but victims can still fall because of inappropriate first aid. Therefore, we should improve our understanding regarding the principles and procedures as well as skills in dealing with disaster victims.

Immediately after a sudden or forewarned disaster, while panic and total confusion still rules, we should keep calm and thoughtful in coping. The steps we take to help victims will very much affect their future condition. First aid administered accurately and quickly will be very important for the victim's survival.

1. Objectives of first aid

The main objectives of first aid are as follows:

Prevent the worsening of the conditions of victims

Many fatalities happen because victims received help too late or because of ignorance of people at the scene in administering first aid, e.g., if a victim suffers a wound that is bleeding a little, try as quickly as possible to stop the bleeding in order to prevent a serious blood shortage. Use a sterile bandage otherwise an infection may further worsen the victim's condition.

Prevent additional victims

During a disaster situation there can be a large number of victims. The purpose of first aid is to prevent this number from growing and the victims' conditions from worsening, e.g., when helping someone is drowning in a river, the helper should be able to swim and understand the condition of the river current. This is to prevent the helper from also drowning and increasing casualties.

Facilitate further handling

First aid is only a temporary measure and therefore will still need further aid from competent officials and agencies such as midwives, medical aides, doctors, and hospitals. Therefore when administering first aid, refrain from methods that could complicate further aid treatments, e.g., do not put strange ointments on the wound because it will have to be cleaned once the person gets, and this would definitely take valuable time.

Mitigate the victim's suffering

By administering first aid, hopefully physical suffering such as pain and panic can be minimized. Give encouragement, e.g., help will be coming soon; the wound is not so serious; wrap a burn with young banana leaves.

Components of first aid

Victim

The main aid component is victim as the person who needs help

Helper

A helper is someone whose condition is better than the victim's, with willingness and ability to apply first aid.

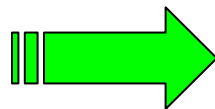
Sickness/injury

Sickness/injury is a condition which makes a victim suffer, it may include physical or psychological sickness. What should be known regarding sickness/injury is the injury/sickness type, treatment principles, and methods of administering first aid.

Priority attention

During an emergency situation the total number of victims is usually higher than the number of helpers, so helpers should establish the priority of the victims to help first.

- Select victims most able to be helped
- Give precedence to victims needing minor treatment so they can assist others.
- Give more attention to patients with a high level of fear and panic in order to prevent a disruption of the aid process
- Whenever there are victims in a buried position/covered by something and must be located, those found first should be helped immediately.
- Whenever a deceased victim is found, wait and focus on finding other safe victims.
- Get victims who can participate actively involved in searching for help.
- When a victim is found with multiple injuries/sickness, apply help in this order



- 1. Breathing disorder**
- 2. Bleeding**
- 3. Loss of consciousness**
- 4. Bone fractures**

How to deal with injuries

Competence:

Participants will be able to understand the principles and procedures, as well as how to use the tools suitable for administering first aid.

Quality Input:

- First Aid Kit,
- Alternative First Aid equipment,
- Rehearsal equipment

Activities for first aid

1. Bleeding wounds

During certain disasters, a bleeding wound may occur, e.g., piercing by flying building material during a cyclone, being struck down by building debris, scratching by a sharp object. Keep in mind that a bleeding wound can be quite dangerous and should straightaway be treated because of several factors:

- Whenever there is a loss of blood exceeding 20% of the total blood in a human body, this may cause unconsciousness and when no immediate help is given could result in death.
- Blood outflow from a wound. A wound represents a window for viruses or bacteria to enter the body, therefore the wound should be covered immediately to prevent an infection.

Internal bleeding

Internal bleeding occurs when there is an internal body wound, although no blood has left the body. Body parts that often experience internal bleeding are the thoracic cavity, the stomach cavity and the head cavity.

Applying aid is through calming the victim, and by taking him/her to a clinic or hospital as quickly as possible, because the treatment is limited to those with special competence.

Internal bleeding symptoms:

- **Stomach cavity bleeding is indicated by enlarged, hard and stiff stomach**
- Thoracic cavity bleeding is indicated by short-windedness.
- Head cavity bleeding by decreasing consciousness and may result in paralysis.

External bleeding

External bleeding occurs when skin is scratched and blood seeps out of the body through the wound/scratch.

External bleeding symptoms:

- Scratches and wounds on skin
- Bleeding of wound
- Pain
- Dizziness caused by too much blood loss

Although the body has the ability to stop bleeding, it is necessary to apply first aid against a bleeding wound. The main way to do this is through:

- exerting pressure on the wound
- placing a bandage on the wound
- exerting pressure and placing a bandage (tourniquet) on the wound
- exerting pressure on internal blood center points, for instance by the neck side, underneath the upper arm
- and even when there is no more bleeding, the wound should still be covered to prevent bacteria/germs from entering through the open skin.

2. Treatment of wounds

A wound is usually treated by bandaging.

Locate wound position

Wounds in different locations demand different treatment, therefore it is most important when a victim is still conscious not to move a lot and to remain in a seating or standing position (position of head should be the highest).

Pay attention to the human body's anatomical shape

During the treatment of a wound, the body's anatomy has to be noticed, because it will affect the bandaging method. It comprises three basic shapes:

- cylindrical, e.g., arm, thigh, calf, neck, body.
- round, e.g., head.
- joint, e.g., elbow, heel, and knee.

Identify size of the wound (extent and intensity of blood outflow)

The size of a wound determines the treatment method, even though it follows the same principles. Cover wound and stop the bleeding. There are four methods to stop bleeding: applying pressure, bandaging, bandaging and applying pressure (tourniquet) and total bandaging.

When trying to stop bleeding, do not bind too loose as blood will not stop but also do not bind too tight, as this will stop blood from flowing to the wounded area. Therefore it is necessary to ask a victim, whether the bandage is too loose or too tight. When no response can be obtained from the victim, the bandage tightness is done in such a way that the pulse can still be felt beneath the bandage.

3. Burns

A burn may occur because of fire from an electrical short-circuit, a stove or machinery.

