Unit 5: Drugs: Uses and Misuses

Introduction

Hardly a day goes by without a story in the news about **drugs**. Someone is killed in a drug deal. Someone dies of an **overdose** of drugs. Someone commits a crime to get money to buy drugs. Someone hurts or kills other people because he or she is out of control while on drugs.



Drug overdoses cause many deaths.

One-half of all the people in our jails and prisons are serving time for selling, buying, or using illegal drugs. Some of the more common illegal drugs include *cocaine*, *marijuana*, and *heroin*.

However, illegal drugs make up only half the story. The use and misuse of *legal* drugs harms our families and communities as much, or even more, than the use of illegal drugs does. But because **alcohol** and **tobacco** are legal, we may be shocked by the cost we all pay when they are misused.

The number of deaths, injuries, and illnesses because of legal and illegal drugs is staggering. In more than one-half of all car crashes in which someone dies, one of the drivers has been drinking. Driving while under the influence of

alcohol or riding with someone under the influence is the leading cause of death among teenagers. Every year 40,000 teenagers are crippled or disfigured because of someone who drove after drinking. Misusing alcohol not only impairs our judgement and causes us to lose our ability to control a car, it also can make us violent and out of control. More than one-third of all murders, rapes, and assaults are committed by someone who was drinking.



influence of alcohol or riding with someone under the influence is the leading cause of death among teenagers.

Cigarette smoking and inhaling the smoke from someone else's cigarette are among the leading causes of death in the United States. More Americans will die from tobacco this year than will die from all other drugs—including alcohol—combined! More Americans will die this year from tobacco than have died in World War I, World War II, and the Vietnam War—combined!

Drugs: Affecting the Body, the Mind, or Both

A *drug* is any chemical substance that causes a change in the body, the mind, or both. Some drugs are used to promote health. These drugs are called *medicines*. When we get a flu vaccine, we are taking a drug that can *prevent disease*. When we take an antibiotic to fight an infection, we are taking a drug to help *cure a disease*. When we take an aspirin for a headache, we are taking a drug to *relieve* a symptom—pain.

Some drugs are taken to produce a desired feeling. These drugs are called *drugs of abuse*—they are not taken for

A drug is any chemical substance that causes a change in the body, the mind, or both.

medical purposes. When someone uses a drug such as marijuana, the **user** does so to *feel the effects* of the drug. Marijuana and other drugs of abuse can produce feelings of intense pleasure, or **euphoria**. Some drugs of abuse produce feelings of increased energy. Some produce a feeling of tranquillity. These drugs produce certain feelings or emotions by affecting the body's **nervous system**.

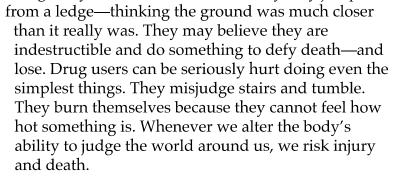
The *nervous system* includes the brain, the spinal cord, and the body's nerves. Chemical reactions in the brain enable us to think, feel, and move. When we lift an arm, a message from the brain travels down the spinal cord and through nerves to the muscles in the arm. When we touch scalding water, skin receptors in our fingers send a message to our brain, alerting us to danger. When we feel pleasure or pain from a sound, sight, or thought, we are experiencing a chemical reaction.

When drugs of abuse act on the nervous system to produce a desired feeling, they also cause abnormal chemical reactions in the brain. These abnormal effects on the nervous system often cause slowed reaction time, slurred speech, blurred vision, and impaired judgment.

Drugs: Clouding the Mind, Damaging the Body

Because drugs of abuse affect the way users see and think about their surroundings, users may do something that causes injury or death to themselves or to others. Everyone has heard of an accident caused by a teenager who drove while drunk and couldn't see the road or other cars clearly. Alcohol, cocaine, and other drugs of abuse can also cause users to

do things they otherwise would not. They may jump



Some drugs cripple or kill by attacking the body. Smoking tobacco may cause emphysema, a disease that destroys the lungs and suffocates the victim. Drinking may cause cirrhosis, a liver disease that is often fatal. When we take drugs for medical purposes, we can improve the health of the body. But when we take drugs for nonmedical purposes, we damage the body.

The Different Kinds of Drugs: Over-the-Counter, Prescription, and Illegal Drugs

Drugs are classified in three different ways: **over-the-counter drugs**, **prescription drugs**, and illegal drugs. These classifications describe how a drug can be obtained.

Over-the-counter drugs are available without a

prescription, or doctor's note. They can be found on the shelves of any drug store or pharmacy. These drugs include aspirin, cold remedies and cough syrups, laxatives, some antihistamines, and many others. These drugs have instructions that are easy to follow. Over-the-counter drugs are also called *nonprescription drugs*.



Over-the-counter drugs are available without a prescription.

Prescription drugs can be obtained only with a doctor's note, or prescription. A patient presents a prescription to

a pharmacist. The pharmacist fills the prescription and provides the patient with instructions on how to use the drug. Instructions include the **dosage**, or how much of the drug is to be taken, and how often it should be taken. Prescription drugs



Prescription drugs can be obtained only with a doctor's note, or prescription.

can do wonders. They can help a patient fight a life-threatening disease. They can ease a patient's pain. They can help a patient experience the world in a normal way.

Sometimes drugs are called *illegal* because they were obtained without a prescription. For example, a tranquilizer is a drug that helps people relax. If a doctor prescribes a tranquilizer to a patient, the drug is legal. If, however, someone buys the drug without a prescription, the drug is illegal. Some drugs are always illegal because they cannot legally be sold or bought. Illegal drugs such as *heroin* or *LSD* are not used for medical purposes. A doctor cannot prescribe them to a patient.

Drugs are complex and mysterious substances. Doctors and scientists are always increasing their knowledge about how a drug works. Therefore, a drug may at first be put into one class and then later be changed to a different class. If an *over-the-counter* drug turns out to be easily misused, its classification may be changed to *prescription*. In some cases, as more is learned about a drug, its classification may even be changed to *illegal*. Regardless of whether a drug has been classified as over-the-counter, prescription, or illegal, any drug can be misused. Legally owning a drug does not give anyone the right to give the drug away, sell it, or use the drug in a way it was not intended. These are crimes.

