

PNAM 660

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# MANUAL

**for**

**Health**

**Workers**

## ACKNOWLEDGEMENT

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Health Education Section  
National Public Health Service  
Republic of Liberia

## INTRODUCTION

This Manual has been prepared for use by health workers. The primary purpose of the Manual is to provide a reference book for health workers and to assist in standardizing activities of these workers.

All health workers should keep in mind that one of their principal functions is to teach the people of the villages good health practices, and to help them to improve their mode of living as a means of preventing illness.

Much of the illness from which the people of Liberia suffer is preventable. If each health worker will emphasize health teaching and show the people of the village how they can help themselves to achieve more healthful living through better health practices, the health worker can and will contribute a great deal toward the conservation of life and the ultimate welfare of the country.

## TABLE OF CONTENTS

	Page
Introduction.....	1
Table of Contents.....	2
Manual for Village Health Workers.....	3
How People Learn.....	4
Health Workers Must Remember.....	6
Rules for Health Workers.....	7
Care of the Medical Kit.....	8
Dosage of Drugs.....	8
Contents of Medical Kit.....	9
Clean Water.....	11
How to Build a Sanitary Toilet.....	13
Cuts and Wounds.....	15
Wounds with Plenty of Bleeding.....	17
Infected Wounds.....	17
Broken Bones.....	20
Unconsciousness.....	20
Fainting.....	20
Poisoning.....	21
Burns.....	23
Bites.....	23
Malaria.....	24
Diarrhea.....	26
Worms.....	28
Coughing Disease.....	32

TABLE OF CONTENTS (Cont'd)

	Page
Sore Throat.....	33
Aches and Pains.....	34
Beri-Beri.....	35
Sore Eyes.....	39
Lice.....	41
Itch (Scabies).....	41
Infected Skin.....	42
Tropical Ulcer.....	44
Yaws.....	45
Leprosy.....	45
Schistosomiasis (Snail Fever).....	47
Medicines in the Medical Kit.....	52

## MANUAL FOR VILLAGE HEALTH WORKERS

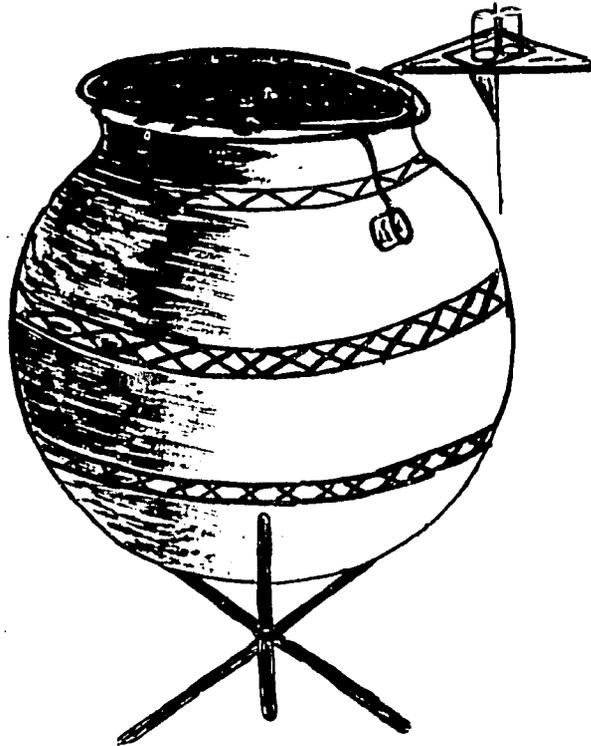
Many kinds of diseases are communicable. This means that the disease can be passed from a sick person to a well person. Some diseases are carried from a sick person to a well person by insects, such as flies, mosquitoes, etc. Other kinds of disease are not passed from one person to another but are caused by not eating the right kinds of food, or by drinking bad water or when one part of the body does not work properly.

Much of the disease in Liberia today is the kind which can be passed from one person to another, from not eating the right kinds of food and from drinking bad water. Often the disease is carried in the waste matter coming out of the body. Some of these diseases are worms, "running stomach", or dysentery which are carried in the feces (waste bowel movements). Coughing diseases like tuberculosis are carried in the phlegm or matter that a person coughs up and spits out. If a person coughs or sneezes into the air, the disease is carried in the spray from his nose and mouth. Just in breathing, coughing diseases can be carried from sick to well people while they are sleeping near each other.

Both sick and well people must learn how these diseases spread. Then they will want to stop diseases from spreading. They will help to destroy the matter that comes from people's bodies and that will help to keep other people from getting sick.



PROVIDE THE STATION WITH  
RUNNING WATER IF POSSIBLE



## HOW PEOPLE LEARN

All people have some common wants and desires which are usually the reasons behind all the things that they do. We should know about these wants and desires and keep them in mind when we teach people new things.

People want love and affection. They want to belong to a group and feel safe and secure.

People want to feel important. They want other people to think that they are useful.

People want to be like other people; they do not want to be much different.

People are most willing to learn when they can see that it will benefit them in some way.

Learning must start with the wants, the interests and the past experiences of the people. This must include the social customs and beliefs of the people as well as the ideas of their friends and leaders.

Learning or change can best be made by those people who have influence in their family or neighborhood. These people can in turn teach their friends and others who respect them. All people have their own ideas about health matters which they believe to be true. These beliefs must never be disregarded. Health Workers must find out why they believe as they do before they try to change their ideas and habits.

People learn best by doing, or being shown and then trying to do it themselves. This is much better than just telling people what to do. Experience is the best teacher.

In teaching we should use only words that we are sure the people will understand.

Repeating something to be learned many times is good. It is better to have short practice periods repeated from time to time. This gives the new learning time to "sink in".

People learn more through their eyes than through their ears or any other way. A picture is worth hundreds of words- if it is the right picture. A Health Worker can many times explain his teaching better by making simple drawings. Sometimes someone in the group may be able to make these drawings.

When people are learning new things, they must be helped to keep in mind the main ideas. Do not include many small details in your explanations or pictures.

Keep the interest of the people who are learning new things. This may be done by having them help decide what subjects are to be taught next. When people are permitted to give their ideas about a subject they feel more important and useful and are always interested.

The feeling of the people at the time they learn new things has a great deal to do with how much they learn. A sick child does not learn well. A mother who is worried about something at home cannot pay much attention.

People must like the Health Worker in order to be interested in learning what he has to teach. No matter how much the Health Worker knows, if he is not liked by the people he will not be followed by them. The good Health Worker first listens to what the people want and tries to help them get what they think they need first. Then he can help them to learn about health.

"If I hear it ----- I forget it;

If I see it ----- I remember it;

If I do it ----- it is mine."

**HEALTH WORKERS MUST REMEMBER THAT:**

1. They must always be gentle and kind to the sick. Sick people have a burden with their sickness and should not have the added burden of being treated roughly. Medical treatment should give comfort and consolation as well. This will bring hope and courage and aid in a more rapid recovery. A cordial contact between patients and health workers will help the patient to learn. Then the worker can explain about hygiene and ways to keep people from catching diseases.
2. They are not doctors or nurses
3. They must follow exactly the instructions of this manual, and never over-step their responsibility. They must treat the conditions listed in this manual and in the manner prescribed.
4. They must send all seriously ill persons to a hospital or a clinic.
5. Many diseases in the village are spread from one person to another. Dirty hands and dirty things, scattered human and animal wastes and people crowding close together help to spread diseases.
6. People suffering from pain, diarrhea, cough, fever, etc., can be helped by giving them proper medicine. But what is more important is that people in the village can learn how to keep well. Forming new habits is a slow process. The health worker can help their friends and relatives when they are sick. They can help them form good habits to keep well.

## CARE OF THE MEDICAL KIT

### THE HEALTH WORKER MUST TAKE CARE OF THE MEDICAL KIT !

Keep the kit in a dry place off the ground.

Keep bottles clean and properly labeled.

Keep all equipment clean. Wash eye dropper after using it, then drop it in boiling water for five minutes. When putting drops into someone's eyes, DO NOT LET THE DROPPER TOUCH THE PATIENT. After a temperature is taken with a thermometer, wash (rub) the thermometer in soap and water and soak it in alcohol for ten minutes.

DO NOT BOIL THERMOMETERS

Burn dirty bandages and tongue depressors after using them.

## DOSAGE OF DRUGS

The doses stated in the Manual for each sickness are for adult patients. For children 2 to 12 years of age, doses are one-half those for adults. For babies up to two years of age, doses are one-fourth those for adults. To give a tablet to a baby, crush it in a spoon, add a little water or mother's milk and with the baby lying down, put it in his mouth.

