



## 4

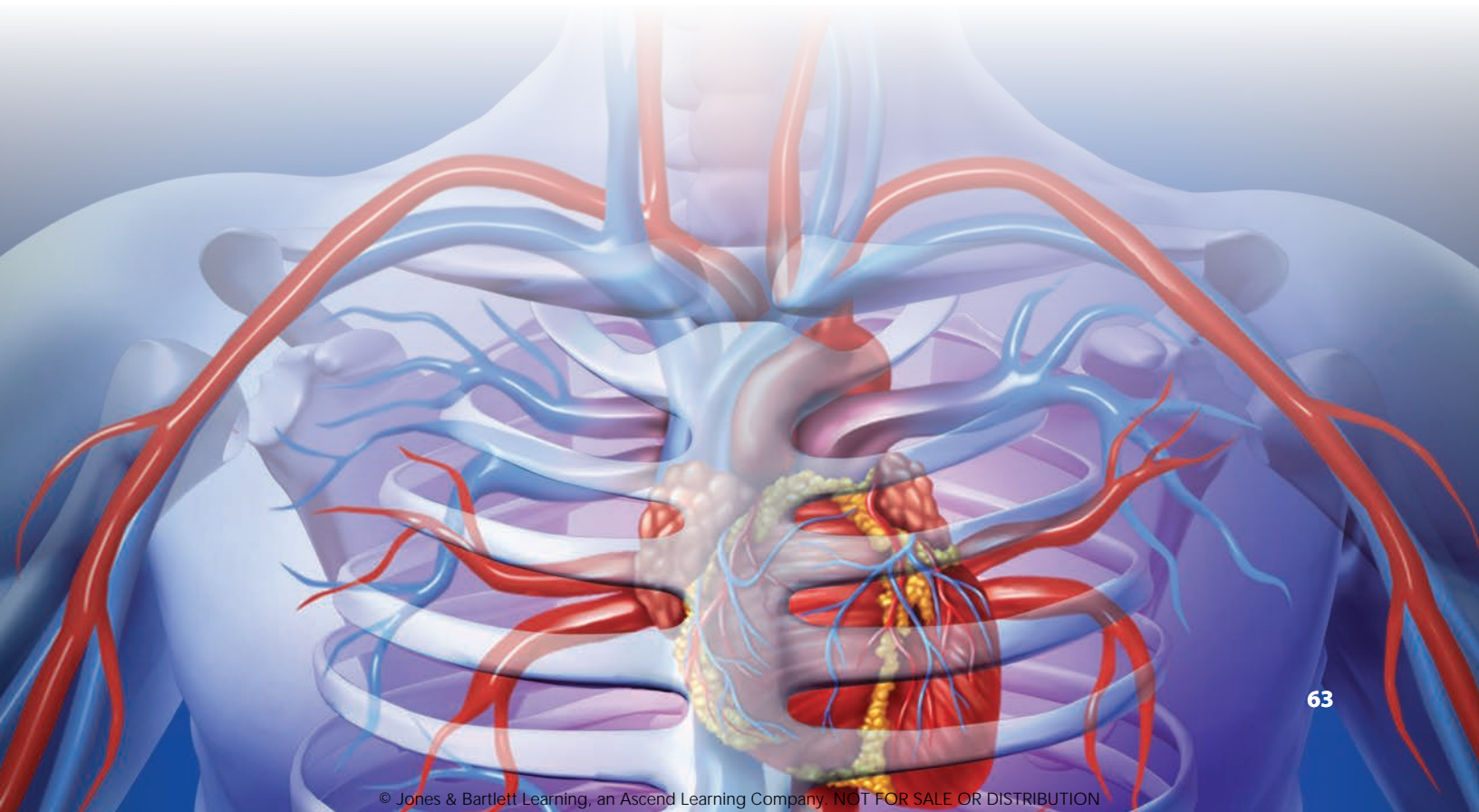
# Medical Terminology

### OBJECTIVES



*Study the information in your TEXTBOOK that corresponds to each objective to prepare yourself for the activities in this chapter.*

1. Identify, define, and use basic word elements individually and within medical terms.
2. Demonstrate proper pronunciation of medical terms and unique plural endings.
3. Use common medical abbreviations and symbols, and explain how items on the “Do Not Use” list can cause problems.



## MATCHING

Use choices only once unless otherwise indicated.

### MATCHING 4-1: KEY TERMS AND DESCRIPTIONS

Match each key term with the *best* description.

