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NUMBER 40-1

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HEADQUARTERS THIRD UNITED STATES ARMY

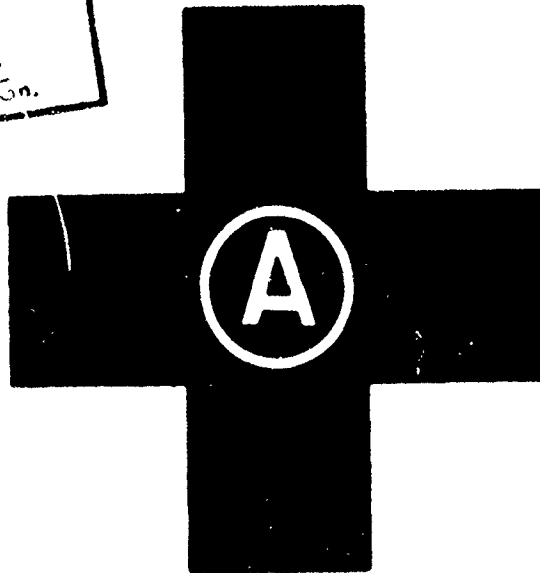
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HEADQUARTERS
THIRD UNITED STATES ARMY
Fort McPherson, Georgia

PAMPHLET
NUMBER 40-1

26 May 1961

MEDICAL

First Aid in the Home

Pamphlet 40-1, First Aid in the Home, is published for information.
(AJASU)

FOR THE COMMANDER:

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FOR THE CHIEF:

ALEXANDER N. GOLINI
Major, Infantry
R&D Coordinator

FOREWORD

This booklet is intended as a guide to help you to prevent accidents and to give simple first aid when emergencies do arise.

You are always welcome to receive treatment and care at any Army hospital. The hospital staff is aware of the many responsibilities involved in providing superior medical service to authorized personnel. We ask your cooperation and understanding when applying for medical care. We urge you to use the appointment system in all cases except emergencies.

Patients who are in need of emergency medical treatment will be seen at any time. Emergency medical care is the care given to patients who are physically unable to wait; it is given to save life and limb and to prevent undue suffering. You will be given definitive treatment in a courteous and most judicious manner.

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FIRST AID AND HOME SAFETY

FIRST AID

First aid is the help you can provide an injured person until professional medical assistance can be obtained. You owe it to yourself, your family, and neighbors to know and understand the simple procedures to be applied quickly and intelligently when an emergency occurs.

Knowledge of first aid procedures can:

1. Prevent accidents.
2. Help you do the right thing at the right time.
3. Prevent added injury or danger to an accident victim.

We urge you to familiarize yourself with the contents of this booklet before emergencies arise so that you will be able to render immediate assistance when necessary.

FIRST RULES FOR FIRST AID

The following rules should be followed in any serious emergency:

1. Remain Calm: If the patient is conscious, reassure him and try to remain calm. Your calmness can allay his fear, anxiety, and panic. It will convince him everything is under control. You will be able to think clearly, act rapidly, and efficiently.
2. Establish a Clear Airway: Make sure the patient is breathing. All efforts are in vain if the victim has stopped breathing.
3. Stop the Bleeding: Apply constant pressure directly over the wound until bleeding stops. Do not elevate the injured part if it is broken. Use a tourniquet only as a last resort.
4. Protect the Wound: Keep the wound clean. Cover it with a simple sterile dressing. This step will help to prevent further infection.
5. Prevent Shock: Have the patient lie flat and quiet. Keep him comfortably warm. If he can swallow, give him warm fluids. Do not give anything by mouth to a patient who is vomiting or is unconscious.

6. Do Not Move the Patient: Unless absolutely necessary, do not move the patient. Do not turn or manipulate him; do not encourage him to sit or stand up. Have him lie flat on his back until medical assistance arrives. If it is necessary to move him, splint him at the site of the accident before moving.

HOME FIRST AID SUPPLIES

Purchase only a few simple, but necessary, supplies. An elaborate or expensive kit is not necessary. Drug stores sell prepacked first aid kits. If you desire, you can make up your own kit.

All first aid supplies should be kept in a separate container and marked distinctly. The container should be kept unlocked in a specific location so that it will be readily available when needed. The kit should be in a safe place out of the reach of small children.

The following check list of basic supplies should be sufficient:

- Soap
- Sterile gauze dressing
- Bandages
- Band Aids
- Adhesive
- Sterile absorbent cotton
- Large triangular bandage (clean sheeting can be substituted)
- Vaseline gauze dressing packets
- Razor blade
- Scissors
- Sharp knife
- Tweezers
- Safety pins
- Flashlight
- Medicine dropper
- Medicine glass or measuring cup
- Thermometer
- Medicines
 - Tube of Petroleum Jelly
 - Table salt
 - Baking soda
 - Spirits of Ammonia
 - Universal Antidote for poison

ABDOMINAL PAIN

Abdominal pain can be caused by overeating, appendicitis, eating wrong foods, and many other reasons. If the patient has nausea and/or vomiting with persistent abdominal pain, consult a doctor. Do not give a laxative.

If there is no fever, nausea, or vomiting, and abdomen is soft, have patient rest quietly in bed. Give warm liquids and bland diet, if tolerated. Call a doctor if the pain persists.

ARTIFICIAL RESPIRATION

If a patient's breathing has stopped, start artificial respiration immediately. The most effective method of artificial respiration is mouth to mouth, or mouth to nose breathing.

Mouth to mouth breathing technique is as follows:

1. Position the patient flat on his back.
2. Turn head to one side and wipe fluid, vomitus, or foreign body from mouth and throat with fingers.
3. Tilt the head back to extend the neck sharply.
4. Lift the jaw forward. Place the thumb into the mouth with thumb behind incisor teeth. Do not hold or depress tongue. Grasp the jaw firmly and lift forward to pull the tongue forward out of the air passage.
5. Form an airtight seal.
 - a. Pinch the nostrils closed to avoid leaking air from nose.
 - b. Rescuer opens mouth widely, places it over victim's mouth and rescuer's thumb, and forms an airtight seal with his lips.



