High on Spice: The Dangers of Synthetic Marijuana

LESSON PLAN

By Leanne Arnow
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**Title:**
High on Spice: The Dangers of Synthetic Marijuana

**Subject Area:** Health Education

**Grade Level:** 7-College

**Time Frame:** One class period

**Relevant Standards:**

National Health Education Standards, Grades 6-8

**Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.**

1.8.2 Describe the interrelationships of emotional, intellectual, physical, and social health in adolescence.

1.8.8 Examine the likelihood of injury or illness if engaging in unhealthy behaviors.

1.8.9 Examine the potential seriousness of injury or illness if engaging in unhealthy behaviors.

**Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.**

2.8.3 Describe how peers influence healthy and unhealthy behaviors.

2.8.4 Analyze how the school and community can affect personal health practices and behaviors.

2.8.6 Analyze the influence of technology on personal and family health.

2.8.9 Describe how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.

2.8.10 Explain how school and public health policies can influence health promotion and disease prevention.

**Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.**

3.8.4 Describe situations that may require professional health services.

**Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.**

4.8.4 Demonstrate how to ask for assistance to enhance the health of self and others.
Relevant Standards continued:

Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

7.8.1 Explain the importance of assuming responsibility for personal health behaviors.

Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.

8.8.2 Demonstrate how to influence and support others to make positive health choices.
8.8.4 Identify ways in which health messages and communication techniques can be altered for different audiences.

National Health Education Standards, Grades 9-12

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

1.12.2 Describe the interrelationships of emotional, intellectual, physical, and social health.
1.12.8 Analyze personal susceptibility to injury, illness, or death if engaging in unhealthy behaviors.
1.12.9 Analyze the potential severity of injury or illness if engaging in unhealthy behaviors.

Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.

2.12.3 Analyze how peers influence healthy and unhealthy behaviors.
2.12.4 Evaluate how the school and community can affect personal health practice and behaviors.
2.12.6 Evaluate the impact of technology on personal, family, and community health.
2.12.9 Analyze how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.
2.12.10 Analyze how public health policies and government regulations can influence health promotion and disease prevention.

Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.

3.12.4 Determine when professional health services may be required.
Relevant Standards continued:

Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.

4.12.4 Demonstrate how to ask for and offer assistance to enhance the health of self and others.

Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

7.12.1 Analyze the role of individual responsibility for enhancing health.

Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.

8.12.2 Demonstrate how to influence and support others to make positive health choices.
8.12.4 Adapt health messages and communication techniques to a specific target audience.

Learning Objectives:

Students will be able to...

- describe the physical and psychological effects of synthetic marijuana
- recognize several street names for synthetic marijuana
- understand the dangers of using illegal drugs, including exposure to toxic chemical additives
- refute the statement that synthetic marijuana is just like natural marijuana
- explain the possible long-term effects of synthetic marijuana on the brain and body
- identify three resources for getting help with a synthetic marijuana addiction
Materials:

- *High on Spice: The Dangers of Synthetic Marijuana* video and Teacher’s Resource Book
- 3 pieces of chart paper
- 9 thick markers
- 2 copies of the pre/post-test per student (see pages 10 - 11 for template)
- 2 copies of the pre/post assessment rubric (see page 9 for template)
- Homework: copy of Student Activity 9 (see Teacher’s Resource Book page 21) and Student Fact Sheets 1-5 (see Teacher’s Resource Book pages 22-28) per student

Advanced Preparation:

- Make three opinion charts by copying one of the following questions and the check box below onto each chart.

Which do you think is a stronger drug?
Which do you think has more severe adverse effects?
Which do you think sends more teenagers to emergency rooms?

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<thead>
<tr>
<th>Natural Marijuana</th>
<th>Synthetic Marijuana</th>
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Each completed chart should contain a different question and look like this:

Which do you think is a stronger drug?

