



# Unit V – Wellness, Fitness and First Aid

## Chapter 9 - Drug Awareness

### Section 3 – Drugs: Part 2



# What You Will Learn to Do

Assess the effects of drug and substance abuse on life today



# Objectives

1. Identify the risks associated with alcohol and various drugs
2. Explain the effects of alcohol and drug use, misuse and abuse on daily life



# Key Terms

**Hallucinogen** - A drug that causes hallucinations

**Inhalants** - Medications or chemicals that are inhaled

**Nicotine** - The drug in tobacco that may act as a stimulant and cause addiction



# Hallucinogens

**Hallucinogens** alter the physical senses, producing visions, sounds and smells that are not real, and distorting the concepts of time and space in the user's mind.



While they aren't physically addictive, users often become psychologically dependent on hallucinogens.



# Lysergic Acid Diethylamide (LSD, Acid)

Lysergic acid diethylamide can come as brightly colored tablets, imprinted blotter paper, thin squares of gelatin, or as a clear liquid.



A “trip” from an average dose of LSD can last as long as 8 to 10 hours.



# Lysergic Acid Diethylamide (LSD, Acid)

LSD is a powerful **hallucinogen** that scrambles and confuses the senses.

A tiny drop taken with sugar or food can cause a person to trip or experience false visions, smells and sounds for hours.





# Lysergic Acid Diethylamide (LSD, Acid)

Some people experience **flashbacks** of LSD's effects days, weeks, and years after the original trip. An overdose of LSD can result in psychosis, accidental death and suicide.







# Phencyclidine Hydrochloride (PCP)

Phencyclidine hydrochloride can be in the form of a liquid, capsules, white crystalline powder, or pills.



PCP interrupts the functions of the neocortex, the section of the brain that controls the intellect and keeps instincts in check.



# Phencyclidine Hydrochloride (PCP)

PCP stays in the system for a long time.

Some of these effects may last 6-12 months, following prolonged daily use.

Large doses of PCP can cause convulsions and coma, heart and lung failure, or ruptured blood vessels in the brain.





# Phencyclidine Hydrochloride (PCP)

PCP, used as a tranquilizer for animals, can cause frightening hallucinations when used by humans.





# Psilocybin (Mushrooms, Shrooms) and Mescaline (Mesc, Buttons, Cactus)

Two other hallucinogens are:

**Psilocybin** -  
produced from a large  
type of mushroom



**Mescaline** –  
produced from a type  
of cactus





# Psilocybin (Mushrooms, Shrooms) and Mescaline (Mesc, Buttons, Cactus)

Eating mushrooms poses another danger, because many mushrooms look alike – and some are poisonous enough to cause death.





# Inhalants (Air Blast)

**Inhalants** are toxic chemicals that are huffed (sprayed into a cloth and held over the mouth and nose) or bagged (sniffled from a bag, bottle or can) to achieve a brief, mild euphoria.

Some commonly used are:

- Glue
- Freon
- Nail Polish
- Spray Paint
- Gasoline





# Inhalants (Air Blast)

Effects of inhalants are unpredictable and depend on what chemical or chemicals are inhaled, and how much.





# Ecstasy (XTC, Love Drug)



**Ecstasy** is a “designer drug” that closely resembles cocaine.

It produces euphoria that lasts several hours, heightens pleasure and sometimes hallucinations in high doses.





# Rohypnol (Roofies, Forget Pill, Date-Rape Pill)

Rohypnol is used legally as a medical sedative in Europe and Latin America. As a drug of abuse, it is called roofies, the forget pill and the **date-rape pill**.





# Rohypnol (Roofies, Forget Pill, Date-Rape Pill)

It earned its reputation as the **date-rape pill** by being slipped into the drinks of females, who were taken advantage of in a state of sedation brought on by the drug, and then were unable to remember exactly what happened to them.





# Steroids

Anabolic steroids are available only by prescription in the United States, but many steroid supplements are available over the counter.



Abusers of steroids take many times the recommended dosages in an effort to bulk up. Steroid abuse has been increasing in recent years, especially among middle-school students.



