<table>
<thead>
<tr>
<th>TITLE OF LESSON</th>
<th>FOCUS OF LESSON</th>
<th>RECOMMENDED SUBJECT FOR INTEGRATION</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spit Tobacco: Myths &amp; Facts</td>
<td>Introductory – Spit Tobacco Knowledge Assessment</td>
<td>Health</td>
<td>50 min.</td>
</tr>
<tr>
<td>Big Tobacco: Can You Believe Them?</td>
<td>Media Influences; Spit Tobacco Advertising</td>
<td>English, Health or Consumer Science</td>
<td>As assigned</td>
</tr>
<tr>
<td>Helping a Friend Quit Spit Tobacco</td>
<td>Advocacy, cessation</td>
<td>Social Studies, Health or Consumer Science</td>
<td>50 min.</td>
</tr>
<tr>
<td>I’m Warning You... Yeah, Right!</td>
<td>Spit Tobacco Advertising/ Media Influences</td>
<td>English</td>
<td>50 min.</td>
</tr>
<tr>
<td>Good Egg, Bad Egg (spit tobacco experiment)</td>
<td>Oral Health Effects of Using Spit Tobacco</td>
<td>Science or Health</td>
<td>30 min.</td>
</tr>
<tr>
<td>Tobacco as Insecticide (spit tobacco experiment)</td>
<td>Chemicals in Tobacco</td>
<td>Science or Health</td>
<td>30 min.</td>
</tr>
<tr>
<td>Spit Tobacco Research Paper</td>
<td>Disease Caused by Spit Tobacco, Media Influences, Other</td>
<td>English or Health</td>
<td>As assigned</td>
</tr>
<tr>
<td>Lives in Jeopardy</td>
<td>Game – Culminating Activity/ Unit Assessment</td>
<td>Health</td>
<td>30 min.</td>
</tr>
</tbody>
</table>
SPIT TOBACCO MYTHS & FACTS

TITLE: Spit Tobacco Myths & Facts
GRADE LEVEL: 9th to 12th
SUBJECTS: Health
TIME: 50 minutes

Performance Indicators

- Students will defend the healthy choice not to use spit tobacco.
- Students will analyze personal susceptibility to illness or death if engaging in unhealthy behaviors.
- Students will identify how the use of spit tobacco could interfere with personal health and career goals.

Health Standard

- Concepts
- Decision-making
- Goal setting

Materials/Preparation

- Preview “Quit the Spit” DVD (9 minutes)
- Copy student activity “Spit Tobacco: Myths and Facts.”
- Review PowerPoint slides or transparencies that will be used for classroom discussion.
- Review Colorado Healthy Kids Colorado Survey data on spit tobacco use. http://www.cde.state.co.us/cdeprevention/healthykidscolo.htm
- Review pamphlet “50 Things You Should Know About Spit Tobacco”, “Health problems Associated with the use of Spit Tobacco” and “Youth Tobacco Use in Colorado”: (For more information see teacher resources, contact your district health coordinator or your local county tobacco coordinator.)

Teaching Steps

1. Use the first two PowerPoint slides/transparencies to introduce the lesson.
   a. Ask students to estimate what percentage of Colorado youth use spit tobacco – write estimates on the board.
   b. Ask students to estimate what percentage of students in their high school use spit tobacco – write estimate on board.
      i. Review state level and district specific (if available) Colorado Healthy Kids survey data regarding spit tobacco use.
      ii. Main point: a small number of students use spit tobacco. That’s the healthy decision!

2. Handout student activity “Spit Tobacco: Myths and Facts.” Ask students to quickly complete the activity (approximately five minutes).

3. Discuss correct answers.

Continued on next page
4. Show “Quit the Spit” DVD.

5. Discuss DVD. (Use the second transparency/ppt as a guide for major DVD discussion points or see Quit the Spit discussion guide.)

6. Use remainder of PowerPoint slides/transparencies for continued classroom discussion.

7. End lesson by asking students to complete the assessment activity. (See assessment section.)

Assessment

- Have students take out a sheet of paper. Have them divide the paper in half vertically. On the left half, have students write three goals for the next year; three goals for five years from now; three goals for ten years from now. On the right half of the paper for each goal time period, have students write how spit tobacco use could interfere with attaining these goals.
Teacher Resources

- **TIPS Fact Sheet: Smokeless Tobacco**
  http://www.cdc.gov/tobacco/factsheets/smokeless_tobacco.htm
  Forms of spit tobacco and health effects, includes list of references/web links.

- **Chewing Tobacco: Not a Risk Free Alternative to Cigarettes**
  http://www.mayoclinic.com/health/chewing-tobacco/CA00019
  Discusses spit tobacco as just one form of smokeless tobacco, health risks of spit tobacco and other forms of smokeless tobacco. Smokeless doesn’t mean harmless.

- **Leukoplakia**
  http://www.mayoclinic.com/health/leukoplakia/DS00458
  Includes signs, symptoms, causes, risk factors, and photos.

- **If You Chew: Quit**
  http://www.cda.org/articles/smokelesstobacco.htm
  Lists health effects of spit tobacco, includes short discussion of each condition.

- **Spitting into the Wind: Facts About Dip and Chew**
  Spit tobacco is addictive and does not increase athletic performance. Includes color photo of mouth lesions.

- **Tobacco Truth/Tobacco Facts**
  http://www.tobaccofacts.org/tob_truth/spit.html
  Identifies three forms or types of spit tobacco. Ingredients found in spit tobacco. Features the Rick Bender story, including photos.

- **Spit Tobacco**
  http://www.entnet.org/healthinfo/tobacco/spit_tobacco.cfm
  Highlights: What is spit tobacco? What is in spit tobacco? Effects of using spit tobacco, symptoms of using spit tobacco and tips for quitting.

- **Spit (Smokeless) Tobacco and Kids**
  Marketing spit tobacco to kids, harms from spit tobacco use. Types of spit tobacco.

- **Teens Health: Smokeless Tobacco**
  http://kidshealth.org/teen/drug_alcohol/tobacco/smokeless.html
  Defines smokeless tobacco, what’s the danger and what can spit tobacco do to me?

- **Quitting Spit (smokeless) Tobacco**
  http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smokeless_Tobacco.asp?sitearea=&level=
  Information on nicotine addiction and quitting spit tobacco.

- **State Tobacco Control Laws**
The following PowerPoint slides are included on the “A Pinch of Truth” CD provided with the toolkit. The PowerPoint file can also be printed onto transparency film if transparencies are preferred.

1. A Pinch of Truth: Spit Tobacco: Myths & Facts
2. What Do You Know About Spit Tobacco?
   - What are some of the terms used for spit tobacco?
   - What is the prevalence of spit tobacco use in the United States, Colorado, this community?
   - Is spit tobacco safe to use?
3. Quit the Spit DVD Process Questions
   - How bad is spit tobacco?
   - How hard is it to stop once you start?
   - How much do you have to use before it starts to hurt you?
   - How did spit tobacco interfere with Gruen Bon Behrens personal or career goals?
4. Smokeless Not Harmless
   - Tobacco companies use the term “smokeless” to imply safety.
   - Misleading – smokeless tobacco is NOT a safe alternative to cigarettes.
5. Chemicals in Spit Tobacco Include...
   - Tobacco-specific N-nitrosamines or TSNA’s (cancer-causing agents only found in tobacco)
   - Uranium 235 (found in nuclear weapons)
   - Formaldehyde (embalming fluid)
   - Nicotine (more addictive than cocaine)
   - Cadmium (found in car batteries)
   - Cyanide (poison)
   - Arsenic (pesticides)
   - Benzene (component of gasoline)
   - Lead (heavy poison)
6. Nicotine
   - An addictive chemical found in all forms of tobacco.
   - Causes physical dependency
   - Chewing tobacco users absorb nicotine through the mouth and stomach.
   - Blood concentration levels of nicotine affect the brain, blood vessels, heart, and other organs
Spit Tobacco: Full of Chemicals
- All forms of tobacco contain harmful chemicals.
- Concentrations of cancer-causing chemicals are higher in chew tobacco than cigarettes.
- Myth: “If you don’t smoke these chemicals, you can avoid cancer.” WRONG!
  - You only swap lung cancer for mouth cancer.

Other Health Effects of Using Spit Tobacco...
- Bad Breath
- Yellow/brown teeth
- Gum recession
- Tooth decay
- Increased heart rate
- Increased blood pressure
- Constricted blood vessels
- Cancer of the mouth
- Cancer of the throat

Spit Tobacco
- How ‘Big Tobacco’ hooks new users
  - Graduation theory
  - New users frequently start using milder tasting, flavored brands.
  - As the body becomes accustomed to nicotine, the spit tobacco user moves up the ladder to brands with more “bioavailable” nicotine.
  - Tobacco companies control bioavailable nicotine
    - Controlling the pH level of the product
    - Controlling the amount of nicotine in the product
    - Varying the cut of the tobacco

Yeah, but....
- Like playing roulette
- What’s the cost?
  - You do the math
  - Can of spit tobacco
  - Trip to the dentist/doctor
  - Average cost of high blood pressure medication
  - Cancer care
- What could you buy with the money saved?

Spit Tobacco Use Leads To...
- Addiction
  - Nicotine is absorbed through mucous membrane of the mouth.
  - Nicotine absorbed from a wad of chewing tobacco is equivalent to smoking 3-4 cigarettes.
- Once addicted, it is difficult to stop using spit tobacco.

The Facts Are In.....
- Spit Tobacco Hurts the Body!
Spit Tobacco

- The best way to avoid health risks is to never use spit tobacco!
How Spit Tobacco Affects Body Systems

- **Spit tobacco affects the digestive system.**
  - Spit tobacco irritates the mouth and causes sores or white patches (leukoplakia) on the cheeks, gums or tongue. These white patches can be an early indicator of oral cancer. About 75% of daily users of spit tobacco will get leukoplakia.
  - The Mayo Clinic reports that leukoplakia can develop within just one week of starting to use spit tobacco.
  - Spit tobacco irritates the throat and stomach. It can cause ulcers and constant pain.
  - Cancer of the esophagus, larynx, stomach, pharynx, and pancreas are caused by constant exposure to chemically enhanced spit tobacco.

- **Spit tobacco affects the circulatory system.**
  - The nicotine in spit tobacco gets into the bloodstream through the lining of the mouth and the gastrointestinal tract. Nicotine damages the heart by causing it to beat too hard and too fast.
  - Flavoring salts in spit tobacco contribute to abnormal blood pressure.

- **Spit tobacco affects the skeletal system.**
  - Abrasives and grit in spit tobacco can wear away the teeth. This causes pain and cavities (tooth decay).
  - Because tobacco has an unpleasant taste, some brands of spit tobacco are heavily sweetened with sugars, which promote tooth decay. Flavorings such as mint, licorice or cherry may be added to improve the taste and also contribute to tooth decay.
  - Tobacco juice causes teeth to turn yellow.
  - Spit tobacco causes gums to pull away from the teeth. Bone can be lost, which can cause teeth to fall out.

- **Spit tobacco affects the nervous system.**
  - Using spit tobacco affects the senses reducing the ability to taste and smell.
  - Nicotine in spit tobacco alters mood and feelings and causes craving for more tobacco.
  - Nicotine reaches the brain in 3-5 minutes when spit tobacco is chewed.