Tilt victim's head back so chin points upward.



Pull or push the jaw into a jutting-out position.



Open your mouth wide. Place it lightly over the victim's mouth. Pinch victim's nostrils shut.

6. Blow to inflate victim's lungs.

a. Blow firmly.

b. Observe victim's chest rise as lungs inflate.

c. If chest does not rise, check to see if airway is clear.

7. Remove mouth from victim's mouth, turn head to one side, and inhale.

a. Note fall of victim's chest as he breathes out.

b. Hear and feel air escape from victim's lungs.

8. Repeat the procedure.

a. Repeat deep rapid breaths for first thirty seconds to oxygenate victim.

b. After thirty seconds, continue deep breaths at the rate of 12-20 times per minute.

c. If the victim is a child, use shallow breaths at 20 times per minute.

9. Continue resuscitation until victim is recovered.

The procedure for mouth to nose breathing is the same as for mouth to mouth breathing. The difference is that the mouth is sealed airtight and the rescuer blows into the patient's nose. The rescuer places his mouth over the victim's nose and blows.



Or close nostrils with the pressure of your cheek.



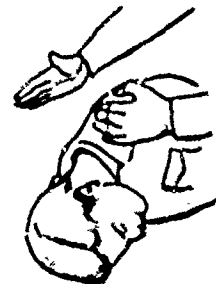
Or close the victim's mouth and place your mouth over the nose.



Blow into the victim's mouth or nose.



Remove your mouth, turn your head to the side, listen for return outflow of air from victim's lungs.



Several sharp pats between shoulder blades may dislodge foreign matter from victim's throat.

ARTIFICIAL RESPIRATION: Infants and small children - Mouth to mouth technique

1. Clean visible foreign matter from mouth with finger; place child on back; use fingers of both hands to lift lower jaw from beneath and behind so it juts out (as with adults).

Place your mouth over both mouth and nose of child to make "leakproof" seal. Breathe into child with shallow puffs of air, about 20 per minute.

If air exchange seems to be blocked, and you cannot breath easily into child check "jutting out" position of jaw to be sure tongue has not fallen back and that airway is open.



2. If air passages are still blocked, suspend child by ankles--or--old child head-down over one of your arms and give several sharp pats between shoulder blades to help dislodge obstructing matter.



RESCUE BREATHING



Mouth-to-Mouth



Mouth-to-Nose

VICTIM ON HIS BACK IMMEDIATELY

- | | |
|---------------------|---|
| CLEAR THROAT | of water, mucus, toys, coins, or food. |
| TILT HEAD BACK | to open air passage. |
| LIFT JAW UP | to keep his tongue out of air passage. |
| SEAL NOSE (or lips) | to prevent air leakage when you blow. |
| BLOW | until you see his chest rise. |
| LISTEN | for snoring and gurgling-signs of throat obstruction. |
| REPEAT | 10 - 20 times a minute. |

CONTINUE RESCUE BREATHING UNTIL HE BREATHE'S FOR HIMSELF.

BITES

Animal Bites: If the bite is from a dog, cat, squirrel, fox, skunk, bat, or any other animal, try to catch the animal, or obtain assistance in catching the animal. This is important. Use extreme care in attempting to catch the animal. Turn him over to the local health authorities for observation. Report all animal bites to the hospital. To treat:

1. Cleanse wound thoroughly with soap and water.
2. Rinse with running water.
3. Paint with antiseptic.
4. Apply sterile dressing.
5. Consult with doctor.
6. Report bite to proper authority (hospital or private physician).

Insect (Ants, Mosquitoes, Chiggers) Bites: Many insect bites cause swelling, irritation, and inflammation. They can be poisonous. Infection frequently occurs as a direct result from scratching. The following first aid measures should give relief:

1. Wash the area.
2. Apply cold compresses.
3. Apply calomine lotion or alcohol to relieve itching.
4. If patient complains of aching muscles and pain, call a doctor.

Snake Bites:

1. Poisonous: The specific treatment for poisonous snake bite is antivenin which should be given as soon as possible to neutralize the poison. Pharmacies sell or rent snake-bite kits containing antivenin, instruments, and instructions. If possible, it is best to have a doctor give the antivenin; however, anyone trained in first aid can administer it. These kits should be carried by campers and outdoorsmen who visit in snake infested areas. If there is no antivenin available and you are unable to summon medical assistance, use the incision-suction method. Incision-suction method:

- a. Act quickly and calmly.

b. Make victim lie down and keep absolutely quiet. (Movement helps spread poison).

c. Apply a tight bandage around the extremity a few inches above the bite. Have the bandage tight enough to make the veins stand out, but not tight enough to cut off arterial circulation.

d. Use snake-bite kit, if available. The kit contains a tourniquet, a knife or razor blade, antiseptic, and suction pump. If no snake-bite kit is available, improvise.

e. If antiseptic is available, apply to area surrounding fang marks.

f. Sterilize the knife or razor blade with a flame or alcohol.

g. Make a single cut over each fang mark. Cuts should be $\frac{1}{4}$ inch long and $\frac{1}{8}$ inch deep.

h. Apply suction to wound. Use suction pump, if available. If not apply mouth suction, spitting the blood and other fluids out frequently. Snake bite poison is harmless in the mouth, unless there are cuts and sores in the mouth. Even so, the risk is not great.

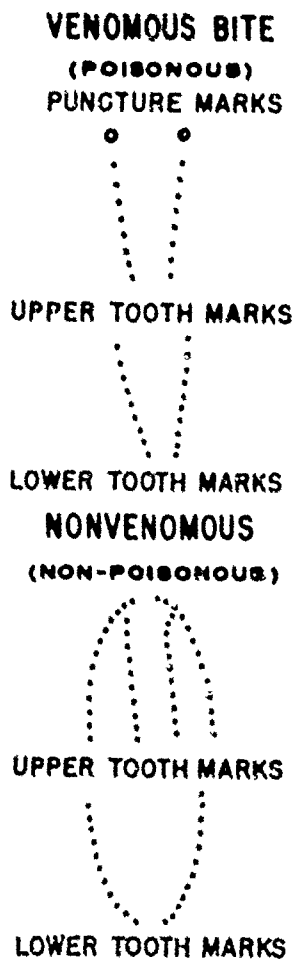
i. Release tourniquet every 15 minutes for 30 seconds, then reapply tourniquet. Continue this procedure until medical care is available.

j. Medical care is urgent in the case of poisonous snake bites. Transport the patient lying down, preferably on a litter. Suction procedures can be accomplished during the evacuation of the patient.

