

Module Title: Tobacco

Microlesson Title: Health Risks

Title: Health Risks Presentation

Nicotine

- Tobacco users have difficulty quitting because tobacco contains an addictive drug, a substance that causes physiological or psychological dependence.
- All tobacco products contain nicotine, the addictive drug found in tobacco leaves. Nicotine is a stimulant, a drug that increases the action of the central nervous system, the heart, and other organs. Using nicotine raises blood pressure and increases the heart rate.

Poisonous substances in tobacco smoke.

- Tobacco is an addictive and toxic drug. It's a carcinogen, a cancer-causing substance. Tobacco smoke contains tar and carbon monoxide. It also contains the same poisonous compounds found in products such as paint, rat poison, and toilet cleaner.

Tar

- Cigarette smoke contains tar, a thick, sticky, dark fluid produced when tobacco burns. Tar damages a smoker's respiratory system by paralyzing and destroying cilia, the tiny hair-like structures that line the upper airways and protect the body against infection.
- Tar also destroys: the air sacs, which absorb oxygen and rid the body of carbon dioxide, and lung tissue, reducing lung function. Smokers are susceptible to diseases such as bronchitis, pneumonia, emphysema, heart disease, and cancer. According to the CDC, more people in the United States die from lung cancer than any other type of cancer.

Carbon monoxide

- Carbon monoxide, a colorless, odorless, and poisonous gas, is another compound found in cigarette smoke. It is absorbed more easily than oxygen. Carbon monoxide deprives the body's tissues and cells of oxygen. It also increases the risk of high blood pressure, heart disease, hardening of the arteries, and other circulatory problems.

Pipes, cigars, and smokeless tobacco.

- No tobacco product is safe to use
- The dangers of tobacco use are not limited to smoking cigarettes. The smoke from pipes and cigars also cause serious health consequences. Cigars contain significantly more nicotine and produce more tar and carbon monoxide than cigarettes. One cigar can contain as much nicotine as an entire pack of 20 cigarettes. Pipe and cigar smokers also increase the risk of developing cancer of the lips, mouth, throat, larynx, lungs, and esophagus.
- Another form of tobacco that some believed to be safer to use in cigarettes is smokeless tobacco, tobacco that is sniffed through the nose, held in the mouth, or chewed.

Smokeless (sometimes called spit) tobacco products are not a safe alternative to smoking. The nicotine and carcinogens in these products are absorbed into the blood through the mucous membranes in the mouth or the digestive tract.

Harmful effects of tobacco use.

- Tobacco use causes both short - term and long - term damage to your body.
- Health officials have warned the public about the dangers of tobacco use for several decades. If a pregnant female smokes, she risks the health of her fetus, as well as her own health. Pregnant women who smoke during pregnancy risk giving birth to an infant with low birth weight and other health problems.

Some effects of tobacco use occur immediately. These short - term effects include the following:

- Brain chemistry changes. Addictive properties of nicotine cause the body to crave more of the drug. The user may experience withdrawal symptoms, such as headaches, nervousness, and trembling as soon as 30 minutes after the last two pack of use.
- Respiration and heart rate increase. Breathing during physical activity becomes difficult and endurance is decreased. Nicotine may cause an irregular heart rate.
- Taste buds are dulled, and appetite is reduced. Tobacco users often lose much of their ability to enjoy food.
- Users have bad breath, yellow teeth, and smelly hair, skin and clothes. If tobacco use continues for any length of time, these are unattractive effects can become permanent.

Over time, tobacco use can cause damage to many body systems people who are exposed to others who smoke can also suffer many health problems. Here are some of those health problems :

- Chronic bronchitis can occur when the Cilia and the bronchi become so damaged that they are useless. This leads to buildup of tar in the lungs, causing chronic coughing and excessive mucus secretion.
- Emphysema is a disease that destroys the tiny air sacs in the lungs. They're sacks become less elastic, making it more difficult for the lungs to absorb oxygen. A person with Advanced emphysema uses up to 80% of his or her energy just to Breathe.
- Lung cancer can develop when the Cilia and the bronchi are destroyed, and extra mucus cannot be expelled. Cancerous cells can multiply, block the bronchi, and moved to the lungs. Nearly 90% of the lung cancer deaths are caused by smoking.
- Coronary heart disease and stroke can be caused by nicotine. Nicotine constrict blood vessels, which cuts down blood flow to the body's limbs. Nicotine also contributes to plaque buildup in the blood vessels, which can lead to hardening arteries, a condition called arteriosclerosis. Arteries may become clogged, increasing the risk of heart attack and stroke. The risk of developing heart disease is greater for smokers than for non-smokers.
- A weakened immune system from long - term tobacco use makes the body more vulnerable to disease.

