This manual for child care personnel in day care homes and centers provides a step by step review of what to do in common emergency situations. It is emphasized that the manual is not a substitute for the complete first aid course which every careperson should have. Initial sections of the manual focus on preparing for emergency conditions, planning and practicing (including role-playing), and obtaining reliable assistance. Section II outlines basic life support procedures for unconscious, non-breathing, and choking children. Sections III, IV, and V deal with spinal cord injuries, concussions and broken bones, as well as transportation to a hospital. Section VI discusses burn treatment procedures. Section VII covers responses to poisoning. Section VIII indicates procedures for convulsions. (A slide/sound presentation, one 16 mm film, and pamphlets were produced in conjunction with this manual.) (RH)
CHILD HEALTH AND SAFETY SERIES

Developed by

Southwest Educational Development Laboratory
Austin, Texas

Project Director: Joyce Evans, Ph.D.

Writers: Louise Iscoe, Barbara Kihnel
         Yvonne Newman, Becky Zuniga

Media: Robert Ruther

Audio-Visuals: Mike Lacey Productions

Content for Emergency Child Aid
developed by

Deanna Sebestyen, R.N.
Coordinator, Day Care Enrichment Program
City of Dallas; Department of Public Health

Medical Consultant

Mary Ann Micka, M.D., M.P.H.
Texas Department of Health
Child and Maternal Health Division

Developed for the
Child Development Program Division
Texas Department of Human Resources

Project Manager: Marian Monroe

This program was produced by the Southwest Educational Development Laboratory under a contract from the Texas Department of Human Resources. The content of this program does not necessarily reflect the position or policy of the Texas Department of Human Resources and no official endorsement should be inferred.
CHILD HEALTH AND SAFETY SERIES

Module I  SAFETY PRECAUTIONS
(includes manual, pamphlets, and one slide/sound presentation)

Module II  HEALTH PRECAUTIONS
(includes manual, pamphlets, and one slide/sound presentation)

Module III  WHEN A CHILD IS SICK OR HURT
(includes manual, pamphlets, and one slide/sound presentation)

Module IV  MEDICAL PROBLEMS
(includes manual, pamphlets, and one slide/sound presentation)

Module V  THE SERIOUSLY ILL CHILD
(includes manual, pamphlets, and one slide/sound presentation)

Module VI  EMERGENCY CHILD AID
(includes manual, pamphlets, and one videotape or one 16 mm film)

Module VII  THE GROWING CHILD...BIRTH THROUGH FIVE
(includes manual, pamphlets, and three slide/sound presentations)

Module VIII  THE GROWING CHILD...SIX THROUGH FIFTEEN
(includes manual, pamphlets, and three slide/sound presentations)
EMERGENCY CHILD AID

CONTENTS

I. EMERGENCY CHILD AID
   PREPARATION FOR EMERGENCIES 3
   PLANNING AND PRACTICING 4

II. BASIC LIFE SUPPORT
   OPENING THE AIRWAY 11
   ARTIFICIAL RESPIRATION 12
   CHOKING 13

III. SPINAL CORD INJURIES 17

IV. CONCUSSIONS 18
   IDENTIFICATION 18
   TREATMENT 18

V. BROKEN BONES
   IDENTIFICATION 19
   TREATMENT 19
   TRANSPORTATION TO HOSPITAL 21

VI. BURNS
   IDENTIFICATION 22
   TREATMENT 22
   HEAT BURNS 23
   ELECTRICAL BURNS 23
   CHEMICAL BURNS 23
   CHEMICAL BURNS TO THE EYES 24

VII. POISONING
    IDENTIFICATION 26
    TREATMENT 26
    PREVENTION 28

VIII. CONVULSIONS 29
    CAUSES 29
    TREATMENT 29

SUMMARY 31

TEST YOUR KNOWLEDGE 33
EMERGENCY CHILD AID

Emergencies are bound to happen while caring for children. To prevent injuries and to save lives, adults should be familiar with emergency care. This manual and the accompanying videotape or film are designed to show adults how to care for an injured child, until other help arrives. Although the illustrations are of young children, the same steps apply for older children as well.

This manual and the video or film are not a substitute for a first-aid course. Adults who are responsible for the care of children should be trained to give first aid. A complete first training course is usually provided by the local American Red Cross or Public Health Department. A copy of a first-aid manual should be in every child care center and home.

