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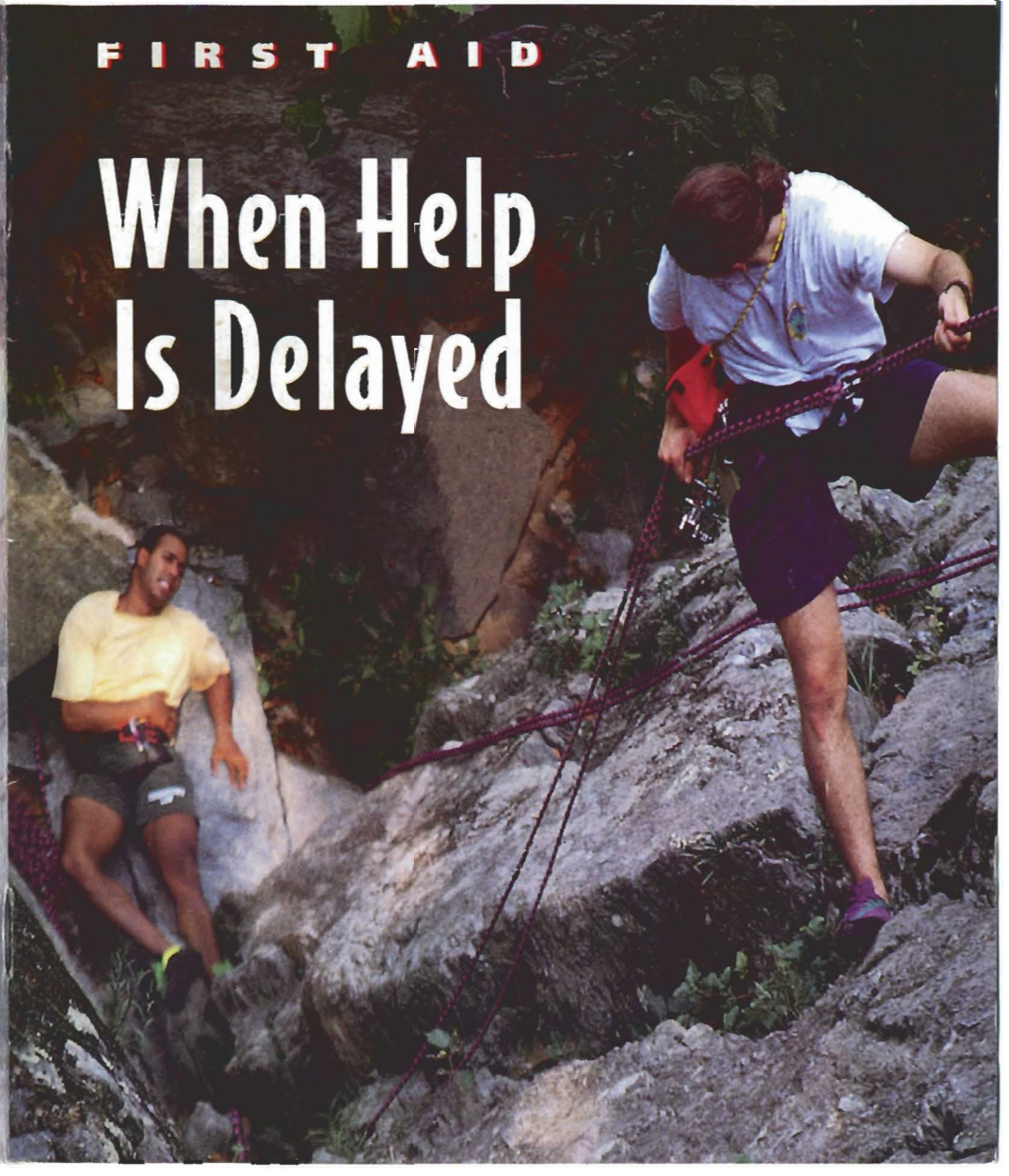
FIRST AID

When Help Is Delayed



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The emergency care procedures outlined in this manual reflect the standard knowledge and accepted emergency practices in the United States at the time this manual was published. It is the reader's responsibility to stay informed of changes in the emergency care procedures.

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FIRST AID

When Help Is Delayed

GLOSSARY

Acute: Having a rapid and severe onset, then quickly subsiding.

Anaphylactic shock: A severe allergic reaction in which air passages may swell and restrict breathing: a form of shock.

Anaphylaxis: A severe allergic reaction; a form of shock.

Anaphylaxis kit: A container that holds the medication and any necessary equipment used to prevent or counteract anaphylactic shock.

Antibiotic: A medicine used to help the body fight bacterial infection.

Carbohydrates: Compounds that contain oxygen. carbon, and hydrogen; the main source of energy for all body functions.

Delayed-help situation: A situation in which emergency assistance is delayed for more than 30 minutes.

Diabetes: A condition in which the body does not produce enough insulin or does not use insulin effectively enough to regulate the amount of sugar (glucose) in the bloodstream.

Diabetic coma: A life-threatening emergency in which the body needs insulin.

Diabetic emergency: a situation in which a person becomes ill because of an imbalance of sugar (glucose) and insulin in the bloodstream.

Dislocation: The displacement or separation of a bone from it's normal position at a joint.

Epilepsy: A chronic condition characterized by seizures that may vary in type and duration; can usually be controlled by medication.

Frostbite: A condition in which body tissues freeze; most commonly occurs in the fingers, toes, ears, and nose.

Immobilize: Using a splint , improved or premade, or other method to keep an injured body part from moving.

Throw bag: A nylon bag containing 50 to 75 feet of coiled floating line; used as a rescue device.

Tourniquet: A wide band that is wrapped tightly around an extremity to control severe bleeding; used as a last resort measure.

Wilderness: an area that is wrapped tightly around an extremity to control severe bleeding; used as a last resort measure.

Wind chill factor: A combination of temperature and wind speed.

WHAT YOU SHOULD LEARN

After completing this module, you should be able to --

1. *List three types of problems that could create a delayed-help situation.*
2. *Describe the information you should gather in a delayed-help situation before making a plan to get help.*
3. *List four ways to get help in a delayed-help situation.*
4. *Describe the four options to consider in getting help in a delayed-help situation.*
5. *List the steps to take before leaving a victim alone for an extended period of time.*
6. *Describe how to protect a victim from heat or cold.*
7. *Describe four types of shelters you can use or construct.*
8. *List three general types of preparation for venturing into an environment where help may be delayed.*
9. *Define the key terms for this module.*

You and your buddy Jeff decide to take advantage of the warm, sunny weather and enjoy a day of rock climbing in the Evergreen Mountains. Even though it's getting late in the afternoon by the time you get to Jeff's apartment to pick him up, you both decide that a day of climbing will be good for you. In your haste you forget to check your gear for essential safety equipment such as helmets, gloves, extra food and water, emergency shelter, and first aid supplies. When you finally arrive at the cliff, Jeff is the first to begin the descent to the ridge below. As you feel the temperature dropping, you briefly think of the dinner plans you have made for later that evening. Suddenly, Jeff screams "HELP!" He loses his balance, slips and falls, and lands on a ridge about 10 feet down from where you are standing. When you make your way down to him, you see that Jeff is in excruciating pain.

Introduction

In previous first aid training, you learned how to apply the emergency action steps *Check-Call-Care* to many emergency situations. You also learned how to determine when advanced medical care is needed and when you should call EMS personnel. In some situations, however, advanced medical care is not easy to contact or close. Situations in which medical care is delayed for 30 minutes or more are called ***delayed-help situations.***

Delayed-help situations include rural areas, such as farms and wilderness or back-country environments. Often, people living or working in these areas may be able to call EMS personnel but, because of distance or adverse travel conditions, may wait a long time before EMS personnel arrive. Difficulties in communication may also exist.

In delayed-help environments, as in all emergency situations, use the emergency action steps *Check-Call-Care* as your basic plan of action to help the victim and keep yourself safe.

