



| | | | |
|---|--|-----------------|--------------------|
|  | General Specimen Information, Identification, Handling Issues CCL-032 | Dept: 324318 | Critical Care Labs |
| | | Effective Date: | 2/6/2019 |
| | | Revised Date: | |
| | | Contact: | Ann Shoffner |
| Name & Title: Gregory Pomper, MD CLIA Laboratory Director | | Date: | 2/27/19 |
| Signature:  | | | |

1) **General Procedure Statement:** Blood Gas Lab staff should follow established laboratory guidelines to maintain consistency in the processing of laboratory test requests and patient specimens. [This procedure is a combination of former procedures CCL-009, CCL-018, CCL-020 and CCL-003](#)

a. **Purpose:** To provide specimen requirements and handling guidelines to lab staff

b. **Responsible Department/Party/Parties:**

- i. Procedure owner: Ann Shoffner
- ii. Procedure: Critical Care Lab (CCL) Staff
- iii. Supervision: Ann Shoffner
- iv. Implementation: Ann Shoffner and Critical Care Lab (CCL) Staff

2) **Procedure:**

A. **GENERAL INFORMATION REGARDING LABORATORY SPECIMENS:** Specimen requirements are defined in the procedure for each test. Specimens are evaluated prior to testing according to the defined requirements.

1. **SPECIMEN PRIORITY:** Blood Gas Lab locations analyze samples on a first come, first serve basis with priority being given to samples identified as CODE, ED, OR, ECMO or STAT. Any PICU or NICU samples received in the ICU Lab are also given priority.

2. **STAT SPECIMEN COLLECTION:** All specimens must be collected and delivered to the Blood Gas Laboratory location by the section requesting the service per the WFBH policies and procedures for specimen collection.

3. **SPECIMEN LABELING:** All specimens received in the labs should be labeled with a minimum of the patient's first and last name and birth date or medical record number. See expanded section in this document.

4. **SPECIMEN TRANSPORT:** With the exception of ACT testing, specimens may be transported to the Blood Gas Labs via the hospital pneumatic tube system. Ordering locations without pneumatic tube are responsible for transporting samples to the laboratory. Specimens should be placed in a biohazard bag prior to transport. ACT samples should be hand carried to the laboratory as soon as possible post collection, not delivered via the pneumatic tube system.

5. **STANDARD PRECAUTIONS:** All samples transported to and received in the Clinical Labs should be handled according to Standard Precautions and Blood borne Pathogens standards as outlined in the WFBH Infection Control Manual, the Lab Safety Manual and Blood Gas Lab Safety Check list.

6. **ORDERS for Blood Gas/electrolyte analysis:** Generally, the approved provider, places a "communication" order in EPIC. Arterial orders route to Respiratory Therapy's worklist to be collected. Venous and A-line samples route to Nursing's worklist to be collected.

7. ADD-ON/MODIFY TESTS: In the event a verbal request is made to add or modify tests onto a sample received previously in the lab for testing, document it on the original requisition in the lab noting date/time, tests to add or modify, name of ordering physician, name of person calling with their extension or beeper number, tech initials taking the call. Read back the add-on lab orders to the requestor to ensure accuracy of the order. For BGAS, Co-Ox and electrolyte add-ons, request that a requisition be sent to the laboratory performing the testing. For other add-on testing, request that the add-on test be placed in Wake One by the ordering location. In the rare occasion of an Add On order from an outside facility that cannot place an order in EPIC, the laboratory should solicit written or electronic authorization for that verbal Add On order within 30 days. Certain tests have specific time requirements for add on testing. Refer to the respective testing procedures for add on testing guidelines.

8. UNCLEAR TEST ORDERS: For test orders that are unclear, including sample types not defined, the lab should call the ordering location for clarification. Document the information and who you spoke with on the requisition.

9. SPECIMEN EVALUATION AND REQUIREMENTS: Specimen types are defined in the Laboratory Information System (LIS) for each test. Specimens must be evaluated prior to processing according to the defined test requirements. Specimens not meeting the defined requirements of a test procedure should be rejected and recollected.

10. LEAKING/BROKEN SPECIMENS: Leaking, broken or contaminated specimens should be evaluated and discarded if it cannot be safely salvaged or if the quality of test results is compromised. A physician may direct lab personnel to proceed with testing of the sample in question. The remarkable sample condition should be noted by the results in RapidComm/LIS.