# Tobacco

Many people hold the view that experimentation with or use of tobacco is normal or acceptable behavior.



The hazards of tobacco include cancer and other diseases. It can also have ill effects on others.

In addition to smoking cigarettes, pipes or cigars, people who use tobacco products can also do so orally in the forms of chewing tobacco and snuff.



# Tobacco

Three major components make up tobacco, each having their own ill effects.

These are:

- Tar
- Carbon monoxide (a by-product of burning tobacco leaves)
- Nicotine





# Tobacco

**Tar** causes a variety of cancers and contributes to emphysema.



**Carbon monoxide** restricts the oxygen-carrying capacity of the blood.



**Nicotine** is the substance in tobacco believed to cause dependency.



# Tobacco

Cigarette smoking is a major independent risk factor for **heart attacks** (sometimes fatal) in both men and women.



Although chewing tobacco and snuff are not smoked, they increase the risk of disease and damage to the delicate lining of the **mouth** and **throat**.



# Tobacco

**SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.**

Despite the labels required by federal law warning individuals about the hazardous effects of using tobacco products, use continues.





# Tobacco



Recent research has indicated that **non-smokers who breathe in second-hand smoke** can have an increased risk of lung cancer, heart disease and respiratory disorders.



# Tobacco

As the public becomes more aware of the dangers of inhaling second-hand smoke, legislation protecting the **rights of nonsmokers** continues to increase.





# Tobacco

With each puff on a cigarette, cigar or pipe, a smoker inhales over **4,000** different chemicals.



Of these, **at least 1,000** are known to be dangerous.



# Tobacco

## Harmful Chemicals in Tobacco Smoke

acetaldehyde

acetone

acetonitrile

acrolein

acrylonitrile

ammonia

aniline

benzene

benzopyrene

2, 3-butadione

butylamine

carbon monoxide

dimethylamine

dimethyl-nitrosamine

ethylamine

formaldehyde

hydrocyanic acid

hydrogen cyanide

hydrogen sulfide

methacrolein

methyl alcohol

methylamine

methylfuran

methylnaphthalene

nicotine

Nitric oxide

nitrogen dioxide

phenol

pyridine

toulene



# Nicotine and Addiction

In its pure form, nicotine is one of the strongest poisons known. Taken in large amounts, nicotine can kill people by paralyzing their breathing muscles.





# Nicotine and Addiction

When tobacco is smoked, nicotine enters the lungs, where it is immediately absorbed into the bloodstream. Seconds later, the nicotine reaches the brain.



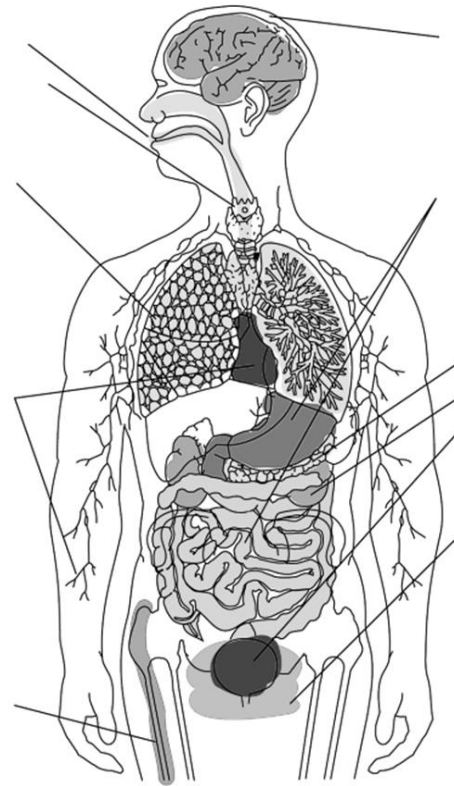
Nicotine constricts blood vessels, which cuts down on the blood flow to hands and feet. Beginning smokers usually feel the effects of nicotine poisoning with their first inhalation.



# Nicotine and Addiction



The Long Term Effects  
of Smoking Tobacco



Mouth, Lip, Throat,  
Larynx

Respiratory System

Circulatory System

Bones

Pregnancy and Babies

Brain

Stomach and Intestines

Pancreas, Kidney and Bladder

Reproductive System

Male and Female



# Nicotine and Addiction

Tolerance can develop in new smokers after the second or third cigarette.