Special considerations, however, may change how you check the scene and the victim, call for help, and care for the victim. For instance, you may need to decide whether to transport a victim or leave a victim alone while you get help. You may also need to improvise or modify the care you provide, depending on the environment and the circumstances.

This manual provides information to help you execute *Check-Call-Care* in delayed-help situations. You will also learn how to prepare for emergencies in this environment. If you live, work, or recreate in delayed-help environments, it is important that you understand the limitations of obtaining emergency care.

Key Terms

Delayed-help situation: A situation in which emergency assistance is delayed for more than 30 minutes.
Tourniquet: A wide band that is wrapped tightly around an extremity to control severe bleeding; used as a last resort measure.
Wilderness: An area that is uninhabited by human beings, uncultivated, and left in its nat-ural condition.

TYPES OF DELAYED-HELP SITUATIONS

A delayed-help situation is one in which emergency medical care is delayed for more than 30 minutes. This delay exists because there may be no easy way—

- To call for help.
- For emergency personnel to reach the victim.
- To transport the victim to medical care.

Rural Areas

Rural areas include country and farm areas, which are less settled and populated than cities and where neighbors often live far away. Although it is usually easy to communicate with emergency medical personnel, response time is often delayed because of long distances and adverse road conditions. Temporary events, such as power outages and rising water, may cut off communication and access to EMS personnel.

Emergencies that occur in a rural environment usually involve equipment, animals, electricity, falls, fires, overturned vehicles, chemicals or pesticides, and agricultural machinery mishaps, such as those resulting from tractors, combines, and augurs. It is important to be aware of situations and circumstances that may put you or someone else in danger.

In rural areas, people are usually aware that help may be delayed. If telephone service is available, it may be possible to communicate with an emergency dispatcher who can tell you how to care for the victim until more advanced care is available.

Wilderness

A ***wilderness*** is an area that is not settled, uncultivated, and left in its natural condition. A phone and emergency personnel may be miles away. Some people are required to work in wilderness areas. Others are drawn to wilderness activities because of the challenge, the adventure, and the opportunity to reach out into the unknown. However, what attracts people to the wilderness often presents barriers to getting help in an emergency.

If an emergency occurs in the wilderness, you need to consider how you are going to get help and what care you will give. If the victim cannot move and you have no means of transport, you may need to send someone to get help or go yourself. If the victim is able to move or be moved, you need to decide how to safely transport him or her. If he or she cannot be moved, you will have to shelter the victim from the elements to prevent his or her condition from deteriorating until you return.

Other Delayed-help Environments

Natural and man-made disasters, such as hurricanes, earthquakes, or terrorist acts may also create delayed-help situations. Phone and electrical services may be cut off or restricted. Roads may be damaged. Medical facilities may be crowded or destroyed by the disaster. If you live, work, or plan to travel in an area in which natural disasters occur, it is important to plan ahead for such occurrences.

Boating activities may also involve delayed-help situations. On the water, communication with medical personnel may be possible, but transportation to a medical facility may be limited or delayed.

MIND AT WORK

1. *Are you and Jeff in a delayed-help situation? If so, what factors make it a delayed-help situation?*

APPLYING THE EMERGENCY ACTION STEPS

In a delayed-help environment, you may have to modify the emergency action steps *Check-Call-Care.* As you learned in previous first aid training, the *Check* step involves noting unusual noises, sights, odors, appearance, and behavior that may indicate an emergency. The *Check* step in a delayed-help environment may need to be more detailed. The information you collect will be needed to develop a plan for getting help, securing resources, and for caring for the victim.

The *Call* step may also be modified. In some instances, a phone may be only 2 miles away; in other situations the nearest road may be 10 miles away. Unlike an urban or rural setting, where you can usually call EMS personnel immediately, in the wilderness you must decide how to get help. Depending on how difficult it is to summon help, the *Call* step may be delayed for a few minutes or a few hours. You may even decide to take the victim to help.

As in any situation, the *Care* step in a delayed-help environment involves periodically rechecking the victim's condition while providing care until help arrives. The primary change in a delayed-help environment is that you monitor the victim for a longer period of time because you have to wait longer for help.

CHECK

In a delayed-help situation, the *Check* step of the emergency action steps includes checking the scene, checking the victim, and checking for available resources.

Check the Scene

Begin by checking the scene. Check the whole scene to get a general idea of what happened. Look for dangers that could threaten your safety or the safety of the victim, such as falling rocks, tree limbs, or unsafe equipment (Fig. 1). If you

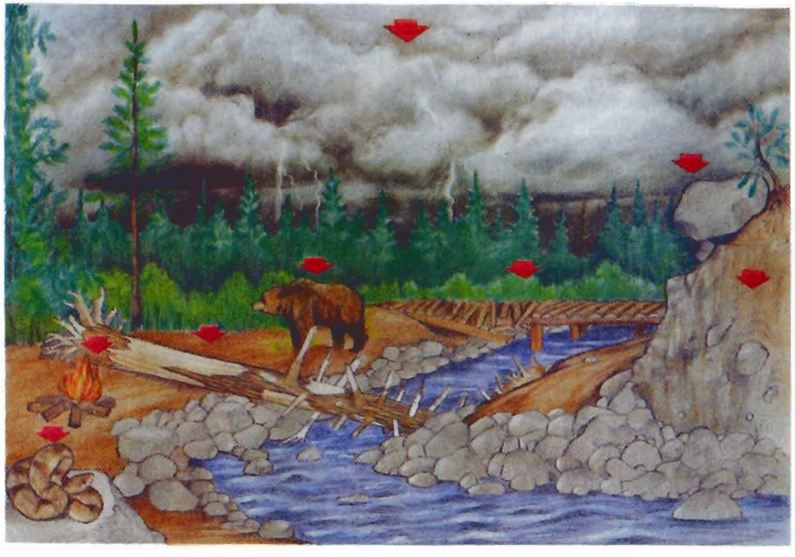

Figure 1 Check the scene for dangers that could threaten your safety or the safety of the victim.

see any dangers, do not approach the victim until you have carefully planned how you will avoid or eliminate the danger. Note any impending problems, such as a threatening storm.

Check the Victim

When you are sure it is safe, approach the victim carefully and continue the *Check* step by checking first for life-threatening conditions.

Check for a loss of consciousness, no breathing or breathing difficulty, no pulse, and severe bleeding (Fig. 2). If the victim has fallen or if you don't know how the injury occurred, assume that he or she has a head, neck, or back injury. Care for any conditions you find in the same way you have learned in previous first aid training.

Next, check the victim for any other problems that are not immediately life threatening, but may become so over time. In delayed-help situations, this check may need to occur before getting help. This ensures that you have all the information about the victim's condition you need to make a plan for getting help. Whenever possible, perform a head-to-toe check even if the victim is unconscious or has life-threatening conditions. If you have other people to assist, do the check while someone else gives rescue breathing. Write down the information that you gather (Fig. 3) so that you remember it. If you have nothing to write with, try to remember the most important or unusual observations.

MIND AT WORK

2. What dangers should you look for at the scene of Jeff's fall? What immediately life-threatening conditions might Jeff have, and what conditions might shortly become life threatening?

Figure 2 Check the victim for life-threatening injuries.

Check for Resources

After checking the victim, start gathering information you will need for planning how and when to get help. Check the surrounding environment for conditions or developing conditions that could endanger you or the victim during the time it will take to get help. Also, note any conditions that would make it difficult for you to go get help. Consider whether you may have to move the victim.

Think about resources you have available for calling for help, caring for the victim, and sustaining you and others. Resources include people available to help, communication or signaling devices, food and water, shelter, first aid supplies, and means of transportation.

CALL

In a delayed-help situation, the *Call* step can be divided into two phases: making a plan for getting help and executing the plan.

Making a Plan

In a delayed-help situation, you have four options for getting help—

- Stay where you are and call, radio, or signal for help.
- Send someone to go get help or leave the victim alone to get help.
- Transport the victim to help.