This module on Emergency Child Aid provides a step by step review of what to do in common emergency situations. Other modules in this series, particularly Module I - Safety Precautions, and Module II - Health Precautions, are designed to help prevent accidents from occurring.
PREPARATION FOR EMERGENCY

There are four basic steps to remember in handling emergencies:

1. Act quickly
2. Take immediate care of the injured child
3. Keep other children calm
4. Get necessary help

Be prepared for emergencies by having first aid supplies on hand and by planning and practicing with the children.

First Aid Supplies

Every home and child care center should have first aid supplies that are complete and readily accessible. Make a first aid kit from a box, a small suitcase, or even a heavy plastic bag. It should be large enough to contain the following items:

- Blunt scissors
- Micro-pore tape (paper)
- Liquid soap
- Clean, dark-colored (bath towel)
- Clean, dark-colored (hand towel)
- Gauze squares, 2 x 2, 3 x 3, and 4 x 4
- Small flashlight
- Safety pins
- Safety pins
- Bandaids
- Cotton balls
- Tweezers
- Thermometer
- Newspapers rolled into two splints
- Two feet of 2" wide cloth strips
- Zip lock bag with 1/8" crushed ice (to be kept in the freezer)

Print the word "HELP" on a brightly colored card, and attach the card to the outside of the first aid kit.
PLANNING AND PRACTICING

Plan the steps to be followed in an emergency. Practice carrying out these plans with the children so they will know what to do if an emergency comes up. Practicing these plans at least once a month reduces confusion during a real emergency and, therefore, makes it easier to give life-saving aid promptly.

Planning should be adapted to each particular situation, whether in a home, a center, or a school. In all cases, planning must include the following:

1. Posting a list of emergency telephone numbers by the telephone, including emergency medical service, fire department, poison control center or hospital, and physician. If possible, glue or tape these numbers to the telephone.

2. Meeting and planning with other adults to decide upon the best plan of action. The plan should consider a variety of circumstances—for instance, an accident involving more than one child, or the only adult in charge.
CENTER PLANNING

Who Administers First Aid

1. Identify those people at the center who can administer first aid. The best qualified adult in a center should be the one to give immediate first aid. At least one adult in every center should have acquired first aid skills through successful completion of a Red Cross course. Also, the American Heart Association offers some life-saving courses that are of great benefit to people working with children or other people in groups.

Who to notify

2. The kind of emergency will determine whether the physician, ambulance, hospital, and/or parents should be called. Everyone at the center should know who should be called first. If you prepare and practice what to say to parents before an emergency arises, you can be certain of including all pertinent information. For instance: __________ I am calling from __________ Center. Your child has a problem and is being cared for, but he needs some medical attention. He fell down, and his arm is bleeding. Please meet us at ______ or come pick him up.

Also, practicing this routine ahead of time should help keep you calm in an emergency, because you will know you’re doing the right thing.

What do you do with the children

3. The children should be kept calm, directed to move to a designated area and remain there. If the group is indoors, the children can sit down and look at books, work puzzles, or carry out some other quiet activity. If the group is outdoors, the children can move to another area and play a circle game or another familiar activity. Carrying on some type of normal activity puts the children at ease and is better for the injured child as well.
CENTER PRACTICE

Children become upset during an emergency if they do not understand what is happening and are not prepared to cope with the situation. Role playing is one effective way to prepare children for emergencies.

Rehearse the role playing in the following manner:

1. Show the children where the card with the word "HELP" is kept.
2. Tell a child to take the card to M____________.
3. Tell the other children to watch the child do it. Call attention to how quickly and quietly he or she is doing it.
4. Show the children where they are to move when an accident occurs. Emphasize how quickly and quietly they need to move.
5. Discuss the behavior you expect from them and tell them why you need their help.

Role play the following actions:

1. Have one child pretend to be injured.
2. "Johnny, take the card to M____________." "Children, move to ____________ (designated area).
3. The principal caregiver pretends to give immediate first aid.
4. Praise the children. If a child does not do it right the first time, take him or her by the hand and walk the child through the practice, explaining the steps. Walk quickly and quietly.
HOME PLANNING

Watch Neighbors to Contact

You should ask two or more neighbors for their assistance. If possible, choose a neighbor a child can reach without crossing the street, or at least without crossing a busy street. Also, try to find a neighbor who stays home most of the time.

2. What the neighbor can do

Your neighbor can keep your children as you attend the injured child. He or she can take the children to the designated area and read a story or play a game with the children. If you want your neighbor to call the emergency numbers, you must give him or her the numbers, say who to contact, and what to relate.