Over-the-Counter Drugs: Treating Minor Medical Problems

Over-the-counter drugs are used to ease minor medical problems. Aspirins may help lessen the pain from headache. Cough syrup helps eliminate the urge to cough. Laxatives can help the occasional bout with constipation.

These drugs generally do not produce feelings or behaviors that people want. Therefore, they are generally not used for unintended purposes. However, if someone does not follow the instructions on these drugs or uses them in ways they are not intended, then the person is misusing

these drugs. Even these relatively safe drugs can cause harm. Too much aspirin can cause internal bleeding and other disorders. The constant use of cold remedies can harm a person's sinuses. And many of these drugs can cause sleepiness or an inability to sleep and relax.

Effects and Hazards of Analgesics			
Aspirin	relieves painreduces feverreduces swelling	causes stomach irritation and bleeding associated with Reye's syndrome in children and adolescents	
Ibuprofen	relieves painreduces feverreduces swelling	may cause liver damage in high doses	
Acetaminophen	relieves painreduces fever	can cause stomach irritation and bleeding	

Prescription Drugs: Legal but Dangerous

Prescription drugs are not available without a doctor's note because they can be dangerous. If taken without a doctor's guidance, these drugs can harm and even kill a person. All prescription drugs have **side effects**. In addition to acting on the body in a desired way, they also act on the body in an undesired way. The *dosage* of a prescription drug needs to be matched to a patient's weight, age, and other factors. A doctor needs to be sure a patient is not **allergic** to a drug. A doctor even needs to be sure that a prescription drug will not mix in a harmful way with another drug a patient is taking. When two or more drugs are taken at the same time, they can change the way each affects the body. One drug can make another stronger or weaker. One drug can mix with another drug to produce a chemical that acts like a poison in the body.

Appropriate Use of Prescription Medication		
Don't take a prescription medication unless it was prescribed for you.		
Do tell the doctor if you have had an allergic reaction to any medication.		
Don't mix medications without checking with your physician or pharmacist.		
Do take the medication for the prescribed length of time and dosage the doctor prescribes.		
Don't think that if a little bit of the drug makes you feel good, that more will make you feel better.		
Do ask the pharmacist to tell you the prescription medication's purpose, side effects, and interaction with food and other medications.		
Don't use a medicine prescribed for someone else even if you have the same symptoms.		

Illegal Drugs: Street Drugs

Illegal drugs are often called *street drugs*. Some people use an illegal drug because they want to experience its effects. Some people use illegal drugs because they have developed a need for a drug.

You are breaking the law when you buy, sell, or use an illegal drug. In Florida, more than

half of all prison cells are filled with drug offenders. The penalties are severe, and a drug record can follow you for the rest of your life.

The Misuse and Abuse of Drugs: Self-Abuse

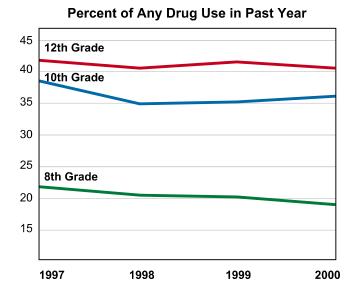
Drug **misuse** describes taking a drug for the correct purpose but not following the instructions written on the package or given by the doctor or pharmacist. If the package or prescription says to take a drug every six hours and someone takes the drug every four hours, that is called *drug misuse*. If the safe dosage for a drug is one pill or tablet and someone takes two pills or tablets, that is also called *drug misuse*.

Drug abuse describes the taking of a drug for something other than medical purposes. Using alcohol or cocaine to change the way we feel is an example of drug abuse. Taking a drug in a way that can hurt a person's health is also an example of drug abuse.

Drugs of Abuse: Altering the Mind and Causing Addiction

Unlike other drugs such as aspirin or antacids, drugs of abuse have certain effects that make them particularly dangerous to the person who uses them. Drugs of abuse change the user's mood or the way a user feels. They can change the way a user thinks or behaves. They can create drug addiction, or a need for the drug. Drug addiction is also called chemical dependency. The addict has become dependent on the chemical or drug.

Drugs of abuse include *alcohol*, *marijuana*, *LSD*, *mescaline*, *cocaine* (and *crack cocaine*), *amphetamines*, *barbiturates*, *tranquilizers*, *morphine*, *heroin*, *codeine*, and *ecstacy* (a **designer drug**).

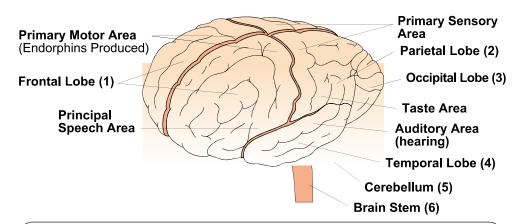


Although the drug in tobacco—**nicotine**—is not considered a drug of abuse, it is one of the most dangerous and damaging drugs in our society.

Altering the Mind: Producing a *High*

Drugs of abuse act on the brain to alter the mood or feelings of the user. Some drugs of abuse such as marijuana and morphine trigger the brain to produce *endorphins*. Endorphins are strong chemicals that eliminate pain and fear and produce euphoria.

View of the Brain



- (1) Frontal Lobe used for reasoning, emotions, judgment, and voluntary movement
- (2) Parietal Lobe contains important sensory centers
- (3) Occipital Lobe contains the centers of vision and reading ability
- (4) Temporal Lobe contains centers of hearing and memory
- (5) Cerebellum regulates balance, posture, movement, and muscle coordination
- (6) Brain Stem regulates circulation and respiration

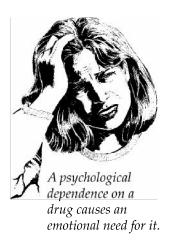
Endorphins, which alleviate pain and fear and induce euphoria, are produced in the primary motor area of the brain. Morphine acts like endorphins, producing the same effects.

