



# Tobacco, Alcohol, & Other Drugs

Tobacco

# What are Drugs

- A Drug is any substance which, when taken into the body, alters the body's function either physically or psychologically.
- Some Drugs are Legal – Tobacco, Caffeine, Alcohol
- Some are not Legal!



# Tobacco



- What is Tobacco?
- A plant that is grown, treated, dried, and then used in a variety of ways.
- The addictive substance in tobacco is Nicotine.

# What is Tobacco?

- A plant that contains nicotine. Tobacco can be smoked in the form of cigarettes, cigars and pipes.
- Smokeless tobacco is tobacco that is chewed or snorted, but not smoked.  
Ex. Chew, snuff, dip





# Reasons Why People Use Tobacco

- Advertising (portrays users to be young, healthy & attractive)
- Peer Pressure
- Boredom
- Look & act older
- Parents smoke (Genetic Predisposition)
- Relax
- Prevent weight gain
- “Buzz” (stimulant effect)



# Nicotine

- The addictive substance in tobacco!
- It is a stimulant
  - Stimulants speed up the central nervous system CNS
    - Heart rate
    - Blood Pressure
    - Respiration
- On the plant it acts as a natural pesticide



# Ingredients

- Nicotine-the worst ingredient
- Colorless liquid
- highly addictive stimulant drug found in tobacco products.
- Stimulates the nervous system
- Nicotine is absorbed into the blood stream after inhalation.

*Each cigarette contains 1-2mg. of nicotine.*



# Nicotine cont.

- What builds the tolerance factor
- Limits circulation, enhances the formation of cholesterol on the walls of the blood vessels.
- Cancer causing
- *Is considered as addictive as heroin, cocaine & alcohol!*







# Smoking

- Smoking is the leading cause of most preventable deaths each year.
- Cigarette smoking is responsible for more than 480,000 death per year in the U.S.
  - Which is about 1200 people a day.
- On average a smoker will die 14 years earlier than a nonsmoker

# Drug Dependence

- Video
- What is Dopamine?
- How does the release of Dopamine lead to addiction during drug use? Specifically with tobacco?



# Dependence

- Physical- dependence on nicotine(active ingredient), when the body becomes used to the effects.
- Psychological- develops when people feel the need to smoke or chew tobacco at certain times or for specific reasons.





# Tobacco Products

- Cigarettes- most profitable
  - Regular- non filtered
  - Filtered- removes only 10% of tar & nicotine
  - Menthol- adds flavor only
  - Clove- “flavoring sauce”
  - Light- low tar & nicotine





# Byproducts of Tobacco





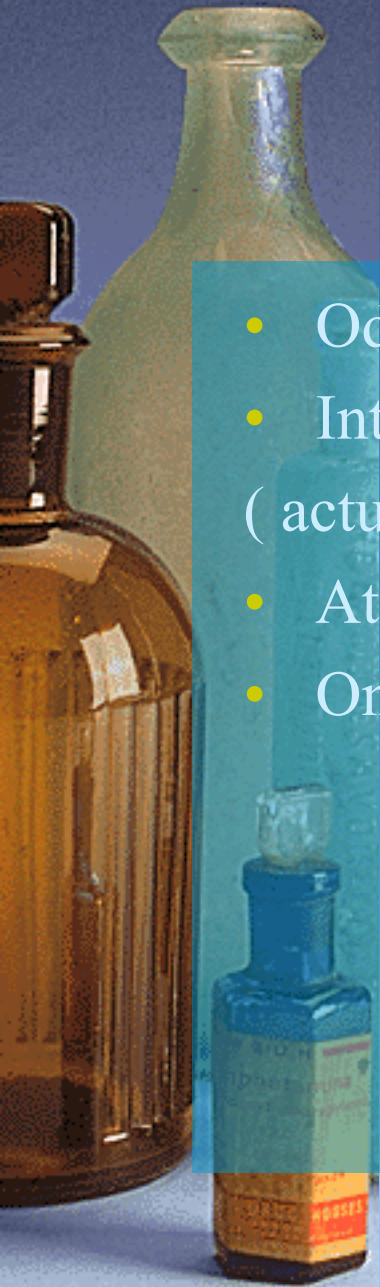
# Tar

## Over 200 separate chemicals

- Where most carcinogens are found
- is a sticky, thick fluid that is formed when tobacco is smoked.
- Irritates respiratory tissue, major cause of lung cancer.
- Kills cilia
- **Medically considered the most harmful by-product.** ( does the most damage to the body)
- Yellows the teeth

