

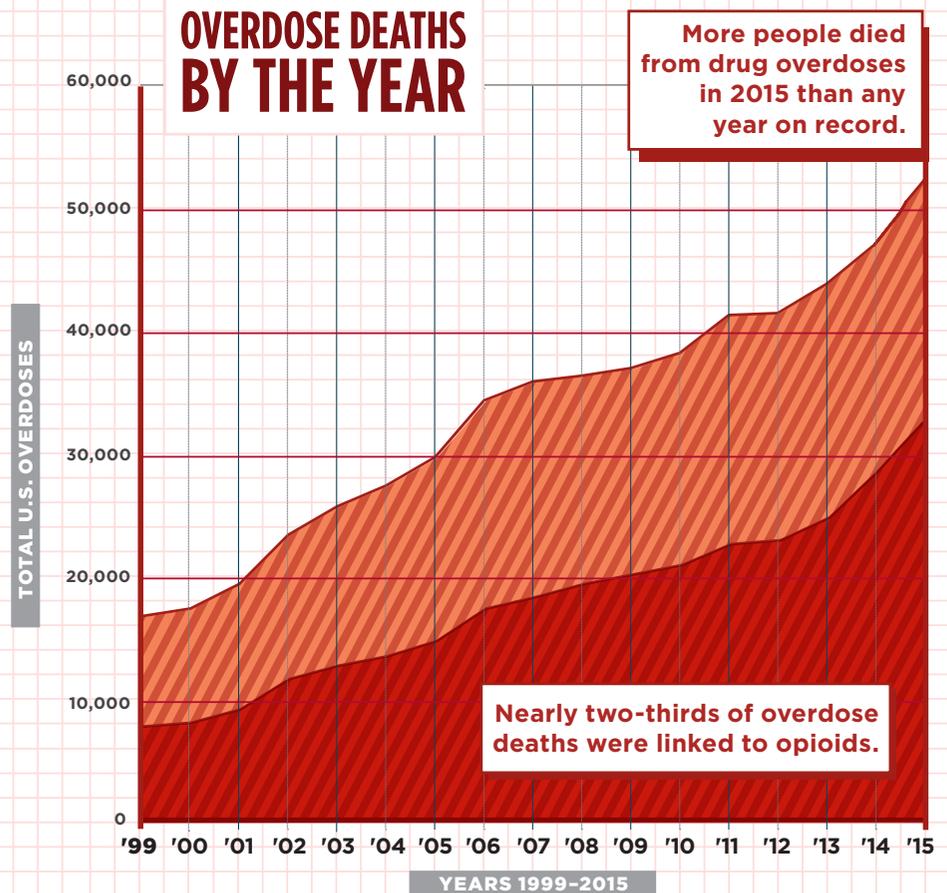
OPIOIDS AND THE OVERDOSE EPIDEMIC

America is facing a national health crisis. More people died from drug overdoses in 2015 than any other year on record. In fact, more people died from drug overdoses than from either car crashes or guns. Nearly two-thirds of overdose deaths were linked to opioids.

Opioids (*OH-pee-oyds*) are a group of chemicals that reduce pain, increase pleasure, and slow breathing. Prescription opioid medications include OxyContin® (oxycodone), Vicodin® (hydrocodone), codeine, morphine, methadone, and fentanyl. Heroin is also an opioid, but it is illegal.

Doctors prescribe opioids to treat severe pain. But these drugs, like heroin, can be addictive and potentially deadly due to overdoses. Opioid overdoses cause breathing to slow or even stop. Without medical help, this can cause death.

In recent years, overdoses and deaths related to opioids have dramatically increased. Health officials call it an *epidemic* because the number of overdoses has increased dramatically throughout the population. Read on to learn more about the crisis and how to stay safe.



Total U.S. Overdose Deaths
 Total U.S. Overdose Deaths From Opioids

Overdose Data: CDC Wonder, 1999–2015. <https://wonder.cdc.gov>.

