Once a person starts smoking it can be very hard to quit. **How can you help others stay tobacco free?**
How Tobacco Affects the Body

Do you know how to help someone quit smoking? Answer the Health eSpotlight question below and then watch the online video. Keep a record of your answers.

Health eSpotlight

Breaking the Tobacco Habit

Breaking a tobacco habit is the first step in stopping the damage done to the body by smoking. However, quitting can be difficult. What steps can you take to encourage and support a friend who wants to quit smoking?

Go to glencoe.com and watch the health video for Chapter 13. Then complete the activity provided with the online video.

Start-Up Activities

Make this Foldable® to record what you learn in Lesson 1 about tobacco’s harmful effects. Begin with a plain sheet of 8½” x 11” paper.

1. Fold the sheet of paper in half along the short axis.

2. Open and fold the bottom edge up to form a pocket. Glue the edges.

3. Label the front of the booklet as shown. Label the pockets “Tobacco Products” and “Harmful Effects.” Place an index card or quarter sheet of notebook paper into each pocket.

Visit glencoe.com and use the eFlashcards to preview vocabulary terms for Chapter 13.
Facts About Tobacco

What Is Tobacco?

Tobacco is a woody, shrub-like plant with large leaves. It is estimated that there are more than 4,000 chemicals in tobacco, many of which have been proven to cause cancer. One of these is nicotine—an addictive drug found in tobacco leaves and in all tobacco products.
Nicotine is an **addictive** drug, meaning it is _capable of causing a user to develop intense cravings_. Once the drug has been in the body regularly for some time, a person begins to depend on it.

Another dangerous ingredient in tobacco is **tar**, _a thick, oily, dark liquid that forms when tobacco burns_. When smokers inhale, tar deposits form on the **bronchi** (BRONG-ky), which are _passages through which air enters and spreads through the lungs_. If tar builds up, serious diseases such as emphysema and lung cancer can develop. These diseases make it very difficult for a person to breathe.

Carbon monoxide is a third harmful substance that is released when tobacco is burned. **Carbon monoxide** is _a poisonous, colorless, odorless gas_. Carbon monoxide enters the bloodstream through the lungs and reduces the amount of oxygen delivered to the body’s organs and tissues. This weakens muscles and blood vessels, which can lead to heart attack and stroke.

**Define**

What is carbon monoxide?

**Different Tobacco Products**

There are many different tobacco products on the market today. These include cigarettes, cigars, pipes, specialty cigarettes, and smokeless tobacco.

**Cigarettes**

Of the many different products that contain tobacco, the most commonly used is cigarettes. Cigarettes put smokers at risk for emphysema and other lung and heart diseases, cancer, infertility, and stroke. Cigarettes and other forms of tobacco can cause bad breath, stain teeth and fingers, and cause the skin to wrinkle prematurely. More than 400,000 cigarette smokers die from smoking-related illnesses every year.

**Cigars and Pipes**

Cigars contain larger quantities of the same harmful substances as cigarettes. One large cigar can contain as much tobacco as a pack of cigarettes. Cigar smokers have a higher risk of developing cancer of the mouth, larynx, and throat. They are also at greater risk of dying from heart disease.
Some people smoke pipes using loose tobacco. Pipe smokers usually inhale less than cigarette smokers. However, they are still at risk of developing cancer of the lips, mouth, and throat.

**Specialty Cigarettes**

Two other tobacco products are bidis and kreteks. Bidis (BEE-deez) are flavored, unfiltered cigarettes imported from Southeast Asia. Kreteks (KREE-teks), also called clove cigarettes, are imported from Indonesia. Kreteks typically contain a mixture of tobacco, cloves, and other additives. Both can have higher concentrations of nicotine, tar, and carbon monoxide than regular cigarettes.

**Smokeless Tobacco**

Smokeless tobacco is *ground tobacco that is chewed or inhaled through the nose*. Nicotine absorbed from smokeless tobacco is three to four times greater than the amount delivered by a cigarette. It can lead to cancers of the mouth, esophagus, larynx, stomach, and pancreas. It also stains the teeth and causes bad breath, tooth decay, and gum disease.

---

**Lesson 1 Review**

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

**What I Learned**

1. **Vocabulary** What is nicotine?
2. **List** Identify and describe the risks associated with three harmful substances found in all forms of tobacco.
3. **Recall** What is the most common form in which tobacco is used? Name three other tobacco products.