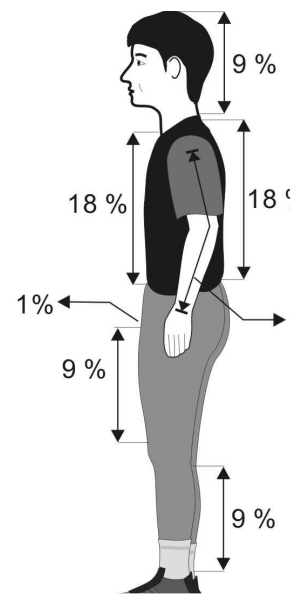
Intensity level of a burn

The intensity level is established in 2 ways, i.e., percentage of the burned body part and the degree of extent and depth of burned skin.

Percentage

Based on burned body parts, the percentages of burned body surface can be observed in picture 1 as follows:

- *Head until neck 9%,*
- *Left or right arm 9%,*
- *Front body part (stomach and chest) 18%,*
- *Back body part (back) 18%,*
- *Upper left leg 9%,*
- *Upper right leg 9%,*
- *Lower right leg 9%,*
- *Lower left leg 9%,*
- *Genitals 1%,*



Total: 100

Picture 1: Percentage of burned body surface

Degree

The degree refers to the depth level of burn suffered by a victim. Four degrees of burn depth exist, and the symptoms are as presented in the following table.

Table 1: Degrees of a burn and the symptoms

Degree	Indications/Symptoms
1	Reddish skin but painful when touched. The burned part of skin is only down to the epidermis
2	Skin blisters and peels off, and is painful when touched.
3	Skin peels off until colored white mingled with blue, not painful even if pierced with a needle, because the burn has already damaged the nervous system network existing in the skin.
4	Skin and flesh are already burned. Bone is seen. Victim does not feel anything around burned area. Feels intense heat/thirst.

Burn symptoms

The presence of a burn can be observed from the combination of symptoms as follows:

- Red colored skin
- Blistered skin
- Peeling off skin
- Painful when touched
- Feeling very hot
- Flesh get burned until the bones can be seen
- Stinging smell
- Feeling very thirsty
- Not bleeding

Principles of first aid against burns

- Stop deepening process of the burn. Most effective: pouring or soaking the wound with cold and clean water.
- When a burn causes skin to peel off, immediately cover the wound with a clean cloth, avoid smearing with anything else to prevent risk of infection that may complicate further treatment. Cover the wound using a sterile cloth, for instance an already washed and ironed clean handkerchief or clean plastic.
- After the wound is covered, a bandage may be applied. Bandaging a burn is different than bandaging a bleeding wound. During bandaging a burn, it is important to be sure that the wound is covered rather than the tightness of the bandage.
- After the wound is covered, try to get further treatment.

4. Broken bone

A broken bone wound refers to a wound which occurs on a bone, in the form of cracking, breaking or sticking out of the body. Broken bones are injuries most common during earthquakes. The cause of a broken bone is for instance being struck by building debris, trampled on, getting squeezed.

Types of broken bone wounds

- Fractured bone: a bone experiences trauma/impact it may cause the bone to crack, but not break apart.
- Closed broken bone: a bone breaks, but is still inside the body.
- Open broken bone: a bone breaks and sticks out through the skin.

Symptoms of broken bone wounds

Several symptoms easily recognizable are among others:

- Black and blue
- Swollen
- Very painful when touched or moved
- Change in form
- Broken neck bone can be noticed when there are wounds on both head and neck
- Broken backbone can be noticed when there is a difference in the length of the legs
- Broken rib-bone is followed by breathing difficulties

Principles of first aid against broken bone wounds

The first aid principle to address a broken bone wound is through the fixation to rest/minimize activity of the two joints that flank the broken bone. This is necessary to prevent friction of the broken bone. Friction of a broken bone can aggravate the wound.

Treatment of broken bone wounds

Treatment of a broken bone wound (fixation) is known as splint bandaging. Fixation is done by applying two splints comprising of wood lined with thin cloth/sponge. The splints, each two centimeter in length are meant to flank the fracture location, which are then bound with a rope, and tightened to support the broken body part and prevent it from suspending.

Treating a broken neck is by propping up the neck to prevent any movement, whether left and right, to and fro, as well as turning around.

A broken back does not need first aid, but needs special aid from competent persons. What should be exercised is to make victim remain in a lying down position, and to make use of a flat and hard palanquin when transferring the victim to a different location.

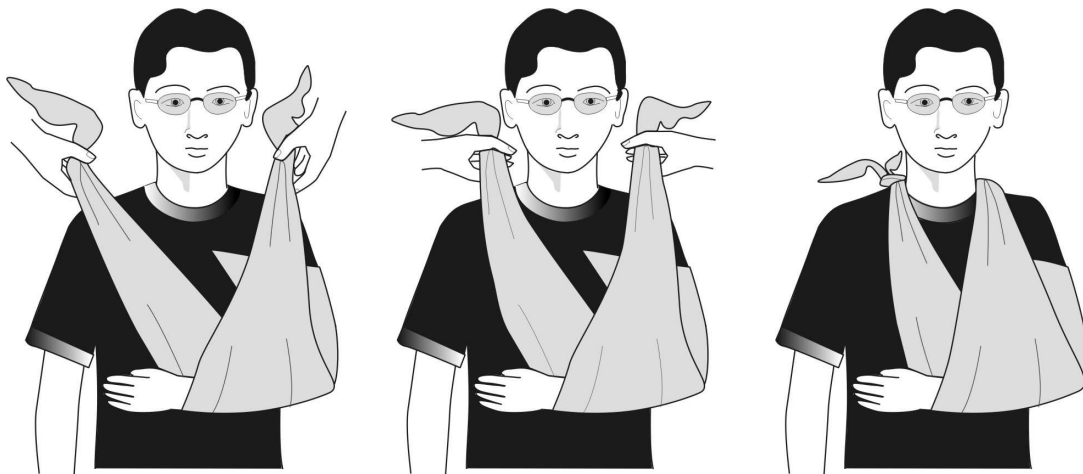
When treating a victim with a broken collarbone, no splints are needed, only a shoulder binder to retain its position and prevent the victim from stooping.

