

Tobacco



America

BE HEALTHY

DON'T

SMOKE!!!!

SMOKING

DON'T

GET
THE
FACTS
BEFORE
THEY
KILL
YOU

Chapter Preview

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▲ Working with the Photo

Most teens do not smoke. **If you were offered tobacco, what would you say?**

Start-Up Activities



Before You Read

What do you already know about the effects of tobacco? Take the short quiz below. Keep a record of your answers.

HEALTH QUIZ Answer *True* or *False* for each of the following:

1. Secondhand smoke is not harmful.
2. Nicotine is a drug found in cigarettes.
3. If you have a habit of using tobacco, you can easily give it up.
4. Smokeless tobacco, or spit tobacco, is not as bad as cigarettes.
5. Cigarette smoke contains some of the same chemicals found in rat poison.

ANSWERS: 1. False; 2. True; 3. False; 4. False; 5. True

FOLDABLES®

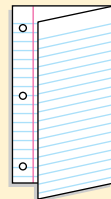
Study Organizer



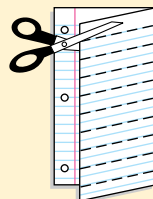
As You Read

Follow the steps below to make this Foldable®. Use it to record what you learn in Lesson 1 about tobacco's effects on the respiratory system. Begin with a sheet of notebook paper.

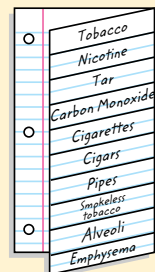
- 1** Fold a sheet of paper in half so its long edges meet.



- 2** Cut a slit along every third line on the top sheet. Your Foldable™ now has 10 tabs.



- 3** Label the tabs as shown.



Define key terms and record facts about tobacco's effects on the body.

Go Online



Visit glencoe.com and complete the Chapter 8 crossword puzzle.

Lesson 1

How Tobacco Affects the Body

Guide to Reading

Building Vocabulary

As you read this lesson, write each term and its definition in your notebook.

- nicotine (p. 230)
- tar (p. 231)
- carbon monoxide (p. 231)
- alveoli (p. 234)
- emphysema (p. 234)

Focusing on the Main Ideas

In this lesson you will be able to

- **identify** the harmful ingredients in tobacco smoke.
- **describe** how tobacco affects the body.
- **apply** the skill of advocacy to encourage someone to be tobacco free.

Reading Strategy

Predicting Look over the headings in this lesson. Then write a question that you think the lesson will answer. After reading, check to see if your question was answered.

FOLDABLES Study Organizer Use the Foldable® on p. 229 as you read this lesson.

Quick Write

Write a few sentences to explain why you think tobacco use might be harmful.

Facts About Tobacco

A single puff of tobacco smoke contains more than 4,000 harmful chemicals! Most of those chemicals hurt your body's ability to work properly. Several of them can cause cancer in people who smoke. In the United States, more than 400,000 people die every year from smoking-related illnesses. Even if you aren't the one using tobacco, tobacco smoke can still be harmful.

What Is in Tobacco?

Natural tobacco contains harmful substances that are released when a person smokes or chews it. Tobacco companies add more harmful ingredients when they prepare tobacco to be sold. Some of the same ingredients you would find in cleaning products or pest poisons are added to tobacco products. Deciding not to take poisons into your body is a healthful decision.

Nicotine

One harmful substance found in tobacco is called nicotine. **Nicotine** is an addictive, or habit-forming, drug found in tobacco. Once you are addicted to nicotine, your body has a strong need, or craving, for it. As a result, you want to smoke again and again.

A person can become addicted to nicotine very quickly. Nicotine has other effects, too. It makes your heart beat faster and raises your blood pressure. It causes dizziness and an upset stomach and reduces the amount of oxygen your blood carries to the brain.

Tar

When tobacco burns, it produces tar. **Tar** is a thick, dark liquid that forms when tobacco burns. Tar coats the airways and the linings of the lungs. Lungs coated with tar can become diseased.

Carbon Monoxide

Tobacco smoke contains another substance called carbon monoxide. **Carbon monoxide** is a colorless, odorless, poisonous gas produced when tobacco burns. When carbon monoxide enters the body, it damages the brain and the heart by reducing the amount of oxygen available to these organs. Too much carbon monoxide can kill you.

Other Deadly Substances

Tobacco smoke and smokeless tobacco contain even more dangerous chemicals. For example, cyanide is a deadly poison. It is a common ingredient in pest-control products. Formaldehyde is a burning, stinging gas that is used as a preservative in the laboratory and also causes nasal cancer. Methyl ethyl ketone is used in solvents and harms the central nervous system. Polonium 210, an element known to cause cancer, is found in some tobacco products. These are only a few of the thousands of harmful ingredients contained in cigarettes and other forms of tobacco.



Reading Check

Describe What is the main harmful effect of nicotine?



◀ Tobacco products contain many harmful substances. Using tobacco puts people at risk for lung cancer and other health problems.

Name three harmful substances found in tobacco.

Pathologist



A pathologist is a medical specialist who examines samples of body tissues, cells, and organs in order to find and study diseases. There will always be a need for pathologists because our population is growing and living longer than ever before. In order to prepare for a career as a pathologist, you should take a variety of science classes, including biology and anatomy.

What are the branches of pathology? Go to Career Corner at glencoe.com to find out.

- ▼ Tobacco contains many of the chemicals found in poisonous household products. **How can these chemicals damage your health?**



Forms of Tobacco

Tobacco companies harvest leaves from tobacco plants. They dry the leaves and prepare them for people to smoke or to chew. Tobacco products come in different forms. The most common ones are cigarettes, cigars, pipe tobacco, smokeless tobacco, clove cigarettes, and flavored tobacco.

Cigarettes

Cigarettes contain shredded tobacco leaves. They may also have filters. Tobacco companies claim that filters block some of the harmful chemicals found in cigarettes. However, filters do not remove enough chemicals to make cigarettes less dangerous. There is no such thing as a safe cigarette. Even if a tobacco user does not inhale the smoke, the smoke still can affect the person's health.

People can buy flavored cigarettes, which may taste and smell sweet. However, they have even more chemicals than regular cigarettes. Some people smoke clove cigarettes, which contain tobacco and ground spices called cloves. Others smoke flavored tobacco placed in water pipes called hookahs. Clove cigarettes and flavored tobacco are just as harmful as regular cigarettes because they contain the same substances that damage the body.

Cigars and Pipes

Cigars and pipes also contain shredded tobacco leaves. Cigar smoke contains up to 90 times more of the cancer-causing chemicals found in cigarette smoke. People who smoke cigars or pipes are more likely to develop mouth, tongue, or lip cancer than people who don't smoke.

Smokeless Tobacco

Smokeless tobacco comes in two forms: chewing tobacco and snuff. People often call chewing tobacco "dip" or "spit tobacco." Snuff tobacco can either be sniffed or chewed. Chemicals in chewing tobacco and snuff do not pass into the lungs. They are held in the mouth rather than inhaled as smoke. Nicotine is absorbed into the tissues and the bloodstream through the digestive tract.

Smokeless tobacco contains the same chemicals as cigarettes. Nicotine in smokeless tobacco has the same effects as nicotine in cigarettes. So smokeless tobacco is just as harmful and addictive as cigarettes.



Reading Check

Name List two common forms of tobacco besides cigarettes.

Tobacco Affects Body Systems






When you smoke, your skin, breath, hair, and clothes smell like smoke. Tobacco use affects the senses of smell and taste. As a result, food doesn't smell or taste the same.