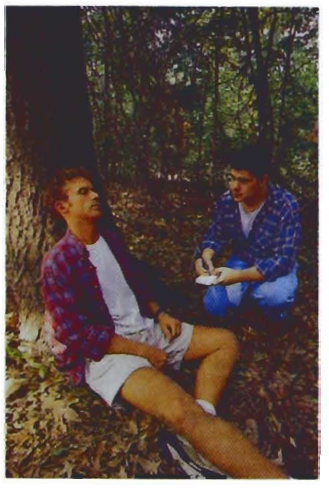

Figure 3 Write down the information you gather while interviewing the victim.

- Care for the victim where you are until the victim has recovered enough to travel on his or her own.

Consider all the information you have gathered during the *Check* step about the conditions at the scene, the victim's condition, the resources available where you are, and the available means for summoning help. Discuss your options with others, including the victim, if appropriate. To help decide on the best approach, ask yourself and others these questions:

- **Is advanced medical care needed and if so, how soon?** If you discovered any conditions for which you would normally call 9-1-1, or if any such conditions seem likely to develop, you should plan to get help immediately.
- **Is there a way to call from the scene for help or advice?** If communication is possible, contact EMS personnel as soon as you have enough information about the victim's condition and the victim is safe from dangers at the scene. Emergency medical personnel can tell you how to care for the victim and advise you about getting help.

The Unreckoned Cost

Rippling grain; cattle grazing by a stream; apple orchards in the spring; dark green fields of soy beans stretching as far as the eye can see—to many, a farm or ranch may not seem a particularly dangerous place. Yet historically, farming has been one of the most hazardous occupations in the United States. The death rate for agricultural workers is five times the national average for all industries.

The very nature of farming puts workers at risk. Crops must be planted and harvested under pressure from weather and time. Money isn't always available to make needed equipment repairs or hire necessary labor. Equipment tends to be large and heavy, and much farm machinery is designed to chop, crush, cut, or compress. Although newer equipment usually includes some safety features, such as rollover protection structures on tractors, older equipment provides little, if any, built-in safety protection.

The possibilities for injury are many. Equipment turns over, crushing the driver or passenger. Machinery traps arms and legs, mangling or amputating them. Gas generated by stored silage causes serious lung damage or death. Shifting grain buries people alive. The list goes on and on. The greatest number of deaths are caused by tractor overturns and runovers, followed by other machinery injuries, drowning, firearms, falls, fires, electric current, animals, poisoning, suffocation, and lightning. In 1993, farm injuries in the United States caused 1000 deaths and disabled 130, 000 people.

Children up to age 16 make up a disproportionate number of these farm fatalities and injuries. Nationally, one in five agricultural fatality victims is under age 18. Approximately 300 children anually die farm-related deaths, and thousands are injured, many permanently disabled. Too often, these children lack adequate supervision or are doing a task beyond their capabilities. Farm children tend to take on adult work at an early age. Children only eight years old drive tractors. Five-year-olds feed farm animals, including those with young who therefore may be extremely aggressive and protective. Children also play around machinery, tools, wire, gasoline pumps, and other potential hazards in barns and other areas.

Nowhere is the need for training to deal with delayed-help emergency situations greater than in the farming community. Farms are often isolated, far from neighbors, towns, or easily traveled roads. Many roads have no identifying signs. Injuries may occur in isolated areas of the farm where vehicle access is problematic. Weather may make reaching the injured person difficult or even immediately impossible. Emergency medical service is generally more limited than in urban areas. Responders are often volunteers who have other duties and may be far from the scene of the emergency. The first person on the scene, often a family member, is generally the person who gives the initial care and whose actions often determine whether the victim lives or dies.

Various individuals, groups, and organizations have developed resources to address the farm injury situation. First Care is a program developed by Allen L. Van Beek, M.D., a microsurgeon and plastic surgeon. Raised on a farm, at age 13, he had a first-hand experience with farm injuries when a

tractor ran over both his legs. In 1968, as an army flight surgeon stationed in Vietnam, he worked with Col. George Omer, M.D., a hand surgeon who told him about micro-surgery, a new form of surgery that had the potential to save severed limbs. After Vietnam, Dr. Van Beek studied reconstructive and plastic surgery. Perfoming surgery with the aid of a microscope and microscopic needles, he has repaired or reattached countless fingers, hands, arms, and legs mangled or severed in farm injuries. Many of the victims are children.

Dr. Van Beek developed First Care to fill what he felt was a huge void in the rural health care system. First Care is designed to teach the person who first comes upon a victim how to cope in those first minutes after an emergency and provide care until advanced medical help can arrive. The program includes color slides of farm injury victims to familiarize those who will find the victims with the sight of mangled limbs so that they will not panic. The program is sponsored by the Minnesota Farm Bureau Federation and The North Memorial Medical Center. It is taught by volunteers and includes a manual, a video, and a first aid kit designed ex-pressly for farm injuries and is packaged in an oil-and water-resistant box that fits in the cab of a tractor or combine. For more information about this program, contact the Minnesota Farm Bureau Federation, 1976 Wooddale Drive, P.O. Box 84370, St. Paul, MN 55164-0370; phone: (612) 739-7300; fax: (612) 578-2159.

Other organizations include Farm Safety 4 Just Kids, an organization located in Earlham, Iowa, that works to prevent farm-related childhood injuries, health risks, and fatalities. It puts out a variety of resource materials and activity ideas , including a catalogue of items to teach farm safety. One of its efforts is to raise the awareness of farm fam-ilies about the developmental stages of children and how parents can apply that knowledge to tai-lor farm tasks to a child's skills, judgment, and maturity. To learn more about this program, contact Farm Safety 4 Just Kids, P.O. Box 458, Earlham, IA 50072-0458; phone: (515) 758-2517 or 1-800-423-KIDS; fax: (515) 758-2517.

FARMEDIC Training, Inc. is a nonprofit corporation that has been training EMS professionals in farm emergencies. It is currently working also to train farm families and workers who are the first people on the scene of an emergency to respond appropriately. FARMEDIC is in the process of developing a curriculum for a "First on The Scene" program for farm family members, farm workers, agricultural business people, and agricultural students. For more information, contact FARMEDIC, Alfred State college, National Training Center, Alfred, NY 14802; phone: (607) 587-4734 or 800-437-6010; fax: (607) 587-4737.

- **If phone or radio communication is not possible, is there a way to signal for help?** The advantages of signaling are that it is faster and safer than going for help. The disadvantages include that you may not know whether your signal has been received and that the receivers may not know what type of help you need.
- **If there is no way to call for help, is it possible to go get help?** Consider whether you can get help safely while not jeopardizing the safety of the victim. Carefully weigh the decision if going to get help means leaving the victim alone.
- **Is there a way to transport the victim to help?** Consider whether you have a safe and practical way to transport the victim. Ask whether the victim's injuries allow for safe transport. If the victim cannot walk, it will be extremely difficult to carry him or her any distance, even if you have a large number of people to assist. Unless a vehicle or other means of transportation is available, you probably will not be able to transport the victim to help without great difficulty.
- **Is it possible to provide care where you are until the victim can travel?** Think about the risks of caring for the victim without medical assistance and the possibility that serious complications may develop. On the other hand, consider how quickly the victim may be able to recover, enabling you to safely transport him or her to medical care.
- **Is it safe to wait for help where you are?** Environmental hazards, such as a threatening storm or falling temperatures, may make it unsafe to wait for help.

You may discover that there is no "best" plan for getting help. You may have to compromise, reducing overall risk by accepting certain risks.

