

CHAPTER 2

DRUG-TAKING BEHAVIOR: THE PERSONAL AND SOCIAL ISSUES

DISCUSSION QUESTIONS AND ASSIGNMENTS

1. The list of celebrities who have died under drug-related circumstances (page 32 of the text) does not include those cases in which the contributing reason was the consumption of alcohol or tobacco. Assign students to research one or two instances in which a well-known person has died from the toxic effects of these two products (acute or chronic toxicity in the case of alcohol, chronic toxicity in the case of tobacco). A discussion can ensue concerning instances of drug toxicity not only involving well-known personalities but also people in their families or acquaintances of theirs. Some possible recent examples are Heath Ledger, Michael Jackson, Greg Giraldo, and Whitney Houston. Other classic examples include: Yul Brynner (lung cancer, tobacco), John Wayne (lung cancer, tobacco), Peter Jennings (lung cancer, tobacco), Walt Disney (lung cancer, tobacco), Edward R. Murrow (lung cancer, tobacco), and Mickey Mantle (cirrhosis, alcohol).
2. Have students collect, over a fourteen-day period, one or two articles in a newspaper, magazine, or from a trusted on-line source that covers drug-related violent acts or crimes. A selection might focus upon organized crime (e.g., a drug cartel in Colombia or Mexico) or a street-level incident (e.g., a homicide among gang members in a turf war). The selection should be analyzed in terms of whether the violence or crime would be categorized as pharmacological, economically compulsive, or systemic (pages 45–48 of the text).
3. Have students research the extent to which needle exchange programs for intravenous drug abusers have been proposed or implemented in their community. If there are existing needle exchange programs, are they officially sanctioned or merely ignored by authorities?
4. Invite a police officer or parole officer to class and take questions from the class regarding his or her experiences with drug-related crime.
5. Organize a brief debate on the pro and con arguments for the legalization of psychoactive drugs. Assign two groups of people to organize among themselves their ideas supporting each side. They may wish to use some of the positions expressed in the Point/Counterpoint Debate “Should we legalize drugs?” at the end of Part I in the text (pp. 58–59) as starting points for a debate.

NOTE: Continually updated statistical information about drug-related emergency cases in the United States can be accessed through the following web sites:

The Drug Abuse Warning Network (DAWN) program
<http://www.samhsa.gov/data/DAWN.aspx>

Substance Abuse and Mental Health Services Administration
<http://www.oas.samhsa.gov>

Continually updated statistical information about arrestees and illicit drug use in the United States can be accessed through the following web site:

International Arrestee Drug Abuse Monitoring (I-ADAM)
<http://www.nij.gov/topics/drugs/markets/adam/>

LECTURE OUTLINE FOR CHAPTER TWO

A. Drug Toxicity

1. **The toxicity of a drug refers to the potential physical or psychological harm that a drug might present to a user. If harmful effects are short term or temporary, the drug has some level of acute toxicity. If effects are long term or acquired over time, the drug has some level of chronic toxicity. Issues of chronic toxicity are examined in the context of drug tolerance and/or drug dependence.**
2. **A dose-response curve is a graph of the percentage of a population that experiences some response as a function of dosage level.** An "ED50" refers to the dosage that produces a response in 50 percent of the population. A "LD50" refers to the dosage that is lethal for 50 percent of the population. In general, the further apart the ED-response and LD-response curves, the safer (less toxic) the drug.
3. **Two ratios, the therapeutic index (LD50 over ED50) and the margin of safety (LD1 over ED99), provide information regarding a drug's relative safety.** The higher the ratio, the safer (or less toxic) the drug is. It should be pointed out, however, that these measures cannot be calculated for street drugs that have unknown dosage levels and possible contaminants.
4. News reports of well-known public individuals who have died as a direct consequence of drug misuse or abuse are vivid reminders of the hazards of drug use, but they can be misleading when one is attempting to arrive at an idea about the toxicity of particular drugs within a general population.

B. The DAWN Reports

1. **The Drug Abuse Warning Network (DAWN) is a system for reporting drug-related emergencies in U.S. metropolitan hospitals. These occurrences are referred to as drug-related ED visits (ED being an abbreviation for emergency department).**
2. In 2011, approximately one-half of all ED visits were associated with either drug abuse or drug misuse, with an average of two drugs being reported in a given drug-related ED visit. About a third of the time, a drug-related ED visit involved more than one drug, and in some cases, there were five or more drugs mentioned at the time. The percentage of ED visits involving prescription or OTC medication alone (34 percent) was greater than with illicit drugs alone (27 percent), and the percentage involving medications in some combination (57 percent) was greater than the percentage involving illicit drugs in some combinations (51 percent).
3. **DAWN statistics are not reported for ED visits involving alcohol use alone by individuals who are twenty-one years or older. If all emergencies related to alcohol use alone were reported, the numbers would far exceed those related to any other drug.** An examination of other ED-related circumstances would be obscured.
4. In 2011, about 1/4 (24 percent) of drug-related ED visits involved some use of alcohol in combination with an illicit drug, with a prescription or OTC medication, or with an illicit drug and a medication. Of the illicit-drug-related ED visits, the largest number of cases involved cocaine, marijuana, heroin, and stimulants (principally methamphetamine).
5. **Current DAWN statistics on drug-related deaths in the United States are not reported on a nationwide basis but instead in terms of individual metropolitan areas. Although the demographics and size of these areas vary widely, some generalizations can be made. Across regions, however, opiate drugs and cocaine are the two most frequently**

represented in drug-related deaths. Alcohol is commonly in third place. Medications to treat anxiety and depression are typically in the top five most frequently reported drugs in drug-related death cases. Multiple-drug (polydrug) use is commonly responsible for drug-related deaths. Marijuana is far less prominent in drug-related deaths than other illicit substances.

6. DAWN reports provide information only regarding the acute toxicity of drugs.

C. Behavioral Tolerance and Drug Overdose

1. **Tolerance refers to the capacity of a certain dosage of a drug to have a gradually diminished effect as the drug is taken repeatedly.** Due to tolerance, a drug user requires a higher dosage in order to maintain an equivalent response.
2. **Behavioral tolerance refers to the process of drug tolerance that is linked to drug-taking behavior occurring consistently in the same surroundings or under the same circumstances.**
3. Drug-taking behavior can be highly influenced by the surroundings in which that behavior occurs. In these cases, tolerance effects are maximized when drugs are used in the same environment or under the same circumstances. **This process, referred to as behavioral tolerance (alternatively, conditioned tolerance), is related to classical or Pavlovian conditioning principles.**
4. Environmentally induced withdrawal symptoms can increase the chances of craving the drug when the individual is in an environment that is associated with prior drug-taking behavior.

D. Physical and Psychological Dependence

1. **In cases of physical dependence, the drug abuser continues the drug-taking behavior in order to avoid physical withdrawal symptoms that would occur when that behavior ceases. In cases of psychological dependence, the continuance of drug-taking behavior is motivated by a craving for the pleasurable effects of the drug.**
2. The concept of physical dependence is largely based upon the experiences of heroin abusers, since heroin cessation produces significant physical withdrawal symptoms. The cessation of other abused drugs, however, produces little or no physical withdrawal symptoms. In these cases, animals can be shown to demonstrate incessant and intense attraction to the drugs, resulting in patterns of self-administration.
3. **Current experts in the field of drug abuse assert that the distinction between physical and psychological dependence has outgrown its usefulness in understanding patterns of drug-taking behavior.**

E. Diagnosing Drug-Related Problems: The Health Professional's Perspective

1. From 2000-2013, *The Diagnostic and Statistical Manual, Fourth Edition, Text Revision* (DSM-IV-TR) of the American Psychiatric Association identified two general conditions related to drug-taking behavior: substance dependence and substance abuse. **Substance dependence identifies a situation in which an individual displays signs of dependence with respect to a certain drug: tolerance, withdrawal, unintentional overuse, preoccupation with the drug, or continued drug use despite major drug-related problems. Substance abuse identifies a situation in which drug-taking behavior continues despite recurrent social, occupational, interpersonal, or legal problems related to that behavior.**

2. "Substance dependence" and "substance abuse" are preferred terms rather than "drug dependence" and "drug abuse" because there is often confusion in the public mind as to the definition of a drug, particularly in instances of alcohol and nicotine use.
3. In 2013, *The Diagnostic and Statistical Manual, Fifth Edition*, (DSM-5) was issued with two major changes involving drug taking behavior. First, the four possible criteria previously listed for the diagnosis of substance abuse and the seven possible criteria for the diagnosis of substance dependence have been combined into one set of eleven criteria for a newly established diagnosis called substance use disorder
4. **Substance use disorder is the new DSM-5 diagnostic term to identify an individual with significant problems that are associated with some form of drug-taking behavior.** A minimum of two criteria has been established for an individual to be identified as having a substance use disorder. The DSM-5 has set a severity-of-symptoms scale for this condition. The presence of two or three criteria is considered to reflect a mild level of substance use disorder, four or five criteria for a moderate level, and six or more for a severe level. See page 42, Table 2.1 for both DSM-IV-TR and DSM-5 criteria.