Title: "What's in a cigarette?"

Nicotine - The addictive drug found in tobacco leaves. Nicotine is a stimulant, a drug that increases the action of the central nervous system, the heart, and other organs. Using nicotine raises blood pressure and increases the heart rate.

Tar - A thick, sticky, dark fluid produced when tobacco burns. Tar also destroys the aveoli, or air sacs, which absorb oxygen and rid the body of carbon dioxide. Lung tissue is also damaged, reducing lung function.

Carbon Monoxide - colorless, odorless, and poisonous gas, is another compound found in cigarette smoke. It is absorbed more easily than oxygen. Carbon monoxide deprives the body's tissues and cells of oxygen.

Title: "Short-term effects of tobacco use"

1. Brain chemistry changes. Addictive properties of nicotine cause the body to crave more of the drug. The user may experience withdrawal symptoms, such as headaches, nervousness, and trembling as soon as 30 minutes after the last two pack of use.
2. Respiration and heart rate increase. Breathing during physical activity becomes difficult and endurance is decreased. Nicotine may cause an irregular heart rate.
3. Taste buds are dulled, and appetite is reduced. Tobacco users often lose much of their ability to enjoy food.
4. Users have bad breath, yellow teeth, and smelly Hair, Skin and other and clothes. If tobacco use continues for any length of time, these are unattractive effects can become permanent.

Title: "Long-term effects of tobacco use"

1. Chronic bronchitis can occur when the Cilia and the bronchi become so damaged that they are useless. This leads to buildup of tar in the lungs, causing chronic coughing and excessive mucus secretion.
2. Emphysema is a disease that destroys the tiny air sacs in the lungs. They're sacks become less elastic, making it more difficult for the lungs to absorb oxygen. A person with Advanced emphysema uses up to 80% of his or her energy just to Breathe.
3. Lung cancer can develop when the Cilia and the bronchi are destroyed, and extra mucus cannot be expelled. Cancerous cells can multiply, block the bronchi, and moved to the lungs. Nearly 90% of the lung cancer deaths are caused by smoking.

4. Coronary heart disease and stroke can be caused by nicotine. Nicotine constrict blood vessels, which cuts down blood flow to the body's limbs. Nicotine also contributes to plaque buildup in the blood vessels, which can lead to hardening arteries, a condition called arteriosclerosis. Arteries may become clogged, increasing the risk of heart attack and stroke. The risk of developing heart disease is greater for smokers than for non-smokers.
5. A weakened immune system from long - term tobacco use makes the body more vulnerable to disease.

Microlesson Title: Choosing to be Tobacco Free

Title: Choose to be Tobacco-Free Presentation

Teens & tobacco

- Fewer teens are starting to use tobacco
- The number of non-smokers in the United States, including teens, is on the rise. Knowing the health risks of tobacco use helps teens make helpful decisions to stay tobacco-free.

Why some teens use tobacco.

- Teens start smoking for many reasons. Some teens falsely believe that smoking will help control their weight or cope with stress. Others believe that smoking will make them seem mature and independent.
- The truth is that smoking reduces the body's capacity for physical activity, so it actually may lead to weight gain. Health problems caused by tobacco use and nicotine dependence may increase the tobacco users stress level.
- Many times, teens are influenced to try tobacco products by movies, TV, and advertisements. Media images may convince teens that tobacco use is glamorous.

Reduce tobacco use among teens.

- Many teens recognize the health risks of tobacco use and are avoiding the use of tobacco products. The CDC reports that 82% of high school students nationwide do not smoke. Several factors contribute to this trend :
- **Tobacco legislation.** In 1998, tobacco companies in 46 states reached a legal settlement that restrict tobacco advertising aimed at young people. It is illegal for anyone under the age of 18 to purchase tobacco products in the United States.
- **No - smoking policies.** Legislation has limited smoking in public places and businesses.
- **Family Values.** Teens whose parents avoid tobacco use are more likely to avoid tobacco use themselves.
- **Positive peer pressure.** Teens who do not smoke act as healthy role models for other teams.

Tobacco free lifestyle has many benefits.