For example, consider a situation in which you are hiking in a remote area on a cold but sunny day. Late in the afternoon, one of your

Figure 4 When calling for help, describe all important aspects of the victim's condition, your location, and other information rescuers will need.

companions injures an ankle. Generally, the safest thing to do for the ankle would be to immobilize it, send someone for help, and wait with the victim until emergency transportation arrives. However, you know that it will take until nightfall for someone to summon help and many more hours for help to arrive. No one in your party is dressed to survive the low temperatures overnight. Because of the danger from the cold, you may decide that the plan with the lowest overall risk is to immobilize the ankle and then assist the victim in walking to shelter, even though following this plan may cause further injury to the ankle.

Getting Help

Once you have a plan, you need to execute it. Getting help may mean calling or signaling for help, sending for help, taking the victim to help, or even going without additional help until the victim has recovered enough to travel.

Calling

If you have some means of quickly calling for help, such as a telephone or two-way radio, make sure you have gathered all the necessary information about the victim's condition and your location that EMS or rescue personnel will need to plan their response (Fig. 4). Having essential information when you call reduces confusion and improves the likelihood that correct help will be sent to the right location. In addition, if you include all essential information in your first communication, emergency personnel will be able to respond even if later communication attempts fail.

It is important to give the rescuers specific information about your location. Identifying prominent landmarks and marking your area can help rescuers find your location. Consider that some landmarks are clearly visible during the day but are not visible at night. Flares are one way of marking your location. Do not use flares in heavily wooded or dry areas that could ignite. You may need to send someone to meet EMS personnel at a main road or easy to identify location and have them guide EMS personnel to the victim. Do not give mileage approximations to the EMS dispatcher unless you are sure of the distance.

Improvised distress signals

If you have no way to call for help and it is dangerous or impractical to use flares or send someone for help, you may have to improvise. Two of the most widely used general distress signals are—

- **Signals in Threes.** A series or set of three can be used to signal "Help!" Three shots, three flashes of light, three shouts, three whistles, or three smoky fires are all examples (Fig. 5). Use extreme caution when building fires. Always stay near the fire, and have water or dirt close by to extinguish sparks. Do not use fires in dry areas. A small fire can easily get out of control. Build your fires in a triangle at least 50 yards (45 meters) apart so that they are visible as separate fires.
- **Ground-to-Air Signals.** To signal an aircraft, use either signals in threes (three fires or three flashes of light) or else mark a large "X" on the ground. The X ground-to-air signal is a general distress signal meaning "unable to proceed" or "need immediate help." If constructing an X signal, make sure that you choose a large, open area and that the X you construct stands out against its background. The X signal should be at least 20 feet (6 meters) across.

In addition, smoke, mirrors, flare guns, and whistles create a visual or auditory attraction (Fig. 6). Smoke signals can be effective because they can be seen for many miles. If you are on a boat, making an urgent "pan-pan" call over marine radio indicates that you have an emergency. You should be familiar with various ways of signaling that are appropriate for your location and environment.

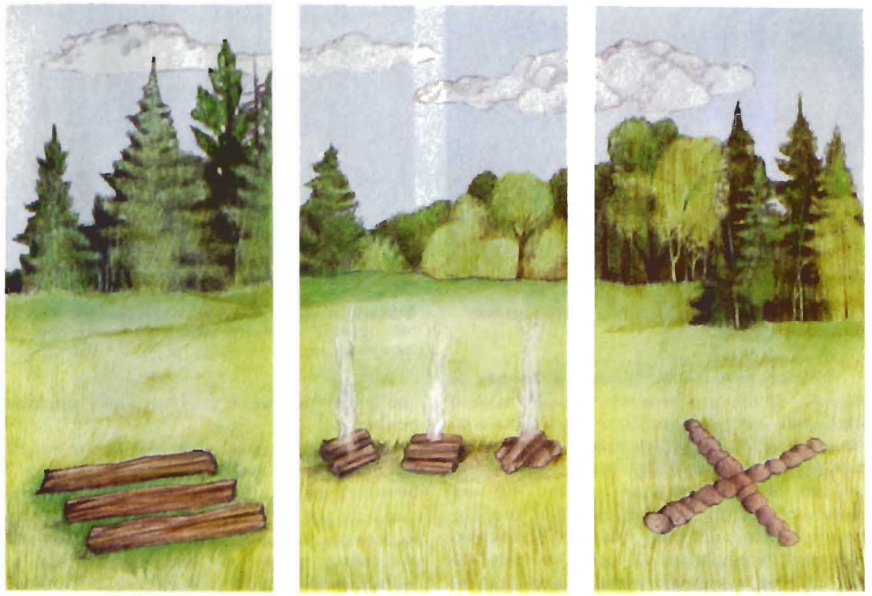

Figure 5 A set of three or an "X" is used to signal "Help".

Figure 6 A mirror can be used to summon help.

Sending for help

When you send someone to get help, the person should not leave without certain information. This information will help rescue personnel determine what resources they need for the rescue and should include a note indicating the victim's condition, a map indicating the location of the victim, and a list of other members in the group and available resources. Record weather, terrain, and access routes. This information must be carried in writing in the event that something happens to the person or if he or she gets lost.

The safety of the messenger seeking help is extremely important. Make sure you send enough people to ensure the messenger's safety and success in delivering the message. If going for help involves hazards or challenges, do not send people who are not prepared to overcome these problems.

Another consideration in going for help is making sure you can lead rescuers back to the victim. When in the wilderness or on the water, the most accurate way to describe your location is to use compass readings. You should be trained in map and chart reading and the use of a compass if you travel or work in delayed-help environments.

Figure 7 A compass, surveyor's tape, or ropes can help you mark your path.

Figure 8 If you must leave an unconscious victim to go get help, position the person on one side in case he or she vomits while you are gone.

In many areas hikers frequent, paths may be marked. Sometimes, however, you may have to mark your own path and the victim's location. When going for help, always mark your way so that you can find your way back or in the event you are too tired, rescuers can find the way back to the victim. You can use ropes and surveyor's tape to track your path (Fig. 7). It is also important to regularly look back at the area you just traveled, which can assist you on your return trip. What you see may look different from the area you are facing.

When sending for help, make sure that you leave enough people to care for the victim while waiting for help. Those remaining with the victim should be those in your party best equipped to care for the victim.

Finally, before sending anyone for help, consider whether tasks at the scene require everyone's help. For instance, moving a victim a short distance to a shelter is easier to do when everyone helps.

Leaving a victim alone

Generally, it is not a good idea to leave a victim alone. Sometimes, however, it may be necessary. If you are alone with the victim, have no way to call or signal for help, and are reasonably sure that no one will happen by, then you may decide as a last resort that it is best to leave the victim and go get help.

If you decide to leave the victim alone, plan the route you will follow to go for help. Follow the guidelines under "Sending for Help" that explain the importance of making sure you know how to lead rescuers back to the victim. Write down the route, the time you are leaving, and when you expect to arrive. Leave this information with the victim.

Before you go, do what you can to provide for the victim's needs while you are gone. If possible, make sure that food and water are available and provide a container for the victim to use as a urinal or bedpan. If the victim cannot move, make sure that these things are within reach.

Make certain that the victim has adequate clothing and shelter and that he or she is protected from the ground, if necessary. See "Protection from the Elements" in this manual for more information. Recheck any splints or bandages, and adjust them if necessary so that they are not too tight. If the victim is unconscious or completely unable to move, place him or her in the recovery position, lying on one side with the face angled toward the ground, to protect the airway in case of vomiting (Fig. 8).

Before you go, make sure that a conscious victim understands that you are going to get help. Give the victim an idea of when to expect a response. Be as reassuring and positive as the situation allows.

Transporting a victim to help

In situations involving injury or sudden illness, it is usually best to have help come to you. Consider transporting a victim to help only if a vehicle or other means of transportation is available beyond simply carrying the victim. Even if you have a large number of people to take turns, carrying a victim any significant distance is very difficult and can be hazardous, especially if the terrain is not smooth and flat.

Figure 9 **A,** To perform the pack-strap carry, position yourself with your back to the victim. Cross the victim's arms in front of you and grasp the victim's wrists. **B,** Lean forward slightly and pull the victim onto your back.