## CONTENTS OF THE MEDICAL KIT

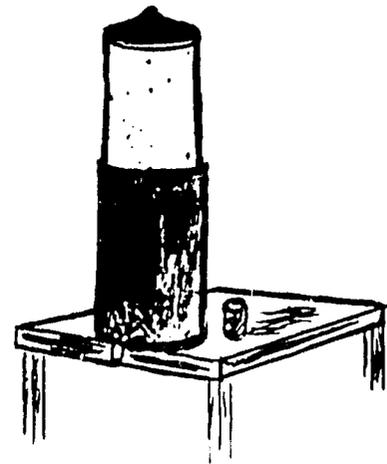
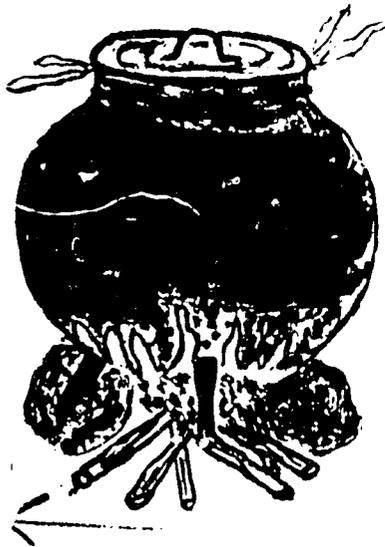
Aspirin  
Soda Bicarbonate  
Resochin  
Epsom Salts  
Boric Acid Solution  
Petrolatum Jelly  
Sulfur Ointment  
Calomine Lotion  
Zinc Oxide Ointment  
Spirits of Ammonia  
Yellow Oxide of Mercury  
Merthiolate  
Triple Sulf  
Sulfadiazine Ointment  
Aureomeycin or Terramycin or Penicillin Eye Ointment  
Piperazine  
Cod Liver Oil

### Supplies

Adhesive Plaster  
Bandages  
Cotton  
Tongue Depressors  
Applicators  
Eye Dropper, glass  
Scissors, bandages  
Thermometers, oral and rectal



RIVER WATER IS UNSAFE FOR DRINKING



BOIL WATER FOR  
FIVE MINUTES TO  
MAKE IT SAFE FOR  
DRINKING

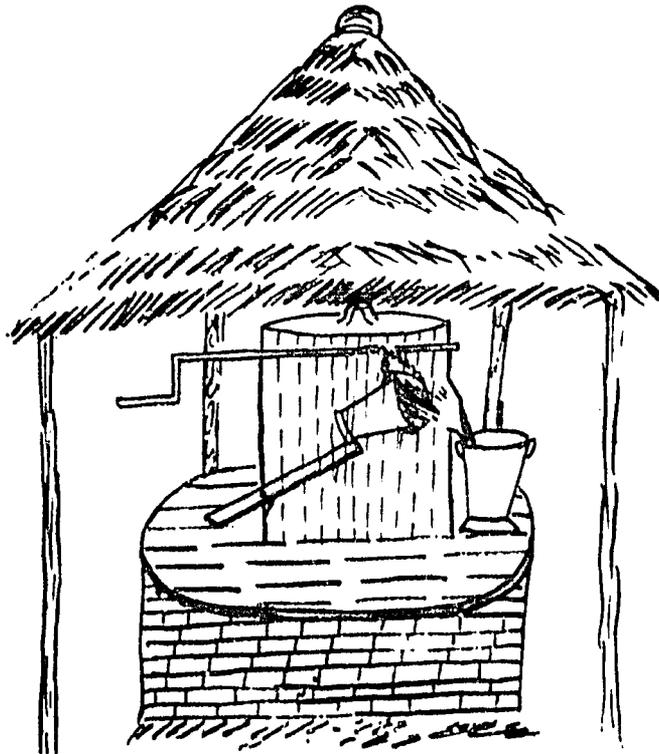
## CLEAN WATER

Water that comes from an open well may be used for washing, but it is not safe for drinking. Boil it five minutes to make it safe for drinking.

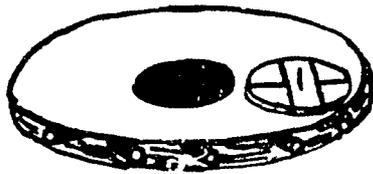
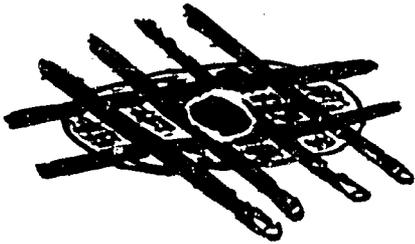
Wells should be covered and waste drained away from the well or pipe to keep it clean.

Water that comes from rivers, ponds, lakes or creeks is unclear, especially if people live nearby. It is very easy for germs or agents of diseases to get into the water.

You should help the people to build safe wells for the village.



A VERY SIMPLE  
TOILET IS EASY  
TO MAKE



## HOW TO BUILD A SANITARY TOILET

Dig a pit at least 75 feet from a water source and in ground that is lower than the spring or well. The pit should be four feet deep, four feet wide and four feet long.

If the walls of the pit tend to cave in, reinforce the walls with sticks. Cover the pit with a good floor of planks or poles. Cover the floor with dirt so that flies cannot get into the spaces between the planks or poles.

In the floor, cut a hole 12 inches long by six inches wide. Do not make the hole bigger because a child might fall into it.

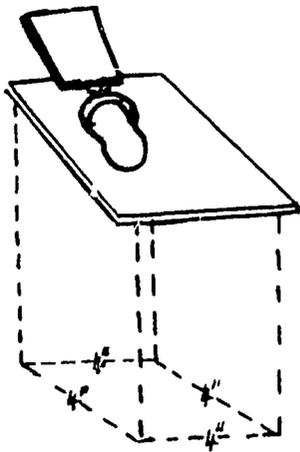
Make a cover with a handle for this hole and teach everyone to keep the hole covered so that flies cannot get into it.

A wall or small fence may be placed around the toilet. This will provide privacy and keep animals away.

The poles and planks will get soft and the pit will become filled. When this happens, cover it all up with plenty of dirt, and make another toilet.

Your sanitary inspector will be glad to show you how to build a sanitary toilet.





BUILD AND USE  
A SANITARY  
TOILET.

## CUTS AND WOUNDS

### I. BRUISES:

**Cause:** Usually caused by blows and bumps against hard surfaces, which produce swelling and bluish color under the skin. These are painful.

**Treat-  
ment:** Up to six hours, apply cold wet dressings. After 24 hours, apply warm wet dressings.

### II. SMALL CLEAN-CUT WOUNDS:

**Cause:** Usually made by sharp cutting instruments like knives, razors, broken glass. They tend to bleed freely but they are not as likely to be infected as other wounds.

**Treat-  
ment:** Apply merthiolate. Cover the wound with a clean dressing and bandage firmly.

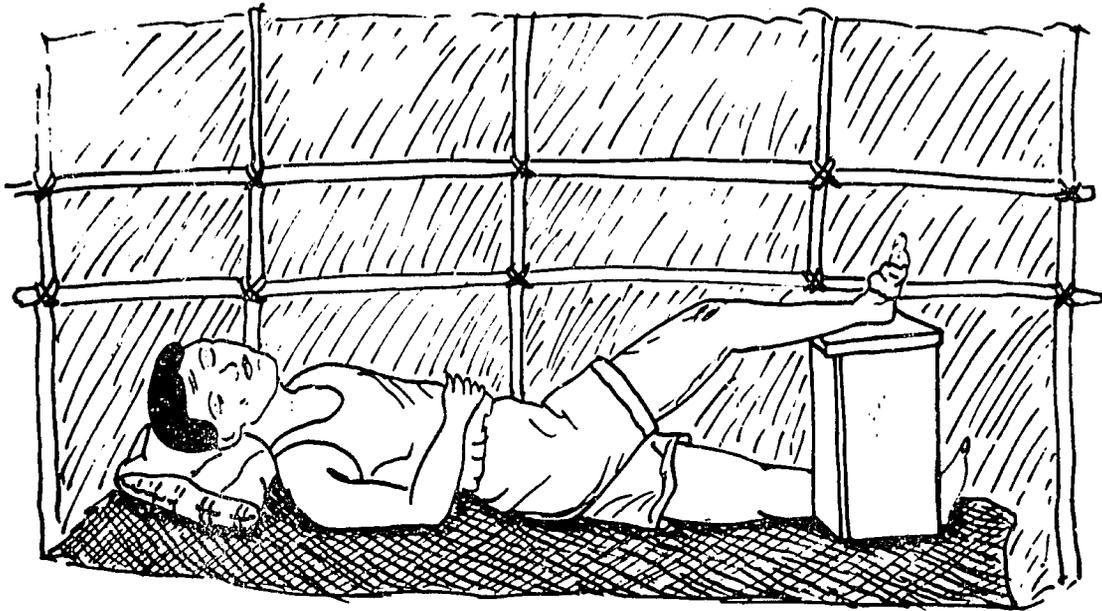
### III. DIRTY WOUNDS:

**Cause:** Rubbing and scraping off the skin. Tearing by blunt or dull instruments or falling on angular surfaces. Grinding or tearing by saws, barbed wire, machinery. These wounds look dirty and do not bleed freely.