F. Special Circumstances in Drug Abuse

1. **A particular problem in drug abuse involves drug-taking behavior of women who are pregnant at the time. The developing fetus is subject to the toxic effects of the ingested drug.**
2. Injecting drugs carry the additional hazard of spreading disease through shared or non-sterile needles. Hepatitis and HIV infections are two prominent examples of health hazards associated with injected drug use.

G. Drugs, Violence, and Crime

1. **The Arrestee Drug Abuse Monitoring (ADAM) program in the U.S. Department of Justice tracks the percentage of arrestees in major U.S. cities who have tested positive for an illicit drug.** It is an attempt to connect drug-taking behavior with violence and crime, though the connection between drugs and these behaviors is far from simple. **Drug-related violence can be discussed in three categories: pharmacological violence, economically compulsive violence, and systemic violence.**
2. **Pharmacological violence refers to acts of violence resulting from the influence of a particular drug.** Some drugs can increase the likelihood of violent behavior, while others can decrease it. In general, ADAM statistics reflect the fact that many arrestees have some illicit drug in their system at the time of arrest. However, the length of the detection period in standard urinalysis tests for illicit drugs (ranging from a matter of several hours to two months, depending on the drug) makes it difficult to determine whether an offense was committed as a direct result of the influence of a particular drug. **Nonetheless, there is no question that alcohol as a drug can induce pharmacological violence.**
3. **Economically compulsive violence refers to acts of violence resulting from the need to finance the cost of purchasing a particular drug.** The market conditions for drug sales represent an influential factor for this form of violence. As drug prices increase, economically compulsive violence goes up. **The type of economically compulsive crime committed in association with drug use varies by gender. Males are likely to commit crimes against persons or property, whereas females are more likely to commit crimes against the public order, such as prostitution.**
4. **Systemic violence refers to acts of violence that are related to drug dealing and the heightened violence within a network of illicit drug distribution.** Systemic violence

became a major social problem during the 1980s and 1990s, when crack cocaine abuse was at its height.

H. Governmental Policy, Regulation, and Laws

1. **Between 1900 and 1970, U.S. drug policy changed from a philosophy of laissez-faire (“do as you please”) to an increasingly restricted philosophy with respect to drug access and use.**
2. The Harrison Act of 1914 was the first legislation to restrict access to opiate drugs and cocaine. At that time, the U.S. Treasury Department was entrusted with drug law enforcement responsibilities. Under the Harrison Act, opiate drugs were defined as “narcotics.” Eventually cocaine was included in the narcotic category, though its pharmacology and behavior effects are diametrically opposite to those of opiates.
3. **In 1970, the Comprehensive Drug Abuse Prevention and Control Act classified drugs in terms of five schedules of controlled substances.** Schedule I drugs include heroin, LSD, mescaline, and marijuana. By definition, Schedule I drugs have no acceptable medical use. **Schedule I and II refer to drugs presenting the highest level of abuse potential, and carry the most stringent restrictions on their possession and access. Schedule V drugs present the least abuse potential, and are the most accessible among controlled substances.**
4. In 1988, the Anti Drug Abuse Act set penalties for money laundering when associated with drug smuggling and sales and established the position of a cabinet-level “drug czar” to coordinate federal drug-law enforcement. **Drug policy in the United States presently originates from the White House Office of National Drug Control Policy.**
5. Since 1970, the responsibility for drug-law enforcement has moved from the Department of the Treasury to the Department of Justice, ending the era of U.S. drug regulation based upon taxation.

I. Drug Law Enforcement and Global Politics

1. **The federal Drug Enforcement Administration (DEA) is responsible for limiting the supply of illicit drugs in the United States.** A majority of the funds budgeted for drug control purposes are used for restricting the supply of drugs, as opposed to the demand for drugs by individuals. Several billions of dollars are currently spent each year in attempts to stop the trafficking of illicit drugs and their importation into the United States from other countries: principally nations in Central and South America.
2. **Additional federal agencies involved in drug control include the U.S. Customs and Border Patrol Agency, the U.S. Coast Guard and other branches of the U.S. military, and the Immigration and Naturalization Service.** Government agents are stationed overseas, working with the Departments of Defense and State, to limit exportation of illicit drugs at the source.
3. Increasing pressure is being placed on changing official drug-control policy from a goal of zero tolerance (i.e., a complete and total cessation of illicit drug trafficking and illicit drug-taking behavior) to a goal of harm reduction. **The goal of a harm reduction policy focuses on minimizing the social and psychological costs associated with drug-taking behavior rather than the elimination of the behavior itself.**

VIDEO SUGGESTIONS

"Breaking the Taboo: Have We Lost the War on Drugs?" (2012), 52 min. Films for the Humanities and Sciences, 132 West 31st Street 17th Floor New York, NY 10001. Available on DVD. DVD (Chaptered) ISBN 978-1-61753-943-5

As the war on drugs continues, drugs are cheaper and easier to get than ever before. This documentary examines the more than 40 year war on drugs, the impact on countries, on society, and whether we need to support drug liberalization.

"Legal Drugs: Still Addictive, Still Deadly" (2005), 51 min. Films for the Humanities and Sciences, 132 West 31st Street 17th Floor New York, NY 10001. Available on DVD. DVD (Chaptered) ISBN 978-1-60825-493-4

The vast majority of drug addicts are not criminals; tobacco and alcohol, both perfectly legal in most societies, are used and abused in staggering abundance. This program details the ways smoking and drinking chemically take hold of the brain. Explaining the many reasons—besides nicotine—for tobacco's stealthy effects, the program describes the existence of thousands of other addictive chemicals in the plant. It also studies properties in alcohol, which some scientists have nicknamed the "dirty drug," that short-circuit the brain and cause considerable damage.

"Rehab" (2005), 87 min. Films for the Humanities and Sciences, 132 West 31st Street 17th Floor New York, NY 10001. Available on DVD. DVD (Chaptered) ISBN 978-1-4213-2513-2

This documentary follows five young addicts through the camp's 30-day rehab program and tracks their progress, or lack thereof, in the months that follow. Featuring remarkably candid interviews with the participants, riveting one-on-one and family counseling sessions, and heartbreaking portrayals of post-camp life—which means relapses, more detox, and even jail time for some—the video clearly illustrates the challenges a recovering addict faces in order to avoid becoming the worst kind of statistic. Contains harsh language. An HBO Production.

"Substance abuse in the elderly" (2000), 30 min. Films for the Humanities and Sciences, 132 West 31st Street 17th Floor New York, NY 10001. Available on DVD.

Senior citizens discuss how they deal with the challenges of complex regimens of medication and diminished tolerance for alcohol, as they run the risk of falling into the trap of substance abuse.

"If...drugs were legal" (2005), 61 min. Films for the Humanities and Sciences, 132 West 31st Street 17th Floor New York, NY 10001. Available on DVD.