2. Nonpoisonous Snake Bites: Cleanse the wound with soap and water. Apply a sterile dressing over the wound.

Tick Bites: Some ticks spread disease. Do not touch them with bare fingers. After visiting in a tick infested area, examine skin and clothing for ticks. The head of a tick adheres to the skin and is difficult to remove. Avoid trying to remove ticks with your bare hands. To destroy ticks, burn them, do not squeeze. To treat tick bites:

1. Dislodge tick. Remove carefully with tweezers.



2. Scrub site with soap and water.
3. Consult a doctor if the bite becomes swollen or infected.

STINGS

1. Black Widow Spider, Scorpion, Tarantula: The bite of a Black Window spider can cause intense pain, muscle spasms, cramps, fever, and nausea. If these symptoms are present, call a doctor. First aid can be rendered as follows:

- a. Keep the patient lying down, quiet, and warm.
- b. Wash wound with soap and water.
- c. Apply an ice compress to area if there is swelling present.
- d. Black coffee may be given as a stimulant.
- e. Save spider for identification, if possible.

2. Bee, Wasp, Hornet: If individuals allergic to bee venom are stung by a bee, they should seek immediate medical aid. First aid treatment is as follows:

- a. Remove the stinger. Use outward scraping motion of a finger nail. Do not grasp with a tweezers.
- b. Apply cold packs of baking soda solution.
- c. Apply ice bags or ice cubes.

BRUISES

Apply cold compresses to keep discoloration and swelling down. If skin is broken, clean wound with soap and water and apply sterile dressing.

BLEEDING (Hemorrhage)

Patients suffering from severe bleeding are anxious and apprehensive. It is most important to remain calm, to reassure the victim, think clearly, and work rapidly, but efficiently. Remove enough of the patient's clothing

to determine the site of bleeding. Use sterile dressing over the wound. Substitute clean pieces of material to cover the wound if sterile dressings are not available. Do not apply medicine or ointments on wounds. It is more important to stop the bleeding.

To stop bleeding:

1. Have victim lie down.
2. Place sterile dressing firmly over wound.
3. Apply continuous pressure with your hand.
4. If bleeding from an extremity which is not broken, elevate and support the limb. If limb is broken, do not elevate.
5. Apply pressure bandage when bleeding has stopped.

For massive bleeding:

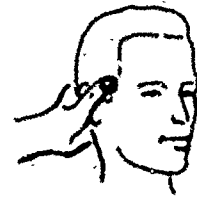
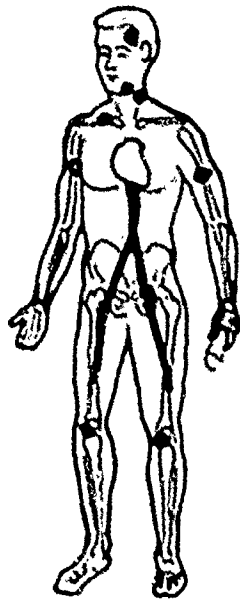
1. Apply tourniquet and call a doctor. A wide piece of material will make a tourniquet.
2. Apply tourniquet so that it will not cut into the body.
3. Once the tourniquet is applied, leave it in place.
4. Mark down the time the tourniquet is applied.
5. A tourniquet will be applied for massive bleeding only when all other measures to stop the bleeding fail.

Internal bleeding:

1. Keep patient warm, quiet, and lying on back with head turned to one side, if vomiting.
2. Keep airways clear of obstruction.
3. Consult a doctor.

Nosebleed:

1. Pinch nostrils tightly together and hold for approximately 10 minutes.
2. Apply cold wet compresses over the bridge of the nose.
3. Caution patient not to blow his nose.
4. Consult a physician if nosebleeds persist or recur frequently.



Apply pressure as indicated to stop bleeding from:

Head

Neck; Mouth

Arm pit

Shoulder

Upper Arm

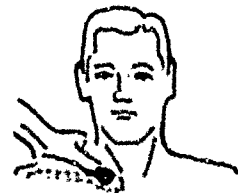
Hand

Forearm

Foot

Leg

Thigh



BLISTERS:

The unbroken skin covering of a blister is the best protection against infection.

1. Small Blisters:

- a. Wash with soap and water.
- b. Apply sterile bandage.

2. Large Blisters:

- a. Wash carefully with soap and water.
- b. Dry and apply antiseptic around edge of blister.
- c. Puncture blister at the edge with a sterile needle.
- d. Press with sterile gauze to drain fluid.
- e. Cover with sterile dressing.
- f. Do not puncture blisters caused by major burns.

BOILS

Apply hot wet compresses several times daily. Do not squeeze. If boil breaks, wipe pus away with sterile gauze and discard. Consult a doctor if the boil is severe or occurs frequently.

BURNS

1. Minor Burns:

a. Signs:

- (1) Skin area is reddened and unbroken.
- (2) No blisters are apparent.
- (3) A small area is involved.

b. First Aid:

- (1) Hold area under cold running water for a few minutes.

(2) Apply paste of wet baking soda.

(3) Bandage.

2. Major Burns: Cover the patient and get him to a hospital as soon as possible. First Aid should be rendered as follows:

- a. Keep victim lying down to lessen shock.
- b. Carefully cut clothing away from burned area. Do not pull clothing if it adheres to burn - leave it.
- c. Cover burned area with sterile dressing or clean sheets. Pain is reduced if air is excluded from burn.
- d. Watch patient for signs of shock and treat if shock develops.
- e. Get patient to hospital as soon as possible.
- f. Caution - in treating major burns, do not open blisters; do not apply grease or antiseptics.