**Important:** Puncture wounds like those caused by wires or rusty nails are hard to clean and become infected easily. One of the common infections from these wounds is tetanus (lockjaw).

**Treat-  
ment:** Clean the wound with soap and water and a clean gauze. Apply merthiolate immediately, then cover with a clean dressing, and bandage.

**Important:** Cause puncture wounds to bleed by pressing on both sides of the wound. Apply merthiolate. Take the patient to the clinic or hospital.



PUT THE PART WHERE THE  
WOUND IS AT REST.

#### IV. WOUNDS WITH PLENTY OF BLEEDING:

**Cause:** These wounds are usually caused by sharp cutting instruments like cutlasses, knives, axes etc.

**Treatment:** Stop the bleeding. To do this, make the patient lie down and keep him quiet. Remove enough clothing so that the wound can be seen clearly. Work rapidly and carefully. Apply a tourniquet. Apply a clean piece of gauze directly over the wound at the site of bleeding. Press firmly for at least six minutes. Release the pressure for a few seconds. If bleeding stops by this procedure, then apply a dressing over the wound and bandage firmly. If bleeding persists, tighten the tourniquet again. Keep the injured part quiet and elevated. Keep the patient warm. Give plenty of drinks such as tea or water. Send for a physician.

#### V. INFECTED WOUNDS:

**Cause:** Any time the skin is broken the wound can become infected. If a wound is very dirty, or is not properly cleaned and covered, it has a good chance of becoming infected.

**Symptoms:** The part is red, swollen, hot and painful. Sometimes pus is coming out.

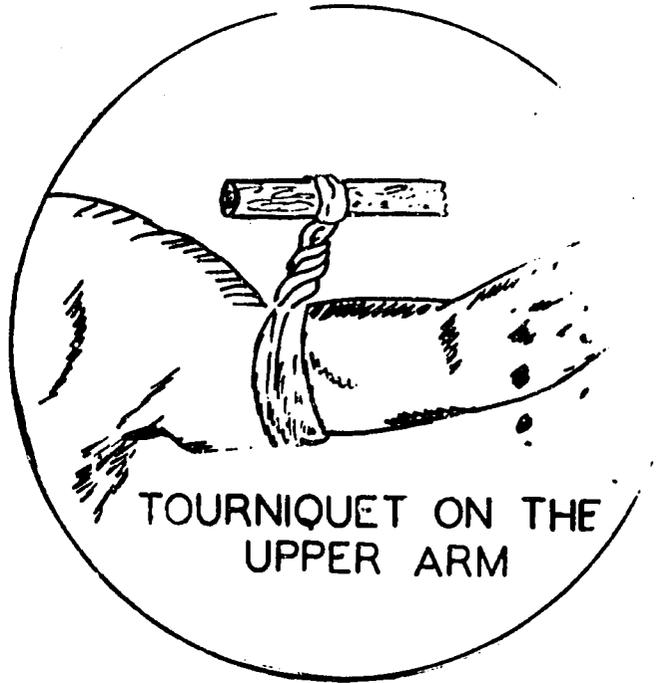
**Treatment:**

1. Put the patient at rest; put the part where the wound is, such as the arm or leg at rest. If possible put the part up on a pillow.
2. Give two tablets of tripi. sulpha and one tablet of soda bicarbonate for three, days, three times a day.
3. Give the patient plenty of boiled water or tea.
4. Patient should not use the sick part until all the redness, heat and swelling have gone.

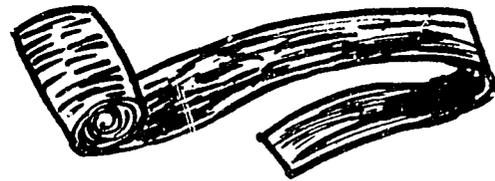
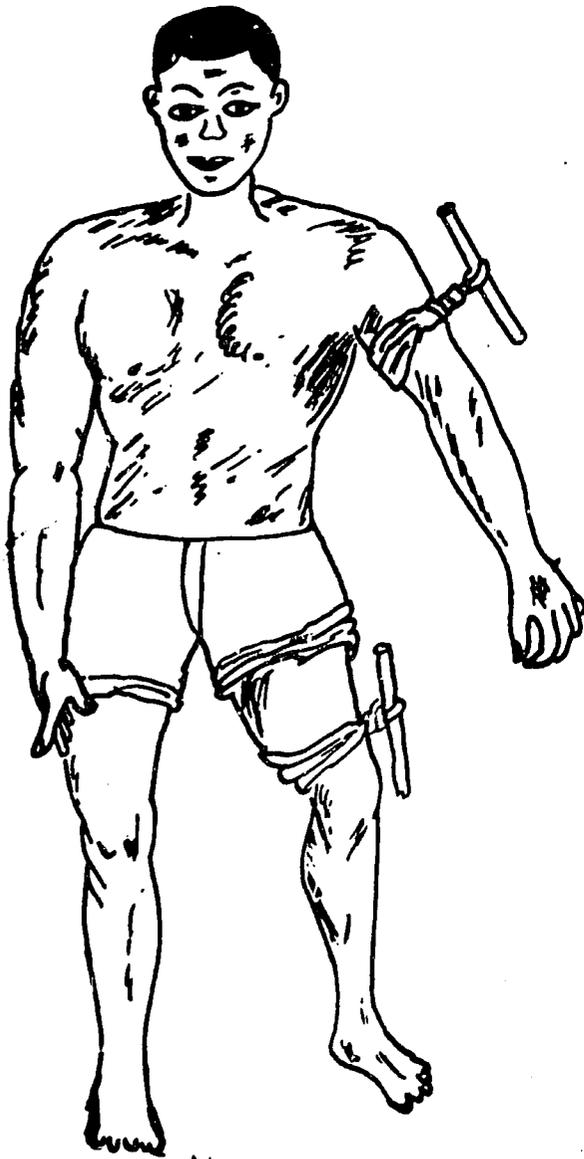
5. If pus or blood comes from the wound, absorb it with a clean gauze and burn the gauze.

**Prevention:** All wounds should be washed with soap and clean water and then kept covered with a bandage. If the bandage sticks to the wound, do not pull it off. Cut off the free parts of the bandage and put on some fresh bandage over the old bandage on the wound. Healing takes place under the sticking bandage.





TOURNIQUET ON THE UPPER ARM



PIECE OF CLOTH OR BELT FOR TOURNIQUET

BEST PLACES TO APPLY A TOURNIQUET FOR BLEEDING WOUND OF THE ARM OR LEG.

## BROKEN BONES

The muscles of your body move the bones because the muscles are always slightly stretched. When a bone is broken, the muscles draw up and pull the bone out of place. Only a doctor, nurse or someone with special training should try to stretch and pull the bone back in place. Until you can get a doctor, "splint" the part. "To splint" means to tie or strap a leg or arm to a plank ( or any object that is straight and firm), so that it will not move or wiggle, until a doctor can "set" it.

Do not move a person with a broken arm or leg until it is "splinted" so that the break cannot move.

## UNCONSCIOUSNESS

May be caused by many things. Get a doctor as soon as possible. Do not try to make the unconscious person stand up. Do not try to give the person anything to drink. Stretch him flat and put a blanket or covering over him. Do not move him unless it is absolutely necessary. If an unconscious person has to be moved, three or more people should help. All stand on one side and lift together keeping him straight all of the time.

## FAINING

May be caused by pain or severe emotions. The person who faints may fall or slide down in his chair. Put or keep his head down. Let him sit on a chair or bench and let him bow down placing his head between his knees. You can also let him lie down. Pour a little Spirit of Ammonia on a piece of cotton and let him smell it.

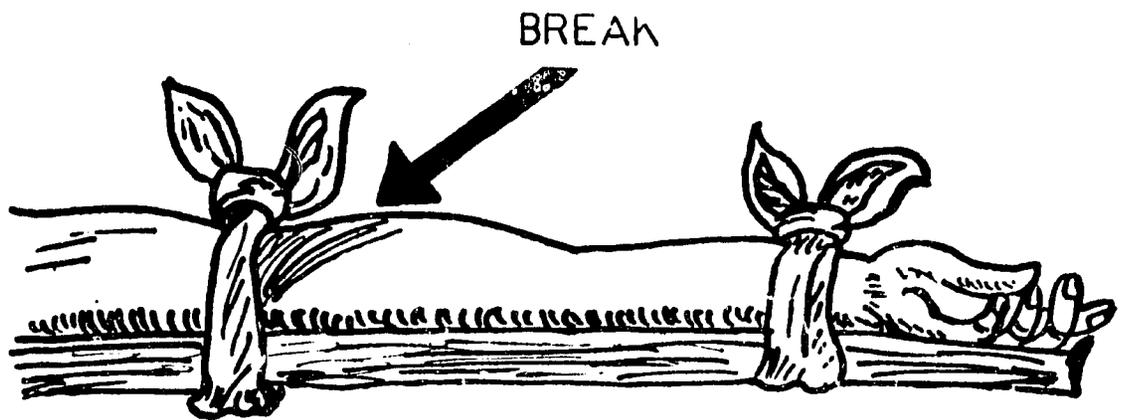
## POISONING

- Cause:** May be from poisonous foods like certain kinds of mushrooms. May be from spoiled foods.
- Symptoms:** Frequent nausea, vomiting, abdominal pain, weakness, collapse.
- Treatment:** In any case of poisoning if the patient is vomiting, he is getting rid of the poison. Encourage him to drink large amounts of water and vomit more.

