(Translated from Vietnamese version)

TRAINING ON SEARCH & RESCUE FOR VOLUNTEERS IN COMMUNITIES

Flood Management and Mitigation Program
Component 4: Flood Emergency Management Strengthening

2007

CHAPTER I - SEARCH & RSECUE

1. AIM

This chapter presents basic search and rescue methods for use in different emergency situations including: safe casualty evacuation, transporting injured and general First Aid methods.

2. LEARNING OBJECTIVES

After reading this chapter, you will:

- Know the basic principles of organising search and rescue operations, while quarding the safety of the rescuers.
- Be introduced to some hazard-specific search and rescue methods
- Be able to identify immediate First-aid measures and the safest casualty evacuation and transportation techniques
- Recognise the need for local Red Cross volunteers and shock brigades to be prepared for search and rescue in emergencies.

A INTRODUCTION

Every year in Viet Nam, disaster and accidents continue to occur, despite our attempts to control them, causing unnecessary deaths, tremendous human suffering and loss. The vast majority of casualties still rely on their local community, relatives, friends, neighbors and Red Cross shock brigades and volunteers for live saving and assistance.

Regardless of the availability of professional search and rescue workers, the local people will still carry out much of the rescue work. Because of this, it is extremely important that local communities are prepared they have to be trained. We have organized thousands of shock brigade effective short-term rescue work. We also need to institutionalise the ongoing training of these local Red Cross volunteer shock- brigades and volunteers is to yet to be developed. As such, it provides basic, practical information, rules and procedures about search and rescue work, which are within the scope and ability of shock brigades.

This chapter should be read in conjunction with the Vietnam Red Cross Society Community First aid and Health Manual (1998) below chapters

B SEARCH AND RESCUE ON LAND

The following are basic rules and principles one should follow when engaged in a search & rescue operation:

 Damaged buildings and facilities should only be approached from the least dangerous side or access.

- When searching for casualties do NOT walk over rubble if not necessary, do NOT enter collapsed buildings and facilities do NOT walk or stay near badly damaged and collapse-prone buildings.
- While surveying indoor space in buildings, do NOT use open fire (torches, kerosene lamps) for lighting.
- Do NOT allow many people to gather in one spot, in shafts, or floors.
- Do NOT go near collapse-prone walls or other constructions.
- Move very carefully over building ruins (only if it is necessary) as they are unstable heaps of unconnected fragments.
- When removing rubble from ruins do NOT permit abrupt jerks, shaking, or strong blows at the site.
- When dismantling or clearing ruins, first drag away or extinguish any smouldering or burning objects.
- Open doors to burning rooms very cautiously, be aware of possible flames or hot gas ejection.
- In burning spaces, move by bending low or else on your knees. Try to stay near windows, making it possible to get quickly out of the danger zone if need be
- Large concentrations of carbon monoxide gas are possible in the basements of burning buildings. Only enter these areas after a long period of ventilation.
- All piped service water in collapsed buildings should be shut off and electric lines switched off.
- If there are electric power cables at the excavation site, use metal spades and picks very cautiously in order to avoid electrical shock.
- If an electrical cable is discovered, suspend it, in order to avoid further damage or tearing, do NOT step on cables.

C BASIC EQUPMENT NEEDS

In most areas, communities will have to manage with equipment that is readily available locally. The list below, therefore, reflects the types of basic resourseces and equipment that can be used for Search and Rescue operations:

Ladders
 Axes
 Heavy gloves

Ropes
 Steel tubes
 Thick pieces of cloth and blankets

Spades (shovels)PicksWooden planksFirst aid kits

CrowbarsHose pipes...

Every Disaster preparedness center should have enough stock of such equipment to equip a 10 - 15 person shock brigades team.

Emergency Response Posts. ERPs, of which 26 were built in the Central Provinces during 2000, contain additional equipment for both land and water rescue (see annexes for details and below for further information on water rescue)

REMEMBER!

To use hands only for rescue when possible and to handle spades and picks cautiously when they must be used to avoid inadvertently injuring a casualty further

D SEARCH AND RESCUE IN LANDSLIDES

When there is a possibility for warning the local population about a landslide threat, evacuation of population, livestock and property to safe areas should be organised. The help of shock brigade volunteers is always necessary, especially for the elderly, children, disabled people, and for people who live far from others.

D.1 What should Red Cross shock brigade volunteer do?

- Warn everyone in the area about a the danger
- Direct people to safe areas based on most probable landslide or mudflow location and direction, the safest places are determined as mountain stops and hills, which are not predisposed to landslides.
- When going uphill to safe places one should not follow valleys, gorges, or ditches, as these might become channels of the landslides.
- Help the ill, the elderly, the handicapped, children, and the weak along the way.

D.2 What to do if people are on a moving landslide?

- Leave building and move down hill
- If the landslide slows down, be aware of rocks earthen masses, or other debris, still rolling down.
- Bear in mind that, at high speed, when the landslide finally stops, a strong jolt is possible.
- When landslides over, make sure there is no threat of second one and only after that, cautiously assist people back to their home.
- Immediately start search and rescue, draw casualties out, give them First Aid, and control possible secondary hazards such as fires.
- Send a message about what happened to alert authorities at the district level.

E CASUALTY TRANSPORTATION AND EVACUATION FROM DANGEROUS AREAS

Casualties are often trapped in building rubble, on first floors, etc. Casualty evacuation is carried out after finding them and giving them First Aid.

E.1 What evacuation technique?

The following indicators will determine the method for evacuation:

- Casualty condition, type and severity of injury
- Degree of threat to casualty and rescuer
- Transportation means available
- Evacuation distance
- Type of location and type of available techniques for reaching the casualty.

5.2 What a rescuer should do during an evacuation?

- Be calm, rational, and cautious, and aware of immediate life hazards.
- Be skilled in different casualty evacuation techniques
- Be able to make improvised means of transportation.

Remember!

Allocating or choosing the wrong means of transportation may worsen casualty condition, even leading to unnecessary death

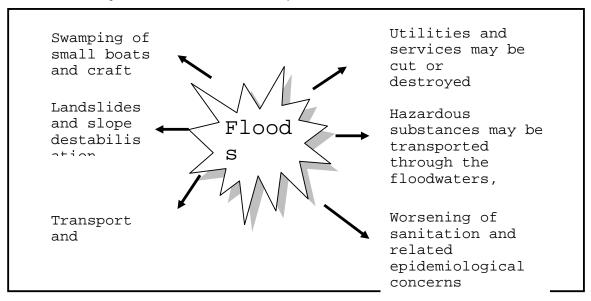
Casualties may be evacuated with or without special means of carrying them but in all cases in such <u>as away that they can see to where they are being carried.</u> For transporting casualties rescuers would at least be provided with large pieces of cloth (woolen blankets or canvas); although it is advisable to have stretchers.

When casualties are evacuated on stretchers their feet should be turned to the direction of transportation. In this way the basic rule will be followed: the casualty looks forward along the path of movement and away from the danger zone. (Uphill evacuation is an exception, in which case the rule would be head first in order to keep the head elevated above than body). When carrying a casualty on stretchers rescuers walk small steps and not in step. Do not walk in synchronized steps (as it jolts the casualty too much).

F CASUALTY EVACUATION TECHNIQUES (See in chapter II – Safe move casualty)

G SEARCH AND RESCUE IN WATER

Shock brigade volunteer rescuers should be aware that in floods, there are secondary hazards that may be as detrimental to the persons as the water it self:



When there is a flood threat, Red Cross shock brigades/volunteers are of great help to communities through implementation of the following measures:

- Warning the population of the flood threat
- Evacuating people, livestock, things of material or cultural valuable, etc. from potentially flooded areas
- Taking valuable objects and furniture to upper floors of buildings
- Blocking first-floor windows and doors with, for example sand bags



G.1 Life-saving guidelines

The first consideration in any rescue is self-preservation. The number of people who drown while attempting a rescue highlights the important of this factor.

