

Specimen Collection Guide

The following is only a guide. For complete, comprehensive and up-to-date information please search for the specific test(s) in the [Test Catalog \(http://spectrumhealth.testcatalog.org/\)](http://spectrumhealth.testcatalog.org/) and follow Collection Instructions.

(This document was last updated 8/22/2016)

From collection to transport, Spectrum Health Regional Laboratory expects quality specimens. A quality specimen is one that has been collected and transported, keeping specimen integrity and patient identification intact. Please use this guide to help keep specimen integrity. Quality specimens = Quality results!

Where noted, there may be differences between Inpatient Collection and Outpatient Collection. When possible, inpatient collectors should refer to [PolicyTech](#).

If you have any questions please consult the [Test Catalog](#) or contact the Laboratory Call Center 616.774.7721. If there are errors in this document, please contact LaboratoryServices@spectrumhealth.org. Attn: Specimen Collection Guide Errors.

The fastest way to search through this document is to hold Ctrl+F and search for a word or phrase or use the Table of Contents on page 2.

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General Collection and Handling

Patient Identification

The person obtaining any specimen for laboratory testing is required to properly identify the patient before submitting samples. At least two patient identifiers must be checked before specimen collection (Name, Spectrum Health Medical Record Number, Date of Birth, or Social Security Number).

Outpatient: the above person is also responsible for ensuring that the patient identification agrees with what is on the test requisition or EMR (Electronic Medical Record). If the information does not match, it is the submitting office's responsibility to determine where the discrepancy lies and correct the information before sending any specimens to the laboratory for testing.

For Type and Screen specimens, the patient identification must be witnessed by a second person, and both must initial the blood specimen. One of these witnesses must be laboratory personnel. Please refer to [Blood Collection – Special](#) Below or to PolicyTech for more information.

Specimen Labeling

All specimens must be labeled in the presence of the patient immediately after collection to further ensure proper specimen identification. Specimen Labels and any Documentation **must** include Patient and Collection information listed below:

Inpatient:

- Patient's last and first name
- Patient's Medical Record Number
- Date and Time of specimen collection
- Collector's User ID
- For non-blood specimens, specify the Specimen Type (Urine, CSF, Pleural, Peritoneal)

Outpatient

- Patient's Full Name, **do not** use initials
- Date of Birth
- Date and Time of specimen collection
- Collector's initials
- Source and specimen type (if applicable)

The office staff drawing blood specimens should print their name in the indicated area on the requisition form.

NOTE: If two patient identifiers are not used on the specimen, the specimen will be rejected, the order will be cancelled and a request for recollection will be made. This includes Cytology (i.e. Pap) specimens. This is a Joint Commission National Patient Safety Goal.. (NSPG.01.01.01: "Use at least two patient identifiers when providing care, treatment or services.")

PolicyTech Reference #9955

Laboratory Requisitions (paper orders) and Forms

Spectrum Health Laboratory supplies the following forms:

Form #	Description
443	Laboratory Requisition (General)
477	Anatomic Pathology Requisition
450	Cystic Fibrosis (CF) Test Requisition
480	Advanced Technology Lab (ATL)
485	Toxicology Requisition (Chain of Custody)
490	Infectious Disease (Microbiology)
495	Allergen Testing
No #	Pediatric Blood Lead Testing
X06246	Laboratory Supply Requisition
No #	Additional Test (Add-on) Request Form

All of our forms and requisitions may be found in the online laboratory catalog: <http://spectrumhealth.testcatalog.org/catalogs/179/files/4259>

These forms have been designed to obtain the following information:

- Complete Patient Identification (at least 2 identifiers!)
- Ordering Provider (no initials or nicknames)
- Collection Information
- Complete Billing Information
- Diagnosis (ICD-10 code or description)
- Order Expiration
- Special Instructions (fasting, random, etc.)
- Test(s) Desired

Additional clinical information is required for specialty tests: Anatomic Pathology, Quads, Molecular Diagnostics, Cytogenetics, and Flow Cytometry. For more information please refer to the online laboratory catalog: <http://spectrumhealth.testcatalog.org/>

Specimen Handling

Specimen handling and requirements are located in the Test Listing section. The Test Listing includes specimen type, volumes required for testing, storage temperature, and any special handling requirements. The specimen volume requested assures the availability of enough sample to allow for repeat testing if needed. In most inpatient testing situations, immediate transport of the specimen to the laboratory will ensure proper special handling and storage.

Send Out tests require separate samples. (Do not combine these tests with other lab tests in one tube.)

Minimal Exposure to Light (General): This is different than protecting a specimen from light. Please routinely take general precautions to minimize the specimen's exposure to light. These precautions should include:

- After collection, placing specimens out of direct sunlight and overhead lighting.
- Centrifuging and placing specimens, as appropriate, in the refrigerator as soon as possible.
- (*Outpatient*) Transporting the specimens in opaque containers (courier coolers).
- Processing specimens in lab ASAP.
- Storing completed specimens, as appropriate, in routinely non-lighted refrigerator.

Protect From Light (Specific): Protection from light is required for specific tests and will be listed in the specimen requirements and special notes sections of the appropriate test listings. Protection from light involves non-routine actions like wrapping the specimen in foil or using amber aliquot/pour-over tubes. For these tests, failure to protect from light affects the test results. Therefore tests not sufficiently protected from light may be cancelled.

Standard Temperatures:

Ambient:

Refrigerated:

Frozen:

Specimen transport

Spectrum Health provides individual plastic biohazard bags for transporting specimens. All samples from a single patient should be placed in one transport bag. Two patients' samples should never be combined in one bag. Any remaining label portions should be sent to the laboratory in the same sealed bag with the specimens. When submitting urine/body fluids, use the well-constructed containers provided by Spectrum Health and properly secure the tops before placing in transport bag. **Do not put urine or body fluids in transport bags with other specimens. Do not send syringes with needles attached.**

Inpatient:

Most specimens can be transported via the pneumatic tube system to the laboratory. Specimens that cannot be tubed include the following precious specimens obtained by invasive procedures:

- Cerebrospinal fluids (CSF)
- Peritoneal Lavage (in saline bag)
- Thoracentesis, paracentesis, etc.
- Bronchial washings, lavages
- Capillary Gases
- Tissue
- Amniotic Fluid

Outpatient

Spectrum Health provides individual plastic biohazard bags for transporting specimens. Specimen bags are color coded according to transportation temperature (blue for frozen specimens, green for refrigerated specimens, white for ambient specimens, and red for STAT specimens). Each sample should be placed in a separate transport bag according to temperature. Urine or body fluids should be bagged separately. Large glass bottles or fluid should also be bagged. Never send syringes with needles attached. Always make sure lids to containers are on tight. Two patients should never be combined in one bag. Place labeled specimen into the self-locking portion of the transport bag. Fold the requisition form and place it in the sleeve portion of the transport bag with the patient name facing up. You may also use an orange (Epic) slip or a green (eSHare) slip to note that the specimen order is electronic. The transport bag must be sealed to prevent leaks if breakage should occur during transport.

PolicyTech Reference #9955

Unacceptable Specimens

The quality of results is dependent on accuracy of specimen collection and labeling. If identification information is not complete, is inaccurate, or the specimen is improperly labeled or collected, the laboratory reserves the right to reject the specimen and require recollection. General recollection criteria for specimens include:

- Improper transport temperature or time
- Inaccurate collection tube volume
- Dried out swabs
- Insufficient specimen quantity
- Lipemia
- Improper collection including improper transport, media, or fixative
- Misidentification of specimen
- Improper collection container
- Leaky specimen container
- Hemolysis if the tests ordered include: Potassium, Magnesium, AFP testing, Bilirubin, GOT, Phosphorous, CPK, LDH (These tests are affected by hemolysis and may give false results.)
 - Spectrum Health Laboratory reserves the right to reject grossly hemolyzed or improperly clotted specimens based on the tests ordered. Hemolysis and clots can adversely affect the results of a variety of assays.

Hemolysis Interpretation:

- **Slight specimen hemolysis:** Hemolysis can affect laboratory results for the listed analytes: however the degree of hemolysis in this specimen may not be high enough to cause significant change.

Analytes that may be affected are: Potassium, Acetaminophen, AST, Betahydroxybutyrate, Bilirubin Direct, Folate, Haptoglobin, LDH, Osteocalcin, PTH Intact, Troponin T.

- **Moderate specimen hemolysis:** Recommend repeat testing on redraw if results are not consistent with the patient's clinical situation

Results for the following analytes may not be accurate due to hemolysis: Potassium, Acetaminophen, AST, ALT, Alk Phos, Ammonia, Betahydroxybutyrate, Bilirubin Direct, CK, Ethanol, Folate, GGT, Haptoglobin, Iron, LDH, Osteocalcin, PTH Intact, PTH Intraoperative, Troponin T.

- **Gross specimen hemolysis.** Recommend repeat testing on redraw.

Results for the following analytes may not be accurate due to hemolysis: Potassium, Acetaminophen, AST, ALT, Alk Phos, Ammonia, Amylase, Betahydroxybutyrate, Bilirubin Direct, Bilirubin Total, CK, Ethanol, Folate, GGT, Haptoglobin, Iron, LDH, Magnesium, Osteocalcin, Phosphorus, PTH Intact, PTH Intraoperative, Troponin T, Uric Acid and many other analytes.

Rejection Criteria:

The quality of results is dependent on accuracy of specimen collection and labeling.

Specimens will be considered unacceptable under the following conditions:

- Any specimen not accompanied by a requisition or electronic order
- Any specimen which is not properly labeled or for which patient identification is discrepant.

Note: all specimens must be labeled with two patient identifiers. This is a Joint Commission National Patient Safety Goal for 2015. (NSPG.01.01.01: “Use at least two patient identifiers when providing care, treatment or services.”)