- **Spit tobacco affects the reproductive system.**
  - Nicotine harms a pregnant woman’s unborn baby. The baby may be small or born too early.
  - Nicotine crosses the placenta and has been found in amniotic fluid and the umbilical cord blood of newborn infants.
SPIT TOBACCO MYTHS & FACTS

Discussion Questions—Quit the Spit DVD

1. The DVD listed several different forms of tobacco. Can you recall them?
   - Cigarettes
   - Spit tobacco
   - Cigars
   - Pipe tobacco

2. Are any of these forms of tobacco safe to use?
   - NO!

3. A tobacco “myth” (may need to explain this word) that you’ve probably heard is that spit tobacco is a safe alternative to cigarettes. After watching the DVD, how would you respond to that myth?
   - Just because there is no smoke, doesn’t mean that spit tobacco is safe.

4. The DVD focused on one form of tobacco—spit tobacco. How does spit tobacco hurt the body?
   - Sores in mouth (hurt, bleed, sometimes it’s hard to eat).
   - Gums become red and pull away from the teeth (especially in the area where the spit tobacco is placed).
   - Tooth decay (grit and sugar in spit tobacco).
   - Teeth get yellow, brown stains (disgusting, ugly).
   - Bad breath (disgusting).
   - Oral cancer (mouth, tongue, throat).

5. What are some of the chemicals found in spit tobacco?
   - Spit tobacco is dangerous because it contains over 28 known cancer-causing agents. Ingredients found in spit tobacco include:
     - Polonium 210 (nuclear waste)
     - N-Nitrosamines (cancer-causing)
     - Formaldehyde (embalming fluid)
     - Nicotine (addictive drug)
     - Cadmium (used in car batteries)
     - Cyanide (poison)
     - Arsenic (rat poison)
     - Benzene (lighter fluid)
     - Lead (nerve poison)

6. What is one of the substances in tobacco that makes a user want more of it?
   - Nicotine (an addictive drug)

7. How would you respond to someone who said, “You can use a little spit tobacco, and not get hooked.”

Continued on next page
Continued from previous page

- Even a little spit tobacco has enough nicotine in it to get a person addicted. Small quantities don’t mean less addiction.

- One of the marketing tactics that the tobacco industry uses is offering “introductory” products – those that are flavored (mint, cherry) and have more sugar. There is enough nicotine in these products that when used, it makes someone want more of it to get the same effect, popularly know as a “buzz.”

- Teens often overrate their ability to stop using tobacco. They think they can quit any time – until they actually try to stop.

- When people become addicted to spit tobacco they can feel as though they’ve lost their power over the choice of whether or not to use it. When people are addicted to a drug, like the nicotine in tobacco, they continue to use it even though they know it is causing them harm. When they become addicted they may not be able to stop when they want to. It’s best to never start using spit tobacco.

8. In the DVD, Gruen talked about having oral cancer and the surgeries (and pain he had). Do you recall how long he chewed when he discovered a lesion in his mouth?
- Two years
- The doctor in the DVD concluded by saying that oral cancer can strike at any age.

- By being aware of the myths and truths about spit tobacco, you have the power to not start using spit tobacco!

- The best option is never to use tobacco. or, if you do, to stop as early as possible to lessen the long-term health effects.

9. The DVD also pointed out some social consequences of using spit tobacco. What was mentioned?
- Girl in DVD said “makes you look trashy”
- Yuk, wouldn’t want to kiss someone who was spitting tobacco
- Young man who used spit tobacco and quit said “girls wouldn’t talk to you when you have chew in your mouth.”

10. Where could someone go for help, if they wanted to quit using spit tobacco?
- School counselor
- School nurse
- Family doctor
- Dentist
- County nursing service
- County smoking and health coordinator
- Colorado Quitline
- Parent
NOTES

**SPIT TOBACCO MYTHS & FACTS**

**Health Problems Associated With the Use of Spit Tobacco**

- **Bad breath** – More money spent on mouth wash, breath mints.
- **Yellow teeth** – Socially unappealing, ugly.
- **Tooth decay/tooth cavities** – Toothache, more trips to the dentist. The sugar in tobacco leads to tooth decay/painful cavities.
- **Mouth sores/gum diseases** – Juices in tobacco irritate gums, cause inflammation and in time the gums recede (pull away) from the teeth. The teeth are more likely to decay or become loose and eventually fall out. Bone can be lost which can cause teeth to fall out.
- **Potential cancerous lesions** – Spit tobacco users often develop white patches in their mouth (leukoplakia, pre-cancerous lesions) and have a 50 times greater risk of developing cancers of the lower lip, tongue, mouth, throat, larynx and esophagus than do nonusers. Spit tobacco can also cause cancers of the stomach, pancreas and prostate. Almost 75% of people who use spit tobacco daily, have mouth sores.
- **Changes the brain** – Spit tobacco can change a person’s mood and feelings. The nicotine in spit tobacco causes cravings for more tobacco and affects mood and feelings.
- **High blood pressure, heart attacks, stroke, kidney disease** – Spit tobacco increases heart rate and blood pressure. It damages the heart by causing it to beat too fast and leads to a greater risk of heart attack. People who use spit tobacco also have higher cholesterol levels than people who do not use tobacco products, increasing the risk of heart attack and stroke.
- **Digestive problems** – Spit tobacco irritates the throat and stomach. It can cause ulcers and constant pain.
- **Addiction** – Nicotine is absorbed through the mucous membrane of their mouth (lining of the mouth). Nicotine absorbed in this way is no less addictive than nicotine inhaled from smoking cigarettes or cigars. The truth is the amount of nicotine released into the body from a wad of spit tobacco is the equivalent of smoking three to four cigarettes. Since nicotine is a habit-forming drug, spit tobacco users become just as chemically dependent as cigarette smokers. People who use spit tobacco develop a tolerance for nicotine and will use more tobacco to feel the effects of nicotine. Some people switch to brands with more nicotine and tend to use spit tobacco more frequently the longer they’ve been using spit products.
- **Once addicted, it becomes difficult to stop using spit tobacco** – Withdrawal from nicotine causes signs and symptoms such as intense cravings, increased appetite, irritability and depressed moods. While it may be difficult to stop, the physical withdrawal symptoms usually last only three to five days.

The best way to avoid health risks is to never use spit tobacco.
Directions: Decide if the statement is true or false.

1. The worst oral health problems associated with spit tobacco are bad breath and stained teeth.
2. Spit tobacco is safer than smoking cigarettes because smoke is not inhaled into your lungs.
3. Holding an average pinch of spit tobacco in your mouth for 30 minutes gives you as much nicotine as smoking three to four cigarettes.
4. Nicotine is an addictive drug.
5. Physical withdrawal symptoms from nicotine last six months.
6. Using spit tobacco can make your teeth fall out.
7. Spit tobacco companies sponsor rodeos or other sporting events to promote their product.
8. Spit tobacco improves athletic performance.
9. Most teenagers in Colorado do not use spit tobacco.
10. Spit tobacco causes tooth decay.
11. Spit tobacco is not physically harmful to you if you currently are not experiencing any medical problems.
13. One of the ingredients in spit tobacco is sugar.
14. Spit tobacco increases your heart rate and blood pressure.
15. Young people tend to underestimate the likelihood that they will become addicted to nicotine.
16. Good gum care can offset the harmful effects of using spit tobacco.
17. If you use spit tobacco for only five to ten years, you won’t get cancer.
18. It’s easy to quit using spit tobacco when you want to.
1. False
Receding gums, tooth decay, teeth can fall out, mouth sores, oral cancer, heart disease are some of the oral health problems.

2. False
Spit tobacco is not a safe alternative to cigarettes. Since nicotine is a habit forming drug, snuff and spit tobacco users become just as chemically dependent as cigarette smokers.

3. True
Spit tobacco products induce a higher blood-nicotine level, which is sustained for longer periods, since users tend to chew over a period of hours.

4. True
Tobacco relapse rates are similar to heroin relapse rates.

5. False
Physical withdrawal symptoms usually last 3-5 days and often include headaches, anxiety, fatigue and depression.

6. True
Use of spit tobacco leads to gum disease which can cause teeth to loosen and fall out.

7. True
Tobacco companies sponsor events like rodeos because they provide a friendly association “between tobacco and exciting, glamorous, or fun activities.

8. False
A study of professional baseball players found no connection between spit tobacco use and player performance. Using spit tobacco increases your heart rate and blood pressure within a few minutes. This can cause a buzz or rush, but the rise in pulse and blood pressure places an extra stress on your heart. This may actually reduce your overall performance.

9. True
The majority of Colorado teens do not use tobacco products.

10. True
The sugar and grit in spit tobacco wears on tooth enamel and leads to tooth decay.

11. False
The health effects of spit tobacco may not be noticed until symptoms develop to the point where they can no longer be ignored.

12. True
There are 28 cancer causing agents contained in spit tobacco. The most harmful carcinogen is tobacco specific nitrosamines (TSNA’s). Spit tobacco users consume on average more than 10 times the amount of cancer causing substances (nitrosamines) than cigarette smokers. They are formed during the curing, fermenting and aging of tobacco. TSNA’s have been detected in spit tobacco at levels 100 times higher than the levels of other nitrosamines.

Continued on next page
Continued from previous page

that are allowed in bacon, beer and other foods. Some of the other cancer causing agents in spit tobacco are: polonium 210 (nuclear waste), formaldehyde (embalming fluid), cadmium (used in car batteries), arsenic (rat poison), benzene (lighter fluid), and lead (nerve poison).

13. True
Sugar is added to spit tobacco to disguise the taste. It’s also not uncommon to add flavorings, like cherry or mint.

14. True
Heart rate and blood pressure increases within a few minutes of using spit tobacco.

15. True
Many teens think they can stop using tobacco whenever they want. The sad truth is that nicotine is a drug that requires increasing amounts or higher concentration to achieve the same feeling.

16. False
There is no evidence that brushing and flossing will undo the harm that spit tobacco is doing to your teeth and gums.

17. False
Long-term users are more likely to develop cancer, but they are not the only ones at risk. Cancers have been found in the mouths of people who have used the product regularly for as few as two years.

18. False
Unfortunately, nicotine addiction makes quitting difficult. But those who have quit successfully are very glad they did.
SPIT TOBACCO MYTHS & FACTS: FACT SHEET

Youth Tobacco Use In Colorado

YOUTH TOBACCO USE IN COLORADO
Each year, more than 11,000 Colorado youth under 18 years of age become daily smokers. At this rate, nearly 100,000 Colorado youth alive today will die an early, preventable death because of a decision made as a child.

Many factors interact to encourage tobacco use among youth, including tobacco advertising and promotion, tobacco use by peers and family members, and easy access to tobacco products.

How many youth in Colorado are smoking cigarettes?
- More than 24 percent of Colorado students in grades 9 to 12 report smoking cigarettes at least once during the past month.
- Forty-one percent of young smokers (students in grades 9 to 12), report having smoked their first whole cigarette when they were 12 years old or younger.
- About 56 percent of Colorado students in grades 9 to 12 report having tried smoking cigarettes.
- More than 40 percent of young smokers (students in grades 9 to 12), report having smoked cigarettes on school property at least once during the past month.

