BLOOD COLLECTION TUBES

- **LIGHT BLUE TOP TUBE** – 2.7 ml draw and 1.8 ml draw  
  Liquid 3.2% sodium citrate anticoagulant

- **RED TOP TUBE** – 4 ml draw  
  Sprayed on clot activator

- **GOLD TOP TUBE (SST)** – 3.5 ml draw  
  Sprayed on clot activator with gel for serum separation

- **LIGHT GREEN TOP TUBE** – 3 ml draw  
  Lithium heparin anticoagulant with gel for plasma separation

- **PURPLE TOP TUBE** – 2 ml draw or 4ml draw or 6ml draw  
  Sprayed on K2EDTA Anticoagulant

The following tubes are available upon request through Catholic Medical Center’s Laboratory Customer Services:

- **NAVY BLUE TOP TUBE** – 6 ml draw (trace element)  
  No additive

- **NAVY BLUE TOP TUBE** – 7 ml draw  
  Na Heparin

- **NAVY BLUE TOP TUBE** – 6 ml draw  
  K2EDTA anticoagulant

- **GREEN TOP TUBE** – 4 ml draw  
  Sodium heparin anticoagulant

- **GRAY TOP TUBE** – 6 ml draw  
  Powder sodium fluoride / potassium oxalate anticoagulant

- **YELLOW TOP TUBE** – 8.5 ml draw  
  Liquid ACD solution A

- **YELLOW TOP TUBE** – 6 ml draw  
  Liquid ACD solution B

- **YELLOW TOP TUBE** – 8.3 ml draw  
  SPS (Sodium Polyanelthol Sulfonate)

After specimen collection, all tubes - with the exception of the Light Blue Top tube (Sodium Citrate) - are to be gently inverted 8-10 times. This will ensure the proper distribution of additives with the specimen. The Light Blue Top Sodium Citrate tube should be gently inverted only 3-4 times to avoid activation of platelets which could skew test results.

Gold and red top tubes should be allowed to clot for a minimum of 30 minutes and centrifuged within a maximum of 2 hours after collection. Serum for the red top tube must be removed as soon as possible from the cells to maintain the integrity of the specimen. Extra red top tubes that are collected in the emergency will only be viable for one hour on arrival in the lab.
### BD Vacutainer® Venous Blood Collection Tube Guide

For the full array of BD Vacutainer® Blood Collection Tubes, visit www.bd.com/vacutainer.

Many are available in a variety of sizes and draw volumes (for pediatric applications). Refer to our website for full descriptions.

<table>
<thead>
<tr>
<th>BD Vacutainer® Tubes with BD Hemogard™ Closure</th>
<th>BD Vacutainer® Tubes with Conventional Stopper</th>
<th>Additive</th>
<th>Inversions at Blood Collection*</th>
<th>Laboratory Use</th>
<th>Your Lab’s Draw Volume/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>Red/Gray</td>
<td>• Clot activator and gel for serum separation</td>
<td>5</td>
<td>For serum determinations in chemistry. May be used for routine blood donor screening and diagnostic testing of serum for infectious diseases. Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 30 minutes.</td>
<td></td>
</tr>
<tr>
<td>Light Green</td>
<td>Green/Gray</td>
<td>• Lithium heparin and gel for plasma separation</td>
<td>8</td>
<td>For plasma determinations in chemistry. Tube inversions ensure mixing of anticoagulant (heparin) with blood to prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>Red</td>
<td>Red</td>
<td>• Silicone coated (glass) and clot activator, Silicone coated (plastic)</td>
<td>0</td>
<td>For serum determinations in chemistry. May be used for routine blood donor screening and diagnostic testing of serum for infectious diseases. Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 60 minutes.</td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>Gray/Yellow</td>
<td>• Thrombin</td>
<td>8</td>
<td>For stat serum determinations in chemistry. Tube inversions ensure mixing of clot activator (thrombin) with blood to activate clotting.</td>
<td></td>
</tr>
<tr>
<td>Royal Blue</td>
<td></td>
<td>• Clot activator, plastic serum and K₂EDTA (plastic)</td>
<td>8</td>
<td>For trace-element, toxicity, and nutritional chemistry determinations. Special stopper formulation provides low levels of trace elements (see package insert). Tube inversions ensure mixing of either clot activator or anticoagulant (EDTA) with blood.</td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td></td>
<td>• Sodium heparin and Lithium heparin</td>
<td>8</td>
<td>For plasma determinations in chemistry. Tube inversions ensure mixing of anticoagulant with blood to prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>Gray</td>
<td></td>
<td>• Potassium oxalate/sodium fluoride</td>
<td>8</td>
<td>For glucose determinations. Oxalate and EDTA anticoagulants will give plasma samples. Sodium fluoride is the anticoagulant agent. Tube inversions ensure proper mixing of additive with blood.</td>
<td></td>
</tr>
<tr>
<td>Tan</td>
<td></td>
<td>• K₂EDTA (plastic)</td>
<td>8</td>
<td>For load determinations. The tube is certified to contain less than .01 µg/mL (ppm) lead. Tube inversions prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>Yellow</td>
<td></td>
<td>• Sodium polyethel sulfonate (SPS)</td>
<td>8</td>
<td>SPS for blood culture specimen collections in microbiology:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Acid citrate dextrose additives (ACD):</td>
<td></td>
<td>ACD for use in blood bank studies, HLA phenotyping, and DNA and paternity testing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solution A - 22.0 g trisodium citrate, 8.0 g tric acid, 24.5 g dextrose</td>
<td>8</td>
<td>Tube inversions ensure mixing of anticoagulant with blood to prevent clotting.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solution B - 13.2 g trisodium citrate, 4.8 g tric acid, 14.7 g dextrose</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lavender</td>
<td>Lavender</td>
<td>• Liquid K₂EDTA (glass) and spray-coated K₂EDTA (plastic)</td>
<td>8</td>
<td>K₂EDTA and K₂EDTA for whole blood hematology determinations. K₂EDTA may be used for routine immunohematology testing, and blood donor screening. Tube inversions ensure mixing of anticoagulant with blood to prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td>• K₂EDTA with gel</td>
<td>8</td>
<td>For use in molecular diagnostic test methods (such as, but not limited to, polymerase chain reaction [PCR] and/or branched DNA [bDNA] amplification techniques). Tube inversions ensure mixing of anticoagulant (EDTA) with blood to prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>Pink</td>
<td>Pink</td>
<td>• Spray-coated K₂EDTA (plastic)</td>
<td>8</td>
<td>For whole blood hematology determinations. May be used for routine immunohematology testing and blood donor screening. Designed with special cross-match label for patient information required by the AABB. Tube inversions prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td>Red/Light Gray</td>
<td>• Buffered sodium citrate 0.105 M (2.0%) glass 0.129 M (3.2%) plastic</td>
<td>3-4</td>
<td>For coagulation determinations. CTAD for selected platelet function assays and routine coagulation determination. Tube inversions ensure mixing of anticoagulant (citrate) to prevent clotting.</td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td></td>
<td>• Citrate, triphophyline, adenosine, dipyridamole (CTAD)</td>
<td>3-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td></td>
<td>• None (plastic)</td>
<td>0</td>
<td>For use as a discard tube or secondary specimen tube.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** BD Vacutainer® Tubes for pediatric and partial draw applications can be found on our website.