#### Key Terms

1. \_\_\_\_ Combining form
2. \_\_\_\_ Combining vowel
3. \_\_\_\_ “Do Not Use” list
4. \_\_\_\_ Prefix
5. \_\_\_\_ Suffix
6. \_\_\_\_ Unique plural endings
7. \_\_\_\_ Word root

#### Descriptions

- A. Comes before a word root and modifies its meaning
- B. Distinctive Greek or Latin word endings that indicate more than one
- C. Establishes the basic meaning of a medical term
- D. Follows a word root and adds to or changes the meaning
- E. Itemization of dangerous abbreviations, symbols, and acronyms
- F. Makes pronunciation easier
- G. Word root joined with a vowel

### MATCHING 4-2: WORD ROOTS AND MEANINGS

Match each word root with its meaning. Not all meanings will be used.

#### Word Roots

1. \_\_\_\_ aer
2. \_\_\_\_ bucc
3. \_\_\_\_ chondr
4. \_\_\_\_ cry
5. \_\_\_\_ cubit
6. \_\_\_\_ cyt
7. \_\_\_\_ derm
8. \_\_\_\_ glyc
9. \_\_\_\_ hemat
10. \_\_\_\_ lip
11. \_\_\_\_ leuk
12. \_\_\_\_ morph
13. \_\_\_\_ my
14. \_\_\_\_ prandi
15. \_\_\_\_ sphygm
16. \_\_\_\_ squam
17. \_\_\_\_ thromb
18. \_\_\_\_ ren
19. \_\_\_\_ scler
20. \_\_\_\_ vas

#### Meanings

- A. Air
- B. Bladder
- C. Blood
- D. Bone
- E. Cartilage
- F. Cell
- G. Cheek
- H. Chest
- I. Clot
- J. Cold
- K. Elbow
- L. Fat
- M. Form
- N. Hard
- O. Kidney
- P. Liver
- Q. Lung
- R. Meal
- S. Muscle
- T. Pain
- U. Pulse
- V. Scale
- W. Skin
- X. Sugar
- Y. Vessel
- Z. White

**MATCHING 4-3: PREFIXES AND MEANINGS**

Match each prefix with its meaning. Not all meanings will be used.

**Prefixes**

1. \_\_\_\_\_ a-
2. \_\_\_\_\_ brady-
3. \_\_\_\_\_ dorso-
4. \_\_\_\_\_ epi-
5. \_\_\_\_\_ homeo-
6. \_\_\_\_\_ intra-
7. \_\_\_\_\_ macro-
8. \_\_\_\_\_ medi-
9. \_\_\_\_\_ neo-
10. \_\_\_\_\_ per-
11. \_\_\_\_\_ poly-
12. \_\_\_\_\_ tri-

**Meanings**

- A. Back
- B. Before
- C. Between
- D. Difficult
- E. Equal
- F. Large
- G. Many
- H. Middle
- I. New
- J. Outside
- K. Over
- L. Same
- M. Slow
- N. Three
- O. Through
- P. Unequal
- Q. Within
- R. Without

**MATCHING 4-4: SUFFIXES AND MEANINGS**

Match each suffix with its meaning. Not all meanings will be used.

**Suffixes**

1. \_\_\_\_\_ -algia
2. \_\_\_\_\_ -emia
3. \_\_\_\_\_ -ic
4. \_\_\_\_\_ -ism
5. \_\_\_\_\_ -itis
6. \_\_\_\_\_ -lysis
7. \_\_\_\_\_ -meter
8. \_\_\_\_\_ -oxia
9. \_\_\_\_\_ -penia
10. \_\_\_\_\_ -stasis
11. \_\_\_\_\_ -tomy
12. \_\_\_\_\_ -ule

**Meanings**

- A. Blood condition
- B. Breakdown
- C. Burst forth
- D. Condition
- E. Deficiency
- F. Incision
- G. Infection
- H. Inflammation
- I. Measuring instrument
- J. O<sub>2</sub> level
- K. Pain
- L. Pertaining to
- M. Recording
- N. Small
- O. Specialist
- P. Stopping
- Q. Tumor
- R. Twitch

## LABELING EXERCISES

### LABELING EXERCISE 4-1: WORD ELEMENTS AND MEANINGS

Identify the highlighted element in each medical term listed below. Write the type of element (prefix, word root, combining vowel or form, or suffix) and its meaning on the corresponding line. If the element has no meaning, write “NA.”

