West Virginia Teacher’s Guide for Oral Health Education

6th-12th Grades
Dear Educator,

Enclosed please find supplemental resources provided through the West Virginia Department of Health and Human Resources Oral Health Program to aid your efforts in providing oral health education. The West Virginia Department of Education (WVDE) Content Standards and Objectives (CSOs) pertaining to oral health have been utilized in developing the presentations and materials. The CSOs have been placed at the top of each lesson to assist in ease of adaption in your classroom. The brief lessons cover core competencies, and several allow for elaboration into more advanced science and health CSOs. For additional information on oral health and learning, please find a fact sheet in the resource binder.

As a teacher, you are well aware of the direct connection between oral health and student learning. Students with preventable yet untreated oral health problems may have trouble concentrating and learning, have frequent absences from school, or develop permanent disabilities that affect their ability to learn and grow. Poor oral health has been related to decreased school performance, poor social relationships, and less success later in life.

To prevent any child from suffering due to oral disease, a basic understanding on how to achieve and maintain a healthy mouth is necessary. We are confident you will find these supplemental educational resources for oral health beneficial in addressing these critical essentials.

The educational resources have been designed to be cross-curricular in nature. The use of technology-based learning has been infused throughout the resources to further assist in implementation.

Thank you for the opportunity to provide your students with the knowledge of how to achieve a lifetime of healthy smiles!

Sincerely,

Jason Roush, DDS
West Virginia State Dental Director

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Assistant Director, Office of Healthy Schools
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Introduction

The Content Standards and Objectives (CSOs) for West Virginia Public Schools provide the framework for instruction of the knowledge and skills needed for students to lead healthy lives. The goal of this curriculum is to 1) educate students about the impact of personal hygiene on oral and overall health and 2) provide an efficient means for educators to easily infuse oral health content into existing curricula.

Healthy children who are free of dental pain will learn more effectively in the classroom. The West Virginia Oral Health Program endorses the concept of emphasizing oral health as an integral part of total body health.

Through this series, the West Virginia Oral Health Program believes that oral health can be integrated throughout the child’s education. These modules were developed to help meet the CSO’s for the West Virginia Public Schools in grades Pre K–12.

As a result of incorporating the Oral Health Education Resource kit into the elementary curriculum, the student will be able to do the following:

- Recognize the relationship between personal behavior and personal health and have an understanding of oral health promotion and dental disease prevention
- Demonstrate an ability to identify accurate oral health information and to be able to utilize this information to positively influence oral health and total well-being
- Demonstrate a variety of oral health behaviors that promote healthy mouths, healthy bodies and healthy communities

The modules for grades Pre K–12 contain lesson plans which are designed in a “ready-to-go” format for the classroom teacher.

Each lesson plan includes:

- Title
- Objectives
- Related CSO(s)
- Leading questions to engage the students
- Possible activities for students to assess knowledge/skills
- Resources for teachers

A teacher evaluation/feedback form is included with the curriculum. This form can be faxed to the WVDHHR Oral Health Program. We appreciate your comments as you integrate the oral health education information into classrooms.

An additional resource list is also included.
**Teacher Evaluation**

Please complete the following questions concerning the Oral Health Resource Guide.

1. Did you find the Oral Health Resource Guide useful to incorporate oral health education into your classroom?
   - Useful
   - Somewhat Useful
   - Not Useful

2. Did you like the layout of the binder?
   - Yes
   - No

3. Do you feel the material was age appropriate for the grade level assigned?
   - Yes
   - No

4. How many times during the school year did you refer to the guide for lesson materials?
   - None
   - 1-3 times
   - 3 or more times

5. Would you like to see more technology resources available?
   - Yes
   - No, technology available was sufficient

6. Would you recommend the guide to teachers that may not be utilizing the material?
   - Yes
   - No

7. Do you plan to use the guide in your teaching in future years?
   - Yes
   - No

8. Please list any additional comments/concerns you may have below.
### Oral Health Education Resource Guide Grades 6th-8th Module: At a Glance

<table>
<thead>
<tr>
<th>Lesson Title</th>
<th>Lesson Objectives</th>
<th>WV CSOs</th>
</tr>
</thead>
</table>
| **Lesson 1-Brushing and Flossing-The Good, The Bad, and The Ugly** | After this lesson, children will be able to:  
- Understand proper brushing and flossing techniques  
- Understand the cavity process | **HE.6.6.01**  
List personal health practices  
**HE.7.6.01**  
Develop personal health practices  
**HE.8.7.05**  
Create good health practices to improve personal and family health |
| **Lesson 2-Nutrition** | After this lesson, children will be able to:  
- Understand how food choices affect the teeth and body  
- Understand setting and outcomes | **HE.6.7.05**  
Discuss good health practices to improve personal and family health  
**HE.7.5.05**  
Differentiate between healthy and unhealthy alternatives when making decisions  
**HE.8.6.03**  
Design a personal health goal and track progress toward its achievement |
| **Lesson 3-Tobacco** | After this lesson, children will:  
- Have a better understanding of the harmful effects tobacco has on our bodies | **HE.6.1.02**  
List the negative effects of alcohol, drugs, and tobacco  
**HE.7.1.02/HE.8.1.02**  
Analyze the effects of risky behaviors on body systems and general wellness  
**HE.8.8.04**  
Explain how to influence to make positive health choices |
Lesson Plan 1

Title: Brushing and Flossing-The Good, the Bad, and the Ugly

Key Learning Point: The goal is to learn how to brush and floss our teeth correctly

Student Goals & Objectives:

After this lesson students will be able to:

- Understand proper brushing and flossing techniques
- Understand the cavity process

WV CSOs:

- HE.6.6.01 List personal health practices
- HE.7.6.01 Develop personal health practices
- HE.8.7.05 Create good health practices to improve personal and family health

Length of Lesson: 30 minutes

Brushing and flossing should be routine for students by the time they are in middle school. However, for some children it is not. Discuss proper brushing and flossing techniques as provided below. Stress the need for regular brushing and flossing to reduce cavities and gingivitis (inflammation of the gums).

- Always use a soft bristled toothbrush
- Apply only small amount of toothpaste
- Place the toothbrush with the end of the bristles where the teeth and gums meet, angling the brush towards the gums. Move the brush in short, slow, back and forth motions. Do not scrub back and forth
- Brush two minutes at least twice a day
- Brushing should be followed up by flossing at least once a day to remove plaque, bacteria, and food debris that can’t be reached by brushing alone
Toothbrushes should be replaced every three months or sooner if bristles are flat or following a sickness
Regular dental checkups every six months
When brushing and flossing aren’t part of daily routine, cavities can form

**Recommended Activities:**

- Have student read handout on cavities then answer the questions on worksheet provided
- Complete experiment with apple to show students how decay happens
- Word search
- May refer to *The Gross, Disgusting, and Totally Cool Mouth* book for pictures of cavities, plaque, brushing, and flossing (this resource may be “checked out” from your regional oral health coordinator to serve as a visual aid for this lesson).
Cavities

Ninety-seven percent of all the people in the world have cavities. If you do not brush your teeth, you get cavities, and if you ignore the cavities, they can cause a lot of pain. Cavities, also called dental caries, are holes in your teeth caused by the enamel breaking down and the inside of the tooth beginning to rot.

