Alcohol

Alcohol

- Also known as ethanol
- Synthetic or natural from fermentation
- 47-57% (male higher) of people admit to drinking alcohol regularly
 - Caucasians more than any other racial or ethnic group at 57%

Factors influencing use

- Peer pressure
- Family
- Media messages

Alcohol is a factor in about 60% of fatal burn injuries, drownings, and homicides

Alcohol is a factor in about 50% of severe trauma injuries and sexual assaults

Alcohol is a factor in about 40% of fatal motor crashes, suicides, and fatal falls

Over 24% of US college students have NEVER had a drink

Immediate Effects

- Alcohol is actually a depressant
- Slows reaction time
- Impairs vision
- Diminished judgement
- Intoxication: body is poisoned by alcohol or another substance which affects the physical and mental control

Alcohol and Unsafe Situations

- Proof = 2x% of alcohol
- Illegal under age 21
- Increases risk of crime/rape/assault/robbery
- Alcohol abuse in teens
- Zero-tolerance policies

Short term effects

- Brain
 - Decreased movement, speech, vision
- Memory
 - Disorganized and concentration is dulled
- Judgement
 - Altered and coordination is impaired
- Heart
 - Heart rate and blood pressure decreases; irregular heart rate
- Blood vessels
 - Expands blood vessels and temperature decreases
- Stomach
 - Acid increases
- Liver
 - Toxins released and causes inflammation and scarring
- Kidneys
 - Kidneys increase in output and lead to dehydration
- Lungs co2 released and breathing slows/is irregular
- Sleep disturbances

Alcohol and Medications

- Multiplier effect; greater or different effect than if taken alone
- Decreased drug absorption
- Medications break down faster
- Damage to the liver due to increased metabolism
- Dizziness or sleepiness with antihistamines

"But I heard alcohol is good for your health"

Some studies have shown

- Small amounts daily can decrease coronary artery disease, high blood pressure, and stroke
- Moderate drinkers 1-2/day have the lower mortality rates
- Heavy drinkers have the highest mortality rate
- Found problems with these studies
 - Also consider women have an increased risk of breast cancer with alcohol

Underage Drinking

- Brain is growing until about 21 years old
- American Medical Association has stated underage drinking can cause severe and possible lasting brain damage

Long Term Effects



- Addiction
- Loss of brain functions
- Brain damage (decreased size)
- Damage heart muscle
- High blood pressure
- Fatty liver
- Alcoholic hepatitis
- Cirrhosis
- Stomach ulcers/stomach cancer
- Pancreas problems
- Fetal Alcohol System
- Increase risk of cancer, cardiovascular, and liver disease

Factors Influencing Blood Alcohol Concentration

- How quickly you drink.
- What you drink: soda increases while mixers and water decrease, hot increases
- Sex: women absorb 30% more alcohol into their bloodstream
- Age: As age increases the effect increases
- Lower weight increases the effect
- Fatigue or Stress increases effect
- Food slows the absorption
- Aspirin and many over the counter drugs increase the risk and keep you drunk longer
- Birth control pills keep you drunk longer

Blood Alcohol Consentration Tables

Link to <u>tables</u>

Binge Drinking and Alcohol Poisoning

- Most common in teens/college (39%)
- Stops involuntary actions such as breathing/heart beat
 - Symptoms
 - Confusion, coma, vomiting, and seizures
 - Slow respiration 8 breaths/minute
 - Irregular heartbeat
 - hypothermia/low body temperature
 - Severe dehydration from vomiting
- 97,000 students between 18-24 are victims of alcohol related sexual assault or date rape

CALL 911 and call poison control

Alcohol level can continue to rise while they are unconscious

Good Samaritan Law

Being Alcohol Free

- Maintain a healthy body
- Make responsible decisions
- Avoid risky behaviors
- Avoid illegal activities

Treatment of alcohol abuse

- ²/₃ do so without proper treatment
- Counseling
- Medication

How to protect yourself from risky alcohol-related behavior

- Don't drink to get drunk
- Pair-up with a friend
- Make arrangements to get home safely
- Don't accept drinks from strangers
- Know the signs of alcohol poisoning

Drinking and Driving

- DO NOT DO IT
 - Decreased judgement
 - Decreased vision and hearing
 - Decreased reaction time
- Every 53 minutes someone dies from drunk driving

Drinking and Driving

https://vimeo. com/2152124