

Stress and Drug Abuse



— A message from Dr. Nora Volkow,
Director of NIDA

In This Installment

- What is *stress* and how can teens better handle it?
- How does the body react to stress and drugs?
- What are some of the connections between stress and drug abuse?

Assessment Tools

Use the Student Activity Reproducible on the back of this page as an assessment quiz to determine what your students have learned about the connections between stress and drug abuse.

More Information

For more information about stress and drug abuse, read the NIDA Community Drug Alert Bulletin, “Stress & Substance Abuse”
www.drugabuse.gov/StressAlert/StressAlert.html

and visit
www.nida.nih.gov/DrugPages/Stress.html.

For information about helping teens handle stress, read:

“Family Guide: Coping Skills for the ‘Little Things’”
www.family.samhsa.gov/get/copingskills.aspx.

White House Council on Youth Violence, “Helping Your Children Navigate Their Teenage Years: A Guide for Parents,” December 2000.
<http://download.ncadi.samhsa.gov/ken/pdf/SVP-0013/SVP-0013.pdf>.

Dear Teacher:

As a teacher you see students under stress every day—from pressures of over-scheduling to worries about how to fit in. This month’s *Heads Up* article from the National Institute on Drug Abuse and Scholastic provides students with information to help them make smart choices when they feel overwhelmed. In the article they’ll find science-based facts about stress, information about the connections between stress and drug abuse, and practical suggestions for handling stress.

The Lesson Plan and Activity Reproducible that follow are designed to help students understand this important information.

Thank you for working with NIDA to bring the facts about stress and drug abuse to your students.

Sincerely,

Nora D. Volkow, M.D.
Director of NIDA



Lesson Plan & Reproducible

Preparation: Before the lesson, make two photocopies of the Student Activity Reproducible for a pre- and post-lesson quiz.

OBJECTIVE

Students will understand and reinforce their knowledge of how stress affects the body, how drugs impact the body’s response to stress, and how stress and drug abuse are related.

NATIONAL SCIENCE EDUCATION STANDARDS

Life Science; Science in Personal and Social Perspectives

WHAT YOU WILL DO

- Introduce the topic of *stress* by asking students about stress they experience in their daily lives. Briefly discuss their responses. What are some ways (positive and negative) that teens respond to stress? Record student responses.
- Distribute copies of the Student Activity Reproducible. Tell students to write their name on the paper and answer the questions.
- Have students read the article “Stress and Drug Abuse” in their magazine. When they have finished, begin a discussion by asking,

What are some ways that the body reacts to stress? What are some connections between drugs of abuse and stress? What has some of the latest scientific research revealed about stress and drugs?

- After the discussion, have students complete the Student Activity Reproducible again. When they have finished, reveal the correct answers to the reproducible.
- Wrap up the lesson by asking students, *How would you respond to a friend who says, “I know that using drugs reduces stress”? What are some healthy ways that you can reduce stress?*
- For further student reading, visit www.scholastic.com/headsup for: “Drug Addiction and Stress: The Brain Connection” and “Scientists Find a Connection between 9/11 and Substance Abuse.”

ANSWERS TO REPRODUCIBLE:

1. e; 2. e; 3. c; 4. e; 5. c; 6. d; 7. a; 8. a; 9. b; 10. a

For printable past and current articles in the **HEADS UP** series, as well as activities and teaching support, visit www.scholastic.com/HEADSUP or www.drugabuse.gov/parent-teacher.html.

What Do You Know about Stress and Drug Abuse?

Answer the questions below to find out what you know about stress and its connection to drug abuse.

- 1. Short-term physical responses to stress include:**
 - a. a faster heart rate.
 - b. sweaty palms.
 - c. a pounding head.
 - d. tense muscles.
 - e. all of the above.
- 2. Long-term physical responses to stress include:**
 - a. back pain.
 - b. high blood pressure.
 - c. sleeplessness.
 - d. an inability to make decisions.
 - e. all of the above.
- 3. Drugs of abuse increase levels of the hormone CRF in the brain. The function of CRF is to:**
 - a. control breathing.
 - b. control movement of arms and legs.
 - c. initiate the body's response to stress.
 - d. stimulate digestion.
- 4. Stress affects which of these body systems?**
 - a. central nervous
 - b. endocrine
 - c. immune
 - d. cardiovascular
 - e. all of the above
- 5. Which of the following statements is true?**
 - a. All stress is bad for you.
 - b. Using illicit drugs reduces stress.
 - c. Anyone can learn to manage stress.
 - d. Everyone deals with stress in the same way.
- 6. If a friend is stressed out, a good suggestion you might offer would be to:**
 - a. eat healthy foods, exercise, and get enough sleep.
 - b. talk openly to an understanding listener who will remain calm.
 - c. focus on one problem at a time.
 - d. all of the above.
- 7. The "stress hormone cycle" involves the release of hormones from:**
 - a. the brain, the pituitary gland, and the adrenal glands.
 - b. only the adrenal glands.
 - c. only the brain and the pituitary gland.
 - d. only the brain.
- 8. Stress can cause brain changes similar to those caused by drug addiction.**
 - a. true
 - b. false
- 9. Drug abuse is harmful, but it does relieve stress.**
 - a. true
 - b. false
- 10. Stress is thought to be a cause of relapse to drug addiction.**
 - a. true
 - b. false