In the case of an open broken bone, first step is to cover the wound, and thereafter conduct a fixation against the broken bone.

Keep in mind:

In treating broken bone wounds, do not try to restore the bone to its original position, by pressing, pulling or reinserting the stuck out bone.

If no splints are available, part of the victim's body can be utilized as a splint. For instance in the case of a broken lower arm, fixation can be done by binding the broken arm to the victim's body.



Picture 2. Treatment of a victim with a broken arm

5. Evacuation techniques for persons with injuries

Definition of evacuation

Evacuation is defined as transferring a victim from one place to another with the hope of receiving further aid, in order of his/her condition not aggravated or to prevent hazards from other threats for instance aftershocks, landslides or fires.

Objectives of evacuation

The objectives of an evacuation are to protect victims from the surrounding conditions against possible aftershocks, and to receive further aid when deemed necessary.

Evacuation requirements

An important requirement for evacuation is the stable condition of the victim, for instance breathing is normal again; bleeding has stopped; victim is conscious again. The above mentioned requirements may be ignored if the area where the victim is currently located is still unsafe from hazards, for instance fire hazards.

Evacuation method

To evacuate in a simple manner is to transfer a victim by carrying, with or without support tools. The transferring of a victim may be well exercised by 2 to 6 persons. In a specific situation, evacuation may be carried out alone, for instance from inside a very narrow collapsed building. Keep in mind that the evacuator should rely on his ability to transfer a victim. If he/she is apparently unable, he/she should seek help.

Evacuation equipment

Evacuation equipments are tools that can be used for transferring a victim to a safer place. The use of evacuation equipments should be adapted to the total number of helpers and to the injury/sickness condition of the victim

For transport we know two tools usually used i.e. a long board and a *dragbar*, both functioning as palanquins. Other than these two standard tools, there are also simple tools by utilizing surrounding objects such as a door, ladder, sofa, chair, blanket, stocking or a rice/fertilizer bag.

Recognizing support tools to provide aid

Support tools for administering aid are used if the patient's condition needs administering aid with support tools, because there are many cases where a patient does not need a support tool, e.g. getting knocked or bruised, ignited by fire, getting slightly scratched and bleeding has already stopped by itself, etc. However, there a lot of cases where the use of support tools is required to help disaster victims exist.

In this module standard support tools are introduced, i.e. support tools in line with medical standards for helping disaster victims. These tools can be purchased, or self-made, but most important is that these tools are capable of providing ease to patients and helpers in coping with disaster cases.

Recognizing surrounding objects that can be used for administering aid

During a disaster situation, although the preparation is already thought adequate, quite often the tools already prepared prove to be insufficient or inappropriate. This condition demands the ability to use surrounding objects as replacements for standard tools for treating victims. Although very different when compared to standard equipment, these replacement tools can be utilized to administer aid. Samples of replacement tools include:

Table 2 Alternative support tool samples to administer aid

No	Standard tool/material	Replacement objects
1	Palanquin	Ladder, blanket, chair, bag, stocking
2	Splints	Banana branch, wood, bamboo, cardboard box
3	Dressing cloth	Handkerchief, clean cloth
4	Burn wound cover	Young banana leaf, sterile cloth, sterile plastic
5	Mask	Stocking, towel, sarong
6	Triangle cloth	Midrib of banana leaf, raffia rope, a torn piece of cloth, belt, shoelace
7	Medicines	Several types of medicine plants around us, for instance banana tree sap, vanilla leaf sap, papaya leaves, lamtoro leaves, balsam.

STUDENT ACTIVITY SHEET 1

TOPIC: Treatment of bleeding wounds

Objective:

Participants will be able to simulate the treatment and bandaging techniques of bleeding wounds.

Tools and Materials:

- Bandage or triangle cloth to apply pressure and bind.
- Pictures of various aid stages

Activities

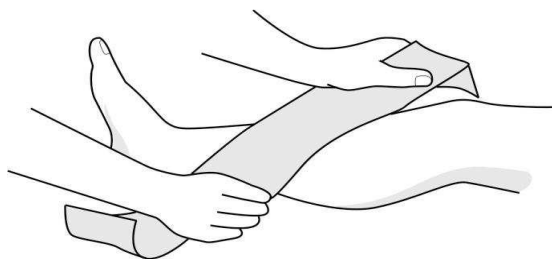
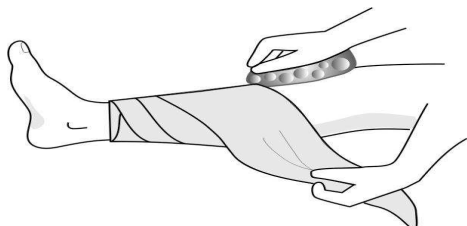
The principle of treating bleeding wounds is to as quickly as possible stop blood outflow, because it can be fatal if blood outflow exceeds 20% of the total blood in the body.

The next principle is to as quickly as possible cover the wound, because open skin presents an entrance for bacteria and other germs to the body. A sterile cloth should be used when applying a bandage to prevent the wound from catching an infection, or one should apply disinfectant to the wound if available.

Another important point is that the bandage applied to a wound should not be too tight, because this might obstruct other body parts, or too loose, because otherwise the bleeding will not stop. If the victim is conscious please ask him/her about the bandage tightness, but if the victim is unconscious one should check for pulse signs around the wound area.

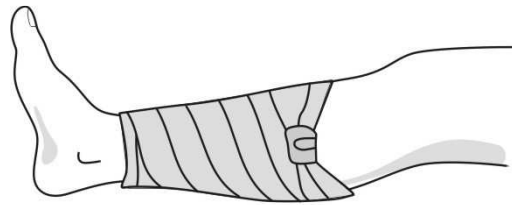
Activity 1: Bleeding wound treatment on cylindrical body parts

1. Clean the wound with disinfectant medicine of the same sort.
2. Prepare a triangle cloth (bandage).
3. Cover the wound with the bandage, 1 with a slipknot.