More than 4 million adolescents under the age of 18 in the United States smoke cigarettes. Each day, more than 6,000 young people try a cigarette and nearly 3,000 become regular smokers — that adds up to more than one million new smokers each year.

How many youth in Colorado are using spit tobacco?
- About 11 percent of young men in grades 9 to 12 report having used spit tobacco at least once during the past month.
- Twenty-four percent of young men in grades 9 to 12 report having tried spit tobacco.
- Significantly more young men than women (11% vs. 3%, respectively) currently use spit tobacco.

What do youth think about using tobacco?
- Youth who smoke (Colorado students in grades 9 to 12) are less likely than youth who don’t smoke to believe that cigarette smoking is harmful.
- Youth who smoke (Colorado students in grades 9 to 12) are more than three times as likely than youth who don’t smoke to believe that it is safe to smoke cigarettes for a year or two.

What does Colorado do to prevent underage youth from buying tobacco?
The Colorado Department of Revenue, Tobacco Enforcement Unit, enforces the state law that prohibits the sale of tobacco products to minors. In addition to conducting compliance checks and inspections at retail sales outlets, the program provides merchant education and assures compliance with Federal Synar requirements.
DOES THE TOBACCO INDUSTRY TARGET YOUTH?
IN 2003, THE TOBACCO INDUSTRY SPENT MORE THAN $593,000 PER DAY ON MARKETING IN COLORADO, WITH MUCH OF THAT ADVERTISING EFFECTIVELY REACHING CHILDREN.

COLORADO’S YOUTH-FOCUSED EFFORTS TO COUNTER TOBACCO INDUSTRIES MARKETING EXPENDITURES
The State Tobacco Education and Prevention Partnership funds agencies and organizations with statewide reach to address various youth tobacco prevention and cessation strategies:

STEPP in Schools: K-12 Tobacco Prevention Initiative
- Select schools throughout the state receive funding, curricula, training and technical assistance from the Rocky Mountain Center for Health Promotion and Education to implement comprehensive tobacco prevention and education strategies.

Youth Smoking Cessation Initiative
- One hundred high school and community-based organizations throughout the state implement a research-based youth tobacco cessation program with interested high-school aged youth who smoke.

Get REAL: Youth Empowerment Initiative
- Nearly 50 youth coalitions and adult partners across the state are funded to promote youth advocacy and empowerment as a strategy to expose tobacco industry marketing to children and teenagers.

Tony Grampsas Tobacco Initiative
- Select community-based organizations currently funded under the Tony Grampsas Youth Services Project are working on youth tobacco prevention strategies in their communities.

REFERENCES
Spit Tobacco

WHAT IS SMOKELESS TOBACCO?
SMOKELESS TOBACCO IS COMMONLY REFERRED TO AS SPIT, DIP, CHEW, PLUG, WAD, PINCH AND QUID. SMOKELESS TOBACCO USERS DRAMATICALLY INCREASE THEIR RISKS OF ORAL CANCERS OF THE LIP, TONGUE, CHEEKS, GUMS, FLOOR AND ROOF OF THE MOUTH, THROAT, LARYNX AND ESOPHAGUS. USING SMOKELESS TOBACCO CAN ALSO CAUSE CANCERS OF THE STOMACH, PANCREAS AND PROSTATE.\(^\text{3}\)

SPIT, DIP, CHEW...
There are two types of smokeless tobacco: Chew and Snuff.

Chew comes in loose-leaf, plug (compressed) or twist forms. A wad of chew is put inside the cheek.

Snuff is more finely ground and is packaged dry, moist or in tea bag like pouches. Snuff is typically placed between the cheek and gum. Sniffing (inhaling dry snuff through the nose) is more common in Europe than in the United States.

WHY DO PEOPLE USE SPIT TOBACCO?
Between 10 and 16 million Americans use smokeless tobacco products every year.\(^\text{1}\)

People may be attracted to smokeless tobacco because of:
- increased smoking restrictions in schools, workplaces and public places,
- misconceptions that smokeless tobacco is a good alternative to cigarettes and presents minimal health risks,
- misconceptions that smokeless tobacco improves athletic performance,
- increased advertising expenditures by tobacco companies promoting smokeless tobacco products,
- marketing offers of gifts, gear and coupons,
- and the emergence of milder and sweeter brands.

WHO USES SMOKELESS TOBACCO IN COLORADO?
- Twenty-seven percent of high school males and nine percent of high school females report having used smokeless tobacco.\(^\text{2}\)
- Thirty-four percent of adult men and five percent of adult women report having used smokeless tobacco.\(^\text{2}\)
- Current use of smokeless tobacco is more common among male high school students than it is among adult men.\(^\text{2}\)
- Eight percent of adult males, twelve percent of high school males and two percent of middle school males currently use smokeless tobacco.\(^\text{2}\)
- Less than one percent of adult females, three percent of high school females and one percent of middle school females currently use smokeless tobacco.\(^\text{2}\)
- More high school males living in rural areas (17 percent) currently use smokeless tobacco compared to their urban and suburban counterparts (8 percent and 13 percent, respectively).\(^\text{2}\)
- More adult males in rural areas (19 percent) currently use smokeless tobacco than urban adult males (11 percent) and suburban adult males (7 percent).\(^\text{2}\)

WHY ISN’T SMOKELESS TOBACCO A GOOD SUBSTITUTE FOR CIGARETTES?
Smokeless tobacco contains two to three times the nicotine as cigarettes as well as numerous cancer-causing agents.

Smokeless tobacco contains 28 cancer-causing agents and many other dangerous chemicals, including:
- formaldehyde (embalming fluid)
- arsenic (rat poison)
- acetaldehyde (irritant)
- hydrazine (toxic chemical)
- cadmium (used in car batteries)
- polonium (nuclear waste)
- cyanide (used in the gas chamber), and
- lead (banned from paint products).\(^\text{4}\)

WHY IS NICOTINE ADDICTIVE?
Nicotine from smokeless tobacco is absorbed more slowly than that from cigarettes. However, more nicotine per dose is absorbed and remains in the bloodstream for a longer period of time.\(^\text{4}\)

Nicotine is highly addictive and contributes to:
- increased heart rate,
- high blood pressure,
- stroke,
- increased risk of heart disease, and
- reproductive disorders.\(^\text{5}\)
SPIT TOBACCO MYTHS & FACTS: FACT SHEET

HOW DOES USING SMOKELESS TOBACCO INCREASE MY RISK OF CANCER?

- Smokeless tobacco users drastically increase their risks of oral cancers of the lip, tongue, cheeks, gums, floor and roof of the mouth, throat, larynx and esophagus. It can also cause cancers of the stomach, pancreas and prostate.²

- Smokeless tobacco is responsible for more than 30,000 oral cancer diagnoses and more than 8,000 oral cancer related deaths in the United States each year.³

- On average, only half of those with oral cancer will survive more than five years. This is the second lowest survival rate of all cancers (second only to lung cancer).⁴

- Seventy-three percent of daily smokeless tobacco users have leukoplakia – white sores or patches in the mouth that can become cancerous.⁵

WHAT ARE OTHER HEALTH AND PERSONAL CONCERNS?

Other health and social implications of smokeless tobacco use include chronic bad breath, yellowing of the teeth, tooth abrasion (worn spots on the teeth), tooth decay, tooth loss, gum disease, gum recession and loss of bone in the jaw.⁶

HOW CAN I GET HELP QUITTING TOBACCO?

Call the Colorado Quitline at 1-800-QUIT-NOW (1-800-784-8669) or log onto www.co.quitnet.com for free assistance and tips on quitting.

REFERENCES


February 2003
Big Tobacco: Can You Believe Them?

Title: Big Tobacco: Can You Believe Them?
Grade Level: 9th to 12th
Subjects: Health
Time: Use typical time frame for analytical assignment

Performance Indicators
- Students will identify tobacco marketing and advertising strategies that specifically target youth.
- Students will evaluate the effect of media on personal and family health.

Health Standard
- Analyzing influences

Materials/Preparation
- Review Teacher Resource – “Tobacco Companies and Products.”
- Campaign for Tobacco-Free Kids – Tobacco Company Marketing to Kids Handout
  Make copies for each student group.
- Campaign for Tobacco-Free Kids – Tobacco Industry Continues to Market to Kids Handout
  Make copies for each student group.
- Campaign for Tobacco-Free Kids – Philip Morris and Targeting Kids Handout
  Make copies for each student group.
- “Tobacco Company Research” – One copy for each student.

Teaching Steps
1. Explain to the students that many people believe that the tobacco companies market and target their products to children and youth. The tobacco companies deny this claim. During this class period the students are going to decide whether this is true or not.
2. Divide the students into three groups.
3. Hand out one of the Campaign for Tobacco-Free Kids handouts to each group. Give the students time to read the handouts. Have each group briefly tell the class what their handout claimed.
4. Take class to the computer lab or where they will have access to Internet (preferably each student will be able to research on his/her own). Handout the “Tobacco Company Research” sheet. Have students pick a company; make sure that someone is researching each company. Let students work on the computers and find the answers.
5. Have students form groups based on the tobacco company they researched.
6. Have student groups share the information from each tobacco company.
7. Let students discuss whether or not they believe the tobacco companies market or target the youth audience.

Assessment
- Completion of Tobacco Company Research handout; presentation of findings to class.
■ Advertising and Children’s Use of Tobacco
http://www.mediafamily.org/facts/facts_tobacco.shtml

■ Big Tobacco Seen Moving to Smokeless Tobacco
http://www.msnbc.msn.com/id/11239243/

■ Chronic Disease Notes and Reports
Special Topic: Tobacco Control
http://www.cdc.gov/nccdphp/publications/cdnr/pdf/CDNRDec05.pdf

■ Point of Sale Nicotine Marketing
http://whyquit.com/Youth/StoreMarketing.html

■ Smokeless Tobacco in the United States: An Overview of the Health Risks and Industry Marketing Aimed At Children

■ Smokeless Tobacco Accused of Advertising to Children
http://www.no-smoking.org/june02/06-05-02-3.html

■ U.S. Smokeless Tobacco’s Suspension of Ads in Four Magazines Falls Woefully Short of Changes Company Should Make

■ Company Plans to Sell Snuff as Smokeless Tobacco
http://bmj.bmjournals.com/cgi/content/full/327/7409/247-a
US Smokeless is preparing to market one, Revel, nationwide shortly. It is seeking approval for advertisements that show an attractive couple arm in arm. The new product’s slogan is “Anytime, anywhere,” to emphasize its accessibility.

■ Can Tobacco Cure Smoking? A Review of Tobacco Harm Reduction
http://www.surgeongeneral.gov/news/testimony/tobacco06032003.htm
Prepared witness testimony to House Committee on Energy and Commerce

■ San Diego Judge Rules R. J. Reynolds Guilty of Violations
http://www.lungsandiego.org/tobacco/press_rjreynolds.asp
What Do NASCAR, Baby Bibs and Rodeos Have to do with Tobacco?

■ Golden Leaf Barren Harvest: The Costs of Tobacco Farming
Tobacco growing goes global, power imbalance, illusory economic benefits, toll on people and the environment, industry manipulation.

