



YEAR 2—TEACHER EDITION

HEADS UP

REAL NEWS

ABOUT DRUGS

AND YOUR BODY

From the Editors at Scholastic

DEAR TEACHER

Welcome to **Heads Up: Real News About Drugs and Your Body**, a drug education program produced jointly by the editors of Scholastic Inc. and the scientists of the National Institute on Drug Abuse (NIDA). Our approach is simple: We give students the facts about drugs of abuse. We tell them how drugs can imperil their health and jeopardize their future. We back it all up with hard science and statistics. To bring the facts alive, we use real stories of struggle and success from real teens. With accurate, compelling information, teens can make the right decisions about drugs. We are proud to bring you Year 2 of this exciting program, and we thank you for partnering with us in working to keep this generation of students healthy and drug-free.

—The Editors

To order additional free copies of this **Heads Up** Teacher Edition, call 800-729-6686 and refer to NCADI MS952. For the accompanying Student Edition, refer to NCADI MS951.

A Message From the Director of NIDA



I have good news to share with you. Teen drug use is on a downward trend. Every year since 2001, the percentage of teens using drugs and trying them for the first time has declined. We at the National Institute on Drug Abuse (NIDA) believe that this positive development is due in large part to education—including efforts in the classroom by teachers like you.

NIDA was founded in 1978. As part of the National Institutes of Health, the world's premier biomedical and behavioral research agency, our mission is to bring the power of science to bear on drug abuse and addiction—and to use education and outreach to share our findings. By using materials such as *Heads Up: Real News About Drugs and Your Body* with your students, you become a participant in our work, as important as the scientists here at NIDA. As I'm sure you'll agree, just one teen battling drug abuse or addiction is too many. For that reason, even in the face of good news about teen drug use, we're staying focused on our efforts. Thanks for joining us in the push toward the day when drug abuse and addiction are a thing of the past.

Nora D. Volkow, M.D.,
Director,
National Institute on Drug Abuse

In Your Student Edition

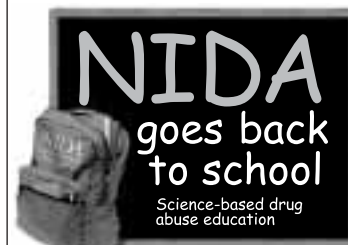
True stories about teens battling addiction, plus the science behind drugs including:

- cocaine • LSD • prescription medications

Plus: Facts about the teen brain and why teens are susceptible to drug abuse.

In Your Teacher Edition

- Lesson plans
- Assessment quizzes for each article to be administered before and after reading
- Pre- and post-reading discussion questions
- Reproducible skill sheets linked to the articles



National Institute on Drug Abuse • National Institutes of Health
U.S. Department of Health and Human Services

For more go to www.scholastic.com/headsup
or www.drugabuse.gov

LESSON PLANS

Preparation: There is an assessment quiz for each of the four articles in the Student Edition of *Heads Up: Real News About Drugs and Your Body*. The quizzes are located on pages 3 and 4 of this Teacher Edition. Before you begin teaching each article, make two copies of the appropriate quiz for each student. Have students take the quiz before and after reading the article. This will allow you to assess what they have learned. Answers can be found on page 8.

LESSON 1 Big White Lies, pages 2-3

OBJECTIVE: To alert students to the dangers of cocaine and test their knowledge of the topic before and after reading the article.

National Science Education Standards: Life Sciences; Science in Personal and Social Perspective

WHAT YOU WILL DO

Pre-reading: Hold a class discussion based on these questions: “What do you know about the drug cocaine?” “What are its effects?” “Why is it dangerous?” “What are some ways that cocaine addiction would affect a person’s life?” Then, have students complete and hand back Assessment Quiz 1. Finally, have them read

“Big White Lies.”

Post-reading: Hold a class discussion based on these questions: “What did you learn about cocaine that surprised you?” “How does cocaine change a user’s brain?” “How can cocaine make a user less able to feel pleasure?” Next, tell students it’s time to see how much they’ve increased their knowledge. Hand out the second copies of Assessment Quiz 1. Have students label the papers “after” and take the quiz. Collect and grade the quizzes.

