SPECIMEN COLLECTION – URINE (CLEAN CATCH, 24 HOUR, etc.)

PURPOSE
This procedure will be used by staff to assist patients in the collection of urine specimens. Proper labeling, collecting and handling are of the utmost importance in providing valid specimens for testing.

SCOPE
This procedure is intended for use within the UCSF Medical Center Hospitals and Clinics.

PERSONNEL
Urine collection is performed when urine testing is ordered by the patient’s health care provider. Licensed individuals authorized by their scope of practice or unlicensed clinical staff who have completed training and demonstrated competency may label, prepare, and instruct patients in the task of collecting a urine specimen.

- Certified Phlebotomists – Hospital and Ambulatory setting
- Medical Doctors – Hospital and Ambulatory setting
- Nurse Practitioners – Hospital and Ambulatory setting
- Physician’s Assistants – Hospital and Ambulatory setting
- Registered Nurses – Hospital and Ambulatory setting.
- Licensed Vocational Nurses – Ambulatory setting only
- Medical Assistants – Ambulatory setting only

EQUIPMENT
- Completed Requisition
- Patient Labels
- Towelette
- Specimen container(s)
- 24 Hour Collection:
  - Preservatives (if any)
  - Appropriate labels (24 Hr, Chemical Warning, etc).
PROCEDURE

I. IDENTIFY PATIENT
   A. Use two forms of patient ID.
      1. Patient Name
      2. Medical Record Number and/or
      3. Date of Birth
   B. Verify Requisition
      1. Patient ID matches patient information on requisition
      2. Requisition is completed with required test request information

II. SPECIMEN COLLECTION: PATIENT COLLECTION
Specimen can be collected by the patient after instruction and without direct supervision.

A. Random: specimen may be collected at any time.
   1. Label specimen container with Patient ID.
   2. Instruct patient to void directly into the toilet. During mid-stream, position the specimen container and proceed to void into the container, filling it half full.
   3. Instruct patient to securely seal the container and note time of collection on patient label.
   4. Return specimen to appointed location.

B. First Morning or 8-Hour: collected immediately upon rising from a night’s sleep.
   1. Label specimen container with Patient ID.
   2. Instruct patient to empty bladder before going to bed for the night.
   3. Instruct patient that all urine voided during the night should be collected.
   4. Upon waking next day, instruct patient to void entire contents of bladder into specimen container.
   5. Instruct patient to securely seal the container and note time and date of collection on patient label.
   6. Instruct patient to return specimen to appointed location that same morning.

C. Timed Specimen: collected at a specified time, such as two hours after eating a meal.
   1. Label specimen container with Patient ID.
   2. Verify with patient the specific timing required for specimen collection.
   3. Instruct patient to void at the appointed time. Tell patient to void directly into the toilet; during mid-stream, position the specimen container and proceed to void into the container, filling it half full.
   4. Instruct patient to securely seal container and note date and time of collection on patient label.
   5. Instruct patient to return specimen to appointed location that same day.
D. **Clean –Catch**: collected midstream, after cleansing of the genital area.

**MALE PATIENT**
Instruct patient to:
1. Wash hands with soap and water
2. Pull back foreskin if present
3. Completely wash the glans penis (“head” of penis) using a sterile cleansing towelette provided.
4. Start to urinate directly into the toilet
5. During mid-stream, position the container, then begin urinating into the container.
   a. Do not touch the container to the genital area
6. It is not necessary to fill the cup, half full is enough.
7. Instruct patient to return sample to a specified location.

**FEMALE PATIENT**
Instruct patient to:
1. Wash hands with soap and water
2. Holding the labia apart, wash the entire area with the sterile cleansing towelette provided; wiping from front to back.
3. Continue spreading the labia and start to urinate directly into the toilet.
4. During midstream, position the container, and then begin urinating into the container.
   a. Do not touch the container to the genital area
5. It is not necessary to fill the cup, half full is enough.
6. Instruct patient to return sample to a specified location.

**E. 24-Hour Urine Specimen**
1. Review requisition and determine correct urine container and additives for tests ordered. Check on-line lab manual “Urine Collection For Chemical Analyses” to determine:
   a. Correct container (brown, plain or acid washed)
   b. Correct preservative (6N HCl, Boric Acid Tablets, etc.)
   c. Dietary restrictions if any
   d. Conflicts in preservatives used for tests ordered.
   e. Trace metals: read special instructions in Lab Manual
2. Affix 24 hour urine collection label to appropriate container
   a. Add warning labels as appropriate to inform patient of presence of toxic chemical preservatives.
3. Provide patient with the container(s) and instruct Patient to:
   a. Begin the 24-hour collection by emptying bladder or catheter bag at a fixed time and discarding that specimen. Note the time as the start time of the 24-hour collection.
   b. Follow collection procedure described on the label (See Appendix).
      1. Completely fill in dates and collection times
      2. Refrigerate specimen during collection
c. Handle container carefully. If Patient comes in contact with the preservative, flush the area thoroughly with water. Avoid breathing any vapors.

d. Instruct Patient to return specimen to the Lab on the same day 24 hour collection is completed.

e. If patient testing requires two separate 24 hour collections, instruct patient to complete preservatives collection first and plain collection second.
   i. Plainly mark the containers as first and second collection.

