Specimen Collection and Preparation

Laboratory test results are dependent on the quality of the specimen submitted. It is important that all specimens and request slips be properly labeled with the name of the patient, collection date, and the origin (source) of the specimen, when applicable.

If there is any doubt or question regarding the type of specimen that should be collected, it is imperative that Bronson Laboratory Services (BLS) be called to clarify the order and specimen requirements.

Patient Preparation: Fasting Specimens

Please refer to specific tests in the Alphabetical Test Listing section of the online catalog for additional details.

The requirement for a fasting specimen requires an overnight fast. The last meal should be eaten 12 hours before specimen collection. During the 12-hour fast, only small amounts of water may be taken. Other beverages and caffeine-containing liquids, including coffee, must be omitted. Avoid chewing gum, mints, candies, and tobacco products. Avoid even mild exercise during the fast. Over the counter drugs should be avoided when possible. Prescription medicines critical to health maintenance should be taken.

Tests for lipid and lipoprotein disorders require further dietary restriction. In addition to the above fast, alcohol should not be ingested for 24 hours prior to specimen collection. The evening meal before the test should contain no fatty foods and should be completed before 6 p.m.

Patients for glucose tolerance testing (GTT) should be on a full, unlimited, normal diet for at least 3 days prior to the day of the GTT. GTT should not be performed on obviously ill or bedridden patients. GTT is not performed on inpatients unless the attending physician confers with the clinical pathologist.

Specimen Identification Requirements

The purpose of this Bronson policy (Policy Code G-12) is to provide the standardized requirements for patient specimen labeling throughout the Bronson system to ensure patient safety.

- Patient is positively identified at the time of collection using **2** unique identifiers—patient's name and date of birth.
  - —Patient's medical record number can be used in addition to patient's name and date of birth.
  - —Patient's hospital armband must be checked for name and medical record number.
  - —Patient's room number must not be used as an identifier.
  - —Outpatients must be identified by asking the patient to state their name and date of birth.
- The request form and patient labels must match exactly with patient's name (first and last), and date of birth and/or medical record number.
- Specimen collection containers are to be labeled:
  - —Immediately upon collection.
  - —Legibly with indelible ink.
  - —In the presence of the patient.
  - —By the person who collected the specimen or assisted in the collection.
  - —Patients collecting their own specimen (such as urine) must be given a collection container which is labeled in their presence prior to collection.
- Specimen collection container must have a patient identification label. Three types of labels available are a Laboratory Information System (LIS) generated collection label, a preprinted Chart Label, or be hand labeled using indelible ink with the following:
  - —Patient's first and last name.
  - —Patient's date of birth.
  - —Patient's medical record number can be used in addition to name and date of birth.
  - —Date and time of collection.
  - —Identification of person collecting specimen: initials, employee #, or phlebotomy code are acceptable.
  - —Source of specimen if other than blood or urine

Specimen Collection and Preparation

- **Specimen for Blood Bank**: Label the specimen in the presence of the patient with the patient's full name, date of birth, and medical record number. Dual Signoff must be documented on the label, consisting of the collector's employee ID and witness initials. The witness may be another employee, the patient, or a designated caregiver. Specimens with incomplete Dual Signoff must be redrawn..
- Specimen will be considered unlabeled or mislabeled, which is not acceptable for analysis and requires a redraw if:
  - —There is no label on specimen container.
  - —Patient's name and date of birth is missing from either the specimen container and/or the request form.
  - —Patient's full name, date of birth, or medical record number on specimen container and request form do not match.
  - —Specimen container is labeled with more than 1 label that does not match each other.
- Specimen containers will not be relabeled or returned if they are labeled improperly
  - —The appropriate nursing unit or physician practice will be notified that the specimen must be recollected.
  - —A Patient Safety Report is generated for each rejected specimen for Quality Improvement tracking.
  - —Irretrievable specimens are the exception. Irretrievable specimens include:
    - Code gases.
    - STATS.
    - Body fluids, spinal fluid, pericardial fluid, and fluids other than urine.
    - Tissue specimens, biopsies.
    - Timed drug levels for treatment.
- Labeling information on "Irretrievable Specimens" can only be corrected by the person who collected the specimen.
  - —Ordering physician or physician responsible for the patient is notified by nursing.
  - —Physician must call the laboratory to acknowledge that the identity of the specimen is in question and that testing is still desired.
  - —Documentation of such actions will occur on the result report and with a Patient Safety Report.

