

Chapter 22

Assisting With Specimens

Collecting Specimens

- Specimens (samples) are collected and tested to prevent, detect, and treat disease.
- The doctor orders what specimen to collect and the test 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.

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'd.

- 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