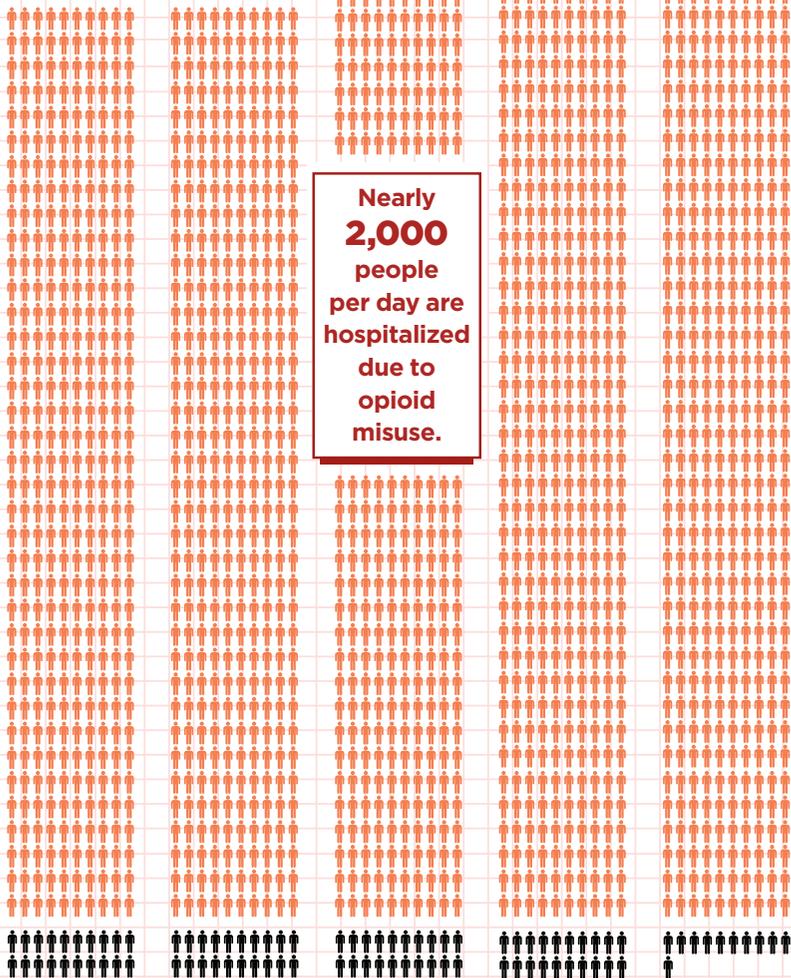


When opioids are prescribed by a doctor and used as directed, most people don't become addicted, overdose, or die—but some do. Opioids are very powerful painkillers that should be handled with extreme care. The following safety precautions are very important.

- ✓ Never take any drug not directly supplied by a doctor or a pharmacy. Prescription painkillers that are made or sold illegally can be deadly.
- ✓ If a doctor prescribes an opioid painkiller, discuss with him or her whether there are less addictive options.
- ✓ Medications should be taken exactly as prescribed.

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OPIOID MISUSE BY THE DAY



Nearly **2,000** people per day are hospitalized due to opioid misuse.

Roughly **91** people die every day from opioid overdose.

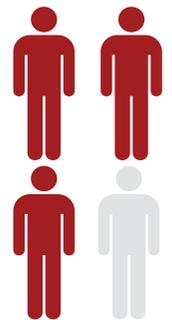
WHY IS THIS HAPPENING?

↑ An increase in prescriptions:

Between 1999 and 2013, the number of opioid prescriptions in the United States quadrupled. New guidelines are now helping decrease the number of prescriptions.

↑ A rise in heroin use:

People addicted to prescription opioids sometimes end up using heroin, which is cheaper. As a result, the use of heroin has been increasing across most age groups and populations. Heroin today is much more pure and powerful than it was 30 years ago—which increases the risk of overdose.



THREE OUT OF FOUR HEROIN USERS STARTED BY MISUSING PRESCRIPTION OPIOID MEDICATIONS.

↑ A rise in fentanyl deaths:

Fentanyl is an opioid that is 50 to 100 times more powerful than other opioids—increasing the risk of overdose. Normally, fentanyl is prescribed only for extreme pain. But now it is being illegally made and is sometimes mixed with heroin and other drugs without the users' knowledge. Recently, people have died when they took this powerful drug without knowing it.

✚ A LIFESAVING DRUG

Naloxone is a medication that can reverse opioid overdose and restore breathing. It can save a victim's life if administered quickly enough. Naloxone is used by medical personnel, but programs are underway to also make it available to opioid users, their friends, and other potential bystanders.

► **More Info:** For additional facts about opioids and health, visit scholastic.com/headsup and teens.drugabuse.gov.

Safety Tips (continued)

- ✓ Opioids should never be mixed with alcohol or with any other drug (except as prescribed by a doctor) because this greatly increases the risk of overdose.
- ✓ Prescription drugs should never be shared with anyone else. This is both illegal and dangerous.