3. How to get acquainted

You should invite your neighbor over for snacks or just to visit; the children should get acquainted with the neighbor.

4. What to do if you cannot get a neighbor's help

Start by putting red nail polish on the "0" on your phone. All the children should practice, one at a time:

- How to dial
- What to say. Something simple such as "Help! My teacher is hurt." or "Help! My friend is hurt."
- Where to leave the receiver. The receiver must be left off the hook for the telephone company to trace the call. Have a place where the receiver can rest.

The children should be able to go by themselves to a designated area. An area where you can keep an eye on them is best.

Rehearse Role Playing

1. Tell your neighbor about the emergency practice.

2. Show the children where to walk, and how to walk, to the neighbor, how to knock or ring the doorbell and how to call the neighbor's name. Because the children are so little and their knock so soft, you will need to make special provisions such as sending two children to knock at the same time.

3. Tell the children what to say. "Come, Johnny is hurt."

4. Let them know what to do if is not home. Show them where to walk and how to walk. Then continue doing everything as with the first neighbor.

5. Show the children how to go back with or without the neighbor.
Role Play the Following Actions

1. Have one child pretend to be injured.

2. "Tommy and Bobby, go get help. Children, go to _______ (designated area) and wait for M___________."

3. Pretend to administer first aid.

4. Have someone act as the neighbor who takes children to the designated area and starts an activity.

5. Praise the children whose behavior is acceptable. If a child has problems, help him or her know what is expected.

Role Play Telephoning for Help

1. Pretend you are hurt.

2. "Johnny, go call for help. Children, go sit _______ (designated area)."

3. Praise the children for their behavior. Review by going over the procedure. Ask the children to comment:
   - Did Johnny say the right thing?
   - Did Johnny place the receiver on the chair (or wherever)? etc.

By remaining calm, and by preparing children to cope in an emergency, you will be able to provide the best care possible for the injured child.
Severe accidents, the child's life may be in immediate danger. Any time a child stops breathing, bleeds profusely, has a crushing injury, or receives an electric shock, his or her life is threatened. In such cases, the following steps should be taken immediately:

1. Stay calm.
2. Use first aid emergency measures.
3. Call appropriate medical personnel for help.
4. Call the parent.

Basic life support includes cardiopulmonary resuscitation, which is a method of reviving people or bringing them back to consciousness. This is called for in the ABC's of survival when:

A. Airway is obstructed
B. Breathing stops
C. Circulation, or heart, stops

In each of these circumstances, immediate action is required; delay may result in death. The adult caregiver who can apply the steps of cardiopulmonary resuscitation often can maintain a child's life until the child can be transported to a medical facility or a physician or emergency paramedic team arrives.

For complete training in the ABC steps of cardiopulmonary resuscitation, check with the local chapter of the American Heart Association, American Red Cross, or health department.

One adult caregiver in each center and one adult in the home should be able to give artificial respiration and cardiac resuscitation in an emergency.
If a child appears unconscious, first verify this by:

1. Loudly calling the child's name.
2. Gently pinching the child.

Then, check to see which basic life supports are needed.

When a person stops breathing for even a moment, his or her life is in immediate danger. To function properly, the brain requires a constant, rich supply of oxygen, and when breathing stops, the supply of oxygen stops, also. If the brain is deprived of oxygen for four to six minutes, damage is likely to occur; after six minutes, brain damage is almost inevitable.

Artificial respiration can be used to start a child breathing. The first essential step is to immediately open the airway, which may be blocked by the child's own tongue or by objects in the mouth or throat.

1. Place the child flat on his/her back and on a firm surface.
2. Determine if the child is conscious.
3. Check for respiration, or breathing:
   - Feel with your hand for movement of air from the child's nose and mouth.
   - Listen for air movement.
   - Look for air movement by watching the child's chest and abdomen. Feeling and hearing are more effective than seeing, for it is difficult to see the chest and abdomen move in a fully clothed child.
OPENING THE AIRWAY

When a person is unconscious, his or her muscles relax. This causes the tongue to fall back into the throat, blocking it and closing the airway. There are two simple and effective methods to open the airway and relieve the obstruction caused by the tongue.

1. Head-tilt maneuver

Kneel next to the child. Gently slide the palm of the hand under the child's shoulder blades. Raise the child's shoulders slightly. This causes the neck to extend, clearing the airway. Be careful not to let the child's head drop back too far, for this could cause the child's neck to extend too much and close the airway. Sometimes this procedure is all that is needed to enable the child to begin breathing spontaneously.