3. Chemical Burns: To treat chemical burns:

- a. Strip clothing from the patient.
- b. Drench burn continuously with large amounts of clear running water.
- c. Get medical attention.

4. Chemical Burns of Eye:

- a. Flush the eye gently with sterile water.
- b. Cover the eye with dressing.
- c. Consult a doctor.

CARBON-MONOXIDE POISONING

Carbon monoxide is a colorless, odorless gas that kills without warning. The majority of fatalities caused by carbon monoxide poisoning is due to carelessness. Carbon monoxide is generated by an automobile left running in a closed garage, faulty oil burners, coal and wood fires, etc.

1. Symptoms include:

- a. Headache.
- b. Dizziness.
- c. Weakness.
- d. Difficulty in breathing.
- e. Skin, fingernails, and tips of fingers turning bright red.

2. First aid should be applied as follows:

- a. Get the victim in fresh air.
- b. Keep the victim lying down.
- c. Cover for warmth.
- d. Start artificial respiration immediately.
- e. Call for medical assistance.

COLDS AND COUGHS

Colds start with a dry sore throat, stuffed up feeling in the nose, or running nose, and headache. Colds are caused by viruses and usually last a few days. The following measures will afford relief to the patient:

1. Rest in bed.
2. Force fluids.
3. Coughing may be relieved by application of steam inhalation.
4. Use of cold cream under the nose to prevent it from becoming sore.
5. Chap stick or cold cream to keep lips from dryness and cracking.

Preventive measures to keep the condition from spreading to other members of the family are:

1. Keep away from other people as much as possible.

2. Use a kleenex or handkerchief when coughing or sneezing.
3. Wash hands thoroughly.

CONVULSIONS

Convulsions do not, as a rule, last more than a few minutes. The most important step in treating a patient having a convulsion is to prevent him from hurting himself. The following measures are recommended in assisting these patients:

1. Place patient on the floor.
2. Do not try to restrain convulsive movements.
3. Turn patient's head to one side to allow saliva to drain.
4. Place a rolled handkerchief between his teeth to keep him from biting his tongue.
5. Loosen all clothing.
6. Cover patient to keep him warm.
7. Reassure him after seizure.
8. Consult a doctor if seizures occur frequently.

CUTS AND SCRATCHES

If the cut has dirt in it or the area around the cut is dirty, consult a doctor. He may wish to give tetanus toxoid or tetanus antitoxin. If cuts are deep and extensive, it may be necessary to suture the wound. First aid should be applied as follows:

1. Stop bleeding. Pressure alone will usually stop it.
2. Wash well with soap and water. Prevent infection by washing away from the wound.
3. Apply an antiseptic. When dry, apply sterile bandage.

DIARRHEA

Diarrhea is a frequency of bowel movements. It can be caused by food, infections, poisoning, poor sanitation, nervous or emotional disorders. Consult a doctor for all cases of acute or persistent diarrhea, especially in children suffering fluid loss through accompanying vomiting. Diarrhea can often be controlled by:

1. Refraining from solid food for 18-24 hours.
2. Giving the patient warm (not hot) fluids, tea, broth, or boiled milk. Do not give fruit juices.
3. Resting.
4. Giving bland diet when bowel movements stop.
5. Refraining from the use of laxatives.

EARACHE

Consult a doctor. He must determine the cause of the earache to prescribe proper treatment.

FAINTING

Fainting can be caused by fatigue, hunger, severe pain, poor ventilation, emotional upset, and other causes. If fainting occurs frequently, consult a doctor. First aid can be rendered as follows:

1. Keep patient lying down. Position him so that his head is lower than the rest of his body.
2. Loosen any tight clothing.
3. Hold aromatic spirits of ammonia or smelling salts under his nose.
4. Keep patient warm and quiet.

Prevention: If an individual complains of feeling faint, have him sit down. Bend his head forward between his knees until he feels better. Give him fresh air.

FEVER

Temperatures may vary from 97° to 99° Fahrenheit in well people. Exercise in hot weather may cause an elevation of temperature. Small children may have a fever as high as 103° or 104° at the beginning of a mild infection. Babies teething will frequently run high temperatures. High temperatures are not always a sign of severe illness. Patients may be seriously ill and have no more than 100° of temperature. Abnormal temperatures are a symptom and must be considered with, or in relation to, the other symptoms. When fevers are high, persistent, or accompanied by other symptoms, such as nausea, vomiting, pain, rash, sore throat, or swelling, consult a doctor.

Use of thermometers: For conscious adults and teen-agers, use an oral thermometer. If the patient has had hot fluids, wait at least 20 minutes before taking a mouth temperature. Use a rectal thermometer for all unconscious patients and children. Never leave a child who has a rectal thermometer inserted alone. **First aid:**

1. Rest and quiet.
2. A cool water sponge bath.
3. Have the room cool.
4. Give fluids if patient is not vomiting.

FOREIGN BODIES

Foreign bodies in the ear: Children often put small objects in their ears. Peas, beans, seeds, etc., absorb moisture and swell, making removal difficult. Sometimes an insect will crawl into the ear. To render first aid:

1. If the object is loose, gently pull earlobe backwards and tilt the head so the object will fall out.
2. If it is a bean or pea, drop a little mineral oil into the ear to lessen swelling.
3. If it is an insect, drop a little warm oil into the ear to smother the insect.
4. Have a doctor remove the objects or insects if they do not fall out.

CAUTION: Never dig at the object with a toothpick, wire, hairpin, etc. as there is great danger of seriously injuring the ear. Have the doctor remove the object.

Foreign body in the eye: Foreign bodies entering the eye usually rest on the lining of the eyelids or become embedded in the eyeball. Only professionally trained personnel can remove embedded objects. It is safe to use simple first aid measures to remove specks, eyelashes, or cinders which rest loosely on the surface. To render first aid:

1. Wash hands before touching eye.
2. Pull upper eyelid out and down over lower lid, or shut both eyes for a minute. The tears may wash out the particle.
3. Use a medicine dropper filled with boric acid solution or water to flood the eye and flush out the particle.
4. If the speck is visible on the lower lid, pull gently downward and use wet applicator or corner of clean cotton cloth to remove speck.
5. If unable to remove speck, cover eye with a sterile dressing and consult a doctor.