Continued on next page
Tobacco Industry’s Targeting of Youth, Minorities, and Women
http://www.americanheart.org/presenter.jhtml?identifier=11226
Abundant evidence exists that youth, minorities and women have been targeted by big tobacco.

Pervasive Influence of the Tobacco Industry
http://www.nnh.org/tobacco/a-8-2.htm
Promotions for cigarettes and spit tobacco are often linked to sporting events. Brand names used in sponsoring sports, musical and cultural events convey an image of corporate “good citizenship” and generosity. Sponsors connect tobacco products, which are toxic and addictive, with exciting, healthy events and activities.

Smokeless Tobacco Fact Sheets
Smokeless tobacco products by region of the world, brands and common name.

The Brands of Big Tobacco
http://www.co.tompkins.ny.us/wellness/tobaccofree/asp/brands.htm
Lists U.S. tobacco companies and their products

Physicians for a Smoke-free Canada
http://www.smoke-free.ca/pdf_1/JantziTobaccoReport.PDF
Tobacco company’s and countries of origin.
What are the major tobacco companies in the United States?

- Philip Morris: www.philipmorrisusa.com
- Lorillard: www.lorillard.com
- US Smokeless Tobacco Company: www.ussmokeless.com

What products / brands do these tobacco companies produce?

- Philip Morris – Accord, Alpine, Basic, Benson & Hedges, Bristol, Cambridge, Chesterfield, Collector’s Choice, Commander, Daves, English Ovals, L&M, Lark, Marlboro, Merit, Parliament, Players, Saratoga, Virginia Slims
- RJ Reynolds – Camel, Kool, Winston, Salem, Doral, Pall Mall, Eclipse, Barclay, Belair, Capri, Carlton, GPC, Lucky Strike, Misty, Monarch, More, Now, Tareyton, Vantage, Viceroy
- Lorillard – Newport, Kent, True, Old Gold, Maverick, Satin, Max
- Santa Fe Natural Tobacco Company – American Spirit
- US Smokeless Tobacco Company – Skoal, Copenhagen, Rooster, Red Seal, Husky, Revel
- North Atlantic Trading – Beechnut
- Pinkerton Tobacco Company – Longhorn
Tobacco Company Research

**Directions:** Choose a major tobacco company in the United States – Philip Morris, RJ Reynolds, Lorillard, or US Smokeless Tobacco. For your chosen company, find the following information on its website.

1. Which company did you choose to research?
2. What is their company website address?
3. What products / brands does this tobacco company produce?
4. Which products (brands) are you familiar with and how do you know about them?
5. Who do you think is the target audience for their products? Why?
6. Does the company website have a youth smoking link?
7. What information is contained in the link?
8. Do you think your chosen tobacco company markets or targets the youth audience? Why or why not?
HELPING A FRIEND QUIT

TITLE: Helping a Friend Quit Spit Tobacco
GRADE LEVEL: 9th to 12th
SUBJECTS: Health
TIME: 50 minutes

Performance Indicators
- Students will examine barriers that can hinder healthy decision making.
- Students will analyze how peers influence healthy and unhealthy behaviors.
- Students will demonstrate how to offer assistance in helping a friend quit using tobacco.

Health Standard
- Communication
- Decision-making
- Analyzing influences

Materials/Preparation
- Review “Why People Use Spit Tobacco.”
- Review “Teaching Training Strategies: Brainstorming.”
- “Steps to Quitting” and “How to Quit Spit Tobacco” – one copy for each student.
- Review Teacher Resource – “Characteristics of a Successful Role Play.”

Teaching Steps
1. Ask students to brainstorm the reasons someone would use spit tobacco or ask students to identify the six major (most likely) reasons high school students use spit tobacco. Write the reasons on the board; begin to categorize them into the six categories. Label the six categories when students have exhausted reasons (categories include: peer/social pressure, habit, rituals/ceremonies, addiction, salt cravings, alternative to smoking).
2. Have students discuss the six reasons and how the reasons might affect someone’s ability to quit. (Majority of people who use tobacco indicate they would like to quit.)
3. Have students review the “Steps to Quitting” handout and discuss any questions about the steps (See teacher resources section for additional information).
4. Pass out national resources. Ask students if they are familiar with any of these organizations and if they think they are credible. Point out that each of these national organizations offers information and resources on spit tobacco.
5. Pass out the “Role Play Scenarios.” Discuss guidelines for role play. Establish amount of time for practice (five minutes) and maximum time for role play (two minutes).

Continued on next page
Continued from previous page

6. Pair students and ask each pair to choose one scenario to role play for the class. Encourage students to incorporate the information they know about the health risks of spit tobacco (lesson 1), reasons people use spit tobacco, the steps to quitting, and national resources into their role plays (as appropriate for the scenario they choose).

Assessment

- Have students work in pairs. Have them choose a scenario from the “Role Play Scenario” list or they can come up with their own. (Teachers may want to pre-approve student created scenarios.)
- Have students perform role play for the class.
Why People Use Spit Tobacco

Peer Pressure
Most youth who use spit tobacco started in a social situation; it was given to them by a peer.

Social Pressure/Acceptance/Rebellion
Many environments condone the use of spit tobacco and spit tobacco is socially accepted, even encouraged, for example at a rodeo or as part of a cultural ceremony. The environment can be the trigger for spit tobacco use.

Habit
Habits are hard to break. Some people use tobacco because they believe that it relieves stress or they think that it gives them energy. Many spit tobacco users enjoy the ritual associated with tobacco use. They also enjoy the sensation of having something in their mouth.

Rituals, Ceremonies or Religious Observances
Tobacco is used for rituals, ceremonies or religious observances in some cultures. Many people differentiate between ceremonial use and misuse of tobacco.

Addiction
There is a significant amount of nicotine in spit tobacco. An average dose of spit tobacco is 4.6 mg – compared to 1.8 mg for cigarettes. New spit tobacco users frequently start with products that are milder tasting and more flavored. After a period of time, there is a natural progression of product switching to brands that are more full-bodied, less flavored than the entry brand. When spit tobacco is used, the body adjusts to the chemicals you give it, requiring greater amounts or stronger spit tobacco to reach the same level. This process is called addiction.

Salt Cravings
A typical can of spit tobacco contains over 1,100 mg of salt. Some people are not only addicted to the nicotine in tobacco, but also have significant salt cravings.

Alternative to Cigarette Smoking
Some people mistakenly believe that spit tobacco is a safe alternative to cigarettes because they don’t inhale smoke. WRONG!

Advertising
The tobacco industry has targeted young males with its aggressive advertising. Ads associate spit tobacco with rodeos, rock stars, and sports heroes. Spit tobacco companies sponsor rock concerts, rodeos, auto racing, motocross, and tractor pulls.

Tobacco companies have done a great deal to ease new users into the product, like adding flavor and packaging moist snuff in sachets. U.S. Tobacco made the following statement, “Cherry Skoal is for somebody who likes the taste of candy, if you know what I’m saying.” Manufacturers have also altered the nicotine content and pH of the product to increase its addictiveness. Spit tobacco is not a safe substitute for smoking. It is as addictive as cigarettes. Users who try to quit go through the same withdrawal symptoms smokers do.
HELPING A FRIEND QUIT: FACT SHEET

Are You (or someone you know) Hooked on Spit Tobacco?

1. Have you switched to a stronger brand?

2. Can you go more than a few hours without it?

3. Do you have strong cravings when you try to quit?

4. Do you reach for a pinch of spit tobacco first thing in the morning?
Nicotine addiction can be hard to beat, but establishing a quitting process can help. A Youth Quit Kit can be requested from your local county tobacco coordinator or from the Colorado Quitline. N-O-T on Tobacco is a cessation class for teenage tobacco users sponsored by the American Lung Association.

Step 1: Make a list of the reasons why you want to quit spit tobacco. Make the decision to quit. You may want to quit because...
- You don’t want to risk getting cancer.
- The people around you find it offensive.
- You don’t like having bad breath.
- You don’t want stained teeth or no teeth.
- You don’t like being addicted to nicotine.
- You want to start leading a healthier life.

Step 2: Set a quit date, throw away all of your spit tobacco products. Make a plan. Change your routine. Tell yourself out loud every day that you are quitting spit tobacco one minute at a time. Because nicotine is so addictive, consider every minute, hour, day, week and month without using spit tobacco a success.

Step 3: Ask for help. Tell your friends, family, and teachers that you have decided to quit spit tobacco. Ask for help and encouragement. Let them know how they can help you. Tell friends not to offer you spit tobacco. You may want to ask a friend to quit with you.

Step 4: Talk to a health professional (doctor, dentist, county tobacco coordinator) about quitting spit tobacco. Nicotine replacement therapy may be an option (discuss with your family physician).

Step 5: Find alternatives to spit tobacco. What will you do in the situations where you usually use spit tobacco? Stock up on oral substitutes. Examples include: sugarless gum, pumpkin or sunflower seeds, apple slices, raisins, or dried fruit.

Step 6: Find activities that you are going to do to keep your mind off spit tobacco. You could ride a bike, talk or write a letter to a friend, work on a hobby, or listen to music. Exercise can help relieve tension caused by quitting. Knowing your triggers—situations, places or emotions that make you more likely to use spit tobacco—and preparing for these situations can help ensure your success of staying spit tobacco free.

Continued on next page
Step 7: Set realistic goals and achieve them. Quitting is a process. Remember that everyone is different, so revisit your personalized plan and make adjustments as necessary to stay spit tobacco free. During the toughest moments of withdrawal and temptation, try methods that are “DEAR.”

- **Delay** – If you can wait another 30 minutes before taking a pinch of spit tobacco, or if you can put spit tobacco out of your mind by doing something else and thinking positive thoughts, the urge may pass.

- **Escape** – When feeling irritable from nicotine withdrawal and presented with a confrontation, consider walking away from the source and doing something else for a minute or two.

- **Avoid** – Stay away from situations where the temptation to use is high until you are confident that you can remain tobacco free. You can’t avoid these high-risk situations, then plan ahead what you will do instead of using spit tobacco, so you will be able to resist the temptation to use.

- **Reward** – Give yourself a reward (other than spit tobacco) every day you stay tobacco free. You could put the money that would have been spent on spit tobacco products each day and put it into a container. Watch how fast the dollars accumulate!

Step 8: Reward yourself. Recognize and acknowledge when you reach a goal. Make a list of something that you would like to do/want to buy for yourself. When the saved money reaches that amount, reward yourself! Successful quitting is a matter of planning and commitment.
HELPING A FRIEND QUIT: HANDOUT

Quitting Spit Tobacco: National Resources

- American Cancer Society
  1-800-ACS-2345 (1-800-227-2345)
  Internet address: www.cancer.org

- Centers for Disease Control and Prevention Office on Smoking and Health
  Internet address: www.cdc.gov/tobacco/how2quit.htm

- National Cancer Institute Cancer Information Service
  1-800-4-CANCER (1-800-422-6237)
  Internet address: www.cancer.gov

- Nicotine Anonymous
  1-877-TRY-NICA (1-877-879-6422)
  Internet address: www.nicotine-anonymous.org

- Smokefree.gov
  (info on state Quitlines)
  1-800-QUITNOW (1-800-784-8669)
  Internet address: www.smokefree.gov

- National Institute of Dental and Craniofacial Research
  National Institutes of Health
  Bethesda, MD 20892-2190
  Phone: 301/496-4261
  Internet address: www.nidcr.nih.gov
Brainstorming is a technique that assists groups in generating many ideas quickly and allows participants to pool their knowledge and creativity (without the fear of being judged).