EXTRA ACTIVITY: See the reproducible, “Cocaine and LSD” on page 5.

LESSON 2 “I’m Losing My Mind,” pages 4-5

OBJECTIVE: To use science and personal stories to show the dangers of LSD and to test students’ knowledge of the topic before and after reading the article.

National Science Education Standards: Life Sciences; Science in Personal and Social Perspective

WHAT YOU WILL DO

Pre-reading: Hold a class discussion based on these questions: “What is LSD?” “Why do people take it and how does it affect their lives?” “How is it dangerous?” Then, have students complete and hand back Assessment Quiz 2. Finally, have them read “I’m Losing My Mind.”

Post-reading: Hold a class discussion based on these questions: “How did LSD affect Amanda’s life?” “How could she have found acceptance without drugs?” “What was happening in Amanda’s brain when she took LSD?” Next, tell students it’s time to see how much they’ve increased their knowledge. Hand out the second copies of Assessment Quiz 2. Have students label the papers “after” and take the quiz. Collect and grade the quizzes.

EXTRA ACTIVITY: See the reproducible, “Cocaine and LSD” on page 5.

LESSON 3 Crushed Dreams, pages 6-7

OBJECTIVE: To explain the risks of abusing prescription medications, particularly the painkiller OxyContin, and to test students’ knowledge of the topic before and after reading the article.

National Science Education Standards: Life Sciences; Science in Personal and Social Perspective

WHAT YOU WILL DO

Pre-reading: Hold a class discussion based on these questions: “What is a prescription medication?” “Why do some medicines require prescription?” “Are all over-the-counter medicines safe for everyone at all times?” Then, have students complete and hand back Assessment Quiz 3. Finally, have them read “Crushed Dreams.”

Post-reading: Hold a class discussion based on these questions: “Why do you think Ryan didn’t believe he’d become addicted to OxyContin?” “Was Ryan’s addiction to OxyContin easier to kick than an addiction to a street drug? Why or why not?” “Do you think Ryan have trouble staying free of drugs in the future?” Next, tell students it’s time to see how much they’ve increased their knowledge. Hand out the second copies of Assessment Quiz 3. Have students label the papers “after” and take the quiz. Collect and grade the quizzes.

EXTRA ACTIVITY: See the reproducible, “Cause and Effect: Prescription Drugs Are Strong Medicine,” on page 6.

LESSON 4 Thrills of a Lifetime, pages 8-9

OBJECTIVE: To explain how the teen brain develops and how that development affects risky behaviors like drug use, and to test students’ knowledge of the topic before and after reading the article.

National Science Education Standards: Life Sciences; Science in Personal and Social Perspective

WHAT YOU WILL DO

Pre-reading: Hold a class discussion based on these questions: “How do teenagers’ brains differ from adult brains?” “List some personality traits of typical teens. How might brain development account for the way teens feel and act?” “Are most teens as skilled at decision-making as adults?” Then, have students complete and hand back

Assessment Quiz 4. Finally, have them read “The Thrills of a Lifetime.”

Post-reading: Hold a class discussion based on these questions: “Does the way in which teenagers’ brains develop put them at higher risk for abusing drugs?” “Because of how their brains are wired, teens tend to enjoy taking risks. How can this be a positive? How can it be negative?” Next, tell students it’s time to see how much they’ve increased their knowledge. Hand out the second copies of Assessment Quiz 4. Have students label the papers “after” and take the quiz. Collect and grade the quizzes.

EXTRA ACTIVITY: See the reproducible, “Fewer Teens Use Drugs,” on page 7.

Name: _____

ASSESSMENT QUIZ 1



**HEADS UP
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Cocaine: What Do You Know?

Take this quiz to test your knowledge of cocaine. Circle the correct answer to each question.