- If you do not use tobacco, you have better cardiovascular endurance and lung function. You can improve your fitness level and athletic performance. When you avoid tobacco, you reduce your risk of lung cancer, heart disease, and stroke.

Living tobacco-free has mental, emotional, and social benefits, too.

- You will have a sense of freedom because you know that you are not dependent on an addictive substance. You will have less stress because you do not have to worry about tobacco related health problems. You will have more confidence in social situations because you look and feel better.

Strategies for avoiding tobacco.

- The best way to avoid the negative consequences of tobacco use is never to start using tobacco products. With these strategies, you can stick to your decision to live tobacco-free:
- **Surround yourself with positive influences.** Being around people who share your healthy living values and beliefs will strengthen your commitment to leave a tobacco-free life. Choose friends who do not use tobacco.
- **Reduce peer pressure.** By staying away from situations where tobacco products may be used, do you reduce the chance of being pressured to use tobacco.
- **Be prepared with refusal skills.** Practice in advance what you will say if someone offers you tobacco. Be assertive and leave the situation if the pressure continues. Be confident and stand up for your healthy choices.

There are good reasons for quitting tobacco use.

- Teens who use tobacco give these reasons for quitting:
- They begin to have health problems, such as asthma, coughing, or respiratory infections.
- They realize the high cost of tobacco or find it difficult to purchase tobacco products if they are under 18 years old.
- They realize that using tobacco can lead to other risky behaviors, such as the use of alcohol and other drugs.
- They understand the damaging effects of second-hand smoke and do not want to harm others.
- They feel more powerful because they are not controlled by an addiction to nicotine.

Ending the addiction cycle.

- Overcoming nicotine addiction can be difficult, but millions of people have succeeded. It is not impossible. It is common to experience symptoms of nicotine withdrawal, the process that occurs in the body when nicotine, and addictive drug, is no longer in use. Symptoms can include irritability, difficulty concentrating, anxiety, sleep disturbances, and cravings for tobacco.
- To relieve the symptoms some people, use nicotine substitutes, products that deliver small amounts of nicotine into the user's system while he or she is trying to give up the tobacco habit. These include gum, patches, nasal sprays, and inhalers. Some are over the counter products; others require a doctor's prescription. Smoking while using nicotine substitutes is dangerous due to increased nicotine exposure.

Title: Factors in the reduction of tobacco use among teens.

1. **Tobacco legislation** - In 1998, tobacco companies in 46 States reached a legal settlement that restrict tobacco advertising aimed at young people. Tobacco companies are required to fund as that discourage young people from smoking. It is illegal for anyone under the age of 18 to purchase tobacco products in the United States.
2. **No - smoking policies** - Legislation has limited smoking in public places and businesses.
3. **Family Values** - Teens whose parents avoid tobacco use are more likely to avoid tobacco use themselves.
4. **Positive peer pressure.** Teens who do not smoke act as healthy role models for other teens.

Title: Strategies to live tobacco-free

1. **Surround yourself with positive influences.** Being around people who share your Healthy Living values and beliefs will strengthen your commitment to leave a tobacco-free life. Choose friends who do not use tobacco.
2. **Reduce peer pressure.** By staying away from situations where tobacco products may be used, do you reduce the chance of being pressured to use tobacco.
3. **Be prepared with refusal skills.** Practice in advance what you will say if someone offers you tobacco. Be assertive and leave the situation if the pressure continues. Be confident and stand up for your healthy choices.

Title: Reasons for quitting tobacco use

1. They begin to have health problems, such as asthma, coughing, or respiratory infections.
2. They realize the high cost of tobacco or find it difficult to purchase tobacco products if they are under 18 years old.
3. They realize that using tobacco can lead to other risky behaviors, such as the use of Alcohol and Other Drugs.
4. They understand the damaging effects of second-hand smoke and do not want to harm others.
5. They feel more powerful because they are not controlled by an addiction to nicotine.

Microlesson Title: Promoting a Smoke-Free Environment

Title: Promoting A Smoke-free Environment Presentation

Health risk of tobacco smoke

- The health effects of tobacco smoke affect smokers and non-smokers. Non-smokers who breathe air containing tobacco are also at risk for health problems. Environmental

tobacco smoke (ETS), or second hand smoke, is air that has been contaminated by tobacco smoke.