Tranquilizers or *barbiturates* produce a soothing and quieting feeling by turning off the excitable tissue in the brain or by depressing the nervous system. *Stimulants* excite the brain and stimulate the nervous system.

The feelings these drugs produce make the user want to use them again. When any of these drugs are taken without following doctor's instructions, they are being abused. Abuse can lead to addiction.

Addiction: The Hook

Drugs of abuse are **addictive**. When a person is addicted to a drug, he or she feels a need for the drug. Addiction to a drug can be physical and psychological. When a person has a **physical dependence**, or has a *physical addiction* to a drug, the body will not function normally without the drug. A person addicted to alcohol needs alcohol to do even easy and routine tasks. Without alcohol, the person will become ill and be unproductive. When a person has a **psychological dependence** on a drug, or has a psychological *addiction*, the drug user feels the emotional need for a drug. The user's mind will be distracted with thoughts of getting and using the drug. Some drugs, such as marijuana, can cause psychological addiction without causing physical addiction.



Drugs of abuse also cause the user to develop tolerance for a drug. The more a person uses a drug of abuse, the more of that drug is needed to get the effects desired. At first, an alcoholic may need six beers to satisfy an addiction. Later on the alcoholic may need eight beers, and then 10 beers, and so on and so on. All drugs of abuse damage the body. The greater the amount used, the greater the damage to the body. In some cases, drug abusers have developed such a high tolerance for a drug that they actually died from the increased dosage they needed.

Drugs of abuse make users not care about the damage the drug is doing to their health. Smokers know cigarettes will kill them, but the need for cigarettes has become greater than their fear of poor health and death. Amphetamine users—called *speed freaks*—may know that they are at risk of having a heart attack or stroke, but they will continue to *speed*.

In lab tests, rats have been given an endless supply of different addictive drugs, such as cocaine. Rats will become so addicted to cocaine that they will stop eating and doing anything else—except taking more and more cocaine. They will continue taking the drug until it kills them. We may be smarter than rats, but many people respond in a similar way to addictive drugs. Many people will continue taking a harmful drug until it damages their health or even kills them.

Drugs of abuse are very hard to quit. Addiction may be a slow process, taking years, or it may start with only *one* use. Once a person has struggled with addiction, that person will always have to fight the disease and work to remain drug free.

Stage 1 - First Use

This is the first time the person is introduced to the substance of choice and has no intention of becoming addicted. The person may think he or she will just try it once or that occasional use can't do any harm. The person may have felt pressured socially or just curious. The user may then like the temporary feeling the alcohol or drug of choice gives him or her.

Stage 2 - Regular Use

This is the stage where the person finds out they like the feeling the substance temporarily gives him or her. The person may need the drug more often. He or she may also need it in greater amounts and have trouble controlling the use of the drug. The user may use the drug to hide from problems. The user may deny he or she has an addiction to alcohol or drugs.

Stages of Addiction

Stage 4 - Dependence

170

The person is out of control with his or her alcohol or drug use. The user becomes isolated from friends and experiences major health, work, and school problems. The person could easily have a serious accident from the substance abuse.

Stage 3 - Increased Use

The person may start to combine drugs. He or she is beginning to have problems functioning in everyday life and begins to lose control of things that used to be important to him or her. This is the stage when he or she begins having major problems at school and work, and friends and loved ones begin to be tired of his or her behavior. The user still believes he or she is in control of the alcohol or drug of choice.

The Cycle of Drug Use: Use, Abuse, Addiction, and Withdrawal

The drug user often goes through four stages: drug use, drug abuse, drug addiction, and *withdrawal*. Although most drug addicts go through these stages, the adolescent is particularly vulnerable to drug addiction. Some scientists believe that the adolescent's brain, which is still developing, is affected more than an adult's brain by the chemicals in drugs.

Drug Use: Socializing with Drugs

Although people who take drugs of abuse may end up as drug addicts, they usually do not become addicted at first. Most drug addicts begin by smoking the occasional cigarette as an adolescent. They may also drink alcohol. They experiment with an illegal drug such as marijuana. These drugs were used at parties on weekends and perhaps occasionally on a weeknight. At this point, the adolescent could still control the use and could decide not to smoke, drink, or use marijuana.

Drug Abuse: The Move towards Addiction

Some adolescents who occasionally use drugs will begin to use them more frequently. They will begin to buy their own drugs and will use them when alone. They can still choose how much of a drug they will do and when they will do a drug. They do not show up at school or home intoxicated, or high.

Drug Addiction: The Drug Takes Over

Adolescent users now use the drug every day or nearly every day. They have developed a tolerance to the drug, so they increase how much they take. They would rather be by themselves than with friends or family. Or they only want to be with others who do drugs. Most or all of their activities now involve buying and doing drugs. Their family relationships and school work suffer. They may be arrested for driving while intoxicated or for buying or possessing a drug. The desire for the drug has taken over their life.

Withdrawal: One Price of Addiction

Addiction to a drug is also called *chemical dependence*. The body's *chemistry* has come to *depend* on a drug. Without the drug, the body experiences many problems. The drug addict's vision may become blurry. The addict may experience stomach cramps and diarrhea. Tremors, or the *shakes*, may occur. The addict may experience cold sweats—feeling both feverish and icy cold. The drug addict in withdrawal may even experience **hallucinations**: The addict may see, hear, and feel things that are not really there.

Addiction to a drug also causes *psychological dependence*, or a craving for the drug. The user may be willing to do anything to get the drug. The emotional need for drugs can cause a person to do things he or she would never do when *straight* and *sober*. People who would otherwise respect their body will sell it to others, even at the risk of contracting the deadly AIDS virus. Getting the drug becomes more important than life.

The physical and psychological symptoms experienced by drug users when they quit are part of **withdrawal**. Withdrawal can be so painful that many drug addicts continue to use drugs *not because they enjoy the drug* but because they do *not want to go through the pain of withdrawal*.