2. Jaw-thrust maneuver

If the head-tilt method does not open the airway, use this maneuver to thrust the lower jaw farther forward.

- Kneel beside the child's head.
- Place fingers behind the angles of the child's lower jaw.
- Forcefully bring the jaw forward.
- Using thumbs, pull the lower lip down to allow breathing through the mouth as well as through the nose.

Once the airway has been opened, check for breathing by feeling, listening, and seeing. If the child has not started to breathe spontaneously in eight seconds, it will be necessary to use artificial respiration.
ARTIFICIAL RESPIRATION

1. Clear the child's mouth of any objects or matter.

2. With your mouth, cover the child's mouth and nose.

3. Give four quick puffs of air into the child's mouth and nose. If this does not get air into the lungs because the airway is obstructed, try using back blows or manual thrusts. These are explained in the following section on choking.

4. If the child does not begin to breathe after the four puffs of air have been administered, begin sustained artificial respiration.
   - For infants, puff air into the child's mouth and nose every three seconds.
   - For children over one year of age, give a puff of air every five seconds.

Artificial respiration can cause the stomach to fill with air. This can be dangerous if it causes the child to vomit while unconscious. Watch the stomach to see if it becomes extended. If it does:

1. Turn the child's head and shoulders to the left side and press the stomach down.

2. Clear the mouth of any matter.

3. Resume artificial respiration immediately.
CHOKING

Young children put all kinds of things into their mouths that don't belong there. Thus, they are likely to choke not only on food while they are eating but also on small toys and other objects while they are playing.

Signs of choking

Most people are familiar with signs of choking. A child who is choking will suddenly show one or more of the following symptoms:

- Be unable to speak or cough.
- Grasp at throat.
- Appear blue around the mouth.
- Show exaggerated breathing efforts though seem unable to get any air.
- Be panic-stricken.

There are several emergency measures that might be taken.
BACK BLOWS

1. For an infant or a small child who is choking and conscious:

   - Bend the child over the adult's forearm so the head is lower than the body. This will allow the object to fall out of the airway.
   - Strike the child four times with the heel of the hand between the shoulder blades.
   - If the object falls into the mouth, remove it with your fingers.

2. For an older child who is conscious and sitting or standing:

   - If the child is sitting, have him or her lean forward.
   - If the child is standing, have him or her bend forward.
   - Stand slightly to the back and to the side of the child.
   - Deliver four sharp blows with the hand to the child's back between the shoulder blades.

3. For an older child who is conscious but lying down:

   - Kneel down and roll the child toward you so that his/her chest rests against your knees.
   - Deliver four sharp blows with the hand to the child's back between the shoulder blades.
MANUAL THRUSTS

A series of manual thrusts may further help dislodge an object on which a child is choking. The combination of back blows and manual thrusts appears to be more effective in clearing the airway than either method used by itself.

1. For a conscious child:
   - Place the child on his/her back.
   - Straddle the child's hips.
   - Place the heel of one hand against the child's abdomen between the lower end of the breastbone and the naval. Put your other hand on top of the first hand.
   - Press the hand into the child's abdomen with a quick upward thrust. Four thrusts may be given.

2. For the unconscious child:
   - Place the child on his/her back.
   - Open the airway and try artificial respiration.
   - If this does not work,
     - Give four back blows.
     - Perform eight manual thrusts.
     - Turn the child's head to the side and clear the mouth.
   - If the child is still not breathing, repeat the back blows and manual thrusts, then repeat artificial ventilation. Check periodically to see if the object appears in the mouth. If it does, stop and remove it.

Note: Any child who has an object dislodged by the thrusting method must be examined afterward by a physician. There is a possibility that a bone may be cracked during this procedure.
ABDOMINAL THRUST/HEIMLICH MANEUVER

1. For the conscious child, sitting or standing:
   - Stand behind the child and wrap your arms around the child's waist.
   - Grasp your fist with your other hand; place the thumb side of the fist against the child's abdomen between the lower end of the breastbone and the naval.
   - Press the fist into the child's abdomen with a quick upward thrust. Four thrusts may be given.

Circulation

This is the last of the ABC steps of cardiopulmonary resuscitation. After determining that the child is unconscious, turn the child if necessary to open the airway, then give four quick breaths of air. Quickly check for a pulse to determine if the child's heart is beating and pumping blood to the brain.