CAUTION: Severe damage can result from unsuccessful attempts to remove embedded foreign bodies of the eye. To avoid further injury: Never rub the eye; always wash hands before examining the eye. Dirt might enter and result in added injury; be gentle, and get to a doctor immediately.

Foreign body in the nose: If an insect or a foreign object, e.g., bean or seed that is apt to swell, has lodged in the nose, insert a few drops of mineral oil or olive oil. This will prevent swelling and lessen irritation. Patient may blow nose gently, but must keep both nostrils open. Consult a doctor if object does not come out. Never probe a nose to remove a foreign object.

Foreign body in the stomach: Children often swallow such objects as pins, tacks, and coins. Consult a doctor immediately. Never give a laxative or force the child to vomit.

FROSTBITE AND OVER EXPOSURE TO COLD

Frostbite can be avoided by wearing warm loose clothing and keeping dry. Proper footwear and gloves are important. If clothing becomes wet, change it immediately. The face, hands, and feet are the parts most frequently frostbitten. To render first aid:

1. Remove clothing that fits closely to site of injury.
2. Rapidly thaw affected part by putting it in tepid water or by placing the part next to a warm part of your body.
3. Wrap patient in blankets and give him warm fluids.
4. After thawing, wrap the injured part loosely in a dry sterile dressing.
5. Treat all cases of frostbite as litter patients.
6. Consult a doctor.

CAUTION: The following precautions should be taken:

1. Use preventive measures, such as wearing dry socks and clothing.
2. Avoid wearing tight clothes.
3. Do not massage frostbite areas.
4. Do not use vaseline gauze dressings.
5. Do not open blisters.
6. Do not allow patient with frostbite of the feet or legs to walk.
7. If an arm or hand is frostbitten, put the arm in a sling.

EFFECTS OF HEAT

The ill effects of heat can often be prevented by the following preventive measures:

1. Keep living and working areas as cool as possible.
2. Keep the head and body covered when in the sun.
3. Wear light loose fitting clothes.
4. Insure an adequate intake of fluids and salt.

Heat Cramps: Heat cramps are caused by an excessive loss of body salt through profuse sweating and an inadequate intake of fluid and salt. The patient may complain of severe muscle cramps, weakness, nausea. Effective treatment is to:

1. Give the patient salt water to drink.
2. Apply heat to the cramped area.

Heat Exhaustion: Heat exhaustion is caused by excessive loss of water and salt from the body. The patient's skin is pale and moist. The usual symptoms are headache, nausea, faintness, dizziness, profuse sweating, and normal temperature. First aid treatment is as follows:

1. Have the patient lie in a shaded area or cool room.
2. Loosen clothing.
3. Have patient drink large amounts of cool salt water. Use $\frac{1}{4}$ teaspoon of table salt to a quart of water.
4. If patient does not improve, consult a doctor.

Heatstroke: Heatstroke is a grave emergency, often fatal. It presents the following symptoms:

1. Hot dry skin.
2. No sweating.
3. Nausea.
4. Weakness, dizziness, rapid breathing.
5. High body temperature, 104° to 108° .
6. Mental confusion - often unconsciousness.

First Aid is as follows:

1. Work quickly - call for a doctor.
2. Get the patient to a cool spot if out-of-doors.
3. If possible, immerse him in a bath of cold water and ice or wrap him in cold wet sheets.
4. If he is able to swallow, give him cold drinks, but no stimulant.
5. While patient is in the tub, rub his arms and legs. Direct movement toward the heart. If he is in sheets, rub through sheets.
6. Check body temperature every 10-15 minutes.

7. Continue treatment until medical aid arrives or until temperature drops to about 101°.

FRACTURES (BROKEN BONES)

A fracture is a broken bone. The two main types of fractures are:

1. A closed fracture, which is a break in the bone without a break in the skin.
2. An open fracture, which is a broken bone that is exposed through a break in the skin.

Signs or symptoms of a fracture are:

1. Tenderness over the injury.
2. Pain on movement.
3. Inability to move the injured part.
4. Swelling and/or discoloration.

First aid measures are:

1. Handle injured patient gently. Rough treatment can cause additional damage.
2. Try to make patient comfortable without moving him.
3. Apply a dressing if the fracture is an open one.
4. Stop bleeding, if bleeding is present. Do not apply a tourniquet.
5. Call for medical assistance.
6. Splint the patient at the site of accident before transporting him. Proper splinting often reduces pain and prevents shock. Splints may be improvised from material such as trees, limbs, poles, cardboard, newspaper, magazines, etc. Be sure and pad all splints.

FRACTURED SKULL OR CONCUSSION

First aid should be rendered as follows:

1. Keep the patient lying down. Do not allow him to sit up or walk.

2. Keep the patient warm.
3. Place a pillow under the patient's head if face is flushed.
4. If face is pale, keep head slightly lower than body.
5. Give nothing by mouth.
6. Contact a doctor as soon as possible.

POISONING BY MOUTH

If poisons are swallowed, try to dilute the poisons, then call for a doctor. Use simple measures. If patient is conscious, give large amounts of water. Warm water or warm salt water will help to induce vomiting. If a patient has swallowed lye, corrosive acids, or alkali, do not force him to vomit. If antidote for poison is known, give it; if unknown, give the universal antidote. Universal antidote may be purchased at a drug store and should be kept on hand.

General antidote: The Universal Antidote (homemade) is as follows:

- 2 T - Finely crushed burnt toast (T = Tablespoon)
- 1 T - Very strong tea
- 1 T - Milk of Magnesia

Mix in $\frac{1}{2}$ glass of water and give to patient.

The Antidote for unknown poisons is as follows:

- 1 Glass of milk
- 3 Raw egg whites beaten into a glass of water
- Starch or flour made into a thin soup with water

First aid measures include:

1. Washing out stomach by giving large amounts of fluids which will cause patient to vomit.
2. Calling a doctor.
3. Keeping patient warm.