- A requisition that is incomplete or contains discrepant information, requisitions information must match specimen label.
- Specimens grossly leaking into the biohazard bag
- Broken slides that cannot be repaired

PolicyTech Reference #19557 Cytology Specimen Rejection, #8390 Reference/Standard Histology Specimens, #19798 Specimen Collection, Labeling, Accessioning, Inadequacy and Rejection Requirements, #9955 Laboratory Specimens-Collection Priorities, Labeling and Transport, #6390 Cancel – Correct – Credit Procedure, #8167 Cancel-Credit-Correct Laboratory Specimens Policy, #11156 Cancellation of Laboratory Orders-Guidelines, #10299 Determination of Specimen acceptability, #11099 Laboratory Orders – Inpatient, #11101 Laboratory Orders Policy - Outpatient

Additional Test Request (Specimen Add-On, Blood In Lab (BIL), Specimen In Lab (SIL))

For inpatients: Please input the orders into Cerner and include the label comment ‘Specimen in Lab’. A label should print in your area. Send the label to the lab via the pneumatic tube system.

For outpatients: Please fax a completed [Additional Test Request form](#), including additional diagnoses as indicated to (616) 267-2751.

Each situation will be investigated by lab for appropriateness. If specimen is still viable, the test will be completed and results will be sent. If specimen is not available or not appropriate, a call will be made by laboratory staff or the Laboratory Customer Service Call Center to alert clinicians that a new specimen is required.

Blood Specimen Collection Instructions

Venipuncture Collection Procedure

1. Make a positive identification of the patient by having them state/spell their name and date of birth.
2. Position the patient so that the vein is readily accessible.
3. Wash your hands and wear gloves during this procedure.
4. Select the vein for venipuncture.
5. Apply the tourniquet 3-4 inches above the intended site. Have the patient make a fist, but do not have them pump. Do not allow the tourniquet to stay on more than one minute while you search for a vein. Prolonged obstruction of blood flow may have adverse effects on some blood tests.
6. Palpate or feel for the vein, even when the vein is seen. The vein will feel like an elastic tube that “gives” under pressure of your finger.
7. If you are not certain that you have found a vein, examine the other arm.

Vacutainer Collection

1. Attach new sterile needle to a new holder/vacutainer and assemble the appropriate blood collection tubes.
2. Inspect needle for any visible nicks or burrs.
3. Scrub the area for venipuncture with an alcohol pad in an outward circular motion. Allow to air dry
4. Re-clean the area with alcohol if you accidentally touch the skin where you plan to puncture the skin. Allow the area to air dry.
5. The vein should be “fixed” or held taut during the puncture. Place the thumb about one inch below where the needle is to enter, then press down and gently pull the skin towards you.
6. With the bevel side up, puncture the skin at a 15-30° angle and slide into the vein.
7. When the needle is successfully in the vein, push the collection tube all the way in the needle holder so blood will flow into the tube. Be sure to hold the vacutainer holder steady as this is done.
8. Fill tubes in the following order:

Blood culture tube/bottle(s) – BacT/ALERT SA Aerobic and Anaerobic
 Blank tube - EST or plastic “no additive” serum tube
 Coagulation tube (light blue top) – Buffered Na(Sodium) Citrate (9NC)
 Serum tube (red top, plastic) – Serum REF 367815

Additive tubes:

Trace Element Serum tube (royal blue top, red label or no label)
 Serum Separator tube (SST) (gold top, gel in bottom)
 Plasma Separator tube (PST) Gel Lithium Heparin (light green top, gel in bottom)
 Lithium Heparin 75 tube (dark green top, no gel)
 Sodium Heparin 95 tube (dark green top, no gel)
 K2 (Potassium) EDTA 10.8 tube (pink top)
 K2 (Potassium) EDTA 5.4 tube (lavender top)
 Trace Element EDTA tube (royal blue top, light blue label)
 K2 (Potassium) EDTA 5.4 tube (tan top)
 Sodium Fluoride Potassium Oxalate tube (gray top)
 ACD Solution A & B tubes (yellow top, glass tubes)
 Verify Now tube – collected only at BW or 35 MI Labs

9. When the tube has filled, hold the needle holder steady and gently pull the tube off. If additional tubes are required, slide the next tube in and press firmly so that the stopper is punctured by the inside needle.
10. Remove the last collection tube before removing the needle from the vein.
11. Release the tourniquet BEFORE removing the needle.
12. Virtually simultaneously, pull the needle out of the arm as you firmly place a piece of gauze over the puncture site while having the patient keep the arm in an extended, straight position. Ask the patient to apply pressure to the site.
13. Gently invert the tubes that contain additives 8-10 times.
14. While still applying pressure to the patient's arm, discard the needle in a puncture resistant sharps container discarding the entire assembly
15. Inspect the venipuncture site for hemostasis. If bleeding hasn't stopped, continue applying pressure, then place an adhesive bandage on the puncture site.
16. Label the tubes with the patient's full name and date and time of collection while in the presence of the patient to ensure accurate information.
17. Remove gloves and wash your hands before attending to another patient.

Venipuncture - Syringe or Butterfly

1. Select the appropriate size syringe and needle and follow the vacutainer instructions above with the following modifications. Be sure to choose a syringe that will collect enough blood to fill all of your tubes.
2. Once the needle is in the vein, pull the plunger slowly.
3. Release the tourniquet BEFORE removing the needle.
4. Virtually simultaneously, activate the safety feature on Butterfly as you firmly place a piece of gauze over the puncture site while having the patient keep the arm in an extended, straight position. Ask the patient to apply pressure to the site.
5. As quickly as possible fill the proper tubes with the blood, using a transfer device, before the blood begins to clot. Allow the tube to draw the blood into the tube. Never force the blood into the tube, as this causes hemolysis and may force the cap off the tube, spraying blood.
6. Fill tubes in the following order:
 - Blood culture tube/bottle(s) – BacT/ALERT SA Aerobic and Anaerobic
 - Blank tube - EST or plastic “no additive” serum tube
 - Coagulation tube (light blue top) – Buffered Na (Sodium) Citrate (9NC)
 - Serum tube (red top, plastic) – Serum REF 367815
 - Additive tubes:**
 - Trace Element Serum tube (royal blue top, red label, no label)
 - SST (gold top, gel in bottom)
 - PST Gel Lithium Heparin (light green top, gel in bottom)
 - Lithium Heparin 75 tube (dark green top, no gel)
 - Sodium Heparin 95 tube (dark green top, no gel)
 - K2 EDTA 10.8 tube (pink top)
 - K2 EDTA 5.4 tube (lavender top)
 - Trace Element EDTA tube (royal blue top, light blue label)
 - K2 EDTA 5.4 tube (tan top)

Sodium Fluoride Potassium Oxalate tube (gray top)
ACD Solution A & B tubes (yellow top, glass tubes)
Verify Now tube – collected only at BW or 35 MI Labs

7. Gently invert the tubes that contain anticoagulants 8-10 times.
8. While still applying pressure to the patient's arm, discard the needle in a puncture resistant sharps container using the one handed technique to unscrew it from the needle holder or discard the entire assembly
9. Inspect the venipuncture site for hemostasis. If bleeding hasn't stopped, continue applying pressure, then place an adhesive bandage on the puncture site.
10. Label the tubes with the patient's full name and date and time of collection while in the presence of the patient to ensure accurate information.
11. Remove gloves and wash your hands before attending to another patient.

PolicyTech Reference #9952 Phlebotomy: Collection of Diagnostic Blood Specimens by Venipuncture

Neonatal Heel Puncture Procedure (under 6 months old)

1. Make a positive identification of the patient by asking parent/guardian to state/spell child's name and date of birth, if available
2. Wash your hands and wear gloves during this procedure.
3. Position the neonate in such a way that you have access to the heel. Select the site. Use the plantar section of the heel.
4. Warm the site. Wrap foot in a heat pack for approximately 5 minutes (never warmer than 39-40°C).
5. Scrub the area with an alcohol pad in an outward circular motion. Re-clean the area with alcohol if you accidentally touch the skin where you plan to draw blood.
6. Allow the area to air dry.
7. Using a lancet, puncture the appropriate heel area no deeper than 2.0 mm.
8. Wipe off the first drop of blood as it contains intracellular fluid, which may alter test results.
9. Hold the foot by using a moderately firm grip. Do not scarp the tubes on the patient's foot. Do not excessively massage or milk the foot to fill tubes.
10. Fill each microtainer in the following order:

Capillary Blood Gas
Lavender Tube
Green Tube
Gold Tube
Red Tube

NOTE: Blood cultures and coagulation specimens are not acceptable on capillary specimens

11. Gently invert microtainers 8-10 times.
12. Hold pressure until bleeding stops. Bandages are not recommended on neonates.
13. Remove gloves and wash hands.
14. Label the tubes with patient's full name and date and time of collection while you are still with the patient to ensure proper specimen identification.

Policy Tech Reference # 8919 Heel Stick for Capillary Blood Draw – Pediatrics/Neonatal

Finger Poke Procedure Never to be performed on patients <1 year old

1. Make a positive identification of the patient by having them state/spell their name and date of birth.
 2. Wash your hands and wear gloves during this procedure.
 3. Position the patient so that the finger is steady and supported in a comfortable position. Avoid using a finger that is cold, cyanotic, swollen, or inflamed.
 4. With your thumb and index finger, grasp either the patient's middle or ring finger about three inches from the tip of the finger.
 5. Cleanse the entire fingertip with an alcohol swab.
 6. Thoroughly air-dry the tip of the finger.
 7. While holding the patient's massaged finger with one hand, grasp the auto-lancet with the other. Place on the patient's fingertip, remove the safety block and depress button allowing the auto-lancet to puncture the finger near the tip.
 8. Wipe off the first drop of blood as it contains intracellular fluid, which may alter test results.
 9. Fill each microtainer in the following order:
 - Capillary Blood Gas
 - Lavender Tube
 - Green Tube
 - Gold Tube
 - Red Tube
- NOTE: Blood cultures and coagulation specimens are not acceptable on capillary specimens
10. Gently invert microtainers 8-10 times.
 11. Hold the finger downward to increase the blood flow. Collect the specimen by capillary action.
 12. Bandage the finger when complete.
 13. Remove gloves and wash hands.
 14. Label the tubes with patient's full name and date and time of collection while you are still with the patient to ensure proper specimen identification.