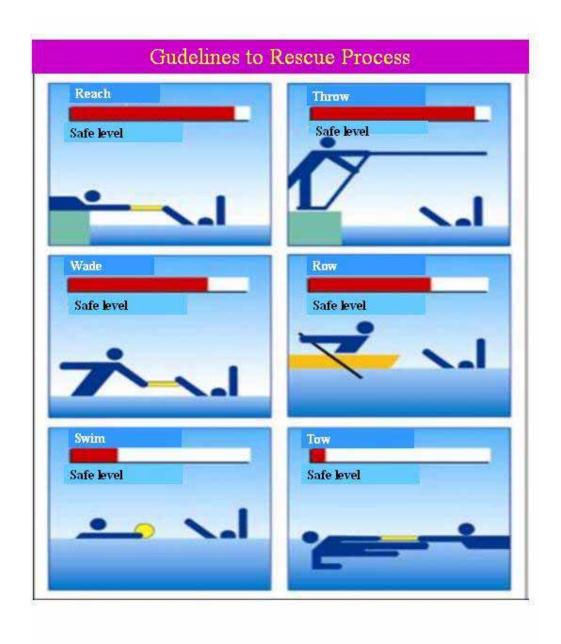
Rescues that can be performed without getting wet are the safest. A reach or throw rescue should be considered first.

Wading and using available craft are next considerations. Only if none of these can be used should a lifesaver consider swimming to perform a rescue.

The following sequence outlines the order in which the methods of rescues should be considered, taking into account the maximum degree of safety for the rescuers:

GUIDE TO EMERGENCY PROCEDURE					
Action	Degree of safety				
Reach					
Throw					
Wade					
Row					
Swim					
Tow					

This sequence should be fully understood by all potential lifesavers as it provides the basic for rescue attempts (see Figure)



CHAPTER II – FIRST AID

PRINCIPLES & IN ORDER ACTION Responding to emergencies

A HOW TO IDENTIFY AN EMERGENCY SITUATION?

1 Personal level:

When a person in an emergency situation who needs caring immediate and get first aid, we can see they have signs and symptoms as follows:

- Intense pain chest: The Casualty will hug his chest and difficulty breath
- **Shock:** as a situation of green-white face sign, perspire, heart fast rhythm or weak.
- **Swoon, unconscious**: Casualty is laying not budge any body part, therefore breathing and circulation may be still maintained or stopped.
- **Bleeding:** there are injuries to skin or blood pulses.
- **Broken bone signs:** Casualty is feeling pain, swell, purple at bone fracture and there are dislocation at site, casualty's hand or leg is not normally, may be the bone is fracture or severe broken bone, which opening out of body.

2 Large level:

- Loud noise/sound queer: Suddenly we can hear a sound queer/loud noise, they are sound of car brake, broken of glass or chairs/desks were fall ...
- Noise sound/scream of people: in addition with above things, we can hear many people who are scream or children crying
- The scene is jumble: We can see an unusual scene, there are troublous on the scene of cars, motorcycles, objects, etc

B ORDER IN FIRST AID OPERATIONS:

1 Survey the scene:

a. For what?

An emergency can be occur from a disaster or an accident, there are many damages as fires; objects fall, electric lines broken, chemical burning, level deep of rive... they will threat to any body at the scene such as rescuers, casualties and anyone. We should survey the scene for:

What is happened, occurring and it happening in further.
Rescuers do NOT entry in the scene of a disaster/accident
occurring but they should be carefully round survey, above and
floor at the scene for assessment what was happened, occurring
and it going happen for make a specific decide.

- Urgent level: a disaster/accident level will depend on injury situation, amount of casualties, smouldering or powerful of disaster.
- Safety conditions: Which conditions may be help to casualties or the scene leaving to safe location for care of them and also safe for rescuers?
- How many casualties?: Disaster or accident situation occurred
 with large or small damages depend on time, address when it
 was happen within amount of people at the scene. Therefore the
 rescuer should careful survey and assess how many casualties at
 the scene and where are they trapped? Avoid do not miss out
 any casualties.
- Who can help to do? People stand at the scene will help rescuers to First Aid or take care for casualties, they can help to call for ambulance, Fire Department, Protection scene polices or find out any things available at the scene for rescue casualties.

b. How to survey the scene?

- **Hear by ears:** lest hear any scream, moan of casualties and assess that where are people trapped?
- Look by eyes: Look at round of disaster/accident location occurs for disaster/accident assess situation and find out threatening dangerous. The people motionless lay not scream or moan they can get least damage because they get a choking or unconscious situation.
- **Judgment**: By own consider and judge through damage sings and injury situation casualty for assess that who will rescue urgent and who will next.
- **Use flashlight:** In any situations, the rescuer needs equipment flashlight for them in search & rescue work.
- Look on ceiling, floor and around: Objects fall, electric lines broken, column of a house or walls collapse, ruins, fires every where which are threatening to life casualties, persons in the scene and rescuers.
- Listen attentively from call for help such as scream, moan and cry of casualties.

2 To examine and assessment primary situation of the casualty:

a. Check on conscious and response of casualty :

- Do not smack to face of casualty, do not pull sideboards and draw for check on conscious casualty because it is not effect, casualty get a fracture of bone even it will make injury situations be severe.
- Rescuer shake shoulders, at the same time scream to airs of the casualty and give a simple question and call them to do for assess conscious situation.

 If you done every thing above but the casualty are not response or budge that means the casualty was unconscious, let's check ABC immediate.

b. Check the Airway:

When an unconscious person is laying face-up, gravity lets the jaw drop back-wards. The mouth falls open but this tends to block rather than open the airway. Because the person is unconscious, the muscles are relaxed and the tongue falls against the back wall of the mouth and blocks air from entering and leaving the lungs. The soft palate, which is also made of muscle, may contribute to blockage of the air way. Turning the person on the side prevents this obstruction.

In addition to the tongue and soft palate, other causes of upper airway obstruction include:

- Solid or semi-solid material such as food, vomit, blood or a foreign body.
- Laryngeal spasm
- Swelling or injury of the way

When the person is positioned on the side, quickly clear the mouth of any visible foreign material, using your fingers

Remove dentures only if they are broken or are so loose that they may block the airway. Do not probe down the throat with your fingers if you do not see anything to remove as you may accidentally push material further into the airway or cause damage inside the mouth.

Tilt the head backward by placing one hand on the top of the head. Support the jaw at the point of the chin with the other hand, without using force. Turn the person's face slightly downwards to enable fluid or mucus to drain from the mouth.

Figure shows this process of positioning the person, clearing the mouth and tilting the head.

Jaw Support

You may need to support the person's jaw to keep an open airway when the person is on the side

Use a "pistol-grip" technique as follows:

- 1. Support the jaw at the point of the chin without putting any pressure on the soft tissues of the neck.
- 2. Support the point of the chin with the knuckle of your middle finger, with the little and ring fingers clear of the soft tissues of the neck. Keep your index finger along the line of the jaw.

3. Put your thumb along the front of the lower jaw between the lower lip and the point of the chin, using it to open the mouth slightly.







c. Check for Breathing:

After opening the airway, check for breathing. A conscious person who can speck, cough or cry is breathing. However, you may not know if an unconscious person is breathing until you check



If the person is breathing, the chest will rise and fall. However, chest movement by itself does not mean air is reaching the lungs. You must also listen and feel for sings of breathing. Position yourself so you can hear and feel air as it escapes from the nose and mouth. At the same time, watch the rise and fall of the lower chest and upper abdomen. Take the time to look, listen and feel for breathing for a full 3-5 seconds.

If breathing normally, keep the person lying in a stable position on the side, with the head tilted backward, jaw supported and face pointed slightly downwards to keep the airway open. Ensure that someone calls for emergency help

If the person's breathing is noisy or difficult, check the airway carefully. Noisy breathing may indicate partial obstruction.

If the person is not breathing, you must quickly turn the person on the back and begin expired air resuscitation immediately. The longer a person goes without oxygen, the greater the risk of tissue damage and/or death.

d. Check Circulation:

The last step in primary survey is checking for the circulation of blood. If the hear is stopped, blood will not circulated throughout the body. If this

happens, the person will die in just a few minutes because the brain is not getting any oxygen. The person will need cardiopulmonary resuscitation (CPR) to maintain life.

If a person is breathing, the heart is beating and is circulating blood. You determine the rate and rhythm of the heart by checking the radial pulse.

e. How to examine the casualty:

- Look
- Listen
- Feel

3 Call Emergency Personnel:

The third emergency action principle is to get professional help to person as soon as you can. The information you provide to doctors will help to ensure that the person receives proper medical care as quickly as possible.

