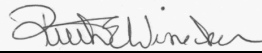

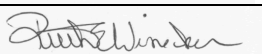


SOP 001 – Accessioning of Specimens

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SOP 001 – Accessioning of Specimens

SOP Name: Accessioning of Specimens	SOP #: 001	
North Carolina Office of the Chief Medical Examiner Toxicology Laboratory	Revision:	Revision Date/Initials:
	3.3.2.1.3 – Updated 3.3.3.2.1 – Updated 3.3.3.3 – Updated 5.11 – Updated 6.7 – Updated 8.8 – Blank entry deleted 9.1.4.1 – Cross reference link fixed 4.2 – Updated Add storage location 3.3.2.1.5 – Added procedure for receipt of unknown specimens	03/02/2016 – MSF 07/07/2017 - MSF 08/14/2017 - REW
	Approving Authority Name	Approving Authority Signature
Ruth E. Winecker, Ph.D.		04/07/2015
Ruth E. Winecker, Ph.D.		06/27/2016
Ruth E. Winecker, Ph.D.		08/14/2017

SOP 001 – Accessioning of Specimens

1. Principle

- 1.1. This procedure describes the method for accessioning specimens.

2. Reagents and Materials

- 2.1. Computer
- 2.2. Scanner
- 2.3. Date Stamp
- 2.4. L#, S#,T# Stickers
- 2.5. Ink stamp for Photocopies
- 2.6. Manila Folders
- 2.7. Blank Tox Request
- 2.8. Green Ballpoint pen
- 2.9. Green Highlighter
- 2.10. Red Wax Pencil
- 2.11. Specimen Receipt Log
- 2.12. Storage Trays for Specimens

3. Procedure for Accessioning Specimens

- 3.1. When specimens arrive, the [Receipt Log](#) must be filled out by the individual delivering the specimens and the evidence technician.
 - 3.1.1. Date/Time
 - 3.1.2. Case Identification (e.g. Morning mail, Mecklenburg, Morgue)
 - 3.1.3. Transport (e.g. USPS, courier, OCME)
 - 3.1.4. Released and Received by
 - 3.1.5. Disposition (e.g. accession, storage)

SOP 001 – Accessioning of Specimens

- 3.1.6. Condition
- 3.2. Specimens are placed in the “Reception Bin” in accessioning (Room 2611).
- 3.3. The following procedure will be followed to accession the received specimens:
 - 3.3.1. Inspect specimen kit boxes and/or specimen collection bags to ensure custody seals are intact.
 - 3.3.1.1. If a seal is found to be open or broken, make a note on the enclosed Toxicology Request Form (TRF) as well as on the final report (see 5.11).
 - 3.3.2. Open the kit and remove specimen(s) and Tox request form from transport container.
 - 3.3.2.1. Inspect specimen containers and note the following on both the TRF and final report (see 5.11):
 - 3.3.2.1.1. Leaking containers
 - 3.3.2.1.2. Non-conforming specimens (examples):
 - a. Decomposed
 - b. Urine or Vitreous that appears bloody
 - c. Empty or missing vial (Listed on TRF as a specimen)
 - d. Blood vial without sodium fluoride preservative
 - 3.3.2.1.3. If TRF is not received or required fields are left blank, fill in missing info with the information given on specimen container (green ink) and attach “[Addendum to Toxicology Request Form](#)” (pink sheet) to TRF. (Pink sheet may also be attached by certifying chemist/toxicologist)
 - 3.3.2.1.4. If no identification is given on the specimen container,
 - a. Write “=” followed by the name of decedent (TRF), your initials and the date on the side of the specimen container.
 - b. Contact submitting Medical Examiner for explanation and Note on final report. (5.11).