Check for pulse

- Feel for the pulse on the side of the neck.
- Place one hand on either side of the child's neck.
- Slide finger close to the jawbone, about midway between the chin and the ears.
- Use light pressure to feel for pulse.

Note: Be sure to use fingers, not thumbs. With thumbs, you might confuse your thumb pulse with the pulse of the victim.

If there is a pulse, but no breathing is apparent, begin artificial respiration. If there is no pulse, external resuscitation is needed.

For complete training in external heart compression, check with the local chapter of the American Heart Association, American Red Cross, or health department.
III SPINAL CORD INJURIES

If a child has had a bad fall or some other accident in which the spinal cord might be injured, take extreme care to avoid further injury.

1. **DO NOT MOVE THE CHILD.** Moving a child with a spinal injury could result in paralysis.

2. Stabilize the head in the position in which it is found.
   - Use two rolled towels.
   - Place the towels close to each side of the victim's head.
   - Slightly raising the child without moving the head, neck, and back, slide the large firm object under the child's neck and back.
   - Tie a bandage or scarf under the firm object and around the towels to hold them in place.
   - Obtain a large, thin board or sheet and another flat, firm object.

3. Check to see if the child is breathing. If the child is breathing, wait for the emergency team or physician to arrive.

4. If the child is not breathing, the airway must be opened or the child will die because of inability to breathe. To open the airway:
   - Use the Jaw-Thrust. (See Breathing: Jaw-Thrust.)
IV CONCUSSIONS

Concussions are a frequent head injury among children. A concussion occurs when the brain hits against the skull wall, causing a temporary loss of some or all of the ability of the brain to function. Concussions are generally caused by a fall or a blow to the head.

IDENTIFICATION

A child who has a concussion may become totally unconscious and be unable to breathe for a short period of time, or the child may remain conscious but be confused and stagger about. Children usually regain consciousness quickly and soon return to play.

1. Be alert for possible injury to the brain, for often there is no outward sign that such injury occurred. Inside the skull the brain may be bruised or bleeding. Slow bleeding may cause a delay in symptoms for six to 18 hours after the injury has taken place.

2. Symptoms of a concussion include:
   - Loss of memory of events surrounding the accident
   - Loss of memory of the events prior to the injury
   - Unusual or excessive tiredness or slowness
   - Irritability
   - Changes in eye movement, such as eyes crossing or inability to focus; excessive dilation (enlargement) of the pupils, unequal pupils
   - Nausea
   - Vomiting

TREATMENT

1. Watch carefully for at least 24 hours any child who has received a blow to the head but remains conscious. If any of the signs of a concussion occur, take the child to a physician immediately.

2. For a child who loses consciousness or blacks out, take the child to a physician as quickly as possible. An X-ray or other tests may be needed to determine the extent of the injury.

3. Notify parents any time a child receives a blow to the head. Caution them to be alert for symptoms which may occur when the child is at home.
V  BROKEN BONES

Despite orders to the contrary, children often climb and jamb off of everything from furniture to play equipment to fences and trees. As a result, broken bones and other injuries to the bones, joints, and muscles are not uncommon in young children.

IDENTIFICATION

1. There are several signs that indicate a broken or badly bruised bone:
   - A great deal of pain
   - A lump or knot, or the bone itself pushing the skin out
   - Complaints of pain when the area is touched
   - Swelling and discoloration
   - Refusal to move an injured part
   - Indication from the child that "the bones are rubbing together"

2. Sometimes there are no signs, or only minimal ones, that a bone is broken. Some fractures can be recognized only by an X-ray.

3. Do not ask a child to walk on a foot, move his fingers, pick up something, or otherwise test to determine if a bone is broken. At best, the results of such efforts would be inconclusive, and at worst, they might make a break more serious.

TREATMENT

1. Stabilize a possible broken bone until medical aid arrives.
   - To learn the correct techniques to apply splints, take a Red Cross first aid course.
   - If emergency ambulance service is available, call them at once. Stay with the child, keeping him/her still and quiet until the ambulance arrives. An ice pack wrapped in a towel can be applied to the hurt area until help arrives. Let the trained emergency personnel splint the child's arm or leg and transport the child to the nearest emergency hospital or center.
   - If no emergency ambulance service is available, keep the child's arm or leg immobile while taking him/her to a hospital.
Preparing a Splint

The purpose of a splint is to prevent movement of a broken bone. The use of a splint reduces pain by preventing movement at the site of the injury.

A splint can be made of any material that is firm enough to prevent movement. Newspapers, magazines, and boards can be used. Commercial splints can be purchased from medical supply houses.

