

<b>COURSE:</b> Health	<b>GRADE(S):</b> 7 <sup>th</sup> Grade
<b>UNIT:</b> Tobacco	<b>TIMEFRAME:</b> 7 Lessons

**NATIONAL STANDARDS:**

- STANDARD 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.
- STANDARD 2:** Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- STANDARD 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.
- STANDARD 4:** Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- STANDARD 7:** Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- STANDARD 8:** Students will demonstrate the ability to advocate for personal, family and community health.

**STATE STANDARDS:**

**10.1. Concepts of Health**

10.1.9.D. Analyze prevention and intervention strategies in relation to adolescent and adult drug use.

**10.2. Healthful Living**

10.2.9.B. Analyze the relationship between health-related information and adolescent consumer choices.

10.2.9.C. Analyze media health and safety messages and describe their impact on personal health and safety.

10.2.9.E. Explain the interrelationship between the environment and personal health.

*Reading Assessment Anchors:*

**R7.A.2 Understand nonfiction appropriate to grade level**

R7.A.2.1 Identify and apply the meaning of vocabulary in nonfiction

R7.A.2.3 Make inferences, draw conclusions, and make generalizations based on text.

R7.A.2.4 Identify and explain the main ideas and relevant details.

**R7.B.3 Identify, interpret, describe, and analyze concepts and organization of non-fictional text.**

R7.B.3.1 Interpret, describe, and analyze the characteristics and uses of facts and opinions in non-fictional text.

R7.B.3.2 Distinguish between essential and nonessential information within or between text.

**UNIT OBJECTIVES:**

Recall factual information regarding tobacco.

**CONTENT:**

- I. What is Tobacco?
  - Tobacco is a powerful drug which comes from the leaves of the tobacco plant.
  - The leaves of the plant are dried, aged for two or three years, then used to make cigarettes, cigars, pipe tobacco, chewing tobacco and snuff.
    - o Changes the chemistry of the brain.
    - o About 50 million people in the US smoke tobacco on a regular basis.

Analyze why the chemicals in tobacco and tobacco, in all its forms, is harmful.

## II. Chemicals in Tobacco

- Nicotine: An addictive drug that is found in all tobacco products.
  - o Nicotine affects smoker's brain in the same way as heroin and cocaine.
  - o The tobacco user constantly craves more nicotine.
  - o Nicotine makes the user feel more relaxed and more alert.
- Tar: A dark, thick, sticky liquid that forms when tobacco burns.
  - o Several substances in tar are known as carcinogens (cause cancer.)
  - o Poison contained in tar and tobacco, are arsenic, benzene, formaldehyde, and hydrogen cyanide.
  - o Tar can cause cancer, emphysema and other diseases.
- Carbon Monoxide is a colorless, odorless, poisonous gas that is produced when tobacco is burned.
  - o Carbon monoxide passes through the lungs and into the bloodstream.
  - o Carbon monoxide reduces the amount of oxygen the blood cells can carry.

## IV. Different Forms of Tobacco

- Cigarettes
  - o Most common form in which tobacco is used.
  - o A typical smoker goes through at least one pack a day (20 cigarettes).
  - o Because smoke passes through the lungs, smokers are at risk for several different lung diseases, including lung cancer and emphysema.
  - o Lung cancer is ten times as common among smokers, than nonsmokers.
- Cigars and Pipes
  - o Cigars and pipes are another form of tobacco that is smoked.
  - o Cigars and pipes produce more nicotine than cigarettes.
  - o These smokers are more likely to develop cancers of the lip, mouth and throat.
- Smokeless Tobacco
  - o Chewing tobacco is made up of coarsely ground tobacco leaves. Users suck or occasionally chew it.
  - o Snuff is tobacco made into a fine powder. It is sniffed or placed between the lower lip and gum, where

it mixes with saliva and is absorbed into the body.

- o Chewing tobacco contains high levels of tar.

- Snuff: There are two categories of snuff, dry and moist.
  - o *Dry snuff*: is processed into a fine powder with very little moisture. It is sold in metal cans or glass containers.
  - o *Moist snuff* (fine cut): is tobacco pressed into fine articles or strips, with 50% moisture content, some varieties are flavored. This is usually packaged in cans or plastic.
- "Spitting" Tobacco: is an industry phrase used to promote snuff and chewing tobacco.
  - o Spitting tobacco is a synonym for chewing tobacco.
  - o The behavior of spitting is offensive and unsanitary.
  - o Users of snuff or chewing tobacco have to spit because:
    - Using the smokeless tobacco increases the amount of saliva in the mouth.
    - Users do not swallow tobacco because it can make them feel sick.
    - Smokeless tobacco tastes bad after being in the mouth for a while.
  - o Males the age of 18-21 have the highest rate of use for smokeless tobacco.
- All forms of tobacco can cause cancer and other health risks. Chewing tobacco and snuff also cause cancer, especially oral cancer.

