

# Truth About Tobacco

## Summary

Students will identify the short- and long-term effects of tobacco use.

## Main Core Tie

Health Education I (7-8)

[Strand 4: SUBSTANCE ABUSE PREVENTION \(SAP\) Standard HI.SAP.4:](#)

## Materials

### - [Posters:](#)

"Short-Term Effects of Smoking," "Long-Term Effects of Smoking," "The Toll of Tobacco in Utah," "Cigarette Use Data," "Smokeless Tobacco Use Among Utahns," "How the Tobacco Industry Influences Youth."

Worksheets: ["The Top Ten Reasons Why I'll Never Use Tobacco,"](#) ["Reasons Not to Use Tobacco"](#)

Materials: Tar jar made from a wide-mouth, 2-quart plastic jar filled with 1 quart of dark molasses or dark Karo Syrup  
Coffee stirrer straws or other straws  
Balloons

## Intended Learning Outcomes

Identify the short- and long-term effects of tobacco use.

## Instructional Procedures

### Lesson at a Glance

Discuss the effects of tobacco use.

Play and discuss the "I've Got Your Number" magic game.

Discuss what manipulation is and how the tobacco industry manipulates.

Demonstrate and discuss the "Tar Jar," "Straw," and "Balloon" activities.

Review the short- and long-term effects of tobacco. criteria.

Discuss the benefits of not using tobacco and complete the "Top Ten Reasons" worksheet.  
health-related need. Risk/Protective Factors

### New Vocabulary

alveoli

blood pressure

bronchitis

cancer

tar

chronic

cardiovascular disease

emphysema

phlegm

### Introduction (Setting Focus)

Play the "I've Got Your Number" magic game.

This activity is a variation of an old magic trick. The trick is accomplished by using the words "select," "choose" and "that leaves" at strategic times. In the end, the magician forces the selected number while the participant thinks he or she has had a free choice.

Write the chart listed below on the board:

A	B	C	D
1	5	9	13
2	6	10	14
3	7	11	15
4	8	12	16

A volunteer writes one of the numbers on a piece of paper, shows it to the magician (teacher) and hides the selection from the class. In this example, we'll use the number "11"; however, any number may be selected.

Ask a second volunteer to select two columns. The object for the magician is to not cross out the column containing the chosen number but to eliminate the rest. If the person selects C as one of the columns and B as the other, then say, "You selected C and B. That leaves out A and D." Cross out A and D.

If the person selects A and D, say, "You selected A and D. We'll cross those out. That leaves B and C." The magician simply crosses out the unwanted numbers and uses the word "selected" to mean either columns and numbers to keep or to cross out.

Another class member is asked to select either column B or column C. Use the same technique to eliminate column B in this example. If the volunteer selects B, say, "You selected B, we'll cross that one out." If the volunteer selects C, say, "You selected C for your choice, we'll keep that and cross out B."

Another volunteer is asked to choose two numbers within the remaining column, which in this example contains the secret number. Use the same tactics within the column to force the selection of the secret number, using the key words "select" and "leaves" until you have led the person to the chosen number 11.

For example, First ask him/her to choose two numbers. If the volunteer selects 9 and 11, say, "You chose 9 and 11. We'll cross out the other two numbers." If the volunteer selects 10 and 12, say, "You selected 10 and 12 for yourself. That leaves us with 9 and 11." Cross out 10 and 12. Repeat the process with the last two numbers, again using with words "select" and "leaves" as you eliminate the unwanted number. Dramatically reveal that the volunteers have, in some magic psychic way, selected the chosen number.

In print, the process seems unlikely to succeed. However, it almost always fools the participants into thinking they have actually magically arrived at the selected number.

Most students will be pretty amazed that the volunteers are able to come up with the chosen number. Little do they realize, at first, what's really going on. After a couple of times, you will probably have one or more students who figure out what you are doing. You can have them take turns leading the volunteers to the number. Play the game a few more times and then explain that the magic is really just trickery.