Why People Start Using Drugs

There is probably no single reason why people decide to start taking a drug. Some scientists argue that certain people have personality traits that lead them into drug taking. They may be curious and adventurous. Or they may be particularly vulnerable to peer pressure. When friends dare them or encourage them to take drugs, they are not strong enough to refuse.

The particular experience a person has with a drug can also affect his or her decision to experiment with the drug a few more times. One person may try marijuana and feel sick or feel nothing at all. Another person may experience euphoria. One person may drink and experience a terrible hangover. Another person may wake up after a night of drinking and feel fine.

How society responds to drug use is another factor in whether people will start to use drugs. Drinking alcohol and smoking cigarettes is tolerated in the United States. People who drive while intoxicated may not suffer severe penalties. Consequently, adolescents and young adults may not view drinking to get drunk as an inappropriate or irresponsible behavior.

The media—films, television, magazines, books, and music—sometimes show drug use as being sexy, glamorous, or exciting. The rugged cowboy who smokes is still a heroic figure in the media. The wealthy playboy who does cocaine can be an attractive model for some people. Of course, in real life, drugs do not make people sexy or attractive. Drugs make people sick. After a few years of doing drugs, the drug user's body will begin to show deterioration. The user's mind will not be as sharp.

Unfortunately, when teenagers look at other teenagers who do drugs, they do not see the damage that will occur in the future. Most teenagers have not been using drugs long enough to begin showing the harmful effects.

Doing drugs may be a way to rebel. Young people do drugs to rebel against parents, school, and society's expectations of them. People do drugs to escape boredom, to experience something new, or to take a risk. Some people start to use drugs to stay awake, to sleep, or to relieve pain. Some people do drugs to numb themselves from the emotional pain they feel.

Some people do drugs to numb themselves from the emotional pain they feel.

Adolescents who feel unloved by their parents, or spouses who feel unloved by their husbands or wives, may try to turn off their pain by turning off their feelings with drugs.

Why People Continue Using Drugs

The reasons why people start using drugs are often not the reasons why they *continue* to do drugs. Drugs of abuse create euphoria, or a feeling of being "high." People become addicted to those feelings. Drug addicts who use heroin would use milk powder if it would give them the same feelings. When the drug wears off, drug users feel depressed. They then need more of the drug to relieve and escape their depression. Drug users fall into a vicious cycle. They take a drug to feel high. But after feeling good, they crash into painful and lonely feelings. They then need the drug to escape the bad feelings with which the drug has left them.

People often continue to use drugs because they *cannot stop*. Alcoholics, cigarette smokers, crack cocaine addicts—most people who recognize their addiction to a drug do not want to continue their drug use. Just ask them! But drug addicts believe that they will die if they do not get the drug. They believe that the drug is what makes their life worth living. Once the cycle of abuse is established, it is hard to break.

How to Say "No" to Alcohol and Other Drugs

Saying "No" to alcohol and other drugs is not easy for teenagers or adults. Imagine you are at a party where it seems everyone is drinking. Someone

> offers you a drink and you say, "No thank you." The person begins to pressure you: "Come on, have a drink, it won't kill you!" You say again, "No thanks, I really

don't want one."

The person starts to tease you, even insult you. "Why not, are you chicken? Can't you handle a beer?" At this point, you will want to put an end to this lack of respect for nondrinkers. So simply say: "I don't drink because I don't want to drink." You don't owe anyone more of an explanation. It's your choice and you've made it!

Saying "No" to alcohol and other drugs is not easy for teenagers or adults.

If that person continues to pressure you, simply walk away. No one should pressure you to drink. Only people who have a drinking problem themselves pressure other people to drink (or do drugs).

Alcohol: The Most Commonly Abused Drug

Alcohol is the drug in *beer*, *wine*, and *liquor*. Liquor includes whiskey, gin, and vodka. It is the only legal drug that produces euphoria and can be bought without a prescription. Perhaps that is why alcohol is the most commonly abused drug among teenagers and adults. In the United States, there are an estimated 10 to 16 million alcoholics, or people who are addicted to alcohol.



Alcohol is the most commonly abused drug among teenagers.

Many millions more abuse alcohol occasionally. One such pattern is called *binge drinking*. Binge drinking is periodic excessive drinking. A danger associated more with binge drinking than any other pattern of abuse is *alcohol poisoning*. Alcohol poisoning is a dangerous toxic condition that occurs when a person drinks a large amount of alcohol in a short period of time. The brain's ability to control breathing can be interrupted and death can result.

Of all drugs, alcohol can be the easiest to become addicted to and the hardest to quit. We see alcohol from the time we are a child. It's advertised on television. We see people using it to celebrate special occasions, such as weddings or birthdays. Alcohol is even a part of some religious customs. We watch as our parents or characters in movies use alcohol to unwind and relax in the evening. And alcohol has even become a symbol of growing up. When we reach legal age, we go to a bar and have a drink to show we're *legal*.

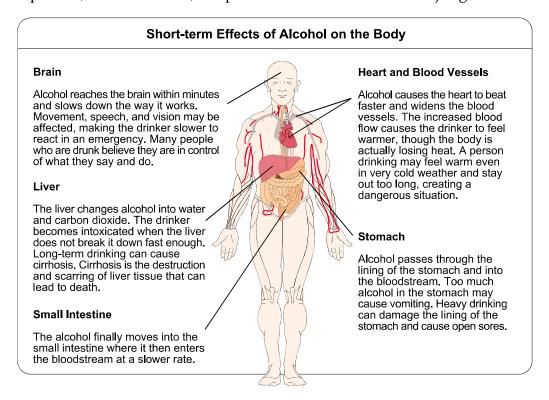
Unlike other drugs of abuse, alcohol can be legally used. If people are trying to stop taking an illegal drug, they can stay away from sellers and other people who use them. It is nearly impossible, however, to stay away from alcohol. We see it in supermarkets and even drug stores. We see people drinking it at restaurants and on television programs. No wonder alcohol has become such a problem in our society.