---

BD Diagnostics
Prenatal Systems
1 Becton Drive
Franklin Lakes, NJ 07417 USA

BD Global Technical Services: 1-800-631-0174
vacutainer_technicalservices@bd.com

BD Customer Service: 1-888-237-2762

www.bd.com/vacutainer

---

Printed in USA 08/08

VS5229-9

---

**Insert gently, do not shake.**

**The performance characteristics of these tubes have not been established for infectious disease screening in general. Therefore, users must validate the use of these tubes for their specific assay/technology/reagent system combinations and specimen storage conditions.**

**BD, BD and the BD Logo are trademarks of Becton, Dickinson and Company. © 2008 BD.**

---

BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2008 BD.
How to Prepare a Quality Sample
Using BD Vacutainer® PST™ Tubes

Invert 8-10 Times

- Gently invert 8-10 times immediately after collection to mix lithium heparin anticoagulant with blood.
- Insufficient mixing may lead to micro clot and fibrin strand formation.

Spin 10 Minutes

- Centrifuge at full speed
  1100 – 1300g for 13 mm Plus Plastic tubes
  1000 – 1300g for 16 mm Plus Plastic tubes
  for 10 minutes in a swing-bucket unit or 15 minutes for a fixed-angle unit (balance tubes in centrifuge).

Ready for Analysis

- Use in laboratory for plasma determinations in chemistry.

Gel barrier will form to separate plasma from red blood cells.
How to Prepare a Quality Sample
BD Vacutainer® Rapid Serum Tube

Allow blood to clot for a minimum of 5 minutes in a vertical position.

Observe a dense clot.

Centrifuge at
*4000g for 3 minutes,
2000g for 4 minutes, or
1500–2000g for 10 minutes
(balance tube in centrifuge),
at 23-27°C.

Barrier will form, separating serum specimen from clot.

Transport spun tube to laboratory.

Gently invert 5-6 times to mix clot activator with blood.

Invert 5-6 Times

Clot 5 Minutes

Spin as low as 3* Minutes

Ordering Information

Reference Number: 368774
Material: PET
Tube Size (mm): 13 x 100
Draw Volume (mL): 5.0
Closure Type/Color: BD Hemogard™/Orange
Label Type: Paper V-Notch™
Additive: Thrombin-based Clot Activator
Packaging Box/Case Quantities: 100/1000

For more information please contact your local BD Sales Consultant

BD Global Technical Services at 1.800.631.0174  BD Customer Service at 1.888.237.2762

BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company.
© 2010 BD  VS8876

Sufficient volume achieved if blood drawn falls above minimum fill indicator. For blood transfer, do not fill above illustrated dashed maximum line.

Note: The quantity of blood drawn into evacuated tubes varies with altitude, ambient temperature, barometric pressure, tube age, venous pressure and filling technique.

2.7 mL Draw Tube
13 mm x 75 mm Full Draw

1.8 mL Draw Tube
13 mm x 75 mm Full Draw

Maximum Fill*

Minimum Fill Indicator

Minimum Fill indicator represents the minimum volume of blood required for appropriate analysis.

A discard tube (without additives) must be used if only a citrate tube is to be drawn using a winged blood collection set. It is important to remove the air from the blood collection set to ensure the proper blood volume is obtained in the tube.

Do not fill tubes from other tubes or combine two partially filled citrate tubes.

If the specimen is drawn with a syringe, do not fill the BD Vacutainer® Citrate Tube beyond the level as illustrated on the reverse side of this guide. Allow the tube to draw the blood from the syringe using a BD Vacutainer® Blood Transfer Device if available. Do not force blood into tube.

Immediately after draw, gently invert tube 3 to 4 times. Do not shake.