A projection to 2015 when a coalition of European nations has decriminalized most stimulants, narcotics, and hallucinogens. Interwoven with the fictional narrative are real-world interviews, highlighting both sides of the drug legalization debate.

"The war on drugs: The reality behind the movie *Traffic* (2001), 5-part series, 22 min. each. Films for the Humanities and Sciences, 132 West 31st Street 17th Floor New York, NY 10001. Available on DVD.

ABC News Anchor Ted Koppel and correspondent Deborah Amos update the subject of America's war on drugs, addressing the gritty facts so realistically portrayed in the Steven Soderbergh film *Traffic*.

ESSAY QUESTIONS FOR CHAPTER 2

- 2.1 Describe the therapeutic index and margin of safety measures as a way of understanding drug toxicity. Include in your answer an explanation of the denominator and numerator that go into each ratio.

pp. 30–31

- 2.2 Picture yourself as an emergency room physician at a metropolitan hospital that participates in the DAWN reporting system. What questions would you ask an incoming patient who is displaying symptoms that might be drug-related? What circumstances might prevent you from making an accurate record of the role drugs may have played in these symptoms?

pp. 33–35

- 2.3 Define behavioral tolerance and explain how this phenomenon might account for a drug-related overdose fatality, even though the dose might have fallen short of the lethal range.

pp. 37–39

- 2.4 Distinguish between the major DSM-IV-TR criteria for a diagnosis of substance dependence and a diagnosis of substance abuse and the new DSM-5 criteria for substance use disorder, as defined by the American Psychiatric Association.

pp. 41–43

- 2.5 Distinguish between pharmacological, economically compulsive, and systemic types of drug-related violence. Give a specific example for each type.

pp. 45–48

- 2.6 Discuss how harm reduction may be a better alternative than use reduction.

pp. 53–54

TRUE/FALSE QUESTIONS FOR CHAPTER 2

- 2.1 Cocaine has been used as a local anesthetic in the United States.
p. 29 Ans: T
- 2.2 Water has the potential for being a psychoactive substance.
p. 29 Ans: T
- 2.3 There are substances that exist which do not have any potential for toxicity.
p. 30 Ans: F
- 2.4 Drug safety depends on the possibility that the drug can be toxic at low doses compared to other drugs.
p. 30 Ans: T
- 2.5 If a drug is ED₅₀, it means the drug will become toxic if 50 mg of the drug is taken.
p. 30 Ans: F
- 2.6 Each effect produced by a particular drug will have its own dose-response curves.
p. 30 Ans: T
- 2.7 Examining the properties of a drug effect is that same as examining the properties of the drug itself.
p. 30 Ans: F
- 2.8 If an LD₁₀₀ dose were to be given to a group of 50 mice, all of them would die.
p. 30 Ans: T
- 2.9 The margin of safety measure of a particular drug is a more conservative (in the direction of safety) measure of drug toxicity than the therapeutic index for that drug.
p. 31 Ans: T
- 2.10 The higher the margin of safety ratio, the more toxic the drug.
p. 31 Ans: F
- 2.11 A problem with street drugs is that the user doesn't know the toxicity risks until the drug has been used.
p. 31 Ans: T
- 2.12 The DAWN reporting program reaches practically all emergency department patients in the United States.
p. 33 Ans: F
- 2.13 According to 2011 DAWN statistics, about 1/4 (27 percent) of drug-related ED visits involved some use of illicit drug use only.
p. 34 Ans: T
- 2.14 According to 2011 DAWN statistics, most ED visits involved alcohol only.
p. 34 Ans: F
- 2.15 DAWN statistics are collected for ED visits involving alcohol use alone by individuals twenty-one and older.
p. 34 Ans: F
- 2.16 Men outnumber women two-to-one in terms of ED visits involving illicit drug use.
p. 34 Ans: T

- 2.17 A patient mentions drinking eight glasses of vodka and gin during a drug-related ED visit. This is an example of an alcohol-in-combination DAWN case.
p. 35 Ans: F
- 2.18 Polydrug use refers to the use of a drug at different dosage levels from administration to administration.
p. 35 Ans: F
- 2.19 Multiple substance use is another name for polydrug use.
p. 35 Ans: T
- 2.20 Injecting heroin followed by snorting heroin is an example of polydrug use.
p. 35 Ans: F
- 2.21 In the DAWN reports, cocaine, heroin, and alcohol-in-combination cases are almost always lethal.
p. 35 Ans: F
- 2.22 According to recent DAWN statistics, there has been a greater number of drug-related ED for visits prescription and OTC medications alone than with illicit drugs alone. Narcotic analgesics are on the rise.
p. 34-35 Ans: T
- 2.23 There are more fatalities from chronic smoking of tobacco than from illicit drug use.
p. 36 Ans: T
- 2.24 If an individual experiences drug tolerance, an increasing dose must be taken over time in order to maintain the same level of drug effect.
p. 37 Ans: T
- 2.25 Drug abusers take drug doses which are well beyond the LD-response curve amounts.
p. 37 Ans: F
- 2.26 In most cases, the dosage levels taken by drug abusers would be lethal if taken by a first-time user.
p. 37 Ans: T
- 2.27 Tolerance is maximized when the user always takes the drug in the same setting.
pp. 37–38 Ans: T
- 2.28 Drug tolerance is to setting as behavioral tolerance is to repetition.
pp. 37–38 Ans: F
- 2.29 Behavioral tolerance is based on Pavlovian conditioning.
pp. 37–38 Ans: T
- 2.30 The concept of physical dependence originates from observations of heroin abusers.
p. 39 Ans: T
- 2.31 The existence of physical dependence in a particular drug hinges upon the presence of physical withdrawal syndromes, should the individual stop taking the drug.
p. 39 Ans: T
- 2.32 Withdrawal symptoms are the approximately the same for every psychoactive drug.
pp. 39–40 Ans: F
- 2.33 Continuing drug-taking behavior in order to avoid withdrawal is one indication of physical dependence.
p. 39 Ans: T

- 2.34 Withdrawal symptoms involve symptoms generally opposite from the original effect of the drug.
p. 39 Ans: T
- 2.35 Most addicts completing the withdrawal process in its entirety do not become re-addicted.
pp. 39-40 Ans: F
- 2.36 In an experiment discussed in the text, laboratory animals would choose cocaine over food even if the animal was starving to death.
p. 40 Ans: T
- 2.37 Tolerance, withdrawal symptoms, and unintentional overuse are three of the seven criteria for substance dependence.
p. 42 Ans: T
- 2.38 The placental barrier protects a fetus from toxic substances in the mother.
p. 43 Ans: F
- 2.39 The greater the extent of drug-taking behavior during pregnancy, the more likely there will adverse consequences during labor and delivery.
p. 43 Ans: T
- 2.40 A dirty needle carries the risk of HIV infection but not of hepatitis infection.
p. 43 Ans: F
- 2.41 In 2009, the ban on federal funding for needle exchange programs was lifted.
p. 43 Ans: T
- 2.42 Needle exchange programs are available in all fifty states.
p. 43 Ans: F
- 2.43 Needle-exchange programs have increased the prevalence of heroin abuse in recent studies.
p. 43 Ans: F
- 2.44 Prescription drugs have little effect on pregnant woman and the newborn.
p. 44 Ans: F
- 2.45 All psychoactive drugs have the same adverse effects on the fetus.
p. 44 Ans: F
- 2.46 Fetal effects of methamphetamine are unknown but likely to be similar to effects of cocaine—reducing normal fetal blood flow.
p. 44 Ans: T
- 2.47 There is a statistical association between the use of illicit drugs and crime.
p. 45 Ans: T
- 2.48 Violence resulting directly from the physiological effects of an injected drug is referred to as systemic violence.
p. 45 Ans: F
- 2.49 Tendencies toward violence have been observed during times of crack withdrawal as well as crack intoxication.
p. 46 Ans: T