DON'TS

- Don't leave a casualty lying on their back (face up)
- Don't put a pillow, bag, or rolled clothes under casualty's head
- Don't carry or drag the casually unless there is an extremely urgent threat (fire, explosion, or collapse)
- Don't transport the casualty yourself if you can call for other rescuers with stretchers)

CALL TO:

- 113 for The Police
- 114 for The Fire Department
- 115 for The Ambulance
- •
- •And other calling, You can call everyone for helping
- The information you provide to doctors will help to ensure that the person receives proper medical care as quickly as possible. What the information you will provide to them? You must provide some information as follows:
 - What is your Phone number?
 - Disaster/accident happened location: You must provide enough information of disaster/accident happened location, in addition it is popular site such as school's name, market's name, bridge's name and which ways their located, how kilo Mets far from there?
 - Type of disaster/accident: Boat to sink, fires, traffic accident, storm, whirlwind, explosion, etc
 - How many casualties are there? How many casualties are there? who is get severe injury, who is unconscious, and so on

- What are casualties situation? You should be talk on casualty's health, what are they get injuries, this is helping the rescuer take materials for first aid operations.
- What are they needed to help? The rescue can to require specific needs for helping from professional and fire police.
- Which ways for quick the Ambulance come? Let's clear talk which ways from hospital for the Ambulance quick come to accident site, the ambulance will be difficulty if there are has schools, markets on the way.

4 Give First aid and safe moving:

This is fist aid operations, therefore every action there are simple works within any materials at the local so that will quickly resuscitation breathing, circulation, control bleeding, fixing bone fracture, care for casualty in shock and safe moving to hospital or health stations, the casualties will get a carefully take care. So that, casualties have severe injuries and dying they are need a care of professional.

First aid operations need chosen to urgent in order as follows:

- *Emergency situation:* Unconscious casualties, they need an urgent resuscitation for breathing and circulation.
- *The First urgent*: Casualties get severe bleeding of blood pulse; they need to bleeding control and dress to wound immediate.
- The Second urgent :
 - o Burning casualty and severe shock casualty
 - o The casualty is bone fracture of spinal column, femur bone, opening fracture then other bone fracture need to fix.
- *The third urgent:* there is the casualty need to operation or dying this is out of rescuer's capacity because the casualty need monitoring, mind at rest and quickly moving to hospital.

Safe moving: Safe moving active also to do flow an order urgent, however, we choose the casualty for safe moving is difference to give FA urgent:

- Emergency urgent: They are casualties need quickly moving to hospital for operation as casualty skull injured, internal bleeding, burn within large area and rate on body or dying casualty because that is out of rescuer's capacity
- The First urgent: They are casualties get blood pulse injury, special those are artery or big blood pulse who are need quickly stopped the bleeding, make a tourniquet and bandage.
- The second urgent: They are casualties get a spinal column fracture, femur bone fracture, opening bone fracture and other bone fracture need to fix.
- o *The Third urgent*: muscles injury

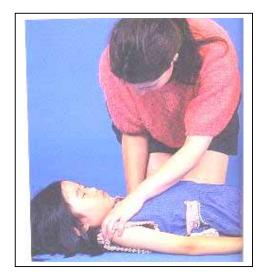
Remember!

- Safety for you and the standing scene
- Don't move the casualty when they are not yet get FA
- Calm and remember that the rescuer is always need to help
- Unite actions
- Avoid activities unnecessary
- Prevent communicable disease by ware glove.

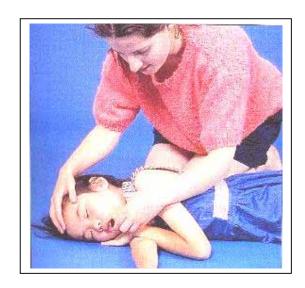
UNCONSCIOUS

If you see an unconscious casualty, you need to do as follows:

1. Try to awake the casualty for conscious by to shake casualty's shoulders and cream to casualty's ear. You can to pinch the casualty for the casualty's response. Carefully survey any moves of casualty's eyes, sound or other move of the casualty's body.



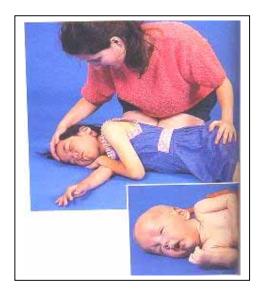
- **2.** If the casualty not conscious, open casualty's mouth check for any materials those are blocked the airway,
- **3. Cleaning the casualty's mouth,** if you see any materials those are blocked the casualty's airway, put the casualty is positioned on the side and remove any foreign materials such as food, vomit, broken teeth, dentures by your fingers.



How to clean casualty's mouth:

When the person is positioned on the side, quickly clear the mouth of any visible foreign material, using your fingers

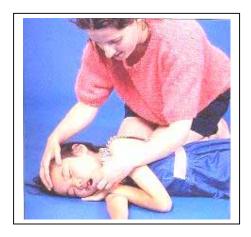
Keep backward casualty's head, using fingers clear the casualty's mouth of any visible foreign materials block the airway do choking. After done you must back position the casualty



Note: Do not keep the casualty positioned on the side if they get severe injury because that is become damage when we are moving the casualty.

4. CLEAR AIRWAY:

For the adult and children: Tilt the head backward by placing one hand on the top of the head. Support the jaw at the point of the chin with the other hand, without using force. Turn the person's face slightly downwards to enable fluid or mucus to drain from the mouth. This position will help casualty easy breath.



For the baby: Slightly raise baby's chin for head backward. Use rolls clothes put under baby's shoulder for head to backward. Do not do same the adult.

5. CHECK FOR BREATHING:

If the person is breathing, the chest will rise and fall. However, chest movement by itself does not mean air is reaching the lungs. You must also listen and feel for sings of breathing. Position yourself so you can hear and feel air as it escapes from the nose and mouth. At the same time, watch the rise and fall of the lower chest and upper abdomen. Take the time to look, listen and feel for breathing for a full 3 – 5 seconds.

If breathing normally, keeps the person lying in a stable position on the side, with the head tilted backward, jaw supported and face pointed slightly downwards to keep the airway open. Ensure that someone calls for emergency help

If the person's breathing is noisy or difficult, check the airway carefully. Noisy breathing may indicate partial obstruction.

If the person is not breathing, you must quickly turn the person on the back and begin expired air resuscitation immediately. The longer a person goes without oxygen, the greater the risk of tissue damage and/or death.

Look at casualty's chest and feel for breathing with your ear over the stoma

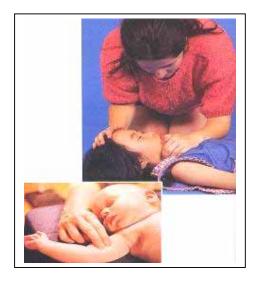


6. CHECK FOR CIRCULATION

- o **For the Adult and Children:** Tilt head backward for open the casualty's airway, use 2 or 3 fingers check the carotid pulse
 - With index and middle finger, feel the casualty's windpipe and Adam's apple
 - Slide fingers down into the groove of the neck on the side of the casualty opposite you
 - Feel for the pulse for 5 seconds, using pads of your fingers.

o For the Infant:

- With index and middle finger, check the bronchial pulse.
- Feel for the pulse on the inside of the infant's arm, between the muscles.
- Feel for the pulse for 5 seconds, using pads of your fingers.



7. If casualty not breathing but still heartbeat – you must implement EAR (mouth to mouth):

EAR for An adult:

- Tilt casualty's head backward, jaw support for open the airway and mouth.
- Press two nose hole between your forefinger and thumb
- You inhale a breath in to your lung then use your mouth get close to casualty's mouth and breath, at the same time your eyes look for rise/fall of casualty's chest.
- Breath to casualty's lung until you sees casualty's chest is rise, and then
 you unclose your mouth for casualty's chest is fall.
- Breath 10 times/minute, after 10 times to breath rest 5 seconds check for breathing of the casualty
- Check for a carotid pulse after giving the 5 full breaths. If the casualty has a pulse but not breathing, continue EAR by giving 1 breathe every 4 seconds. Take a breath yourself and breathe into the casualty.
- Do not stop EAR unless one of the following occurs:
 - The casualty begins to breathe unaided
 - o The casualty has no pulse. Begin CPR
 - o Another first aider takes over for you
 - o Ambulance personnel arrive on the scene and take over
 - You are physically unable to continue.

EAR for Children:

The technique of EAR varies somewhat for a child(1-8 years of age) to take into account the child's underdeveloped physique and slightly faster breathing and heart rates. Be sure to turn the unconscious child onto the side to clear the airway and then check for breathing. Follow the same sequence as for an adult, with the following exceptions :

- Check for breathing with the jaw supported and the head in a neutral position. If necessary, tilt the head back slightly to open the airway.
- Check breathing by looking for he movement of the chest and upper addomen while listening and feeling for air escaping from the nose and mouth

- Gently puff air into the child, using just enough pressure to make the chest rise.
- If the breath does not go in, check that the airway is open. Sometimes gentle head tilt is needed to open the airway, The older the child, the more head tilt is needed to open the airway.
- Because children breathe faster than adults, give a small breath or puff of air every 3 seconds (20 per minute) for a child.