What causes cavities: Some people say that eating too much sugar leads to cavities, but that is only half true. On its own, sugar will not hurt your teeth, but when you add sugar to the microorganisms living on your teeth, then you might have a problem. Microorganisms are tiny bacteria that are so small that you can only see them with a microscope. This sticky, slimy colony of microorganisms is called plaque. They normally live on your teeth, but you need to control the amount of microorganisms by brushing. Plaque begins to form four to twelve hours after you brush your teeth, so it is important that you brush your teeth at least twice a day.

It is the bacteria living on your teeth that can cause cavities, but how do the bacteria cause them? Some people say that the bacteria start to eat your teeth, but this is not true. What happens is the bacteria produce acid right next to your teeth, and this acid breaks down the enamel that is the outer covering of your tooth. Enamel is usually quite hard, but it cannot stand up to acid. What does this have to do with sugar? Well, the little microorganisms living on your teeth eat sugar! So if you have sugary foods, and do not brush your teeth, the microorganisms are feeding and growing in numbers! The hole in the enamel keeps growing until you go to a dentist and have it fixed. If the hole gets all the way through, even the inside of your tooth will start to decay, and that’s when you get toothaches.

Cavities are not the only things that can happen if you do not brush your teeth. If tartar builds up it can cause big problems as well. Tartar comes from plaque that hasn’t been removed by brushing. Plaque can harden to tartar in only a few days! The usual places for tartar to build up are between teeth and around the gum line. Buildup of tartar at the gum line can cause the gum to become red and sore, and this can lead to gingivitis (gum disease).
Now that you know how cavities are caused, you can also prevent them. You should brush your teeth with fluoride toothpaste at least twice a day. It is better if you can brush your teeth after eating. Remember that plaque starts to build up four to twelve hours after you brush, so you want to make sure to brush it off again regularly! You should use a soft toothbrush, and you do not need to brush hard. If the bristles on your toothbrush are bent sideways, you are pressing too hard. Floss your teeth at least once a day, usually in the evening. Flossing your teeth helps to get any food that is stuck between your teeth, and it also removes any plaque between your teeth and under your gums that your toothbrush missed. Try not to eat too many sugary foods and drinks like candy and soft drinks. You do not have to stop eating them, but make sure that you do not eat them right before bed, and that you can brush your teeth after you have eaten something sugary. Finally, remember to go to your dentist two times a year for a check-up! If you follow the steps to good tooth health, your teeth will last a very long time.
Answer the following questions about Cavities.

1. What is the difference between plaque and tartar?

2. How quickly can plaque form on your teeth?

3. How do bacteria and plaque work together to cause cavities?

4. How does sugar help to cause cavities?

5. What causes toothaches?

6. What can a buildup of tartar lead to?

7. What does flossing do?

8. Write the steps you can take to have healthy teeth:

9. Will you change anything from your current routine to make sure that you have healthy teeth?
**Answers to Cavity Worksheet-Teacher Copy**

1. Plaque is a sticky, slimy substance on your teeth in which bacteria live. Tartar is hardened plaque.

2. Plaque begins to form four to twelve hours after brushing.

3. Bacteria produce acid next to the tooth which eats away at the tooth enamel.

4. Bacteria eat sugar. When sugar is left next to the teeth, bacteria have a feast and can multiply.

5. Toothaches are caused by cavities going all the way into the middle of the tooth.

6. A buildup of tartar at the gum line can lead to gingivitis.

7. Flossing removes bits of food and plaque stuck between teeth and under the gum line.

8. Brush at least twice a day with fluoride toothpaste and a soft toothbrush; floss at least once a day; cut down on eating sugary foods; go to see your dentist for a check-up every six months.

9. Student’s own answer. Answers may vary.
Good Oral Health Word Search

ACID
BACTERIA
BRUSHING
CAVITY
FLOSSING
GINGIVITIS
PLAQUE
SUGAR
TOOTHACHE
TOOTHPASTE
Apple Tooth Decay Experiment—Teacher Copy

Demonstrate that tooth decay and cavities are the results of a process that begins on the enamel of teeth.

**Materials:**
- 2 Apples (one for experiment, one control) per group of children
- 2 Paper lunch bags per group
- 1 Sharpened pencil per group

**Activity Time:** Minimum two days

**Instructions:**
1. Divide into groups of two.
2. Poke a hole in one of the apples using a sharp pencil, (this is experimental apple) and place in the lunch bag.
3. Place the other healthy apple into a different lunch bag (this is a control apple).
4. Predict what you think will happen to the apples.
5. Leave apples to sit for a minimum of 24 hours.
6. Remove apples from the bags and cut the apples in half.
7. Discuss if your predictions were correct or not and why. Use the following questions as a guide.

**Discussion Questions:**
1. How can an apple be a “model” for a tooth?
   *An apple’s peel/skin can be compared to a tooth’s enamel, and its inside can be compared to dentin inside a tooth.*

2. How can a pencil hole in an apple be a model for tooth decay?
   *Just like the pencil hole in the apple caused the fruit to rot, bacteria can penetrate a tooth’s enamel to cause tooth decay.*

3. How can you prevent what happened to the apple from happening to your tooth?
   *By brushing your teeth every day, you can remove the plaque from your teeth. This will help prevent cavities.*

4. Using the experiment as an example, can you describe what a cavity is?
   *A cavity is a hole in your tooth caused by plaque, just like the hole in the apple caused by the pencil. If the hole is not repaired, it can cause your tooth to decay just like the apple.*
Demonstrate that tooth decay and cavities are the results of a process that begins on the enamel of teeth.

**Materials:**
2 Apples per group  
2 Paper lunch bags per group  
1 Sharpened pencil per group

**Activity Time:** Minimum two days

**Instructions:**
1. Divide children into groups of two.  
2. Poke a hole in one of the apples using a sharp pencil, (this is experimental apple) and place in lunch bag.  
3. Place the other healthy apple into a different lunch bag (this is control apple).  
4. Predict what you think will happen to the apples.  
5. Leave apples to sit for a minimum of 24 hours.  
6. Remove apples from the bags and cut the apples in half.  
7. Discuss if your predictions were correct or not, and why. Use the following questions as a guide.  
8. Record your results of experiment.

**Discussion Questions:**
1. How can an apple be a “model” for a tooth?  
2. How can a pencil hole in an apple be a model for tooth decay?  
3. How can you prevent what happened to the apple from happening to your tooth?  
4. Using the experiment as an example, can you describe what a cavity is?
Lesson Plan 2

Title: Nutrition

Key Learning Point: The goal is to learn how proper nutrition affects our mouth.

