**Skills Covered:** Human health; textual evidence; evaluate arguments; recall relevant information; write opinion essays; critical thinking

**Lesson Plan:** Before completing the activity, ask students: *Why is it important to encourage people around you not to smoke?* (Tobacco smoke is dangerous for both smokers and nonsmokers around them.) *Do you think knowing the facts might affect people's decisions about using tobacco or related products? Why or why not?* Hand out the worksheet and have students complete it individually. After everyone has finished, reconvene as a class and discuss their answers.

**Key Concepts:** Many students face situations in which they must make healthy decisions about tobacco, exposure to secondhand smoke, and products, such as e-cigarettes. To stay healthy, they need to choose not to use these products and also to protect themselves from secondhand smoke. That means encouraging people around them not to smoke. Peer pressure or concerns about what friends might think can make it difficult to make healthy decisions. Helping students consider what they might do and say in certain situations before they happen can better prepare them to make healthy decisions when they need to.

**Critical-Thinking Discussion Questions:** Why is it sometimes difficult to make healthy decisions about tobacco or other related products, such as e-cigarettes? (Peer influence can pressure you to make different decisions; it can be difficult to stand up to adults and older teens.) *Why might teens not know the risks of e-cigarettes?* (The products don’t contain tobacco, so people might think they are safe; they don’t have the same warnings as tobacco products; they may include advertisements that appeal to teens; they have candy-like flavors that may make them seem harmless.)

**WORKSHEETS ANSWER KEY**

**WORKSHEET 1: What Do You Know About the Dangers of Tobacco?**

**(Assessment Quiz)**


**WORKSHEET 2: Know the Facts**

1. The percentage of adults and youth who smoke has decreased in the last 10 years. Answers may vary about why but may include that education has helped give people the facts about how dangerous cigarettes and tobacco are for health. That may have encouraged fewer people to smoke.
2. These products contain nicotine, a drug that is addictive. It causes changes in the brain that make you feel more alert or give you a sense of pleasure. But once the effects wear off, you crave more of it.
3. Answers may vary but should include benzene, which can be found in gasoline; formaldehyde, which is used to embalm dead bodies; cadmium, which is used in batteries; or polonium 210, which is found in fuels from nuclear reactors.
4. Answers may include that people once thought tobacco could help people, such as soldiers injured in World War I. Over time, evidence grew that tobacco was dangerous. Eventually, government officials created laws, such as banning certain ads, aimed at protecting people from the dangers. Smoking rates then decreased.
5. E-cigarettes are not regulated by the FDA and they do not have to need the same warnings on their packages as tobacco cigarettes. Answers may include that this may make teens think that the products are safe to use.
6. Answers will vary.

**WORKSHEET 3: Making Smart Decisions**

1. Answers will vary but may include that Ashley should not stay at her friend’s house. She could invite Natalie over to her house. At Natalie’s house she would be exposed to secondhand smoke from the college students’ cigarettes. Opening windows does not eliminate the risk of secondhand smoke. Tobacco smoke contains dangerous chemicals that are absorbed into your body when you breathe in the smoke. These chemicals can harm nearly every organ in your body. Also, even if the college students leave and the smoking stops, the smoke lingers in the air and she could be exposed to the chemicals from tobacco smoke, which stick on surfaces. This is called thirdhand smoke.
2. Answers will vary but may include that Sam should encourage his brother and his brother’s friend not to use e-cigarettes. E-cigarettes contain nicotine, the same addictive drug that is in tobacco cigarettes. The drug affects the way the brain processes information and causes you to crave more. Studies have shown that adolescents are even more sensitive to nicotine than adults. The drug may impact the development of the prefrontal cortex. E-cigarettes may lead people to want to smoke tobacco cigarettes. Some e-cigarettes also contain toxic chemicals that may cause cancer, including flavoring chemicals that have been linked to severe lung disease. E-cigarettes have ads and flavors that may appeal to young people, but that doesn’t mean they are safe.
3. The US government does not currently regulate the products. One reason is that it takes time for scientists to gather the evidence needed to make laws about the use of e-cigarettes. Scientists are busy collecting data about the effects of e-cigarettes.

**ADDITIONAL RESOURCES:**

- cdc.gov/tobacco/basic_information/youth/index.htm
- kickbuttsday.org
- smokefree.gov
- teens.drugabuse.gov/drug-facts/tobacco
- nicotine-e-cigarettes
- tobacofreekids.org

**STANDARDS**

- Health/Life Skills
- Science Literacy
- English Language Arts

**National Science Education Standards:**

- Personal Health
- Structure and Function in Living Systems

**Next Generation Science Standards (NGSS):**

- LS1.A: From Molecules to Organisms: Structures and Processes

**Common Core State Standards for English Language Arts:**

- RI.1: Cite textual evidence
- RI.2: Central idea and details
- RI.8: Evaluate claims in a text
- W.1 & 2: Write opinion and informative texts
- W.7: Synthesize multiple texts