

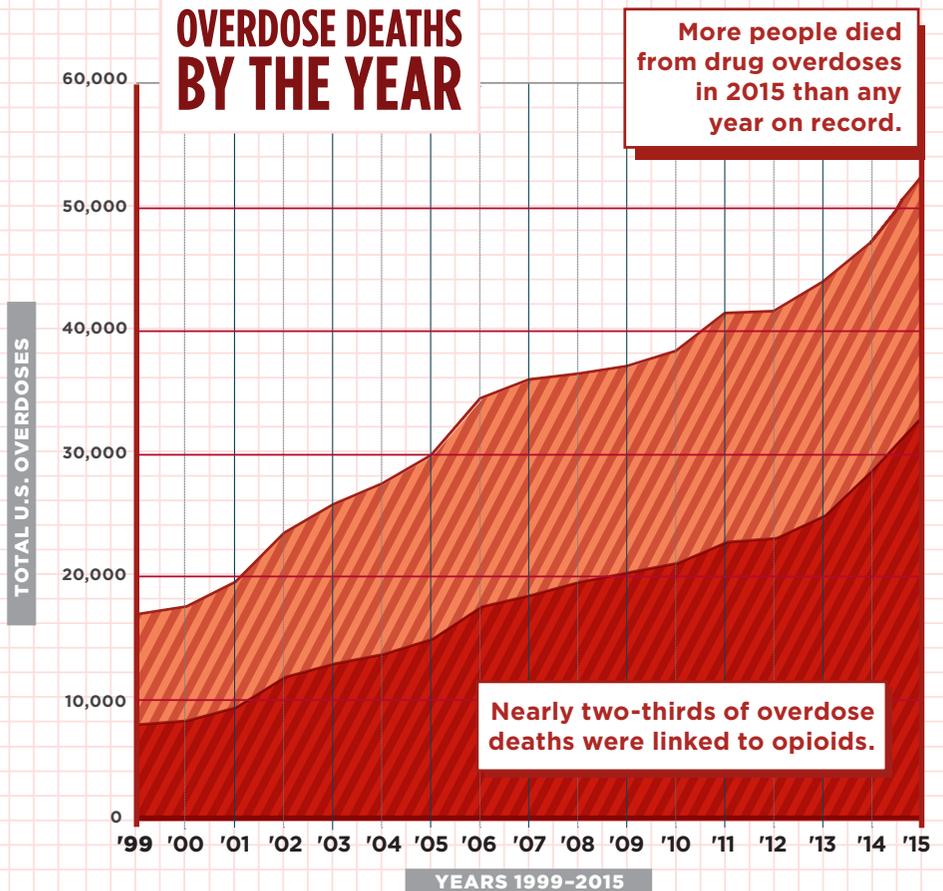
OPIOIDS AND THE OVERDOSE EPIDEMIC

America is facing a health crisis. More people died from drug overdoses in 2015 than in any other year on record. Nearly two-thirds of overdose deaths were linked to opioids.

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

Doctors prescribe opioids to treat severe pain. But these drugs can be deadly because of overdoses. Opioid overdoses cause breathing to slow or even stop. Without medical help, this can cause death.

Health officials say that we now have an opioid overdose *epidemic*. That's because the number of overdoses has increased dramatically across the country. Read on to learn more.



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

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

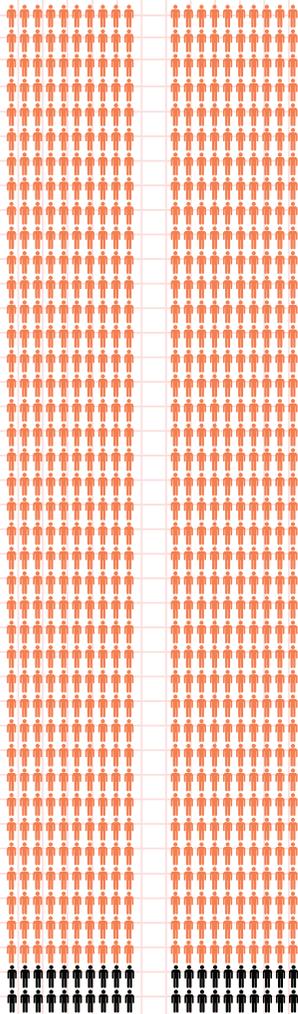


Opioids are very powerful painkillers. They should only be taken as prescribed by a doctor. The following safety precautions are very important.

- ✓ Only take prescription drugs supplied by a doctor or a pharmacy.
- ✓ If a doctor prescribes an opioid painkiller, ask if there are safer options.
- ✓ Medications should be taken exactly as prescribed.
- ✓ Opioids should never be mixed with alcohol or with

(continued on next page)

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.

Safety Tips (continued)

any other drug (except as prescribed by a doctor). This increases the risk of overdose.

- ✓ Prescription drugs should never be shared with anyone else. This is both illegal and possibly dangerous.

A LIFESAVING DRUG

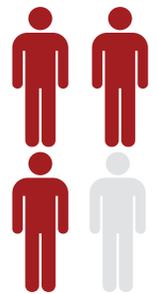
Naloxone is a lifesaving medication. It can reverse opioid overdose and restore breathing. It can save a victim's life if administered quickly enough. Naloxone can be used by medical professionals and ordinary people.

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

WHY IS THIS HAPPENING?

↑ **An increase in prescriptions:** Between 1999 and 2013, the number of opioid prescriptions in the United States quadrupled. New guidelines have helped to 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, heroin use has been



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

increasing. Heroin today is much more pure and powerful than it was 30 years ago. This increases the risk of overdose.