4. Preventing patient from aspirating vomitus.
5. Starting artificial respiration if patient stops breathing.
6. Saving poison container for identification.
7. Giving antidote on container or universal antidote.

Antidote Chart for Some Common Poisons:

1. Alkalies

Caustic
Lye
Ammonia
Drain pipe cleaners
Quicklime
Washing Soda

a. Do not force vomiting. Give acid juice of 4 lemons in 1 pint of water, or slightly diluted vinegar.

b. Follow with 2 or 3 raw egg whites beaten in water, or salad oil, melted butter, or a glass or two of milk.

2. Acids

Strong
Battery Acid
Sulfuric
Nitric
Hydrochloric

a. Do not force vomiting. Give teacup full of milk of magnesia, or 2 T of baking soda in a pint of water.

b. Follow with 2 glasses of milk or 2 raw egg whites in water.

3. Carbolic Acid

Phenol (Ingredient of common disinfectants)
Creosote
Creosol disinfectants

Give large amounts of warm water, also, thin soup of cornstarch in water, or raw egg whites in water. Do not give alcoholic drinks.

4. Iodine: Give flour or cornstarch in water; bread; large amounts of starchy substance. Follow with emetic - induce vomiting. Repeat starch and emetic until vomitus contains no blue material.

5. Petroleum distillates

Kerosene
Gasoline
Benzine
Naphtha
Lighter fluid
Inflammable Cleaning fluids

Do not force vomiting. Give $\frac{1}{2}$ cup mineral oil, Stimulant - Strong coffee or tea. Keep warm. Combat shock. Artificial respiration if needed.

6. Salicylate drugs (overdose)

Aspirin
Headache tablets
Cold pills
Oil of Wintergreen

Induce vomiting. Give Universal Antidote or weak baking soda solution (1 tsp to pint), Strong coffee.

7. Overdose of Sleeping Pills

Barbituates
Sedatives
Opiates
Paregoric

If conscious, give emetic to induce vomiting. Give strong black coffee. Keep patient awake. Artificial respiration if necessary.

8. Wood Alcohol

Rubbing Alcohol
Denatured Alcohol
Menthonal

Give emetic to induce vomiting. 1 T of baking soda in 1 quart of warm water. Repeat emetic. Follow with glass of milk containing a teaspoon of baking soda.

FOOD POISONING

The most common forms of food poisoning are infections caused by bacteria or their toxins in contaminated foods. Symptoms range from mild, lasting a few hours, to severe cases which need the attention of a doctor. Symptoms include:

1. Abdominal pain and distress.
2. Abdomen is always soft.
3. Nausea and vomiting.
4. Cramps.
5. Diarrhea.
6. Chills or fever.

First aid is as follows:

1. If severe, call a doctor.
2. Put patient to bed and keep warm.
3. Give warm fluids after nausea stops.

BOTULINUS POISONING

Caused by toxins of organisms which may be in improperly home-canned foods. Symptoms occur 18-24 hours after eating or may not occur for several days and include:

1. Fatigue.
2. Dizziness, headache.
3. Blurring of vision or double vision.
4. Muscular weakness.
5. Difficulty in breathing.

Medical attention should be obtained immediately.

MUSHROOM POISONING

Avoid all wild mushrooms. Symptoms appear 2-8 hours after eating and include:

1. Abdominal pain.

2. Diarrhea.
3. Dizziness.
4. Disturbed vision.
5. Cramps in arms or legs.
6. Cold sweating.

For first aid, call a doctor and give a large dose of Epsom Salts.

POISON PLANTS (Poison Ivy, Oak, Sumac)

Poison ivy, poison oak, and poison sumac cause skin irritation. Learn to recognize these plants so you will know when you have come in contact with them and can start treatment before a rash appears.

1. Poison ivy is a creeper. It has three leaves on each stem. The leaves are shiny, pointed, and have prominent veins.
2. Poison oak is a shrub. The leaves are broader and more deeply notched than the ivy.
3. Poison sumac is a small tree. It has loose, drooping clusters of white berries.

If you discover that you have been exposed to a poison plant, wash the affected part of your body thoroughly with a strong soap and water. Symptoms usually occur one to nine days after exposure. The skin becomes red, swollen, and itches. Small blisters form.

First aid should be rendered as follows:

1. Wash thoroughly with soap and water (Do not use brush).
2. Rinse with an alcohol solution.
3. Apply calomine lotion to relieve itching.
4. Consult a doctor in severe cases.

SHOCK

Every serious accident, burn, poisoning, or injury is almost always accompanied by some degree of shock. It is a condition of great weakness of the body and can be fatal. Expect shock to happen after any serious injury. Take preventive measures before it occurs. Symptoms of shock are:

1. Weakness.
2. Rapid, but weak pulse.
3. Pale face.
4. Cold and clammy skin.
5. Thirst.
6. Nausea.
7. Shallow, irregular breathing.

First aid should be rendered as follows:

1. Have patient lie flat with head lower than the rest of his body.
2. Cover patient and keep him warm.
3. Loosen his clothing.
4. If patient is conscious and able to retain fluids, give him fluids. Give him warm tea or coffee.
5. Do not give fluids to an unconscious patient or a patient with and abdominal wound.
6. Consult a doctor.

SPLINTERS

If a splinter is near the surface, it can be easily removed. If it deeply embedded, call a doctor. To remove a splinter:

1. Wash your hands well.
2. Clean the area around the splinter and apply an antiseptic.

3. Sterilize a needle or a pair of tweezers to remove the splinter.
4. Loosen the skin around the splinter with a needle and remove it with the tweezers.
5. Encourage bleeding from above the sight of entry.
6. Apply antiseptic and a dry sterile bandage.

SPRAINS

Sprains are caused by violent stretching or twisting of a joint. Muscular exertion, lifting, and falling are common causes. Sprains are partial or complete tears of supporting ligaments of a joint. Symptoms include:

1. Pain in the joint at the time of injury.
2. Pain increase upon movement.
3. Tenderness to touch.
4. Rapid swelling.
5. Discoloration appears later.

