



CLINICAL PATHOLOGY  
LABORATORIES

---

# CLIENT REFERENCE GUIDE

---

St John Providence Clinical Pathology Laboratories  
19251 Mack Avenue, Suite 101  
Grosse Pointe Woods, MI 48236  
(800) 863-5959  
[www.stjohnprovidence.org/lab](http://www.stjohnprovidence.org/lab)

## *Table of Contents*

---

### **Introduction**

Vision Statement .....	3
About Us .....	3
Accreditation and Affiliations .....	3

### **Services**

Billing Procedure.....	4
Consultation Service.....	4
Courier Service.....	4
Ordering Supplies from the Laboratory.....	4
Phlebotomy Training Services.....	4
Physician Office Laboratory Services .....	4

### **Results Reporting**

Quality Control.....	4
Repeat Determinations .....	5
Medicare Coverage of Laboratory Testing .....	5
Reporting Procedure .....	5
Report Format Description .....	6
Report Form Terminology.....	6

### **Requisition Form Instructions**

Requisition Form Instructions .....	6
Laboratory Requisition Form .....	6
Surgical Cytopathology Requisition.....	7
Alpha Fetoprotein Requisition Form.....	7
Allergen Request Form.....	7
Cystic Fibrosis Information Form.....	7

### **Blood and Body Fluid Specimen Collection and Processing**

Acceptable Blood and Body Fluid Specimen Identification.....	8
Specimen Rejection Criteria.....	8
General Guidelines for Submitting Cytology Specimens.....	8
Acceptance/Rejection of Cytology Specimens.....	8
Order of Blood Draw.....	9
Blood Collection Tube Instruction .....	9
Blood Processing and Packaging for Courier Pickup.....	9
Semen Collection .....	10
Stool-Culture Collection.....	10
Stool-Occult Blood Collection .....	11
Stool-Ova and Parasite Collection.....	11
Urine-General Collection Guidelines .....	12
General Collection Instructions For a 24 Hour Urine Specimen.....	12
Urine-24 Hour Collection For Creatinine Clearance .....	12
Urine-24 Hour Collection for Catecholamines/VMA .....	13
Urine-24 Hour Collection for F.S.H. (Follicle Stimulating Hormone).....	13
Urine-24 Hour Collection for 5HIAA-Serotonin.....	13

### **STAT Tests Available**..... 14

### **Test Result Notification Policy**

Telephoned Results Notification Policy .....	15
Critical Results .....	15-17

## **INTRODUCTION**

### **Vision Statement**

Together, we deliver the highest quality patient care experience, every day, everywhere, for everyone.

### **About Us**

St. John Providence Health System Laboratories is comprised of hospital laboratories, satellite laboratories and numerous patient service centers. As part of St. John Providence Health System, we are committed to the quality, access, continuity and cost effectiveness of patient care. Our pathology staff includes physicians, board certified in anatomic and clinical pathology as well as subspecialty certified in cytopathology, immunopathology, chemical pathology, transfusion medicine, clinical microbiology, hematopathology, dermatopathology, and oral pathology. Our pathology staff provides medical and technical consultations and interpretations every hour of the day, every day of the year. Our board certified and registered clinical laboratory professionals provide the knowledge and experience to help physicians manage patients' care.

### **Accreditation and Affiliations**

St. John Providence Health System Laboratories is a member of the Joint Venture for Hospital Laboratories (JVHL) and all affiliates are accredited by the College of American Pathologists (CAP), the American Association of Blood Bank (AABB), and certified by the Clinical Laboratory Improvement Amendments of 1988 (CLIA).

### **BILLING PROCEDURE**

Each account is billed directly to the patient's insurance company or to the patient. In circumstances wherein laboratory testing is indicated on patients who are unable to pay and who lack appropriate insurance coverage, the physician is requested to contact the laboratory for arrangement of special considerations.

---

### **CONSULTATION SERVICE**

Medical Technologists / MLS, Pathologists, Clinical Chemists, and other support personnel are available for consultation. Please direct your questions to St. John Clinical Pathology Laboratories at:

- **Telephone #: (800) 863-5959**
  - **Hours: 24 hours, 7 days per week**
- 

### **COURIER SERVICE**

Courier Service is available for specimen pick-up and report delivery. Please contact our client services department for courier services:

- **Telephone #: (800) 863-5959 Ext. 5**
  - **Hours: Mon - Fri (7:00am - 11:30pm)**
  - **Saturday/Sunday (8:00am – 11:00pm)**
- 

### **ORDERING SUPPLIES FROM THE LABORATORY**

For physicians desiring to collect specimens in their office, supplies are provided at no charge for specimens tested by St. John Providence Clinical Pathology Laboratories. Client supplies can be routinely ordered and replenished by submitting a client supply order form indicating the type and quantity of each item requested. For your convenience, you may email your order using the online supply order form located at [www.stjohnprovidence.org/lab](http://www.stjohnprovidence.org/lab) or fax your order to 313-343-7842. Supply orders for in

stock items will be filled within 2-5 business days. For questions or additional information, contact our Client Supply Department directly at 313-343-7421.