Specimen Collection: Standard Precautions

Standard precautions from the U.S. Centers for Disease Control (CDC) must be adhered to for all patient specimens. All specimens must be regarded as potentially infectious.

Gloves must be worn whenever there is potential for risk of exposure to blood, body fluids, or tissue specimens. Goggles, gowns, and masks are also indicated in areas where contact with aerosols or large amounts of body fluids may occur. Wash hands before each patient contact, prior to putting on gloves. Gloves must be worn when collecting specimens. Wash hands immediately after removing gloves. Gloves must be changed between each patient, washing hands immediately after removing gloves.

To prevent needlestick injuries, the use of safety needles is required. Needles must not be recapped, purposely bent, cut, broken, or otherwise manipulated by hand. Place used needles and other sharp items into puncture-resistant biohazard containers for disposal. Never send a specimen with the needle attached to prevent needlestick injuries.

After specimens are obtained from the patient, label the primary container (blood tube, urine screw-cap container, etc.) in the presence of the patient. Place specimens in a secondary container such as a plastic, Ziploc bag for transport to the laboratory.

Specimen Collection: Blood

The following table lists the most common types of collection tubes required for blood specimen analysis. Refer to the Alphabetical Test Listing for collection tubes required for tests ordered. Always allow the tube to fill completely for correct blood to anticoagulant mix.

Specimen Collection and Preparation

Tube	Contents/Additive	Handling (Once Filled)
Green top	Heparin anticoagulant	Invert tube 8 times to prevent coagulation. **Note:** It is important to distinguish when a sodium heparin vs. lithium heparin tube is required.
Grey top	Potassium oxalate as an anticoagulant and sodium fluoride as a preservative	Invert tube 8 times to prevent coagulation.
Lavender top	EDTA anticoagulant	Invert tube 8 times to prevent coagulation. **Do not centrifuge.**
Light-blue top	Buffered sodium citrate anticoagulant	Tube must be filled completely. Ratio of blood to anticoagulant is critical. Invert tube 8 times to activate anticoagulant. Use discard tube if drawn through blood collection set (ie, butterfly).
Light-green top plasma separator with gel	Heparin anticoagulant and a gel for plasma separation (gel forms a barrier to preserve specimen after centrifugation)	Invert tube 8 times to mix blood. Centrifuge for 10 to 15 minutes if not sent immediately to the laboratory.
Red-top	Plain Vacutainer containing no anticoagulant	Allow blood to clot before centrifugation if not sent immediately to the laboratory.
Gold top or black/ grey top serum separator with gel	Clot enhancer and a gel which forms a barrier to preserve specimen after centrifugation. No anticoagulant.	Invert tube 8 times to mix blood. Allow to clot for 30 minutes before centrifuging for 10 to 15 minutes if not sent immediately to the laboratory
Royal-blue top	2 types of royal blue-top Monoject tubes - 1 with the anticoagulant EDTA and the other plain. These are used for collection of whole blood or serum for trace element analysis.	
Special collection tubes	Some tests require specific tubes for proper analysis. Please contact BLS prior to patient draw to obtain correct tubes for metal analysis or other tests as identified in the individual test listings.	
Blood culture bottles	Fill the following bottles with specified amounts of blood. Yellow top, pediatric bottle: 1-4 mL Green top, adult, aerobic bottle: 8-10 mL Orange top, adult, anaerobic bottle: 8-10 mL	Invert bottle 8 times to mix blood.

Blood Collection: Venipuncture

The evacuated tube system (Vacutainer) is the most commonly used means of drawing blood specimens. This method is preferable to the needle and syringe method, as it allows the blood to pass directly from the vein into the evacuated tube. This method prevents clotting of the specimen and reduces the risk of hemolysis (rupturing of red cells). Improperly collected specimens (ie, wrong anticoagulant, clotted, hemolyzed, or insufficient amount) will result in rejection of the specimen for testing.

- *Patient Preparation*: The ordering physician should provide the patient with information on fasting, diet, and medication restrictions prior to requesting testing. See the Alphabetical Test Listing for specific requirements relating to test ordered.
- *Considerations for Venipuncture*:
  - —Draw specimen from vein without an IV
  - —Avoid drawing from a vein associated with a hematoma.
  - —If a patient has had a mastectomy, do not draw blood from that side of the body.
  - —Label specimen(s) immediately after collection, in the presence of the patient.