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Size</th>
<th>Draw</th>
<th>Citrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>363083</td>
<td>13 x 75 mm</td>
<td>2.7 mL</td>
<td>3.2% (0.109M)</td>
</tr>
<tr>
<td>363080</td>
<td>13 x 75 mm</td>
<td>1.8 mL</td>
<td>3.2% (0.109M)</td>
</tr>
</tbody>
</table>

Minimizing Preanalytical Variables for Coagulation Tests

- Assemble needle in holder; always fully seat and hold a citrate tube on the back end of the needle while filling.
- Allow the tube to fill until the vacuum is exhausted and blood flow ceases.
- Tubes should fill between ±10% of the stated draw volume of the tube (CLSI guideline, Dec. 2003, Doc. H1-A5, Vol. 23, No. 33).
- Minimum fill indicator represents the minimum volume of blood required for appropriate analysis.
- A discard tube (without additives) must be used if only a citrate tube is to be drawn using a winged blood collection set. It is important to remove the air from the blood collection set to ensure the proper blood volume is obtained in the tube.
- Do not fill tubes from other tubes or combine two partially filled citrate tubes.
- If the specimen is drawn with a syringe, do not fill the BD Vacutainer® Citrate Tube beyond the level as illustrated on the reverse side of this guide. Allow the tube to draw the blood from the syringe using a BD Vacutainer® Blood Transfer Device if available. Do not force blood into tube.
- Immediately after draw, gently invert tube 3 to 4 times. Do not shake.
BD Vacutainer® PST™ Tubes contain spray-coated lithium heparin and a gel for plasma separation. They are used for plasma determinations in chemistry.

<table>
<thead>
<tr>
<th>Reference #</th>
<th>Tube Size (mm)</th>
<th>Draw Volume (mL)</th>
<th>Closure</th>
<th>Type</th>
<th>Color</th>
<th>Label type</th>
</tr>
</thead>
<tbody>
<tr>
<td>367960 ✓</td>
<td>13x75</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>368056 NEW</td>
<td>13x75</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>367961 ✓</td>
<td>13x100</td>
<td>3.5</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>367962 ✓</td>
<td>13x100</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>367963 ✓</td>
<td>13x100</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td>ST</td>
</tr>
<tr>
<td>367964 ✓</td>
<td>16x100</td>
<td>8.0</td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
</tbody>
</table>

▲ BD CLINICAL ADVANTAGE:
BD Vacutainer® PST™ Tubes eliminate the need to wait for a clot to form, making it an ideal tube for STAT testing, as well as for patients receiving anticoagulant therapy. The BD Vacutainer® PST™ Tube still provides the convenience of gel separation with the added advantage of improved turnaround time.

To learn more about the full product offering of BD Vacutainer® Specimen Collection Products or the educational materials and services offered by BD Diagnostics - Preanalytical Systems, please contact your local BD Sales Consultant.

BD Global Technical Services: 1.800.631.0174
BD Customer Services: 1.888.237.2362
www.bd.com/vacutainer
Sufficient volume achieved if blood drawn falls above minimum fill indicator.
For blood transfer, do not fill above illustrated dashed maximum line.

Note: The quantity of blood drawn into evacuated tubes varies with altitude, ambient temperature, barometric pressure, tube age, venous pressure and filling technique.

Minimizing Preanalytical Variables for Coagulation Tests

- Assemble needle in holder; always fully seat and **hold** a citrate tube on the back end of the needle while filling.
- Allow the tube to fill until the vacuum is exhausted and blood flow ceases.
- Tubes should fill between ±10% of the stated draw volume of the tube (CLSI guideline, Dec. 2003, Doc. H1-A5, Vol. 23, No. 33).
- Minimum fill indicator represents the minimum volume of blood required for appropriate analysis.
- A discard tube (without additives) **must** be used if **only** a citrate tube is to be drawn using a winged blood collection set. It is important to remove the air from the blood collection set to ensure the proper blood volume is obtained in the tube.
- Do not fill tubes from other tubes or combine two partially filled citrate tubes.
- If the specimen is drawn with a syringe, do not fill the BD Vacutainer® Citrate Tube beyond the level as illustrated on the reverse side of this guide. Allow the tube to draw the blood from the syringe using a BD Vacutainer® Blood Transfer Device if available. Do not force blood into tube.
- Immediately after draw, **gently** invert tube 3 to 4 times. **Do not shake.**

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Size</th>
<th>Draw</th>
<th>Citrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>363083</td>
<td>13 x 75 mm</td>
<td>2.7 mL</td>
<td>3.2% (0.109M)</td>
</tr>
<tr>
<td>363080</td>
<td>13 x 75 mm</td>
<td>1.8 mL</td>
<td>3.2% (0.109M)</td>
</tr>
</tbody>
</table>

BD Global Technical Services: 1.800.631.0174  
www.bd.com/vacutainer

BD, BD Logo and BD Vacutainer® are trademarks of Becton, Dickinson and Company.  
© 2007 BD   Patents Pending   10/07   VS5944-3
**Best Sites for Venipuncture**

Superficial veins of the upper limb

1. **Median cubital vein**
   A superficial vein, most commonly used for venipuncture, it lies over the cubital fossa and serves as an anastomosis between the cephalic and basilic veins.

2. **Cephalic vein**
   Shown in both forearm and arm, it can be followed proximally where it empties into the axillary vein.

3. **Basilic vein**
   Shown in the forearm and arm, it divides to join the brachial vein.

**Inappropriate Sites for Venipuncture**

- Arm on side of mastectomy
- Edematous areas
- Hematomas
- Arm in which blood is being transfused
- Scarred areas
- Arms with fistulas or vascular grafts
- Sites above an IV cannula

Follow your facility's phlebotomy procedures.

