

# Chapter 26

## Collecting Specimens

# Lesson 26.1

- Define the key terms and key abbreviations in this chapter.
- Explain why specimens are collected.
- Explain the rules for collecting specimens.
- Describe 3 types of urine specimens.
- Describe 5 urine tests.

# Lesson 26.1 (Cont.)

- Explain how to use reagent strips.
- Describe how to collect a stool specimen.
- Describe how to collect a sputum specimen.
- Perform the procedures described in this chapter.
- Explain how to promote PRIDE in the person, the family, and yourself.

# Collecting Specimens

- Specimens (samples) are collected and tested to prevent, detect, and treat disease.
- The doctor orders what specimen to collect and the tests needed.
- All specimens sent to the laboratory require requisition slips.

# Urine Specimens

- The random urine specimen
  - The random urine specimen is collected:
    - For a routine urinalysis
    - Any time during a 24-hour period
  - Many people can collect the specimen themselves.
    - Weak and very ill persons need help.

# Midstream Specimen Collection

- The midstream specimen (clean-voided specimen or clean-catch specimen)
  - The perineal area is cleaned before collecting the specimen.
  - To collect the specimen:
    - The person starts to void into a receptacle.
    - Then the person stops the stream of urine.
    - A sterile specimen container is positioned.
    - The person voids into the container until the specimen is obtained.
    - You may need to position and hold the specimen container in place after the person starts to void.

# The 24-Hour Urine Specimen

- All urine voided during 24 hours is collected for a 24-hour urine specimen.
  - First void of the day is discarded.
  - Save all voidings for the next 24 hours.

# Testing Urine

- The doctor orders the type and frequency of urine tests.
- Testing for pH
  - Urine pH measures if urine is acidic or alkaline.
  - Normal urine pH is 4.6 to 8.0.
  - A routine urine specimen is needed.
- Testing for glucose and ketones
  - The diabetic person may have glucose and acetone (ketone bodies, ketones) in the urine.
  - Urine is tested for glucose and ketones.
  - The doctor uses the test to make drug and diet decisions.



# Testing Urine (Cont.)

- Testing for blood
  - Hematuria means blood in the urine.
  - Blood that is not seen is occult blood.
  - A routine urine specimen is needed.
- Using reagent strips
  - Reagent strips have sections that change color when they react with urine.
  - To use reagent strips, follow the manufacturer's instructions.
    - Do not touch the test area on the strip.
    - Dip the strip into urine.
    - Compare the strip with the color chart on the bottle.

# Stool Specimens

- Stools are checked and studied for blood, fat, microbes, worms, and other abnormal contents.
- The stool specimen must not be contaminated with urine.
  - The person uses one receptacle for voiding and another for a bowel movement.
- Some tests require a warm stool.
  - The specimen is taken at once to the laboratory or to the storage area for transport to the laboratory.

# Sputum Specimens

- Mucus from the respiratory system is called sputum when expectorated (expelled) through the mouth.
- Sputum specimens are studied for blood, microbes, and abnormal cells.
- The person coughs up sputum from the bronchi and trachea.
  - It is easier to collect a specimen in the morning