Policy Tech Reference # 9791 (Finger Stick for Capillary Specimens)

Blood Specimen Collection Instructions – Special

Blood Bank Specimen

Inpatient:

A specimen drawn for Blood Bank Type and Screen orders and ABO and Rh typing orders must be labeled with the Cerner User Identification (ID) by the health care provider collecting the specimen. A second person who has verified patient identification and witnessed the collection must sign the order label with their Cerner ID. One of these people must be a laboratory staff person with the exceptions noted below.

Exceptions: Specimens for type and screen collected within the surgical suites, offsite, or Adult Hematology Oncology Clinic and cord blood specimens for type and screen will not require a laboratory staff Cerner User ID. Two sets of Cerner User IDs will still be required as stated above.

If a patient's blood type is on file in the Cerner Blood Computer, other blood specimens in the Laboratory can be used for Type and Screen testing. The Cerner ID of the person drawing the specimen does need to be recorded in Cerner.

Surgical Patients:

Blood Bank policies and requirements are campus specific. Pre-operative blood bank testing must be arranged with the location performing the surgical procedure. However, the following are general guidelines that are applicable to both the Butterworth and the Blodgett Hospital Blood Banks.

(Type & Screen, and Crossmatches) can be drawn up to seven days before the scheduled surgical procedure only when the patient meets the following criteria:

- The patient must not have received any blood transfusions in the last three months.
- The patient must not have been pregnant in the last three months.

Each patient must be asked the above questions before the blood specimens are drawn. If the patient does not meet these criteria, or if the patient's history is uncertain, the blood sample may not be drawn more than three days prior to the scheduled surgery.

Each blood bank specimen collected must have the collector's User ID, as well as, a witness' User ID (someone who was present for the entire procedure). The witness may be the patient in an outpatient setting.

Outpatient Blood Bank Services

Policies and procedures for outpatient transfusions are also campus specific. Please contact the Blodgett Campus Blood Bank at (616) 774-7703, or Butterworth Blood Bank at (616) 391-1219 for details.

Note: Offices/facilities who obtain Blood Bank specimens, please call (616) 391-1219 for patient ID criteria.

Cryoglobulin Specimen

It is critical that the following steps are followed closely or the test may be invalid:

Inpatient:

- Patient must be fasting
- Draw 4 plain 6 ml red top tubes (Serum Separator tube not acceptable)

- Label tubes with patient's full name, today's date, time of collection, and test requested or Cerner printed labels.
- Transport specimens to lab enclosed in your fist or wrapped in an activated Instant Hot Pack – Medium (aka infant heel warmer) to maintain at or near body temperature before and during the clotting process.

Outpatient:

It is recommended that this test be drawn at the Spectrum Health Butterworth Laboratory or 35 Michigan Laboratory locations. If a cryoglobulin test must be drawn at another location, the following steps must be followed.

- Patient **MUST** be fasting.
 1. Draw 4 plain 6 mL red stopper tubes (serum separator tubes are NOT acceptable).
 2. Label tubes with patient's full name, date of collection, time of collection, and test requested.
 3. Maintain as close to body temperature as possible while transporting to a 37°C water bath before specimens clot. Methods found acceptable for this are keeping tubes in a tight fist, placing tubes in underarm of lab coat that is being worn, wrapping tubes in an activated Infant Heel Warmer.
 4. Place unclotted tubes in a 37° water bath. Water level must be deep enough to surround blood in tubes, but tubes should not be completely immersed under water.
 5. Leave in water bath approximately 45 minutes or longer if not clotted.
 6. Remove tubes from water bath. All steps must be performed without delay or Cryoglobulin may be lost.
 7. Centrifuge for 5 minutes at 3000 rpm.
 8. Transfer serum to one labeled 12x75 mm tube and centrifuge again.
 9. Transfer all serum to a plastic transport tube. Specimen may be stored at 4°C if overnight storage is required.
- This specimen must be free of all red cells and the minimum volume of serum required is 4mL.

Coagulation (Hemostasis) Specimen

Specimen collection, processing, storage and transport are critical to obtain valid results for hemostasis tests.

Blue top tubes (3.2% Sodium Citrate) are used for most hemostasis tests. See individual test listings.

Specimen must not be the first tube drawn; to avoid contamination by tissue thromboplastin when evacuated tubes are used, draw a clear top tube first. Obtain venous blood by clean venipuncture. Avoid stasis, immediately mix with anticoagulant at the ratio of 9 volumes of blood to 1 volume of anticoagulant (4.5 mL of blood to 0.5 mL of sodium citrate solution). Difficult venipuncture draws may cause acceleration of the clotting process due to the presence of tissue factor or hemolysis. This may produce falsely shortened coagulation times thereby masking factor deficiencies or additionally cause platelet clumping.

The venipuncture must not be traumatic or slow flowing. Avoid leaving the tourniquet on for an extended time. Hemolyzed or clotted specimens are unacceptable. Tubes must be filled to capacity (+/- 10% of the fill volume), do not over or under fill. Mix immediately by gentle inversion 8 – 10 times.

Alternate Methods:

1. Syringe Draw:
 - a. Draw blood into a sterile syringe and immediately transfer into a sodium citrate tube of appropriate size.

2. Central Line Draw:

- a. Collection of blood for hemostasis testing through intravenous lines that have been flushed with heparin should be avoided.
- b. If the blood must be drawn through an indwelling catheter the possibility of heparin contamination and specimen dilution is of consideration.
- c. If obtaining a specimen from an indwelling line that may contain heparin, the line should be flushed with 5 mL of saline, and the first 5 mL of blood or 6 times the line volume (dead space of the catheter), be drawn off and discarded prior to the coagulation tube being filled.
- d. For samples collected from a normal saline lock, (capped off venous port), twice the dead space volume of the catheter and extension set should be discarded.
- e. If specimen received was drawn from an indwelling catheter, (drawn from a line), and the physician requests results, perform testing on the specimen and result with the following comment; *“Specimen was drawn from an indwelling line, results may be unreliable.”*

To obtain a hemostasis plasma sample, centrifuge the capped specimen tube at a speed and time required to consistently produce platelet-poor plasma (platelet count < 10,000/uL). The centrifugal speed and duration to accomplish this must be established in the individual laboratory. Our laboratories use centrifuges at 3,000 to 4,000 rpm for ten minutes or higher speed and shorter duration centrifuges. When removing plasma to send to Hemostasis (Coag), it is important NOT to go all the way down to the cells. Leave a minimum 1/4 inch of plasma sitting on cells. This layer contains the platelets which were separated from the plasma during spinning. The platelets interfere with Hemostasis (Coag) testing so we leave this layer undisturbed. Refer to Test Listing for sample volume and number of aliquots.

See individual test listings for time limitations.

Blood Glucose Testing

Several Glucose Tests are available at Spectrum Health laboratory. Patients should be given the proper instructions regarding fasting.

A fasting specimen is:

No caloric or caffeine intake for at least 8 hours. Do not drink (other than water), eat, smoke, chew gum, candy, cough drops, etc., for at least 8 hours prior to blood tests requiring fasting.

Blood Glucose Testing Available:

For safety and accuracy of testing, outpatients are encouraged to have Oral Glucose Tolerance Tests (OGTT) performed at one of our Outpatient Service Centers.

- Glucose: This test may be ordered as either a fasting (see above) or a random glucose level.
- One Hour Post Glucose Tolerance Test: This test is recommended and only available as a screen for PREGNANT PATIENTS at 24-28 weeks gestation. This is a non-fasting test. The patient is given a 50 gram oral glucose load and blood is drawn one hour later.
- Two Hour Glucose Tolerance Test: This test is recommended and only available for NON-PREGNANT PATIENTS. The patient must be fasting for this test (see above for requirements). A fasting glucose specimen will be drawn. The patient is given a 75 gram oral glucose load. Blood is drawn two hours later.
- Three Hour Glucose Tolerance Test: (PREGNANT PATIENTS ONLY) This test is recommended as a follow-up or confirmatory test for an abnormal One Hour Post (50 gram) OGTT. The patient must be

fasting for this test (see above for requirements). A fasting Glucose specimen will be drawn. The patient is given a 100 gram oral glucose load. Blood is drawn one, two and three hours later.

Blood Culture Collection

Most cases of bacteremia are detected by using two or three sets of separately collected blood cultures. More than three sets of blood cultures in a 24-hour period yield little additional information. Conversely, a single blood culture may miss intermittently occurring bacteremia and make it difficult to interpret the clinical significance of certain organisms. Please use the following guidelines:

- Acute Sepsis: Collect two or three cultures from separately prepared sites prior to starting antibiotic therapy.
- Acute Endocarditis: Obtain three blood cultures with three separate venipunctures over 1-2 hours and begin therapy.
- Sub-acute Bacterial Endocarditis: Obtain three blood cultures on day one. If all are negative at 24 hours, obtain three more.
- Patients on Antibiotic Therapy: It is preferred that samples be collected into FAN bottles (green) immediately prior to the next dose of antibiotics.