---

**BD Diagnostics**
Preanalytical Systems

BD Global Technical Services 1.800.631.0174
BD Customer Service 1.888.237.2762
www.bd.com/vacutainer

BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. ©2004 BD. 6/04 VS5730-2 www.bd.com/vacutainer
Troubleshooting Hints for Blood Collection

Proper insertion of evacuated tube

1. Correct
   For proper insertion of tube, carefully center the tube in the holder.

2. Incorrect
   Improper insertion resulting in an incompletely punctured stopper.

3. Incorrect
   Partially punctured stopper.

Troubleshooting Hints for Blood Collection

Needle positioning and failure to draw blood

Correct insertion technique:
Blood flows freely into needle.

Incorrect insertion:
Bevel on lower wall of vein does not allow blood to flow.
Bevel on upper wall of vein does not allow blood to flow.
Needle partially inserted into vein causes blood leakage into tissue.
Needle inserted through both vein walls.
Collapsed vein.

BD Diagnostics
Preanalytical Systems
BD Global Technical Services 1.800.631.0174
BD Customer Service 1.888.237.2762
www.bd.com/vacutainer

BD Diagnostics
Preanalytical Systems
BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. ©2004 BD. 6/04 V55731-2
www.bd.com/vacutainer
BD Vacutainer® Order of Draw for Multiple Tube Collections

**Designed for Your Safety**

Reflects change in NCCLS recommended Order of Draw (NCCLS H3-A5, Vol 23, No 32, 8.10.2)

### Closure Color

<table>
<thead>
<tr>
<th>Collection Tube</th>
<th>Mix by Inverting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BD Vacutainer® Blood Collection Tubes</strong> <em>(glass or plastic)</em></td>
<td></td>
</tr>
<tr>
<td>Blood Cultures - SPS</td>
<td>8 to 10 times</td>
</tr>
<tr>
<td>Citrate Tube*</td>
<td>3 to 4 times</td>
</tr>
<tr>
<td>BD Vacutainer® SST™ Gel Separator Tube</td>
<td>5 times</td>
</tr>
<tr>
<td>Serum Tube <em>(glass or plastic)</em></td>
<td>5 times (plastic) none (glass)</td>
</tr>
<tr>
<td>Heparin Tube</td>
<td>8 to 10 times</td>
</tr>
<tr>
<td>BD Vacutainer® PST™ Gel Separator Tube With Heparin</td>
<td>8 to 10 times</td>
</tr>
<tr>
<td>EDTA Tube</td>
<td>8 to 10 times</td>
</tr>
<tr>
<td>Fluoride (glucose) Tube</td>
<td>8 to 10 times</td>
</tr>
</tbody>
</table>

Note: Always follow your facility’s protocol for order of draw

*When using a winged blood collection set for venipuncture and a coagulation (citrate) tube is the first specimen tube to be drawn, a discard tube should be drawn first. The discard tube must be used to fill the blood collection set tubing’s “dead space” with blood but the discard tube does not need to be completely filled. This important step will ensure maintenance of the proper blood-to-additive ratio of the blood specimen. The discard tube should be a nonadhesive or coagulation tube.

Handle all biologic samples and blood collection “sharps” (lancets, needles, luer adapters and blood collection sets) according to the policies and procedures of your facility. Obtain appropriate medical attention in the event of any exposure to biologic samples (for example, through a puncture injury) since they may transmit viral hepatitis, HIV (AIDS), or other infectious diseases. Utilize any built-in used needle protector if the blood collection device provides one. BD does not recommend reshielding used needles, but the policies and procedures of your facility may differ and must always be followed. Discard any blood collection “sharps” in biohazard containers approved for their disposal.
PATIENT SAFETY IS IN YOUR HANDS.

- Label all specimens in the presence of the patient
- List the full legal name, First and Last
- List another unique identifier i.e. Date of Birth or Medical Record Number
- List the date and time of the collection
- List the collectors ID
PROPER SPECIMEN LABELING

LABELING

All specimens arriving in the laboratory must be properly labeled to support Patient Safety. Two unique identifiers for the patient must be on the specimen. The first and last name of the patient is mandatory. Either a date of birth or the medical record number is acceptable as the second identifier. The patient’s social security is not necessary. The date and time of collection, as well as the ID of the collector should be noted if not captured electronically.

The labeling information must be confirmed with the patient when ever possible before labeling the specimen by asking the patient to recite the spelling of their name and date of birth. If the patient is unable to confirm by spelling the name etc, the name of a care giver that provides confirmation of the identity of the patient should be listed. Any discrepancies must be reconciled.

Information presented on the order request and specimen labels must be in agreement. Additionally, this information should be concurrent to the information present on the patient identification band.

GUIDELINES FOR LABELING:

- Immediately after collection, legibly label the specimen in the presence of the patient.
- For positive patient identification ask the patient to spell their first and last name along with reciting their date of birth. Compare with the preprinted label if available. If no label is available, hand label the tube with the patient’s full name, date of birth, date and time of collection, and the code/initials of the collector. This information along with the patient's demographics should also appear on the requisition.

<table>
<thead>
<tr>
<th>Patient Identification Label For Specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
</tr>
<tr>
<td>DOB</td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Phleb Initials</td>
</tr>
</tbody>
</table>

Catholic Medical Center Laboratory    100 McGregor Street, Manchester, NH 03102
Labels whether electronically or manually generated should be:
- Placed vertically over the tube’s paper label with the name seated near the cap of the tube.
- Placed on straight, not wrapped around the tube or tube bottom, or overlapping the tube cap
- Free of wrinkles and tears
- Free of stray marks in the bar-coded area
- Placed on the tube in single thickness (only a single label placed on the tube)

**SPECIMEN REJECTION DUE TO LABELING ERROR**

The laboratory strives for 100% compliance when it comes to specimen labeling and Patient Safety. Specimens are considered mislabeled when there is a mismatch between patient specific identifiers and information accompanying the specimen. When insufficient, inconsistent, or inaccurate identification exists, the laboratory will recommend that a new specimen be obtained if feasible, based on the outline of the following charts (Retrievable Specimens, Irretrievable or Precious Specimens).