Student Goals & Objectives:

- Understand how food choices affect the teeth and body
- Goal setting and outcomes

WV CSOs:

- HE.6.7.05 Discuss good health practices to improve personal and family health
- HE.7.5.05 Differentiate between healthy and unhealthy alternatives when making decisions
- HE.8.6.03 Design a personal health goal and track progress toward its achievement

Length of Lesson: 30 minutes

How Nutrition Affects Oral Health

The foods that you eat come in contact with the germs and bacteria that live in the mouth. If you do not brush, plaque will accumulate on the teeth. Plaque thrives on the starches and sugars that are found in a great deal of foods. When plaque combines with the sugars and starches, an acid is produced that attacks enamel on the teeth, and eventually causes decay. According to the American Dental Association, the acid attacks the teeth for 20 minutes or more.

Choosing a Healthy Diet

Choosing a healthy diet may sound easy; however, fruits, milk, cereals, bread, and some vegetables contain sugars and/or starches. Carbonated sodas, sweet fruit drinks, and sugary snack foods should be limited.

You do not have to avoid these foods. Just keep in mind that you should eat a balanced diet, brush your teeth twice a day, and floss daily.
Healthy Tips

- Drink plenty of water
- Eat a variety of healthy foods from the five major food groups
- Cut down on snacking between meals
- Limit snacks and drinks that are high in sugar
- Brush twice a day
- Floss daily
- Visit your dentist for regular checkups every six months

Summary

While eating healthy foods and avoiding snacks and drinks that are high in sugar are good ways to prevent cavities, a good dental routine is essential to maintain healthy teeth and gums.

Recommended Activities:

- Save and review food labels and how to determine amount of sugar in an item and make sure to check serving size
- Complete sugar quiz with each student
- Encourage goal setting by having student complete Track Your Drink for a whole week
- Complete attached experiments Acid Attack and Hidden Sugar

My Fitness Pal

This app is available for iPad, iPhone, or android phones. This can also be accessed by website: www.myfitnesspal.com. This will allow student to track the nutritional values of the foods and drinks they are consuming.
Sugar Quiz - Teacher Copy

Sugar-added drinks can lead to cavities and obesity. Mouth bacteria use sugar to make acid. Acid on teeth forms cavities.

Which drinks are your favorite and how many teaspoons of sugar are in each drink?

**Sugar Drinks (1 cup, 8oz serving)**

<table>
<thead>
<tr>
<th>Drink</th>
<th>Tsp. of Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy drinks</td>
<td>15.5</td>
</tr>
<tr>
<td>Cola</td>
<td>7</td>
</tr>
<tr>
<td>Lemon lime soda</td>
<td>6.5</td>
</tr>
<tr>
<td>Sports drink</td>
<td>5</td>
</tr>
<tr>
<td>Sweet tea</td>
<td>4.5</td>
</tr>
<tr>
<td>Lemonade</td>
<td>6.5</td>
</tr>
<tr>
<td>Fruit flavored drink aide</td>
<td>4</td>
</tr>
<tr>
<td>Chocolate flavored drink</td>
<td>5</td>
</tr>
</tbody>
</table>

**Keep in mind that a 20oz bottle is 2 ½ servings**
Sugar Quiz - Student Copy

Sugar-added drinks can lead to cavities and obesity. Mouth bacteria use sugar to make acid. Acid on teeth forms cavities.

Which drinks are your favorite and how many teaspoons of sugar are in each drink?

Fill in the blank with the correct amount of sugar for each drink.

<table>
<thead>
<tr>
<th>Sugar Drinks (1 cup, 8oz serving)</th>
<th>Tsp. of Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy drinks</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Chocolate flavored drink</td>
<td></td>
</tr>
</tbody>
</table>

Pick from the following choices:

- 15.5 tsp.
- 4 tsp.
- 4.5 tsp.
- 6.5 tsp.
- 5 tsp.
- 6.5 tsp.
- 7 tsp.
- 5 tsp.
Track What You Drink

Challenge yourself and set a goal for the next week to drink beverages with less sugar. Keep track of what you drink and the amount of sugar in each drink. Remember to check serving size!

<table>
<thead>
<tr>
<th>Day</th>
<th>Drink</th>
<th>Amount of Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
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<tr>
<td>Saturday</td>
<td></td>
<td></td>
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<tr>
<td>Sunday</td>
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</tbody>
</table>
Acid Attack Experiment

This experiment simulates an acid attack on bones (bones are rich with calcium just like teeth)

What You Will Need:

2 clean chicken bones
1 container with lid
1 bottle of white vinegar

What to Do:

Pour several inches of vinegar into the container. Soak the clean chicken bones overnight.

What Will Happen:

Check out the bones after they have soaked in the vinegar overnight. Are they softer or harder?
Hidden Sugar Experiment

This experiment identifies the sugar content in food. Sugar is a major factor in the growth of plaque and tooth decay. (Note: An adult must supervise this experiment.)

What You Will Need:

1 bottle of Benedict’s solution  
Assorted small pieces of food (cookies, crackers, bread, fruit)  
Several glass test tubes  
1 heat source (burner, gas or electric)  
Tongs

What to Do:

Place a piece of food in each test tube and then pour 30-40ml of Benedict’s solution over the food. Heat the test tubes one at a time over the burner, using the tongs to hold the test tubes

What Will Happen:

Benedict’s solution is blue. The presence of sugar will turn the solution to orange. Are there some foods you thought were sugar-free that have sugar?
Lesson Plan 3

Title: Tobacco

**Key Learning Point:** The goal is to learn the negative effects of tobacco.

**Student Goals & Objectives:**

After this lesson students will be able to:
- Understand the harmful effects tobacco has on our body

**WV CSOs:**
- HE.6.1.02 List the negative effects of alcohol, drugs, and tobacco
- HE.7.1.02/HE.8.1.02 Analyze the effects of risky behaviors on body systems and general wellness
- HE.8.8.04 Explain how to influence to make positive health choices

**Length of Lesson:** 30 minutes

**Quick Facts:**
- Too many young people today become addicted to tobacco, and the results are showing up in their mouths.
- Smoking or using smokeless tobacco (chewing tobacco) can make you four times more likely to develop oral cancer.
- Smoking causes 20% of all deaths in the United States.
- One half of all people who smoke regularly will eventually die of smoking related diseases.
- Studies have found that nicotine is just as addictive as heroin and cocaine.
- Tobacco contains at least 69 cancer causing substances and almost 4,000 other chemicals.

