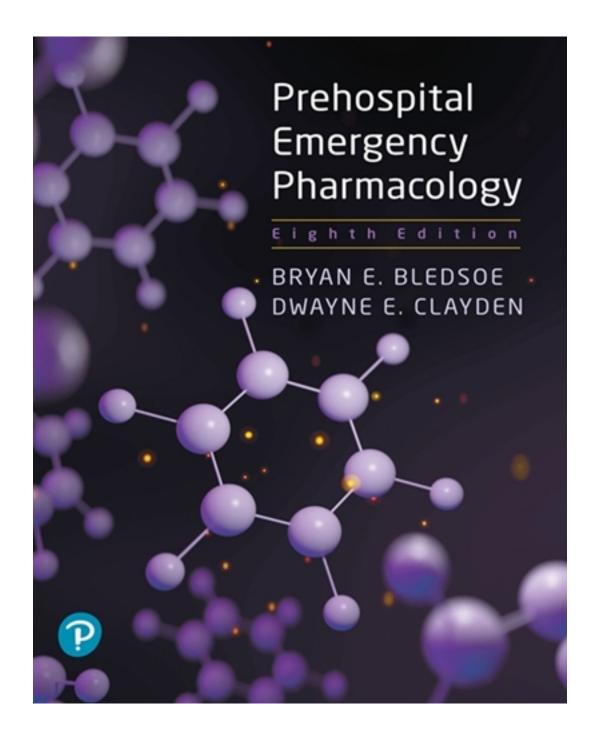
Test Bank for Prehospital Emergency Pharmacology 8th Edition by Bledsoe

CLICK HERE TO ACCESS COMPLETE Test Bank



Test Bank

Prehospital Emergency Pharmacology, 8e (Bledsoe/Clayden) Chapter 1 General Information

- 1) The study of natural drug sources that has been expanded to include chemicals developed and used in laboratory research most correctly describes:
- A) Pharmacology.
- B) Pharmacodynamics.
- C) Pharmacognosy.
- D) Pharmacokinetics.

Answer: C

Explanation: A) Pharmacology is the study of drugs and their actions on the body.

- B) Pharmacodynamics refers to the mechanisms by which medications produce biochemical or physiological changes in the body.
- C) Study of natural drug sources that has been expanded to include chemicals developed and used in lab research.
- D) The study of how medications enter the body, reach their site of action and eventually become eliminated.

Page Ref: 2

- 2) Atropine is a powerful organic alkaloid that reacts with acid to form a salt that is readily soluble in body fluids. From which of the following sources is atropine derived?
- A) Plant
- B) Animal
- C) Mineral
- D) Synthetic

Answer: A

Explanation: A) Atropine is developed from the plant Atropa belladonna.

- B) Animal sources are extracted from the body fluids of animals.
- C) Mineral sources provide inorganic material not available from plants or animals.
- D) Synthetic sources are created in the lab using processes such as recombinant DNA. They may be used in combination with natural sources.

Page Ref: 3

- 3) Examples of synthetically produced medications include:
- A) Diazepam, fentanyl, and adenosine.
- B) Pepsin, pancreatin, and oxytocin.
- C) Atropine, morphine, and digitalis.
- D) Magnesium, sodium bicarbonate, and calcium chloride.

Answer: A

Explanation: A) Diazepam, fentanyl, and adenosine are all produced synthetically.

- B) Pepsin, pancreatin, and oxytocin are derived from animal sources.
- C) Atropine, morphine, and digitalis are identified as plant sources.
- D) Magnesium, sodium bicarbonate, and calcium chloride are identified as mineral sources of drugs.

- 4) In order to obtain the MOST current information related to a medication, it is suggested that the prehospital provider:
- A) Use only local protocol as your source.
- B) Use multiple sources and compare information in conjunction with medical direction.
- C) Rely on an EMS guide as the sole source of information.
- D) Utilize the internet as a resource because it is most correct.

Answer: B

Explanation: A) Local protocols may not encompass the many medications currently available.

- B) Using multiple sources as well as comparing information will provide the provider with the most current information. Medical direction is also imperative.
- C) While EMS guides may provide some information, they may not include all relevant information.
- D) Internet sources are sometimes difficult to determine validity of information present and should be verified.