Supplies Needed:

- Tourniquet
- Alcohol
- Dry cotton or gauze
- Sterile blood collection safety needle
- Needle holder device (screw needle into needle holder device)
- Blood collection evacuated tubes (appropriate for tests ordered)
- Bandage
- Pen to label tubes

Specimen Collection and Preparation

Procedure:

1. Greet patient, stating your name and informing them that you need to obtain a blood specimen.
2. Confirm identity of patient. Ask their name and date of birth. Inpatients are identified additionally by examining the patient armband to confirm name, date of birth, and medical record number. Name, date of birth, and medical record number must match the information on the laboratory request form.
3. For tests requiring dietary restrictions, ask the patient if they have followed the guidelines prior to blood collection. If they have not, suggest they return at a time when they have followed the guidelines as test results may be adversely affected.
4. Wash hands. Glove.
5. Position patient:

    - *Chair* - Seat patient comfortably in chair with arm extended on armrest to form a straight line from shoulder to wrist. Arm and elbow should be supported firmly by the armrest and should not bend at elbow.
    - *Bed* - Patient may lie on their back in a comfortable position. Placing a pillow under the patient's arm to be used for collection may provide additional support. Patient's arm should be extended to form a straight line from shoulder to wrist.

6. Assemble supplies needed.
7. Inspect patient's arms and select an appropriate venipuncture site by palpating arm firmly with index finger of opposite hand you normally use. The larger and fuller median cubital veins are most frequently used.
8. Cleanse venipuncture site with alcohol-moistened cotton or gauze pad, rubbing in a circular motion outward from puncture site. Allow area to dry.
9. Apply tourniquet 3 to 5 inches above vein site. Do not leave tourniquet on for >2 minutes. Patient may form a fist to make the vein prominent, but should open hand once blood begins to flow into tube.
10. The vein may be "fixed" or held taut during puncture. The needle should be in line with the vein at a 15° angle with the skin, bevel up. Firmly grasping the holder, puncture vein with needle. Push tube onto needle in holder. Blood should immediately begin to fill tube due to the vacuum action. Fill all tubes completely.
11. When collecting more than 1 tube of blood during a venipuncture, the required order of draw is:

    - Sterile tube for blood culture
    - Light-blue top
    - Red top or gold top gel
    - Green top
    - Lavender/purple top
    - Grey top or other additives

12. Once filled, remove tube and replace it with a new tube as needed, keeping the needle steady in the vein. Gently invert collected tube of blood 5 to 10 times. **Do not shake.**
13. After all tubes have been drawn, release the tourniquet. Remove tube from holder before removing needle from vein.
14. Press a sterile gauze pad over the venipuncture site and remove needle. Hold pad in place for 1 to 3 minutes until bleeding has stopped.
16. Place a bandage over the site to prevent blood leakage.
17. Immediately label all tubes with patient's name (first and last), date of birth, and date and time drawn. See "Blood Bank Services" for specific labeling requirements of blood bank specimens.
18. Check the Alphabetical Test Listing for any special handling requirements (eg, ice, etc.).
19. Place all tubes in approved specimen transport bag with the request form. Transport to the laboratory as soon as possible.

Specimen Collection and Preparation

Specimen Collection: Blood Culture

Supplies Needed:

- Blood Culture Bottles
  - —Adults:
    - 1 aerobic bottle
    - 1 anaerobic bottle
  - —Children and Low Volume Adults
    - 1 pediatric bottle
- Gloves
- Cleansing Supplies
  - —ChloraPrep **or** iodine, alcohol pads, and gauze
- Drawing Equipment
  - —20-mL syringe, needle, and transfer device (when available) **or**
  - —Butterfly set, luer adapter, and transfer device (when available)
- Alcohol Prep Pads (for cleaning bottle tops)
- Tourniquet
- Patient Labels (1 per bottle)
- Laboratory Test Request Form

Procedure:

1. Wash hands.
2. Identify patient to be drawn using the patient identification procedure.
3. Observe appropriate infection control precautions for each patient.
4. Tie tourniquet around patient's extremity and locate a vein. Then untie tourniquet.
5. Prepare draw site using 1 of the following methods:

- ChloraPrep* - Open the package of ChloraPrep. Pinch wings on applicator to break ampule and release antiseptic. Do not touch sponge. Wet sponge by repeatedly pressing and releasing sponge against treatment area until liquid is visible on skin. Use repeated back and forth strokes of the applicator for approximately 30 seconds. Completely wet treatment area with antiseptic. Allow area to dry for approximately 30 seconds. **Do not blot or wipe away.**
- Iodine* - Cleanse venipuncture site with an alcohol prep pad. Beginning in center of venipuncture area, swab skin in an outward spiral pattern using iodine swab. Using a new iodine swab, repeat procedure. Let iodine remain on skin for 1 minute. Cleanse iodine from patient's skin using an alcohol prep pad, then dry venipuncture area using a sterile gauze pad.

*While skin is being prepared with iodine or drying from the ChloraPrep, remove flip-caps on the blood culture bottles and apply an alcohol prep pad to the rubber septum of each bottle to clean it. **Do not apply iodine to bottle tops.**

6. Retie tourniquet and relocate vein without contaminating draw site. If you palpate over the venipuncture area, you must repeat the cleaning procedure.
7. Perform venipuncture using a needle and syringe or butterfly set.
8. Draw required amount of blood, withdraw needle from vein, and place pressure on venipuncture site using a sterile gauze pad.
9. Inject blood into culture bottles as described in the Blood Volume for Culture table. **Do not change the needle on the syringe prior to inoculating bottles. Do not inject air into bottles.** Discard drawing supplies into sharps container.

Blood Volumes for Culture	
Blood Volume	**Blood Volume in Culture Bottle**
16-20 mL	8-10 mL in aerobic (green top) and 8-10 mL in anaerobic (orange top)
10-16 mL	8-10 mL in aerobic (green top) and remainder in anaerobic (orange top)
4-10 mL	Entire specimen in aerobic (green top)
<4 mL	Entire specimen in pediatric (yellow top)

10. Label each bottle with an acceptable patient label being careful not to cover the bar code on bottle. Write on each label the set number, date and time of draw, site of venipuncture, and initials or tech code of the phlebotomist.
11. Wash off any remaining iodine from patient's skin using an alcohol pad and a sterile gauze pad. Apply a bandage to the venipuncture site. Remove and discard gloves. Wash hands.

12. Blood culture bottles should be held at ambient temperature until received in the laboratory.
13. Send bottles directly to the Microbiology department during the first and second shifts. If the pneumatic tube system is used, place each bottle in a separate plastic bag. During the third shift, send bottles to the main laboratory accession area where personnel will place them in the blood culture instrument.

Note:
1. If multiple laboratory tests are ordered, prepare patient's skin and draw the blood cultures first, followed by the other tubes.
2. For adult patients who are difficult to draw and from whom <5 mL of blood is available for culture, a pediatric bottle may be inoculated. A 16-mL to 20-mL draw is optimal for adults, and a pediatric bottle is suboptimal but acceptable.
3. If the patient is allergic to iodine, alcohol prep pads may be substituted for iodine, but a total of 2 minutes of contact with patient's skin is required instead of 1 minute.
4. ChloraPrep should not be used on patients with known allergies to chlorhexidine gluconate or isopropyl alcohol, on open skin wounds, or as a general skin cleanser.
5. Blood for culture should not normally be drawn from an indwelling catheter unless the catheter is suspected as the source of a catheter-related bloodstream infection. If ordered, the catheter blood cultures should be clearly labeled as such to differentiate.
6. Blood cultures drawn from patients with intravenous (IV) lines should be drawn from below the IV or from another extremity to avoid diluting the specimen with IV fluid.

Specimen Collection and Preparation

Specimen Collection: Specimen Collection for Specimens Other Than Blood

Bronson Laboratory Services
Specimen Collection: Specimen Collection For Specimens Other Than blood