Medical Term	Type of Element	Element Meaning
1. arterio <b>spasm</b>	_____	_____
2. <b>cyano</b> tic	_____	_____
3. <b>cyto</b> logy	_____	_____
4. <b>diap</b> edesis	_____	_____
5. endocri <b>nolo</b> gist	_____	_____
6. hemopo <b>iesi</b> s	_____	_____
7. <b>neona</b> tal	_____	_____
8. osteochon <b>dr</b> itis	_____	_____
9. post <b>prandi</b> al	_____	_____
10. <b>tachy</b> cardia	_____	_____

### LABELING EXERCISE 4-2: SINGULAR AND PLURAL WORD ENDINGS

Highlight the word endings in each of the medical terms below and circle any that are plural. Write the applicable singular or plural form of the term on the corresponding line.

1. appendix \_\_\_\_\_
2. cava \_\_\_\_\_
3. lumina \_\_\_\_\_
4. nucleus \_\_\_\_\_
5. ova \_\_\_\_\_
6. papillae \_\_\_\_\_
7. phalanx \_\_\_\_\_
8. protozoa \_\_\_\_\_

### LABELING EXERCISE 4-3: PRONUNCIATION GUIDELINES

1. Circle the terms below in which the “g” is pronounced like a “j.”  
gallbladder/genetic/Giardia/gonad/gyrate
2. Circle the terms below in which the ending is pronounced like “eye.”  
chordae/diastole/fungi/myalgia/nuclei
3. Circle the terms below in which the “c” is pronounced like an “s.”  
capillary/cell/circulation/colitis/cytology
4. Circle the terms below in which the “e” at the end is pronounced separately.  
adipose/arteriole/diastole/exocrine/syncope
5. Circle the terms below containing “pn” where only the “n” is pronounced.  
apnea/dyspnea/pneumatic/pneumonia

## KNOWLEDGE DRILLS

### KNOWLEDGE DRILL 4-1: KEY POINT RECOGNITION

The following sentences are taken from Key Point statements found in Chapter 4 of the TEXTBOOK. Fill in the blanks with the missing information.

1. A (A) \_\_\_\_\_ typically indicates a (B) \_\_\_\_\_, organ, body system, color, condition, substance, or (C) \_\_\_\_\_.
2. However, a combining (A) \_\_\_\_\_ is kept between two (B) \_\_\_\_\_, even if the second (C) \_\_\_\_\_ begins with a (D) \_\_\_\_\_.
3. When a suffix begins with (A) \_\_\_\_\_, the (B) \_\_\_\_\_ is (C) \_\_\_\_\_ as in hemorrhage.
4. When a suffix is added to a word ending in (A) \_\_\_\_\_, the (B) \_\_\_\_\_ is changed to a (C) \_\_\_\_\_ or \_\_\_\_\_, as in pharynx becoming (D) \_\_\_\_\_ and (E) \_\_\_\_\_ becoming thoracic.
5. It is more important to be able to identify the (A) \_\_\_\_\_ of a word (B) \_\_\_\_\_ than to identify its (C) \_\_\_\_\_.
6. To determine the meaning of a medical term, it is generally best to start with the (A) \_\_\_\_\_, then go to the (B) \_\_\_\_\_, and identify the meaning of the (C) \_\_\_\_\_ or (D) \_\_\_\_\_ last.
7. A (A) \_\_\_\_\_ (B) \_\_\_\_\_ is not normally used when a suffix starts with a (C) \_\_\_\_\_.
8. Occasionally there will be both a(n) (A) \_\_\_\_\_ and (B) \_\_\_\_\_ word (C) \_\_\_\_\_ with the same meaning.
9. For example, the word root (A) \_\_\_\_\_ means "vein," a (B) \_\_\_\_\_ (C) \_\_\_\_\_.
10. When a (A) \_\_\_\_\_ begins with a vowel and the (B) \_\_\_\_\_ ends in the same vowel, one is dropped as in (C) \_\_\_\_\_.

**KNOWLEDGE DRILL 4-2: SCRAMBLED WORDS**

Unscramble the following words using the hints given in parentheses and the letters that have been placed in the correct boxes. Finish writing the correct spelling of the scrambled word in the corresponding box.