SOP 001 – Accessioning of Specimens

- 3.3.2.1.5. If specimens are received without a way to identify who submitted them or a way to identify the decedent (no return address no TRF, vials are blank), then the occurrence will be documented in the logbook and the specimens will be discarded as per policy TOX-P13.
- 3.3.2.1.6. If specimen container is damaged or unsealable, transfer specimen to an appropriate undamaged container. Make a note of the transfer on the TRF and final report (5.11).
- 3.3.3. Read over Tox Request Form.
 - 3.3.3.1. Verify that the decedent's name on the TRF matches the name written on the specimen vial(s).
 - 3.3.3.1.1. If names do not match, contact submitting Medical Examiner for explanation and Note on final report. (5.11).
 - 3.3.3.2. If there is any disease listed on the TRF, i.e.: HIV, Hepatitis, TB, etc.:
 - 3.3.3.2.1. Highlight info in pink on TRF and mark container lid with red wax pencil.
 - 3.3.3.3. If TRF contains lab results or there is a 'HOLD' on analysis, highlight pertinent information with green highlighter. Toxicology may still be performed pursuant to laboratory policy (dependent on case history).
- 3.3.4. With a colored pen, write mode of delivery on the TRF (i.e. OCME, FedEx, US Mail, or Courier) in upper right hand corner.
- 3.3.5. Stamp TRF with date received.
- 3.3.6. Place L# sticker above or beside date received depending on Tox request form.
- 3.3.7. Line up specimens according to order on back of TRF.
 - 3.3.7.1. If specimen details are not entered on the TRF, fill in as much as possible from specimen container (i.e. blood, urine, vitreous, etc.) and note "per container label", initial, and date.
 - 3.3.7.1.1. Contact the ME via email reminding them to be sure to fill out the TRF in its entirety.

SOP 001 – Accessioning of Specimens

- 3.3.7.1.2. Place a copy of the correspondence in the associated toxicology folder.
- 3.3.7.1.3. Enter a case specific comment in MEIS (5.15) (To be done following data entry – Section 5)
- 3.3.7.2. If blood is submitted with no specimen type listed, it shall be accessioned as a “bloody fluid.”
- 3.3.7.3. On the TRF, place S# bar code sticker with “*” in appropriate location or box beside corresponding specimen.
- 3.3.7.4. Write container type (i.e. “TT” for test tube, “SJ” for standard jar, and nothing for 20mL scintillation vial.)
- 3.3.7.5. In the margin above the container type, write the estimated amount of specimen in mL.
- 3.3.7.6. Place the 2nd and 3rd S# stickers on the side and lid of the specimen container.

Note: If the lid of the specimen container is too small to accept an S# sticker (test tube), place both stickers on side of the container being careful not to cover up pertinent information written on the container.

3.3.8. Antemortem Specimens

- 3.3.8.1. Organize Antemortem specimens in chronological order (date/time)
- 3.3.8.2. Write specimen and date/time on the back of the TRF if not listed
- 3.3.8.3. Give at least two of the earliest specimens S# and put the remaining test tubes in a bag with one S#.
 - 3.3.8.3.1. If there is multiple of the earliest specimen, choose the tubes with the most volume.
 - 3.3.8.3.2. If antemortem specimens arrive without date and time of collection, select the 2-3 tubes with the most volume.
 - 3.3.8.3.3. Prior to placing the toxicology specimen bar code on the tube, scan the barcodes into the “Tests Tubes with No Date” worksheet (S:\toxicology\Administrative Documents\Forms

SOP 001 – Accessioning of Specimens

and Letters\TOX P11 Laboratory Documentation\Test Tubes with No Date.docm), print the worksheet and write the decedents name on the sheet. The printed worksheet shall be kept in the toxicology folder in case the hospital needs to be contacted regarding the date/time of collection.

3.3.8.3.4. Ask one of the toxicologists for advice if necessary

3.3.9. Do above for all received specimens/specimen kits and place specimens in appropriate tray type (see section 4).

Note: Any un-accessioned specimens remaining at close of business will be placed in the refrigerator (Room 2612 – table 112) until such time that accessioning can resume.