<table>
<thead>
<tr>
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Advanced Preparation continued:

- Post the charts around the classroom where students can reach them. Leave three thick markers near each chart.
- **Optional**: Give students the pre-test and fill in the pre-assessment rubric before teaching the lesson. Use the data to help you differentiate the lesson for your students.

Procedure:

Motivation

- As students enter the room, point out the three charts you posted (see “Advanced Preparation”). Ask students to respond to the question on each chart by putting a check mark in the box that best expresses their opinion.

Adaptation for students with special needs:

If you anticipate that your students will have trouble managing this activity, guide them in responding to one chart at a time. Read and discuss the question on each chart, clarifying any confusion students have. Then ask students to come up two or three at a time and put a check mark in the box that best expresses their opinion. Make sure that all students respond to a question before you introduce the next one.

Show the video

- Tell students that they will be watching a video called *High on Spice: The Dangers of Synthetic Marijuana*. Ask them to keep their responses to the opinion charts in mind as they watch the video.

Vocabulary

In addition to the lesson vocabulary words, several terms relating to drugs and the law are used in the video. After you show the video, make sure your students understand the terms below.

- **controlled substance**: a drug or chemical whose manufacture, possession and use are regulated or banned by the government
- **Drug Enforcement Administration (DEA)**: the federal agency responsible for enforcing laws and regulations governing controlled substances
High on Spice: The Dangers of Synthetic Marijuana

Vocabulary continued

- **narcotic**: originally a medical term for a drug with numbing or sleep-inducing properties but commonly used to refer to any illegal drug.
- **Schedule 1 drug**: a drug that has a high potential for abuse and no accepted medical use.

Adaptation for gifted students:

Challenge students to think deeply about the lesson content by asking them the following open-ended discussion questions.

• What can communities do to increase public awareness of the dangers of synthetic marijuana?

• The maximum penalty for selling as much as 110 pounds of natural marijuana is 5 years in jail and a $250,000 fine. But store owners who use deceptive marketing practices to sell synthetic marijuana can lose their license, be fined up to 1 million dollars, and serve up to 20 years in jail. Is the discrepancy between the consequences for natural marijuana dealers and synthetic marijuana dealers fair? Why or why not?

• Should spice remain illegal, or should it be legalized with age restrictions the way alcohol is? As you think about this question, keep in mind the drug’s adverse short-term effects and its unknown long-term effects, but also consider that the manufacture and sale of illegal drugs cannot be regulated, which can result in more dangerous versions of the drug getting into the hands of teenagers.

• Synthetic marijuana was a researcher’s failed attempt to create a pain relief medicine without adverse effects for cancer patients. Given the potential benefits and risks of creating new drugs, do you think that researchers should continue to work on creating a safe synthetic cannabinoid for cancer patients?

Discussion

- Invite students to share their thoughts and reactions to the video.
- Have students reflect on the class opinion charts. Ask if any students would change their answers after watching the video. Then have students explain why their opinions have or have not changed, citing information they learned from the video.
- Lead a class discussion, using the following discussion questions as a guide:

Discussion Questions

- What would you say to someone who tells you that Spice is the same thing as pot?
- Why do you think people use synthetic marijuana, given its severe adverse effects?
- How is smoking Spice similar to playing Russian roulette?
- What makes synthetic marijuana especially dangerous for teenagers?
- At what point would you say that a synthetic marijuana user has a drug problem?
- What could you do if you think your friend is addicted to synthetic marijuana?
Wrap up/Assessment

- Pass out the post-test and give students about 5 minutes to complete it.

- As you grade the tests, fill out the post-assessment rubric. Compare these scores to the pre-test scores to monitor your students’ progress.

Homework

- Student Activity 9, Letter to the Editor, can be given as a homework assignment. Give each student a copy of the activity page and student fact sheets (see “Materials”). Read the directions on the activity page and tell students that their assignment is to write a letter to the editor of their local newspaper or a national magazine, urging him or her to keep synthetic marijuana in the public eye. Ask students to bring their letters to class for editing before they mail them. Keep a copy of each student’s letter, and have students share their finished letters with the class.

