ALCOHOL

- Ethyl alcohol-psychoactive ingredient
- Depressant
- Proof value is the concentration of alcohol in the beverage
- Two times the percent alcohol
- 100 proof = 50% alcohol

BEVERAGE TYPES

- BEER (12 OUNCES)
  - 3-6 % ALCOHOL
- WINE (5 OUNCES)
  - 8-14 % ALCOHOL
- LIQUOR (1 1/2 OUNCES)
  - 35-50 % ALCOHOL
  - EACH OF THESE CONTAIN 0.6 OZ. OF ALCOHOL

ABSORPTION

- 20 % Absorbed rapidly from stomach
- 75 % Absorbed through small intestine
- Influenced by carbonization, rate of consumption & presence of food in the stomach

METABOLISM

- Oxidation; 2-10% excreted by lungs, kidney and sweat glands
- Liver primary site of metabolism
- Rate is 2/3 oz. per hour
- Remainder circulates through the bloodstream=BAC

BLOOD ALCOHOL CONCENTRATION

- Determined by amount consumed, body size, and rate of metabolism
- Caffeine, other stimulants, eating, or other tricks do NOT influence metabolic rate
- Metabolic rate same whether awake or sleeping

BAC

- Smaller person= higher BAC
- Less overall body tissue
- High percentage body fat?
- High BAC-fat has fewer blood vessels
- Women higher BAC due to higher body fat percent
BAC .03-.05

- Mild effects
- Light headedness, relaxation, and release of inhibition
- Mild euphoria

BAC .05-.10

- Exaggerated feelings and behavior
- Impairment of reaction time and fine motor coordination
- Impaired during driving

BAC .10-.15

- Unsteadiness in standing and walking
- Loss of peripheral vision
- Driving extremely dangerous

BAC .15-.30

- Staggered gait
- Slurred speech
- Pain and other sensory perceptions impaired
- Vomiting

BAC MORE THAN .30

- Stupor or loss of consciousness
- Anesthesia
- Death possible

Alcohol Poisoning

- Drinking large amounts of alcohol over a short period of time raises BAC into lethal range
- Death can be caused by CNS or respiratory depression or by inhaling vomit into lungs

Alcohol Poisoning (cont’d)

- Place person on side and watch
- Breathing rate drops to less than 8 breaths per minute or pale or bluish look?
- Call 9-1-1

Alcohol-Drug Mix
• Number-one cause of drug-related deaths in U.S. 
• Other depressants 
• Antidepressants or antihistamines 
• Some antibiotics, diabetes medication, aspirin, and ibuprofen 
• Illegal drugs

**Alcohol-related Injuries and Violence**

• Kills over 200,000 Americans each year 
• Contributes to over 50% of all murders, assaults, and rape 
• Major factor in suicides 
• Triples risk of fatal injuries-swimming and boating 
• Related to more than half all fatal falls and serious burns

**Drinking and Driving**

• Injuries? 500 K-about 1 per minute 
• Over half of 40,000 fatalities

**HEALTH HAZARDS**

• Cirrhosis of liver 
• Inflammation of pancreas 
• Inflammation of stomach lining 
• Cardiac myopathy 
• Mortality 
• Fetal alcohol syndrome

**CIRRHOSIS**

• Liver cells destroyed 
• Lose ability to metabolize alcohol 
• Can cause death

**INFLAMMATION**

• Pancreas 
• Nausea and vomiting 
• Abnormal digestion 
• Severe abdominal pain 
• Stomach 
• Bleeding and ulcers

**CARDIAC MYOPATHY**

• Toxic effects on heart tissue
- Malnutrition and vitamin deficiencies
- Elevated blood pressure-increased risk of stroke

MORTALITY

- Cancer rates 10 times higher
- Oral, stomach, pancreas, liver, breast
- Life span 10-12 years shorter

FETAL ALCOHOL SYNDROME

- Alcohol crosses placenta
- Reduced birth weights
- Heavy drinking?
- Small teeth with faulty enamel
- Irregular earlobe shape
- Small wide-set eyes

F.A.S. (cont’d)

- Heart defects
- Physical and mental growth retarded
- Usually mentally retarded
- Leading cause of mental retardation

ABUSE

- Recurrent alcohol use that has negative consequences
- Warning signs:
  - Drinking along / secretly
  - Using alcohol to get through difficult situations
  - Feeling uncomfortable when alcohol is not around

WARNING SIGNS (cont’d)

- ESCALATING CONSUMPTION
- CONSUMING HEAVILY IN RISKY SITUATIONS
- GETTING DRUNK REGULARLY OR MORE FREQUENTLY
- DRINKING AT UNUSUAL TIMES

BINGE DRINKING

- College students
- More likely to have unplanned sex, drive after drinking, trouble with the law, damage property, and get injured
• More likely to miss classes, get behind in school work, and more likely to argue with friends

**BINGE DRINKING**

• Bother nondrinking students;
• Assault
• Unwanted sexual advances
• Having studying or sleep disturbed

**ALCOHOLISM**

• Excessive problems with alcohol usually involving tolerance or withdrawal
• Loss of control over beginning or ending drinking

**PATTERNS OF DEPENDENCE**

• Regular daily intakes of large amounts
• Regular heavy drinking limited to weekends
• Long periods of sobriety interspersed with binges of heavy drinking
• Heavy drinking limited to periods of stress

**WITHDRAWAL**

• Jitters most common; can last two weeks
• Seizures-more serious
• DTs-Delirium tremens; medical emergency
• Disorientation, confusion and hallucinations
• Paranoia

**SOCIAL AND PSYCHOLOGICAL EFFECTS**

• For every alcoholic, another 3-4 people directly affected
• Suffer from *dual disorders*
• Clinical depression, panic disorder, antisocial personality disorders
• May have other substance-abuse problems

**CAUSES OF ALCOHOLISM**

• Genetic link
• Child abuse
• Imitation of abuse of peers or others
• Changing society and values
TREATMENT

- AA
- Can’t return to social drinking
- AL-ANON for families

RESPONSIBLE USE

- Implications:
  - Limitation of alcohol use
  - Knowing consequences of consumption
  - As a host or hostess

RESPONSIBLE USE

- Pace drinks; alternate with non-alcoholic drinks
- Eat before and during drinking
- Drink slowly
- Dilute liquor with water

RESPONSIBLE USE

- Know strength of beverages
- Know personal limits
- Drink in well-lighted, quiet places;
- Dark and noisy places produce tenseness

DESIGNATED DRIVER

- Not responsible use
- Non-drinking driver so others can get drunk
- Avoids personal responsibility