Steps
1. Facilitator identifies a topic statement and records on chart.
2. Facilitator clarifies the topic and reviews the ground rules.
3. Group generates ideas. Facilitator records. It is important for facilitator to record exactly (or as close as possible) what each person says. This is not a time to edit or judge the ideas.
4. Facilitator reviews the generated list. Participants ask for clarification needed for any of the generated ideas and reach a consensus on deletions or edits.
5. Group comes to a consensus on a few ideas to discuss further. Carefully consider the value and potential of each, even those that seem impractical.

Guidelines for Brainstorming

<table>
<thead>
<tr>
<th>Brainstormers</th>
<th>Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Be creative.</td>
<td>• Assemble flipchart, markers, tape.</td>
</tr>
<tr>
<td>• Say anything that comes to mind.</td>
<td>• Review guidelines with participants.</td>
</tr>
<tr>
<td>• Share as many ideas as possible.</td>
<td>• Write down every idea.</td>
</tr>
<tr>
<td>• Defer judgment and/or evaluation of ideas.</td>
<td>• Defer judgment—refrain from commenting on ideas.</td>
</tr>
<tr>
<td></td>
<td>• Allow repetition.</td>
</tr>
<tr>
<td></td>
<td>• Allow periods of silence.</td>
</tr>
<tr>
<td></td>
<td>• Get as many ideas as possible.</td>
</tr>
<tr>
<td></td>
<td>• Encourage everyone’s participation.</td>
</tr>
<tr>
<td></td>
<td>• Allow plenty of time.</td>
</tr>
</tbody>
</table>
Definition: Role play is a strategy for teaching content and practicing skills. It helps students learn how others react to various attitudes and behaviors in a controlled situation.

Elements
- Introduce and model the skill or desired outcome.
- Provide time for student practice using scripted plays.
- Visually begin and end the role play.
- Facilitate feedback on the performance.
- Positive feedback about the group’s performance skills.
- Process the role play to reinforce the content or skill learned.

Utilizes Three Types of Questions
1. What did you learn?
2. What does it mean?
3. What will you do?

How to Conduct Successful Role Plays
Role Play Guidelines:
- Never more than two participants
- Short and sweet—one page
- Practices the skill and desired outcome
- Never allow props (practicing spitting and chewing)
- Use names that can be both male and female (Alex, Chris, Pat)

Role Play Steps
1. Hand out the role play to groups of two.
2. Make name tags from sticky notes.
3. Begin and end the role play so that students aren’t stereotyped with the behavior.
4. Discuss feedback and processing.

Provide Feedback on Role Play
Discuss the performance of the two students.
- Did they seem real?
- Did they speak loudly?
- Did they face the audience?

Scripted Role Plays
- Initially written by the teacher. If you have trouble coming up with scenarios, ask the students the situations where they see these unwanted behaviors.
- After the role play model has been introduced, and students have successfully modeled pre-scripted role play scenarios, have students write their own role plays. Always check student developed role plays and modify them so the role play does not go on forever, and that they are practicing the desired outcome.
- Select and use the best student developed role plays.
Helping a Friend Quit: Handout

Spit Tobacco Role Play Scenarios

**Scenario 1:** Friend is asking another friend for help and support to quit spit tobacco.

Student 1: Youth who uses spit tobacco.

Student 2: Friend who is trying to help and be supportive of student number one who wants to quit.

**Scenario 2:** Friend is approaching another friend who uses spit tobacco and is encouraging the person to quit.

Student 1: Friend who wants to help their friend to quit spit tobacco.

Student 2: Friend who is approached by student number one about quitting.

**Scenario 3:** Youth is approaching a health professional and asking for information about quitting spit tobacco.

Student 1: Youth who wants information about quitting spit tobacco.

Student 2: Health professional who is approached by student number one for information.

**Scenario 4:** Youth is asking his/her parent for help and support to quit spit tobacco.

Student 1: Youth who uses spit tobacco.

Student 2: Parent who is trying to help and be supportive of student number one who wants to quit.
Helping A Friend Quit: Resources

- **Points About Role Playing**
  http://www.yale.edu/peace/role-play.htm
  Offers general guidelines about role plays and points to carry them out effectively.

- **Role Play for Behavioral Practice**
  http://www.etr.org/recapp/practice/rpbp.htm
  Provides an introduction, description and tips for successful role plays.

- **Communication at CDC**
  http://www.cdc.gov/healthmarketing/entertainment_education/tips/tobacco.htm
  Includes tips for scripts, case example (athlete with tobacco between toes)

- **Smokeless Tobacco: Tips on How to Stop**
  http://familydoctor.org/177.xml
  Why is it hard to quit using smokeless tobacco? Why is it important to quit using smokeless tobacco? How to prepare to quit using spit tobacco.

- **Why Do People Use Tobacco**
  http://www.sk.lung.ca/content.cfm?edit_realword=why

- **National Youth Tobacco Survey**
  http://www.cdc.gov/tobacco/data_statistics/surveys/NYTS/index.htm
  Includes data on prevalence of cigarette and other tobacco use; information on five determinants of tobacco use.

- **Cultural Use of Tobacco**
  http://www.secondhandsmoke.ca/PDF/october/The%20Cultural%20Use%20of%20Tobacco.pdf
  Background information on cultural use of tobacco.

- **Ceremonial Use of Tobacco**
  http://www.mpm.edu/wirp/ICW-166.html
  Information on ceremonial use of tobacco.

- **Quitting Spit (Smokeless) Tobacco**
  http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smokeless_Tobacco.asp?sitearea=&level=
  Nicotine is a drug that is highly addictive, similar to heroin or cocaine. Users become physically and psychologically dependent on nicotine. The symptoms of withdrawal from nicotine are temporary. Symptoms, alternatives, use of quitlines.

- **Nicotine Withdrawal Symptoms: Coping With Nicotine Withdrawal**
  http://quitsmoking.about.com/cs/carvingsandurges/a/withdrawal.htm
  Physical withdrawal from nicotine is a temporary condition. The document covers symptoms, coping skills, other ways to manage temporary withdrawal and new patterns of activity.

- **Handling Withdrawal Symptoms**
  http://www.click2quit.co.uk/staying_on_track/ST03i.asp
  Withdrawal symptoms are temporary. Tips to deal with the most common symptoms.

- **How to Help Someone Quit Chewing Tobacco**
  http://quittobacco.com/quitchew.htm
  Why do people chew, cessation techniques, addresses temporary use of mint, cocoa products.

- **I Quit: What to Do When You’re Sick of Smoking, Chewing, Dipping**
  http://www.cdc.gov/tobacco/quit_smoking/how_to_quit/iquit/index.htm
  A booklet that can be downloaded and used during the quitting process.

- **Spit Tobacco: A Guide for Quitting**
I’m Warning You: Yeah, Right!

I’m Warning You...Yeah, Right

GRADE LEVEL: 9th to 12th

SUBJECTS: Health

TIME: 50 minutes

Performance Indicators

- Students will demonstrate how to influence and support others to make positive health choices.
- Students will explain how spit tobacco companies market their products and how spit packaging downplays or ignores the negative consequences of tobacco use.

Health Standard

- Accessing information
- Analyzing influences
- Advocacy

Materials/Preparation

- Review DVD “Smokeless Not Harmless” (five minutes).
- Review Facts on Spit Tobacco Advertising and Package Warning Labels.
- Review Tobacco Fact Sheet: Tobacco Warning Labels & Packaging.
- Review online resources related to tobacco warning labels (other countries).
  - Canada—http://www.hc-sc.gc.ca/ahc-asc/media/photogal/label-etiquette/index_e.html
  - Brazil—http://www.inca.gov.br/english/cigarrete_packages.html
- White paper and colored markets—one for every three students.

Teaching Steps

1. Show DVD “Smokeless Not Harmless” (5 minutes). Suggested discussion and/or student research questions include:
   - How much money does the tobacco industry spend each year on media to promote its products?
   - How much money does the tobacco industry spend in Colorado each year for product promotion?
   - Why do you think the tobacco industry has increased promotion of spit tobacco products?
   - Why does the tobacco industry need to spend so much money on product promotion?

Continued on next page
2. Use poster – Spit Tobacco Advertising and Warning Labels to discuss target audience, product placement and package warning labels.
   - Do you think the warning label on spit tobacco products deters users or potential new users? “Why or why not?”
   - How do other countries advertise tobacco products? What are their requirements for the spit tobacco warning label?
3. Assign students to research teams to find information about spit tobacco advertising and spit tobacco warning labels (at a minimum students should find the answer to each of the suggested discussion questions).
4. Ask each research team to design a tin of spit tobacco, including a warning label. The package design and warning label must tell the truth about the product.
5. Ask students to develop a commercial for their product. The spit tobacco tin created by each group will serve as the basis for the commercial.

Assessment
- Student product design, spit tobacco warning label, and commercial indicate understanding of the tobacco industry’s manipulative strategies and promotional tactics.
I'M WARNING YOU: YEAH, RIGHT!: RESOURCES

- Warning Label Fact Sheet  

- US Code: Smokeless Tobacco Warning Label  
  http://www.law.cornell.edu/uscode/html/uscode15/usc_sec_15_00004402----000-.html

- Tobacco Products: Fast Facts  

- Enhancing the Effectiveness of Tobacco Package Warning Labels: A Social Psychological Perspective  
  http://tobaccocontrol.bmj.com/cgi/content/abstract/11/3/183

- Campaign for Tobacco-Free Kids Statement To the Federal Trade Commission on Proposal Regarding Smokeless Tobacco Warning Labels  

- Selected Actions of the US Government Regarding the Regulation of Tobacco Sales, Marketing and Use  

- FTC Report to Congress Shows Increase in Smokeless Tobacco Revenues and Expenditures  
  http://www.ftc.gov/opa/2003/08/smokeless.shtm

- Maintaining and Gaining  
  A loyal customer base, product innovations and proper marketing keep the loose-leaf category viable

- National Tobacco Policy and Youth Smoking Reduction Act (S. 1415)  
  Marketing/advertising restrictions, licensing of retailers, industry penalties, non-participating manufacturers, trust fund expenditures.

- National Tobacco Policy and Youth Smoking Reduction Act (S. 1415)  
  Marketing/advertising restrictions, licensing of retailers, industry penalties, non-participating manufacturers, trust fund expenditures.

- International Cigarette Labeling Practices  
  http://tobaccocontrol.bmj.com/cgi/content/abstract/8/4/368
  A study of tobacco warning labels in 43 countries.

Continued on next page
Continued from previous page

- Health Warning Labels for Consumer Tobacco Products
  http://www.hc-sc.gc.ca/ahc-asc/media/photogal/label-etiquette/index_e.html
  Health Canada provides pictures of various warning labels for tobacco products.

- Health warnings and images on cigarette packages
  The Brazilian government announced stronger tobacco packaging regulations including new warnings matched with more shocking images. In 2002, Brazil has become the second country in the world to implement such tough labeling and reporting measures.

