

## Chapter 16

# At a Glance



## TEENS Talk

**Tackling Tobacco** What misconceptions did you have about tobacco products before watching this video?



### Section 1 Teens and Tobacco

#### Key Ideas

- ✓ Friends, family, and the media greatly influence whether someone starts to use tobacco.
- ✓ Tobacco users take in nicotine whenever they use cigarettes, cigars, pipes, or smokeless tobacco products.

#### Vocabulary

- nicotine (402)
- smokeless tobacco (403)
- chewing tobacco (403)
- snuff (403)

### Section 2 Chemicals in Tobacco Products

#### Key Ideas

- ✓ The major short-term effects of nicotine use are increased heart rate, increased blood pressure, and changes in the brain that may lead to addiction.
- ✓ In addition to nicotine, two of the most harmful substances in tobacco smoke are tar and carbon monoxide.

- ✓ Smokeless tobacco contains many of the same dangerous chemicals that are in tobacco smoke.

#### Vocabulary

- stimulant (406)
- tar (408)
- carcinogen (408)
- carbon monoxide (409)



### Section 3 Risks of Tobacco Use

#### Key Ideas

- ✓ With every dose of tobacco, users increase their risk of developing respiratory diseases, cardiovascular disease, and several different forms of cancer.
- ✓ If a person continues to smoke over a long period of time, the damage that occurs to the respiratory system becomes permanent.
- ✓ The combined effects of nicotine, tar, and carbon monoxide force the cardiovascular system to work harder to deliver oxygen throughout the body.
- ✓ Tobacco use is a major factor in the development of lung cancer, oral cancers, and many other cancers.

- ✓ Long-term exposure to secondhand smoke can cause cardiovascular disease, many respiratory problems, and cancer.

- ✓ Pregnant women who smoke put their babies at risk for many health problems.

#### Vocabulary

- chronic obstructive pulmonary disease (COPD) (411)
- chronic bronchitis (411) • emphysema (412)
- leukoplakia (414) • mainstream smoke (414)
- sidestream smoke (414) • secondhand smoke (414)

### Section 4 Saying No to Tobacco

#### Key Ideas

- ✓ Sticking to your decision not to use tobacco involves being able to say no clearly and with confidence.
- ✓ The health benefits of quitting tobacco use begin immediately and continue throughout life. Society also benefits every time a tobacco user quits.

- ✓ The most important factor in successfully quitting tobacco is a strong personal commitment.

#### Vocabulary

- nicotine substitute (420)

Tobacco 421

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**Tackling Tobacco** Ask for volunteers to share their answers. Use examples from the video to review facts about the dangers of tobacco use.

### Key Ideas Review

**L2** Have students reword the section objectives as questions and then try to answer them. Students should find the answers in the text for any questions they cannot answer.

**L2** Have pairs of students work together to rephrase in their own words the key ideas in each section.

### Vocabulary Review

**L1** Read definitions of the vocabulary terms and go around the class asking students to identify the terms. Have students look up and reread the definitions of any terms they miss.

**L2** Have students use a pencil to write sentences using the vocabulary terms. Then have students erase the vocabulary term in each sentence, exchange sentences with a partner, and try to fill in the missing terms in the partner's sentences.



Students can go online to take a self test on Chapter 16.

## Reviewing Key Ideas

### Section 1

- b
- because people are now more aware of the dangers of tobacco use
- Having friends who use tobacco increases the risk of using tobacco. Having friends who do not use tobacco decreases the risk of using tobacco.
- Sample answer:* I think there should be more restrictions, because this might reduce the number of people who smoke.

### Section 2

- b
- Nicotine mimics neurotransmitters and activates the brain's "reward pathway."
- Teens become addicted faster and more intensely than adults.
- It decreases muscle action in air passages, increases mucus production, and paralyzes cilia lining air passages.
- Sample answers:* because they think bad things cannot happen to them; because they do not realize how addictive tobacco is

### Section 3

- b
- Any three:* cancer of the lung, mouth, esophagus, larynx, stomach, pancreas, kidney, bladder, and blood
- Any one:* cerebral palsy, sight impairment, hearing problems, learning difficulties, or sudden infant death syndrome
- Sample answer:* ban smoking in public places, because this is the only way to ensure that secondhand smoke does not affect other people

### Section 4

- a
- Students can suggest any of the tips for quitting listed on page 419.

## Reviewing Key Ideas

### Section 1

- In nature, nicotine acts as a(n)
  - growth agent in plants.
  - insecticide.
  - plant pigment.
  - nutrient.
- Why is tobacco use less socially acceptable than it used to be?
- How can friends be both positive and negative influences in regard to tobacco?
- Critical Thinking** Do you think there should be more or fewer restrictions on the advertising and sale of tobacco products? Explain.

### Section 2

- The odorless gas in tobacco smoke that binds to hemoglobin is
  - carbon dioxide.
  - carbon monoxide.
  - tar.
  - nicotine.
- Describe how nicotine affects the brain.
- How does the development of nicotine addiction differ in teens and adults?
- How does tobacco smoke affect a smoker's air passages?
- Critical Thinking** Why do you think some people believe they can use tobacco without becoming addicted?

### Section 3

- The smoke that a smoker exhales into the air is called
  - environmental tobacco smoke.
  - mainstream smoke.
  - sidestream smoke.
  - secondhand smoke.
- What are three types of cancer that have been linked to tobacco use?
- Name one disorder that babies of mothers who smoked are at risk for.
- Critical Thinking** What do you think are the most effective ways to protect nonsmokers from the effects of secondhand smoke? Explain.

### Section 4

- Which of the following benefits happens immediately after someone quits smoking?
  - Blood oxygen levels return to normal.
  - Lung function increases by 30%.
  - The risk of having a stroke returns to normal.
  - Senses of taste and smell return to normal.
- What would you suggest to an ex-smoker to help him or her not start smoking again?
- Discuss the different methods a person could use to quit smoking.
- Critical Thinking** Some employers prefer not to hire smokers because their healthcare costs are higher. Do you think it is appropriate not to hire someone because he or she smokes? Why or why not? **WRITING**



## Building Health Skills

- Making Decisions** Suppose that your favorite uncle has come to visit. He asks you for an ashtray. Smoking is not allowed in your home. How would you handle this situation tactfully?
- Advocacy** Suppose that you work for an advertising firm. The Surgeon General has hired your firm to work on a new anti-smoking campaign. Develop a 30-second public service commercial that will discourage young people from smoking. **WRITING**
- Setting Goals** Evaluate how smoking could affect your career goals.

## Health and Community

**Volunteering to End Smoking** Contact a local chapter of the American Cancer Society, American Lung Association, or other similar agency. Find out about their efforts to reduce smoking in your community. Ask about volunteer opportunities for teens. Create a flyer describing the possible opportunities and share it with your health class. **WRITING**

- A person could quit abruptly or gradually. The person could quit alone or with the help of classes or support groups. The person could use a nicotine substitute.
- Students might think it is or is not appropriate. Evaluate the answer based on the quality of the argument.



## Building Health Skills

- Sample answer:* I would tell him that my parents do not allow smoking in the house and politely ask him to smoke outside.
- Public service announcements should give convincing, teen-relevant reasons for not smoking.
- Sample answer:* Smoking might cause me to be unhealthy and unable to do my job.