Blood Volume:

- Children: 1mL per year of life of blood per venipuncture. Dispense entire sample into blue (aerobic) bottle.
- Adults: 20 mL of blood per venipuncture for routine blood culture. (8-10 mL per bottle; 2 bottles per set.)
- 1-5 mL in a MycoF/Lytic bottle, Fungal & AFB.

Collection Sites

Blood can be collected by venipuncture of peripheral veins, arteries, or from intravascular catheters.

If blood is obtained from an intravenous catheter, a corresponding specimen should also be obtained by venipuncture and labeled as such.

Collection Materials

BacT/Alert Blood Culture collection sets.

Prep Kits, Chloraprep applicator or betadine on patients younger than 2 months old.

Collection Procedure

1. Disinfect the culture bottles or Isolator tubes with a Chloraprep “sepp” ampule prior to the venipuncture. An iodine swab stick or iodine pad should be used on patients younger than 2 months old.
2. Remove the Frepp component from the kit. Hold in a horizontal position and pinch the handle to break the ampule. Do not continue to squeeze the handle.
3. Place the sponge on the selected venipuncture site and depress once or twice to saturate the sponge.
4. Scrub vigorously for at least 30 seconds and allow the site to dry before proceeding.

5. Insert the needle into the vein and draw the blood into a syringe. Do not change needles before injecting blood into the culture bottles or Isolator tube. (A new needle should be used for each venipuncture).
6. Dispose of the collection system in accordance with universal precautions.
7. Label bottles with patient's full name and date and time of collection, draw site, and volume in the patient's presence.
8. Transport the bottles to the laboratory as soon as possible.

PolicyTech Reference ID 9953 (Blood Culture Collection) and 10974 (Blood Cultures, Neonatal)

Body Fluid Collection

Body fluid Culture

Fungal – Not hair, skin or nail

AFB

Body Fluid Anaerobes

Send specimen in sterile container with cap (cup or glass jug for large quantities of fluid). For less than 1.0 mL of fluid, please use eSwab™. **Note: If you have swab with fluid from abscess drainage or ear drainage, please order as Wound Culture** (see [Specimen Type: Swab](#)). Specify source of specimen (i.e. Eye Fluid, Peritoneal (ascites) fluid, pleural fluid, synovial fluid, etc.)

Amniotic Fluid (AF)

Lamellar Body Count (LBC)

Specimen Requirement: 3-5 mL of amniotic fluid (AF) obtained through amniocentesis.

Do not centrifuge.

Blood, meconium, or mucus contaminated fluids are not acceptable and may be rejected.

LS/PG

Specimen Requirement: 5 mL of amniotic fluid (AF) obtained through amniocentesis.

Do not centrifuge.

Store on ice and deliver to Spectrum Lab. Do not store specimen in glass siliconized (red stopper) tubes.

Chromosome Analysis

Specimen: 20 - 30 mL of Amniotic Fluid in two (2) sterile centrifuge tubes with screw caps.

Discard first 2 mL to prevent contamination with maternal cells.

Transport at Room temperature (if ambient temperature exceeds 80° F or is below 40°F, please send in an insulated container).

Do not freeze.

Cerebrospinal Fluid (CSF)

- Routine Culture, AFB, Fungus Culture: Send specimen in sterile container. Label container with patient information, specimen source, and date of collection
- Cell Counts: Fresh CSF fluid, not less than 0.5 mL collected in a sterile tube.
- Cytology: See [Cytology Specimen Collection](#)

Lab Testing is performed using the following tube order regardless of label:

1) Hematology, 2) Microbiology, 3) Hematology, 4) Chemistry

Cyst Fluid Collection

Fluids of Breast Cyst, Ovarian Cyst, Renal Cyst, Thyroid Cyst

- Routine Culture, AFB, Fungus Culture:
- Send specimen in sterile container.
- Label container with patient information, specimen source, and date of collection.
- Cytology: See [Cytology Specimen Collection](#)

Cytology

See [Cytology Specimen Collection](#).

Miscellaneous Fluids

Pleural, Peritoneal, Cul-de-sac, Pericardial, Washings, Paracentesis Fluids, Ascitic Fluids, and Synovial Fluid

- Routine Culture, AFB, Fungus Culture: Send specimen in sterile container. Label container with patient information, specimen source, and date of collection.
- Cell Counts: Fresh Fluid collected in a lavender top tube, minimum 3 mL.
- Cytology: See [Cytology Specimen Collection](#).

Respiratory/Sputum

See [Respiratory/Sputum collection](#)

Semen Collection (SH Gerber and SH Zeeland only)

Semen Culture

- Sterile collection container required.
- Send to lab ASAP.

Sputum Collection

See [Respiratory/Sputum collection](#)

Vesicular fluid

Remove vesicular fluid from the lesion via aspiration with a 26 or 27-gauge needle attached to a tuberculin syringe. Transfer directly into viral transport media (UTM). Replace cap and screw on tightly.

Cytology Specimen Collection

Please refer to the test “Medical Cytology” in the Test Catalog for complete and up-to-date information

[Medical Cytology Test #46](#)

Please refer to the specimen types below for collection instructions

Body Cavity Fluids

Applies to Cytology Effusions or Cytology Fluids: Pleural, Peritoneal, Cul-de-Sac, Pericardial, Cyst, Washings, CSF and other miscellaneous fluids

Specimen Collection:

- Label container with patient's full name and birthdate or Spectrum Health MRN.
- Specimen should be a fresh, unfixed fluid collection in a clean, leak-proof container.
- Volume of at least 50 mL is preferred (CSF: Volume .5 mL is required)
- Refrigerate if there is a delay in sending specimen to the Laboratory.
- Indicate on the order specimen type, source of fluid and pertinent clinical information. Please also specify left or right side.

Breast Smear

Specimen Collection: Specify nipple discharge. Spread material evenly on slide and place IMMEDIATELY in cytology fixative container or spray with cytology fixative.

- Applies to direct smears from the nipple discharge (for aspirated material, see Fine Needle Aspirations):
- Label slides with patient's full name and date of birth on the frosted end of a clear glass slide with a No. 2 lead pencil. Also indicate left or right.
- Gently express the nipple and subareolar area of any secretions which may be lying in the collecting ducts.
- Allow a small drop of fluid to collect.
- Immobilize the breast and smear the slide across the drop of fluid.
- Immediately spray the slide with the cytology fixative or place in a container of 95% ETOH. A delay in fixation may result in marked cellular distortion! Make as many smears as the material allows
- Include pertinent clinical data in the order. Specify left or right side. Label specimen container with 2 patient identifiers (full name and date of birth or Spectrum Health MRN). Include specimen source.

Bronchial Washings

Applies to Bronchial Aspirate and Bronchoalveolar Lavage

Specimen Collection:

- Label container with patient's full name and birthdate or Spectrum Health MRN. Also include specimen source.
- Collect the washings/lavage (not less than 1-2 mL of fresh, unfixed material) in a clean, leak-proof container.
- Indicate on the order site lobe and pertinent clinical data (i.e. clinical impression, past diagnosis, radiographic findings and history of radiation or chemotherapy should be included in the order.)
- Refrigerate if there will be a delay in reaching the laboratory.

Brushings

Applies to Bronchial Brushings, GI Tract Brushings (Esophageal, Gastric, Colonic, Bile Duct) and Urinary Tract Brushings

Specimen Collection: Specimen includes collection from brushing of lesion or suspicious area.

- The brush should be sent in ThinPrep Cytolyt solution.
- Brushes received in formalin or 95% ETOH cannot be processed
- Specify and properly label the container with the site brushed, lobe and left or right side, and 2 patient identifiers that include patient's full name and date of birth or Spectrum Health MRN. Include in the order source and pertinent clinical information, i.e., history of malignancy, chemotherapy or radiation therapy, and tentative diagnosis.

Eye Scraping

- Send air dried slides labeled with patient name and date of birth or MRN, source and date of collection in a cardboard mailer to the cytology lab.
- Giemsa stain is available upon request in the order.
- For FNA eye, see [Fine Needle Aspiration](#).

Fine Needle Aspiration (FNA)

- Place a drop of aspirated material on a glass slide (labeled with the patient's full name and date of birth or Spectrum Health MRN, on the frosted end with a No. 2 lead pencil)
- Place second labeled slide on top of aspirated material and draw two slides apart.
- Immediately fix one slide with cytology fixative spray or place in container of 95% ETOH and allow the second slide to dry.
- The number of slides prepared will depend on the amount of material aspirated and the areas sampled
- Rinse any residual material in the syringe and needle into a tube containing sterile balanced salt solution and refrigerate or Cytolyt solution. NOTE: Once the needle and syringe come in contact with Cytolyt solution, a new needle and syringe must be used for additional passes.
- Label container with 2 patient identifiers, including patient's name and label with specimen source.
- Complete Fine Needle Aspiration portion of the Anatomic Pathology consultation form and send with specimen to the Cytology Lab. Indicate site and include pertinent clinical data on requisition.

- When transporting solution vials containing cells to the laboratory, make sure the vial is tightly sealed. Align the mark on the cap with the mark on the vial to prevent leakage.

Gynecological Collection

Please see test codes:

- [47 Pap Test - no reflex HPV](#)
- [52 Pap Test - HPV if ASCUS or AGUS](#)
- [55 Pap Test - HPV if NIL, ASCUS or AGUS](#)

Includes vaginal/cervical cytology collection and Thin Prep Pap Test methods.

Suggestions for adequate smear:

- Patient should avoid douches 48-72 hours prior to examination.
- Do Pap smear prior to bimanual exam.
- Visualize entire cervix
- Do ectocervical scraping first and then endocervical sample by gently rotating brush to reduce bleeding caused by brush.
- Small amounts of blood will not interfere with cytologic evaluation, but large amounts preclude cytologic evaluation.
- Use of lubricating jelly will interfere with cytologic examination. Please refer to Hologic Letter, located in the resource section to the left.
- Do not use wooden collection devices.