Tobacco use also has serious consequences. It is a risk factor that can cause diseases and other health problems. You have already learned that nicotine raises the heart rate and blood pressure. Smokers can't run as long or as fast as they did before they started smoking. They also get sick more often and tend to stay sick longer. Smoking tobacco can cause diseases in your mouth and lungs. It also affects your entire body. In fact, tobacco use damages each of the five main body systems. **Figure 8.1** lists some of the effects of tobacco on your body systems. Many of these problems and illnesses can be prevented if a person chooses the positive health behavior of staying tobacco free.

FIGURE 8.1

TOBACCO'S EFFECTS ON BODY SYSTEMS

Using tobacco harms many body systems, causing many health problems. **What does tobacco use do to the nervous system?**

Respiratory System	Digestive System	Nervous System	Excretory System	Circulatory System
				
Tobacco smoke damages the air sacs in the lungs. This damage can lead to a life-threatening disease that destroys these air sacs. Smokers are also between 12 and 22 times more likely than nonsmokers to develop lung cancer.	All forms of tobacco increase the risk of cavities and gum disease. Tobacco dulls the taste buds and can cause stomach ulcers. Tobacco use is linked to cancers of the mouth, throat, stomach, esophagus, and pancreas.	Tobacco use reduces the flow of oxygen to the brain, which can lead to a stroke.	Smokers have at least twice the risk of developing bladder cancer as nonsmokers. Smokeless tobacco can also put users at risk of developing bladder cancer.	Tobacco use is linked to heart disease. It increases the chances of a heart attack. Smoking also raises blood pressure and heart rate.



Health Skills Activity

Advocacy

Convincing Others Not to Smoke

Molly and her dad decided to spend their Saturday shopping at the mall. They took a break for lunch at the food court. During lunch, Molly tells her dad that she would like to help her aunt Kate quit smoking. Aunt Kate is Molly's favorite aunt, and Molly is concerned for her health. Molly's dad suggests that Molly have a talk with her aunt to influence her to make the healthful choice to quit smoking.

What Would You Do?

What would you say to Aunt Kate if you were in Molly's situation? Write a few sentences about what you would say. Use the following steps to help you:

- Have a clear, health-focused stand.
- Be ready to support your position with information.
- Remember your audience.
- Urge others to make healthful choices.

Respiratory System

Breathing in tobacco smoke affects your respiratory system. Tobacco smoke damages the **alveoli** (al·VEE·oh·lye), *the tiny air sacs in the lungs*. When this happens, your lungs are less able to supply oxygen to your body. In fact, damage to the alveoli can cause **emphysema**, *a disease that results in the destruction of the alveoli in the lungs*. When this disease affects a large part of the lungs, it can cause death.

Digestive System

Smoking can damage your digestive system. It can lead to mouth and stomach ulcers, which are painful, open sores. Smoking also harms teeth and gums, causing teeth to yellow and making it more likely that you will get cavities and gum disease.

Nervous System

Your brain needs oxygen. Tobacco smoke contains carbon monoxide, which can cut down the amount of oxygen that the blood can carry to the brain. Nicotine reaches the brain in only a few seconds and attaches to special receptors in brain cells. The brain **adapts** to nicotine by increasing the number of nicotine receptors. This causes tobacco users to need more tobacco.

Academic Vocabulary

adapts (uh DAPTS) (*verb*)
adjusts; to get used to new conditions. *Brandon adapts to his new school by being friendly to other students and by joining the soccer team.*

Circulatory System

Smoking affects the circulatory or cardiovascular system, which includes the heart and blood vessels. As a person smokes, blood vessels constrict, or squeeze together. Over time, the blood vessels can harden. When this happens, the blood vessels cannot send enough blood and oxygen throughout the body. This increases the chances of a heart attack or stroke. People with hardened or clogged blood vessels have *coronary heart disease*. Smoking is a leading cause of this disease. Smoking also raises blood pressure and heart rate. Both side effects hurt the circulatory system.

Excretory System

Tobacco can harm your excretory system. Smokers and tobacco users are much more likely to develop bladder cancer than non-smokers. Chemicals in tobacco smoke are absorbed from the lungs and get into the blood. From the blood, the chemicals get into the kidneys and bladder. These chemicals damage the cells that line the inside of the bladder and increase the risk of cancer. Smoking tobacco is also a factor in the development of colorectal cancer, a cancer that affects the colon and the rectum.



Reading Check

Explain Describe how tobacco use affects the teeth.



Visit glencoe.com and complete the Interactive Study Guide for Lesson 1.

Lesson 1 Review



After You Read

Review this lesson for new terms, major headings, and Reading Checks.

What I Learned

1. **Vocabulary** Define *tar*.
2. **Explain** Describe the ways in which smoking harms the body.
3. **Identify** Name five substances in tobacco smoke that are harmful to the body.
4. **List** Name three forms of tobacco.

Thinking Critically

5. **Hypothesize** How might you influence a peer to make the healthful choice to quit chewing tobacco?

6. **Analyze** Why do you think it is important for a teen to never try tobacco?

Applying Health Skills

7. **Accessing Information** Do research to find more information about the harmful effects of tobacco. Use health journals, magazines, and Web sites of national organizations to help you. Write a short report about the information you found.



For more Lesson Review Activities, go to glencoe.com.

Lesson 2

The Respiratory System

Guide to Reading

● Building Vocabulary

As you read this lesson, make flash cards for each new term.

- respiratory system (p. 236)
- trachea (p. 237)
- epiglottis (p. 237)
- bronchi (p. 237)
- lungs (p. 237)
- diaphragm (p. 237)

● Focusing on the Main Ideas

In this lesson you will be able to

- **explain** why you need oxygen to live.
- **name** the parts of the respiratory system.
- **describe** the breathing process.
- **identify** problems of the respiratory system.

● Reading Strategy

Sequencing As you read the lesson, summarize the steps of the breathing process.

Quick Write

Have you ever had a respiratory illness, like a cough or cold? Describe how you felt. Explain why you think a healthy respiratory system is important.

You Need Oxygen to Live

The body needs oxygen to work properly. Oxygen helps you perform all kinds of activities, like playing your favorite sport or talking to your friend on the phone. How does oxygen get into your body? You breathe it in. How does oxygen get to your cells? It travels through your respiratory system. Your **respiratory system** includes *the organs that supply your blood with oxygen*. Blood carries the oxygen to your whole body.

Parts of Your Respiratory System

The main parts of your respiratory system include the mouth and nose, the trachea, the lungs, and the diaphragm. **Figure 8.2** shows the respiratory system in more detail.

Air enters your body through your nose and mouth. *Cilia* (SIH·lee·uh) line the inside of your nose. These tiny, hair-like structures trap dirt and particles from the air you inhale before it travels to other parts of your respiratory system.

- ◀ Daily exercise is important to maintaining the health of your respiratory system. **How do you exercise every day?**



The **trachea** (TRAY-kee-uh) is a passageway in your throat that takes air into and out of your lungs. You may know the trachea as the windpipe. The **epiglottis** (eh-pi-GLAH-tis) is a flap of tissue in the back of your mouth that keeps food out of your trachea. It covers the trachea when you eat and uncovers it when you breathe.

As you breathe in, your body takes in oxygen. As you breathe out, your body rids itself of carbon dioxide. Carbon dioxide is a gas, just like oxygen. As your cells burn oxygen, they make carbon dioxide as a waste product. The exchange of oxygen and carbon dioxide happens in your lungs. The **bronchi** (BRAHNG-ky) are two passageways that branch from the trachea, one to each lung. Your **lungs** are two large organs that exchange oxygen and carbon dioxide. Your **diaphragm** (DY-uh-fram) is a large, dome-shaped muscle below the lungs that **expands** and compresses the lungs, enabling breathing.