Page Ref: 4, 5

- 5) A tool that may be readily available and carried by the prehospital provider for field use when seeking information regarding an unknown medication is:
- A) United States Pharmacopeia.
- B) Physicians' Desk Reference.
- C) Drug information/hospital formulary.
- D) Smart phone.

Answer: D

Explanation: A) The United States Pharmacopeia contains all current drugs, but is not readily available.

- B) The Physicians' Desk Reference, while useful, is not typically readily available or practical at the scene of an emergency.
- C) The drug information/hospital formulary is generally not used in the prehospital setting.
- D) Specific applications are available for most smart phones that contain readily available information related to both prescribed and non-prescription medications.

- 6) The phase of drug testing that includes determining toxicity, pharmacokinetics, and determining a drug's "therapeutic index" occurs during:
- A) Postmarketing surveillance.
- B) New drug application.
- C) Clinical research and development.
- D) Preclinical testing, research, and development.

Answer: D

Explanation: A) Postmarketing surveillance occurs during phase four of testing. A new drug's therapeutic index must already be determined.

- B) An investigational new drug may be applied for once the therapeutic index has been determined prior to the phase 1 of human drug testing.
- C) Clinical research and development begins after the therapeutic index has been determined.
- D) Preclinical testing, research, and development occurs prior to human testing and is concerned with the pharmacokinetics and pharmacodynamics of a new drug in order to discover its therapeutic index.

Page Ref: 6

- 7) The term "therapeutic index" refers to:
- A) Ratio of a drug's lethal dose to its effective dose.
- B) Amount of drug required to cause a side effect.
- C) Pharmacokinetics of a drug.
- D) Efficacy of a drug.

Answer: A

Explanation: A) The ratio of a drug's lethal dose to its effective dose determines the therapeutic index.

- B) Side effects are the undesired effects of a medication.
- C) Pharmacokinetics refers to the drug's movement from introduction into the system until system elimination.
- D) Efficacy refers to how well the drug works in terms of treatment effect.

Page Ref: 6

- 8) Which of the following statements regarding the use of abbreviations in pharmacology is TRUE?
- A) Abbreviations vary depending upon the drug manufacture.
- B) The abbreviation "mg" always will refer to the mineral, magnesium.
- C) The USP in the only recognized source for determining abbreviations.
- D) Abbreviations in pharmacology should be used carefully to avoid confusion and should be agreed upon in local systems.

Answer: D

Explanation: A) Abbreviations should be used with caution as they can lead to confusion. A standardized system is in place that makes charting and documentation more clear and concise.

- B) Most sources recognize the abbreviation "mg" to indicate the unit of measure "milligram." Magnesium is an element with the designation of Mg.
- C) The USP contains the formulary used in the United States.
- D) Medical abbreviations should be used carefully to avoid confusion and should be agreed upon in local systems.

- 9) Following the designation of a new drug as an "investigational new drug," there are ______phases of testing on humans.
- A) one
- B) two
- C) three
- D) four

Answer: D

Explanation: A) There are three other phases of drug testing.

- B) There are two other phases of drug testing.
- C) There is another phase of drug testing.
- D) There are four phases of drug testing that occur following the designation of a drug as an "investigational new drug."

Page Ref: 9

- 10) The phase of drug testing that determines the pharmacokinetics, toxicity, and safe dose in humans is:
- A) Phase one.
- B) Phase two.
- C) Phase three.
- D) Phase four.

Answer: A

Explanation: A) The primary purpose of phase one testing is to determine the pharmacokinetics, toxicity, and safe dose in humans.

- B) The primary purpose of phase two testing is to find the therapeutic medication level and watch carefully for toxic and side effects.
- C) The primary purpose of phase three testing is to refine the usual therapeutic dose and to collect relevant data on side effects.
- D) The primary purpose of phase four testing involves postmarketing analysis during conditional approval.

Page Ref: 9

- 11) An example of a drug that may receive expedited medical approval would be:
- A) A drug used to treat a rare disease that affects less than 200,000 people.
- B) A placebo that is administered to provide psychological control of responses.
- C) A drug that may help prevent a public health threat such as HIV.
- D) A drug that is being evaluated in order to determine the therapeutic index.

Answer: C

Explanation: A) This Answer describes the definition of an orphan drug.