↑ **A rise in fentanyl deaths:** Fentanyl is an opioid that is 50 to 100 times more powerful than other opioids. This increases 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. People have died by taking this powerful drug without knowing it.

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 caution. Included is advice on how students can keep themselves and loved ones safe.

Critical-Thinking Questions:

- 1) An epidemic is when a disease or health-related event or behavior happens in a community at far greater rates than would normally be expected. What evidence in the article shows that the United States is facing an opioid overdose epidemic? *(Answers may include that more people died from drug overdoses in 2015 than in any other year on record; heroin use and overdoses have increased across the country; 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 information from the article. *(Answers may include to make sure people only take drugs supplied by a doctor or pharmacy; if a doctor prescribes a prescription painkiller, ask if there are safer options; never share prescription drugs; 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? Look in "Safety Tips" for the answer. *(It may lead to higher overdose rates because mixing opioids with other drugs increases the risk for overdose.)*
- 4) What is one piece of advice that can help people stay safe if they are prescribed opioid pain medications? *(Answers may include to talk with their doctor to see if there are safer alternatives; take the medications only as prescribed; seek help if they begin taking opioids for nonmedical reasons; never mix 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 is one way people can misuse prescription opioid pain medications? What are some possible consequences of this?
- **Grades 9–10:** Explain one factor 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 across 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 12,000. 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 misuse; 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.]

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

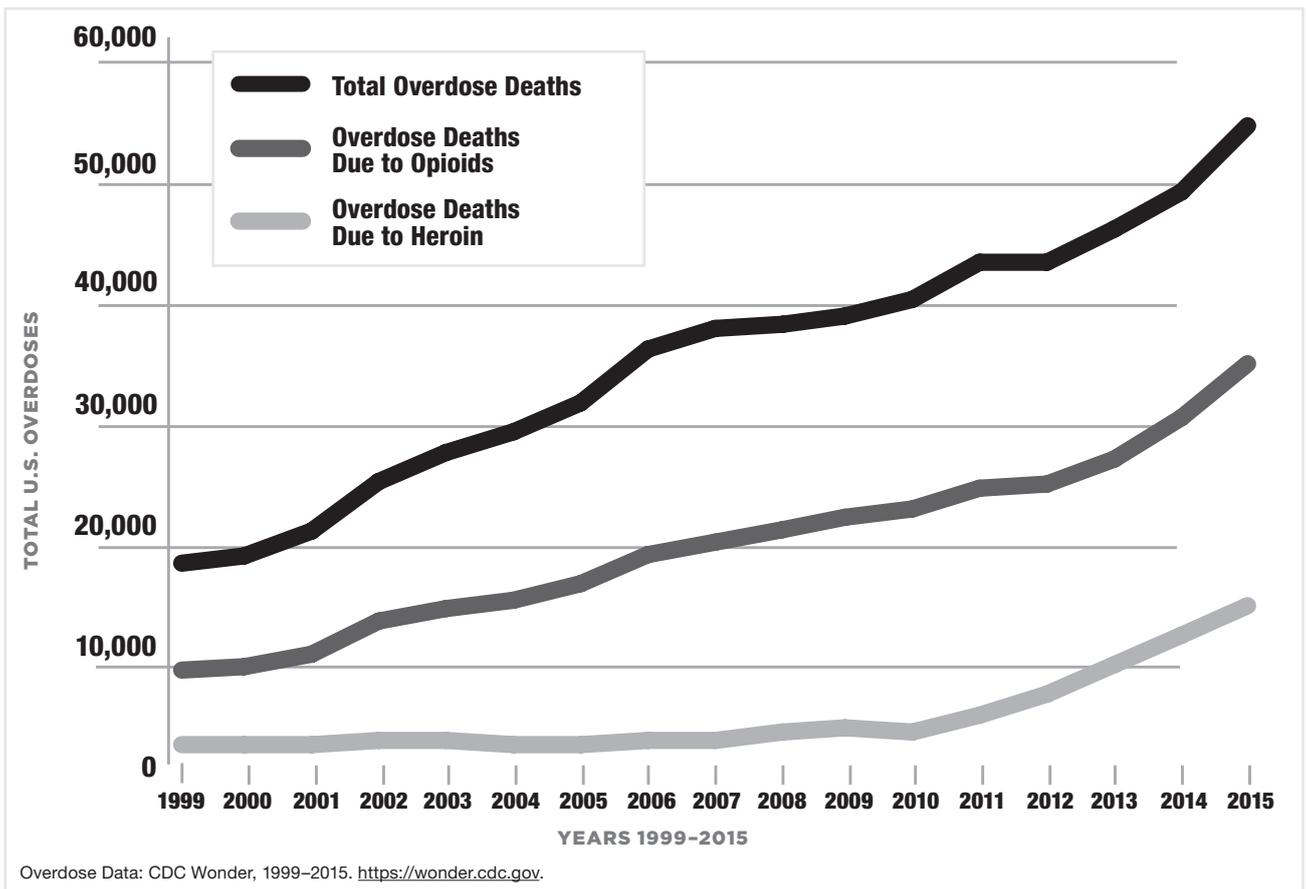
Additional Teaching Resources:

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

Opioids in America: Alarming Trends

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

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



- How is the graph above different from the graph in the article?
- According to the graph above, roughly how many deaths in 2015 were due to heroin?
- Name one factor 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 is one possible reason that the number of drug overdoses related to opioids has increased in recent years?
- Naloxone is a drug that medical professionals use to reverse the overdose effects of opioids. Do you think naloxone should be available for everyone to use? Explain your answer.

- **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