Central Processing and Phlebotomy Review Link Index

Central Processing

SOP Number:	**CCP010**	**Creation Date:**	June 8, 2005
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	June 8, 2005	
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/12	01	Pathologist Review	Dr. James Scherer
1/13	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/14	02	Supervisor Review	N. Lozano
11/2014	02	Revision-Updated 6.7	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
3/2015	02	Revision- 5.6, 5.7, 11.1	N. Lozano
4/2015	02	Revision-Updated 10.7.2	N. Lozano
6/2016	02	Revision-Updated 5.5,7.2,10.6	N. Lozano
3/2017	02	Revision-added 21.4, 21.5	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Central Processing

It is the policy of the Central Processing and Phlebotomy Department to accuratelly provide the bolk of the pre-analytical processing of laboratory specimens.

1.0 LABORATORY COMMUNICATION BOARD

1.1 This board provides employees with written documentation of Information pertinent to the operations of the CP department. Use this board to enter comments regarding:

Absences – inform the Lab Manager or Lead Technologist when an Employee calls in sick, to make arrangements for adequate staffing. Document call ins and tardiness data in Communication Book. Call in policy must be followed.

Meetings-date and time of meetings will be documented on board as well. Central Processing and Phlebotomy procedure, policy changes and clarifications are communicated through hospital email, department meetings, and one on one interaction with supervisor. A notice will be sent out via email explaining any procedural changes or revisions informing associates of these changes. Department meeting minutes will be saved on SharePoint and distributed via hospital email. Coaching tools, annual, mid-year evaluations and performance feedback will be communicated in private, one on one communication with supervisor and associate(s).

1.2 Any other information that assists in the smooth operation between shifts is handed off verbally, OSR, or specimen tracker. Department equipment and or LIS software malfunctions are reported to appropriate personal.

1.3 No badge –assocites are accountable for wearing their work badge. If work badge is damaged or lost, the associte will enter replacement request via LIS and or notifiy supervisor.
A KRONOS Time Adjustment form must be filled out for time correction(s) due to mis-punches.

2.0 PATHOLOGIST / ADMINISTRATION MAGNETIC BOARD

2..1 The magnetic board provides and updates location of the Pathologist and Laboratory Administrative personnel. A magnetic button designates the pathologist on call after 5 p.m., weekends, and holidays which will be paged using number posted.
*In case of an **Autopsy** is needed by one of the Facilities do the following:

Day Time

2.11 Document name of the Facility or Funeral Home where the Autopsy is needed.

2.12 Get the patient's chart from Medical Records or the floor and deliver to Pathologist's Conference room table. Content form must be sign by next of kin and doctor. Place content form in front of chart.

After 5 pm or Saturdays

2.13 Page and inform On Call Pathologist of Autopsy. Repeat page if no respond after 5-10 minutes and or call back from Pathologits.

2.14 After confirmation from Pathologist, notify requesting Facility confirmation was made and the estimated time of arrival.

2.2 Department will make the following **documentation of phone call and Pathologist paged** for FS;

2.21 Name of caller and their phone number
2.22 Specific site i.e SMH or SSH or SS
2.23 OR room and direct OR contact number
2.24 Physician or Surgeon's name
2.25 Any information about the case i.e. Frozen section will be made on CP Daily Activity Log for future reference and follow up.

2.3 **To page Patholgist** use icon Mobility Pager on computor desk top to access pager. Enter the following information when paging the On Call Pathologist **SMH FS Rm "___" and Phone # "___"** (please include area code and phone #) ie. SMH FS RM5 316-902-4280. Verify direct OR contact number is on the specimen requisition.

2.4 **Documentation for dispatching and or delivery of FS** specimen from Memorial Lab to Shorleine Histology Frozen Room (Mon-Fri 0700 – 0500) will be made on CP Activity Log for futrue reference.

3.0 CENTRAL PROCESSING SPECIMEN COLLECTION LOG

3.1 Logbook #1, located in the CP area is the department daily activity log and contains specimen collection and updates concerning Hospital collections. (i.e.-unable, refused, phlebotomist dispatched). This logged information can be used to locate phlebotomist when paging for a STAT order or which person collected blood sample for compatiblity testing. Documentation of possible stroke patient specimens from ED are logged in Logbook #1 as per policy. See section Z :Laboratory Stroke Specimen Collection Policy.

3.2 Logbook #2, located at SML and at HPG in the OP area computer.

i.e Pathway for accessing log from Desk Top is as follow:

- My Computer
  - S:
    - LAB_SSH
      - Memorial
        - Phlebotomy
          - Main Lab Out Patient Log (SML OP)
          - HPG (HPG OP)

Select month in use, open file, use lower tab to open correct day. File/Save entered data before exciting.

3.3 CAP Specimen Recollection/Rejection Data Log is located in the CP area. Collected information is forward to the Laboratory Performance Improvement Coordinator and posted in QA board.

4.0 SPECIMEN COLLECTION, LOGGING, LABELING

4.1 Identification of the patient is crucial to ensure that the blood specimen is being drawn from the individual designated on the lab request form. Two positive identifiers will be used (i.e. name, acc#, DOB) as stated in NPSG #1 Improve the Accuracy of Patient ID.

4.2 To minimize unnecesarliy large blood draw volumes, patient's lab orders are reviewed to avoid unnecessary repetition of tests, minimize the use of standing orders, and reduce adverse consequences of excess venipuntures.
Orders are combined or added to prevent unnecessary multiple collections and collection tubes.

4.3 Each specimen to be collected by phlebotomist must be labeled with a pre-printed label created by the LIS. This label contains the patient name,hospital number, room number or assigned clinic and the specific test ordered. Each specimen must be inverted after collection and labeled at bedside and in presence of the patient. **DO NOT LEAVE THE PATIENT OR THE PATIENT'S ROOM UNTIL THE TUBES ARE COMPLETELY LABELED CORRECTLY.**

4.4 To alert the technologist of a STAT, a CODE, or Special Handeling of the specimen, color dots, insturction stickers, and or color border labels will be used on specimen vials. (i.e. Blue Dots, Red/Yellow borders, "Recollect"/"Pending Discharge" stickers)

4.5 The pathway for printing specimen labels (i.e. indicating to the LIS that The specimen is to be collected) is as follows:

- **CHRISTUS Spohn Health LAB **LIVE****
  - **FACILITY**
    - **CHRISTUS Spohn Hosp Memorial and or Hosp Shoreline**
      - **LAB ASSITANT**
        - **Phlebotomist Desk Top**

4.6 The use of COLLECTION BATCHS PREVIEW AND CREATE provides the phlebotomist with a LIS test requistion label that contains a unique specimen number which is used for specimen. The first 4 digits are the date (i.e. 0513 for May 13) followed by a colon and a letter for department identifier (U for urinalysis), 5 numerical digits and a priorty code (S for Stat, U for Urgent, R for Routine, T for Timed, and Z for ABG/VBG). This label also contains patient name, hospital identification number, and nursing unit location. This requisition label contains aliquot labels used for containers associate with that specimen. The aliquot label contains the patient name, account number, and the LIS specimen number.

4.61 Pathway to Print a Collection Batch

- Phlebotomist Desk Top
- Preview/Create.
- From and Thru Category.
  Accept defaults or change range as specified per site location.
- Select F12/OK.
- Select Category(ies).
  Use Create key to build the batch.
  Message window will appear displaying Batch # if reprinting of batch is required.
- Accept defaut printer or change location.

See **Diagram 22.0** at the end of this document for an example of Preview/Create sequence.

4.62 Pathway to Reprint a Collection Batch

- Phlebotomist Desk Top
- Coll Batch.
- Reprint
- Enter Category Batch ID, Date, and Batch # to reprint.
  If batch # is unknown, use F9 key to lookup list.
  At *Print window enter **N** and verify start location. Once correct batch # is located return to *Print window and enter **Y.**

See **Diagram 22.1** at the end of this document for an example of Batch Reprint sequence.

4.7 The CP daily activity log book is used by phlebotomist to provide a way to monitor patients collected, location of dispatched phlebotomists, FHC specimen arrival, and documentation of nursing home calls. A aliquot label or manual entry is used.

4.8 Specimens received in the Laboratoy must meet the specimen requirements and special instructions outlined for each Laboratory test in the **Laboratory Service Directory Manual.** All specimens will meet the integrity and quality Speciment Collection and Preparation Guide Lines.

4.9 Specimens arrive to CP by several methods. Pneumatic Tube System and or Hand delivered from nursing units, nursing homes, and or via couier. Specimens that are labeled with an addressograph or handwritten should be query in Meditech. The pre-printed label created by the LIS is printed and used to re-label specimen for processing after verification of the two positive identifiers and collection informatiion. (refer CP Meditech Manual).

4.10 Re-labeling a specimen with the pre-printed LIS label must be applied without covering the patient's name on the original label.

4.11 When handling specimens use Standard Precautions as outlined in the Central Processing personal protective equipment table (i.e. – gloves and lab coat).

5.0 ADD-ONS, EXTRA SPECIMENS, HOLD ORDERS, BODY FLUIDS

5.1 Single container submitted specimens requiring more than one department are delivered to the first appropriate depatment with all submitted LIS order labels. (i.e. BFCNT,BFGLU, UA, UDS,URCUL etc).

5.2 Add-ons or additional testing requested by nursing units on specimen that are already in the laboratory are order by the nursing units. If a nursing unit calls and informs lab perssonel that an add-on is needed, the specimen integrety is verified. If specimen is acceptable, the nursing unit will order test with "specimen in lab" in comment box, or lab personnel will edit comment box using canned message (i.e. CPL/CPLP)which includes the name of nursing staff who requestd to use specimen in lab. Enter the accession number of specimen in lab on add on order/label which will help the technologist locate and process the specimen faster. The label should be distrubuted to the appropriate department and the personnel of that department should be informed of the additional test.

5.3 Laboratory samples submitted as extra specimens (i.e physician anticipating additional orders) may be distributed to the respective departments for storage. These specimens must be properly labeled with a patients name, hospital account number/DOB, time collected and initials of collector. Three XXX may be used to indicate the specimen is

an extra collection. If the specimen is not labeled it is to be disposed of in a biohazardous container.

5.4 Extra body fluids that do not require cytology testing should be stored in a refrigerator. Each extra specimen must be labeled with the date and the words "EXTRA FLUID". This will help indicate when the specimen can be disposed of.

5.5 "HOLD" order is enter by lab personnel on a Care Area collected specimen or a CBN (Collected by Nurse) specimen with no LIS order. The HOLD order will have documentation of specimen collection date, time, collector, source, and name of nursing staff notified.

Specimen will be disposed as per set guidelines. Ref. section 11.1 for cancellation of "HOLD" order.

Discard specimen post stability range;

Specimen type	Storage	Stability Range
Urine	Refrigerated	48 hours
Respiratory	Refrigerated	48 hours
Swab	Refrigerated	48 hours
Stool	Refrigerated	48 hours
Body Fluid	Refrigerated	7 days
BC	Room Temp	24 hours

NOTE: CSF and or CODE BLUE specimen(s) are to be delivered to appropriate department.

5.6 CSF, unless otherwise specified the tubes will be processed as follows:

Tube#1 Chemistry
Tube #2 Microbiology
Tube #3 Hematology (deliver 1st) and Cytology (after Hematology**)
Tube #4 Hold tube for additional orders- Deliver to Chemistry

Receive all test orders, separate CSF vial with their corresponding orders and deliver to the apprpriate department(s). If only a small amount of CSF is obtained and/or less than 3 tubes are submitted to the laboratory, receive and deliver all CSF tube(s) to Microbiology.

**CP would only deliver specimens directly to Pathology if there were not corresponding Hematology orders or if a tube was specifically designated for Cytology/Pathology.

5.7 When CP department receives notification of a **suspected case of Highly Infectious Pathogens (i.e., CJD, Mad Cow Disease, 14-3-3 prion/protein test)** the associate taking the call is to Notify All laboratory sections by providing patient's information, location, and specimen ETA. All suspected cases of *Highly Infectious Pathogens,* the specimens (CSF tubes) are to be delivered to Chemistry department.

While prior to specimen submission was intended for the collectors we would want any notification, even after the fact, communicated to all.

6.0 SPECIMEN RECEIVING, BATCHING

6.1 Each specimen received in Central Processing Department must be labeled with a pre-printed label created by the LIS. This label contains the patient name, hospital number, room number or assigned clinic and the specific test ordered. Specimens "CBN", Collected By Nurse, are submitted with the Order Detail Form. Both specimen and form identifications are verified. (See section 6.3 if data does not match)

6.2 This Meditech barcode label also contain a specimen number that is unique for that specimen. The specimen number is utilized in the receiving process. The first 4 digits are the date (i.e. 0513 for May 13) followed by colon and a priority code (S for Stat, U for Urgent, R for Routine and T for timed).

6.3 The label contains a barcode and barcode number. The barcode number can be used for specimen identification on any hand-held barcode reader. The barcode number is translated by the LIS into the specimen number found on the label.

6.4 The pathway for receiving a specimen (i.e. indicating to the LIS that the specimen is in the laboratory and ready to be tested) is as follows:

- **CHRISTUS Spohn Health LAB **LIVE****
  - **FACILITY**
    - **CHRISTUS Spohn Hosp Memorial or Hosp Shoreline**
      - **LAB ASSITANT**
        - **Specimen Desk Top**
          (Single and Receive are automatically selected)

6.5 Press the Enter key or the Tab key to get to **Specimen** window. Enter the specimen number and press the Enter key or the Tab key. The LIS will bring up the associated patient name and information. Verify that the information is correct.

6.6 Enter the collection time and the identifier/initials of the person collecting the specimen.

6.7 Use comment box to identify a recollected specimen. The use of canned messages (i.e CPRS or 1RC) may be used in comment box for Nursing Staff, Doctor, and Laboratory staff. All updated comments must be enter before any other comment in box. (i.e. to be recollected-specimen hemolyzed-specimen clotted) This will eliminate any confusion/questions.

6.8 When all information has been entered, use the mouse to click on the Save button (green check mark) at the bottom right hand side or press F12 key. This files the information and makes the specimen available for further processing. See **Diagram 22.2** at the end of this document for an example of the receiving screen. Also, refer to the Client/Server Laboratory Module User Manual, Released 5.1 for more detailed information.

6.9 When all information has been entered, if an asterisk (*) appears on the **Ed CD** column **Collected** window between **Time** and **By** *this indicates a discrepancy between order date and collection date or the specimen has* been *marked to edit the collection date.* After information has been verified and the F12/OK key has been press, a window will appear to FILE, EDIT, or CANCEL specimen. Select FILE if order and collection information is correct, select EDIT if order date needs to be corrected (new specimen number will be assigned) or CANCEL if not sure and futher information is needed.

6.10 The pathway for batching a specimen (i.e. indicating to the LIS that the specimen is in the laboratory, ready to be batched, and to be sent out to be tested) is as follow:

- **Specimen Desk Top** (change task by selecting from right hand side)
  - **Site Batches**
    - **Enter/Edit**

6.11 At the Batch Date window enter **T** (today's date), use tab key/enter key to advance to Batch Number window. Enter **N (New)**. Use tab/enter key tto advance to Send From Site window. Enter **SMLAB**, use tab/enter key to advance to Send to Site window. Enter **SHLAB**. Tab/enter key to advance to Include Specimen Form Pool window. **Very important to enter "N".** Advance to Specimen window. Scan label or enter specimen number. Advance to Batch Status and enter **Send.** F12 to file.

6.12 The Print Destination window appears. Increase the Copies to be printed to 2. Select OK to print.

6.13 Submit one batch sheet with specimen and give second sheet to Chemistry department.

7.0 VERIFICATION AND REJECTION OF SPECIMEN

7.1 The meditech bar-code label should be placed on the specimen or if the label is not available, an addressograph label should be placed on each tube. All specimens submitted to lab must have two positive identifiers. The specimen must include the time of collection and the identifier/intials of the person collecting the specimen. Specimens must be collected in the appropriate tube for the test that is ordered. This information can be found on the right side of the specimen label.

(i.e. Lav5 for H&H/EDTA 5ml, Blue5 for PTT/SODIUM CITRATE 5ml, SST10 for K/SERUM SEPERATOR TUBE 10ml). The specimen will be visually acceptable draw. Short draws will be Rejected.

7.2 Any unlabeled specimen or discrepancies with submitted specimen and order requistion are to be discarded and the nursing station notified that the specimen has been rejected and a new specimen must be collected. (Refer to Laboratory Specimen Rejection Policy.) File a Risk Management "Risk Event Notification" using CHRISTUS Connect and document in the Central Processing Specimen Logbook. The reason for rejection and action taken with specimen must be part of the LIS specimen comment process for future referral.

7.3 If a specical means collecion specimen is received into the laboratory with any of the aforementioned labeling or identification problems the unit manger/shift coordinator is notified. The responsible collector will come to the laboratory and sign a "Specimen Acceptance of Responsibility" form followed by documentation of the "Risk Event Notification" and Central Processing Specimen Logbook. (Refer to Laboratory Specimen Rejection Policy)

8.0 RECOLLECTED SPECIMENS, EDITING

8.1 When "received" specimen are found to be unacceptable by department technologist, (i.e. hemolyzed, clotted), CP/phlebotomist will be requested to recollect specimen(s). The reason for recollection of specimen will be documented in the CAP Specimen Rejection Collection Data Log. The specimen will be unreceived in the LIS. The reason for unreceiving must be noted for future referral. (i.e. Time/reason for rejection- recollection/name of nurse notified followed by initals of documenter. Use F5 to access CP canned messages)

8.2 When a specimen is "not collected", enter reason in comment box found on the bottom left hand side of the screen. See **Diagram 22.3** at the end of this document for an example. (i.e. Time/reson specimen was not obtained/name of nursing staff notified/intials of editor. Use F5 to access CP canned messages)

8.3 The pathway for unreceiving or editing a specimen (i.e. indicating to the LIS that the specimen is to be colleted) is as follows:

- **Specimen Desk Top**
  - **Edit**
    - **Specimen Data**
      - **Unrecieve**

8.4 Enter the patient's account, select test from list and press the Enter key. The LIS will bring up the associated patient name and information. Verify that the information is correct.

8.5 Enter new collection catogory and time. Advance to append to comment box and enter Time/reason for rejection- recollection/name of nurse notified followed by initals of documenter. Advance to specimen box, verify specimen number to recollect. Remove other specimen numbers which maybe in same requisition or they too will be unreceive.

8.6 When all information has been entered, use the mouse to click on the Save button (green check mark) at the bottom right hand side or press F12 key. Unreceive order is now "ORD" status and can be pulled from Preview and Create menu.

9.0 DISTRIBUTION OF SPECIMENS TO RESPECTIVE DEPARTMENTS

9.1 Acceptable specimens that have been received into LIS are available for distribution to the Laboratory departments. Specimen are delivered to their respective departments promptly, notifying Technologists of special priorities (i.e. STAT or CODE BLUE). See Section 17.0 Delivery of Specimen from Central Processing which list the departments and vials.

9.2 STAT and or CODE specimens should NOT be batched for delivery while receiving and should be delivered to their respective departments immediately. See section Z :Laboratory Stroke Specimen Collection Policy for the essential step of the placement of a BLUE DOT on each tube with subsequent placement of speciment(s) in a BLUE BIO-BAG.

10.0 UNCOLLECTED SPECIMEN

10.1 The use of LAB PATIENT MASTER LOG and THE SPECIMEN TRACKING provides the phlebotomist with a LIS list of past and future patient lab orders which have not been collected. This information contains patients account number, patient's name, location, and time for collection. This helps phlebotomist monitor uncollected specimens in modules L (Lab), M (Micro), and B (Blood Bank).

10.2 The use of L modules provides the phlebotomists with a list of patient orders from the following departments;Hematology, Coagulation, Chemistry, Serology, and Urinalysis.

10.3 The use of M modules provides the phlebotomists with a LIS list of patients which have not been collected for Microbiology and pending PPD. See **Diagram 22.4** at the end of this document for an example. Labels can also be reprinted using specimen number available from list. Internal inquiry of order can be viewed by clicking on lefts side window which selects patient and order to view comments and or ordering detail questions.

10.4 The pathway for LIS Patient Master Log (i.e. indicating to the LIS that the specimen is to be collected) is as follow:

- **LAB ASSITANT**
  - **Mangement Reports Desktop**
    - **LIS Patient Master Log**

10.5 The pathway for LIS Specimen Tracking is as follow:

- **Specimen DeskTop**
  - **Tracking (Right Hand side)**
    -Laboratory
    -Microbiology
    -Blood Bank

10.6 For daily monitoring and editing of uncollected specimens, ACCEPT all set defaults for profile. i.e. SMCP, SHLPET, SHLCPPAV. Press F12 key. This files information and allows LIS to print to screen or printer of choice. Use mouse and click on Preview to print to screen or Print to print to paper printer.

10.7 For **Morning Collection Stacks** monitoring and editing of uncollected specimens, the same pathway is used but, before accepting set defaults for profile SMCP or SHCP, change COLB value to ORD.

Click Save or press F12 key. This files information and allows LIS to print to screen or printer of choice. Use mouse and click on Preview or Print.

10.7.1 To minimize blood collection volumes, deletions of duplicate orders, combining of orders, and line draw patients, orders are edited using the above printed information from the Print Master Log. Date/time stamp "Line Draw" sheets sent to floors and date/time stamp sheets as they are retuned to lab. See **Diagram 22.5** at the end of this document for an example.

10.7.2 Line Draw order labels are edited using canned message CPTS. Order collection label(s), vial(s) are packaged in bio-bag and send to the unit for nurse to collect.

10.7.3 From the Preview and Create screen, select and create batches 0000-0600.

10.7.4 Separate labels instacks, grouped by floors. Separate individually by patient, keeping each patient's labels attached. Pull out labels for the LINE DRAWS and place on line draw rack.

10.7.5 Calculate the total number of patient draws and divide among the Graveyard and AM phlebs.

10.7.6 Vial and LIS order label is bagged for each patient listed and send to appropriate floor for RN to collect.

11.0 SPECIMEN CANCEL/UNCANCEL

11.1 Test ordered on a patient will be CANCELLED if specimen was unobtainable, patient refused, Nursing unit requested cancellation, duplicate order, LIS order for "HOLD" specimen entered/recieved, and test was on wrong account number or wrong test. Nursing unit will be notified and reason for cancellation must be part of the cancellation process for future referral. See **Diagram 22.7** at the end of this document for an example.

11.2 The pathway for cancelling a specimen to be cancelled (i.e. indicating to the LIS that the specimen is to be cancelled) is as follows:

- **LAB ASSITANT**
  - **Specimen Desktop**
    - **Cancel**

11.3 Enter specimen number and press the Enter key, press F12 key, or use the OK button (green check mark). The LIS will bring up the associated patient name and information. Verify that the information is correct. Enter the reason for cancellation in the Cancellation Comments Box. (i.e. Time/Reason for cancellation/Name of staff requesting cancellation or the use of canned message 1SR)

11.4 When all information has been entered, use the mouse to click on the OK button (green check mark) or press F12 key. This files information and allows LIS to cancel specimen.

11.5 The pathway for uncancelling single or multiple specimens/requistion to be uncancelled is as follows:

- **LAB ASSITANT**
  - **Requisition Desktop**
    - **Uncancel Req**

11.6 Test ordered on a patient will be UNCANCELLED if cancellation was done in error, or if patient allowed specimen to be collected with in four hours of cancellation. Reason for uncancelling must be part of the uncancelling process for future referral. See **Diagram 22.7** at the end of this document for an example.

11.7 Enter patient's name or account number and press the Enter key, press F12, or use the OK button (green check mark). The LIS will bring up the associated patient name and information. Verify that the information is correct.

11.8 Enter the F9 key (i.e. indicating to the LIS to do a Lookup of requisition status). Use arrow key to select test to be uncancelled. Press the Enter key, press F12 key, or use OK button (green check mark). Verify that correct test was selected to uncancel.

11.9 The test selected will be indicated with an arrow on the far right side. Press the letter **Y** for the box under **Uncancel?** and press the Enter key. Enter reason for uncancelling specimen in **Append to specimen comments** found on the bottom left hand side of the screen. (note that LIS automaticly list time and date user cancelled and uncancelled specimen) The reason for uncancelling specimen must be noted as part of the uncancelling process for future referral. Press the F12/OK key to file.

12.0 ORDER ENTRY CANCELLATION REQUEST

12.1 Test ordered are not elligable for cancellation by nursing staff if order status is COLB. Nursing staff request OE cancellation if test is a duplicate order, no written order, Doctor's request, orders are discontinued, and wrong test. **OE** cancellation request form will print in CP printer. Request Form will have all information needed for lab to cancel test. Reason for cancellation must be part of the cancellation process for future referral. Refer to 10.2 for cancellation pathway.

12.2 OE cancellation request form will have date, time, test to cancel, Req#, and reason for cancellation request. Use arrow key or mouse to select test to be canceled. (Note: Test should be in COLB status, but occasionally test may be in COMP status)

12.3 The LIS will bring up the associated patient name and information. Verify that the information is correct. Use Req # from OE Cancellation form to verify selection is correct. (Note: Req # is found on left top corner following three asteriks.) Enter the reason for cancellation in the Cancellation Comments Box.

12.4 When all information has been entered, use the mouse to click on the OK button (green check mark) or press F12 key. This files information and allows LIS to cancel test.

12.5 Remove collection label from collection rack, found in Phlebotomy area.

13.0 EDIT SPECIMEN DATA/COLLECTION DATA

13.1 Test ordered on a patient will be elligable for EDIT SPECIMEN DATA/COLLECTION DATA if specimen was unobtainable and Nursing unit requested date change or patient was recollected and time is essential to patient treatment. See **Diagram 22.9** at the end of this document for an example. (note:order date and service date must match for insurance purpose.)

13.2 Specimen collection dates will need to be changed if a specimen was ordered prior to midnight but collected shortly after midnight. This will ensure collection times do not conflict with order times. Specimen collection times will need to be changed if patient is receiving blood or therapeutic drugs and timing is curcial for obtaining the specimen at the correct time. Also, if patients leave for procedures and the nursing staff will ask to collect once they return at a later time.

13.3 The pathway for EDIT SPECIMEN DATA of a specimen to be change (i.e.indicating to the LIS that the specimen's date is to be changed and a new specimen number will be assinged) is as follows:

- **Specimen Desk Top**
  - **Edit**

13.4 Select Specimen Data, enter specimen number which will bring up associated patient's name and information. Verify all information is correct.
Edit the specimen's Coll time, Status, Received status, the Recv date and time, Rec'v by, or add individual specimen comments.

13.5 To edit collection date, same pathway is used, but select Collection Data See **Diagram 22.10** at the end of this document for an example.)

13.6 Enter the new collection date or use T+1 (Today plus # of future dates). Use Enter key to advance to specimen window and scan barcode. Verify the information is correct. Press F12/Save key to file. Specimen order status is "ORDER" and will returns to Preview and Create.

14.0 NON HOSPITAL/REFERED SPECIMENS

14.1 Specimens received in the Laboratory must meet the specimen requirements and special instructions outlined for each Laboratory test in the **Specimen Collection Manual**.

14.2 Non Hospital/Refered patients are regristered in the LIS by Admitting staff or occationally by Laboratory staff. Refered specimens are hand

delivered or arrive via courier. Specimens are delivered to CP and follow CP SOP policy. Refer to Section **S-Out Patient Specimen Collection** for stepwise instuctions.

15.0 REFERENCE LABORATORY SPECIMEN HANDLING

15.1 Specimens received in the Laboratory must meet the specimen requirements and special instructions outlined for each Laboratory test in the **Specimen Collection Manual**. Specimen unacceptability can be discovered during any stage of specimen processing – pre-analytic, analytic, post-analytic – and thus rejected in any of these stages.

15.2 If online instructions are unavailable (computer system down) this information is obtained by calling the laboratory number. Telephones are answered 24 hr/day 7 days/wk. to provide collection instructions.

16.0 ADD- ONS AND EXTRA SPECIMENS ON NON HOSPITAL/REFERED CLIENT

16.1 Add-ons or additional testing requested by Non Hospital/Refered Clients on specimens that are already in the Laboratory are ordered by Admitting or Laboratory Staff. Admitting staff must verify order date, received date and service date, as well as the ICD9 code. Verbal phone orders are unacceptable.

16.2 Laboratory samples collected as extra specimens may be distributed to the respective departments for storage. These specimens must be properly labeled with a patient's name, time collected and initials of collector. Three XXX are used to indicate the specimen is an extra collected sample for an anticipating order which may follow. If the specimen is not labeled, it is to be disposed of in a biohazardous container.

17.0 DELIVERY OF SPECIMEN FROM CENTRAL PROCESSING

17.1 Laboratory blood samples are received by phlebotomist and delivered to their appropriate department.

Tube Color	Additive	Department	
Lavender	(4.0) EDTA	"H"	Hematology
Lavender/Pink	(10.0/7.0) EDTA	"BB"	Blood Bank
Lavender	(4.0) EDTA	"LR"	Chemistry/SSH STAT LAB
Blue	NaCitrate	"CG"	Coag/Chem/SSH STAT LAB
Yellow	(6.0)SST/Clotting	"C"	Chemistry
	(4.0) SST/Clotting	"S"	Chemistry
Red	(6.0) Clotting	"C"	Chemistry
Grey	NaFluoride	"C"	Chemistry

Green	Lith Heparin	"C"	Chemistry/SSH STAT LAB
	Na Heparin	"LR"	Speical Chemistry
Green(Aero)	BacT/ALERT FA	"BC"	Bacteriology
Purple(Ana)	BacT/ALERT SN	"BC"	Bacteriology
Pink(Peds)	BacT/ALERT F	"BC"	Bacteriology
Red/White(Myco)	Bact/ALERT	"BC"	Bacteriology

When the specimen is found to be unacceptable, (i.e. hemolyzed, clotted, questionable) Techs or CP/Phlebotomist will unreceive, make comment, and request recollection(Ref:8.0). Collect data on CAP Specimen Data Log which is submitted to Laboratory Performance Improvement Coordinator.

17.2 Laboratory urine specimens are received by phlebotomists and or CP. When multipe urine orders are submitted, all labels will remain with urine sample for technologists to aliquot and deliver to next appropriate department.
Urine specimens are delivered to the following department;

Routine	"U"	Urinalysis
Cultures	"M"	Bacteriology
UDS	"C"	Chemistry
HCG	"S"	Chemistry/Hematology

18.0 PHLEBOTOMY SUPPLY STORAGE

18.1 Due to the importance of specimen integrity and accuracy of patient results phlebotomy collection tubes are monitored closely. Expired tubes will not be used and will be discarded. Vacutainer tubes must be stored at a temperature range of 4° C – 25° C as suggested by the manufacture.

18.2 Storage room temperture must be monitor and recorded daily by Designee who will document reading and initial temperature log post in storage room.

18.3 The digital thermomerter has a built in alarm that will alert when the temperature falls above or below the acceptable storage temperature. The corrective action log on the temperature log must be documented with corrective action taken to address the temperature change.

18.4 The monthly temperature log sheet will be picked up to be reviewed by department Lead Tech and filed in appropriate binder.

19.0 EVALUATION OF PHLEBOTOMY PRODUCT

19.1 The quality of test results reported by any laboratory are directly

dependent upon the proper collection and handling of the specimen submitted. The products used for phlebotomy must meet Federal Register Standards. Products are introduced by Vendors, Internet, and Sales Representatives.

19.2 Evaluation information has been obtain, the results are submitted to Manager.

20.0 PHLEBOTOMY TRAY MAINTENANCE

20.1 Each phlebotomist involved in performing veni-punctures should become familiar with procedure and supplies available in phlebotomy tray and at any location where veni-punctures are performed routinely. The described supplies are as follow:

1. Blood collection tray
2. Gloves
3. Plastic bio-hazard bags
4. Needles (protecive device sterile, 21 and 23 gauge, butterfly)
5. Sterile syringes
6. Single use vacutainer holder
7. Vacutainer tubes
8. Blood Transfer device
9. Tourniquets
10. Antiseptic
11. Sterile gauze pads
12. Adhesive tape or bandage
13. Equipment for special handling of collectd specimen is available in CP.

20.2 DAILY-A visual inspection of supplies should be done daily, and the phlebotomy tray is restocked at the end of the shift.

20.3 WEEKLY-A detail examination of supplies is done weekly. Verify all expiration dates and remove supplies which may expire within the month.

20.4 Each phlebotomist is responsible for maintaining their collection tray and collection cart.

21.0 BONE MARROW, SLIDES FOR PATHOLOGISTS / HISTOLOGY

21.1 Slide(s)s to be reviewed by a specific Pathologist may arrive to CP. Verify slides are properly labeled and appropriate paperwork was

submitted. Deliver slide tray and papaerwork to the Histology department immediately.

21.2 Bone marrow specimen(s) (i.e. clot, core) and slides may arrive to CP. Verify BM specimens, and slides are properly labeled with the appropriate paperwork submitted. See **Diagram 23.0**

21.3 A bone marrow specimen collected in a Sodium Heparin tube (green top) for Flow or Cytogen must be received in LIS, tagged with Bone Marrow Label and Do Not Centerfuge Label when appropriate. delivered to the appropriate department immdeiately.

21.4 Amputated limbs are brought to the Pathology/Histology department at the Shoreline laboratory with proper patient identification. Patient's full name, patient's account number and source of speciment (exact site) Paperwork includes two completed forms. Meditech Requisition Form and Consent for Disposal of Amputated Member form. See **Diagram 24.0** at the end of this document for an example.