**LABELING GUIDELINES:** It is expected that lab specimens will be labeled at the point of collection in the presence of the patient. The labels are required to have 2 unique patient identifiers, Date and Time of collection and the collectors ID. Immediate notification to the provider is imperative for all discrepancies.

****************************************************************

**RETRIEVABLE SPECIMENS**

For Retrievable Samples to include but not limited to: urines, blood collections, Stool, Semen, Swabs, (except those obtained in the OR). Blood Bank specimens must match exactly and have all of the labeling criteria or they will be rejected.

*For specimens mailed to the laboratory by the patient, such as fecal occult blood cards, the second identifier can be the address and phone number of the patient as the card template displays. The requisition information accompanying the stool cards should match the name, address and phone number as written on the stool card.*

<table>
<thead>
<tr>
<th>Type of Labeling Error</th>
<th>QM Form/Discard Form/Precious Spec Form as appropriate</th>
<th>Specimen held/Processed off line until clarification</th>
<th>Pathologist Consult</th>
<th>Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlabeled specimen</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Last name only, no DOB or MR#</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>
## PROPER SPECIMEN LABELING

<table>
<thead>
<tr>
<th>Type of Labeling Error</th>
<th>QM Form/ Discard Form/ Precious Spec Form as appropriate</th>
<th>Specimen held/ Processed off line until clarification</th>
<th>Pathologist Consult</th>
<th>Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>First name only with or without DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Last name, first initial No DOB or MR#</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Last name, First Initial, DOB or MR#</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Last name, nickname DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Last name change due to marital status. Must have documentation from the patient that the name has changed as of a date. Info must be captured as a chartable comment in soft.</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y if not confirmed. NO If info is confirmed by the patient.</td>
</tr>
<tr>
<td>Lack of JR. SR.</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Full name, No DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Specimen label does not match the name on the requisition</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>The secondary label does not match the primary label</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Name is misspelled</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
</tbody>
</table>

## IRRETRIEVABLE SPECIMENS

To include but not limited to Body Fluids other than urine, Pathology Specimens, Pap Smears (by exception), Deep wound cultures collected in the OR.

<table>
<thead>
<tr>
<th>Type of Labeling Error</th>
<th>QM Form/ Discard Form/ Precious Spec Form as appropriate</th>
<th>Specimen held/ Processed off line until clarification</th>
<th>Pathologist Consult</th>
<th>Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlabeled specimen</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Last name only, no DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>First name only with or without DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Last name, first initial No DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Last name, First Initial, DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be Determined</td>
</tr>
<tr>
<td>Last name, nickname DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be Determined</td>
</tr>
</tbody>
</table>
PROPER SPECIMEN LABELING

<table>
<thead>
<tr>
<th>Last name change due to marital status</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>To be Determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of JR. SR.</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Full name, No DOB or MR#</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Specimen label does not match the name on the requisition</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>The secondary label does not match the primary label</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be determined</td>
</tr>
<tr>
<td>Name is miss spelled</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>To be Determined</td>
</tr>
</tbody>
</table>

✓ Decisions to discard the precious specimens will be made by the pathologist.
✓ Consult the pathologist “On Call”.
✓ For third shift, preserve the specimen until a pathologist can be reached in the early AM.
✓ Any documentation to accept the specimen for testing must be obtained in writing. This documentation must be signed off by the physician who procured the specimen (Precious Specimen Form completed)
✓ All discrepancies must be documented as a chartable comment in SCC order entry by a laboratory supervisor or manager.

The laboratory strives for 100% compliance when it comes to specimen labeling and Patient Safety.

Authorized by Weldon Sanford MD Laboratory Medical Director __________________________
4/21/2009 ad; updated 05/12/09 as. updated 10/04/10 as
Benefit of Proper Secondary Label Alignment

Examples of misaligned secondary labels

Steps to properly align secondary labels

✔ Step 1
Using the colored sidebar as your guide, position the secondary label on the tube, leaving the colored sidebar exposed.

✔ Step 2
Smoothly wrap the secondary label around the tube, leaving a clear window to the sample.

Benefits of Proper Secondary Label Alignment

- Sample visibility
- Ability to know the tube type if the closure is removed
- Easy to see fill indicator
- Consistent bar code location, creating instrument-readable labels

Provides visual guide for proper placement of secondary labeling

- Color-coded sidebar
- Color-coded notch
- Nominal fill indicator
- Tube type and additive concentration (if applicable)
- BD reference number
- BD sterile symbol
- BD lot number & expiration date
- Draw volume

A Perfect Alignment for a Perfect Solution!

For more information, please contact:
TimeMed Labeling Systems, Inc.
144 Tower Drive • Burr Ridge, IL 60527
Phone: 1.800.323.4840 • Fax: 1.800.548.5359

www.TimeMed.com

For more information, please contact:
BD Global Technical Services: 1.800.631.0174
BD Customer Service: 1.888.237.2762
www.bd.com/vacutainer

BD Diagnostics Preanalytical Systems
1 Becton Drive
Franklin Lakes, NJ 07417
In the event a specimen is deemed unacceptable, the ordering provider will be made aware of the status of the specimen and related testing as soon as possible.

