Tobacco/Nicotine On Trial: Effects

More Practice With I STOP’D and Bugs

3 Cs
- I care about myself.
- I care about others.
- I care about my community.

Help students to understand and invite them to state clearly:
- I have the right to care about myself.
- I have the responsibility to make smart choices when I care about myself.
- I show I care about myself when I make choices to live healthy and not use alcohol, tobacco or other drugs.

Preparation

Copies
- Tobacco Knowledge Pre-Test (see Student Workbook page 2)
- Worksheet: “How Many People Use Tobacco?” (see Student Workbook page 3)
- Home Connection: “Chemical Compounds Found in Tobacco Products” (see page 102 and page 103)

Material
- Wordstrips: “Which Kills the Most?” (see page 107)
- "Myths or Facts About Tobacco” (Student Workbook page 4)
- Teacher Resource Sheet: “Tobacco Vocabulary List” (see page 106)
- Website: www.tobaccofreeutah.org (Data & Reports – Utah Facts)

Music
- “Clear the Air” from the CD Take a Stand (see page 162)

Vocabulary
- nicotine
- cyanide
- formaldehyde
- methanol
- arsenic
- cadmium
- ammonia
- acetone
- leukoplakia
- toluene
- polonium-210
- carbon monoxide
- benzene
- tar
- tobacco

Lesson at a Glance

Introduction
1. Tobacco Knowledge (Pretest)

Strategy
2. Tobacco Use Patterns
3. Myths and Facts About Tobacco
4. Which Kills the Most?
5. What’s in Tobacco?
6. The Straw Activity

Conclusion
7. “Clear the Air”

Core Curriculum Objectives and Standards

Objectives
- Identify the effects of tobacco use.

Standards
7050-0203 Physiological effects of substance abuse.
1. Tobacco Knowledge Pretest.
   - Have each student complete the “Tobacco Knowledge Pretest” in his or her *Student Workbook*.
   - Using the Tobacco on Trial pre/post tests will give you an idea of what your students are learning about tobacco.

2. Tobacco Use Patterns
   - Direct students to the “How Many People Use Tobacco?” in their *Student Workbooks*.
   - Have students estimate what percentage of various groups of people use tobacco (cigarettes, cigars, and smokeless tobacco products.)
   - If students find it difficult to understand how to fill in the graph, give them an example using something other than tobacco i.e., What percentage of people bite their nails in the various groups mentioned on the graph?
   - Do not complete the graph at the bottom of the worksheet at this time. Students will fill in this graph during the discussion phase of this activity.
   - Ask students to share some of their estimates.
   - Use the website www.tobaccofreeutah.org (Data & Reports – Utah Facts and Figures) to discover actual Utah tobacco use rates. Compare it to students’ estimates.
   - Complete actual data bar graph with these tobacco statistics: My Age, High School Age, and Adults.
   - Discuss why people overestimate the number of tobacco users.
   - Why do many people think tobacco users are in the majority?
   - How do tobacco advertisers try to make tobacco use seem like more people are using it than is really the case?

3. Myths and Facts About Tobacco
   - Refer to “Myths And Facts About Tobacco” in the *Student Workbook*.

4. Which Kills the Most?
   - Place the word strips (page 107) on the board in random order.
   - Have students rank the list by those things which they think cause the smallest to greatest number of deaths.
   - Re-arrange the strips using the answer key.

   **Answer key**
   
<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td>2,400</td>
</tr>
<tr>
<td>Cocaine/Crack</td>
<td>3,300</td>
</tr>
<tr>
<td>Fires</td>
<td>4,000</td>
</tr>
<tr>
<td>Homicide</td>
<td>22,000</td>
</tr>
<tr>
<td>Suicide</td>
<td>31,000</td>
</tr>
<tr>
<td>AIDS</td>
<td>31,000</td>
</tr>
<tr>
<td>Car Accidents</td>
<td>49,000</td>
</tr>
<tr>
<td>Secondhand Smoke</td>
<td>53,000</td>
</tr>
<tr>
<td>Alcohol</td>
<td>105,000</td>
</tr>
<tr>
<td>Tobacco</td>
<td>434,000</td>
</tr>
</tbody>
</table>

   Information for this and other lessons in the Tobacco on Trial section comes from www.tobaccofreeutah.org

Ask

- What is it about tobacco use that causes such high death rates?
- What kinds of disease and death occur because of tobacco use?
- What do you remember when we talked about problems and the things that “bug” us?
5. What's in Tobacco?
Refer to the “Home Connection” student handout sheets.