- ETS is composed of mainstream smoke, the smoke exhaled from the lungs of a smoker, and side stream smoke, the smoke from the burning end of a cigarette, pipe, or cigar.
- Because mainstream smoke has been exhaled by a smoker, it contains lower concentrations of carcinogens, nicotine, and tar. For this reason, side stream smoke is more dangerous than mainstream smoke. ETS from cigarettes, cigars, and pipes contains more than 4,000 chemical compounds.
- More than 50 of those chemicals are cancer - causing carcinogens. Some studies show that infants and young children who are exposed to ETS are more likely to develop asthma and their peers who are not exposed to ETS. Inhaling ETS is a serious health risk.

Health risk for non-smokers

- Second-hand smoke causes more than 3,400 deaths from lung cancer each year. ETS causes eye irritation, headaches, ear infections, and coughing in people of all ages. It worsens asthma and other respiratory problems, and it increases the risk of coronary heart disease.

Health risk to unborn children and infants

- Choosing to live tobacco-free is one of the healthiest choices a pregnant female can make for her baby.
- Smoking during pregnancy can seriously harm the developing fetus. Nicotine passes through the placenta, constricting the blood vessels of the fetus. Carbon monoxide reduces the oxygen levels in the blood of the mother and the fetus.
- This increases the risk of impaired fetal growth, spontaneous miscarriage and prenatal death, premature delivery, low birth weight, deformities, and stillbirths. The infant may also suffer from growth and developmental problems during early childhood.
- Babies of mothers who smoked during pregnancy or who are exposed to ETS are more likely to die of sudden infant death syndrome (SIDS). Infant exposed to ETS after birth are twice as likely to die of SIDS. They may have severe asthma attacks, ear infections, or respiratory tract infections.

Health risks to young children

- Young children are particularly sensitive to ETS. Children of smokers are more likely to be in poor health than children of non-smokers. Consider these facts:
- Children of smokers tend to have a higher incidence of sore throats, ear infections, and upper respiratory problems than children of non-smokers.
- Secondhand smoke can slow lung development. Children who live with smokers are more likely to have weaker lungs than children of non-smokers.
- Also, children learn by example. The children of smokers are more than twice as likely to smoke themselves.

You can act to reduce the effects of ETS.

- Since you spend so much time in your home, you try to minimize the health effects of ETS. If a family member smokes, encourage a person to quit by telling him or her the health effects of tobacco smoke. Try to establish smoke-free areas in the house. Open Windows to allow fresh air in.

- If you have a visitor who smokes, politely request that he or she does not smoke inside your home. If you are visiting a home in which someone smokes, try to stay outside or in a different room as much as possible. Open the windows to provide fresh air.

Creating a Smoke Free Society

- In Most states, it is illegal to sell tobacco to teens under the age of 18, and it is illegal to smoke in public places.
- Medical research shows that any exposure to secondhand smoke can cause health problems. When a smoker chooses to smoke, that person makes a decision that affects his or her health, and the health of others. In the United States, efforts to create a smoke-free society continue to grow. The health effects of tobacco use, and the cost of health-related illnesses are just some of the reasons for this movement.
- According to the US Surgeon General, the only way to fully protect people from damaging health effects of ETS is to prohibit smoking in public places. Many states now prohibit smoking in any workplace. Advertisements aimed at young people encourage them not to smoke, and public service announcements encourage parents not to smoke near their children.

Supporting National Health Goals

1. One of the goals of the healthy people 2020 is to reduce tobacco use and the number of tobacco-related deaths.
2. States and local communities are also supporting the efforts to create a smoke-free society.
3. Laws prohibiting the sale of tobacco to minors have been enacted.
4. Some states have successfully sued tobacco companies to recover the cost of treating tobacco-related illnesses.
5. Community activities that promote healthy lifestyles provide everyone with the opportunity to practice healthful behaviors. These activities allow anyone to become a role model encouraging others to avoid tobacco use.

Title: "Reduce effects of ETS"

- If a family member smokes, ask the family member to quit by explaining the health effects for smokers and nonsmokers.
- Establish your home as a smoke free environment.
- Use air cleaners in your house.
- Open windows if smoking is occurring indoors.
- Meet somewhere else if smoking occurs indoors.

Title: "Health risks to young children"

1. Children of smokers tend to have a higher incidence of sore throats, ear infections, and upper respiratory problems than children of non-smokers.
2. Secondhand smoke can slow lung development. Children who live with smokers are more likely to have weaker lungs than children of non-smokers.
3. Also, children learn by example. The children of smokers are more than twice as likely to smoke themselves.