- 2.50 The high price of illicit drugs on the street contributes to the incidence of economically compulsive violence.
p. 46 Ans: T
- 2.51 Systemic violence might include robbing a shopkeeper in order to get money to buy drugs.
p. 46 Ans: F
- 2.52 Under a laissez-faire philosophy, the government would assert little or no regulatory control with respect to drugs.
p. 48 Ans: T
- 2.53 Under the Harrison Act, cocaine was defined as a narcotic but opiate drugs were not.
p. 49 Ans: F
- 2.54 The smoking of opium in the United States was opposed at least in part because of its association with Chinese immigrants.
p. 48 Ans: T
- 2.55 Though cocaine was not defined as a narcotic, it was still affected by the Harrison Act of 1914.
p. 49 Ans: T
- 2.56 The Marijuana Tax Act of 1937 did not apply to growers of marijuana.
p. 49 Ans: F
- 2.57 Harry J. Anslinger was the Director of the Federal Bureau of Investigation (FBI) during the 1930s.
p. 49 Ans: F
- 2.58 Five "schedules" of controlled substances resulted from the Comprehensive Drug Abuse Prevention and Control Act of 1970.
pp. 49-50 Ans: T
- 2.59 Schedule IV drugs have the highest potential for abuse.
p. 50 Ans: F
- 2.60 Heroin is an example of a Schedule I drug.
p. 50 Ans: T
- 2.61 "Drug czars" were established as a result of the 1988 Anti-Drug Abuse Act.
p. 50 Ans: T
- 2.62 Expenditures to carry out the war on drugs are up by more than 1,400 percent since 1981.
p. 52 Ans: T
- 2.63 Year to year, there is a clear cut correlation of budget allocations used for drug regulation and the availability of illicit drugs.
p. 52 Ans: F

MULTIPLE CHOICE QUESTIONS FOR CHAPTER 2
(1 = easy, 2 = medium, 3 = difficult)

2.1 According to the text, each year we spend in the United States approximately _____ on health care for either specialty services, behavioral consequences, or the prevention of alcohol and illicit drug abuse.

- A. 5 billion
- B. 10 billion
- C. 20 billion
- D. 25 billion

2 p. 29 Ans: D

2.2 An extreme case of intoxication can involve which of the following non-drug substances?

- A. broccoli
- B. chocolate
- C. water
- D. sushi

2 p. 29 Ans: C

2.3 If a drug is dangerous, poisonous, or in some way interferes with a person's normal functioning, that drug is said to be _____.

- A. toxic
- B. addictive
- C. illicit
- D. acute

1 p. 30 Ans: A

2.4 _____ is defined as the possibility that the short-term effects of a particular drug will trigger a toxic reaction.

- A. Acute toxicity
- B. Collateral toxicity
- C. Conditional toxicity
- D. Chronic toxicity

2 p. 30 Ans: A

2.5 A dose-response curve is generally shaped as a(n) _____.

- A. S
- B. U
- C. inverted U
- D. inverted V

1 p. 30 Ans: A

2.6 An S-shaped graph (dose-response curve) helps explain _____.

- A. drug addiction
- B. drug elasticity
- C. drug toxicity
- D. none of the above

1 p. 30 Ans: C

2.7 As dose level rises, it is likely that the effect produced by the drug _____.

- A. rises as well
- B. rises and then falls
- C. falls and then rises
- D. remains the same

1 p. 30 Ans: A

2.8 An effective dose (ED) of a drug depends upon _____.

- A. what drug effect is being observed
- B. what percentage of the test population you have specified
- C. both A and B
- D. neither A nor B

2 p. 30 Ans: C

2.9 When reporting the ED₅₀ of a drug, the "50" refers to _____.

- A. 50 milligrams of the drug
- B. 50 percent of the test population
- C. volunteers 50 years of age or older
- D. 50 percent of the maximal dose that is possible to administer

2 p. 30 Ans: B

2.10 The LD-response curve for a particular drug will always be positioned _____ with respect to the ED-response curve.

- A. on top
- B. farther to the left
- C. farther to the right
- D. at the bottom

3 p. 31 Ans: C

2.11 Analogy: The ED-response curve is to the LD-response curve as _____.

- A. effective is to lethal
- B. emotional is to linguistic
- C. early is to late
- D. illicit is to licit

2 p. 31 Ans: A

2.12 The therapeutic index is a way of comparing _____.

- A. the LD₅₀ against the LD₁
- B. the LD₁ against the ED₉₉
- C. the ED₉₉ against the ED₅₀
- D. the LD₅₀ against the ED₅₀

3 p. 30 Ans: D

2.13 The ratio of the LD₅₀ over the ED₅₀ is called the _____.

- A. therapeutic index
- B. margin of safety
- C. effective dose for a particular drug effect
- D. lethal dose

2 p. 30 Ans: A

2.14 The margin of safety is _____ than the therapeutic index.

- A. less accurate in gauging drug toxicity
- B. simpler to calculate
- C. more conservative in the direction of safety
- D. less meaningful in general

2 p. 31 Ans: C

2.15 In terms of toxicity, a drug with a therapeutic index of two _____ a drug with a therapeutic index of ten.

- A. is roughly equivalent to
- B. is safer than
- C. is more dangerous than

D. cannot be compared to

3 p. 31 Ans: C

2.16 The margin of safety is a way of comparing _____.

- A. the LD50 against the LD1
- B. the LD1 against the ED99
- C. the ED99 against the ED50
- D. the LD50 against the ED50

3 p. 31 Ans: B

2.17 The ratio of the LD1 over the ED99 is called the _____.

- A. therapeutic index
- B. margin of safety
- C. effective dose for a particular drug effect
- D. lethal dose

2 p. 31 Ans: B

2.18 A dash of quinine is sometimes added to street "heroin" in order to _____.

- A. simulate the bitter taste of real heroin
- B. make the heroin more injectable
- C. strengthen the effect of the heroin
- D. weaken the effect of the heroin

2 p. 31 Ans: A

2.19 The margin of safety regarding the response to illicit drugs _____.

- A. is carefully monitored by the FDA
- B. is totally unregulated
- C. is increasingly monitored in several U.S. states
- D. is monitored by the FDA with respect to heroin

1 p. 31 Ans: B

2.20 According to the text, drugs that are unauthorized copies of prescription medications are known as _____.

- A. customized drugs
- B. copycat drugs
- C. look-alike drugs
- D. bootleg drugs

1 p. 31 Ans: C

2.21 Drug-related deaths among celebrities _____.

- A. can give you a fairly accurate idea about the relative toxicities of psychoactive drugs
- B. may not represent the drugs most frequently encountered by the rest of society
- C. involve drugs that are relatively inexpensive
- D. involve information that is largely unreported

2 p. 33 Ans: B

2.22 DAWN stands for the _____.

- A. District Attorney Wait-list Number (for arrests)
- B. Distribution of Abuse in White Non-adults
- C. Drug Abuse Wait-list Number (for treatment)
- D. Drug Abuse Warning Network

1 p. 33 Ans: D

2.23 Which of the following statements is true?

- A. DAWN statistics come from analysis of data from all U.S. hospitals.
- B. DAWN statistics come from major U.S. metropolitan hospitals.

- C. DAWN statistics come from primarily rural hospitals in the U.S.
- D. DAWN statistics only come from U.S. hospitals with minority populations.