First aid should be rendered as follows:

1. Consult a doctor.
2. Relieve pain by resting the joint.
3. Elevate and support part.
4. Use cold applications (ice bag or compresses) for the first few hours after injury.
5. If the patient has sprained an ankle and must walk for aid, bandage the ankle leaving the shoe on the patient.
6. If the patient has sprained his wrist, use a sling for support.

STRAINS

Strains are caused by overstretching or pulling muscles or tendons. The symptoms are pain at the time of injury. Stiffness and pain on movement develop during the first few hours after injury. First aid should be applied as follows:

1. Rest of the injured muscle.
2. Place patient in the most comfortable position.
3. Apply heat - hot water bottle, lamp or heating pad.
4. When pain eases, gentle massage can be given.
5. Consult a doctor if strain is severe or does not respond to treatment.

HOME SAFETY AND PREVENTIVE MEASURES

Every effort should be made to reduce the ever increasing number of unnecessary accidents and tragedies by the practice of good home safety and preventive medicine measures. Enthusiastic adoption of sound health practices will lead to a healthier and longer life by reducing disease, death, and disability. First aid is never a substitute for home safety. It merely helps you after an accident has happened.

There are many publications containing information of interest to the householder. The Army Health Nurse and the department of clinics have many pamphlets which can assist you in the prevention of accidents and disease. The American Red Cross and the local Public Health Department have literature available upon request.

The causes of accidents are far too numerous to list. This chapter will deal briefly with some of the common causes of accidents and how to prevent them.

1. Accidental Poisoning by Ingestion: Medications, especially aspirin, sedatives, iron pills, tranquilizers, antihistamines, and many other drugs are most frequently ingested. Household products, such as bleaches, detergents, pesticides, kerosene, and petroleum products, are also a causative factor in many accidental poisonings. The following preventive measures should be taken:

- a. Medications:

- (1) Insure that all containers of drugs are properly labeled.
- (2) Use warning labels for containers of poisons.
- (3) Store all medicines in a special cabinet out of the reach of children.
- (4) When medications, which have been prescribed for a specific individual are no longer needed for that person, discard the unused portion down the sink.
- (5) Discard old medications. Iodine has a tendency to get stronger with age and may burn; peroxide loses its strength.
- (6) Never give or take medicines in the dark. Always read the label and directions at least twice before giving or taking medication.

b. Household Poisons:

- (1) Keep safely out of the reach of small children.
- (2) Acids and caustics:
- (a) Injuries due to acids and caustics may result in:
1. Burning when in direct contact to skin and clothing.
 2. Fume poisoning when inhaled.
 3. Burning or poisoning when ingested.
 4. Fires or explosion from carelessness.
- (b) Injuries can be avoided by:
1. Careful handling of the container.
 2. Wearing rubber gloves and protective clothing when necessary.
 3. Avoiding exposure to caustic fumes.
 4. Washing the hands thoroughly before eating or touching other body surfaces.

c. Cosmetics: Many cosmetics, such as hair dye, hair removers, liquid nail polishes, can cause serious poisoning. Keep them out of reach of small children.

2. Food and Water:

a. Food supplies, when contaminated, can result in serious illness. To prevent illness:

(1) Wash all fruits and vegetables before eating.

(2) Before opening a can or a jar of food, inspect it. A bulging lid or rubber ring, gas bubbles, and leakage are often signs of spoiled food.

(3) Examine foods, such as poultry, fresh meat, and butter, as they spoil quickly. Make sure they are properly refrigerated at a temperature of 40° F.

(4) When on picnics, do not allow food to remain in the sun. Make sure it is refrigerated.

b. Water Supply: When on picnics or camping trips, make sure you do not drink contaminated water.

3. Accidents Due to Electrical Appliances: Every day serious accidents happen due to improper use and maintenance of electrical equipment. The following precautions should prevent many of these accidents:

a. Never touch interior live metal parts of sockets, plugs, or receptacles used to carry current.

b. Do not touch electrical appliances while in a tub.

c. Replace all electrical cords that are abraded and have ill fitting plugs.

d. Do not hang cords on nails.

e. Make sure all electrical items you purchase have been inspected and approved by proper authority.

f. Turn off the current after using portable appliances, such as irons, etc.

g. If lamp shades are made of combustible material, be sure they are not in contact with the bulb. Do not place combustible material over a light to dim it.

h. Turn off the power before replacing electric light bulbs, radio tubes, etc.

i. Open the circuit before replacing a fuse.

4. Fire Hazards: Injuries, death, and property loss due to fire are absolutely unnecessary and can be prevented by control of fire hazards. Everyone should be made aware of the danger of fire and the precautions to take to prevent it. The following suggestions are a general guide for the prevention of fires in the home:

a. Keep matches out of the reach of young children.

b. Teach children the dangers of playing with fire.

c. Extinguish all cigarettes, cigars, and matches before discarding them.

d. Do not smoke in bed.

e. Do not keep combustible waste material in or near the house.

f. Keep greasy and oily rags in tightly closed metal cans.

g. Do not use kerosene to start a fire in the stove.

h. Use safe commercial cleaning materials. Do not use gasoline or benzine for cleaning.

i. Avoid hanging curtains near open flames.

j. Use safe, tested, and fireproof Christmas decorations.

k. Burn refuse in a metal container out-of-doors, away from the building. Extinguish embers. Do not burn too much at one time. If it is windy out, wait until the wind has died down.

l. Teach everyone in the household who is old enough to absorb the knowledge how to call the fire department, how to evacuate the house, and how to put out simple fires.

5. Gas and Gas Appliances: Precautions to use against injury from gas or gas appliances are:

a. Report any leakage of gas immediately. Open windows and provide ventilation. Do not use a lit match or candle to locate leakage.

b. Make sure all pilot lights are lit. These lights are extinguished frequently and gas escapes.

c. Make sure the gas appliances you purchase meet approval requirements.

d. If gas furnaces and wall heaters are used, make sure you have proper ventilation.

e. Keep appliances clean and in good condition.