3.4. Final Review

3.4.1. Review TRF for accuracy. If TRF is contaminated, photocopy with plastic cover and stamp with rubber stamp- “photocopy-original contaminated by specimen.”

3.4.2. Any corrections or statements written on the TRF should be initialed and dated.

714-00496

Office of the Chief Medical Examiner
813-4711

REQUEST FOR TOXICOLOGICAL ANALYSIS
Telephone 800-672-7024

FC
L2074-00044
Date Received: **JAN 0 3 2013**

Decedent Name: **BRANDON FISHER**
First Middle Last

Age: **27** Race: **W** Sex: **M** Date of Death: **12-27-13** County of Death: **Meck** Autopsy Performed? Yes No

Probable Cause of Death: **PENDING**

Medical Examiner or Pathologist must complete A with a separate form for each set of specimens to be analyzed. Original form must be enclosed in same container as specimens and forwarded to the DHEC. Samples received by other than DHEC are discarded. All Medical Examiners are available from 08:00-18:00.

PERTINENT HISTORY (Including drugs available): **DOA ER AFTER FOUND LIFELESS IN RESTROOM OF PHARMACY. DRUG PARAPHERNALIA IN VEHICLE; SPOON, "NEEDLES", MATERIAL THOUGHT TO BE HEROIN**

AUTOPSY: **PULMONARY EDEMA RECENT NEEDLE PUNCTURES**

ANALYSES REQUESTED: **ETHANOL BASES LCMS**

PLEASE PRINT: **JMSullivan** Name of Medical Examiner **JMSullivan** Name of Pathologist

I hereby certify that I personally obtained or authorized the collection of the enclosed specimen(s) and that the results of these analyses are to be used for the investigation of a medical examiner case as defined in Part I, Article 16 of Chapter 130A of the NC General Statutes.

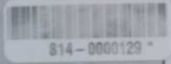



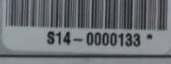
Signature: **JMSullivan** Date: **12-28-13**

Please list each specimen on reverse side

DHHS Form # 1167 (Rev 03/11)

3.4.2.1.

SOP 001 – Accessioning of Specimens

THIS SECTION FOR OCME USE ONLY SPECIMEN BAR CODE (1 Per Spec)		SPECIMEN Blood, Urine, Vitreous, Liver, Spleen, Stic, Gastric, or SPECIFY	ANATOMIC SOURCE Heart, Lung, Aorta, IVC, SV, or SPECIFY	CONDITION Preserved, Decomposed, Embalsmed, Fixed, Autoclaved	DATE OBTAINED
1		BLOOD	A	P	12-28-13
2		BLOOD	WC	P	12-28-13
3		URINE	Bladder	P	12-28-13
4		LIVER	LIVER	P	12-28-13
5		VITREOUS	EYES	P	12-28-13

Please list one specimen per block

DDHS Form # 1167
(Rev 6/11)

3.4.2.2.

4. Specimen Storage

4.1. Specimen storage trays are tape labeled with an alphanumeric code that signifies its location in the storage system e.g. 101C-T012414.

