SPECIMEN REQUIREMENTS

General Guidelines for Specimen Handling
Specimen requirements generally include the requested volume, storage temperature, and any special handling notes.

- The requested volume provides us with enough specimen to run at least two performances of the assay either singly or in duplicate.
- The minimum volume allows one single analysis including instrument dead volume.
- Storage temperature is either room temperature (15 -30°C), refrigerated (2 to 10°C) or frozen (-20°C to -70°C). If the temperature is not indicated, the sample may be stored and shipped at the temperature that is most convenient for you.
- If the volume is not enough to run all the tests our Client Services department will contact the ordering provider.
- If repeat or confirmatory tests cannot be performed, the report will indicate that the specimen quantity submitted was “QNS” (Quantity Not Sufficient) for additional testing.
- When serum or plasma is submitted for analysis, it is good practice to collect a volume of blood that is 2 to 2.5 times the volume of serum or plasma needed for the test.

THE PERFECT LAB SPECIMEN - It All Begins With You
The quality of a laboratory test results is dependent on many variables and it all begins with you. Your care, skill, and knowledge when preparing the patient and specimen are essential to the provision of the highest quality standards for testing and services. The patient must be properly prepared so that the best possible specimen can be collected. Also, the specimen should be properly processed, packaged and transported to the laboratory in a timely manner and under environmental conditions that will not compromise the integrity of the specimen. After all of these activities take place; a quality analysis can be performed. The specimen collection and handling process can be completed by you and your staff, or by referring your patient to a Concord Hospital Patient Service Center. Please contact the laboratory with questions, prior to collecting the specimen.

Health and Safety Precautions
Specimens must be handled in a safe manner and according to applicable legal requirements or guidance. Information on safe specimen handling may be obtained from the U.S. Occupational Safety and Health Administration (OSHA) and the Centers for Disease Control and Prevention (CDC). In handling human specimens, the goal is to protect health care workers, ancillary staff, as well as the general public from exposure to blood and to other potentially infectious body fluids. Besides following other specimen preparation procedures included in this directory, you should ensure that there is no leakage from or visible contamination outside the specimen container and that there are no needles or other sharps in the package that could cause injury or pathogenic exposure to anyone handling or opening the package and inner containers. We reserve the right to refuse to accept any transports that pose a safety hazard to our employees.
**Patient Preparation**

Many tests require that the patient be prepared in a specific way to ensure useful results. The best analytical techniques provide results that are only as meaningful as the quality of the specimen that has been submitted for analysis. Our goal is to provide you with the most useful diagnostic information possible. If you have questions about patient preparation for any test, please consult the General Test Listing section in this directory or call Client Services for further assistance. The brochure “Has Your Physician Ordered a Lab Test?” is available through Client Services that includes directions to our Patient Service Centers, fasting directions and specimen drop off information. Please contact Laboratory Client Services for Patient Lab Test Brochures.

**Fasting requirements**

For the majority of tests performed on serum, plasma or whole blood, a fasting specimen is preferred. Non-fasting specimens often contain fat particles that can interfere with many analytical procedures. Concord Hospital Laboratory fasting recommendations: Fasting Glucose- 8 hours, Lipid Profile – 12 hours

**Unstable Specimens**

Based on the stability and time requirements, any outpatient with a lab test requiring special tubes, handling or freezing (within 4 hours of being drawn) must have their blood drawn at the Memorial Patient Service Center located on the Concord Hospital campus. A list of the Unstable Specimens is located on the On-Line Concord Hospital Directory of Services Website.

**ACCEPTANCE/REJECTION OF LABORATORY SAMPLES**

**Rejection Guidelines**

Concord Hospital Laboratory has standards for specimen identification and specimen requirements that must be met for all patient laboratory testing. For all specimen labeling and collection guidelines, consult the test directory information in Directory Services available at Patient Care locations or electronically on the On-Line Concord Hospital Laboratory Directory of Services. Specimens meeting the criteria are accepted; specimens that do not meet criteria are subject to rejection and may not be accepted for testing. The appropriate health care provider is notified of specimen rejection. Specimens are accepted/rejected based on the following guideline:

**Pre- Analytical Rejection Guidelines**

Specimens not meeting the following guidelines will be rejected.