1. thagolpoy (the study of disease)

		t				o		
--	--	---	--	--	--	---	--	--

2. sloycligys (breakdown of sugar)

	l						s		
--	---	--	--	--	--	--	---	--	--

3. tecalanubit (pertaining to in front of the elbow)

		t				b				
--	--	---	--	--	--	---	--	--	--	--

4. tucubansouse (beneath the skin)

			c			a				u	
--	--	--	---	--	--	---	--	--	--	---	--

5. yendasp (difficult breathing)

	y				e	
--	---	--	--	--	---	--

6. nelra (pertaining to the kidneys)

	e		a	
--	---	--	---	--

7. vexalcasutrar (outside the blood vessels)

			r			a			u			
--	--	--	---	--	--	---	--	--	---	--	--	--

8. cetryocmi (a small cell)

			r					e
--	--	--	---	--	--	--	--	---

9. trienesti (intestinal inflammation)

			e		i			
--	--	--	---	--	---	--	--	--

10. critocles (pertaining to being hard)

	c					t		
--	---	--	--	--	--	---	--	--

11. nosuve (pertaining to a vein)

				u	
--	--	--	--	---	--

12. borothsims (abnormal condition of clotting)

		r					s		
--	--	---	--	--	--	--	---	--	--

**KNOWLEDGE DRILL 4-3: TRUE/FALSE ACTIVITY**

The following statements are all false. Circle the word(s) that make the statement false and write the correct word(s) that would make the statement true in the space provided.

1. The basic meaning of a medical term is defined by the suffix. \_\_\_\_\_
2. The prefix of the medical term toxicology is *toxi*. \_\_\_\_\_
3. The Greek root *nephr* and the Latin root *ren* both mean liver. \_\_\_\_\_
4. A suffix adds to the meaning of a prefix. \_\_\_\_\_
5. The word root of the medical term “coronary” means heart. \_\_\_\_\_
6. A word root combined with a prefix is called a combining form. \_\_\_\_\_
7. The suffix of the word “hyperthyroidism” means high. \_\_\_\_\_
8. The singular form of the word “phalanges” is phalange. \_\_\_\_\_
9. The meaning of the abbreviation “NPO” is nothing to drink. \_\_\_\_\_
10. The “e” in systole is silent. \_\_\_\_\_
11. Ilium means hip bone and is pronounced the same as ileum, which means large intestine. \_\_\_\_\_  
\_\_\_\_\_
12. The plural of ovum is ovae. \_\_\_\_\_
13. The prefix of the word “exocrine” means below. \_\_\_\_\_
14. The most common combining vowel is “a.” \_\_\_\_\_
15. “ESR” is the abbreviation for erythrocyte sedimentation ratio. \_\_\_\_\_
16. “IV” is on the “Do Not Use” list because it can be mistaken for the number 10. \_\_\_\_\_
17. The abbreviation “HIPAA” stands for Health Information Portability and Accountability Act. \_\_\_\_\_  
\_\_\_\_\_
18. The word “percutaneous” means through the cuticle. \_\_\_\_\_
19. The abbreviation for the Centers for Disease Control and Prevention is CDCP. \_\_\_\_\_
20. The abbreviation “QNS” means quantity not supplied. \_\_\_\_\_

## SKILLS DRILLS

### SKILLS DRILL 4-1: REQUISITION ACTIVITY

The following requisition contains abbreviations for common laboratory tests. Write the full name of the test in the space provided on the requisition.

**Any Hospital USA**  
**1123 West Physician Drive**  
**Any Town USA**

*Laboratory Test Requisition*

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PATIENT INFORMATION:

Name: \_\_\_\_\_  
(last) (first) (MI)

Identification Number: \_\_\_\_\_ Birth Date: \_\_\_\_\_

Referring Physician: \_\_\_\_\_

Date to be Collected: \_\_\_\_\_ Time to be Collected: \_\_\_\_\_

Special Instructions: \_\_\_\_\_

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TEST(S) REQUIRED:

ASO _____ Bili _____ CBC _____ Chol _____ CK _____ DIC _____ ESR _____ FSH _____ Gluc _____ GTT _____	Hgb _____ Lytes _____ O&P _____ PT _____ PTT _____ RBC _____ RPR _____ TIBC _____ TSH _____ UA _____
--	---





8. large cell

Elements \_\_\_\_\_ / \_\_\_\_\_  
P S

Definitions \_\_\_\_\_ / \_\_\_\_\_

9. stopping blood (or blood flow)