---

### **PHLEBOTOMY TRAINING SERVICES**

Laboratory specimen collection techniques, equipment, and safety requirements are continuously changing and require proper knowledge to maintain quality assurance. SJPHS Laboratories' competent professional staff offers complimentary review of phlebotomy techniques for the referring physician's office team. Classes are held once a month at convenient locations. Please call 313-343-7563 for more information or to register for a class.

---

### **PHYSICIAN OFFICE LABORATORY SERVICES**

In instances where referring physicians operate laboratory facilities in their offices, professional staff of the St. John Providence Clinical Pathology Laboratories or designated consultants will consult with physicians and their personnel in order to review procedures and practices. This is aimed at achieving optimum accuracy and precision of laboratory work performed in the physician's office. To arrange for this service or to obtain additional information, please contact our Client Service Department:

- **Telephone #: (800) 863-5959 Option 6**
- 

### **QUALITY CONTROL**

St. John Providence Clinical Pathology Laboratories employ a wide range of quality control techniques to obtain maximum accuracy and precision for each analysis. These include maintaining high quality personnel together with high caliber instruments, reagents, and rigorous control of the analytic processes. Our highly trained and competency tested associates, along with the latest instrumentation, information systems and rigorous control of the testing processes assure you of the highest quality of

laboratory testing. Quality control specimens are analyzed along with patient specimens. The laboratory participates in the Survey and Quality Assurance Service (QAS) Programs of the College of American Pathologists. In addition, the laboratories are accredited by the College of American Pathologists. Physicians and their staff are invited to visit the laboratory and review quality control procedures and results with the professional team. Visits may be arranged by appointment at:

- **Telephone #: (313) 343-3517**

---

**REPEAT DETERMINATIONS**

Repeat determinations will be performed at NO CHARGE upon specific request by a referring physician. This may require having the patient return to the laboratory or physician's office in order to obtain another specimen if the laboratory no longer has sufficient specimen available for the repeat determination, or if stability characteristics of the analyte(s) in question demand a new specimen.

---

**MEDICARE COVERAGE OF LABORATORY TESTING**

When ordering laboratory tests that are billed to Medicare/Medicaid or other federally funded programs, the following requirements apply:

Only tests that are medically necessary for the diagnosis or treatment of the patient should be ordered. Medicare does not pay for screening tests, except for certain specifically approved procedures, and may not pay for non-FDA approved tests or for those tests considered experimental.

If there is reason to believe that Medicare will not pay for a test, the patient should be informed. The patient should sign an Advance Beneficiary Notice (ABN) to indicate that he or she is responsible for the cost of the test if Medicare denies payment. ([view form](#))

The ordering physician must provide an ICD-9 diagnosis code, not a narrative description, if required by the fiscal intermediary or carrier.

Due to government compliance regulations, St John Providence Clinical Pathology Laboratories can no longer service patients at our Patient Service Centers without the supporting diagnosis information present on the Laboratory order or requisition. Our Laboratory associates at the service centers will no longer have the ability to call physician offices for this information. Patients will need to contact their physician for completion of their diagnosis information before returning to our draw station for service. We apologize for any inconvenience.

---

**REPORTING PROCEDURE**

Patients are assigned a unique identifying number in the laboratory's computer system. When tests are completed, the results are entered into the patient's file in the computer. Reports are printed periodically each day, containing results of completed work. In most cases, the requested work on a given patient will be completed in 24 hours or less. Our laboratory prepares three types of patient reports:

1. **PRELIMINARY**: A preliminary report is a partial report that contains results of laboratory work completed during the day a report is printed. This allows the physician to receive, at the earliest possible time, the results of the completed laboratory work. In addition, pending test results will be noted on all preliminary report forms.
2. **FINAL**: A final report is generated when the last of the requested work is completed. The report summarizes the results of all tests requested during the patient's visit or from the specimen obtained at the physician's office including the data previously reported in all preliminary reports. Therefore, when the FINAL report is obtained, the PRELIMINARY report may be discarded. When all of the requested laboratory work is completed in a single day, only a FINAL report is prepared.

### 3. ABNORMAL SUMMARY

At their request, a physician can choose to receive both Preliminary and Final charts, or just Final charts only. For more information, call the laboratory at (800) 863-5959.

#### **REPORT FORMAT DESCRIPTION**

1. **COMMENTS:** Miscellaneous remarks, e.g. identity of a reference laboratory will appear in this area.
2. **TEST:** The name of the specific test(s) ordered on the patient.
3. **RESULT:** Test results are printed in this area.
4. **FLAG:**  
 H (high) Denotes an out of range, high test result.  
 H\* (high) Denotes a markedly out of range high test result.  
 L (low) Denotes an out of range low test result.  
 L\* (low) Denotes a markedly out of range low test result.
5. **REFERENCE:** The numerical classification of normal for the population as a whole or by age and sex when applicable.