**Thinking Critically**

4. **Analyze** Julia is at a party where another girl lights a cigarette. When Julia points out that smoking is bad for her health, the other girl shrugs. “I’m a strong person,” she says. “I can quit any time I want.” How might Julia reply?

5. **Evaluate** Pete chews smokeless tobacco. He uses it when no one else is around so others do not have to watch him spitting tobacco juice. “It’s a win-win situation,” says Pete. Do you agree with Pete’s point of view? Explain your answer.

**Applying Health Skills**

6. **Analyzing Influences** Some teens start smoking because they see their peers smoking. With a group, brainstorm other reasons teens might start to use tobacco. Make a list of the reasons and compare it with those from other groups.
Tobacco Use Is Hazardous to Your Health

The message that smoking is bad for your health is not new. In 1965, Congress passed a law requiring tobacco manufacturers to print health warnings on cigarette packages. Similar labeling laws have since been passed for other tobacco products.
How Tobacco Use Affects the Body

The chemicals in tobacco and tobacco smoke can cause damage to most of the body’s systems. Tobacco use is particularly damaging to teens because their bodies are still growing and developing. Some of the effects of tobacco use are evident almost immediately. Others become apparent over time. Figure 13.1 shows both the short-term and the long-term harmful effects of tobacco use on body systems.

**FIGURE 13.1**

**IMPACT OF SMOKING ON THE BODY SYSTEMS**

The negative health effects of smoking begin immediately and grow progressively worse the longer you smoke. What are the short-term and long-term effects on the nervous system?

**A Nervous System**

*Short-term effects:* Changes take place in brain chemistry. Withdrawal symptoms (nervousness, shakes, headaches) may occur as soon as 30 minutes after the last cigarette. Heart rate and blood pressure increase.

*Long-term effects:* There is an increased risk of stroke due to decreased flow of oxygen to the brain.

**B Circulatory System**

*Short-term effects:* Heart rate is increased. Energy is reduced because less oxygen gets to body tissues.

*Long-term effects:* Blood vessels are weakened and narrowed. Cholesterol levels increase. Blood vessels are clogged due to fatty buildup. Oxygen flow to the heart is reduced. Risk of heart disease and stroke is greater.

**C Respiratory System**

*Short-term effects:* User has shortness of breath, reduced energy, coughing, and more phlegm (mucus). Colds and flus are more frequent. Allergies, asthma, bronchitis, and other serious respiratory illnesses increase.

*Long-term effects:* Risk of lung cancer, emphysema, and other lung diseases increases.

**D Digestive System**

*Short-term effects:* User has upset stomach, dulled taste buds, and tooth decay.

*Long-term effects:* Risk of cancer of the mouth and throat, gum and tooth disease, stomach ulcers, and bladder cancer increases.
One long-term physical effect of smoking is a dry, hacking cough. This indicates that the tobacco has done permanent damage to the smoker’s body. A dry cough is often a symptom of chronic obstructive pulmonary disease (COPD), a condition in which passages in the lungs become swollen and irritated, eventually losing their elasticity. This condition includes chronic bronchitis, asthma, and emphysema. In the United States, COPD causes over 100,000 deaths per year. Ninety percent of these deaths are linked to smoking.

Smokers are also at an increased risk of developing lung cancer. Figure 13.2 gives some important facts about the link between smoking and lung cancer.

Smoking is also a leading cause of cardiovascular disease, a disease of the heart and blood vessels. Long-term smoking increases cholesterol levels and contributes to arteriosclerosis, a hardening of the arteries. Both conditions reduce oxygen flow to the heart, dramatically increasing a smoker’s risk of stroke and heart attack. Other long-term effects of smoking include cancers of the brain, throat, breast, and bladder.

Define What do the letters COPD stand for?

FIGURE 13.2

The Facts About Lung Cancer

Smoking can cause serious damage to the lungs. What can you do to decrease your chances of getting lung cancer?

Compare the healthy lung with the cancerous lung. Now think about the following facts:

1. Smoking is the number one cause of lung cancer, causing 87 percent of lung cancer cases.
2. Cigarette smoke contains more than 4,000 different chemicals, many of which are cancer-causing substances.
3. Lung cancer is the leading cancer killer in the United States, causing more deaths than the next three most common cancers combined.
4. Secondhand smoke is also an important cause of lung cancer.
Fresh-Air Friend

Mike gets a ride to school with a girl in his class named Ashley. Mike is concerned about his health because Ashley’s mom smokes in the car. Mike hasn’t mentioned his concern because he doesn’t want to sound rude or ungrateful. He’s tried opening a window, but Ashley says it makes her cold. Mike doesn’t know what to do or say. Use the decision-making process to help him make a decision.