- Cocaine is made from**
 - the beans of the coffee plant.
 - the leaves of the coca plant.
 - the roots of the coca plant.
 - the stems of the cacao plant.
- According to a 2002 NIDA study, what percentage of U.S. 8th-graders tried cocaine in 2002?**
 - Less than one percent
 - 3.6 percent
 - 10.6 percent
 - 15.6 percent
- Cocaine belongs to a class of drugs known as**
 - hallucinogens.
 - sedatives.
 - narcotics.
 - stimulants.
- Cocaine acts by causing a flood of _____ in the brain.**
 - the brain chemical dopamine
 - toxins
 - the brain chemical serotonin
 - fluid
- Even in healthy young people, cocaine can trigger**
 - lung cancer.
 - eczema.
 - diabetes.
 - heart attacks.

Name: _____

ASSESSMENT QUIZ 2



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LSD: What Do You Know?

Take this quiz to test your knowledge of LSD. Circle the correct answer to each question.

- LSD belongs to the class of drugs known as**
 - hallucinogens.
 - stimulants.
 - narcotics.
 - sedatives.
- LSD was invented in a lab in**
 - 1638.
 - 1888.
 - 1938.
 - 1988.
- LSD often causes users to**
 - become violent and aggressive.
 - stop breathing.
 - see and hear things that aren't there.
 - overeat.
- What do scientists believe to be the most serious risks of long-term use of LSD?**
 - heart attack and stroke
 - psychosis and re-experiencing drug symptoms
- (continued)**
 - liver and kidney disease
 - brain tumors
- What is the most serious short-term risk of taking LSD?**
 - stroke
 - losing touch with reality and doing something dangerous
 - bleeding in the brain
 - migraine headache

Name: _____

ASSESSMENT QUIZ 3



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Prescription Drug Abuse: What Do You Know?

Take this quiz to test your knowledge of the dangers of abusing OxyContin and other prescription drugs. Circle the correct answer to each question.

- OxyContin, a commonly abused prescription drug, is meant to be used as**
 - an antibiotic.
 - a painkiller.
 - a sleeping pill.
 - an antacid.
- A 2002 NIDA study found that _____ of 8th-graders reported abusing OxyContin.**
 - less than one percent
 - 1.3 percent
 - 4.3 percent
 - 10.3 percent
- OxyContin causes addiction by acting on the emotional center of the brain, which is called**
 - the cerebellum.
 - the brain stem.
 - the limbic system.
 - the cerebrum.
- In kids that don't need them, the drugs Ritalin and Adderal can cause**
 - attention deficit hyperactivity disorder (ADHD).
 - lung and throat cancer.
 - severe fatigue.
 - addiction and convulsions.
- It is _____ okay to use a prescription drug that was not prescribed specifically for you.**
 - always
 - usually
 - sometimes
 - never

Name: _____

ASSESSMENT QUIZ 4



**HEADS UP
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The Teen Brain: What Do You Know?

Take this quiz to test what you know about how the teen brain differs from the adult brain. Circle the correct answer to each question.

- Compared with adults, teens are _____ to take risks.**
 - more likely
 - somewhat less likely
 - equally likely
 - much less likely
- In teens, the brain's emotional center is**
 - nonexistent.
 - just beginning to develop.
 - difficult to find.
 - very well-developed.
- The brain's emotional center is known as the**
 - brain stem.
 - limbic system.
 - prefrontal cortex.
 - cerebrum.
- Teens are less equipped than adults to plan ahead and consider consequences because a part of their brains known as the _____ is still developing.**
 - brain stem
 - limbic system
 - prefrontal cortex
 - cerebrum
- Scientists say the brain is a plastic organ, meaning that it**
 - has the capacity to change.
 - is made of artificial materials.
 - never changes in any major way.
 - is made of tissue that looks like plastic.

HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY

Cocaine and LSD: Review Activity and Resources

What Are the Facts?

What is the difference between a fact and an opinion? A fact is something that is definitely true and can be proved. An opinion can't be proved since it conveys feelings, beliefs, or judgments.

After you've read "Big White Lies" and "I'm Losing My Mind," look at the following statements about stimulants, hallucinogens, and dissociative drugs. If you think the statement is a fact, write F in the space provided. If you think the statement is an opinion, write O in the space provided.