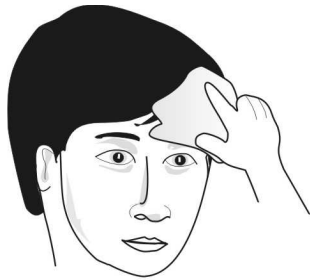
4. If the wound is large, apply a sterile pressing tool on wound, or use a pressing tool in the shape of a cardboard box or a piece of wood if the wound is large and bleeding rapidly.

5. After applying a pressing tool, bind the wound straightaway using the next method.

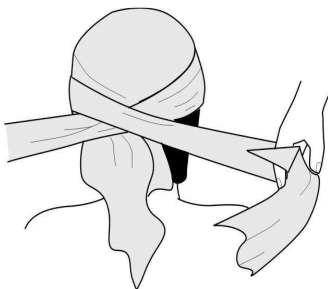


Activity 2: Bleeding wound treatment on round body parts

1. Determine if the wound needs a pressing tool or not, if considered necessary apply a pressing tool.



2. Prepare an already folded bandage.
3. Start binding starting from the wound area.



4. Bind around the head in circles, upon arriving opposite of the wounded area, cross the bandage.

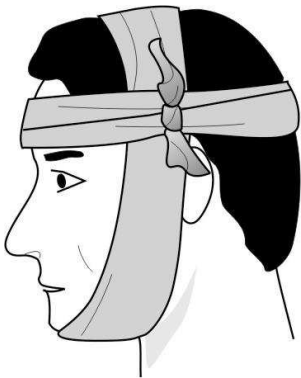
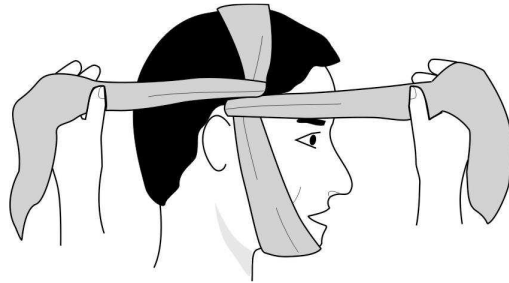
5. After crossing, tie bandage in shape of a parcel (not in the direction of first binding) until arriving at the position of the wound. When reaching the same position as the wound, tie with a slipknot.



6. If a wound exists on the chin or upper forehead, a triangular cloth is needed to prevent the bandage from coming loose.

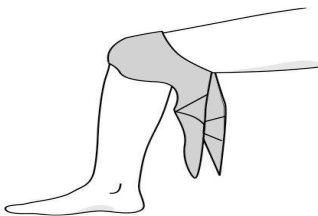


7. After the wound is pressed, tie a pair of strings from bottom to behind the head, going over the ears. Then tie with a slipknot.



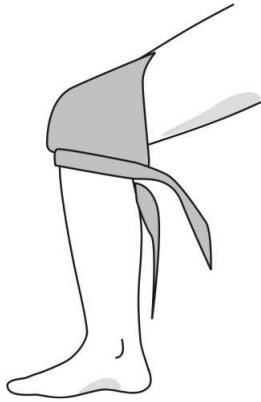
8. Tie another pair of strings to the direction of behind the head via below the ears. Make sure binding is not too loose and not too tight.

Activity 3: Bleeding wound treatment on the joint area

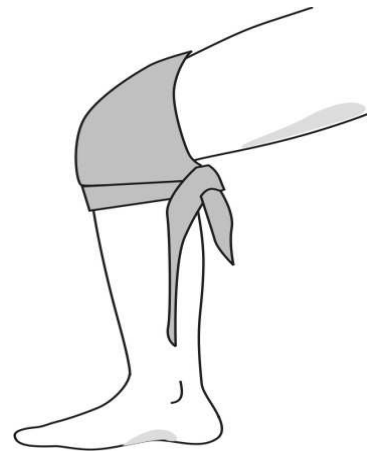


1. For instance a wound exists on the knee.
2. Prepare pressing tool and a tying bandage which is already tied-up.

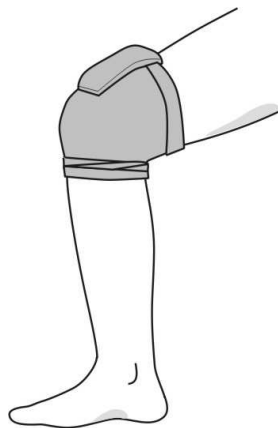
3. Bandage the wound starting from the wound area; pull both ends of the bandage to behind the knee, cross them.



4. After crossing, pull both tying strings up front to below the knee, cross them again.



5. After having crossed, pull the tying strings to behind the knee, and after crossing pull tying strings again up front of the knee in the direction of above the knee. Check the tightness of the tying strings.



STUDENT ACTIVITY SHEET 2

TOPIC: Treatment of Burns

OBJECTIVE:

Participants will be able to simulate burn treatment techniques.

TOOLS AND MATERIAL

- Triangular cloth
- Pictures of various aid stages

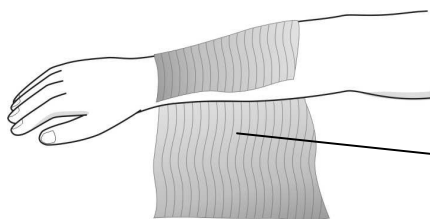
ACTIVITY STEPS

The first process of administering aid to a burn victim is to prevent the burn from deepening, by pouring cold fluid onto the wound, i.e. clean water or antibiotic medicine. This is necessary because in general, a burn tends to undergo a deepening process if no appropriate measures are taken.