21.5 The exception to this protocol will be after hours, weekends, and or holidays. Amputated limbs will be taken to the main laboratory. The completed "Requisition Form" and a signed "Consent for Disposal of Amputed Member" form must accompany limb. Verify the leg disposal form is also signed by laboratory party accepting limb. Store the limb in the "limb refrigerator" under the designated area, with all accompanying paperwork in a biohazard bag which has been taped to the ourtside of the leg's biohazard bag.

22.0 DIAGRAMS AND EXAMPLES

See pages 20 through the end of the document.

Diagram 22.0
Preview/Create

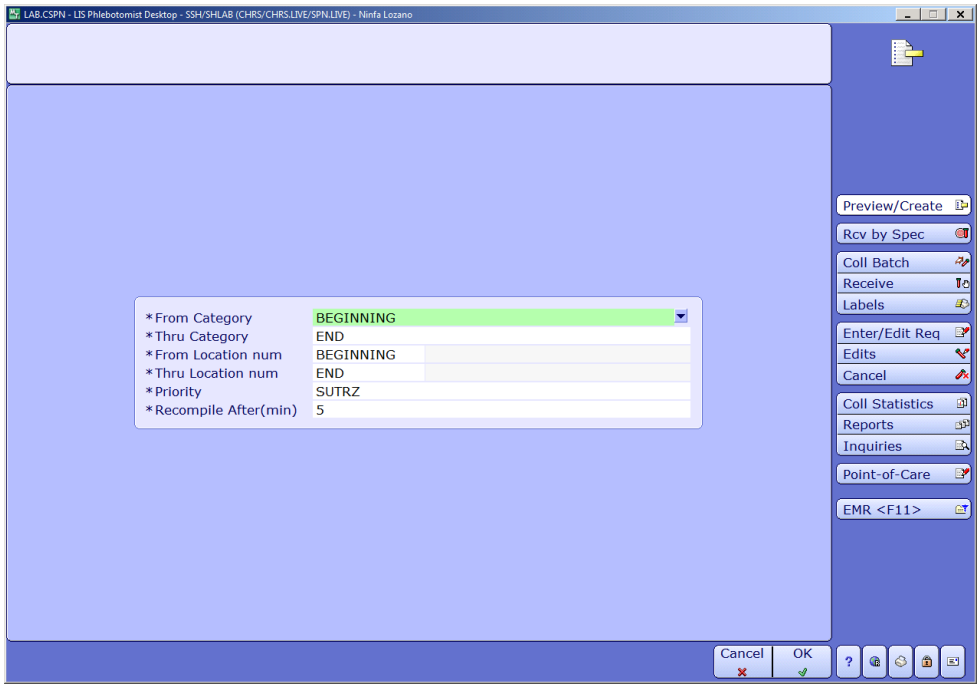


Diagram 22.0
Preview/Create

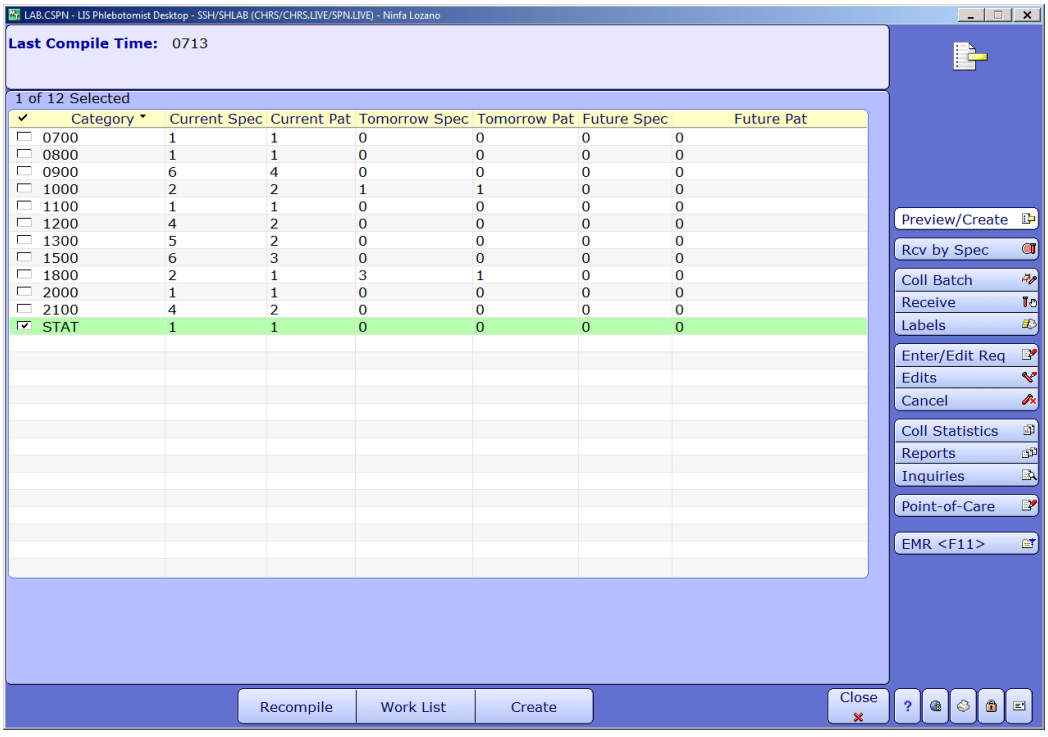


Diagram 22.0
Preview/Create

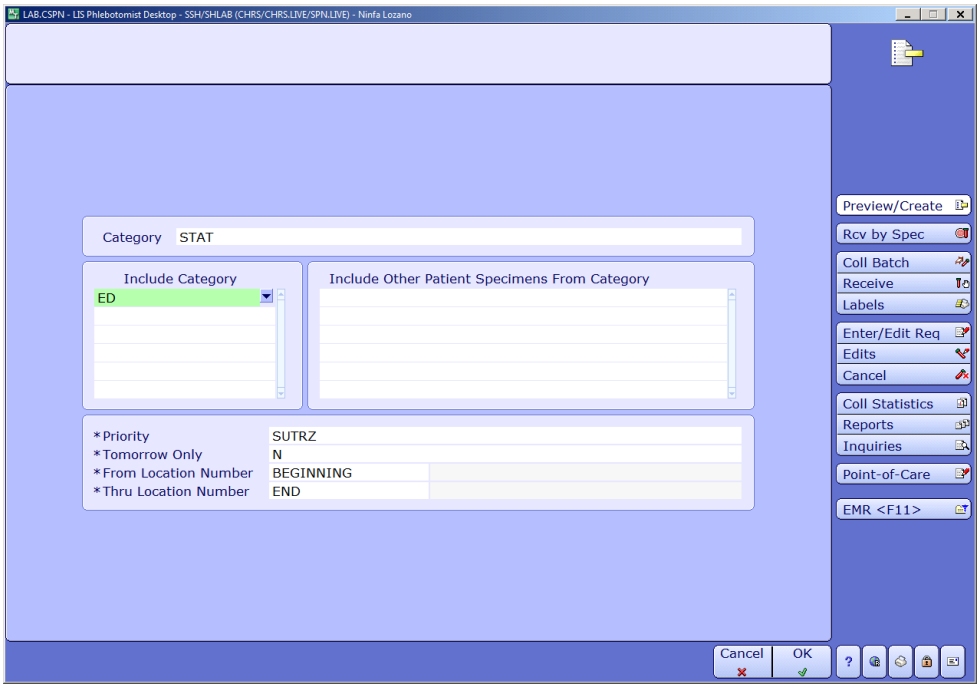


Diagram 22.0
Preview/Create

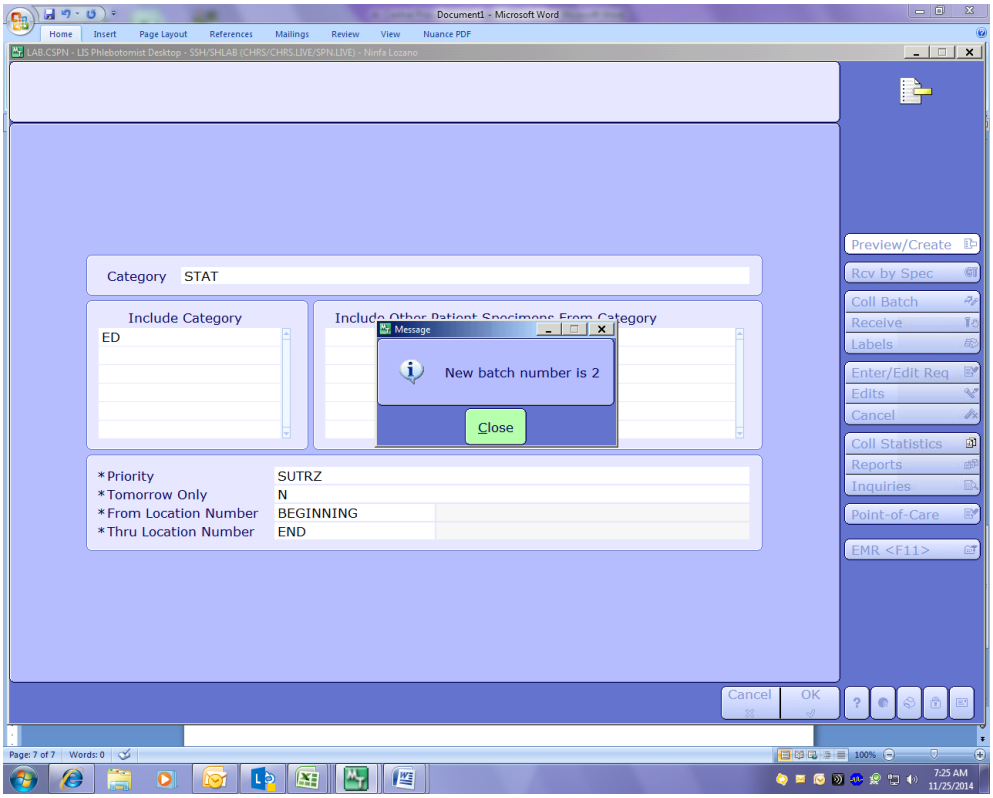


Diagram 22.0
Preview/Create

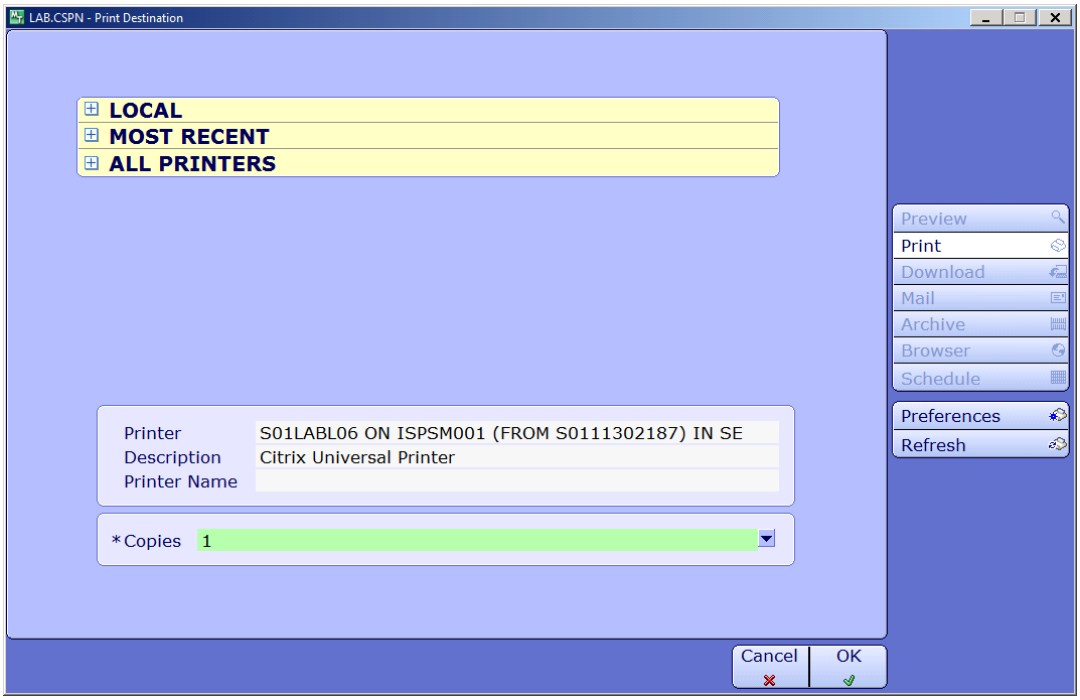


Diagram 22.1
Reprint Batch

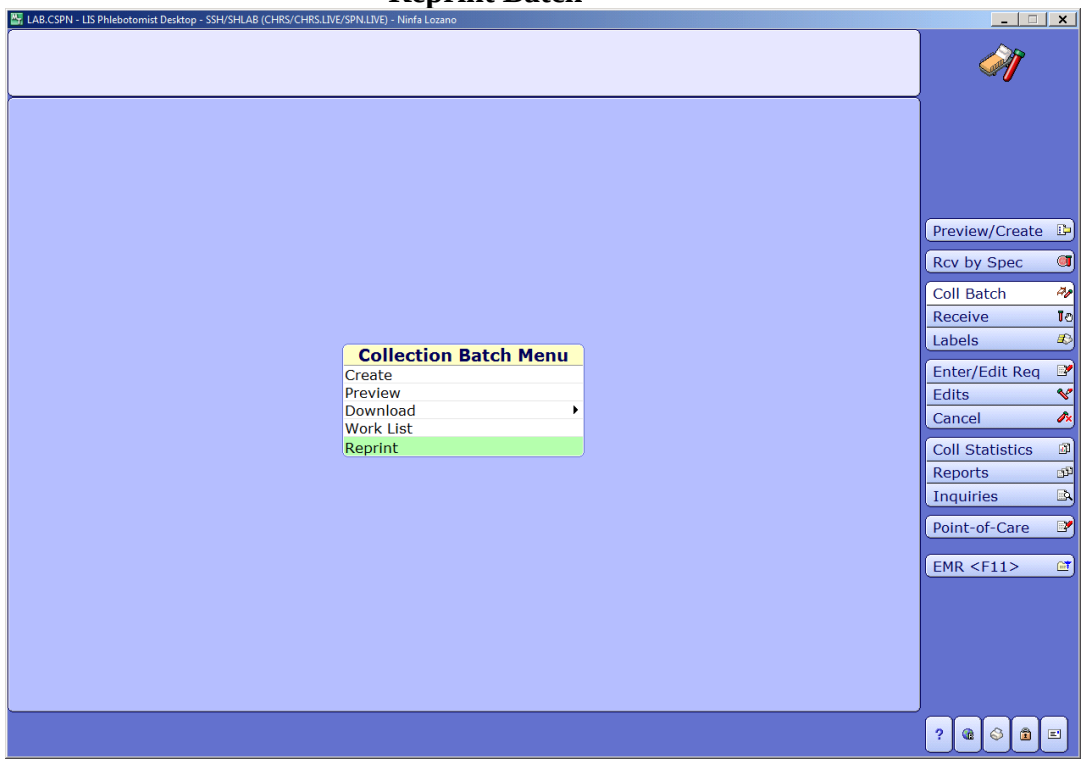


Diagram 22.1
Reprint Batch

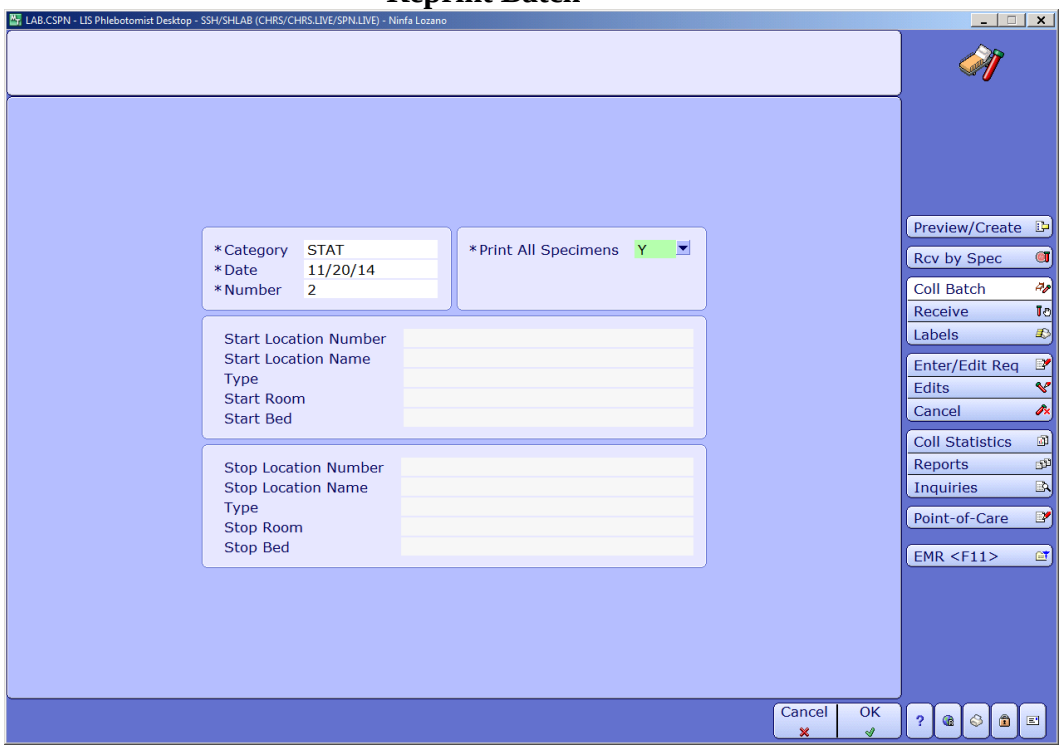


Diagram 22.2
Specimen Receiving

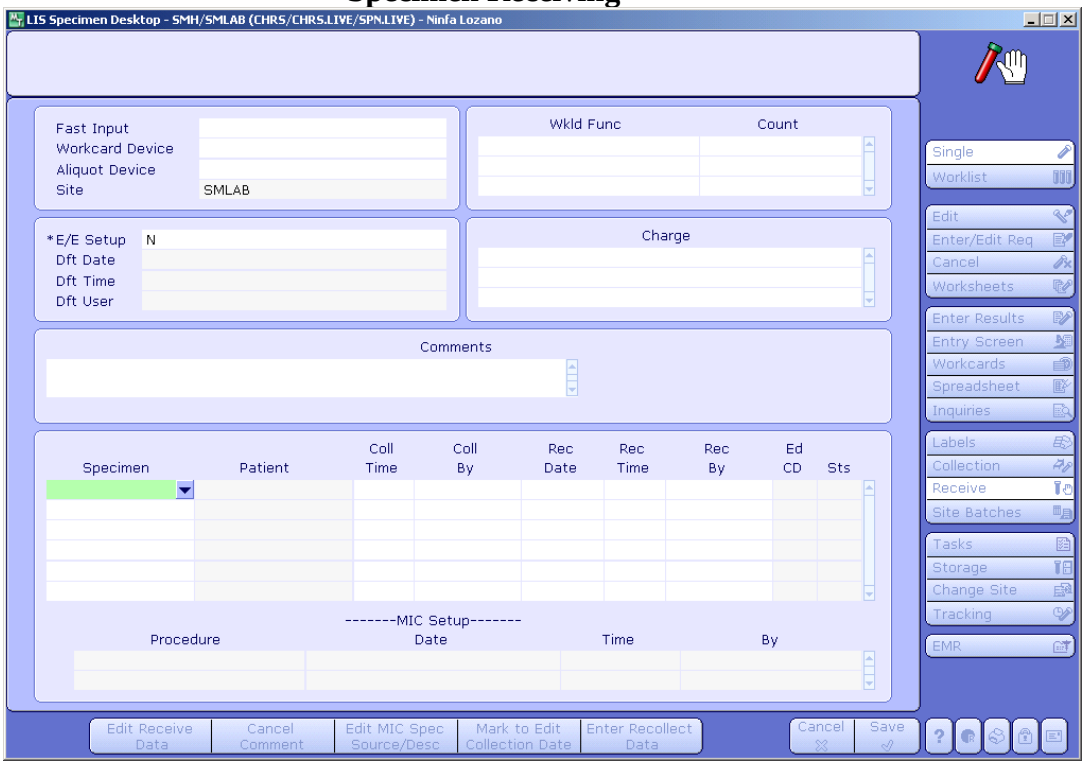


Diagram 22.3
Specimen Unreceiving, Editing

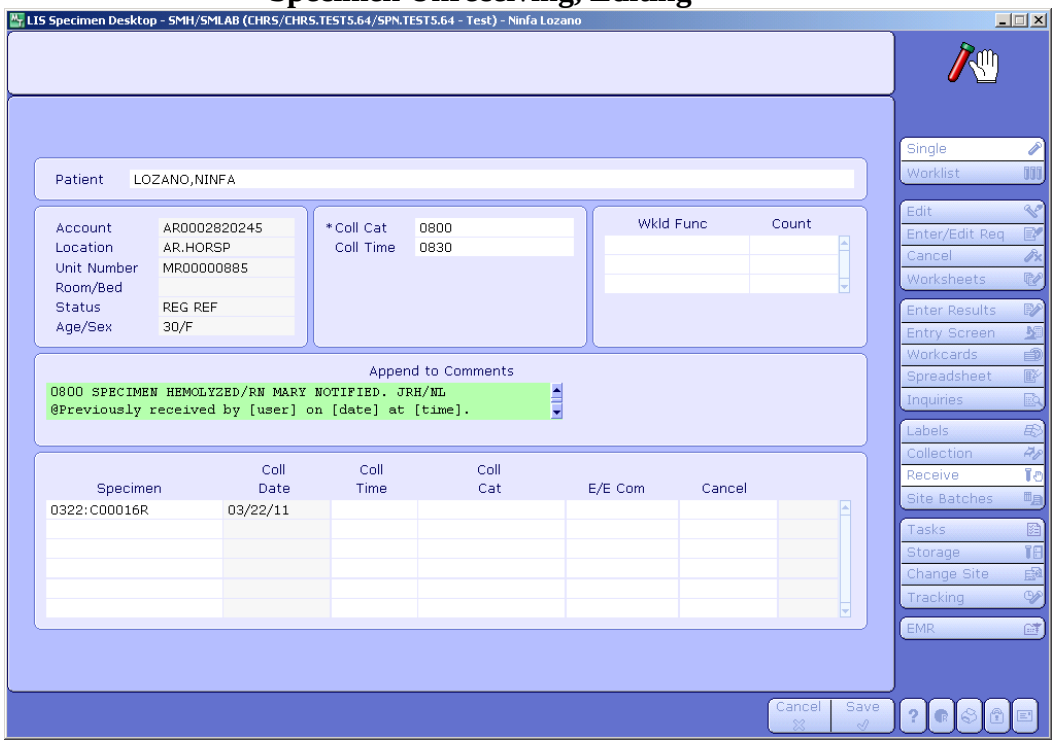


Diagram 22.4
Lab Patient Master Log Uncollected Specimen-LAB, MIC

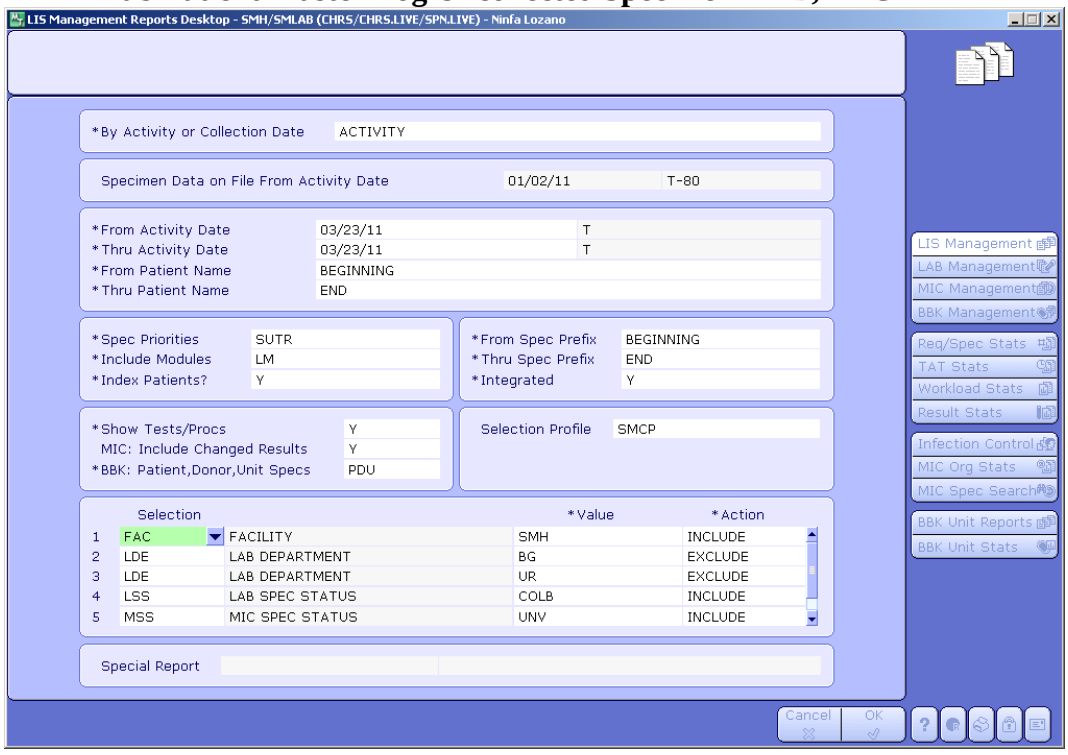


Diagram 22.5
Specimen Tracking Uncollected Specimen

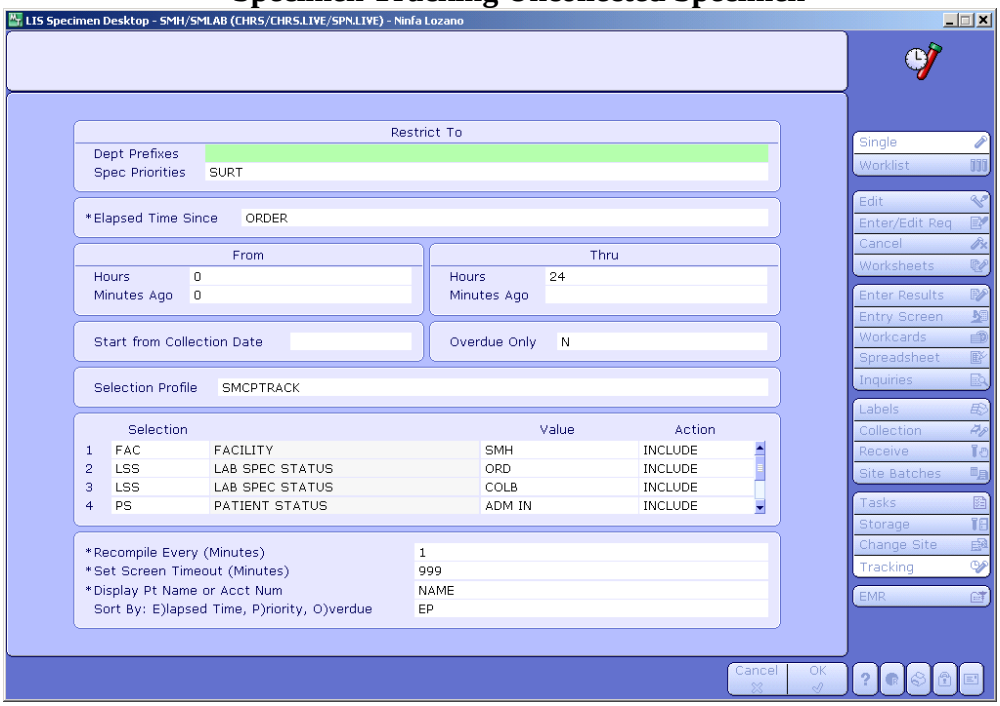


Diagram 22.6
Uncollected Specimen/Line Draw Sheet

LINE DRAWS

Floor _____ Date_____

Please fill out this form with patient's name and room number that the nursing staff will be collecting from their lines. We will tube the collection tubes before 0330.
Please return this form to the laboratory (tube station #111) before 0100
Thank You!

Patient's Identification information	Color of Tube Required	Patient's Identification information	Color of Tube Required

