

# MALTA MED EMERGENT CARE LABORATORY

## SERVICE DIRECTORY

The Clinical Laboratory Service Directory has been reviewed and approved on the dates indicated. This manual is the property of Malta Med Emergent Care and may not be copied or disclosed without proper approval.

**Reviewed By:**

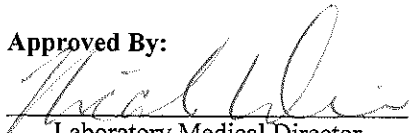


Administrative Laboratory Director

11/17/16

Date

**Approved By:**



Laboratory Medical Director  
Malta Med Emergent Care Laboratory

11/29/16

Date

**MALTA MED EMERGENT CARE  
DEPARTMENT OF CLINICAL  
LABORATORY SERVICES  
  
SERVICE DIRECTORY**

**MALTA MED EMERGENT CARE  
DEPARTMENT OF LABORATORY MEDICINE  
CLINICAL LABORATORY SERVICE DIRECTORY  
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# CLINICAL LABORATORY SERVICE DIRECTORY

## USE OF THE DIRECTORY

The purpose of this directory is to provide information on the diagnostic services offered by the Malta Med Emergent Care Laboratory. The information presented is intended to serve as a resource for test selection, requisition and specimen requirements. The optimal use of our diagnostic resources is best achieved through the use of this manual and direct communication with our professional staff.

The “**Scope of Service**” section describes the services which are provided by each laboratory department, including hours of operation.

The “**Client Services**” section provides information on the support services, billing information and laboratory reports.

The “**Specimen Collection and Transport**” section provides basic instructions for collecting specimens.

A **Specimen Reference Guide** is available at the facility website at the address below. It provides general instructions about requisitions, specimen types, containers, equipment and techniques for specimen collection.

A **List of Laboratory Tests** is also available at the facility website at the address below. It provides searchable table of all tests arranged in alphabetical order according to their most common name. In addition, some tests are also listed by their most commonly known synonyms. Test order name, lab department, collection container, storage for transport, CPT, test methodology and other information are provided

The **Service Directory**, **Specimen Reference Guide** and **List of Laboratory Tests** are updated on a periodic basis. They are available on the facility website at the following URL:

<https://www.maltamed.org/imaging-and-lab-services/>

Contact the laboratory for assistance with the medical indication and appropriate selection of laboratory tests.

## DIRECTORY OF LABORATORY SERVICES

LABORATORY/SERVICE	PHONE NUMBER	NAME
<b>Administration</b>		
Laboratory Medical Director	583-8442	Nicole M. Durie, M.D.
Site Administration	886-5424	Emily Wright, RN, Site Administrator
Laboratory Administration	583-8443	Richard Vandell, Administrative Director
Laboratory Information Services	580-2810 583-8657	Reta Caligaris, LIS Coordinator John Leming, LIS Coordinator
Quality Assurance/Compliance	580-2557	Madeline LaPierre, Supervisor
Evening Supervisor	583-8750	Mary Hill, Supervisor
<b>Laboratory Services</b>		
Clinical Laboratory	866-5433	Karin Loffredo, MMEC Supervisor
Phlebotomy	866-5430	Christine DiDonato, Phlebotomy Coordinator

# CLINICAL LABORATORY SERVICES

## SCOPE OF SERVICE PLAN

Clinical Laboratory Services at Malta Med Emergent Care provides the highest quality services to support and enhance the ability of the facility and other health care providers to deliver superior care to our patients. The Facility and Departmental Missions are the laboratory's purpose and guide. They underscore our determination to have a beneficial impact on patients.

We provide services of the highest quality through innovative ideas while constantly improving, striving for and maintaining a high degree of skill. We seek to meet this goal in a work environment that values a sense of community among all employees, an opportunity to perform meaningful work and a sense of dignity from the contributions they all make.

We are committed to service, education and development.

**SERVICE:** Providing clinical cutting edge technology, performed in a timely and cost effective manner. Our goal is to exceed client/patient expectations while maintaining a cost competitive position. This process keeps a strong customer focus, involves staff, and uses data and team knowledge to improve decision making.

**EDUCATION:** To create a "learning organization" within the Clinical Laboratory and to educate clinicians in optimal test utilization, and to provide assistance with interpretation of laboratory results.

**DEVELOPMENT:** To implement new procedures to expedite the diagnosis and treatment of patients.

The key to achieving these goals is constant communication among well trained laboratory staff and their customers. Strong medical direction, a quality-centered management strategy and advanced technology is vital to providing quality laboratory services.

Services are provided according to facility and departmental policy and procedure and are in compliance with current established techniques. All services meet the regulatory requirements of the New York State Department Of Health (NYSDOH), The Centers for Medicare & Medicaid Services (CMS), Clinical Laboratory Improvement Amendments (CLIA), the College of American Pathologists (CAP), and the Joint Commission (JC).

The Laboratory's quality system is organized to monitor processes and operations for all laboratory sites through the performance of self-assessment audits, error management, and customer feedback.

The performance of the procedures involves highly skilled Board Certified Pathologists, New York State licensed Clinical Laboratory Technologists, Support staff includes Laboratory Support Specialists and Phlebotomists.

Our major areas of service are:

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Blood Gases  
Chemistry/Special Chemistry  
Hematology/Coagulation  
Rapid Microbiology Tests  
Phlebotomy  
Point-of-Care Testing (POCT)  
Therapeutic Drugs

All departmental services are provided under the administrative and clinical direction of the Administrative Director and/or Laboratory Medical Director. The Administrative Director manages and directs the daily departmental operation in conjunction with the Supervisor to provide administrative coverage during off hours.

The laboratory monitors and supervises all waived and moderately-complex point-of-care testing. All laboratory tests performed within the facility for which a result is generated and which is used for the treatment of a patient comes under the laboratory DOH licenses and is controlled by the laboratory.

## LABORATORY HOURS OF OPERATION /GENERAL INFORMATION

### Main Campus:

The Malta Med Emergent Care Clinical Laboratory is opened 24 hours a day. Routine results for testing performed in house are available within 24 hours of specimen receipt. Hours for outpatient phlebotomy services are listed under “Phlebotomy Services”.

### Tests performed at the MMEC Laboratory:

Amylase	Lactic acid	PTH	HAV total	RSV
Acetaminophen	Lipase	Prolactin	HBcore ab	Monospot
BMP	lipid panel	FT4	CBC	Eosinophil count
B-HCG	LD	T3	CBC no diff	RF
CK total	Lithium	FT3	Urinalysis	Rapid strep ag
CKMB	Magnesium	TSH	Protime	Salicylate
Cardiac CRP	Phosphorous	Cortisol	APTT	
CRP	TIBC	PSA	D-Dimer	
Depekene	Uric acid	LH	ESR	
GGT	Urine microalbumin	FSH	Fecal Occult	
Ferritin	Urine total protein	Prolactin	Rapid BV	
Hepatic function panel	Urine creatinine	HBSag	Rapid trichomonas	
Hemoglobin A1C	BNP	HBSab	Rapid flu A/B ag	
Iron	Vitamin B12	HCV	Urine pregnancy	

All other laboratory tests are transported to the Saratoga Hospital Main Laboratory or the appropriate reference laboratory

## AREAS OF SERVICE

### PHLEBOTOMY SERVICES

**Monday - Friday: 7am to 9pm**

**Saturday: 7am to 7pm**

**Sunday: 7am to 5pm**

**Closed: Thanksgiving and Christmas**



## **POINT-OF-CARE TESTING**

The Point-of-Care Testing (POCT) program monitors and supervises all laboratory testing performed outside the physical facilities of the clinical laboratory. This includes testing done by facility employees and medical staff. The program provides guidelines to ensure consistent, accurate and reliable laboratory testing at the patient's immediate location.