HEADS UP
REAL NEWS ABOUT DRUGS AND YOUR BODY

OPIOIDS AND THE OVERDOSE EPIDEMIC

America is facing a national health crisis. More people die from drug overdoses in 2015 than any other year on record. In fact, more people die from drug overdoses than from either car crashes or guns. Nearly two-thirds of overdose deaths are linked to opioids.

Opioids (overdose deaths) are a group of chemicals that reduce pain, increase pleasure, and slow breathing. Prescription opioid medications include Oxycodone (Oxycontin), Vicodin[®], codeine, morphine, and fentanyl. Heroin is also an opioid. So is the illegal drug.

Doctors prescribe opioids to treat severe pain. But these drugs, too, Heroin can be addictive and potentially deadly due to overdoses. Opioid overdose causes breathing to slow or even stop. Without medical help, this can cause death, in recent years.

Overdose deaths related to opioids have steadily increased since the number of overdoses has increased because of the number of combinations that have increased because of the combination. Read on to learn more about the crisis and how to stay safe.

SAFETY TIPS

- Never take any drug that a doctor prescribed for another person.
- If you are prescribed an opioid, discuss with your doctor whether there are less addictive options.
- Medications should be taken exactly as prescribed.

OPIOIDS AND THE OVERDOSE EPIDEMIC

America is facing a serious health crisis involving opioid drugs. On average, 3,900 people begin using prescription opioid painkillers for nonmedical use every day, greatly increasing each person's risk for addiction and overdose. Deaths involving opioid overdoses have more than quadrupled since 1999. The article "Opioids and the Overdose Epidemic" helps to show the extent of the crisis as well as what is causing it. The article also explains that while prescription opioid pain medications can play an important role in a person's medical care, they need to be used with extreme care. Included is advice on how students can keep themselves and loved ones safe.

SUBJECT

- Science Literacy
- English Language Arts
- Health/Life Skills

COMMON CORE STATE STANDARDS

RST.6-8.1 and RST.9-10.1

- Cite specific textual evidence to support analysis of science and technical texts.

RST.6-8.7 and RST.9-10.7

- Evaluate content presented in diverse formats, including visually and quantitatively.

NEXT GENERATION SCIENCE STANDARDS

MS-LS1-3 and HS-LS1-2

- From Molecules to Organisms: Structures and Processes

NATIONAL SCIENCE EDUCATION STANDARDS

- Structure and Function in Living Things
- Personal and Community Health

Additional Teaching Resources:

- headsup.scholastic.com/teachers
- teens.drugabuse.gov

Critical-Thinking Questions:

- 1) An epidemic occurs when a disease or health-related event or behavior happens in a community at far greater rates than would normally be expected. What evidence indicates that the United States is facing an opioid overdose epidemic? *(Answers may include that more people died from drug overdoses in 2015 than any other year on record; heroin use and overdoses have increased across many age groups and populations; the number of people dying from opioid drugs today is more than four times the number who died in 1999.)*
- 2) What are some ways to help control the opioid overdose epidemic? Support your answer with textual evidence. *(Answers may include to improve how opioid medications are prescribed and dispensed so that only people who really need the drugs get them; carefully monitor those who receive prescriptions; make medications such as naloxone readily available so that if a person overdoses, he or she can quickly get lifesaving help; increase education about opioids so people better understand the risks.)*
- 3) Nearly all people who use heroin also use at least one other drug. What impact can that have on overdose rates? *(It may lead to higher overdose rates because mixing opioids with other drugs increases the risk for overdose.)*
- 4) What are at least three pieces of advice that can help people stay safe if they are prescribed opioid pain medications? *(Answers may include to talk with their doctor to make sure that there are no other safe alternatives; take the medications only as prescribed; seek help if they begin taking opioids for nonmedical reasons; never combine opioids with alcohol or other drugs; don't share prescriptions with other people; only take medications supplied by a doctor or pharmacy.)*

Writing Prompts:

- **Grades 6–8:** What are three ways people can misuse prescription opioid pain medications? What are some possible consequences of this?
- **Grades 9–10:** Explain at least three factors that may have led to an increase in the number of opioid overdoses in America.
- **Grades 11–12:** Why do you think heroin use is increasing among many different populations in America? Support your answer with evidence from the text.

Tiered Vocabulary Tools:

Visit scholastic.com/headsup/opioidepidemic-vocabulary for a tiered vocabulary list to support this article.

Student Work Sheet:

The skills work sheet on the reverse side has students analyze graphs and combine the information with what they learned in the article to answer critical-thinking questions.