3 p. 33 Ans: B

2.24 Information about drug-related medical emergencies is collected by the _____.

- A. Drug Abuse Warning Network
- B. Omnibus Drug Act
- C. U.S. Government in cooperation with the Canadian Government
- D. both A and C

1 p. 33 Ans: A

2.25 As assessed by DAWN, drug-related ED visits refer to occurrences resulting from _____.

- A. adverse reactions to medications
- B. the use of dietary supplements
- C. the use of illicit drugs
- D. all of the above

1 p. 33 Ans: D

2.26 Drug-related ED visits _____.

- A. include any and all visits to an emergency department that are related to recent drug use
- B. are not counted in DAWN statistics if they result in a fatality
- C. are by definition the result of illicit drug use
- D. exclude suicide attempts

2 p. 33 Ans: A

2.27 Which of the following would NOT be included as a drug-related ED visit in DAWN statistics?

- A. nonmedical use of a prescription or OTC drug
- B. alcohol-only consumption if the patient is younger than twenty-one years old
- C. malicious poisoning
- D. alcohol-only consumption if the patient is twenty-one or older

2 p. 34 Ans: D

2.28 DAWN statistics do not include drug-related ED visits involve the ingestion of _____.

- A. alcohol in combination with other drugs
- B. hallucinogens alone
- C. alcohol alone, unless the patient is under the age of twenty-one
- D. hallucinogens in combination with other drugs

1 p. 35 Ans: C

2.29 According to recent DAWN statistics, alcohol-in-combination is responsible for _____ of drug-related ED visits.

- A. one-tenth
- B. one-third
- C. one-fourth
- D. three quarters

3 p. 34 Ans: C

2.30 Alcohol-in-combination ED visits are described as _____.

- A. consuming two or more different alcoholic beverages at one time
- B. using alcohol in conjunction with some other drug
- C. alcohol being combined with non-alcoholic beverages
- D. none of the above

1 p. 34 Ans: B

2.31 Which of the following is an example of an alcohol-in-combination ED visit?

- A. drinking beer directly after drinking a glass of wine
- B. mixing gin, whiskey, and vodka in the same beverage
- C. smoking a marijuana joint while drinking beer
- D. mixing vodka and orange juice in the same beverage

1 p. 34 Ans: C

2.32 Which of the following would NOT be an example of polydrug use?

- A. alcohol combined with heroin
- B. alcohol combined with marijuana
- C. Motrin combined with Tylenol
- D. beer combined with tequila

1 p. 35 Ans: D

2.33 According to DAWN statistics, very few drug-related deaths resulted from the use of _____ alone.

- A. marijuana
- B. methamphetamine
- C. cocaine
- D. opiates

2 p. 35 Ans: A

2.34 Which of the following is an example of polydrug use?

- A. snorting cocaine and injecting cocaine
- B. drinking whiskey and drinking vodka
- C. taking LSD and smoking cocaine
- D. both A and C

2 p. 35 Ans: C

2.35 If Drug A and Drug B have the same number of drug-related ED visits but Drug A is used by ten times the number of individuals as Drug B, what are the relative toxicities of the two drugs?

- A. Drug A is more toxic than Drug B.
- B. Drug B is more toxic than Drug A.
- C. Drugs A and B have equivalent toxicities.
- D. Not enough information is present to judge the relative toxicities of Drugs A and B.

3 p. 35 Ans: B

2.36 Drug A has ten times the number of drug-related ED visits in the DAWN statistics as Drug B. Drug A is used by ten times the number of individuals as Drug B. What are the relative toxicities of the two drugs?

- A. Drug A is more toxic than Drug B.
- B. Drug B is more toxic than Drug A.
- C. Drugs A and B have equivalent toxicities.
- D. Not enough information is present to judge the relative toxicities of Drugs A and B.

3 p. 35 Ans: C

2.37 In recent years, DAWN statistics indicate _____.

- A. an decline in emergencies involving methamphetamine (speed)
- B. a slow decline in the number of emergencies in general
- C. an increase in emergencies involving methamphetamine (speed)
- D. no essential change in methamphetamine (speed) emergencies

1 p. 35 Ans: C

2.38 In recent years, DAWN statistics indicate _____.

- A. a decline in emergencies involving narcotic analgesics (prescription pain medication)
- B. a slow decline in the number of emergencies in general
- C. an increase in emergencies involving narcotic analgesics
- D. no essential change in emergencies involving narcotic analgesics

1 p. 35 Ans: C

2.39 Heroin-related emergencies have tended to increase since the 1990s because _____.

- A. heroin can be injected safely
- B. heroin can be used without a needle injection
- C. heroin can be ingested by mouth
- D. all of the above

1 p. 35 Ans: B

2.40 The DAWN reports mainly focus on emergency department cases caused by _____.

- A. acute toxicity
- B. chronic toxicity
- C. illicit drugs only
- D. licit drugs only

2 p. 36 Ans: A

2.41 Analogy: Acute toxicity is to chronic toxicity as _____.

- A. short-term is to long-term
- B. licit is to illicit
- C. non-lethal is to lethal
- D. stimulants are to depressants

1 p. 36 Ans: A

2.42 DAWN statistics provide information predominantly about _____.

- A. acute toxicity
- B. chronic toxicity
- C. drug dependence
- D. alcohol abuse

1 p. 36 Ans: A

2.43 The greatest number of drug-related deaths each year results from _____.

- A. the drinking of alcohol and the smoking of tobacco
- B. overdose of licit prescription and OTC medications
- C. abuse of illicit drugs
- D. heroin and cocaine abuse

2 p. 36 Ans: A

2.44 The physical or psychological harm a drug such as tobacco or alcohol might cause over a long period of use is known as _____.

- A. secondary toxicity
- B. acute toxicity
- C. delayed toxicity
- D. chronic toxicity

1 p. 36 Ans: D

2.45 The first documented case of drug tolerance had to do with someone named _____.

- A. King Mithridates VI of Pontus
- B. Lucretia Borgia
- C. Timothy Leary
- D. Socrates

1 p. 37 Ans: A

2.46 The capacity of a drug dose to have a gradually diminished effect on the user as it is taken repeatedly is known as _____.

- A. drug interaction
- B. drug dependence

- C. drug tolerance
- D. the placebo effect

1 p. 37 Ans: C

2.47 Todd started drinking caffeinated coffee every night to stay awake to study for finals. On Sunday evening, Todd was able to stay awake after drinking one cup of coffee. By Thursday evening, Todd found that he needed to drink two cups of the coffee to get the same effect. Why is this so?

- A. Todd must have used caffeine in combination with a second drug on Sunday evening.
- B. One of the two cups on Thursday night must have been a placebo.
- C. Todd has developed a tolerance to low doses of caffeine.
- D. Todd has become dependent on caffeine.

2 p. 37 Ans: C

2.48 Assume that an initial dose of 100 mg will produce a particular drug effect. After tolerance, which dose level would most likely produce an equivalent response?

- A. 50 mg
- B. 75 mg
- C. 100 mg
- D. 150 mg

3 p. 37 Ans: D

2.49 Assume that an initial dose of 100 mg will produce a particular drug effect. After repeated administrations, a dose of _____ produces an equivalent response. Which alternative would be consistent with the greatest degree of tolerance?

- A. 50 mg
- B. 100 mg
- C. 150 mg
- D. 200 mg

3 p. 37 Ans: D

2.50 The ingestion of increasingly large doses of a toxic drug will produce _____.

- A. a diminished response due to drug dependence
- B. an increased response due to drug sensitization
- C. a diminished response due to drug tolerance
- D. no measurable change in the response to the drug

2 pp. 37–38 Ans: C

2.51 If tolerance to a potentially toxic drug has occurred, a toxic response might occur only if the dose level is _____.

- A. relatively low
- B. relatively high
- C. virtually zero
- D. substituted by a placebo

2 p. 38 Ans: B

2.52 In general, during repeated drug administrations, the strongest response will occur _____.

- A. during initial administration of the drug
- B. after at least two weeks of daily administrations
- C. after one year of weekly administrations
- D. during initial administration and then after several months of repeated administrations

2 p. 38 Ans: A

2.53 It is possible that, through tolerance, individuals may have _____ after a period of regular administrations of a drug.