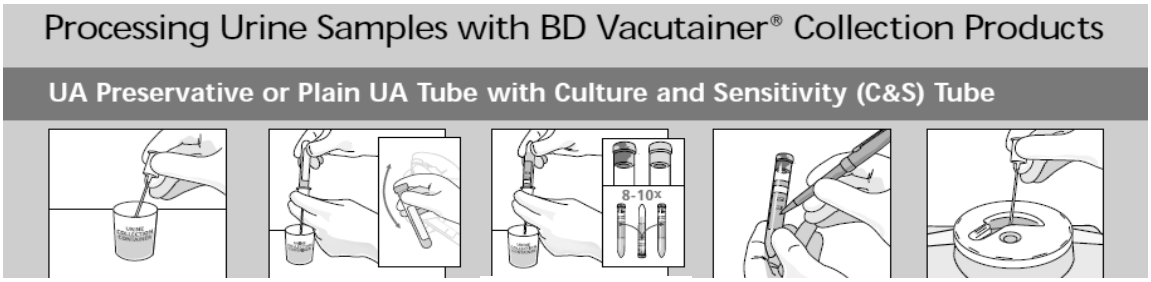
Source	Test	Container	Storage	Stability
Body Fluid	AFB culture/smear	Sterile container	Refrigerate	24 hours
Body Fluid (<1 ml)	Culture, Anaerobic	Port A Cul Fluid Vial	Room Temp	24 hours
Body Fluid (1-2 ml)	Culture, Anaerobic	Sterile container	Room Temp	30 minutes
	Culture, Anaerobic	Port A Cul Fluid Vial	Room Temp	24 hours
Body Fluid (>2 ml)	Culture, Anaerobic	Sterile container	Room Temp	3 hours
	Culture, Anaerobic	Port A Cul Fluid Vial	Room Temp	24 hours
Body Fluid	Culture, Bacterial Routine	Sterile container	Refrigerate	24 hours
Body fluid	Culture, Bacterial Routine	eSwab **(not preferred container type)**	Refrigerate	72 hours
Body fluid	Culture, Fungal, Other	eSwab **(not preferred container type)**	Refrigerate	72 hours
Body Fluid	Culture, Fungal, Other	Sterile container	Refrigerate	24 hours
Body Fluid	Cytology	Sterile container	Refrigerate	4 days
Catheter Tip	Culture, Bacterial Routine	Sterile container	Refrigerate	24 hours
Cervix	GC/Chlamydia DNA probe	Genprobe collection kit or Thin Preps	Refrigerate	60 days
Cervix	GC/Chlamydia/Trichomonas DNA probe	Genprobe collection kit or Thin Prep	Refrigerate	60 days
Cervix	Pap Smear	Thin Prep	Room Temp	21 days
Cervix	HPV	Thin Prep	Refrigerate	21 days
Cervix/Vaginal	Culture, Genital	eSwab	Refrigerate	72 hours
Cervix/Vaginal	Culture, Herpes	Viral Transport Media	Refrigerate	72 hours
Cervix/Vaginal	KOH prep	eSwab	Refrigerate	72 hours
Vaginal/Perirectal	Group B Strep Screen	eSwab	Refrigerate	72 hours
CSF	AFB culture/smear	Tube 2	Refrigerate	24 hours
CSF	Culture, Bacterial Routine	Tube 2	Room Temp	2 hours
CSF	Culture, Herpes	Send out for PCR	Refrigerate	1 week
CSF	Cytology, Cerebrospinal Fluid	Sterile Container	Refrigerate	24 hours
CSF	Enterovirus PCR	Tube 2	Refrigerate	72 hours
Eye	GC/Chlamydia DNA probe	Genprobe collection kit	Refrigerate	60 days
Hair, Skin and Nails	Culture, Fungal	Sterile container	Refrigerate	24 hours
Nares	S. aureus Screen	eSwab	Refrigerate	72 hours
Nasophyaryngeal	Pertussis ONLY	Nasopharyngeal culturette Amies charcoal	Refrigerate	7 days
Nasophyaryngeal	Respiratory Infectious Disease Panel	Nasopharyngeal swab in VTM	Refrigerate	72 hours
Rectal	GC/Chlamydia DNA probe	Genprobe collection kit	Refrigerate	60 days
Sputum	AFB culture/smear	Sterile container	Refrigerate	24 hours
Sputum	Culture, Bacterial Routine	Sterile container	Refrigerate	24 hours
Sputum	Culture, Fungal, Other	Sterile container	Refrigerate	24 hours
Sputum	Cytology	Sterile container	Refrigerate	4 days
Stool	C-Diff	Sterile container	Refrigerate	48 hours
Stool	Gastrointestinal PCR Panel	Preservative-Carey Blar	Refrigerate	72 hours
Stool	Fecal Occult Blood	Clearview FOB sample vial	Refrigerate	10 days