11. RETURN OF SPECIMENS RECEIVED IN THE LAB. Specimens designated for our lab should not be returned back to the ordering location.

12. SPECIMENS WITH ATTACHED NEEDLES: As a general rule, specimens with attached needles should not be accepted in the lab. If the specimen is from a critical patient, caution the sender that needles should be removed at the collection site. Use your judgement. Remove the needle with hemostats only if you feel it is safe to do so.

13. SPECIMEN DISPOSAL: All specimens received in the laboratory are considered bio-hazardous and should be handled according to the WFBH Laboratory Infection Control Policy. Liquid waste from the RapidLab 1265's and the Cobas may be poured down the bio-hazard sink if flushed with plenty of water.

14. SPECIMEN RETENTION: Blood gas specimens should be held for approximately 20-30 minutes after the results are reported in the event there are any questions about the results or add-on tests if suitable. Green top tubes for iSTAT Creatinine and Serum samples are held for 48 hours. IOPTH samples are held for 48 hours.

15. SECONDARY SPECIMEN CONTAINER LABELING: Secondary sample containers should be adequately identified with patient information throughout the testing process. For example, bullet tubes used to check for hemolysis should be identified with the patient's MR# or last 4 digits of the CSN prior to centrifuging. Sample cups used in IOPTH testing should be labeled with a Beaker aliquot label or identified using either the MR# or the digits following the BG in the Beaker specimen ID (ex 18W-326BG0123. The patient's last name alone is not an acceptable identifier.

Continued.....

B. SPECIMEN PROBLEMS/ISSUES:

Ordering locations should be notified ASAP in the event a specimen does not meet the defined test requirements.

Documenting Lab errors: CCL staff should notify lab management either verbally or by email when a lab related error in patient testing occurs. Errors are evaluated for root cause – random error vs a process problem. CAPA forms are completed when applicable. NOTE: If the results need to be corrected or credited, include that it was a lab error in the description of the reason for the correction/credit.

Documenting Specimen issues: Remarkable events regarding patient testing, lab services should be entered into the Hospital Safety System – RL6. Samples that are clotted, contaminated, mislabeled, unlabeled, broken, lost then found, etc should be ordered (then cancelled) in Beaker. Specimen issues not captured in Beaker should be logged on CCL's QA Labelling Incident Log.

1. **Non-resulted tests:** Any order entered into the LIS that has not been resultd may be cancelled in Beaker. Include the reason, the person you spoke with and the time. The Specimen Inquiry screen captures detailed cancelling information including the person cancelling the test and the reason the test was cancelled. Consult the Cancelling a Test that has NOT been Final Verified section in the Beaker Quick Reference Guide for more detailed instructions.
2. **Resulted tests:** A test that has been final verified cannot be cancelled in Beaker. Results should be modified in Beaker using the *Result Correction function* then credited. Document the name of the person you spoke with and the time you spoke with them. The correction statement notes the previous result with the date/time the result was changed. The Specimen Inquiry screen captures detailed correction information including the person correcting the result and the reason the result was corrected. If a test needs to be ordered in the place of the credited test, create a new order with a new Specimen ID number. Consult the *Modifying a Result (Result Correction)* section in the Beaker Quick Reference Guide for more detailed instructions.
3. **Crediting tests:** Refer to the *Crediting a Test that has been Final Verified* section of the Beaker Quick Reference Guide for instructions on crediting a test Beaker.

C. SPECIMEN LABELLING AND PATIENT IDENTIFICATION REQUIREMENTS:

The collection of arterial blood samples for blood gas analysis is performed primarily by the Respiratory Care staff. Nursing staff collect samples for activated clotting times (ACTs) and venous blood gases. Policies and procedures related to the collection of blood for blood gas analysis are determined and written by Respiratory Care. The Department of Nursing defines blood collection procedures for nursing staff.

1. All specimens received in the labs should be labeled with a minimum of the patient's first and last name and birth date or medical record number. For blood gas analysis, the sample should be labeled with the CSN document label if at all possible.
2. The sample should be accompanied by a test requisition noting the patient's first and last name, birth date or medical record number, location, physician name and CSN/account number. The requisition should note the test(s) requested, the source of the specimen when appropriate, the collector's initials, the date and time of collection.
3. Any identification discrepancies should be resolved prior to releasing results on the patient's sample.