- B) A placebo is used in testing and does not require expedited medical approval.
- C) Expedited approval may be granted when a drug may be of use in treating a public health threat such as HIV.
- D) The therapeutic index is obtained during preclinical phase of drug testing and does not require expedited approval.

- 12) A drug in which potential tax credits or grants may provide incentives to assist in the research and development for a condition that affects a very small portion of the general population is known as a/an _____.
- A) Orphan drug
- B) Expedited drug
- C) Investigational new drug
- D) Phase 1 drug

Answer: A

Explanation: A) A company may receive incentives to encourage research and development of a drug that is meant for a small percentage of the general population.

- B) An expedited drug is a drug that moves quickly through the normal phases of human testing when that drug may help in the prevention of a public health crisis.
- C) A drug gains the status of investigational new drug when it has completed its preclinical testing phase and is ready for human testing.
- D) Phase one refers to a drug testing and approval phase.

Page Ref: 10

- 13) The FDA may require the manufacture of a drug to post a prominent "black box" warning when:
- A) The drug receives IND status (Investigational new drug).
- B) Following phase one human testing.
- C) Unlabeled uses of the drug occur.
- D) A problem may arise that may lead to death or severe injury if the medication is used.

Answer: D

Explanation: A) A drug gains the status of investigational new drug when it has completed its preclinical testing phase and is ready for human testing.

- B) The primary purpose of phase one testing is to determine the pharmacokinetics, toxicity, and safe dose in humans.
- C) Unlabeled uses of a drug may occur when a physician or group of peers determines that a drug that has indications for one disorder inadvertently is beneficial for another disorder that it was not given an indication for during the human testing phases.
- D) The FDA requires a prominent "black box" warning when the use of a prescribed drug may lead to death or injury as a result of its use.

- 14) A physician has prescribed a drug normally used for hypertension to treat recurrent episodes of angina based on recommendations of colleagues and the most recent medical journals. Which of the following describes his actions?
- A) The physician may do so legally based on the unlabeled use of medications.
- B) The physician may do so legally if the uses are posted in the PDR.
- C) The physician may do so legally if the uses are approved by the manufacturer of the drug.
- D) It is illegal for the physician to prescribe a drug for anything other than the manufacturers intended, stated use as registered with the USP.

Answer: A

Explanation: A) A physician may utilize a medication for something other than its intended use if colleagues, or current medical journals, agree.

- B) The *PDR* will only contain the manufactures approved indications.
- C) The manufacture can only recommend a drug for its specific indications that are determined during human drug testing.
- D) A physician may utilize a medication for something other than its intended use if colleagues, or current medical journals, agree.

Page Ref: 11

- 15) The use of standing orders and treatment protocols are BEST described as:
- A) The emergency care provider following the orders and advise of an on-scene physician.
- B) The administration of morphine following on-line medical consultation.
- C) The independent authority granted to prehospital care providers a consequence of the Controlled Substance Act.
- D) Treatments that are rendered to treat specific presenting signs and symptoms prior to contacting medical direction.

Answer: D

Explanation: A) This describes face-to-face transfer of orders from physician to paramedic.

- B) This describes the function of on-line medical direction.
- C) No such authority exists. The CSA regulated and controlled narcotics and other dangerous drugs by classifying them.
- D) Treatments of specific presenting signs and symptoms may be treated when standing orders and protocols are in place and under the direction of off-line medical direction.

- 16) The _____ included the truth in labeling clause which would require manufacturers to post a statement accurately describing a package's content.
- A) Controlled Substance Act
- B) Federal Food, Drug, and Cosmetic Act of 1938
- C) Pure Food and Drug Act of 1906
- D) Kefauver-Harris Amendment

Answer: B

Explanation: A) The Controlled Substance Act helped regulate and control narcotics and other dangerous substances by providing classifications related to the medications use.

- B) The Federal Food, Drug, and Cosmetic Act required a statement that accurately described a package's content.
- C) Established the FDA and prohibited the sale of medicinal preparations that had little or no use and restricted the sale of drugs with a potential of abuse. It was not as all-encompassing as its originators envisioned.
- D) The Kefauer-Harris Amendment was an amendment to the Federal Food, Drug, and Cosmetic Act that required pharmaceutical manufacturers to provide proof of the safety and effectiveness of their drugs.