Avoid adding any substances to the wound because it may complicate further treatment. After having carried out the measure as good as possible, cover the wound straight away. This is necessary to prevent germs or dirt from entering through the open skin. It is suggested that before covering with cloth, one should first cover the wound with a sterile substance, cold and not sticking against the wound, because if the wound is immediately covered with cloth, when replaced the cloth will stick to the wound. The internal part of a coiling young banana leaf is suitable to function as a layer.

Activity 1: Treatment of burns on cylindrical body parts

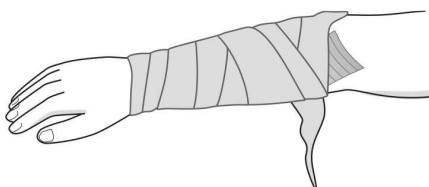
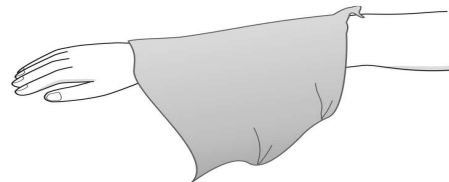
1. After having tried best to prevent the wound from deepening, cover the wound with a sterile substance, cold and not sticking against the wound, e.g. the internal part of a still coiling, young banana leaf. After having layered the wound, cover it with a folded bandage like a ribbon with sufficient width, starting from the



Banana leaf

wound area.

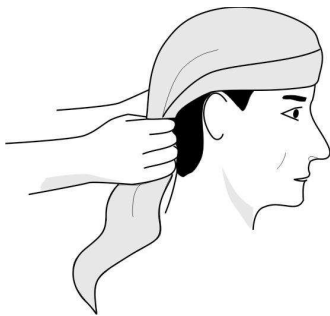
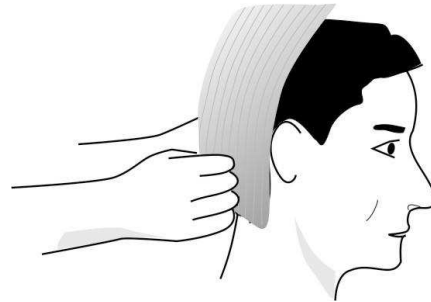
2. Pull both ends of the bandage to behind the wound, until the bandage is fully used, and finish with tying up both bandage ends with a slipknot.



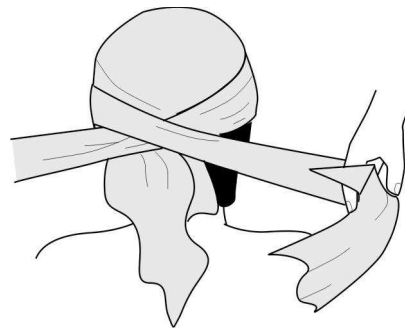
3. The covering does not have to be tight, but should cover the whole wound area.

Activity 2: Treatment of burns on round body parts

9. Repeat activity 1 on Activity-1, but let bandage still take the shape of a triangle, position the tip of the triangle to behind the wound.



10. Then pull both bandage ends to behind the wound, make sure that the bandage tip is covered.



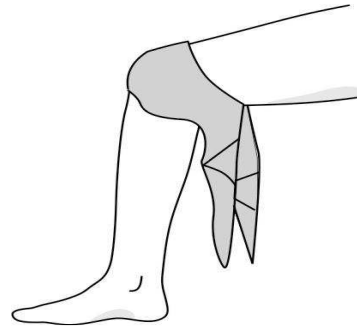
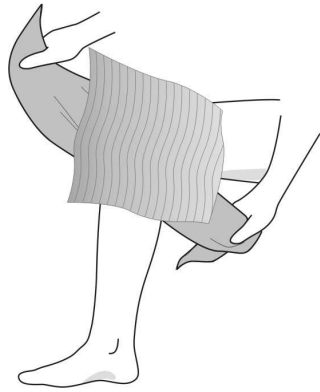
11. Pull again both bandage ends to the direction of the wound, tie up with a slipknot.



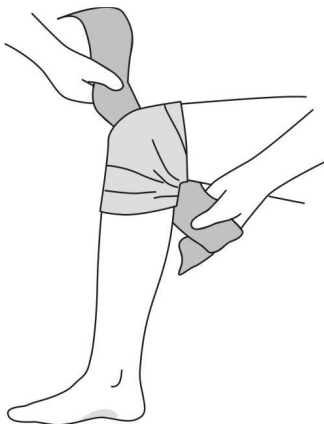
12. Make sure that the wound and surrounding area is fully covered, although the binding should not have to be too tight.

Activity 3: Treatment of burns on the joints

6. The principle used is by repeating activity 1 of Activity-1, and treatment of bleeding wounds on the joints.
7. Form a triangle like a ribbon (similar to activity 2 of Activity-1).
8. Bandaging starts from the wound area, pull the cover ends to behind the wound, then pull again up front to the direction of above the wound.

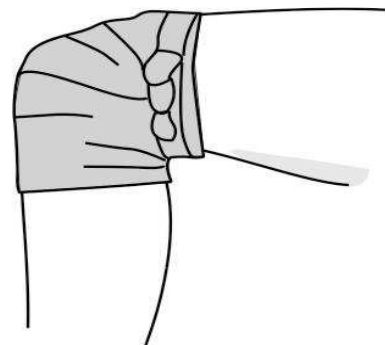


9. Pull the strings to behind the wound, and return up front to the direction of below the wound.



10. When there is no more string left, tie it up with a slipknot, if there are still string ends, tie them up until behind the wound

11. The bandage if seen from behind the wound is like the number eight. Make sure that the wound and surrounding area is fully covered.



STUDENT ACTIVITY SHEET 3

TOPIC: Treatment of broken bone wounds

Objective:

Participants will be able to simulate treatment techniques against broken bone wounds.

Tools and Materials:

- A pair of splints in various sizes
- Banana branch with a diameter of 10 cm and length of 1 meter
- A pair of open-toe slippers
- Bandage/triangular cloth
- Wooden board
- Pictures of various aid stages

Activities:

The main principle in dealing with a broken bone is to minimize the movement of the broken bone, with the aim of preventing friction between the two broken bone tips, because it may worsen the fracture, and squeeze the muscle/tissue sticking to the bone.