- State the situation
- List the options
- Weigh the possible outcomes
- Consider your values
- Make a decision and act
- Evaluate the decision

What Would You Do?

Apply the six steps of the decision-making process to Mike’s problem. What are Mike’s options? Show how Mike makes a healthful decision.

Lesson 2 Review

What I Learned

1. Vocabulary What is cardiovascular disease? How is this caused by smoking?
2. List What are some ways that tobacco use damages the circulatory system?
3. Describe What is the relationship between smoking and lung cancer?

Thinking Critically

4. Analyze Of the health risks associated with tobacco use, which one do you consider the most serious? Explain your answer.
5. Explain Why do you think it is important to put warning labels on cigarette packages?

Applying Health Skills

6. Advocacy Make a poster encouraging teens not to smoke. One part of your poster should clearly state the health risks associated with various tobacco products. The other part should try to persuade teens not to use tobacco.
Lesson 3

Tobacco Addiction

Tobacco’s Web of Addiction

Nicotine is an extremely powerful and addictive drug. It is just as addictive as heroin or cocaine. When nicotine enters the body, it interacts with receptors in the brain. The brain sends a message to the body to speed up heart and breathing rates. As these feelings go away, they leave the user wanting more. Tobacco use soon becomes a habit, and the user can quickly become addicted. Once addicted, it becomes very difficult to quit smoking.

The best way to prevent tobacco addiction is to never start using tobacco. Why is it difficult to stop smoking once a person has started?
Tolerance and Dependence

As the body gets used to nicotine, it develops a tolerance to the drug. **Tolerance** is a process in which the body needs more and more of a drug to get the same effect.

Any time the nicotine level drops or is absent, the body experiences a craving. This is a sign that the body has a physical dependence on nicotine. **Physical dependence** is a type of addiction in which the body itself feels a direct need for a drug. The cravings that result from a physical dependence can only be satisfied by more nicotine.

Addiction to a drug affects the mind as well as the body. Some people begin to believe they need tobacco to perk up or relax. What these people are experiencing is a psychological dependence on nicotine. A **psychological dependence** is an addiction in which the mind sends the body a message that it needs more of a drug. Certain events, situations, and habits trigger a desire to use tobacco. For example, some people feel the need to smoke at parties or nightclubs.

Studies have reported that a staggering 90 percent of adult smokers began smoking before the age of 18. Teens are more likely to develop a severe level of addiction than people who begin smoking at a later age. Teens who use tobacco are also much more likely to use drugs such as marijuana, cocaine, and alcohol. **Figure 13.3** provides greater detail on nicotine addiction among teens.

**Academic Vocabulary**

**trigger** (TRIG er) (noun) to cause a reaction or a series of reactions. Certain foods can trigger headaches in some people.

**Reading Check**

**Identify** What percentage of adult smokers began smoking before the age of 18?

---

**FIGURE 13.3**

**The Path to Smoking Addiction**

The nicotine in tobacco is very addictive. **Based on the facts below, how would you react if a friend said to you, “No way, I won’t get addicted”?**

**The Path to Smoking Addiction**

1. Tobacco companies market to young people. Some young people start smoking at 11 or 12 years old.

2. Every day in the United States, more than 6,000 teens and preteens try their first cigarette.

3. Teens can feel symptoms of nicotine addiction only days or weeks after they first start smoking on an occasional basis. Addiction symptoms are felt well before teens begin to smoke daily.

4. The earlier in life smoking is first tried, the higher the chances are of becoming a regular smoker and the lower the chances are of ever being able to quit.
Breaking the Tobacco Habit

Although some of the damage done by smoking cannot be reversed, it is never too late to quit using tobacco. Here are some steps to do just that:

- **Prepare to stop.** Set a specific date for quitting. Mark that date on a calendar so you won’t forget.
- **Get support and encouragement.** Let family and friends know you are quitting and ask them for help and support.
- **Find out about health services.** Doctors, support groups, and certain organizations can help users quit. Explore resources in your community.
- **Change your daily routine.** It helps to avoid smokers and routines that were part of your life as a smoker.
- **Follow a healthy lifestyle.** Eat well, manage stress, and get plenty of physical activity to help you feel good without the use of tobacco.