Note: if required for testing, remember to draw patient’s blood by Venipuncture, prior to the 24-hour collection.

4. When specimen is received in the lab:
   a. Check requisition to verify correct container was initially given to the patient
   b. Verify correct labeling, and that date and times of collection are noted.
   c. Note Patient’s weight in kg if a creatinine was ordered.
   d. Note Patient’s weight in kg and height in cm if CrCl was ordered.
   e. Draw patient’s blood if required.
      i. Serum creatinine must be drawn within 24 hours of CrCl collection.

F. Infectious Disease Urine Specimen Collection (Chlamydia)
   1. Instruct patient not to urinate at least one hour prior to the time of collection.
   2. Label specimen container with Patient ID.
   3. Instruct patient NOT to cleanse perineal area, and to void directly into the specimen container, filling it half full with the initial urine stream (first catch).
   4. Instruct patient to securely seal the container and note time of collection on patient label.
   5. Patient must return specimen to appointed location within 12 hours of collection.
   6. Laboratory staff will pipette 2ml of the sample into the specified urine transport tube necessary for processing of the specimen, prior to testing.

III. SPECIMEN COLLECTION: ASSISTED COLLECTION

A. Catheter Specimen: collected from catheter inserted through the urethra into the bladder (refer to Nursing Procedure Manuals regarding catheterization procedures)
   1. Label specimen container with Patient ID.
   2. Check requisition to verify type of urine specimen required (random, timed, etc.)
   3. Clean intermittent catheterizations: collect specimen from catheter flow.
4. Urinary drainage system: collect specimen from closed urinary drainage system only, unless ordered by physician.
   a. Clean port with betadine swab and clamp tube below port site.
   b. Using sterile needle and syringe, aspirate specimen through catheter port and transfer specimen to sterile (plain, red top) vacutainer tube.
5. Note date and time of collection on patient label.
6. Securely seal the container and deliver specimen to the laboratory, or store in specimen refrigerator for messenger pick-up.

IV. TRANSPORT AND STORAGE
A. Ensure lid is securely placed on container to prevent leakage during transport.

   B. If specimen is not sent to Lab for immediate analysis, refrigerate specimen (2 to 8 C) until transported to the Lab.

PROCEDURE NOTES:
I. Critical Points
   A. For Inpatients, before obtaining urine specimen, identify the patient by comparing the patient name and ID# on the requisition and label with the name and ID# on the patient’ armband. If patient has no armband do not collect specimen until charge nurse has identified patient and an armband has been place.
   
   B. For Outpatients, before obtaining urine specimen, verify with the patient or patient’s guardian that the patient’s name and birth date, are consistent with the information printed on the requisition and labels. If patient is unable to communicate verbally, picture ID provided by the patient, such as Driver’s License may be used to confirm patient identity.
   
   C. Always label the specimen container in the presence of the patient, prior to obtaining the sample. Always label the container yourself.

PRECAUTIONS:

Generally it is accepted that after standing two hours at room temperature, the chemical composition of urine changes. Samples must be refrigerated if not tested promptly.

REFERENCES:


PROCEDURE REVIEW HISTORY SHEET

Procedure Title: SPECIMEN COLLECTION – URINE (CLEAN CATCH, 24 HOUR, etc.)
version 1.2

Author: Betty Yalich Date November 6, 2006
Director: Tim Hamill, M.D. Date November 6, 2006
In Use Date: November 14, 2006 Discontinued Date________

ACTION: Reviewed, or Revised/Approved

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DFS: QUALITY ASSURANCE/PROCEDURES-APPROVED: Specimen Collection_Urine v1.2 3_08_8_11
APPENDIX: 24 HOUR URINE COLLECTION INSTRUCTION LABEL

Collection Instructions for 24 Hour Urine Sample

1. To begin 24 hour collection, empty bladder and flush urine down toilet. Record date and time below.

2. For the next 24 hours add ALL urine into bottle. Refrigerate bottle between additions, if indicated below.

3. End collection 24 hours after start time by emptying bladder and adding final sample to collection container.

4. Record ending time below.

5. Return bottle to the laboratory promptly.

PATIENT INFORMATION

PATIENT NAME: ____________________________

Patient ID: ________________________________

Tests Required: ____________________________

Preservative Added: __________ # of bottles: __

*** Important ***

Refrigeration Required: Yes_________No ________

Collection Start Time: _______ Date __________

Collection End Time: _______ Date __________
APPENDIX: 24 HOUR URINE COLLECTION WARNING LABELS

WARNING
Contains 6N HCL avoid contact with skin. In case of contact flush with water.

Peligro
Contiene 6N HCL (quimico) evite el contacto con su piel. En caso de contacto lavarse con agua.

警告
包含6N HCL，避免皮肤接触。如有接触，用水冲洗。

ВНИМАНИЕ
Содержит кислоту (6N HCl). Избегайте контакта с кожей.
В случае контакта с кислотой промывайте водой.

CAUTION
ACID ADDED

UPCR-6028