**Unit 7 Chapter 20 Tobacco**

**\*\* 26% of teens have reported current tobacco use- cigarettes, cigars, and smokeless tobacco\*\***

**Over 6.4 million children who are alive today will die of a smoking-related illness.**

Advertisements for tobacco products often feature healthy attractive people, sending the message that using tobacco has no health problems so what is the truth?

**Nicotine-** the addictive drug found in tobacco leaves.

**Additive drug**- a substance that causes physiological or psychological dependence.

**Stimulant-** a drug that increases the action of the central nervous system, the heart, and other organs. Nicotine is a stimulant, it raises blood pressure, and increases the heart rate.

**Carcinogen-** a cancer-causing substance. Tobacco is addictive and toxic.

**Tar-** a thick, sticky, dark fluid produced when tobacco burns cigarette smoke contains tar It damages a smoker’s respiratory system by paralyzing and destroying cilia. Tar also destroys the alveoli, or air sacs which absorb oxygen.

**Carbon monoxide-** colorless, odorless, and poisonous gas, is another compound found in cigarette smoke. It is absorbed more easily than oxygen. It 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.

**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 cigarettes. Pipe and cigar smokers also increase the risk of developing cancers of the lips, mouth, throat, larynx, lungs, and esophagus.

**Smokeless Tobacco-** tobacco that is sniffed through the nose, held in the mouth, or chewed. THESE 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. The harmful chemicals of smokeless tobacco are absorbed into the body at levels up to three times the amount of a single cigarette.

**Leukoplakia-** or thickened, white, leathery-looking spots on the inside of the mouth that can develop into oral cancer. Smokeless tobacco causes cancers of the mouth, throat, larynx, esophagus, stomach, and pancreas.

**Short Term Effects**

**Brain chemistry changes-** The additive properties of nicotine cause the body to crave more of the drug.

**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 reduced-** Tobacco users often lose much of their ability to enjoy food.

**Users have bad breath, yellowed teeth, and smelly hair, skin, and clothes-** tobacco use continues for any length of time, these unattractive effects can become permanent.

**Long Term Effects**

**Chronic bronchitis-** can occur when the cilia in the bronchi become so damaged that they are useless. This leads to a 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. The air sacs become less elastic, making it more difficult for the lungs to absorb oxygen. A person with advanced emphysema uses up to 80 percent of this or her energy to breathe.

**Lung Cancer-** can develop when the cilia in the bronchi are destroyed, and extra mucus cannot be expelled. Cancerous cells can multiply, block the bronchi, and move to the lungs. Nearly 90% of lung cancer deaths are caused by smoking.

**Coronary heart disease and stroke-** can be caused by nicotine. Nicotine constricts 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 hardened arteries, a condition called arteriosclerosis. Arteries may become clogged, increasing the risk of heart attack and stroke.

**Weakened immune system-** from long-term tobacco use makes the body more vulnerable to disease.

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

**Mainstream smoke-** the smoke exhaled from the lungs of a smoker.

**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. Infants and young children who are exposed to ETS are more likely to develop asthma than their peers who are not exposed to ETS.
* 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 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).

**Chapter 21 Alcohol**

**Ethanol-** the type of alcohol in alcoholic beverages- powerful and addictive drug.

**Fermentation-** is the chemical action of yeast on sugars. Water flavoring, and minerals are mixed with ethanol to produce beverages such as beer, wine, and flavored malt-liquor drinks. Alcohol also can be processed to create spirits, or liquors, such as whiskey and vodka.

**Depressant-** a drug that slows the central nervous system (Alcohol.) Using alcohol slows reaction time, impairs vision, and diminishes judgment. Consuming too much will cause a person to become intoxicated.

**Intoxication-** is the state in which the body is poisoned by alcohol or another substance and the person’s physical and mental control is significantly reduced.

**Factors that influence alcohols effects**

**-Body Size:** smaller person feels the effect of the same amount of alcohol faster than a larger person does.

-**Gender:** alcohol generally moves into the bloodstream faster in females than males because women have smaller bodies.