**How does tobacco affect oral health?**
- Tobacco contains many substances known to be destructive to your body’s cells and tissues.
- Smokers have more hardened dental plaque (calculus or tartar) than nonsmokers.
- Blood circulation is decreased by as much as 70%.
Along with cancer, tobacco also causes the following:

- Bad breath
- Stained teeth
- Bone loss
- Shrinking gums
- Mouth sores
- Decreased sense of taste and smell
- Poor healing of mouth sores
- Decay due to the amounts of sugar in the smokeless tobacco

Recommended Activities:

- Have students read or read to them The Truth About Tobacco handout and complete quiz. Sometimes it’s fun to have them take the pre-quiz and post-quiz to see what they may have known before discussion
- Students can complete the word search puzzle
- Refer to *The Gross, Disgusting, and Totally Cool Mouth* book for pictures of mouth cancer
- Complete the Effects of Tobacco experiment
- May refer to Gross Mouth model for visual of what smokeless tobacco does to the mouth (this may be “checked out” by your regional oral health coordinator to serve as a visual aid).

Visit [www.tobaccofreeschool.ca/games_and_activities.shtml](http://www.tobaccofreeschool.ca/games_and_activities.shtml) for a variety of learning games and activities that can be used in conjunction with this lesson and the use of your smart board.
The Truth About Tobacco Facts Handout

- Teen smokers cough and wheeze more, have smaller lungs, weaker hearts, do worse in sports and fitness tests, get sick and miss more school

- It can be hard to play sports if you use tobacco. Smoking causes shortness of breath and dizziness, and chewing tobacco causes dehydration

- About two thirds of young smokers say they want to quit, and most wish they had never started

- Chewing tobacco and dipping snuff are NOT safe alternatives to cigarettes

- One dip can have as much nicotine as several cigarettes and can cause bleeding, mouth sores, yellow teeth, and bad breath

- More than 7,000 chemicals are in cigarette smoke

- More than 85% of smokers start before they are 18 years old

- About 4,000 young people become new smokers each day

- More than 400,000 people die from smoking each year

- Within two days of quitting smoking, your sense of taste and smell are greatly improved. Carbon monoxide and nicotine levels in the body go down. Heart and lungs begin to repair

- Cigarette butts harm the environment

- Nearly 12.5 acres of forest are destroyed each year to provide trees to cure tobacco

- Secondhand smoke fills the air with deadly toxins

- Every year secondhand smoke kills about 49,000 adults from heart disease and 3,000 from lung cancer
The Truth about Tobacco Quiz

1. Smoking is harmful only if you smoke for a long time (20-to-30 years or more).
   a. True
   b. False

2. If you smoke a pack a day for one year, it will cost you about:
   a. $150.00
   b. $1,000
   c. $1,500
   d. $3,000

3. Nicotine in tobacco is highly addictive.
   a. True
   b. False

4. Spit tobacco is a safe and non-addictive alternative to cigarettes.
   a. True
   b. False

5. Which of these chemicals is found in cigarette smoke?
   a. Ammonia (used to clean toilets)
   b. Cyanide (used to kill rats)
   c. Formaldehyde (used to preserve dead frogs)
   d. All of the above

6. More than 80% of smokers start before they turn:
   a. 18 years old
   b. 21 years old
   c. 25 years old

7. How many young people become new smokers each day?
   a. 1,000
   b. 2,000
   c. 3,000

8. Tobacco kills more people each year than which of the following causes of death:
   a. Illegal drugs
   b. Car accidents
   c. AIDS
   d. All of the above

9. Within two days of quitting smoking, your sense of taste and smell are greatly improved
   a. True  b. False

10. What is the number one source of pollution on California beaches?
    a. Oil Slicks
    b. Hospital Waste
    c. Cigarette Butts
Answers to Tobacco Quiz

1. False
2. $1,000.00
3. True
4. False
5. All of the above
6. 18 years old
7. 3,000
8. All of the above
9. True
10. Cigarette Butts
TOBACCO WORD SEARCH

AMMONIA
ARSENIC
BAD BREATH
CIGARETTES
CYANIDE
FORMALDEHYDE
HAIRY TONGUE

HALITOSIS
NICOTINE
ORAL CANCER
SNUFF
STAINS
TOBACCO
TOOTH DECAY
The Cost of Smoking:

1. Have the children write down all the things they would do if they had $1,800.

2. Have them to multiply 365 by $5.00 (about the cost of a package of cigarettes/spit tobacco).
   Answer: Approximately $1,800- if you saved $5.00 a day for one year, you would save $1,800.

3. If you spent $5.00 a day for one year on tobacco, what would you have? Nothing!

Now let’s look at the impact tobacco has on your health:
Tobacco is the leading preventable cause of death in the United States. According to the Center for Disease Control and Prevention, more deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined. The poisons in tobacco are absorbed through the skin in the mouth and through the lungs causing body functions to slow down or stop. One of the poisons in tobacco is tar. Tar is the black, oily stuff used to pave streets. It coats the air sacs in the lungs until you can no longer breathe and you suffocate to death (suffocating to death in this way is called emphysema). Over the years you are slowly suffocating, your body doesn’t get the amount of oxygen it needs and the blood vessels get narrow, the kidney and bladder are washed with tobacco poisons daily, and the heart is over worked. Soon a simple activity like walking is hard to do.
Can You Breathe?

Caution: Be sure participants have no health restrictions before they take part in the exercise. The effort needed to breathe through the straw resembles the characteristic shortness of breath caused by emphysema.

Instructions
Give each participant a three-inch section of drinking straw. Explain the experiment:

1. Run in place for one minute
2. Put the straw in your mouth and breathe only through the straw (not through the nose)
3. Bite gently on the straw as you try to breathe to simulate an even more severe case of emphysema (slowly suffocating to death)
4. Resume normal breathing without the straw

Discuss participant reactions. Did they gulp for air? People with emphysema never get that gulp.

Tar Baby:
Show the amount of tar that a pack-a-day smoker would inhale in a year (approximately one cupful, according to the American Cancer Society). Pour one cup of thick, dark syrup or molasses slowly into a tall, thin, clear container. Let participants guess when you will stop pouring.

Questions:
1. Were you surprised at the amount of tar inhaled by a pack-a-day smoker?
2. What would happen if this were a two pack-a-day smoker?

Stay Soft:
Allow participants to compare the feel of a damp, soft sponge and a dry, hard sponge. The sponges demonstrate the difference between healthy lung tissue and damaged tissue.
Ask participants:

Why is hardened lung tissue a problem? (Answer: Once the air sacs or alveoli in the lungs are hardened, they can no longer squeeze out air.)