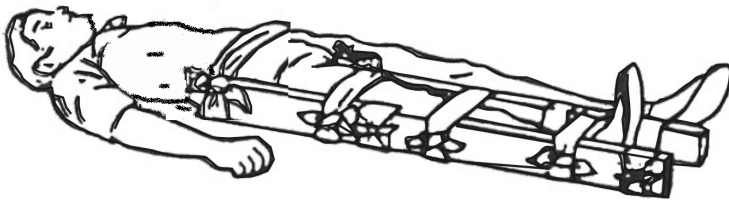
Keep in mind: In several cases of broken bones, i.e., a broken neck or a broken backbone, it is suggested to administer first aid as little as possible, because aid should only be given by those specialized, what can be done is to let victim rest and minimize victim's movement especially around the area of the broken bone.

In all broken bone cases, particularly in the case of an open broken bone, it is not allowed to restore or try restore the bone position, either through massaging, pulling or pressing, what is important is just to rest the broken bone.

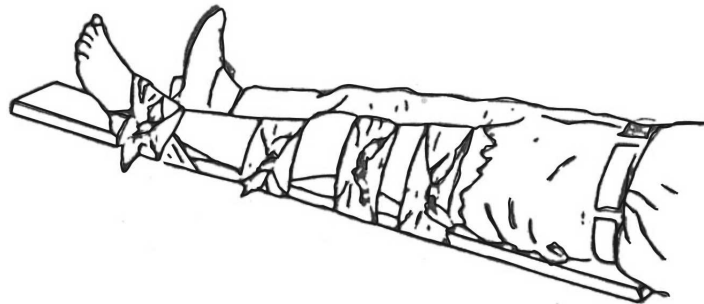
Should there be wounds around the broken bone area, which are bleeding or a burn wound, these should be attended to first before attending to the broken bone wound.

Activity 1: Treatment of broken bones on cylindrical body parts (legs and arms)

1. When a victim suffers from a broken thigh, lay down the victim with straight legs
2. Prepare five bandages already folded in the shape of ribbons
3. Fasten one splint against the outer side of victim's leg, tie bandage from the splint's upper end around the victim's waist, fasten another splint along the inner side of the victim's leg



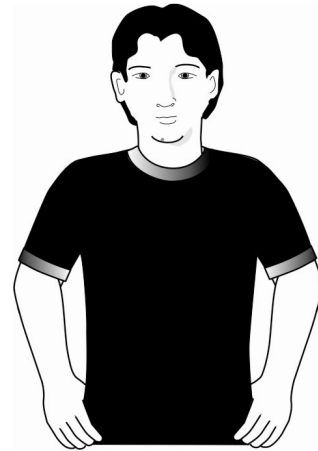
4. Insert 4 bandages under victim's leg, and fasten on the hip, above the knee, below the knee and above the heel. Tie up bandages starting from top to bottom



5. When there is only 1 splint, the healthy leg can replace another splint, whereas the procedure and the method of binding is similar to activities 3, 4 and 5.

Activity 2 Treatment of broken collarbone wounds

1. Ask the victim to stand up, with his/her chest expanding and with his/her hands on his/her hips



2. Install special collarbone splints according to order
3. Lower victim's hands, victim can now be taken to the hospital
4. If no special collarbone splint available, utilize a bandage to pull the collarbone
5. Place victim's position like in activity 1
6. Drape bandage from behind the neck, pull bandage ends to the back via both the victim's armpits, then tie up both bandage ends with a firm knot
7. Pull one remaining bandage up/to the bandage behind victim's neck, then pull firmly and tie up to the other bandages end.

Activity 5: Treatment of open broken bone wounds

1. For example, a victim suffers from broken left thigh and bone fragments are sticking out
2. Place the victim in the most comfortable position and comfort him/her to help ease the pain
3. Do not change the position of the legs, do not try to insert back the stuck out bone.
4. Cover stuck out bone straightaway with a sterile cloth if bleeding occurs on the wound area, the bleeding wound should be treated first through covering and bandaging it.
5. Place a pair of splints of 1 meter length underneath the broken leg and above the broken leg
6. Bind the splint and the leg above the area of the broken thigh
7. Bind splint and leg below the area of the broken thigh
8. Bind splint and leg where the two legs meet
9. Bind both splints at the end of each splint.

STUDENT ACTIVITY SHEET 4

TOPIC: Evacuation Procedures

Objectives:

- Participants will be able to simulate techniques of carrying a victim lying on his/her back
- Participants will be able to make and demonstrate evacuation procedures using a stretcher made of cloth/sack/undershirt
- Participants will be able to demonstrate the activity of carrying and evacuating a victim alone.

Tools and Materials:

- Sarong, rice sack or undershirt
- Two canes or straight bamboo
- A 2 meters long cloth, at least wider and longer than the victim
- Pictures of various aid stages.

Activities

The objective of an evacuation is to protect a victim from the possibility of further disaster or to provide further aid to the victim.

In the case of a helper, consideration should be given to the physical strength of carrying a victim, the victim's weight, the number of helpers, and the surrounding environment, where the victim should be carried to as well as knowledge of the types of wounds and their dealing methods. Whereas in the case of the victim, consideration should be given to when to evacuate after his/her condition becomes stable, i.e. not suffering from breathing problems and the wound is already treated. However which is to be done first, to treat or to evacuate? The answer is, if the surrounding condition is safe, wound treatment should take precedence, but if the surrounding condition warrants evacuation, it should be effected immediately, for instance in a situation where there are hazard like fire, flood or earthquake aftershocks, then most important will be how to save the victim first without dealing with the wounds suffered.

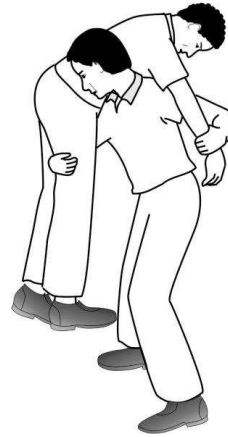
Activity 1: Carrying technique

1. The helper's position is in line with the victim's, exactly by the neck, waist and knee of the victim
2. The helper is in a squatting position next to the victim with his right knee standing, whereas his left leg is resting on the floor.