If the child bigins breathing unaided, turn the child onto the side and mantian an open airway

EAR for the infants under 1 year old:

An infant is defined as being under 1 year old. Because the infant's tongue is proportionally larger it is more likely to block the airway, so be sure the airway is open when you give EAR. The breathing rate is the same as for children: 1 puff every 3 seconds. The EAR technique is similar to that for children with the following differences:

- Steady the infant's head continuously because it is unstable
- Do not tilt back the head, but support the jaw
- Avoid putting any pressure on the soft tissues under infant's chin because this could obstruct the airway.
- For the EAR, cover both the infant's mouth and nose with your mouth.
- Use gentle puffs of air from your cheeks only. Use just enough pressure to make the chest rise to avoid distending the infant's stomach.
- After giving five puffs, check for the carotid pulse or the brachial pulse in the arm. Feel for the pulse on the in side of the infant's arm, between the muscles.
- Breathing 20 times on minute, after 20 times to breath take 5 second for the breathing rate of the infant.

8. IF THE CASUALTY DOES NOT BREATHING AND NOT PULSE, GIVE AN EXTERNAL CARDIAC COMPRESSION (ECC) & EAR TECHNIQUE IMMEDIATELY:

ECC TECHNIQUE:

For effective ECC, the casualty should be lying flat on a firm surface. The casualty's head should be kept on the same level as the heart. ECC is much less effective if the casualty is on a soft surface, like a mattress or reclined car seat.

Finding the Correct Hand Position

Using the correct hand position is important. It allows you to give the most effective compressions without causing injury. The correct position for your hand is over the lower half of the sternum (breastbone). At the lowest point of the sternum is an arrow-shaped pice of hard tissue called the xiphoid? You should avoid direct pressure on the xiphoid, which lies over the stomach, as pressure in this area can cause regurgitation and aspiration of stomach contents into the lungs.

Use the callipering method to locate the correct hand position for chest compressions

One the heel of your hand is in position on the sternum, with your other hand grapes the wrist of the hand on the chest.

Use the heel of your hand to apply pressure on the sternum. Try to keep your fingers off the chest by holding them upward. Applying pressure with your fingers can lead to inefficient chest compression or unnecessary damage to the chest wall.

The correct hand position provides the most effective compressions without the risk of complications.

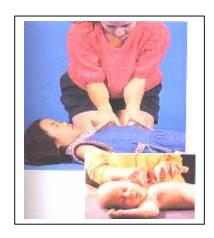
Position of the First Aider

To give ECC, kneel beside the casualty. Position your-self is midway between the chest and the head in order to move easy between compressions and breaths.

Your body position is important when giving ECC. Compressing the chest straight down provides the best blood flow. The correct body position is also less tiring for you.

Kneel at the casualty's chest with your hands in the correct position. Keep your shoulders directly over your hands. When you press down in this position, you will be pushing straight down on to the sternum. If using the wrist grip technique, lock the elbow of the compressing arm. Locking the elbow keeps your arm straight and prevents you from tiring quickly. With the alternative hand grip, both elbows should be locked in a straight position.

Compressing the chest requires little effort in this position. When you press down, the weight of your upper body creates the force needed to compress the chest. Push the weight of your upper body, not with the muscles of your arm. Push straight down. Do not rock back and forth. Rocking results in less effective compression and wastes much needed energy. If your arms and shoulders tire quickly, you are not using the correct body position. After each compression, release the pressure on the chest without losing contact with it and allow the chest to return to its normal position before starting the next compression





Chest Compression Technique for Adults, Children, Infants				
	ADULT	CHILD	INFANT	
HAND	Two hands	One hand	Two fingers	
POSITION	On lower 1/2 of	On lower 1/2 of	On lower 1/2 of	
	sternum	sternum	sternum	
COMPRESS	About 4 – 5 cm	About 2 – 3 cm	About 1 – 2 cm	
BREATHE	Until chest raises	Until chest raises	Until chest raises	
RATIO	15 compressions and	15 compressions and	15 compressions and	
ONE	2 breaths in 15	2 breaths in 10	2 puffs in 10 seconds	
OPERATOR	seconds	seconds		
RATIO	5 compressions and 1	5 compressions and 1	5 compressions and 1	
TWO	breath (e.g. 60	breath (e.g. 100	puff (e.g. 100	
OPERATOR	compressions and 12	compressions and 20	compressions and 20	
	breaths per minute	breaths per minute	puffs per minute	

If there is not another trained person takes over CPR for you:

- Let's begin with you should be to give 5 breaths for the casualty's alive
- Give ECC 15 compressions then 2 breaths (a cycle includes 15 compressions and 2 breaths).
- To give 4 cycles, check for casualty's breathing and pulse in 5 seconds.





- Let's begin with you should be to give 5 breaths for the casualty's alive;
- Then you should be to give EAR, other First Aider give ECC

A cycle is 5 ECC and 1 EAR, after 10 cycles check for the casualty's breathing and pulse in 5 seconds before you continue next cycles.

- **9**. If the casualty's heartbeat returns but there is still no breathing, continue giving EAR. You should be stopping ECC.
- **10.** If the casualty begins to breaths again, turn the casualty on the side, keep the airway open and check the vital signs closely until ambulance personnel arrive

CPR ACTION CHECKLIST:

- 1. Safety
- 2. Shout and tap
- 3. Call for help
- 4. Position casualty
- 5. Open airway
- 6. Look, listen and feel
- 7. 5 slow full breaths
- 8. Feel for pulse
- 9. Chest compressions
 - Landmark check
 - Node position
 - Rate: 80 100 per minute
 - Number 15
 - Smooth up and down pressure
- 10. Continue CPR with correct ratio 15:2
- 11. Re-check pulse after the first four cycles

THE CASUALTY AS ALSO UNCONSCIOUS WHEN THEY ARE BIGINS TO BREAT AGAIN

- Do not put the casualty alone on the scene; you should be sure open casualty's airway.
- An Unconscious needed protection.
- Transport the casualty going to hospital immediate

IN A DEAD FAINT – As a person became in a dead faint will be unconscious but he or she will conscious again in few minutes

UNCONSCIOUS IS NOT CLEAR – As a person can to be in a state anxious suspense and he or she does as a person get drunk too much before became unconscious in sleeping

UNCONSCIOUS: As a person get unconscious state is clearing unconscious.

UNCONSCIOUS AND IN A DEAD FAINT CAUSE:

Causes become unconscious and in a dead faint include bleeding, fracture bone, electric shock, and shock, convulsive, choking, drowning and poisoning cases.

FIRST AID TO UNCONSCIOUS APPROACH PERSON

- 1. Help them site on the chair with head to fold up ahead-way, the casualty's head between their kneels
- 2. Talk them take deep breaths
- 3. Make sure clear in the room

FIRST AID TO UNCONSCIOUS PERSON (IN A MOMENT)

- 1. Laying the casualty on the back with casualty's legs are rise
- 2. To enlarge casualty's clothes
- 3. Make sure clear in the room

PREVENTION AND EDUCATION

As a volunteer in community, you should be doing as follow:

- 1 Training for every body on knowledge how to first aid for the unconscious person.
- 2 Teach all people how to avoid be award get to electric shock, poisoning and accidents.

When disaster/accident is happen:

Prepare to give first aid for unconscious and injuries casualties

CHOKING

Choking will be occurring when the casualty is not breathing easy because that has a foreign object to obstruct in the airway.

Signs always occur with the casualty get obstructed in the airway:

- Not talk any words or sound
- Casualty always take their hands cover on their neck by themselves
- Casualty's lips and tongue become livid
- Casualty will be unconscious if the obstruct object is not move out of their mouth.

Choking is always happen most of infants, because they like to take some thing in their mouth or these are to happen with the people do eat hard foods.

With the weak people and unconscious obstruct in the airway is also occur when they get vomit.

GIVE FIRST AID

There are some changes made to choking technique when dialing with children and infants. The major difference are outlined below

Children:

Do not use finger sweep. Use the mouth opening action, then if a foreign body is seen remove it; do not finger sweep if no foreign body is seen. Adjust pressure in abdominal thrusts to account for the size of the child.