- A. a dramatically increased response
- B. an increasing response which then levels off

- C. no discernible response at all
- D. a newly acquired sense of brotherhood

1 p. 38 Ans: C

2.54 Tolerance effects depend upon which of the following factors in drug-taking behavior?

- A. repetition
- B. the ingestion of an illicit substance
- C. the abuse potential of the drug
- D. the age range of the individual using the drug

1 p. 38 Ans: A

2.55 Drug tolerance is to _____ as behavioral tolerance is to _____.

- A. setting; repetition
- B. setting; sensitivity
- C. repetition; sensitivity
- D. repetition; setting

2 p. 38 Ans: D

2.56 Principles of Pavlovian conditioning have been used to explain which of the following drug-taking phenomena?

- A. the placebo effect
- B. behavioral tolerance
- C. forms of tolerance tied to purely physiological effects
- D. a large number of ER mentions in the DAWN reports

2 p. 38 Ans: B

2.57 According to the text, behavioral tolerance is also referred to as _____.

- A. environmental tolerance
- B. conditioned tolerance
- C. analgesic tolerance
- D. administrative tolerance

2 p. 38 Ans: B

2.58 According to the research of Shepard Siegel, environmental cues that are present while taking morphine (an analgesic drug) produce _____.

- A. a heightened analgesic effect
- B. a lessened analgesic effect
- C. a heightened sense of identification to the location where the drug is being used
- D. little or no effect on one's response to the drug

3 p. 38 Ans: B

2.59 Behavioral or conditioned tolerance can be considered to be an important contributor to which drug-taking phenomenon?

- A. lethal overdoses
- B. improved responses to a drug
- C. the placebo effect
- D. increased sensitivity to a drug

1 p. 39 Ans: A

2.60 Conditioning effects have been demonstrated with which of the following drugs?

- A. cocaine
- B. alcohol
- C. nicotine
- D. all of the above

2 p. 39 Ans: D

2.61 Drug dependence can be _____.

- A. physical and psychological
- B. psychological but not physical
- C. neither psychological nor physical
- D. both A and B are correct

2 p. 39 Ans: D

2.62 Physical dependence requires the presence of _____.

- A. a craving for the drug
- B. a set of physical withdrawal symptoms
- C. a physical response to the drug
- D. none of the above

2 p. 39 Ans: B

2.63 In the case of heroin and other abused drugs, withdrawal symptoms are typically _____.

- A. opposite to the effects of the drug
- B. surprisingly similar to the effects of the drug
- C. unrelated to the effects of the drug
- D. at first similar to but then totally opposite from the effects of the drug

1 p. 39 Ans: A

2.64 If one of the effects of heroin is constipation, then withdrawal symptoms after chronic heroin abuse would include _____.

- A. increased constipation
- B. diarrhea
- C. a period of constipation followed by normal intestinal activity
- D. increased dizziness and headache pain

2 p. 39 Ans: B

2.65 Physical dependence is an inadequate explanation for the abuse of a particular drug if _____.

- A. the drug is legally available
- B. the drug is relatively low in toxicity
- C. withdrawal from the drug produces no physical symptoms
- D. withdrawal from the drug produces specific physical symptoms

2 p. 39 Ans: C

2.66 A key factor in psychological dependence is the presence of _____.

- A. craving
- B. physical withdrawal symptoms
- C. a heightened sense of well-being
- D. a decline in one's sensitivity to pain

1 p. 39 Ans: A

2.67 A problem in proposing psychological dependence as an explanation for drug abuse is _____.

- A. the necessity to show withdrawal symptoms
- B. the requirement that illicit drugs be involved
- C. the presence of conditioned tolerance
- D. its inherent circularity

2 p. 40 Ans: D

2.68 In studies of psychological dependence, a catheter refers to _____.

- A. a tube inserted orally to restrict feeding and drinking
- B. measurement device for assessing drug tolerance
- C. a tube inserted into a vein for the administration of a drug directly into the bloodstream
- D. a tube inserted into a muscle for administration of a drug directly into muscle tissue

2 p. 40 Ans: C

- 2.69 A strong tendency for an animal to self-administer a drug that ordinarily would NOT produce physical withdrawal symptoms yields evidence in favor of _____.
- A. physical dependence
 - B. psychological dependence
 - C. both physical and psychological dependence
 - D. neither physical nor psychological dependence

1 p. 40 Ans: B

- 2.70 Studies of self-administration of drugs in animals indicate that there is little or no inclination for animals to self-administer _____.
- A. cocaine and other stimulants
 - B. hallucinogens
 - C. amphetamines
 - D. all of the above

2 pp. 40-41 Ans: B

- 2.71 LSD, antipsychotic drugs, and antidepressant drugs all share the common feature of _____.
- A. producing little or no self-administration in animals
 - B. producing hallucinogenic effects
 - C. producing effects similar to cocaine and amphetamine
 - D. producing strong indications of psychological dependence

2 pp. 40-41 Ans: A

- 2.72 Drug abusers continue to use drugs due to _____.
- A. a strong compulsion to continue taking the drug
 - B. the desire to avoid withdrawal symptoms
 - C. cravings for the pleasurable effects of the drug
 - D. all of the above

2 p. 41 Ans: D

- 2.73 In studies of self-administration of drugs in animals, cocaine appears to have a _____ compared to heroin.
- A. greater potential for psychological dependence
 - B. lesser potential for psychological dependence
 - C. similar potential for psychological dependence
 - D. lesser potential for drug toxicity

2 p. 41 Ans: A

- 2.74 The DSM-IV-TR of the American Psychiatric Association defines two fundamental conditions related to drug-taking behavior: _____.
- A. substance dependence and drug abuse
 - B. substance dependence and drug dependence
 - C. substance dependence and substance abuse
 - D. drug dependence and drug abuse

1 p. 41 Ans: C

- 2.75 According to the DSM-5, the newly established diagnosis for drug-taking behavior is _____.
- A. substance dependence and substance use disorder
 - B. substance use disorder and drug dependent syndrome
 - C. substance dependence and substance abuse
 - D. substance use disorder

2 p. 41 Ans: D

- 2.76 According to the DSM-5, there are now _____ criteria for the newly established diagnosis.

- A. four
- B. seven
- C. eleven
- D. twelve

2 p. 41 Ans: C

- 2.77 According to the DSM-5 definitions, substance use disorder implies that _____.
- A. the individual is already dependent upon the substance for 6-month and meets 2 conditions over this period.
 - B. there must be withdrawal symptoms
 - C. there are tolerance issues
 - D. both B and C

2 p. 42 Ans: D

- 2.78 Which of the following is the time frame used for a DSM-5 diagnosis of substance use disorder?
- A. three or more criteria must have occurred within a 12-month period of time.
 - B. three or more criteria must have occurred within a 6-month period of time.
 - C. two or more criteria must have occurred within a 9-month period of time.
 - D. two or more criteria must have occurred within a 12-month period of time.

2 p. 42 Ans: D

- 2.79 Tolerance, withdrawal symptoms, and unintentional overuse are three of the seven criteria for the previous DSM-IV-TR diagnosis of _____.
- A. substance abuse
 - B. drug abuse
 - C. substance dependence
 - D. drug-taking behavior

2 p. 42 Ans: C

- 2.80 Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home is not sufficient to signify a diagnosis of _____.
- A. schizophrenia
 - B. substance use disorder
 - C. substance abuse
 - D. depression

3 p. 42 Ans: B

- 2.81 In the DSM-5, the American Psychiatric Association added this new criterion for substance use disorder.
- A. recurrent legal difficulties
 - B. craving or a strong desire or urge to use the substance
 - C. recurring failure to meet major role obligations
 - D. unintentional use in excessive amounts

2 p. 42 Ans: B

- 2.82 The "placental barrier" refers to a barrier between the _____.
- A. bloodstreams of the mother and the fetus
 - B. placenta of the mother and bloodstream of the mother
 - C. bloodstream of the mother and brain of the mother
 - D. bloodstream and brain of both mother and fetus

1 p. 43 Ans: A

- 2.83 The placental barrier is particularly effective in blocking the crossing of _____.
- A. all drugs
 - B. alcohol and nicotine
 - C. illicit drugs

D. none of the above

2 p. 43 Ans: D

2.84 Which types of effects are typically associated with a mother's use of drugs during the early weeks of her pregnancy?