4. Mislabeled, partially labeled (only one identifier) and unlabeled incidents should be evaluated and handled by the Blood Gas Lab staff. Refer to the Hospital's Patient Identification policy (formerly PPB-NCBH-83) for information regarding the labeling of specimens and the protocol for handling specimens that do not meet minimum requirements.

D. MISLABELED, UNLABELED SPECIMENS and PARTIALLY LABELED SPECIMENS:

1. Specimens that are determined by the lab or the ordering location to be unlabeled, partially labeled or labeled with the wrong patient identification, as noted in the policy statement above, shall be discarded and requested to be recollected. Exceptions are made for irretrievable samples and blood gases from emergent traumas and code situations. See section *E* for more information on exceptions for partially labeled/unlabeled samples.
2. Irretrievable specimens should be referred to the Path resident on call in the event there is a request from Nursing or Respiratory to label the sample. See section *F* below for more information on resolving labeling issues with irretrievable samples.
3. All mislabeled, partially labeled and unlabeled samples and a report of their disposal shall be reported to the charge nurse or nurse taking care of the patient.
4. Receipt of all samples and the tests ordered on the samples must be documented in the LIS by ordering and crediting with the appropriate workload exclusion code: FBID (ordering location ID error) or LBID (lab ID error). Documentation should also include the last name and first initial of the person communicated with and the time the communication took place.
5. If incorrect results have been reported on a mislabeled sample, those results should be replaced immediately with the appropriate workload exclusion code: FBID or LBID. Documentation should also include the last name and first initial of the person communicated with and the time the communication took place.
6. Labelling incidents should be entered into the Hospital Safety System – RL6.
7. All mislabeled specimens should be marked as BADID.

E. SAMPLE and REQUISITION DO NOT MATCH:

Incidents involving samples where the label ID and requisition ID do not match shall be evaluated by the Blood Gas Lab Tech.

1. Notify the floor of the situation to help determine whether or not the sample is labeled correctly.
2. A sample can be used if the incorrect requisition was sent with a correctly labeled sample. Request that the ordering location send the correct requisition.
3. The sample shall be discarded if it is suspected or determined to be mislabeled, i.e. the requisition is correct, but the specimen is not. If there is any uncertainty about the identity of the sample, discard the sample and follow the protocol for a mislabeled sample.
4. Document the incident in the Hospital Safety System – RL6.

F. RESOLVING LABELING ISSUES with IRRETRIEVABLE SPECIMENS

Depending on the circumstances, an arterial blood gas sample may be considered an irretrievable specimen. Note the exceptions below in section *f*. All other requests to label an unlabeled sample or to relabel a misidentified sample should be referred to the Pathology Resident on call. The following protocol shall be followed.

1. The request to label/relabel the sample should come from the charge nurse or physician taking care of the patient.
2. Obtain the name and number of the person requesting that the labeling error be corrected. Inform them that you will contact the Pathology Resident on-call.
3. Complete the *NCBH Department of Pathology Mislabeled/Unlabeled Specimen Request to Relabel* form found electronically under *G:\Lab_Shared\ICU_ORLab\FORMS and LOGS* and also

attached to this policy. Document the requestor's name, phone number, correct patient name, medical record number, specimen type, tests requested, a description of the problem (including incorrect patient identification), date/time path resident called.

4. Contact the Path Resident on-call and inform them of the details about the labeling incident. The Path Resident will call the requesting person to gather information and determine whether or not the relabeling is approved.
5. The Path Resident will contact the lab and inform whether or not the specimen labeling error is approved to be corrected. No labeling correction can take place without this approval. The decision to relabel should be documented including the name of who will be relabeling the sample.
6. Relabeling must be done in the laboratory by the person who collected the specimen, or their designee approved by the path resident.
7. The person correcting the labeling error must sign and print their name on the documentation at the time the correction is made. The Path Resident must also sign the documentation at their earliest convenience.
8. Forward the completed documentation to the Lab Manager.
9. **Specimens cannot be returned to the ordering location for relabeling.**

G. EXCEPTIONS FOR PARTIALLY LABELED/UNLABELED SAMPLES:

The Critical Care Laboratories will accept partially labeled or unlabeled samples in the following circumstances.