Discuss the activity using the following prompts:

What happened to make this magic trick seem like a real psychic phenomenon?

How did the magician lead the volunteer to where the magician wanted the volunteer to go rather than where the volunteer wanted to go?

What is trickery or manipulation? (to play upon; control by artful or unfair means; to deceive or defraud; methods to influence the behavior or emotions of others for one's own gain)

Would you be tricked again if you played this game?

What skills would keep you from being tricked again?

How is the trickery or manipulation in this game similar to the trickery or manipulation of the tobacco industry? Explain that for many years, the tobacco industry has been manipulating us to try to get us where they want us to be for their gain.

Show and discuss the "How the Tobacco Industry Influences Youth" poster. Explain that the tobacco industry thinks "youth" are easily manipulated.

Explain that every year, more than 400,000 people die from smoking-related illnesses; others quit. To stay in business, the tobacco industry needs about 3,000 replacement smokers each day, otherwise they will go broke. Their number one target is YOUTH!

The tobacco industry targets youth because they are:

More influenced by advertising (they want to belong and fit in, be cool and popular, feel independent, look attractive, and/or have fun).

More likely to take risks.

More likely to smoke if peers smoke.

More likely to become addicted and to become a heavier smoker.

More likely to spend more money in their lifetime on smoking due to starting early-- fewer people start smoking after the age of 18.

Ways the tobacco industry targets youth:

Billions spent on advertising (it's hard to sell a deadly product).

Studies generated to find out what images, ads, and techniques attract kids.

Ads placed in magazines young people read.

Candy-flavored cigarettes and smokeless tobacco are produced.

Pay-outs to chain stores to prominently display tobacco products.

Pay-outs to the movie industry to show actors and actresses smoking on screen or have their products featured in movie sets.

Sponsorship of sporting and entertainment events that heavily expose youth to tobacco advertising.

Distribution of promotional items such as lighters, key chains, and hats with tobacco logos. Most kids who smoke own some of these items.

Television and magazine promotions using young, hip, and attractive models to convey the image that smoking is fun and exciting.

Advertisements directed at kids can be found everywhere. This exposure to tobacco products leads youth to overestimate the number of people who smoke.

Political contributions aimed at legislators to support the interests of the tobacco industry--an economic necessity in states dependent on taxes generated from tobacco companies.

Discuss the concept of youth tobacco usage with the following prompts and ideas:

Why would the tobacco industry want youth to think that everyone uses tobacco?

Estimate the percentage of people who use tobacco in each category (cigarette use among youth grades 7--12 and adults, spit tobacco use grades 7--12 and adults).

Display the posters "Cigarette Use Data" and "Spit Tobacco Use Among Utahans" and discuss the actual number of tobacco users in Utah. Compare the actual numbers to their estimates.

Why would people, especially youth, overestimate the number of tobacco users?

Who benefits from the erroneous idea that most people use tobacco?

Encourage students to GET THE TRUTH ABOUT TOBACCO--DON'T BE TRICKED!

Body (Strategies/Activities)

Students complete the "Top Ten Reasons Why I'll Never Use Tobacco" " worksheet during the following activities and discuss their answers.

Complete the tar jar activity:

Pass around the tar jar. Encourage participants to slowly turn it around to see the tar "goop" off the sides and top of the bottle.

Describe the tar jar. Use the tar jar to describe how much tar pack-a-day smokers take into their lungs in one year. The tar jar contains one quart of "tar." This is the amount of tar that accumulates in the lungs after only one year of smoking a pack of cigarettes per day.

Describe the effects of tar.

Tar contains over 4,000 chemicals, 37 of which are known to cause cancer.

Tar affects the lungs by damaging cilia.

Cilia are tiny hairs in the lungs that move in a wave-like motion and help clean the lungs of mucus and smoke-borne chemicals.

When cilia don't work, mucus that carries dust, chemical particles and bacteria no longer cleanses the lungs.

When mucus cannot be removed from the lungs, it results in an overload of mucus and results in "smoker's cough." With "smoker's cough," large amounts of mucus are coughed up, but not enough to completely and properly clean the lungs.

