

_____ Chief Executive Officer	_____ Date
_____ Chief of Staff	_____ Date
_____ Chief Operating Officer/ Chief Nursing Officer	_____ Date
_____ Laboratory Medical Director	_____ Date

**SADDLEBACK MEMORIAL MEDICAL CENTER**  
**Policy/Procedure**

**SUBJECT: URINE CLEAN CATCH COLLECTION PROCEDURE**

**1. PURPOSE:**

To obtain a meaningful report on a urine sample, it is important that the urine specimen be collected properly. While a regularly voided specimen is acceptable for a routine urinalysis, a midstream collection is preferred. For collection of a urine culture, a midstream urine is mandatory. In order to maintain the integrity of the sample after collection, the urine must be transferred to tubes containing preservatives that prevent compromise of the sample during transit. Clinical and Laboratory Standards Institute (CLSI) recommends the use of chemical preservatives if the specimen cannot be refrigerated or processed within two hours of collection.

**2. POLICY:**

- 2.1 Patients must receive proper instructions from laboratory or hospital staff along with the sterile cup and hygienic wipe.
- 2.2 Sample must be transferred to the preservative tubes by the laboratory or hospital staff immediately after collection.

**3. PRINCIPLE:** Patients are instructed to collect a clean catch midstream sample in a sterile cup. Along with verbal instructions, the patient can see written instructions which are posted on the bathroom wall where urine samples are collected. Urine collected into the sterile collection cup is transferred via BD Vacutainer cup lid into the 2 tubes in the kit and possibly a 3<sup>rd</sup> tube if chemistries are requested. It is important to fill the tubes in the following order:

- 3.1 Grey top Culture and Susceptibility tube is filled first. This tube contains 2.63mg/mL Boric Acid, 2.08mg/mL Sodium Borate and 1.65mg/mL Sodium formate. The inside of the tube is sterile and the sample is stable once in the preservative, for 72 hours after collection without refrigeration.
- 3.2 Yellow and red tiger top tube is filled next. This tube is for Urinalysis and contains 94% Sodium propionate, 5.6% Ethyl Paraben and 0.4% Chlorohexidine. This vial stable for 72 hours
- 3.3 Red stopper with clear cap is filled last. This is a sterile tube with no additives and can be used for urine chemistries.

**4. SPECIMEN REQUIREMENTS:**

Maximum Volume	Minimum Volume Required	Stability Time
Cup Volume: 120 ml	Cup Minimum: 20 ml	-----
Grey Tube: 4 ml	Grey Minimum: 3 ml	Good for 48 hours at ambient temperature
Yellow/Red Tube: 8 ml	Yellow/Red Minimum: 7 ml	Good for 72 hours at ambient temperature
Red stopper/clear: 6 ml	Red stopper/clear Minimum: 5 ml	Dependent on test(s) ordered

**4.1 SPECIMEN REJECTION CRITERIA:**

- 4.1.1 Urine Culture and Susceptibility will not be accepted if tubes are received greater than 48 hours after collection. Urinalysis tubes will not be accepted after 72 hours.
- 4.1.2 Leaking samples or broken transport tubes will not be accepted.
- 4.1.3 Sample tubes with less than the minimum volume listed above will not be accepted.

**5. REAGENTS AND SUPPLIES:****5.1 Reagent List:**

5.1.1 BD Vacutainer Urine Culture and Susceptibility Preservative tube. 13x75mm. Contains Boric Acid, Sodium Formate and Sodium Borate. Do not use beyond expiration on the tube. Stable at ambient temperature

5.1.2 BD Vacutainer UA Preservative tube, plastic with conical bottom. Contains Ethyl Paraben, Sodium Propionate and Chlorohexidene preservative. Do not use beyond expiration date on tube. Stable at ambient temperature.

5.1.3 BD 6mL Vacutainer, no additives. Do not use beyond expiration date on tube. Stable at ambient temperature.

5.1.4 PHS Patient Cleansing Wipe.

**5.2 Supplies List:****5.2.1 Urine collection kit which contains:**

5.2.1.1 Urine collection cup

5.2.1.2 Preservative Urinalysis tube (Tiger Red/Yellow)

5.2.1.3 Preservative Grey Culture tube

5.2.1.4 PHS Patient Cleansing Wipe

### 5.2.2 Gloves

5.2.3 **Labels** - 2 (3 if chemistries are also ordered) Patient labels that have been checked against the patient's armband prior to labeling specimen tubes at the bedside.