You can do like the picture below:



If the child became unconscious you give CPR technique

Infants

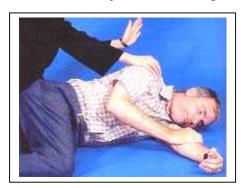
The sequence for infants is quite different and is stated below:

Pag 24

- 1. Place the infant face down straddling your arm with the head lower than the trunk, and the head supported with the hand around the jaw. Support your arm on your thigh.
- 2. Deliver 5 back blows between the shoulder blades with the heel of the hand.
- 3. Sandwich the infant between your arms. Turn the infant over and deliver 5 chest thrusts using 2 gingers, just below the interhippie line.
- 4. Check the air way. If you see a foreign body hooks it out, but avoids blind finger sweeps.
- 5. Position the head in a neutral position.
- 6. Attempt rescue breathing
- 7. Reposition the head, and attempt rescue breathing
- 8. Give 5 back blows
- 9. Give 5 chest thrusts
- 10. Check airway, look for foreign bodies.
- 11. Continue from step 6 until the object is dislodged

Adults:

- 1. Tell them bend ahead their body with the head lower chest.
- 2. If they can not cough with obstruct airway, using your hand's hill hard flap on between casualty's should-blade, you can do it again if it is possible



- 3. If they are not breathing, you can use Heimlich technique.
- 4. If they are become unconscious, give ECC + EAR try to push foreign body out from mouth

MOVE CASUALTY IMMEDIATE GET A CARE OF MEDICAL ASSISTANCE if you can not move foreign body out the airway

PREVENTION AND EUCATION

Let's keep safe your house!

Keep out small materials from children

Pulverize food and small spoon when you spoon-feed for the child

Choking airway is also happen with a weak person and vomiting.

Train to mothers how to rescue choking, to child in schools and other volunteers

DROWNING

Any body become drowning when they swallow a few water or liquid that is obstruct the air inhale casualty's lung.

We often think that drowning when the people depth in the water, however drowning as also the casualty's face be conceal hollow water

A people become drowning with any liquid so that is also happen with their vomit.

Children is easy get drowning risk because they can not to guess the water depth, on the other hand they can not swim and escape from difficulty situation.

IF YOU SEE A DROWNING PERSON:

- 1. Look around and be careful avoid damage form you.
- 2. Call for helping
- 3. If the casualty in **hollow depth water**, rise the casualty's head over water surface (liquid) then safety move the casualty



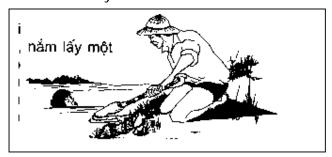


4. If the casualty get drowning in depth water

BE CAREFULLY BY YOUR SELF DO NOT GET DROWNING

DO NOT JUMP IN WATER TO RESCUE THE CASUALTY IF YOU CAN NOT SWIM

• If the casualty drown near the bank, you take any thing bring to casualty then you pull them in a safety.

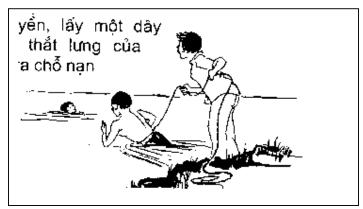


• You are also to throw a rope to them from the bank that is to help them catch it then you pull them going to bank, If they are far from the bank with unconscious situation :

Use a boat available rescue the casualty immediate.



• If the boat it is not available: you tie rope around your waist them swim to rescue with other one take other top rope standing the bank.



- You will swimming to casualty with around a rope ties your waist. Talk to them let's be calm, backward hold a casualty's hand and try to rise casualty's face higher than water surface. Try to pull casualty and you going to the bank in safety with a person standing on the bank
- If you have a lifebuoy, you will swim with a lifebuoy but you must tie a rope around your waist.
- 5. When the drowning casualty and rescuer has a safety near the bank the rescuer give first aid to unconscious casualty follow step by step:
 - Clear and opening the casualty's airway
 - Check for breath and circulation
 - Give EAR and ECC if you can not feel the casualty's pulse
 - **RECOVERY POSITION FOR CASUALTY** if the casualty have breathing return



- The casualty will be vomit when they have recovery; therefore, we must put recovery position for them that is preventing drowning again by their vomit.
- Keep casualty on recovery position until they are take strong health to wake up and walk. The casualty also needs maintain warm the body by a blanket.

TRANSPORT the casualty going to the health center (hospital) after you given first aid for them

PREVENTION & HEALTH EDUCATION

You can to prevent from drowning for your home by get around barrier turn pond and depth water area to protect the children.

- Always keep a close watch on children when they are playing or to bath with a water tap.
- Teach the children how to safe swim.
- Talk people do not swim alone.
- Note from dangerous location or depth water in communities. To mark "Dangerous location" on the community's map warning all teachers and pupils to know
- To instruct on first aid for fisherman, teachers, parents and other members in communities.
- To participate and support "Water safe movement"

During disaster is happen

Well prepared for drowning rescue action preparedness to storm, flood.

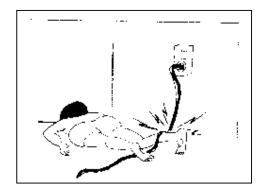
ELECTRIC SHOCK

Electric shocks will death cause with people!

Electric shock is a shock and burn caused

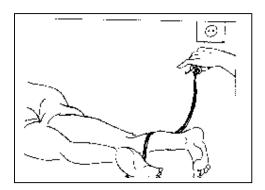
Before you give first aid, the first necessary we must turn off power or be carefully segregate electric out of the casualty (see figures below), If not do that, you will also become a casualty.

1. DISCOVERY FROM DANGEROUS

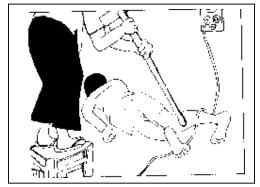


2. TURN OFF ELECTRIC POWER IMMEDIATE

Pull a male plug out of electric-hole (just contact on plastic objects) or turn off at the main power.



3. IF YOU CAN NOT TURN OFF ELECTRIC POWER, you must do this follow figure below :



PUSH ELECTRIC WIRE OUT OF CASUALTY AS DOING FOLLOW:

You should stand on dried wood, thick papers or wear rubber shoe, use a dried sprig wood (e.g. broom-stick, bamboo shoulder pole or roll of papers) then push electric wires out of the casualty.

DO NOT TOUCH on casualty's body until they have isolate out of electric power then you must transport the casualty to safety location.

- If the casualty have gently shock the casualty needs be console, check for burn and you site near them until they are safe feeling.
- If the casualty have burn from electric shock you doing care of the casualty
- It the casualty have unconscious situation give first aid for them

TRANSPORT CASUALTY IMMEDIATE to health center when they get:

- Burn within a wound bigger than casualty's hand
- Unconscious
- Shock

PREVENTATION & HEALTH EDUCATION

- Make sure your house have safe in electric power
- ➤ Keep out electric power from children
- ➤ Using sticking plaster to covered on unnecessary electric holes.
- Guide for pupils, children, partner how to prevent electric shock and how to treat
- ➤ Help to mark "Dangerous location" any risk sites (e.g. high tension electric power, electric wires lower hang.
- Recall every one keep out from falling electric wires.
- Preparedness to treat all electric accidents

REMEMBER!

- Always look for dangerous electric power around you
- Turn off or push electric power before you give first aid
- Do not become other casualty form you when you give first

aid

BLEEDING

- ➤ External bleeding occurs when a blood vessel is opened externally, such as through a tear in the skin
- ➤ Internal bleeding is the escape of blood from arteries, veins or capillaries into spaces in the body.

Several bleeding (external/internal bleeding) become shock, unconscious and die

Controlling external bleeding:

- Wash your hands before/after you give first aid
- Always wear gloves / plastic bags protection from infectious disease when you contact casualty's blood

v A few blood flow from wound:

- 1. Clean the wound, gently clear on wound by cleaned water with soap
- 2. If it is a hollow wound such as graze, expose the wound.
- 3. Cover small compresses on wound prevent from infection.
- 4. Check for bleeding again
- 5. Look for other wounds.

v Severe bleeding from wound:

REMEMBER! Protect yourself from infection by wearing gloves when blood is present (if gloves are not available, using plastic bags as makeshift gloves is a good alternative)

- 1. Press covers casual's injury by your fingers; where possible encourage the casualty to apply pressure using their own hand to limit your contact with blood least 10 minutes for stop bleeding.
- 2. If possible, lay the casualty down, and rest the injured area.
- 3. If an arm or leg is injured, elevate the affected limp and keep it raise for 5 minutes after bleeding stops.
- 4. Place a clean non-fluffy dressing pad over the wound and apply firm direct pressure for 10 minutes.
- 5. If there is a foreign object embedded in the wound, apply pressure around the object not direct over it.
- 6. If blood comes through the first dressing, place another pad over the first without removing the original pad.