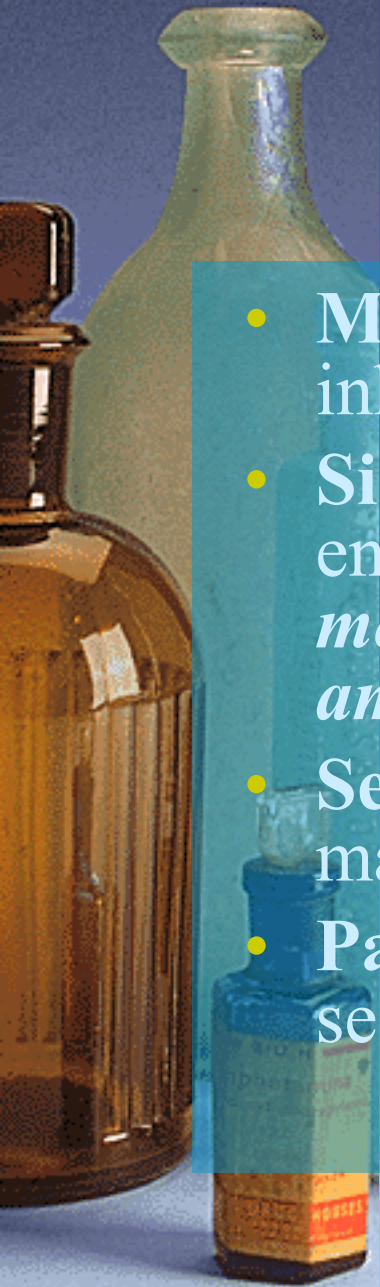
# Carbon Monoxide

- Odorless, tasteless gas
- Interferes with the ability of blood to carry oxygen.  
( actually replaces the oxygen in the blood)
- Attaches quickly to red blood cells.
- Only affects smokers and the people around them.



# Smoke Damage

- **Mainstream smoke-** smoke that is directly inhaled into the smokers lungs.
- **Sidestream smoke-** the smoke that comes off the end of a burning cigarette, cigar, or pipe. *Contains more tar, nicotine, carbon monoxide and ammonia than mainstream smoke.*
- **Secondhand/Environmental smoke-** Exhaled mainstream smoke & sidestream smoke.
- **Passive Smoking/Involuntary-** breathing in secondhand smoke.







# Environmental Smoke Statistics CDC

- *Being around people who smoke you are exposed to over 4000 chemicals.*
- *Environmental smoke is responsible for 3000 lung cancer deaths & 35,000 heart disease deaths per year in the US*



# Risks with Passive Smoking/Involuntary Smoker

- Lung cancer
- Heart disease
- Respiratory Problems

Children- ear infections, respiratory problems, bronchitis, pneumonia, lungs do not develop properly

Infants-SIDS



# Chemicals found in Secondhand/Environmental Smoke

- Formaldehyde
- Vinyl chloride
- Carbon Dioxide
- Butane
- Ammonia
- Lead
- Arsenic
- Chromium
- And many others

• *There are over 4,000 different chemicals in secondhand smoke*



- Smokeless Tobacco- **3x's the amount of nicotine than a cigarette!** A tobacco product made from chopped tobacco leaves that is placed inbetween the gums and cheek.
  1. Snuff- powdered tobacco that is inhaled
  2. Dip - placed in mouth between lip and teeth.
  3. Chew- shredded tobacco, placed in cheeks.
  4. Quid- term for a small amount of smokeless tobacco.



# Leukoplakia


- Is the changes of the cells in the mouth, due to long term use of smokeless tobacco.
- The abnormal cells in the mouth appear as white patches of tissue.
- **NOT CANCER, but can turn into cancer**

\***Oral Cancer**- most common form of cancer with the use of smokeless tobacco( Exs. Mouth, throat, lip, tongue etc.)

\**Pipe Smokers usually develop lip & tongue cancer*



# How Smoking Harms Health

- 
- Respiratory System-
  - COPD/COLD-
  - Chronic Bronchitis-
  - Emphysema-
  - Cardiovascular Disease-

**\*\* 90% of all lung cancers are directly related to smoking!**



# Chronic Bronchitis

- is a recurring inflammation of the bronchial tubes that causes mucus to line the bronchial tubes. Causes deep, harsh coughing& wheezing. Develops in almost all smokers after 10 years.


*Bronchi- the two main tubes/airways in the lungs.*

# Emphysema

- condition in which the alveoli lose most of their ability to function properly. The lungs lose their ability to inflate and hold air. The small air sacs (balloon like structures) burst instead of inflating and holding air.
- People with emphysema breath about 30x's a minute ( healthy adult 12-20x's)
- They can not breath out!
- Can not be cured
  - *Alveoli – small balloon like structures attached to the bronchial passages, they inflate & deflate with inhalation & exhalation. (300 million +)*







# How can smoking cause Cardiovascular Disease

1. Speeds up the development of fatty deposits.
2. Damages inner linings of arteries.
3. Reduces space in artery
4. Increases the risk of blood clots.

*The nicotine raises a persons resting heart rate 20 beats per minute.*

*(Normal- 40 to 100 beats per minute)*



# Local Health Bureau

- Responsible for enforcing the sale of tobacco.
- You must be 18 in PA to buy tobacco products.
- Surgeon General- spokesperson and advocate for health issues and for prevention of diseases.  
Nominated by the president of US for a 4 year term.