6. Automobiles and Traffic:

a. Develop and practice safe driving habits.

b. Keep your car in good operating condition.

c. Teach your child not to play in the road or driveways.

d. Do not leave children alone in a locked care while shopping or visiting.

e. Do not allow children to play in your car.

f. Keep the car doors locked when driving with children in the car.

Preventive measures listed below should be taken to eliminate accidents from the following miscellaneous causes:

1. Falls On or Down Stairs:

a. Have all stairways well lighted.

b. Provide handrails for stairways, especially in a household with children and aged individuals.

c. Prevent small children from climbing stairways by installing a gate at the foot and top of stairway.

d. Avoid waxed, wet, and greasy stairways which can cause falls.

e. Replace loose or frayed rugs on stairways as they can cause falls.

f. Do not store items on stairways, such as cellar stairway.

g. Teach children not to leave small items, such as marbles, pencils, and toys on stairs.

2. Slipping: Many serious injuries have been incurred by falls from slipping. Avoid these by:

- a. Using rubber suction mats to stand on when taking a shower or bath.
- b. If possible, installing handrails next to the tub.
- c. Eliminating small, loose rugs which may cause slips.
- d. Exercising care when walking on highly waxed slippery floors.

3. Ladders:

- a. Use a sound, sturdy ladder.
- b. Anchor ladder before climbing on it, open it to its full extent, lock spreaders, and place on firm foundation.
- c. Do not stand on top of ladder.
- d. If a chair is used in place of a ladder, do not stand on arm or back and make sure seat is sturdy enough to hold your body weight.
- e. Avoid substituting fragile crates, boxes, and barrels for ladders.

4. General Hazards:

a. Trash: Trash, in the form of broken glass, old tin cans with ragged edges, frequently is the cause of bad cuts and scratches. Such trash should be placed in a specific receptacle. Children should be taught not to play with trash.

b. Bruises: Fingers and hands are frequently bruised by being caught by doors, windows, screens, etc. Children should be warned of this danger. They should not lean out of open windows.

c. Hot Water and Hot Liquids: The careless handling of hot water can result in severe burns. Never leave a small child in a bathtub unattended. Never leave a hot cup of coffee or tea where a child can get at it. Place cooking pots on the burner nearest the back of the stove (back burners) so that children cannot reach them.

d. Razor Blades: Razor blades should be kept in a covered container out of the reach of small children. Blades should be discarded in a safe manner. Do not throw them in waste baskets or let them lie around where children can get them.

e. Closets: Store items in closets and shelves so they will not fall or slide off and cause accidents.

f. Plastic Bags: There has been much information published on the danger of children playing with plastic bags. The thin plastic adheres to a child's face and can, and has, caused suffocation. Destroy the bags as soon as you are through with them. Do not drop them in waste paper baskets where children can get them.

g. Toys and Playthings:

(1) Children are curious and like to investigate toys. Toys should be substantially built. Surfaces should be smooth and free from sharp edges or points.

(2) Toys made of lead or painted with lead base paints are not safe due to the possibility of lead poisoning.

(3) Pencils, crayons, and paint brushes should never be held in the mouth. Serious mouth or throat injuries could result from a fall in such cases.

(4) The eyes of dolls and stuffed animals should be embroidered. Avoid giving a baby or small child dolls with buttons for eyes, dolls with fragile heads. These toys should be made of cloth or other soft material, free of harmful dye.

(5) Toys should be kept in toy boxes or in a designated storage area. They should not be left where individuals may fall over them.

h. Chemical Sets: Chemical sets are a source of potential danger. Children should be taught how, when, and where to use the set and the dangers involved in experimentation.

i. Kites: Kite strings should be made of nonconductive material. Cotton strings are safest, but will conduct electricity if wet. Kites should not be flown where the string may come into contact with electric wires.

CIVIL DEFENSE

Prepare now to protect your family in the event of enemy nuclear attack. The following measures of protection are recommended by the Office of Civil and Defense Mobilization:

1. Home Shelter: Build an underground shelter or select the safest area in your home. A corner of the basement makes an excellent emergency shelter. The following supplies should be stored:

- a. A two-week supply of food and water. Rotate the food so you always have a fresh supply on hand.
- b. Store a battery or transistor radio, can opener, flashlight, batteries, blankets, clothing, first aid kit, soap, water purification tablets, bags and containers for waste.
- c. Keep the gas tank in your car filled with gas.

2. Warning Signals: Civil defense warning signals may be sirens, horns, or whistles. Know your local community plan. There are two distinct signals for public action directed by local government:

- a. A long steady blast, 3-5 minutes long means alert. Tune your radio to COMELRAD stations which will broadcast official information. Take action as directed. Do not attempt to use the telephone.
- b. A series of short blasts lasting 3 minutes means take cover, attack is imminent.

(1) If in a building without a shelter, go to the basement or interior room on the first floor.

(2) If outdoors or in a car, and no shelter is available, lie face down on the ground or crouch on the floor of your car.

(3) When directed to take shelter, close all the doors and windows and draw the blinds. Turn off all electricity at main switch, or disconnect all electrical appliances. Turn off gas range burners or room heaters.

3. Fallout Protection: Any protection against radioactive particles is better than none. An underground shelter is the safest. A basement with windows and doorways sandbagged will give some protection. A frame house will reduce danger if you remain on first floor near the center. The five steps to safety which should be learned are:

- a. Warning signals and what they mean.
- b. Your community plan for emergency action.
- c. Protection from radioactive fallout.
- d. First aid and home emergency preparedness.
- e. Use of COMELRAD - 640 or 1240 - for official directions.

7 April 1961

<u>ITEM NO.</u>	<u>LIBRARY CODE</u>	<u>AUTHOR/ ISSUING AGENCY</u>	<u>TITLE</u>
(26)	TIS- Inst Mat	US Army Infantry School	ARTILLERY HANDBOOK, by Associate Arms Group, Command and Staff Department. Instructional Material, July 1960 (supersedes 1959 edition).
(27)	_____	_____	COMBAT OPERATIONS HANDBOOK, by Command and Staff Department. 21 November 1960.