How Alcohol Affects the Body: Attacking the Central Nervous System

A few minutes after alcohol is drunk, it enters the body's bloodstream. Once in the bloodstream, alcohol travels to every part of body. Drinkers feel the effects of alcohol as it deadens the nervous system. The brain loses some or all of its ability to control behavior. When drinking alcohol,

people lose their **inhibitions**. Without inhibitions, they may do many things they will regret. Some people on alcohol are willing to engage in risky sex. Sex without protection can lead to a sexually transmitted disease (STD) such as the deadly AIDS virus.

Loss of inhibitions may make some people talk more or become loud and aggressive. Some people may become violent. Although alcohol makes some people more active and aggressive, it is not a stimulant. Alcohol is a **depressant**. It encourages aggressive and risky behavior because it depresses, or shuts down, the part of the brain that controls judgment.



Alcohol also affects the cerebral cortex, the part of the brain where thinking takes place. A person drinking alcohol may forget recent memories and worries. Some people use alcohol to forget unpleasant events. When alcohol wears off, however, the memories and worries return. Covering them up does not make problems go away. Alcohol is *not* a healthy way to resolve problems.

Alcohol also numbs muscle coordination. We all know how people who are drunk move their bodies. They stagger and flail about. Because alcohol deadens the brain's ability to make judgments, drinkers may not be aware of having lost coordination. They may believe they can safely drive a car

or swim when they cannot. However, look at the statistics. In the United States, there is an average of one alcohol-related car accident resulting in a death every 32 minutes. On the average, one person is injured in alcohol-related crashes every two minutes.

Blood Alcohol Level (BAL): The Measure of Alcohol in the Body

How alcohol affects the body depends mostly on something called the **blood alcohol level (BAL)**. In the person who does not abuse alcohol, the liver can process about one drink an hour. One drink equals one 12-ounce beer, one 5-ounce glass of wine, or 1.5 ounces of liquor. If a person takes more than one drink an hour, the alcohol begins to build up and affects the body more and more. The chart on the following page describes the effects caused at different BALs.

Alcohol Content in One Drink



A 12 ounce beer has the same amount of alcohol as a 5 ounce glass of wine. A 5 ounce glass of wine has the same amount of alcohol as 1.5 ounces of liquor.

The effects of alcohol on a person depend on the amount consumed and other factors. Someone who has recently eaten will feel the effects of alcohol more slowly than someone who has not eaten. The same amount of alcohol will affect a thinner person more than it will affect a heavier person. A person who drinks often will develop a tolerance to alcohol. The more often the person drinks, the more alcohol the person will need to become drunk.

If you drive while under the effects of alcohol (DUI) or while intoxicated (DWI), you stand a good chance of being arrested and losing your license. That is, of course, if you are not one of the thousands upon thousands of Americans who will die this year in a car crash caused by someone who is drunk.

	The Effects of Alcohol		
Approximate Blood Alcohol Level	Number of Drinks in a One-Hour Period	Effect on a 140-Pound Person	
.025	1	feeling of well-beingfeeling relaxed and warmimpairment of judgement	
.05	2	 slower reactions inhibitions and self-control lessened behavior can become silly and impulsive 	
.075	3	 hearing and speech affected coordination and reflexes impaired person can no longer make reliable decisions about driving 	
.1	4	 legally drunk status in most states* vision, hearing, and speech impaired judgement and reflexes impaired 	
.161	6	 legally drunk status in most states* blurred vision speech and hearing severely impaired 	
.215	8	extreme intoxicationno control over thoughts and perceptionsdifficulty walking and standing	
.321	12	 severe and dangerous intoxication brain unable to control breathing coma or death 	

* In Florida, legally drunk status is .08 for adults and zero tolerance or .02 for driver's under the age of 21.

The Hangover: Recovering from Alcohol

g TI F

A hangover is really their body going through withdrawal.

When most people wake up after a long night of drinking, they experience a *hangover*. A hangover is really their body going through withdrawal—it no longer is getting alcohol. Their head can feel as if it's about to explode as a drum pounds away in the brain. Their stomach can become upset, and the drinker may experience vomiting or

diarrhea—or both. What the drinker is experiencing the morning after is caused by a number of things. Alcohol causes their body to lose water, so their brain is dehydrated. As their brain begins to rehydrate, or regain water, their nerves hurt as they swell with

water. Their body also feels the toxic effects of formaldehyde. The gas formaldehyde forms as their body breaks down alcohol.

Hangovers can be severe—just ask anyone who is going through one. He or she will probably swear never to drink again.

Health Consequences

Alcohol has the most damaging effects on the body of any drug of abuse. After a person has been abusing alcohol for some years, he or she can expect one or more of the diseases and disorders described below.

Tissue in the brain is damaged by too much drinking. Drinkers lose control over their eyeballs and may not be able to move them from side to side. They may develop a staggering walk and look as if they are about to fall over at any moment. They may lose their memory—and probably will begin lying to cover it up. Their ability to think will decline. Their moods may swing from happy to sad without a reason. They may begin to feel burning pain in their legs and feet as their circulation becomes poor. They may fall into a coma ... and die. These are the possible effects of alcohol on the brain.

Their *stomach* also can begin to deteriorate. Their stomach can become inflamed and develop ulcers. Cirrhosis, or a diseased liver, will occur as the liver becomes overworked by all the alcohol in the drinker's system. Most alcoholics develop diarrhea, malnutrition, and a diseased pancreas. Any one of these stomach problems can result in death ... and all of them are very painful.

Their *heart* will eventually become damaged by years of abusive drinking. Drinkers also may develop high blood pressure. High blood pressure will cause their heart to work harder than normal and create unnecessary strain. Eventually drinkers will suffer heart failure from damage to the heart muscle.

Even *skeletal muscles* damaged from too much drinking become weak and swollen. Some bones may even die or become arthritic.