Diagram 22.7
Specimen Cancel/Uncancel

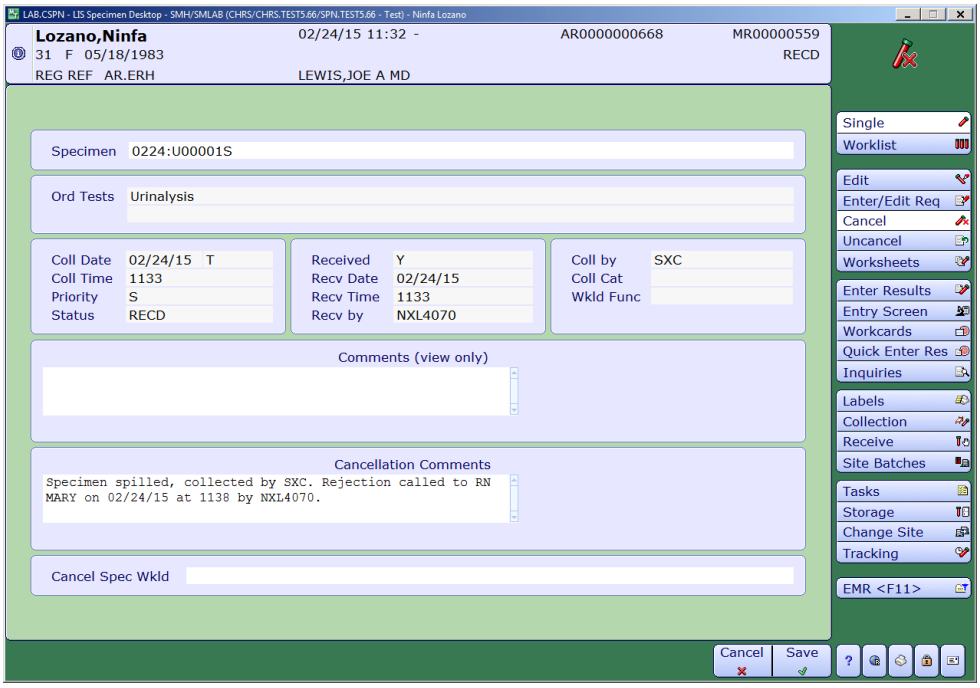


Diagram 22.8
Specimen Cancel/Uncancel

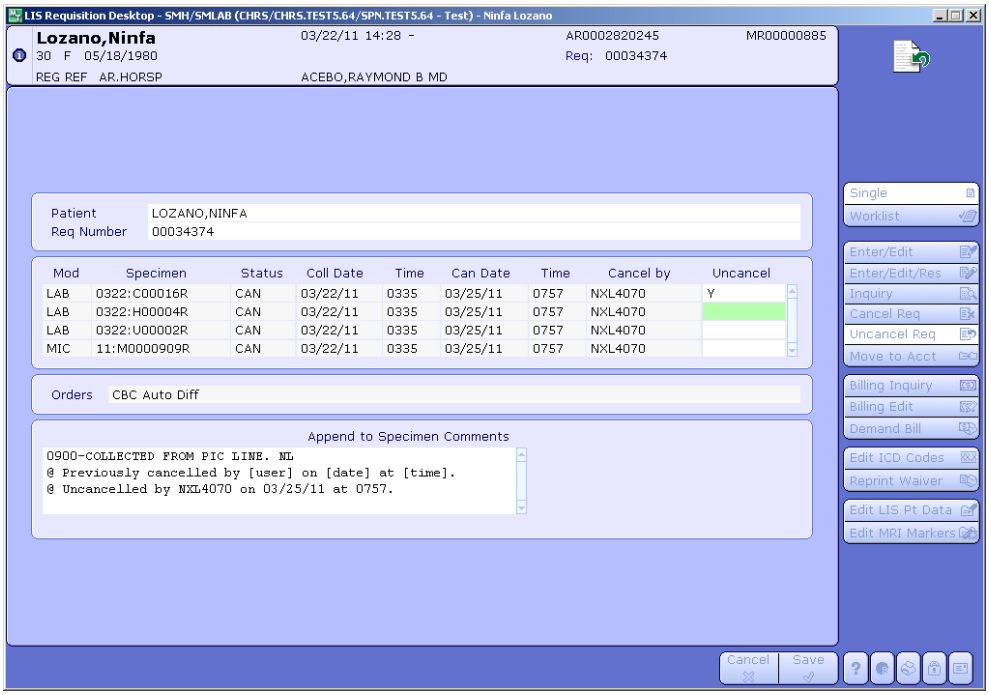


Diagram 22.9
Edit Specimen Data/Collection Data

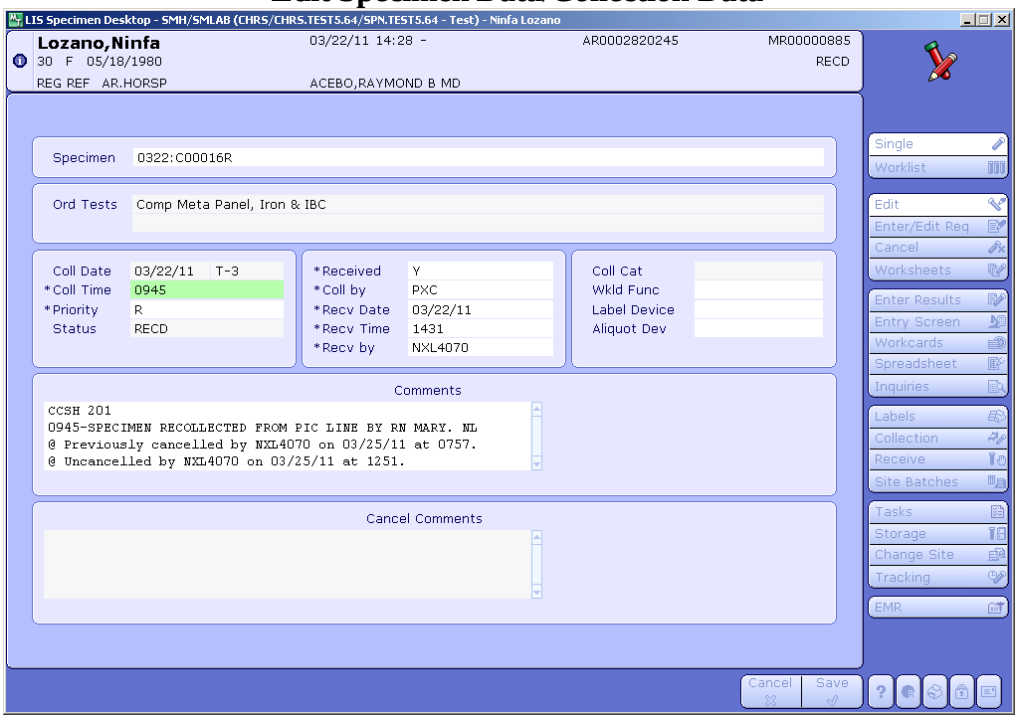


Diagram 22.10
Edit Specimen Data/Collection Data

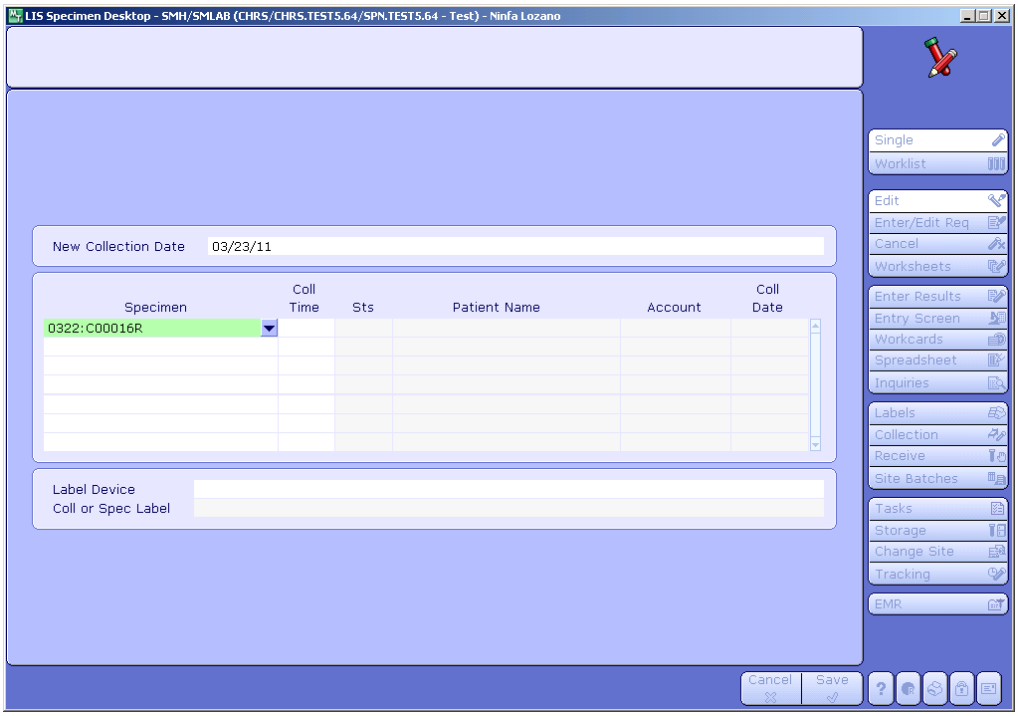


Diagram 23.0
Bone Marrow, Slides for Pathologist / Histology Requisition Form

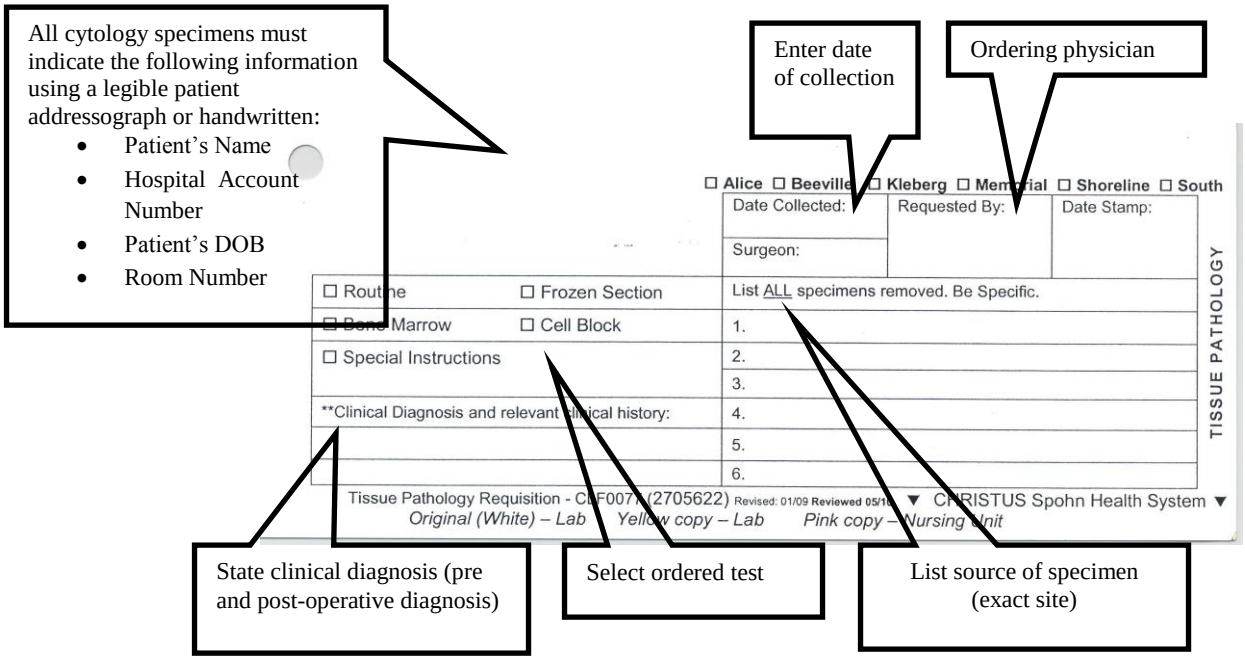
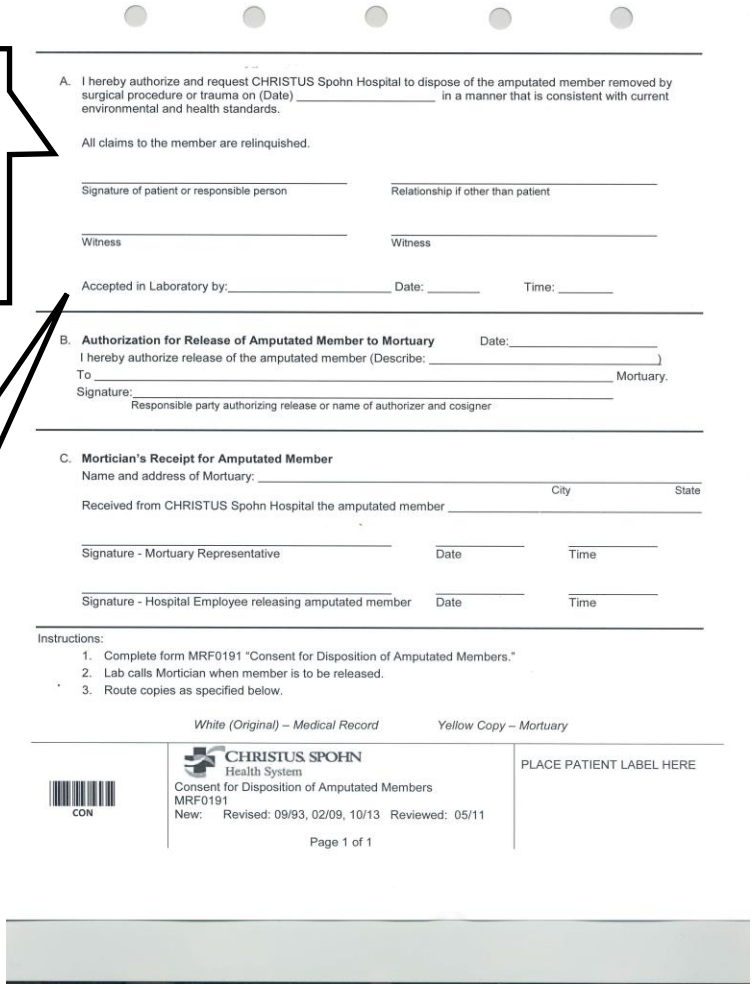


Diagram 24.0
Consent for Disposal of Amputated Members Form

Verify form sections A and B are signed by patient/nearest relative as well as a hospital witness

Date, Time and Signature of the laboratory party accepting amputated member.



A. I hereby authorize and request CHRISTUS Spohn Hospital to dispose of the amputated member removed by surgical procedure or trauma on (Date) _____ in a manner that is consistent with current environmental and health standards.

All claims to the member are relinquished.

Signature of patient or responsible person | Relationship if other than patient

Witness | Witness

Accepted in Laboratory by:_____ Date: _____ Time: _____

B. **Authorization for Release of Amputated Member to Mortuary** Date:_____
I hereby authorize release of the amputated member (Describe: _____)
To _____ Mortuary.
Signature:_____
Responsible party authorizing release or name of authorizer and cosigner

C. **Mortician's Receipt for Amputated Member**
Name and address of Mortuary: _____
City State
Received from CHRISTUS Spohn Hospital the amputated member _____

Signature - Mortuary Representative | Date | Time

Signature - Hospital Employee releasing amputated member | Date | Time

Instructions:
1. Complete form MRF0191 "Consent for Disposition of Amputated Members."
2. Lab calls Mortician when member is to be released.
3. Route copies as specified below.

White (Original) – Medical Record *Yellow Copy – Mortuary*

CON

CHRISTUS SPOHN Health System
Consent for Disposition of Amputated Members
MRF0191
New: Revised: 09/93, 02/09, 10/13 Reviewed: 05/11

Page 1 of 1

PLACE PATIENT LABEL HERE

LIS DOWNTIME 5.6

SOP Number:	**CCP020**	**Creation Date:**	April 20,2011
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2011	
01	October 10, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2011	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
2/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

LIS DOWNTIME 5.6

In the event the LIS is down due to a scheduled and or unscheduled mantenance it is the policy of Central Processing and Phlebotomy Department to accuratelly provide the bolk of the pre-analytical processing of laboratory specimens.

1.0 SCHEDULED DOWNTIME

1.1 Scheduled Downtime may occur monthly for upgrades. A Census Report which helps to locate patients should be printed before the computer goes down. Floors are notified to use Laboratory Downtime Requisition and to call lab for STAT order collections. The Downtime office materials needed are stored in same location as DT Requisitions. See **Diagram 5.1** at the end of this document for an example of Laboratory Downtime Requisition.

1.2 The pathway for printing a Census Report (i.e. indicating to the LIS the report to be printed) is as follow:

- **ADM**
  - **Census**
    - **Alpha**

1.3 From Name is set to default to BEGINNING. Use Enter key, F12 or ENTER button (green check mark) to advance to Thur Name. The default is END for Thur Name.

1.4 When all information has been entered, use the mouse to click on the OK button (green check mark) or press the F12 key. This files information and allows LIS to print to screen or printer of choice. Use the mouse and click on OK to View to screen or select Print on right side of screen. Enter number of copies needed in *Copies window. Verify print location and click OK. To change Print location, click +LOCAL or MOST RECENT and select preferred print location. Refresh change before clicking OK or using F12 key. See **Diagram 5.2** at the end of this document for an example.

1.5 Supplies needed during any downtime event are located in Central Processing labeled Downtime Materials. The following data is needed during any downtime event:

- Fax numbers to all nursing units and the ED.
- Nursing unit alpha census

2.0 SPECIMEN COLLECTION AND ORDERING

2.0 Each specimen to be collected by phlebotomists must be labeled with a pre-printed label created by the LIS or an addressograph (chart) label which is used a long side with the down time requisition. These labels must contain the patient's name, hospital number, room number or assigned clinic, the specific test ordered, Coll By, Coll Date, and Coll

Time.

2.1 All orders and or labels should be printed out before scheduled shut down. The pathway for printing specimen labels (i.e. indicating to the LIS that the specimen is to be collected) is as follows:

- **Phlebotomy Desktop**
  - **Preview and Create (Automatically selected)**

2.2 From Category defaults to BEGINNING. Use Enter key to accept and advance to Thru Category which defaults to END. Use Enter key to accept and advance to From Location. **BEGINNING** for From Location. Enter key or Tab key to advance to Thru Category. **END** for Thru Location. Enter key or Tab key to advance to Priority window. Delete the "Z" priority. (Z is used for Respiratory Department). At the Recompile After window, the default is 5 min. When all information has been entered, use the mouse to click on the SAVE button (green Check mark) or press F12 key. See **Diagram 5.3** at the end of this document for an example of information needed.

2.3 Select all batches, the CURRENT SPECIMEN CATEGORY, and the TOMORROW SPECIMEN CATEGORY. The mouse is used to select batches individually or click on the top left check mark to select all batches to be printed.

2.4 The bottom of the screen has three selections; Recompile, Work List, and Create. See **Diagram 5.4** at the end of this document for an example. Use the mouse and click on Create, then click on the OK button (green check mark) or F12 key. This files the information and allows LIS to create the report. *To print the TOMORROW SPECIMEN CATEGORY change the Tomorrow Only window to* ***Y***. See **Diagram 5.5** at the end of this document. F12/File A message box will appear with the assigned batch number if reprinting of the batch/labels is required. Okay request or confirm to print labels.

2.5 Labels are sorted by date and time. Specimens are collected, labeled and distributed to the proper departments. Labels are placed in a box marked To Be Received or the use of the Down Time Receive Sheet is available. Laboratory Downtime Requisitions are placed in second folder to order tests when LIS is available.

2.6 The laboratory is notified as soon as the LIS is available. The pathway for ordering test from the Laboratory Downtime Requisition (i.e. indicating to the LIS that the test is ordered, collected, and received) is as follows:

- **Specimen Desktop**
  - **Enter/Edit Req**

See **Diagram 5.6** at the end of this document for an example.

2.7 Enter the patient's account number and press the Enter key or Tab key. The LIS will bring up the associated patient name and information. Verify that the information is correct.

2.8 Enter N (New) for Req # and accept default information. Use Enter key or Tab key to advance to Coll Date. Use information from Laboratory Downtime Requisition to fill out Coll Date, Coll Time, and Priority. At Received? Window type Y. Continue using information from Laboratory Downtime Requisition for Coll by. Accept the default information for
Recv Date, Recv Time and Recv by. Use Enter key or Tab key to advance to Label Device. Enter printer label device identification. Use Enter key or Tab key to advance to Order window. Order the test using upper case letters for known mnemonic. F9 key can be used to inquire test mnemonic. (I.e. indicating the LIS to list test. CBCAD (Mnemonic) COMPLETE BLOOD COUNT with AUTO DIFFERENTIAL (Name)

2.9 When all information has been entered, use the mouse to click on the SAVE button (green check mark) or press F12 key. Printed labels are given to department for use, which informs departments the specimen is available for further processing.

3.0 UNSCHEDULED DOWNTIME

3.1 Unscheduled downtime can be activated if OE (Order Entry) fails to transmit lab orders or if Meditech completely fails.

3.2 Phlebotomy staff will notify nursing floors to activate the downtime procedure and to use Laboratory Downtime Requisition.

3.3 To ensure as little interruption in patient care as possible nursing will place an addressograph label on all 4 sheets including room location to ensure patient information and orders are consistent.
Nursing staff must fill the Collection Time, the Priority for Collection, and the Source of the specimen, the Test and or Tests before submitting the form to the laboratory. All Collected by Nurse (CBN) specimens must have a Downtime Requisition filled out. If an incomplete downtime requisition form is submitted to the laboratory, it will be rejected and returned to ordering location to be completed.

3.4 Specimens are collected using the Laboratory Downtime Requisition form. This form is in quadruplicate color sheets (1^{st} page: white, 2^{nd} page: light yellow, 3^{rd} page: pink, 4^{th} page: dark yellow) The bottom left corner allows space for the addressograph patient information which phlebotomy staff will use to locate patient.

3.5 Phlebotomy staff must legibly complete the requisition by providing the collector's initials, collection time and date of specimen collection. Each specimen must have same collection information including test.

3.6 The quadruplicate color downtime requisition is verified before it is divided and delivered to the appropriate department with the collected specimen. The delivery protocol will be as follows:

- Top white copy is placed in the accordion file folder labeled ORDERS by patient last name.
- Pink copy and the EDTA (lavender) vial are delivered to Hematology Department.
- Light yellow copy and the Urine specimen are delivered to Urinalysis Department.
- Dark yellow copy and all chemistry specimens are delivered to Chemistry Department.
- Copies are made if extras are needed for additional departments. i.e Microbiology, Blood Bank, Coagulation.

3.7 When departments finish with the testing results are faxed to the appropriate floor then filed.

3.8 If unable to fax results, it is acceptable to send copies of reports through the pneumatic computerized tube system. It is important that a copy be made of the original downtime report so a copy remains in the main lab.

3.9 Phlebotomy staff will follow LIS downtime protocol starting with section **2.6 Specimen Collection and Ordering** of this policy.

4.0 PROCEDURAL NOTES

4.1 Submitted specimen to laboratory with no requisition of any type during downtime will require nursing staff be notified to submit DT requisition for specimen processing. Laboratory is unable to retrieve LIS order for processing.

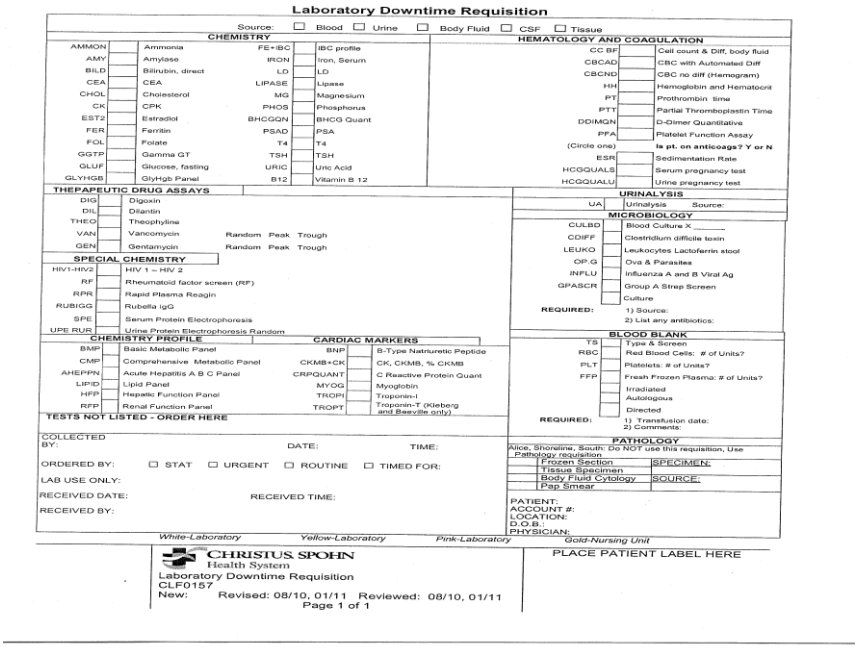
4.2 Any discrepancies on requisition and specimen and or collected specimen missing information submitted to laboratory require investigation by CP personnel. Follow Specimen Rejection Policy.

4.3 Out Patient or Client requisition orders will follow same DT requisition protocol. CP/Phlebotomy or PAR staff will make photocopies for each department having a specimen to process. Original requisition may remain with PAR staff or CP/Phlebotomy staff depending on specimen drop off location.

5.0 DIAGRAMS AND EXAMPLES

See pages 6 through the end of the document.

Diagram 5.1
Scheduled Downtime
Laboratory Downtime Requisition



Laboratory Downtime Requisition

Source: ☐ Blood ☐ Urine ☐ Body Fluid ☐ CSF ☐ Tissue

CHEMISTRY

AMMON	Ammonia		FE+IBC		IBC profile
AMY	Amylase		IRON		Iron, Serum
BILD	Bilirubin, direct		LD		LD
CEA	CEA		LIPASE		Lipase
CHOL	Cholesterol		MG		Magnesium
CK	CPK		PHOS		Phosphorus
EST2	Estradiol		BHCGQN		BHCG Quant
FER	Ferritin		PSAD		PSA
FOL	Folate		T4		T4
GGTP	Gamma GT		TSH		TSH
GLUF	Glucose, fasting		URIC		Uric Acid
GLYHGB	GlyHgb Panel		B12		Vitamin B 12

HEMATOLOGY AND COAGULATION

CC BF		Cell count & Diff, body fluid
CBCAD		CBC with Automated Diff
CBCND		CBC no diff (Hemogram)
HH		Hemoglobin and Hematocrit
PT		Prothrombin time
PTT		Partial Thromboplastin Time
DDIMQN		D-Dimer Quantitative
PFA		Platelet Function Assay
(Circle one)		**Is pt. on anticoags? Y or N**
ESR		Sedimentation Rate
HCGQUALS		Serum pregnancy test
HCGQUALU		Urine pregnancy test

THEPAPEUTIC DRUG ASSAYS

DIG	Digoxin			
DIL	Dilantin			
THEO	Theophylline			
VAN	Vancomycin	Random	Peak	Trough
GEN	Gentamycin	Random	Peak	Trough

SPECIAL CHEMISTRY

HIV1-HIV2	HIV 1 – HIV 2
RF	Rheumatoid factor screen (RF)
RPR	Rapid Plasma Reagin
RUBIGG	Rubella IgG
SPE	Serum Protein Electrophoresis
UPE RUR	Urine Protein Electrophoresis Random

URINALYSIS

UA	Urinalysis	Source:

MICROBIOLOGY

CULBC	Blood Culture X ____
CDIFF	Clostridium difficile toxin
LEUKO	Leukocytes Lactoferrin stool
OP,G	Ova & Parasites
INFLU	Influenza A and B Viral Ag
GPASCR	Group A Strep Screen
	Culture
REQUIRED:	1) Source: 2) List any antibiotics:

CHEMISTRY PROFILE

BMP	Basic Metabolic Panel		
CMP	Comprehensive Metabolic Panel		
AHEPPN	Acute Hepatitis A B C Panel		
LIPID	Lipid Panel		
HFP	Hepatic Function Panel		
RFP	Renal Function Panel		

CARDIAC MARKERS

	BNP		B-Type Natriuretic Peptide
CKMB+CK			CK, CKMB, % CKMB
CRPQUANT			C Reactive Protein Quant
MYOG			Myoglobin
TROPI			Troponin-I
TROPT			Troponin-T (Kleberg and Beeville only)

BLOOD BLANK

TS	Type & Screen
RBC	Red Blood Cells: # of Units?
PLT	Platelets: # of Units?
FFP	Fresh Frozen Plasma: # of Units?
	Irradiated
	Autologous
	Directed
REQUIRED:	1) Transfusion date: 2) Comments:

TESTS NOT LISTED - ORDER HERE

COLLECTED BY: DATE: TIME:

ORDERED BY: ☐ STAT ☐ URGENT ☐ ROUTINE ☐ TIMED FOR:

LAB USE ONLY:

RECEIVED DATE: RECEIVED TIME:

RECEIVED BY:

PATHOLOGY

Alice, Shoreline, South: Do NOT use this requisition, Use Pathology requisition

	Frozen Section	SPECIMEN:
	Tissue Specimen	
	Body Fluid Cytology	SOURCE:
	Pap Smear	

PATIENT:
ACCOUNT #:
LOCATION:
D.O.B.:
PHYSICIAN:

White-Laboratory Yellow-Laboratory Pink-Laboratory Gold-Nursing Unit

PLACE PATIENT LABEL HERE

CHRISTUS SPOHN Health System
Laboratory Downtime Requisition
CLF0157
New: Revised: 08/10, 01/11 Reviewed: 08/10, 01/11
Page 1 of 1

Diagram 5.2
Census Report

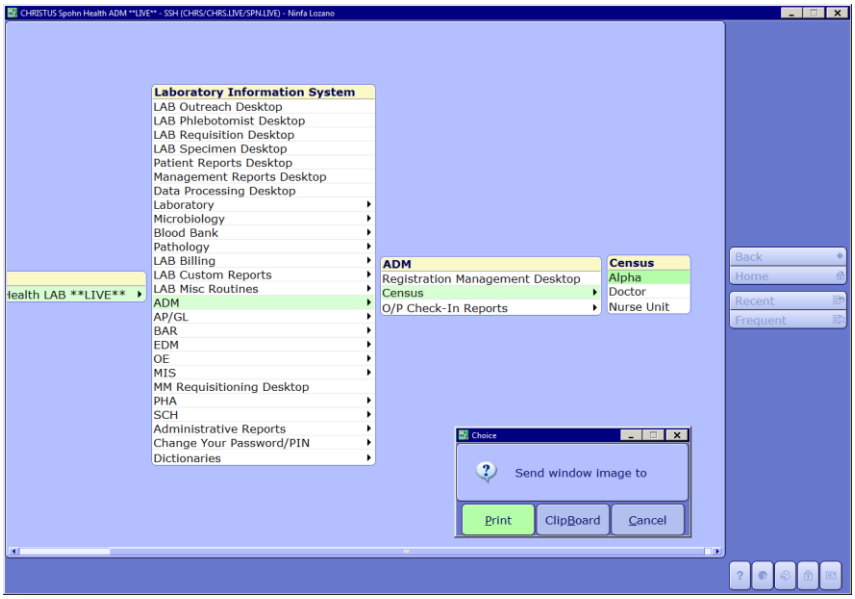


Diagram 5.3
Specimen Collection and Ordering
Preview/Create

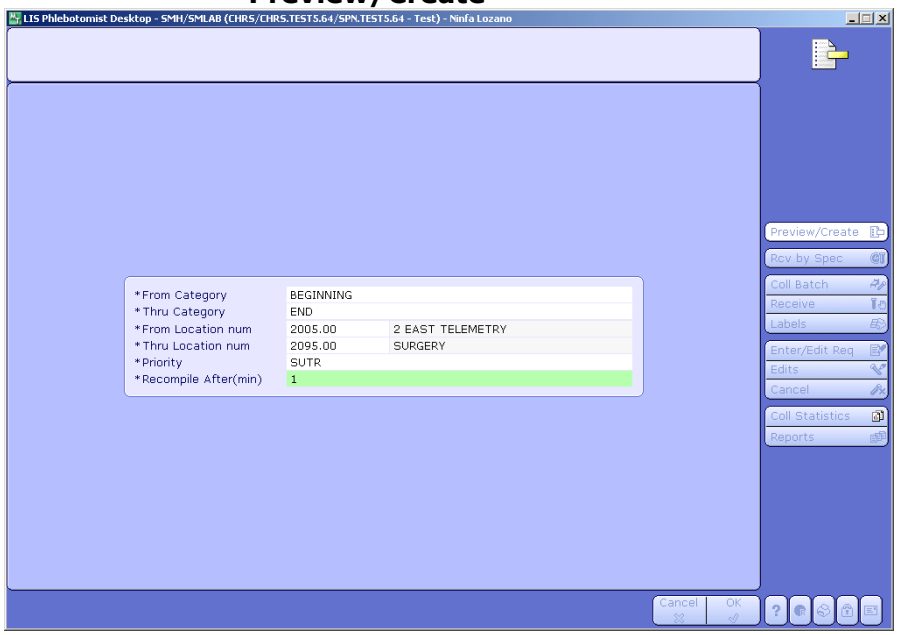


Diagram 5.4
Specimen Collection and Ordering
Preview/Create

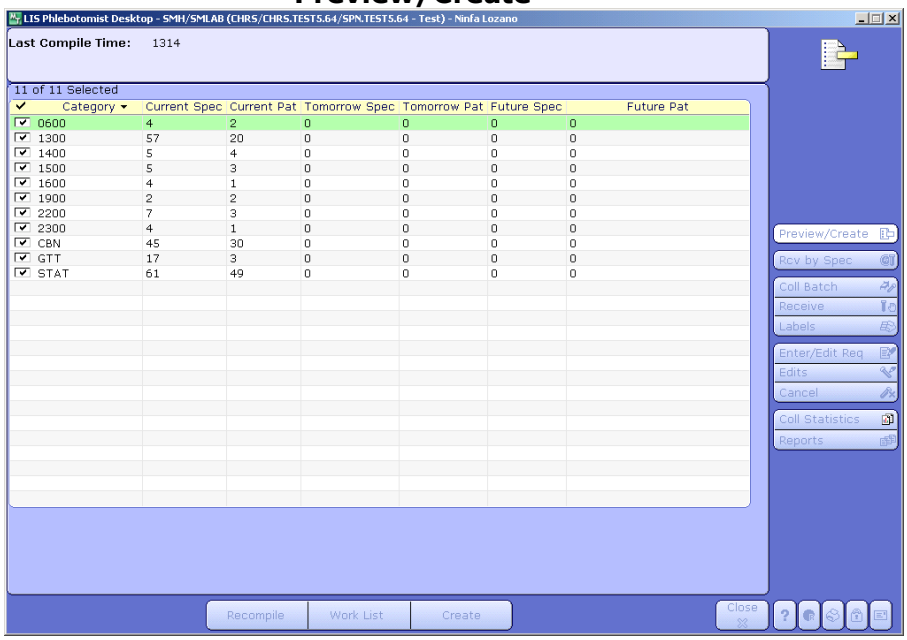


Diagram 5.5
Specimen Collection and Ordering
Preview/Create
To include future orders

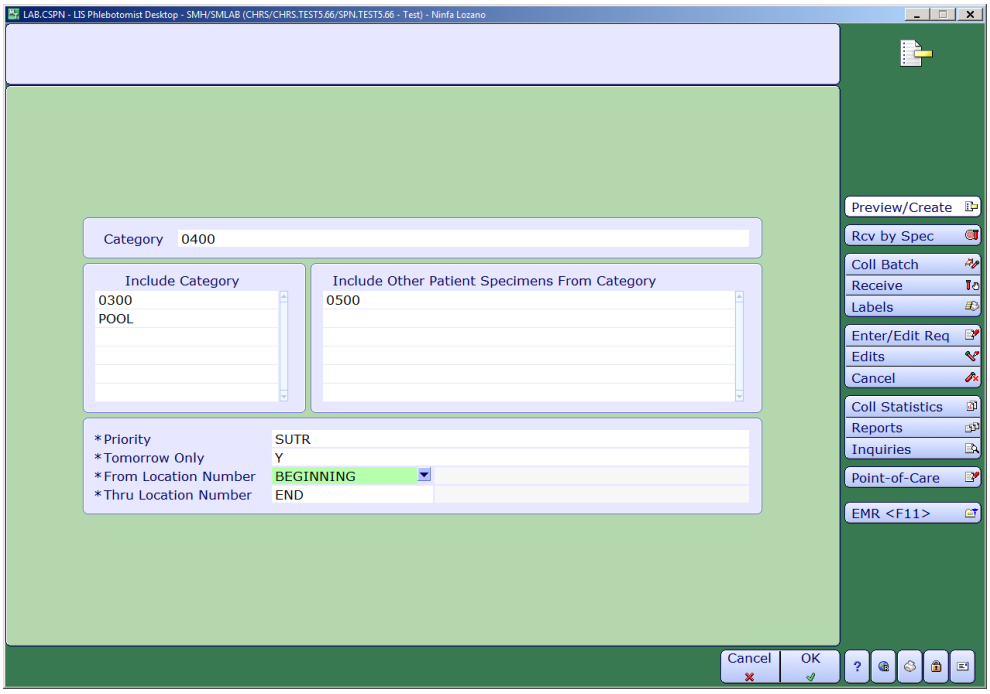
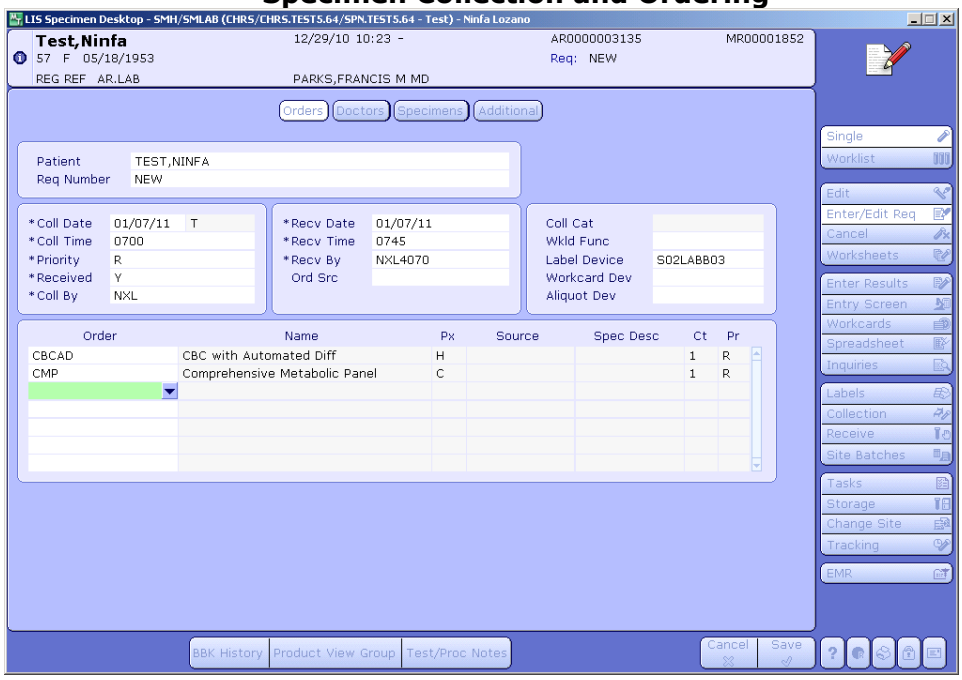


Diagram 5.6
Specimen Collection and Ordering



Computerized Tube System

SOP Number:	**CCP030**	**Creation Date:**	June 8, 2005
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	June 8, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/11	01	Supervisor Review	N. Lozano
10/12	01	Pathologist Review	Dr. James Scherer
1/13	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
2/2017	02	Supervisor Review	

CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2

It is the policy of the Central Processing and Phlebotomy Department to follow the guideline and procedure of the CTS.