#### **REPORT FORM TERMINOLOGY**

1. **SENT OUT:** This indicates that testing is performed at a reference laboratory. A separate report accompanies or follows this report.
2. **PENDING:** This indicates that the test is in process; a final report will follow when testing is complete.

#### **REQUISITION FORM INSTRUCTIONS**

All specimens submitted to the laboratory must be accompanied by a requisition form. Requisition forms are designed to be as convenient as possible for the physician and staff to eliminate both ordering and information

errors. The following lists the information that is **required** to be completed on the requisition.

#### **LABORATORY REQUISITION FORM:** [view form](#)

1. Fill in all of the shaded areas. Forms are labeled in advance with your office address, telephone number and client number. To minimize specimen preparation time, preassigned bar coded specimen labels unique to each form are also provided.
2. Patient's name: Last Name, First Name, and Middle Initial.
3. Patient's street address, city, state, and zip code.
4. Patient's telephone number.
5. Patient's birth date, social security number, and gender.
6. Patient's insurance information. Include billing address, effective date, parent name, and primary care physician when applicable.
7. ICD-9 Diagnosis Codes: Examples of diagnosis codes are listed on the back of the requisition form.
8. Indicate the requesting physician and the name and address of the primary care physician or consulting physicians.
9. Date and time of specimen collection.
10. Indicate the requested test(s) with a check mark. Tests may be ordered individually or by profiled groups as indicated on the form.
11. The source or site of specimen collection is required for any microbiology request.
12. Date and time of the last dose of medication taken is required for any of the (\*) asterisked therapeutic drug levels.
13. Tests not listed on the requisition may be written in the space at the bottom of the requisition. Customization of the request form is also available to add procedures that are commonly ordered by your office but do not already appear on the form. Contact our Client Account Specialist department at (800) 863-5959 Option 6.

**The following specimen notations are used on the requisition to indicate special specimen preparation needs or clarify procedure components:**

- + Additional Patient History Form required.
- ◆ Refrigerate after collection.

▲ Includes testing for Candida species, Gardnerella Vaginalis and Trichomonas Vaginalis and charged accordingly.

▲▲ Includes culture for Salmonella, Shigella, Campylobacter, and E. Coli and charged accordingly.

\* Complete Therapeutic Drug Dosage Information at Top of Form

\*\* Titer and confirmation if indicated.

\*\*\* Please see reverse side of page one for a complete listing of the panel components.

1) Manual Differential performed on appropriate specimens and charged accordingly.

2) Includes Total Protein and Protein Electrophoresis.

@ = ABN targeted tests

**SURGICAL / CYTOPATHOLOGY REQUISITION FORM** [view form](#)

1. Please provide all required information. Request forms are labeled in advance with the client office address, telephone number and client number. Pre-assigned specimen labels unique to each form are also provided.
2. Patient name: Last name, First name, and Middle initial.
3. Patient telephone number, birth date, age, gender, and social security number
4. Patient address, city, state, and zip code.
5. Name of insurance subscriber and relationship to patient.
6. Patient insurance information.
7. ICD-9 diagnosis code(s): Examples of diagnosis codes are listed on the back of the requisition form.
8. Physician name.
9. Date and time of collection and initials of the person completing requisition information.
10. Cytology Requests: Indicate the type of specimen being submitted and the procedure(s) required. Complete the clinical information indicated on the requisition form.

11. Surgical Pathology Requests: Indicate source of the specimen. *It is extremely important to provide a brief clinical diagnosis and pertinent history.*

**ALPHA FETOPROTEIN REQUISITION FORM:** [view form](#)

1. Requesting physician's name and telephone number.
2. Patient name: Last name, first name, and middle initial.
3. Patient birth date.
4. Maternal information: weight, race, diabetic status, and maternal history.
5. Date of last menstrual period (LMP).
6. Multiple gestation status.
7. Date of ultrasound if applicable.
8. Gestational age in weeks.
9. The method used to determine the gestational age if ultrasound performed.
10. Estimated gestational age if an ultrasound was not performed and date of last menstrual period unknown and how it was determined.

**ALLERGEN REQUEST FORM** [view form](#)

1. Fill in Patient name and date.
2. Indicate ordering Physician.
3. Indicate allergens requested; **Please note:** allergen panels are located on the front of the form, while individual allergens are listed on the back. If a panel is desired, please check off *every allergen* in the panel.
4. Allergen Request Form must be accompanied by a Lab Requisition form with patient demographic and insurance information.

**CYSTIC FIBROSIS INFORMATION FORM** [view form](#)

- 1.

## **BLOOD AND BODY FLUID SPECIMEN COLLECTION AND PROCESSING**

### **Acceptable Blood and Body Fluid Specimen Identification**

All specimens procured in the physician's office or drawstation must be legibly labeled using two unique patient identifiers. Two identifiers must include the Patient's Full Name and the Birth Date or unique Identification Number. Also required on the requisition:

- Date and time of specimen collection
- Physician's name
- Test(s) required

Slides must be labeled with the patient's full name. Print the name in pencil on the frosted end of the slide.