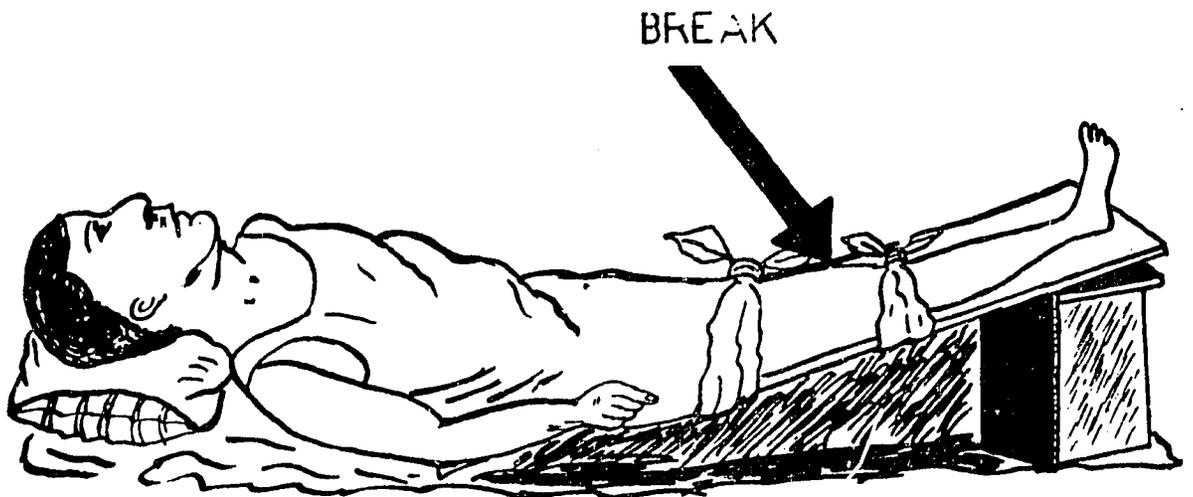
If the patient has not vomited after taking the poison and if he is conscious and can swallow, induce him to vomit by giving strong salt water. Another method to cause the patient to vomit is to tickle his throat. To do this put your finger in his mouth and touch the inner part of his tongue. After the patient has vomited several times, then give bland, absorbing fluids or food like corn starch solution, egg whites, milk of magnesia, milk, olive oil or rice solution.

If the patient is not conscious, do not try to make him swallow. If you do, you will choke him.

Any case of poisoning is serious and must be taken to a doctor or a hospital immediately.



SPLINTED FOREARM



SPLINTED LOWER LEG

## BURNS

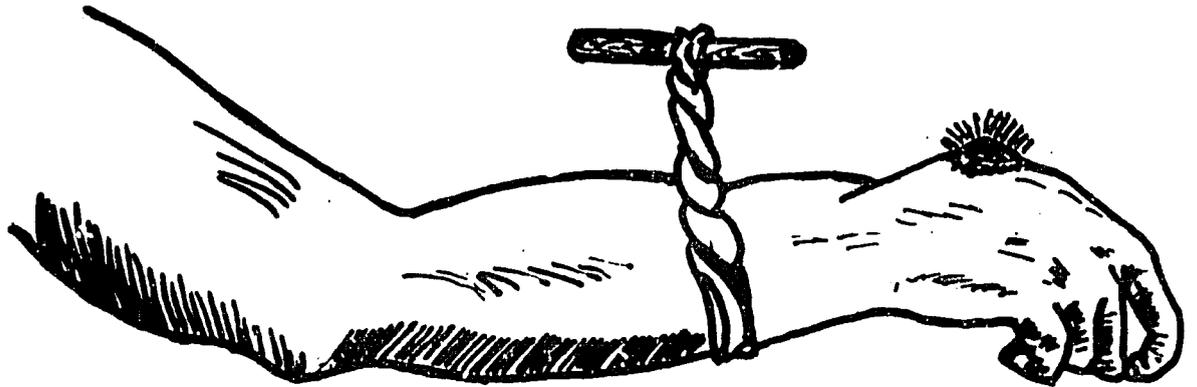
- Cause:** Burns may be caused by hot water, hot oil, blazing fire, hot coals, or by some burning substance like acid.
- Symptoms:** They depend on how big and deep the burn is. The skin is red, usually there are blisters, sometimes the skin is scorched and blackened. In severe cases even the flesh is exposed.
- Treatment:** Gently wash away the dirt, ashes, loose skin with cool, boiled water. Dry gently with absorbent cotton. Apply gauze upon which has been spread petroleum jelly, covering all of the burn. Place a thick padding of cotton over all and bandage firmly.
- Important:** Where the skin has been destroyed, the patient should be treated by a doctor or treated in a hospital.

## BITES

### A. SNAKE BITES

- Cause:** Bite of snake --All snakes are not poisonous, but treat all snake bites as if made by a poisonous snake.
- Symptoms:** Blister swelling and pain at the site of the bite. Dizziness, faintness, weakness.
- Treatment:** Immediately apply a tourniquet above the swelling. Make a cross-cut incision, one-half inch by one-half inch at the site of the bite. Make the wound bleed freely by pressing on either side firmly, or suck the wound spitting out the blood.

SEND THE PATIENT TO A HOSPITAL OR DOCTOR IMMEDIATELY.



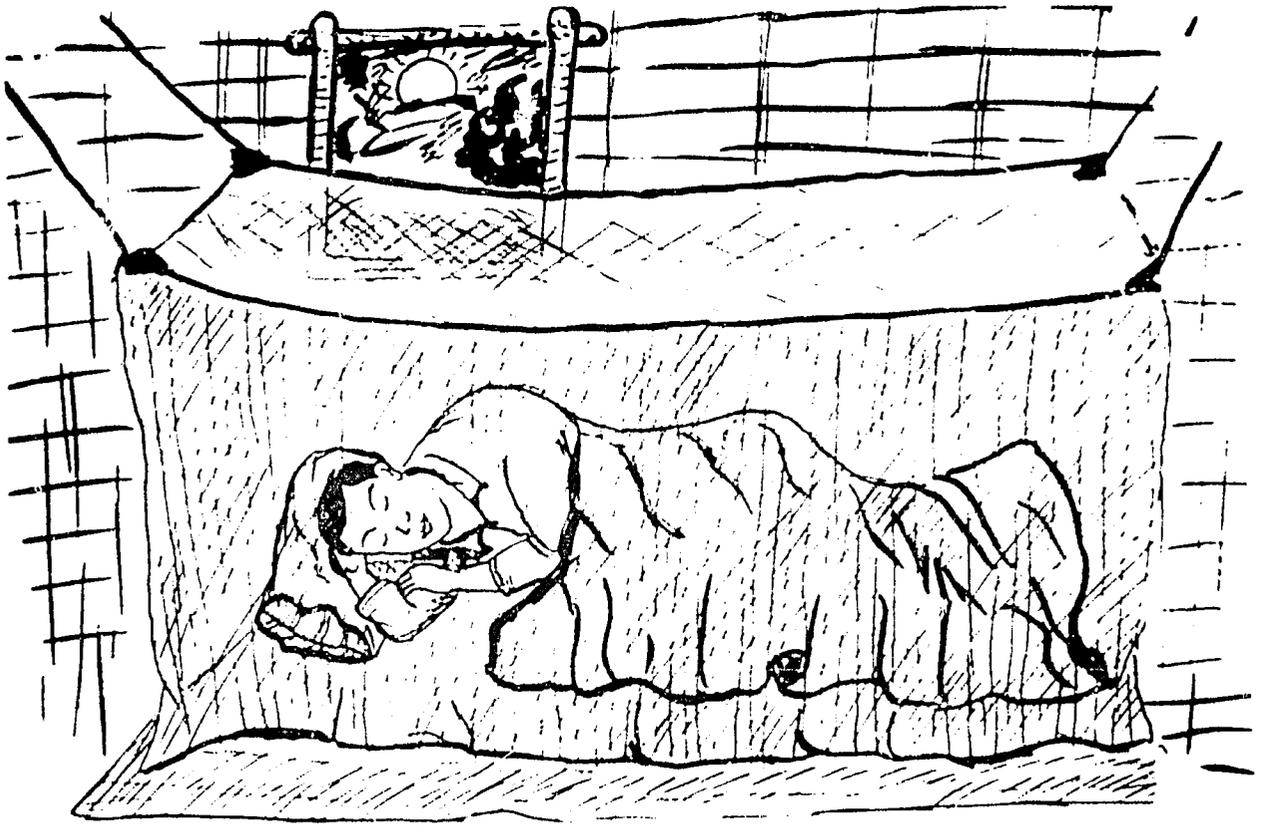
IMMEDIATELY APPLY A TOURNIQUET  
ABOVE THE SWELLING.