Thin Prep Pap Test Collection

Broom-Like Device Protocol

1. Obtain an adequate sampling from the cervix by inserting the central bristles of the broom into the endocervical canal deep enough to allow the shorter bristles to fully contact the ectocervix. Push gently, and rotate broom in a clockwise direction five times.
2. Rinse broom into the PreservCyt solution vial by pushing the broom into the bottom of the vial 10 times, forcing the bristles apart. As a final step, swirl the broom vigorously to further release the material. Discard the collection device.

Endocervical Brush/Spatula Protocol

1. Obtain an adequate sampling from the ectocervix using a plastic spatula.
2. Rinse the spatula into the PreservCyt solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.
3. Obtain an adequate sampling from the endocervix using an endocervical brush device. Insert the brush into the cervix until only the bottom most fibers are exposed. Slowly rotate $\frac{1}{4}$ or $\frac{1}{2}$ turn in one direction. Do not over-rotate!

4. Rinse the brush in the PreservCyt solution by rotating the device in the solution 10 times while pushing against the PreservCyt vial wall. Swirl the brush vigorously to further release material. Discard the brush.

Specimen Container

1. Tighten the cap so that the torque line on the cap passes the torque line on the vial.
2. Record the patient's full name and date of birth or Spectrum Health MRN on the vial
3. Record the patient information and medical history, including pertinent clinical history (birthdate and LMP), source (Vag or Ecto/Endo) and if the pap test is a screening or diagnostic test on the Anatomic Pathology Requisition.
4. Place the vial and requisition in a specimen bag for transport to the cytology laboratory.

Special Instructions

Federal regulations mandate that the following pertinent information be included on the requisition:

- Last Menstrual Period (LMP)
- Source of Specimen
- Patient's Full Name
- Birthdate
- Clinical History
- Physician's Name

History of surgery, exogenous hormones, DES exposure, history of carcinoma, radiation, chemotherapy, abnormal vaginal bleeding, previous abnormal paps are necessary for complete cytologic evaluation.

Specimen Stability

PreservCyt solution – store the vials at 15°-30°C (59° -86°F) without cells. Once the vials contain cells, they are preserved for approximately 4 weeks at 4°-37°C (39° - -98.6°F).

When transporting solution vials containing cells to the laboratory, make sure the vial is tightly sealed. Align the mark on the cap with the mark on the vial to prevent leakage.

Skin Scrapings

Scrape for Viral Inclusions (includes Herpes Cytology)

Specimen Collection:

- Using a pencil, label the glass slide with the patient's full name and date of birth or Spectrum Health MRN.
- Scrape the margins of the ulcerated area of the lesion. Do not scrape the center of the lesion, which is usually too necrotic to yield well-preserved cells.

- Place in container of 95% ETOH IMMEDIATELY. If alcohol containers are not available, spray fix slides and send to the Laboratory in a cardboard slide folder.
- Include the source of the scrape and pertinent clinical information in the order.

Sputum

Specimen Collection: Includes fresh collection (not less than 3 mL) in sterile container

- Label container with patient's full name and date of birth or Spectrum Health MRN. Include source and date of collection.
- Instruct the patient to thoroughly cleanse the mouth before collection
- Instruct the patient to cough deeply from the diaphragm upon awakening and before eating.
- Encourage the patient to expectorate deep sputum, not saliva, into sterile container
- Return container immediately to the laboratory along with orders.
- Refrigerate if there will be a delay in specimen transport to Laboratory

Urine

Specimen Collection: Freshly voided, clean-catch urine, catheterized urine, cystoscopy urine, washing of urinary bladder, urethra, ureters, or renal pelvis.

- Label container with patient's full name and date of birth or Spectrum Health MRN.
- Send specimen in a sterile (no preservative), leak-proof container.
- Please indicate in the order or on the container whether the urine is voided or catheterized. Pertinent clinical information including history of recent instrumentation is necessary for interpretation of specimen.
- If there will be a delay in specimen transport, refrigerate or add Cytolyt solution to the specimen.

Specimen Stability

Storage Requirements:

CytoLyt solution: store the containers at 15°-30°C (59° -86°F) without cells. Cells in CytoLyt solution are preserved for 8 days at room temperature. For best results, transport specimen to laboratory immediately for processing. If there is a delay, refrigerate solution until it is delivered to the laboratory. This 8 days at room temperature time pertains to samples in minimum CytoLyt solution to sample ration of 1 part CytoLyt solution to 3 parts sample.

Genital Collection

Chlamydia/Gonococcus – Genital Swab

[Gonococcus Only, PCR, Genital Swab](#)

[Chlamydia Only, PCR, Genital Swab](#)

[Chlamydia Gonococcus, PCR, Genital Swab](#)

Abbott *multi-collect* specimen kit

Collection Instructions for all sites except Big Rapids (Big Rapids, see below):

Specimen Type: Genital Swab

Container/Tube: Abbott *multi-collect* specimen collection kit

Collection Instructions:

Female

Specimens should be obtained with a swab using a speculum moistened with sterile warm water to facilitate collection.

Lubricants other than water should not be used since they can be toxic to the organism.

1. Discard disposable transfer pipette; it is not required for endocervical swab specimen collection
2. Remove the sterile swab from the wrapper, taking care not to touch swab tip or lay it down on any surface
3. Insert the white tip of the specimen collection swab into the endocervix canal.
4. Gently rotate the swab for 15 – 30 seconds to ensure adequate sampling
5. Withdraw the swab, carefully
6. Handle the cap and tube carefully to avoid contamination, including the outside of the transport tube and cap. If necessary, change gloves.
7. Unscrew the transport tube cap and immediately place the specimen collection swab into the transport tube so that the white tip is down.
8. Carefully break the swab at the scored line on the shaft; use care to avoid splashing the contents
9. Recap the transport tube. Ensure the cap seals tightly.
10. Label the transport tube with sample ID, including date and time of collection.
11. Transport to lab within 24 hours at room temperature or 14 days refrigerated.

Male

1. The patient must be instructed not to urinate at least 1 hour prior to sampling.
2. Insert small swab 2-4 cm into Urethra.
3. Rotate swab for 3-5 seconds and withdraw swab.
4. Insert swab into the Abbott *multi-collect* transport media. Snap off shaft of swab at the score line.
5. Leave swab in tube. Cap tube and label specimen.
6. Transport specimen within 24 hours at room temperature or refrigerate.

APTIMA

[APTIMA Chlamydia NAAT](#)

[APTIMA Gonococcus NAAT](#)
[Trichomonas NAAT \(APTIMA\)](#)

Thin Prep Vial

Specimen Type: Cervical cytology specimen

Container/Tube: ThinPrep Vial

Collection Instructions: See [Cytology Section](#)

APTIMA Vaginal Swab

Specimen Type: Vaginal specimens

Container/Tube: APTIMA Vaginal Swab

Collection Instructions:

1. Partially peel open the swab package. Do not touch the soft tip or lay the swab down.
2. Hold the swab so that the thumb and forefinger are positioned in the middle of the shaft covering the score line. Do not hold the swab shaft below the score line.
3. Carefully insert the swab into the vagina about 2 inches past the introitus and gently rotate the swab for 10 to 30 seconds. Make sure the swab touches the walls of the vagina so that moisture is absorbed by the swab. Withdraw the swab without touching the skin.
4. While holding the swab in the same hand, unscrew the cap from the tube. Do not spill the contents of the tube. Do not touch the top of the cap.
5. Immediately place the swab in the transport tube so that the score line is at the top of the tube.
6. Carefully break the swab shaft at the score line against the side of the tube.
7. Discard the top portion of the swab shaft.
8. Tightly screw the cap onto the tube, being careful not to touch the top of the cap.
9. Record the patient's name and date of birth on the vial.

Important Note: Collect the specimen using only the APTIMA Vaginal Swab Collection Kit when requesting APTIMA Chlamydia NAAT testing. Other swabs are not acceptable for use with this assay.

GeneXpert Collection Kit for Female Genital Collections (Big Rapids Hospital Laboratory)

Container/Tube: GeneXpert "Xpert CT/NG Vaginal/Endocervical specimen collection kit"

Use GeneXpert Collection Kit for Female Genital collections

Specimen Type: Genital Swab

Container/Tube: GeneXpert "Xpert CT/NG Vaginal/Endocervical specimen collection kit"

Collection Instructions:

Vaginal Collection

1. Open the individual collection package that contains the pink-capped Transport Reagent tube and the individually wrapped collection swab. Discard the larger swab.

2. Open the collection swab wrapper by peeling open the top of the wrapper. Remove the swab, taking care not to touch the tip or lay it down.
3. Hold the swab in your hand, placing your thumb and forefinger in the middle of the swab shaft across the scoreline.
4. Carefully insert the swab into vagina about two inches inside the opening of the vagina.
5. Gently rotate the swab for 10-30 seconds. Ensure the swab touches the walls of the vagina so that moisture is absorbed by the swab. Withdraw the swab and continue to hold it in your hand.
6. Unscrew the cap from the transport tube. Immediately place the collection swab into the transport tube.
7. Identifying the scoreline, break the swab shaft against the side of the tube. Discard the top portion of the swab shaft. Avoid splashing contents on the skin. Wash with soap and water if exposed.
8. Re-cap the transport tube and tighten cap securely.
9. Label the transport tube with sample ID, including date and time of collection.
10. Transport to lab within 24 hours at room temperature or 14 days refrigerated.