Withdrawal

Some people choose to quit smoking *cold turkey*, meaning they stop all use of tobacco immediately. When a person stops using tobacco, he or she may experience symptoms of withdrawal. These are physical and psychological reactions that occur when someone stops using an addictive substance. The physical symptoms of withdrawal include headaches, tiredness, increased hunger, and a jittery, restless feeling. **Nicotine replacement therapies (NRT)** are products that assist a person in breaking a tobacco habit. These products reduce the amount of nicotine in the body slowly, reducing the symptoms of withdrawal.

The psychological symptoms of withdrawal can include irritability, sudden cravings for tobacco in certain situations or at certain times, and difficulty concentrating or sleeping. Counseling or support groups can help a user overcome a psychological dependence on tobacco.

**Define** What are nicotine replacement therapies?
### Dealing with Relapse

The body undergoes physical changes when a person no longer uses tobacco. Learning to live without tobacco takes time and a lot of willpower. Sometimes, the symptoms of withdrawal are so bad that a person takes up smoking again. As a result, many people who decide to quit tobacco suffer a relapse within the first three months of quitting. A **relapse** is a return to the use of a drug after attempting to stop. Resuming the habit after working hard to quit can be discouraging. Self-esteem often drops and people may feel frustrated and angry. Most people attempt to quit several times before they succeed. Reviewing what caused a relapse and taking steps to prevent it from happening again can help. For example, if a person is in the habit of smoking after a meal, planning another activity can take the person’s mind off smoking.

**Go Online**
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 *tolerance*. How does a tolerance to nicotine form?

2. **Recall** Explain the difference between physical dependence and psychological dependence.

3. **Give Examples** What are the symptoms of nicotine withdrawal?

**Thinking Critically**

4. **Analyze** What specific dangers does trying tobacco pose for teens?

5. **Synthesize** How do nicotine replacement therapies help a person stop smoking?

6. **Apply** Madison’s mother has been trying to quit smoking, but has had several relapses. What can Madison do to help her mother quit smoking?

**Applying Health Skills**

7. **Refusal Skills** Some teens try tobacco for the first time because of peer pressure. With a small group, brainstorm effective ways to say no when peers offer or suggest that you use tobacco. Make a list of the best ideas and share them with your classmates in a roundtable discussion.
Lesson 4

Tobacco’s Costs to Society

Guide to Reading

Building Vocabulary
Explain how the terms below are related. Then find each in the lesson and write a definition for each term in your journal.
- secondhand smoke (p. 320)
- sidestream smoke (p. 320)
- mainstream smoke (p. 320)
- passive smoker (p. 320)

Focusing on the Main Ideas
In this lesson, you will learn to
- identify ways in which tobacco harms nonsmokers.
- describe the costs tobacco use has on society.

Reading Strategy
Identifying Problems and Solutions After reading this lesson, state why secondhand smoke is a problem. Offer your suggestions for dealing with this problem.

Tobacco’s Many Costs

For every dollar spent to spread the word about the dangers of tobacco, tobacco companies spend $23 on marketing. Marketing is a method used by businesses to make the public aware of their product. Each year tobacco companies spend $12.7 billion on advertising alone. Whether or not they smoke, U.S. taxpayers pay around $38 billion each year in federal taxes to treat the many health problems caused by smoking. That averages to about $320 per American household. There are many more costs associated with tobacco use. This lesson takes a look at some of them.

Cost to the Individual

Researchers discovered that the average smoker smokes a pack and a half a day. The average price per pack in most states is up to $5. This means the typical smoker spends $7.50 per day on tobacco. Over the course of a month, that works out to $225. In 10 years’ time, the smoker will have spent $27,000 on tobacco.

The average smoker spends $225 a month on cigarettes. How would you put this money to better use?
Academic Vocabulary

estimated (ES tuh meyt ted) (adjective) obtained using rough calculations. Tyra’s assignment was to calculate the estimated number of teens who join after-school sports teams.

Buying tobacco products is not the only cost of smoking. Smokers pay higher health insurance rates than nonsmokers. They can also expect to live shorter lives and have more health problems than nonsmokers. This is especially true for females, whose lives are shortened by an average of five years from smoking.

