

CHAPTER 15

Health and Your Safety

Lessons

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“ My **family** goes on a **rafting trip** every summer. We always wear our **life jackets**. You never know when you **might fall out** of the boat! ”

Health **IQ**

PRE-READING

Answer the following multiple-choice questions to find out what you already know about safety. When you've finished this chapter, you'll have the opportunity to change your answers based on what you've learned.

1. When getting into shallow water, the best way to stay safe is to
 - a. dive head first.
 - b. lower yourself in.
 - c. jump in feet first.
 - d. None of the above

2. Which of the following actions will help keep you safe while you are cycling?
 - a. wearing a helmet
 - b. going with friends
 - c. wearing bright clothing
 - d. all of the above

3. People younger than 12 should sit in
 - a. the back seat of a car.
 - b. a child safety seat.
 - c. the front seat of a car.
 - d. None of the above

4. Which type of burn is dark colored and deep?
 - a. first-degree burn
 - b. second-degree burn
 - c. third-degree burn
 - d. none of the above

5. What should you NOT do while trying to save a drowning person?
 - a. get in the water
 - b. use a long pole to reach the person
 - c. throw the person a life preserver
 - d. call for help

6. Which of the following is NOT an important part of a fire escape plan?
 - a. It includes two ways out of the building from each room.
 - b. It includes a safe place for your family to meet outside of the building.
 - c. It explains how to put the fire out.
 - d. Your family practices it regularly.

ANSWERS: 1. b; 2. d; 3. a; 4. c; 5. a; 6. c

Lesson 1

Safety Around Home

What You'll Do

- **Describe** three accidents that happen at home.
- **Describe** five ways to stay safe when you cycle or skate.
- **List** three ways to stay safe in a vehicle.

Terms to Learn

- accident
- smoke detector
- fire extinguisher

Start Off Write

How can you stay safe while you are skating?

Ravi's little sister leaves her toys on the stairs. Ravi always picks up after her. Ravi knows that if he didn't put the toys away, someone may trip on them. Someone could have an accident.

An **accident** is an unexpected event that may lead to injury. Falls, fires, and electrical shock are three common accidents.

Falls

Have you ever tripped and fallen? Almost everyone has. Most of the time, people aren't hurt. But falls cause many of the injuries seen in an emergency room. Some people trip over objects on the stairs. Other people fall when they use a chair instead of a ladder to reach something high. Have you ever spilled something on the floor and forgotten to wipe it up? People can slip on a wet floor and fall. You can prevent falls by doing the following things:

- Don't leave objects on the stairs or floors. Help younger children put their toys away.
- Use a ladder instead of a chair to get items that are out of reach.
- Wipe up spills right away.
- To protect small children, put safety gates in front of stairways. Watch out for other hazards, such as open windows.

Figure 1 Can you see the potential accidents in this picture? Toys on the stairs and a wet floor could cause a fall. The boy should use a ladder instead of a wheeled stool.





Figure 2 Putting smoke detectors in every room can help keep you safe.

Fires

Fires can cause burns, and inhaling smoke can injure lungs. Open flames, frayed electrical cords, and overloaded power outlets can cause fires. Some chemicals can start a fire, also.

Ask your parents to put smoke detectors in each room of your home. A **smoke detector** is a small, battery-operated alarm that detects smoke from a fire. Check your smoke detectors once a month to make sure they are working. You can also ask your parents to buy a fire extinguisher. A **fire extinguisher** is a device that releases chemicals to put out a fire.

Make an escape plan with your family in case there is a fire. You should know two ways out of the house from each room. Also, choose a place where everyone can meet outside. Your family should practice your escape plan regularly.



Putting Out Grease Fires

Never use water to put out a grease fire. Water will make the fire spread. Always use a fire extinguisher, baking soda, or salt. When in doubt, leave the building and call for help from a neighbor's home.

LIFE SKILLS ACTIVITY

PRACTICING WELLNESS

In groups, draw a picture of a home or room that has 10 accident risks. You could include things that cause falls, fires, or other accidents. Trade your

picture with other groups, and identify the risks that are in each picture. Describe how each risk can be fixed.

Hands-on **ACTIVITY**

ACCIDENTS AT HOME

1. In groups, write down five accidents that happened in your home last week. How often did each happen?
2. Make a bar graph of your results. The graph should show the kinds of accidents and how often they happen.

Analysis

1. Which type of accident is the most common? Which type is the least common?
2. What can you do to prevent the accidents you listed from happening?

Electrical Shock

Has anyone ever told you to be careful around electrical outlets? If you aren't careful, you could be shocked. *Electrical shock* is an accident in which electricity passes through the body. Electrical shock can stop a victim's heart. Also, the victim may stop breathing. Many victims have burns and internal injuries. Do the following to avoid electrical shock:

- Don't touch bare electrical wires.
- Avoid putting too many plugs into an outlet.
- Put safety covers on outlets if small children are in the home.
- Keep small appliances, such as hairdryers, away from water.



Figure 3 Safety gear keeps you safe when you skateboard.

Cycling and Skating Safety

Cycling and skating are fun. But they can also be risky. Thousands of teens are hurt each year while cycling and skating. Many of these injuries can be avoided.

Wearing your safety gear is very important. Wear a bicycle helmet every time you ride your bike. A helmet lowers your chances of a head injury. You should also use a helmet for skateboarding and in-line skating. Elbow pads, knee pads, and wrist guards also keep skaters from getting hurt.

The following can help keep you safe when you cycle or skate:

- Pay attention to traffic, and avoid busy areas.
- Follow the rules of the road.
- Wear bright clothes, and don't ride or skate after dark.
- Don't cycle or skate alone.