#### IV. How Tobacco Affects the Body's Systems

- Nervous System
  - o Short Term Effects
    - Nicotine changes the brain's chemistry and is addictive.
    - Withdrawal symptoms (nervousness, shakes, head aches) occur as early as a half an hour after the last cigarette.
    - Change in brain chemistry also causes an increase in adrenaline, which leads to increased heart rate and blood pressure.
  - o Long Term Effects
    - Smoking reduces the flow of oxygen to the brain, increasing the chances of stroke.
- Circulatory system
  - o Short term Effects

Compare and contrast tobacco's effects on the different body systems.

- Constricts blood vessels, which reduces oxygen supply to tissue.
- Tobacco increases heart rate.
- Long Term Effects
  - Smoking weakens the blood vessels, and causes a fatty buildup that clogs blood vessels.
  - Reduced oxygen flow to the heart can damage the heart muscle. Smokers therefore run a far greater risk of heart disease and heart attack.

- *Respiratory System*

- Short term effects
  - Smoking causes shortness of breath.
  - Shortness of breath affects the smoker's ability to walk, run, climb and bike.
- Long Term Effects
  - Tar and other chemicals destroy the cilia.
  - Cilia are tiny hair like projections that line the respiratory passage and filter out dust and foreign material.
  - Smoking also damages the alveoli, the tiny air sacs in the lungs.
  - Over time, smokers are far more likely than nonsmokers to suffer from cancer, emphysema and other major lung diseases.

- *Digestive system*

- Short Term Effects
  - Tobacco can cause stomach upset and halitosis (bad breath).
  - More frequent use stains teeth, dulls the taste buds, and increases the risk of cavities.
- Long Term Effects
  - Cigarettes, pipes, cigars, and smokeless tobacco can cause cancer of the mouth and throat.
  - Tobacco can cause tooth decay and has been linked to stomach ulcers.
  - The risk of bladder cancer increases up to ten times with long term use.

V. How Smoking Affects Personal Appearance

- Stained teeth
- Stained fingers
- Clothing damaged by cigarette burns
- Bloodshot eyes
- Wrinkles

VI. Tobacco Addiction

- Most people find it difficult or impossible to

Analyze the effects of smoking on nonsmokers.

stop.

- They form an addiction (a physical or mental need for a drug or other substances).
- According to the CDC, nicotine addiction in the United States is the most common form of drug addiction.
- Nicotine is as addictive as heroin, cocaine and alcohol.
- Nicotine's addictive cycle:
  - o 20 seconds after smoking, the cigarette stimulates the neurons to release adrenaline and other chemicals in the smoker's brain.
  - o After 30 minutes the chemicals have left the brain.
  - o The smoker begins to have symptoms such as difficulty concentrating, headache and irritability.
  - o The one-two punch of pleasure followed by discomfort causes the smoker to crave another cigarette.
  - o The smoker may experience both physical dependence and psychological dependence.

#### VII. Secondhand smoke

- Smoke that the nonsmokers inhale as a result of being around smokers.
- Secondhand smoke is also called passive smoke and environmental tobacco smoke (ETS).
- There are over 4000 different chemicals in ETS.
- People who don't smoke but are exposed to tobacco smoke are called passive smokers.
- Passive smokers are forced to breathe two types of secondhand smoke:
  - o Mainstream: smoke that the smoker exhales
  - o Sidestream smoke: smoke that comes from the burning tip of a cigarette.
- Sidestream smoke, which has not passed through a smoker's lungs, carries twice as much tar and nicotine as mainstream.
- Secondhand smoke is responsible for 3,000 deaths from lung cancer each year.
- How secondhand smoke effects children:
  - Decreases lung efficiency and impairs lung function in children of all ages.
  - Increases the frequency and severity of childhood asthma.
  - Increases the number of ear infection a child will experience and the duration of the illness.

#### VIII. How to be tobacco free

Explain how internal and external pressures influence tobacco use.

- Why teens start to use Tobacco
  - o Tobacco: A False Crutch
  - o They think it will help them deal with stress.
  - o As a form of weight control.
  - o Tobacco is not an effective way to cope with stress or weight control.
  - o Most new users become addicted very quickly.
  - o Tobacco also reduces a person's capacity for aerobic exercise.
- Tobacco: False Independence
  - o Smoking makes some teens feel mature.
  - o Some teens smoke in order to be accepted by their peers or to form a friendship.
- Tobacco and the media
  - o Many teens use tobacco because of the images they see in the media which are various methods of communicating information, such as, newspapers, magazines, radio or television.
  - o Tobacco companies spend billions of dollars on advertising or media messages intended to influence people's behavior and opinions.
  - o Tobacco ads are designed to attract young people. They show tobacco users as athletic, fun-loving, free spirits.
  - o Studies by the Surgeon General show a direct link between tobacco ads and smoking.
- The "tobacco mask" – smokers in advertising and the media do not show their real faces. The image of tobacco use in the media is just the opposite of reality.
  - o Image: smokers are healthy, athletic, rebels, mature, and attractive.
  - o Reality: Smokers are sickly, constantly short of breath, social outcasts, dependent on a drug, and prematurely aged.