## B. DOG BITES

- Cause:** Not all dogs are rabid, but all dog bites should be treated as though made by a rabid dog.
- Symptoms:** There may be pain or bleeding, depending upon the depth of the wound.
- Treatment:** Immediately wash the wound, surround skin with soap and water and with a brush, paint the surrounding skin with iodine or mercuriolate. A small amount of cotton wrapped firmly around the end of a small applicator stick is dipped into the mercuriolate or iodine. With this the wound is probed to its greatest depth. After the First-Aid treatment, take the patient to the clinic or hospital.
- Prevention:** Do not permit stray dogs around the village. Immunize dogs.

## MALARIA (Chills and Fever)

- Cause:** Bites from the Anopheles mosquito. Certain kinds of mosquitoes carry the disease, malaria. They bite a sick person and then carry the disease to a well person when they bite him. This kind of mosquito breeds in puddles of water, old tin cans, coconut hulls, and other places. It enters your house at night and bites you when you are asleep. It may stay in the house a short time after it bites a person.
- Symptoms:** Headache, chills and fever; after a few hours, sweating begins and fever goes down. Chills may happen every day or every other day or every third day. Between attacks, the patient may feel well. The face is usually pale. Often the spleen becomes large.



A MOSQUITO NET HUNG OVER YOUR MAT  
AT NIGHT WILL KEEP THE MOSQUITOES  
FROM BITING YOU.

**Treatment:** Resochin or Aralen, four tablets at once, and two tablets  
(Adults) six hours later. Thereafter, two tablets a day for two days. Total 10 tablets.

**Prevention:** Spray all houses inside with chieldrin once every nine months. This will kill mosquitoes which enter the house and the disease will disappear from the community. The National Public Health Service is conducting a program to accomplish this. A mosquito net hung over your bed at night will keep the mosquitoes from biting you.

### DIARRHEA

**Cause:** Diarrhea and dysentery disease are carried into the body in water and food, and from dirty hands.

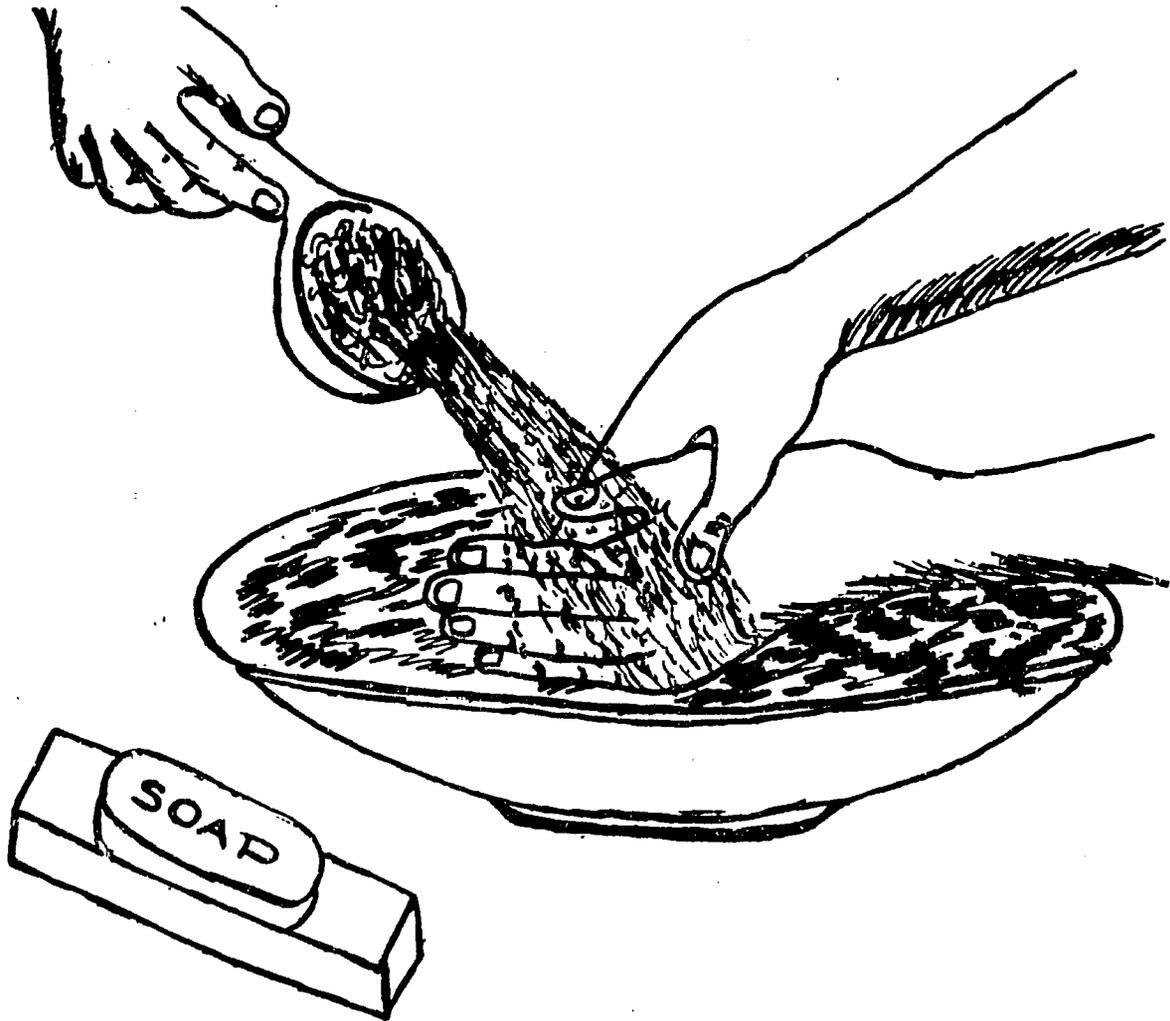
**Symptoms:** Patients with diarrhea have frequent watery stools, often with pain in the abdomen. Dysentery is like diarrhea but the patients may have fever also. The pain in the abdomen is often severe and there may be pus, mucous or blood in the stools.

**Treatment:**

1. Patient should stay in bed until diarrhea stops.
2. He should eat light foods such as ripe bananas for 24 hours.
3. He should drink plenty of boiled water or tea.
4. If patient is not better in three days, give two tablets of triple sulfas and one tablet of soda bicarbonate, three times a day for three days.

**Important:** 5. If the patient is not well in three days, consult a physician.

WASH HANDS WITH  
SOAP AND WATER  
BEFORE EATING.



Prevention: 1. Boil all drinking water.

2. Peel fruit or vegetables with a clean knife.

3. Clean vegetables well before scalding or cooking.

4. Wash dishes with soap and water.

5. Pour hot boiling water over dishes after washing them.

6. Always wash hands with soap and water before eating and after coming from a toilet.

7. Build a sanitary toilet and use it properly so that animals and flies cannot spread the waste around.

8. Keep animals tied or in a fenced area.

#### WORMS

The ascaris or common round worm is not the only worm which is being passed around from person to person.

Pin worms are tiny little white worms less than one-half inch long. They are spread the same way as round worms.