The laboratory reserves the right to reject specimens that are:

- Improperly labeled - including but not limited to, missing two unique patient identifiers, incorrect spelling, or wrong date of birth.
- Resulting from inappropriate patient preparation for the test.
- Missing clinical information necessary for the interpretation of the test.
- Missing collection date and time.
- Submitted without an order or patient demographic information.
- Submitted in an inappropriate container to perform the test.
- Shipped or stored in unsuitable transport media.
- Submitted in an expired container/tube.
- Submitted in an inadequately filled tube.
- Submitted in specimen collection containers were leaking.
- Submitted in a way that may pose a safety hazard.
- Hemolyzed or unexpectedly clotted.
- Not maintained at optimum specimen storage /transport temperatures.
- Received after expected delivery time to the lab was exceeded.
- Compromised because the integrity of the specimen was not maintained.

Note:
For those specimens identified as irretrievable and suboptimal, testing can only occur when permission is given by signature of the ordering provider and/or approved by the pathologist. A Disclaimer will be appended to the test result stating the suboptimal condition.

The ordering provider/patient will be notified if recollection is desired.
**SPECIMEN PROCESSING**

To maintain the integrity of blood specimens, clotted samples should be centrifuged within two hours of collection but not before they have been allowed to properly clot, approximately 30 minutes.

To operate the centrifuge, balance the samples (a water balance tube of identical size and fill may be necessary). The separator tubes and red top tubes should be spun for 15 minutes at approximately 3000 rpms. The cycle of the centrifuge should not be interrupted once it is operational. Allow the centrifuge to come to a complete stop before opening the lid. Respinning separator tubes may cause tainted testing results. CMC will supply and maintain the fixed angle centrifuges for the processing of specimens that will be tested at CMC.

Inpatient blood specimens may be sent to the lab as soon as they are collected and labeled. The laboratory will take responsibility for processing the specimens using the automated processor. The instrument (Tecan) will electronically receive the specimen in the lab computer system, centrifuge, aliquot, and sort the specimens eliminating the risk of mislabeling the prodigy specimens.

Specimens collected in the outpatient locations or during down time may have to be separated after centrifuging to maintain the integrity of the testing sample. Red top tubes should never be sent without centrifuging and separating the specimen. Separating is accomplished by aspirating/removing the Serum/Plasma (liquid) component of the centrifuged specimen with a plastic disposable dropper and placing the contents of the dropper in a clean well-labeled transport tube with a secure cap. Avoid aspiration of the specimen close to the cell layer. Place the specimen at the appropriate storage temperature.

Usually when freezing specimens, the serum/plasma is the component that is frozen and the cells remain at refrigerated or room temperature and may even be immediately discarded. Specimens with limited stability should be processed, separated and stored as required. Specimens that are collected on ice should be chilled throughout the preparation process and stored frozen as soon as possible. Specimens that are frozen should not be allowed go through a freeze-thaw-freeze cycle.

Specimen such as urine should be kept refrigerated after collection to maintain the integrity of the specimen.

Please note; Metal testing requires special processing and transport equipment. See specific Metal Free Processing Procedure or call Customer support (663-8031) for assistance.
SPECIMEN PACKAGING

All diagnostic specimens submitted to the lab will be packaged in at least a primary and a secondary container. This precaution is to prevent the accidental exposure of potentially infectious samples to the staff and the public. The primary container is the vessel that contains the actual specimen, the collection tube, bottle, or jar etc. The secondary container is the packaging the primary container is placed in. Most often specimen tubes are placed in small zip lock plastic bags. Larger specimens may be placed in large plastic bags or hard walled plastic containers.

There are two sections to the plastic specimen transport bags used as secondary containers. The larger pouch is meant for the specimens and thinner pouch is used for the transport of the paper requisitions. Specimens and paperwork should be packaged separately in the same bag to prevent contamination in the event of a spill.

All lids to specimen jars, cups, jugs and the like are secured and tightened to prevent leakage. The leakage may render the specimen unable to be tested. All specimens that have been collected with a needle and syringe must have the needle removed and replaced with a stopper to prevent leakage.

Light sensitive samples must be packaged to prevent the specimen’s exposure to any light source. This can be accomplished by wrapping the primary container with aluminum foil.

Lab specimens are often susceptible to variations in temperature. Packaging specimens to maintain the optimum temperature specific to the testing is critical to the accuracy of the results.

Packaging for the specimen to travel in the pneumatic tube system requires additional attention. Along with the primary and secondary containers additional padding is required in the transport carrier. Please note the complete procedure is located on the CMC Intranet / Administrative Manual/Computerized Tube System.

Single specimens may be placed in a zip lock bag and the requisition may be placed in the attached pocket of the bag. Multiple blood specimens are preferably “ racked” as opposed to individual specimen bags. This saves time, cuts back biohazard waste, and lessens the ergonomic impact of zipping and unzipping multiple specimen bags. Specimens should stay in the upright position.
SPECIMEN PACKAGING

Inpatient sweep collection may be racked in the following manner, then placed in the black transport bag for delivery to the lab.

To Rack Specimens
Place specimens by patient in the slots of the rack, running the length of the rack. Place multiple tubes of each patient behind the original tube.

Patient Rack

<table>
<thead>
<tr>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
<th>#6</th>
<th>#7</th>
<th>#8</th>
<th>#9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

= Blue top tube  =Gold top separator tube  = lavender tube  = urine collection tube

OUTPATIENT PACKAGING

Completed requisitions are placed upside down in the order in which the specimens have been collected. The rack is then placed in a large zip lock bag for transport. All additional completed forms necessary to process the specimens, especially those specimens that will be forwarded to another testing facility, should be attached to the original requisition. Incomplete or missing forms could delay the turnaround time for resulting. These specimens are refrigerated until ready for pick up unless otherwise stated in the specific test requirements.