Academic Vocabulary

expands (ik-SPANDZ)
(verb) increases in size or volume, gets bigger.
A balloon expands when you use your lungs to blow air into it.

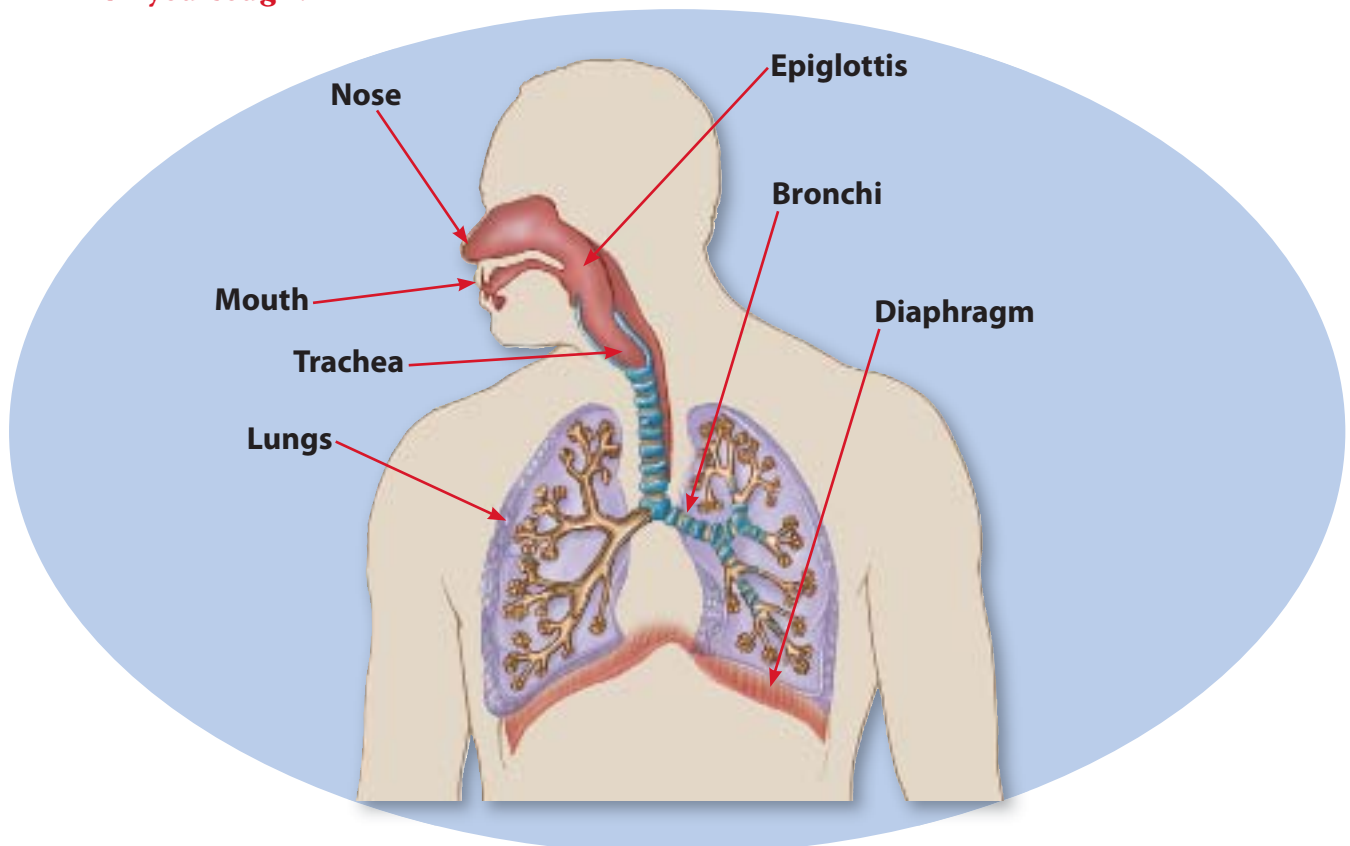


Explain What is the function of the diaphragm?

FIGURE 8.2

PARTS OF THE RESPIRATORY SYSTEM

As you breathe, your lungs work with all the other parts of your respiratory system. Look at the diagram, and think about what happens when you cough. **Which parts of your respiratory system do you use when you cough?**



The Breathing Process

Three processes happen in your body when you breathe. First, you inhale, or breathe in air. The diaphragm, a muscle below the lungs, moves down and your chest expands, letting air into your lungs. Second, oxygen from the air passes out of your lungs and into your blood. At the same time, the oxygen replaces carbon dioxide. Third, you exhale, or breathe out air. Your diaphragm pushes up, forcing air and carbon dioxide out of your lungs. **Figure 8.3** shows the steps of the breathing process.



Reading Check

List What are the three steps of the breathing process?

FIGURE 8.3

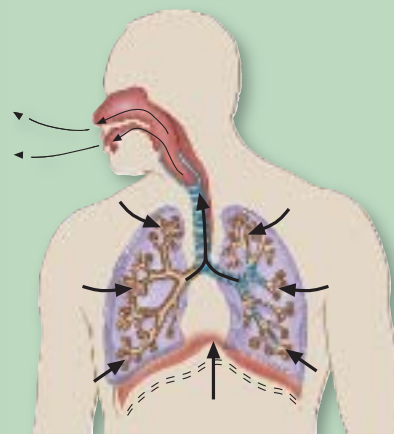
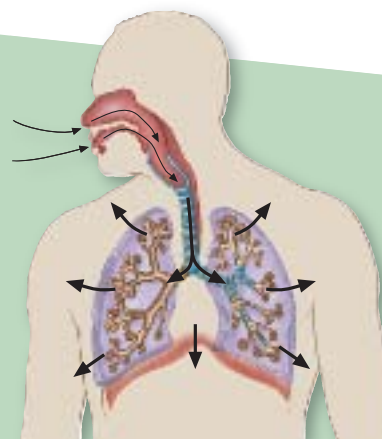
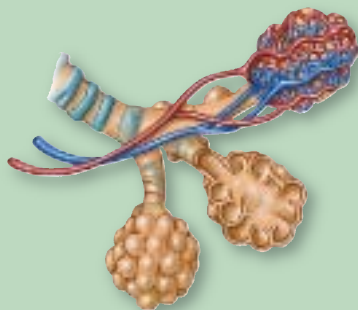
How BREATHING WORKS

Your brain controls your respiratory system, so you breathe automatically. You don't have to think about breathing. **What chemical compound is contained in exhaled air?**

1 Inhaling. Your diaphragm moves down and your ribcage expands, creating more room in your chest. This causes air to flow into your body through the nose or mouth. The air then moves past the epiglottis and into the trachea and bronchi.

2 Inside Your Lungs. The bronchi divide into smaller passageways called bronchioles (BRAHNG-kee-ohlz). Air flows through the bronchioles into the alveoli, which are surrounded by capillaries. In the capillaries, oxygen moves from the air into the bloodstream, and carbon dioxide from the blood moves into the alveoli.

3 Exhaling. Your diaphragm moves up, and your ribs move in and down, pushing air out of your lungs. The air, now containing carbon dioxide, moves back through the bronchioles and bronchi, flows up the trachea, and out through the nose or mouth.



Problems of the Respiratory System

Tobacco use does not cause all the problems that can affect your respiratory system. However, it can make many of these problems worse. Tobacco smoke, chemicals, germs, and air pollution are harmful to your health because they can damage the many parts of your respiratory system. **Figure 8.4** lists some of the many problems tobacco can cause.