Page Ref: 13

- 17) Which of the following is TRUE of the Comprehensive Drug Abuse Prevention and Control Act of 1970?
- A) It required labeling of all medications.
- B) It required that manufactures provide proof of safety and effectiveness prior to production.
- C) Controlled import, manufacture, and sale of the opium plant and derivatives.
- D) Provided classifications of drugs into five different categories or "schedules."

Answer: D

Explanation: A) Labeling of medications was required by the Federal Food, Drug, and Cosmetic Act.

- B) The Kefauer-Harris Amendment was an addition to the Federal Food, Drug, and Cosmetic Act.
- C) The Harrison Narcotic Act of 1914 regulated the importation, manufacture, and sale of the opium and its derivatives.
- D) The Controlled Substances Act of 1970, or the Comprehensive Drug Abuse Prevention and Control Act of 1970 classifies drugs used in medicine into five different categories, or schedules. Page Ref: 14
- 18) Which of the following would be listed as a Schedule I drug?
- A) Heroin
- B) Hydromorphone
- C) Codeine
- D) Tramadol

Answer: A

Explanation: A) Heroin has no medical use and is scheduled as a Schedule I drug.

- B) Hydromorphone is a Schedule II drug.
- C) Codeine is a Schedule III drug.
- D) Tramadol is a Schedule IV drug.

- 19) Careful management of narcotic medications carried on emergency service vehicles includes:
- A) Eliminating standing orders and protocols when using narcotics.
- B) Only using Schedule IV narcotics if necessary.
- C) Ensuring that the medications are stored in a substantial safe or cabinet or have a tamperproof seal.
- D) Allowing Schedule I drug if an unlabeled medication use exists according to current literature.

Answer: C

Explanation: A) Standing orders may be necessary in circumstances where on-line medical direction is not available.

- B) Schedule IV narcotics generally do not have application to prehospital care.
- C) All narcotics should be stored in a substantial safe or cabinet or have a tamperproof seal if necessary to remove from unit.
- D) Schedule I narcotics have no acceptable use in prehospital care and often are illegal. Page Ref: 15
- 20) A term that refers to the amount of drug that is absorbed and reaches the general circulation is:
- A) Purity.
- B) Potency.
- C) Efficacy.
- D) Bioavailability.

Answer: D

Explanation: A) Purity refers to the uncontaminated amount of the drug containing only one active component.

- B) Potency refers to a drugs strength or power to produce the desired effect.
- C) Efficacy refers to how well the drug works in terms of treatment effect.
- D) Bioavailability is the degree to which a drug becomes absorbed and reaches general circulation.

Page Ref: 17

- 21) While checking the medications in your unit's drug box, you identify the medication, "meperidine hydrochloride, USP." You recognize this as the drug's:
- A) Chemical name.
- B) Official name.
- C) Trade name.
- D) Generic name.

Answer: B

Explanation: A) Chemical name precisely describes the medications atomic and molecular structure.

- B) The official name of a drug is followed by the letters USP indicating that it is in the official formulary of the United States.
- C) A trade name of a drug is the name a manufacturer gives a drug and is registered.
- D) The generic name, while similar to the official name does not have USP following it.

- 22) Liquid medications administered into the body through intramuscular, subcutaneous, or intravenous are known as:
- A) Parenteral medications.
- B) Prefilled syringes.
- C) Tinctures.
- D) Suspensions.

Answer: A

Explanation: A) Parenteral medications are liquids administered by IM, SQ, or IV routes.

- B) Prefilled syringes are ways in which a medication is supplied.
- C) A tincture is a medication extracted with alcohol.
- D) A suspension contains insoluble medications.

Page Ref: 20

- 23) After determining that your patient has overdosed on a narcotic medication causing a decreased respiratory drive, you administer the medication, naloxone that opposes the effects of the narcotic increasing the respiratory drive. This is an example of a/an:
- A) Side effect.
- B) Contraindication.
- C) Adverse reaction.
- D) Antagonism.

Answer: D

Explanation: A) A side effect is an unavoidable, undesired effect seen with therapeutic medicine doses.

- B) A contraindication is a situation in which it would be harmful to administer a medication.
- C) An adverse reaction is the same as a side effect.
- D) An antagonism signifies the opposition between two or more medications such as morphine and naloxone.