Alcoholics also suffers from ugly *facial disorders*. Their face becomes red as alcohol makes the blood rush to the surface of the skin. Alcoholics may develop red bumps on their face and nose. Their skin can become scaly

and covered with dry flakes. Their skin will eventually turn purple from bleeding in the skin. And drinkers are apt to come down with skin infections from poor circulation.

Drinkers may develop *cancer* of the mouth, colon, rectum, stomach, prostate, thyroid gland, or pancreas. Alcoholics may look old, but few of them live out a normal life span.

The person who abuses alcohol may suffer from *blackouts*. A blackout is different from passing out. A person can suffer a blackout and not lose consciousness. However, after a blackout, the person will not remember what has happened.

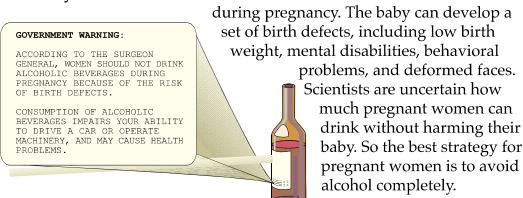
Abusive drinkers can eventually suffer from *hallucinations*. Drinkers will begin hearing voices and seeing things. And their personality may change. A once thoughtful and kind person can become angry, irritable, and impatient.

Mixing Alcohol with Other Drugs: A Dangerous Combination

Drinking while doing other drugs is dangerous. People who mix a tranquilizer with alcohol may be depressing their nervous system to a dangerous level. Tranquilizers, sedatives, or any kind of barbiturate mixed with alcohol can cause people to pass out or even fall into a coma. In addition, because alcohol impairs judgment, drug takers may take more pills or drugs than they realize. They may take an overdose of drugs.

Alcohol and Pregnancy: Risking the Baby's Health

The pregnant woman who drinks puts herself and her baby at risk. **Fetal alcohol syndrome (FAS)** affects babies whose mothers abused alcohol



Myths about Alcohol: What You Don't Know Can Hurt You and Others

Myth: "A can of beer or glass of wine has less alcohol

than a mixed drink of liquor."

Truth: An ounce of alcohol is an ounce of alcohol,

whether it is in a can of beer, a glass of wine, or

a mixed drink.

Myth: "Mixing beer and wine and liquor will get you

more drunk than drinking only one of them."

Truth: An ounce of alcohol is an ounce of alcohol. It

doesn't matter where it comes from, your body

will react the same way to it.

Myth: "A cold shower or cup of black coffee will

sober someone up."

Truth: A cold shower or cup of coffee will only keep a

drunken person awake. An awake drunken person is more likely to do something dangerous than one

who is allowed to sleep it off.

Myth: "It's OK to mix alcohol and other drugs."

Truth: It is very dangerous to mix alcohol with

any other drugs. Alcohol can increase or change the effects of other drugs. Alcohol

and other drugs are a deadly combination.



How to Know If You or Someone You Know Has a Drinking Problem

Occasional and moderate drinking for persons of legal age (21 years old in Florida) can be a responsible practice. Responsible drinkers eat before drinking and drink slowly. Responsible drinkers limit themselves to one or two drinks a day. They respect those around them who do not want to drink. They obey the laws—especially the law against driving while under the influence of alcohol. Healthy drinkers do not let alcohol change their personality. They don't drink to become loud or to feel OK about having casual sex. Alcohol does not become their excuse to behave differently than they usually do.

The person with a drinking problem or who is an alcoholic can be helped. Learn the behaviors of someone who has a drinking problem.

- The problem drinker drinks on an empty stomach and gulps drinks. He or she is *drinking* to get drunk.
- The problem drinker *pressures* other people to drink.
- The problem drinker *only socializes with other drinkers* and is uncomfortable with people who don't drink.
- The problem drinker often gets loud, angry, and violent, or silent and withdrawn when drinking.
- The problem drinker drinks to solve problems; he or she believes alcohol will cure his or her sadness or emotional pain.

Recovering from Alcohol Abuse: Returning to a Productive Life

Alcohol is a very addictive substance. A teenager can become an alcoholic after only a few months of heavy drinking. Alcoholics are willing to give up everything in life to get a drink and continue drinking. Alcoholics often drop out of school and lose their jobs, their families, and even their health. Fortunately, there is help.

Problem drinkers, or alcoholics, usually go through four steps in their road to recovery. The first step is to realize and accept the problem. As long as drinkers deny they have a drinking problem, they cannot begin to get well. Problem drinkers can be very good at denying their problem. They may tell themselves "I wouldn't drink if others would treat me well." Or "I'm not like these other people who can't handle booze."

Four Steps to Recovery

- 1. Realize and accept the problem.
- 2. Enter a program.
- 3. Gain self-understanding.
- 4. Raise self-esteem.

Next, problem drinkers enter a program. A program includes individual or group counseling. Sometimes alcoholics will first need to enter a hospital during withdrawal to regain their health and strength. At this point, the drinker has begun to share his or her life with the outside world.

The third step leads problem drinkers to self-understanding. Drinkers drink for a reason. They need to become aware of why they drank. They need to see themselves in a new way and to build a self-image that does not include alcohol.

Lastly, problem drinkers need to gain confidence in their ability to work and socialize. Alcoholics have low self-esteem. They need to raise their self-esteem and begin to value their abilities. They need to become productive members of society.

To recover from alcohol, problem drinkers must understand that even when they are not drinking, they are still alcoholics. They must remain on guard against again falling into abusive drinking.

Call for Help: Begin a Program to Recover

Many groups and agencies have been formed to help people with alcohol problems. Alcoholics Anonymous (AA) is a group that has been helping drinkers stay sober for many years. To reach AA, call 1-212-870-3400. The

Call for HELP!