Microlesson Title: Tobacco-Persuade Others

Title: Tobacco – Persuade Others Presentation

Tobacco – Persuade Others

- Knowing the facts about tobacco should lead to persuading others not to use tobacco.

Are Teens Starting to Smoke?

- According to the CDC, did you know that each day there are more than 3,200 people, under the age of 18, who smoke their first cigarette?
- The Centers for Disease Control and Prevention (CDC) found that in 2012, 7% of middle school and 23% of high school students reported current use of a tobacco product.
- And according to the Department of Health and Human Services it is estimated that each day approximately 2,100 youth and young adults who are occasional smokers become *daily* smokers.
- Adolescent tobacco use is concerning because adolescents are still growing and their brains are still developing. Signals in the brain move more slowly than in a mature brain. The decision-making part of the teenage brain that is responsible for impulse control and planning is not fully developed, so teens may make more impulsive decisions — such as starting to smoke tobacco — compared to adults.
- In addition, a recent research study suggested that teenagers may be more vulnerable to nicotine addiction than adults. This study showed that adolescent rats were more prone to developing addiction than adult rats, and this increased susceptibility may be linked to differences in activity between the adolescent brain and the adult brain.
- Smoking around friends or siblings can also be damaging to them, as secondhand smoke is a known harmful toxin.
- Teens who smoke may be sick more often than their non-smoking peers and may develop lung problems or have more asthma attacks. This can harm their athletic performance
- Smoking may lead to the use of alcohol and other drugs.
- Smoking has a negative effect on their personal appearance (i.e., bad breath, yellow teeth, poor skin).

- Tobacco use is the single most preventable cause of death in the United States and in the world.
- Smoking is a well-known cause of heart disease, cancers, and stroke.
- Smoking decreases life expectancy.
- Nicotine has adverse effects on brain development which could have lasting effects on memory and attention.

Teens Against Tobacco Use (TATU)

- Teens Against Tobacco Use (TATU) is a program that allows students ages 14-17 to mentor youngsters about the dangers of smoking. Research indicates that teens enjoy opportunities to positively influence their younger counterparts. Consequently, this mentoring also serves to reinforce their decisions to remain smoke-free. Evidence suggests that peer-led programs such as TATU are more effective in reducing tobacco use among youth.

The Need for Tobacco Education

1. Tobacco use begins at an early age. Almost 90 percent of all smokers begin before the age of 18.
2. Everyday more than 4,000 kids try their first cigarette; and each day more than 2,000 other kids under 18 years of age become new regular, daily smokers. That's more than 750,000 new underage daily smokers each year.
3. The tobacco industry concentrates its marketing efforts on our nation's children. They recognize that new smokers must continually be recruited to replace the nearly half-million who die annually of tobacco-related illnesses.

Title - "Facts about smoking"

1. According to the CDC, did you know that each day there are more than 3,200 people, under the age of 18, who smoke their first cigarette?
2. The Centers for Disease Control and Prevention (CDC) found that in 2012, 7% of middle school and 23% of high school students reported current use a tobacco product.
3. And according to the Department of Health and Human Services it is estimated that each day approximately 2,100 youth and young adults who are occasional smokers become *daily* smokers.
4. Most adult smokers today state that they started smoking by age 18. In 2010, close to 70% of adult smokers reported that they would like to quit.

Title - "Harmful effects of teen smoking"

1. **Reduced physical fitness.** Smoking reduces lung function and lung growth. It also causes shortness of breath, coughing, wheezing and increased phlegm
2. **Early heart disease.** Smoking can damage the heart and blood vessels which can increase the risk for atherosclerosis and heart disease
3. **Poor oral health.** Smokers may suffer from yellow teeth, bad breath and other mouth problems
4. **Poor skin.** Smoking is associated with skin wrinkling and early skin damage

Title - "Teens should know"

1. Smoking around friends or siblings can also be damaging to them, as secondhand smoke is a known harmful toxin
2. Teens who smoke may be sick more often than their non-smoking peers and may develop lung problems or have more asthma attacks. This can harm their athletic performance
3. Smoking may lead to the use of alcohol and other drugs
4. Smoking has a negative effect on their personal appearance (i.e., bad breath, yellow teeth, poor skin)
5. Tobacco use is the single most preventable cause of death in the United States and in the world
6. Smoking is a well-known cause of heart disease, cancers, and stroke
7. Smoking decreases life expectancy
8. Nicotine has adverse effects on brain development which could have lasting effects on memory and attention