Factors to consider when deciding to move the victim include the extent of the injuries, distance to be traveled, and available help. Remember that excessive movement may aggravate or worsen the victim's condition. You should not attempt to move or transport a victim who you suspect has a spinal injury unless you have special training and equipment. However, if the scene is not safe or a potential for danger exists, you may have to move the victim.

If you decide to transport a victim to help, plan the route you will follow. Remember that you may need to travel more slowly to avoid further injury to the victim. It is better to have a person besides the driver who will care for the victim during transport. Know what you should do if you must interrupt the transport so that you can care for the victim if his or her condition worsens. If possible, inform someone else of your route and alternate plans.

Moving an injured victim into a vehicle is likely to cause pain, which may be unavoidable. Plan and rehearse how you will move the victim into the vehicle. Immobilize any possible bone or joint injuries before moving the victim to the vehicle. Select a place in the vehicle for the victim that will be as comfortable as possible and that will allow care to be provided during transport. Bring the vehicle as close to the victim as possible. Before placing the victim in the vehicle, make sure he or she will fit in the location you have selected. Use an uninjured person as a "test victim" to make sure the space is adequate. Provide padding to make the victim as comfortable as possible.

Transport the victim at a safe speed following the route you have planned. The attendant should constantly monitor the victim's condition and work with the driver to make any necessary changes in transport conditions. If a vehicle is unavailable, you may have to improvise a method to safely transport the victim to help. Consider methods such as the pack-strap carry (Fig. 9) or improvising a stretcher from a blanket and skis.

MIND AT WORK

3. What do you think would be the best method for getting help in this situation? Why?

Figure 10 **A,** Tree branches can be used to make an improvised arm splint. **B,** An ankle can be splinted using clothing.

CARE

In a delayed-help situation, you may need to care for the victim for a long time. It is important that you remain calm so that you can provide the best care possible, whether for a few minutes or a few hours. Provide support and reassurance to the victim until EMS personnel arrive and take over care.

Monitoring the Victim

After you complete your initial check of the victim and provide care for the conditions found, regularly monitor the victim's condition while waiting for help. Monitoring is especially important in a delayed-help situation because the longer help is delayed, the more time there is for the victim's condition to change.

Continuously monitor the breathing victim who is unconscious or has an altered level of consciousness. Listen to and observe the victim's breathing. If the victim stops breathing or vomits, you will need to give care. Otherwise, the victim should be rechecked about every 15 minutes. A person with minor injuries might be checked with less frequency, however, a seriously ill or injured victim may need to be checked more often. If the victim can answer questions, rechecking can consist mainly of asking the victim if his or her condition has changed. You should also watch for changes in skin appearance and temperature and level of consciousness. Changes in these conditions may indicate developing problems, such as heat or cold emergencies and shock. Recheck any splints or bandages, and adjust them if they are too tight.

Keep a written record, and note any changes you find and the time the changes occur. Also note the care you provide.

Fractures and Dislocations

If you are not certain how serious an injury is, care for it as if it is a more serious injury. For example, if you suspect a bone or joint injury, care for it as if it were serious.

In previous first aid training you learned how to recognize and provide care for musculoskeletal injuries. The main difference in providing this care in the wilderness is that you may have to be creative in improvising materials with which to immobilize an injury (Fig. 10, *A* and *B*). You should not attempt to move a person with a possible fracture unless it is absolutely necessary or the injury does not affect the person's ability to walk. As a rule, do not attempt to move a person or have the person move without splinting the injured part. However, if the injury is stable or can otherwise be supported, do not wait to transport the victim to help.

After splinting a broken bone or dislocation, you must loosen the splint and re-check for circulation, warmth, and sensation in the extremity of the injured limb. Checking should be done about every 15 minutes.

Bleeding

In delayed-help situations, the appropriate care for severe bleeding is the same as you learned in previous first aid training—apply direct pressure, first with your gloved hand and then with a pressure bandage, elevate the wound if possible, and, if necessary, apply pressure at a pressure point.

Most external bleeding can be easily controlled. Direct pressure should be maintained for a full 10 minutes or more, then release pressure to see if the wound bleeds again. Use your watch to time yourself. If, for any reason you release pressure from the wound, repeat the previously described procedure for another 10 minutes to allow severed blood vessels to begin to close and for a blood clot to form.

If bleeding cannot be controlled, consider applying a tourniquet in addition to maintaining direct pressure. A ***tourniquet*** is a wide band of cloth or other material placed tightly just above a wound to stop all flow of blood. Do not use a narrow band, rope, or wire. Application of a tourniquet can control severe bleeding from an open wound of the arm or leg, but it is rarely needed and should not be used except in situations where the previously described measures fail. *The use of a tourniquet is dangerous.* Properly applied, the tourniquet will stop all blood circulation to a limb beyond the point of application. When left in place for an extended period, uninjured tissues may die from lack of blood and oxygen. Releasing the tourniquet increases the danger of shock, and bleeding may resume. If a tourniquet is applied too loosely, it will not stop arterial blood flow to the affected limb and will only slow or stop venous blood flow from the limb. Applying a tourniquet means risking a limb in order to save a life.

To apply a tourniquet, place it just above the wound. Do not allow it to touch the wound edges. If the wound is in a joint area or just below, place the tourniquet immediately above the joint.

- Wrap the tourniquet band twice tightly around the limb, and tie an overhand knot (Fig. 11, *A*).
- Place a short, strong stick or similar object that will not break on the overhand knot; tie two overhand knots on top of the stick (Fig. 11, *B*).
- Twist the stick to tighten the tourniquet until bleeding stops (Fig. 11, *C*).
- Secure the stick in place with the loose ends of the tourniquet, a strip of cloth, or other material (Fig. 11, *D* and *E*).
- Make a written note of the location of the tourniquet and the time it was applied, and attach the note to the victim's clothing.
- Treat the victim for shock, and give necessary first aid for other injuries.
- Do not cover a tourniquet.

Note the time the tourniquet was applied. Loosen it after 5 minutes to determine if bleeding has stopped. If bleeding continues, tighten the tourniquet for another 5-minute period. Then, loosen the tourniquet and recheck bleeding. If bleeding has stopped, leave the loosened tourniquet in place. Follow-up medical care is imperative.

Burns

General steps for caring for a burn in a delayed-help environment are the same as in other settings:

- **Cool the burned area to stop the burning.** Immerse the burned area in cool water. Smother flames with blankets or other material if water is not available. Using cool water on serious burns increases the possibility of hypothermia and shock, especially in a cold environment. Be careful not to use more water than necessary and to immerse only the burned area.
- **Cover the burned area.** Once the burn has been cooled, your main concern is keeping the area clean. Use a clean, dry cloth or a sterile burn dressing (such as one with a water-based gel coating) to cover the burn. Be sure that the gel on the dressing can easily be washed away with water.
- **Prevent infection.** Since the danger of infection is greater in delayed-help environments, apply a thin layer of antibiotic ointment to the cooled burn. Keep a dressing over the burn as mentioned. If an emergency facility is more than a day away, you must redress the burn daily. Redressing includes taking old dressings off, cleaning the burned area with sterile water and mild soap, re-applying a thin layer of antibiotic ointment, and covering with a clean dressing. If none of these materials are available, leave the burn alone; it will form a scab.