The clinical laboratory in conjunction with departments that perform Point-of-Care Testing coordinates all activities associated with the program:

- Review and approval of testing procedures and equipment,
- Monitoring Quality Control,
- Proficiency Testing,
- Training of individuals who performed testing.

Requests to add a test to the program must be submitted to the Laboratory Administrative Director. Moderately Complex Point-of-Care Testing at Malta Med Emergent Care is licensed by the New York State and must meet all CLIA, CAP and JC guidelines for laboratory testing.

## **LABORATORY SPECIALTIES**

### **CHEMISTRY**

Chemistry conducts routine Clinical Chemistry, Therapeutic drugs, Endocrinology and Toxicology.

### **HEMATOLOGY**

The hematology laboratory performs blood counts, coagulation studies, differentials, and urinalysis testing. .

### **CLINICAL MICROBIOLOGY**

Rapid antigen testing for group A Streptococcus, Influenza A & B, RSV and Trichomonas are performed 7 days/week, 24 hours/day.

### **REFERENCE LABORATORIES**

Tests that are not performed at our on-site laboratories are referred to the Saratoga Hospital main lab or outside reference laboratories. Reference laboratories must also hold the appropriate New York State laboratory permits. Criteria based on quality and responsiveness to our customers' needs are used in the selection of all reference laboratories. Our reference laboratories are approved by the Malta Med Emergent Care's Healthcare Quality Council on an annual basis. A current list of all approved reference laboratories is available by contacting the Laboratory Quality Assurance/Compliance Supervisor (580-2557).

# CLIENT SERVICES

## **RESOLVING CUSTOMER COMPLAINTS**

The staff at Malta Med Emergent Care is committed to resolving issues to the satisfaction of our customers. It is important to us that you let us know when we have failed to meet your expectations. Issues can be referred to the Administrative Laboratory Director (583-8443), the Quality/Compliance Supervisor (580-2557) or the Laboratory Supervisor (866-5433)

## **REQUEST FOR SUPPLIES**

Outreach Clients: In accordance with New York State law on Laboratory Business Practices (Subpart 34-2 of 10 NYCRR), the laboratory will provide supplies to collect, process and transport specimens sent to our laboratory for testing. To obtain supplies, please complete an “*Outpatient Laboratory Supplies Request*” form. Allow three business days for routine deliveries.

Inpatient: Supplies for routine blood collection and urine tubes are available from the laboratory. Specimen collection cups are available from General Stores.

## **TEST REQUISITIONS**

The laboratory will examine specimens only at the request of licensed physicians or other person authorized by law to use the findings of laboratory examinations in their practice or the performance of their official duties. Authorized persons include:

- Physicians
- Dentists and podiatrists
- Chiropractors
- Physician Assistants and Certified Nurse-Midwives provided the supervising physician authorizes such examination.
- Nurse Practitioners
- Police officers provided such examination is incidental to arrest charges for alcohol or drug impairment.
- Judges ordering paternity tests under the Family Court Act.

The laboratory provides pre-printed requisitions for outpatient test requests.

The following information is required prior to the testing of any specimen:

- Name, address and phone number of physician
- Signature of physician or designee. (Stamps are not acceptable. Electronic signatures are acceptable but must be approved by the HIS director.)
- Date of order (we will not accept written requests that are more than 12 months old).
- Patient’s full name and date of birth
- Diagnosis for each test requested. ICD-10 code is preferred.
- Name of tests (s)

### **Insurance information:**

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Insurance information must be obtained for all requested laboratory services. Written documentation on the requisition is preferred but not required. If insurance information is not available, the patient will be billed.

Standing orders:

Standing orders are used when the patient is required to have lab tests over a period of time [i.e. Protime, monthly]. These orders are valid for a period of **6 months from the date of the original requisition.** Renewals of standing orders that have expired are the responsibility of the provider and the patient.

## **NOTICE TO PHYSICIANS REGARDING MEDICAL NECESSITY**

The Centers for Medicare and Medicaid Services (CMS) requires that we notify physicians and other providers legally authorized to order laboratory tests that Medicare will only pay for tests that meet the Medicare coverage criteria and are considered “reasonable and necessary” to treat or diagnose the patient’s medical condition.

Diagnosis: Physicians are required to provide a diagnosis that medically justifies each laboratory test at the time the request for testing is presented. It is critical that the information provided is consistent with the documentation in the patient’s record since it may be requested as part of a post payment review.

Organ and Disease Panels: All panels (organ and disease or custom) can only be billed and paid when all components in the panel are medically necessary.

Medicare Fee Schedule: A current Medicare laboratory fee schedule with CPT codes is available upon request from the Malta Med Emergent Care Laboratory. The Medicaid reimbursement amount is equal to or less than the amount of Medicare reimbursement.

Clinical Consultant: Access to a clinical consultant regarding laboratory tests is available at 583-8442.

Material contained in this yearly notification is current as of the date published and is subject to change without notice. The OIG believes that a physician who orders medically unnecessary tests and knowingly causes a false claim to be submitted may be subject to sanctions or remedies under criminal or administrative law.

## **COVERAGE DECISIONS/ ADVANCE BENEFICIARY NOTICES (ABN)**

In order to ensure that services being paid by the Medicare program are medically necessary CMS has established National Coverage Determinations (NCDs) and has required local carrier to establish Local Coverage Determinations (LCDs). Each policy lists the diagnosis for which Medicare considers a test to be medically necessary. Tests that have an NCD or LCD associated with them are highlighted on the Malta Med Emergent Care Laboratory requisition.

Please refer to the Center for Medicare Service (CMS) website for a complete list of coverage decisions.

Patients presenting directly to our patient service centers have their tests screened for medical necessity prior to collecting the specimen. If there is a reason to suspect that the test is not covered by Medicare, C:\Users\KS\Desktop\2016 2017 MMEC Lab Service Directory.Docx

the patient is notified and asked to sign an Advanced Beneficiary Notice (ABN). This informs the patient that the test ordered by their provider does not meet Medicare's guidelines and will not be paid by Medicare. If the patient signs the ABN, they are acknowledging that they are responsible for payment.

Medicare can deny claims based on the following:

- Medicare does not usually pay for this service for the diagnosis provided (See appropriate NCD or LCD).
- Medicare does not pay for investigational or research use of tests.
- Medicare does not pay for this service based on frequency limitations. Examples of tests with frequency limitations include fecal occult blood, PSA and pap smears when ordered for screening purposes.
- Medicare does not pay for most routine screening tests.
- Medicare does not pay for tests ordered as part of an annual physical exam.