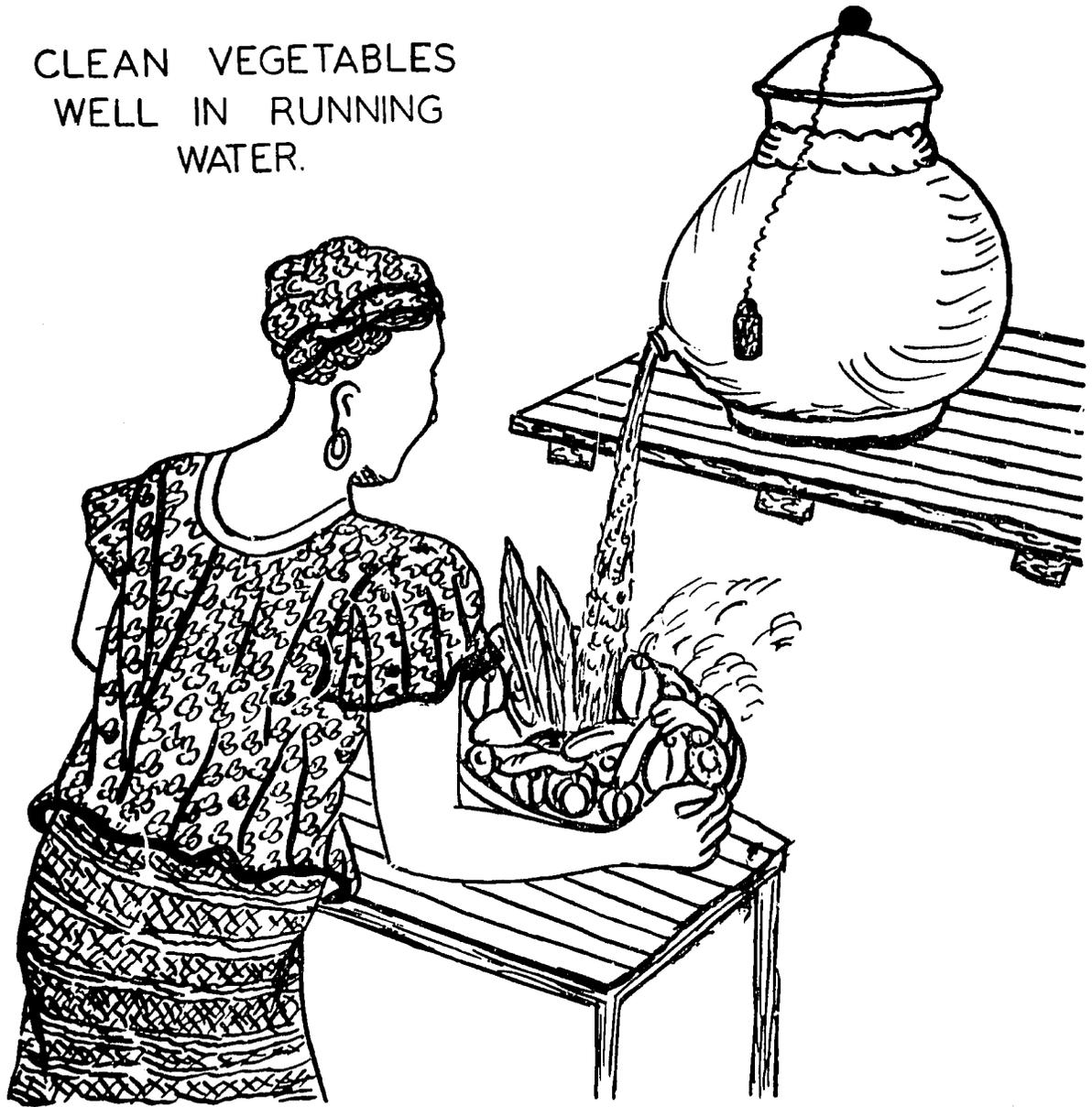
Piperazine will help get rid of these worms.

Hookworms have hoods in their mouths. They attach themselves to the inside of the intestines and suck blood. When these hookworms are young and small, they go through the skin of the feet. It is good to wear slippers or shoes to protect against these worms. It is better to build and use toilets so that worm eggs do not get in the soil.

Chinepoplum will help get rid of these worms.

Building and using sanitary toilets and washing hands frequently with soap and water (especially before eating) will help the community get rid of these worms permanently.

CLEAN VEGETABLES  
WELL IN RUNNING  
WATER.



COMMON WORMS  
(Ascaris)

**Cause:** Eating with dirty hands; eating uncooked food not properly washed with boiled water; putting dirty hands in the mouth; putting unclean things in the mouth.

Worms in the body lay eggs. These tiny eggs come out in human waste. When the waste is spread around it mixes with the soil. Children get worm eggs on their hands when they play on the floor or on the ground. Adults get worm eggs on their hands when they work in the fields or gardens. Worm eggs live a long time in the soil. After they are swallowed, the worms hatch inside the person's body.

**Symptoms:** Pain in the abdomen. This may be steady pain or coming and going pain. Sometimes the patient has a poor appetite, sometimes a strong appetite. The belly is sometimes swollen, though not always. Sometimes worms may be passed out in the stools.

**Treatment:** IMPORTANT: Must be done under the supervision of a doctor or a nurse.

1. Piperazine: the doctor or nurse will regulate the dose.
2. No food must be taken on the day that the medicine is to be given.
3. Next morning give one heaping teaspoon of Epsom salts in a glass of warm water.
4. Food should be taken in small amounts.

CAUTION: Be sure a child does not chew the tablets.

Ask the patient or the mother to save the bowel movements so that both you and the patient can see the worms.

**Prevention:**

1. Always wash hands before eating, and after coming from the W.C.
2. Keep your house and yard clean.
3. Build a sanitary W.C. and use it properly so that waste cannot be spread around. Remember that the eggs of intestinal worms can only come from the waste of people who have the worms inside their bodies.

WORM EGGS ARE  
TAKEN INTO THE  
MOUTH FROM  
DIRTY HANDS.



COVER YOUR NOSE AND MOUTH WHEN  
YOU COUGH OR SNEEZE.



## COUGHING DISEASES

**Cause:** From being close to someone who has cough and cold. May start after exposure to cold weather and being wet. It may be very mild or very serious.

**Symptoms:**

1. Mild sickness - headache, feel bad all over, discharge from nose, sneezing, coughing.
2. More serious - same symptoms of mild sickness plus fever, or pain in chest or losing weight.

**Treatment:**

1. Take temperature.
2. Take weight if possible.
3. Have patient rest in bed or on his mat.
4. Give plenty of warm drinks. Water used for making drinks should be boiled. Lime juice, lemon juice, tea or chicken broth is good for patient.
5. If patient is not better in three days, give two tablets triple sulfa and one tablet soda bicarbonate three times a day for three days.
6. If patient is not better in one week, the sickness is more serious.
7. Do not repeat triple sulfa tablets.

**Important:**

8. Get doctor if possible, or take patient to a hospital. In the meantime, keep the patient in bed or lying on his mat.
9. Give plenty of warm drinks.
10. Encourage him to eat meats, fruits and vegetables in addition to rice.
11. Keep the rest of the family away from him (he should not sleep close to others.)

13. Wash the dishes with soap and water.
14. Burn the cough material from his nose and mouth.
15. Teach the patient to cover his nose and mouth when he coughs.
16. Keep the patient at rest until —
  - a) his temperature is normal (morning and afternoon.)
  - b) he feels better
  - c) He weighs the same as he did before he got sick.

**Prevention:** The best prevention against coughing diseases is to keep people who are coughing away from people who are not coughing. Teach patients to collect and burn what they cough up or spit out.

#### SORE THROAT

**Cause:** Sore throat is spread from one person to another by the person with the sickness, coughing and sneezing and spreading the disease around. Also the disease is on spoons and plates that the sick person has used to eat with.

**Symptoms:** Pain when swallowing, fever and headaches, redness of the throat.

- Prevention:**
1. Teach people to cover their mouths and noses when they cough or sneeze.
  2. Keep people with sore throats separate from people who are well. They should sleep in a separate room, or at least in a corner apart from others.
  3. Wash their dishes with soap and water and rinse them with hot boiling water.

- Treatment:
1. Put patient to bed.
  2. Give plenty of warm drinks. Boil water used for making drinks. Lime juice, tea or chicken broth may be used.
  3. Give one teaspoonful of Epsom salts in a glass of hot water.
  4. Patient must gargle his throat with hot salt water (one-fourth teaspoon salt to one glass hot water) every two hours.
  5. Aspirin, one tablet, crushed, at once and every four hours, total, five tablets.
  6. If no better in three days, give two tablets Triple Sulfa and one tablet Soda Bicarbonate three times a day for three days.

#### ACHES AND PAINS

##### HEADACHE:

- Cause: May be due to exposure to the sun, straining the eyes, lack of sleep or many other things.
- Symptoms: Aching or pain in the head.
- Treatment: Aspirin, two tablets at once and thereafter one every four hours.  
(Adults)  
Total - six tablets. If pain lasts more than two days and if there is fever, send the patient to the clinic or hospital. Headache that lasts a long time or comes and goes over a long period of time may be caused by one or more different kinds of things.  
Send patient to doctor.

## BACKACHE AND JOINT PAIN:

- Cause:** Twisting or wrenching back or joint; unusual strains, poor posture.
- Symptoms:** Pain or aching in lower back, or in shoulder, knee or other joint.
- Treatment:** 1. Aspirin, two tablets at once, one every four hours, total (Adults) eight tablets.
2. Take a towel or large piece of cloth and dip it in hot water. Wring it out and put on the painful part. When the cloth cools, dip in hot water again, wring it out and repeat. Continue for twenty (20) minutes. Apply hot cloths three times a day. BE CAREFUL NOT TO BURN THE PATIENT. If pain lasts over three days or there is fever, send patient to doctor.