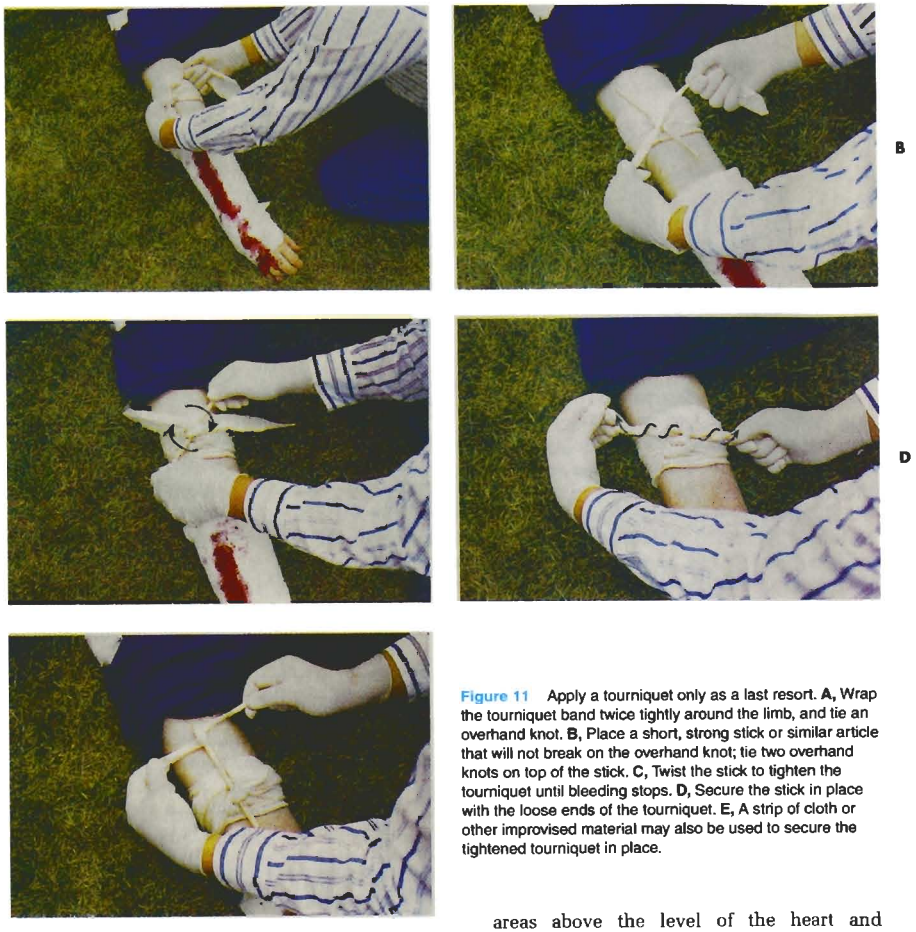

Figure 11 Apply a tourniquet only as a last resort. **A,** Wrap the tourniquet band twice tightly around the limb, and tie an overhand knot. **B,** Place a short, strong stick or similar article that will not break on the overhand knot; tie two overhand knots on top of the stick. **C,** Twist the stick to tighten the tourniquet until bleeding stops. **D,** Secure the stick in place with the loose ends of the tourniquet. **E,** A strip of cloth or other improvised material may also be used to secure the tightened tourniquet in place.

- **Minimize shock.** Partial- and full-thickness burns, or burns covering more than one body part, can cause serious loss of body fluids. Give fully conscious victims water or clear juices to drink. Adults should receive 4 ounces (1/2 cup) over a 20-minute period, sipping slowly. A child should receive half that amount, 2 ounces (1/4 cup) and an infant half of that, 1 ounce (1/8 cup) over the 20-minute period. Elevate burned areas above the level of the heart and keep the burned victim from becoming chilled. Always monitor breathing and consciousness. The victim of serious burns requires transport to a medical facility as soon as possible.

Sudden Illness

If you are a diabetic or responsible for someone who is a diabetic, you should become familiar with the signs and symptoms of low blood sugar. If you are a diabetic, training someone you will be with in a delayed-help environment as to how to give you your insulin is also a good idea. This may include measuring the dosage and giving the shot.

When caring for a victim of sudden illness, such as someone experiencing a diabetic emergency or a seizure, follow the same procedures as if you were not in a delayed-help situation. However, there are a few extra things to think about if you are far from help or transportation. Be sure victims recovering from an episode of low blood sugar rest after eating/drinking something sweet. In addition, if the victim does not show signs of improvement within 5 minutes after ingesting a sweet substance, you need to give the person water in the amounts described in the Shock section below. Transport that person to a medical facility. Some wilderness first aid experts recommend rubbing small amounts of a sugar and water mixture (or some other sweet liquid such as fruit juice or a sports drink) on the gums of an unconscious person. Remember, victims of diabetic emergencies need to get a sugary substance into their system immediately. However, never give an unconscious person anything to eat or drink.

The care for someone who has experienced a seizure in a delayed-help environment is the same as the care given in other environments. Do no further harm and complete a detailed check for injuries after the seizure is over. Be sure to maintain the victim's body temperature to help to prevent shock, such as by putting some form of insulation between the victim and the ground and covering the victim with a blanket or coat if necessary. Consider ending the trip if you suspect any injuries or possible reccurrence of the seizure.

Shock

In a delayed-help situation, it is likely you will have to provide care for shock. Although treatment for shock is carried out by advanced medical personnel, it is possible to minimize or delay its onset.

Remember that shock is not always initially present. It may develop while you are waiting for help. Check for signs and symptoms of shock every time you recheck the victim's condition. Be alert for conditions that may cause shock to develop over time, such as slow bleeding, vomiting, diarrhea, or heat loss.

If you or someone you are with is susceptible to a severe form of anaphylaxis or anaphylactic shock as a result of an insect bite or bee or wasp sting, be sure someone knows the location of necessary medication, such as oral antihistimines or injectible epinephrine, and how to use it. Anaphylatic shock can be life threatening if the victim does not receive care immediately. Quickly transport a person who shows signals of anaphylatic shock, such as swelling and breathing difficulty, to a medical facility.

If medical care is more than 2 hours away, it may be appropriate to provide preventive care for shock by giving a fully conscious victim cool water or clear juices. You can give an adult about 4 ounces (half a cup, or about 60 milliliters) of water to sip slowly over a 20-minute period. For a child, give half this amount (2 ounces or about 30 milliliters) and for an infant, half of that (1 ounce, about 15 milliliters), over the same 20-minute period. Giving frequent, small amounts, rather than fewer large amounts, minimizes vomiting.

Even in a delayed-help situation, do not give fluids if the victim is unconscious, is having seizures, has a serious head or abdominal injury, or vomiting is frequent and sustained. If you give fluids and the victim then starts to vomit, wait before giving the victim any more to drink. Remember to keep the victim from becoming chilled or overheated.

Head, Neck, and Back Injuries

If you suspect a head, neck, or back injury, the goal and the care are the same as in any other emergency: prevent further injury by providing in-line stabilization (Fig. 12).

Caring for a victim with a spinal injury while maintaining in-line stabilization is difficult to do without assistance. Safely transporting a spinal injury victim without special training and equipment is nearly impossible. Therefore, when caring for a spinal injury victim in a delayed-help situation, it is generally best to stay right where you are and wait for rescue personnel to arrive.

Caring for a spinal injury victim outdoors for an extended period of time may be even more difficult. The victim will not be able to

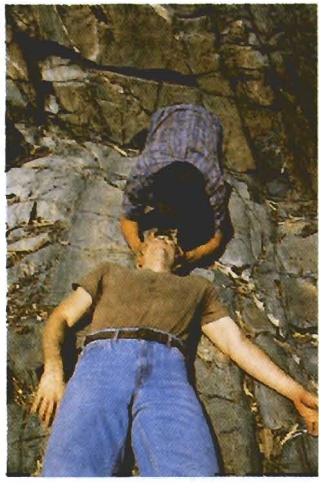

Figure 12 Provide in-line stabilization if you suspect a head, neck, or back injury.

maintain normal body temperature without help. The person will need help with drinking, eating, and going to the bathroom. If you are alone and need to free yourself from maintaining in-line stabilization of the victim's head and neck, place two heavy objects wrapped in clothing next to each side of the head to hold it in line.

Help the spinal injury victim maintain normal body temperature by placing insulation underneath him or her or providing shelter from the weather. If two or more rescuers are on hand, roll the victim on one side to place insulation underneath the body, being careful not to twist the spine (Fig. 13).