### **SPECIMEN REJECTION CRITERIA**

In order to assure proper patient care, the laboratory will be unable to process specimens which have not been properly collected or labeled. The most common of these situations are listed below:

- Specimens with no patient name.
- Mislabeled or illegible specimen label.
- Hemolyzed specimens, in particular those for Potassium, Calcium, Magnesium, Troponin, LDH, AST (SGOT), Iron and Iron binding capacity.
- Clotted anticoagulated tubes (e.g. blue or lavender tubes).
- Incompletely filled tubes for coagulation testing (e.g. blue stoppered tubes).
- Leaking Bacteriology specimens.
- Improperly centrifuged gel tubes (e.g. serum or plasma not completely separated from the cells).
- Specimens collected into improper or expired containers.
- Improper specimen handling (e.g. storage / transport requirements)

*Resolution to sample rejection will be by notification to the collection site by the recollection department or a result comment on the patient report.*

## **GENERAL GUIDELINES FOR SUBMITTING CYTOLOGY SPECIMENS**

1. A cytology requisition form should be completed and accompany the specimen. The specimen must be labeled with the patient's full name, birth date or unique ID number, physician, and source of specimen.
2. Request only cytology or surgical pathology procedures on the Cytology/Surgical Pathology Requisition form. Separate request forms are available for Blood, Microbiology, AND Virology.
3. PLEASE do not write requests for Cytology on any form except Cytopathology request form.
4. When placing the label on the specimen container, please put the label on the container itself, not the lid.
5. To prevent contamination, please insert the request form in the outside pocket of the plastic bag containing the specimen.
6. **Place cytology specimens in separate bag from other specimens.**

### **ACCEPTANCE / REJECTION OF CYTOLOGY SPECIMENS**

All specimens should be properly labeled, accompanied by a request form containing the required information, including pertinent clinical information.

1. If a specimen is received without an identifying label or requisition form, or if the requisition form contains discrepant information, that specimen will be rejected until it is properly identified and/or all required information is received.
2. Cytology personnel will attempt to contact the appropriate person to identify the specimen by calling the doctor and/or charge person of the area where the specimen was collected.
3. Slides will be rejected if received broken, and are beyond repair.

### ORDER OF BLOOD DRAW

To prevent blood collection tube additive carry over, which leads to adverse test results, tubes should be collected from the patient in the following ORDER of DRAW.

- If ordered, always collect a Blood Culture before other collection tubes..
- Use the following order for collection of multiple tubes:
  - CLEAR (DISCARD)
  - BLUE TUBE
  - RED TUBE
  - GOLD TUBE
  - GREEN TUBE
  - LAVENDER TUBE
  - PINK TUBE
  - MOLECULAR TUBE
  - GRAY TUBE
  - OTHER
- Use a clear or an extra blue tube to ensure proper filling of the Blue tube to the indicated fill level..
- Additional specialty tubes are drawn in order based on the tube additive.

### COLLECTION TUBE INSTRUCTIONS

- Allow the tubes to fill until blood stops flowing into tubes.
- All tubes must be mixed by gentle inversion five to ten times immediately after drawing.
- Allow Red & Gold (SST) tubes to stand 30 minutes at room temperature before centrifugation and storage. Specimens must be handled according to the directions found in the on-line Test Directory until courier pick-up.
- The amount of serum, plasma, or whole blood indicated in the on-line Test Directory indicates the minimum volume needed for analysis.
- It is imperative that Blue top tubes be filled to the etched fill indicator near the top of the label to eliminate dilution

errors. A discard tube should be collected first when using a butterfly needle.

- Label all specimens with proper patient identification, including full patient name and birth date and/or ID number.
- Document individual who collected the specimen, along with the date and time on the requisition.

### BLOOD PROCESSING AND PACKAGING FOR COURIER PICKUP

1. Centrifuge tubes of blood, with their stoppers in place, for 10 minutes to insure adequate separation of serum or plasma from the clot or cells.
2. Specimens should be centrifuged within 2 hours of collection.
3. For tests that require serum, allow the blood to clot upright for 30 minutes at room temperature before centrifuging.
4. For tests that require plasma, the blood can be centrifuged immediately after collection.
5. If a serum separator gel tube (gold top) or plasma separator gel tube (green top) is used, the serum or plasma can be stored on the gel barrier as long as there is no leakage of red cells into the serum/plasma. Keep the tube stoppered.
6. If a non-gel tube is used, immediately pipette the serum or plasma into a clean plastic screw top container unless instructed otherwise. Care should be taken to not transfer red cells with the serum or plasma. All aliquoted specimens must be properly labeled.

The specimens should be put in separate bags for each patient. The test request form should be folded and placed in the outside pocket of the specimen bag, **WITH THE BAR CODE VISIBLE**. This will ensure proper tracking and accountability of the specimens and request forms.