Once signed, the patient is given a copy of the ABN.

## **TRANSPORT AND COURIER SERVICES**

The Clinical Laboratory provides courier service for pickup of laboratory specimens, and delivery of supplies and reports (phone 580-2516). Our courier staff is trained to ensure prompt and reliable service to our clients. Courier service is available Monday-Friday on a regular schedule. Limited STAT pickup of specimens is available on request.

## **TURN AROUND TIME FOR LABORATORY TESTS**

With the exception of tests sent to reference laboratories, most laboratory results are available on the same day.

## **PROCESSING REQUESTS FOR STAT TESTING**

Stat testing represents a critical clinical need for timely results. The goal for all stat testing is that results will be available as fast as possible and, at most, within one hour of receipt of the specimen in the laboratory. Requests for stat testing should be authorized by the provider. For stat requests, the test must be ordered as priority "S" in the order entry computer system. Paper requisitions must be clearly marked as stat.

After completion of testing, the outpatient results will be available in the computer, faxed or called to the appropriate location. If results are to be called or faxed, please be sure to include a phone or fax number on the requisition.

### **STAT PROCEDURE LIST**

This list is not intended to be an exclusive list of stat tests. Other tests on the laboratory's menu may be run on a stat basis but may require a turnaround time (TAT) longer than one hour.

Amylase	Acetaminophen
BMP	CMP
B-HCG	CK total
CKMB	Depakene (valproic acid)
Ethanol	Electrolytes
Hepatic function panel	Lactic acid
Lipase	Lithium
Magnesium	Phosphorous
Troponin I	Uric acid
BNP	CBC
CBC no diff	Protime
APTT	Ddimer
Fecal occult blood	Monospot
Rapid BV test	Rapid strep antigen
Rapid flu A/B antigen	BNP
Urine pregnancy	Urinalysis

## **REPORTING TEST RESULTS**

Outpatient reports: The laboratory offers several options for the delivery of test results:

- Printers: Depending on the volume, providers may request a printer that will transmit reports directly to their office. The report frequency can be customized based on provider's needs.
- Automatic fax: Results can be faxed to the provider on a scheduled basis with stats broadcast as soon as they are complete.
- Delivery by courier: Scheduled morning and afternoon deliveries are available for local providers.
- Out of town providers: These reports are generated several times a day and are mailed and/or faxed to the providers.
- Electronic Reports: Malta Med Emergent Care has options for electronic reporting of results, including the routing of results through our regional health information exchange HIXNY.
- Contact the Laboratory LIS Coordinator (580-2810) for additional information.
- Result are available to providers enrolled with the HINXY provider portal

## **REPORTING CRITICAL VALUES/ALERT VALUES**

Critical Results: A laboratory result that indicates the presence of a life-threatening emergency, which may be corrected by appropriate and timely intervention. Critical values are always called by the technologist directly to the appropriate nurse or designee, who is responsible for communicating the value to an authorized provider in a timely manner.

Significantly Abnormal (Alert) Results: Results that are significantly abnormal but do not constitute a medical crisis. These are urgent results that may require prompt action by a responsible provider. The laboratory technologist will call the result to the appropriate nurse or designee as soon as possible.

Critical results and significantly abnormal results reported by reference laboratories are also included under this policy.

### **Critical Result Reporting:**

Once a critical value has been identified, the result is **immediately** called to the appropriate nurse or designee. The person receiving the result must read the result back to the technologist to ensure that it has been interpreted correctly. The procedure is as follows:

- During business hours: The technologist will call the physician’s office and give the result directly to a nurse or the physician.
- After business hours: the on call physician will be contacted by the technologist.  
Physician not available: In the event that the technologist cannot reach the appropriate physician to communicate the critical value, the facility’s administrative policy “*Critical/Alert Value Notification Policy*” will be activated. Results will be reported to the Emergency room physician who will address the critical result.

## CRITICAL/ALERT RESULTS

**Critical results:** *These results must be communicated to the responsible licensed caregiver within 90 minutes of initial recognition of the critical result by the notifying diagnostic area.*

**Alert Results:** *Should be communicated to the responsible caregiver within 8 hours but no later than the next business day. Department specific protocols apply.*

**Results are called unless noted otherwise:**

\*First instance only= No critical value in the same result range (high vs. low) in the past 5 days.

\*\*Broadcast or faxed only

CHEMISTRY/HEMATOLOGY			
Acetaminophen (ug/mL)	High	≥50	
Amylase (U/L)	High		>500**
BUN (mg/dL)	High		>100**
Calcium (total) (mg/dL)	High	>13.0; first instance only	>13.0; not first instance
	Low	<7; first instance only	<7; not first instance
CK (IU/L)	High		>1000
CKMB (ng/ml)	High	>5.0 with a relative index of ≥4; indicative of acute MI; first instance only	
Creatinine (mg/dL)	High		>4.0**
Glucose (mg/dL)	High	>600	
	Low	<50	
	High	>400	
	Low	<40	
Glucose-Urinalysis- <i>Birth to 18 years</i>		Any positive result	
Hemoglobin (g/dl)	High	>20	
	Low	<7.0	<8.0
		Critical drop: > 3	
Hematocrit (%)	High	>60	
	Low	<22	
	Low	<30	
<i>Birth- two weeks</i>			
INR	High	>5	
Lactate/Lactic acid (mmol/L)	High	≥2.5	
Lithium (mmol/L)	High	>1.5	
Magnesium (mg/dL)	High	>5.0; first instance only	>5.0; not first instance
	Low	<1; first instance only	<1; not first instance

Manual Differential			Blast or malignant cells; first instance only
PH	High	>7.6	
	Low	<7.2	
Phosphorus (mg/dl)	Low	<1.0	
Platelets (x 10 <sup>9</sup> )  <i>Birth- two weeks</i>	High	>1000; first instance only	
	Low	<30; first instance only	
	High	>900	
	Low	<50	
Potassium (mmol/L)	High	>6.0	
	Low	<2.8	
PTT	High	>80 NO heparin	
		>100 (patients on heparin)	
Salicylate (mg/dL)	High	≥30.0	
SGOT (IU/L)	High		>500**
SGPT (IU/L)	High		>500**
Sodium (mmol/L)	High	>160	
	Low	<120	
Total Bilirubin (mg/dL) <i>Birth- two weeks</i>	High	>15.0	
Troponin (ng/ml)	High	>0.6; indicative of acute MI; first instance only	
Valproic Acid (ug/mL)	High	>125.0	
WBC (x10 <sup>3</sup> μL)	High	>35; first instance only	
	Low	<1; first instance only	

Laboratory critical values revised: 8/3/15



# **SPECIMEN COLLECTION AND TRANSPORT**

## **SPECIMEN LABELING**

Laboratory results are used by physicians to provide quality patient care. Proper patient identification and specimen labeling is essential in providing accurate results that can safely be used in decision-making by the physician.

### **Identify the patient:**

Ask the patient to state their full name and date of birth prior to collecting the specimen. Specimen containers are to be labeled with proper patient identification in the presence of the patient and immediately after completing the collection procedure. (Employees of Malta Med Emergent Care should refer to the “*Patient Identification*” and “*Specimen Labeling Policy*” for additional instructions on specimen labeling).