 **FIGURE 8.4**

DISEASES AND DISORDERS OF THE RESPIRATORY SYSTEM

People can take medicines to control some respiratory diseases, such as asthma. Without the right treatment, respiratory problems can become dangerous. **Explain how using tobacco contributes to emphysema.**

Disease or Disorder	Description	Treatment
Asthma	Disorder in which airways narrow; symptoms include wheezing or gasping, shortness of breath, coughing	Medication to relieve symptoms; avoiding activities or substances that trigger attacks
Cold/Flu	Illnesses caused by viruses; symptoms include fever, aches, cough, runny nose	Bed rest and liquids; vaccines can prevent some types of flu
Emphysema	Disease in which alveoli lose their ability to stretch; symptoms include extreme difficulty breathing; caused by smoking or severe and uncontrolled chronic asthma	No known cure; pure oxygen can make breathing easier
Lung Cancer	Uncontrolled growth of cells that reproduce abnormally in lungs; often caused by smoking	Surgery, radiation, chemotherapy; survival rates are very low
Mouth and Tongue Cancer	Uncontrolled growth of cells in the mouth and tongue; can cause growths called tumors that show on the cheeks and lips; almost always caused by tobacco use	Surgery, radiation, chemotherapy; survival rates are very low if it spreads
Pneumonia	Bacterial or viral disease that affects the lungs; symptoms include fever, breathing difficulty, chest pain	Antibiotics for bacterial type; bed rest for viral type
Tuberculosis	Bacterial disease that affects the lungs; symptoms include tiredness, cough; can be fatal	Antibiotics



▲ The top photo is a healthy lung. The bottom photo is a cancerous lung. Healthy lungs provide oxygen to your body.

What happens to the cells in the lungs if they become cancerous?

Respiratory Diseases

When did you last have a cold or the flu? These are two of the most common respiratory diseases. You usually get over a cold or the flu in a few days. However, smokers take much longer to get over a cold or the flu.

If your respiratory system is not healthy, you can develop chronic, or ongoing, disease, such as emphysema. Emphysema damages alveoli in the lungs. There is no cure for emphysema, but in most cases it can be prevented by not smoking tobacco.

Tobacco use can also aggravate or increase the symptoms of asthma. Asthma is a chronic respiratory disease that causes air passages to become narrow or blocked, making breathing difficult. People with asthma cough and gasp for air. They shouldn't smoke or be around smokers.

Some diseases of the respiratory system are inherited, such as cystic fibrosis (CF). A person with CF also has trouble breathing. The disease causes the lungs to make abnormally sticky mucus. A person with CF may feel like he or she cannot breathe at all. Smoking can also aggravate this condition.



Reading Check

Describe What are the symptoms of cystic fibrosis?

Cancer

Smoking can cause cancer. Cancer is the uncontrolled growth of cells. Cancer can spread from one part of the body to another and attack healthy tissues and organs. All tobacco products contain substances that can cause cancer. Smoking can cause cancers of the mouth, throat, lung, kidney, and bladder. Lung cancer is the leading cause of death among people who smoke. Lung cancer is hard to diagnose and can spread quickly. A person who quits smoking can reduce the risk of developing cancer.

Smokeless tobacco can cause cancers of the mouth, head, and neck. Someone who uses smokeless tobacco has a higher risk of developing cancer than a smoker does. One-half to three-quarters of smokeless tobacco users develop mouth sores, or ulcers. These sores can disappear if the user quits. Quitting the use of smokeless tobacco reduces the risk of developing mouth cancer.

Tips for Taking Care of Your Respiratory System

Your whole body depends on a healthy respiratory system. The following positive health practices can help you keep it that way:

- Avoid tobacco use.
- Stay away from people who smoke. Don't go to places where the air is smoky.
- Take care of your body when you have a cold, the flu, or any other respiratory illness.
- Drink plenty of fluids.
- Take deep, full breaths often.
- Eat a healthful diet.
- Get outside and breathe fresh air.
- Pay attention to any allergy alerts, ozone alerts, and pollution alerts announced for your area.
- Be physically active on a regular basis.



Reading Check

Name List two ways you can care for your respiratory system.



Visit glencoe.com and complete the Interactive Study Guide for Lesson 2.

Lesson 2 Review



After You Read

Review this lesson for new terms, major headings, and Reading Checks.

What I Learned

1. **Vocabulary** Define *trachea*.
2. **Explain** Why do you need oxygen to live?
3. **Identify** Name the different parts of the respiratory system.
4. **List** Name four respiratory illnesses.

Thinking Critically

5. **Describe** How might quitting smokeless tobacco use affect the health of the mouth?

6. **Analyze** Why is it important to take care of your respiratory system when you have a cold or the flu?

Applying Health Skills

7. **Communication Skills** Write a letter to a filmmaker. Ask the filmmaker to ban smoking scenes in movies. Explain why filmmakers should want to send out a tobacco-free message to everyone, especially children and teens. Use facts from this lesson in your letter.



Lesson 3

Tobacco Use and Teens

Guide to Reading

Building Vocabulary

In your own words, use each new term in a sentence.

- addiction (p. 244)
- withdrawal (p. 244)
- psychological dependence (p. 244)
- physical dependence (p. 244)
- tolerance (p. 245)
- target audience (p. 246)
- product placement (p. 246)
- media literacy (p. 246)

Focusing on the Main Ideas

In this lesson you will be able to

- **identify** reasons why teens use tobacco.
- **explain** how a person can become addicted to nicotine.
- **apply** accessing-information skills to find health information on quitting tobacco use.
- **describe** how antismoking efforts are helping teens stay tobacco free.

Reading Strategy

Summarizing For each main heading in this lesson, make a flash card that captures the main points of the heading.

Quick Write

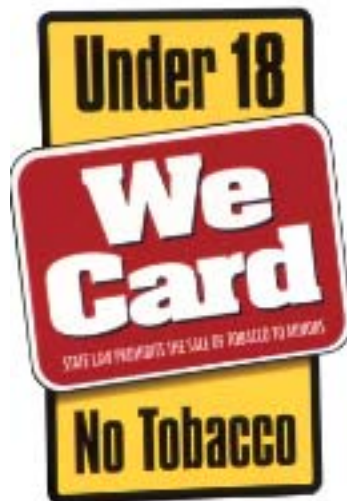
Do the ads you see on TV and in magazines affect your decisions? Write a few sentences about how advertising can influence a teen's choices.

Why Do Teens Begin Using Tobacco?

Most teens know that making the decision to avoid tobacco use is the way to stay healthy. They also know it's against the law for people under the age of 18 to buy tobacco. Still, teens try tobacco for many reasons. The good news is that the number of teen smokers has fallen over the years. A 2004 study found that 89 percent of middle school students don't smoke.

Reasons for Tobacco Use Among Teens

One of the main reasons teens may try tobacco is peer pressure. Teens may try tobacco even if they don't want to because they think they might lose their friends. Real friends will not pressure you to try an activity that is harmful to your health. It's important to choose friends who influence you to make healthful choices, like staying tobacco free.



- Each state has its own legal smoking age. **Why do you think these signs are posted in stores that sell tobacco products?**

FIGURE 8.5

WHY TEENS USE TOBACCO

Every day in America, 2,000 more young people start using tobacco. One-third of people who start using tobacco in their teens will die at a young age. **Reasons for using tobacco are listed below. Counter each by thinking of reasons not to use tobacco.**



There are other reasons teens may try using tobacco. **Figure 8.5** names some of them. Some teens think using tobacco makes them seem cooler, older, or more mature. They also think smoking will help them feel more confident around others who smoke. Some teens may try tobacco simply because they've been told not to use it. They just want to rebel. Other teens are curious and want to try it for themselves. Teens often believe that they will not be harmed by tobacco use or that the health risks do not apply to them.