MIND AT WORK

4. What should you do to care for Jeff?

DIFFICULT DECISIONS

One of the most stressful and emotional situations you can be faced with is dealing with a life-threatening condition when professional help is not easily obtainable. To give a seriously injured victim the best chance of survival, EMS personnel must arrive quickly to provide advanced medical care and to transport the victim to a medical facility. Some victims in delayed-help situations will die because no quick EMS response is available.

Figure 13 Place an insulating barrier between the victim and the ground.

In a delayed-help situation, you may be faced with the difficult question of how long to continue resuscitation efforts if the victim's condition does not improve and advanced medical help is hours away. There is no simple answer to this question. In such a situation, you will ultimately need to make your own decision. However, some general principles can help you do so.

The purpose of CPR is to partially and temporarily substitute for the functions of the respiratory and circulatory systems. However, CPR is not designed for and is not capable of sustaining a victim's life indefinitely. Usually, the longer CPR is continued, the less likely it is that the victim will survive.

The victim's survival depends largely on what caused the heart to stop in the first place. If the cause was a direct injury to the heart, such as from a heart attack or from crushing or penetrating trauma to the chest, little chance exists that the victim will survive in a delayed-help environment, whether or not CPR is performed. On the other hand, if the heart is not injured but stops as a result of hypothermia, lightning strike, or drowning, the victim's heart has a better chance of starting. In this case, CPR can limit brain damage in case the heart starts and may even improve the chance that the heart will start.

Once CPR is started you must continue to provide care until the victim's heart starts beating or until you are relieved by another trained person, EMS personnel arrive and take over, you become too exhausted to continue, or the situation becomes unsafe. In a delayed-help situation, you may also generally stop if you have performed CPR for 30 minutes without restarting the heart.

The exception to stopping CPR after 30 minutes is if the victim's heart stopped as a result of hypothermia, drowning, or a lightning injury. In these cases, continue CPR until the victim's heart starts beating, you are relieved by another trained rescuer, EMS personnel arrive and take over, you are too exhausted to continue, or the scene becomes unsafe.

PROTECTION FROM THE WEATHER

When caring for a victim in a delayed-help situation, it is critical to protect the victim from environmental conditions such as heat, cold, wind, rain, sleet, or snow. You may need to construct a shelter for the victim using whatever materials you have on hand.

Protecting the Victim

A person who has an injury and is not able to move may develop a heat- or cold-related condition. The fact that you may be comfortable does not necessarily mean the victim is. In cold weather, lying on the ground draws heat away from the body and increases the chances of hypothermia. If it is too hot, the heat from the ground will travel to the body and raise the temperature. If the body's normal temperature is not maintained, the person may slip into shock.

To keep the victim from getting chilled or overheated, provide some type of insulation to protect the victim. If the ground is dry, you can use cloth items such as towels, blankets, clothing, or sleeping bags to insulate the victim from the ground. You can also improvise insulation from dry leaves or grass. If the ground is wet, put a waterproof tarp, raincoat, or poncho between the insulating material and the ground. If the victim is exposed to hot sun, rain, snow, or chilling wind, provide an appropriate shelter.

Constructing Shelter

The following are four basic types of shelters:

- Natural shelters
- Artificial shelters
- Snow shelters
- Tents and bivouac sacs

The type of shelter depends on where you are, the resources you have, and whether you can move the victim safely into a shelter or it is best to construct a shelter over the victim. Natural shelters are structures existing naturally in the environment, such as caves, overhangs, and even large trees (Fig. 14, *A*). Artificial shelters are those you construct of materials, such as small trees or branches (Fig. 14, *B*). An insulated tarp attached to branches makes a good temporary shelter. You can make a snow shelter by digging out a snow cave, which is easy if it only has to hold one person (Fig. 14, *C*). Larger snow caves involve hard work and may take a while to dig. Snow cave shelters are also not advisable if the temperature is above freezing, since as temperature rises, the strength and stability of a snow shelter weakens, making it unsafe. Many people carry a light tent, such as a pole tent or a bivouac sac, that can be easily assembled (Fig. 14, *D*). Although tents will keep you dry, they are usually not warm in extreme cold. Bivouac sacs made from Gore-Tex™ and similiar fabrics are better at holding warmth. Whether a shelter is natural or artificial, it should be well ventilated to prevent build-up of condensation and/or toxic fumes.

A fairly common situation is getting stranded in a car. A car can be an effective shelter. If you are stranded, it is better to stay in your car than to go find help. If you need heat, it is possible to keep the heater on for 15 to 20 minutes each hour. Make sure snow or ice does not block the exhaust pipe and cause carbon monoxide fumes to back up into the car. Leave the window opened a crack to prevent carbon monoxide poisoning. You can also use candles as a source of heat. It is important, especially in the winter months, that you keep your car in good working condition and filled with gasoline and carry a vehicle survival kit.

Figure 14 **A, Natural shelter. B,** Artificial shelter. **C,** Snow shelter. **D,** A pole tent.

PREPARING FOR EMERGENCIES

If you live or work in a delayed-help environment or plan to travel to one, develop a plan for how you will respond to emergencies that may arise.

Types of Preparation

There are three general types of preparation—knowledge, skills, and equipment.

Knowledge includes knowing the emergency care resources available and how to access them. It also includes knowing the local geography, including landmarks and hazards. For instance, if you are going on a hiking trip, talk with park rangers or others who know the environment (Fig. 15, *A*). Plan your route and decide on check points (Fig. 15, *B*). If you are planning a boating expedition, consult the Coast Guard about possible weather hazards for that time of year. If you will be boating on inland waters, also consult with the local authority with control over dam water releases. People in rural areas should meet with their local EMS service and ask about how to access EMS personnel, what to do in the event of an emergency, and estimated arrival time of EMS personnel for their particular location.

Figure 15 Appropriate preparation such as **A,** talking to a park ranger who knows the environment, and **B,** using a map to plan your route.

VEHICLE SURVIVAL KIT

- First aid kit
- Sleeping bag
- Extra winter clothing
- Emergency food
- Waterproof matches
- Long-burning candles
- Pocket knife
- Pot or coffee can
- Toilet paper
- Citizen's band radio
- Flashlight with extra batteries
- Extra quart of oil
- Chains
- Snow shovel
- Tow chain
- Sand or kitty litter
- Two jugs of water
- Tool kit
- Gas line deicer
- Flares
- Ax
- Folding saw

Auerbach PS: *Wilderness medicine*, St. Louis, 1994, Mosby.

Skills include proficiency in any language you need to get help; wilderness or survival skills; and technical skills necessary to safely engage in certain activities, such as scuba diving or rock climbing. For instance, if you plan to use a two-way radio, know its operation and how to call for help. Rural inhabitants should know how to safely handle the hazards that they encounter on a regular basis, such as pesticides or farm machinery. Courses are available that address specific situations such as wilderness first aid and farming emergencies.

Equipment includes appropriate clothing for your location and activities, first aid supplies and equipment suitable for your activities and expected hazards, and devices for signaling and communication. The contents of a first aid kit should be modified to suit particular needs. For example, boaters should waterproof their kits by placing the contents in a waterproof container. People driving on long trips may want to add flares, a blanket, and a flashlight to their kits.

Ensuring Adequate Preparation

Different delayed-help environments have different characteristics. In addition, your preparation needs will vary with the activities you plan, the weather that is expected, and the special needs or skills of you and your companions.