Do not remove clothing from any suspected break or fracture. Leave this for the doctor who will cut it away.

Apply a clean dressing to any broken skin.

Do not try to push a bone back into place that has broken the skin or seems at an odd angle.

Make the splint long enough to immobilize the area both above and below the injury.

Pad the splint, if possible, to avoid irritating the skin.

Keep the splint in place with strips of cloth, such as large handkerchiefs, neckties, pieces of a sheet, rags, or gauze bandage.

Because different parts of the body require different types of splinting, it is necessary to obtain training and supervised practice in how to apply a splint in an emergency.
TRANSPORTATION TO HOSPITAL

1. If emergency ambulance service is available, wait for their arrival so that trained personnel can lift and move the child without causing further damage. This is better for the child, and it also avoids the possibility of additional problems caused by an adult who may be too upset to drive.

2. If no ambulance service is available:

   Unless there is imminent danger, immobilize the broken bone before moving the child from the place where he/she was injured.

   Avoid any unnecessary movement of the child.

   If there is any possibility that there is a spinal injury, do not move the child. Make sure he or she is breathing. Wait with the child until medical help arrives.
There are three kinds of burns—heat, electric, and chemical—and each occurs frequently among children. Because burns affect the skin, they often do more damage than is readily apparent.

The skin serves many functions:
- Isolates the inside of the body
- Protects the body against bacteria
- Controls body temperature
- Enables the body to retain fluids
- Communicates to the brain through its nerve endings what is going on outside the body.

Because the skin serves so many functions, if it is damaged severely the result may be injury to the entire system and even death.

IDENTIFICATION

1. Burns are rated according to severity.
   - A first degree burn is limited to the surface of the skin. This is indicated by a reddening of the skin in the burned area.

   A second degree burn causes damage both on top and beneath the surface of the skin. It is usually indicated by blisters.

   A third degree burn destroys the entire thickness of the skin. It may appear dry and pale, or it may look charred and brown. Because a third degree burn often destroys nerve endings, it may not be painful at first, which can be deceptive.

TREATMENT

1. All burns

   There is a high risk of infection in burn cases. Therefore, except for very small first degree burns, take the child to a physician if there is any doubt at all about severity of the burn and the treatment. For all severe burns, call the emergency ambulance service to take the child to the hospital. If no ambulance is available, obtain other transportation as quickly as possible.
2. **Heat Burns**

These burns are most common and are caused by direct contact with a hot object, such as a stove or heater. Spilling a hot substance like boiling water, or hot grease on a child can also result in a heat burn.

- Do not apply grease (butter, lard, vaseline, or other ointments) to a burn. Instead,
  - Place the burned area in cool water for two to five minutes.
  - Cover the burn with a sterile dressing or clean sheet.
  - Use cool, wet compresses for the relief of pain. A padded ice pack also may be used.
  - If taking the child to the hospital, continue the cool, wet compresses on the way.

3. **Electrical Burns**

Direct contact with a wire, an electrical outlet, or a socket which is live or has an electrical current running through it, can result in an electrical burn.

- Check to see if the child is still connected to the current. Switch it off, otherwise you too may be injured.
- Check the child’s breathing. If the child is not breathing apply artificial respiration (see Section II).
- Treat burn the same way as for fire—apply a dry sterile dressing.

4. **Chemical Burns**

These are caused by cleaning materials that contain strong chemicals that can cause burns, such as electric dishwasher powder; toilet bowl cleaner, and the like:

- Immediately flush with water the area of skin burned by the chemical. Speed is essential; do not delay even long enough to remove the child’s clothing.
- Continue to flood the area while removing the child’s clothes.
- The simplest and most effective method is to use a shower head or spray attachment, turning it on moderately so that it can continue washing over the burned area. Do not use too strong a spray because the force might cause tissue damage.
Chemical Burns of the Eyes

If a chemical gets into a child’s eyes, immediate action is essential to prevent permanent eye damage and possibly blindness.

1. Flood the eye for five to 20 minutes.

2. Hold the eye open.

3. Direct water from the inside of the eye (closest to the nose) to the outside. If the chemical is in only one eye, this will prevent washing it into the other eye.