- **a.** Sample(s) must have two patient identifiers: Name and Date of Birth/Medical Record Number on specimen and match requisition information.
- **b.** Sample(s) must be collected in the proper tube or container in the sufficient volume for the test requested.
- **c.** Sample(s) must be collected, transported and/or stored within the proper time and temperature limits for the test requested.
- **d.** Samples will not be accepted for testing with attached needles or other sharps.
Analytical Rejection Guidelines
Samples that are hemolyzed, icteric or lipemic to such a degree that it may interfere with analysis, or technologist discretion when there is reason to believe that specimen has been compromised will be rejected. Technical Staff will review the degree of interference and Pathologists will be consulted on an as-needed basis.

Post-Analytical Rejection Guidelines
“Delta check” is used to define result variation of a certain percentage or absolute value difference from a previous result. The LIS is programmed to stop auto posting on selected analytes when a failed delta check occurs. When a delta variance occurs or when results are suspect, the technologist completing the test will follow the post analytical guidelines in the Specimen Acceptance and Rejection Procedure.

SPECIMEN LABELING
Specimen Label Requirements
Written orders must accompany all outpatient and client specimens; paperwork and samples are reconciled prior to processing. Information on the specimen label and requisition must match. Inpatient orders are placed through the computer and labels are generated for specimen collection.

The sample must have been labeled at the bedside or in the presence of the patient (out-patient). Under no circumstances may unlabeled specimens leave the immediate proximity of the patient. In the event that a bar code label is not available for in-patients, the phlebotomist will write required information on the tube or on label to be applied to specimen at the bedside. All specimens submitted to Concord Hospital Laboratory for testing must be properly labeled to establish identification and accurate patient testing. Unlabeled specimens are immediately rejected.

All specimen labels must include:
1. Patient’s First and Last Name
2. Patient Date of Birth
3. Date of Collection
4. Time of Collection
5. Initials of Person Collecting the Sample
6. Anatomic site (for Pathology and Microbiology specimens)

SPECIAL SPECIMEN INSTRUCTIONS
Blood Bank
Patients requiring Blood Bank pre-transfusion testing must be identified through the use of a Typenex bracelet. This Typenex bracelet number must be on the patient sample (apply red sticker with three letters and four numbers directly to tube, or write the information on the tube) before testing can be completed and products released.
Serum Specimens
Specimens submitted for serum testing clot for at least 30 minutes before centrifuging. Specimens must be spun within 2 hours for tests requiring serum, please refer to specific tests for stability requirements.

Body Fluids
- Must be delivered to the laboratory within 30 minutes of collection
- Fluids received in a collection device (such as a syringe) with a needle still attached will be rejected. All needles must be removed prior to transport to the Laboratory to reduce the risk of employee exposure.
- Spinal Fluids submitted must be labeled with the Tube Identification Number (1, 2, 3 or 4)

Cytology Smears
All slides for cytology examination should remain in the cardboard/plastic slide holder and be labeled with the patient’s First and Last name.

Histology and Cytology Specimens
Please refer to Histology and Cytology testing guide online on the Concord Hospital Lab Site or contact Histology Lab (227-7000, ext. 4660) or Cytology (227-7000, ext. 4665) for test information.

Microbiology Specimens
It is recommended that specimens sent for culture in which a gram stain is sought, a second swab from the same site should be obtained and submitted. If a second swab cannot be obtained, both the gram stain and culture will be performed from the single swab. Please write source on requisition and specimen. Anaerobic transport media is recommended for all anaerobic cultures.

Semen Analysis
Semen Analysis specimens must arrive at the main laboratory within 30 minutes of collection. Patient Instructions for Semen Analysis are available on the Concord Hospital Lab Site and through Laboratory Client Services.

Stool Specimens
All stool specimens sent in containers without preservative, must arrive in the lab within 2 hours of collection. Patient Instructions for Stool Collection are available on the Concord Hospital Lab Site and through Laboratory Client Services.

Urine Specimens
Urine specimens for routine urine testing are required to be refrigerated immediately upon collection if specimen is not delivered to Concord Hospital Laboratory within two hours. Please securely tighten lid of urine container. Urine spilled in transport may invalidate culture results.