• Understanding what is in tobacco products may help you understand why these products cause so many diseases and death.
• There are more than 4,000 chemicals in cigarettes.
• About 100 of them are carcinogens, which means they are known to cause cancer.
• About 50 of those chemicals are tumor-causing, while three are radioactive. It is no surprise that cigarettes are deadly.
• Why doesn’t a person who smokes cigarettes die instantly with all these different poisons in cigarettes? The amounts of each are very small, and they are inhaled rather than ingested.

6. The Straw Activity.
Distribute a narrow drinking straw to each student.

Be aware and cautious of students who may have asthma or a breathing disability.
• Place the straw in your mouth, hold your nose, and breathe only through the straw.
• Sit quietly in your seat and think about how easy or difficult it is to breathe through the straw.
• Run in place for 20 seconds and think what is it like to breathe through the straw.

• How did your body respond when you were breathing through the straw?
• When people smoke, their lungs lose the ability to hold oxygen, and they have difficulty breathing, especially when they try to exercise.
• What kinds of bugs might people have who have this difficulty breathing?
• What could you do to never have this problem?
• What could you do to help someone quit smoking?
• The following are some suggestions from Utah’s Truth About Tobacco Campaign.
If someone you love uses tobacco encourage them to quit. If your loved one doesn’t quit right away, be patient with them. Nicotine is very addictive and it can take many tries to successfully quit tobacco but it is never too late to quit.

Most people are aware that the overall health benefits of quitting tobacco are huge. However, few are aware that many of those benefits occur in relatively short periods of time. While there will be obvious differences between specific individuals, improvements in your health when you quit smoking begins in as little as 20 minutes and continues over a 10 year period. After that time, the former smoker’s risk of tobacco-related death and illness is dramatically reduced.

For help quitting, call the Utah Tobacco Quit Line at 1-800-QUIT-NOW or visit UtahQuitNet.com

The TRUTH™

Conclusion

Sing

7. “Clear the Air”

Learn and sing the song “Clear the Air.”

• When you have the right information, you can make the smart choice not to use tobacco.

• Making smart choices helps us to be more free because we are not hindered by poor health and other bugs.

• I show I care about myself when I make choices to live healthy and not use alcohol, tobacco or other drugs.

Tie in the 3 Cs

I care about me.
I care about others.
I care about my community.

Home Connection

• Make a copy of both Home Connection papers for each student.

• Take a short amount of class time to explain the home assignment.

• Send the Home Connection paper home with each student and instruct students to share the information with their families.

Optional Activities

Student Workbook

“Negative Consequences of Smoking” (see Student Workbook page 5)

“Truth or Dare” crossword puzzle (see Student Workbook page 6)
### Myths or Facts About Tobacco