3. One hand under the victim and one hand above the victim depending on strength. The strong hand is to be placed under the victim's body.

4. Count one, two, three, as command to start carrying the victim, when the victim's position is above the knee of the helper, the position of the hands should be switched from above to below.

1.



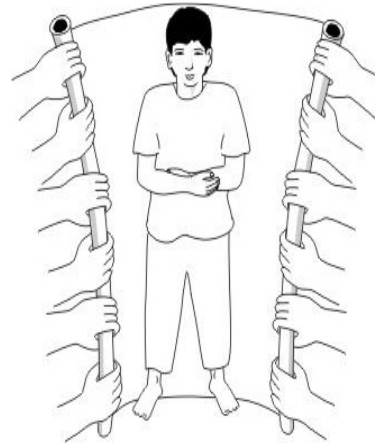
5. Count one, two, three, as a command to stand up.

6. Count one, two, three, as a command to embrace the victim's body against the helper's body, there after the victim is moved by walking.

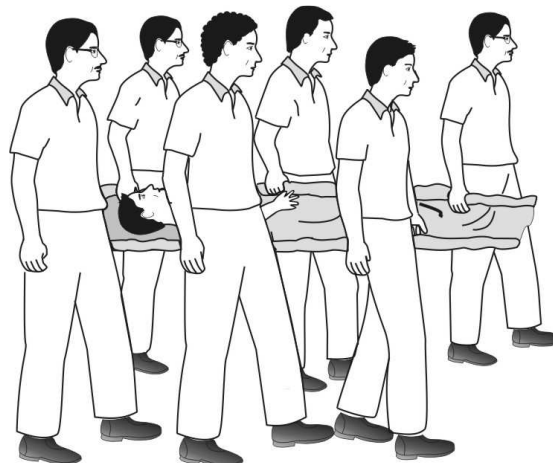
7. The lowering method is done in the same manner, but done the other way around.

Activity 2: Helping a victim using a stretcher out of cloth

1. Spread the cloth longer and wider than the victim's body.
2. Place victim on the cloth.
3. Total helpers are six, two in front (next to the victim's head), two in the middle (next to the victim's waist), and two behind (next to the victim's calf), the tallest helper's should be positioned by the head.
4. Remaining cloth at victim's side is rolled towards the victim's body.



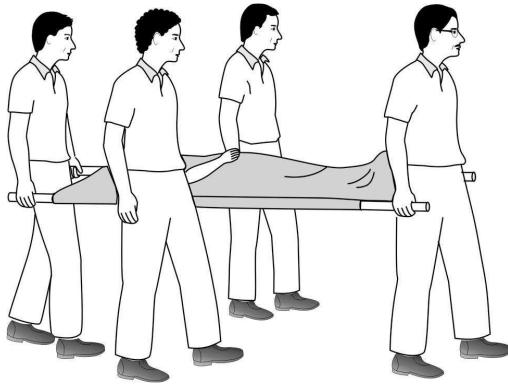
5. The helpers are squatting, facing in the direction of the victim's head (in the same line as victim's position) with inner knees upright (near the victim) and outer knees resting on the floor
6. The hands near the victim take hold of the rolled cloth.
7. Count one, two, three, as command to lift the victim, so that the victim's position is above the helpers' knees.
8. Count one, two, three as a command to stand up.
9. Count one, two, three as a command to lower the victim down to the helper's waists.



10. Lowering the victim is done in the same manner, but done the other way around.

Activity 3: Making a stretcher out of a sarong/sack/undershirt

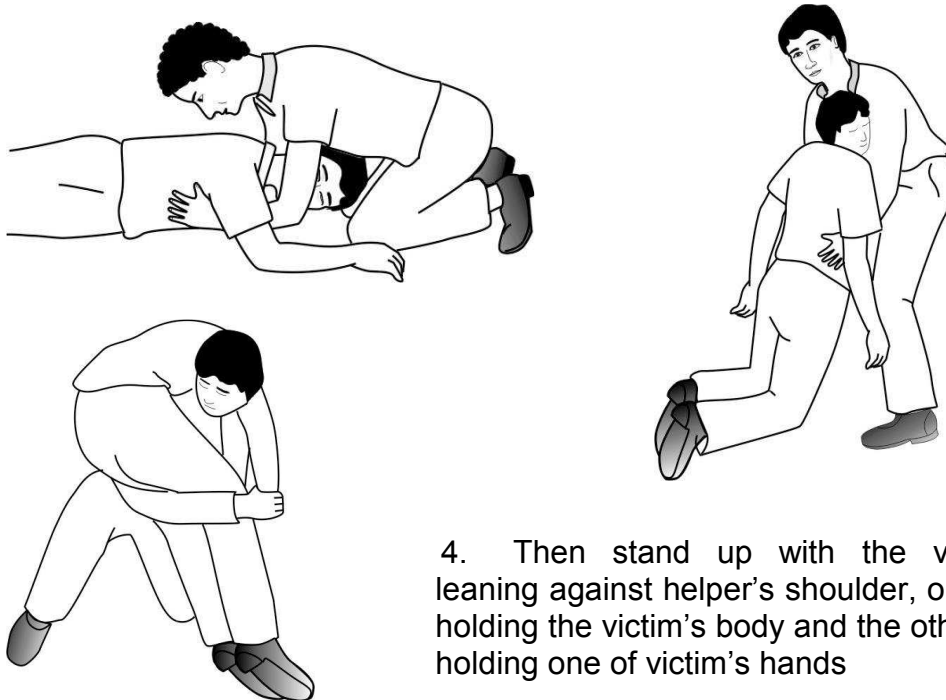
1. Take two straight canes/bamboo of 2 m length
2. Place them parallel to each other and insert the sarong/ underneath.
3. Place the victim in between the two canes above the sarong/sack/undershirt
4. Helpers hold the cane tips so that 4 persons are needed



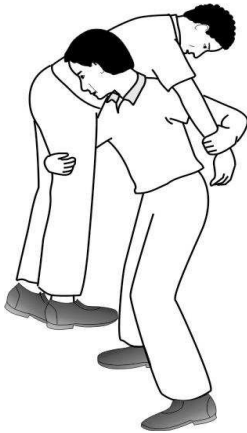
5. Position of the helpers is similar to evacuation with a stretcher from cloth.