## BERI-BERI

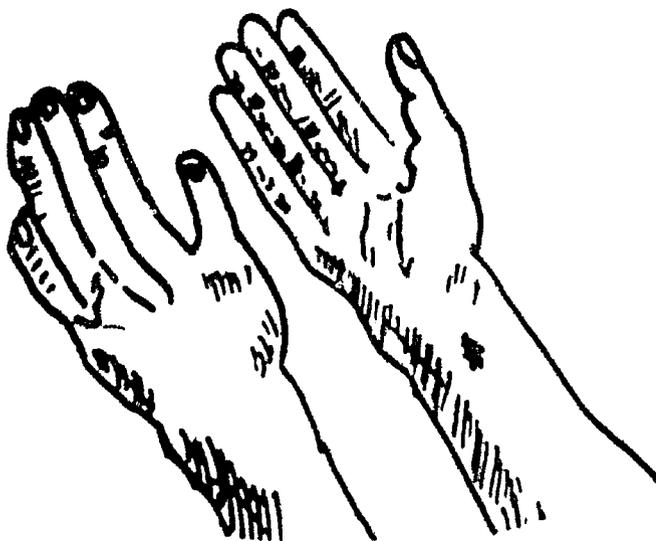
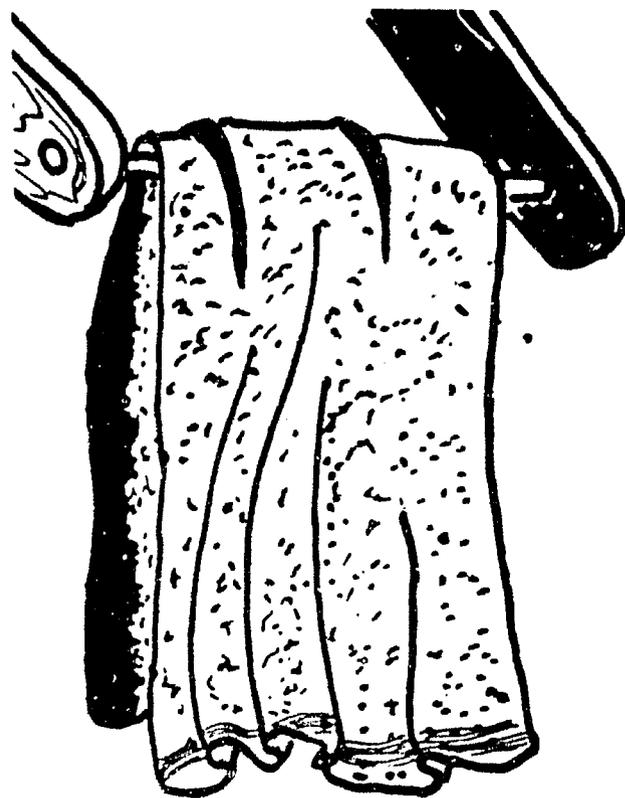
- Cause:** The lack of small amounts of very important substances which are found in fresh and natural foods. Many of these substances are in the brown part of the rice, which is lost when the rice is polished by milling.
- Symptoms:** Numbness or pain or both in the arms and legs.  
Swelling of legs and feet.  
Dryness of the skin.  
Being undernourished (too thin).
- Treatment:** Eat brown rice daily.  
Eat plenty of greens and fruits.



EATING VEGETABLES AND FRUITS  
EVERY DAY HELPS KEEP YOU  
WELL AND STRONG

Prevention: It is much more important to stay well by eating the right kinds of foods than to get sick and take pills. If people would eat brown rice every day they would have much better health. Fresh vegetables and fruits have small amounts of valuable substances that the body needs. People should grow and eat many vegetables and fruits in order to stay well. Eggs, meat and fish should be eaten frequently.

DISEASE FROM SORE  
EYES IS ON THE  
PATIENT'S HANDS, ON  
THE TOWEL AND IN  
THE WATER THAT  
THE PATIENT  
HAS USED.



## SORE EYES

**Cause:** Contact with a person who has sore eyes. Washing face with the same cloth or in the same water as that used by a person with sore eyes. Rubbing the eyes with dirty hands.

**Symptoms:** Discomfort in the eyes, tears or pus running from the eyes. Impaired vision if eyes are sore a long time.

**Treatment:** Wash away pus with a clean cloth or cotton dipped in boiled water. Wipe dry. Pull down the lower lid gently and squeeze Yellow Oxide of Mercury ointment inside the lower lid. This treatment must be repeated for 10 days. Aureomycin ophthalmic ointment may also be used in the same way. Repeat daily for three days.



## LICE

- Cause:** Lice are small insects which get into the hair, onto the body and into the clothing. They come from other persons who have them. They lay eggs which hatch and make more and more lice. Lice can live and grow on dirty heads, body and clothes. These insects may spread serious diseases.
- Symptoms:** The insects are found on the head and body and in the clothing and bedding. Their presence causes itching and may give disease.
- Treatment:** Dusting the hair and head with DDT dusting powder, also the clothing and bedding.
- If no DDT is available apply equal parts of kerosene and vinegar to the parts of the body that have lice.
- Bathe the patient in hot soapy water, and wash clothes in hot soapy water. Teach him to keep his clothes and body clean.
- Prevention:**
1. Take a bath once a day with soap and water.
  2. Wear clean clothes. Wash your clothes often.
  3. Keep your house clean.
  4. Keep your hair and hands clean.

## ITCH (SCABIES)

- Cause:** Small mites burrowing beneath the skin. They come from contact with other persons who have them or from their clothing.
- Symptoms:** Itching; worse at night. Begins between the fingers and on inner sides of wrists. By scratching, the patient spreads it over his body, especially to the genital regions, abdomen and armpits.

**Treatment:** The patient must have a bath with soap. The entire body is rubbed with sulfur ointment once a day for three to seven days. On the next day, another bath must be taken. All clothes must be boiled and mats changed for clean ones. (Clothes may be changed several times during the seek of treatment.)

**Prevention:** Frequent baths and change of clothes. Cleanliness in the home. Bedding or bed mats should be washed or wiped with soapy water and put in the hot sun for several hours.

**NOTE:** Examine other members of the family for itch and treat them if infected.

#### INFECTED SKIN

**Cause:** Scratching of mosquito bites, washing skin with dirty cloth, wearing dirty clothes and other uncleanly practices. Contact with other persons who have sores and infected skin. Neglect in care of small wounds.

**Symptoms:** Dirty crusts with pus underneath, sometimes boils. Often on babies' heads and faces; often on arms and legs at any age.

**Treatment:**

1. Wash the affected part gently and thoroughly with soap and water.
2. Soak and remove crusts.
3. Apply sulfadiazine ointment and cover with gauze and bandage. If the sore is on the foot or leg and lasts a long time, have the patient sit on a chair all day long with his foot up. He should not walk until it heals.

**Prevention:** Keep the body clean. Keep clothes, bed mats, house and yard clean. Avoid scratching especially with dirty fingernails.



REST WITH THE  
LEG UP IS ALWAYS  
HELPFUL.

## TROPICAL ULCER

**Cause:** Through a small break in the skin the germs or agents of disease enter and an ulcer forms and grows larger and larger. Tropical ulcer is often found in undernourished people, particularly children.

**Symptoms:** The ulcer is usually on the foot or legs and lasts a long time. It is hard to heal. There may be a thin layer of grayish-green matter over the ulcer. There is continuous oozing from the sore of bloody substance.

**Treatment:** Rest, with the leg up, is always helpful. Clean the wound as well as you can by wet dressings. Fix a piece of gauze a little bigger than the ulcer. Soak the gauze in Cod Liver Oil and put it on the ulcer. Bandage. Put on fresh Cod Liver Oil every three (3) days. Teach patient to eat plenty of different kinds of foods.

**Prevention:**

1. Avoid hurting or breaking the skin of the feet and legs.
2. Tend to small cuts and wounds.
3. Keep the body clean.
4. Stay healthy by forming good habits.
5. Eat plenty of fruits, vegetables, eggs, meat and fish besides rice.

## YAWS

**Cause:** Yaws is a disease of the skin, passed from person to person. It is easy to spread if people's bodies, clothes and houses are dirty.

**Symptoms:** Sores on the face, arms, legs and anywhere on the body. The sores are like extra skin and flesh piled up with scabs, and scales surrounding. The sores grow larger and spread to other parts of the body. Sores are not painful or itchy.

**Treatment:** Dressers may treat this disease. Other health workers should not attempt to treat yaws. Send the patient and his family to the local clinic.