Smoking is costly in two other ways as well. Burning tobacco is a leading cause of forest fires and fires in the home.

Recall How much does the United States spend each year on health care costs related to tobacco use?

Costs to the Nonsmoker

Smokers are not the only people who pay a price for their habit. The health of those who don’t smoke is also affected. Whenever a smoker lights up, smoke is released into the air that everyone breathes. This is referred to as secondhand smoke, or environmental tobacco smoke (ETS). ETS is a mixture of two forms of smoke from burning tobacco products. The first is sidestream smoke, or smoke that comes directly from a burning cigarette, pipe, or cigar. The second type is mainstream smoke, or smoke that is exhaled by a smoker. Sidestream smoke contains twice as much tar and nicotine as mainstream smoke.

A nonsmoker who breathes in secondhand smoke is said to be a passive smoker. Passive smokers develop many of the same health problems as people who actually light and smoke tobacco products. An estimated 40,000 nonsmokers die each year from heart disease. About 3,000 additional nonsmokers die of lung cancer.

Secondhand smoke is particularly hard on children younger than 18 months and people with asthma. What are some actions that you can take to eliminate secondhand smoke in certain places?
Costs to the Unborn Child

Health experts have long recognized that pregnancy and tobacco do not mix. Smoking during pregnancy increases the risk that the baby will be born too soon and have developmental problems. Babies born to smoking mothers also have lower birth weights than those born to nonsmoking mothers. One reason for the lower birth weight is that the developing baby gets too little oxygen. The lack of oxygen is caused by the presence of carbon monoxide gas in the mother’s blood.

**Identify** If a pregnant female smokes, how is her baby affected?

Costs of Lost Productivity

Productivity is a measure of how much a person is able to produce based on how much time he or she works. If you finish most of your homework in study hall, you might say study hall is “productive.” People who use tobacco have lower productivity levels on the job. They are sick more often than nonsmokers and, therefore, get less done. This reduced or lost productivity is costly to businesses. It is also costly to the nation as a whole. It is estimated that smoking costs the U.S. economy $80 billion per year in lost productivity.

Countering the Costs of Tobacco

According to the Centers for Disease Control and Prevention, the cost of each pack of cigarettes sold in the United States is more than $7 in medical care. Other studies suggest that the cost may be even higher. Some public action groups and Congress have been investigating ways to lower that cost. A ban on the manufacture and sale of tobacco products has been proposed. Many smokers, however, claim that would interfere with their constitutional rights.

Another proposal is to increase the amount of excise tax on cigarettes. This would make it more costly to purchase tobacco products and give the government more money to educate people about the dangers of tobacco use. The graph in Figure 13.4 on the next page shows the portion of the retail price of cigarettes that goes to excise tax in selected states.

**Explain** What are two possible solutions to offsetting the costs of tobacco on society?
**STATE EXCISE TAX RATES ON CIGARETTES**

Since January 1, 2002, 41 states have increased their cigarette tax in an effort to reduce smoking. **What is the tax rate for a pack of cigarettes in Florida? In New York?**

<table>
<thead>
<tr>
<th>State</th>
<th>Tax Rate (¢ per pack)</th>
<th>State</th>
<th>Tax Rate (¢ per pack)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>160</td>
<td>New York</td>
<td>150</td>
</tr>
<tr>
<td>Arizona</td>
<td>118</td>
<td>North Carolina</td>
<td>5</td>
</tr>
<tr>
<td>Connecticut</td>
<td>151</td>
<td>Rhode Island</td>
<td>246</td>
</tr>
<tr>
<td>Florida</td>
<td>33.9</td>
<td>South Carolina</td>
<td>7</td>
</tr>
<tr>
<td>Georgia</td>
<td>37</td>
<td>Vermont</td>
<td>119</td>
</tr>
<tr>
<td>Michigan</td>
<td>200</td>
<td>Washington</td>
<td>142.5</td>
</tr>
<tr>
<td>Montana</td>
<td>170</td>
<td>Wisconsin</td>
<td>77</td>
</tr>
<tr>
<td>New Jersey</td>
<td>240</td>
<td>District of Columbia</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled by FTA various sources, 2005.

---

**Lesson 4 Review**

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

**What I Learned**

1. **Vocabulary** What is secondhand smoke? How does it affect the nonsmoker?

2. **Identify** How much money do tobacco companies spend each year on advertising?