4. After thoroughly washing the eye, close the lid gently and cover it with a soft pad.

5. Contact a physician and take the child to the physician or to the nearest hospital as quickly as possible.
Children are curious. They explore the world around them not only by looking and feeling but also by tasting and sniffing. All too often they taste harmful substances that an unthinking adult has left within their reach, substances such as cleaning fluids, drain cleaners, furniture polish, mothballs, and ant poison. Sometimes these are left under the sink or in other places to which children have easy access; other times they are put in harmless-looking containers such as pop bottles. There are several rules that all adults should remember:

1. Keep all poisonous substances out of reach of children.

2. Never store a poisonous substance in a container intended for something else, such as a pop bottle or mayonnaise jar. Leave them in the original container for proper identification and emergency instructions that are printed on it.

3. If a child has eaten, or is suspected of having eaten, any poisonous substance, check with a physician immediately. The physician may give you instructions over the phone, or may wish to see the child.

4. Note: THERE IS NO SINGLE SUBSTANCE THAT NEUTRALIZES ALL POISONS. In some cases, the child should not vomit as this would cause greater injury.
IDENTIFICATION

1. Check the container to determine the kind of poison the child has taken and to learn the type of treatment to give.

2. If the container is unlabeled or the substance is unknown, save the container and a sample of the substance to show the physician or emergency room. They may be needed for chemical analysis.

3. If there is no indication of the substance that the child has ingested, and the child has vomited, take a small bottle of vomitus for the physician to analyze. Identification of the substance is essential to determine the best antidote or treatment.

TREATMENT

1. Immediately call the poison control center, the hospital or a doctor to find out whether to make the child vomit. If you cannot reach any of these services, check the label of the container the substance came in to learn if vomiting should be induced. Only do this as a last resort, as the information on labels is not always accurate.

2. DO NOT INDUCE VOMITING IF THE CHILD IS IN CONVULSIONS, IS GROGGY, OR IS UNCONSCIOUS.

3. When vomiting is needed, give the child milk or water: 1 or 2 cups for children under five years old, up to a quart for older children.

4. To induce vomiting, give one tablespoon of syrup of Ipecac, followed by a glass of water. Syrup of Ipecac, which can be obtained without prescription from any drug store, should be kept on hand for emergencies. Stimulate the gag reflex by pressing with the finger or blunt instrument at the back of the throat.

Most children will vomit within 15 or 20 minutes. If they do not vomit in this time, the dose of syrup of Ipecac may be repeated only once. Stay with the child; make sure that the child does not swallow the vomit, which would block the lungs. Try to keep the child comfortable, placing him/her on one side, with the head and trunk sloping slightly downward.
5. Keep the Child Warm.

6. Call the physician or emergency ambulance service immediately after giving Ipecac (or, if possible, have someone else call while you are taking the necessary emergency measures).

Induce vomiting for the following substances:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Alcohol</th>
<th>Ant powder</th>
<th>Arsenic</th>
<th>Aspirin</th>
<th>Barbiturates</th>
<th>Belladonna</th>
<th>Boric acid</th>
<th>Bromides</th>
<th>Camphorated oil</th>
<th>Cathartics</th>
<th>Cigarettes</th>
<th>DDT</th>
<th>Food poisoning</th>
<th>Headache and cold compounds</th>
<th>Ipecac</th>
<th>Insecticide</th>
<th>Iodine</th>
<th>Iron tonic pills</th>
<th>Mothballs</th>
<th>Mushrooms</th>
<th>Nicotine</th>
<th>&quot;Pep&quot; medicines</th>
<th>Phenobarbital</th>
<th>Phenobarbital tonic pills</th>
</tr>
</thead>
</table>

Do not make the following:

- Antiseptic
- Rust remover
- Acids: Nitric, Oxalic, Sulphuric, Phosphoric
- Auto polish
- Benzine
- Caustic lime
- Cleaning fluids
- Drain cleaners
- Furniture polish
- Gasoline
- Insect spray
- Kerosene
- Lye
- Pine oil
- Silver nitrate
- Toilet bowl cleaner
- Turpentine

7. If you do not know what the child has eaten, give 1 to 2 glasses of water or milk; do not make him or her vomit until you have called the physician.
PREVENTION

1. Keep all drugs, poisonous substances, and household chemicals locked up. Don't merely put them out of reach, because children can climb surprisingly high.

2. Never tell children you are giving them candy when you are actually giving them medicine. Children often take candy when they think no one is looking; if it is really medicine, it would be easy for them to take an overdose.