Summary:

As you can see, tobacco has an impact on our health as well as our money. Also, breathing in second hand smoke, smoke from someone else’s cigarette, has the same impact on your body as if you were the one smoking. Avoid all tobacco and second hand smoke to increase your lifespan and your money supply.
Reference and Resource List

Materials were compiled from the following sources:

- West Virginia University Extension Office
- American Lung Association
- The Gross, Disgusting, and Totally Cool Mouth Book
- www.abcteach.com
- www.weirdsciencekids.com/betobaccofree
- www.starsmilez.com
- www.healthyteeth.org

There are also resources available that may be “checked out” by your regional oral health coordinator to serve as visual aids for each lesson.
<table>
<thead>
<tr>
<th>Lesson Title</th>
<th>Lesson Objectives</th>
<th>WV CSOs</th>
</tr>
</thead>
</table>
| **Lesson 1 Diet, Oral Health and Wellness**       | Upon completing this lesson, students will better understand:  
- The role that diet can play in preventing dental decay  
- The health habits to prevent dental decay  
- The health benefits of drinking water daily  
- The impact of eating disorders on oral health and overall health  
- The benefits of fluoride as a nutrient on oral health | W.HS.3.02 Identify the factors that influence personal choices on health promoting products based on current information (e.g., quackery, food labels, media, peers, family)  
HE.HS.7.03 List examples and explain short and long term impacts of health decisions (e.g., smoking, good diet, wearing seat belts) on the individual, family and community (e.g., lung cancer, heart disease, STDs) |
| **Lesson 2 Oral Piercing**                       | Upon completion of this lesson, students will be able to:  
- List common health complications that can occur with oral piercings  
- List serious health complications that can occur with oral piercings  
- Describe reasons why an infection may occur with oral piercings | HE.HS.2.05 Analyze how peers influence health and unhealthy behaviors  
HE.HS.5.01 Apply a decision making process for various life situations  
HE.HS.7.03 List examples and explain short and long term impacts of health decisions |
| **Lesson 3 Tobacco**                             | Upon completing this lesson, students will better understand:  
- Some of the physical dangers of smoking and smokeless tobacco.  
- Various factors influence their decision to use | HE.HS.2.05 Analyze how peers influence healthy and unhealthy behaviors (e.g., positive and negative peer pressure)  
HE.HS.3.01                                                                                                                     |
<table>
<thead>
<tr>
<th>Tobacco</th>
<th>Identify and evaluate the validity of health information, products and services (e.g., books, magazine advertisements, infomercials/TV, internet, newspaper advertisements, billboards, radio)</th>
</tr>
</thead>
</table>
| Personal responsibilities regarding tobacco use | **HE.HS.3.02**
Identify the factors that influence personal choices on health promoting products based on current information (e.g., quackery, food labels, media, peers, family)

**HE.HS.7.03**
List examples and explain short and long-term impacts of health decisions (e.g., smoking, good diet, wearing seat belts) on the individual, family, and community (e.g., lung cancer, heart disease, STDs)
Lesson Plan 1

Title: Diet, Oral Health, and Wellness

Key Learning Point: The goal is to teach positive dietary and lifestyle habits to improve oral health and maintain a healthy weight. Lesson Plan: Identify positive dietary and lifestyle habits to improve oral health and maintain a healthy weight.

Student Goals & Objectives:

Upon completing this lesson students will better understand:

- The role that diet can play in preventing dental decay.
- The health habits to prevent dental decay.
- The health benefits of drinking water daily.
- The impact of eating disorders on oral health and overall health.
- The benefits of fluoride as a nutrient on oral health.

WV CSOs:

- HS.3.02 Identify the factors that influence personal choices on health promoting products based on current information (e.g., quackery, food labels, media, peers, family).
- HE.HS.7.03 List examples and explain short and long-term impacts of health decisions (e.g., smoking, good diet, wearing seat belts) on the individual, family, and community (e.g., lung cancer, heart disease, STDs).
- Describe the benefits of fluoride as a nutrient on oral health.

Length of Lesson: A minimum of 10 minutes to a maximum of 20 minutes is needed depending on the number of activities included.

Lesson Topics (with discussion points and questions)

Information for Teacher Prior to Lesson:

Teens and adolescents have increased personal independence about health habits including dietary choices. Teens spend more time eating with friends and less time eating with their families. Healthy diets can help prevent
dental diseases and contribute to overall well-being. Poor dietary habits developed during teenage years can impact personal wellness into adulthood.

Choosing the correct foods, beverages and snacks is a learned skill and is essential in reducing the risk for both dental decay and obesity. Teens are influenced by media and celebrity news and may try the latest fad diet, which could compromise overall health. Eating disorders, such as bulimia and anorexia nervosa, can impact oral health. Frequent vomiting (purging) may cause enamel erosion because of acid content. Starvation diets can rob the body of essential nutrients needed for optimal oral health and general health.

Diet, nutrition, and oral health are closely related in that pain-free teeth are needed to chew nutritious foods. Carbohydrates are nutrients that supply energy for the body keeping the mind and muscles working every day. Carbohydrates combined with bacteria left on the teeth lead to dental decay. Sugars in foods and beverages are used by bacterial plaque to create acid that dissolves tooth enamel. All carbohydrates have the potential to demineralize enamel. Factors to consider about between-meal snacks are the simple sugar content, the frequency it is eaten, the texture of the food, and the nutritional content. Complex carbohydrates found in fruits, vegetables and whole grains should be eaten frequently. Simple carbohydrates found in sugar, honey, and fruit juices need to be eaten in limited amounts. Fresh fruits and vegetables do not have a sticky texture that will adhere to the teeth. Whole, fresh foods contain fiber, vitamins and minerals needed for healthy bodies. Snacking with nutritious low-fat choices will contribute to overall health. As with any food or beverage eaten, appropriate portion sizes of foods need to be followed.

Adolescents often choose flavored drinks, sports drinks or soda when thirsty. These sweetened beverages usually do not contain essential nutrients but do increase calorie intake. By age fourteen, many adolescents are consuming three or more eight-ounce servings of sweetened soft drinks daily. Most regular twelve-ounce sodas contain ten to twelve teaspoons of added sugar. Teens should be encouraged to drink water when thirsty. Water is not only calorie-free but provides additional fluoride if the community has fluoridated water. Most bottled water does not contain enough fluoride to prevent tooth decay. Too many calorie-containing beverages (milk and fruit juice) between
meals may contribute to excess calories. Other important factors for reducing the risk for tooth decay include daily brushing, flossing and using fluoride toothpaste.

**Prior to Lesson:**

Have all students keep a food log (attached) which can be kept for several days. On a determined day, have all students bring their personal dietary logs. Review the logs with students. Have them circle all items high in sugar with a red pen/highlighter. Identify fruits and vegetables with another color. Have students star meals/snacks that they eat with friends/peers. Lead a discussion around the student findings.

Or use one of the Alternative Food/Nutrition Tracking Apps

Student Discussion Leading Questions:

1. How many soft drinks did you have over the past three days? How many is that every week?
2. Do you think sport drinks or fruit punch contain as much sugar as a soda?
3. What do you like to snack on between meals or late at night?
4. How many glasses of water do you drink per day?
5. How does sugar consumption impact your teeth? Tooth decay? Obesity?
6. How many of you have followed a new diet recently?
7. Have you ever known someone dealing with an eating disorder?
8. Does bottled water contain fluoride? Where does a majority of the water you drink come from?
9. How many meals or snacks did you eat with your peers? Your family?
   How does who you are eating with influence what you eat or drink?
10. What factors determine what you choose to consume?