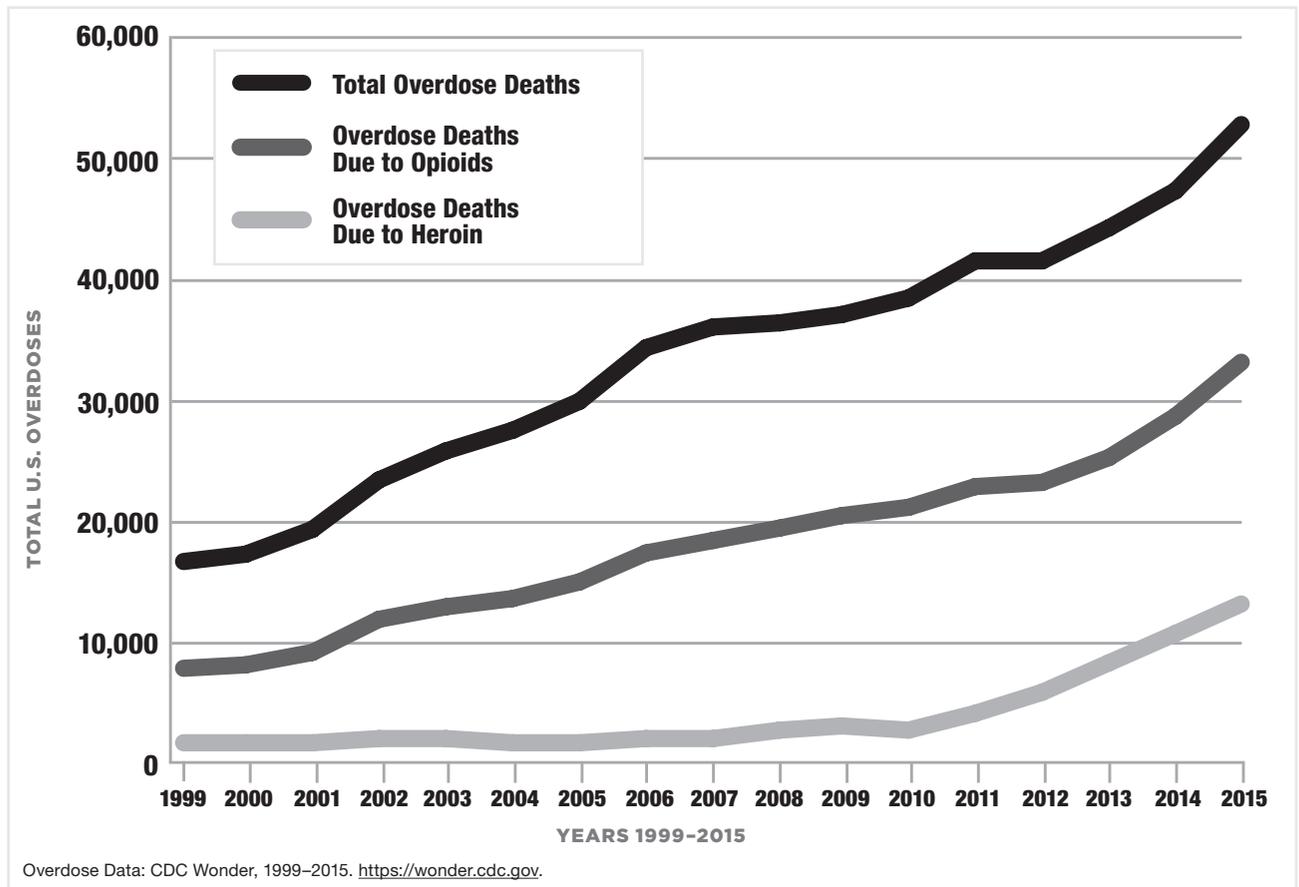
Answer Key: 1. The graph also includes the number of heroin overdose deaths from 1999–2015. 2. Roughly 40%. 3. Answers may include that more people have started using heroin over time and that heroin potency has increased, making overdoses more likely. 4. The increase in the number of drug overdose deaths due to opioids is more than half the total number of drug overdose deaths. 5. Answers may include that the number of opioid prescriptions has increased, and with more people using the drugs there is more chance of abuse; some people who become addicted to opioid painkillers are turning to heroin, which is cheaper and often easier to obtain than prescription opioids; there has been an increase in the production and use of illegal fentanyl—a very powerful opioid that can cause overdoses. 6. Answers may vary but should include the evidence that naloxone can prevent death in opioid overdose if it is given soon enough. If ordinary people have access to it, they may be able to get it to an overdose victim quickly and save the person's life.