### **Additional information:**

To ensure proper specimen processing, the following information should be on the specimen label:

1. Patient full name and date of birth.
2. Specimen type and/or anatomic collection site
3. Date and time of collection
4. Initials of the collector

Refer to Pathology and Blood Bank for additional information.

## **SPECIMEN TRANSPORT:**

All specimens are considered biohazardous. Specimens must be collected in sterile leak-proof containers and placed into a sealable plastic bag prior to transport to the laboratory. Lab slips and specimen labels must be left outside the bag to prevent contamination.

Transport specimens to the laboratory as soon as possible. See “Table of Diagnostic Tests” and for specific information on specimen storage and transport. Improper specimen storage can adversely affect test results.

## **REJECTION OF SPECIMENS:**

Specimens will be rejected if the following conditions are not met:

1. Patient identification on specimen is omitted, illegible, insufficient or incorrect.
2. The apparent condition of the specimen indicates that it is unsatisfactory for testing or that it is inappropriate for the test requested.
3. It has been collected, labeled, preserved or otherwise handled in such a manner that it has become unsatisfactory or unreliable as a test result.
4. It is perishable and the time lapse between the collection of the specimen and its receipt by the laboratory is of such duration that the test finding may no longer be reliable.

The laboratory will promptly contact the provider/patient care unit regarding specimen rejections.

## **COLLECTION PROTOCOLS**

Refer to the Malta Med Emergent Care Laboratory Specimen Reference Guide for general collection instructions

## **SPECIAL SPECIMEN COLLECTION REQUIREMENTS/NOTES**

### ***Hematology:***

**PT, PTT, & D-DIMER:** All tests must be collected in a blue-top tube containing 3.2% buffered sodium citrate. Evacuated collection tubes must be filled to completion to ensure a proper blood-to-anticoagulant ratio. The sample should be mixed immediately by gentle inversion at least six times to ensure adequate mixing of the anticoagulant with the blood.

A discard tube is not required prior to collection of coagulation samples unless a winged blood collection kit is being used. **Winged blood collection kits (butterfly) must use a discard lead tube prior to collecting specimen tube to submit for testing.** This discard tube must be a blue-top tube containing 3.2% buffered sodium citrate or a non-additive tube.

If it is necessary to draw from an in-dwelling line, flush with saline: to avoid Heparin contamination and dilution of specimen, a minimum of 5 cc of blood should be discarded before collecting the specimen.

- PT specimens are stable for 24 hours.
- Fibrinogen and D-Dimers should be performed within 4 hours of collections.
- PTT specimens should be centrifuged within 1 hour of collection. If testing cannot be performed within one hour of collection, frozen plasma must be submitted. Specimens should be centrifuged for at least 15 minutes at 1500xg to produce platelet-poor plasma and the plasma **quick frozen** and maintained in this condition until tested.

### **Notes:**

1. **High Hematocrit Samples.** Patients with an elevated hematocrit have a relatively low amount of plasma for a given whole blood (collection) volume. This tends to effectively increase the plasma citrate concentration. If the patient has a known hematocrit >55%, the amount of citrate in the collection tube must be decreased according to the formula below:

$$\text{Citrate volume} = (100 - \text{hematocrit}) / (595 - \text{hematocrit}) \times \text{total volume}$$

**Example:** Patient hematocrit = 60%

$$\begin{aligned} \text{Total volume} &= 5 \text{ mL (standard citrated plasma collection tube volume)} \\ (100 - 60) / (595 - 60) \times 5 &= 0.33 \text{ mL sodium citrate} \end{aligned}$$

2. **Plasma Processing.** Transfer the sample as soon as possible (preferably within 30 minutes of collection). Transfer plasma using a plastic pipette into a plastic tube. Note that glass **should not** be used because glass can activate the clotting cascade. Label each tube “**plasma, citrate.**” The specimen should be **frozen** immediately and maintained frozen until tested.

## ***Microbiology:***

### **Specimen Collection Guidelines**

ESwab Transport Systems consist of 1 flocked swab and 1 vial containing 1ml of transport media, all of which are provided in 1 package.

- **Do not remove transport fluid present in the transport tube.**

Collect specimen before administering antimicrobial agents when possible.

Collect specimen with as little contamination from indigenous flora as possible to ensure that the sample will be representative of the infected site.

Utilize appropriate collection procedures using sterile equipment and aseptic technique to collect specimens to prevent contamination of specimens during invasive procedures.

Collect an adequate amount of specimen. Inadequate amounts of specimen may yield false-negative results.

Collect specimens in a sturdy, sterile, leak-proof container.

- Sending a syringe is acceptable but the following steps must be performed:
  - **REMOVE THE NEEDLE** from the syringe.
  - **EXPEL ALL AIR** from the syringe.
  - Cap the syringe is tightly.
  - **\*\*DO NOT SEND A CAPPED SYRINGE IN A VACUUM TUBE SYSTEM!**

### **Unacceptable Specimens**

- Specimens received in leaking, cracked or broken containers.
- Swabs that have been delayed in transit more than 1 hour, if they are **NOT** in some type of system containing transport media.
- Specimens collected using swabs with cotton tips or wooden shafts.
- Specimens collected with calcium alginate swabs.
- Specimens with obvious (visually apparent) contamination.
- Specimens not appropriate for a particular test.
- Specimens submitted for anaerobic culture which by definition contain normal anaerobic flora (vaginal, GI, upper respiratory).
- Duplicate throat, urine, sputum, or stool specimens within a 24 hr. period.
- Specimens that are not the correct volume.
- Specimens in formalin.

## Blood Culture Specimen Type and Collection

**Test Name:** (BCUL) Blood Culture

**Media:** BacT/ALERT Aerobic (FA) Bottle (green cap), **Fill Volume:** minimal is 5 ml, maximum is 10 ml  
 BacT/ALERT Anaerobic (FN) Bottle (orange top), **Fill Volume:** minimal is 5 ml, maximum is 10 ml  
 BacT/ALERT Pediatric (PF) Bottle (yellow cap), **Fill Volume:** minimal is 0.5 ml, maximum is 5 ml