Specimen Collection and Preparation

Stool	Giardia/Cryptosporidium or OVP	Protofix Vial	Refrigerate	72 hours
Stool	H.pylori Antigen	Sterile container	Refrigerate	72 hours
Stool	Lactoferrin	Sterile container	Refrigerate	2 weeks
Stool	Ova & Parasite exam	Protofix Vial	Room Temp	72 hours
Throat	Group A Strep Culture	eSwab	Refrigerate	72 hours
Throat	GC/Chlamydia DNA probe	Genprobe Collection Kit	Refrigerate	60 days
Tissue	AFB culture/smear	Sterile container	Refrigerate	24 hours
Tissue	Culture, Anaerobic	Sterile container	Room Temp	2 hours
Tissue	Culture, Bacterial Routine	Sterile container	Refrigerate	24 hours
Tissue	Culture, Fungal, Other	Sterile container	Refrigerate	24 hours
Tissue	Culture, Quantitative	Sterile container	Refrigerate	24 hours
Tissue	Pathology	Formalin	Room Temp	n/a
Urethra	Culture, Herpes	Viral Transport Media	Refrigerate	72 hours
Urethra	GC/Chlamydia DNA probe	Genprobe collection kit	Refrigerate	60 days
Urine	Culture, Bacterial Routine	Sterile container (inpatients)	Refrigerate	24 hours
Urine	Culture, Bacterial Routine	Grey Top Urine Preservative vial	Refrigerate	48 hours
Urine	GC/Chlamydia DNA probe	Aptima collection kit - Urine	Refrigerate	60 days
Urine	GC/Chlamydia DNA probe	Sterile container	Refrigerate	30 days
Urine	Cytology	Sterile container	Refrigerate	4 days
Wound	Culture, Anaerobic	eSwab	Room Temp	24 hours
Wound	Culture, Bacterial Routine	eSwab	Refrigerate	72 hours
Wound	Culture, Fungal, Other	eSwab	Refrigerate	24 hours

Specimen Collection and Preparation

Specimen Collection: Urine



1. Submerge tip of transfer straw in specimen in the sterile container.
2. Order of draw: Must draw grey top tube before the cherry red/yellow top tube.
3. Push Grey Top Tube into the holder end of the transfer straw, until needle pierces the rubber stopper.
4. Hold in position until flow stops.
5. Remove Grey Top from holder.
6. Invert tube several times to dissolve white pellet at the bottom of the tube.
7. Repeat steps 3 thru 5 using the cherry red/yellow tube.
8. Invert red/yellow tube several times mix urine with the preservative coated on the sides of the tube.
9. Label all specimens with SDWLHQW¶V ILUVW DQG last name, date of birth, date and time collected.
10. Dispose of transfer straw in sharps container.

WHEN ORDERING:	CONTAINER/sTO SEND
Urinalysis only OR Urinalysis and Culture	
Urine Culture only	
Miscellaneous urine tests micro albumin, electrolytes, urine genprobe, strep pneumo antigen, leJLRQHOOD DQWLJHQ HWF**«)**	
Urine Genprobe (GC/Chlamydia)	

Clean-Catch, Midstream, Random Urine: **First-morning** specimen is preferred as it is the most concentrated. It is important to avoid contaminating urine with bacteria and cells from the skin.

1. Wash hands with soap and water.
2. Unscrew the blue cap.

Caution: DO NOT REMOVE the yellow label from the top of the Urine Collection Cup. There is a needle under the label.

3. Place blue cap on counter with straw facing upwards. **Do not** touch inside of cap or straw.
4. Open the towelette package. The package contains 2 towelettes.

a. Males:

- Cleanse the end of the penis with the 1 towelette.
- Begin at the urethral opening and work away from it. Uncircumcised male: foreskin must be retracted.
- Repeat using the second towelette.
- Urinate the first portion of urine in the toilet.

b. Females:

- Stand in a squatting position over the toilet.
- Separate the folds of skin around the urinary opening.
- Cleanse the area around the opening with 1 towelette.
- Repeat using the second towelette.
- Urinate the first portion of urine in the toilet.

6. As you continue to urinate, bring the collection cup into the midstream to collect the urine sample.
7. **Do not** touch the inside or lip of the cup.
8. Urinate remainder of urine into the toilet.
9. Replace the blue cap onto the Urine Collection Cup.
10. Return the sample to the healthcare worker.