<table>
<thead>
<tr>
<th>Myth</th>
<th>Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a person smokes just a few cigarettes he or she won’t get addicted.</td>
<td>Tobacco is addictive. Very few people can smoke just a few and not get addicted. The body quickly gets used to the amount of nicotine put into it and requires the same amount or more to feel “normal.” Tobacco is thought to be more addictive than heroin. Nine out of every 10 people who start to smoke or chew tobacco will get addicted.</td>
</tr>
<tr>
<td>Tobacco isn’t a drug.</td>
<td>Tobacco is a drug! It has addictive qualities just like heroin, cocaine, or alcohol. People use it knowing it is harmful to them, and it changes how their brain and body function. It alters mood, increases the heart rate, and drives the craving that smokers know all too well.</td>
</tr>
<tr>
<td>You look more grown-up and cool when you smoke.</td>
<td>Most people look really silly putting a white stick between their puckered-up lips, sucking in chemically polluted air, making a strange facial expression, and then blowing out that chemically polluted air. They’re also making themselves sick and making their skin look old and wrinkly before it should be.</td>
</tr>
<tr>
<td>Chewing tobacco is safer than smoking.</td>
<td>Chewing tobacco is just as dangerous as smoking cigarettes. Chewing tobacco causes just as many diseases, just different ones. Instead of lung cancer and emphysema, a person who chews may get lip, mouth, throat, or stomach cancer.</td>
</tr>
<tr>
<td>Smoking cigarettes doesn’t actually kill a person.</td>
<td>Smoking kills over 1,200 people a day. Tobacco smoke contains over 4,000 chemicals, 43 of which cause cancer. Tobacco is dangerous and deadly. Smoking kills more Americans each year than alcohol, crack, cocaine, heroin, homicide, suicide, fires, car accidents, and AIDS combined!</td>
</tr>
</tbody>
</table>
Dear Family,

We have been studying about the effects of tobacco. Please help me complete this assignment and find various household items that contain the same ingredients as a tobacco product.

Thanks.

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**CHEMICAL COMPOUNDS FOUND IN TOBACCO PRODUCTS**

Spend about 15 minutes going through your kitchen and bathroom cupboards and cabinets at home and finding the common household items listed on the next page. Find at least five items that contain one of the chemicals listed. List the brand name of that item and the chemical it contains below.

<table>
<thead>
<tr>
<th>Example: Windex Glass Cleaner</th>
<th>Example: Ammonia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
<td>5.</td>
</tr>
</tbody>
</table>
Dear Family,

This page contains information that will help me complete my home connections assignment.

- **Nicotine:** an active ingredient in many bug sprays
- **Cyanide:** the deadly ingredient in rat poison
- **Formaldehyde:** the foul-smelling preservative found in dead laboratory frogs
- **Ammonia:** a poisonous gas and powerful cleaning agent used to clean toilets
- **Arsenic:** a potent ant poison
- **Methanol:** jet engine and rocket fuel
- **Cadmium:** found in car batteries
- **Butane:** a flammable chemical in lighter fluid
- **Acetone:** a poisonous industrial solvent, also found in fingernail polish remover
- **Toluene:** a poisonous industrial solvent
- **Polonium-210:** a highly radioactive element
- **Carbon Monoxide:** an extremely poisonous gas found in auto exhaust
- **Benzene:** a poisonous toxin

Some of these products, when used in directed ways, can be helpful to create a healthy environment. For example, gasoline is pumped into a car’s fuel tank and used to power the vehicle. If misused, it can be very dangerous. Many tobacco products contain the chemicals listed above.

Please discuss with me the following questions.

How could misusing the chemicals and products listed above damage my body and mind?

What long-term effects might tobacco use have on my body, mind and pocketbook?

What are our family traditions with regard to tobacco and what are the family rules about its use?

How does breathing secondhand smoke affect even non-smokers, especially children?
Querida familia,

Hemos estado estudiando acerca del efecto del tabaco. Por favor ayúdame a completar esta asignación y a encontrar productos de limpieza que tengamos en el hogar, los cuales contengan los mismos ingredientes que el tabaco.

Gracias.

**COMPUESTOS QUÍMICOS ENCONTRADOS EN EL TABACO**

Por favor dedica 15 minutos para checar los gabinetes de tu cocina y de los baños que tengas en tu casa y encuentra los productos de limpieza que tengas, los cuales están listados en la siguiente página. Encuentra por lo menos cinco artículos los cuales contengan uno de los químicos listados. Nombra la marca de ese artículo y el químico que contenga de los cuales se encuentran listados en la parte de abajo.

<table>
<thead>
<tr>
<th>Ejemplo: Windex Limpiador de Vidrio</th>
<th>Ejemplo: Amonia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
Querida Familia,
Esta página contiene información la cual me ayudará a completar mi asignación de conexión para el hogar.