---

## **SEMEN COLLECTION**

St. John Providence Clinical Pathology Laboratories requires that a semen collection be brought directly to one of the following Hospital Laboratories for processing within one hour of collection:

- St John Hospital & Medical Center
- St John Macomb-Oakland Macomb Campus
- St John River District Hospital
- St John Providence Hospital
- St John Providence Park Hospital

### **Patient Instructions:**

1. Abstain from sexual intercourse for 2-3 days prior to collection of the specimen.
2. A small, clean, dry plastic or glass container may be used for the collection. Please obtain from laboratory whenever possible.
3. The specimen should be free from lubricants, spermicides, and contact with latex condoms. If more detailed instructions are needed please contact your physician.
4. Record the full name, date, and time of collection on the specimen container.
5. Bring the specimen **directly** to the laboratory draw station reception.
6. Patient will be instructed to register at the Registration area *after* dropping off specimen. Patient can then return to the Laboratory with registration papers.

**NOTE:** Semen collections should be delivered *within one hour* of collection. A specimen delivered after this time may not be suitable for examination. Specimens should not be exposed to extreme heat or cold.

---

## **STOOL - CULTURE COLLECTION**

1. The patient should be cautioned against the use of antacids, barium, bismuth, anti-diarrheal medication or oily laxatives prior to collection of specimen.
  2. Three consecutive specimens obtained during the acute stage (first three days) of diarrheal disease are suggested.
  3. A clean wide-mouthed container or plastic bag placed over the toilet seat is an acceptable collection container.
  4. An appropriate (i.e. bloody, slimy, watery) area of stool should be selected and sampled with the collection spoon provided in the cap of the vial. Sufficient stool is added to each container to bring the liquid level up to the “fill to here” line. This will result in introducing approximately 1 gram of sample into the preservative solution.
  5. Agitate each specimen with the spoon along sides of the vial, tighten the cap and shake firmly to insure that the specimen is adequately mixed. When mixing is completed the solution should appear homogeneous.
  6. Return vial to accompanying container, seal and label properly.
  7. Patients may drop off their stool specimens directly at any St. John Providence Clinical Pathology Laboratories’ draw station. Specimens can also be picked up from the physician’s office.
-

---

### **STOOL - OCCULT BLOOD COLLECTION**

1. For accurate results, it is very important to follow the diet for 3 days prior to collecting the first stool sample. Remain on diet until completion of collection.
2. Foods to eat:
  - Well cooked pork, poultry and fish
  - Any cooked fruit and vegetables
  - High fiber foods
3. Foods, vitamins and drugs to avoid:
  - Red meat (beef, lamb)
  - Any raw fruits and vegetable (especially melons, radishes, turnips and horseradish)
  - Vitamin C in excess of 250 mg per day
4. For 7 days prior to and during the stool collection period, **avoid** non-steroidal anti-inflammatory drugs (ibuprofen, naproxen or aspirin). Acetaminophen (Tylenol) can be taken as needed.
5. You may use any clean dry container to collect your stool sample. Collect sample before it contacts the toilet bowl water.
6. Open front of section 1. Use one stick to collect a small sample.
7. Apply sample inside Box A. Collect a second sample from a different part of the stool using the same applicator. Apply this sample inside Box B. Discard applicator in waste container. Do not flush wooden applicator.
8. Close the cover flap. Fill in the date on the front of the slide; place slide in this envelope; allow slide to air-dry overnight.

Repeat Steps 2-4 for your next 2 bowel movements. After last completed slide has air-dried overnight, patients may drop off their specimens directly at any St. John Providence Clinical Pathology Laboratories' draw station. Specimens can also be picked up from the physician's office.

---

### **STOOL - OVA AND PARASITE COLLECTION**

1. The patient should be cautioned against the use of antacids, barium, bismuth, antidiarrheal medication, or oily laxatives prior to collection of the specimen.
2. To assure the recovery of parasitic elements that are passed intermittently and in fluctuating numbers, three specimens spaced a few days apart must be examined.
3. A clean wide-mouthed container or a plastic bag placed over the toilet seat is an acceptable collection container.
4. An appropriate (i.e. bloody, slimy, watery) area of stool should be selected and sampled with the collection spoons provided in the caps of the vials. Sufficient stool is added to each container to bring the liquid level up to the "fill to here" line. This will result in approximately 5 mL of sample. To insure adequate sampling of the formed stool, material should be removed from the sides, ends, and middle of the bolus.
5. Agitate each specimen with the spoon along the sides of each vial (blue and pink), tighten the cap and shake firmly to insure that the specimen is adequately mixed. When mixing is completed, the specimen should appear homogenous.
6. Return the vials to their container, seal the container, and label appropriately.
7. If the specimen is insufficient for both vials, please fill the "blue" vial, which contains formalin only.
8. Patients may drop off their specimens directly at any St. John Providence Clinical Pathology Laboratories' draw station. Specimens can also be picked up from the physician's office.