Activity 4: Evacuation of a victim by one person in an open space

1. Evacuation is done by carrying the victim
2. The Victim is lying in a facing downwards position
3. Helper squats by the head, placing both hands on the victim's back through the armpits, then gradually raises the victim to the chest and then to the shoulders



4. Then stand up with the victim's stomach leaning against helper's shoulder, one helper's hand holding the victim's body and the other helper's hand holding one of victim's hands



5. If the victim can stand up, the helper stands opposite of the victim

6. Helper stops and places victim's stomach on his shoulder, with other hand holds victim's hand

7. The helper carries the victim on his shoulder, and holds one of the victim's hands above his shoulder.

8. The lowering method is similar to the picking up, but done the other way around and then the victim is put to rest on his/her back

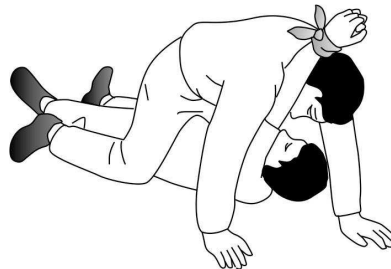
9. This method is not allowed to be exercised with a victim that has a broken backbone or a broken neck bone.



Activity 5: Evacuation of a victim by one helper out of a debris covered room

Put the victim to rest on his/her back, bind both hands in front of the body

1. The helper crawls above the victim's body, the victim's bound hands are draped around the helper's neck
2. The victim is evacuated by being dragged underneath the helper



3. This method is not allowed with a victim who has a backbone injury or a broken neck
4. When the situation is no longer dangerous, the victim's injuries should receive treatment first, especially breathing and bleeding problems.

STUDENT ACTIVITY SHEET 5

TOPIC: Identification of objects that can be used as alternative support tools.

Objective:

- Participants will be able to identify objects in the surrounding environment that can be utilized as support tools.

Activities

1. Work in groups of 4 - 5 students.
2. Discuss with your friends what the functions of support tools are in applying first aid.
3. Fill your findings into column 2 of the provided observation table.
4. Look for objects in your surrounding environment that can be utilized as alternative support tools in line with their functions.
5. Fill names of these objects into column 3 of the same table.
6. If it is still unclear, study the example given in line 1 of the same table.
7. You are allowed to extend the table lines to suit support tool functions you identify.

No	Tool function	Objects that can be utilized
1	<i>binder</i>	<i>Shoelaces, raffia fibre, banana stem, tampar, rubber bands</i>
2		
3		
4		
5		
6		
7		

STUDENT ACTIVITY SHEET 6

TOPIC: Identification of tools to be prepared to anticipate common disasters

Objective:

- Participants will be able to identify the tools that should be prepared to anticipate disasters.

Activities

1. Work in groups of 4 - 5 students.
2. Imagine that tomorrow a cyclone will occur, which will cause a lot of damage, including the collapse of your houses, so that your families need several tools for a temporary stay/emergency situation.
3. The functions of tools for an emergency situation are as mentioned in column 2 of the provided observation table.
4. Discuss within your groups tools that should be prepared in dealing with cyclone disasters in line with the functions in column 2.
5. Fill your discussion results into column 3 of the same table.
6. You are allowed to extend the table lines to fill in other functions of your group's discussion results.

No	Tool function	Tools to be prepared
1	Lighting	
2	Shelter	
3	Sleeping	
4	Food sufficiency	
5	Communication	

STUDENT ACTIVITY SHEET 7

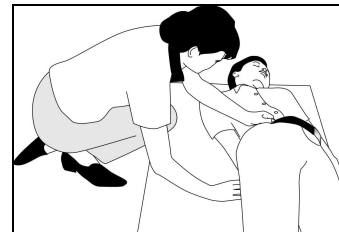
TOPIC: Treatment of unconscious victims

Objective:

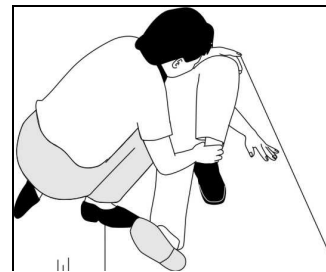
- Participants will be able to simulate the technique: dealing with unconscious victims

Activities

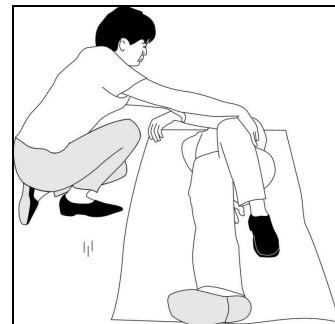
1. Put victim to rest on his/her back, straighten the legs and hands alongside the body, it is suggested to loosen victim's clothes.
2. Make sure that victim is still breathing. Bring your cheek closer to victim's nose to feel any breathing. Listen to victim's sighs. Look to detect any movement of chest.
3. Place one of victim's hands under his/her buttock (e.g. right arm under right buttock).



4. Bend one leg opposite the hand underneath the buttock (e.g. the hand underneath the buttock is the right hand, thus leg bended should be left leg, and so is the opposite).



5. Arrange victim to slant to the hand underneath the buttock (e.g. right hand underneath the buttock, thus victim should slant to the right).



6. Arrange left leg position until the knee and place foot sole firmly on the floor.



7. Move right hand (from underneath the buttock) to the back of the body so that it is not pinned under the body.



8. Place left hand back under the right cheek. Tilt victim's head upward so that breathing is smooth.



9. The victim is in final stable position.