3. **Vocabulary** What is smoking’s cost to the United States in terms of business productivity?

**Thinking Critically**

4. **Evaluate** Why are pregnant women advised not to smoke?

5. **Analyze** Erin was waiting in line for the movies. When the man in front of Erin lit a cigarette, a woman standing behind the man said it was rude. “Why?” the man asked. “I’m not hurting anyone else, am I?” How would you respond to this question?

**Applying Health Skills**

6. **Advocacy** With a group, brainstorm ways to lessen the cost of tobacco to society. Once you come up with a plan, share it with those in other groups. Take the best ideas from all plans. Share these with your local government representative in the form of a class letter or e-mail.
Why Some Teens Start Using Tobacco

With everything you have read in this chapter, you may wonder why any teen would use tobacco. Here, you will find some answers and learn about ways to stay tobacco free.

Pressure from Peers

At some point, most teens will be offered tobacco. Some will not only have it offered to them, but be strongly encouraged to use it as well. This pressure you feel to go along with harmful behaviors or beliefs of others your age is called negative peer pressure.

Messages like this encourage people to say no to tobacco. What would you say if someone offered you a cigarette?
Other Pressures

Some of the pressures to smoke can come from indirect sources, such as the following:

- **Family members.** Teens who live in homes where tobacco is used are more likely to use tobacco themselves.
- **Advertising.** Tobacco companies use strategies such as **point-of-sale promotions**, which are advertising campaigns in which a product is promoted at a store’s checkout counter. They effectively capture the attention of shoppers as they are waiting to pay.
- **Media.** TV shows and movies often show characters having fun while smoking.

The good news is that fewer and fewer teens are using tobacco every year. **Figure 13.5** shows what teens really think about tobacco.

**Describe** What are some ways in which teens are pressured to smoke?

**FIGURE 13.5**

**TEEN OPINIONS ON SMOKING**

Here is what teens across the United States said in response to statements about tobacco use. **How would you respond to these statements?**

<table>
<thead>
<tr>
<th>All numbers are percentages</th>
<th>Agree</th>
<th>Disagree</th>
<th>No Opinion or Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeing someone smoke turns me off.</td>
<td>67</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>I would only date people who don’t smoke.</td>
<td>86</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>It is safe to smoke for only a year or two.</td>
<td>7</td>
<td>92</td>
<td>1</td>
</tr>
<tr>
<td>Smoking can help you when you’re bored.</td>
<td>7</td>
<td>92</td>
<td>1</td>
</tr>
<tr>
<td>Smoking helps reduce stress.</td>
<td>21</td>
<td>78</td>
<td>3</td>
</tr>
<tr>
<td>Smoking helps keep your weight down.</td>
<td>18</td>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>Chewing tobacco and snuff cause cancer.</td>
<td>95</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I strongly dislike being around smokers.</td>
<td>65</td>
<td>22</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Centers for Disease Control and Prevention, 2005.
Staying Tobacco Free

You can protect your health now and in the future by making a commitment to stay tobacco free. Ninety percent of adult smokers report having started smoking before age 18. If you avoid using tobacco now as a teen, there is a strong possibility that you won’t start smoking as an adult.

There is no question that resisting negative peer pressure can be difficult, but you can do it. Start by choosing friends who do not use tobacco. Also, avoid situations where tobacco is likely to be used. Finally, if you do feel pressure to try tobacco, remember to use the S.T.O.P. strategy to help you say no. The S.T.O.P. strategy is explained in Chapter 5.

Nonsmokers’ Rights

You have the right to breathe air that is free of tobacco smoke. Laws have been passed in recent years to protect the rights of nonsmokers. Many local laws forbid smoking in designated areas such as businesses, schools, and public transportation vehicles.

Identify What action has been taken to protect nonsmokers’ rights?

Lesson 5 Review

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

What I Learned

1. Vocabulary What is negative peer pressure?

2. Describe Name ways of avoiding pressure to try tobacco.

3. Recall What right is shared by all nonsmokers?

Thinking Critically

4. Evaluate Of all the sources that pressure to smoke can come from, which do you find the most persuasive, and why?

5. Analyze You are sitting in a nonsmoking area of a restaurant. A person at the next table lights up. When you point to the nonsmoking sign, the person extinguishes the cigarette. She then says, “You know, smokers have rights, too.” How do you respond?