---

---

### **URINE - GENERAL COLLECTION GUIDELINES**

1. Random and timed urine collection containers are supplied by the laboratory and may be accompanied by specific directions for specimen collection when required.
2. Patients may pick up urine collection containers at any St. John Clinical Pathology Laboratory draw station.
3. Timed urine collection containers must be labeled with the patient's name or barcoded requisition label; the test(s) requested; and the start and finish times of the collection.
4. A completed requisition form must accompany a urine collection indicating the test(s) to be performed.
5. More than one 24 hour urine collection may be required when several 24 hour urine tests are requested due to different storage conditions. Please contact the laboratory at (800) 863-5959 for specific specimen requirements.
6. All urine collections should be refrigerated during and after collection.
7. Patients may drop off their urine collection directly at any St. John Providence Clinical Pathology Laboratory draw station. Specimens can also be picked up from the physician's office.

---

### **GENERAL COLLECTION INSTRUCTIONS FOR A 24 HOUR URINE SPECIMEN**

1. Start the urine collection in the morning. Completely empty the bladder and **DISCARD THIS URINE.**
2. Record the time of voiding, this marks the start of the collection period. (Please record this time on the container provided).
3. Within the next 24 hours add all urine voided during this time to the container and immediately mix well. Keep the specimen refrigerated during the entire 24 hour period.
4. 24 hours after the recorded time, void completely and include this specimen in the total 24 hour collection. **NOTE END OF COLLECTION TIME ON CONTAINER PROVIDED.**
5. Bring the specimen to a St. John Providence Clinical Pathology Laboratories location as soon as possible.

---

### **URINE - 24 HOUR COLLECTION FOR CREATININE CLEARANCE**

1. The height and weight of the patient must be indicated on the requisition form when a Creatinine Clearance is requested.
  2. A serum specimen is required for a Creatinine Clearance. The specimen must be collected within 48 hours of the urine collection.
  3. FOLLOW SPECIMEN COLLECTION INSTRUCTIONS FOR 24 HOUR URINE
-

---

**URINE - 24 HOUR COLLECTION FOR CATECHOLAMINES/VMA**

1. Please follow the restrictions listed below for the 48-72 hour period prior to and during the 24 hour collection period.
2. Optimum results of this laboratory procedure are obtained when the patient is off medications for a minimum of 48-72 hours.
3. Discontinuation of medications should be done only after consulting with your personal physician.  
FOOD TO BE AVOIDED: Bananas, coffee, tea, chocolate, alcoholic beverages, and cocoa.
4. **PLEASE: NO SMOKING**
5. **FOLLOW SPECIMEN COLLECTION INSTRUCTIONS FOR 24 HOUR URINE**

---

**URINE - 24 HOUR COLLECTION FOR F.S.H. (FOLLICLE STIMULATING HORMONE)**

Please follow the restrictions listed below for the 48-72 hour period prior to and during the 24 hour collection period. Optimum results of this procedure are obtained when the patient is off of medications for a minimum of 48-72 hours.

1. Discontinuation of medications should be done only after consulting with your personal physician.
2. **FOLLOW SPECIMEN COLLECTION INSTRUCTIONS FOR 24 HOUR URINE**

---

**URINE - 24 HOUR COLLECTION FOR 5HIAA-SEROTONIN**

1. Please follow the instructions and restrictions listed below for the 72 hours prior to and during the 24 hour collection period.
2. Optimum results of this laboratory procedure are obtained when the patient is off medications for a minimum of 72 hours.
3. Discontinuation of medications should be done only after consulting with your personal physician.
4. **PLEASE: NO SMOKING**
5. **FOLLOW SPECIMEN COLLECTION INSTRUCTIONS FOR 24 HOUR URINE**

**FOODS TO BE AVOIDED:**

Peanuts	Dried Cod	Asparagus	Tea
Bananas	Gluten Wheat	Chipped Beef	Vanilla
Tomatoes	Lactalbumen-Milk	Cashew Nuts	Plums
Raisins	Eggplant	Casein-Milk	Walnuts
Avocados	Pineapple	Dried Eggs	Alcohol
Parmesan Cheese	Caffeine	Coffee	Chocolate

**STAT TESTS AVAILABLE AT CORE LAB**

St. John Clinical Pathology Laboratories offers a limited number of laboratory tests that are provided on a STAT basis. However, it is emphasized that the following list of STAT procedures does not preclude other emergency procedures which the physician may consider vital to the diagnosis and treatment of their patient. When the attending physician feels it is mandatory that a procedure be performed, other than those indicated on the list, they may contact the Medical Technologist Supervisor at (800) 863-5959.