Elements \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
WR CV S

Definitions \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

10. pertaining to poison

Elements \_\_\_\_\_ / \_\_\_\_\_  
WR S

Definitions \_\_\_\_\_ / \_\_\_\_\_

11. study of tissue

Elements \_\_\_\_\_ / \_\_\_\_\_  
WR S

Definitions \_\_\_\_\_ / \_\_\_\_\_

12. pertaining to the head

Elements \_\_\_\_\_ / \_\_\_\_\_  
WR S

Definitions \_\_\_\_\_ / \_\_\_\_\_

13. condition of hard arteries

Elements \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
WR CV WR S

Definitions \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

14. inflammation of the brain

Elements \_\_\_\_\_ / \_\_\_\_\_  
WR S

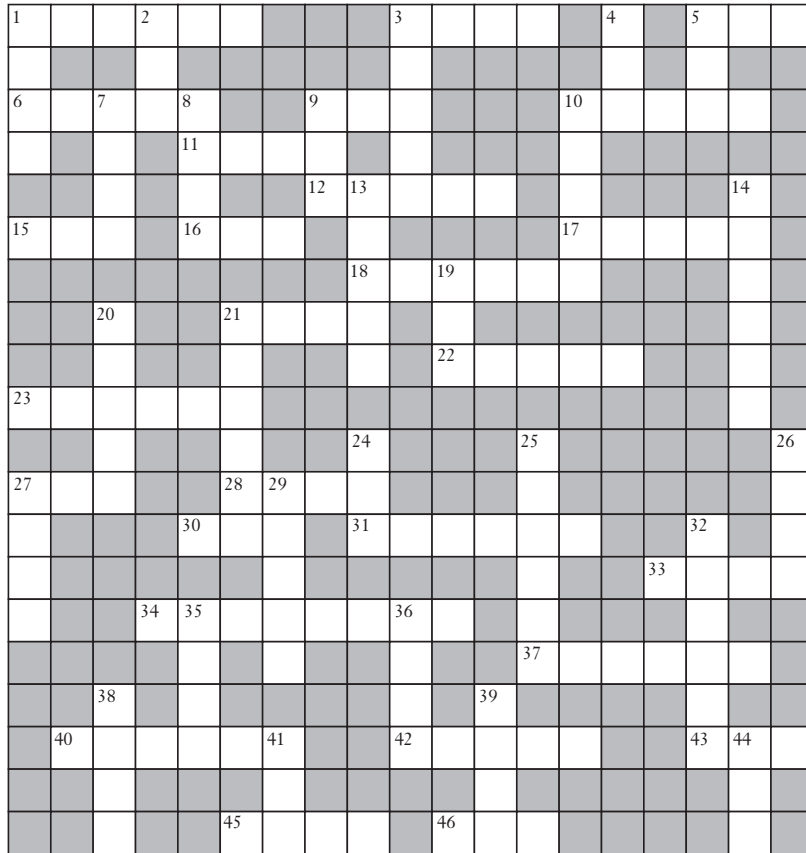
Definitions \_\_\_\_\_ / \_\_\_\_\_

15. pertaining to through the skin

Elements \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
P WR S

Definitions \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

## CROSSWORD

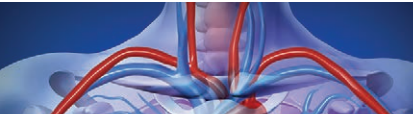


### ACROSS

- Prefix meaning different
- Word root meaning glucose
- Fasting blood sugar (abbrev.)
- Prefix meaning small
- Prefix meaning difficult
- Before surgery (abbrev.)
- Prefix meaning half
- Word root meaning heart
- Word root meaning vein
- Prefix meaning below
- Word root meaning intestines
- Word root meaning clot
- Word root meaning disease
- Word root meaning kidney
- Word root meaning head
- Glucose tolerance test (abbrev.)
- Word root meaning bone
- Word root meaning tumor
- Suffix meaning abnormal flow
- Prefix meaning around
- Word root meaning brain
- Word root meaning chest
- Word root meaning fiber
- Prefix meaning within
- Suffix meaning tumor
- Prefix meaning after
- Suffix meaning enzyme

### DOWN

- Prefix meaning same
- Erythrocyte sedimentation rate (abbrev.)
- Word root meaning stomach
- Prefix meaning through
- Fever of unknown origin (abbrev.)
- Prefix meaning blue
- Suffix meaning condition
- Disseminated intravascular coagulation (abbrev.)
- Word root meaning vein
- Word root meaning joint
- Word root meaning artery
- Word root meaning kidney
- Word root meaning liver
- Word root meaning lung
- Word root meaning air
- Suffix meaning specialist in study of
- Word root meaning vessel
- Word root meaning sugar
- Word root meaning hard
- Combining form meaning blood
- Word root meaning death
- Prefix meaning against
- Word root meaning bile
- Suffix meaning inflammation
- Prefix meaning new
- Prefix meaning poor