-**Food:** food in the stomach slows down the passage of alcohol in the bloodstream.

-**Rate of Intake:** if a person drinks alcohol faster than the liver can break it down, the person becomes intoxicated.

-**Amount:as** the amount of alcohol consumed increases, the level of alcohol in the bloodstream rises.

**-Medicine:** alcohol can interfere with the effects of medicines, and medicines can heighten the effects of alcohol.

Alcohol can change the effect of medicines. These interactions can lead to illness or death.

**Long Term Effects**

* Can have long term effects on a users physical, mental/emotional, and social health
* Damage to brain cells and a reduction in bran size.
* Increase in blood pressure, which may lead to a heart attack or stroke.
* Buildup of fat cells in the liver, which can lead to cell death
* Damage to the digestive lining of the stomach causing ulcers, and cancer of the stomach
* Destruction of the pancreas.

**Binge Drinking-** drinking five or more alcoholic drinks in one sitting, and is a serious problem.

**Alcohol poisoning-** a severe and potentially fatal physical reaction to an alcohol overdose.

* Mental confusion and stupor
* Coma and an inability to be roused
* Vomiting and seizures
* Slow respiration ten seconds between breaths or fewer than eight breaths per minute
* Irregular heartbeat
* Hypothermia or low body temperature pale or bluish skin color.

**Psychological dependence-** a condition in which a person believes that a drug is needed in order to feel good or to function normally.

**Physiological dependence-** a condition in which the user has a chemical need for a drug.

\*\* It is illegal for anyone under the age of 21 to buy, possess, or consume alcohol. For teens who break the law consequences can be very serious. Teens can be arrested and sentenced to a youth detention center. Arrest can limit college and employment options.

\*\* alcohol impairs judgment and lowers inhibitions and can cause a person to compromise his or her values. Teens who use alcohol are likely to become sexually active at an earlier age, and to engage in unprotected sexual activity. Teens who drink are twice as likely to contract an STD than teens who do not.

**Alcohol abuse-** the excessive use of alcohol

**Alcoholism-** is a disease in which a person has a physical or psychological dependence on drinks that contain alcohol.

**Blood alcohol concentration (BAC)-**  is the amount of alcohol in a person’s blood, expressed as a percentage. Depends on the quantity and type of alcohol that is consumed.

**Driving while intoxicated (DWI) or Driving under the influence (DUI) are illegal. Adult drivers with a BAC of 0.08 percent can be charged with drunk driving.**

* Injuries or death of the driver and others
* Arrest, jail time, court appearance and fine or bail, a police record, and possible lawsuits.
* Severely restricted driving privileges and/or immediate confiscation of driver’s license
* Higher auto insurance rates or canceled insurance policy

**Fetal alcohol syndrome (FAS)-** a group of alcohol-related birth defects that include physical and mental problems.

* Small head and deformities of face, hands, or feet
* Heart, liver, and kidney defects
* Vision and hearing problems
* Central nervous system problems, developmental disabilities and poor coordination
* Difficulties learning and short attention span
* Hyperactivity , anxiety, and social withdrawal

**Alcoholic-** is an addict who is dependent on alcohol.

-Stage 1 abuse: may begin with social drinking. A physical and psychological dependence develop. Person may experience memory loss and blackouts. May lie or make excuses to justify his or her drinking.

-Stage 2 Dependence: person cannot stop drinking and is physically dependent on alcohol.

-Stage 3 Addiction: the final stage of alcoholism, the person is addicted. At this stage the liver may already be damaged.

**Recovery-** is the process of learning to live an alcohol-free life.

**Sobriety-** living without alcohol

Al-anon/alateen-helps families and friends learn to deal with the effects of living with an alcoholic

Alcoholic anonymous- provides help for alcholics

Mothers against drunk driving (MADD)- provides education to prevent underage drinking

Students against drunk driving (SADD)- provides peer led education about avoiding alcohol use