KIT FOR OVERNIGHT CAMPING

Case

Durable in temperature extremes
Water and dust tight
Sized to meet personal needs

Contents

Scissors
Tweezers
Hypothermia thermometer (reads down to 85 degrees F) (29.4) degrees C)
Over-the-counter pain medication
Over-the-counter antihistamine
Antacids
Antibiotic ointment
Sunblock (SPF15 or higher)
Sunburn lotion or cream
Lip protection, such as ointment or cream
Adhesive tape
Roller gauze, 2-inch, 4-inch
Sterile dressings, 4 x 4
Nonstick dressings
Adhesive bandages
Sewing kit (safety pins, needle, thread)
Soap
Cotton swabs
Tongue depressors
Eye drops
Disposable gloves
Allergy kit
Water purification tablets or filter
Knife
Waterproof container of matches, with flint bar or lighter
Spare socks
Heliograph mirror/whistle
Flashlight and spare batteries
Foot powder
Magnifying glass
Sheet of aluminum foil
Nylon cord
Mosquito netting/emergency blanket
Compass/map
Insect repellent

When planning a trip, several major considerations will help you determine special safety needs. These include—

- Determining that more than one person in the group knows first aid.
- Maximum anticipated delay in obtaining medical help.
- Total duration of the trip or activity.
- Level of risk associated with the activity and environment.
- Group-related factors, such as preexisting medical or physical conditions.
- Requirements for special equipment and supplies for high-risk or other specific activities.
- Group size. It is best to travel in a group larger than two so that at least one person is always available to stay with the victim.

This information can help you prepare for a trip or activity. The following section details some general principles and ideas for finding out what preparation is needed.

Start preparing early. The sooner you start to plan, the more information you will be able to gather. You will also have more time to act on that information by getting any necessary training and equipment.

Take courses and talk to people with experience. Professionals, such as park rangers and Coast Guard personnel, as well as enthusiasts of the activity you will be engaged in, are good sources of information. You may find experienced people in clubs for those that participate in the activity or in stores that sell equipment for the activity. Ask what preparations they recommend to make your experience safe and enjoyable. If possible, talk to more than one person to get a range of viewpoints.

Look for books and magazines that include information on your intended destination and activity. Find more than one source of written information so that you get more than one author's point of view.

Find out about local weather conditions for the time you will be there. Make sure that you know the environmental conditions you need to be prepared for. An atlas, or reference book, and experienced people may provide you with information about weather-related challenges for the area in which you will be traveling.

Find out about local emergency resources in the area you will be, including how to summon help. Find out if the emergency number is 9-1-1; if it is not, find out what the local emer-

Don't Know Much About *Health* History?

It is a warm summer afternoon and you are preparing to give a canoe lesson down by the waterfront. A couple of your older campers are helping to get the oars and lifejackets from the boat house. As you unhook a few of the hanging lifejackets, a swarm of wasps suddenly begins circling inside the small, dark building. You and the two campers run from the boathouse and up the trail toward the camping area. As you are running, you look behind and see one of the campers fall to the ground. His face is swelling and he is breathing rapidly and making a loud wheezing noise.

Would the first aid care you give be different if you knew this child was highly allergic to wasp stings?

Being in a position of responsibility, such as described in this scenario, requires emotional stability and being prepared for many types of emergencies. Certain settings make this task even more important and challenging for the person in the supervisory role. Knowing some things about the individuals you are responsible for can mean the difference between life and death. Day camps and resident camps are examples of environments where an individual has responsibility for others and where knowing the health history of the persons being cared for can be crucial. Sometimes the health history of the individual is known, either from forms filled out by the parents or registration documents. Health conditions, such as asthma, diabetes, epilepsy, history of anaphylaxis, and a history of heart attack and strokes, are recorded on these forms.

Most camps are required by state regulations or association standards to maintain some type of a health-care plan that includes requiring health histories, providing emergency response procedures and using one or more qualified health managers. These health-care plans should clearly identify who is able to dispense emergency oral or injectable medications, such as epinephrine in the form of an EPIPEN™ for allergic reactions and insulin to diabetics.

The American Camping Association (ACA), the industry leader in camp accreditation and service, is a professional camp organization that provides standards and guidelines for day and resident camps in the United States. These standards include health care procedures and training requirements, such as being certified in American Red Cross first aid and CPR, site selection criteria, and management of activities such as horseback riding and aquatic sports. The ACA's membership includes over 3000 camp owner/operators dedicated to managing professional, safe camps.

For more information write:

American Camping Association, Inc.
5000 State Road 67 North
Martinsville, IN 46151-7902

BEING PREPARED

Before taking off on a hike, day or overnight, the Boy Scouts of America (BSA) suggest you leave informatioin about the whens, wheres, and hows of the trip, including when you will return.

When you are traveling in a wilderness or backcountry area, the BSA recommends having the following with you at all times.

1. Map, preferably a **topographic map** of the area in which you will be traveling.
2. **Compass**–and know how to use it before you leave.
3. **Matches** in a waterproof container.
4. 24 hours of **EXTRA high energy food**.
5. **Water**, 1-2 liters (2-3 quarts).
6. Extra **clothes**, such as socks and a sweater.
7. **Rain gear**.
8. A pocket **knife and whistle**.
9. **Sun protection** such as a wide-brimmed hat, sun glasses, and sun screen.
10. **First-aid kit with an emergency blanket**.

gency number is. Get other important phone numbers, such as hospitals, clinics, and law enforcement agencies. If traveling to a foreign country, find out whatever details you can about the medical care that is available.

Plan your route and write it down. Let others know about your timing, routes, destination, and companions. Letting others know your destination and estimated time of arrival may lessen the response time in the event of an emergency.

Plan for emergencies. Ask yourself, "What if . . . ?" questions. For example, if you are planning a camping trip that will include day hikes far from a base camp, ask yourself, "What if someone in our group is injured such that the victim can't hike back to camp? Will we have what we need to wait with the victim overnight?" Talk over possible answers with the group. When you decide on a plan, write it down. Writing down emergency plans prevents confusion in the event of an emergency.

Planning for emergencies is an important part of preparation for any trip or activity. Adequate preparation can not only reduce the risk of certain problems, it can help make your trip more enjoyable, whether or not an emergency occurs.

SUMMARY

Emergencies do not always happen where it is quick and easy for you to activate the emergency medical system, for advanced medical personnel to reach the victim, or for the victim to be transported to a medical facility. In these delayed-help situations, you will need to provide care for a much longer time than usual.

In a delayed-help situation, just as in all emergency situations, use *Check-Call-Care*, the emergency action steps, as your basic plan of action. In a delayed-help situation, however, you generally check the scene and the victim in greater detail before getting help. You need the information from this more detailed check to develop a plan for getting help and caring for the victim. Getting help may involve calling for help, sending for help, leaving the victim alone and going for help, transporting the victim to help, or allowing the victim to recover sufficiently so that he or she can walk to help.

In general, the care you provide the victim in a delayed-help situation is no different from what you have learned in previous first aid training. However, you will spend more time caring for the victim. Regularly monitoring the victim's condition while waiting for help and writing down any changes that you find is more important in delayed-help situations. You may also need to protect the victim from heat and cold or construct a shelter if help is delayed for an extended period of time.

If you are planning to venture into a delayed-help enviroment or if you live or work in one, think about how you can reduce the risk of emergencies. Adequately preparing yourself for a delayed-help environment includes early planning, talking to people with experience, reading, finding out about local weather conditions and emergency resources, planning your route, and constructing plans to deal with emergencies should they arise.

Answers to Application Questions

1. The mountains where you and Jeff are located cause a delayed-help situation. It will take more than 30 minutes for you to get help to Jeff. Being on the mountains will also require specially trained rescue personnel to remove Jeff.
2. When checking the scene, you want to check for dangerous conditions, such as loose or slippery rocks. You should be sure the area Jeff is lying on is safe and stable. It appears that Jeff is conscious, however, if his injuries are not cared for, he may develop shock, a life-threatening condition.
3. Jeff slipped and fell. He may have a head, neck, or back injury, and you should not attempt to move him unless necessary. In this situation, since you are trained in first aid, you should care for Jeff by checking for injuries and protecting him from the weather.
4. After your check, you will have to decide to go for help, or signal for help. If you decide to leave Jeff, be sure to take measures to prevent him from getting dehydrated, chilled, or overheated.