4.1.1. 101 = shelf number

4.1.1.1. 1-91 Freezer

4.1.1.2. 100-112 refrigerator

4.1.2. C = row

4.1.3. T = sample type

4.1.3.1. T = scintillation vial

4.1.3.2. B = Tissue

4.1.3.3. P = Bag of test tubes

4.1.3.4. K = test tube rack

4.1.3.5. HDT = Tissue Homogenate

4.1.4. 012414 = DDMMYY tray was created

4.2. To create a new electronic storage location.

4.2.1. Log onto MEIS: <https://meis.ocme.dhhs.nc.gov>

SOP 001 – Accessioning of Specimens

- 4.2.2. From the menu bar select: “Tox Administration” → “Maintain Storage”.
- 4.2.3. In the “Add a location” field, enter the new location to be added to the data base and select the “Add a Location” button.
- 4.3. Scintillation vials containing blood, urine, vitreous, etc. are initially stored in the refrigerator (~ 4°C).
- 4.4. Tissue specimens are stored in the freezer (~ -20°C).
- 4.5. Most test tubes are stored in the refrigerator with the exception of purple topped test tubes.
 - 4.5.1. Purple topped test tubes (for genetic testing) are to be placed directly into the freezer.
 - 4.5.2. Freezer rack 90 (starting with 90B) is reserved for purple topped test tubes.
 - 4.5.3. Make a note on the TRF: “5 Year Hold”.
 - 4.5.4. Label test tube with the discard date (= date of receipt + 5 years)
 - 4.5.5. Purple topped test tubes will be discarded 5 years after receipt.
- 4.6. Serum separator tubes
 - 4.6.1. The serum in serum separator tubes shall be transferred to another test tube if:
 - 4.6.1.1. It is the only specimen received with the case
 - 4.6.1.2. There is less than 2mL of specimen available in each of the other accessioned specimens for the case.
 - 4.6.2. If transferred, make a note on the TRF and final report (5.11).
 - 4.6.3. Otherwise, the serum separator tubes shall be accessioned as normal.
5. **Procedure for Entering Specimens into Computer Database**
 - 5.1. General ways in which to move about the 4GL database include:
 - 5.1.1. TAB will allow you to move to the next field

SOP 001 – Accessioning of Specimens

- 5.1.2. RIGHT MOUSE CLICK while in a field to view a dropdown box of all the respective choices
- 5.1.3. DOUBLE CLICK W/ LEFT MOUSE BUTTON on the choice you would like to select and the field will automatically be updated
- 5.1.4. In many fields, you can type the first 3 to 4 letters of a word and MEIS will automatically update the field with a corresponding choice (i.e. enter “bl” in the specimen type field and MEIS will automatically update field with “blood”)
- 5.2. Log on to a computer set up for 4GL → Start Button – open “Putty” → select and open “Cerebrum” or “Fornix” → Login by entering User Name – Enter – Password - Enter → at bash-3.2\$: Type “MEIS” – enter
- 5.3. General inquiry box appears → Applications → Toxicology → Views → New Tox Document → Screen appears.
- 5.4. Scan the L# (Request Bar Code Field), and enter the date received.
- 5.5. Type in the Body Tracking Number (B# assigned if autopsy is performed at OCME, Mecklenburg Co., and ECU) in the “Known Bar Code” field and check for correct name when it appears on screen.
 - 5.5.1. If there is not a B#, type in decedent’s name, age, race and sex.
 - 5.5.1.1. If Hispanic, note this by clicking the Hispanic box “Y” for yes.
 - 5.5.2. If unknown, check unidentified block and leave name blank.
- 5.6. In the appropriate fields, enter:
 - 5.6.1. Date of death
 - 5.6.2. County of death
- 5.7. Enter the Name of the Medical Examiner and Pathologist.
 - 5.7.1. In the ‘Submit by’ field, enter “M” for Medical Examiner or “P” for Pathologist.
 - 5.7.1.1. Note: if the Pathologists name was given on TRF, it should be placed in the ‘Submit by’ field.
 - 5.7.2. Click ‘Save/Next’ button.