Alcoholics Anonymous (AA)

1-212-870-3400 http://www.aa.org/



National Clearinghouse for Alcohol and Drug Information (NCADI)

> 1-800-729-6686 http://www.health.org/

> > 7

Al-Anon/Alateen

1-888-4AL-ANON 1-888-425-2666 http://www.al-anon.org/

T

North Florida

www.northfloridaal-anon.org
South Florida

www.southfloridaal-anon.org

đ

National Association for Children of Alcoholics (NACoA)

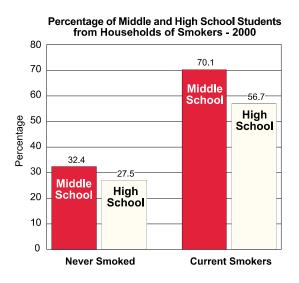
1-888-55-4COAS 1-888-554-2627 National Clearinghouse for Alcohol and Drug Information will answer any questions you have about alcohol and how to stop letting it run your life. Their toll free number is 1-800-729-6686. If someone in your family drinks too much alcohol, you also need help. An alcoholic affects not only himself but those around him. Al-Anon/ Alateen is an organization that helps family members of alcoholics recover. Alateen is a recovery program for young people. Call them toll free at 1-888-425-2666. There is also the National Association for Children of Alcoholics (NACoA). NACoA advocates for all children and families affected by alcohol and other drug dependencies. Call them toll free at 1-888-554-2627.

Tobacco: The Legal Drug That Damages the Body on Contact

Very few people who have smoked a cigarette enjoyed their first experience. The first-time smoker probably choked and coughed on the smoke. He or she may even have become dizzy and suffered a headache and an upset stomach. Good news: cigarette smoking has been rapidly declining among American teenagers. Still, almost one in every 18 eighthgraders, one in every eight tenth-graders, and one in every five twelfthgraders regularly smoke cigarettes. Why do people start and continue to use this life-threatening product?

Why People Start Using Tobacco: Copying Other People's Behavior

Few people would ever smoke cigarettes if they weren't influenced and encouraged to do so. Many smokers have been influenced by watching their parents, older siblings, and friends smoke. Smoking cigarettes becomes a way to model themselves after their family members. Teenagers are four times more likely to start smoking if they see their parents or siblings smoking. Parents who smoke should understand that they are probably passing their cigarette habit on to their children.



One-half of all teenagers who have at least two friends who smoke also begin to smoke. Very few teenagers who do not have smoking friends become smokers themselves. We can pick our friends, and choosing healthy friends who don't smoke is a good way not to be tempted ourselves to become smokers.

Advertising is also a powerful influence on teenagers. Cigarette ads show macho, healthy cowboys as they ride through beautiful nature scenes. Ads also show attractive men and women socializing. We want to be like these successful and good-looking people. Cigarettes appear to be a part of their image, just as the successful businessperson wears a tailored suit and carries a laptop computer onto a plane. These images, however, are far from the truth. Smokers are not healthy. Nor are they sexy—they smell of stale smoke and have yellow teeth. They may be good-looking for a few years, but smoking will hurt their good looks with added wrinkles and bad skin.

Advertising companies work hard to hook young adults. Advertisers want to replace the two million smokers throughout the world who die each year from lung cancer and other smoking-related diseases.

Why People Continue to Use Tobacco: The Addictive Drug *Nicotine*

Tobacco is made up of hundreds of chemicals. One of these chemicals—nicotine—is an addictive drug. Smokers become addicted to nicotine. Nicotine is a **stimulant** and gives smokers a rush. When this rush wears off, smokers begin to go through withdrawal. They feel a letdown. Without another dose of nicotine in their system, smokers may begin to feel irritable, dull, sleepy, and even angry. To avoid feelings of withdrawal, smokers smoke another cigarette.

Very few teenagers who

Smokers also begin to make smoking part of their routine. After eating, they light up a

do not have smoking friends become smokers themselves.

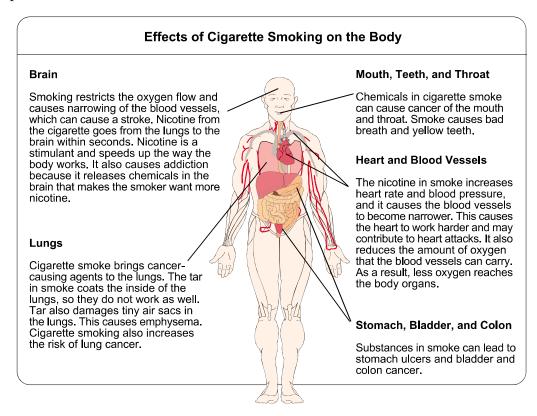
cigarette. With a soft drink or beer, they smoke a cigarette. They take a smoke break at work. They learn to have a cigarette when they awaken in the morning or as they drive to school or work. So their routines reinforce their need for cigarettes. Every time they finish eating, their mind says: "It's time for another smoke!"

Smokers also continue to smoke to avoid *smoker's cough*. If you've ever watched a smoker begin to cough uncontrollably, you have seen *smoker's cough*. This cough is actually caused by tiny fibers in the lungs attempting to clear germs, mucus, and dirt from the lungs. The smoker smokes another cigarette to paralyze these fibers and stop the cough.

Like alcohol, cigarettes are a legal drug. The smoker who wants to quit will have a difficult task. Cigarettes are hard to hide from. We see them in ads, in movies, in restaurants ... everywhere! The best way to avoid a cigarette addiction is not to start smoking.

How Tobacco Affects the Body

Three of the most poisonous and harmful ingredients in cigarettes are nicotine, tar, and *carbon monoxide*. Nicotine cuts down the flow of blood in the body. Consequently, the body becomes starved for the oxygen carried by blood. The heart pumps harder to try to get more blood and oxygen to the different parts of the body. Nicotine also raises the smoker's blood pressure.



The tar in tobacco is brown and sticky—it is similar to the tar used to cover roads and roofs. The sticky mass coats the smoker's lung. Tar is a cancer-causing substance.

Carbon monoxide is a poisonous gas. It robs the blood cells of oxygen. Smokers actually choke their body when they inhale smoke. The body will be short of oxygen for up to six hours after a person smokes a cigarette.