1.0 COMPUTERIZED TUBE SYSTEM

1.1 The CTS is used to transport supplies, records, specimens, medication, and other small items. The purpose of this policy is to establish procedures and guidelines for the operation of the system in Central Processing.

1.2 All specimens received in Central Processing via CTS (Computerized Tube System) must be labeled correctly, properly sealed and correctly packaged. All associates working in Lab and receiving specimens are aware of the potentially infectious items transported through the CTS. All hospital CTS users have been trained on the proper usage by their department manager.

2.0 PACKAGING, DISPATCHING SPECIMEN

2.1 Potentially infectious items must be contained and transported in a manner that prevents breakage, leakage or contamination of the system.
All specimens must be sent in a zipped biohazard bag placed inside a padded "bubble" bag if available.

2.2 Make sure container or blood specimen caps are secure. Verify that each specimen collected by phlebotomies is labeled with pre-printed label created by the LIS. This label contains the patient name, hospital number or assigned clinic and the specific test ordered.

2.3 Place labeled specimens in a zipped biohazard and place inside the padded "bubble" bag if available. Seal bag/pouch. Place pouch in carrier, ensure both latches are engaged and place carrier in dispatcher. Send carrier to Lab. The pathway for sending a specimen or carrier to the Lab using the CTS is as follows:

- **STATION READY**
  - **ENTER LAB ADDRESS**
    - **SEND**

2.4 Verify your carrier has been accepted for processing. The accepted message will read SELECTION ACCEPTED PLEASE WAIT. The dispatching of the carrier by the CTS will soon follow.

2.5 If an error is made while keying an entry, press CLEAR and start over. If an improper keyboard entry is made, a short "beep" will sound. Press CLEAR and start over.

2.6 If you wish to stop a transaction after the SEND button has been Pressed and SELECTION ACCEPTED is displayed, press CANCEL.

Note: The transaction cannot be cancelled if the dispatcher has started to move.

2.7 If TRANSCATION WAS ABORTED is displayed, press CANCEL and start over.

3.0 RECEIVING SPECIMEN

3.1 The messages INCOMING CARRIER and INCOMING SECURE CARRIER indicate carriers will be arriving at your station.

3.2 Remove carriers promptly to prevent receiver bin from becoming full and shutting off station, observing Universal Precautions when necessary. Note: If a carrier is suspected of being contaminated, follow the System Spill Procedures for Users contained in this policy. If carriers or latches are damaged, remove from system and send to Plant Operations to be repaired. If RETURN SURPLUS CARRIERS is displayed, place empty carrier in dispatch station and press EMPTY SEND to return carriers.

3.3 Acceptable specimens which meet requirements are received by Central Receiving and follow Standard Operation Procedures. Unacceptable specimens which do not meet requirement are rejected as outlined in the Laboratory Specimen Rejection Policy.

4.0 ITEMS APPROVED FOR TRANSPORT

4.1 The following items may be sent through the pneumatic tube system. All specimens must be sent in a zipped biohazard bag place inside a padded "bubble: bag if available.

- **Stoppers blood tube**
- **Blood Cultures (plastic vials)**
- **Urine container with screw on lid (Tightly Screwed)**
- **Culture Swab**
- **Small stool specimens in screw top tube**

4.2 A combination of Ziploc baggies, Zip N' Fold pouches, and foam liners may be used to immobilize and package items.

5.0 ITEMS NOT APPROVED FOR TRANSPORT

5.1 The following items should **not** be sent through the pneumatic tube system. All specimens must be hand delivered in a zipped biohazard bag.

- **Special Means Collection Specimens:**
  Spinal fluid
  Amniotic fluid
  Blood Components
  Surgical Tissue

- **Containers with Snap-On lids which contain hazardous substances:**
  - **Surgical tissues in formalin**
  - **Sputum for acid fast stain**
  - **24 hour urine**
  - **Empty blood bags**
  - **Gloves "loose"**
- **Other**
  - **Drinks or food items**
  - **Contaminated supplies**
  - **Money/checks**
  - **Sharps**
  - **Patient valuables**
  - **Non-leak tight containers containing liquids**

5.2 Leakage is primarily due to improper packaging and non-immobilization of contents.

5.3 To comply with regulations regarding with Central Processing receiving items approved for transport in the CTS a review of specimens packaging, specimen labeling and other approved/not approved items will be performed daily. Units that need improvement will be documented and a report will be submitted to Risk Management. Plant Operations will be notified if any corrective or preventive action is needed on CTS.

Daily Assessments:

-Tube Carrier in good condition?
-Tube Carrier sealed/closed correctly?
-Specimen in a zipped Bio-Hazard Bag?
-Specimen/item properly secure in appropriate container?
-Specimen/item submitted ordered in LIS?
-The source of specimen/item submitted identified correctly?
-Col by, Date, Time, information on CBN specimen?
-Blood specimen in correct container for requested test?
-LIS specimen label for add-ons correctly identified?
-Does the CTS alarm work correctly?
-CTS keeping correct count of tube carriers?
--Bio-Hazard Bag zipped locked?
-Container approved for transport?
-Specimen container correctly identified?
-Specimen submitted with Detail Order form?
-Specimen/item container identification matches order identification?
-Order date matches collection time and date?
-Quality and integrity of specimen submitted is acceptable?

6.0 CTS PARTS APPROVED DECONTAMINATION

6.1 The following parts are approved for decontamination with disinfectants. Carrier liners, Zip N' Fold pouches, and Plastic Carriers. Autoclaving, due to high temperatures, will damage parts, Do not autoclave parts. Disinfectants of choice are Ethylene oxide, hospital approve germicide, or OMNI II solution.

7.0 CTS SPILL

7.1 Always use Universal Precautions when handling carriers that may be contaminated. Stop sending carriers form the station where the contamination was first noticed place a work order.

The pathway for PLACING A WORK ORDER is as follows:

- **CHRISTUS INTERANET**
  - **Plant Maintenance (located center of front page)**

7.2 Use Name and Password is provided to be used to gain access when placing the work order.

7.3 For urgent or safety related requests, contact the Christus Health Facilities Desk at 844-CB-FIXIT (844-223-4948)

8.0 DISINFECTION STATIONS AND TUBING

8.1 Procedure is done by Plant Operations. The basic procedure consists of sending a carrier containing the cleanout bottle from station to station until all affected segments of the system have been traversed. This procedure will require one person except when cleaning the inter-zone lines, which require two people and telephone communication between them. As the carrier travels through the tubing, the cleanout bottle dispenses the cleaning solution, while the carrier rubbing band acts as swabs.

9.0 CTS UNSCHEDULED DOWNTIME

9.1 Problems should be reported to Plant Operations. The user areas will be notified and given an assessment as to how long a station or the system will be down.

9.2 Stat items requiring immediate transport are to be handled by the individual area's personnel.

9.3 Plant Operations will notify all user areas that the system is functioning again.

10.0 STATION DIRECTORY

10.1 Floor locations and their CTS address are listed at each station.

SEND EXTRA CARRIERS TO ADDRESS "00"

Patient Instructions-24 Hour Collection

SOP Number:	**CCP042**	**Creation Date:**	April 1, 2003
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
2/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Patient Instructions-24 Hour Collection

Name:_____DOB:_____DATE:_____

Height:_____ Starting Time: _____

Date_____Hour_____

Weight:_____ Ending Time: _____

Date_____Hour_____

INSTRUCTIONS FOR SPECIMEN COLLECTION OF 24 HOUR URINE COLLECTION

UPON WAKING, VOID – EMPTY BLADDER <u>DO NOT COLLECT FIRST URINE</u>.

After the first urine has been discarded, collect all other urine for 24 hours, include the first urine of the next morning.

Example: If you start at 7:00 am, you will finish the next day at 7:00 am.

Every time you void, the urine must be placed in the container given at the laboratory. Keep the collected urine cool, on ice, during the collection period. (Use of ice chest is recommended) If you need another container, one may be obtained in the laboratory or you may use a clean plastic container from home.
After the 24 hour urine collection is completed, the patient needs to bring in the container/s into the laboratory, as soon as possible. (Blood may be collected along with test)

INSTRUCIONES PARA COLECCION DE ORINA DE 24 HORAS

Al LEVANTARSE EN LA MANANA, ORINE EN EL EXCUSADO <u>NO COLECTE EL PRIMER ORINE</u>

Luego empieze a colectar toda la orina en la botella por 24 horas. Incluyendo la primera orina del dia siguiente.

Ejemplo: Si usted empieza a colectar a las 7 de la manana debe de terminar de colectar a las 7 de la manana del dia siguiente.

Cada vez que orine tiene que poner la orina en la botella hasta que se terminen las 24 horas. Si usted necesita otra botella puede levantar una en el laboratorio o puede usar una botella de plastico que este bien limpia. Por favor mantenga la botella en hielo las 24 horas. (Caja de hielo es recomendada) Traiga la botella o botellas al laboratorio, tan pronto como le sea posible. (Puede que le saguen sangre)

Patient Instructions-GTT

SOP Number:	**CCP040**	**Creation Date:**	April 1, 2003
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
2/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

INSTRUCTIONS FOR SPECIMEN COLLECTION OF GLUCOSE TOLERANCE TEST

All Glucose Tolerance Tests require the patient to be fasting for at least 8 but not more than 16 hours prior to the start. No Tolerance will be started in the clinic area. The patient must come to the lab.
The patient will have a blood specimen drawn and urine collected at the start of the test. The patient will be given a flavored drink containing 100 grams of glucose (50 grams for OB clinic patients) pending glucose baseline. The time starts at the beginning of glucose ingestion and the solution should be drunk within 5 minutes.

The patient should remain seated during the test. Food and smoking are not permitted during the test but water is encouraged.

The patient should expect to be in the lab area for 3 to 5 hours, depending on the tolerance ordered by the Physician.
The patient will have blood drawn at specified intervals depending on the test ordered. Up to seven specimens may be required. All patients except OB clinic will have urine specimens collected at the same intervals as the blood.

INSTRUCIONES PARA COLECCION DE TOLERANCIA DE GLUCOSA

Todas las pruebas de Tolerancia de Glucosa requieren que el paciente este en ayunas (sin comer) por lo menos 8 horas, pero no mas de 16 horas antes de empezar el examen.
Ninguna prueba de tolerancia se empezara en la clinica. El paciente debe de venir al laboratorio.
Al paciente se le colectaran muestras de sangre y orina al empezar la prueba. Luego se le dara a tomar una soda de sabor que contiene 100 gramos de azucar (glucosa). Se marcara el tiempo al empezar a tomar la soda, la cual debe tomarse en menos de 5 minutos.

El paciente debe permanecer sentado durante el tiempo que dure la prueba. No se permite comer o fumar durante la prueba, pero se recomienda que tome agua.

El paciente debe permanencer en el laboratorio de 3 – 5 horas, dependiendo del tipo de tolerancia ordenada por su doctor.
Al paciente se le coletaran varias muestras de sangre a diferentes intervalos de tiempo, dependiendo de la prueba ordenada, pueden ser hasta siete muestras.
Todos los pacientes, excepto los de la clinica OB tienen que dar muestras de orina al mismo intervalo de tiempo que se colecta la sangre.

Any questions about specimen collection, please request to speak to a Chemistry technologist.
Preguntas acerca de la coleccion de tolerancia de glucosa, favor de reclamar cita con un technologist del departamento de Chemistry

Patient Instructions-Occult Blood

SOP Number:	**CCP041**	**Creation Date:**	April 1, 2003
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
2/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Patient Instructions-Occult Blood

INSTRUCTIONS FOR SPECIMEN COLLECTION OF OCCULT BLOOD

All Fecal Samples should be collected from three consecutive bowel movements or three bowel movements closely spaced in time.

Fecal samples collected from the toilet bowl with the aid of a container, toilet tissue, or collection tissue. Fecal samples should not be collected in hematuria or obvious rectal bleeding is present. Pre-menopausal women must be instructed to avoid collecting fecal samples during or in the first three days after a menstrual period.

Patient preparation

Food to eat:

Well-cooked pork, poultry, fish. Any cooked fruits and vegetables.
High fiber foods (e.g. whole wheat bread, bran cereal, popcorn)

Foods, drugs, and Vitamins to Avoid:

Red meat (beef, lamb) including processed meats and liver. Any raw fruits and vegetables (especially melons, turnips, radishes, and horseradish)
Vitamin C in excess of 250 mg/day.
Caution: Some iron supplements contain quantities of vitamin C, which may excess the daily limit.
Aspirin or other non-steroidal anti-inflammatory drugs (avoid for 7 days prior to and during the test period).

Preparing the test

1. Collect small fecal sample on one end of an applicator stick.
2. Apply thin smear inside box A.
3. Reuse applicator stick to obtain second sample from a different part of the stool sample. Apply thin smear inside box B.
4. Close cover and place in biohazard bag.
5. After all three collection kits are completed, the patient needs to bring specimens to the laboratory as soon as possible.

INSTRUCIONES PARA COLECCION DE MUESTRAS FECALES

Las muestras deberan de ser colectadas en 3 veces diferentes que usted valla al inodoro(toilet)

Muestras fecales colectadas desde el toilet con la ayuda de un recipiente, papel sanitario o toallitas de papel. Las muestras fecales no deberan de ser colectadas cuando el paciente tiene sangramiento en la orina o sangramiento rectal evidente. Las mujeres en pre-menospausia van a ser instruidas para evitar la coleccion de muestras fecales durante o en los primeros 3 dias despues del periodo menstrual.

Preparacion del paciente

Alementos permitidos:

Carne de cerdo bien cocinada, aues, pescado. Cualquier frutas y vegetales cocinadas.
Comidas altas en fibra (ejemplo: pan de trigo entero, ceral, palomitas de maiz)

Alimentos, Medicamentos y Vitaminas que se deben de evitar:

Carne roja (res, cordero) incluyendo carne e higado procesado. Cualquier frutas y vegetales sin cocinar (especialmente melones, nabo, rabano, y rabano picante)
Vitamina C mas de 250 mb/dia.
Advertencia: Algunos suplementos de hierro contienen cantidades de vitaminas C las que pueden exceder el limite diario.
Otros medicatmentos como al aspirina y no esteroides anti-inflamatorios deberan de ser evitados por siete dias antes y durante el examen.

Procedimiento:

1. Colectar una peguena muestra fecal con la punta de uno de los aplicadores.
2. Aplique una capa fina dentro del cuadro A.
3. Use de nuevo el aplicador para obtener la segunda muestra de otra parte diferente de las heces fecales. Aplique una capa fina dentro del cuadro B.
4. Cubra,cierre y deposite las muestras en la bolsa biohazard.
5. Despues que la coleccion este completa, traiga la muestra al laboratorio tan pronto como sea posible.

Patient Instructions-Urine Collection

SOP Number:	**CCP043**	**Creation Date:**	April 1, 2003
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CP SOP Volume 1
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

INSTRUCTIONS URINE SPECIMEN COLLECTION

Male:

The glans of the penis should be exposed adequately and thoroughly cleaned with the towelette.

Allow a small amount of urine to pass into the toilet and then collect the midstream specimen (approx. 1-3 oz) in sterile container. Void rest of urine into toilet.

DO NOT allow glans to touch the sterile container. Cap the container and return the specimen to lab staff.

Wash your hands for 15-20 seconds with soap and water.

Use a paper towel to turn off faucet.

Female:

Separate the labia minora widely and keep separated throughout the procedure. Cleanse the area with towelette.

Void forcibly and allow initial stream of urine to drain into toilet, continuing to keep the labia separated.

Catch midstream specimen in the sterile container. DO NOT touch any portion of perineum with the container.

Collect about 1-3 oz of urine, then void rest of urine into toilet. Cap the sterile container and return the specimen to lab staff.

Wash your hands for 15-20 seconds with soap and water. Use a paper towel to turn off faucet.

INSTRUCCIONES PARA LA COLECCION DE MUESTRAS DE ORINA

Caballeros:

Limpie el pene con la toalla ascéptica.

Desaloje la primera orina en el sanitario.

Sin permitr que el pene toque el envase, continúe orinando utilizando el envase que el técnico le entregó y termine de orinar en el sanitario.

Cierre el envase cuidadosamente y déjelo en la pequeña puerta que está en la pared junto al sanitario.

Lave sus manos por un período de 15 a 20 segundos. Utilize una toalla de papel para cerrar la llave de agua.

Damas:

Separe los labios vaginales y manténgalos separados.

Límpiese con la toalla ascéptica que el técnico le entregó.

Desaloje la primera orina en el sanitario. Sin hacer contacto con el envase que el técnico le entregó continúe colectando la orina dentro de el y termine de orinar en el sanitario.

Cierre el envase cuidadosamente y déjelo en la pequeña puerta que está en la pared junto al sanitario.

Lave sus manos por un período de 15 a 20 segundos. Utilize una toalla de papel para cerrar la llave de agua.

PATIENT IDENTIFICATION

SOP Number:	**CCP050**	**Creation Date:**	May 20, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Correct patient identification is crucial to insuring that the blood specimen is being drawn from individual designated on the request form. NPSG #1 will be followed by all phlebotomists. Two positive identifiers used are patient's full name, hospital account number and/or date of birth on all Inpatient, Outpatients, Emergency Room patients, and Psychiatric patients. Ref to CHRISTUS SPOHN HEALTH SYSTEM POLICY H-120 for guideline and policy manual.

1.0 POSITIVE IDENTIFIERS

1.1 Positive verification of patient identification is strictly enforced. The patient's room number or physical location is not to be used as an identifier. Associates must use two positive identifiers in both pre-analytical and analytical phases of specimen collection and specimen process.

1.2 Patient's full name, Hospital Account Number, and Patient's Date of Birth are positive patient and specimen identifiers.

2.0 PATIENT IDENTIFICATION

2.1 In-Patient Conscious and Unconscious

2.11 An In-Patient will be registered and assigned to a physical location and a room number. A hospital identification armband will be placed on patient's wrists upon admission and if wrists can not be used, either one of the ankles may be used.
2.12 If conscious, ask the patient to state his/her name and date of birth. Verify the information with the LIS collection label.
2.13 If the patient does not speak or understand the English language, and a friend or relative is unable to identify and explain the procedure to the patient a language interpreter can be contacted to help before the blood is drawn.
2.14 If unconscious, the patient will be assigned a name, i.e. "John Doe". Verify the information with the LIS collection label.
2.15 Conscious and or unconscious patient, verify the full name and hospital account number on the **patient's ID armband** with the patient's full name and hospital account number on the LIS label.
2.16 Report any discrepancy to appropriate personnel. **Do Not Draw Patient Without Armband. Immediate replacement is necessary if ID armband was lost or if removal of patient ID armband occurs.**
2.17 If nursing service personnel identifies patient, record this information on the LIS label followed by documentation in LIS.
2.18 A specimen collected by associate other than laboratory associate will follow Veni-Puncture Policy. Rejected specimens will be documented as per Laboratory Rejection Policy.

2.2 Out-Patient, Out-Patient Surgery Unit, and Emergency Room Patient

2.21 An Out Patient or an ED Patient is registered and follows the In-Patient registration protocol.

2.22 Follow patient identification as outlined in 2.1 In-Patient Conscious and Unconscious.

2.3 Psychiatric Patient

2.31 Nursing personnel will take laboratory personnel to the patient in the Psychiatric Unit and aid in their identification.
2.32 Do Not Attempt blood collection in the Psychiatric Unit without assistance of nursing personnel.
2.33 Do Not Take Blood Collection Tray to patient's room in the Psychiatric Unit. Leave collection tray at nursing station and take only equipment needed to collect blood from the patient.

2.4 Newborn/Pediatric Out Patient

2.41 A Newborn or Pediatric Out Patient is registered and follows the In-Patient registration protocol.
2.42 Follow patient identification as outlined in 2.1 In-Patient Conscious and Unconscious
2.43 If Newborn is not named, the gender and last name is one of the two identifiers used (e.g. Baby Boy Lozano and Hospital account number).

Ref: NCCLS, Vol 11, #10, 3rd Ed.

Veni-Puncture Collection

SOP Number:	**CCP060**	**Creation Date:**	June 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	June 1, 2004	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision	Dr. Joe Lewis
5/2013	02	Updated Section 4.2	N. Lozano
4/2014	02	Supervisor Review	N. Lozano
1/2015	02	Updated Section 11.3	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Veni-Puncture Collection

It is the policy of Central Processing and Phlebotomy Department to follow the guideline and procedure that all CHRISTUS Sphon Health System inpatients and outpatients should be accurately identified using at least two positive identifiers prior to conducting procedures. (Patient Care H-120)

1.0 INTRODUCTION

1.1 Obtaining a blood specimen from a patient's vein is called a veni-puncture. It is a procedure which requires both knowledge and skills and should be performed in manner to reduce patient anxiety regarding the procedure.

2.0 SUPPLIES

All supplies are single use per veni-punture attempt.

2.1 Collection tubes
Tourniquet (non-latex)
Alcohol
Gause pads and bandage
Gloves (non-latex)
Safety Needles (Do not break seal/remove shield/preattach to holder)
Vacutainer holder
Transfer Device
Syringe, if needed
Winged infusion set (Butterfly), if needed
Lancets, if needed

2.2 Blood collection/evacuated systems- Most commonly used, allows the blood to pass directly from the vein into the evacuated tube. Consists of the following:

a) Sterile blood collection safety needle.
b) Holder, used to secure both the needle and the evacuated tube.
c) Evacuated tube containing pre-measured vacuum and a pre-measured additive.

2.3 Syringe-Used to draw a specimen from individuals with "fragile", "thready", or "rolly" veins. The transfer device is used with syringe to safely transfer blood into evacuated tubes.

3.0 SAFETY AND HANDWASHING

3.1 The staff is required to decontaminate hands with hygenic hand rub or by washing with disinfectant soap before and after direct contact with a patient or objects immediately around a patient.

Veni-Puncture Collection

Follow the CDC recommended hand hygiene technique:

- Handwashing-wet hands with water, apply soap, rub hands together for at least 15 seconds.
- Handrubs – apply to palm of one hand, rub hands together covering all surfaces until dry.

3.2 Standard precautions must be followed and gloves must be worn.

3.3 For infection control safety, paper towels may be placed beneath phlebotomy tray when setting down. Discard paper towels when leaving the room.

4.0 PATIENT CONTACT

4.1 The veni-puncture is usually the only contact the patient will experience with labortory personnel. Care must be taken so this is not an unpleasant experience by using AIDET prinicples: Acknowlege, Introduce, Duration, Explanation, and Thank You.

4.2 **Acknowledge the Patient**

Reassure the patient: Gain the patient's confidence. Verify patient's identification using two positive identifiers.

- Full name and hospital account number for in-patients
- Whenever practical, ask patient to state Full Name and Date of Birth for out-patients

4.3 **Introduce Yourself to the Patient**

Tell them your name and your department. Tell them what procedure you will be performing.

4.4 **Duration**

Tell the patient how long they may expect the procedure to take. (Ex.: this should take a few minutes)

4.5 **Explanation**

Very important to explain to the patient the procedure you will be performing. Use this time to ask if any collection sites are off limits due to past and pending surgeries, etc. And to ask if they have any questions.

4.6 **Thank the Patient!**

Veni-Puncture Collection

4.7 Position the patient.

a) Sitting patient.
1) Ask the patient to be seated in a chair.
2) Have patient extend the arm to form a straight line from the shoulder to the wrist on the armrest or table. The arm should be fully supported and should not be bent at the elbow.

b) Supine (lying down) patient.
1) Ask the patient to lie on his/her back in a comfortable position and extend the arm to form a straight line from the shoulder to the wrist. Use a pillow or towel to help support the arm if needed.

c) Startling the patient.
1) Avoid startling the patient.
2) Awaken patient, if they appear to be sleeping; do not attempt veni-puncture without assistance if the patient does not respond or awaken readily.

d) Foreign object in mouth.

1) There should be no objects in the patient's mouth at the time the specimen is drawn, i.e. glass thermometer, gum, etc.

4.8 Adverse Reactions

A phlebotomy adverse reaction is defined as any new or unexpected reaction during the veni-punture. Phlebotomy procedure may be require to be discontinuate. Attend to patient, or call the emergency number to activate a **code.**

14000 – Shoreline 56000 – South 24999 - Memorial

Code Assist should be called if a patient faints or develops seizures during a phlebotomy procedure.

Phlebotomy staff may provide assists with patient care with the following codes;

Code Gray if a security situation develops. Nursing and a Security Personnel will respond and will determine if further assistance is required.

Code Blue should be called if a patient appears to be undergoing cardiac and/or respiratory arrest (onset of chest pain, stops breathing etc.).

Code White should only be called for in house patients needing medical rapid response and therefore should not be used in our outpatient areas.

Code Green is called in the event a patient falls.

.

5.0 VERIFY PAPERWORK AND TUBES

5.1 Compare information on the requisition with the verbal information given and on patient's identification bracelet; **do not draw the patient until any discrepancies have been investigated.**

5.2 The requisition form should include the following: Patient's full name, patient's identification number, date and time of collection, collector's initials, room number, physician's name and code as well as the name of the test ordered. **VBG** (Venous Blood Gas) order collection requires the laboratory assistance. Collect specimen using syringe technique or collect a Li-Hep vial which will be given to respiratory tech for immediate processing.

5.3 Confirm tubes are appropriate for the test requested and **Do Not Pre-label tubes.**

5.4 To minimize blood collection volumes Refer to the LIS requisition label or the alphabetical test listing for tube.

6.0 SELECT VEIN SITE

6.1 Locate vein by palpating and tracing the path of the vein several times with index finger. The vein is palpated to determine the depth, direction and diameter of the vein.

6.2 Superficial veins of the anterior surface of the upper extremity are most commonly used, i.e. the median cubital, cephalic and basilic vein.

6.3 If superficial veins are not readliy apparent

a) Force blood into vein by massaging arm form wrist to elbow.
b) Apply warm damp cloth or heat inducing pedi-pak (heel warmer) to site for five minutes, this will cause vein dilution.
c) Lower extremity over the table or bedside to allow blood to fill vein.

6.4 Alternative site: Check oppsite arm, hands etc. The brachial, axillary and subclavian veins are deep veins and not acceptable venipucture.

6.5 Special phlebotomy collections such as wrist veins-veins on the underside of the wrist must not be used. Lower extrimitys (legs/feet) can only be accessable only with a physician's order. CBN

Central/Arterial reference 6.7 of this procedure. Mediport access reference Difficult Veni-Puncture Procedure 6.0.

6.6 Drawing above an IV site is not recommended. Drawing below an IV is the perfered choice, but it is recommended to have **IV truned off.**

a) If safe to do so, a **nurse will need to turn the IV off** for 2-4 minutes prior to blood collection. **Laboratory associates are not to handle any patient equipment**, only authorized personnel.
b) Draw patient and indicate on label that specimen was drawn from same side of IV.
c) When collection is completed, notifiy nursing staff IV can be turned on.

6.7 Drawing from a CVC (Central Venuos Catheter) may be inaccurate because of flushing solution, medications, infusion solutions and drawing techniques. **Laboratory staff will not draw or handle CVC lines**, only authorize RNs. Sharepoint Ref: H-155 CHRISTUS SPOHN HEALTH SYSTEM GUIDELINE AND PROCEDURE MANUAL.

6.8 Laboratory staff will encounter different wristbands placed on patients to assist the healthcare worker to: identify the patient, to be aware that the patients has known alleriges, their resuscitation status, Blood Bank collections status, their level risk of falling and collection site restrictions. Be familiar with their prupose so that patients receive the benefit of those bracelets and thus the highest level of care.

7.0 CLEANSE VENI-PUNCTURE SITE

7.1 Cleanse site using 70% isoproply alcohol with a circular motion from center to the periphery. This circular motion should move the bacteria away from the puncture site.

7.1.1 Disinfection of the veni-puncture site is of utmost importance for blood culture collection. Refer to Blood Culture Collection procedure.

7.1.2 For all alcohol levels, use a non-alcohol based solution such as betadine, providone-iodine or zephiran as a skin perparation.

7.2 Allow the alcohol to air dry for the bacteriostatic action to work. The alcohol must also be dry to prevent hemolysis of the specimen as well as to prevent the patient from experiencing a burning sensation when the venipuncture is performed.

8.0 APPLY NON-LATEX TOURNIQUET

8.1 A tourniquet is used to increase venous filling and make the veins more prominent and easier to enter.

8.2 Place the tourniquet three to four inches above the venipuncture site. The tourniquet should be released (after no more than one minute) when specimen is being drawn to prevent hemoconcentration and hematoma.

8.3 If tourniquet is applied to assis in vein selection, release and reapply after two minutes.

8.4 If a Non Latex and Single use tourniquet is not available and the patient has a skin problem or is allergic to latex, place the tourniquet over clothing, or paper tissue.

9.0 GATHER AND INSPECT EQUIPMENT

9.1 Inspect the tip of the safety needle to ensure seal is not broken.

9.2 Open and inspect the tip of the safety needle for burrs or bends.

9.3 Make sure the tubes are in date.

10.0 ORDER OF DRAW

10.0 The purpose of the order-of-draw is to avoid possible test result error due to cross contamination from tube additives.

1. Blood Culture vial
2. Coagulation tube (BLUE)
3. Serum tube with or without clot activator (RED or SST)
4. Heparin tube (GREEN)
5. EDTA (LAVENDER)
6. Glycolytic inhibitor tube (GRAY)

Use the same "order of draw" as above for syringe draws. To transfer the blood from the syringe to a venous blood collection tube, activate the safety feature of the needle. Remove and discard the needle and apply a safety transfer device.

11.0 PERFORM VENIPUNCTURE

11.1 Using evacuated tube system..

a) Thread needle into holder until secure.
b) Insert blood collection tube into the holder. Avoid pushing tube beyond the guideline to prevent a premature loss of vacuum.
c) Make sure patient's arm is in a downward position to prevent reflux.
d) Grasp patient's arm firmly. Make sure the skin is held taut by anchoring the vein below the venipuncture site using the

Veni-Puncture Collection

thumb; anchor 1 to 2 inches below site so that the 15° is maintained.

e) Insert the needle (bevel up) into the vein using a 15° angle beween the needle and the skin.

f) Push the tube onto the back of the needle or pull it on by using the "ears" of the needle adapter. Hold the adapter steady while changing tubes so the needle does not move under the patient's skin or comes out of the vein.

g) DO NOT ALLOW contents of tube to contact the stopper. Movement of fluid back and forth in the tube can cause back-flow of blood into venous system and cause possible adverse reaction.

h) A constant forward pressure on the end of the tube will prevent release of the shut-off valve and stop blood flow.

i) Fill tube until the vacuum is exhausted and blood flow ceases. This will ensure correct ratio of anticoagulant to blood. Tube will not completely fill.

j) When blood flow ceases, remove tube from the holder. The shut-off valve will recover the point, stopping the flow until the next tube is inserted.

k) Release the tourniquet as soon as possible after the blood begin to flow or once the last tube is inserted.

l) After drawing tubes with additives, mix by inversing tubes immediately after removing from the back of the needle by gentle inversion five to eight times. DO NOT mix vigorouly-will cause hemolysis of specimen.

m) If additional specimen are needed, insert next tube into holder and repeat procedure from (g) to (k)

n) Probing for a vein is not recommended; nerve and tissue damage may result.

o) If two unsuccessful attempts have been made, have another person attempt, notify nurse or call the physician.

p) After specimen has been collected, document collection information needed on LIS label and at bedside place lables on vials in the presence of the patient.

11.2 Using needle and syringe.

a) Break the seal in the syringe by moving the plunger in the syringe back and forth.

b) Insert appropriate needle into syringe.

c) Place patient's arm in a downward position if possible.

d) Grasp patient's arm firmly. Make sure the skin is held taut by anchoring the vein below the venipuncture site using the thumb; anchor 1 to 2 inches below site so that the 15° is maintained.

e) Line up the needle and syringe with the vein from which the blood will be drawn.

f) Turn the needle so that the bevel side is up.

g) Push needle into the vein. A sensation of resistance will be followed by easy penetration as the vein is entered. Remove

tourniquet if good blood flow is established, but no longer than 1 minute.

h) Withdraw the desired amount of blood.
i) Remove needle (see 15.0)
j) Transfer blood safely into evacuated tube using a Transfer Device.
k) After specimen has been collected, document collection information needed on LIS label and at bedside place lables on vials in the presence of the patient.