Vehicle Safety

Vehicle accidents are the leading cause of injury and death for children and teens. Many of these children and teens were not wearing their seat belts. Seat belts can keep you from getting hurt during an accident.

A seat belt must be worn correctly for it to help you. Younger children should use a child safety seat or booster seat. Teens and adults should use both shoulder belts and lap belts.

The safest part of a car is the back seat. People younger than 12 years old should not sit in the front seat. This statement is especially true if the car has an air bag. Air bags are meant to protect larger people. They can injure smaller people. If you have to sit in the front seat, move your seat as far back as possible. Doing so gives you more protection from injury.

The driver of a car or bus has a lot of responsibility. It is important not to distract him or her. If you're on a bus, stay in your seat. Bus rides can be very bumpy, and you could be thrown if you are standing. Know where the emergency exits are. If there is an accident, follow the bus driver's instructions.



Figure 4 If you buckle your seat belt every time you get in the car, you are less likely to get hurt during an accident.

Lesson Review

Using Vocabulary

1. What is an accident?

Understanding Concepts

2. List three common accidents.
3. What are three ways to stay safe during a fire?
4. Name four things other than wearing safety equipment that you can do to stay safe when cycling or skating.

5. What are three ways to stay safe in a vehicle?

Critical Thinking

6. **Applying Concepts** Fire extinguishers should be put in areas where fires are a risk. What are three areas in your home where you could put a fire extinguisher? Explain your answer.

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Lesson 2

Safety at School

What You'll Do

- List five causes of violence.
- List four ways to avoid violence in school.

Terms to Learn

- violence
- gang

Start Off Write

How can you avoid violence at school?

A student at Elfia's school was caught with a knife in his backpack. The student was expelled. But it was still scary. Elfia wondered why anyone would take a knife to school.

When people think of violence at school, they often think of guns or knives. **Violence** (VIE uh luhns) is using physical force to hurt someone or cause damage. The student in Elfia's school might have used the knife he brought to school to hurt someone.

Violence

Why does violence happen at school? Many things can lead to violence. The following are some examples:

- **Anger** Everyone gets angry. Most people can handle their anger. People who can't control their anger may become violent.
- **Stress** Students may be stressed by things at home or at school. Stress causes frustration. Some people take out their frustration on other people.
- **Illegal Drugs** When people use illegal drugs, they act differently. Some people want drugs so much that they will hurt other people to get drugs. Some people hurt other people while they are on drugs.
- **Prejudice** Forming an opinion about other people because they are different is called *prejudice*. Prejudice can cause some people to dislike and to try to hurt others.
- **Negative Peer Pressure** Sometimes, people are violent because they want to fit in or someone else pressured them to be violent. Some students may join a gang. A **gang** is a group of people who often use violence.



Figure 5 Uncontrolled anger can lead to violence.



Figure 6 Community service, such as a beach cleanup, can help you stay away from violent situations.

Staying Safe

You hear about school violence on the news. Maybe you have read a magazine article about school violence. What can you do to avoid violence? There are many things you can do. If you don't feel safe at school, talk to your parents or school counselor. If you know about a violent situation, tell an adult. You're protecting not only yourself but also other people. Brush up on your refusal skills, and learn conflict management skills. These skills can keep you out of a dangerous situation.

Finally, to avoid violence, find a positive way to spend your time. Joining sports teams or school clubs is a great way to avoid violence. You can also volunteer in your community. These activities can keep you out of violent situations. They also provide you with positive influences. So, you're less likely to be around violence.

LIFE SKILLS ACTIVITY

USING REFUSAL SKILLS

Make a poster showing ways to use refusal skills to avoid violence in school. You could draw cartoons or use magazine clippings to make your poster exciting.

Lesson Review

Using Vocabulary

1. Use the terms *violence* and *gang* in a sentence.

Understanding Concepts

2. What are five causes of violence?
3. List four ways to avoid violence in school.

Critical Thinking

4. **Using Refusal Skills** One of Claudia's friends wants her to join a gang. How could Claudia use her refusal skills to tell her friend that she won't join a gang?

Lesson 3

Seven Ways to Protect Yourself

What You'll Do

- List seven ways to protect yourself from accidental injury.
- Describe how the seven safety rules protect you from injury.

Start Off Write

How does knowing your limits keep you safe?

Liza's brother never seems to think about what he is doing before he does it. He is always doing crazy stunts on his skateboard. Last time he tried something, he had to go to the emergency room. He was OK. But it still worried Liza.

Accidents happen all the time. But you can avoid many of them. Liza's brother should have thought about the consequences of his actions. He might have avoided a trip to the emergency room.

Think Before You Act

Imagine that you have been invited to go swimming. Do you know how to swim? Will there be a lifeguard? Could you get hurt? These are just some of the questions you may want to ask yourself before you go swimming. Thinking about the risks of your actions will help you avoid injuries. Ask yourself if what you're going to do is dangerous. Avoid doing anything that might hurt you or another person.

Pay Attention

Take a look around you. Do you see any risky situations? Chances are, you probably do. Pay attention to what's around you. This is one of the best ways to keep from getting hurt. When you pay attention, you know about accidents that could happen. For example, there could be something in your path that could make you trip and fall. Maybe there's a fire risk. Keep your eyes open. If you stay aware, you can be safer.

Figure 7 Paying attention when crossing a busy street is important.





Figure 8 Should you try the hard slope or the easy slope? Knowing when something is too hard for you can keep you from getting hurt.

Know Your Limits

Have you ever played a sport before? If so, you may already know that there are limits to what you can do physically. Know your limits, and stay within those limits. Don't do an activity you know you aren't ready to do. You will be less likely to get hurt.