7. Check for the top or magers or toes. If it is not circulated loosen the dressing.

8. Moving the casualty to health center (hospital, clinic, doctor...) for sew the wound and inject tetanus vaccine. Try to elevate legs or arms during moving the casualty.

v The wound with opening fracture of bone:

REMEMBER! :

Protect yourself from infection by wearing gloves when blood is present

- 1. Ask some one support keep fracture of leg (arm)
- 2. Place a clean non-fluffy dressing pad over the wound with opening fracture of bone, you can using by clean clothes.
- 3. Place around the wound with fracture of bone clean dressing then apply thin on that.
- 4. Fixing fracture area by splints
- 5. Check for circulation on the top of fingers/toes regular
- 6. Moving the casualty to Health Center

Foreign bodies in wounds: see above

First aid internal bleeding:

Sometimes internal bleeding in the body, which will's flow external form natural orifices of the body. Sometimes it is clot internal of the body comes pain, shock; we also don't know how amount blood is lost.

- Should wash your hand before/after give first aid
- Always protect from infection when contact with blood by wears gloves, plastic bags or clean materials before give first aid.
- The Internal bleeding person if you see any signs below the casualty needs seek medical assistant:
 - Blood have through from mouth/nose
 - Blood have through ears
 - Shit in a jumble of blood
 - Piss in a jumble of blood
 - Red blood or dark brow blood in the vomit
 - Blood through from vagina after get injury or during pregnancy

Always remember or even you do not see any sign of bleeding but it is also maybe internal bleeding. If you see there are signs of shock but it is have not external injury, you must suspect that is an internal injury. When the casualty has an internal injury the skin becomes colorless.

NOSEBLEEDS:

- 1. Sit the casualty down, leaning forward.
- 2. Advise them to pinch the soft part of the nose, and breath through their mouth
- 3. Maintain pressure for 10 minutes.
- 4. Release pressure after 10 minutes. If bleeding is not controlled reapply pressure for a further 10 minutes
- 5. An ice pack applies to the nose area maybe useful.
- 6. When bleeding has stopped do not blow the nose for 4 hours.
- 7. If bleeding continues for more than 30 minutes, seek medical assistance.

EARBLEEDS:

- 1. Sit or lay casualty down, tilt head toward the side of the injury.
- 2. Wash your hands.
- 3. Loosely cover the ear with a sterile dressing, and bandage it gentle. Do not plug the ear wit a dressing or try to stop the flow of blood or fluid from the ear
- 4. Continue to monitor the casualty's condition closely. Be prepared to treat the casualty for shock.
- 5. If the casualty have severe bleeding through from ears, seek medical assistance

Give first aid the casualties that will help them prevent all as follows:

- Lose the blood
- Infected
- Pains
- Shock

Dangerous signs - need transport the casualty:

- 1. Severe bleeding uninterrupted, blood still flow after you applied dressing over 10 15 minutes.
- 2. The wound has infected, around the wound becomes swell, fever, pain and red.
- 3. Frightfully pain.
- 4. Shock the casualty becomes dark brow, weak, cold, sweat, and shiver.
- 5. The casualty becomes listless, slack or unconscious.
- 6. Pregnant woman has bleeding through vagina.
- 7. Any bleeding through from nature holes of bodies such as: mouth, nose, ear, etc...

PREVENTION & HEALTH EDUCATION

• For Voluntary First Aiders:

Always wash your hands before/after give first aid. Remember! "Protect by yourself and another one when contact with blood"

• For the members in communities:

Guide the pupils in the schools and another one in communities how to give first aid with common bleeding injuries.

Educate the people how to prevent from accidents in community

• During disaster times:

- Always prepare for responding to disaster.
- Prepare available first aid kits.
- Give first aid bleeding injuries follow medical professional workers.

FRACTURE OF BONES

Identify and assess fractures

A fracture may be indicated by:

- Pain at the injury site.
- Swelling and tenderness.
- Deformity of the injured area.
- Inability to use the injured area normally.
- Blood loss, internal or external, resulting in shock

Aims of giving first aid fractures:

- Reduce paining
- Preventing in shock from severe bleeding (internal or external bleeding)
- Preventing in infected
- Prevent further another injuries

GIVE FIRST AID FRACTURES

1. FRACTURE WITH OPENING INJURY:



- Give first aid fracture but do not move the fracture
- Remember: "Protect by yourself and another one when contact with blood" using gloves, plastic bags, and clean cloth.
- Cover on injured area by clean dressing (non-fluffy)
- If there is an opening fracture, dressing around fracture of bone and bandage for keep in the dress.

THE FIRST IMPORTANT BEFORE TRANSPORT THE CASUALTY YOU SHOULD DO AS FOLLOW:

- Fixed fracture of bone area together another part of casualty's body
- Fixed fracture of bone by soft materials with splints (made from wood, bamboo, blanket, magazines or clothes...)

2. Closed Fracture:



- Fixed fracture of leg/arm bone
- Fixed above and below joints of bone fractured area, never tie cross on fractured site. (see figure below)





- Put soft materials at joints: knee, ankle, and elbow. Beware splint out off casualty's body when transport to health center.
- Look for symptoms and signs of shock situation, unconscious until medical person come
- If casualty's spinal is fracture result the casualty can not move. They need seek medical assistance
- If casualty's skull is fracture result blood through ears, nose then unconscious.
- Transport casualty seeks medical assistance but you should be carefully, you must create a stretcher.

Symptoms and signs show bad fracture (wound):

- Fever
- Pain and swelling
- Top of fingers or toes are dark brow and cold
- Pus through from wound

PREVENTION & HEALTH EDUCATION

AS A VOLUNTARY FIRST AIDER:

- Lead another one how to first aid fracture of bone in schools, factories, enterprises, motorbike club...
- Together with some body in community recognize all dangerous sites lead accident and remark, show every body identify on the community map...
- Organize communication campaign on safety in community and safety during riding motorbike.
- Teaching on musculoskeletal injuries first aid for other volunteers.

Pre & during disaster occur

Prepare available splints, bandage, stretcher for any musculoskeletal injuries and moving casualties when disaster occurs under guide of medical professional.

SNAKE BITES

The venoms of different poisonous snakes have different effects on various part of the body, including the heart, blood and body tissues. The most serious common effect

is paralysis of the breathing muscles which can lead to death. Only an expert can identify all snacks and know for certain whether a bite is from a poisonous snake. All snake. All snake bites should be treated as potentially lethal and immediate medical attention should be sought. Colour identification of a snake is most unreliable because many species change colour as the snake matures. It can be helpful if the snake is killed and brought for identification, but you should NEVER endanger yourself to do so.

Symptoms and signs of poisonous snake bites may appear either quickly or over the course of many hours. They include:

- Paired or single fang marks in the skin
- Nausea, vomiting
- Headache
- · Altered conscious state
- Double vision or blurred vision
- Problems with speaking and/or swallowing
- Weakness in extremities and/or paralysis
- Respiratory distress or cardiac arrest
- Clotting defects



Red-Bellied Black Snack



Highlands Copperhead



Tiger Snack



Common Death Adder





1. Should not do:

- **DO NOT CUT THE BITE** to try drain the venom,
- DO NOT SUCK or wash the bite, and
- DO NOT APPLY A TOURNIQUET
- **DO NOT DIRECT CONTACT** with casualty's blood when your body have a graze, boil wound.

2. To give first aid for snack bite follow these guidelines:

- Use the pressure immobilisation technique for a bite on a limb
- Continually monitor the ABC and be prepared to give EAR or CPR if needed.
- Keep the casualty calm, reassured and at total rest.
- Call an ambulance, or in an isolated area transport the casualty to a medical facility immediately. Anti venom is available for most poisonous snake bites.

APPLYING A PRESSURE IMMOBILISATION BANDAGE

The victim has been bitten by a snake on the lower leg. She is not sure but thinks it was the venomous tiger snake. An ambulance has been called but may not arriver for 30 minutes. You have the victim lying calmly on the ground.



