

Weller Health Education Center

Tobacco Free, You and Me
Addiction Prevention
Grades 3-5

Table of Contents

Program Objectives	2
English Activity	3
Math Activity.....	4
Large Group Activity.....	5-6
Answer Keys.....	7
Note to Teacher	7
Connection with Home: Letter to Guardian	8



Program Objectives

Program Description:

High-impact images and creative activities demonstrate the dangers and consequences of using tobacco to both smokers and those around them.

Standards:

PA Standards 10.1.3d, 10.2.3e

NJ Standards 2.3.2bc, 2.3.4bc

Objectives:

Upon completion of this program, the student will:

1. Name the 2 most damaging chemical substances in tobacco;
2. Discuss 2 ways tobacco can enter the body;
3. Name 5 harmful effects of tobacco use for the smoker and those around the smoker; and
4. List 4 harmful ingredients in tobacco products.

Terminology:

Addiction– an urge to do something that is hard to control or stop

Cancer– a disease that causes the body to make cells that are not normal and can lead to death

Drug– any chemical substance that causes a change in body systems

Inhale– breathing in and bringing air into the lungs

Nicotine– clear and odorless drug in tobacco products that leads to addiction

Tar– a dark and sticky substance in tobacco products that contains over 4,300 dangerous chemicals

Tobacco– a plant that is harvested and used in tobacco products including cigarettes, cigars, pipes, and chewing tobacco



Tobacco Free You and Me

Objective:

Identify and define terminology associated with tobacco use.

Directions:

1. Answer the questions at the bottom of the page.
2. Locate the terms in the word search.
3. Bonus Question: There is a hidden message in the word search! See if you can find it.

H O S D N V D H A V Z C Q T M
N P X N W I E O Q F A U D A D
W Z S A U G C P G N L V I V Q
E X U H B P J O C O S J C T U
H Q N D V V E E T E D N F R T
C S M N U Z R G T I H T A E D
G H C O H J Y T S X N T A K B
R Q D C H D E G Q D C E G F V
G W L E B R G Z I H H T N I N
N N P S A Q M A G G Z Q K N F
E E U G A D D I C T I O N H M
A Z I L I S T T G M A G X A Z
F C Y M X A F V O F J N H L Q
I Z Z O A W V A T N O U V E G
Q G T B W R C H J U H G I P A

1. What is not being able to stop once you have started?
2. What disease is caused by the growth of abnormal cells?
3. This form of tobacco is not inhaled, but absorbed through the mouth.
4. This form of tobacco is inhaled into the lungs to deliver nicotine.
5. Bringing air into the lungs.
6. Organ that brings oxygen into the blood stream.
7. The drug inside tobacco products that causes addiction.
8. _____ smoke is inhaled by other people that are standing nearby those who are smoking.
9. A dark, sticky substance found in tobacco products.



Math Worksheet

Name: _____ Date: _____

Directions:

Complete the math questions in column one. Then, use the solutions you have to fill in the blanks in the tobacco facts in column two.

1. A group of friends went out for pizza. They ordered a small pizza and cut it into 3 pieces. Joey and Kim have already eaten their pieces. What fraction of the pizza is left for Rachel?

2.
$$\begin{array}{r} 4,400 \\ - 100 \\ \hline \end{array}$$

3. What fraction of the square is shaded?

4. $(4+8)/12 =$ _____

There are _____ lungs in your chest that absorb oxygen and help you to breathe.

_____ people die because of their smoking habit each year.

About _____ of the kids who try smoking will become regular smokers.

There are about _____ chemicals in tar and many of these are known to cause cancer.

_____ of people who begin smoking as teens will die from a smoking related disease.



Cilia Volleyball

Background:

Inside the airways are fine hairs called cilia that protect the lungs from fine particles like smoke and ash. Cilia wave back and forth and trap the small particles as they pass by on the way to the lungs. These hair-like fingers slowly sweep the particles back up to the mouth through the use of mucus and keep the particles from settling in the lungs. When a person smokes, the tar from the cigarette is inhaled and deposited on the cilia. Soon the cilia become covered with tar and can no longer perform their waving action and are not effective in trapping the particles. When the waving action ceases, the tar continues through the passageway and becomes deposited in the lungs. Over a period of time the cilia cease to function altogether and the body produces extra mucus to try to protect the lungs. This extra mucus builds up in the lungs and has to be coughed out by the smoker. This is the basis for “smoker’s cough”.

Materials Needed:

- 10 large balloons
- A rope to serve as a net
- 20-30 minutes of classroom time

Activity:

Divide the class into two teams. Stretch a rope which will serve as net about three feet off the ground across the room and have the two teams lie down on their backs with their heads toward the net. This activity is played much like a volleyball game. No one may get up off the floor and they must always have their heads towards the net. The teacher will “serve” by throwing the balloon onto one side of the net. When a team can’t return the balloon, a point is awarded to the other team. Over time, add in additional balloons.