11.3 Using **18 gauge needle** with **NO TOURNIQUET**
(**Lipemic** patient collection to obtain a non-hemolyzed specimen)

a) Insert appropriate safety 18 gauge needle into hub.
b) Place patient's arm in a downward position if possible.
c) Grasp patient's arm firmly. Make sure the skin is held taut by anchoring the vein below the venipuncture site using the thumb; anchor 1 to 2 inches below site so that the 15° is maintained.
d) Line up the needle with the vein from which the blood will be drawn.
e) Turn the needle so that the bevel side is up.
g) Push needle into the vein. A sensation of resistance will be followed by easy penetration as the vein is entered
h) Withdraw the desired amount of blood.
i) After specimen has been collected, document collection information needed on LIS label and at bedside place lables on vials in the presence of the patient.
j) Walk vaccutainer tube(s) to the lab for processing.(Do Not submit collected blood samples via CTS)

12.0 RELEASE AND REMOVE TOURNIQUET

12.1 Tourniquet must be removed before the needle is removed from vein.

12.2 Releasing the tourniquet allows the blood flow to return to normal.

12.3 Release of the tourniquet reduces bleeding at the veni-puncture site.

13.0 ENSURE PATIENT'S HAND IS OPEN

13.1 Opening the hand reduces the amount of venous pressure as muscles relex.

13.2 Do NOT allow patient to pump hand.

Veni-Puncture Collection

14.0 PLACE GAUZE

14.1 Place 2 x 2 gauze pad lightly over veni-puncture site.

15.0 REMOVE NEEDLE

15.1 The needle should be removed slowly AFTER releasing the last tube from the needle sleeve. Take care not to scratch the patient's arm while withdrawing the needle. Using needle and syringe, render the needle safe by using closing shield/guard.

15.2 Apply slight pressure to gauze pad.

16.0 BANDAGE PATIENT'S ARM

16.1 Bandage the patient's arm after checking the puncture site to ensure bleeding has stopped. Instruct patient to leave the bandage on for at least 15 minutes.

16.2 Normal conditions:

a) Slip the gauze pad over the site, continuing mild pressure.
b) Apply tape or adhesive bandage over veni-puncture site, after making sure that the patient is no longer bleeding(stasis).
c) Tell patient to leave bandage on for a minimum of 15 minutes
d) DO NOT have the patient bend their arm;This practice promotes bruising.

16.3 Continued bleeding:

a) Apply pressure to the site with gauze pad until bleeding stops.
b) Wrap bandage tightly around arm over gauzze pad.
c) Tell patient to leave the bandage on the site for at least 15 minutes.

16.4 Excess bleeding:

a) Be alert to excess bleeding.
b) If bleeding persists longer than 5 minutes, notify nursing service.
c) Continue pressure until bleeding stops.

17.0 DISPOSE OF PUNCTURE SUPPLIES

17.1 Needles should not be recapped, bent, broken, or cut nor removed from disposable needle holder/syringe.

17.2 Discard in sharps container which should not be more than ¾ full. To avoid a potential need stick, do not force collecions suppplies into over filled sharps container.

17.3 When collecting from patients in Behavioral Medicine units, take only supplies needed into the room and remove all supplies and discard disposable items at nurses station.

18.0 THANK PATIENT!

18.1 Thank patient!

- Inpatient: Ask the patient: "Is there anything else I can help you with or do for you today? We want to make sure you're receiving *very good care*."
- Outpatient: Tell them: "You may receive a patient satisfaction survey in the mail, we want to make sure you've received *very good service*, please let us know."

18.2 Wash your hands. (see VENI-PUNCTURE PROCEDURE section 3.0 SAFETY AND HANDWASHING)

19.0 DOCUMENT COLLECTION AND LABEL TUBES IN PRESENCE OF THE PATIENT

19.1 Minimum requirements on a label include: patient's full name, patient's identification number, date and time of collection and phlebotomist initials. Other optional information may include: patient's room number, bed location, doctor's name and test information. (see GENERAL section 3.0 SPECIMEN COLLECTION, LOGGING, LABELING)

19.2 Containers used for blood and other specimens are labeled in the presence of the patient. Present to the patient his/her tubes in order for patient to confirm that his/her name is correct.

20.0 SEEK ASSISTANCE WITH DIFFICULT DRAWS

20.1 Seek assistance no later than after two failed attempts of blood colleciton.

20.2 Seek assistance with patients who have restraints.

20.3 Seek assistance with patients who may become combative.

21.0 ISOLATION TECHNIQUES

21.1 Before entering an isolation room, know what type of islotion and what prepartation is required to enter and leave the room. Read the posted signs outside the patient's room or at the nurse's station.

Veni-Puncture Collection

21.2 Do not take phlebotomy trays into isolation rooms. Take only supplies needed and discard all disposable items in isolation.

22.0 TRANSPORT TUBES TO THE LABORATORY AS SOON AS POSSIBLE

22.1 CLSI guidelines set the maximum time limit for separating serum and plasma from cells at two hours (120 minutes) from time of collection. Less time is recommended for certain specimens, particularly for potassium and cortisols. All specimens must be transported in a zipped biohazard bag.

22.2 NOTE: Potentially infectious items must be contained and transported in a manner that prevents breakage, leakage or contamination of the system. If CTS (Computerized Tube System) is used, place biohazard bag inside a padded when available "bubble" bag, place in carrier, ensure both latches are engaged and place carrier in dispatcher. If transporting from outside facility, the same preventative measures should be used to provide a safe delivery of specimens.

22.3 Specimens transported to the laboratory by courier should be placed in a leak proof plastic bag or a lockable rigid container with a biohazard sign affixed on the outside. Uncentrifuged specimens should be delivered to the laboratory within 45 minutes, as the quality of laboratory test results are dependant upon the temperature at which a specimen is transported, processed, stored, and received for processing.

22.4 Certain specimens require special handling. Specimens may require protection from light, (i.e. bilirubin, carotene, RBC folate, urine porphyrins) may need to be chilled, (i.e. ammonia, lacti acid, coagulation factors) and may need to be kept warmed (i.e. cold agglutination, cryoglobulin).

22.5 Both the communication network and the quality of laboratory test results are dependent upon the time that specimens are received for processing.

Ref: NCCLS, H3-A5 Vol 23, #32

Studer, Quint. Hardwiring Excellence: Purpose, Worthwhile Work, & Making a Difference. Fire Starter Publishing 2003: p 94/

Difficult Veni-Puncture Collection

SOP Number:	**CCP070**	**Creation Date:**	June 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	June 1, 2004	
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/12	01	Pathologist Review	Dr. James Scherer
1/13	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
11/2014	02	Revision Updated 3.3, 6.2	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
03/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Difficult Veni-Puncture Collection

It is the policy of Central Processing and Phlebotomy Department to use the following guideline and procedure which will provide guidance for the difficult veni-puncture collection. If a patient is difficult to collect or a blood sample is unobtainable, several procedures may be attempted in an effort to successfully obtain a blood sample. However, limits to the number of veni-punctures the patient must endure are established and the guideline must be followed.

1.0 BLOOD DOES NOT FLOW

1.1 Needle in patient arm.

a) Change position of needles. If needle has penetrated too far into the vein, pull it back a bit. If it has not penetrated far enough, advance it further into the vein.
b) Lift the holder up which may allow blood to flow.
c) Probing for the vein is not recommended as it is painful to the patient, nerve and tissue damage may result.
d) Try another tube, tube may have lost vacuum.
e) Loosen tourniquet. If applied too tightly, blood flow will stop.
f) If blood still does not flow, remove needle and attempt another veni-puncture.
g) Bandage the patient's arm after checking the puncture site to ensure bleeding has stopped. Instruct patient to leave the bandage on for at least 15 minutes.

2.0 REPEAT VENI-PUNCTURE

2.1 Second attempt.

a) New holder with safety needle.
b) Change tube if stopper has been penetrated and the vacuum lost.
c) Re-apply tourniquet – loosen if tourniquet appeared to be on too tight. Tighten if tourniquet was too loose.
d) Change site. If same vein is used, puncture below the first veni-puncture site.
e) Bandage the patient's arm after checking the puncture site to ensure bleeding has stopped. Instruct patient to leave the bandage on for at least 15 minutes.

3.0 SECOND VENI-PUNCTURE FAILURE

3.1 Follow same procedure as in original veni-puncture.

3.2 If blood was not obtained after second attempt, notify nursing personnel that blood has not been collected and if available an additional phlebotomist will be dispatched to try again.

3.3 Return to laboratory and document appropriately. (i.e. canned message CPDD. i.e.

@Difficult draw - Notified Mary,RN (AR.ICU2)
@by LAU 11/13/2014 1144 NXL4070)

3.4 The second and or the third Phlebotomist will also follow second attempt failure policy.

4.0 VENI-PUNCTURE FAILURE

4.1 Notify phlebotomy supervisor that patient cannot be drawn.

4.2 Notify "Charge Nurse" or physician of the status on the blood collection.

4.3 Document in LIS difficult draw and document who was notified, time and your initials.

4.4 Test may be cancelled at this point, or held until:
a) Physician or house staff collects arterial blood.
b) Physician may order a pic line for blood collection.

4.4 Decision to cancel or recollected by arterial stick is made only by the physician. **ONLY with physician orders** are alternative means undertaken – placement of a line, collecting from the legs or feet.

NOTE: Certain test procedures require very little blood. Confirm with laboratory personnel where the test will be performed and determine the minimum amount of specimen required for the test in question. (Optional per Lab site: A "finger stick" collection may be used in place of veni-puncture.)

5.0 MEDI PORT COLLECTION

5.1 Phlebotomist will not access a blood specimen from a Medi Port.

6.0 CVC –CENTRAL VENOUS CATHERTER COLLECTION

6.1 Phlebotomist will verify previous collection methodology via Line Draw Sheet or LIS. Patient's RN will be notified of lab order and vials needed. Bio-bag will be prepared and sent to floor via CTS for RN to use. (Ref to H-155 CHRISTUS SPOHN HEALTH SYSTEM GUIDELINE & PROCEDURE MANUAL for blood collection from CVC)

6.2 Documentation is enter in comment box with standard editing (i.e. canned message CPTS).

6.3 Phlebotomist will monitor pending specimen via Specimen Tracker and remind RN if vials are not collected or submitted on a timely manner which may compromise patient care.

6.4 Submitted CBN vial is matched with LIS Meditech order label if specimen was labeled with the patient's chart label. The pre-printed order label must be applied without covering the patient's name on the original label. Receive specimen as Reference SOP A - CP section 6.0 Specimen Receiving, Batching and deliver vial to appropriate department.

Capillary Heel, Finger Collection

SOP Number:	**CCP080**	**Creation Date:**	April 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 1, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Capillary Heel, Finger Collection

Obtaining a blood specimen from a patient's heel and or a finger is called a capillary blood collection puncture. It is a procedure which requires both knowledge and skills and should be performed in manner to reduce patient anxiety regarding the procedure.

1.0 FINGER STICK BLOOD COLLECTION

1.1 Following NPSG verify patient's identification using two positive identifiers (full name, and hospital account number for inpatients, full name and date of birth for outpatients) . Whenever practical, ask the patient to state his/her name and date of birth. Present LIS labels to be used for patient to confirm that his/her name is correct. Explain procedure to patient.

1.2 Position patient, and organize equipment and supplies. Following NPSG wash hands and glove up.

1.3 The sites most suitable for collection of blood from adults are the palmar surface of the portion of the distal portion of the 3rd (middle) or 4th (ring) finger; the middle finger is recommended.

1.4 Clean the site with 70% isopropyl alcohol. After cleaning, site should be wiped with a sterile gauze pad and allowed to dry completely. Alcohol will cause rapid hemolysis of blood.

1.5 Perform the puncture using a sterile lancet, the skin should be punctured once with one continuous motion at a very slight angle to the skin surface. Puncture depth should not exceed 2.0 mm.

1.6 To facilitate collection, the pressure of the thumb can be eased and reapplied as blood flows. Massaging or milking the puncture site must not be done. This may cause hemolysis and excess tissue fluid to contaminate the specimen.

1.7 Wipe the first drops away with a sterile gauze pad, then proceed to collect the specimen needed. Hematology specimens should be collected first. All specimens collected in Microtainers containing anticoagulants should be mixed immediately.

1.8 If an insufficient sample has been obtained because the blood flow stopped, repeat the puncture at a different site with all new equipment.

1.9 Place a band aid over lanced area.

1.10 Label the specimen and complete paperwork by filling out Col by, Date, and Time on LIS order label.

1.11 Perform appropriate specimen handling.

1.12 Thank the patient.

1.13 Dispose of all puncture equipment and biohazardous materials. Remove and dispose of gloves; wash hands before existing room.

1.14 Deliver specimen to the appropriate department.

2.0 HEELSTICK BLOOD COLLECTION

2.1 Following NPSG verify patient's identification using two positive identifiers and as stated in section 1.1 explain procedure to parent if in attendance.

2.2 Position patient, and organize equipment and supplies. Following NPSG wash hands and glove up.

2.3 The sites most suitable for collection of blood from infants are the lateral or medial surface of the plantar or bottom of the heel. Warming the site will increase the blood flow through that area up to sevenfold.

2.4 The infant's heel should be held with one hand. Hold it with the forefinger at the arch of the foot and the thumb, placed proximal to the puncture site at the ankle.

2.5 Clean the site with 70% isopropyl alcohol. After cleaning, site should be wiped with a sterile gauze pad and allowed to dry completely. Alcohol will cause rapid hemolysis of blood.

2.6 Puncture depth should not exceed 2.0 mm. The infant's heel should be held with one hand. Hold it with the forefinger at the arch of the foot and the thumb, placed proximal to the puncture site at the ankle.

2.7 Wipe away first blood drop with sterile gauze pad. Allow another LARGE blood drop to form.

2.8 Hematology specimens should be collected first. All specimens collected in Microtainers containing anticoagulants should be mixed immediately.

2.9 If an insufficient sample has been obtained because the blood flow stopped, repeat the puncture at a different site with all new equipment.

2.10 Place a band aid over lanced area.

2.11 Label the specimen and complete paperwork by filling out Col by, Date, and Time on LIS order label.

2.12 Perform appropriate specimen handling.

2.13 Thank the patent.

3.0 NEWBORN SCREENS

3.1 Follow the steps in 2.1-2.7 and verify all information is legibly printed in blocks provided by Neonatal Screening Form

3.2 Lightly touch filter paper to LARGE blood drop. Allow blood to soak through and completely fill circle with **SINGLE** application to LARGE blood drop. (To enhance blood flow, VERY GENTLE intermittent pressure may be applied to area surrounding puncture site.) **Apply blood to one side of filter paper only.**

3.3 Fill remaining circles in same manner as step 2.7, with successive blood drops. If blood flow is diminished, repeat steps 2.5 through 2.7.

3.4 Elevate puncture site and apply pressure. Place a band aid over lanced area. Sterile cotton balls can be used in babies whose heels are irritated from multiple heel sticks.

3.5 Label the specimen and complete paperwork by filling out Col by, Date, and Time on LIS order label and Neonatal Screening Form.

3.6 Thank the patient and or parent if in attendance.

3.7 Dispose of all puncture equipment and bio-hazardous materials. Remove and dispose of gloves; wash hands before existing room.

3.8 Deliver specimen to the appropriate department and dry blood spots on a dry clean, flat, non-absorbent surface for a minimum of four hours.

3.9 The completed NBS form for TDHS will be mailed or picked up as scheduled by TDHS associate.

COLLECTION PROCEDURAL NOTES:

For Successful Finger Punctures;

1. Always try to explain exactly what you will be doing to the child.
2. Talk to children in a soft and reassuring manner.
3. Let children participate by holding a sticker or special band-aid.
4. Make sure that you have all your equipment ready and ahead of time.
5. Try to have the child sit on his parent's lap so they can help hold the child.
6. Make sure to warn the child prior to puncturing the finger.
7. Know the quantity of blood needed.

For Successful Heel Draws;

1. Heel punctures should be performed on infants less than 12 months old unless the child is walking or the heel is too big to hold effectively.
2. Pre-warming the heel increases capillary circulation.
3. Know the amount of blood that you need for the required testing; taking too much blood may cause bruising. No more than 2 ml is recommended per collection of a newborn.
4. Stay within the safe boundaries of the heel in order to avoid unnecessary damage to underlying bone or major blood vessels.
5. Avoid excessive squeezing or pressure to the heel.
6. Do not puncture any deeper than 2.0 mm.
7. Always wipe away the first drop of blood.
8. Avoid any scraping of the microcollection tube against the heel.
9. Avoid swollen or bruised areas of the heel.

Blood Bank Collection

SOP Number:	**CCP090**	**Creation Date:**	August 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Review/Updated Section 3.0	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Blood Bank Collection

Obtaining a blood specimen from a patient for a blood tranfusion is called a Blood Bank Crossmatch blood collection puncture. It is a procedure which requires both knowledge and skills and should be performed in manner to reduce patient anxiety and misidentification that can lead to the risk of mistransfusion regarding the procedure.

1.0 BLOOD BANK SPECIMEN COLLECTION

1.1 Before collecting patient, verify with the Blood Band department if a specimen needs to be collected. A CLOT TO HOLD may have been collected. Blood Bank Technologist will give approval for specimen collection.

1.2 Verify patient's identification. Two positive identifiers must be used, and **patient must be wearing a hospital identification wristband.**

1.3 If the patient is conscious and rational ask, "What is your name?" Compare information on the request form with the information on the hospital wristband. **DO NOT COLLECT** the sample if a discrepancy exists.

1.4 **DO NOT RELY** on a bed tag or charts / records beside the bed. Emergency room patients may be assigned a name as in "JOHN DOE" or "Trauma AA" and an identification hospital number.

1.5 Position patient, and organize equipment and supplies. Wash hands and glove up.

1.6 Select a site. Follow Veni-Puncture procedure and collect a **Blood Bank EDTA tube.**

1.7 **THE INDIVIDUAL DRAWING PATIENT'S BLOOD IS RESPONSIBLE FOR IDENTIFYING THE PATIENT, LABELING SPECIMEN AND PLACING BBID ARM BAND ON PATIENT.**

1.8 Fill tube as completely as possible.

1.9 Take one of the Blood Band Identification bands and very firmly, with a ballpoint pen, write:

- **a) PATIENT'S FULL NAME**
- **b) HOSPITAL NUMBER IN PLACE OF MR#**
- **c) DATE**
- **d) TIME COLLECTED**
- **e) COLLECTOR'S INITIALS**

f) On the blank portion of the BBID wristband, the information written on the label will be duplicated on the wristband.

1.10 Peel top label apart from the Blood Band identification wristband and place it on the tube containing the patient specimen. (BBID number top side of tube)

1.11 Place the wristband on the patient's arm, wrapping the band once around the patient's wrist or ankle and firmly close the clip. The band becomes tamper-proof when the clip is closed.

1.12 Tear the excess portion of the band along the clip and place that piece containing the Blood Band Identification Numbers with the blood bank requisition.

1.13 If a second tube is collected, the Meditech label is used to identify it and place one of the small BBID number on it.

1.14 **RECORD ON THE REQUEST SLIP:**
- **a) INITIALS OF COLLECTOR**
- **b) DATE**
- **c) TIME**

DO NOT LEAVE THE PATIENT OR THE PATIENT'S ROOM UNTIL THE TUBES ARE COMPLETELY LABELED.

1.15 Receive Blood Bank specimen in LIS ASAP as per site specific: Verify that the two positive identifiers are correct and match Meditech label. Scan barcode, enter time, and collector. F12, enter BBID number as it appears in BBID. (Cap letters space numbers)
(NOTE; if any discrepancies are found, DO NOT RECEIVE, follow rejection protocol and notify Blood Bank Department.) Refer to section **Central Processing 7.2**

1.16 Submit the blood bank specimen tube, BBID numbers when fitting and requisition to the Blood Bank Department. If hand delivering, announce all EDs and STATs to BB personnel.

2.0 BLOOD COLLECTION FOR CROSSMATCH WHEN THE PATIENT IS ALREADY WEARING A BLOOD BANK IDENTIFICATION BAND.

2.1 Call lab and follow the Blood Bank technician's collection instructions. (i.e. Cut/redraw/reband, Do Not cut/redraw/reband, collect a second tube, return to lab)

2.2 **DO NOT REMOVE / CUT THE BLOOD BANK BLOOD BAND IDENTIFICATION BAND UNLESS INSTRUCTED TO DO SO BY THE BLOOD BANK PERSONNEL.**

2.3 **DO NOT REMOVE ANY OTHER BAND FROM THE PATIENT.**

2.4 Collect as instructed by Blood Bank technician as needed for second blood type ABO/RH verification.

3.0 Type & Screen Early Collection (TSEC)

3.1 Pre-Admit patients who qualify for early specimen collection may have their type & screen and crossmatch specimens collected up to 14 days before surgery.

3.2 The patient obtains the signed form part 1 from the ordering physician and presents it to the admitting department on preadmission.

3.3 The specimen is collected per standard SOP and is sent with the completed form part 1 to the laboratory and places the TSEC computer order.

3.4 The patient will be handed the Type & Screen Early Collection Form Part 2 with attached BBID wristband and will be instructed to bring the band on day of surgery.
(Form is available on the Sharepoint site under Forms / Laboratory)

3.5 Patient presents the BBID wristband and form part 2 to the nurse on day of surgery for wrist banding.

3.6 The Nurse verifies patient's identity prior to banding patient. Nurse asks the patient again if the patient has been transfused or pregnant in the last 3 months. If the patient answers yes, the TSEC sample is no longer good and a new banded sample must be submitted to the transfusion service.

Blood Culture Collection

SOP Number:	**CCP100**	**Creation Date:**	August 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	
M.4.12	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2013	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
11/2014	02	Revision- BD BACTEX FX	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Blood Culture Collection

Obtaining a blood specimen from a patient to rule out sepsis is called a Blood Culture Collection puncture. It is a procedure which requires both knowledge and skills and should be performed in manner to reduce patient anxiety and provide sterile optium recovery of an organisms if present.

1.0 Preanalytical Consideration

1.1 Specimen should be drawn PRIOR to antibiotic therapy, if possible

1.2 If the blood culture and other laboratory blood tests need to be collected at the same time, the blood culture should always be the first bottles/tube(s) collected to avoid contamination of the sample.

1.3 Verify collection time between sets ordered, and gather all needed supplies.

1.4 Verify patient's identification. **Two positive identifiers must be used** for positive patient identification; Account number and full name. In-house patients and out-patients must be wearing a hospital identification wristband. Verify account number in addition to asking patients to state their Name and DOB.

2.0 Blood Culture Specimen Collection

2.1 Carefully select puncture site. **Different sites are selected and sterilized for each set of blood cultures ordered.** It is acceptable to collect Blood Cultures **only** above an IV site when sites are limited. If the collection site is visibly dirty, cleanse the selected site with a 70% isopropyl alcohol pad or soap and water prior to cleansing with a Antiseptic containing soap (chlorhexidine). If needed mark site by applying pressure with hollow tip of pen/skin marker.

2.2 Loosen or release tourniquet. Open the sterile chlorhexidine swabstick. Remove the chlorhexidine swabstick from the kit. Depress the swab sponge against selected site to saturate the sponge. Scrub the site vigorously using back-and-forth motions for 15 seconds. Flip the swab and scrub the site for an additional 15 seconds. **The site must be scrubbed for a minimum of 30 seconds total.** Allow the solution to dry for **30 seconds.**

2.3 Do Not Touch Sterile Site. If site must be re-palpated, open a new Chlorhexidine swabstick kit and repeat steps 3-4.

2.4 Remove the flip-off cap from the vial. Wipe the top of the blood culture vial with 70% isopropyl alcohol pad and leave the pad on top of the bottle until the blood is ready to be injected.
Do not sue iodine to disinfect tops of vials.

2.5 If meniscus and 10 ml target volume were not previously marked on blood culture vial, set the bottle on a flat surface and mark meniscus. Then using the 5ml-graduations on the bottle **mark a 10ml target volume**. If the volume is not monitored the correct blood to media ratio can't be met.

2.6 Tighten or reapply tourniquet and follow veni-puncture procedure using a butterfly needle device for all blood culture vial collections. Carefully monitor the volume collected. Use the 5 ml-graduations on the bottle, and collect 8-10 mls to meet the target volume mark. If the volume is not monitored, the stated maximum amount collected may be exceeded. This condition may adversely create a "False" positive result, due to high blood background. Under filling with blood may reduce recovery of microorganisms and thus interfere with the sensitivity of the test.

2.7 Inoculate directly into the Aerobic, and then the Anaerobic culture vial. Mycobacteria or fungi blood culture may be collected with first set if requested. **A BACTEC Myco/F Lytic bottle needs to be collected if AFB or Fungal culture is requested.**

2.8 Take care to prevent contamination during both bottle preparation and inoculation of the patient sample.

2.9 If using syringe collection, typically a 20-ml syringe is used for adults. **Draw 16-20 ml of blood for one culture set (aerobic and anaerobic).** Using a transfer device, allow 8-10 mls of blood specimen to be inoculated into the aerobic vial first and then the 8-10 mls into the anaerobic vial.

Note: For pediatric patients or difficult-draw adults, a 3-ml syringe is frequently used. Draw 1-3 mls of blood and transfer the entire amount into a BACTEC Peds Plus bottle.

For AFB collection, aseptically inject 3.0-5.0 mls into the BACTEC Myco/F Lytic vial. Note: *This media is used only for AFB Blood cultures and is available on request only from the laboratory.*

If Fungal culture is desired, aseptically inject 3.0-5.0 ml into the BACTEC Myco/F Lytic bottle.

2.10 After vials have been inoculated, routine lab can be collected. Release tourniquet, and remove needle from patient. Bandage site after checking for active bleeding.

2.11 Document collection paperwork, label vials with required information**, collector's initials and date/time**. Special

documentation is required if specimen is collected from line/colored lead. **Please note this on the vial and LIS requisition.**

2.12 Place LIS label on the designated vial labeling area. Both vial barcode and LIS label barcode will run diagonally. (Both barcode labels will be accessible for simple scanning and loading into instrument) Do not cover narrow window to view blood volume inoculated.

2.13 Dispose of all materials used. **Follow steps 1.3-1.12 again to collect second and third set if ordered.**

3.0 Collection Procedural Notes

3.1 Avoid drawing blood through indwelling intravascular catheters unless blood can not be obtained by venipuncture. Blood collected from intravascular catheters should be done with the knowledge that contamination may be an issue. **If the blood is drawn through a catheter, please note this information on the bottle. The correct order for a specimen drawn through a catheter is noted in the source of collection. The source is CENTERLINE verses PERIPHEAL.**

3.2 Whenever an intravenous catheter tip is sent for culture – 2 peripheral blood culture sets should also be done to rule out catheter colonization.

3.3 The volume of blood cultured is critical because the number of organisms per mL of blood in most cases of bacteremia is low, especially if the patient is on antimicrobial therapy. In infants and children, the number of organisms per mL of blood during bacteremia is higher than adults, so less blood is required for culture.

3.31 Newborns / Infants (0 – 3 years of age): Recommended guidelines suggest 1 ml of blood for every year of life. Optimum recovery obtained with 2-4 ml of blood. Transfer the entire amount to a **BACTED Peds Plus bottle.**

3.32 Children (3 -10 years of age): 3.0 to 10 mL of blood per venipuncture. Recommended guidelines suggest 1ml of blood for every year of life. Transfer the entire amount to a **BACTED Plus Aerobic/F** (8-10 ml) OR a **BACTEC Peds Plus bottle** (≤ 4.0 ml)

3.33 Adult:16 to 20 mL of blood per venipuncture split between the Aerobic and the Anaerobic vial. If it is impossible to draw the required amount, divide as

follows:

If it is impossible to draw the required amount divide as follows

Amount per Venipuncture	Amount in BACTEC Plus Aerobic Vial	Amount in BACTEC Anaerobic Lytic Vial
16 – 20 mL	Split equally between aerobic and anaerobic vials	
13 – 16 mL	8 mL	5 – 8 mL
10 – 12 mL	5 – 7 mL	5 mL
5 – 9 mL	entire blood amount	0

NOTE: Optimum recovery of isolates will be achieved by adding 8 to 10 mL of blood (BACTEC Peds Plus/F: 1 – 3 mL; BACTEC Myco/F Lytic: 3 – 5 mL). The use of lower or higher volumes may adversely affect recovery and/or detection times.

4.0 SITE SPECIFIC PHLEBOTOMY DUTY: SHL BD BACTEC FX

4.1 Shoreline Phlebotomists have an additional task of loading and unloading the BC vials from the BD BACTEC FX instrument located in CP department. The BACTEC instrument will set off an alarm which the phlebotomist will respond to. If alarm indicates to unload a negative or a positive vial, the phlebotomist will follow instructions below. All other BD BACTEC alarms and requirements are carried out and maintained by Microbiology Department Technologist.

4.2 LOADING AND UNLOADING BC BOTTLES

Utilizing BD BACTEC FX Interface (Default Method)

Entering Data and Loading Instrument

To enter vials in the instrument, select a drawer where there are available stations. (The number of available stations is shown below the "vial entry" icon on the Status display.)

Method 1 (Vial Activated)

- Select a drawer that has available stations, and open that drawer.
- The barcode scanner turns on, scan a vial sequence barcode label.
- The Vial Entry display appears and the Sequence, Media, and default Protocol are automatically entered
- If you did not scan the Accession, scan or enter it now.
- To change the protocol tap the "modify" button, then tap the up arrow to increase or down arrow to decrease the protocol length.
- Place the vial into an available station (solid green indicator)

Method 2 (Icon Activated)

- Select a drawer that has available stations, and open that drawer.
- Tap the "vial entry" button on the Status display. The Vial Entry display appears and the barcode scanner turns on
- Scan the vial sequence barcode label
- The Sequence, Media, and default Protocol are automatically entered.
- If you did not scan the Accession, scan or enter it now
- To change the protocol tap the "modify" button, then tap the up arrow to increase or down arrow to decrease the protocol length
- Place the vial into an available station (solid green indicator)
- When a vial is placed into the last available station in a drawer, the Activity Complete tone sounds (3 beeps).
- To continue entering vials, select another drawer with available stations.

4.3 POSITIVE AND NEGATIVE VIALS

Notification of positive and negative vials

The system notifies you of new positive cultures in several ways:

- Positive Vial audible alarm sounds
- Station Indicators: FLASHING RED or FLASHING AMBER / RED (alternating) -Anonymous Positive
- -Message box appears on screen
- -Positive vial system indicator for that drawer illuminates
- -On the Status display, the "positives" icon is active (color is red, not grayed out) and the number of positive vials in the drawer is shown

Out-of-Protocol Negatives are indicated by the following:

- Negative vial system indicator for that drawer illuminates
- On the Status display, the "negatives" icon is active and the number of negative vials in the drawer is shown
- Station indicators: FLASHING GREEN

4.4 Removing positive vials

Select a drawer that has positive stations, and open the drawer by pulling it out.

- The barcode scanner turns on.
- All positive, final negative, available, and anonymous (all variations) are indicated by the appropriate lit or flashing station indicators.
- Tap the "remove positives" button on the Status display, OR

- Remove a vial from a FLASHING RED (positive) or FLASHING AMBER / FLASHING RED (anonymous-positive) station
- The Positive Removal display appears. (If an anonymous positive vial was removed, the ID Anonymous display appears. Scan the sequence and accession for the anonymous positive vial and tap the "Save" button. Then tap the "Exit" button to return to the Positive Removal display.)
- If the Show Related Vials function is enabled in configuration, the LEDs of vials with the same accession number illuminate GREEN (in the current drawer), and the Culture – Specimen display shows the related vials in the Vial Window (not applicable to Positive / Anonymous vials).

- Remove any related vials if desired, and either confirm or scan the sequence number (depending on the system prompt). When you have finished removing related vials, tap the "exit" key to return to the Positive Removal display

4.5 Removing negative vials

Select a drawer that has negative stations, and open the drawer by pulling it out.

- The barcode scanner turns on. All positive, final negative, and anonymous (all variations) are indicated by the appropriate flashing station indicators.

For Single Vial Removal

- Tap the "remove negatives" button on the Status display, OR
- Remove a vial from a FLASHING GREEN (negative) station and scan it.
- The Negative Removal display appears.
- Remove and scan all the negative vials. (If any vial sequence numbers were entered manually, the system asks you to verify that the sequence number is correct. You must manually confirm that the sequence number on the vial is the same as the one shown on the screen, and tap the "Verified" button.)

Ref: Microbiology Department SOP

Glucose Tolerance Collection

SOP Number:	**CCP110**	**Creation Date:**	August 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Glucose Tolerance Collection

Obtaining a blood specimen from a patient to aid with the diagnosis of the possilbity of Diabetes is called a Glucose Tolerance Test Collection puncture. It is a procedure which requires both knowledge and skills and should be performed in manner to reduce patient anxiety and provide acuate resutls for proper diagnosis and proper patient treatment.

1.0 Glucose Tolerance Tests (GTT1-6, GLU2PP (MEAL), GLUC50, GTTGEST)

(Patient has been given instruction to read by receptionist while test is ordered in LIS.)

1.1 Verify patient's identification and type of GTT scheduled to be collected.

1.2 Verify patient availability for the time required for the GTT ordered.

1.3 Explain procedure to patient, and verify that patient has been fasting for the hours required. (>8 hrs<16 hrs)

1.4 Perform the first veni-puncture procedure if GTT is ordered to obtain fasting specimen using appropriate container, and obtain a fasting urine specimen if urine samples are required.

1.5 Continuation of GTT **will be determined by chemistry department pending fasting result**. Notify chemistry glucose dose pending result, and make documentation on communication board when fitting.

1.6 Give the patient the correct dose of recommended tolerance beverage. (Refer to section 4.3 under 4.0 Collection Procedural Notes for correct dose.)

1.7 The time starts at the beginning of glucose ingestion and the solution should be drunk within 5 minutes.

1.8 The patient should remain seated during the test. Food, smoking, walking, and chewing gum are not permitted during the test but water is encouraged.