- Health Warning Labels on Tobacco Product Packaging
  Information on warning label requirements in Australia.

- An Act Relating to Prevention of Harmful Effects of Tobacco
  Regulations on tobacco advertising, labeling of tobacco products, regulation of tobacco in eating establishments in Norway.
I' M WARNING YOU: YEAH, RIGHT!: FACT SHEET

Facts on Spit Tobacco Advertising and Package Warning Labels

The Federal Trade Commission (FTC) has jurisdiction to enforce laws against false and deceptive advertising, including advertising for tobacco products. The FTC also has responsibility under various federal laws to insure the proper display of health warnings in advertising and on packaging of tobacco products sold in the United States.

■ The makers of spit tobacco spend a lot of money to advertise and promote their products. Promotional strategies—including free sampling, sponsorships, and coupons—are a large part of advertising.
  • The tobacco industry spends more than $4 million each week in Colorado on advertising.

■ Methods used by spit tobacco companies to get people to use their product include:
  • Give away free samples and gifts.
  • Show how spit tobacco users are “independent,” “macho men,” “take risks,” “cool,” and “enjoy life,” making you think that if you use their products, you’ll be like the people in the ads.
  • Show you how to use “starter” packs of spit tobacco in order to make it easy for you to use.
  • Make “starter” packs with less nicotine and add flavorings such as mint and cherry, so that it’s not as strong or as bad tasting as full-strength spit tobacco to get you used to it.
  • Offer “pouches” that are packets of spit tobacco so you won’t get a lot of loose tobacco or “float” in your mouth making it appear cleaner than loose spit tobacco.
  • Offer clothing and other branded products for sale.
  • Say it’s an alternative to smoking—implying that it’s safe—even by naming it “smokeless” implies safety
  • Sponsor events such as rodeos and car races, implying that spit tobacco can make you a better athlete or you can be like the rodeo or car racing star if you use spit tobacco.
  • Sponsor music concerts.

■ Warning labels are only one element of a broad approach to preventing and controlling the use of “spit” tobacco. They are an important part of the public health effort to prevent initiation and to increase cessation. In 1986, new laws banned advertising spit tobacco products in the media and required warning labels. The law requires manufacturers, importers and packagers of spit tobacco products to display on a rotating basis one of the following health warning labels on product packages and in most advertisements:
  • WARNING: THIS PRODUCT MAY CAUSE MOUTH CANCER

Continued on next page
Continued from previous page

- **WARNING: THIS PRODUCT IS NOT A SAFE ALTERNATIVE TO CIGARETTES**

The Act requires that the respective warnings be placed in a circle and arrow format on all forms of advertisements except billboards.

- There are a few exceptions in the Federal law on tobacco advertising and labeling:
  - Health warning labels on outdoor-billboard advertisements are allowed to be somewhat abbreviated from those appearing in newspaper, magazine, and product packaging.
  - Warning labels are not required on specialty advertising items (such as pens, pencils, clothing, and sporting goods) that carry cigarette company logos, brand names, or other promotional messages.
  - Warning labels are not required for cigars, pipe tobacco, and roll-your-own cigarette tobacco.
  - Safe Harbor Provision – a provision in securities law that excuses liability if the attempt to comply in good faith can be demonstrated. Regulations specifying label requirements as to the size, color, typeface, placement and rotation of those warnings, are set out as safe harbor provisions that state formats or displays that will be deemed to be in conformance with the Smokeless Tobacco Act rather than in terms of displays or formats that are required to conform.
  - Warning label regulations narrowly defined by size, color, contrast, and image are easily manipulated by the spit tobacco industry to make such warnings ineffective.
  - Product placement is critical to the tobacco industry and to the retailer for attracting customers and increasing sales. Anything that the retailer can do to bring tobacco products within immediate eyesight of the consumer will increase their sales.
  - It is illegal to sell spit tobacco and other tobacco products to anyone under the age of 18.
Tobacco product packaging should be designed to maximize informed consent on the part of the consumer, not to maximize the appeal of the product. Strong and prominent health warning labels, limits on labels such as "slim" and "light," package inserts containing detailed health and ingredient information, and standardized packaging formats are among the ways to accomplish this goal.

Health Warning Labels
Health warning labels, both on cigarette packages and on all marketing materials, help create informed consent between tobacco companies and their customers and are an inexpensive and important first step in a national health education program. Unfortunately, warning labels tend to be weak in all but a few countries. More than 40 developing countries do not require any warning labels at all. Of those that do, 73% require weakly worded warnings on the side of the package and many of those are in English rather than local languages.

Numerous studies have been done to determine which elements are most important in creating effective labels. Findings include:

- To command attention, warning labels should occupy a minimum of 25% of the top of the front and back of the package. They should be in black and white or other sharply contrasting colors.

Type style and size also must be specified to avoid industry efforts to undermine the impact of the warning.

- Messages should be unequivocal, simple, and stark. They should convey both the nature and magnitude of the risks, since studies show smokers underestimate most risks associated with tobacco use. Pictorial warnings may also be appropriate, particularly in countries with low literacy rates or where research shows that smokers are ignoring standard warning labels. In Canada, pictorial warnings with colorful graphics and language are expected to be on all tobacco packages by the early part of 2001.

- Warning labels should include rotating messages on different packs, including such messages as: SMOKING KILLS; TOBACCO IS ADDICTIVE; SMOKING CAUSES HEART DISEASE; SMOKING CAUSES 85% OF ALL LUNG CANCER DEATHS; SMOKING HARMES YOUR BABY; QUITTING SMOKING NOW COULD SAVE YOUR LIFE; and TOBACCO SMOKE CAN HARM THOSE AROUND YOU.

- Canada, whose health minister recently proposed enlarging the labels from 30% of the package face to 60%;

- Thailand, which has added the message "SMOKING CAUSES IMPOTENCE" to its list of required warnings; and

- Australia, which was the first nation to require that "how to quit" information be printed on every pack.

- South Africa, Singapore and Poland also require strong warning labels.

Package labels also should include information on how to quit smoking, and a phone number for smokers to call for more information. Tobacco products could also be required to include a package insert, just as other pharmaceutical products are required to do in most countries. The insert would provide more detailed information about the risks of tobacco use and the benefits of quitting.

Other Labeling Issues
Implied health claims: Tobacco companies use words such as "light," "ultralight," "slim" and "superslim" in their brand names and in their marketing materials. Research suggests that these words are intended to make implicit health claims minimizing the harmfulness of the product, and may encourage
smokers motivated to quit to switch to a “light” brand. These words also appeal to smokers, primarily women, who believe they can use cigarettes to lose weight.

“Tar” and nicotine labeling: Several countries require that “tar” and nicotine yields be displayed on cigarette packages or in advertising. However, serious deficiencies in current measurement standards undermine the intent of this requirement. These measurements are now used primarily by tobacco companies to mislead consumers into thinking that smoking so-called “light” cigarettes is a safe alternative to quitting.¹

Plain Packaging:
The Wave of the Future?
As other forms of tobacco marketing are restricted, the tobacco package itself has become an increasingly important part of the industry’s marketing strategy. Tobacco companies design packages to make their products as alluring as possible. The packages—which can be seen throughout the day by potential smokers as well as would-be quitters—are carefully designed to appeal to the target audience. Cigarette packages are seen “every time they are purchased, pulled from someone’s purse or pocket, left on a bar or restaurant table, or held by an actor in a movie.”²

• British American Tobacco has begun to put its racing logo and the image of a Formula 1 car on packages of its State Express 555 brand in Asia.³

• In Thailand, Japan Tobacco introduced cigarette packs with pictures of Thai Buddhist shrines. Following protests at the Japanese Embassy, the photos quickly were withdrawn.⁴

Research suggests that glossy, attractive, unregulated packaging interferes with and undermines the health warning label on the package, and that requiring manufacturers to adhere to a uniform or “plain” packaging format would significantly decrease the appeal of tobacco products to young people.¹ Tobacco companies have strongly resisted plain packaging proposals in countries such as Australia, Canada and New Zealand.⁵ The companies claim that restricting packaging designs would infringe on their trademarks and violate international treaties. Independent legal scholars believe that a proposal to limit packaging design is soundly based on public health data and would withstand the tobacco industry’s challenge, although no country has yet adopted a plain packaging law.⁶

Resources on the World Wide Web

Proposed Canadian Health Warnings
http://www.smoke-free.ca/TobaccoKids/tobaccoorkids2.htm

http://www.globalink.org/tobacco/fact_sheets/16fact.htm


Visit the ad gallery at www.tobaccofreekids.org for more ad samples
I'M WARNING YOU: YEAH, RIGHT!: SAMPLE ADS

NOTES

NEW!

TRY A POUCH LIKE NO OTHER.

A PINCH BETTER®

SKOAL® Pouches

BERRY BLEND

INTRODUCING SKOAL BERRY BLEND POUCHES.

Berry Blend, the most popular new flavor in moist smokeless tobacco is now available in pouches. All the moist, premium tobacco you want in a convenient pouch. 3X larger than Bandits®, loaded with smooth, long-lasting flavor.

Always

A PINCH BETTER®

FRESH, BOLD TASTE. EVERY TIME.
GOOD EGG, BAD EGG

TITLE: Good Egg/Bad Egg Spit Tobacco Experiment
GRADE LEVEL: 9th to 10th
SUBJECTS: Science, Health
TIME: 30 minutes

Performance Indicators
■ Students will be able to explain the effects of tobacco juice on the mouth.
■ Students will be able to explain oral health problems associated with spit tobacco.

Health Standards
■ Concepts
■ Decision-making
■ Advocacy

Materials/Preparation
■ One hard boiled egg (preferably with a few fine cracks in the shell).
■ Spit tobacco.
■ Glass jar with lid.
■ Water.
■ Toothbrush
■ Toothpaste.
■ Latex gloves.
■ Pamphlet – “Cold Hard Facts: About Dip” (pictures stained, yellow teeth, and mouth lesions). Additional information can be found in teacher resource links.
■ Pamphlet – “50 Things You Should Know About Spit Tobacco.”
■ Order Mr. Gross Mouth and Mr. Dip Lip – Available from the Prevention Information Center Resource Library – 1-888-251-4772 (toll free) or (303) 239-8633. (Cost: PIC borrower pays return postage which is usually around $5.00/item requested.)

Mr. Gross Mouth is a hinged model of the teeth, tongue and oral cavity and demonstrates gingivitis, oral carcinoma, tooth decay and more. Use the accompanying bottle of tobacco juice to make the tongue “spit.”

Mr. Dip Lip is a large mouth model that opens and closes from the back like a puppet and flesh-like lips retract to show disease effects of dipping on the inner lip, gums and outer lips. (Cost: PIC borrower pays return postage which is usually around $5.00/item requested.)

Teaching Steps
1. Obtain permission from the principal to conduct the experiment and to bring spit tobacco into the school.
2. Set up experiment and place in refrigerator two to three days before using this activity.
   • Fill the jar half full with water.
   • Place a wad of tobacco the size of a golf ball in the jar.
   • Shake jar to mix.
   • Soak the egg in the tobacco juice in a refrigerator for 2-3 days.

Continued on next page
3. On class day, explain how you set up this experiment, show students the jar and ask students if they can predict what may have happened to the egg? Write responses on the board and why (rationale) for that prediction.