You can also have limits based on your values. If something is important to you, you probably won't do anything to put it at risk. For example, you may want to make good grades in school. Getting caught cheating could ruin your grades. So, you won't cheat to make good grades.

Practice Refusal Skills

Have you ever had a friend ask you to do something that might get you hurt? What did you do? Did you use your refusal skills? Don't be afraid to say no. It may seem hard to say no to your friends. You may be afraid of what they will think. But is doing what they want you to do worth getting hurt?

You can practice your refusal skills with your parents and friends. Make up situations that are hard to refuse. Then, think of different ways to say no. And learn how to sound like you mean it when you tell someone no. Remember that you can always walk away. Using your refusal skills in risky situations can keep you from getting hurt.

Health Journal

Write about a time when you didn't do something because you weren't ready for it.



Figure 9 Safety goggles protect your eyes during science experiments.



Use Safety Equipment

Safety equipment may not keep you from having an accident. But it can keep you from getting hurt when you do. There are many different kinds of safety equipment. Rubber gloves protect your hands from dangerous chemicals. Goggles protect your eyes. You can avoid burns by using potholders to pick up hot pans.

Safety equipment is very important for sports and outdoor activities. Be sure to use the right safety equipment for your activity. Don't ride your bike without wearing a helmet. Wear a helmet, elbow pads, and knee pads when you go skating. Wear a life jacket when you go boating. When you use safety equipment, you can avoid getting hurt.

Change Risky Behavior

Do you sometimes forget to close cabinet doors? Do you ride in a car without using your seat belt? These habits are examples of risky behavior. Risky behavior can lead to an accident. If you want to stay safe, try to change your risky behaviors. Ask your family or your friends to help you identify your risky behaviors. Then, the next time you catch yourself doing something risky, you can remind yourself to stop.

Maybe a friend or someone in your family has a risky behavior. Let him or her know about it. Together, you can work on changing risky behavior.

Myth & Fact

Myth: It's OK to ride your bike without a helmet if you're going only a few blocks.

Fact: For teens and children, many cycling injuries happen within a few blocks of home. In fact, many of those accidents happen when cyclists are leaving their own driveways. You should always wear your helmet when cycling.

Change Risky Situations

Maybe you've changed your risky behavior. But there may still be risky situations. Take a look around you. Do you see anything that may cause an accident? For example, you may see an overloaded outlet, which could cause a fire. Or you may see a spill on the floor, which could cause a fall. So, what can you do about these risky situations? You can change them! Tell an adult about the danger. Or if you won't get hurt, you can change the risky situation yourself. For example, you can wipe up that spill.

If you see a risky situation outside your home, let your parents know. Even if you can't fix it, letting someone know about a risky situation helps. You may keep someone from having an accident.



Figure 10 Taking an active part in preventing accidents is one way to avoid injuries.

Lesson Review

Understanding Concepts

1. What are seven ways to avoid injury?
2. List three examples of risky behaviors other than those listed in the text.

3. How are risky behaviors and risky situations different?

Critical Thinking

4. **Making Inferences** You have been asked to go to a party at a friend's house. What are some risks you may think about before you go?

Lesson 4

Safety in the Water

Horatio's mom makes Horatio wear a life jacket when they go boating. He doesn't like to wear it. But he knows it may save his life.

What You'll Do

- **Explain** why you should wear a life jacket while boating.
- **List** seven ways to stay safe while swimming.
- **Describe** diving safety.
- **List** four ways to avoid drowning.
- **Explain** how you can rescue someone who is drowning.
- **Describe** the water survival float.

Terms to Learn

- life jacket

Start Off Write

Why shouldn't you jump in the water to save someone who is drowning?

A **life jacket** is a vest that keeps you floating in the water. Horatio wears his life jacket in case there is an accident while he is boating. A life jacket will keep Horatio's head above water so he can breathe.

Boating Safely

Have you ever gone rafting or canoeing? Or do you know someone who has a motor boat? Boating can be a lot of fun. But it can also be risky. You should wear a life jacket when you're boating. In fact, many states have laws about life jackets. These states often require that everyone in a boat has a life jacket. The following can also make boating safe and fun.

- Always go with an experienced person.
- Don't stand in a boat. The boat might tip over, or you may fall out.
- Avoid boating in bad weather.
- Avoid rough water unless you know how to handle it. If you're white-water rafting, wear a helmet to protect your head.



Figure 11 Life jackets can keep you safe when you're boating.



Figure 12 There are many different kinds of warning signs near water. To stay safe, be sure to follow them.

Swimming Safely

Swimming is a great way to cool down on a hot day. It is also great exercise. But it is important to stay safe when you go swimming. Keep the following tips in mind the next time you go swimming:

- Learn how to swim.
- Don't swim alone.
- Obey posted safety warnings. Signs around swimming areas let you know about safety risks.
- Swim in designated areas. Avoid areas that don't have a life-guard on duty.
- Watch out for boats. Boaters often can't see swimmers.
- Don't swim away from shore. Swim parallel to shore. That way you can get back to shore if you get tired.
- Avoid swimming in rough water and in bad weather.

Diving Safely

Have you ever dived into a pool? Diving can be a lot of fun. It can also be dangerous if you don't do it right. If you are going to dive, make sure that you know how deep the water is. Diving into shallow water is dangerous. You may hit your head or hurt your neck. If you don't know how deep the water is, you should slowly get in feet first. After you know the water is deep enough, you can jump or dive safely.

**LIFE SKILLS
ACTIVITY**

COMMUNICATING EFFECTIVELY

Imagine you are a radio announcer. In groups, create a public service announcement (PSA) that promotes safe swimming and diving. Perform your PSA for the class.