## Chapter Review Questions

- Which word element establishes the basic meaning of a medical term?
  - Combining form
  - Prefix
  - Suffix
  - Word root
- Which word part is a prefix?
  - epi
  - gram
  - lip
  - ole
- To what part of the body does the word part “cephal” refer?
  - Head
  - Intestine
  - Kidney
  - Liver
- Which part of the word “pericarditis” is the word root?
  - ardi
  - cardi
  - itis
  - peri
- What does the suffix “-lysis” mean?
  - Breakdown
  - Incision
  - Stoppage
  - Surgical puncture
- The plural form of “ovum” is
  - ova.
  - ovae
  - ovi.
  - ovix.
- The singular form of “atria” is
  - atra.
  - atrius.
  - atrix.
  - atrium.
- The medical term for platelet is
  - coagulocyte.
  - hepatocyte.
  - leukocyte.
  - thrombocyte.
- Venule means
  - condition of a vein.
  - pertaining to a vein.
  - small vein.
  - vein tumor.
- Which of the following means kidney inflammation?
  - Nephremia
  - Nephritis
  - Renemia
  - Renitis
- The “e” at the end is pronounced separately in
  - arteriole.
  - flange.
  - syncope.
  - venule.
- The abbreviation “ESR” stands for
  - erythrocyte sedimentation rate.
  - established secondary reaction.
  - estimated sedimentation range.
  - evaluated survival response.
- The abbreviation “RBC” means
  - random blood count.
  - rare blood cancer.
  - red blood cell.
  - reduced blood content.
- The abbreviation “PPD” means
  - platelet plasma donor.
  - postprandial diet.
  - potassium and phosphorus determination.
  - purified protein derivative.
- Which of the following abbreviations is on The Joint Commission’s current “Do Not Use” list?
  - ACTH
  - HbSAg
  - MSO<sub>4</sub>
  - PCO<sub>2</sub>
- Which part of the word “arteriospasm” is the suffix?
  - arte
  - arteri
  - ospa
  - spasm
- The prefix of the word “antiseptic” means
  - against.
  - away from.
  - difficult.
  - without.
- The law that was designed to make health insurance more portable and accountable is
  - ACO.
  - CLIA.
  - HCEA.
  - HIPAA.
- The nurse says a patient’s fingers are too cyanotic to use for a fingerstick. How would the fingers look?
  - Bluish in color
  - Gray and sweaty
  - Red and calloused
  - Yellow in color
- Which is a suffix that means condition or state of?
  - algia
  - ism
  - oma
  - penia



## Case Studies

### CASE STUDY 4-1: LABORATORY ORDERS

A phlebotomist receives a telephone order from the ICU requesting STAT collection of ABGs, lytes, and a WBC on a patient with COPD.

#### Questions

1. What is the complete name of the patient's location?
2. What is the collection priority, and what does it mean?
3. What are the complete names of the tests that the phlebotomist will collect?
4. What is the complete name of the disorder the patient has?

### CASE STUDY 4-2: OUTPATIENT BLOOD DRAW

A patient arrives at an outpatient surgery blood drawing station with a requisition from her physician for a preop CBC and a chem profile. The requisition indicates that the patient has h/o syncope and must be fasting for the tests and NPO for surgery, which is scheduled for later that morning.

#### Questions

1. Why is the patient having the blood tests?
2. What does NPO mean, and how does the phlebotomist determine that the patient is NPO?
3. Look up the meaning of "syncope" in the glossary in the TEXTBOOK. What does h/o syncope mean? Should it concern the phlebotomist? Why or why not?

### CASE STUDY 4-3: SAFETY ISSUES AND GLOVING

A recent case of HBV in the laboratory suggests that there are safety issues and that OSHA standards are not being followed. The phlebotomist who became contaminated claims that the gloves they use in the laboratory are not of quality and that is why she was exposed. Her supervisor tells her that the gloves are FDA-certified and CAP inspections also verify the safety of the gloves.

#### Questions

1. Write the complete name of the disease the phlebotomist contracted.
2. Spell out the name of the national organization that governs glove quality.
3. What is the complete name of the laboratory organization that inspects and accredits laboratories?
4. Write the complete name of the federal agency that sets safety standards for the laboratory.