#### IX. Surgeon General's Warnings

- Health warnings placed on tobacco products that identify health risks:
  - o Initial warning – 1966
  - o Surgeon General's – first time 1970
- *Examples of Warnings*
  - o *Surgeon General's Warning*: Quitting smoking now greatly reduces serious health risks.
  - o *Surgeon General's Warning*: Cigarette smoke contains Carbon Monoxide.
  - o *Surgeon General's Warning*: Smoking causes lung cancer, heart disease and emphysema

	<ul style="list-style-type: none"> <li>- Selling strategies <ul style="list-style-type: none"> <li>o <i>Bandwagon</i> – these ads suggest everyone is doing it or using it.</li> <li>o <i>Card stacking</i> – ads give one sided views of their products.</li> <li>o <i>Down-home appeal</i> – these ads show average people recommending the product.</li> <li>o <i>Fact vs. Opinion</i> – statements that are opinions that can't be or haven't.</li> <li>o <i>Fantasy</i> – unreal features and powers (giants, superhuman strength, and athletic prowess) are part of the ad and become associated with the product.</li> <li>o <i>Humor</i> - an ad that makes people laugh.</li> <li>o <i>Glittering Generality</i> – These ads use expression, such as, "great", "the best". These claims have no factual basis.</li> <li>o <i>Sensory</i> – Images or sounds in the ad are appealing to the senses.</li> <li>o <i>Statistics</i> – buyers seem to be impressed by statistics, but ads usually do not explain what study or who did the research.</li> <li>o <i>Testimonial</i> – well-know people claim that they use the product and love it.</li> <li>o <i>Transfer</i> – An attractive, sociable, sexy or well-dressed person sells the product. Buyers imagine when they use the product, they will either meet or become like this person.</li> </ul> </li> </ul>
<p><b>ACTIVITIES:</b></p> <p>Perform a skit on refusal skills for tobacco use. (Internal/ External Influences, Interpersonal Communication and Self-Management).</p> <p>Research on substances found in tobacco products (Accessing Information).</p> <p>Worksheet on smokeless tobacco. Students will read a fact sheet and complete a worksheet that accompanies the fact sheet.</p> <p>In cooperative groups students will compile information on the short term and long term effects of tobacco use. (Interpersonal Communication).</p> <p>By examining tobacco ads, students will identify the type of advertising used and will create their own advertisement that deals with reasons not to use tobacco products.</p> <p>Write a letter to the tobacco companies stating the harmful effects of their product.</p>	<p><b>ASSESSMENTS:</b></p> <p>Students will complete a poster/brochure that includes important information pertaining to tobacco.</p> <p>Teacher observation of proper refusal skills of tobacco use during performed skits. (Interpersonal Communication)</p> <p>Compose a letter to a smoker explaining the effects of their smoking. (Advocacy)</p> <p><b>REMEDIATION:</b></p> <ul style="list-style-type: none"> <li>✧ Meet with a peer teacher to discuss materials.</li> <li>✧ Supplemental materials</li> <li>✧ Meet one on one with teacher.</li> </ul> <p><b>ENRICHMENT:</b></p> <p>Interview a person who is or was a smoker.</p>

(Advocacy)

*Teacher directed differentiated instructional projects and activities are ongoing and based on student need.*

**RESOURCES:**

*Tobacco: Comprehensive Health for the Middle Grades*, Garzino, Mary, ETR Associates (1996)  
Santa Cruz, CA

*Teen Health Course 1*, Merki, Mary Bronson, Ph.D. ,  
Glencoe McGraw Hill (1999) New York, NY  
Pages 226-231

**WEBSITES:**

*No Tobacco* (1995), Anti-Smoking Site for teens  
Retrieved June 20, 2006 from:  
<http://www.notobacco.org/>

*Tobacco vs. Kids* (2006), Campaign for Tobacco-Free Kids  
Retrieved June 20, 2006 from:  
<http://www.tobaccofreekids.org/>

*Get Outraged* (2001), Department of Public Health,  
Retrieved June 21, 2006 from:  
<http://www.getoutraged.com/>

*Addiction* (2006), Donovan, Amy  
Retrieved June 20, 2006 from:  
<http://school.discovery.com/lessonplans/programs/addiction2/>

Research tobacco on the internet.

Write a story in which we live in a smoke free society.

"Cigarettes, Cigarettes: The Dirty Rotten Truth About Tobacco", by Pete Traynor.