Figure 13 Taking a swim class can help you avoid drowning.

Avoid Drowning

Thousands of people drown each year. Drowning is an accident you can avoid. Swimming alone, improper diving, and horseplay increase your chances of drowning. Changing these behaviors can keep you safe. Obeying warning signs and wearing a life jacket can also keep you safe in the water. You should swim in areas that have a lifeguard on duty. Lifeguards are trained to save you.

Saving a Drowning Person

Sometimes a lifeguard isn't around to help. You may have to help someone who is in trouble. If you see someone drowning, yell or call for help first. Try to find an adult. If you can't get help right away, try to rescue the victim from shore or the side of the pool. Use a pole or another long object to reach the person. You can also throw a life preserver to the victim.

You should never get into the water to save someone unless you have been trained to do so. Rescuing a drowning person can be dangerous. A drowning person will panic and may drag the rescuer under water. Even strong swimmers are at risk when they try to save a drowning person. Once the drowning person is out of the water, he or she may need medical care. Call for help right away.

Brain Food



Drowning is second only to car accidents for accidental death in children under 15 years old. More than 4,000 people drown each year. Of those, more than one-third were less than 14 years old.

Water Survival

Have you ever been scared while swimming? Did the water seem too deep? Or did you feel tired? If you are ever in such a situation again, don't panic. Staying calm is the most important thing you can do in the water. If you are having trouble, yell or wave your hands to get help. While you're waiting for help, use the water survival float shown in the figure below to stay afloat.

Figure 14 Water Survival Float



1 Inhale deeply, and hold your breath. Lie face down in the water, and relax your body. Let arms and legs dangle below your body. Move as little as possible while you float. Staying still keeps you from using up your oxygen. Rest in this position until you need to breathe.



2 Gently bring your arms up, and slowly push down against the water. Meanwhile, gently kick your legs like you're riding a bicycle. Extend your body, and bring your head above water to breathe. After you take a breath, resume the resting position until you need to breathe again.

Lesson Review

Using Vocabulary

1. What is a life jacket?

Understanding Concepts

2. What are seven ways to stay safe while swimming?
3. Describe safe diving.
4. What are four ways to avoid drowning?

5. How can you rescue someone who is drowning?
6. Describe the water survival float.

Critical Thinking

7. **Making Good Decisions** Imagine you see a person drowning in a pool. There's no lifeguard. What should you do?

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Lesson 5

Weather Emergencies and Natural Disasters

What You'll Do

- List three ways to learn of weather emergencies.
- Describe five events that can result in natural disasters.

Terms to Learn

- natural disaster
- thunderstorm
- tornado
- hurricane
- flood
- earthquake

Start Off Write

Why shouldn't you take shelter under a tree during a thunderstorm?

Natalia's parents woke her up in the middle of the night once. A storm warning was on the radio. Natalia and her family spent the rest of the night in the basement. That night was frightening.

Natalia's family stayed in the basement to be safer from the storm. Storms that cause a lot of damage are natural disasters. A **natural disaster** is a natural event that causes widespread injury, death, and property damage. Most storms don't become natural disasters.

Recognizing Weather Emergencies

Bad weather can be dangerous. How will you know when the weather has become dangerous? Turn on the radio or TV. Your local radio and TV stations will let you know if a storm has gotten worse. Radio and TV stations will use the Emergency Alert System (EAS) to warn people. During a storm or an emergency, the EAS sends a tone through your TV or radio. The tone is followed by instructions about how you can stay safe. Some communities use emergency sirens or fire-station sirens to let people know about weather emergencies. Storms cause power outages. Have a battery-operated radio in case the power goes out. Then, you can find out about how to stay safe in bad weather.

Figure 15 While it may look beautiful, lightning is very dangerous.



Thunderstorms

Have you ever been scared by a thunderstorm? **Thunderstorms** are heavy rainstorms that have strong winds, lightning, and thunder. Thunderstorms happen when warm, moist air rises quickly. Tall, dark clouds form as the air cools. Within these clouds, electrical energy begins to gather. But the cloud can hold only a certain amount of electrical energy. The cloud releases the excess electrical energy as lightning. Lightning transfers the energy to the air. The air expands and sends out sound waves. These sound waves are called *thunder*.

Lightning is one of the most dangerous parts of a thunderstorm. Lightning is attracted to tall objects. If you are outside, stay away from trees. Lightning may strike the tree you are hiding under and knock it down. If you are in an open field, lie down. Otherwise, you're the tallest object in the area! You should also stay away from bodies of water. If lightning hits water while you are in it, you could be hurt or die.

Tornadoes

A tornado happens in about 1 percent of thunderstorms. A **tornado** is a spinning column of air that has high wind speed and touches the ground. Some tornadoes are strong enough to pick up trees, cars, or houses.

Because of advances in weather forecasting, knowing about tornadoes before they happen is usually possible. Weather forecasters use watches and warnings to let people know about tornadoes. A *watch* is a weather alert that lets people know that a tornado may happen. A *warning* is a weather alert that lets people know that a tornado has been spotted. Thunderstorms also have watches and warnings.

If there is a tornado warning for your area, find shelter. The best place to go is a basement or cellar. If you don't have a basement or cellar, go to a windowless room, such as a closet, in the center of the building. If you are caught outside, try to find shelter indoors. Otherwise, lie down in a large, open field or a deep ditch.

MATH
ACTIVITY

Almost 75 percent of the world's tornadoes happen in the United States. If 1,250 tornadoes happen worldwide each year, how many happen in the United States?