- Possible responses: ate the shell away, disintegrated, turned the shell yellow, etc.

4. Pass the jar around and have students smell tobacco juice (only if it has a foul odor).

5. Use latex gloves, remove egg from jar and observe how stained it is.

6. With a toothbrush and toothpaste, brush the egg as if it were a tooth with eight or 10 strokes. Note that brushing is not able to remove all the stain, especially in the cracks.

- Review facts related to spit tobacco and what it does to the mouth.

7. Show Mr. Gross Mouth or Mr. Dip Lip model (stained, yellow teeth) and do demonstration of tobacco juice/split tongue.

Assessment

- Assign students to team with another student. Ask each team of two students to create a 30-second skit to demonstrate what you would tell someone who you know uses spit tobacco. Select a few student teams to perform their skits.

This activity is used with permission of Tar Wars, www.tarwars.org. The activity was compiled by the Trumbell County Health Department; Mel Milliron, C.H.E.S. Health Education Planner (330) 675-2489, hemillir@co.trumall.oh.us.
GOOD EGG, BAD EGG: RESOURCES

- **Using Smokeless Tobacco is Gambling With**
  [http://www.quittoabacco.com/facts/effects.htm](http://www.quittoabacco.com/facts/effects.htm)
  Includes photos of stained (yellow) teeth.

- **Tobacco and Healthy Teeth Don’t Mix.**
  [www.healthyteeth.org/tobacco/index.html](http://www.healthyteeth.org/tobacco/index.html)
  Includes how tobacco affects oral health.

- **Tobacco and Oral Health.**
  Effects of tobacco on the oral cavity. Photos.

- **Spit (smokeless) Tobacco.**
  [http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smokeless_Tobacco.asp](http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smokeless_Tobacco.asp)
  Cancerous and non-cancerous oral lesions related to use of spit tobacco.

- **Spitting into the Wind: Facts About Dip and Chew.**
  Spit tobacco is addictive and does not increase athletic performance. Includes color photo of mouth lesions.

- **Youth Tobacco Use in Colorado**

- **Smokeless Tobacco QUITNET**

- **State Tobacco Control Laws**

- **TIPS Fact Sheet: Smokeless Tobacco**
  [http://www.cdc.gov/tobacco/factsheets/smokelesstobacco.htm](http://www.cdc.gov/tobacco/factsheets/smokelesstobacco.htm)
  Forms of spit tobacco and health effects, includes list of references/web links.

- **Chewing Tobacco: Not a Risk Free Alternative to Cigarettes**
  Discusses spit tobacco as just one form of spit tobacco. Health risks of spit tobacco and other forms of spit tobacco. Smokeless doesn’t mean harmless.

- **If You Chew: Quit.**
  [http://www.cda.org/articles/smokelesstobacco.htm](http://www.cda.org/articles/smokelesstobacco.htm)
  Lists health effects of spit tobacco, includes short discussion of each condition.

- **Tobacco Truth/Tobacco Facts**
  Identifies three forms or types of spit tobacco. Ingredients found in spit tobacco. Features the Rick Bender story, with photos.

- **Spit Tobacco**
  [http://www.entnet.org/healthinfo/tobacco/spit_tobacco.cfm](http://www.entnet.org/healthinfo/tobacco/spit_tobacco.cfm)
  Highlights: What is spit tobacco? What’s in spit tobacco? Effects and symptoms of using spit tobacco, and tips for quitting.

- **Spit (Smokeless) Tobacco and Kids**
  Marketing spit tobacco to kids, harms from spit tobacco use, types of spit tobacco.

- **Teens Health: Smokeless Tobacco**
  Defines smokeless tobacco, what’s the danger and what can spit tobacco do to me?

- **Quitting Spit (smokeless) Tobacco**
  Information on nicotine addiction and quitting spit tobacco.
GOOD EGG, BAD EGG: FACT SHEET

Health Problems Associated With the Use of Spit Tobacco

- **Bad breath** – More money spent on mouth wash, breath mints.
- **Yellow teeth** – Socially unappealing, ugly.
- **Tooth decay/tooth cavities** – Toothache, more trips to the dentist. The sugar in tobacco leads to tooth decay/painful cavities.
- **Mouth sores/gum diseases** – Juices in tobacco irritate gums, cause inflammation and in time the gums recede (pull away) from the teeth. The teeth are more likely to decay or become loose and eventually fall out. Bone can be lost which can cause teeth to fall out.
- **Potential cancerous lesions** – Spit tobacco users often develop white patches in their mouth (leukoplakia, pre-cancerous lesions) and have a 50 times greater risk of developing cancers of the lower lip, tongue, mouth, throat, larynx and esophagus than do nonusers. Spit tobacco can also cause cancers of the stomach, pancreas and prostate. Almost 75% of people who use spit tobacco daily, have mouth sores.
- **Changes the brain** – Spit tobacco can change a person’s mood and feelings. The nicotine in spit tobacco causes cravings for more tobacco and affects mood and feelings.
- **High blood pressure, heart attacks, stroke, kidney disease** – Spit tobacco increases heart rate and blood pressure. It damages the heart by causing it to beat too fast and leads to a greater risk of heart attack. People who use spit tobacco also have higher cholesterol levels than people who do not use tobacco products, increasing the risk of heart attack and stroke.
- **Digestive problems** – Spit tobacco irritates the throat and stomach. It can cause ulcers and constant pain.
- **Addiction** – Nicotine is absorbed through the mucous membrane of their mouth (lining of the mouth). Nicotine absorbed in this way is no less addictive than nicotine inhaled from smoking cigarettes or cigars. The truth is the amount of nicotine released into the body from a wad of spit tobacco is the equivalent of smoking three to four cigarettes. Since nicotine is a habit-forming drug, spit tobacco users become just as chemically dependent as cigarette smokers. People who use spit tobacco develop a tolerance for nicotine and will use more tobacco to feel the effects of nicotine. Some people switch to brands with more nicotine and tend to use spit tobacco more frequently the longer they’ve been using spit products.
- **Once addicted, it becomes difficult to stop using spit tobacco**—Withdrawal from nicotine causes signs and symptoms such as intense cravings, increased appetite, irritability and depressed moods. While it may be difficult to stop, the physical withdrawal symptoms usually last only three to five days.

The best way to avoid health risks is to never use spit tobacco.
Performance Indicator

■ Students will be able to explain the harmful effects of nicotine and tobacco.

Materials/Preparation

■ Obtain permission from your principal to conduct this experiment (bringing tobacco into the school).

■ Review process questions and answers on the effects of nicotine.

■ Wingless fruit flies.

■ Spit tobacco—the best tobacco product to use for this experiment is fine cut tobacco that comes in little round containers; brand of tobacco does not affect the results of the experiment.

■ Petri dish—or any clear container with a lid that will not allow the insects to escape. Smaller containers are more efficient because the insects must be in contact with the tobacco treated surface for them to be effected by the nicotine.

■ Clock.

Teaching Steps

1. Background information: Nearly one in five deaths in the United States is the result of using tobacco products. These products contain nicotine which is responsible for the most common drug addiction in the U.S. The experiment will demonstrate the effects of nicotine.

2. To begin the procedure, put 1/4 teaspoon of spit tobacco in a Petri dish, place the lid on and shake it for approximately 15-30 seconds making sure all areas of the inside of the container have been touched by the tobacco.

3. Dump out the tobacco by tapping the dish on the side of a trash can or counter to get the little specks of tobacco out until the dish appears clean. Do not wipe the dish because nicotine will be wiped away affecting the intensity of the nicotine dosage.

4. Shake 10 to 30 fruit flies into the dish and replace the lid quickly so the flies do not crawl out and escape.

5. Record the starting time the flies were exposed to the nicotine. Immediately some of the insects will begin to experience knockdown, which is when an insect is not able to function normally. A fly lying on its back or side is a sign of knockdown because this is not normal behavior.

6. Continue observing the flies and record the length of time required for all the flies to experience knockdown which typically occurs within two to three minutes.

Continued on next page
7. Variation: Other insects can be used, but it is important to understand that different sizes of insects will respond differently to the same dosage of nicotine. For example, flower beetles take an average of 5-6 minutes for all to experience knockdown.

Conclusion

This fruit fly experiment clearly shows to students that nicotine is a very harmful substance. The quick death of the flies from the nicotine will make an impression on any age of student about how very toxic nicotine really is. This experiment easily ties together information about the many harmful consequences of using tobacco products and also what nicotine is and does. The experiment stresses that using chemicals in one’s body such as nicotine is DEADLY.
Q. What makes the insects die in the experiment?
A. The nicotine in the tobacco is what causes the flies to die. They walk on the treated surface, and the nicotine is absorbed into their bodies through their feet. In addition, the nicotine is volatile and they inhale it through their spiracles.

Q. What does the nicotine do?
A. Nicotine is a very toxic chemical, and fruit flies and humans have very similar effects in their bodies in response to it. Nicotine affects the nerves at the nerve synapse causing poisoning of the nervous system. While flies absorb nicotine through their feet and spiracles, humans acquire it through cigarette smoke or by absorbing it in their mouths with spit tobacco.

Q. If nicotine is so toxic, why do humans not die immediately when exposed like the fruit flies?
A. If a large dosage of nicotine was ingested by a human, the person would die by the nicotine paralyzing the breathing muscles. Humans do not die immediately though from smoking or spit tobacco, because only a small amount of nicotine is absorbed into the body in these ways. This small amount is not large enough to kill the body, but does harm it. The longer a person smokes or chews, the more harm the body will experience. At first, when smoking or spit, the nicotine makes the person feel alert and awake, then calm and relaxed, but soon immediate and eventual harm occur.

Examples of immediate harm:
- Loss of some sense of taste and smell
- Mood and temperament affected
- Bad breath
- Dizziness
- Tiring easily
- Increased heart rate
- Nervousness
- Lower skin temperatures
- Nausea
- Discoloration of teeth
- Headaches
- Chemistry of brain & central nervous system affected
- Irritability
- Reduced blood flow in legs & feet
- Difficulty in sleeping
- Gum disease and tooth loss

Examples of eventual harm:
- Nicotine causes addiction to smoking and spit which leads to cancer from the tars and carcinogenic substances found in these products. Tobacco accounts for 30% of all cancer deaths in the US. Cancer of the mouth, lip, tongue, gum, larynx, esophagus, kidney, bladder, pancreas, uterine cervix, and lungs have all been tied to the use of tobacco

Continued on next page
Continued from previous page

products. These tobacco chemicals also pollute the lungs, which can result in chronic bronchitis, emphysema, chronic obstructive pulmonary disease, or smoker’s cough.

- Nicotine affects the heart which increases a chewer’s chances of having a stroke or having heart disease—America’s #1 killer.

Q. Is low nicotine tobacco better?

A. Using a product that has a lower content of nicotine sounds like a more responsible choice than using a product with a standard amount of nicotine. The greatest problem with low nicotine products is that, because they do not satisfy an addiction due to their lower amounts of nicotine, the person will smoke or chew much more of the product than if the product had more nicotine. This allows more carcinogenic substances and, possibly, more nicotine to be put into the body then if the person would have smoked or chewed regular products.