24-Hour Urine
24-hour urine specimens must arrive at the main laboratory within two hours of collection. Proper collection and preservation of 24-hour urine specimens are essential for accurate test results, and patients should be carefully instructed in the correct procedure. Patient Instructions for 24 hour Urine Collection including dietary restrictions are available on the Concord Hospital Lab Site and through Laboratory Client Service.
**TRANSPORTING SPECIMENS**

**Storing and Security of Specimens**
Maintain specimens at room temperature or on cool packs, unless otherwise noted. We will provide a “lock box” for specimens awaiting pick-up, however the client is responsible for the security of the specimens.

**Transportation Bag**
All specimens collected should be placed into a plastic, biohazard specimen collection bag. Place the test requisition slip in the side pocket of the bag. Be sure matching specimens and specimen requisitions are placed in the same bag prior to transport. Care must be taken to ensure that specimens do not leak out of their containers, please firmly seat and tighten all container lids prior to transport.

**Needles, Sharps or Medical Waste**
Do not send any needles or other breakable medical equipment. Sending medical waste as a diagnostic specimen violates the law and may create a health hazard. Properly discard used needles or other sharps prior to transport. For tests requiring the syringes, the needle must be removed from the syringe and discarded and capped before sending to the laboratory.

**Specimen Tracking**
Each specimen must be logged onto a *Specimen Tracking Log* sheet, to verify its transport to the laboratory. Place the white copy of the *Specimen Tracking Log* in the large plastic Tracking Bag, to travel with the specimens to the laboratory. Retain the yellow copy in your office. *Specimen Tracking Log* sheets may be obtained by contacting the Laboratory Client Service department at (603) 227-7050.

**Courier Services**
Please call the Laboratory Client Services at (603) 227-7050 for all Laboratory Courier Requests.
Routine Courier Services are available from the Hospital Material Management Department, Monday – Friday 8:00AM – 5:30 PM for credentialed providers.
- Couriers provide specimen pick-up and delivery of test reports and supplies.
- A lock box may be used for the end of the day pick-ups.
To request a lock box, please contact Laboratory Client Services at (603) 227-7050.

**SPECIMENS SENT OUT FOR TESTING**

**Reference Lab Testing**
If a physician requests a test that is not performed at our facility, the specimen will be accepted by Concord Hospital Laboratory. Those tests will be entered into our computer and forwarded to a contracted, accredited Reference Laboratory. Upon receipt of the completed test information, the data will be entered into our computer and incorporated into our hard copy outpatient report.
Reference Lab Kits
A Reference Lab Kit is defined as any reference-testing specimen that is sent to a reference laboratory other than those contracted with Concord Hospital Laboratory. Providers occasionally communicate a preference to have particular tests referred to a specialized laboratory. The specialized laboratory may provide a ‘test kit’ including special tubes and instructions. In an attempt to standardized practices and recover our costs, the following steps are necessary:

- **It is recommended that the provider contact the laboratory client service department at least three (3) days prior to the patient’s arrival.**

- Concord Hospital Laboratory will process complete kits **Monday – Thursday from 7am – 12:30 pm only.** Please direct your patient to go to the Memorial Patient Service Center (and Dartmouth-Hitchcock PSC for DHC patients only).

- A complete reference lab kit includes:
  - A completed requisition for the intended reference lab with all necessary information.
  - Instructions for collection, packaging and shipping.
  - Specimen tubes.
  - All necessary packaging material.
  - Prepaid shipping and air bill and envelope.

The estimated cost for the processing and handling of Reference lab kits is based upon supplies provided by the Concord Hospital Laboratory, the processing and handling time of collected specimens, and shipping costs if a prepaid shipped is not provided.

Patients presenting with an incomplete kit or at a time outside the approved listed hours, will be asked to return when all necessary information/supplies have been obtained, or during appropriate draw times.

**NOTE** Results performed at reference laboratories outside our contracted network will not be electronically archived in our information system, nor will a paper copy be held in Medical Records. The report is sent directly to the ordering provider from the outside lab.

The patient will be registered, informed of the laboratory fee for this service and asked to sign a Responsibility for Payment of Service form. If the patient does not sign the form, the blood cannot be collected or processed. The patient will then be advised to consult his/her physician for further guidance. If the patient agrees, the test will be ordered in compliance with laboratory guidelines.