**Teacher Note:** You may want to have all of your students write letters to one publication of your choice instead of allowing each student to pick a different publication. It might be helpful to contact the publication in advance and mail all of the letters together. Another option is to use the homework assignment as a practice letter and then have students write a class letter to a newspaper or magazine together.
**Pre/Post Assessment Rubric**

Record each student's performance by writing a 1, 2, or 3 in each box, or use your own grading scale.

**Key:**  
1 = not meeting expectations  
2 = approaching expectations  
3 = meets expectations

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Pre/Post Test

Name: _______________________________________________

Directions: Answer each multiple choice question by circling the correct response.

1. How much stronger is synthetic marijuana than natural marijuana?
   a. twice as strong
   b. ten times as strong
   c. 100 times stronger
   d. 500 – 700 times stronger

2. Using Spice is even riskier for teenagers than it is for adults because
   a. teenagers have a lower tolerance for cannabinoids
   b. the frontal lobe of the brain is not fully developed in teenagers
   c. teenagers are smaller than adults
   d. teenagers are more active than adults

3. The adverse physical and psychological effects of synthetic marijuana include
   a. paranoia
   b. rapid heart beat
   c. disorientation
   d. all of the above

4. Synthetic marijuana is a Schedule I drug because it
   a. has a high potential for abuse and no accepted medical use
   b. has a high potential for abuse and accepted medical use with severe restrictions
   c. is only available to cancer patients
   d. is only legal in some states

5. Which of the following is NOT a possible long-term effect of synthetic cannabinoids?
   a. cancer
   b. brain damage
   c. sickle cell anemia
   d. heart disease
6. Why did the chemist who created synthetic marijuana stop his research project?
   a. because he couldn’t eliminate the adverse effects of the drug
   b. because he realized that minors might abuse the drug
   c. because he lost funding for his research
   d. because the FDA would not approve the drug

7. The active ingredients in natural and synthetic marijuana bind to
   a. receptors in the brain
   b. tissue in the lungs
   c. blood vessels in the heart
   d. muscles in the neck, arms, and legs

8. Which of the following is NOT a street name for synthetic marijuana?
   a. K2
   b. Snow
   c. Haze
   d. Judgment Day

9. Before 2011, synthetic marijuana was marketed and sold as
   a. energy pills
   b. bath salts
   c. incense
   d. plant fertilizer

10. The Drug Enforcement Administration lists synthetic cannabinoids in the same category as which of the following drugs?
    a. Ecstasy
    b. heroin
    c. cocaine
    d. all of the above
Post-Test Answer Key

1. d
2. b
3. d
4. a
5. c
6. a
7. a
8. b
9. c
10. d
Additional Titles for Grades 7 – College

- Prescription Drugs Update
- Buzz in a Bottle: The Dangers of Caffeine-Spiked Energy Drinks
- Danger behind the Wheel: The Facts about Distracted Driving
- The New Marijuana: Higher Potency, Greater Dangers
- Anatomy of a Puff
- Addiction and the Human Brain
- This Is Your Brain on Tobacco: A Research Update
- Everything You Need to Know about Alcohol in 22 Minutes
- Straight Talk: The Truth about Alcohol and Sex
- Legal But Deadly: Abusing Prescription Drugs
- Everything You Need to Know about Tobacco in 22 Minutes
- Everything You Need to Know about Substance Abuse in 22 Minutes
- DUI: The Hard Truth
- Drugs: Crime and Punishment
- Tales from the Prom: The Good, the Bad and the Ugly
- The Myths of Marijuana Debunked
- Spit This! The Hazards of Smokeless Tobacco
- Underage Drinking Tool Kit
- Drugged Driving: The Road to Disaster
- The Top Ten Myths about Alcohol and Drugs
- Pharm Parties: A Lethal Mix
- Understanding Fetal Alcohol Syndrome

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