1. **An ED BGAS WITH LIMITED ID:** Patients coming into the ED in acute respiratory distress may need to be treated immediately before they can be registered, meaning that there may not be time for an accurate ID and/or medical record number. In this event, the ED knows to include a name (it may be an identifier such as Mr/Miss X, Y or a Trauma number etc...) and possibly a bed number. It is acceptable to process the specimen and report the results with this information. Notify the ED to give us the identity/medical record number as soon as possible if one is not received in a reasonable period of time.
2. **An ED BGAS WITH NO ID:** Request that the specimen be identified immediately. One may proceed to run testing before the specimen is identified but identification shall be available prior to reporting results. If the ID is still unavailable when results are ready to report, call the ED and notify the attending physician of the results of the unidentified specimen, and that the specimen needs to be identified.
3. **An ICU / OR BGAS specimen in extremely emergent (i.e. Code Blue, trauma) situations:** Unlabeled samples may be labeled at the lab window by the person bringing the specimen. This may be done by the person presenting the sample by getting a stamped label from the patient location or handwriting a label at the lab. The person presenting the sample can obtain the patient information over the phone if necessary.

3) Related Procedures:

- Patient Identification Policy Medical Center formerly Lab Admin 15 and PPB-NCBH-83 entitled Patient Identification and Identification of Blood, Body Fluids and Tissue Samples
- Blood Procurement – Respiratory Care. Formerly PPB-WFBMC-RC-45, PPB-WFBMC-46, PPB-WFBMC-RC-50, PPB-WFBMC-RC-55, PPB-WFBMC-RC-250
- BLOOD PROCUREMENT (CAPILLARY) PUNCTURE IN INFANTS/NEONATES) - Formerly PPB-NCBH-RC-40
- Sterile Body Fluid and Blood Collection, including Blood Cultures from Venipuncture, Arterial Lines and Central Lines. Formerly PPB-NSG-310
- Department of Pathology - Contaminated Requisition Handling Policy
- Department of Pathology - Specimen Transportation Policy
- Department of Pathology – Laboratory Record Retention Policy
- Department of Pathology – Laboratory Waste Disposal Policy

4) Attachments:

Pathology Request to Relabel Form

5) Related Forms:

Pathology Request to Relabel Form

6) Related CAP Standards: COM.06300

7) References:

CCL-QRG-010 Beaker Quick Reference Guide
WFBMC Intranet/Policies/Respiratory Care
WFBMC Intranet/Policies/Nursing

8) Review/Revision/Implementation:

- Review Cycle: All procedures must be reviewed at least every 2 years.
- Office of Record: Department of Pathology, Critical Care Laboratory

9) Previous Revision Date(s):

10) Revised/Reviewed Dates and Signatures:

Reviewed/Revision Date: _____

Signature: _____

Reviewed/Revision Date: _____

Signature: _____

Reviewed/Revision Date: _____

Signature: _____

**NORTH CAROLINA BAPTIST HOSPITAL
DEPARTMENT OF PATHOLOGY
MIS-LABELED / UNLABELED SPECIMEN
REQUEST TO RELABEL**

| | |
|---|-------------------|
| REQUESTOR'S NAME: | |
| REQUESTOR'S PAGER/PHONE: | |
| PATIENT NAME: | |
| PATIENT MR#: | |
| PATIENT LOCATION: | |
| SPECIMEN TYPE: | |
| TESTS REQUESTED: | |
| PROBLEM DESCRIPTION: Incorrect ID: | |
| PATH RESIDENT PAGED/CALLED: | |
| DATE/TIME PAGED/CALLED: | |
| DECISION TO RELABEL (yes or no and by whom): | |
| TECH: | DATE/TIME: |

| | |
|--|--------------------------|
| The patient sample referenced above belongs to: | |
| Patient Name: | Medical Record #: |
| Signature | Print name |

| |
|---|
| Pathology Medical Staff Comments: |
| - Approving Path Medical Staff Signature |

Path Resident pager: 806-9627

Medical Director pager: 806-3359