Beware! Exposing specimens to extreme weather conditions will compromise the integrity of the testing specimens. If placing specimens in a pick-up box for the courier, the box must be locked to insure the privacy of the patients and the security of the samples.

Cold packs should be added to the pick up boxes in extreme heat and bottles of hot water may be placed in the box in extreme cold. It is best to place the box in the foyer of the building to protect it from the extreme temperatures. Non blood specimens such as swabs and urine tubes can be placed in the rack as well. Any collection vessel that is not accommodated by the rack may be individually bagged and placed in the large zip bag for transport.
Special Handling of Specimens Intended for Light-Sensitive Analyte Testing
Transport these specimens in foil wrapping

Examples of light-sensitive analytes:
- Bilirubin
- Erythrocyte Protoporphyrin
- Carotene

Follow your facility’s procedures for specimen handling.

BD Diagnostics
Preanalytical Systems
BD Global Technical Services 1.800.631.0174
BD Customer Service 1.888.237.2762
www.bd.com/vacutainer

Special Handling of Chilled Specimens
Certain analytes must be preserved prior to analysis by keeping the specimen chilled. To ensure accurate results of such specimens, transport them in an ice slurry.

Examples of analytes requiring chilled specimen transport:
- ACTH
- Acetone
- Angiotensin Converting Enzyme (ACE)
- Blood Ammonia
- Catecholamines
- Free Fatty Acids
- Lactic Acid
- Pyruvate
- Renin Activity

Follow your facility’s procedures for specimen handling.

BD Diagnostics
Preanalytical Systems
BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. ©2004 BD. 6/04 VS5732-2
www.bd.com/vacutainer
# SPECIMEN STABILITY TIME SENSITIVE TESTS CHART

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Specimen Stability from Collection Time</th>
<th>Special Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>20 minutes on ice</td>
<td>Must be collected on ice and performed within 20 minutes of collection.</td>
</tr>
<tr>
<td>Beta-Hydroxy</td>
<td>30 minutes RT or Refrig</td>
<td></td>
</tr>
<tr>
<td>BNP</td>
<td>whole blood 7 hrs Room Temp or Refrig</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plasma 24 hrs - Room Temp or Refrig</td>
<td></td>
</tr>
<tr>
<td>B12 and Folate</td>
<td>8 hrs- Room Temp or Refrig</td>
<td>After 8 hrs protect from light and refrigerate</td>
</tr>
<tr>
<td>C-Diff</td>
<td>48 hr Refrigerated</td>
<td></td>
</tr>
<tr>
<td>CBC</td>
<td>24 hr- Room Temp</td>
<td>Clotted samples or those containing clots, fibrin strands, or platelet clumps, grossly hemolyzed specimens, insufficient volume, and those drawn above an IV are not acceptable. Sample stability is 24 hours at room temperature.</td>
</tr>
<tr>
<td>Cold Agglutinin</td>
<td>Room temperature</td>
<td>specimen clots at 37 degrees</td>
</tr>
<tr>
<td>Cryoglobulin</td>
<td>3 days at Room temperature</td>
<td></td>
</tr>
<tr>
<td>D-Dimer</td>
<td>24 hr- Room Temp or Refrig</td>
<td></td>
</tr>
<tr>
<td>Direct Bili</td>
<td>24 hr- Room Temp or Refrig</td>
<td>Protect from Light</td>
</tr>
<tr>
<td>Total Bilirubin</td>
<td>24 hr- Room Temp or Refrig</td>
<td>Protect from Light</td>
</tr>
<tr>
<td>ED Cardiac Panel-Biosite</td>
<td>4 hrs- Room Temp</td>
<td></td>
</tr>
<tr>
<td>ESR</td>
<td>24 hr- Room Temp</td>
<td>Insufficient volume (Tube must be 2/3 full), specimens more then 24 hours post-collection, hemolysis, clotted specimens, and improperly labeled specimens.</td>
</tr>
<tr>
<td>Fibrinogen</td>
<td>4 hr- Room Temp</td>
<td>Patient plasma should be tested within 4 hours (centrifuged or uncentrifuged) if stored in an unopened tube at Room Temp Short draw tubes, clotted and hemolyzed specimens are never acceptable.</td>
</tr>
<tr>
<td>HIT- Heparin Dependent Antibodies Screen-IgGAM</td>
<td>Separated plasma: freeze immediately 6 months frozen at -20</td>
<td>Plasma should be separated as soon as possible after collection, this test cannot be added on.</td>
</tr>
<tr>
<td>Herpes Viral Culture</td>
<td>4 days refrigerated, 6 months frozen</td>
<td>Viral Culture Medium(VCM) only</td>
</tr>
<tr>
<td>Homocysteine</td>
<td>1 hour- on ice</td>
<td>separate plasma and perform testing immediately, refrigerated plasma stable for 7 days</td>
</tr>
<tr>
<td>Ionized Calcium</td>
<td>Room temperature</td>
<td>Specimen should never have been uncapped.</td>
</tr>
<tr>
<td>Kleihauer Betke</td>
<td>2 hrs - Room Temp</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 hours on ice</td>
<td></td>
</tr>
<tr>
<td>Lactic Acid</td>
<td>1 hour- on ice</td>
<td>Must be collected on ice and performed within 1 hr of collection</td>
</tr>
<tr>
<td>Test Name</td>
<td>Specimen Stability from Collection Time</td>
<td>Special Instructions</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LDH</td>
<td>Specimen kept at Room Temp, serum/plasma must be separated from cells within 2 hrs of collection.</td>
<td>This test cannot be added-on.</td>
</tr>
<tr>
<td>Lupus Screen</td>
<td>90 days frozen, prepare platelet poor plasma, freeze immediately.</td>
<td></td>
</tr>
<tr>
<td>O&amp;P Screen</td>
<td>24 hrs - Room Temp if not in preservative 2 weeks if in preservative</td>
<td></td>
</tr>
<tr>
<td>Osmolality-Serum</td>
<td>3 hours at Room Temperature up to 10 hours refrigerated</td>
<td></td>
</tr>
<tr>
<td>Osmolality-Urine</td>
<td>3 hours at room temperature up to 24 hours refrigerated 1 week frozen</td>
<td></td>
</tr>
<tr>
<td>PFA</td>
<td>4 hrs- Room Temp</td>
<td>Patient samples are stable for up to 4 hours and must be stored at room temperature. Do not refrigerate or centrifuge sample prior to analysis. <strong>Do not use the pneumatic tube; hand deliver to the lab via transport personnel. Hemolyzed specimens not accepted.</strong></td>
</tr>
<tr>
<td>PT and/or PT Mixing Study</td>
<td>24 hr- Room Temp</td>
<td>Patient plasma should be tested within 24 hours (centrifuged or uncentrifuged) if stored in an unopened tube at Room Temp <strong>Short draw tubes, clotted and hemolyzed specimens are never acceptable. Frozen platelet poor plasma good for 2 weeks at minus 20 degrees, and good for 12 months at minus 70 degrees.</strong></td>
</tr>
<tr>
<td>PTT and/or PTT Mixing Study</td>
<td>4 hr- Room Temp</td>
<td>Patient plasma should be tested within 4 hours (centrifuged or uncentrifuged) if stored in an unopened tube at Room Temp <strong>Short draw tubes, clotted and hemolyzed specimens are never acceptable. Frozen platelet poor plasma good for 2 weeks at minus 20 degrees, and good for 12 months at minus 70 degrees.</strong></td>
</tr>
<tr>
<td>Retic</td>
<td>24 hr- Room Temp</td>
<td>Clotted samples or those containing clots, fibrin strands, or platelet clumps, grossly hemolyzed specimens, insufficient volume, and those drawn above an IV are not acceptable. Sample stability is 24 hours at room temperature.</td>
</tr>
<tr>
<td>Stool culture</td>
<td>24 hr- Room Temp no preservative 96 hrs preservative</td>
<td></td>
</tr>
<tr>
<td>TEG</td>
<td>2 hrs- Room Temp</td>
<td>Specimens are stable at room temperature for two (2) hours. They must not be refrigerated, nor centrifuged. <strong>Do not use the pneumatic tube.</strong></td>
</tr>
<tr>
<td>Urinalysis</td>
<td>Room Temp - 2 hours Refrigerated 24 hours In preservative 72 hours</td>
<td></td>
</tr>
<tr>
<td>Test Name</td>
<td>Specimen Stability from Collection Time</td>
<td>Special Instructions</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Urine Culture</td>
<td>24 hr- Refrig unpreserved; 48 hr preserved RT or Refrig</td>
<td></td>
</tr>
<tr>
<td>Urine Tox Screen- Bisosite</td>
<td>48 hrs Refrig</td>
<td></td>
</tr>
<tr>
<td>Viral culture</td>
<td>72 hours refrigerated</td>
<td>Viral Culture Medium (VCM) only</td>
</tr>
<tr>
<td>Rubeola Screen</td>
<td>48 hrs- Refrig</td>
<td></td>
</tr>
<tr>
<td>Varicella Zoster Screen</td>
<td>longer than 48 hrs if spec is frozen</td>
<td></td>
</tr>
</tbody>
</table>
TRANSPORTING AND TRACKING SPECIMENS