Applying Health Skills

6. Accessing Information Use the Internet to research government policies and laws related to the sale and use of tobacco products. What laws have been created by your state’s government? Analyze the purpose and benefits of these laws.
What Is Goal Setting?
Goal setting is a five-step plan for improving and maintaining your personal health. Some goals are easy to reach while others may be more challenging.

The Five Steps of the Goal-Setting Plan

Step 1: Choose a realistic goal and write it down.
Step 2: List the steps that you need to take to reach the goal.
Step 3: Find others, like family, friends, and teachers, who can help and support you.
Step 4: Set checkpoints along the way to evaluate your progress.
Step 5: Reward yourself once you have reached your goal.

Model
Read how Carrie and Rebecca use goal setting to make Rebecca’s wedding reception smoke free.

Carrie and Rebecca were discussing plans for Rebecca’s wedding reception. Carrie remembered that many of the guests smoke. “What are we going to do?” Carrie asked Rebecca.

Carrie and Rebecca then came up with a plan to make the reception smoke free.

1. **Identify a specific goal.** Rebecca wants to have a smoke-free reception.

2. **List the steps you will take.** All the smokers will be asked to smoke outside.

3. **Get help and support from others.** Rebecca and her fiancé will ask their nonsmoking relatives to notify the smokers about the decision.

4. **Evaluate your progress.** Rebecca will make sure that everyone knows that the wedding is a nonsmoking event.

5. **Reward yourself.** Rebecca’s reward will be a smoke-free reception.
Help Pilar use the goal-setting steps to protect herself from environmental tobacco smoke at a birthday party.

Pilar is on her way to a birthday party with relatives. Her aunt Emily, who smokes, is going to be there. Though Pilar is looking forward to seeing her aunt, she wants to protect her health by avoiding secondhand tobacco smoke.

1. What is Pilar’s specific goal?
2. What are some steps she could take?
3. How could she get help and support from others?
4. How can she evaluate her progress?
5. What is Pilar’s reward?

Apply

Use what you have learned about goal setting to complete the activity below.

Imagine that you are planning to take a vacation with your relatives. Some of your relatives smoke. You know issues will come up about when and where smoking will be allowed. For example, the smokers in the group will want to sit in the smoking section at restaurants. Use your goal-setting skills to help you stay tobacco free. Explain why it is important to stay away from tobacco smoke.

Self-Check

■ Did I make a plan for achieving my goal of remaining tobacco free?
■ Did I explain why it’s important to avoid tobacco smoke?
Recently, many people were surprised to hear that the Centers for Disease Control and Prevention (CDC) issued a warning about secondhand smoke. It advised anyone at risk of heart disease to avoid any indoor public spaces where smoking is allowed. According to the CDC, exposure to secondhand smoke for as little as 30 minutes can significantly increase a person’s risk of heart attack.

**DETECTING A HIDDEN DANGER**

The health risks posed by secondhand smoke are well documented, but what triggered the warning was a small study out of Helena, Montana. When the city passed a law banning indoor smoking, Helena’s only heart hospital recorded a 40 percent drop in the number of heart attacks. They went from an average of 40 per six months to just 24.

What’s more, when a court order lifted the ban half a year later, the heart-attack rate bounced right back. Dr. Robert Shepard, who wrote the Helena study, offers this explanation: “There is laboratory evidence that secondhand smoke makes platelets in the blood stickier. This causes clots and sends arteries into spasm—both of which can lead to heart attacks.” The chemical reaction and the resulting damage occur quickly.

**WHAT DOES IT MEAN FOR EVERYONE ELSE?**

The study’s findings could be very important. The CDC estimates that in the United States, secondhand smoke causes 35,000 deaths a year from heart disease. This figure, some experts believe, will have to be revised upward. Why? Because 60 percent of Americans—both smokers and nonsmokers—show biological effects of tobacco-smoke exposure.

Shepard did offer some reassurance for people who cannot avoid groups of smokers when they walk outside. Exposure for a few seconds probably doesn’t do much harm, he says, because the toxins in cigarette smoke are diluted in outside air.
Lesson 1  Facts About Tobacco
Main Idea Tobacco is an addictive and harmful drug.
- Harmful substances in tobacco include nicotine, tar, and carbon monoxide.
- Tobacco products include cigarettes, cigars, pipes, bidis, kreteks, and smokeless tobacco that is chewed or inhaled.