ABO Type & Screen	DIGOXIN
APTT	DILANTIN (PHENYTOIN)
AST (SGOT)	DILANTIN, FREE
ACETONE	DRUG SCREEN-Urine
ACETAMINOPHEN	ELECTROLYTES (SERUM or URINE)
ALCOHOL (ETHYL)	-Sodium
ALKALINE PHOSPHATASE	-Potassium
AMIKACIN	-Chloride
AMYLASE	-CO2 (serum only)
AMMONIA	FETAL FIBRONECTIN
BARBITURATES (Urine drug screen recommended)	GENTAMICIN
BETA-HCG (QUALITATIVE, serum or urine)	GLUCOSE
BETA-HCG (QUANTITATIVE, serum)	IRON/TIBC-OVERDOSE
BILIRUBIN, TOTAL	LACTIC ACID
BILIRUBIN, NEONATAL	LDH (LD)
CALCIUM	LITHIUM
CALCIUM, IONIZED	MAGNESIUM
CARBAMAZEPINE (TEGRETOL)	METHEMOGLOBIN
CARBON MONOXIDE	METHOTREXATE
CKMB	MONO SPOT
COMPLETE BLOOD COUNT (CBC)	NAPA (N-Acetyl Procainamide)
-WBC (WHITE BLOOD COUNT)	OSMOLALITY (Serum or Urine)
-RBC (RED BLOOD COUNT)	pH/BLOOD GASES
-HBG (HEMOGLOBIN)	PHENOBARBITAL
-PLATELET COUNT	PROCAINAMIDE
-HCT (HEMATOCRIT)	PROGESTERONE
-DIFFERENTIAL	PROTHROMBIN TIME (PT)
CHOLINESTERASE	PSEUDOCHOLINESTERASE
COMPLETE URINALYSIS	QUINIDINE
-pH	RETIC COUNT
-PROTEIN	SACLICYLATE
-GLUCOSE	SICKLE CELL
-ACETONE	SPINAL FLUID
-BILIRUBIN	-CHLORIDE
-OCCULT BLOOD	-GLUCOSE
-UROBILINOGEN	-PROTEIN
-NITRITE	-GRAM STAIN
-MICROSCOPIC (RBC/hpf, WBC/hpf)	THEOPHYLLINE
CREATININE PHOSPHOKINASE (CK)	TOBRAMYCIN
CREATININE (serum or urine)	TROPONIN
CELL COUNT on:	UREA NITROGEN
-SPINAL FLUID	URIC ACID
-BODY FLUID	VALPROIC ACID
-SYNOVIAL FLUID	VANCOMYCIN

**TELEPHONED RESULTS NOTIFICATION POLICY**

Results are telephoned to the physician or physician office under the following circumstances;

1. When specifically requested by a Physician
2. Tests ordered STAT
3. Test results markedly out of range and which demand immediate notification to the physician

Telephoned results will be followed by a paper copy. Routinely, laboratory results are sent to the office printer or mailed. When the laboratory is informed that more than one physician is caring for a patient, e.g. through consultations, each attending physician will receive a copy of laboratory work.

**NOTE: STAT and Alert/Critical result calls are made on a 24/7 basis; "Fax" and "Call to" requests are done from 9 AM to 7 PM.**

**ALERT/CRITICAL RESULT NOTIFICATION**

A critical value is defined as a laboratory test value that may be life threatening and require immediate clinical attention. An alert value is defined as a test result that is serious enough to warrant alerting the health care provider, but not of a life threatening nature such that the physician needs to be notified immediately. Below are listed those tests which have been assigned upper and/or lower limit values. Any test result outside of these limits should be considered a "critical" or an "alert" value and is called to the physician's office during office hours or directly to the physician for critical values after office hours. Readback by receiver may be required for specific critical values.

CHEMISTRY	LESS THAN	GREATER THAN	ALERT OR CRITICAL CALL
Amylase	N/A	300 IU/L	Alert
ALT (SGPT)	N/A	500 IU/L	Alert
AST (SGOT)	N/A	500 IU/L	Alert
Bilirubin-Total	N/A	15.0 mg/dL	Alert
Bilirubin-Newborn	N/A	20.0 mg/dL	Critical
BUN (Outpatient)	N/A	100 mg/dL	Alert
Calcium, Total	6.5 mg/dL	13.0 mg/dL	Critical
Calcium - Ionized	0.82 mmol/L	3.00 mmol/L	Alert
Carbon Dioxide	15 mmol/L	44 mmol/L	Alert
Chloride (outpatient)	80 mmol/L	115 mmol/L	Alert
Chloride (inpatient)	80 mmol/L	N/A	Alert
CK (CPK) (outpatient)	N/A	1000 IU/L	Alert
CK (CPK) MB	N/A	10.0 ng/mL	Critical
With CK-MB Index (outpatient)	N/A	5.0%	Critical
Creatinine (outpatient)	N/A	6.0 mg/dL	Alert
Glucose	50 mg/dL	500 mg/dL	Critical
Glucose (newborn)	40 mg/dL	300 mg/dL	Critical
Lactic Acid	NA	5.0 mmol/L	Critical