<table>
<thead>
<tr>
<th>Químico</th>
<th>Descripción</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotina</td>
<td>este es un ingrediente activo en los aerosoles usados para combatir insectos</td>
</tr>
<tr>
<td>Cianuro</td>
<td>este es un ingrediente mortal usado en el veneno para ratas</td>
</tr>
<tr>
<td>Formaldehido</td>
<td>este preservante de olor pestilente es encontrado en sapos de laboratorio muertos</td>
</tr>
<tr>
<td>Amoniaco</td>
<td>es un gas venenoso y un agente limpiador muy poderoso usado para limpiar inodoros</td>
</tr>
<tr>
<td>Arsenico</td>
<td>es un poderoso veneno para matar hormigas</td>
</tr>
<tr>
<td>Metanol</td>
<td>combustible para aviones y cohetes</td>
</tr>
<tr>
<td>Cadmio</td>
<td>encontrado en las baterías de carros</td>
</tr>
<tr>
<td>Butano</td>
<td>un químico flamable</td>
</tr>
<tr>
<td>Acetona</td>
<td>un solvente industrial muy poderoso, también encontrado en la acetona usada para quitar esmalte de uñas</td>
</tr>
<tr>
<td>Tolueno</td>
<td>un solvente industrial venenoso</td>
</tr>
<tr>
<td>Polonio-210</td>
<td>un elemento altamente radioactivo</td>
</tr>
<tr>
<td>Monóxido de Carbono</td>
<td>un gas extremadamente venenoso encontrado en los escapes de los carros</td>
</tr>
<tr>
<td>Benceno</td>
<td>una toxina venenosa</td>
</tr>
</tbody>
</table>

Algunos de estos productos, cuando se usan de forma directa, pueden ser de utilidad para crear un ambiente saludable. Por ejemplo, la gasolina es bombeada en un carro en el cual su tanque está totalmente lleno y es usada para poder arrancar el vehículo. Si se hace mal uso de esto, puede ser demasiado peligroso. Muchos productos del tabaco contienen los químicos listados en la parte de arriba.

Por favor platica conmigo acerca de las siguientes preguntas.

¿De qué forma pueden dañar mi cuerpo los productos y los químicos listados en la parte de arriba si son usados incorrectamente?

¿Qué efectos a largo plazo puede causar el uso del tabaco en mi cuerpo, mente y bolsillo?

¿Cuáles son nuestras tradiciones familiares y las reglas familiares con respecto al uso del tabaco?

¿De que forma el respirar el humo de segunda mano afecta a los no fumadores, especialmente a los niños?
ADDICTION: A physical condition in which a person begins to depend on a substance or needs a substance to feel normal.

ARSENIC: A poison used to kill mice and rats.

CARBON MONOXIDE: A poison that comes out of a car’s exhaust pipe.

CARCINOGEN: A cancer-causing substance.

CILIA: The hair-like structures found in your lungs that “sweep” or clean harmful particles out of the lungs.

CHRONIC BRONCHITIS: A disease that causes excessive coughing.

EMPHYSEMA: A disease of the lungs that makes breathing difficult.

SECONDHAND SMOKE: Secondhand smoke is the smoke that non-smokers inhale when they are around those who do smoke.

FORMALDEHYDE: A gas, in a liquid solution, which is used as a preservative.

GATEWAY DRUG: A drug that is usually used first in drug experimentation.

LEUKOPLAKIA: A white or colorless growth of abnormal cells inside the mouth that often turns into cancer.

NICOTINE: A poison in tobacco that is sometimes used as an insecticide.

NITROSAMINES: Carcinogens found in chewing tobacco and cigarettes.

OXYGEN: A colorless, orderless gas in the air we breathe.

PHLEGM: The substance people cough up when their lungs get dirty.

TAR: The gooey, black substance found in tobacco that coats the lungs.

TOBACCO: A plant with broad leaves—the leaves are processed into a finely ground, brown substance and used mainly for smoking and chewing.

TOBACCO INDUSTRY: The group of companies that make and sell tobacco products.