Catheterized Urine - Straight Catheter:

1. Discard first urine flow from catheter. This portion may contain contaminating organisms and cells as a consequence of catheter insertion.
2. Collect a specimen of mid or later flow of urine into the blue cap sterile cup from the urine collection kit.
3. See Urine Collection and Processing Reference Guide for additional clinical staff instructions.

Catheterized Urine - Indwelling Catheter (Foley Catheters):

1. Check to ensure there is no backflow of urine from collection bag into catheter tubing.
2. Cleanse the port with alcohol and then attach the syringe to the catheter.
3. Draw the specimen into a sterile syringe.
4. Expel urine from syringe into the blue cap sterile cup form the Urine Collection Kit.
5. Discard syringe in a biohazard sharps container.
6. See Urine Collection and Processing Reference Guide for additional clinical staff instructions.

Cystoscopy Urine:

1. Following insertion of cystoscope; allow first portion of specimen to drain in collection pan, and then collect specimen in the blue cap sterile cup from the Urine Collection Kit.
2. See Urine Collection and Processing Reference Guide for additional clinical staff instructions.

Suprapubic Aspirate Urine:

1. Wait at least 4 to 6 hours after the last urination.
2. Clean suprapubic skin with iodine followed by alcohol.
3. Insert 22-gauge needle attached to a 20-mL syringe into the skin at about a 30° angle to abdominal wall, immediately superior to symphysis in midline.

Note: Infants may require a smaller syringe and needle. Aspirating as one penetrates, stop as urine is obtained, and fill syringe with urine.

4. Expel urine from syringe into the blue cap sterile cup from the Urine Collection Kit.
5. See Urine Collection and Processing Reference Guide for additional clinical staff instructions.

Specimen Collection and Preparation

24-Hour Urine:

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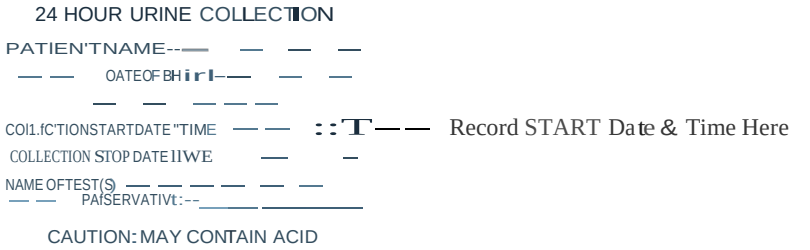
Patient Instructions for 24 Hour Urine Collection

Supplies

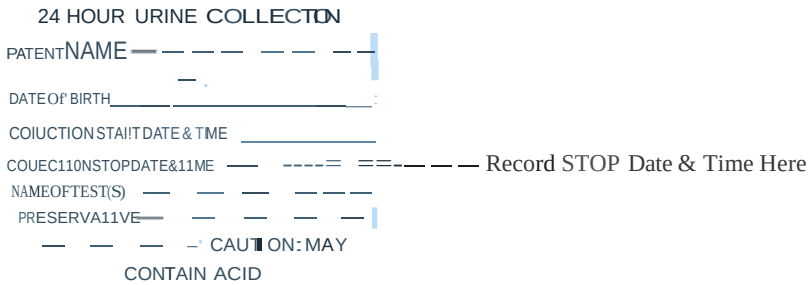
- 24-Hour Urine Collection Jug
  '"NOTE: May contain acid; do not urinate directly into the urine collection jug. Use the provided urine collection transfer device to safely transfer urine into the collection jug.
- Urine collection transfer device (device that fits on the rim of the toilet to enable safe transfer of urine to collection jug)

24-Hour Collection Instructions

1. Follow your provider's directions regarding food, drink, or drugs before and during collection.
2. Empty your bladder completely when you get up in the morning. DO NOT SAVE THIS URINE SPECIMEN. Discard your first morning urine in the toilet. This is your START time.
3. Record the START Date and Time on the collection jug label (Example: 9/20/09 at 7:00AM).