[Continue to work sheet on next page.]

Opioids in America: Alarming Trends

Statistics show that opioid overdose is a public health emergency in America. In 2015, 3.8 million Americans reported that they had misused prescription painkillers in the last month. The use of heroin has also increased dramatically in recent years. Abusing these powerful drugs greatly increases a person's risk for overdose. Complete the activity below to analyze statistics of the opioid crisis.

Directions: Study the graph below, which has been modified from the graph shown in the article "Opioids and the Overdose Epidemic." Then, use the information in both graphs and the article to answer the questions that follow.



- How is the graph above different from the graph shown in the article?
- According to the graph, roughly what percentage of the opioid overdose deaths in 2015 were due to heroin?
- What are two possible factors that may have impacted the change in heroin overdose deaths over time?
- What evidence is there that the recent increase in drug overdoses is due mainly to opioids?
- What are three possible reasons that the number of drug overdoses related to opioids has increased in recent years? Use evidence from the graphs and the article to support your answer.
- Drugs that can reverse the overdose effects of opioids, such as naloxone, are normally given only by medical personnel. Do you think these medications, as well as training to administer them, should be readily available to all people? Explain your answer.

VOCABULARY LIST

GRADES 6-12

Dear Teacher,

The vocabulary list on the following pages is drawn from the “Opioids and the Overdose Epidemic” student article and work sheet.

This vocabulary can be previewed with students prior to reading or reinforced with students afterward. Encourage students to incorporate these words into their writing about and discussion of the “Opioids and the Overdose Epidemic” student article and the “Opioids in America: Alarming Trends” work sheet.

The vocabulary list integrates two different tiers of vocabulary words that can be used across several content areas, such as *analyze*, *crisis*, and *precaution*, and domain-specific words, such as *epidemic*, *morphine*, and *opioid*.

Some suggestions for students to help their understanding:

- organize concept maps that include word parts, synonyms, antonyms, and examples;
- compose memory aids that explain the words or use them in a meaningful context;
- employ the words to create newspaper articles, stories, or poems.

Sources: Unless otherwise noted, definitions below are sourced or adapted from *Merriam-Webster's Collegiate Dictionary*, National Institute on Drug Abuse, and *Scholastic Children's Dictionary*

The infographic is titled "HEADS UP: OPIOIDS AND THE OVERDOSE EPIDEMIC" and is dated "The week ending Oct 28, 2018". It features several data points and sections:

- OVERDOSE DEATHS BY THE YEAR:** A line graph showing a sharp increase in overdose deaths from 2000 to 2017. A callout states: "More people died from drug overdoses in 2017 than in any other year since 1999." Another callout notes: "More than 100,000 people died from drug overdoses in 2017, a 25% increase from 2016." A third callout says: "More than 100,000 people died from drug overdoses in 2017, a 25% increase from 2016."
- OPPIOID MISUSE BY THE DAY:** A bar chart showing that 3,000 people die from opioid misuse every day.
- WHY IS THIS HAPPENING?:** A section with four bullet points:
 - **An increase in prescription drug use:** The number of opioid prescriptions in the United States increased from 1.5 billion in 2000 to 2.5 billion in 2017.
 - **A rise in heroin use:** Heroin use has increased significantly since 2000, with 1.5 million people using it in 2017.
 - **A rise in fentanyl use:** Fentanyl is a powerful synthetic opioid that is often used in combination with other drugs, increasing the risk of overdose.
 - **A rise in heroin use:** Heroin use has increased significantly since 2000, with 1.5 million people using it in 2017.
- SAFETY TIPS:** A section with four bullet points:
 - **Never take any drug that you do not know.** If you are unsure of what a drug is, do not take it.
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 - **Never take any drug that you do not know.** If you are unsure of what a drug is, do not take it.
- A LIFESAVING DRUG:** A section with four bullet points:
 - **Heroin is a powerful synthetic opioid.** It is often used in combination with other drugs, increasing the risk of overdose.
 - **Fentanyl is a powerful synthetic opioid.** It is often used in combination with other drugs, increasing the risk of overdose.
 - **Naloxone is a powerful synthetic opioid.** It is often used in combination with other drugs, increasing the risk of overdose.
 - **Naloxone is a powerful synthetic opioid.** It is often used in combination with other drugs, increasing the risk of overdose.

