

## Dear Teacher:

The most recent *Monitoring the Future* survey showed an increase in daily marijuana use among high school students from 2009 to 2010. The survey also found that fewer teens consider marijuana to be harmful. This “softening” of teen attitudes may be attributed to mixed and even favorable messages about marijuana in popular culture and the media.

The fact is that marijuana use poses serious risks, and young people are the most vulnerable. The younger a person is when they start smoking marijuana, the more likely they are to become addicted. It is estimated that one in six people who start using marijuana in their teens will become addicted.

Experts at NIDA want to give your students the straight facts about the consequences of marijuana use on their bodies, brains, and futures. We hope you share this article with



your students so they will be well-informed about the risks associated with marijuana use.

Sincerely,

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

## In This Installment:

- **Student article:** Scientific facts about the risks associated with marijuana use
- **Student work sheet:** Students create a public service announcement (PSA) to inform their peers about the risks of marijuana use.

### Attention Teachers and Students!

Enter the: **NIH Lessons About Bioscience (LAB) Challenge**  
Details at <http://lab.challenge.gov/>

# MARIJUANA FACTS: BREAKING DOWN THE MYTHS

**Overview:** The lesson below and the reproducible student work sheet on the reverse side reinforce student comprehension of key facts and concepts in the article “Marijuana Facts.”

## Alignment With National Standards

- *Science (NSES):* Life Science: Structure and Function in Living Systems; Science in Personal and Social Perspectives: Personal and Community Health
- *Life Skills (McREL):* Self-Regulation; Thinking and Reasoning

## Lesson

### Before-Reading Questions:

- Do you think marijuana is addictive?
- What do you know about how marijuana affects your memory, motor skills, and judgment?

### After-Reading Questions

(factual responses in *italics*):

- Why is marijuana addictive? (*The main active ingredient in marijuana, THC, binds to receptors [proteins] in the brain that are located in areas regulating mood, sensation, memory, feelings, etc. Marijuana also indirectly increases dopamine—just as most drugs of abuse do—which contributes to the high users experience. These effects are why some people use marijuana again and again, which can lead to addiction.*)
- Why can abusing marijuana lead to lower grades? (*Marijuana affects attention and memory, making it difficult to learn, focus, or concentrate. These effects can lead to poor academic performance.*)
- Why is driving under the influence of marijuana dangerous? (*Marijuana use impairs motor coordination. It slows reaction times to signals and sounds while driving. These effects increase the likelihood of an accident.*)

### Critical Thinking:

- Research shows that the younger someone is when they start smoking marijuana, the more likely they are to become addicted. In fact, one in six people who start smoking marijuana in their teens will become addicted. How does knowing this and other facts in the article affect any decision you make about using marijuana?
- Imagine your friend is using marijuana, and you are trying to convince him or her to stop. Your friend says that the drug is not harmful and everybody does it. What would you say to him or her? (*Possible answer: Most teens DON'T smoke marijuana. The facts show that serious risks ARE associated with marijuana use, especially for teens.*)

## Student Work Sheet

Have students (individually or in groups) create a PSA and present it to the class. Evaluate students on their creativity and ability to include facts from the article in a comprehensive and interesting way.

*Extension:* Have students record their PSA and present it to the class. Students can also log on to <http://drugfactsweek.drugabuse.gov/contestwinners.php> to hear original songs and music videos created by teens about substance-abuse awareness.

## More Information

- For more information on drugs, go to <http://teens.drugabuse.gov> or [www.scholastic.com/headsup](http://www.scholastic.com/headsup).
- For immediate help with a crisis, call 1-800-273-TALK.
- To locate a treatment center, call 1-800-662-HELP or visit <http://findtreatment.samhsa.gov>.

For printable past and current articles in the HEADS UP series, as well as activities and teaching support, go to [www.drugabuse.gov/parent-teacher.html](http://www.drugabuse.gov/parent-teacher.html) or [www.scholastic.com/headsup/teachers](http://www.scholastic.com/headsup/teachers).



Name \_\_\_\_\_ Date \_\_\_\_\_

# Marijuana Facts: Use Your Knowledge

Teens need the facts about the effects of marijuana use on their bodies and brains so that they can make smart choices about their health. Use the information you learned from the article to complete the activity below.

**Your Assignment:** Create a 20-second public service announcement (PSA) for TV or the Web that will give viewers facts about marijuana or important health information related to marijuana use.

**Your Goal:** Give your peers the information they need to make informed decisions based on facts.

**Use your answers to the questions below to outline the PSA. Use additional paper as needed.**

1. Focus your PSA on one main fact from the article “Marijuana Facts.” Which fact do you want to use in your commercial?

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2. Write a brief statement on why you chose this particular fact for your PSA and why you think it is the most persuasive.

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3. Do you want to use animation or actors in your commercial? Describe two characters you would use in your PSA, and why you would use either live actors or animation.

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4. Rather than using characters, you may choose to use a voice-over with pictures. Describe the type of voice you would use (for example: adult, teen, authoritative, friendly) and what kinds of pictures or illustrations you would include.

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5. On a separate sheet of paper, write a short script for either the voice-over or a dialogue between the characters in your commercial. The script should be no more than one page long.

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