3. Do not transfer poisonous substances to unlabelled containers, such as pop bottles.

4. Do not store poisonous substances on shelves used for storing food.

5. Do not leave discarded medicines where children or pets might find them.

6. Never give or take medicines in the dark or without looking at the label.
CAUSES

Convulsions are common in very young children. They can be caused by high fevers and may never recur. They may also be caused by meningitis, brain tumors, or severe head injuries, and in this way serve as an indication that something is wrong. Seizures that go untreated or undiagnosed may lead to more seizures. Regardless of the cause, a seizure in a child is a sign that the child should be checked by a physician.

TREATMENT

1. If a child is having a convolution, protect him/her from injury until the seizure passes.
   - Move chairs, toys, and other sharp objects out of the way.
   - If the child is banging his/her head on the floor, place a small, thin blanket under the head.

2. Do not place a padded tongue blade between the child's teeth. This is no longer recommended because forcing the jaws apart has resulted in more injury than would have been caused by the seizure itself.
Gently turn the child on his/her side to prevent vomit or saliva from being swallowed into the lungs. Do not restrain the child. As long as the brain is sending impulses to the muscles, they will jerk. Attempts to restrain the child may cause broken bones.

Observe the time the seizure starts and ends and note the parts of the body involved. Write this information down so that it can be given to the physician.

3. After the seizure, the child may be dazed or even be unaware that a seizure has occurred. Make the child comfortable; let the child sleep if he/she wants to until the child can be taken to the physician.

4. Other children may be frightened if they observe a child having a seizure. To eliminate fear and to help children understand what is taking place, remain calm and matter-of-fact about the seizure. Explain to the others that seizures cannot be "given to" or "caught by" other children. When a child has epilepsy or some other cause for repeated seizures, it is important for the adult caregiver to be accepting. By neither rejecting nor avoiding a child who has chronic seizures, the caregiver can role model a sympathetic and understanding way to react. This, in turn, will help the other children as well as the victims themselves.
An emergency, by its very nature, is something unexpected. As most adults realize, however, emergencies happen when young children are involved. It is important to know how to act in an emergency—to stay calm, quickly think through the situation, and to take the appropriate action. A caregiver must be prepared; there is not time to wonder what to do next when a life may be at stake. Therefore, it is also important to be familiar with Red Cross first aid measures so that you will know the best action to take. Preventing the preventable accidents, as described in Module I, Safety Precautions and Module II, Health Precautions, is most important, and competent action when accidents do occur should be taken to save the lives of young children.
TEST YOUR KNOWLEDGE

Take this test both before and after studying this module to see what you have learned. An answer key is on the back.

Read each question and circle all the correct answers. THERE IS MORE THAN ONE CORRECT ANSWER FOR SEVERAL OF THE MULTIPLE CHOICE ITEMS.

1. Cardiopulmonary resuscitation is called for when:
   A. An airway is obstructed
   B. Circulation or heartbeat stop
   C. Unconsciousness occurs
   D. Breathing stops

2. In what order should these steps in providing artificial respiration be carried out?
   A. Check for respiration/breathing
   B. Determine if child is unconscious
   C. Place child flat on his/her back
   D. Open the airway

3. True  False  It is fairly easy to determine whether or not a child is breathing by looking at the chest and abdomen for air movement.

4. When a person is unconscious, which are the two most effective methods to open the airway and relieve the obstruction caused by the tongue:
   A. Head tilt maneuver
   B. Back blows
   C. Manual maneuver
   D. Jaw thrust maneuver

5. True  False  Artificial respiration is needed if the child has not started to breathe spontaneously in 30 seconds.

6. True  False  When administering back blows to assist the choking child, the child's head needs to be lower than the body.

7. True  False  Always use your thumb when checking for the pulse.

8. Symptoms of a concussion include:
   A. Irritability
   B. Vomiting
   C. Nausea
   D. Changes in eye movement

9. Any child who receives a blow to the head should be watched carefully for the next:
   A. Few hours
   B. 8 hours
   C. 24 hours
   D. 12 - 14 hours
10. True  False  If you are not sure whether or not a bone is broken, it is a good idea to test by asking the child to try to move.

11. True  False  Vaseline or ointment should be applied to the burned area.

12. True  False  If a child has eaten something poisonous, the first thing to do is to read the label for an antidote.

13. True  False  If in doubt about what to do when a child has eaten a poisonous substance, have the child drink 1 – 2 glasses of water or milk.

14. Induce vomiting for ingestion of:

   A. Acids
   B. Alcohol
   C. Gasoline
   D. Aspirin

15. True  False  If possible, when a child is having a seizure, place a padded tongue blade between the child's teeth.