**Store and Transport:** Room Temperature (transport as soon as possible for optimum results)

Specimen Type	Collection/Container	Comments
<b>Neonates to 1 year</b>	BacT/ALERT Pediatric (PF) Bottle (0.5 to 1.5 ml...at least 1.0 ml is preferred)	<p>♪<b>Note:</b> <i>Recent studies have shown no difference in microbial recovery when blood specimens were drawn for culture simultaneously or at spaced intervals for up to 24 hours. Recent studies also have shown no significant differences in positivity rates of blood cultures obtained in relation to fever spikes of patients.</i></p> <p><b><i>Volume of blood collected is the most important variable in detecting bacteremia or fungemia.</i></b></p> <p>Single blood cultures should <b>NEVER</b> be drawn from adult patients.</p> <p>Blood cultures should not be repeated in 2 to 5 days because blood does not become sterile immediately following the start of antimicrobial therapy.</p> <ul style="list-style-type: none"> <li>• Exception: Patients with infective endocarditis.</li> <li>• Exception: Patients with <i>Staphylococcus aureus</i> bacteremia, where positive follow-up blood cultures at 48 to 96 hours were the strongest predictor of complicated <i>S.aureus</i> bacteremia.</li> </ul> <p>The use of surveillance blood cultures for earlier detection of sepsis should be limited to certain populations such as those in intensive care, undergoing transplantation or with vascular catheters.</p> <p>The optimal recovery of bacteria and fungi from blood depends on culturing an adequate volume of blood. <i>Pediatric patients often have higher numbers of microorganisms in their blood however low-level bacteremia may also occur.</i></p>
<b>Children: 1 to 6 yrs</b>	BacT/ALERT Pediatric (PF) Bottle (1 ml per year of age, divided between 2 blood culture orders)	
<b>Children weighing 30 to 80 lbs</b>	<p style="text-align: center;"><b>Total 8 to 20 ml</b> (divided between 2 blood cultures orders) ↓</p> <p>4 ml in BacT/ALERT Pediatric (PF) Bottle x 2 draws = <b>8ml total</b></p> <p style="text-align: center;">–OR–</p> <p>5ml in each BacT/ALERT Aerobic (FA) Bottle and Anaerobic (FN) Bottle x 2 draws = <b>20ml total</b></p>	
<b>Adults and children weighing &gt;80 lbs</b>	<p><b>7.5 to 10 ml in each bottle:</b> 1 BacT/ALERT Aerobic (FA) and 1 BacT/ALERT Anaerobic (FN) Vial</p> <p><b>5 to 7.5 ml in each bottle</b> (is <u>minimal amount</u>): 1 BacT/ALERT Aerobic (FA) Bottle and 1 BacT/ALERT Anaerobic (FN) Bottle</p>	<p><b>Frequency:</b> Blood Cultures should be drawn simultaneously or over a short timeframe.</p> <p>Drawing blood at intervals is only indicated when it is necessary to document continuous bacteremia in patients with suspected infective endocarditis or other endovascular infections.</p> <p><b>Generally: The present guideline is to collect 2 to 3 sets per episode. SEE CHART ON NEXT PAGE</b></p>

<b>Bacteremia/Fungemia</b>	<b>Recommendations</b>
<b>Acute sepsis, meningitis, pneumoniae, etc. (when immediate antimicrobial therapy is required)</b>	<ul style="list-style-type: none"> <li>Obtain 2 to 3 sets (of maximum volume) consecutively from separate sites before starting therapy.</li> </ul>
<b>Continuous bacteremia and Subacute infective endocarditis</b>	<ul style="list-style-type: none"> <li>Draw 3 sets from separate sites, spaced 30 to 60 minutes apart and begin therapy (do not obtain from indwelling catheters)</li> <li>If all are negative 24 hours later, obtain three more sets as described above.</li> </ul>
<b><u>A</u>cute infective endocarditis</b>	<ul style="list-style-type: none"> <li>Draw sets within a 30 minute period before starting empiric antimicrobial therapy.</li> </ul>
<b>Fever of unknown origin</b>	<ul style="list-style-type: none"> <li>Draw 2 to 3 sets in a 24 hr period</li> <li>Obtain 2 more sets after 24 to 36 hours.</li> </ul>
<b>Pediatric Blood Cultures</b>	<ul style="list-style-type: none"> <li>Draw 2 to 3 aerobic cultures within a 24 hour period</li> <li>Anaerobic cultures may be considered in high-risk groups</li> </ul>
<b>Patients on antimicrobial therapy</b>	<ul style="list-style-type: none"> <li>Collect sample prior to the next dose of antibiotic</li> </ul>

## Respiratory Culture (includes Gram stain) Specimen Type and Collection

**Test Name:** (RESCUL) Respiratory Culture and Gram Stain

**Storage/Transport:** Transport to the laboratory immediately at Room Temperature. **Refrigerate** at 2 to 8°C if specimen will be delayed less than 30 minutes.

Specimen Type	Collection/Container	Comments
<b>Sputum (Expectorated)</b>	Collected from a deep cough (first morning specimens are the best)  Sterile Container	<b>Follow current nursing procedure for cleaning of mouth before collection.</b>
<b>Sputum (Induced)</b>	Sterile Container	This is performed using an ultrasonic nebulizer to assist the patient in producing a suitable specimen for testing.
<b>Endotracheal Aspirate</b>	Sterile Container	Trach specimens are susceptible to colonization within 24 hrs of collection.
<b>Tracheal Aspirate</b>	Sterile Container	
<b>Bronchoalveolar washing</b>	Bronchoscopy “surgical” collection placed in a Sterile Container	Bronchoalveolar washing is from the major airways which is the same area sampled by an endotracheal aspirate.  These are less suitable for culture than BAL specimens.
<b>Bronchoalveolar lavage (BAL)</b>	Bronchoscopy “surgical” collection placed in a Sterile Container	Bronchoalveolar lavage is from the distal respiratory bronchioles and alveoli.
<b>Bronchial Brush, Protected</b>	Bronchoscopy “surgical” collection placed in a Sterile Container	Bronchial Brush (PSB, protected specimen brushings) placed in nonbacteriostatic sterile saline (involved area is “brushed” and the brush is withdrawn into an inner cannula, which is withdrawn into the outer cannula to prevent contamination as it is removed).

## GC Culture Specimen Type and Collection

**Test Name:** (GCCUL) GC Culture

**Media:** JEMBEC Collection and Transport System (provided by the Microbiology Laboratory)

**Storage/Transport:** See Comment section below. Transport at **Room Temperature** as soon as possible.

**DO NOT REFRIGERATE!!**

Specimen Type (Source)	Collection/Container	Comments
<ul style="list-style-type: none"> <li>• Pharyngeal</li> <li>• Urethral</li> <li>• Rectal</li> <li>• Conjunctiva</li> <li>• Vitreous or aqueous fluid from eye (bacterial endophthalmitis)</li> <li>• Vaginal (preteen-aged females suspected of sexual abuse)</li> <li>• Endocervix (Bartholin's glands)</li> <li>• Epididymis</li> <li>• Disseminated Gonococcal Infection (DGI)                             <ul style="list-style-type: none"> <li>○ Endocervix (female)</li> <li>○ Urethra (male)</li> <li>○ Skin lesions</li> <li>○ Joint fluid (sterile body fluid) from wrist, knee, fingers, ankle or elbow.</li> <li>○ Blood</li> </ul> </li> <li>• Pelvic Inflammatory Disease (PID)                             <ul style="list-style-type: none"> <li>○ Endocervix</li> <li>○ Endometrium</li> <li>○ Fallopian tubes (females)</li> </ul> </li> </ul>	<p>Specimens are to be collected using rayon, dacron or flocked swabs and directly inoculated to a JEMBEC agar plate and a CAP agar plate (optional).</p> <p>Inoculate JEMBEC plate in "Z" pattern.</p>	<p><b>NOTE:</b> Vaginal swab specimens are <b>NOT</b> considered optimal for the diagnosis of gonorrhea in women and should be reserved only for the evaluation of preteen-aged girls with suspected sexually transmitted disease due to presumed sexual abuse.</p> <p><b>Transport:</b> Directly plated cultures (JEMBEC) must be transported to the laboratory in an increased CO2 environment.</p> <ul style="list-style-type: none"> <li>• <b>Place CO2 tablet (provided by the Micro Lab) in the specified area of the JEMBEC agar plate.</b></li> <li>• <b>Place the JEMBEC plate in the zip-lock bag (provided by the Micro Lab), seal and immediately transport at <u>room temperature</u> to the Microbiology Laboratory.</b></li> </ul>








