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## Urine Collection

### **Purpose:**

To ensure accurate and reliable collection, handling, and processing of urine specimens for laboratory analysis.

### **Supplies:**

#### *Materials Needed:*

- Clean, dry, and sterile urine collection containers (with or without preservatives as required)
- Patient identification labels
- Disposable gloves
- Antiseptic wipes
- Biohazard bags
- Laboratory requisition

### **Identify Patient:**

1. Ask the patient to tell you their name and date of birth: e.g., “Please tell me your name and date of birth.”
2. Compare the name and date of birth against any corresponding requisition, specimen labels, orders, consent, etc.: prior to any test, treatment, procedure or collection or processing of a specimen, the staff is to confirm that all source documents match with the patient identifiers listed on the patient identification band.
3. Label the urine collection container with two patient identifiers; name and date of birth.

### **Types of Urine Collection:**

- Random Urine Specimen: Collected at any time.
- First Morning Specimen: Collected immediately after waking.
- Midstream Clean-Catch Specimen: Collected midstream after initial voiding.
- Timed Collection (e.g., 24-hour urine): Collected over a specific period.

- Catheterized Specimen: Collected via a catheter by a healthcare professional.

### **Patient Preparation:**

Explain the procedure to the patient, including the type of specimen required.

Instruct the patient on proper hygiene and collection techniques, especially for clean-catch midstream specimens.

#### *1. Collection for Random or First Morning Specimen*

- a. Provide the patient with a sterile collection container.
- b. Instruct the patient to void directly into the container, ensuring the container does not touch the skin.
- c. Secure the lid tightly on the container immediately after collection.
- d. Label the specimen container with the patient's information (name, date of birth, date and time of collection).

#### *2. Collection for Midstream Clean-Catch Specimen*

- a. Instruct the patient to wash their hands with soap and water.
- b. Provide the patient with antiseptic wipes:
  - i. **For females:**
    1. Spread folds of skin and hold open
    2. Wash area from front to back only
    3. Keep skin spread open
    4. Repeat using a second towelette
  - ii. **For males:**
    1. Retract foreskin completely.
    2. Wash tip of penis, keep skin retracted
    3. Repeat using second towelette
- c. Instruct the patient to start urinating into the toilet, then collect the midstream urine into the sterile container without touching the inside of the container.
- d. Complete urination into the toilet.
- e. Secure the lid on the container and label it appropriately.

#### *3. Collection for Timed Specimen (e.g., 24-hour Urine Collection)*

**Distribute 24 hour urine collection patient instructions located on the Kent Test Catalog**

**Verify the 24 hour urine test request does not require preservative prior to collection (see Mayo Preservative Chart). If preservative is needed, instruct patient not to discard. Record type of preservative on container.**

- a. Provide the patient with a large collection container (with or without preservative as required).
- b. Collect all urine for the next 24 hours, including the first void on the following day at the same time the collection started.
- c. Keep the collection container refrigerated or in a cool place during the collection period.
- d. Label the container with the patient's information and the collection start and end times.

4. *Collection for Catheterized Specimen or Suprapubic Aspiration*

- a. These procedures must be performed by trained healthcare professionals following sterile techniques.

### **Transportation of Specimens**

- All outpatient and outreach specimens are processed according to the test. Refer to the Kent test catalog for specific storage and transportation requirements per analyte. Patient's urine specimen will be placed in a plastic zip lock bag and is delivered to the laboratory by hospital approved courier.

### **References:**

Mayo Clinic- 24 hour Urine Collection Procedure

Garza, Diana and Becan-McBride. **Phlebotomy Handbook**. Appleton & Lange, Stamford, CT. 2010.