The media also play a part in teen tobacco use. Magazines, music videos, and movies show images of people using tobacco. Tobacco companies spend billions of dollars advertising their products. Ads are developed that appeal to teens. They show attractive-looking people using tobacco products.



Reading Check

Identify Name two reasons teens may consider trying tobacco.

Tobacco Addiction

As you learned in Lesson 1, tobacco contains nicotine. Nicotine is a drug that causes addiction. An **addiction** is a mental or physical need for a drug or other substance. Nicotine is as addictive as cocaine and heroin. Anyone who stops using nicotine goes through withdrawal. **Withdrawal** is the unpleasant symptoms that someone experiences when he or she stops using an addictive substance. During withdrawal from smoking, a person may sleep badly and crave nicotine. He or she may feel moody or nervous, or be extra hungry.

Psychological Dependence

First a tobacco user becomes psychologically dependent on tobacco. **Psychological dependence** is a person's belief that he or she needs a drug to feel good or function normally. Most people know that tobacco is dangerous. Their need for it outweighs the fear of danger as they connect tobacco use with feeling relaxed. For example, a person might smoke during work breaks. Breaking this connection means changing habits. For example, a person could chew sugarless gum instead of reaching for a cigarette.

Physical Dependence

A person who uses tobacco quickly develops a physical dependence to nicotine. **Physical dependence** is an addiction in which the body develops a chemical need for a drug. Teens can develop a physical dependence for nicotine much more easily than adults can. Their bodies and brains are not fully developed.

- Getting involved can help break a psychological dependence on tobacco. **Name two activities you could suggest to someone who wants to quit.**





Health Skills Activity

Accessing Information

Quitting Tobacco Use

A person's physical dependence on nicotine makes it very hard to quit using tobacco. Some people cannot quit on their own. Sometimes they need help to overcome the physical addiction to nicotine. Two common methods for quitting are nicotine replacement and certain medications.

- Nicotine replacement may involve nicotine gum, patches, and lozenges. You don't need a prescription for these treatments. You do need a prescription for nicotine inhalers and nasal sprays.
- People who want to quit smoking may join support groups. They can find suggestions about how to stop from organizations such as the American Heart Association and the American Lung Association.

On Your Own

Use home, school, and community resources to find valid information about a method of quitting tobacco use. Use what you learn to create an informative brochure. Your brochure should cover how the method works. It should also include how the method helps people deal with their cravings for nicotine. Present your brochure to your class.

The body's tolerance for nicotine also increases over time. **Tolerance** is the body's need for larger and larger amounts of a drug to produce the same effect. The body's need for nicotine causes a person to crave the tobacco product. Tobacco users must smoke or chew tobacco more often. They may constantly need to do something with their hands. They may have to keep something in their mouths all the time.



Reading Check

Describe Name some symptoms of nicotine withdrawal.

Tobacco Advertising

Tobacco companies spend millions of dollars a year to advertise their products. Colorful ads featuring happy, attractive people can make teens feel that it's fun or cool to use tobacco. Tobacco advertisements can strongly affect teens.

Targeting Teens

Tobacco companies see teens as a target audience. A **target audience** is a group of people for which a product is intended. Tobacco companies work hard to make their products appealing to teens. Companies may package their cigarettes in bright wrappers or use cartoon characters to sell their product.

Open any magazine and you will find a tobacco advertisement that shows young, attractive people having fun. Maybe they are dancing or playing sports. The tobacco companies want you to think that using their products is fun. They also want you to think that using tobacco makes you attractive.

Like many teens, you probably have favorite celebrities. You often see them wearing a particular brand of clothing or drinking a certain kind of soda. **Product**

placement is when a company pays to show its products in media being used by celebrities. Tobacco companies pay to have celebrities use their products too. If your favorite celebrity smoked cigarettes, would you want to smoke too? By now, you know how harmful tobacco products are to your personal health.

Media literacy is the ability to understand the goals of advertising and the media. The goal of tobacco advertisements is to fool you into becoming a lifelong customer. However, if you are media literate, you will be able to ignore the ads. You will be able to analyze whether health information, products, and services are valid.



Reading Check

Describe Explain how product placement can influence a teen to use tobacco.

Antismoking Efforts

Today, more than ever, both teens and adults are more informed about the dangers of tobacco. In fact, most teens want to stay healthy by avoiding tobacco use. As a result, most teens and adults are in favor of a tobacco-free society.

What Teens THINK

Do you think that movies make smoking look cool?

Yes, very much so! In fact, I think that movies may just be what is causing more minors to start smoking. I say this because our idols are the people acting in movies and we look up to them. So if they smoke, it's more likely that we will too, unfortunately!

Christian T.
Greensboro, NC

Legal Bans on Tobacco Ads

Tobacco advertising has more limits than ever before. In the United States, laws protect young people from tobacco advertising. For example, companies cannot place outdoor advertisements within 1,000 feet of schools and playgrounds. Tobacco companies cannot make or sell hats, T-shirts, and other items. Tobacco advertisements cannot appear on radio and television. This is why product placement in the media is such an important issue. This practice allows tobacco companies to sidestep the law. Finally, it is illegal to sell tobacco to anyone under age 18. In some states, the age is even higher.

Antismoking Ad Campaigns

Today, antismoking ads are helping to create awareness about the dangers of tobacco use. They want to send the message to people of every age that choosing to use tobacco is a risk behavior that has many negative short-term and long-term consequences. Smokers who see these ads recognize the dangers of tobacco and often try to quit or seek treatment as a result. Nonsmokers who see these ads recognize the benefits of remaining tobacco free.



Reading Check

Describe List some of the legal bans on tobacco ads.



Visit glencoe.com and complete the Interactive Study Guide for Lesson 3.

Lesson 3 Review



After You Read

Review this lesson for new terms, major headings, and Reading Checks.

What I Learned

1. **Vocabulary** Define *product placement*.
2. **Identify** Name three reasons why teens use tobacco products.
3. **Explain** Describe how the media may encourage teens to use tobacco.
4. **Give Examples** List two ways in which tobacco companies target teens.
5. **Describe** Explain how antismoking ads help teens stay away from tobacco.

Thinking Critically

6. **Describe** How does physical tolerance affect how much a person smokes?
7. **Analyze** Explain what happens because of physical dependency on tobacco.

Applying Health Skills

8. **Refusal Skills** With a classmate, write a short play that shows a teen using the S.T.O.P. formula to say no to someone who offers him or her a cigarette.



Tobacco Use and Society

Guide to Reading

● Building Vocabulary

As you read this lesson, write each new term and its definition in your notebook.

- secondhand smoke (p. 248)
- passive smokers (p. 248)
- mainstream smoke (p. 248)
- sidestream smoke (p. 248)

● Focusing on the Main Ideas

In this lesson, you will be able to

- **list** the effects of tobacco use on nonsmokers.
- **describe** the consequences of passive smoking.
- **explain** the rights of nonsmokers.
- **access** reliable information about groups that help promote a tobacco-free lifestyle.

● Reading Strategy

Finding the Main Idea Take a look at the major headings in this lesson. For each heading, write one sentence that states the main idea.

Quick Write

How does tobacco smoke in the air harm nonsmokers? Write a few sentences that tell what you know about secondhand smoke.