Figure 16 Many tornadoes are smaller than the one in this picture. Tornadoes can cause a lot of damage.



Figure 17 The people in this picture are preparing for a hurricane. The wooden boards help protect their windows from the high winds of a hurricane.



Hurricanes

Hurricanes form over warm, tropical areas of the ocean. A **hurricane** is a large, spinning tropical weather system that has wind speeds of at least 74 miles per hour. Hurricanes can last several days. Wind speeds of most hurricanes reach 74 to 93 miles per hour. Some wind speeds reach about 190 miles per hour. Hurricanes can also produce major rains and heavy surf.

If there is a hurricane, the weather service will give a warning. Sometimes, people living on the shore are asked to move inland to wait out the storm.

Floods

Some storms produce a lot of rain. Other storms cause hail and snow that melt into water. Where does all of this water go? Sometimes, an area gets so much rain that it begins to flood. A **flood** is an overflowing of water into areas that are normally dry. Floods tend to happen near rivers or creeks. Flooding also happens around lakes and the ocean. For example, hurricanes can cause large waves that flood the coast.

Like thunderstorms and tornadoes, floods also have watches and warnings. In areas where flooding is common, there is often plenty of warning about floods. However, sometimes there isn't much warning. A *flash flood* is a flood that rises and falls with very little warning. Flash floods are often caused by very heavy rainfall in a short amount of time or by the failure of a dam.

The best thing to do during a flood is to find a high place to wait out the flood. Stay out of floodwaters. Even shallow water can be dangerous if it is fast moving. Some floodwater moves so quickly that it can pick up cars.

STUDY TIP

for better reading

Reviewing Information

Flashcards are a great way to help you learn new material. On one side of an index card, write the name of a type of natural disaster. On the other side, define the natural disaster. You can carry your cards with you and use them to review natural disasters when you have a break.



Figure 18 This damage was caused by an earthquake in California.

Earthquakes

What's that shaking? It could be an earthquake! An **earthquake** is a shaking of the Earth's surface caused by movement along a break in the Earth's crust. Earthquakes last only a few seconds, but they can cause a lot of damage. Earthquakes can damage buildings and other structures. You may lose electricity and water. They can also cause landslides.

If you are inside during an earthquake, kneel or lie face down under a heavy table or desk. Stay away from windows, and cover your head. If you are outside, find an open area. Avoid buildings, power lines, and trees. Lie down, and cover your head. If you are in a car, have the driver stop the car in an open area. Stay inside the car until the earthquake is over.

Health Journal

Describe a time when you were caught in severe weather or a natural disaster.



Lesson Review

Using Vocabulary

1. List and describe five events that may cause a natural disaster.

Understanding Concepts

2. What are three ways to learn about a weather emergency?
3. What is the difference between a watch and a warning?

Critical Thinking

4. **Making Inferences** One way to protect yourself after an earthquake is to keep an emergency kit. If an earthquake caused power and water outages, injuries, and road damage, what would you need in your emergency kit?

Lesson 6

Dealing with Emergencies

Hannah's older brother just finished a special class. He learned how to take care of people who have been hurt in an accident.

What You'll Do

- **Describe** when you should give first aid.
- **List** five things you should tell an operator during an emergency phone call.

Terms to Learn

- first aid

Start Off Write

What information should you give during an emergency phone call?

Hannah's brother was learning how to give first aid. **First aid** is emergency medical care for someone who has been hurt or who is sick. First aid is given to someone until professional medical care is possible. First aid is used to save someone's life. It is also used to care for minor injuries.

When to Give First Aid

When should you give first aid? Someone who is unconscious, not breathing, or in pain needs first aid. But before you give first aid, you need to learn the right way to do it. You can take a first-aid class to learn how to care for someone who is hurt. You should not give first aid unless you have taken a first-aid class. If you give first aid incorrectly, you may hurt the victim more.

Don't give first aid if you are in danger. For example, if a victim is in a burning house, you should not go inside the house. Make sure that whatever caused the victim's accident won't also hurt you. Then, call for help right away. When you find someone who is hurt, check the area around the victim. You can also look for clues about what happened. The figure below lists some of the things you should check before giving first aid.

Figure 19 The rescuer in this photo is checking to see if the victim is breathing.

Things to Look For

- ▶ Is the victim conscious?
- ▶ Are there any obvious injuries?
- ▶ Is the victim breathing?
- ▶ Does the victim have a pulse?
- ▶ Are there any bottles or boxes which indicate poisoning?
- ▶ Does the victim have any preexisting health problems?



Making Emergency Phone Calls

If you see an emergency, call for help. In most areas, you can call 911. If your community doesn't use 911, be sure you know the local emergency numbers. In fact, many people keep an emergency phone number list next to the phone. Most emergency phone number lists include the police department, the fire department, and poison control. Also, a list can include numbers for your parents at work, your doctor, your neighbors, and other people in your family.

Stay calm when making an emergency phone call. When you call for help, you will need to give the following information:

- your name
- your location
- the type of emergency
- the condition of the victim if someone is hurt
- what you have done to care for a victim

If you call for help, don't hang up right away. The operator may have more questions for you. The operator can also help you through the emergency.

Your safety always comes first. Get away from danger before you call for help. If you are by yourself and you find someone who is hurt, call for help before giving first aid. If you are with someone else, one person should stay with the victim while the other calls for help.



Figure 20 Making an emergency phone call can save someone's life.

Health Journal

In your Health Journal, create an emergency phone number list for your family.



Lesson Review

Using Vocabulary

1. What is first aid?

Understanding Concepts

2. What are five things you need to tell an operator when you make an emergency phone call?

Critical Thinking

3. **Making Good Decisions** Imagine that you see a house on fire. You know that someone lives in the house. What should you do?