## 6. PATIENT PROCEDURE

6.1 Unscrew the cap of the urine specimen cup. Place the cup on the counter. Place the cap on the counter face up. Do not touch the inside of the cup or the cap.

### 6.1.1 Male:

6.1.1.1 Wipe the head of the penis in a single motion with the towelette. If not circumcised, hold the foreskin back before cleansing.

6.1.1.2 Urinate a small amount in the toilet.

6.1.2 Place the cup under the stream of urine, and continue to urinate into the cup.

6.1.3 Finish voiding into the toilet.

6.1.4 Screw the cap on the cup and give it to the RN/PCT.

### 6.1.2 Female:

6.1.2.1 Separate the labia. Wipe the inner labial folds front to back in a single motion.

6.1.2.2 Keep the labia separated and urinate a small amount into the toilet.

6.1.2.3 Place the cup under the stream of urine, and continue to urinate into the cup.

6.1.2.4 Finish voiding into the toilet.

6.1.2.5 Screw the cap on the cup and place in metal cabinet or return cup to the RN/PCT.

## 7. Hospital Staff Procedure.

7.1 RN/PCT will perform hand hygiene and don gloves.

7.2 After patient hands the urine to the RN/PCT, the urine must be transferred to the

two (3 if chemistry tests are ordered) tubes. Gloves must be worn during transfer.

- 7.3 Compare the labels to the patient's armband and ensure they include patient's Full Name, medical record number, Date and Time collected, initials, and source (UA Midstream) recorded on the labels. (Urine is processed in Microbiology differently as to whether they are clean catch versus catheter specimen, so it is important to record UA – Mid)
- 7.4 Label Urine container and the 2 tubes (3 if chemistries are ordered) at the bedside with label(s) checked in 7.3.
- 7.5 Peel back the sticker to expose the rubber covered cannula.
- 7.6 Push the grey stopper tube into the integrated transfer port. Hold in position until flow stops. (Minimum required is 3 ml).
- 7.7 Remove the tube and shake vigorously (inverting the tube at least 8-10 times)
- 7.8 Push the yellow/red tiger top UA Preservative tube into the integrated transfer port.
- 7.9 Hold in position until flow stops. Minimum volume for tube is 7mL.
- 7.10 Remove tube. Invert UA Preservative Tube 8-10 times to completely mix the sample.
- 7.11 If chemistry tests are ordered, push the sterile red stopper/clear cap tube into the integrated transfer port completely.
- 7.12 Hold in position until flow stops. Ideal volume is 5-6.0 mL.
- 7.13 Remove tube.
- 7.14 Dispose of the urine and cup per normal protocols, but ensure that the blue lid with the integrated transfer port is placed in a large sharps containers found in the dirty utilities or designated area(s).
- 7.15 If there is not enough urine to transfer to the tubes, take the labeled urine cup to the lab (**The blue top urine container can NOT be sent in the tube system**). If you need to tube the urine to the lab, you must transfer the urine to a white top container, labeled appropriately as instructed in 7.3.
- 7.16 If POC testing is going to be done, it should be performed on the urine cup specimen to ensure that the tube stopper does not come off if tubed to the lab.
- 7.17 Place the tube(s) or the urine container in a biohazard bag.

7.18 Status the urine tests as collected in Epic, print out the transmittals and place them in the outside pocket of the biohazard bag.

7.19 Send the urine sample(s) with the transmittals to the lab.

**8. LIMITATIONS OF PROCEDURE:** Inadequate volume of urine in the preservative tubes (UA and C&S) will result in unacceptable preservative/sample ratio. Testing cannot be done from tubes with less than minimum volumes.

**9. REFERENCES:**

- 9.1 College of American Pathologists, Commission on Laboratory Accreditation, Urinalysis, current edition.
- 9.2 Urinalysis; Approved Guideline, Clinical and Laboratory Standards Institute, Third Edition, GP16-A3, Vol.29 No.4.
- 9.3 Murray, Patrick et al, Manual of Clinical Microbiology, ASM Press, 2007, pgs 323-325
- 9.4 Garcia, Lynn, Clinical Microbiology Procedures Handbook, Volume 1, Section 3.12, ASM Press, 2010
- 9.5 [www.bd.com](http://www.bd.com)

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