Apply a pressure bandage over the bite area

- Use crepe roller bandage over the bite area to apply firm pressure
- Tie or tape bandage in place



Apply a second bandage upward on the extremity

- Bandage the leg upward from the toes to above the knee
- Bandage the leg as high as you can
- Secure the en of the bandage



Apply a padded splint to immobilise the leg

- Apply an improvised splint which extends well above the bandage area
- Secure the splint in place with 2 or more ties over padding where there are joints



Check the victim's toes to ensure circulation has not been cut off

- Look for discolouration of the skin on the foot and toes.
- Ask the victim if the foot feels cold or numb.

If the circulation is not restricted

• Keep the victim at rest and wait for the ambulance

If the victim's circulation is restricted

• Loosen the bandage slightly, but maintain pressure over the bite site

Monitor the victim until the ambulance arrives

- Monitor the conscious sate and check the ABC
- Be prepared to give EAR or CPR if needed

BURNS

Burns are a type of soft tissue injury caused primarily by heat. Burns also can occur when the body is exposed to certain chemicals, electricity, extreme hotter solar and other forms of radiation.

When a burn occurs, the heat first destroys the epidermis, the top layer of skin. If the burn progresses, the dermis, the second layer, is injured or destroyed. Burns break the skin and thus can cause infection, fluid loss and loss of temperature control. Deep burns can damage underlying tissues. Burns also can damage the respiratory system and the eyes.

The severity of a burn depends on:

- The temperature of the object or gas causing the burn
- The length of exposure to the source
- The location of the burn
- The extent of the burn
- The victim's age and medical condition

You can not judge severity by the pain the victim feels because nerve endings may be destroyed. *Call an ambulance immediately for assistance for burns which*:

- Burns to the head, neck, hands, feet or genital area
- Burns in children under 5 years of age and elderly
- A burn larger than the size of the casualty's palm
- Where smoke or fumes have been inhaled the casualty's airway may be injured
- Have caused the victim to have difficulty in breathing
- Chemical, explosions and electrical burns

DOS AND DONT'S OF BURN CARE

Dos:

- Cool burns by flushing with cool water.
- Remove rings and jeweler.
- Cover the burn with a dry, sterile dressing
- Take steps to minimise shock

Don'ts

- Apply ice directly to burns.
- Touch burns with anything except sterile or clean dressings; do not pull clothes over any burned area.
- Try to clean a full thickness burn.
- Break blisters
- Use any kind of oil or ointment on severe burns.



• Use cotton wool or other fluffy material on burns

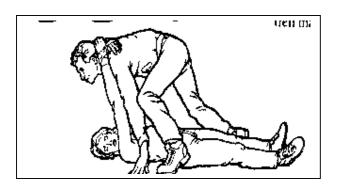
If burns are evident, follow these four basic care steps:

- 1. Cool the burned area
- 2. Cover the burned area
- 3. Prevent infection
- 4. Minimise shock.

Give First Aid the burned:

1. Transport the casualty leave from damage location immediately





2. Cool the burned area with water for at least 10 minutes, for chemical burns 20 minutes



Large amounts of cool water are essential to cool burned area

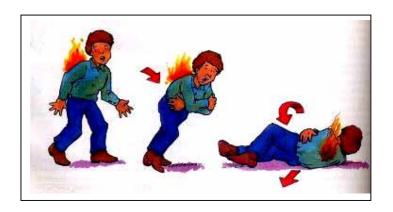


Keep the burned in a basin of cool water for 10 – 20 minutes

- 3. Clear the area of any thing that may keep burning: jewellery, clothing that isn't sticking (cut around stuck clothing).
- 4. In chemical burns it is important to remove clothing contaminated with chemicals
- 5. Clean your hands before/after burns care, Prevent infection by yourself and the casualty then cover the burned area

If the casualty's clothes, hair has fire, you should be do immediately:

- 1. To put down the fired by water
- 2. If there is has not water, cover casualty by a blanket within water and rolls on the ground



PREVENTION & HEALTH EDUCATION

Women and children are often having burns; Women get burns because they are cooks in the kitchen, the children get burns because they are not conscious from damaged.

Training how to care of the burned, first aid for teachers, parents and people in communities

Training for every one in community how to prevent from burns as dos follow:

- o Keep off the children from the kitchen when cooking.
- o Keep off the hot pots from any one avoid touch it causing of the burned.
- o DO NOT hold the child while cooking
- Advise the woman do not wear clothes easy fire catch during cooking.

- o Keep off match box or chemicals from the children.
- o **DO NOT** smoking and NEVER smoking while in the bed
- o Irrigate water in the cinder before throwing
- o Check for safe all electric wire
- Discovery fire risk location in your community, discuss with community's leader and teacher about how to preparedness for fires

MOVING CASUALTY

PINCIPLES OF MOVING CASUALTIES

Usually when you give first aid, you will not face hazards that require moving the casualty immediately. In most cases, moving a casualty needlessly can lead to further injury. For example, if the casualty has a closed fracture of the leg, movement could result in the end of the bone tearing the skin. Soft tissue damage, damage to nerves, blood loss and infection are all possible results of unnecessary movement.

When to move a casualty

You should move a casualty only if there is immediate danger such as fire, lack of oxygen or the presence of poisonous fumes, risk of drowning, risk of explosion, a collapsing structure or uncontrollable traffic hazards

Before you act, consider the following factors in order to ensure that you move a casualty quickly and safely:

- Dangerous conditions at the scene.
- The size of the casualty.
- Your own health and physical ability.
- Whether others can help you.
- The casualty's condition.

Considering these factors will help you decide how to proceed. For example, if the casualty is large and heavy and you have limited strength, or if you are injured or have a significant medical condition, you may be unable to move the person and will only risk making the situation worse. If you become part of the problem, ambulance personnel will now have one more person to rescue.

If any bystanders can help, never try to move a victim by yourself because of the risk of injury to both you and the casualty. When working with others to move a casualty, be sure everyone knows what to do before starting.

Protecting the casualty during a move:

To protect the casualty during any move, follow these guidelines:

- Only attempt to move the casualty if you are sure you can comfortably handle the person's weight. A casualty who falls or slips could be further injured.
- Walk carefully using short steps to keep the casualty as steady as possible.
- When possible, move forward rather than back-ward to avoid bumping into anything.
- Always look where you are going in order to keep an even footing and prevent jarring the casualty.
- Support the casualty's head and spine, maintaining alignment.
- Avoid bending or twisting a casualty with a possible head or spine injury.

Protecting yourself when moving a casualty

It is important to protect yourself when moving the casualty. Use good body mechanics to prevent straining your body or putting yourself at risk of injury. The back is especially vulnerable to injury caused by bending, twisting, lifting and carrying heavy weights.

Follow these guidelines:

- Only attempt to move the casualty if you are sure you can comfortably handle the person's weight. Musculoskeletal injuries can result from attempting to lift or move too great a weight.
- When lifting, bend at the knees and hips and lift with your legs, not your back. Keep your back straight and head erect. Keep your centre of gravity low and your feet spread about shoulder width apart, with one foot slightly forward.
- Hold the weight close to your body for greater stability.
- When carrying or lifting use your whole hand, as this will strengthen your grasp.
- Walk carefully using short steps. This helps you keep your balance and prevents sudden strains.
- When possible, move forward rather than backward.
- Face the direction of any body movement to prevent twisting your back.
- Be especially careful when lifting a casualty in an awkward situation, such as raising a child onto your shoulders or a casualty over a wall or through a window. Avoid twisting or any sudden lurching movement.

Choosing what move to use

When you have decide to move a casualty, your choice of method depends firstly on whether you need to move quickly in an emergency, or can take the time to plan the move and secondly on whether you can use the assistance of others or equipment such as a chair or blanket. Never rush a move if the situation does not require it.

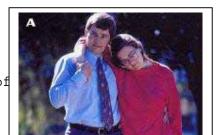
Emergency moves

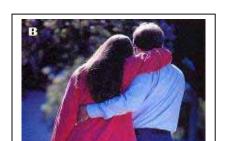
There are several ways to quickly move a person to safety in an emergency. Nut there is no one best way. As long as you can move the person to safety without injuring yourself or causing further injury to the casualty, the move is successful.

Different emergency moves are used depending on the circumstances and whether another person is available to help you move the casualty.