Lesson 7

Giving First Aid

You may have wondered why some restaurants have posters about choking. These posters show people how to give abdominal thrusts to a choking person.

An **abdominal thrust** (ab DAHM uh nuhl THRUHST) is the process of applying pressure to a choking person's stomach to force an object out of the throat. An abdominal thrust pushes air out of the lungs. This air dislodges the object that is choking the victim.

Giving Abdominal Thrusts

Before you give abdominal thrusts, you need to make sure that the victim is choking. A victim who can speak or cough can still breathe. Don't give abdominal thrusts if a person can still breathe. Keep the victim calm. Let him or her cough until the object comes loose or help arrives. A person who needs abdominal thrusts cannot speak or breathe. He or she will probably hold his or her throat.

Before you give abdominal thrusts, call for help. If the victim is an adult, stand behind the victim. Place the thumb side of your fist against the victim's stomach. Your fist should be between the victim's belly button and breastbone. Cover your fist with your other hand. Quickly thrust inward and upward on the victim's stomach. Thrust five times in a row or until the object comes loose.

What You'll Do

- Explain how to give abdominal thrusts to an adult.
- Describe rescue breathing.
- Describe how to treat a victim of poisoning.
- Describe how to treat wounds.
- Compare the three types of burns.

Terms to Learn

- abdominal thrust
- rescue breathing

Start Off Write

How can you help someone who is choking?

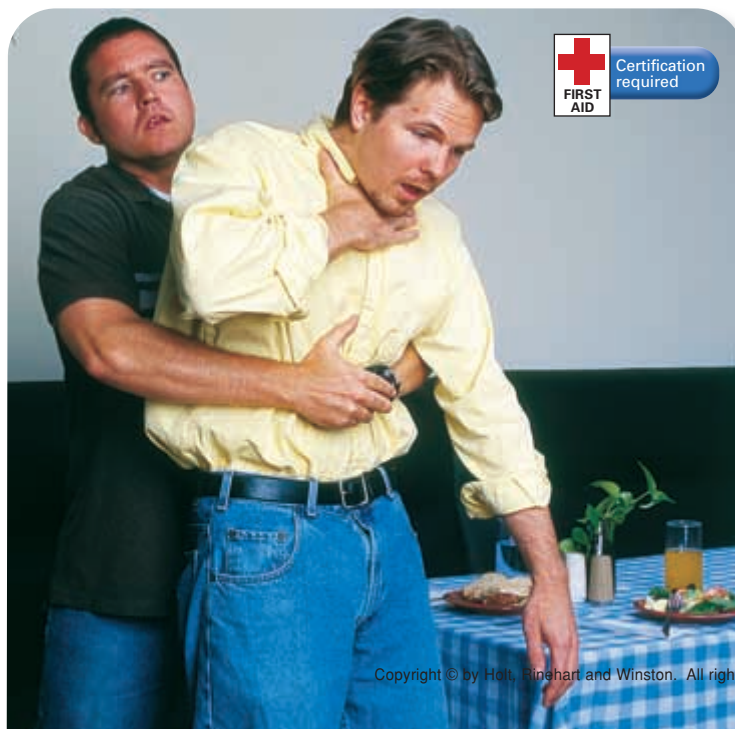


Figure 21 Learning how to give abdominal thrusts can help you save a choking person's life.



1

First, open the victim's airway. Push down on the forehead, and gently lift the chin up to tilt the victim's head back. Clear any objects out of the victim's mouth. Look at the victim's chest for movement, listen for sounds of breathing, and feel for breath on your cheek.



2


If the person is not breathing, give two slow rescue breaths. With your mouth, make a tight seal around the victim's mouth. Pinch the victim's nose shut. Breathe out, into the victim's mouth. Look to see if the victim's chest is moving up and down while you breathe.

Giving Rescue Breathing

Sometimes, accident victims stop breathing on their own. One way to save someone who isn't breathing is to give rescue breathing. **Rescue breathing** is an emergency technique in which a rescuer gives air to someone who is not breathing. You should not give rescue breathing unless you have been trained in it.

Before giving rescue breathing, call for help. Don't move the victim unless you are sure it is safe to do so. Lay the victim on his or her back. The victim should be on the ground or a hard, flat surface. Start rescue breathing by opening the victim's airway. Tilt the victim's head back, and lift his or her chin. Clear any objects out of the victim's mouth. Look, listen, and feel for breathing. If the victim is not breathing, pinch his or her nose shut. Put your mouth over the victim's mouth. Give two, slow full breaths into the victim's mouth. Watch to make sure the victim's chest is rising. If not, the victim has something stuck in his or her airway. Give abdominal thrusts, or wait until more help arrives. Continue rescue breathing until the victim starts breathing again or help arrives.

Rescue breathing for small children and infants is similar to rescue breathing for adults. However, you should place your mouth over the child's nose as well as his or her mouth. And give infants smaller, faster breaths.



Brain Food

Some diseases are spread by saliva. When you give rescue breathing to a victim, you can use a breathing mask to protect you from disease.



Figure 23 Many common household products can cause poisoning.

Caring for Victims of Poisoning

Many things around your home can cause poisoning. Cleaning products, pesticides, and car fluids are just a few of these things. Some medicines cause poisoning if too much is taken. If you find someone who has been poisoned, ask the victim what he or she ate. If the victim isn't awake, check out the area around the victim. Look for clues about the poison. Is there a bottle or box nearby? Is there a smell that you recognize? You can also look at the victim for clues. Call 911. Then, call your local poison control center for help. An operator will ask you questions and tell you what to do.