Endocervical Specimen

Collection kit contains Individual Collection Kit and Cleaning Swab

1. Remove excess mucus from the cervix and surrounding area using the large individually wrapped cleaning swab. Discard the swab.
2. Open package that contains the pin-capped Xpert Swab Transport Reagent tube and individually wrapped swab. Open the collection swab wrapper by peeling open the top of the wrapper.
3. Hold the swab in your hand, placing your thumb and forefinger in the middle of the swab shaft.
4. Insert the collection swab into the endocervical canal. Rotate the swab clockwise for 10-30 seconds in the endocervical canal. Withdraw the swab carefully.
5. Unscrew the cap from the transport tube. Immediately place the specimen collection swab into the transport reagent tube.
6. Identifying the scoreline, break the swab shaft against the side of the tube. Discard the top portion of the swab shaft.
7. Re-cap the swab transport reagent tube and tighten the cap securely.
8. Label the transport tube with sample ID, including date and time of collection.
9. Transport to lab within 60 days at room temperature or refrigerated.

Chlamydia/Gonococcus – Urine

[Chlamydia Only, PCR Urine](#)

[Gonococcus Only, PCR Urine](#)

[Chlamydia Gonococcus, PCR Urine](#)

Abbott multi-collect specimen kit

Specimen Type: Urine

Container/Tube: Abbott multi-collect specimen collection kit

Collection Instructions:

1. The patient should not have urinated for at least one hour prior to sample collection.

2. Discard specimen collection swab; it is not required for urine specimen collection.
3. Using a urine specimen collection cup, the patient should collect the first 20 to 30 ml of voided urine (the first part of the stream).
4. Unscrew the transport tube cap, taking care not to spill the transport buffer within.
5. Handle the cap and tube carefully to avoid contamination.
6. Use the plastic transfer pipette to transfer urine from the collection cup into the transport tube until the liquid level in the tube falls within the clear fill window of the transport tube label or else a new specimen should be collected. Do not overfill. Slightly more than one full squeeze of the transfer pipette bulb may be required to transfer the necessary volume of urine specimen.
7. Recap the transport tube carefully. Ensure the cap seals tightly.
8. Label the transport tube with sample identification information, including date of collection. Take care not to obscure the fill window on the transport tube.

Sterile Urine Cup

Specimen Type: Urine

Container/Tube: Sterile urine cup

Volume: 20 to 30 mL

Collection Instructions:

1. The patient should not have urinated for at least 1 hour prior to specimen collection.
2. The patient should be directed to provide a first-catch urine (approximately 20 to 30 mL of the initial urine stream) into a sterile urine cup free of any preservatives. Female patients should not clean the labial area prior to providing the specimen.
3. Record the patient's name and date of birth on the cup.

APTIMA Urine Transport Tube

Specimen Type: Urine

Container/Tube: APTIMA Urine Transport Tube

Volume: 20 to 30 mL collected in a sterile urine collection cup

Collection Instructions:

1. The patient should not have urinated for at least 1 hour prior to specimen collection.
2. The patient should be directed to provide a first-catch urine (approximately 20 to 30 mL of the initial urine stream) into a sterile urine cup free of any preservatives. Female patients should not clean the labial area prior to providing the specimen.
3. Remove the cap of the APTIMA urine specimen transport tube.
4. Transfer 2 mL of urine from the collection cup to the urine specimen transport tube using the disposable pipette provided. The correct volume of urine has been added when the fluid level is between the black fill lines on the urine specimen transport tube label.
5. Re-cap the urine specimen transport tube tightly.
6. Record the patient's name and date of birth on the vial.

Important Note: Urine specimens should be submitted using only a sterile urine cup or the APTIMA Urine Transport Tube when requesting APTIMA Chlamydia NAAT testing. Other urine collection tubes are not acceptable for use with this assay.

Fetal Fibronectin (fFN)

The Hologic Specimen Collection kit is the only acceptable specimen collection system that can be used to collect specimens for this assay.

Specimen Type: Vaginal Swab

Container/Tube: Hologic Specimen Collection Kit (Rapid fFN)

Minimum volume: 250 µL

Collection Instructions: Follow directions in collection kit for important detailed collection instructions and restrictions.

1. During a speculum examination, prior to any examination or manipulation of the cervix or the vaginal tract, lightly rotate the sterile swab across the posterior fornix of the vagina for approximately 10 seconds to absorb cervicovaginal secretions. Subsequent attempts to saturate the swab may invalidate the test.
2. Remove swab and immerse tip in buffer. Break the shaft (at the score) even with the top of the tube.
3. Align the shaft with the hole inside the tube cap and push down tightly over the shaft, sealing the tube.
 1. Warning: The shaft must be aligned to avoid leakage.
4. Write the patient's name and other identifying information required on the specimen transport tube label.
5. Send the tube to the laboratory for testing. Transport specimens at 2 to 25°C, or frozen.
6. Specimens not tested within eight (8) hours of collection must be stored refrigerated at 2 to 8°C and assayed within three (3) days of collection, or frozen and assayed within three (3) months to avoid degradation of the analyte. Do not expose to temperatures above 25°C.

Special Instructions

Indication: 24 – 35 weeks gestation with suspicion of preterm labor. 22 – 30 weeks gestation with suspicion of high risk delivery.

Specimen not collected correctly will give inaccurate results. Unacceptable specimens: Bloody specimens. Collected in or by any sample device other than the Hologic Specimen Collection Kit. Insufficient volume. Unlabeled. Refrigerated specimens received greater than 3 days after the sampling date. Specimens received at temperatures greater than 25°C.

Human Papilloma Virus (HPV) High Risk types

[Human Papilloma Virus \(HPV\) High Risk Screen](#)

Vaginal or cervical specimens submitted in ThinPrep PreservCyt solution.

See [Cytology PAP for collection details](#).

Herpes Simplex Virus (HSV)

[Herpes Simplex Virus, Culture](#)

[Herpes Simplex PCR for Lesions](#)

1. When possible, the specimen of choice is vesicular fluid removed from the lesion via aspiration with a 26 or 27-gauge needle attached to a tuberculin syringe.
2. Syringes containing vesicular fluid should be expelled directly into viral transport media.
3. For ulcerated lesions, swab first to remove pus without disrupting the lesion base.
4. Pre-moisten a sterile swab with viral transport media and then vigorously swab the area.
5. Crusted lesions should have the crust removed by lifting with a sterile needle.
6. A swab pre-moistened with viral transport media should be used to swab the base of the lesion. Calcium alginate swabs should not be used because they may inhibit Herpes viral replication.
7. Bloody specimens should be avoided.
8. Specimens should be immediately placed into viral transport media (UTM).
9. Transport within 24 hours at 2-8 C.

Trichomonas

[Trichomonas, Wet Prep \(eSwab\)](#)

[See eSwab collection](#) in this document

[Trichomonas NAAT \(APTIMA\)](#)

[See Thin Prep Vial](#) collection in this document

[See APTIMA Vaginal Swab](#) collection in this document

[See APTIMA Urine Transport](#) collection in this document

[Ova and Parasites, Complete](#)

Specimen Type: Urine

Container/Tube: Screw cap, sterile container

Collection Instructions:

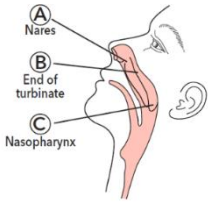
Trichomonas vaginalis: Collection of first-voided urine, particularly after a prostatic massage in male patients

Schistosoma haematobium: Collection of midday urine specimen or a 24-hour collection in a container without preservatives is recommended. Peak egg excretion occurs between noon and 3 p.m.

Respiratory

Bronchial Washing/Lavage - Nasal/Nasopharyngeal swab - Nasal/Nasopharyngeal wash/aspirate specimen

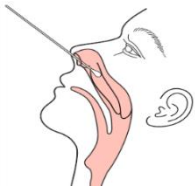
Obtain nasal/nasopharyngeal swab, nasal/nasopharyngeal wash/aspirate specimens*



In each case, collect samples by standard clinical methods.

Tip the patient's head back and check to see which nostril has more mucus (head should be inclined from vertical as shown for proper specimen collection). It is important to obtain as much secretion as possible.

Nasal Swab



Gently insert the sterile swab until resistance is met at the level of the turbinates (less than one inch into the nostril).

Rotate the swab a few times against the nasal wall and remove from nostril.

Sample should be tested as soon as possible.

Nasopharyngeal Swab



Gently insert the sterile swab.

Keep the swab near the septum floor of the nose while gently pushing the swab into the posterior nasopharynx.

Rotate the swab several times and remove from nostril.

Sample should be tested as soon as possible.

Nasal/Nasopharyngeal Wash

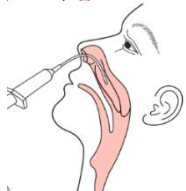


With the patient's head hyper-extended (see other side), instill about 1 mL to 2.5 mL of sterile, normal saline into one nostril with a bulb or syringe.

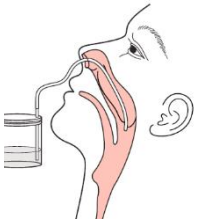
To collect wash, place a clean, dry specimen container directly under the nose with slight pressure on the upper lip.

Tilt the head forward and allow the fluid to run out of the nostril into the specimen container.

Repeat for the other nostril and collect the fluid into the same specimen container.



Nasopharyngeal Nasal Aspirate



Attach mucus trap to suction pump and catheter, leaving wrapper on suction catheter; turn on suction and adjust to appropriate pressure.

Without applying suction, insert catheter into the nostril, directed posteriorly and toward the opening of the external ear. **NOTE:** Depth of insertion is equivalent to distance between anterior naris and external opening of the ear.

Apply suction. Using a rotating movement, slowly withdraw catheter. Catheter should remain in nasopharynx for no longer than 10 seconds.