Lastly, have students identify things within their diets that can be improved upon, and have them develop a plan that will have a positive effect on their health.

**Additional Activities:**
1. Try to monitor/increase daily water intake by keeping a record.

2. Agree to bring in all empty soda cans and see how many the class drinks on an average.

3. Read nutrition labels and calculate the amount of sugar in favorite foods and beverages.

4. Have the students write an essay about the benefits of fluoride in preventing tooth decay and describe some sources of fluoride.

5. Have the students write an essay about a healthy diet that would maintain a healthy body weight and also promote good oral health.

6. Have students divide into groups and design posters showing the sugar contents of various drinks and snacks.

**Additional Resources:**

- Large Soda Can Model – Available from your Regional Oral Health Coordinator
- Food models, posters, and pamphlets from National Dairy Council
- Visit [http://www.mypyramid.gov](http://www.mypyramid.gov)
Pre/Post Test

Diet, Oral Health, and Wellness

1. What is an important consideration for choosing a healthy snack for your teeth?
   a. Nutritional content
   b. Food texture
   c. Frequency eaten
   d. Simple sugar content
   e. All of the above

2. Most 12 ounce sodas contain:
   a. 2 teaspoons of added sugar
   b. 4 teaspoons of added sugar
   c. 8 teaspoons of added sugar
   d. 10 teaspoons of added sugar

3. When you are physically active and thirsty the best beverage to choose for overall health and dental health is:
   a. Sports drink
   b. Water
   c. Fruit punch
   d. Orange juice

4. Which factor may contribute to poor oral health?
   a. High sugar diet
   b. Using fluoride toothpaste
   c. Eating disorders
   d. a and c
   e. All of the above
Food Log for ______________________________
Directions:  
Beginning the morning of day one record every meal/snack/drink/beverage that you consume over the next ____ days.

**Day 1___/___/___**

Breakfast

AM Snack

Lunch

PM Snack

Dinner

Evening Snack

Other
Day 2__/__/__

Breakfast

AM Snack

Lunch

PM Snack

Dinner

Evening Snack

Other
Day 3 ___/___/___

Breakfast

AM Snack

Lunch

PM Snack

Dinner

Evening Snack

Other
Lesson Plan 2

Title: Oral Piercing, The “Hole” Truth

Key Learning Point: The goal of this lesson is to provide knowledge to the student regarding risk involved with oral piercing and mouth jewelry.

Student Goals & Objectives:

Upon completion of this lesson the students will be able to:

- List common health complications that can occur with oral piercings.
- List serious health complications that can occur with oral piercings.
- Describe reasons why an infection may occur with oral piercings.

WV CSOs:

- HE.HS.2.05 Analyze how peers influence healthy and unhealthy behaviors.
- HE.HS.5.01 Apply a decision making process for various life situations.
- HE.HS.7.03 List examples and explain short and long term impacts of health decisions.

Length of Lesson: 30-45 minutes

Use PowerPoint to educate students on oral piercings and begin discussion.

Lesson Topics (with discussion points and questions)

Teens should think twice before adding jewelry to their mouths. Mouth jewelry is becoming a more prevalent form of body art and self-expression in today’s society. Adolescents use mouth jewelry as a fashion statement and as a sign of their independence.

The widespread use of “grillz” is very popular among teens. In dental terminology, the grill spans on the six upper teeth, from canine tooth to canine tooth. Customized dental jewelry known as “grillz” are made from a mold of the wearer’s mouth. They are cast in precious metal and fit over the teeth like a mouthguard. The American Dental Association warns that “grillz” made of non-precious metals such as iron and nickel can cause allergic reactions. In addition, “grillz” can cause problems with tooth decay and poor
oral hygiene since they are kept in the mouth for long periods of time. Food and bacterial plaque left on the teeth can create acids and lead to tooth decay.

Oral piercing is becoming a more prevalent form of body art and self-expression in today’s society. Adolescents use oral piercing as a fashion statement, and as a sign of their independence. Oral piercing involves the tongue (the most common site), lips, cheeks, uvula, or a combination of sites. Oral piercing has been implicated in a number of adverse oral and systemic conditions. A less common form of body modification is tongue splitting. It involves a bisected tongue creating a forked appearance. Common complications following oral piercing and tongue splitting include pain, swelling, infection, and increased salivary flow. Infection is more likely to occur after oral piercing because the mouth contains millions of bacteria. Other problems include gum recession, broken teeth and fillings, interference with speech and eating, scar tissue formation, and the development of metal allergies. There is always a possibility that jewelry can come loose and be aspirated or swallowed. The more serious health complications of oral piercing can include bacterial endocarditis. When you puncture any part of the oral cavity, the bacteria can enter the bloodstream and reach the heart. Additionally, another serious complication that can occur is hemorrhaging, or a brain abscess. If non-sterile instruments are used for piercing, there is a risk of transmission of communicable diseases. Side effects of tongue splitting can include serious infections with damage to speech, taste, and nerves or to blood vessels in the tongue.

**Student Discussion Questions:**

1. Are there any dangers in piercing your tongue?
2. Do any of you have an oral piercing or know anyone who has had his or her tongue or lip pierced?
3. Is there a safer way of making a fashion statement other than oral piercing?
4. How could an oral piercing affect your oral health?
5. Have you ever been pressured to get a body piercing?
6. How old do you have to be in West Virginia to get a piercing?
**Additional Activities:**

1. Have the student collect pictures from magazines or other media and create a poster about the health risks involved with oral piercing. Ask them to show their posters to the class and discuss the ways that oral piercing influences their age group.
2. Have students write an essay about the health complications that could happen after oral piercing.
3. Have the students write a "hypothetical" story about a teenager being pressured to get his/her tongue pierced. Have them describe the circumstances and have them walk through the situation and form an ending to the story. How did the teenager handle the peer pressure?
4. They can also write about how choices that we make today can affect us tomorrow.

**Additional Resources:**

Attached PowerPoint Presentation on Oral Piercings
Pre/Post Test

1. All of the following are common complications of oral (tongue, lips, cheek) piercing except:
   a. Interference with speech
   b. Chipped teeth
   c. Lung damage
   d. Swelling of the tongue
   e. Allergic reaction to the metals

2. What is/are possible serious complication(s) of oral piercing?
   a. Heart complications
   b. Nerve damage to the tongue
   c. Brain abscess
   d. a and b
   e. All of the above

3. The reason(s) you may get an infection from an oral piercing is/are:
   a. Your mouth contains millions of bacteria
   b. Instruments used to pierce may not be clean
   c. Bacteria may enter your blood stream
   d. a and c
   e. All of the above

4. You have an oral piercing; what precaution should you take to avoid infection?
   a. Remove jewelry
   b. Clean the piercing site
   c. Maintain good oral hygiene habits
   d. b and c
   e. All of the above
Pre/Post Test Answer Key

1. All of the following are common complications of oral (tongue, lips, cheek) piercing except:
   a. Interference with speech
   b. Chipped teeth
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   d. Swelling of the tongue
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   a. Remove jewelry
   b. Clean the piercing site
   c. Maintain good oral hygiene habits
   d. b and c
   e. All of the above
Talking points

Chipped teeth
Fractured teeth are a common problem for people with tongue piercings. People chip teeth on tongue piercings while eating, sleeping, talking and chewing on the jewelry. The fracture can be confined to the enamel of the tooth and require a filling, or it may go deep into the tooth which may require a root canal or tooth extraction.