- _____ 1. Cocaine can cause fatal heart attacks and strokes.
- _____ 2. Ecstasy has both hallucinogenic and stimulant properties.
- _____ 3. The most serious side effect of cocaine use is addiction.
- _____ 4. Stimulants narrow blood vessels and reduce the flow of blood and oxygen to the heart.
- _____ 5. Inhaling cocaine through the nostrils is disgusting.
- _____ 6. Cocaine interferes with the brain's normal handling of the neurotransmitter dopamine.
- _____ 7. LSD is also called acid.
- _____ 8. The most disturbing side effect of LSD use is synesthesia, or the blending of senses.
- _____ 9. Hallucinogen persistent perception disorder (HPPD) is a disorder that involves ongoing perception problems, like seeing trails of light that aren't really there.
- _____ 10. LSD binds to and activates a specific receptor for the neurotransmitter serotonin.
- _____ 11. Using hallucinogens is scarier than using dissociative drugs.
- _____ 12. The number of teens using LSD is insignificant.

Now, find two additional facts about hallucinogens, dissociative drugs, or stimulants from the articles. Then, give an opinion of your own on Miguel's or Amanda's experiences with drugs. Use the space provided below.

Fact: _____

Fact: _____

Opinion: _____

Answers are in your Teacher Edition.

Resources

For more information and useful links, go to

>> www.scholastic.com/headsup

On Scholastic's Heads Up site, you'll find more true stories about teens in recovery, plus more information and activities about drugs of abuse.

>> www.drugabuse.gov

NIDA's information-packed Web site.

>> www.BacktoSchool.drugabuse.gov

NIDA's new site for science-based information on drugs of abuse is for teachers and students in all grades—and for parents, too.

>> www.drugabuse.gov/ResearchReports/Cocaine/Cocaine.html

Visit this page to read NIDA's research report on cocaine abuse and addiction.

>> www.drugabuse.gov/ResearchReports/Hallucinogens/Hallucinogens.html

NIDA's research report on hallucinogens and dissociative drugs.

>> www.drugabuse.gov/MOM/MOMIndex.html

Check out NIDA's magazine series for teens. You can click on issues focusing on stimulants, hallucinogens, and more.

>> www.clubdrugs.org

NIDA's comprehensive site on drugs associated with the young adult rave scene.

>> www.drugabuse.gov/consequences

NIDA's new site highlights the variety of medical consequences of drug abuse and addiction, and explains how individual drugs can lead to these often serious health problems.

Friend in Need

If you are concerned that someone you know is abusing cocaine, LSD, or other drugs, talk to a trusted adult (a teacher, parent, guidance counselor, etc.) for advice. Or, if your friend is ready to seek help, you may wish to offer the following resource: www.findtreatment.samhsa.gov or 1-800-662-HELP.

Cause and Effect

**Prescription drugs
are strong medicine**

Read the article “Crushed Dreams” and the sidebars about the effects of prescription drugs that speed up, or stimulate, the central nervous system and those that slow, or depress it. Then, draw a line from each of the drugs on the left, below, to its effects on the right. Each drug or cause has three effects. Some effects may have more than one cause.

CAUSE

EFFECT

Stimulants

Depressants

Alcohol



Intensifies effects of drugs in body



Slow(s) breathing rate



Constrict or tighten blood vessels



Reduce or lessen blood flow to skin



Slow or block signals from nerves and senses



Raise or speed up heart rate



Lower(s) heart rate

Answers are in your Teacher Edition.

Learn More

For more information and useful links, go to

>> www.scholastic.com/HEADSUP

At the Heads Up site, you'll find quotes from teens in recovery, pop-up activities, information about other drugs, and more.

>> www.teens.drugabuse.gov

NIDA's Web site for teens focuses on the science behind all drugs of abuse. Find out how nicotine, prescription drugs, club drugs, and other substances act on the brain.

>> www.thecoolspot.gov

Get the facts you need about alcohol at this Web site for teens, sponsored by the National Institutes of Health.