## Wound Culture (includes Gram stain) Specimen Type and Collection

**Test Name:** (WDCUL) Aerobic Culture and Gram Stain

**Source:** Aspirate, Blister, Burn, Cyst, Drainage, Ear, Eye, Fistula, Incision, Lesion, Pus, Rash, Rectal, Skin/Superficial Wound, Wound, Miscellaneous

**Storage/Transport:** Store at Room Temperature/Transport at Room Temperature immediately or as soon as possible.

Specimen Type	Collection/Container	Comments
		<p> <b>To send a syringe:</b>  <b><u>REMOVE NEEDLE</u>, expel <u>ALL</u> air and tightly cap syringe.</b></p>
<b>Biopsy of Open Wounds (Best Sample)</b>	Sterile Container or Syringe 	<ul style="list-style-type: none"> <li>Debride if appropriate and thoroughly rinse with sterile saline prior to collection.</li> <li>Obtain specimen by biopsy from the leading edge of the lesion or base of the infected area, where pathogens should be present and colonizing organisms are less likely to occur.</li> </ul>
<b>Fine Needle Aspirations</b>	Sterile Container or Syringe 	
<b>Aspirates of Closed Wounds</b>	Sterile Container or Syringe 	<ul style="list-style-type: none"> <li>Cleanse (disinfect) skin or mucosal surfaces as for a blood culture collection.</li> <li>Obtain culture by needle and syringe aspiration from deeper pockets beneath superficial debris.</li> </ul>
<b>Infected Viable Tissue</b>	Sterile Container	<ul style="list-style-type: none"> <li>Submit tissue, placed on top of sterile gauze wet with nonbacteriostatic saline, in a sterile, leak proof container.</li> </ul>
<b>Pus</b>	Sterile Container or Syringe 	<ul style="list-style-type: none"> <li>Aspirate (5 ml the best) the deepest portion of the lesion or exudates with a needle and syringe.</li> <li>Aspirate or collect pus from bite wounds at the time of incision or debridement and not when the wound is fresh.</li> </ul>
<b>Exudates from the Deep Portion of Lesions</b>	<b><i>ESwab Transport System*</i></b>	<p><b><i>*Swabs are the <u>least</u> appropriate specimens, as the organisms isolated may only be colonizing the area and may not be involved in the infective process.</i></b></p> <ul style="list-style-type: none"> <li>Remove superficial debris by thoroughly irrigating and cleansing the wound with bacteriostatic sterile saline.</li> <li>Swab the area where there is evidence of pus or inflamed tissue.</li> </ul>

## AFB Culture Specimen Type and Collection

**Test Name:** (AFBCUL) AFB Culture (Direct Smear) and (AFBSMCUL) Acid Fast Smear & Culture (performed at LabCorp Reference Laboratory)

**Please Note:** Only the Direct Smear (Kinyoun Cold Acid-fast Bacilli Stain – Carbol Fuchsin Stain) is performed at Saratoga Hospital Laboratory. The specimen will be sent to LabCorp Reference Laboratory for a concentrated acid fast smear & culture (with reflex to identification and susceptibility testing).

- This culture will often detect *Nocardia* species and other aerobic actinomycetes and identification, and susceptibility appropriate for these organisms will be included.
- Identification by DNA probes or sequencing and susceptibility to antimicrobial antibiotics that are appropriate to the organism will be performed at an additional charge.

**Storage/Transport:** Transport to the laboratory immediately at room temperature.

**Refrigerate** at 2 to 8°C if specimen will be delayed less than 30 minutes.

For any question related to testing procedure, source, container or transport requirements, please call the Microbiology Laboratory at 583-2551 prior to collection of specimen.

Source	Amount & Container	Comments
CSF	5 ml in a sterile, leak proof container	
Fasting Gastric Aspirate/Lavage	5 ml in a sterile, leak proof container	
Respiratory Aspirate • Induced sputum or tracheal aspirates • Bronchial washings or lavages	5 ml in a sterile, leak proof container	Collect aspirate using sterile, nonbacteriostatic saline or other noninhibitory medium
Sputum	5 ml in a sterile, leak proof container	Collect first morning sputum ( <b>NOT</b> saliva). Three (3) separate specimens collected from 3 separate days (8 to 24 hour intervals) are recommended.
Tissue or Biopsy	2 mm (cm <sup>3</sup> ) in a sterile, leak proof container	Swabs of exudate from skin sources are acceptable otherwise swab specimens should <b>NOT</b> be submitted. • Swab will be rejected without visible evidence of tissue present.
Urine	50 ml in a sterile, leak proof container	
Sterile Body Fluid (pleural, pericardial, chronic peritoneal dialysate)	50 ml in a sterile, leak proof container	
Bone Marrow	5 ml (or as much as possible) in a sterile, leak proof container	<b>* A Direct Smear will not be performed</b>
Whole Blood	10 ml In a green-top (sodium heparin) tube or Isolator Tube	<b>* A Direct Smear will not be performed</b>
Stool	10 ml in a sterile, leak proof container	<b>* A Direct Smear will not be performed</b>

## Urine Culture Specimen Type and Collection

**Test Name:** (URCUL) Urine Culture

**Please Note:** Gram stain can be performed if requested by provider. Order (GS) Gram Stain

### Storage/Transport

- Transport to the laboratory immediately after collection.
- If urine cannot be delivered to the laboratory **within 2 hours** after collection, **refrigerate up to 24 hours** (which includes the holding period and the transport period).
- If refrigeration is not possible and specimen transport will be delayed, collect specimen in transport tubes containing preservatives is acceptable.
  - Place at least 3ml of urine into the transport tube to avoid an inhibiting or diluting effect on the microorganisms that may be present.