Hold trap upright to prevent secretions from going into pump.

Rinse catheter (if necessary) with approximately 2.0 mL viral transport medium; disconnect suction; connect tubing to arm of mucus trap to seal.

Sputum

Note: Patients may pick up sterile specimen containers from our Outpatient Laboratory Locations, but patients may not collect this specimen on-site.

1. Morning collection is preferred – upon awakening and before eating
2. Rinse mouth with water or saline prior to collection
3. Collect four or five deep coughs (not saliva) in a sterile specimen container.
4. Place cap on the container.
5. Label with 2 patient identifiers (first and last name) and orders (include source: sputum and date of collection).
6. Deliver to lab immediately.

Patient Sputum Collection Instructions (Handout)

Throat

1. Choose a well-lit room.
2. Stand directly in front of the patient.
3. Place the patient in a comfortable sitting position facing a light source.
4. Avoid touching the swab tip to any surface other than the tonsil area.
5. Remove the sterile swab from the protective packaging. Hold the swab firmly by the handle. DO NOT place the swab on any surface once it is removed from the protective packaging.
6. Instruct patient to open mouth as wide as possible. Instruct patient to say “ahh.” The tonsil area may be reddened, swollen, or have white patches.
7. Direct the tip toward the tonsil area. Do not touch the swab tip to any other area of the mouth, including the tongue

Collect throat swab samples by standard clinical methods. Depress the tongue with a tongue blade or spoon. Be careful not to touch the tongue, sides or top of the mouth with the swab. Rub the swab on the back of the throat, on the tonsils, and in any other area where there is redness, inflammation or pus.

10. Touch the swab tip to the tonsil area. Rub the swab tip quickly and firmly over this area to obtain a good sample
11. Remove the swab from mouth, without touching any surface.
12. Send to Laboratory as soon as possible.

Viral

[See Viral Collection](#)

Swab Collection

Viral

[see Viral Section](#)

Cytology

[See Cytology](#)

Genital

[See Genital](#)

Respiratory

[See Respiratory](#)

eSwab

Standard Tip Swab or Mini Tip Swab

Collection Instructions: Indicate source of specimen. Specimen is unacceptable if received without fluid or swab in the transport tube.

1. Open the peel pouch and remove the contents. Aseptically unscrew and remove the cap from the eSwab.
2. Place the tube in a secure position so as not to allow the liquid to leak out of the tube.
3. Remove the swab. Collect the patient's sample using the swab.
4. Insert the swab back into the tube of liquid, all the way to the bottom of the tube.
5. Holding the swab shaft close to the rim of the tube, break the applicator shaft at the color breakpoint indication line.
6. Screw the cap on tightly to prevent leakage. Discard the broken handle of the shaft into an approved medical waste disposal container.
7. Write the patient's information (Name and Date of Birth) on the tube or apply a label with patient's information. Indicate source.
8. Send specimen to the Laboratory.

A submission of a fluid, tissue or biopsy is preferred over swabs. Swabs are not appropriate for AFB Cultures

- | | |
|--|--|
| <ul style="list-style-type: none"> • Anaerobe Culture • Genital Culture • Wound Culture • Misc. Culture • MRSA Screen • Bordetella pertussis PCR • Ciprofloxacin Screen | <ul style="list-style-type: none"> • Fungal Culture – Not hair, skin or nail • Group B Strep • Staph. aureus Screen • Strep A Screen (vag/cervix) • Strep A Screen • Throat Culture • Body fluid that is less than 1.0 mL |
|--|--|

Container/Tube: Viral Transport Media (UTM)

Collection Instructions: Rotate the swab tip several times across the mucosal surface. Remove the swab and insert into the red top tube of viral transport medium (UTM) immediately. Push the swab into the tube and break the plastic shaft swab at the break line. Replace cap and screw on tightly.

Stool Collection

Note: Patients may pick up specimen containers from Spectrum Health Outpatient Laboratory Locations, but the patient must have a completed laboratory requisition to pick-up stool containers.

The Stool containers for each test are as follows:

Clean/Empty Vial (white cap)

- Leukocyte Count Stool
- Fecal fat (Qualitative)
- Clostridium Difficile Toxin
- Rotavirus Assay
- AFB culture (AIDS patients only)
- Guaiac (Occult Blood)

Cary Blair C & S Vial (cap color may vary)

- Culture and Sensitivity

SAF Fixative (cap color may vary)

- Ova & Parasite Screen (Giardia/Cryptosporidium)
- Ova & Parasite Complete
- Cyclospora-Foreign Travel
- Microsporidium-Immunosuppressed

Collection Instructions

Also See Patient Handout

1. Label the correct containers for the tests ordered and give them to the patient along with the patient instructions (see Patient Instruction Handouts)
2. Show the patient the scoop spoon from the Clean (White Cap) vial. Explain that each container has a similar "spoon".
3. After collecting the sample the patient should write the date and time of collection on the label.
4. The patient may bring the specimen(s) to one of Spectrum Health's laboratory sites with a completed requisition, or the patient may bring the specimen(s) to your office for transport (with completed requisition) to Spectrum Health Laboratory.
5. Store vials with at room temperature.
6. Transport specimen to Laboratory ASAP (within 24 hours).

Tissue Collection

Chromosome Studies

Place tissue in sterile container with either tissue culture media or transport media and an antibiotic such as Penn/Strep or Gentamicin. Tissue may be stored overnight in medium at 4° C. Specimens that have been placed in formalin are not acceptable.

Transport at room temperature. If the ambient temperature is greater than 80° F or less than 40°F, please send in an insulated container.

Culture Specimens

AFB Culture

Fungal Culture – Hair, Skin, or Nail

Tissue Culture w/Gram

Tissue Culture

Specimens should be placed in a sterile container. Refrigerate. Transport ASAP (within 24 hours).

Histology Specimens

Biopsy specimens must be placed in an appropriate sized container containing 10% formalin. To ensure specimen integrity, completely submerge sample in preservative. Specimens must be transported without delay.

Viral Specimens

Collection of tissue for viral culture should be obtained in a sterile container. (Note: Place tissue in viral transport media (UTM) if immediate transportation is not available.). Store at 2-8° C. Specimens must be received by Spectrum Health Regional Laboratory within 24 hours of collection. If transport exceeds 24 hours, freeze specimens at -70° C.

Urine Collection

Inpatient

The specimen should be labeled with computer-generated label, which includes the patient's name, medical record number, date and time of collection, and the collector's initials. The specimens must be tightly capped and placed in a biohazard bag (extra labels should be placed in the opposite pouch) for transportation to the lab as soon as possible.

Outpatient

The specimen should be labeled with the patient's first and last name, date of birth, date and time of collection, and the collector's initials. The specimens must be tightly capped and placed in a biohazard bag (extra labels should be placed in the opposite pouch) for transportation to the lab as soon as possible.

Urine Collection Container

- 100 mL Sterile Container
- BD 10 mL Urine Vacutainer (sterile) – Yellow top tube
- BD 4 mL Urine Culture Vacutainer (sterile) – Grey Top Tube For Urine Culture ONLY. Urinalysis (UA) should be sent in 2 yellow tubes or a 100 mL sterile container.
- 24 Hour Urine Container – Preservative added – Orange
- 24 Hour Urine Container – No Preservative – Orange
- 24 Hour Urine Container – Ambient/Non-refrigerated specimen – White

Urine Specimen Collection

General and Random Urine Collection

First voided morning specimens should be collected in 100 mL sterile containers and transported to the laboratory as soon as possible. Follow individual testing instructions for transport time and temperature.

Common Urine Collections:

Urinalysis – Send 2 Yellow top or collect in the sterile container. A minimum of 10 mL of urine is required.

Culture - Collect in the sterile container as outlined above, or use the Urine C&S vacutainer (Grey Top tube).

Urinalysis – Do Culture and sensitivity (C&S) If indicated– Collect 2 yellow top urine vacutainer AND 1 grey top urine culture vacutainer or sterile container. Note: C&S grey top vacutainer CANNOT be used to perform Urinalysis testing.

AFB culture - Collect in sterile (white top container). Specimen must be the total first morning void.

Urine Cytology - See Cytology Collection Section.

Urine Chemistry Random analytes - collect in sterile container with lid (no preservatives).

24- Hour Urine Collection

Note: Patients must have a laboratory order to pick up containers or to drop off specimens at Spectrum Health Laboratory.

Label the container with the patient's name before giving it to the patient. If there are multiple containers for the same 24 hour collection, the containers must be labeled as such: first container 1 of 2 and 2nd container 2 of 2.

Give the Patient 24-hour Urine Collection Instruction handout to the patient. ALL urine samples MUST be refrigerated during the entire collection, with the exception of Urine Uric Acid (ambient, room temperature collection – White 24 Hour Container). Instruct the patient to return the specimen as soon as possible after completing collection. Listed below are some of the more commonly used preservatives. (Check Test Listing for preservative requirements prior to collection).

25 mL 50% Acetic Acid

Acid is added to the CONTAINER PRIOR TO START OF COLLECTION for tests such as: Aldosterone, Catecholamines, Cortisol free, Metanephrines, Oxalates, and VMA.

5 gm Sodium Carbonate

Sodium Carbonate is added to the CONTAINER PRIOR TO START OF COLLECTION for Porphyrins.

10 mL 1N Sodium Hydroxide (5% NaOH)

Sodium Hydroxide is added to the container PRIOR TO START OF COLLECTION for Urine Uric Acid.

No Preservative required

Many 24 hour Urine analytes should be collected without preservatives. (Check Test Listing for preservative requirements prior to collection).