4. For the next 24 hours, of the urine that you pass must be transferred into the collection jug provided. Urinate into the urine collection transfer device and then carefully transfer the urine into the collection jug. Do this all day and night. Keep the collection jug refrigerated during collection period.
5. Urinate for the last time the next morning at the same time as the collection started. SAVE THIS URINE SPECIMEN and add it to the collection jug using the urine collection transfer device (the STOP time must be the same as the START time from step 3. above or collection is not considered a 24 hour urine).
6. Record the STOP Dale and Time on the collection jug label (Example: 9/21/09 at 7:00AM(time *nutst* match the statt time or collection is not considered a 24 hour urine)



7. Bring specimen to the laboratory drop off location as soon as possible after 24-hour collection is complete.
8. Certain testing requires a blood draw. Check with lab staff before leaving.

Please call Bronson Laboratory if you have questions about this collection.
(269) 341-6440

Note: Certain tests may also require a blood specimen. Please check specific 24-hour urine test requirements to see if a blood draw is required

Specimen Collection: Stool

Common tests ordered on stool specimens are:

- Occult blood
- 24-Hour fecal fat
- Fecal WBCs
- Stool culture
- Ova and parasite examination
- pH/reducing substances
- Rotavirus antigen
- *Clostridium difficile* toxin

General instructions for stool collection are listed below. Refer to the Alphabetical Test Listing for specific test requirements.

- If patient is taking Milk of Magnesia, Kaopectate or similar medication, or had a barium X-ray recently, wait 7 to 10 days before collecting a specimen.
- Stool collection container is dependant on the test. Please refer to the specific test to find the appropriate specimen container.
- Specimen must not be mixed with water (eg, from toilet bowl) or with urine.
- Specimen container must be labeled with patient's name (first and last), date of birth, and date and time of collection. Refer to the Alphabetical Test Listing for storage and delivery instructions.
- Only 1 stool specimen per day is accepted for routine bacterial culture and ova and parasite examination.

Specimen Collection: Throat Swab

Supplies Needed:

- Culturette tube
- Tongue blade
- Gloves (mask and eye protection, as needed)
- Patient identification label (to be placed on Culturette)
- Laboratory request form (properly labeled with patient identification label)

Procedure:

1. Apply gloves, eye protection, and mask (mask as needed, depending on anticipated exposure).
2. Keeping cotton applicator sterile, remove from Culturette tube.
3. Depress tongue with tongue blade, if indicated.
4. Insert cotton tip of applicator to the **back of patient's throat**, and swab area.
5. Place applicator in Culturette tube.
6. Label specimen with patient's name (first and last), date of birth, date and time of collection, and source of specimen.

Specimen Collection and Preparation

Specimen Collection: Nasopharyngeal Swab

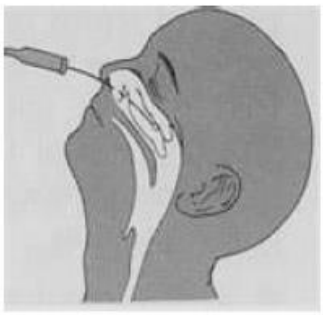
General Information: Obtain nasopharyngeal specimen by nasopharyngeal swab.
Note: Viruses are intracellular, so nasopharyngeal swab must contain an adequate number of cells for optimal results.

Supplies Needed:

- VTM (viral transport media) tube - obtain from Microbiology
- Mask, eye protection, and gloves
- Container of ice (not necessary if specimen is sent to laboratory immediately)
- Flocked nasopharyngeal swab
- Laboratory request form (properly labeled with patient identification label)

Procedure:

1. Apply mask, eye protection, and gloves.
2. Open VTM tube if obtaining viral specimen except for rapid influenza test.
3. Open flocked nasopharyngeal swab package, leaving paper covering on handle end to maintain sterility.
4. Insert swab into the nostril straight to the back of the throat—not upwards. See diagram below for proper insertion of swab. Rub gently to obtain nasopharyngeal cells and secretions.



5. Remove swab and immediately place in VTM tube. Break off excess swab handle to fit into VTM tube.
6. Label VTM tube (according to Bronson's specimen labeling standard), and **immediately send to the laboratory** via pneumatic tube system.
   Note: If specimen transportation is delayed, place specimen on ice.

To view a nasopharyngeal specimen collection video, follow link below:
Bing Videos (or search: Collection of Nasopharyngeal Specimens with the Swab Technique NEJM)
Note: Once you click on the link, you will be directed away from the Bronson Test Catalog website. Please use the "Back" button to return to our website.