Swelling
It is not unusual for the tongue to swell after being punctured, but in some cases, the tongue swells so much that it can cut off a person’s breathing. In rare cases, doctors may pass a breathing tube through a patient's nose until the swelling subsides.

Infection
Infections from tongue piercings are also common because the tongue is covered with bacteria. The moment the tongue is punctured, these bacteria may be introduced into the bloodstream. Dentists are learning that oral infections can lead to infections in other parts of the body as well. Bacteria can reach your heart and cause a variety of health problems. A dentist or doctor should be consulted at the very first sign of infection.

Although any piercing is prone to infection, a recent study in the Journal of Adolescent Health (January 2011) found that stainless steel jewelry can accumulate more bacteria than jewelry made from plastics such as Teflon® (or polytetrafluoroethylene, PTFE). Therefore, if your teen insists on getting an oral piercing, wearing plastic jewelry rather than metal may pose less risk for infection. A dentist or doctor should be consulted at the very first sign of infection.

Allergic reactions
Make sure that the piercer uses the right kind of metal, such as surgical-grade stainless steel. Some people have allergic reactions to certain metals, which can lead to further complications.

Keep It Clean
If a teen does decide to have their tongue pierced, they should realize that it will take four to six weeks to heal, and it may be very uncomfortable. The piercer will place a larger, starter “barbell” in the tongue to give it enough room to heal when the tongue swells. After the swelling goes down, they should get a smaller barbell. This will be less likely to get in the way of teeth and more difficult to chew on. If there are no complications, the barbell can be removed for short periods of time without the hole closing. Some dentists
suggest that to protect teeth, patients should remove the barbell every time they eat, sleep or engage in strenuous activity. Some piercing parlors sell plugs that can be placed in the hole, so the barbell can be removed for as long as necessary.

You will need to keep the piercing clean and you should use an antiseptic mouthwash after every meal and brush the jewelry the same as you would your teeth to remove any unseen plaque.
Oral Piercing Handout

While piercing the tongue, lip or cheek may be attractive to some, there are a number of health-related risks associated with oral piercing, including:

**Infections**
The wound created by piercing, the vast amount of bacteria in the mouth and the introduction of additional bacteria from handling the jewelry all work to increase the risk of infections.

**Transmission of diseases**
Oral piercing is a potential risk factor for the transmission of Herpes Simplex Virus and Hepatitis B and C.

**Endocarditis**
Because of the wound created by the piercing, there's a chance that bacteria could enter the bloodstream and lead to the development of endocarditis—an inflammation of the heart or its valves—in certain people with underlying (and often undiagnosed and without symptoms) heart problems.

**Nerve damage/prolonged bleeding**
Numbness or loss of sensation at the site of the piercing or movement problems (for pierced tongues) can occur if nerves have been damaged. If blood vessels are punctured, prolonged bleeding can occur. Tongue swelling following piercing can be severe enough to block the airway and make breathing difficult.

**Gum disease**
People with oral piercings—especially long-stem tongue jewelry (barbells)—have a greater risk of gum disease than those without oral piercings. The jewelry can come into contact with gum tissue causing injury as well as a recession of the gum tissue which can lead to loose teeth and tooth loss.

**Damage to teeth**
Teeth that come into contact with mouth jewelry can chip or crack. One study in a dental journal reported that 47% of people wearing barbell tongue jewelry for four or more years had at least one chipped tooth.

**Difficulties in daily oral functions**
Tongue piercing can result in difficulty chewing, swallowing food and speaking clearly. This is because the jewelry stimulates an excessive production of saliva. Temporary or permanent drooling is another consequence of increased saliva production. Taste can also be altered.

**Allergic reaction to metal**
A hypersensitivity reaction—called allergic contact dermatitis—to the metal in the jewelry can occur in susceptible people.

**Jewelry aspiration**
Jewelry that becomes loose in the mouth can become a choking hazard and if swallowed, can result in injury to the digestive track or lungs. If you have decided to go through with the oral piercing procedure despite these risks, consider the following tips when looking for an oral piercing studio:

- Ask friends who have had their tongue, lips, or cheeks pierced and have suffered no ill consequences to recommend the name of the studio they visited.
- Visit the studio. Determine if the studio has a clean appearance, especially the area where the piercing is done.
- Ask if they use hospital-grade autoclaves for sterilization and/or use disposable instruments. Does the staff use disposable gloves?
- Ask to see the studio's health certificates.
- Ask if all the needles, studs, hoops, and barbells are kept in sterilized packaging.
- Ask if all staff members involved in the piercings are vaccinated against Hepatitis B.

If the staff is not friendly or willing to answer all of your questions, consider finding another piercing studio.

A pierced tongue can take four to six weeks to heal. Pierced lips take between one and two months to heal. During this healing period, here's what you should do:

- Avoid alcohol, spicy foods, hard foods and sticky foods
- Do not smoke or use tobacco-based products
- Brush after every meal and rinse with a mouthwash, such as Listerine
- Rinse your mouth frequently with warm salt water
- Eat soft foods. Consult with your dentist about taking vitamins to promote faster healing
- Make an appointment with your dentist if you suspect a problem or have a concern. It is critical for a dentist to check your teeth, gums, tongue, and soft tissues for early signs of any problems
Warning Signs after an Oral Piercing

If you notice any of the following warning signs after getting an oral piercing, contact a health care professional immediately:

- Yellow or green discharge from the piercing site (Note: A whitish or clear discharge is normal)
- Scarring or thickened tissue that builds up and darkens around the piercing site
- Increased redness, pain and tenderness, or swelling at the piercing site
- A pimple-like abscess on the piercing site
- Bleeding or tearing after the initial healing of the piercing
- A low-grade fever that is persistent in the days following the piercing
Lesson Plan 3

Title: Tobacco Risks

Key Learning Point: The goal is to educate students on the dangers of tobacco use and the ways big tobacco companies influence decisions.

Student Goals & Objectives:

Upon completing this lesson students will better understand:

- The physical dangers of smoking and smokeless tobacco.
- The various factors that can influence their decision to use tobacco.
- The different advertising strategies that tobacco companies use.
- The personal responsibilities regarding tobacco use.