- Supplement for: “Opioids and the Overdose Epidemic”**
- Student Article: [scholastic.com/headsup/opioid-overdose-epidemic](https://www.scholastic.com/headsup/opioid-overdose-epidemic)
 - Teacher’s Guide (includes work sheet): [scholastic.com/headsup/teachers/opioid-overdose-epidemic](https://www.scholastic.com/headsup/teachers/opioid-overdose-epidemic)

- **addicted** (*adjective*): having a compulsive (uncontrollable) behavior, such as drug use, that continues despite negative consequences
- **addictive** (*adjective*): something, such as a drug, that causes changes to the brain that result in compulsive (uncontrollable) behavior despite negative consequences
- **administer** (*verb*): to provide or supply something, such as medication
- **analyze** (*verb*): to study or examine something closely or carefully in order to understand it
- **bystander** (*noun*): a person who is present but not taking part in a situation
- **chemical** (*noun*): a substance, such as an element or a mix of elements (compound), that can occur naturally or be made by a chemical process
- **codeine** (*noun*): an opioid drug that is used as a painkiller and is commonly prescribed by doctors for mild to moderate pain or cough suppression
- **crisis** (*noun*): a situation that has reached an unstable point and that has a high chance of having a negative outcome
- **dispense** (*verb*): to prepare and give out something, such as a medication
- **dramatically** (*adverb*): done in a way that attracts attention because of an extreme appearance or effect
- **epidemic** (*noun*): an increase in the number of people affected by a disease or condition far above what is normally expected in a population
- **factor** (*noun*): something that causes a result
- **fentanyl** (*noun*): an opioid drug made in laboratories that is much stronger (50 to 100 times) than other legal opioids. It is prescribed only to treat very severe pain.
- **heroin** (*noun*): an illegal opioid drug that has no medical use
- **hydrocodone** (*noun*): an opioid drug that is used as a painkiller and prescribed by doctors for moderate to severe pain
- **illegal** (*adjective*): against the law
- **impact** (*verb*): to have an effect on something or to cause a result
- **increase** (*verb*): to become larger in size, number, or amount
- **medication** (*noun*): a chemical or substance that is used to treat a disease or medical condition
- **methadone** (*noun*): an opioid drug made in laboratories that is commonly used to treat addiction to heroin and other opioids
- **misuse** (*verb*): to use something in a way that is unintended or harmful, such as misuse of a prescription drug
- **modify** (*verb*): to change something slightly
- **morphine** (*noun*): an opioid drug that is used as a painkiller and is prescribed by doctors for severe pain
- **naloxone** (*noun*): an emergency medication used to reverse the effects of opioid overdose and restore breathing. If it is used quickly enough, naloxone can prevent a person from dying of an overdose.
- **opioid** (*noun*): one of a group of drugs that produce relaxation, pleasure, and pain relief. Opioids can be addictive and potentially deadly due to overdoses.
- **overdose** (*noun*): a lethal or toxic amount of a drug; (*verb*): to take a lethal or toxic amount of a drug.
- **oxycodone** (*noun*): an opioid drug that is used as a painkiller and prescribed by doctors for severe pain. It is most commonly prescribed for patients recovering from surgery.
- **Oxycontin®** (*noun*): a brand-name version of the drug oxycodone
- **painkiller** (*noun*): a medication used to treat or reduce pain
- **personnel** (*noun*): a group of people who work for a particular company or in a particular field
- **population** (*noun*): the number of people who live in one place or belong in a certain category
- **potential** (*adjective*): possible, but not yet actual

[Continued on next page.]

- **precaution** (*noun*): an action taken to avoid a dangerous situation or to lead to a positive result
- **prescribe** (*verb*): to write or give medical instructions, such as regarding the use of certain medications
- **prescription drug** (*noun*): a medication that must be ordered by a doctor before it can be dispensed
- **pure** (*adjective*): unmixed with other materials
- **quadruple** (*verb*): to become four times as large in size or number
- **reduce** (*verb*): to make smaller in size, amount, or number
- **report** (*verb*): to announce officially; to describe or explain something that has happened
- **restore** (*verb*): to put back into use or bring back into existence
- **reverse** (*verb*): to turn around completely in direction or position; to go backward
- **risk** (*noun*): the possibility of loss or injury; danger
- **roughly** (*adverb*): approximately, not exactly
- **statistics** (*noun*): a collection of data or facts in the form of numbers
- **supply** (*verb*): to provide something that is needed or wanted
- **Vicodin®** (*noun*): a brand-name version of the drug hydrocodone