- A. low birth weight
- B. physical malformations
- C. growth retardation
- D. premature birth

2 p. 43 Ans: B

2.85 Which effect is typically associated with a mother's use of drugs after the eighth month of pregnancy?

- A. low birth weight
- B. physical malformations
- C. risk of spontaneous abortions
- D. No effects are generally observed

2 p. 43 Ans: A

2.86 Generally speaking, growth retardation, premature birth, low birth weight, and neurological damage to the infant are events most associated with drug use during which time of pregnancy?

- A. before the third month
- B. during the fourth to fifth month
- C. during the sixth to seventh month
- D. after the eighth month

2 p. 43 Ans: D

2.87 The median time interval for those who are HIV infected to show symptoms of AIDS is usually approximately _____.

- A. six months
- B. two years
- C. ten years
- D. twelve years

2 p. 43 Ans: C

2.88 Needle exchange programs have been effective in reducing _____.

- A. the incidence of high-risk sexual behavior
- B. the incidence of HIV infection among intravenous drug users
- C. the prevalence of spontaneous abortions
- D. the incidence of physical dependence

1 p. 43 Ans: B

2.89 Needle exchange programs are _____.

- A. widely accepted in the U.S. but not in Europe
- B. widely accepted throughout the world
- C. available in thirty-eight states in the U.S.
- D. viewed as a failure

2 p. 43 Ans: C

2.90 According to the text, what are the effects of using cocaine or crack during pregnancy?

- A. constriction of blood vessels, reducing normal blood flow to the fetus
- B. high rates of spontaneous abortion
- C. growth retardation such as lower birth rate and smaller head circumference
- D. all of the above

3 p. 44 Ans: D

2.91 The prescription drug isotretinoin (brand name: Accutane) produces _____ when taken during pregnancy.

- A. extreme acne
- B. a deficiency in Vitamin A
- C. major birth defects
- D. substantial sedation

3 p. 44 Ans: C

2.92 When taken during pregnancy, which substance produces fetal effects similar to the effects of cocaine, and shows newborn effects including growth retardation, lethargy, increased difficulty to arouse and, once aroused, increased autonomic reactivity?

- A. marijuana
- B. methamphetamine
- C. heroin
- D. alcohol

3 p. 44 Ans: B

2.93 Withdrawal symptoms are frequently observed in the newborns of mothers who had used _____ during their pregnancy.

- A. heroin
- B. marijuana
- C. prescription drugs
- D. marijuana and tobacco

2 p. 44 Ans: A

2.94 The effects observed among pregnant women with respect to the use of barbiturates are _____.

- A. the same as the effects due to alcohol use
- B. clinically insignificant
- C. substantially greater than the effects due to the use of illicit drugs
- D. different from the effects due to the use of tobacco

3 p. 44 Ans: D

2.95 Which psychoactive drugs have little or no effect on pregnant women or the newborn?

- A. alcohol
- B. marijuana
- C. prescription drugs
- D. none of the above

2 p. 44 Ans: D

2.96 Drug-related violence due to the acute effects of the drug in an individual's system at the time of the violent act is referred to as _____.

- A. acute toxicity
- B. pharmacological violence
- C. systemic violence
- D. none of the above

1 p. 45 Ans: B

2.97 The Arrestee Drug Abuse Monitoring Program tests adult males arrested for a serious offense for _____ major numbers of illicit drugs.

- A. five
- B. six
- C. eight
- D. ten

1 p. 45 Ans: D

2.98 The detection period in a standard urinalysis test for an illicit drug can range from _____.

- A. several hours to two days
- B. several days to two weeks
- C. It depends on the drug for which an individual is being tested.
- D. Urinalysis is an unreliable method for assessing the presence of an illicit drug.

1 p. 45 Ans: C

2.99 A drug least likely to produce pharmacological violence would be a drug that made an individual _____.

- A. agitated and annoyed
- B. irritable and obnoxious
- C. sleepy or passive
- D. euphoric and giddy

1 p. 45 Ans: C

2.100 Which drug shows the least widely reported incidence of pharmacological violence?

- A. marijuana
- B. amphetamine
- C. PCP
- D. alcohol

1 p. 45 Ans: A

2.101 A drug that produces an on-edge manner and social paranoia is _____.

- A. PCP
- B. heroin
- C. marijuana
- D. all of the above

1 p. 46 Ans: A

2.102 Which of the following drugs does NOT produce agitation and paranoia?

- A. amphetamines
- B. cocaine
- C. PCP
- D. heroin

2 p. 46 Ans: D

2.103 Which drug shows the most widely reported incidence of pharmacological violence?

- A. heroin
- B. marijuana
- C. antipsychotic medication
- D. alcohol

2 p. 46 Ans: D

2.104 According to the text, a majority of homicides and sexually aggressive acts are committed by users of _____.

- A. crack-cocaine
- B. heroin
- C. alcohol
- D. nicotine

2 p. 46 Ans: C

2.105 An increase in one's general inclination toward antisocial behavior is characteristic of _____.

- A. the chronic use of most psychoactive drugs
- B. the chronic use of few if any psychoactive drugs
- C. the chronic use of many depressant drugs
- D. the chronic use of hallucinogens

2 p. 46 Ans: B

- 2.106 Economically compulsive violence stems from _____.
- A. the expense of drugs
 - B. the economic status of the country
 - C. the cost of overpowering prescription medication
 - D. none of the above

1 p. 46 Ans: A

- 2.107 Economically compulsive violence is commonly associated with which psychoactive drug?
- A. alcohol
 - B. nicotine
 - C. heroin
 - D. several types of prescription medication

2 p. 47 Ans: C

- 2.108 When heroin prices are high, the incidence of heroin-related property crimes _____.
- A. increases
 - B. There is no effect.
 - C. decreases
 - D. increases or decreases depending on the dose taken

2 p. 47 Ans: A

- 2.109 Generally speaking, if the price of street drugs increases, communities should expect _____.
- A. an increase in crime
 - B. fewer drug users in society
 - C. an increase in licit drug use
 - D. a decrease in emergency room visits due to drug overdose

2 p. 47 Ans: A

- 2.110 Relying on robbery to support one's drug habit is an example of _____.
- A. pharmacological violence
 - B. economically compulsive violence
 - C. systematic violence
 - D. passive aggression

1 p. 47 Ans: B

- 2.111 Which individuals within a community are typically targets for economically compulsive violence?
- A. storekeepers
 - B. children
 - C. the elderly
 - D. all of the above

2 p. 47 Ans: D

- 2.112 When the price of street heroin goes up, property crime related to heroin abuse _____.
- A. increases
 - B. decreases
 - C. is unaffected
 - D. is related to the price of cocaine

1 p. 47 Ans: A

- 2.113 An increase in criminal behavior as a result of a reduction in the supply of heroin is typically used as an indication of _____.
- A. pharmacological violence
 - B. economically compulsive violence
 - C. systemic violence

D. psychological and physical dependence

3 p. 47 Ans: B

2.114 Females are more likely than males to commit crimes that can be classified as _____.

- A. crimes against people
- B. crimes against property
- C. crimes against the public order
- D. When it comes to drug-related crime, no significant gender differences have been identified.

2 p. 47 Ans: C

2.115 Three aspects of drugs and violence are pharmacological, economically compulsive, and _____.

- A. systemic
- B. dynamic
- C. symbiotic
- D. pandemic

2 p. 47 Ans: A

2.116 Drug dealers are most directly affected by _____.

- A. pharmacological violence
- B. economically compulsive violence
- C. systemic violence
- D. passive aggression

1 p. 47 Ans: C

2.117 "Messing up the money" refers to _____.

- A. selling inferior grades of illicit drugs
- B. territorial disputes among drug dealers
- C. fraudulent handling of drug sale money
- D. purchasing drugs with stolen money

2 p. 47 Ans: C

2.118 Violence resulting from territorial disputes in drug dealing is an example of

- A. pharmacological violence
- B. economically compulsive violence
- C. systemic violence
- D. passive aggression

2 p. 47 Ans: C

2.119 In contrast to outlaw motorcycle gangs, the largest proportion of street gangs involved in drug sales during this time were comprised of individuals between _____ years of age.