The Surgeon General, the country's highest medical authority, has called nicotine an **addicting drug**, just like heroin and cocaine.



A tobacco addict who goes without tobacco for a short time may experience **nicotine withdrawal**.

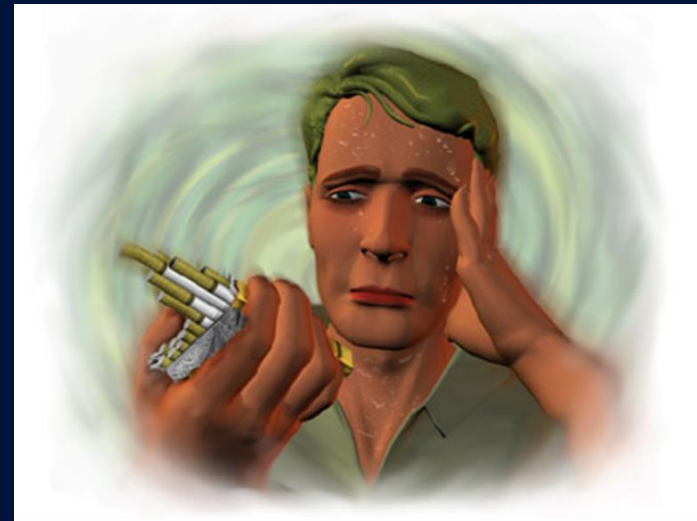
Withdrawal effects may begin as soon as **two hours** after the last cigarette. Physical craving for a cigarette reaches a peak in the first 24 hours.





# Nicotine and Addiction

Tobacco users also suffer **psychological withdrawal symptoms** when they stop smoking.

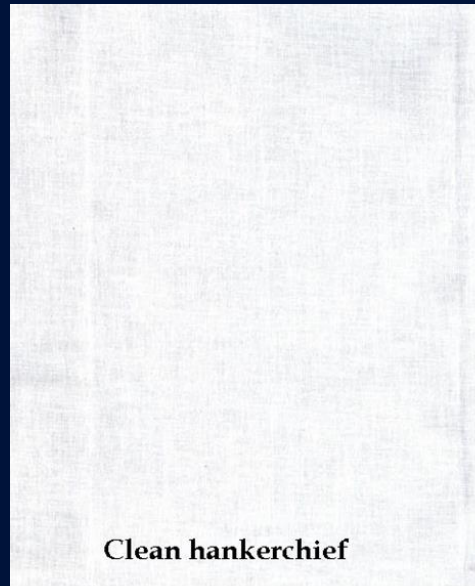


By using tobacco at certain times (when under stress, for example), tobacco users actually condition themselves to rely on it whenever a stressful situation arises.



# Nicotine and Addiction

**Tar** is the dark, sticky mixture of chemicals that is formed when tobacco burns.



Clean hankerchief



Tar from two Marlboro cigarettes

Tar also sticks to the cells of the **respiratory system**, where it damages the delicate cells that line the respiratory tract.



# Nicotine and Addiction

The tar in tobacco smoke contains hundreds of chemical **carcinogens**, or cancer-causing agents.