1.9 Project the collection times, inform patient of times, and log on board when fitting.

1.10 The patient should expect to be in the lab area for 3 to 5 hours, depending on the tolerance ordered by the Physician.

1.11 The patient will have blood drawn at specified intervals depending on the test ordered. Up to seven specimens may be required.

1.12 All patients except OB clinic will have urine specimens collected at the same intervals as the blood or as ordered by physician.

1.13 All blood and urine specimens are delivered to appropriate departments. If urine is not obtained, please notify department tech to result appropriately.

PROJECTED COLLECTION TIME EXAMPLES:

Routine **3 HOUR GTT with urine**		or	**GTTGEST with no urine**
Blood	Urine		Urine collection is skipped if patient is
Fasting: 0700	0700		OB clinic or if physician orders no urine
Patient is given the glucose at 0715 per Chemistry's approval.			
½ hour: 0745	0745		
1 hour: 0815	0815		
2 hour: 0915	0915		
3 hour: 1015	1015		

2.0 POST PRANDIAL (GLU2PP)

(Patient is fasting unless requested by physician)

2.1 Patient order is placed in LIS and instructed by staff to eat a hardy meal (ALL GROUPS! milk, meat, vegetable, fruit, and bread) and return 2 hours after finishing the meal.

2.2 Perform the veni-puncture procedure to obtain a specimen using the appropriate container.

3.0 GLU50

(Patient is fasting unless requested by physician)

3.1 Patient order is placed in LIS and is given the 50 grams (as request by physician) of glucose to drink.

3.2 Project the collection time, inform the patient of the collection time and log on the board when fitting.

3.3 The patient should remain seated during the test. Food, smoking, and chewing gum are not permitted during the test, but water is encouraged.

3.4 After 1 hour, perform veni-puncture procedure to obtain a specimen using the appropriate container.

4.0 COLLECTION PROCEDURAL NOTES:

4.1 Use correct LIS labels available for each container/hour.

4.2 Patient should be monitor for dizziness and nauseous. If symptoms are experience by patient, notify chemistry immediately.

4.3 Recommended tolerance beverage dose:

1)	Non-pregnant adult	75 gm GTT Beverage
2)	Pregnant female	100 gm GTT Beverage
3)	Screen for GDM	50 gm GTT Beverage
4)	Children (under 15 yrs)	1.75 gm/kg ideal body weight up to maximum of 75 gm (divide wt in lbs by 2.2 = kg.) **Note: Chemistry will calculate children's dose.**

PPD Skin Test Collection

SOP Number:	**CCP120**	**Creation Date:**	May 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
1/2015	02	Revision-Updated 3.5, 5.13	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
03/2017	02	Revision-Update 1.1	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Administering antigen to a patient to aid with the diagnosis of the possilbity of exposure to Tuberculosis is called a PPD Skin Test. It is a procedure which requires both knowledge and skills and should be performed in manner to reduce patient anxiety and provide acuate resutls for proper diagnosis and proper patient treatment.

1.0 Administering PPD Antigen (MANTOUX METHOD SKIN TESTING)

1.1 Antigen Storage and stability

- The PPD solution is stored between 2-8 C. **A new vial must be dated when opened. The solution expires after 28 days.**

1.2 Follow the CDC recommended hand hygiene technique

- Handwashing – wet hands with water, apply soap, rub hands together for at least 15 seconds.
- Handrubs – apply to palm of one hand, rub hands together covering all surfaces until dry
- Standard precautions must be followed and gloves must be worn

1.3 Verify patient's identification. Two positive identifiers must be used, and patient must be wearing a hospital identification wristband. An out patient in addition must be verified by stating their Name and DOB.

1.4 Ask patient if they have ever had a positive TB skin test. If the answer is "YES", do not give skin test. Out Patient Associates; Refer to Employee Health Nurse. Out Patient with physician; physician will be notified and patient will follow physician's instruction. Out Patient without physician; Refer to Nueces County Tuberculosis Clinic.

1.5 Out Patient/Associate who answered "NO" to ever having a positive TB skin test, verify if patient/associate can return for PPD reading 48 Hours (max 72 hours). If answer is "NO" do not administer antigen and reschedule for a later date. If answer is "YES" select site. Left forearm is the preferred site if available.

1.6 Gloves must be worn. Prepare 1cc tuberculin syringe with **0.1 ml of test antigen**. Because of absorption onto plastic, the antigen should be drawn into the syringe and immediately used. **The vial of Tuberculin PPD must be dated with open date and the vial which has been entered or in use must be discarded at the 30 day post opened date as it is the expiration date.**

1.7 Clean selected site, and allow drying. The left forearm is the standard site, if another site must be used, the specific site must be documented in the record. If left or right forearm is unavailable, back shoulder area may be used.

1.8 Stretch the skin taut using thumb. Face bevel upward and hold needle and syringe almost parallel to insure proper intradermal puncture.

1.9 Carefully insert needle just below skin surface. The tip of the needle should be seen through the skin.

1.10 Slowly inject the antigen. Firm resistance is felt as the antigen enters the skin. Inject the entire antigen.

1.11 A tense white wheal 5-10 mm in diameter appears over the point of the needle. It is important that the needle is positioned properly. If a wheal does not appear, repeat PPD at least 2" from the original site or opposite arm.

1.12 Wipe away any blood that appears. A small amount of bleeding is normal. Too much bleeding indicates improper administration.

1.13 If skin marker available mark outside injection site using 4 dots, and remind patient/associate to return 48-72 hours for reading of test.

1.14 Dispose of needle according to protocol and document accordingly.

2.0 Receiving PPD

2.1 The pathway for the PPD to be received (i.e. indicating to LIS that the specimen is to be received) is as follows:

2.11 Specimen Desktop - Enter Result
2.12 Enter patient's account number/specimen number (i.e.**:M1267).**
2.13 Type "E" at the result window-line #1. See **Diagram 7.0**
2.14 Enter Antigen Lot #-box line #2 . and enter Exp date –box line #3. See **Diagram 7.1**
2.15 Enter site of injection if different than Left Upper Arm- box line #4
2.16 Enter date in DATE GIVEN- box line#5. See **Diagram 7.1**
2.17 F12/Save, and F12 again.
2.18 Mark **Preliminary/Unverified** file status. See **Diagram 7.2**
2.19 Select OK,F12/Green Check mark, and F12 again.

2.20 Check **Broadcast Results,** and release by entering F12. See **Diagram 7.6**

3.0 Reading the PPD

3.1 Read the skin test at 48-72 hours.

3.2 A reaction consists of induration, a firm nodule under and around the site of injection. This induration is measured transverse to the long axis of the arm with a flexible ruler divided into millimeter (mm).

3.3 Redness (erythema) at the site is ignored. Any question regarding reading, ask for a consultation.

3.4 No reaction is reported **as "0 mm"** – **not as negative**.

3.5 Record result in Meditech.

3.6 A Positive Out Patient, without a physician, will be given an information sheet about the Nueces County Tuberculosis Clinic to follow up with.

4.0 Resulting the PPD

4.1 The pathway for the PPD to be resulted (i.e. indicating to LIS that the specimen is to be resulted) is as follows:

4.11 Specimen Desktop - Enter Result
4.12 Enter patient's account number/specimen number (i.e. **:M1267).**
4.13 Enter initials under READ BY-box line #1
4.14 Enter date at DATE READ-box line #6.
4.15 Enter reading at INDURATION box in mm-box line #7 See **Diagram 7.3**
4.16 Use Enter key **to include interpretation of result**. See **Diagram 7.4**
4.17 F12/Save, and F12 again
4.18 Mark **Final/Verified** file status. See **Diagram 7.5**
4.19 Check **Broadcast Result, Print External Inquiry** and release by entering F12. Provide the printed external copy of PPD result to the associate where fitting. See **Diagram 7.6**

5.0 Resulting Discharged/No Return PPD

5.1 If the patient is discharged or does not return after 72 hours, the pending PPD must be resulted with a message. The pathway for the PPD to be resulted with a message (i.e. indicating to LIS that the patient was discharged/did not return for reading) is as follows:

5.11 Follow 4.11 and 4.12 **Resulting PPD.**

5.12 Return to line 7 Induration window. (F9 to view Code)
Type **PAT** to attach message which reads Patient did not return for skin test reading
Or
Type **DIS** to attach message which reads Patient discharged prior to skin test reading.
Or
Type **NO** to attach message which reads Associate did not return for skin test reading. See **Diagram 7.5**

5.13 Check **Broadcast Result,** and release by entering F12.

6.0 Repeating PPD (if patient does return to have read)

6.1 In general, there is no risk associated with repeated tuberculin skin test placements. If a person does not return within 48 -72 hours for a tuberculin skin test reading, a second test can be placed as soon as possible. There is no contraindication to repeating the PPD (TST), unless a previous PPD was associated with a severe reaction.

6.2 If a patient is determined to have an "indeterminate result" and is confirmed by the Occupational Medicine nurse or other trained personnel, the PPD test should be repeated immediately or as recommended by Occupational Medicine or supervisor.

7.0 Diagrams and Examples

See pages 6 through the end of the document.

Diagram 7.0
PPD Receiving

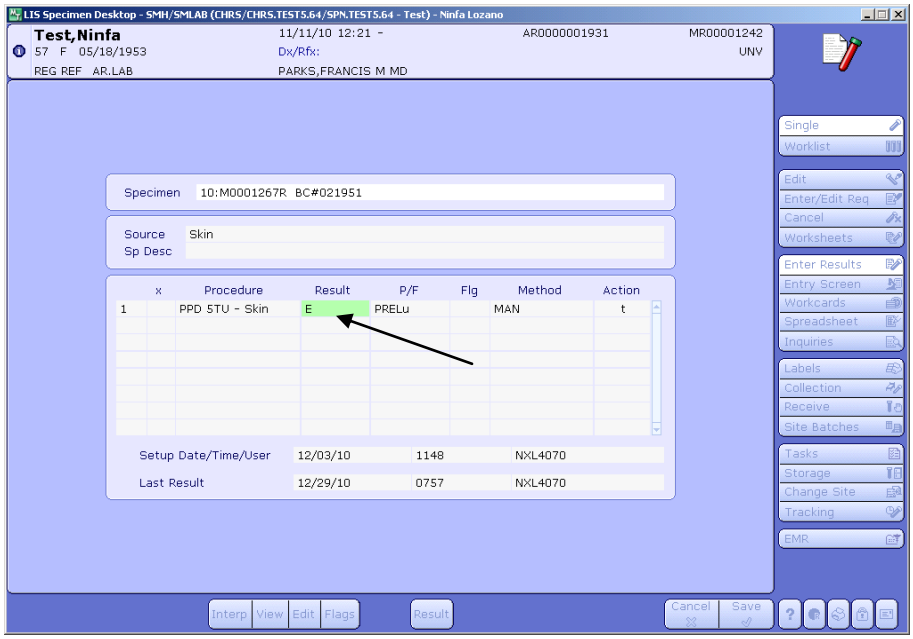


Diagram 7.1
PPD Receiving

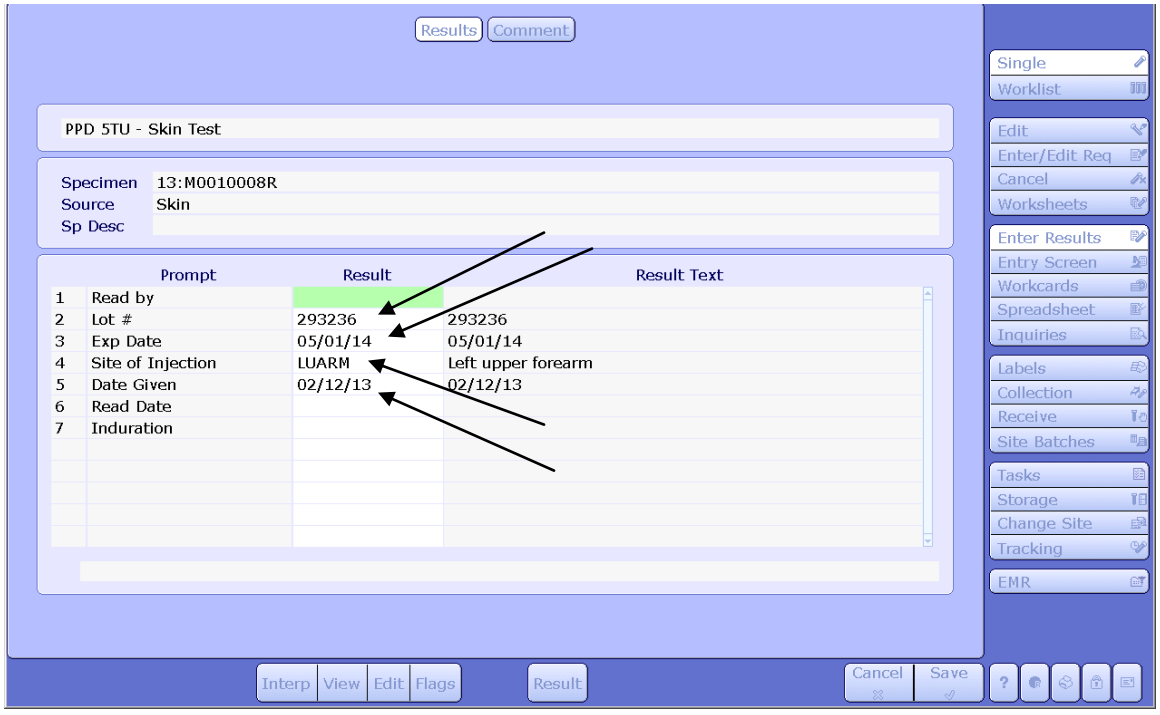


Diagram 7.2
File Status (Receiving)

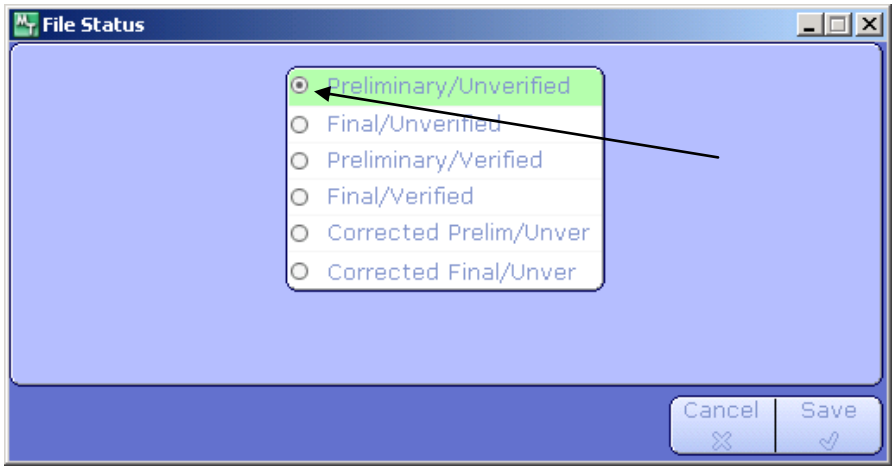


Diagram 7.3
PPD Resulting

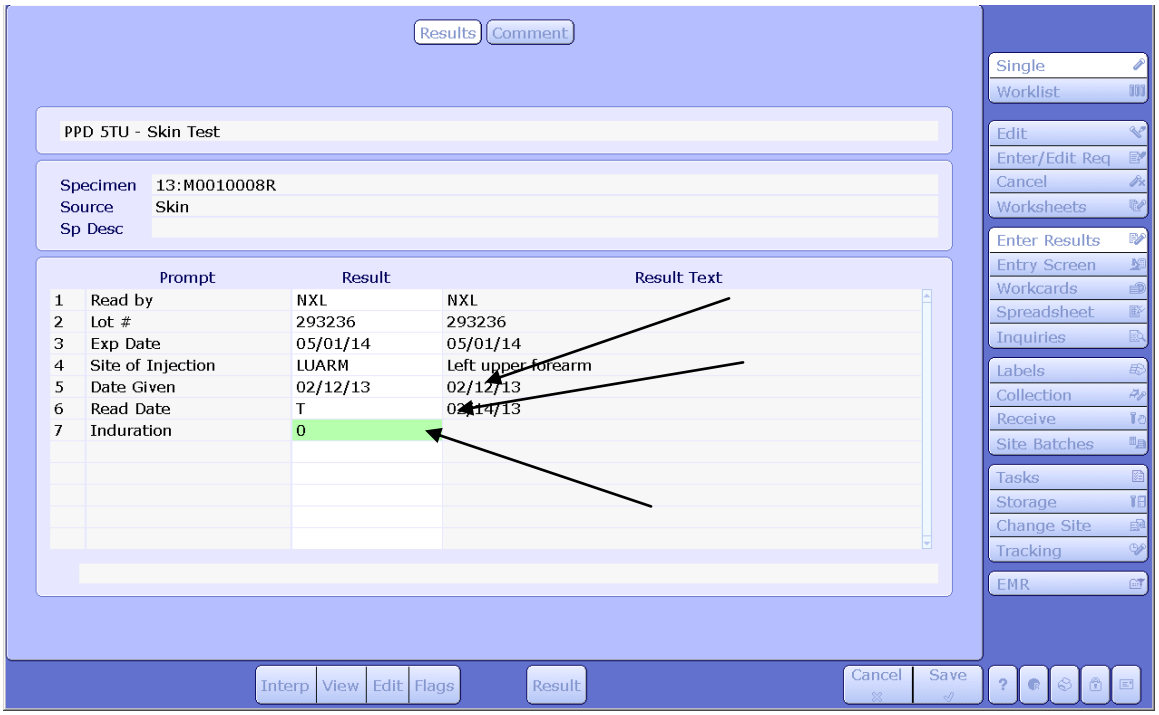


Diagram 7.4
File Guideline (Resulting)

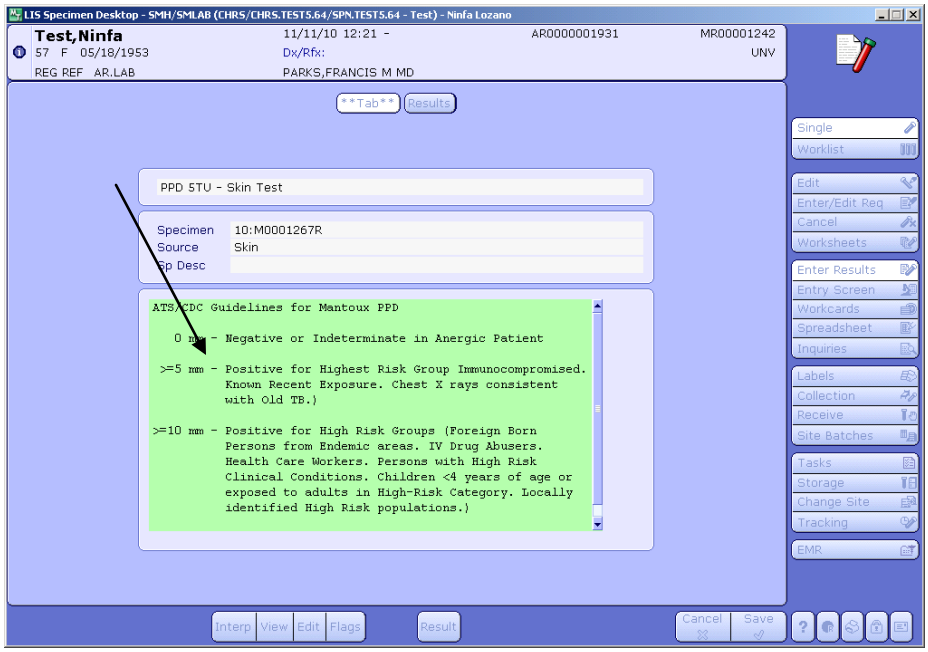


Diagram 7.5
File Status (Resulting)

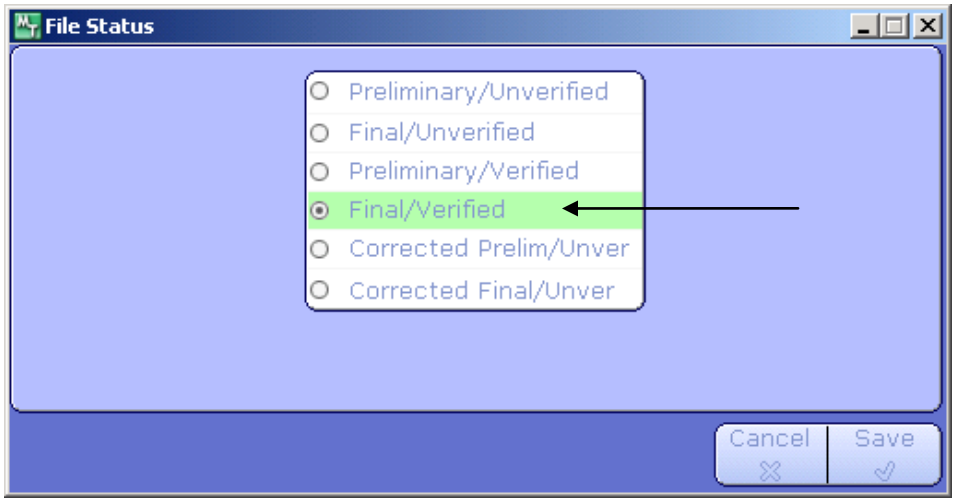


Diagram 7.6
File Results (Receiving & Resulting)

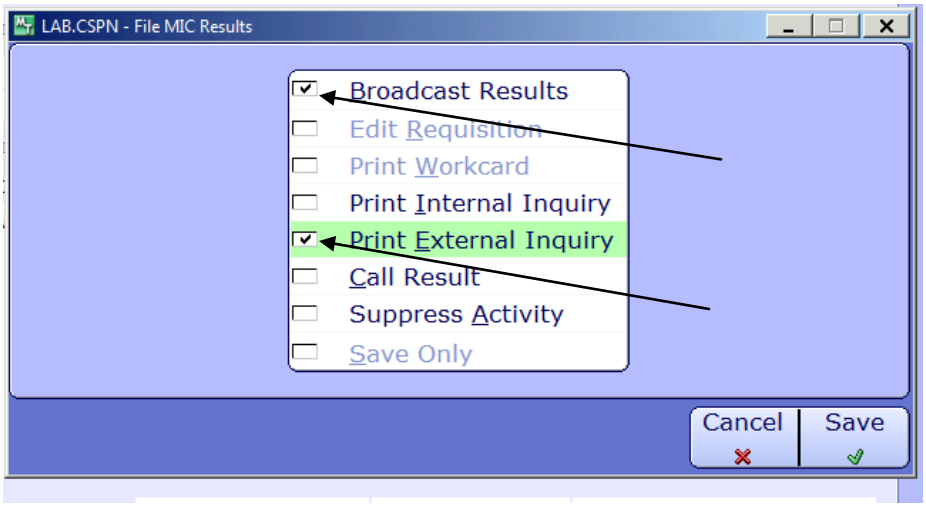
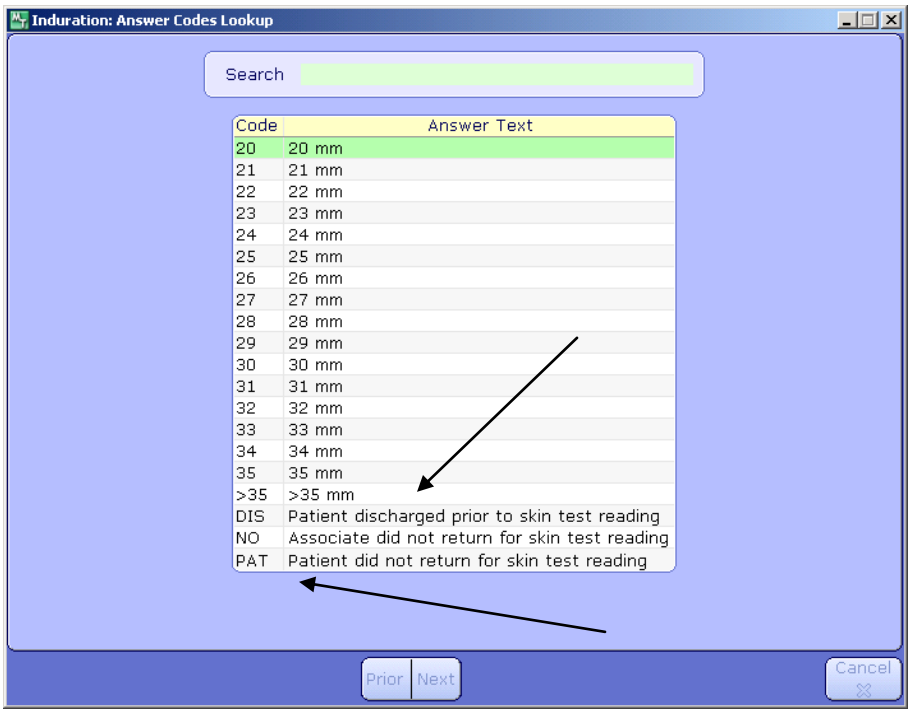


Diagram 7.7
Resulting Discharged/No Return



Requisition Request

SOP Number:	**CCP130**	**Creation Date:**	June 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
GEN. 40938	CAP
GEN 40750	CAP
Related Documents	
Confirmation of unclear orders	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Requisition Request

Labortory will receive an LIS oder as ordered by Physicians or on an out-patient laboratory services requisition form, and an LIS laboratory label is generated. Each specimen label is an order(s) for a blood specimen to be obtained from the patient. A signed physician order or an electronically transmitted request must be received before blood collection or testing can be performed. These orders or request must be made within accordance of State and Federal guidelines.

1.0 LABORATORY REQUISITION

1.1 Orders for a laboratory test should contain the following information:

- 1.11 Patient's last name, first name, and middle initial
- 1.12 Hospital or out-patient identification or registration number.
- 1.13 Patient's Social Security Number, date of birth, and gender
- 1.14 Location of patient.
- 1.15 Requesting physician's complete name and signature
- 1.16 Patient's diagnosis.
- 1.17 Laboratory test required.
- 1.18 Source of specimen (when appropriate)
- 1.19 Date and time of collection
- 1.20 Initials of collector
- 1.21 Special instructions. (fax or phone number)
- 1.22 Clinical data (when appropriate)

1.2 Editing of orders for a laboratory test or requisition can be made by the Phlebotomy or Chemistry Department as necessary to ensure optimum patient care. Common circumstances are listed below**:**

- 1.21 Per clinician request
- 1.22 Per health department request
- 1.23 Per reflex testing policy
- 1.24 To prevent duplicate testing/billing
- 1.25 To comply with specimen integrity requirements
- 1.26 After clarification of unclear orders – clarification may be made by reviewing the clinician's written orders, or by contacting the clinician directly.

(Ref: Policy 3.140 CHRISTUS Health Clinical Policy: Verbal/Telephone Orders)

2.0 SPECIMEN ACCCESSION NUMBER

2.1 A specimen number is assigned automatically by the LIS computer "order entry" system whenever a laboratory test is ordered by the physician.

2.2 This specimen number may also be called an "accession" number. Assigning a laboratory specimen number to each test ordered provides a means of identifying all paperwork and specimens related to an individual patient.

2.3 The specimen number must be placed on each blood specimen collected as indicated by the laboratory request form.

3.0 SPECIMEN LABELING

3.1 Once a specimen is obtained, the following information must be placed on **the specimen blood vial** which is provided on LIS label.

3.12 Patient name.
3.13 Hospital or out-patient identification or registration number.
3.14 Location of the patient.
3.15 Laboratory test required.
3.16 Specimen number.
3.17 Time and date specimen is collected.
3.18 Name or initials of the collector.
3.19 Source and site of collection when applicable.

4.0 CONFIDENTIALITY

4.1 Patient labels contain PHI (personal health information - name, DOB, diagnosis, test ordered, location within the facility). Labels with specimens are delivered to the testing departments. Additional labels (reprints, duplicates, etc.) will be discarded into document destruction bins found in each department. Do not discard requisition labels into other trash receptacles

Ref: NCCLS, Vol 11, #10, 3rd Ed

Exposure Requisitioning

SOP Number:	**CCP140**	**Creation Date:**	April 23, 2012
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 23, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
11/2014	02	Revision-4.0 snap shots	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
03/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Exposure Requisitioning

To define a standardized procedure for testing associates who experience an exposure to blood-borne pathogens via needle stick or splash.

1.0 Exposure to Blood-Borne Pathogens (Expo Panel Source/ Expo Panel Associate)

1.1 The Texas Occupational Injury Assistance Plan (TOIAP) must be filled out immediately after notification of injury. The packet provides the Requisition for the Ordering of Laboratory Exposure Tests required by the laboratory. This packet is necessary to provide the details information which will allow the Occupational Health nurse to coordinate testing results of source and associate.

1.2 Associate must notify Supervisor immediate: Director/Charge Nurse/Shift Coordinator. Associate will receive CHRISTUS Spohn Health System TOIAP Injury Reports packet which must be filled out and submitted to Occupational Health Representative.

1.3 Following notification to Supervisor, Occupational Health RN should be paged using the following numbers:

Alice:	Pager 361.224.3176 / Fax 361.6618369
Shoreline:	Pager 361.224.1212 / Fax 361.881.3205
Memorial/Beeville:	Pager 361.224.2185 / Fax 361.902.4396
South/Kleberg:	Pager 361.224.1210 / Fax 361.985.5156

1.4 After Hours, Week-ends, and Holidays site Shift Coordinator must be contacted.

2.0 LABORATORY ORDER REGISTRATION

2.1 The laboratory must be provided with completed requisition form signed by the Occupational Health Nurse or the nursing supervisor before both exposure and source specimens are collected or testing is initiated. See **Diagram 4.0** at the end of this document for examples of the Occupational Medicine Lab Authorization registration form.

2.2 Registration account is site specific:
AR/SML - AS/SHL - AV/SSL - AQ/SKL - AW/SBL - AY/SAL
Registration Client: Site.EMPHES (i.e. AR.EMPHES)
Location: OCC (i.e. AR.OCC)
Attending: OCCHEA

2.3 Reason for Visit window can display type of exposure, needle stick, blood borne pathogen or 6 month follow up.

2.4 Associate/exposure must have Hospital badge, which will provide a picture with ID number for EXPO PANEL ASSOCIATE registration protocol. Associate must also provide DOB, SS# and Assoc# as requested on Registration Form for Laboratory.

2.5 Patient/source for EXPO PANEL SOURCE will be provided in the TOIAP packet, which will provide the **patient's hospital account number**, and follow ordering protocol. (Generate LIS order if patient's unit did not). Notification of exposure to the Chemistry Department will allow staff to check for blood in lab. Blood in lab will be used if available and or patient/source will be collected as ordered "**U**" Urgent.

2.6 Non-Associate for Exposure will follow the initial Expo Panel Associate registration protocol and must also provide the DOB and SS#. Students, Physicians, Contractors and Visitors are classified as non-associates.

2.7 EMPEXP order set will be ordered for Associate/exposure and Non-Associate/exposure. EMPEXPSRC order set will be ordered for Patient/source. Comment order box will be used **to link both accounts** for Occupational Health Department management.

2.8 Register EMPEXP first and in order comment box enter patient's hospital account number (Source #....).
Order EMPEXPSRC second using active account number and in order comment box enter associate's (EMPEXP) account number. (Exposure #.....).

2.9 Meditech aliquot label for both patient/source and associate/exposure will be adhered to requisition form. Requisition form will be file by Chemistry department.

2.10 Associate may have HIVCombo ABS and HCV orders for the 6 month follow up. Use previous created *Medical Record* number for follow up registration to avoid creating multiple medical record numbers. See **Diagrams 4.1 – 4.7** at the end of this document for examples of the registration protocol.

3.0 LABORATORY TESTING PROTOCOL

3.1 EMPEXPSRC order group tests are HBSAG, HCVAB, and HIV12RG. EMPEXP order group tests are HCVABPN, and HIV12RG.

3.2 All patient/source HIV12RG specimens will be processed as ordered "**U**" and called immediately to site Occupational Health RN or site Shift Coordinator. Documentation of name, date, and time result called must be done for future reference.

3.3 SHL STAT Lab process all HBSAG, HCVAB, and HBSABPN daily before 1400 cut off time. Specimens are held in laboratory for at least 7 days.

4.0 Diagrams and Examples

See pages 4 through the end of the document.