This activity stimulates the action of the cilia. The balloons represent particles of smoke or tar that pass down the airway. The arms of the players represent the cilia. After playing the game for a while stop and explain this to the students. To stimulate the problem of cilia becoming covered with tar, have some students use only one arm to hit the balloons, with the other arm completely out of play. This portrays the cilia becoming covered in tar and ceasing to catch particulates. Additional challenges can be added by allowing each student to touch each balloon only once or making some students not use either arm to further demonstrate the difficulty of cilia becoming saturated with tar.

Discussion Points:

- In the beginning, was the game hard to play?
- As we continued the game, did it get harder? Why?
- What can this activity teach us about smoking?
- What do you think having more than one balloon going at a time tells us about smoking?



- How did you feel when your team couldn't use all of their arms to hit the balloon?
- When many people weren't using their arms, what problems did you have?
- How can we relate these problems to smoking?
- Using the game as an example, how well does your body's defense system work when the cilia become covered with tar?
- When some people couldn't hit the balloon, what did others have to do to compensate for them?
- What does your body do when some of its cilia are not being effective?



Tobacco Free You and Me Word Search

Answer Sheet

1. What is not being able to stop once you have started? ADDICTION
2. What disease is caused by the growth of abnormal cells? CANCER
3. This form of tobacco is not inhaled, but absorbed through the mouth. CHEW
4. This form of tobacco is inhaled into the lungs to deliver nicotine. CIGARETTES
5. Bringing air into the lungs. INHALE
6. Organ that brings oxygen into the blood stream LUNG.
7. The drug inside tobacco products that causes addiction. NICOTINE
8. ____smoke is inhaled by other people that are standing nearby those who are smoking. SECONDHAND
9. A dark, sticky substance found in tobacco products. TAR

Math Worksheet

Answer Sheet

1. A group of friends went out for pizza. They ordered a small pizza and cut it into 3 pieces. Joey and Kim have already eaten their pieces. What fraction of the pizza is left for Rachel $\frac{1}{3}$

2.
$$\begin{array}{r} 4,400 \\ - 100 \\ \hline \mathbf{4,300} \end{array}$$

3. What fraction of the square is shaded? $\frac{1}{2}$

4. $(4+8)/6 = \underline{2}$

5. $50 * 10,000 = \underline{\mathbf{500,000}}$

There are 2 lungs in your chest that absorb oxygen and help you to breathe.

500,000 people die because of their smoking habit each year.

About $\frac{1}{2}$ of the kids who try smoking will become regular smokers.

There are about 4,300 chemicals in tar and many of these are known to cause cancer.

$\frac{1}{3}$ of people who begin smoking as teens will die from a smoking related disease.

Note to teacher- the following letter is intended for your students to take home as a follow-up for the days program. Please copy and distribute as you see fit in order to enable caregivers of students to reinforce the lesson of this program effectively.



Weller Health Education Center

Dear Caregiver,

Your child has participated in a program called “Tobacco Free, You and Me” that was presented by the Weller Health Education Center. This program highlights the physical consequences of using tobacco to the smoker and those around them. Using real-life pictures, the program showed students the effects of habitual use of tobacco products and discussed the impact of nicotine and tar on the body. The Weller Health Education Center strives to convey the importance of making the personal choice not to smoke as a means of managing one’s personal health.

The American Heart Association states that, in the United States, an estimated 25.9 million men (23.9 percent) and 20.7 million women (18.1 percent) are smokers. The health risks of tobacco are well known, yet the rates of smoking and the use of chewing tobacco continue to grow. Statistics show that 90 percent of all adult smokers started when they were kids and more than 4,400 kids become regular smokers each day. Data concludes that there is no safe level of exposure to secondhand smoke and that even brief exposures can be harmful. Childhood exposure to secondhand smoke can cause adverse respiratory problems now, such as increased colds, coughing, sore throats, sniffing, and sneezing and later in life, such as asthma, decline in lung function, heart disease and lung cancer. As a parent, if you smoke, it is in the best interest of your child’s health to smoke outdoors away from them. The easiest way to reduce smoking and negative health effects is to prevent it from starting. As guardians, it is imperative to talk to your children about the negative health implications associated with tobacco. Talking to your kids is an easy and effective strategy that will work to keep kids safe and healthy.

Below you will find some sample tips to guide you in taking steps to improve your family’s safety and health. These activities can help to continue the message started today in our program. For additional resources you are welcome to utilize the parent, teacher and student resource links found on our website at www.wellercenter.org.

Sample Tips:

- 1) Be an effective role model. If you smoke -- quit.
 - a. Local cessation resources are available at free and reduced charges. Start researching at www.tobaccofreene.com.
- 2) Establish your expectations and clear rules about smoking.
 - a. Avoid unrealistic threats. If you do find that your children have been experimenting with tobacco, try to react calmly.
- 3) Emphasize that your children can always come to you with questions or concerns. Let them know that they will not be lectured or yelled at.

Yours in good health,
Weller Health Education Center