Tobacco's Effects on Nonsmokers

Your environment affects your personal health. Even if you do not smoke, being around those who do can be harmful. When people smoke near you, you breathe their secondhand smoke. **Secondhand smoke** is *air that has been contaminated by tobacco smoke*. It is also called environmental tobacco smoke (ETS). When you are around secondhand smoke, you become a passive smoker. **Passive smokers** are *nonsmokers who breathe in secondhand smoke*.

Environmental Tobacco Smoke

Secondhand smoke comes in two forms. First is **mainstream smoke**, *the smoke that is inhaled and then exhaled by a smoker*. Second is **sidestream smoke**, *smoke that comes from the burning end of a cigarette, pipe, or cigar*. Sidestream smoke is especially dangerous. It contains twice as much tar and nicotine as does mainstream smoke.

Dangerous Contents of Secondhand Smoke

Secondhand smoke is filled with nicotine, carbon monoxide, and other harmful ingredients. The U.S. Environmental Protection Agency (EPA) has labeled secondhand smoke as a human carcinogen. This means it causes cancer.

Health Hazards to Adults, Children, and Unborn Babies

Imagine standing in a smoke-filled room for one hour. During that time, you would breathe in nicotine and carbon monoxide. In fact, it would be the same as smoking one cigarette.

Nonsmoking adults who regularly breathe secondhand smoke can get sick from it. They risk getting the same illnesses that affect smokers. This includes heart and lung diseases and respiratory problems. Each year, an **estimated** 53,000 people in the United States die as a result of passive smoking.

Secondhand smoke is especially harmful to children. When children are exposed to secondhand smoke, they are more likely to have respiratory and other problems, like allergies, asthma, ear infections, and heart problems.

Women who use tobacco while pregnant put their unborn children in serious danger. Their babies could die or they could have babies with low birth weight. The lower a baby's birth weight, the higher the chances that the baby will have health problems. Sudden infant death syndrome (SIDS) is linked to babies with mothers who smoked during or after pregnancy.



Identify Name two health problems that secondhand smoke can cause in children.

Rights of Nonsmokers

You have the right to breathe air that is free of tobacco smoke. There are more smoke-free places than ever before. There are also more laws against secondhand smoke. As a nonsmoker, you have the right to protect yourself from secondhand smoke. You can ask people not to smoke around you. If a smoker is a guest in your house, you can ask the person to smoke outside. Talk to your parents about asking houseguests not to smoke in your house.

Smoke-Free Environments

Today, the number of smoke-free businesses and public spaces is on the rise. Most public places, including restaurants, do not allow people to smoke indoors. Some restaurants do not allow smoking indoors or out.

Academic Vocabulary

estimated (ES tuh mayt ed) (*verb*) a rough or approximated number.
At the carnival, Daniella and Miguel estimated that there were 300 jellybeans in the jar.

▼ Secondhand smoke is dangerous to everyone's health. **Why do you think smoke-free restaurants are healthier for customers and restaurant workers?**





Health Skills Activity

Accessing Information

Promoting a Tobacco-Free Community

Many groups work to help people live a tobacco-free lifestyle. As you learn more about what these groups do, you can share what you know with others who want to stay tobacco free. There are many ways to influence others to make the healthful choice not to smoke.

Do some research to find local organizations that promote being tobacco free. Interview people from three or four of these organizations. Ask them about the programs they sponsor and how they let people know about them. Discuss how to become a member. Get the organization's history.

With a Group

After collecting your information, organize a Tobacco-Free Health Fair to share what you have learned. Invite the people you interviewed to speak about their group and its programs at your Tobacco-Free Health Fair.

Legal Restrictions on Smoking

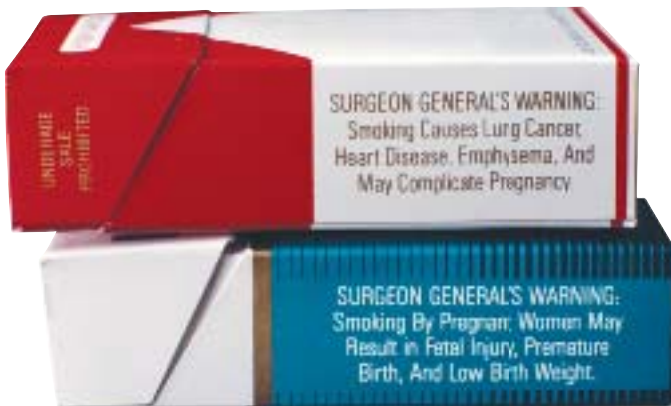
In the late 1980s, national laws went into effect to fight secondhand smoke. In 1989, smoking was outlawed on domestic airplane flights. Nearly all states also have laws that limit smoking. Employers have the legal right to ban smoking in their workplaces. Most employers now exercise this right.

Laws now control how tobacco companies package and sell cigarettes. Packages must have clear warning labels, or disclaimers. The disclaimers say that smoking is harmful. Cans of smokeless tobacco and tobacco ads must also have these disclaimers.



Reading Check

List Name some legal bans on tobacco advertising.



◀ The U.S. government requires tobacco companies to label packages with these disclaimers. **Do you think that these labels keep people from smoking?**

Hidden Costs to Society

Tobacco products cost a lot of money. There are also hidden costs of tobacco use. Tobacco-related illnesses, such as lung cancer and emphysema, often require the person to be in the hospital. Hospital stays and treatments for these illnesses are very expensive. These preventable costs affect the health care system.

Tobacco Strains the Health Care System

People who use tobacco tend to need medical treatment more often than those who do not. If tobacco users have health insurance, it may help them pay some of the costs of their treatment. However, because health insurance companies face more costs to cover tobacco users, they charge tobacco users higher rates for their health insurance. If a tobacco user has no health insurance, the government helps cover the costs. This means that every U.S. family pays, too, as part of their taxes. It is estimated that taxpayers pay about \$38 billion each year, whether or not they smoke.



Reading Check

Describe How can tobacco use affect how much people pay for health insurance?



Visit glencoe.com and complete the Interactive Study Guide for Lesson 4.

Lesson 4 Review



After You Read

Review this lesson for new terms, major headings, and Reading Checks.

What I Learned

1. **Vocabulary** Define *sidestream smoke* and *mainstream smoke*.
2. **Explain** Describe the effects smoking can have on an unborn baby.
3. **Explain** Why do tobacco users pay more for health insurance?
4. **Explain** Why do nonsmokers have to pay to cover part of the cost of smokers' medical treatments?

Thinking Critically

5. **Analyze** How can laws to protect you from secondhand smoke help to protect your health?
6. **Apply** Imagine that you are sitting in the nonsmoking section of a restaurant. What would you do if the smoke from the smoking section bothered you?

Applying Health Skills

7. **Accessing Information** Research the latest restrictions on tobacco ads. Write a paragraph describing your findings.



Lesson 5

Saying No to Tobacco Use

Guide to Reading

● Building Vocabulary

As you read this lesson, write this new term and its definition in your notebook.

- cold turkey (p. 255)

● Focusing on the Main Ideas

In this lesson, you will be able to

- **list** the reasons why it is good to be tobacco free.
- **practice** refusal skills to avoid tobacco use.
- **explain** how a person can get help to quit tobacco use.

● Reading Strategy

Outlining Before reading this lesson, make an outline using the heads as guidelines. Fill in your outline as you read.

Quick Write

What are your reasons for staying tobacco free? Write a few sentences describing why you say no to tobacco.