Excess mucus constantly in the lungs results in increased infections such as colds, and chronic irritation that can lead to cancer, emphysema, chronic bronchitis and chronic lung obstructions.

Complete the nicotine's effects on heart activity:

Students make a fist with their hand.

Students open and close their fist. Encourage students to start out slow, then get faster and faster. This is to simulate the effect nicotine has on the heart. Time students until they can no longer open and close their fist.

Discuss the activity using the following prompts and ideas:

How does the hand feel?

Smoking places the heart under stress and makes it work harder. What happens to overworked, stressed muscles?

How can smoking damage heart muscles?

Repeat the activity and have students wrap their other hand around their wrists, applying slight pressure. This represents the reduced oxygen flow that results from smoking tobacco. How does this further stress the heart?

Complete the straw/emphysema activity. Be aware that this activity may be difficult for asthmatics, and please modify if necessary.

Pass out the straws (coffee stirrers, flex, or regular straws).

Instruct participants to put the straws in their mouths and plug their noses. Have the students wrap their lips around the straw and breathe only through the straw.

Time them for a minimum of 30 seconds. (Do not exceed 90 seconds.) For added impact, ask participants to march in place for a full 30 seconds. If regular straws are used, ask participants to run in place for the full 30 seconds.

NOTE: If anyone appears to be under undue physical or emotional strain, instruct him or her to stop the demonstration immediately.

Explain that the activity is a very good simulation of what emphysema or another chronic obstructive lung disease is really like. Process the thoughts and feelings participants experienced:

What did you feel physically?

What thoughts were going through your mind?

How did you feel emotionally?

What if all of the feelings you just experienced never went away?

How would your daily life change?

Discuss the effects of emphysema.

Smoking affects alveoli.

Alveoli are tiny sacs in which air exchange takes place.

Alveoli are very flexible, expanding to take in air and contracting to push air out.

Emphysema occurs when the alveoli are damaged and lose their flexibility.

Instead of contracting to push air out, the alveoli stay expanded and can no longer contract.

In some cases, the alveoli are damaged so badly, they burst.

Emphysema is not an inability to take air in, but an inability to push air out.

People who suffer from emphysema experience an inability to participate in physical activity, difficulty in performing simple activities (like walking), a necessity for supplemental oxygen 24 hours a day, and difficulty breathing while lying down.

Balloon/alveoli demonstration:

Ask for two volunteers. Give one student a balloon and one a straight pin. Have one partner blow up the balloon (don't tie it off) and instruct the other partner to pop the balloon with the pin.

Once the balloon is popped, ask the student to blow up the same balloon again.

Once the student has established that this isn't possible, discuss the effect that tobacco smoke has on alveoli. Explain that the alveoli are no longer able to "grab" the oxygen molecules due to the tar found in tobacco smoke.

Closure (Wrap-Up and Extension)

Discuss the benefits of NOT using tobacco. Emphasize that spit tobacco, pipe tobacco, and cigars are NOT safe alternatives to cigarette use.

Discuss reasons not to use tobacco.

Students complete "Top Ten Reasons Why I'll Never Use Tobacco" worksheet.

## Extensions

### Additional Resources

Utah Department of Health (1-877-220-3466)

QuitLine: cards and brochures (1-888-567-TRUTH)

- [Tobacco Free Kids](#)

TheTRUTH@utah.gov or call 1-877-220-3466

### 2. [American Lung Association](#)

N.O.T. (youth tobacco cessation program)

Local Health Departments

END (Ending Nicotine Dependence), youth cessation program

QuitLine cards, brochures

American Cancer Society (1-800-234-0533)

Brochures, videos, posters, etc.

### 5. [Centers for Disease Control \(CDC\)](#)

Free videos with lesson guides, materials, and brochures (1-800-CDC-1311)

"Secrets Through the Smoke" (55 minutes)

"I Can't Breathe: A Smoker's Story" (20 minutes)

## Authors

[Utah LessonPlans](#)