Treating Wounds

Have you ever scraped your knee? Or have you ever cut your hand? Scrapes and cuts are usually easy to treat. Some scrapes and cuts can be very serious. Deep cuts can be life threatening.

When you help someone treat a cut, wear sterile gloves. Doing so keeps the injury clean. It also protects you from disease. Then, you should try to stop the bleeding. Cover the injury with gauze. Do not remove the gauze. Add more gauze as you need it. Use your hands to put pressure on the cut. This slows down the flow of blood from the cut. Remember that cuts on your head and hands may bleed a lot even if the cut is not large. You can also elevate the injured area. But don't elevate it if doing so makes the injury worse. If bleeding doesn't slow down or stop within a few minutes, call for help. For deep cuts, go to the emergency room even if bleeding has stopped. The cut may need stitches. The table below describes how to take care of cuts and scrapes.

WARNING!

Treatment for Bleeding

When treating someone who is bleeding, you should use sterile gloves to prevent the spread of disease.

TABLE 1 Treating Cuts, Scrapes, and Deep Wounds

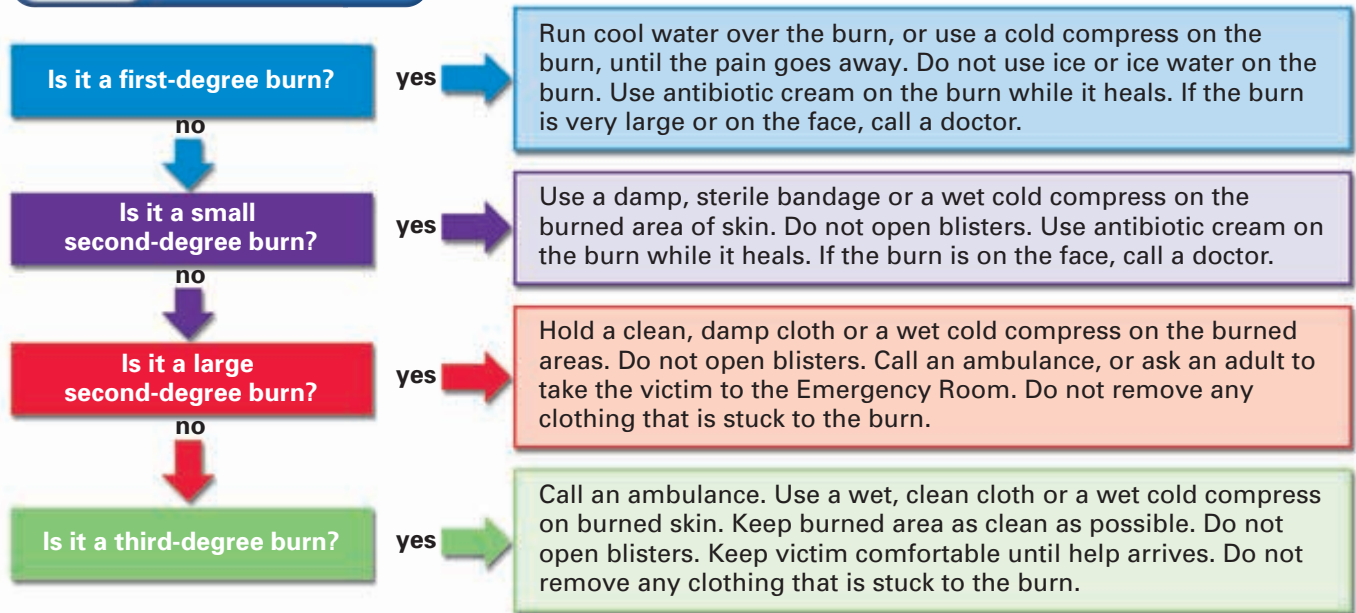
Ask yourself . . .	If your answer is yes, then you should . . .
Is the scrape or cut minor?	Clean the cut with mild soap and water. Put some antibacterial cream on the cut or scrape. Cover the cut or scrape with a bandage.
Is the cut deep?	Cover the cut with clean gauze. Apply pressure to the cut. Continue to apply pressure until the bleeding stops. If the bleeding doesn't stop quickly, call for help. If the cut is very deep, go to the emergency room. You may need stitches.
Is there a lot of bleeding?	Call for help. Cover the wound with gauze. Apply pressure until help arrives. Add more pieces of gauze if the bleeding continues. Don't lift the gauze from the cut. Raise the injured area to help stop the bleeding.

Treating Burns

Open flames, hot water or objects, chemicals, and the sun all cause burns. The three kinds of burns are as follows:

- A *first-degree burn* is red, mild, and not very deep. For example, a mild sunburn is usually a first-degree burn.
- *Second-degree burns* are deeper than first-degree burns. They cause blisters and are very painful.
- *Third-degree burns* are dark in color and deeper than second-degree burns. These burns destroy pain receptors, so these burns usually aren't as painful as second-degree burns.

Figure 24 Caring for Burns



Lesson Review

Using Vocabulary

1. What is an abdominal thrust?

Understanding Concepts

2. How should you take care of a victim of poisoning?
3. What are the three types of burns?
4. How do you care for deep cuts?

Critical Thinking

5. **Making Good Decisions** Imagine that you found someone unconscious on the floor. The victim doesn't have any visible injuries. You notice a funny smell in the air. What should you do?