Tobacco Free: A Healthy Choice

Choosing not to use tobacco shows that you are taking responsibility for personal health behaviors. Choose to spend time with others who are tobacco free. That's another good strategy for improving and maintaining personal health. As a teen, you will probably be asked if you want to try tobacco. Be prepared for this possibility. Practice your refusal skills ahead of time. Take part in tobacco-free events in your community. Help others to be tobacco free.



Reading Check

Explain How do you prepare yourself for when someone offers you a tobacco product?

Benefits of Being Tobacco Free

It's great to be tobacco free! There are many benefits to this safe behavior. To begin with, you'll be healthier. Look at the list below and at **Figure 8.6** to learn more.

- **Staying healthy.** People who smoke get sick more easily and more often than nonsmokers. They also stay sick longer than people who don't use tobacco.
- **Clear, healthy skin.** If you use tobacco, your skin cells are less able to take in oxygen and other nutrients, which leads to unhealthy skin.

- **Fresh breath.** Cigarettes and smokeless tobacco products cause bad breath.
- **Clean, fresh-smelling clothes and hair.** Smokers usually smell like smoke. Stinky cigarette odors cling to clothes and hair. It's hard to get rid of these odors.
- **Better sports performance.** People who use tobacco, especially smokers, don't do as well in sports. Nonsmokers make better athletes than smokers, partly because they have healthier respiratory systems.
- **Saving money.** Tobacco is expensive. The government keeps raising taxes on tobacco. That means costs will keep going up. Teens who do not buy tobacco have more money to spend on other things, like clothes and digital music.
- **Keeping the environment healthy.** Environmental tobacco smoke hurts everyone. By staying tobacco free, you are doing your part to keep the environment healthy. You also are protecting people who are part of your everyday life.



Reading Check

Describe Why are nonsmokers better athletes than smokers?

▼ **FIGURE 8.6**

REASONS TO BE TOBACCO FREE

Reasons to be tobacco free really add up. **What are some other reasons to be tobacco free?**



Go Online

Topic: Taking Action Against Tobacco

Visit glencoe.com for Student Web Activities where you will learn why and how teens across the nation are speaking out against tobacco use.

Activity: Using information provided at the link above, draft an e-mail message entitled "The Top Ten Reasons I Choose Not to Smoke" that you and your friends can sign and e-mail to other teens.



Health Skills Activity

Refusal Skills

Refusing Tobacco

Sindhu and Andrea have been good friends since the third grade. Now that they are older, they go to different schools. Andrea spends much of her time with her new friends. One afternoon, Andrea and Sindhu meet after school. Andrea then offers Sindhu a cigarette. Sindhu wants to keep Andrea as a friend, but she does not want to smoke. What should she say to Andrea?

What Would You Do?

Role-play how Sindhu reacts to Andrea when Andrea asks her to have a cigarette. How can Sindhu use the S.T.O.P. formula in this situation?

- **S**ay no in a firm voice.
- **T**ell why not.
- **O**ffer another idea.
- **P**romptly leave.

You Can Quit

Once you start using tobacco, it's hard to stop. This is one of the best reasons to stay tobacco free. People who do smoke can quit if they really choose to. Many programs and support groups can help.

Once a person decides to quit, he or she may go through nicotine withdrawal. Signs of this include nervousness, moodiness, difficulty sleeping, hunger, and cravings for nicotine. If you know someone trying to kick the habit, share the following:

- **List your reasons.** Keep a list of the reasons you want to quit. Read this list every time you feel like using tobacco.
- **Set small goals.** Try to stay tobacco free one day at a time.
- **Choose tobacco-free places to spend time.** Stay away from others who use tobacco.
- **Change your tobacco-related habits.** For example, eat a healthful snack instead of smoking between meals.
- **Be physically active.** When you feel like using tobacco, take a bike ride, go for a walk, or jog.
- **Keep trying.** Quitting tobacco use doesn't always work the first time. Remember that each effort counts.



Visit glencoe.com and complete the Interactive Study Guide for Lesson 5.



Reading Check

Describe What are two things you can do to quit smoking?

Getting Help

Some people may choose to stop using tobacco **cold turkey**. This means *stopping all use of tobacco products immediately*. They will experience withdrawal symptoms that can last up to six months. Libraries, hospitals, and bookstores offer information if someone wants to quit on his or her own. Many organizations also help users quit. For example, users can find tips on quitting and support groups through the American Lung Association, the American Heart Association, and the American Cancer Society.

Resources for Quitting

Even some people who join a support group may fail to kick the habit. That's when professional health services can help. Doctors are able to prescribe medication to help tobacco users quit. There are also over-the-counter medications such as the nicotine patch or nicotine gum. All allow users to give up tobacco quickly while gradually stopping nicotine dependence.



Reading Check

Name List two organizations that can help a person stop using tobacco.



Connect To... Math



Personal Finances

Smoking is not only unhealthy, it's also an expensive habit. In some states, a pack of cigarettes costs as much as \$7.00.

If a person smokes one pack a day, how much money would he or she spend on cigarettes in one year? What would you choose to buy with that amount of money?

Lesson 5 Review



After You Read

Review this lesson for new terms, major headings, and Reading Checks.

What I Learned

1. **Vocabulary** Define *cold turkey*.
2. **Explain** Describe how you can help someone become tobacco free.
3. **Identify** List at least three benefits of being tobacco free.
4. **Explain** Describe how people who wish to stop using tobacco can get help.

Thinking Critically

5. **Analyze** Why is it easier never to start smoking?
6. **Apply** How would you influence a peer to make the healthful choice to quit smoking?

Applying Health Skills

7. **Goal Setting** Make a plan to help someone quit using tobacco. Include alternative activities the tobacco user can do when he or she experiences the urge to use tobacco.

Building Health Skills

Accessing Information
Practicing Healthful Behaviors
Stress Management

Analyzing Influences

Communication Skills
Refusal Skills
Conflict Resolution
Decision Making
Goal Setting
Advocacy

What Does Analyzing Influences Involve?

Analyzing influences involves recognizing the factors that affect your health choices. These factors include:

- family and culture
- your friends and peers
- messages from the media
- your likes, dislikes, values, and beliefs

Media Messages About Tobacco

Follow the Model, Practice, and Apply steps to help you master this important health skill.

1 Model

Read about how Samantha uses the skill of analyzing influences to recognize how tobacco ads try to make smoking look appealing.

Samantha's health class has been studying how some media try to influence teens to smoke. Her teacher asked Samantha to analyze some newspaper ads for cigarettes. One of the ads was in the sports section. It showed several people having a good time watching a football game. Another ad showed a clear, blue lake with snow-topped mountains in the background.

Samantha saw that the first ad was trying to link good times with friends to tobacco use. The second ad was trying to show that smoking was refreshing and relaxing. Both ads were trying to influence people to buy their cigarettes.



2 Practice

Read the dialogue below and then answer the questions that follow.

Lindsey and Robin were looking at a tobacco ad in a magazine.

Robin: This guy is so cute!

Lindsey: He's way cute! But you know why they picked this guy, right? It makes people think smoking is attractive.

Robin: I wasn't thinking about that. The advertisers are trying to make us think smoking is fun.

Lindsey: It's almost like the tobacco companies are trying to trick us into smoking.

Robin: Yes. They spend a lot of money trying to persuade people to smoke.

1. How do Lindsey and Robin think advertisers try to influence teens?
2. Why do advertisers spend so much money trying to influence teens?



3 Apply

Use what you have learned about analyzing influences to complete the activity below.

Many magazines have tobacco ads. Look through magazines to find a tobacco ad. Write a brief report about the ad. Explain the message the ad is trying to send about smoking. Explain how this ad might influence a teen to smoke. What is the truthful message that tobacco ads *should* send to teens?

