



Urine Specimen COLLECTION

Urine specimen collection is an essential component of urine culture stewardship. Urine culture stewardship is a multifaceted approach to ensure that urine cultures are:

1. Performed only when appropriate indications are present to determine if treatment with antibiotics is indicated AND
2. Collected, stored and processed in a manner to best prevent contamination with microorganisms such as bacteria.

This approach can be used in patients with and without indwelling urinary catheters in a variety of settings. This resource is intended to support urine specimen collection policies and practices in your facility.

Residents **WITH** Indwelling Urinary Catheters

Prior to Collection

- If a urinary catheter has been in place for more than 14 days, consider changing it prior to specimen collection.
- Ensure that appropriate indications for culture collection are present.
- Obtain a facility-approved urine collection kit.
- Never collect a urine culture from the collection bag.

Collection

- Perform hand hygiene and don gloves.
- Occlude the catheter tubing at least three inches below the collection port.
- Scrub the port with a disinfectant wipe when urine is visible under the sampling port.
- Use an aseptic technique to collect the specimen using a facility-approved collection device.
- If needed, transfer the specimen to a facility-approved container and label it according to hospital policy. Be sure to indicate the date and time the culture was collected.
- Prepare the specimen for transport per facility policies for specimen handling.
- Properly discard gloves and perform hand hygiene.

Post- Collection

- Transport the specimen to the laboratory or refrigerate immediately.
- Follow the manufacturer's instructions for your collection tube regarding the amount of time the specimen is stable when at room temperature or refrigerated.
- Consider using a collection tube that contains a preservative such as boric acid to prevent the overgrowth of contaminating organisms when a significant delay is anticipated (e.g., regional laboratory).

Resident **WITHOUT** Indwelling Urinary Catheters

Prior to Collection

- Determine if a urine culture order is appropriate.
- If urine culture is indicated, obtain a facility-approved urine collection kit.
- Do not send urine cultures:
 - For foul-smelling or cloudy urine.
 - Routinely on admission or preoperatively.
 - Routinely before or after a catheter change.
 - As part of a fever workup, if there are no signs or symptoms localizing to the urinary tract.
 - As a test of cure.

Collection

- Perform hand hygiene and don gloves.
- Midstream clean catch is the preferred method.
 - Always clean the perineal area, especially the urethral meatus, prior to collection.
 - Collect urine after the resident has bathed, when possible.
 - Consult with the provider if in/out catheter specimen is appropriate when the resident is unable to void or if you are unable to collect a clean catch specimen.
 - In/out catheterization requires a sterile technique and should be performed by a registered nurse.
 - Alternative to in-and-out catheterization for men: place and obtain a specimen from a newly placed condom catheter.
 - Prepare the specimen for transport per facility policies for specimen handling.
 - DO NOT collect a urine specimen from a urinal, bedpan, diaper or chucks pad.
 - Properly discard gloves and perform hand hygiene.

Post-Collection

- Transport the specimen to the laboratory or refrigerate immediately.
- Follow the manufacturer's instructions for your collection tube regarding the amount of time the specimen is stable when at room temperature or refrigerated.
- Consider using a collection tube that contains a preservative such as boric acid to prevent the overgrowth of contaminating organisms when a significant delay is anticipated (e.g., regional laboratory).

References:

Centers for Disease Control and Prevention. (2019, May 9). *Strategize initiatives you can incorporate you're your program.*
<https://www.cdc.gov/hai/prevent/cauti/indwelling/strategize.html>

Agency for Healthcare Quality and Research. (2021, June 21). *Collection of microbiologic cultures.*
<https://www.ahrq.gov/sites/default/files/wysiwyg/antibiotic-use/long-term-care/microbiological-cultures.pdf>