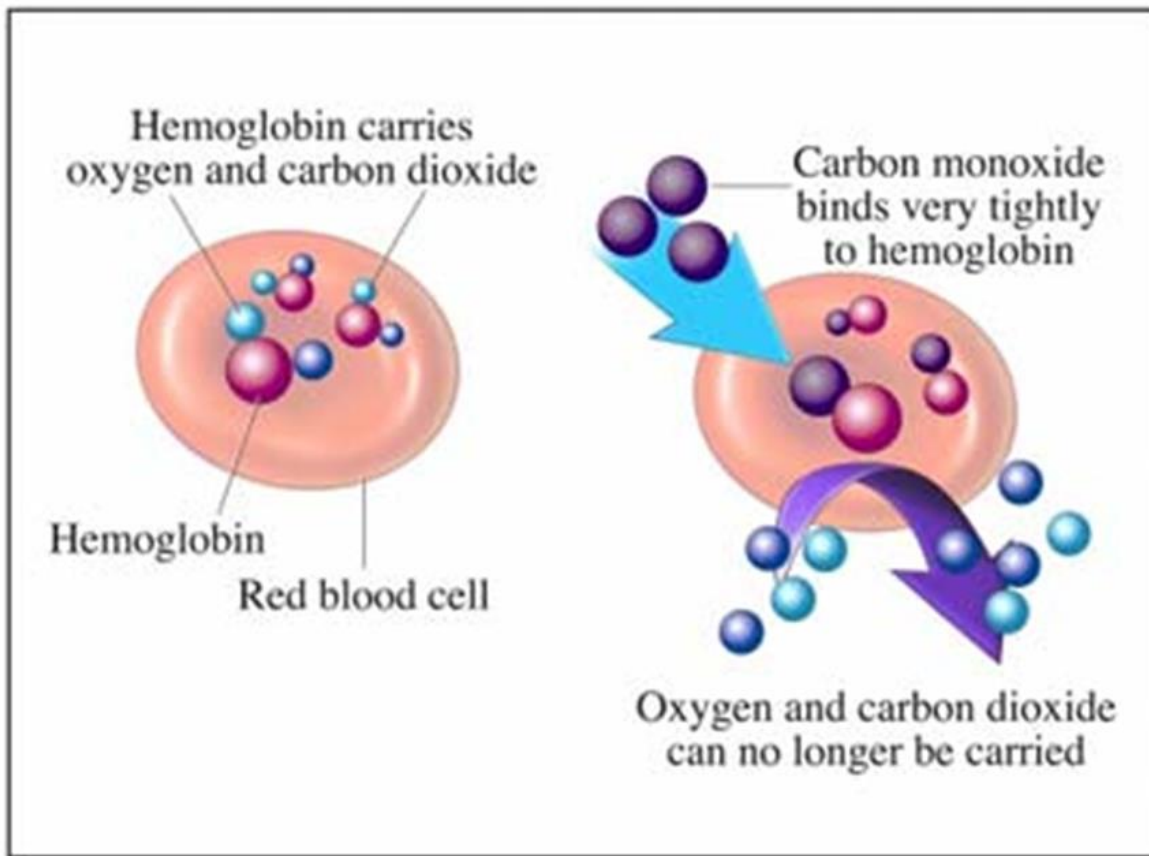


Carbon monoxide is a poisonous, colorless, odorless gas that is found in cigarette smoke.





# Carbon Monoxide



When it is inhaled, it takes place of (displaces), large amounts of oxygen from hemoglobin. The more carbon monoxide present in the blood, the less oxygen in the blood.



# Chemicals in Smokeless Tobacco

Most tobacco users smoke cigarettes, cigars or pipes. And yet there has been an increase, especially among teenage boys, in the use of **smokeless tobacco**.



What they may not realize is that smokeless tobacco contains many of the same harmful chemicals found in tobacco smoke, including the highly addictive drug nicotine.



# Chemicals in Smokeless Tobacco

There are two different kinds of smokeless tobacco



Chewing tobacco

The nicotine in chewing tobacco enters the bloodstream through the membranes of the mouth.



Snuff

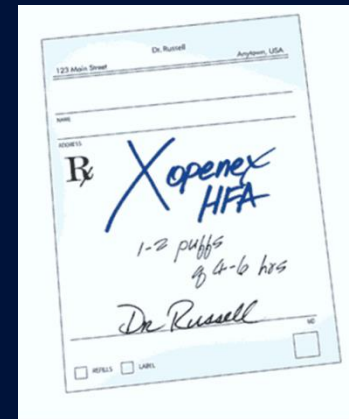
Snuff's nicotine enters through the membranes of either nose or mouth. One can of snuff = nicotine of **60 cigarettes**.



# Conclusion

When drugs are properly used, they can cure illness and save lives.

When abused, however, drugs and alcohol can destroy lives and cause death.



To keep from falling into the trap of drug and alcohol abuse, stay smart, strong and active... **say NO!**



# Questions?