Other Special Instructions

5-HIAA collections: require that the following restrictions apply for at least 48 hours prior to the collection period and during the collection period. Do not eat: avocados, bananas, eggplant, kiwi fruit, pineapple, plums, tomatoes, or walnuts. Substances in these foods may interfere with this test.

Creatinine Clearance testing: the patient needs to have serum gel tube or a heparinized plasma gel tube drawn at the time urine sample is returned.

Heavy Metals: Only Spectrum Health Laboratory Containers

Clean Catch Midstream Instructions

Females

1. Wash hands with soap and water and dry them.
2. Open urine container and avoid touching the inside of the container.
3. Sit on the toilet and spread genital folds with one hand.
4. Using the cleansing wipe, clean the urethral opening and the area around it working from front to back. Discard wipe in the trash.
5. Keep skin folds separated during collection.
6. Begin urinating and pass the first portion into the toilet.

7. Fill the urine container (at least half-full) with the mid-portion of the urination.
8. Pass the remaining urine into the toilet.
9. Securely fasten the lid on the urine container.
10. Label cup with patient name, date of birth, and time/date of collection.
11. Wash hands.

Males

1. Wash hands with soap and water and dry them.
2. Open urine container and avoid touching the inside of the container.
3. Using the cleansing wipe, clean the urethral opening and the area around it, withdrawing the foreskin first, if uncircumcised. Discard wipe in the trash.
4. Begin urinating and pass the first portion into the toilet.
5. Fill the urine container (at least half-full) with the mid-portion of the urination.
6. Pass the remaining urine into the toilet.
7. Securely fasten the lid on the urine container.
8. Label cup with patient name, date of birth, and time/date of collection.
9. Wash hands.

[See Patient Instructions Handouts](#)

Abbott *multi-collect***Specimen Type: URINE**

1. The patient should not have urinated for at least one hour prior to sample collection.
2. Discard specimen collection swab; it is not required for urine specimen collection.
3. Using a urine specimen collection cup, the patient should collect the first 20 to 30 ml of voided urine (the first part of the stream).
4. Unscrew the transport tube cap, taking care not to spill the transport buffer within.
5. Handle the cap and tube carefully to avoid contamination.
6. Use the plastic transfer pipette to transfer urine from the collection cup into the transport tube until the liquid level in the tube falls within the clear fill window of the transport tube label or else a new specimen should be collected. Do not overfill. Slightly more than one full squeeze of the transfer pipette bulb may be required to transfer the necessary volume of urine specimen.
7. Recap the transport tube carefully. Ensure the cap seals tightly.
8. Label the transport tube with sample identification information, including date of collection. Take care not to obscure the fill window on the transport tube.

Failure to collect a urine specimen, including the first part of the voiding, may decrease the sensitivity of this test. If the specimen cannot be delivered to the laboratory within a few hours after collection it should be stored and refrigerated until it can be delivered. Specimen must be received in laboratory for analysis within 24 hours of collection.

Viral Collection

For viral collection and specimen handling, the type of specimen needed depends on the virus you are searching for and the type of body site or lesions involved. The possibility of virus isolation is increased when specimens are collected from the suspected site of infection as soon as possible after the onset of the disease. Note: Do not clean the suspected area with 70% alcohol or similar disinfectants prior to collection.

In addition to viral cultures, many viruses can be rapidly detected by direct examination. Fluorescent Antibody technique (DFA) detections are available for respiratory viruses including: Adeno Virus, Influenza A, B, Parainfluenza 1, 2, 3, and RSV. EIA assay is also available for rapid detection of RSV.

Specimen Collection

Specimens for viral cultures must be placed immediately into viral transport media and may be stored at 2-8 ° C for up to 24 hours. If transport exceeds 24 hours, freeze specimens at -70° C. All specimens must be labeled with name, date, source or site of specimen, and the virus type to be cultured or tested for.

Swab

Collection must be performed with a Dacron tipped swab. (Calcium alginate swabs or swabs with wooded shafts should not be used because they inhibit viral growth.) The swab should be placed immediately into UTM viral transport media. Leave the swab in the media. Store at 2-8° C. Specimens must be received by Spectrum Health Laboratory within 24 hours of collection.

Slides

For Direct examination of Respiratory Syncytial Virus (RSV) by fluorescent antibody technique (DFA), a special 10 wellled slide contained in the RSV Kit is required. To request the RSV Kits complete a Laboratory Supply Order form or call (616) 774-7721.

Fluids and Exudates

Collection can be accomplished by using a clean sterile container, a white-capped 90 mL container, or a syringe. Store at 2-8° C. Specimens must be received by Spectrum Health Laboratory within 24 hours of collection. Freeze at -70° C if transport exceeds 24 hours.

Tissue

Collection of tissue for viral culture should be obtained in a white capped sterile container. (Note: Place tissue in UTM viral transport media if immediate transportation is not available.). Store at 2-8°C. Specimens must be received by Spectrum Health Laboratory within 24 hours of collection. If transport exceeds 24 hours, freeze specimens at -70° C.

Stool

Stool specimens should be collected in a clean container and/or placed in viral transport media. See instructions for Stool Collection Instruction and Patient Handout.

Special Viral Collection Instructions

Cytomegalovirus (CMV) Collection

Blood samples should be drawn in one serum separator tube for IgG/IgM testing or one 3mL EDTA lavender top tube. The specimen should be transported to the lab as soon as possible and should be refrigerated.

Urine samples should be a clean-catch specimen collected in a white capped sterile container. (First voided morning collection is best.)

If immediate transportation to the Spectrum Health Laboratory is not possible, the specimen(s) must be refrigerated.

Human Papillomavirus (HPV)

HPV testing is performed on specimens collected in ThinPrep PreservCyt vials. They can be collected at the time of PAP collection. See PAP specimen collection.

Herpes Culture Collection

When possible, the specimen of choice is vesicular fluid removed from the lesion via aspiration with a 26 or 27-gauge needle attached to a tuberculin syringe.

Syringes containing vesicular fluid should be expelled directly into viral transport media.

For ulcerated lesions, swab first to remove pus without disrupting the lesion base.

Use a sterile swab to vigorously swab the area at the base of the lesion, and place swab in UTM viral transport media.

Crusted lesions should have the crust removed by lifting with a sterile needle.

A swab pre-moistened with sterile saline can be used to collect in areas lacking visible lesions. Calcium alginate swabs or swabs with wooded shafts should not be used because they may inhibit Herpes viral replication. Bloody specimens should be avoided.

Collected specimens should be immediately placed into UTM viral transport media to stabilize the virus and inhibit microbial growth (leave the swab in the media). Store at 2-8°C. Specimens must be received by Spectrum Health Laboratory within 24 hours of collection. If transport exceeds 24 hours, freeze specimens at negative 70°C.

Rotavirus Collection

Collect a 0.2 g (0.2 mL) fecal sample in a clean, dry container, free of any preservatives or detergents that could adversely affect the result of the assay.

Swab samples are acceptable provided that 0.2 gm of feces can be sampled.

For optimal results, a specimen should be collected 3-5 days after the onset of symptoms of rotavirus infection. Samples collected 8 or more days after symptoms are noted may not contain enough virus for detection.

Urine diluted stool specimens should be avoided as urine may affect the results.

Refrigerate specimen. Transport within 24 hours. Store at -70°C if transport exceeds 48 hours.

Respiratory Syncytial Virus (RSV) Direct Examination

Two direct methods are being used by Spectrum Health Laboratory to detect RSV, ELISA Immunoassay (EIA) or rapid, and Fluorescent Antibody technique (FA). RSV Rapid EIA procedure requires a swab specimen in viral transport media UTM. RSV - FA procedure requires a special 10 wellled black slide. To request the RSV Kits complete a Laboratory Supply Order form or call (616) 774-7721. This slide procedure is examined Monday through Friday and must arrive at the laboratory by 2pm for same day results.

Upper Respiratory Viral Collection (RSV, Adeno, Influenza A, B, Parainfluenza 1, 2, 3)

The commonly collected specimens include: nasopharyngeal aspirates and nasopharyngeal scrapings, and nasopharyngeal swabs. Influenza A/B or Flu A/B Rapid (EIA) is available 24/7 and requires a NP swab or Rhinoprobe in viral transport media UTM.

Nasopharyngeal swab (N-P swab)

Obtain 1 mini-tipped (non-metal shaft) culture swab.

If a throat culture is also requested on the child, obtain the throat culture first since coughing will force virus (organisms) into the nasopharynx.

Have the patient tip his or her head back or have someone hold the head in the supine position. Carefully insert the swab into the posterior portion of the nasopharynx passage. Normally an adult is approximately 2-3 inches. On a child it depends on age but is usually 1-3 inches. Do not collect the specimen from the nasal opening only. Obtain swabs from both right and left nasopharynx.

Transfer swab(s) to the UTM viral transport media [leave swab(s) in media].

Nasopharyngeal aspirates/wash

If possible, obtain specimen during the acute phase of the illness when the greatest amount of viral shedding decreases.

Nasopharyngeal wash-volumes of 2-3 mL are recommended. (Excessive wash volumes may decrease the sensitivity of the assay).

Place specimen in UTM viral transport media.

Transport within 24 hours.

Guides and Patient Handouts

[Forms and Requisitions](#)

[ATL Quick Collection Guide](#)

[Micro Quick Collection Guide](#)

[Cerner Label Key](#)

[Throat Collection](#)

[Nasal Collection](#)

Patient Handouts

[Patient Home Collection Brochure](#) Includes collection for urine, sputum, stool, kidney stone, pinworm,

[Hydrogen Breath Test](#)

[Kidney Stones](#)

[One Hour Glucose](#)

[Pinworm](#)

[Sputum](#)

[Stool Collection](#)

[Stool Hemoccult Card](#)

[Urine Clean Catch Midstream](#)

[Urine Timed](#)