Diagram 4.0
Laboratory Order Registration

CHRISIUS SPOHN Health System

CHRISTUS SPOHN HEALTH SYSTEM

OCCUPATIONAL MEDICINE LAB AUTHORIZATION FORM

Expo Associate Name _____ **Assoc#**
Last ***First***

Dept _____ **DOB** _____ **SS#** _____
Name

- **Expo Panel - Assoc**

Diagnosis (ICD-9/10 Code)_____

Authorization by _____ *Date*_____
Medical Director:· Earl Matthew, MD

- Charge to OHO

CHRISIUS SPOHN Health System

CHRISTUS SPOHN HEALTH SYSTEM

OCCUPATIONAL MEDICINE LAB AUTHORIZATION FORM

Expo Source Name _____ **Acct #** _____
Last *First*

Dept Loc Occurred _____ **Medical #** _____

- **Expo Panel - Source**

Diagnosis (ICD-9/10 Code)_____

Authorization by *Date* _____
Medical Director: Earl Matthew, MD

Charge to OHO

Place Patient Label HERE

Diagram 4.1
Laboratory Order Registration

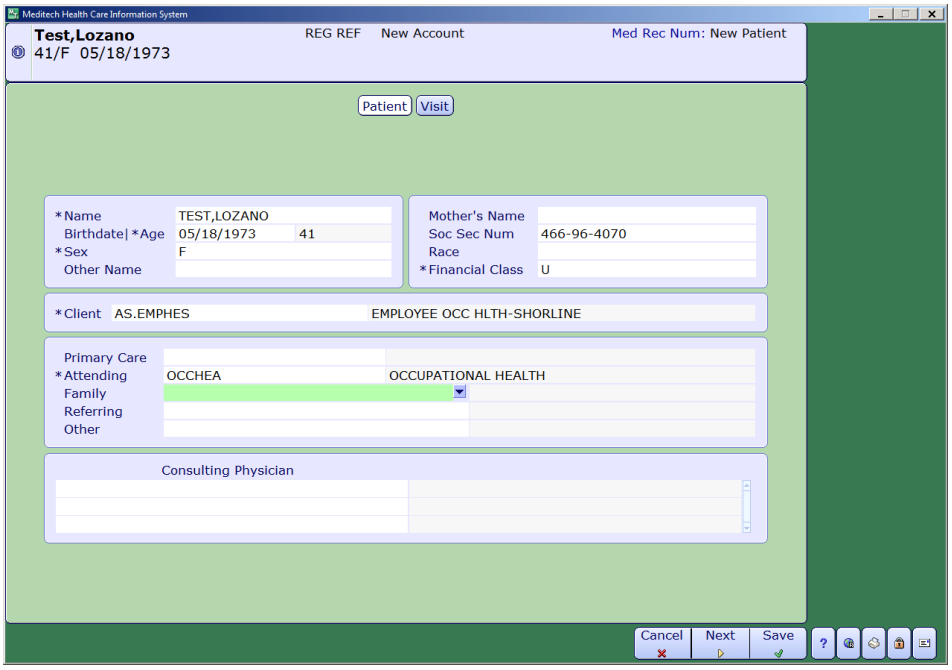


Diagram 4.2
Laboratory Order Registration

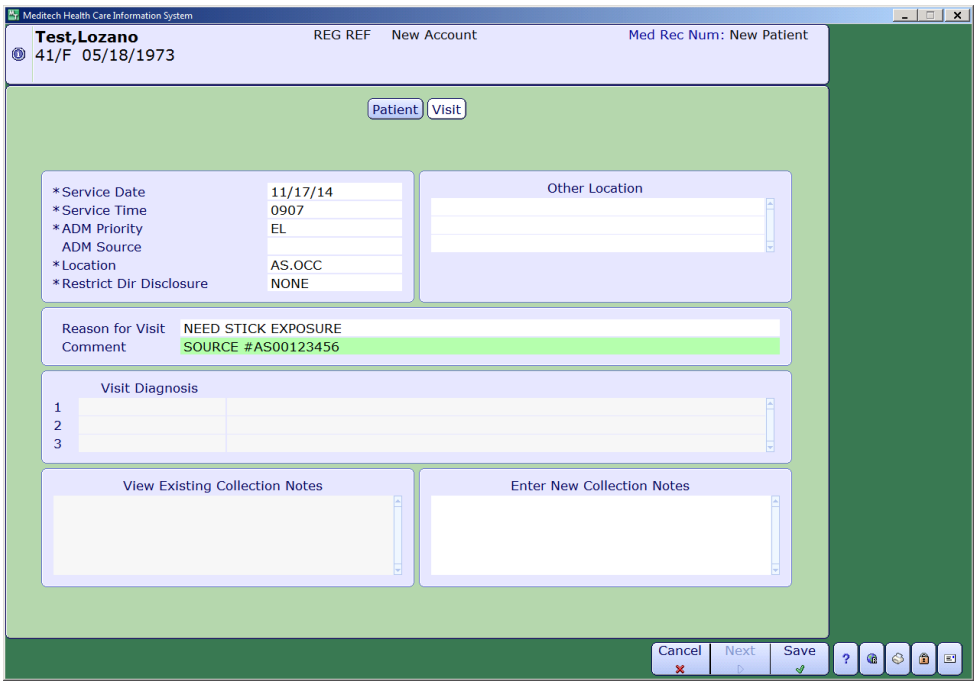


Diagram 4.3
Laboratory Order Registration

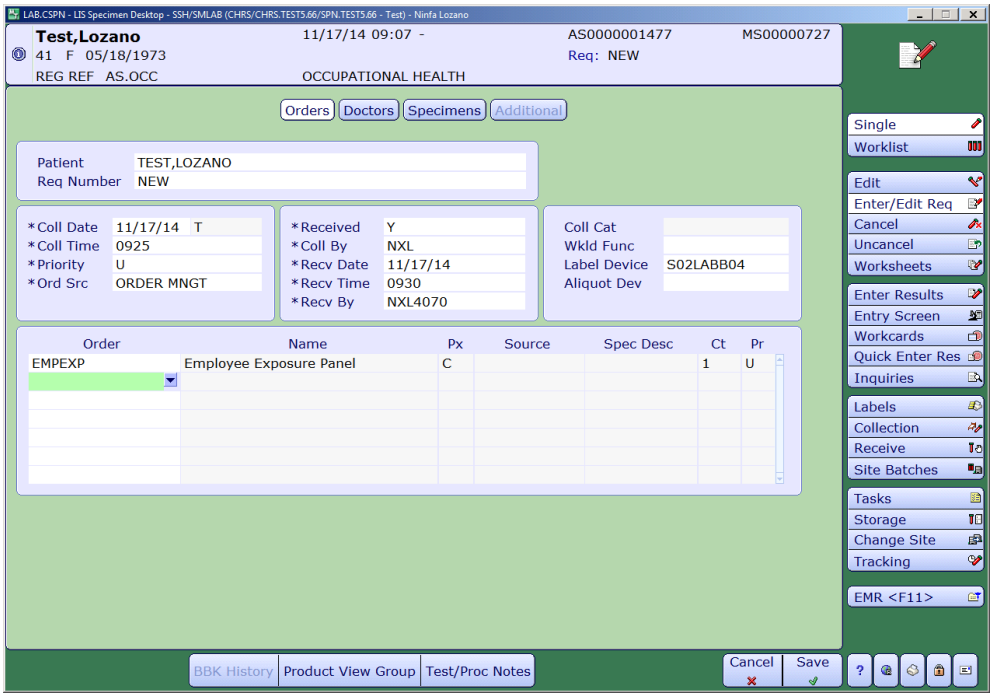


Diagram 4.4
Laboratory Order Registration

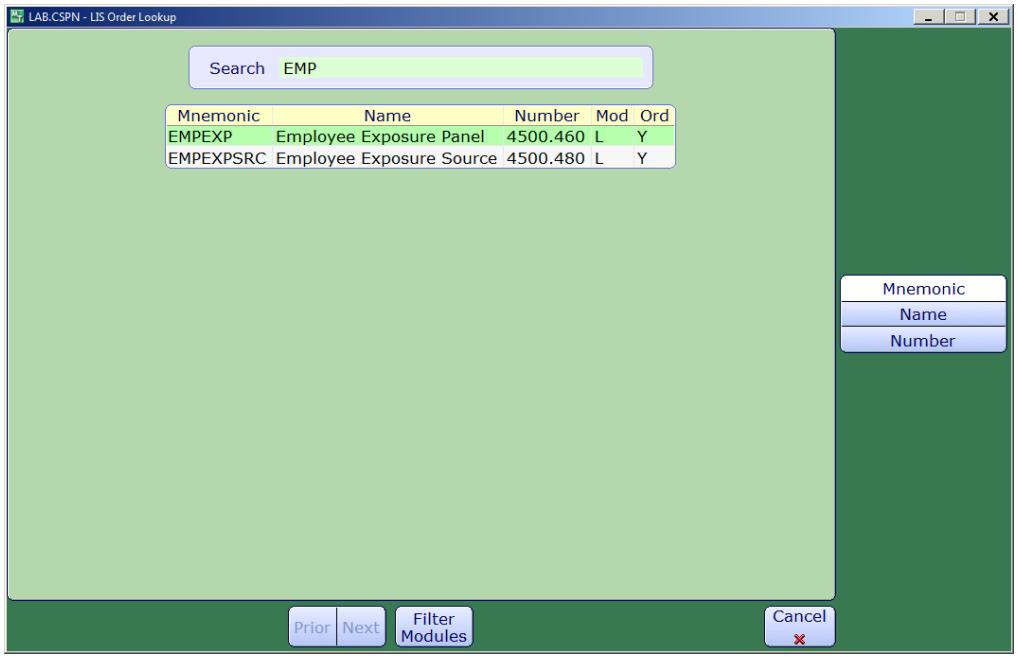


Diagram 4.5
Laboratory Order Registration

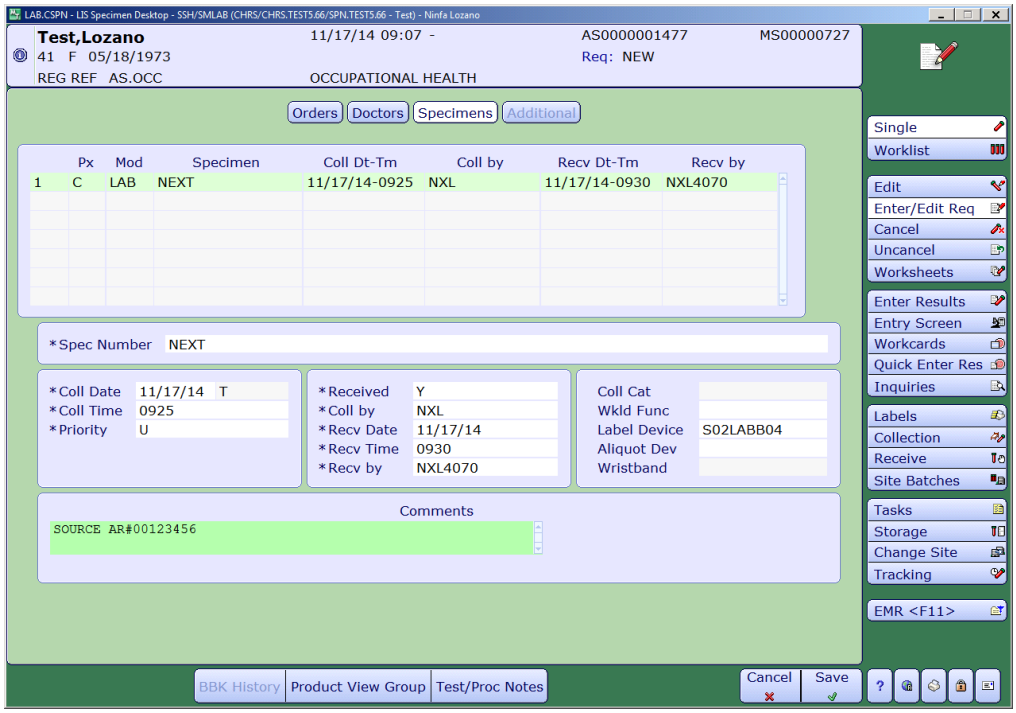


Diagram 4.6
Laboratory Exposure Follow Up Order Registration

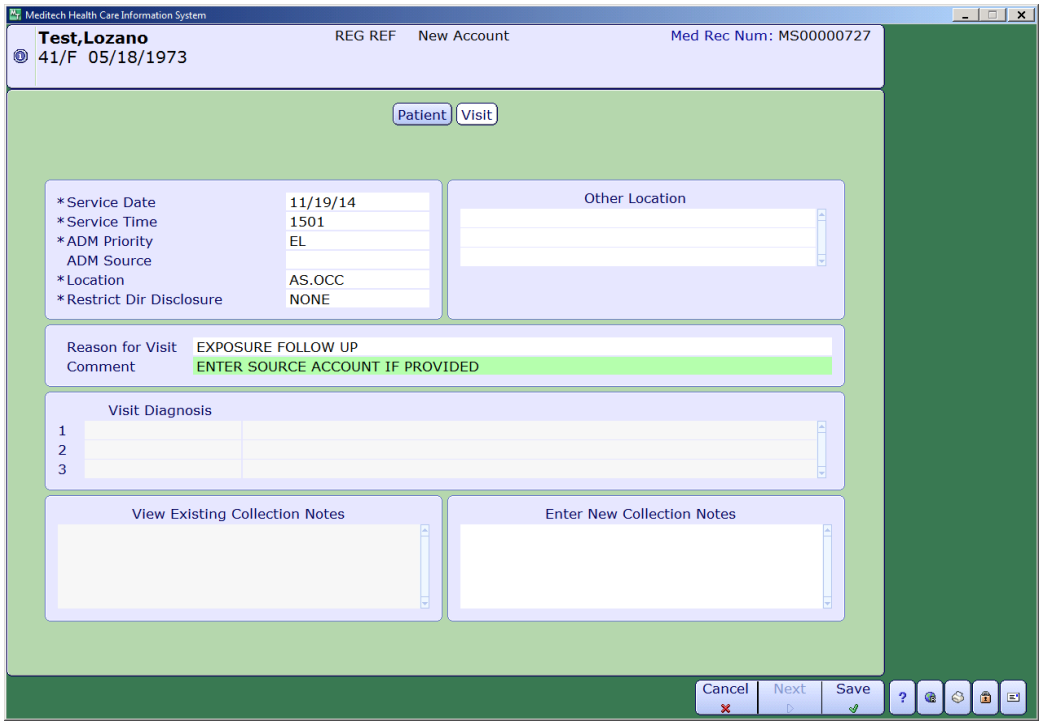
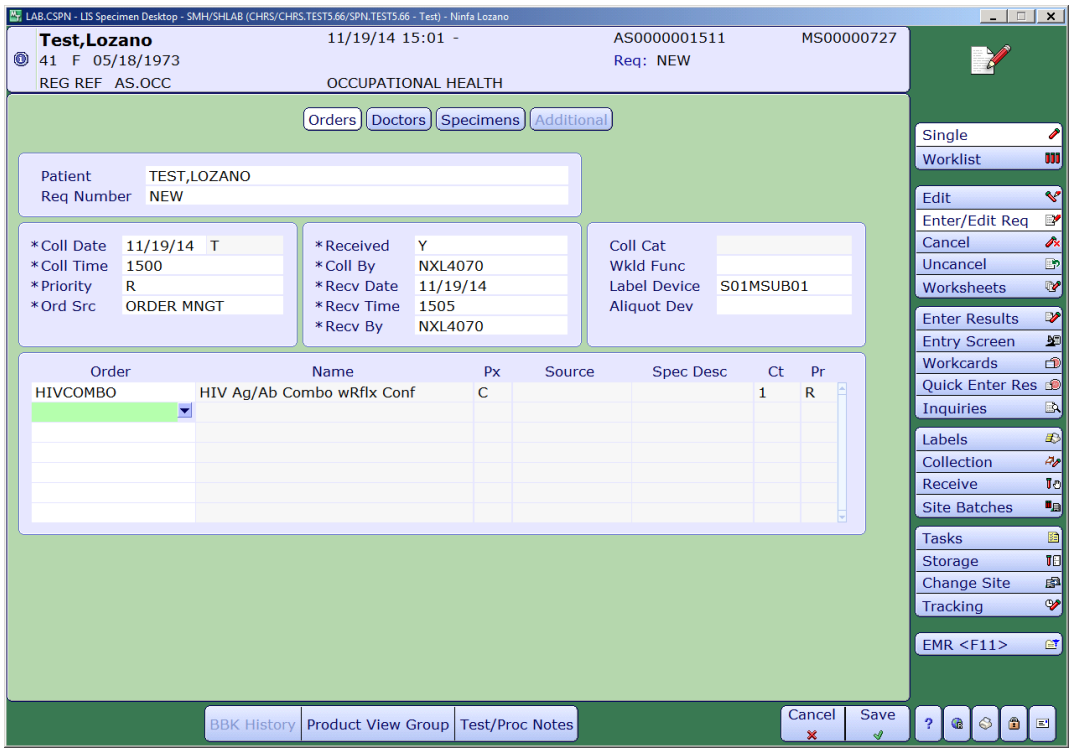


Diagram 4.7
Laboratory Exposure Follow Up Order Registration



PPD Requisitioning

SOP Number:	**CCP150**	**Creation Date:**	January 29, 2013
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	01

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
1/2013	01	New Form	Dr. Joe Lewis
4/2014	01	Supervisor Review	N. Lozano
2/2015	01	Supervisor Review	N. Lozano
6/2016	01	Supervisor Review	N. Lozano
03/2017	01	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

PPD Requisitioning

To define a standardized procedure for ordering a PPD Skin Test which will provide guidelines and responsibilities in regards OCC Health Associates PPD Skin Test orders.

1.0 Compliance Expectation

1.1 New associates must have an initial Two-step PPD testing. Occupational Health will register associate, enter the LIS order and administer first PPD which can be read and resulted at any of CHRISTUS Spohn Health System facilities.

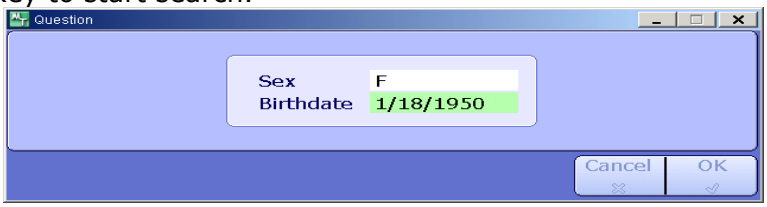
1.2 Reaction of first PPD must be read 48-72 hours after administration and administration of second PPD must be 2-3 weeks following the first PPD.

1.3 Associates will report to lab for annual, biannual, and exposure to MTB PPD skin testing. If associate does not provide the PPD order from OCC Health, associate must fill out the Associate Surveillance Form which provides information needed for registration. Full name, SS#, DOB, Associate #, Department name, Department #, and reason for PPD.

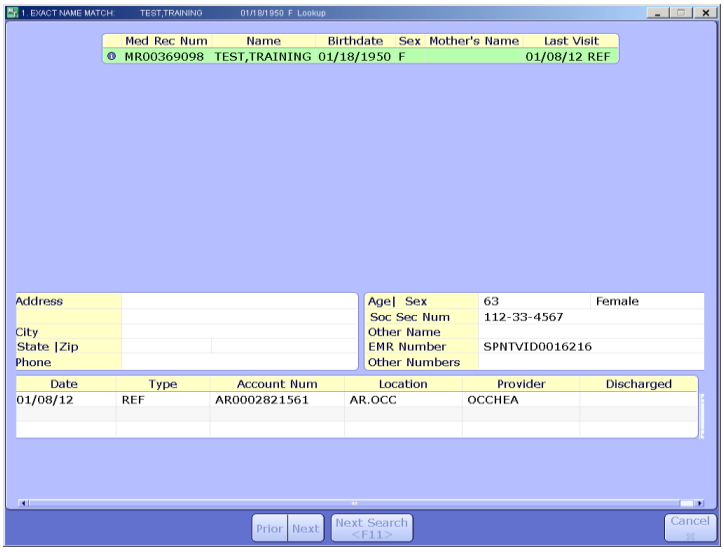
2.0 Registration

2.1 Select Enter/Edit from Specimen or Registration Desk Top. Use associate's last and first name but its best to use SS# if provided. Use enter key. Enter SS# to start look up.

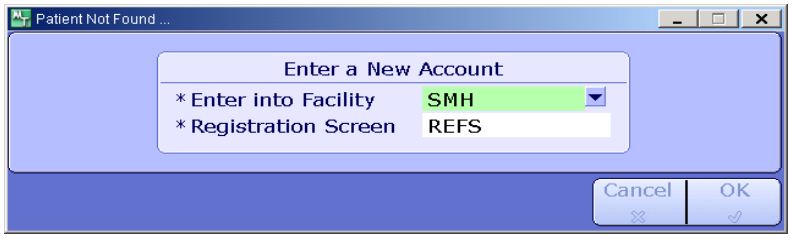
2.2 Enter Sex and DOB on pop up window which will narrow search. F12 and use enter key to start search.



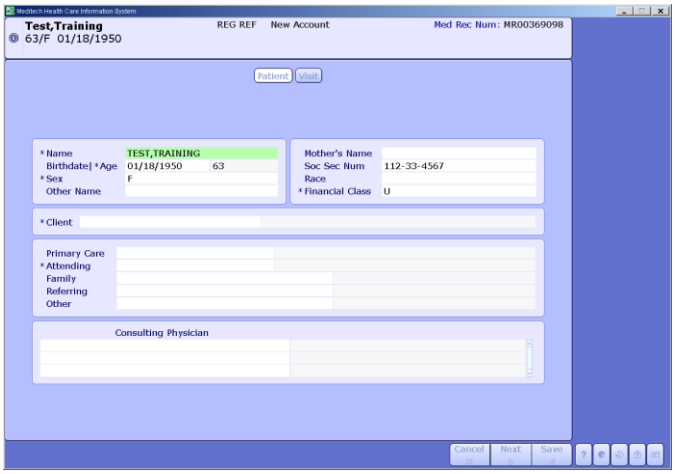
2.3 LIS will provide a list of accounts. Review list (Medical Record # to avoid duplication) and verify previous visit. Note left top corner which reads "Exact Name Match" use enter key. If it reads "Account look up" use Esc key to avoid selecting old account and entering new order. (BAR will reject due to Registration date and Order date did not match)



2.4 Accept ordering site default "*Enter into Facility" and "*Registration Screen".



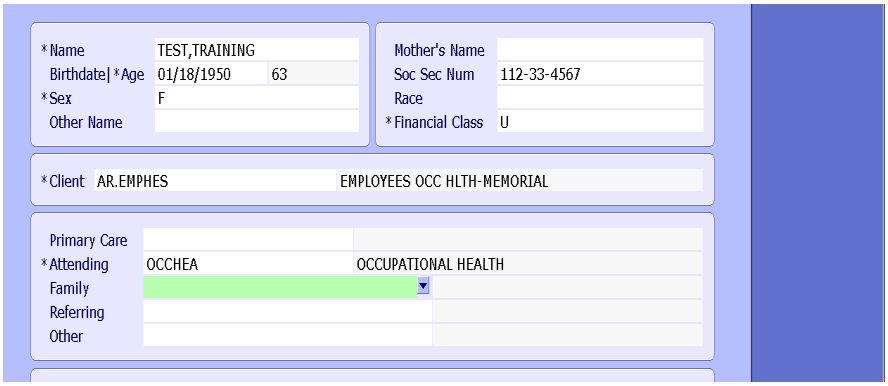
2.5 Verify Registration Screen has same Medical Record number from pervious lookup, Registration date is current if not use Esc key and start over. (an old account will have date stamp on top center screen)



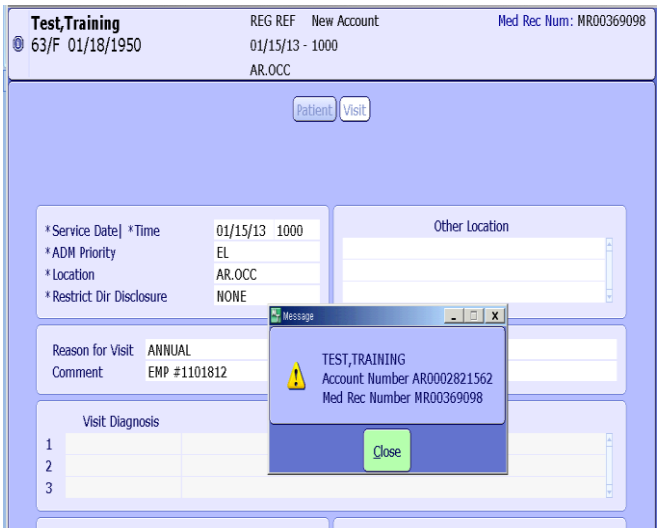
2.6 Associates not found will have new Account number and New Medical Record number.

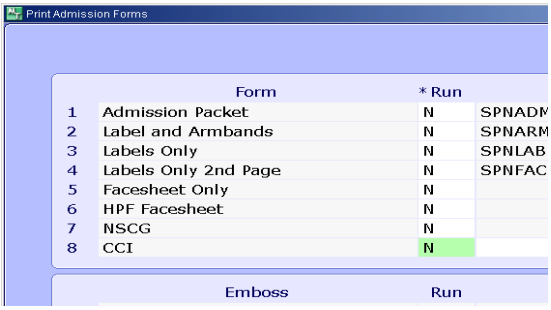
2.7 Verify full name, DOB, and SS#. (Enter DOB and SS# if new patient/associate not found.)

2.8 Registration account is site specific:
AR/SML - AS/SHL - AV/SSL - AQ/SKL - AW/SBL - AY/SAL
Registration Client: Site.EMPHES (i.e. AR.EMPHES)
Location: OCC (i.e. AR.OCC)
Attending: OCCHEA

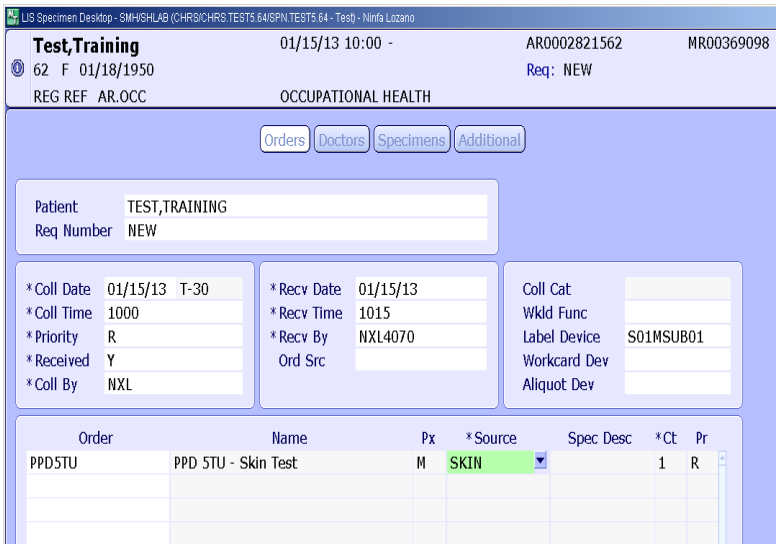


2.9 Reason for Visit window can display annual, biannual, and or exposure to MTB. Use f12 or enter key to file. Use ESC key or enter "N" at Print Admission Forms. Message window pop up will display Account number and MR number.





2.10 At Req Number window enter "N" for New Requisition Order. Continue to enter information all * required windows. Verify Label printer Device. Advance to Order window and type PPD use enter key which will fill in additional information. Specimen Tab key can be use to access comment box to enter associate information if not enter during registration phase. Use F12 key to file and LIS will print order label to be used for reading, resulting, and tracking of pending PPD order.



2.11 Procedural notes.

2.11.1 Look up associate by name if #SS# does not pull a previous registration before prcoessing with regestration.
2.11.2 Avoid duplication of Medical Record number.
2.11.3 Follow PPD protocol…registration, reading, and resulting to meet compliance expectations due to suspension if not done correctly.

SPECIMEN DISPOSITION FLOW CHART

SOP Number:	**CCP160**	**Creation Date:**	June 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

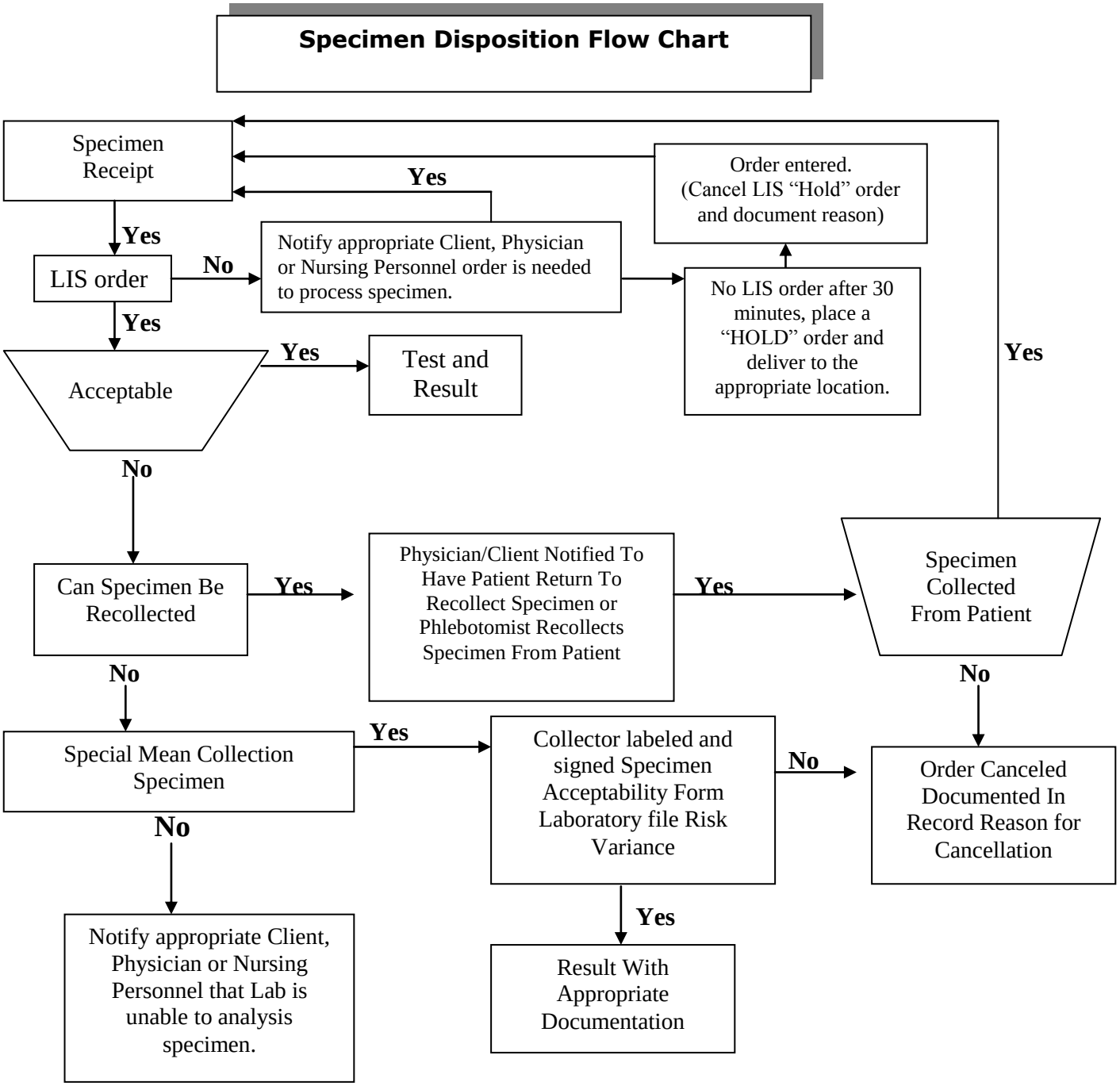
Applicable Standards	
Standard	Organization
Related Documents	
Specimen Acceptability form	
Online Risk Variance	
Specimen Rejection Policy	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
5/16	02	Updated LIS Order Section	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

SPECIMEN DISPOSITION FLOW CHART



Specimens are tested according to the Laboratory Service testing policies. Collection, handling and transport of specimens are critical for the obtaining of accurate laboratory results. Test orders are canceled and documented in the patient record and appropriate personnel notified when testing is unable to be performed. The reason for test cancellation is noted in the laboratory computer record. The section laboratory technician and the Laboratory Quality Assurance Coordinator review the cancellation of laboratory orders due to unacceptable specimens. Trends are noted for customer/client and Phlebotomist training in proper specimen collection.

Emergency Page Codes

SOP Number:	**CCP170**	**Creation Date:**	May 1, 2003
Department:	Central Processing/Phlebotomy	**Effective Date:**	April 5, 2012
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 5, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/12	01	Supervisor Review	N. Lozano
10/12	01	Pathologist Review	Dr. James Scherer
1/13	02	Major Revision-Lab Med Dir	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Emergency Color Codes have been developed for all hospital associates to response rapidly to a defined emergency. The following guidelines and procedures of the codes will provide guidance

CODE YELLOW – Emergency Response Plan Activated (Refer to B152)
Managers Report to Emergency Operations Center. All Associates Immediately Return to Their Assigned Work Areas

1. Both code yellow drills and actual code yellow will be announced by the PBX personnel paging "CODE YELLOW" over the public address system three times at ten-second intervals. At the conclusion of the drill or actual code yellow, PBX personnel will announce via the public address system, "CODE YELLOW ALL CLEAR" three times at ten-second intervals.

2. All Directors will respond to the Control Center in the Board Room to be briefed of the disaster situation and the amount of casualties which may be arriving.

3. The Laboratory Director or assigned Lead Tech, if Director was unable to attend, will return to lab to brief everyone else.

4. Blood Bank will have the City and Facility inventory blood count and Director/Lead Tech will return to the Control Center with BB inventory information list.

5. Departments will also make supply inventory and use Call Back Phone List to staff or have associates on stand by for disaster if help is needed. Associates will be informed which doors to use to enter hospital. Name badges must be worn or entrance will be denied.

6. If lab supplies are needed, they can be brought up from General Stores. If General Stores is closed, the House Supervisor can gain entrance.

7. Extra phlebotomist will be assigned to Emergency Department to assist with casualties.

8. After "CODE YELLOW IS ALL CLEARED", the Director/Lead Tech returns to Control Center in the BoardRoom for the critique.

CODE PINK – Missing Infant/Pediatric or Geriatric Patient Missing (Refer to B151)

1. Both code pink drills and actual code pink will be announced by the PBX

personnel paging "CODE PINK" over the public address system three times at ten-second intervals. A number with code pink may be announced indicating elevator(s) used for infant abduction or missing geriatric patient. At the conclusion of the drill or actual code pink, PBX personnel will announce via the public address system, "CODE PINK ALL CLEAR" three times at ten-second intervals.