TRANSPORTING SPECIMENS

Specimens may be brought directly to the lab from within the hospital. Manually transporting the specimens must be done by placing the packaged specimens into the black specimen transport container marked “diagnostic specimens”. This bag is specifically designated for specimen transport use.

Laboratory staff pick up and transport surgical specimens to the pathology lab. There are special ergonomic carts designated specifically to handle the various size specimen containers. The cart carrier acts as the secondary transport container to prevent exposure to staff and the public. The carrier also serves to protect patient information.

Pneumatic Tube: A variety of hospital units and the Notre Dame Pavilion are connected to the main lab via a computerized pneumatic tube system. The tube system allows for the speedy transport of specimens from critical units directly to the laboratory. The specimens travel by special padded carrier to their designated location. Their arrival is announced with an audible bell within minutes of the original departure. Please refer to the “Computerized Pneumatic Tube Policy” located on the CMC intranet under Administrative policies. This policy speaks to the general operation, limitations, training and maintenance of the Computerized Tube System.

Outreach specimens are picked up by the courier and placed in temperature appropriate coolers for transport. The coolers are kept in the controlled environment inside the vehicle to avoid exposure to the extreme seasonal temperatures in the trunk. Specimens are transported to the laboratory within the time required to maintain specimen integrity.

TRACKING SPECIMENS

It is the intent of Catholic Medical Center to ensure that all laboratory specimens accepted into the facility reach the appropriate testing area and have a traceable path from the specimen collection to receipt in the final testing location under safe, ergonomic, and HIPAA compliant conditions.

The ultimate goal is to integrate the various department systems to allow test order placement, tracking and receipt of these specimens electronically. The organization will work to that essential end.
TRANSPORTING AND TRACKING SPECIMENS

Current Tracking:
In-house specimens are managed by specific lab department pending lists, tracking specimens that are collected but not received in the lab.

Specimens are electronically tracked from the Patient Service Centers to the lab to eliminate lost specimens.

Tracking of Operating Room, Endoscopy and Radiology specimens is accomplished manually by the lab registration staff via sign off sheet.

Courier tracking for clients is limited to tracking at the specimen level only.