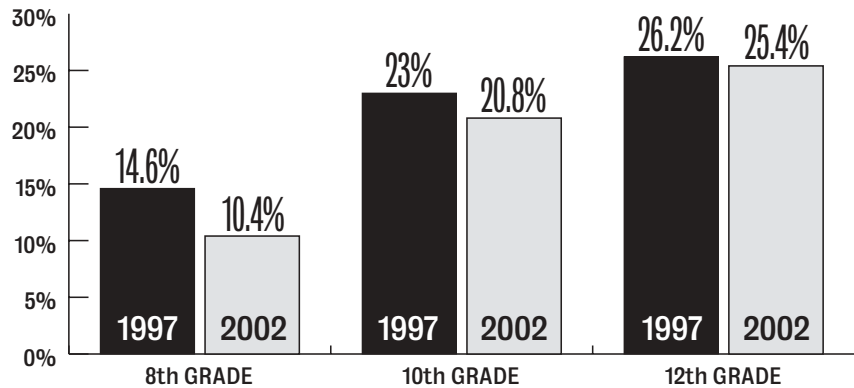
Friend in Need

If you are concerned that someone you know is abusing medications or other drugs, talk to a trusted adult (a teacher, parent, guidance counselor, etc.) for advice. Or, if your friend is ready to seek help, you may wish to offer the following resource: www.findtreatment.samhsa.gov or 1-800-662-HELP.

Fewer Teens Use Drugs

Teenagers are getting the message that drugs are a dead end. Fewer teens today are fooled into thinking that abusing drugs can help solve problems or is a fun way to spend time. To see the downward trend in teen drug use, look at the bar graph below. Then, answer the questions.

PERCENTAGE OF TEENS REPORTING ANY ILLICIT DRUG USE IN PAST 30 DAYS



Source: Monitoring the Future Study, 2002, University of Michigan

- Which group had the greatest decrease in drug use between 1997 and 2002?
 - 8th-graders
 - 10th-graders
 - 12th-graders
- Which group had the smallest decrease in drug use between 1997 and 2002?
 - 8th-graders
 - 10th-graders
 - 12th-graders
- In 1997, what was the difference between illicit drug use among 8th-graders and 10th-graders?
 - 18.6 percent
 - 8.4 percent
 - 13.4 percent
- In 2002, what was the difference between illicit drug use among 10th-graders and 12th-graders?
 - 2.4 percent
 - 3.2 percent
 - 4.6 percent
- What percentage of 8th-graders did not use illicit drugs in 2002?
 - 10.4 percent
 - 89.6 percent
 - 96.4 percent
- If the trend were to continue, what percentage of 12th-graders would report using drugs in 2007?
 - 23.2 percent
 - 27 percent
 - 24.6 percent

Answers are in your Teacher Edition.

Learn More

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NIDA's Web site for teens focuses on the science behind all drugs of abuse. Find out how nicotine, prescription drugs, club drugs, and other substances act on the brain.

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ANSWER PAGE

TEACHER EDITION

ASSESSMENT QUIZZES

QUIZ 1: 1. b, 2. b, 3. d, 4. a, 5. d

QUIZ 2: 1. a, 2. c, 3. c, 4. b, 5. b

QUIZ 3: 1. b, 2. b, 3. c, 4. d, 5. d

QUIZ 4: 1. a, 2. d, 3. b, 4. c, 5. a

REPRODUCIBLES

COCAINE & LSD: 1. Fact; 2. Fact; 3. Opinion; 4. Fact; 5. Opinion; 6. Fact; 7. Fact; 8. Opinion; 9. Fact; 10. Fact; 11. Opinion; 12. Opinion.

CAUSE AND EFFECT: STIMULANTS: Constrict or tighten blood vessels; Reduce or lessen blood flow to skin; Raise or speed up heart rate.

CAUSE AND EFFECT (continued):

DEPRESSANTS: Slow breathing rate; Slow or block signals from nerves and senses; Lower heart rate.

ALCOHOL: Intensifies effects of drugs in body; Slows breathing rate; Lowers heart rate.

FEWER TEENS USING DRUGS: 1. a; 2. c; 3. b; 4. c; 5. b; 6. c.

STUDENT EDITION

HEADS UP WORD SEARCH

1. dopamine
2. abused
3. serotonin
4. strokes
5. stimulant
6. addictive
7. limbic
8. cravings
9. perceive
10. scans