2. ALL SECURITY personnel will respond and monitor exit doors, elevators, and hallways.

3. Associates respond by assisting security monitoring exit doors, elevators, hallways, and informing visitors of situation. Any suspicious activity will be reported to security personnel, or by calling the PBX personnel at 24999. Call will be answered on the first ring. (Do Not Dial O for Emergencies)

4. Phlebotomy will monitor elevators and hallway. Associates will monitor front entrance, front hallway, and elevators.

5. After "CODE PINK IS ALL CLEARED" all associates return to work stations.

CODE BLUE – Cardiac/Respiratory Arrest (Refer to H168)
CODE WHITE –Patient Medical Assistance (Rapid Response Team) (Refer to H151)

1. Both code blue and code white will be announced by the PBX personnel paging "CODE BLUE"/ "CODE WHITE" over the public addresses system three times at ten-second intervals. The location with the code blue or code white will be announced indicating to the Phlebotomist the patient location that is in cardiac or respiratory arrest.

2. The team that includes Nurses, a Respiratory technician, a Physician/s, and a Phlebotomist will respond to the location announced on all code blues.

3. The Phlebotomist will await physician's request for blood specimen collection, or will be given a blood specimen. Tubes collected are normally an EDTA (lavender tube), Clot Tube (SST/Tiger top tube), Lithium Heparin (Green top tube), and a Sodium Citrate (Blue top tube).

4. Label specimens at bed side using patient's chart labels and or LIS labels with the addition of the Blue Dot.

5. The "Laboratory Stroke Specimen Collection Policy" will provide the

guidelines and procedure to follow. Notify CP of specimens; submit specimens to laboratory immediately and specimens will be delivered stat to the corresponding departments for processing.

6. After "CODE BLUE" or "CODE WHITE" is cleared all associates return to work stations.

CODE GRAY – Behavior/Violent Patient/Visitor (All Security Response)(Refer to B149)

1. Code gray will be announced by the PBX personnel paging "CODE GRAY" over the public addresses system three times at ten-second intervals. The location with the code gray will be announced and security personnel along with the nursing supervisor will respond.

2. Code gray will be activated if an outpatient has an adverse reaction during the veni-puncture procedure.

3. After "CODE GRAY" is cleared all associates return to work stations.

CODE RED – Fire or Smoke (Refer to B133 / Drill Refer to B134)

1. Code red will be announced by the PBX personnel paging "CODE RED" over the public addresses system three times at ten-second intervals. The location with the code red will be announced and fire doors automatically close.

2. Associates will exit laboratory into hallway, and wait for overhead instruction or wait to hear "Code Red All Clear" before returning to work stations.

CODE ORANGE INTERNAL – Hazardous Material Spill or Release

1. Code orange will be announced by the PBX personnel paging "CODE ORANGE" over the public addresses system three times at ten-second intervals.
2. Remain in laboratory and wait for instructions pending amount of spill and location of spill. *Small spill* means spill does not pose a threat and can be cleaned up using single spill kit. *Large spill* means spill is a threat to health or

to the environment and may require two or more spill kits to clean up. *Internal spill* means spill is located within the facility and everyone except authorized personnel should be in the affected area.

CODE ORANGE EXTERNAL – Prepare for Patient Influx/Receipt of Mass Casualties

1. There has been a chemical incident in the community and evaluation for decontamination team will be completed and facility may go into lock down to prevent exposure from entering the facility without being decontaminated.

CODE GREEN –Patient Fall (Refer to Corporate Policy 3.030)

1. Code green will be announced by the PBX personnel paging "CODE GREEN" over the public addresses system three times at ten-second intervals followed by the announcement of the location site.

2. A patient has fallen and staff needs to respond and help assess the patient for any injuries and documentation of the event must be filed for investigation.

CODE ASSIST –Visitor or Associate needs medical attention (Refer to B150)

1. Code assist will be announced by the PBX personnel paging "CODE ASSIST" over the public addresses system three times at ten-second intervals followed by the announcement of the location site.

2. If you come across visitor or associate needing help, call for help or call the operator who will need exact location, floor, room number, age, area closest to you and time you found visitor or associate needing help.

CODE 32 – Person with a Weapon (Refer to b143-P)

1. Code 32 will be announced by the PBX personnel paging "CODE 32" over the public addresses system three times at ten-second intervals followed by the announcement of the location site.

2. STAY AWAY from the area and wait to hear Code 32 all clear to avoid interfering with security or local law enforcement defusing the situation.

CODE PURPLE – JCAHO and/or Regulatory Representative Onsite

1. Code purple will be announced by the PBX personnel paging "CODE PURPLE" over the public addresses system three times at ten-second intervals followed by the announcement of the location site.

2. All laboratory staff will prepare for hospital or department inspection.

Dispatching of Phlebotomist

SOP Number:	**CCP180**	**Creation Date:**	May 1, 2012
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Revision-Updated 1.2,1.3,2.0	N. Lozano
3/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

DISPATCHING OF PHLEBOTOMIST

To provide guidelines and responsibilities in regards to phlebotomy staff leaving Hospital premises to provide laboratory services to our nursing home clients. Specimens collected and or picked up must meet the specimen labeling requirements and the requisition form must contain the required information in order to process specimens. Guidelines as set in CCP200 Packaging and Transportation of Specimens are practice to deliver specimens for processing.

1.0 Nursing Home Clients

1.1 Phlebotomist will report to laboratory gather phlebotomy supplies needed, obtain a system cell phone for communication purposes, and the key for a system vehicle. Phlebotomist will be dispatched to start nursing home specimen collections.

2.0 CHRISTUS Corpus Christi Hospital Laboratory

2.1 A call may be made to the laboratory and the Phlebotomy Department will be given the name of client, list of test(s), and time of specimen collection or pick up, and keep all documentation including name of caller.

2.2 If a phlebotomist is not able to leave the premises for a pickup, a Spohn Courier or an Outside Courier will be utilized to pick up specimens. Documentation of either action is noted in specimen Daily Activity Log.

2.3 Consolidation of hospital departments and site specific testing requires transportation of specimens by laboratory phlebotomy staff if and when available.

Out Patient Laboratory Specimens

SOP Number:	**CCP190**	**Creation Date:**	July 5, 2006
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
11/2014	02	Revision-1.33 Chlamydia GC	N. Lozano
02/2015	02	Supervisor Review	N. Lozano
6/2016	02	Revision-1.31 Random Col	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Out Patient Laboratory Specimens

To provide guidelines and responsibilities in regards to specimen acceptance of out patient laboratory specimens for processing.

1.0 URINE SPECIMENS

1.1 Two positive identifiers must be used, account number, name, and date of birth. In addition to the wristband out patient must state their Full Name and DOB. Following the veni-puncture procedure supply the patient with a labeled sterile urine container, two towelettes, and verbal collection instructions.

1.2 Verify type of test requiring a urine sample. Most common out patient urine orders are for a routine urinalysis, culture, glucose, albumin, creatinine, myoglobin, drug screen, and pregnancy. Not as common is a urine for Chlamydia/GC which requires the first part of stream (not mid-stream).

1.3 Determine method of collection between random voided or clean catch midstream or first stream for test ordered. Two primary methods of collection for urinalysis are;

1.31 **Clean Catch Midstream**-give patient a sterile plastic container labeled with patient's full name, and account number, or DOB with 2 towelettes packages. This method will be used for ***both*** male and female patient with a urine culture order.
Instruct patient to wash hands thoroughly, remove first towelette from package. Second towelette and urine container should be opened prior to collection.

1.32 **First Part of Stream-Male & Female Urine** Instruct patient to not urinate for at least 1 hour prior to collection. Collect 10-50 ml of urine using **first part** of stream (not midstream) into cup. Female patients should not cleanse the labial area prior to providing specimen

Provide the patient with two urine containers labeled #1 & #2 plus two positive identifiers if a patient must provide two different methods of collection. Deliver #1 urine specimen ASAP to Micro department to be pipette into PCR media tube.

1.4 Clean Catch Midstream Female users must use down stroke only. Separate the labia minora widely and keep separated through the procedure. Clean the area with towelette. Repeat using the remaining towelette. Void forcibly and allow initial stream of urine to drain into toilet, continuing to keep the labia separated. Catch midstream specimen in the sterile plastic container. DO NOT touch any portion of

perineum with the container. Collect urine in sterile container then void rest of urine into toilet. Have patient screw lip on container and give to laboratory staff immediately.

1.5 Male users should retract foreskin, if present, then wash. Repeat using the remaining towelette. Allow a small amount of urine to drain into toilet and then collect the midstream specimen in sterile container. Void rest of urine into toilet. Have patient screw lip on container and give to laboratory staff immediately.

1.6 Verify urine specimen container is properly labeled with Patient's Name, Account Number, or DOB. Also, the Date, Time of Collection, and Method of Collection. Confirm specimen lid is tied. Receive specimen using LIS.

1.7 The labeled specimen container will be delivered to Central Processing if aliquots are needed, otherwise deliver to the appropriate department.

1.8 Specimen should be processed as soon as possible but if there is a delay in processing, the specimen must be refrigerated for up to 24 hours.

1.9 Any unlabeled specimen is to be discarded and patient must be notified to return. Order will be cancelled in LIS and the reason for cancellation must be noted as part of cancellation process for future referral.

Ref: Urinalysis Department SOP

2.0 BLOOD SPECIMENS:

2.1 Out Patient Laboratory Specimen;

2.11 Verify requisition laboratory order with LIS order. If any discrepancy is found, correct it before calling patient into phlebotomy area.

2.12 Verify patient's identification, and follow veni-puncture procedure. Two positive identifiers must be used, name and date of birth. Verify wristband information in addition to having patient state their Name and DOB. Collect specimen, receive in LIS, and deliver to appropriate department.

2.2 Out Patient Nursing Home Specimen;

2.21 Verify test order on requisition with specimen collected and or

submitted. All blood, urine, stool, sputum, and culture swab specimens must have two positive identifiers and are delivered to CP. Document by initialing requisition form and list vials submitted before delivering requisition to staff for ordering.

2.22 Specimen is delivered to appropriate department and will be labeled with LIS label for processing by department technicians. Original label will not be removed and tech will place LIS barcode label with a view of the patient's name on original label.

2.23 If specimen is found to be unacceptable, (i.e. hemolyzed, clotted, or questionable), laboratory technician will un-receive order, document reason for recollection, and notify phlebotomy department of unacceptable specimen.

2.24 Phlebotomy department will notify nursing home and specimen will be recollected, rescheduled for next day collection, or cancelled. Ordering staff will be notified of any cancelled order.

2.3 Out Patient Neighborhood Clinic Specimen;

2.31 All neighborhood clinic specimens will be labeled with an LIS meditech label. Verify specimen integrity, separate Histology, and Microbiology specimens to insure wet preps are done on a timely manner. Receive specimens in LIS and deliver to departments.

2.32 If any specimens are found to be missing, notify appropriate clinic, document in comment box, and communicate to department laboratory technician. (i.e. not collected, will be submitted with next delivery, etc) Order may remain open for next delivery or may be cancelled with appropriate documentation.

2.4 Out Patient Occupational Medicine Specimen;

2.41 All occupational medicine (pre-employment associates) specimens will be labeled with an LIS meditech label. Verify specimen integrity, and receive specimen in LIS. Deliver specimens with submitted extra LIS meditech labels to appropriate departments.

2.42 PPD's specimens are received following the PPD Skin Testing Stepwise Instruction found in **Section L of SOP.**

2.43 If a discrepancy is found, specimen is unacceptable, or missing,

department laboratory technician will notify occupational medicine. Comment box will have documentation of action taken with specimen.

2.5 Site Batch

2.51 Specimen may be send from ASLAB, AVLAB, AYLAB, AWLAB, and AQLAB in a batch. Verify each specimen assigned to batch before receive batch to our lab site. Once batch is received, separate specimens if necessary, and deliver to appropriate department. If any discrepancies are found, notify the department technician.

Packaging and Transportation

SOP Number:	**MCP200**	**Creation Date:**	May1, 2005
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
02/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
3/2017	02	Supervision Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

Packaging and Transportation

To provide guidelines and resonsibilities in regards to packaging and transporation of specimens by phlebotomy staff.

1.0 PACKAGING AND TRANSPORTATION OF CLIENT SPECIMENS

1.1 Read and follow instructions from Courier Transport competency assignment in MTS training library.

1.2 The quality of specimens collected or picked up from outside clients are dependent upon the time and the temperature that specimens are transported, processed, stored, and received for processing.

1.3 The maximum time limit for separating serum and plasma form cell is set at two hours from collection time. Less time is recommended for certain specimens, particularly for potassium and cortisols.

1.4 Certain specimens require special handling;

1.41 If a specimen requires protection from light, wrap specimen tube with paper or place zipped biohazard bag in a paper bag immediately after properly labeling it (i.e. bilibubin, carotene, RBC folate, urine porphyrins).

1.42 If a specimen requires to be kept warm, place labeled specimen in a heel warmer (i.e. cold agglutination, cryoglobulin).

1.43 If a specimen requires to be kept chilled, place labeled specimen between cool packs or fill zipped biohazard bag with ice and place labeled specimen tube in pocket sleeve and fold in half with specimen in center (.i.e. ammonia, lactic acid, coagulation factors, ionized calcium).

1.44 A specimen may require additional stickers (i.e. STAT, Do Not Centrifuge, BNP, ESR) to alert technologists to process specimen within acceptable time limit.

1.5 Specimens should be placed in a plastic zipped biohazard bag to protect against potentially infectious substances. Make sure specimen caps are secure and bag is sealed or zipped before placing in transportation container.

1.6 A hard plastic lockable container with a biohazard sign affixed on the outside should be used to transport specimens to the laboratory. Proper packaging will prevent breakage or leakage of specimens, and a safe delivery to the laboratory.

1.7 Deliver container promptly to insure the processing and quality of laboratory specimen test results are meet.

1.8 Transporting Coolers must be returned to their designate location to make pick up/delivering cycle.

VALIDATION OF CLINICAL COMPENTENCY

SOP Number:	**CCP210**	**Creation Date:**	May 20, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Lab Med Dir-Major Revision	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
11/2014	02	Revision VIII	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Review updated V a.	N. Lozano
8/2016	02	Updated II e, g	N. Lozano
03/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

VALIDATION OF CLINICAL COMPENTENCY

All new associates to the phlebotomy department must be validated on their competency prior to performing specimen collection and working independently on their own in the hospital. Validation of Clinical Competency is validated every year.

Continued competency should reflect work assigned or performed by the individual Phlebotomist, bearing in mind that all Phlebotomists may not rotate through all areas of the Phlebotomy and Central Department Sections.

One or multiple combinations of methods used to validate phlebotomists are demonstration, mock event, online course/exam, case study, exemplar, class, documentation review, observation, and verbalizes understanding.

Phlebotomy competency tasks which are validated are from the following skill sets;

PHLEBOTOMY PROCEDURES
- Veni-Puncture Collection
- Difficult Veni-Puncture Collection
- Blood Bank Collection
- Blood Culture Collection
- Glucose Tolerance Collection

NON-PHLEBOTOMY PROCEDURE
- PPD Skin Test Collection
- Central Processing
- Care Area Coll Specimen
- Meditech LIS
- Emergency Page Codes
- Client Care
- New Associate Orientation

LIS PROFICIENCY/SPECIMEN PROCESSING/HAND HYGIENE/STANDARD PRECAUTIONS/SPECIMEN COLLECTION
- Critical Thinking Skills
- Interpersonal Skills
- Technical Skills

On completion of the orientation period, the individual will be familiar and able to perform adequately in the following areas. The following checklist will guide associate to assess and check off functional requirements. If a specific section is not completed, the associate will need a preceptor or mentor to instruct and observe until checked off to perform that required procedure.

Phlebotomist Orientation Checklist

I. Safety Procedures (1 day)	Emp	Mentor	Date
a. Safety manual location and contents	_____	_____	_____
b. Emergency evacuation route	_____	_____	_____
c. Emergency phone numbers			
d. Fire alarms and bucket brigade procedure	_____	_____	_____
e. Fire extinguisher, fire blanket location and use	_____	_____	_____
f. Safety and protective equipment (PPE)	_____	_____	_____

II Receptionist / Central Processing Area (1 week)	Emp	Mentor	Date
a. Communication notebook	_____	_____	_____
b. Pathologist/Administration magnetic Board	_____	_____	_____
c. Paging methods-Phlebotomists, Pathologist	_____	_____	_____
d. CP Specimen Activity Log Book	_____	_____	_____
e. PPD / Client Registration	_____	_____	_____
f. Information resources-Online/Manuals	_____	_____	_____
g. Rejection Policy and specimen log protocol	_____	_____	_____
h. ED Specimens / Stroke Policy Specimen	_____	_____	_____
i. CTS-Computerized Tube System	_____	_____	_____
(Retrieving, Dispatching, Monitoring)	_____	_____	_____

III LIS-Lab Inf Sys-Meditech (2 days)	Emp	Mentor	Date
a. Complete exercises (Rec, Can, Uncan, ect)	_____	_____	_____
b. Down Time Protocol	_____	_____	_____
c. Specimen Tracker Protocol (LMB)	_____	_____	_____
d. Printing of order labels	_____	_____	_____
(Morning collection/batches)			
e. LIS Patient Master Log (pending-pasted and future)	_____	_____	_____

IV Other Functions (1 day)	Emp	Mentor	Date
a. Proper telephone etiquette and functions	_____	_____	_____
b. Meditech Report Printer(s)	_____	_____	_____
(location, paper jams, toner storage, service call)			
c. Meditech Label Printer(s)	_____	_____	_____
(location, label loading, troubleshooting, service call)			

V Phlebotomy Collections (2-3 days)	Emp	Mentor	Date
a. Knowledge of NPSG #1-Identify patients correctly and #7-Prevent Infection.	_____	_____	_____
b. Veni-Puncture Collection protocol	_____	_____	_____
c. Difficult Veni-Puncture Collection protocol	_____	_____	_____
d. Heel, Finger Capillary Collection protocol	_____	_____	_____
(site specific)			
e. Knowledge of information on LIS collection label	_____	_____	_____
f. Specimen labeling protocol	_____	_____	_____
g. Specimen handling protocol	_____	_____	_____
h. Specimen delivery to laboratory protocol	_____	_____	_____
i. Knowledge of unit locations for collections	_____	_____	_____

VALIDATION OF CLINICAL COMPENTENCY

VI Blood Bank special instructions (2 hrs)	Emp	Mentor	Date
a. Blood Bank Collection protocol	_____	_____	_____
b. Blood Bank department in-service	_____	_____	_____
c. MTS BB test completed	_____	_____	_____

VIII Microbiology special instructions (2 hrs)	Emp	Mentor	Date
a. Microbiology Blood Culture Collection protocol	_____	_____	_____
b. Bac-Tec instrument loading (site specific)	_____	_____	_____
c. Bac-Tec instrument positive unloading (site specific)	_____	_____	_____
d. BC vial marking & packaging for collection	_____	_____	_____

IX Histology special instructions (2 hrs)	Emp	Mentor	Date
a. Specimen acceptability protocol	_____	_____	_____
b. Specimen delivery protocol	_____	_____	_____
c. Specimen after hour protocol	_____	_____	_____

X Form Documentation (2 hrs)	Emp	Mentor	Date
a. Specimen Acceptability of Responsibility form & protocol	_____	_____	_____
b. Risk Management Variance LIS & protocol	_____	_____	_____
c. Release of Laboratory Specimen(s) form & protocol (ME / Organ Donor Institute.)	_____	_____	_____
d. Autopsy (form & notification protocol)	_____	_____	_____
e. Kronos Time & Attendance sheet protocol	_____	_____	_____

XI Additional areas of responsibility (2 hrs)	Emp	Mentor	Date
a. Department supplies	_____	_____	_____
b. Room temperature reading	_____	_____	_____
c. Department trash disposal	_____	_____	_____
d. Out Patient collection	_____	_____	_____
e. Associate Exposure and Annual PPD collection	_____	_____	_____
f. Healthstream & MTS courses	_____	_____	_____
g. Location Work/Weekend Charge Tech Schedule	_____	_____	_____
g. On Call – as assigned/needed	_____	_____	_____

Emp / Mentor Comments:_____

_____ _____
Emp signature Date

I have reviewed the orientation performance of the above individual and have discussed the job expectations. Competence at this point is acceptable. Deficiencies are noted above and employee will be monitor by mentor.

_____ _____
Department Lead Tech / designee Date

HISTOLOGY SPECIMEN STORAGE DISPOSITION FLOW CHART

SOP Number:	**CP200**	**Creation Date:**	June 1, 2004
Department:	Central Processing/Phlebotomy	**Effective Date:**	January 29, 2013
Author:	N. Lozano	**Version:**	02

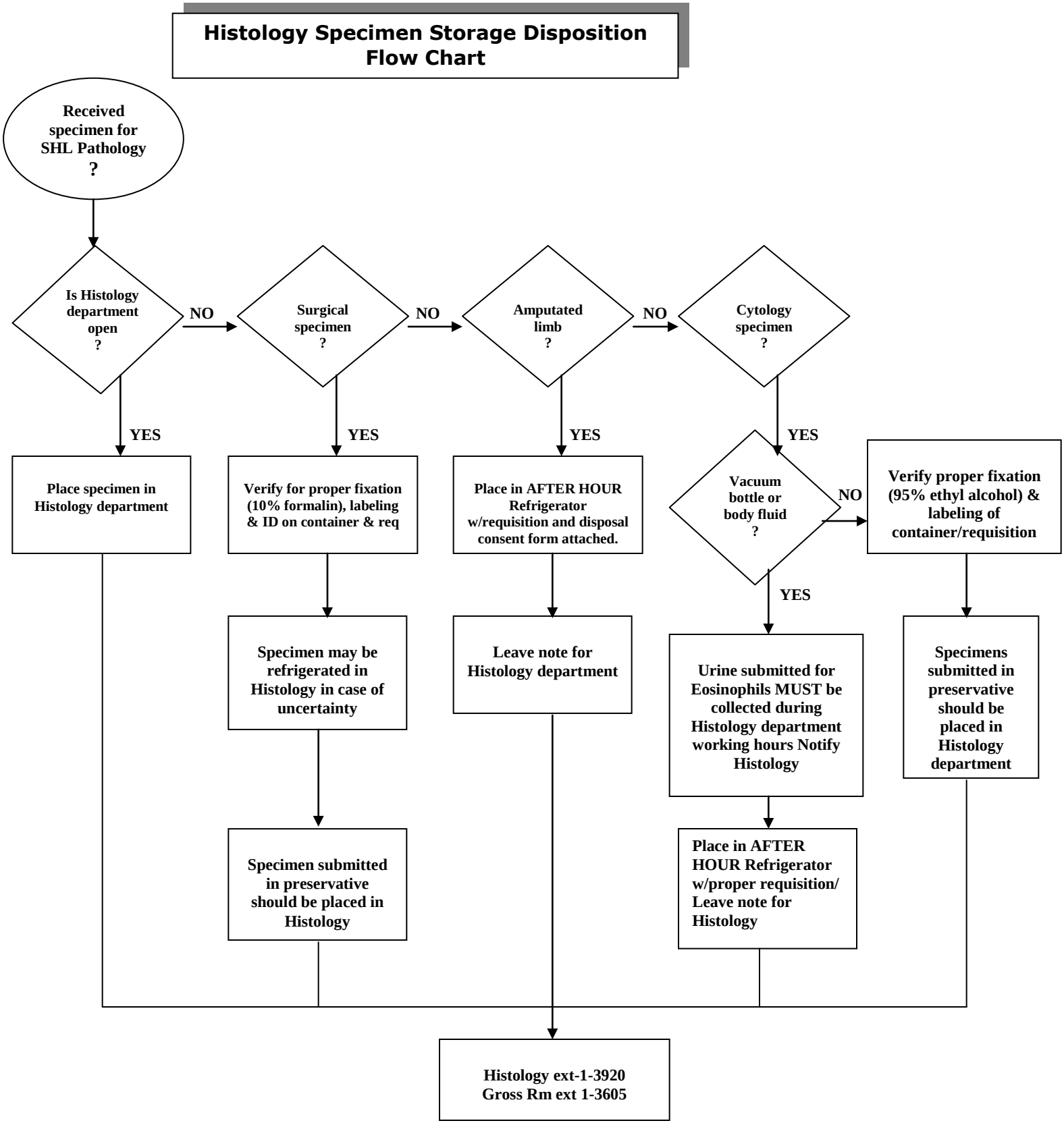
Applicable Standards	
Standard	Organization
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	April 20, 2012	January 29, 2013
02	January 29, 2013	

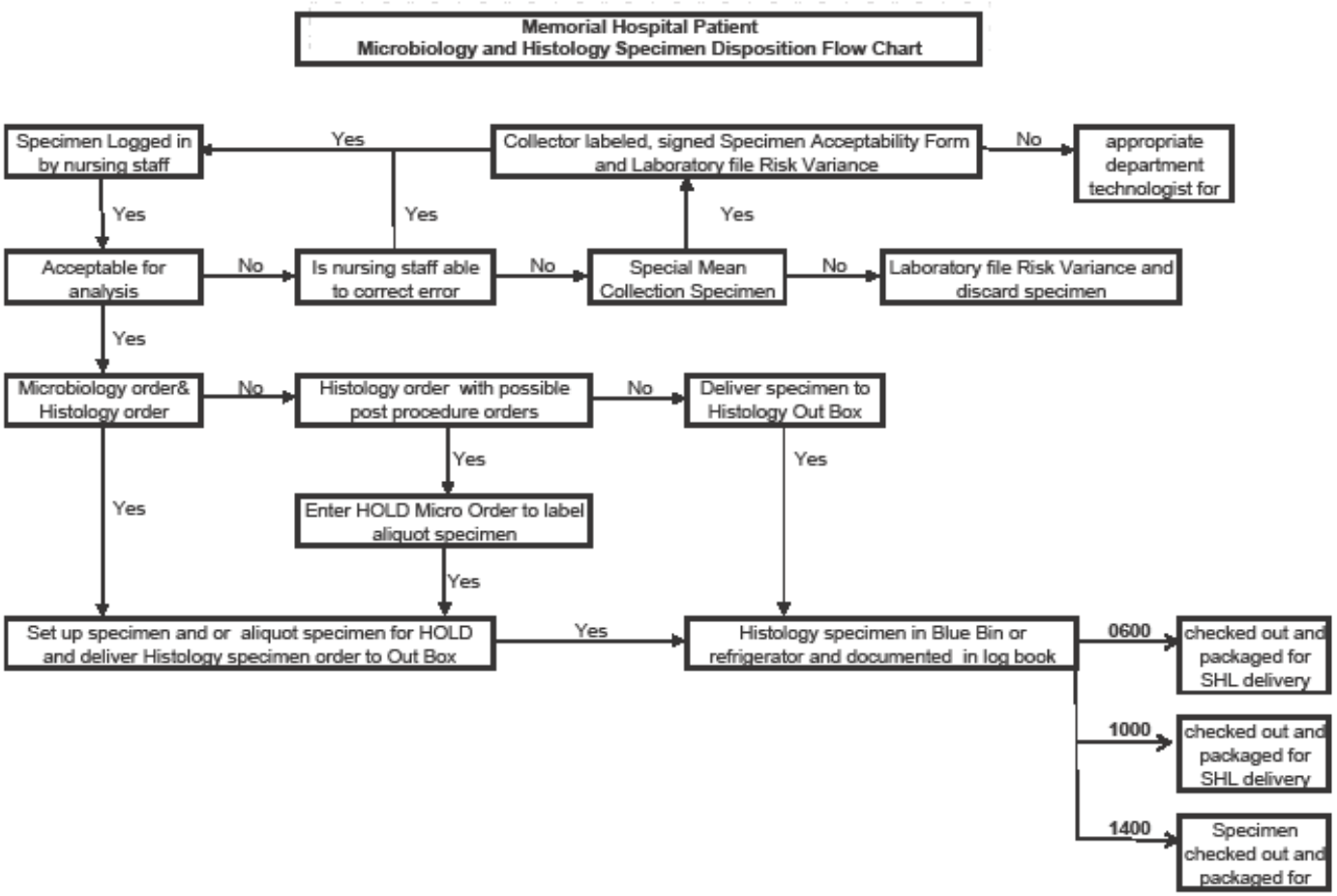
Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
4/2012	01	Supervisor Review	N. Lozano
10/2012	01	Pathologist Review	Dr. James Scherer
1/2013	02	Major Revision	Dr. Joe Lewis
4/2014	02	Supervisor Review	N. Lozano
11/20/14	02	Revision-moved to Main Lab	N. Lozano
2/2015	02	Supervisor Review	N. Lozano
6/2016	02	Supervisor Review	N. Lozano
03/2017	02	Supervisor Review	N. Lozano

Distribution
CSHCC MEMORIAL CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SHORELINE CP/PHLEBOTOMY SOP VOLUME 2
CSHCC SOUTH CP/PHLEBOTOMY SOP VOLUME 2
CSHCC HPG CP/PHLEBOTOMY SOP VOLUME 2

HISTOLOGY SPECIMEN STORAGE DISPOSITION FLOW CHART



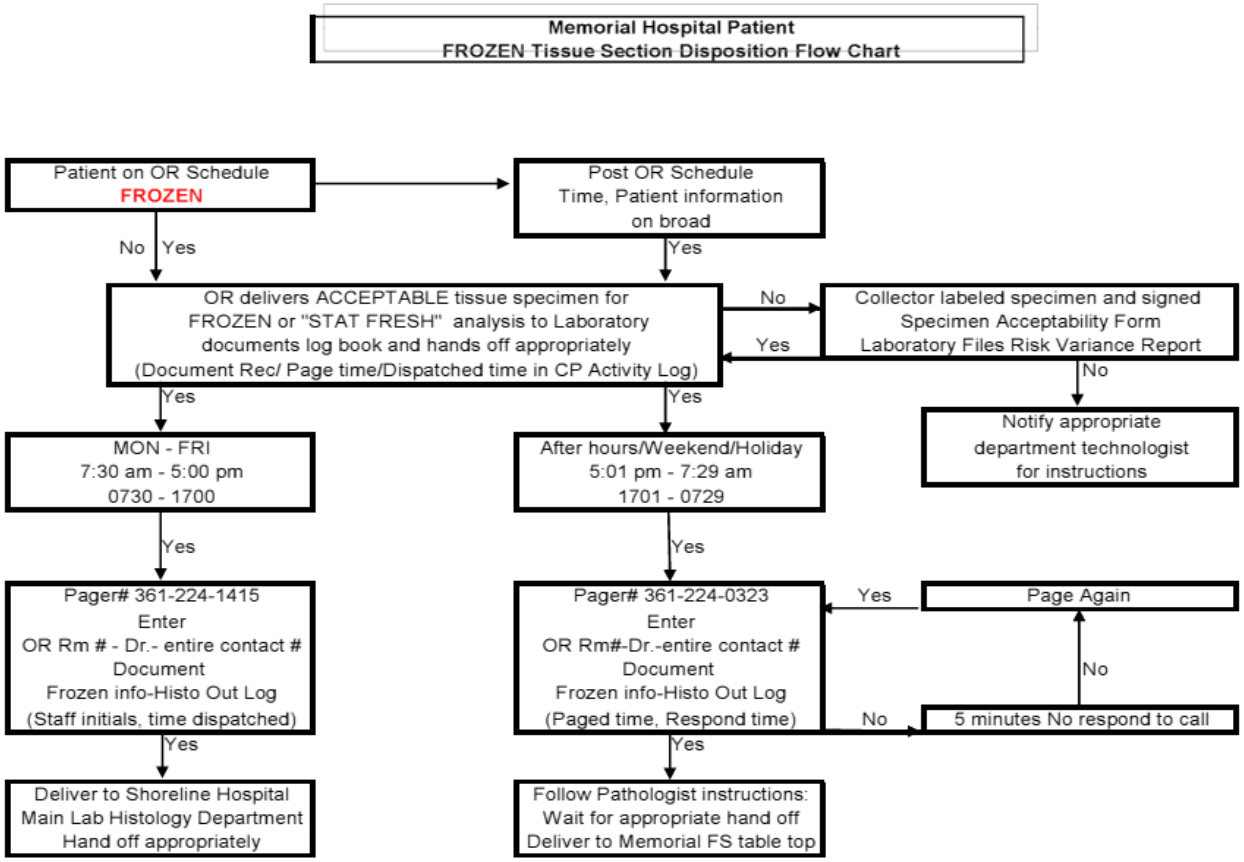
HISTOLOGY SPECIMEN STORAGE DISPOSITION FLOW CHART



Specimens are tested according to the Laboratory Service testing policies. Collection, handling and transport of specimens are critical for the obtaining of accurate laboratory results. Test orders are canceled and documented in the patient record and appropriate personnel notified testing is unable to be performed. The reason for test cancellation is noted in the laboratory computer record. The section laboratory technician and the Laboratory Quality Assurance Coordinator review the cancellation of laboratory orders due to unacceptable specimens. Trends are noted for customer/client and Phlebotomist training in proper in proper specimen collection.

Reference FROZEN Tissue Section Disposition Flow Chart for
FROZEN TISSUE SPECIMEN

HISTOLOGY SPECIMEN STORAGE DISPOSITION FLOW CHART



Specimens are tested according to the Laboratory Service testing policies. Collection, handling and transport of specimens are critical for the obtaining of accurate laboratory results. Test orders are canceled and documented in the patient record and appropriate personnel notified testing is unable to be performed. The reason for test cancellation is noted in the laboratory computer record. The section laboratory technician and the Laboratory Quality Assurance Coordinator review the cancellation of laboratory orders due to unacceptable specimens. Trends are noted for customer/client and Phlebotomist training in proper specimen collection.

HISTOLOGY SPECIMEN STORAGE DISPOSITION FLOW CHART