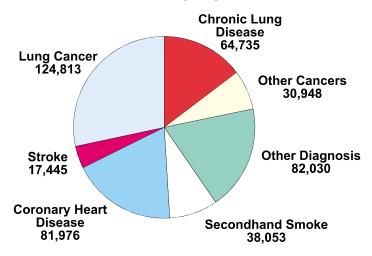
Nothing a cigarette actually does to the body makes people feel good or relaxed. Smokers have *taught* themselves to enjoy cigarettes' harmful effects on the body.

Health Risks

Cigarette smoking is the leading cause of preventable death in the United States. Tobacco will kill more than 440,000 Americans this year. Cigarettes will even start nearly 25 percent of all fires in the United States each year. If we could end smoking, many long-term health problems would be eliminated. Smokers are twice as likely to die from *cancer* as nonsmokers. Most cases of lung cancer would vanish. There would be many fewer cases of cancer of the throat, kidneys, the bladder, or the pancreas. Smoking is a major cause of emphysema, a painful disease of the lungs that leaves its victims choking for air.

Smoking also causes immediate health problems. As soon as smokers take a few puffs on a cigarette, their hearts speed up. The temperature in their fingers and toes drops—smokers are often cold. Smoking keeps their immune system from doing its job. Consequently, smokers are more likely than nonsmokers to catch colds, the flu, or other infections.

440,000 Deaths in the United States from Smoking Cigarettes*



*average annual number of deaths from 1995-1999

Pregnant mothers who smoke are starving their babies of needed oxygen. These mothers have more miscarriages, premature births, and low-weight births than mothers who don't smoke.

Passive Smoke: How Cigarettes Kill Nonsmokers

Unfortunately, even people who don't smoke can be harmed by smokers. Smoke inhaled by a smoker is called *mainstream smoke*. Smoke from the burning end of a cigarette is called *sidestream smoke*. Sidestream smoke can be more harmful to nonsmokers than mainstream smoke is to smokers. Some studies show that sidestream smoke contains *more* nicotine, tar, and carbon monoxide than mainstream smoke.

Breathing in the smoke from other people's cigarettes is also called *passive smoking*. You are at risk of developing many of the same diseases and disorders that smokers do, if you breath sidestream smoke. In fact, for every eight smokers who die from tobacco, one nonsmoker dies from secondhand smoke. This adds up to more than 65,000 nonsmokers who will die from *passive smoking* this year. Children of parents who smoke have more

Remember: Everyone has a right to breathe clean air. Many laws have recently been passed that ban smoking in public places such as government buildings and universities. You have the right to ask that they are enforced!

lung diseases than the children of nonsmokers.

Smokeless Tobacco: Chewing and Dipping

Smokeless tobacco is chewed or dipped. When chewing tobacco is used, a wad or "quid" is placed between the cheek and teeth. The user sucks on it

to get the taste. When tobacco is dipped, the user places a pinch between the lower lip and teeth. The tobacco juices mix with saliva and are absorbed into the body.

The juices from both the chew and the dip must be spit out or swallowed. The nicotine in both of these tobacco products causes the

Smokeless tobacco—snuff and chewing tobacco

- Health problems and other negative effects—face, mouth, throat, and stomach cancer, gum recession, gum disease, loss of bone in the jaw, mouth sores, precancerous lesions in the mouth, stomach ulcers, hypertension, heart disease, bad breath, tooth decay, and tooth stains.
- Addictive—the amount of nicotine absorbed is 2 to 3 times the amount delivered by a cigarette.

Early signs of oral cancer:

- sores, lumps, or white or red patches
- sores that do not heal
- sore throat for prolonged time
- difficulty chewing
- feeling of something in throat
- restricted movement of jaws or tongue



same health problems that cigarettes do. These products, however, also cause extreme damage to the mouth. Oral cancer, or cancer of the mouth and gums, is often caused by smokeless tobacco. Chewers and dippers also experience tooth decay—their teeth fall out and the roots become sensitive to heat and cold.

Quitting: Being Good to Your Body

Most teenagers who smoke claim they will quit. Three out of four, however, will fail. Smoking is a hard habit to quit—without a plan. There are two basic ways to quit: *tapering off* and going *cold turkey*.

When smokers taper off, they begin smoking fewer and fewer cigarettes each day until finally they are not smoking. When smokers use the cold turkey method, they just suddenly quit. They may pick a day after which they will not smoke another cigarette. Some people find this method easier. It is easier for them to not smoke at all than to smoke fewer cigarettes than they usually do.

There are also products that help smokers quit. One product is a patch worn on the skin. The patch releases nicotine into the smoker's body. Each day the smoker wears a patch that releases less nicotine into the body. This gradual withdrawal from nicotine saves smokers from the discomfort of physical withdrawal from nicotine.

Although this system and others can help lessen the discomfort of physical withdrawal, almost all smokers have developed a psychological dependence on cigarettes. Cigarettes have been a part of their daily routine. They have used cigarettes to seek comfort. They look forward to their cigarettes at different times of the day. Giving up this comfort will not be easy.

One way to overcome a psychological dependence on cigarettes is to learn the benefits of being a nonsmoker.

- I can breathe deeply, and the air I take in is clean and healthy.
- My food tastes better. My sense of taste is much sharper now that it's not being dulled by cigarettes.

- I don't have to buy cigarettes; I'm saving a lot of money. I don't have to carry cigarettes around.
- I don't smell; my breath, clothes, and hair smell good again.
- I don't have to offend others and foul their air with my smoking habit.
- I can date many more people who otherwise would not tolerate my bad habit.
- My surroundings are no longer filled with dirty ashtrays and ugly cigarette butts. And I'm not tempted to litter the streets with my cigarette butts.

Try to concentrate on the gains you'll make from not smoking rather than the craving you feel for another cigarette. Avoid the places and situations where you used to smoke—change your routine. When you feel the urge for a cigarette, go for a walk, exercise, or spend time with people who don't smoke.

If you need help to quit, see your doctor, nurse, or local health department. The sooner you decide to quit, the easier it will be.