Self-Check

- Did I explain the message the ad sends about smoking?
- Did I tell how the ad might influence a teen?
- Did I explain the true message about smoking?



Inside Your Lungs

You've learned that smoking affects your lungs. Do you remember what's inside your lungs? Each lung contains millions of little sacs called alveoli. When you inhale, oxygen and anything else you breathe makes its way into these 600 million little sacs. Blood vessels surround the alveoli. They pick up oxygen from the alveoli and carry it to your cells. Smoking makes the alveoli less able to handle the oxygen your body needs.

What You Will Need

- 64 sugar cubes
- Cellophane tape
- One sheet of graph paper



What You Will Do

- 1** Use the sugar cubes to make a square that is 4 cubes long, 4 wide, and 4 deep.
- 2** Use tape to hold these cubes together.
- 3** Use the graph paper to figure out how many paper squares can be covered by the large sugar rectangle.

- 4** Remove the tape and measure how many paper squares can be covered by a single cube. Remember to record all six sides.
- 5** Multiply this single cube measurement by 64.

Wrapping It Up

Which covers more graph paper squares: the large sugar rectangle or the 64 cubes? The cubes represent your alveoli. Just breathing in does not get oxygen to your body cells. It only gets it to your lungs. Alveoli pass oxygen to your blood. Dividing the lungs into many smaller sacs (alveoli) gets more oxygen to your blood faster. Warm-blooded animals like us need this trick. We need to get oxygen at a fast enough rate to perform all our activities.

Reading Review



Visit glencoe.com to download quizzes and eFlashcards for Chapter 8.

FOLDABLES® Study Organizer

Foldables® and Other Study Aids Take out the Foldable® that you created for Lesson 1 and any graphic organizers that you created for Lessons 1–5. Find a partner and quiz each other using these study aids.

Lesson 1 How Tobacco Affects the Body

Main Idea All forms of tobacco have a negative effect on the body.

- There are more than 4,000 harmful chemicals in a single puff of tobacco smoke.
- Tobacco comes in many forms, including cigarettes, cigars, pipe tobacco, smokeless tobacco, clove cigarettes, and flavored tobacco.
- Several body systems are negatively affected by tobacco use.

Lesson 2 The Respiratory System

Main Idea Maintaining a healthy respiratory system is an important part of personal health.

- The respiratory system includes the mouth, nose, trachea, bronchi, lungs, and diaphragm.
- The three processes that happen in your body when you breathe are inhaling, sending oxygen into your blood to replace carbon dioxide, and exhaling.
- Diseases and disorders affected by tobacco include asthma; cold/flu; emphysema; lung, mouth, and tongue cancer; pneumonia; and tuberculosis.

Lesson 3 Tobacco Use and Teens

Main Idea Teens use tobacco for many reasons, including peer pressure and wanting to look cool.

- People who are addicted to tobacco have both a physical and a psychological dependence.
- Tobacco companies target teens with appealing advertisements and product placement.
- It is illegal to sell tobacco to anyone under age 18.

Lesson 4 Tobacco Use and Society

Main Idea Tobacco smoke harms both smokers and nonsmokers.

- Passive smokers are nonsmokers who breathe in secondhand smoke.
- Secondhand smoke causes cancer and is especially harmful to children.
- You have the right to breathe air that is free of tobacco smoke.

Lesson 5 Saying No to Tobacco Use

Main Idea Taking responsibility to be tobacco free is the best choice a teen can make for his or her health.

- There are many benefits to being tobacco free. They include staying healthy; having clear skin, fresh-smelling breath, hair and clothes; better sports performance; saving money; and a healthy environment.
- Quitting tobacco use isn't easy.
- If someone quits using tobacco immediately, it is called *cold turkey*.

After You Read

HEALTH QUIZ

Now that you have read the chapter, review your answers to the Health Quiz on the chapter opener. Would you change any of them? What would your answers be now?

Reviewing Vocabulary and Main Ideas

On a sheet of paper, write the numbers 1–4. After each number, write the term from the list that best completes each statement.

- carbon monoxide
- bronchi
- trachea
- nicotine

Lesson 1 How Tobacco Affects the Body

1. A drug found in tobacco smoke that is extremely addictive is called _____.
2. The colorless, odorless, poisonous gas produced when tobacco burns is called _____.

Lesson 2 The Respiratory System

3. The _____ is the tube in your throat that takes air into and out of the lungs.
4. Two tubes that lead from the trachea to the lungs are called _____.

Lesson 3 Tobacco Use and Teens

On a sheet of paper, write the numbers 5–7. Write **True** or **False** for each statement below. If the statement is **false**, change the underlined word or phrase to make it true.

5. During withdrawal a person often feels worried, depressed, and crabby.

6. Physical dependence is when a person believes that he or she needs a drug to function normally.
7. Tolerance means needing less of a drug to feel its effect.

On a sheet of paper, write the numbers 8–11. After each number, write the letter of the answer that best completes each statement.

Lesson 4 Tobacco Use and Society

8. Passive smokers breathe in air
 - a. that is clean, because secondhand smoke is harmless.
 - b. that contains only carbon dioxide and oxygen.
 - c. that contains nicotine and carbon monoxide.
9. Tobacco companies are required by law to
 - a. advertise to attract teens.
 - b. put disclaimers on all products.
 - c. show people smoking in their ads.

Lesson 5 Saying No to Tobacco Use

10. When a person decides to quit, he or she can
 - a. get help from a doctor.
 - b. get help from an organization such as the American Cancer Society.
 - c. use stress-relief techniques.
 - d. all of the above.
11. One of the many benefits of being tobacco free is
 - a. smoker's breath.
 - b. reduced athletic performance.
 - c. fresh-smelling hair and clothes.



Applying Technology

Tobacco Tales

Using Microsoft Word®, you and your partner will create a chart that evaluates tobacco ads. Follow the steps below to complete this project.

- Cut five tobacco ads from magazines.
- Open a new Word® document with a portrait view.
- Build a table with five rows; one for each ad. Divide the rows into two columns. The left side of the row will have space to describe the ad. The right side of the row will have space for your analysis.
- Enter your descriptions of the ads.
- Enter your analysis of each ad. What are the messages of the ads? Think about the target audience.
- Save your project.

Thinking Critically

Using complete sentences, answer the following questions on a sheet of paper.

- 12. Apply** Tobacco companies show only adults in their cigarette ads. Still, these ads are often aimed at teens. What about these ads do you think appeals to teens? Explain.
- 13. Assess** What is the connection between research into passive smoking and environmental tobacco smoke and the rise of tobacco-free businesses, stores, and restaurants? Explain.

Write About It

- 14. Expository Writing** Write an ad for your local newspaper about breaking the tobacco habit. Make sure to list two organizations that can provide tobacco users with support in their efforts to stop using tobacco. Be sure to include the benefits of being tobacco free.

Standardized Test Practice

Math

Darrin knows he needs to stay tobacco free because he wants to join the track team. To join the team, he needs to improve the time it takes him to run a mile. He tracks his time on a weekly basis. See the chart below.

Week	Time to run 1 mile (min)
1	15
2	12
3	10
4	9

1. By what percent did Darrin improve his time from Week 1 to Week 2?
- A. 25%
- B. 30%
- C. 15%
- D. 20%
2. During which time did Darrin show a 33 percent improvement?
- A. From Week 1 to Week 2
- B. From Week 3 to Week 4
- C. From Week 2 to Week 4
- D. From Week 1 to Week 3