

Are the substances covered in this section drugs?

- In the essentialistic (objective) sense, yes: influence the working of the mind; produce physiological changes
- In the constructionist (subjective) sense, no; most people do not regard/classify them as drugs; possession and sale is legal
- Use is not stigmatized
- Cannot be arrested for use (in most cases)

Drug-Taking Lifestyle

- Data collected by the National Survey on Drugs Use and Health suggests that many of the same people who drink alcohol and smoke cigarettes also take illicit drugs
- In other words, illicit and legal drug use do not exist in separate realms - heavily overlap
- The impulse to alter one's consciousness with one substance - whether legal or illegal - is strongly related to altering it with other substances

Legal Drugs and Illness/Premature Death

- In developing countries, malnutrition and poor sanitation are the major contributors of premature death
- In developed countries, alcohol and tobacco use are the number one and number three causes of premature death respectively
- In the industrialized world, legal drugs (taken together) contribute more than five times as much to premature death than do illegal drugs

**Alcoholism: Stereotypes, Definitions, and Life Problems**

- Symptomatic drinking is a pattern of alcohol consumption aimed at reducing stress and anxiety.
- NIAAA guidelines for "at risk" or "heavy" drinking
  - More than four drinks on any day and more than 14 drinks per week (for men)
  - More than three drinks on any day and more than seven drinks per week (for women)
- It is estimated that about 40 percent of individuals who meet the criteria for alcohol dependence will have one or more alcohol-induced depressive episodes.
- Neuroimaging using CT and MRI brains cans have revealed a consistent link between heavy drinking and physical shrinkage of brain matter.
- Enablers are individuals whose behavior consciously or unconsciously encourages another person's continuation in a pattern of alcohol or other drug abuse.

**Alcohol Abuse and Alcohol Dependence**

- According to health professionals, alcohol abuse is characterized as either (1) the continued use of alcohol for at least one month despite the knowledge of having

persistent physical, social, or occupational problems that have become associated with alcohol use and (2) recurring use of alcohol in physically hazardous situations.

- Alcohol dependence is defined in terms of uncontrolled alcohol intake, unsuccessful efforts to reduce alcohol use, life problems, and alcohol tolerance and withdrawal.
- An estimated 10 percent of U.S. adults overall and 6 percent of college students have met the criteria for alcohol dependence during the past year.
- The DSM-5 revision in 2013 combines the diagnoses of alcohol abuse and alcohol dependence into one diagnosis: alcohol use disorder.
- This new diagnosis is made on the basis of the same behavioral criteria previously identified with alcohol abuse and alcohol dependence, with the exception of "legal problems", which has been dropped, and the criterion of "craving" has been added.

### **Physiological Effects of Chronic Alcohol Use**

- Physical effects of alcoholism include tolerance and withdrawal, liver disease, cardiovascular disease, cancer, and neurological disorders such as Wernicke-Korsakoff syndrome.
- A particular concern is the development of fetal alcohol syndrome (FAS) in the offspring of alcoholic mothers.
- Alcohol withdrawal syndrome is the more common of two general reactions to the cessation of alcohol consumption in an alcoholic. It is characterized by physiological discomfort, seizures, and sleep disturbances.
- Delirium tremens (DTs) are the less common of two general reactions to the cessation of alcohol consumption in an alcoholic. It is characterized by extreme disorientation and confusion, fever, hallucinations, and other symptoms.
- Fatty liver is a condition in which fat deposits accumulate in the liver as a result of chronic alcohol abuse.
- Alcoholic hepatitis is a disease involving inflammation of the liver as a result of chronic alcohol abuse.
- Alcoholic cirrhosis is a disease involving scarring and deterioration of liver cells as a result of chronic alcohol abuse.
- Alcoholic dementia is a condition in which chronic alcohol abuse produces cognitive deficits such as difficulties in problem solving and memory.
- Wernicke-Korsakoff syndrome is a condition resulting from chronic alcohol consumption, characterized by disorientation, cognitive deficits, amnesia, and motor difficulty.
- Confabulation is the tendency to make up elaborate past histories to cover the fact that long-term memory has been impaired.
- Fetal alcohol syndrome is a serious condition involving mental retardation and facial-cranial malformations in the offspring of an alcoholic mother.
- Teratogenic - capable of producing specific birth defects.

### **Acute Effects of Alcohol**

- Potency (quantity required to produce effect) of alcoholic beverages measured by % of alcohol
  - Beer = 4-5% alcohol

- Wine = 10-13% alcohol
- Scotch, vodka, etc. = 40-50% alcohol
- Rule of equivalency = the principle that the effects of alcohol are related solely and exclusively to the total volume of absolute alcohol in the body
  - Denies that different drinks - independent of alcohol content - have different levels of potency
- Blood alcohol concentration (BAC) = the %, by volume, that alcohol comprises of the total content of blood in the body; 0.08% commonly defined as legal intoxication in states throughout U.S. (0.02% for minors)
  - The effects of alcohol, to a large degree, are dose related
  - Effects of alcohol influenced or mitigated by: size of drinker, gender, presence of food/water in the stomach

### **Patterns of Chronic Alcohol Abuse**

- Alcoholics can be found in every age, gender, racial, ethnic, and religious group and in all socioeconomic and geographic categories.
- Total cost in the U.S. are estimated to be about \$224 billion annually
- Men outnumber women in the incidence of binge drinking by about two to one.
- Men outnumber women in the incidence of heavy alcohol use by about three to one, although women are more vulnerable to alcohol-related organ damage.
- The elderly tend to be an underreported group with respect to alcoholism.
- A systems approach to alcoholism examines the complex interacting relationships among individuals, family, friends, and community.
- The concept of codependency has helped shed light on the specific effects of alcoholism on spouses and other family members.
- The children of alcoholics (COAs) carry an increased risk of becoming alcoholic as a result of a vulnerability toward alcoholism that is genetically or environmentally based, or both.

### **Who Drinks? Who Doesn't?**

- Drinking positively related to social class or socioeconomic status (SES) – the higher the income, education, and occupational prestige, the greater the likelihood that someone will drink
  - However, upper-SES persons more likely to drink moderately lower-SES persons
- Men more likely to drink than women – men also drink at greater volume
- Young adults under the age of 35 most likely to drink – likelihood of drinking declines with age (slowly)

### **The Genetics of Alcoholism**

- Studies of adoptions and twins have provided information about the relative influence of genetics and environment on the development of alcoholism.