**Prevention:**

1. Cleanliness
2. Keep your clothes clean
3. Deep your body clean
4. Keep your house clean
5. People should be taught to build larger houses. They should not live and sleep so close together as many diseases are spread by crowding.

## LEPROSY

**Cause:** Leprosy is a disease of the skin and nerves. It is believed that the disease is passed from sick persons to children under 3 years of age.

**Symptoms:** Leprosy may resemble many other diseases of the skin. Hard round lumps appear on the face and upper and lower limbs. Circular areas which cannot feel appear on the body. It may look like ringworm.

**Treatment:** Do not try to treat this disease. If you suspect that a person in the village has leprosy, inform the local doctor.

**Prevention:** Much can be done to prevent catching leprosy by simple cleanliness.

Keep your body clean

Keep your clothes clean

Keep your house clean

Do not allow children to live or associate with a person who has this disease.

SCHISTOSOMIASIS  
(Snail Fever)

**Cause:** In some parts of Liberia this disease is fairly common. It is caused by a tiny animal that goes through the skin. When people wade in rivers or creeks where the tiny animals are, the people get the disease. The tiny animals go into the body and to the bowels. There they lay millions of tiny eggs. The eggs pass out of the body with the waste and go back into the water. Then the eggs hatch and go into snails that live in the water. They live there for some time, then come out of the snail and swim in the water, waiting to go into a human or animal.

**Symptoms:** Bloody diarrhea and bloody urine. If children get a big belly from this disease it stunts their growth.

**Treatment:** Do not try to treat this disease. Send patient to a clinic.

**Prevention:** DO NOT GO IN THE WATER IN PLACES WHERE THIS DISEASE IS COMMON!

Get drinking and bathing water from clean wells and springs.

Keep your hands, body and clothes clean.

Build and use a sanitary W.C.

Keep animals tied or fenced in a dry area.





KEEP YOUR HOUSE CLEAN

IF WE KEEP HUMAN WASTE FROM SPREADING WE WILL HELP TO

CONTROL:

Worms (Ascaris) and other parasites of many kinds.  
Diarrhea-enteritis  
Dysentery  
Other bowel diseases

Intestinal parasites are small animals. Some of them live in the intestines and lay tiny, tiny eggs that are then passed out of the body in the waste. If the waste is spread around the ground, these diseases also get on food and into the drinking water. These diseases also get on children's feet and hands, and on adults' feet and hands, too.

TO STOP THE SPREAD OF THESE DISEASES

WE SHOULD:

1. Boil all drinking water.
2. Peel fruit and vegetables with a clean knife.
3. Clean vegetables well before scalding or cooking.
4. Wash dishes with soap and water and rinse with hot boiling water.
5. Always wash hands before eating, and after coming from a toilet.
6. Build a sanitary toilet and use it.
7. Keep animals tied or in a fenced area.

IF WE KEEP PEOPLE WITH COUGHS AND SORE THROATS AWAY FROM WELL PEOPLE,  
IF WE BURN THE PHLEGM THAT THEY COUGH UP AND SPIT OUT AND IF THEY COVER THEIR  
MOUTHS AND NOSES WHEN THEY COUGH OR SNEEZE, WE WILL HELP TO CONTROL:

Ordinary colds  
Sore Throat  
Bronchitis  
Broncho-Pneumonia  
Pneumonia  
Tuberculosis  
Other Lung Diseases

These diseases like to hide in dust, dirt and darkness. When people live in small houses, have dirt on their bodies and inside their houses, and live and sleep close together, the diseases easily pass from one person to another.

## TO STOP THE SPREAD OF THESE DISEASES

### WE MUST:

1. Burn matter that people cough out. To do this collect phlegm from a coughing person in a paper or handkerchief, then burn the paper or wash and boil the handkerchief. Boiling kills the disease.
2. Wash dishes with soap and water and rinse them with boiling water.
3. Always wash hands before eating.
4. After becoming wet (by rain, etc.) do not sit in a draught or allow your body to get chilly. Wipe your body dry and put on dry clothes.
5. Keep the house clean: free from dirt and dust.
6. Keep your body and your clothes clean.
7. Avoid crowding together especially while sleeping. Encourage families to provide ample space and more rooms in their houses.
8. People who are coughing should live and sleep in a separate room, or at least in a corner apart from the others.

## MANY PEOPLE HAVE MANY KINDS OF SKIN DISEASES

### SOME OF THESE ARE:

Scabies (itch)  
Tinea Flava  
Tropical Ulcer  
Yaws  
Leprosy  
Ringworm  
Impetigo

It is hard to cure these diseases without medicines, but much can be done by people themselves to prevent passing skin diseases from a person with the disease to a person who does not have it.

Both sick people and well people should bathe frequently with soap and water. Keeping the skin clean helps to keep it healthy. The water which a person with skin disease has used to bathe has the germs or agents of the disease in it, and should be boiled, or poured into a sanitary toilet or pit. The basin or bucket must be cleaned. Wash it, then fill it with water and boil for ten minutes. Then empty the basin or bucket and dry it.

## MEDICINES IN THE MEDICAL KIT

### ASPIRIN

Aspirin is a good pain-killer. It is especially good for muscle and joint pain and for headache. It seldom if ever has any harmful effect on the body in the doses prescribed. It is fairly cheap drug. Most people get relief from pain with one tablet every three or four hours. One half tablet is usually enough for children.

### SODA BICARB

Soda is Anti-Acid. It helps in sour stomach and indigestion. Its best use is when used with Sulfa tablets to keep the kidneys anti-acid, while sulfa medicine is in the body. (People with high blood pressure, shortness of breath or swollen ankles should not take soda bicarb.)

### ALSOOLIN

This medicine will cure or help make patients better with malaria. It will do no harm in the doses prescribed.

### EPSOM SALTS

Another name is Magnesium Sulfate. The crystals should be dissolved in water. It causes the patient who takes it to move his bowels.

Be careful not to give too much. If the dose prescribed does not work in 8 hours it can be repeated.

### BORIC ACID SOLUTION

This is a mild "antiseptic" which means that it helps to stop infections. It may be used (1) to wash out eyes or ears; (2) to soften dirt or crusts or scabs; (3) to gargle with; (4) to clean and soothe itchy private parts. Do not use this solution on open wounds and do not swallow it when used as a gargle.

### PETROLATUM JELLY

Vaseline is used to soothe burns.

### SULFUR OINTMENT

It is used for scabies or the itch. The skin is first scrubbed with soap and water. Then the ointment is spread all over the body for at least 7 days.

#### ZINC OXIDE OINTMENT

Is a mild "antiseptic" which helps to stop infections. It may be used on sores, ulcers, pimples, scratches, insect bites. Do not use it on fresh, clean cuts as ointment delays healing.

#### CALOMINE LOTION

Is soothing and drying. Shake the bottle well before using it. Paint it on heat rash and other mild burning and itching of the skin.

#### SPIRITS OF AMMONIA

Is used for people who feel faint. Put a few drops on a small piece of cotton and hold it under the patient's nose.

#### YELLOW OXIDE OF MERCURY

Is an eye ointment and mild "antiseptic". Squeeze a little from the tube into painful or burning eyes. Do not let the tip of the tube touch the eyes. If a child rubs or scratches his eyes or there is mild reddening use this ointment.

#### MERCURIC IODATE

Is a very good "disinfectant"; it kills disease very efficiently. Use it as you are instructed. You may use this on skin and open wounds. You may also soak thermometers and other articles in it to make them clean. The articles must be thoroughly washed first.

#### TRIPLE SULFA

Is good for many kinds of sicknesses:  
Diarrhea without blood  
Diarrhea with blood  
Cough with fever (lasting 3 days to two weeks)  
Deep inflammation

Give the medicine (with soda bicarb) as directed. Too much of this medicine hurts the kidneys. If the damage to the kidneys is bad there will be blood in the urine. If this happens never give more sulfa. Instead give the patient soda bicarb and lots of boiled water.

#### SULFADIAZINE OINTMENT

This ointment is used for skin infections, old draining wounds, deep inflammation, infected scabies, sores, and ulcers. Do not use more than you need.

The body can take up much sulfa from the ointment. Do not use the ointment on clean wounds. When you put this ointment on dirty wounds, slowly, in a few days the wound becomes clean. Then do not use the ointment any more. Put a clean gauze over the wound and bandage it.

#### AUREOMYCIN, TERRAMYCIN OR PENICILLIN EYE OINTMENT

Use this ointment for sore eyes that have been sore a long time or do not get better with Yellow Oxide of Mercury ointment. These ointments are very good for "granular eye-lids".

#### CCD LIVER OIL

It is used to put on tropical ulcers to help them heal. It does not help other kinds of sores.

#### PIPERAZINE

This medicine is used to get rid of worms. The Health Worker should work under the direction of a doctor or nurse so that all the people with worms can be seen by the doctor or nurse and take the medicine properly.

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