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www.scilinks.org/health
Topic: **First Aid**
HealthLinks code: **HD4042**

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Chapter Summary

■ An accident is an unexpected event that may lead to injury. ■ Violence is using physical force to hurt someone or cause damage. ■ Use a pole or life preserver to save someone who is drowning. ■ Examples of weather emergencies and natural disasters are thunderstorms, tornadoes, hurricanes, floods, and earthquakes. ■ First aid is emergency medical care for someone who is hurt or sick. ■ Do not give first aid if you are in danger or are not trained. ■ An abdominal thrust is the process of applying pressure to a choking person's stomach to force an object out of the throat. ■ Rescue breathing is an emergency technique in which air is given to someone who is not breathing.

Using Vocabulary

For each pair of terms, describe how the meanings of the terms differ.

- 1 smoke detector/fire extinguisher
- 2 abdominal thrust/rescue breathing

For each sentence, fill in the blank with the proper word from the word bank provided below.

thunderstorm	earthquake
first aid	natural disaster
flood	violence
tornado	hurricane
accident	

- 3 An overflowing of water into areas that are normally dry is called a(n) ____.
- 4 A(n) ____ is an unexpected event that may cause injury.
- 5 A(n) ____ is a shaking of the Earth's surface.
- 6 A spinning column of air that has high winds and touches the ground is a(n) ____.
- 7 Using physical force to hurt someone or cause damage is called ____.

- 8 A(n) ____ is a natural event that causes widespread damage.
- 9 ____ is emergency medical care for someone who is hurt or sick.

Understanding Concepts

- 10 How can you prevent falls, fires, and electrical shock?
- 11 List five ways to stay safe while skating.
- 12 How can you avoid violence?
- 13 List the seven ways to stay safe from injury.
- 14 What are five ways to stay safe while boating?
- 15 Describe the water survival float.
- 16 Why should you get into water feet first if you don't know how deep it is?
- 17 When should you give first aid?
- 18 What five things do you need to tell a 911 operator during an emergency?
- 19 Describe abdominal thrusts and rescue breathing.

Critical Thinking

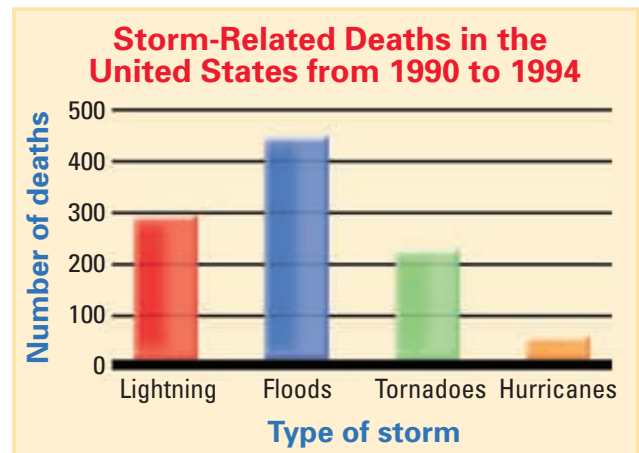
Applying Concepts

- 20 Smoke detectors should be installed in every room of your home. You should also check smoke detectors once a month to make sure they are still working. Why is it so important to take these two steps?
- 21 In the last 50 years, the number of people killed during weather emergencies has gotten smaller. What could explain this trend?
- 22 During the water survival float, a swimmer doesn't move much. In fact, the less a swimmer moves, the better. Why is it so important to keep movement to a minimum during the water survival float?
- 23 When you give rescue breathing to a small child or infant, you should put your mouth over the victim's mouth and nose. Why don't you cover only the victim's mouth?

Making Good Decisions

- 24 Lauren doesn't feel safe. A gang has been giving her a hard time. Most of the time, she can avoid the gang, but sometimes doing so is pretty hard. What should Lauren do to stay safe?
- 25 Pablo learned to skate a few weeks ago. He's been having a good time, and he's learned a lot. Now, his friends want him to try some tricks that he hasn't learned yet. What should Pablo do?
- 26 Tony is eating at a restaurant. Someone at the next table starts choking. The person is coughing and pointing to his throat. What should Tony do?

Interpreting Graphics



Use the figure above to answer questions 27–31.

- 27 Which weather emergency causes the most deaths? Which causes the least?
- 28 How many people were killed by tornadoes? by floods?
- 29 If lightning killed 3,200 people in 1940, how many fewer people were killed between 1990 and 1994?
- 30 What could explain why floods kill more people than other types of storms do?
- 31 Fewer people died in tornadoes between 1990 and 1994 than died in tornadoes in 1940. What could explain this?

Reading Checkup

Take a minute to review your answers to the Health IQ questions at the beginning of this chapter. How has reading this chapter improved your Health IQ?

Using Refusal Skills

Using refusal skills is saying no to things you don't want to do. You can also use refusal skills to avoid dangerous situations. Complete the following activity to develop your refusal skills.

Rajesh's Refusal



Setting the Scene

Rajesh and his family are camping in a state park. One afternoon, Rajesh goes to swim in the lake that borders the park. At the lake, he meets a group of teens. A teen named Kyle suggests jumping off steep rocks into the water. All of the other teens want to try, but Rajesh doesn't think it is a good idea. Kyle and the other teens start calling Rajesh a chicken.



The 5 Steps of Using Refusal Skills

1. Avoid dangerous situations.
2. Say "No."
3. Stand your ground.
4. Stay focused on the issue.
5. Walk away.

Guided Practice

Practice with a Friend

Form a group of three. Have one person play the role of Rajesh and another person play the role of Kyle. Have the third person be an observer. Walking through each of the five steps of using refusal skills, role-play Rajesh responding to Kyle. Kyle should try to convince Rajesh to jump from the rocks. The observer will take notes, which will include observations about what the person playing Rajesh did well and suggestions of ways to improve. Stop after each step to evaluate the process.