One-person moves

If the person is conscious and does not have a serious injury, you may be able to assist the casualty in walking away from the danger. However, if the casualty is unconscious or has a serious injury and you are alone, you need to drag the person from danger using one of the following methods (see all figures below)

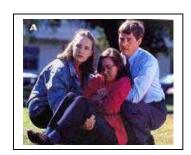


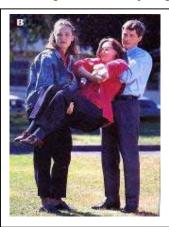


Tow-person move

Two first aiders can move a casualty much more safely than once. If the casualty is conscious and can stand, both can assist the victim in walking away from danger. However, if the emergency situation which requires an immediate move uses the following fore and aft carry method.

- 1. From both sides, support the casualty in a sitting position. Cross the casualty's arm across the chest.
- 2. The large or stronger first aider moves behind the casualty and places one hand under each of the casualty's armpits to reach forward and hold the casualty's wrists. The casualty must keep both arms folded across the chest.
- 3. At the casualty's side, the other first aider puts one hand and forearm under the casualty's thighs and knees and hold the thighs firmly. The other arm is place is placed around the casualty's back.(figure A)
- 4. On the signal from one first aider, both stand, lifting the casualty (figure B)





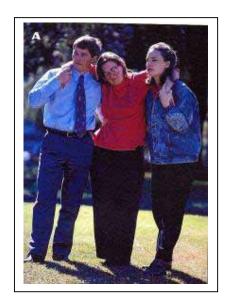
Use this method to carry the casualty quickly from danger or to transfer a casualty to a chair or wheelchair in a non-urgent, planned move.

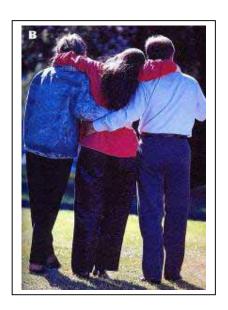
Planned moves

When there is no immediate danger or threat to life but you must still move the person to seek medical attention, take the time to plan the move that is safest not only

for the casualty but for you and other first aiders as well. This could happen in a remote area where help cannot be brought in.

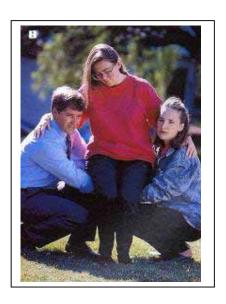
Planned moves include the one or two-person assisted walk, the seat carry, the chair lift and the use of a stretcher.





To lead by the hand with two first aiders





To palanquin the casualty





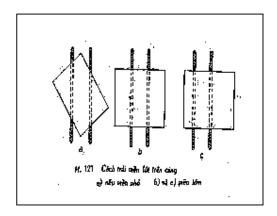
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Moving the casualty by a wheelchair

Moving the casualty by a chair

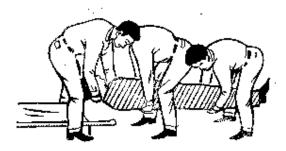
Create a stretcher by chance

You can make a stretcher by chance from a door, ladder, cloth, skirt or blanket turn around two section of bamboo.





Bring the stretcher to a casualty, because you can not move the casualty



- Support the casualty's head and spine, maintaining alignment
- When you putting the casualty on the stretcher you need to supply concrete by a first aider.

Bring the casualty come to the stretcher or putting the casualty on the bed





Using the scoop method

Stretcher moves

If a seriously injured or ill casualty must be moved, a stretcher is the safest way to reduce the risk of causing additional injury. Several kinds of stretchers a commonly used, including the standard stretcher, Don way lifting frame (formerly call Jordon frame) and scoop stretcher. In addition to these, you may see ambulance personnel use other specialties types of stretchers.

Before putting the casualty on any type of stretcher, test it on ensure it has not been damaged and is still able to bear the weight of a victim. One person should lie on the stretcher while each end is lifted independently, and then both ends together, to test that the stretcher is sturdy and secure.

Carrying a stretcher

Once the casualty is secure on the stretcher, it can be carried to the ambulance or other site for continuing care. Four first aiders or bystanders should carry the stretcher when possible, although two trained people can do it when necessary.

It is important that those carrying the stretcher move in a co-ordinated manner. A trained person at the head of the stretcher should be in charge and give instructions to the others.

Follow these steps to lift and carry the stretcher:

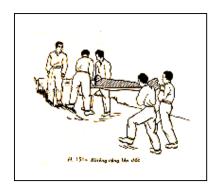
1. All first aiders face forward, squat down, and hold the stretcher handles as shown in Figure below, using good body mechanics.

- 2. The first aider at the casualty's head asks if everyone is ready and gives the instruction to lift. All stand together and hold the stretcher level or with the head slightly raised.
- 3. The first aider in charge gives the instruction for everyone to walk forward. The group should intentionally walk out of step to avoid bouncing the stretcher.
- 4. Follow the instructions of ambulance other personnel to load the casualty into the ambulance or other site.

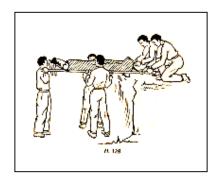
As a general rule, the stretcher should be carried with the casualty's head higher than the feet, unless the casualty is in shock or has hypothermia; a casualty of hypothermia be move feet first except in certain circumstance.

Carry the casualty head first only:

- When carrying a casualty to a bed or into the ambulance
- When climbing up steps or a hill as long as the legs are not injured.
- When going down steps or a hill when the lower limb are injured.



Climbing the casualty up a hill



Carrying the casualty cross a channel

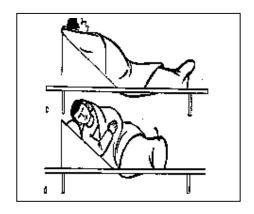


Carrying the casualty into the ambulance

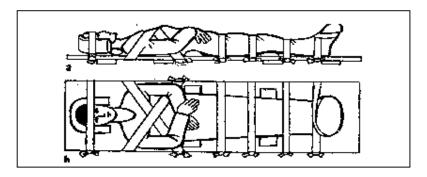


Four first aiders position

Several of carrying a stretcher within the casualty:



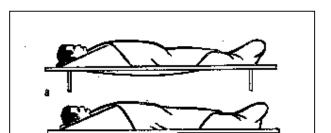
The casualty with chest injured



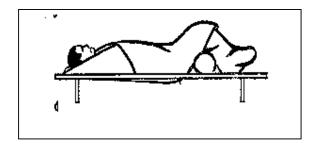
The casualty with spine injured



Safety position of the casualty on the stretcher

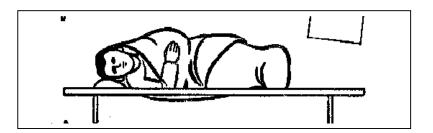


The casualty in shock (Casualty's legs is higher than head)



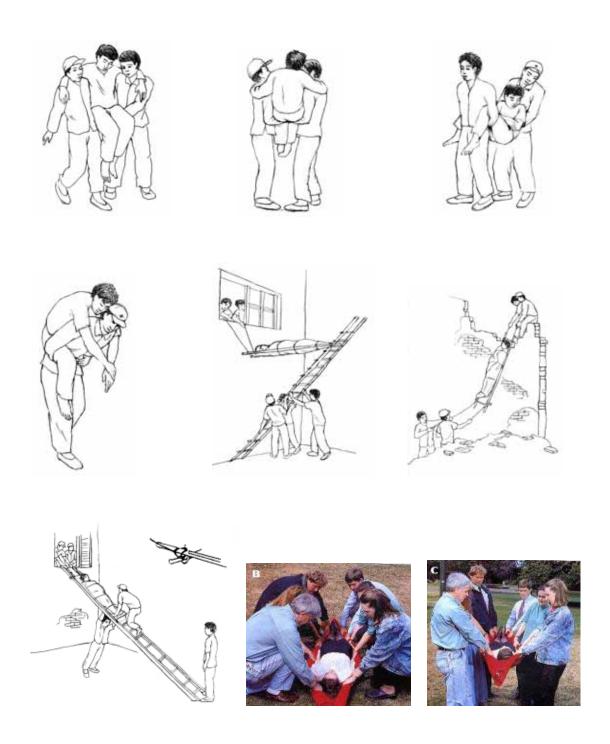
The casualty has a belly injured

- Putting a pillow under the casualty's ham this is support bend casualty's legs
- Putting a pillow or material rolling under casualty's arm and head this is support straight back
 - This position allow all the casualty's muscles are not stretch



The pregnant casualty

Several of moves method the casualty



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Sources reference:

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- Essential First aid documental of New Zealand Red Cross