Lesson 2  Health Risks of Tobacco Use
Main Idea The chemicals in tobacco and tobacco smoke can cause damage to most of the body’s systems.
- Congress passed a law in 1965 requiring tobacco manufacturers to print health-warning labels on cigarette packages. Other tobacco products have similar labels.
- The long-term effects of tobacco include chronic obstructive pulmonary disease, cardiovascular disease, stomach ulcers, infertility, and cancer.

Lesson 3  Tobacco Addiction
Main Idea Once addicted, it is very hard to quit smoking.
- A tolerance to nicotine forms as the body adjusts to the effects of the drug.
- Physical dependence is a type of addiction in which the body feels a direct need for a drug.
- Psychological dependence is an addiction in which the mind sends the body a message that it needs more of a drug.
- Withdrawal is the physical and psychological reactions that occur when someone stops using an addictive substance.

Lesson 4  Tobacco’s Costs to Society
Main Idea There are many costs associated with tobacco use.
- Tobacco products are expensive.
- A nonsmoker who breathes in tobacco smoke is called a passive smoker. They are exposed to secondhand smoke, in the form of sidestream and mainstream smoke.
- Pregnant women who smoke risk having babies born too soon and with developmental problems.
- People who smoke get less work done because they are sick more often than nonsmokers.

Lesson 5  Choosing to Be Tobacco Free
Main Idea You can protect your health now and in the future by making a commitment to stay tobacco free.
- Pressure to use tobacco can come from peers, family members, advertising, and the media.
- Ways to avoid using tobacco include choosing friends who do not use tobacco, avoiding situations where tobacco is likely to be used, and using refusal skills.
- Many local laws forbid smoking at businesses, at schools, and in public transportation vehicles.
Lesson 2  Health Risks of Tobacco Use

4. A condition in which passages in the lungs become swollen and irritated, eventually losing their elasticity, is known as _________.

5. _________ is a disease of the heart and blood vessels.

On a sheet of paper, write the numbers 6–11.
Write True or False for each statement below. If the statement is false, change the underlined word or phrase to make it true.

Lesson 3  Tobacco Addiction

6. A process in which your body needs more and more of a drug to get the same effect is called withdrawal.

7. A form of addiction in which the mind sends the body a message that it needs more of a drug is called _______ addiction.

Lesson 4  Tobacco's Costs to Society

8. Sidestream smoke is smoke that comes from a lighted cigarette, pipe, or cigar.

9. When people miss work because of a tobacco-related illness, the result is lost productivity.

Lesson 5  Choosing to Be Tobacco Free

10. An advertisement that catches your attention at a checkout counter is an example of ______ peer pressure.

11. Teens who avoid smoking are more likely to start smoking as adults.
Thinking Critically

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

12. Apply Nadine smells tobacco on her sister Shari’s hair and clothes one afternoon. How could Nadine talk to her sister about the tobacco smell without accusing her of smoking?

13. Synthesize Explain how a person becomes addicted to tobacco.

Write About It

14. Personal Writing Write a story about a teen faced with a difficult decision. The decision is whether to join a club in which the members smoke. Use the decision-making process to show how the teen makes a healthy choice.

Standardized Test Practice

Math

This chart shows the estimated number of annual smoking-related deaths and their causes. Use this information to answer the questions that follow.

<table>
<thead>
<tr>
<th>Smoking Related Deaths</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung Cancer</td>
<td>123,800</td>
</tr>
<tr>
<td>Other Cancers</td>
<td>34,700</td>
</tr>
<tr>
<td>Chronic Lung Disease</td>
<td>90,600</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>86,800</td>
</tr>
<tr>
<td>Stroke</td>
<td>17,400</td>
</tr>
<tr>
<td>Other Diagnoses</td>
<td>84,600</td>
</tr>
</tbody>
</table>

1. This chart reveals
   A. that lung cancer is not the leading cause of smoking-related deaths.
   B. that more people die of chronic lung disease than lung cancer.
   C. that lung cancer is the leading cause of smoking-related deaths.
   D. that more people die of other cancers and strokes than of lung cancer.

2. Based on this chart, you can assume all of the following except
   A. that smoking can cause a person to have a deadly stroke.
   B. that more people die of other cancers than of strokes.
   C. that smoking leads to a number of deadly diseases.
   D. that more people die in car crashes than from smoking.

TEST-TAKING TIP

When problems include charts, make sure you understand what type of data it shows.