Specimen Type	Collection
<b>Clean Catch</b> (Voided midstream)	<ul style="list-style-type: none"> <li>✚ Refer to <b>Patient Collection</b> section for collection instructions.</li> </ul>
<b>Foley</b> (Indwelling catheter)	<ul style="list-style-type: none"> <li>• Cleanse the catheter port with 70% alcohol moving in concentric circles away from the center.                             <ul style="list-style-type: none"> <li>○ Alcohol only aids in “pushing” any bacteria away from the collection site.</li> </ul> </li> <li>• Using a needle and syringe, collect urine through the catheter port.                             <ul style="list-style-type: none"> <li>○ <b>Never send urine obtained from a catheter bag.</b></li> </ul> </li> <li>• Aseptically dispense the urine collected directly into a disposable leakproof sterile container.                             <ul style="list-style-type: none"> <li>○ <b>Collected a minimum of 10 ml when possible.</b></li> </ul> </li> <li>• When collection is completed, screw cap tightly on container and label according to Laboratory Specimen Labeling Policy.</li> </ul>
<b>Straight Catheter Pediatric Catheter</b> (Insertion of a catheter into the urethra)	<ul style="list-style-type: none"> <li>• Refer to facility procedure for inserting a urine catheter.</li> <li>• This “in and out” procedure must be carried out with aseptic technique to avoid the risk of introducing microorganisms into the bladder.</li> <li>• Discard the initial 15 to 30 ml of urine and submit the next flow of urine for culture.</li> <li>• Aseptically dispense the urine collected directly into a disposable leakproof sterile container.                             <ul style="list-style-type: none"> <li>○ <b>Collected a minimum of 10 ml when possible.</b></li> </ul> </li> <li>• When collection is completed, screw cap tightly on container and label according to Laboratory Specimen Labeling Policy.</li> </ul>
<b>Suprapubic</b> (Needle inserted directly through the skin into the bladder to aspirate urine directly from the bladder)	<ul style="list-style-type: none"> <li>• Refer to facility procedure for patient preparation and needle insertion into the bladder.</li> <li>• Aspirate the urine using a needle and syringe.</li> <li>• Aseptically dispense the urine collected directly into a disposable leakproof sterile container.                             <ul style="list-style-type: none"> <li>○ <b>Collected a minimum of 10 ml when possible.</b></li> </ul> </li> <li>• When collection is completed, screw cap tightly on container and label according to Laboratory Specimen Labeling Policy.</li> </ul>
<b>Ileal Conduit</b> (Double catheter inserted into a cleansed stoma to a depth beyond the fascial level)	<ul style="list-style-type: none"> <li>• Remove the external device.</li> <li>• Cleanse the stoma with 70% alcohol followed by iodine moving in concentric circles away from the center.                             <ul style="list-style-type: none"> <li>○ Alcohol and iodine only aid in “pushing” any bacteria away from the collection site.</li> </ul> </li> <li>• Insert a double catheter into the cleansed stoma, to a depth beyond the fascial level and collect the urine.</li> <li>• Aseptically dispense the urine collected directly into a disposable leakproof sterile container.                             <ul style="list-style-type: none"> <li>○ <b>Collected a minimum of 10 ml when possible.</b></li> </ul> </li> <li>• When collection is completed, screw cap tightly on container and label according to Laboratory Specimen Labeling Policy.</li> </ul>

Specimen Type	Collection
<b>Cystoscopy</b> (Bilateral urethral catheterization)	<ul style="list-style-type: none"> <li>• Refer to facility procedure for patient preparation and collection procedure.</li> <li>• Aseptically dispense the urine collected directly into a disposable leakproof sterile container. <ul style="list-style-type: none"> <li>◦ Collected a minimum of 10 ml when possible.</li> </ul> </li> <li>• When collection is completed, screw cap tightly on container and label according to Laboratory Specimen Labeling Policy.</li> </ul>
<b>Prostatic Massage</b> (Manual massage of the prostate)	
<b>Nephrostomy</b> (Surgical procedure leaving tubing directly in the kidney)	
<b>Ureterostomy</b> (Surgical procedure leaving tubing in abdomen from ureter)	
<b>Kidney</b> (Surgical removal of urine directly from kidney)	

### Rejection Criteria

- Reject a urine specimen > 2 hours old and no evidence of refrigeration.
- Reject 24-hr urine collection.
- Reject urine from the bag of a catheterized patient.
- Reject specimens that have leaked.
- Reject specimen requests for anaerobic culture...*accept suprapubic bladder aspirates or specimens surgically obtained from the kidney (during nephrostomy)*.
- Reject Foley catheter tips.
- Reject any frozen to partially frozen specimen.
- For infants, a catheterized specimen should be collected.
  - Voided or bagged specimens are discouraged.
- Reject urine specimens collected by the same method within 48 hrs of receipt of the first specimen.
- Reject if specimen collection time and method of collection cannot be provided.

### References

1. Isenberg, Clinical Microbiology Procedures Handbook, 2<sup>nd</sup> Edition, Updated March 2007
- J. Michael Miller, A Guide to Specimen Management in Clinical Microbiology, 2<sup>nd</sup> Edition

## MOLECULAR DIAGNOSTICS

TEST	CONTAINER/ SPECIMEN	VOLUME	COLLECTION/TRANSPORT/STORAGE
N. gonorrhoea and/or Chlamydia	BD Probetec CT/GC swab Transport kit (female)	N/A	<ol style="list-style-type: none"> <li>1. Remove excess mucus from the endocervix with the large-tipped cleaning swab provided with kit.</li> </ol> <p><b><i>Do not use the large tipped swab for specimen collection.</i></b></p> <ol style="list-style-type: none"> <li>2. Insert the small tipped specimen swab into the endocervix and rotate the swab for 15 to 30 seconds. Avoid touching the vaginal walls with the swab.</li> <li>3. Verify that the Swab Specimen Transport Buffer is at the bottom. Unscrew the cap, insert the swab, and break the swab at the score line. Replace the cap securely making sure the swab fits into cap. Screw on the cap until it clicks into place.</li> <li>4. Label properly. Swab should be stored at 2 – 3° C for up to 4 days, or frozen at – 20° C.</li> </ol>
N. gonorrhoea and/or Chlamydia	BD Probetec CT/GC Urethral swab (Male)	N/A	<ol style="list-style-type: none"> <li>1. To ensure accurate test results, instruct the patient not to urinate for one hour prior to sampling.</li> <li>2. Insert the small-tipped specimen swab 2 to 4 cm into the urethra and rotate the swab for three to five seconds.</li> </ol> <p><b><i>Do not use the large tipped swab for specimen collection.</i></b></p> <ol style="list-style-type: none"> <li>3. Verify that all Swab Specimen Transport Buffer is at the bottom. Unscrew the cap, insert the swab, and break the swab at the score line. Replace the cap securely making sure the swab fits into cap. Screw on the cap until it clicks into place.</li> <li>4. Label properly.</li> <li>5. Swab should be stored at 2 – 3° C for up to 4 days, or frozen at -20° C.</li> </ol>
N. gonorrhoea and/or Chlamydia	Urine  Sterile Cup	15 – 20 ml <i>Max. 60 ml</i>	<ol style="list-style-type: none"> <li>1. Instruct the patient not to urinate for one hour prior to collection.</li> <li>2. The patient should collect the first 15 to 20 ml of voided urine (the first part of the stream) in a plastic, preservative free sterile cup.</li> <li>3. Close the cup securely and label appropriately.</li> <li>4. Refrigerate the specimen immediately at 2 – 8° C.</li> <li>5. Transport refrigerated.             <ol style="list-style-type: none"> <li>a. Store at 2– 8° C for up to 4 days or frozen at –20° C.</li> </ol> </li> </ol>



MALTA MED EMERGENT CARE

## PATIENT INSTRUCTIONS

### Instructions for collecting Hemocult Slides

- Do not collect samples during, or until three days after your menstrual period, or while you have bleeding hemorrhoids or blood in your urine.
- Do not consume the following drugs, vitamins and foods:

Avoid 7 days prior to and during the test period:

Aspirin or other non-steroidal anti-inflammatory drugs.