Q. Do other drugs harm the body?

A. Yes, other drugs harm the body. It is never good to put chemicals in one’s body unless they are prescribed by a doctor. The human body is balanced in a level of homeostasis, and it is never good to confuse the body with unnecessary chemicals which may result in harm to the systems that work to keep the body alive.

Q. Does it help to quit smoking or using spit tobacco?

A. Yes, it helps to quit. Every time the substances in tobacco touch living cells, harm is done to their body and the more the person reduces his/her chances of getting cancer and other diseases.
Spit Tobacco Research Paper

Title: Spit Tobacco Research Paper
Grade Level: 8th to 12th
Subjects: Health, Language Arts
Time: Use typical time frame for research paper assignment

Performance Indicators
■ Students will be able to utilize resources that provide valid health information.
■ Students will be able to evaluate the validity of health information.

Health Standard
■ Accessing information

Materials/Preparation
■ Classroom resources (encyclopedias, library books, list of websites)
■ Research paper guidelines

Teaching Steps
1. Identify spit tobacco topic options for student research paper. Suggestions include oral cancer or other disease process related to spit tobacco, advertising lies related to spit tobacco, Big Tobacco marketing)
2. Discuss research paper guidelines
   ■ Format, references, number of pages, etc.
   ■ Areas that need to be covered (e.g., causes, signs/symptoms, treatment/cures, ways to prevent or reduce the risk of getting oral cancer.
   ■ Timeline (progress checks, completion date).
3. Discuss available classroom resources, and local resources.
4. Student presentation—major points of their research; may want to have them create a PowerPoint presentation.

Assessment
■ Research paper completed by students.
■ Establish contest for best paper. Use local health agency staff as judges.
SLIT TOBACCO RESEARCH PAPER: RESOURCES

NOTES

List of Websites

■ American Cancer Society http://www.cancer.org/docroot/home/index.asp
■ National Cancer Institute http://www.cancer.gov/
■ Oral Cancer Foundation http://www.oralcancerfoundation.org/
■ National Institute of Dental and Craniofacial Research http://www.nidcr.nih.gov/HealthInformation/DiseasesAndConditions/SpitTobacco/
■ Centers for Disease Control http://www.cdc.gov/tobacco/
■ Encyclopedia.com http://www.encyclopedia.com/
■ Encyclopedia Britannica http://www.britannica.com/
■ MSN Encarta http://encarta.msn.com/
■ Buck Tobacco http://www.bucktobacco.org/

Local Resources

■ School Media Center/Library
■ Local medical clinic, health agency and/or hospital
■ School Nurse
■ STEPP http://www.steppcolorado.org
■ County Health Department
■ Public Library
LIVES IN JEOPARDY

TITLE: Lives in Jeopardy
GRADE LEVEL: 9th to 10th
SUBJECTS: Health
TIME: 30 minutes

Performance Indicators

- Students will be able to recall spit tobacco facts and provide correct questions to associate with facts.
- Students will be able to comprehend concepts related to spit tobacco and apply those concepts to enhance health.

Health Standard

- Concepts
- Accessing information
- Decision-making

Materials/Preparation

- Jeopardy game board and cards (game board included with kit; cards provided on CD-ROM provided with kit).
- Review game cards. Alternative is to develop some cards of your own for each category.
- Review game rules.
- Copy Question & Answer “cheat sheet”—one for each student.

Teaching Steps

1. Distribute one copy of the Q&A “cheat sheet” to each student.
2. Ask students to review the statements about spit tobacco (establish timeframe, e.g. four to five minutes)
3. Divide students into three teams. (Option: create a Jeopardy game contest between different classes/homerooms.)
4. Develop team names and create a distinct “buzzer” sound.
5. Explain game rules and how points will be awarded.

Assessment

- Ask student teams to develop a new spit tobacco question and answer for each category on the Jeopardy game board.
LIVES IN JEOPARDY

This game was designed and provided by Get R!EAL, Colorado’s youth movement against the tobacco industry. Visit getrealcolorado.com for more information.

NOTES

Game Rules
(Similar to Jeopardy game show on television.)

The Lives in Jeopardy is a game designed to expose the spit tobacco industry’s marketing strategies, and to educate students on tobacco control issues. Jeopardy is played so that the participants are given the answer and must come up with the correct question for that answer.

- The game host (teacher or selected student) will begin game by reading an answer. Student teams need to respond with the correct question.
- Each answer will be read until a team buzzes in or time expires (10 seconds after the question).
- Upon buzzing in, a team has 15 seconds to answer in the form of a question (discussion among team members is allowed).
- If a team answers a question correctly, the team gets a sole chance at a 50 point follow up. This time the team has 30 seconds to answer after the question has been read.
- If a team fails to answer the question correctly, the 50 point follow up question becomes a toss-up for the other two teams.
# LIVES IN JEOPARDY

"Cheat" Sheet #1

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ANSWER</th>
<th>QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEADLY PRODUCT</strong></td>
<td>The only consumer product that kills when used as directed.</td>
<td>What is tobacco?</td>
</tr>
<tr>
<td></td>
<td>The amount of money the tobacco industry spends each week in Colorado on advertising.</td>
<td>What is more than 4 million dollars?</td>
</tr>
<tr>
<td></td>
<td>The number of people in Colorado who will die this year from a tobacco-caused illness.</td>
<td>What is 4,200?</td>
</tr>
<tr>
<td></td>
<td>A white spot or patch in the mouth that can become cancerous.</td>
<td>What is leukoplakia?</td>
</tr>
<tr>
<td></td>
<td>An addictive chemical in spit tobacco products</td>
<td>What is nicotine?</td>
</tr>
<tr>
<td></td>
<td>An additive to spit tobacco products that strengthens the taste or odor of the product.</td>
<td>What is a flavor enhancer?</td>
</tr>
<tr>
<td></td>
<td>Not a good substitute for cigarettes.</td>
<td>What is spit tobacco?</td>
</tr>
<tr>
<td></td>
<td>Plutonium, lead, formaldehyde, cadmium, hydrocarbons.</td>
<td>What is really in spit tobacco?</td>
</tr>
<tr>
<td></td>
<td>More addictive and harder to quit than cigarettes.</td>
<td>What is spit tobacco?</td>
</tr>
<tr>
<td></td>
<td>Sugars added to spit tobacco cause this condition.</td>
<td>What is tooth decay?</td>
</tr>
</tbody>
</table>
## Tobacco Lies

<table>
<thead>
<tr>
<th>Category</th>
<th>Answer</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>An ineffective label on tobacco products.</td>
<td>They say, “Today's teenager is tomorrow's potential customer.”</td>
<td>What is the warning label?</td>
</tr>
<tr>
<td>These make tobacco look cool, fun and exciting.</td>
<td>They say, “Today's teenager is tomorrow's potential customer.”</td>
<td>What is Philip Morris tobacco company?</td>
</tr>
<tr>
<td>Target young people by portraying tobacco use as cool, hip and as a vehicle for acceptance into social circles.</td>
<td>These make tobacco look cool, fun and exciting.</td>
<td>What are tobacco advertisements?</td>
</tr>
<tr>
<td>Documented that, as early as the 1960's, scientists were discovering the dangers associated with tobacco use but tobacco companies suppressed the information.</td>
<td>Documented that, as early as the 1960's, scientists were discovering the dangers associated with tobacco use but tobacco companies suppressed the information.</td>
<td>What is the tobacco industry's fraud and deception?</td>
</tr>
<tr>
<td>Speak up, speak out, do something, get involved.</td>
<td>Speak up, speak out, do something, get involved.</td>
<td>What can teenagers do to counteract tobacco lies?</td>
</tr>
<tr>
<td>Money awarded to states for education about tobacco.</td>
<td>Money awarded to states for education about tobacco.</td>
<td>What is the tobacco settlement fund?</td>
</tr>
<tr>
<td>A provision in securities law that excuses liability if the attempt to comply in good faith can be demonstrated.</td>
<td>A provision in securities law that excuses liability if the attempt to comply in good faith can be demonstrated.</td>
<td>What is safe harbor?</td>
</tr>
<tr>
<td>Regulations narrowly defined by size, color, contrast and image.</td>
<td>Regulations narrowly defined by size, color, contrast and image.</td>
<td>What is a spit tobacco warning label?</td>
</tr>
<tr>
<td>Critical to the tobacco industry and the retailer to attract new customers.</td>
<td>Critical to the tobacco industry and the retailer to attract new customers.</td>
<td>What is product placement?</td>
</tr>
<tr>
<td>CATEGORY</td>
<td>ANSWER</td>
<td>QUESTION</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CHEW ON THIS</td>
<td>Three side effects of spit tobacco.</td>
<td>What are bad breath, stained teeth, spit stains on clothes?</td>
</tr>
<tr>
<td></td>
<td>Spit tobacco causes 80% to 90% of these.</td>
<td>What are oral cancers?</td>
</tr>
<tr>
<td></td>
<td>How much more nicotine spit tobacco has than cigarettes.</td>
<td>What is two to three times as much nicotine?</td>
</tr>
<tr>
<td></td>
<td>No spitting, white teeth, no bad breath, more spending money.</td>
<td>What are cool rewards for not using spit tobacco?</td>
</tr>
<tr>
<td></td>
<td>Does not improve athletic performance, in fact it can harm</td>
<td>What is spit tobacco?</td>
</tr>
<tr>
<td></td>
<td>performance and endurance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kills more Americans each year than AIDS, alcohol, suicide, motor</td>
<td>What is tobacco?</td>
</tr>
<tr>
<td></td>
<td>vehicle accidents, fire, heroin, homicide, cocaine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No thank you, I don’t want that stuff in my mouth, I have to get</td>
<td>What are ways to say “no?”</td>
</tr>
<tr>
<td></td>
<td>home, change the subject.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feeling like you need to do something to fit in.</td>
<td>What is peer pressure?</td>
</tr>
<tr>
<td></td>
<td>Tooth paste and brushing does not get rid of this.</td>
<td>What is spit tobacco stained teeth?</td>
</tr>
<tr>
<td></td>
<td>Kills insects on contact.</td>
<td>What is nicotine?</td>
</tr>
</tbody>
</table>
Action on smoking and health
The tobacco industry has denied and lied to governments and to the public since the 1950s. Whether it is about cancer, passive smoking, advertising targeted at children, or its role in smuggling tobacco around the world. Reveals the dirty tricks and real truth about what goes on inside the tobacco industry.

Smokeless Tobacco: Especially for Kids! Seeing Past Smokeless Tobacco Advertising and Promotion
http://www.cancercontrol.cancer.gov/tcrb/less_kids.html
The makers of spit tobacco spend a lot of money to advertise and promote their products because the more people who use spit tobacco and the more spit tobacco each person uses, the more money they make.

Big Tobacco Still Targeting Kids
http://tobaccofreekids.org/reports/targeting/
The 1998 legal settlement between the states and the tobacco companies prohibited the tobacco companies from taking “any action, directly or indirectly, to target youth... in the advertising, promotion or marketing of tobacco products.” However, since the settlement, the tobacco companies have increased their cigarette marketing expenditures by 125 percent to a record $15.1 billion a year, or $41.5 million a day, according to the Federal Trade Commission. Much of this marketing is still targeted at kids.