- A. 10 and 11
- B. 12 and 13
- C. 15 and 16
- D. 16 and 18

3 p. 48 Ans: C

2.120 Systemic violence has been substantially reduced since the late 1990s with respect to which of the following drugs?

- A. LSD
- B. ecstasy
- C. heroin
- D. crack cocaine

2 p. 48 Ans: D

2.121 In the 1990s, a decline in crack abuse was followed by _____.

- A. a decline in homicide rates
- B. a decline in violent crime
- C. an increase in heroin abuse
- D. both A and B

2 p. 48 Ans: D

2.122 In the case of drug-related criminal behavior, an example of a white-collar crime would be _____.

- A. armed robbery
- B. embezzlement
- C. mugging
- D. burglary

1 p. 48 Ans: B

2.123 A laissez-faire policy regarding drugs would involve _____.

- A. little or no regulation
- B. extensive regulation
- C. well-reasoned procedures regarding regulation
- D. an emphasis upon controlling drugs from France

1 p. 48 Ans: A

2.124 Prior to 1900, opiate addicts who were caught _____.

- A. were fired from their jobs
- B. had their children taken from them and placed into foster care
- C. participated fully in the life of the community
- D. were often divorced from their spouses

2 p. 48 Ans: C

2.125 An active public policy toward drug regulation and control _____.

- A. has been prevalent throughout U.S. history
- B. once was prevalent early in U.S. history but no longer is the case today
- C. has been prevalent only in the twentieth century
- D. has declined substantially since 1950

2 p. 48 Ans: C

2.126 Prior to the twentieth century, the only drug for which there was a social movement to control its consumption was _____.

- A. heroin
- B. morphine
- C. cocaine
- D. alcohol

2 p. 48 Ans: D

2.127 Prior to the twentieth century, there was strong opposition to the smoking of _____.

- A. opium
- B. tobacco
- C. cocaine
- D. all of the above

2 p. 48 Ans: A

2.128 *The Jungle*, a novel by Upton Sinclair, _____.

- A. resulted in the enactment of regulatory legislation relating to food and drugs in 1906
- B. was the basis for an anti-marijuana movie in the 1930s
- C. promoted rainforest protection policies and future drug discoveries
- D. supported efforts by the government to educate young people about drug abuse

2 p. 49 Ans: A

2.129 The significance of the Pure Food and Drug Act of 1906 was that it _____.

- A. was enacted to control narcotic drug trafficking
- B. was the first regulatory act regarding drug consumption
- C. banned marijuana in 1937
- D. was repealed in 1914

2 p. 49 Ans: B

2.130 The Pure Food and Drug Act of 1906 _____.

- A. required manufacturers to list the amounts of alcohol or "habit-forming" drugs on product labels
- B. regulated sales of opiates to medical personnel only
- C. banned foods that contained opium
- D. made it illegal for opiate drugs to be used without a prescription

2 p. 49 Ans: A

2.131 The Harrison Act of 1914 _____.

- A. made hallucinogens illegal
- B. required strict record keeping of opiate drug transactions
- C. reduced drug-taking behavior substantially
- D. moved the emphasis in the field of drug abuse from a criminal one to a medical one

2 p. 49 Ans: B

2.132 According to drug legislation between 1914 and the 1960s, cocaine, heroin, marijuana, and peyote were officially classified as _____.

- A. licit drugs
- B. illegal substances only if smoked
- C. narcotic drugs
- D. hallucinogenic drugs

2 p. 49 Ans: C

2.133 As a result of the Harrison Act of 1914, _____.

- A. several other drugs (i.e., marijuana) were classified as narcotics
- B. narcotics were banned from medical use
- C. the Federal Bureau of Narcotics was established
- D. both A and B

2 p. 49 Ans: A

2.134 Harry J. Anslinger _____.

- A. was the director of the Federal Bureau of Narcotics (FBN) for more than thirty years
- B. later replaced J. Edgar Hoover as head of the Federal Bureau of Investigation (FBI)
- C. was a proponent of laissez-faire policies
- D. was a long-standing critic of tobacco smoking

1 p. 49 Ans: A

2.135 The "killer weed" stories in the 1930s led to _____.

- A. an extensive highway beautification program
- B. anti-pesticide legislation during the 1940s
- C. regulation of marijuana cultivation and use
- D. an increase in systemic violence in American cities

1 p. 49 Ans: C

2.136 The Marijuana Act of 1937 _____.

- A. made it a federal offense to smoke marijuana
- B. identified marijuana smoking as equivalent to tobacco smoking
- C. removed all regulations on the smoking of marijuana
- D. imposed a tax on growers, sellers, and buyers of marijuana

3 p. 49 Ans: D

- 2.137 The Comprehensive Drug Abuse Prevention and Control Act of 1970 _____.
- A. outlawed sales of narcotics in the United States
 - B. gave states the authority to pass their own laws regarding narcotic abuse
 - C. classified drugs into five classifications
 - D. applied only to manufacturers of drugs

1 p. 49 Ans: C

- 2.138 Following drug legislation in 1970, the term “schedule” has been used as _____.
- A. a way of calculating the need for treatment options for drug abusers
 - B. a way of classifying drugs
 - C. a way of tracking the FDA’s approval process for new prescription drugs
 - D. a way of monitoring the number of drug arrests

3 p. 49 Ans: B

- 2.139 Which schedule(s) of controlled substances imply the greatest potential for abuse?
- A. Schedule I and II
 - B. Schedule III and IV
 - C. Schedule V
 - D. All five schedules imply relatively equal potential for abuse.

2 p. 49 Ans: A

- 2.140 Which schedule of drugs is most restricted in U.S. society?
- A. Schedule I
 - B. Schedule II
 - C. Schedule III
 - D. Schedule IV

1 p. 49 Ans: A

- 2.141 A Schedule V drug _____.
- A. has a high potential for abuse and no medical use
 - B. has minimal abuse potential and widespread medical use
 - C. has potential for abuse, as well as accepted medical uses; limits on prescriptions apply.
 - D. must be stored in secure vaults by pharmacists and physicians

2 p. 50 Ans: B

- 2.142 Penalties for money laundering when associated with drug smuggling and sales were established by the _____.
- A. Harrison Act of 1914
 - B. Comprehensive Drug Abuse Prevention and Control Act of 1970
 - C. Anti Drug Abuse Act of 1988
 - D. Clean Dollar Bill Act of 1993

3 p. 50 Ans: C

- 2.143 Antianxiety drugs and sedative-hypnotics are officially classified as _____ drugs.
- A. Schedule I
 - B. Schedule II
 - C. Schedule III
 - D. Schedule IV

2 p. 50 Ans: D

- 2.144 During the 1980s, about _____ percent of the budget to control drug abuse was allocated toward treatment and prevention programs.
- A. 30

- B. 40
- C. 60
- D. 70

3 p. 51 Ans: A

2.145 Currently, about ___ percent of the budget to control drug abuse is directed toward efforts to reduce the supply of illicit drugs.

- A. 35
- B. 45
- C. 55
- D. 60

3 p. 51 Ans: D

2.146 The “war on drugs” in the United States was officially declared by President _____.

- A. Richard Nixon in 1971
- B. Theodore Roosevelt in 1906
- C. Ronald Reagan in 1981
- D. George Bush in 1990

2 p. 52 Ans: A

2.147 Which of the following is NOT a program associated with the harm reduction approach toward drug abuse?

- A. needle exchange
- B. nicotine patches
- C. international agreements on drug trafficking
- D. methadone maintenance

1 p. 53 Ans: C

2.148 The opposite concept in relationship to harm reduction is

- A. pharmacological violence
- B. zero tolerance
- C. benign neglect
- D. biopsychosocial model

2 p. 53 Ans: B