Avoid 72 hours prior to and during the test period:

Vitamin C in excess of 250 mg per day

(from all sources, dietary and supplemental)\*

Red meat (beef, lamb), including processed meats and liver

**Raw** fruits and vegetables

(especially melons, radishes, turnips and horseradish)

- Remove toilet bowl cleaners from toilet tank and flush twice before proceeding.
- Collect samples from three consecutive bowel movements or three bowel movements closely spaced in time.
- Label the slide with the patient name, date of birth and date of collection.
- Protect slides from heat, light and volatile chemical (e.g., iodine or bleach).
- Keep cover flap of slides closed when not in use.

For additional information please call 866-5430.

*\*Caution: some iron supplements contain quantities of Vitamin C, which exceed 250 mg per day.*



MALTA MED EMERGENT CARE

## PATIENT INSTRUCTIONS

### 24 Hour Urine Collection (With No Preservative)

**Note: Containers are available from the Malta Medical Emergent Care laboratory.**

### **DO NOT URINATE DIRECTLY INTO THE CONTAINER**

Urine should be collected in another clean container and then carefully poured into the 24 hour collection container.

### **TO COLLECT A 24 HOUR URINE SPECIMEN:**

1. Follow your physician's directions regarding food, drink, or drugs before and during collection.
2. Label the urine bottle with the patient's name and date of birth.
3. Empty bladder completely on awakening in the morning and discard this urine specimen. On the label provided with the container, record date and time under "start" and begin the test. (Example: 6/24/07, 7:00 a.m.)
4. All urine passed during the rest of the day and night for the next 24 hours must be poured into the container. **NOTE: Keep container refrigerated during collection.**
5. Make final collection the next morning at the exact time under start below. On the label provided with the container, record the date and time under "finish". (Example: 6/25/07, 7:00 a.m.).
6. Take the 24 hour specimen to the laboratory as soon as possible.



## Instructions to Collect a Midstream Clean Catch Urine Sample

*Read each step carefully before beginning to clean and collect the urine sample.*

- *If you do not understand these directions or have any questions, please ask for help.*
  - ✚ *If the sample is not collected properly, the test results will not give the provider the correct information needed.*

### 1. Wash Hands.

- **If assisting a patient, gloves are available for use.**

### 2. Open the cleansing wipe packet.

### 3. Clean the urethra (urinary opening), using each wipe only once.

#### Females:

- **Start with parting the skin (labia) around the vagina.**
- **Use the 1<sup>st</sup> wipe to clean one side of the skin (labia).**
  - ✚ **Wipe from front to back.**
- **Use the 2<sup>nd</sup> wipe to clean the other side of the skin (labia).**
  - ✚ **Wipe from front to back.**
- **Use the 3<sup>rd</sup> wipe to clean over the area where the urine comes out (urethra).**
  - ✚ **Wipe from front to back.**

#### Circumcised Males:

- **Clean the head of the penis with the wipe provided.**

#### Uncircumcised Males

- **Retract the skin (foreskin).**
- **Clean the head of the penis with the wipe provided.**

### 4. Throw used wipes in the garbage; please do not throw wipes in the toilet.

### 5. Be careful when picking up the specimen cup.

- **DO NOT put your fingers in the specimen cup.**
- **DO NOT touch inside the blue ring.**

### 6. Hold the blue tab on the outside of the cup and begin urinating in the toilet.

### 7. While urinating, pass the cup into the stream of urine and hold the cup until it is about ½ full.

### 8. Remove cup from stream of urine and finish urinating into the toilet.

- **Uncircumcised Males: be sure to replace the skin (foreskin).**

### 9. Unscrew the blue ring and replace it with the white lid.

- **DO NOT touch the inside of the white lid.**

### 10. Throw the blue ring in the trash.

### 11. Wash hands and return the specimen cup to the staff person.





**MALTA MED EMERGENT CARE LABORATORY**  
**211 CHURCH STREET, SARATOGA SPRINGS, NEW YORK 12866**  
**CYTOLOGY DEPARTMENT**  
**(518) 583-8442**

## **INSTRUCTIONS FOR COLLECTING SPUTUM FOR CYTOLOGY**

*Each patient is given a sputum cytology kit which includes:*

- ...Specimen container with 50% ethyl alcohol fixative*
- ...Cytology requisition*
- ...Zip-lock bag*

### **COLLECTION:**

- 1. Thoroughly cleanse mouth with water before collection.*
- 2. Cough deeply and expel sputum into specimen container.*
- 3. Close container and tighten cap.*
- 4. Write patient full name, date of birth, and date of collection on the specimen container.*
- 5. Complete the Cytology requisition.*
- 6. Place specimen container and requisition inside the zip-lock bag and seal.*
- 7. Deliver the specimen to Malta Med Emergent Care Laboratory.*

**Note:** **If a physician orders sputum for cytology X 3, repeat steps 1-5 for three consecutive mornings; be sure to write patient full name, date of birth and date of collection on each specimen container. Refrigerate each specimen and deliver to laboratory upon completion of three specimens.**

### ***Day(s) and time(s) test performed:***

*Monday – Friday 7:00 AM – 3:00 PM*

*Reference: The Art and Science of Cytopathology, Richard Mac DeMay, second edition, 2012.*



## MALTA MED EMERGENT CARE

**MALTA MED EMERGENT CARE LABORATORY**  
**211 CHURCH STREET, SARATOGA SPRINGS, NY 12866**  
**CYTOLOGY DEPARTMENT**  
**(518) 583-8442**

### **INSTRUCTIONS FOR COLLECTING VOIDED URINE FOR CYTOLOGIC EXAMINATION**

*Each patient is given a urine cytology kit which includes:*

- ..Specimen container with 50% ethyl alcohol fixative*
- ..Cytology requisition*
- ..Plastic cup*

#### **COLLECTION:**

- 1. A first morning voided specimen is not suitable.*
- 2. Have patient drink as much water as possible without causing any discomfort for 1 1/2 to 2 hours. During this period, the urine is discarded.*
- 3. At the end of this period, collect the next voided specimen in plastic cup, then immediately pour urine specimen into container with 50% alcohol fixative. Cap the specimen container tightly and refrigerate.*
- 4. Label specimen container with patient full name, date of birth, and date of collection.*
- 5. If the foregoing procedure cannot be carried out, an alternative procedure would be to submit a freshly voided urine sample after the bladder has been emptied earlier.*
- 6. Each specimen must be accompanied by a completed Cytology requisition. It is important to include all pertinent clinical information on the request form.*
- 7. Place specimen container and requisition inside the zip-lock bag and seal.*
- 8. Deliver the specimen to Malta Med Emergent Care Laboratory.*
- 9. Please call Malta Med Emergent Care Cytology Laboratory for additional information (518) 583-8442.*

***NOTE: If a physician orders urine for cytology x 3, repeat steps 1-5 for three consecutive mornings; be sure to write patient full name, date of birth and date of collection on each specimen container. Refrigerate each specimen and deliver to laboratory upon completion of three specimens.***

*Reference: Koss's Cytology of the Urinary Tract with Histopathologic Correlations, Leopold G. Koss, Rana S. Hoda 2012.*