WV CSOs:

- HE.HS.2.05  Analyze how peers influence healthy and unhealthy behaviors (e.g., positive and negative peer pressure).
- HE.HS.3.01  Identify and evaluate the validity of health information, products and service (e.g., books, magazine advertisements, infomercials/TV, internet, newspaper advertisements, billboards, radio).
- HE.HS.3.02  Identify the factors that influence personal choices on health promoting products based on current information (e.g., quackery, food labels, media, peers, family).
- HE.HS.7.03  List examples and explain short and long term impacts of health decisions (e.g., smoking, good diet, wearing seat belts) on the individual, family and community (e.g., lung cancer, heart disease, STDs).

Length of Lesson: A minimum of 20 minutes to a maximum of 90 minutes

Lesson Topics (with discussion points and questions)

Tobacco use is a bad habit that is very dangerous, not only for your teeth, but for your mouth and entire body. ALL tobacco products are bad for your health, not only cigarettes and cigars. Smokeless tobacco, also called chew, snuff, dip or spitting tobacco has become a very serious health problem for teens and young adults today. You know that smoking cigarettes can
eventually kill you. You may not know that smokeless tobacco can cause mouth, tongue, and lip cancer and can be more addictive than cigarettes.

Tobacco products also stain your teeth and cause gum disease and tooth loss. That certainly won’t enhance your appearance!

Listen to these statistics: 1) Approximately 28,000 Americans were diagnosed as having oral (mouth) cancer last year. Many of them probably thought they were safe because they used smokeless tobacco. Wrong! 2) About 7,200 people will die from mouth cancer this year, and tobacco products cost a lot of money! Bottom line—there is nothing good to say about tobacco products. Never starting is your best defense against health problems related to tobacco. Tobacco products are expensive and cause gum disease, tooth loss and cancer. BE SMART; DO NOT START! SAVE MONEY, TOO!

Read the following statements to the class. After each statement, have students decide whether they agree or disagree. If they agree, they should raise their hand with a balled fist. If they disagree, they should raise their open hand with their fingers spread apart. Before reading the next question, have one student who agrees with the statement give a reason for his or her opinion. Likewise, have one student give a reason for disagreeing with the statement. Here are the statements:

- Local governments have the right to ban smoking in public places.
- Tobacco companies target young people with their advertising.
- It should be illegal for anyone under the age of 18 to purchase, use, or possess tobacco products.
- Quitting tobacco use is the same process for everyone.
- Tobacco companies are ultimately responsible for an individual's smoking.

Lead the class in a discussion about what factors influence their opinions about smoking, such as family, friends, celebrities, television, music, and advertisements.

Divide the class into small groups and have them peruse magazines and newspapers to find at least one tobacco advertisement. Ask them to identify and list the different strategies companies use in their advertising. Some strategies might be: bandwagon, fact versus opinion, fantasy, humor, sensory appeal, statistics, or testimonial.
Next, have the students answer the following questions about their advertisement:

- Is the ad targeted at a specific group (e.g., women, teens, a specific cultural group)?
- Does the ad give a good reason for using the product? What is the reason?
- Does the ad make unbelievable claims?
- Does the ad give useful information about the long/short-term effects of tobacco use?

Move the discussion to personal responsibility and decision making.

- Who is ultimately responsible for an individual's smoking?
- Are people powerless under the influences of tobacco advertisements, or should they take responsibility for their smoking?
- Why might it be more difficult for young people to make responsible choices about smoking?
- Should this be a factor in how tobacco advertisements are regulated?

End the lesson with a discussion about the dangers of smoking. Have students identify four physical effects of using tobacco.

**Adaptation for Younger Students**

Begin the activity with a discussion about the dangers of smoking. Lead the discussion to why people choose to smoke. Bring up the subject of advertising and how it may influence one's decision to smoke. Explain that advertisers use different strategies to sell products. Write the different strategies on the board and briefly describe what each means. Divide the class into groups and assign each group a strategy. Have the groups look through magazines for cigarette advertisements that represent their strategy. When groups have finished, allow them time to present their advertisement and talk about how it uses the strategy to promote smoking that particular brand of cigarette. Explain to students that knowing about how cigarette advertisements work may help them make better decisions about smoking.
**Student Discussion Questions:**

1. Are teenagers particularly at risk to advertising strategies? Why or why not?

2. Why do tobacco companies target young people with their advertisements?

3. How do you think the warning on cigarette packs affects the consumer?

4. Discuss why quitting smoking is so difficult.

How might you as a nonsmoking teenager encourage your peers to be nonsmokers?

**Additional Activities/Lessons:**

**Campaign for Teens**

Have students work in small groups to create anti-tobacco advertisements targeted at teenagers. Let students choose the medium, such as a radio spot, a television announcement, a print advertisement, or an internet site. Let each group present its advertisement and discuss the strategies that make an anti-tobacco campaign successful.

**Class Debate**

Divide the class into two groups. One group takes the role of lobbyists for the tobacco industry, and the other takes the role of lobbyists for antismoking groups. Have each group research its position, and then debate whether more restrictions should be placed on the advertising and selling of tobacco products.
Additional Resources

**The Truth About Tobacco**  
http://www.tobaccofree.org/video.html  
A dynamic video featuring Patrick Reynolds, son of tobacco company founder R.J. Reynolds. As an anti-smoking advocate, Reynolds uses video clips, photos and television spots to demonstrate the impact smoking has on our health and society.

**CDC's TIPS: Tobacco Information and Prevention Resource**  
http://www.cdc.gov/tobacco/index.htm  
Featuring "Tips 4 Kids" and "Tips 4 Teens," this site from the Center for Disease Control provides extensive resources for learning about and avoiding tobacco use.

**American Cancer Society-Cancer Facts and Figures-Tobacco Use**  
http://www.cancer.org/?gclid=CMbS-oLkg6oCFQ2A5QodSiLZ1Q  
This site provides tobacco use data, including smokeless tobacco, from 1998.

**Tobacco Issues**  
http://www.tobaccoissues.com/  
See what a major tobacco company says about health issues related to tobacco at the R. J. Reynolds website.

**SMOKING AND TOBACCO FACT SHEETS**  
http://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm  
A collection of facts about smoking.

**Campaign For Tobacco-Free Kids**  
http://tobaccofreekids.org/  
This site offers research, initiatives and special reports all related to reducing youth tobacco use.
Reference and Resource List

Materials were compiled from the following sources:

- West Virginia University Extension Office
- American Lung Association
- The Gross, Disgusting, and Totally Cool Mouth Book
- www.abcteach.com
- www.weirdsciencekids.com/betobaccofree
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- www.healthyteeth.org

There are also resources available that may be “checked out” by your regional oral health coordinator to serve as visual aids for each lesson.
**Regional Oral Health Coordinators Contact Information**

<table>
<thead>
<tr>
<th>REGION</th>
<th>COUNTIES</th>
</tr>
</thead>
</table>
| **Region 1**  
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Preston  
Randolph  
Taylor  
Tucker  
Upshur |