LDH (LD)	N/A	1500 IU/L	Alert
LDH Isoenzymes	N/A	Band 1>2	Alert
Magnesium	1.0 mEq/L	7.0 mEq/L	Critical
pO2-Arterial (< 1 yr old)	40 mm Hg		Critical
pCO2-Arterial	25 mm Hg	60 mm Hg	Alert
pH ABG-Arterial	7.1	7.65	Critical
Phosphorus, Inorganic	1.0 mg/dL	N/A	Alert
Potassium	2.5 mmol/L	6.5 mmol/L	Critical
Sodium	115 mmol/L	165 mmol/L	Critical
Troponin-T	N/A	0.1 ng/mL	Critical
Uric Acid	N/A	12.0 mg/dL	Alert
<b>THERAPEUTIC DRUGS</b>	<b>LESS THAN</b>	<b>GREATER THAN</b>	<b>CRITICAL CALL</b>
Acetaminophen	N/A	50 ug/mL	Critical
Amikacin - Peak	N/A	30 ug/mL	Critical
Amikacin - Trough	N/A	8.0 ug/mL	Critical
Carbamazepin (Tegretol)	N/A	20 ug/mL	Critical
Digoxin	N/A	2.5 ng/mL	Critical
Disopyramide (Norpace)	N/A	7 ug/mL	Critical
Gentamicin - Peak	N/A	12 ug/mL	Critical
Gentamicin - Trough	N/A	2.5 ug/mL	Critical
Lithium	N/A	2.0 meq/L	Critical
Methotrexate	N/A	15.0 umol/L	Critical
N-Acetylprocainamide (NAPA+Procainamide)	N/A	30 ug/mL	Critical
Phenobarbital	N/A	50 ug/mL	Critical
Phenytoin (Dilantin)	N/A	30 ug/mL	Critical
Phenytoin - Free	N/A	3.0ug/mL	Critical
Primidone (Mysoline)	N/A	15 ug/mL	Critical
Procainamide (Pronestyl)	N/A	12 ug/mL	Critical
Quinidine	N/A	10 ug/mL	Critical
Salicylate	N/A	30 ug/dL	Critical
Theophylline	N/A	25 ug/mL	Critical
Theophylline (Newborn)	N/A	16 ug/mL	Critical
Tobramycin - Peak	N/A	12 ug/mL	Critical
Tobramycin - Trough	N/A	2.5 ug/mL	Critical
Valproic Acid (Depakene)	N/A	175 ug/mL	Critical
Vancomycin	N/A	60 ug/mL	Critical
<b>HEMATOLOGY</b>	<b>LESS THAN</b>	<b>GREATER THAN</b>	<b>ALERT OR CRITICAL CALL</b>

Absolute Neutrophil Count	500	N/A	Alert
Differential	10% PMN	10% Bands	Alert
Hemoglobin	5 g/dL	Or drop by 5 gms or 50 %	Critical
Kleinhauer-Betke	N/A	Presence of Fetal cells	Alert
Platelets (Non-oncology)	15,000 uL	800,000 uL	Critical lower limit
Reticulocyte Count	N/A	25%	Alert
Sedimentation Rate	N/A	100 mm/hr	Alert
White Blood Count (WBC)	2,000/uL	25,000 uL (Outpatient) 50,000 uL (Inpatient)	Alert
WBC (CSF)		Any Amount	Critical
<b>COAGULATION</b>	<b>LESS THAN</b>	<b>GREATER THAN</b>	<b>ALERT OR CRITICAL CALL</b>
D-Dimer	N/A	Positive	Alert
FDP	N/A	Positive	Alert
Fibrinogen	100 mg/dL	NA	Alert
INR	N/A	6.0	Critical
Partial Thromboplastin Time (aPTT)	N/A	120 seconds	Critical
<b>URINALYSIS</b>	<b>LESS THAN</b>	<b>GREATER THAN</b>	<b>ALERT OR CRITICAL CALL</b>
Glucose for pediatrics (age<10)	N/A	Positive	Alert
Ketones	N/A	80 mg/dL	Critical
<b>MICROBIOLOGY</b>		<b>POSITIVE</b>	<b>ALERT OR CRITICAL CALL</b>
Positive smears and cultures in normally "sterile" body fluids, tissues or blood.		Positive culture or gram stain on CSF	Critical
Stool pathogens: <i>Salmonella</i> , <i>Shigella</i> , <i>Campylobacter</i> , <i>Clostridium difficile</i> toxin, <i>Yersinia</i> , <i>E coli O157:H7</i>		Isolation of Neisseria meningitides from blood culture	Critical
Positive GC and Chlamydia amplified or probe testing		Isolation of Group B strep from blood cultures (<1yr)	Critical
Positive Clostridium difficile toxin assays		STAT gram stains-OR only	Critical
Isolation of Neisseria gonorrhoeae		Decreased susceptibility to Vancomycin for Staph aureus	Critical
Positive viral, herpes and <i>Chlamydia</i> cultures			Alert
Mycobacterium tuberculosis-cultures			Alert
Intestinal parasites			Alert
AFB positive smears			Alert
Isolation of methicillin-resistant Staph aureus			Alert
Isolation of vancomycin-resistant Enterococci			Alert
<b>BLOOD BANK</b>		<b>POSITIVE</b>	<b>ALERT OR CRITICAL CALL</b>
Rapid HIV (SUDES)		Positive	Critical