SOP 001 – Accessioning of Specimens

- 5.8. Scan the T# from the case folder. Write the T# in the upper left hand corner of the TRF.
 - 5.9. For first line of specimen id. Code, scan first S#.ol style="list-style-type: none;"> - 5.9.1. Specimen container label status - check (Y or N)
 - 5.9.2. Enter type of container
 - 5.9.3. Type of specimen
 - 5.9.4. Anatomical source and side if known (R or L)
 - 5.9.5. Condition (i.e. post, ante, decomposed, embalmed)
 - 5.9.6. Date specimen obtained by submitter.
- 5.10. Next screen appears.
 - 5.10.1. Type in amount of specimen in milliliters.
 - 5.10.2. Check if volatiles are to be run, hit space if so.
 - 5.10.2.1. Volatiles are to be run on all cases unless otherwise noted on the TRF.
 - 5.10.2.2. Place this analysis on the blood sample taken from a source closest to the heart.
 - 5.10.3. The next section is the Chain of Custody (CoC) portion of the login.
 - 5.10.3.1. TAB to “Released by” field and enter OCME, US Mail, etc. In “received by” field
 - 5.10.3.2. Type in your user name.
 - 5.10.3.3. TAB→ Storage Location: enter storage location of the specimens.
- 5.11. If specimen requires a special comment to appear on the final report (placed on hold, specimen kit received with at least one leaking container, etc.) right click in “Report Comment” field and choose comment from pick list.
 - 5.11.1. If desired comment is not on the list, Type the comment into the “Report Comment Field” e.g. “Urine appears bloody”.

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- 5.12. Click END to return to previous screen. Scan in next S# if applicable, otherwise click “Save/Next”.
- 5.13. Repeat steps outlined in section 4 for all TRFs.
- 5.14. Place specimen in assigned storage location. If there is a CoC typing error, see supervisors. Tox. Folders are placed in pending drawer and TRFs are given to supervisor for test assignment.
- 5.15. To enter a case specific comment that will not appear on the final report:
 - 5.15.1. Log into MEIS - <https://meis.ocme.dhhs.nc.gov/meis/servlet/MeisLogin>
 - 5.15.2. General Inquiry → Enter B#,T#, or enter decedent’s name and select “Submit”
 - 5.15.3. Select “Comments” in the left margin
 - 5.15.4. Enter comment in the “Case Comments” field and click “Add”
 - 5.15.4.1. Comments should be copied and pasted from a list of canned comments – **Do Not Free Type.**

6. Prescription Products

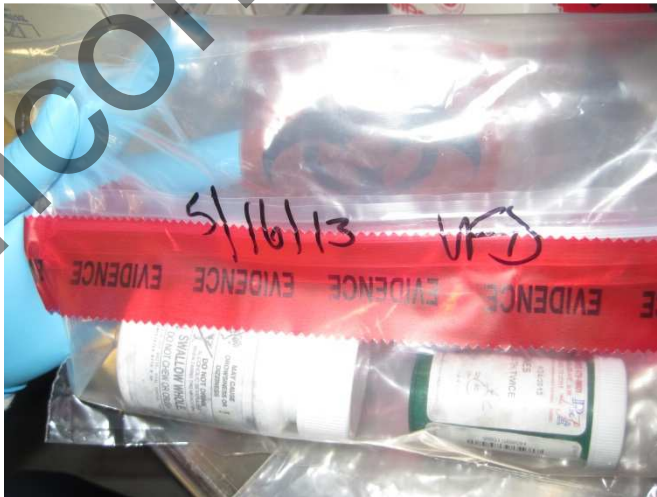
- 6.1. OCME staff pathologists/residents should always drop off medication with a toxicology lab member present. If the medication is not to be logged in at the time of receipt, place in refrigerator (Room 2612 unit 112).
- 6.2. When logging in medication; fill out the top of the Medication Inventory Form for the decedent and place an S# on the Form and remaining S# on the bag of pills.
- 6.3. Seal the bag of prescription product and place evidence tape over the seal so that the bag cannot be opened without tearing the tape.
- 6.4. Initial and date across the tape (7.4.1).
- 6.5. Place [Medication Inventory Form](#) in Tox folder in a manila envelope
- 6.6. Place the Medication in the evidence storage room ([TOX-P3](#)).
- 6.7. Use comment “Prescription product may be counted and documented at a later date per the discretion of the Toxicologist”
In Ingress

SOP 001 – Accessioning of Specimens

- 6.8. Medication counts will be done at the request of the Pathologist or Toxicologists by counting current medication (e.g. those prescribed and filled within 3 months of death) and listing all medication (see [SOP 003](#)).
 - 6.8.1. Pill Counts performed in lab 2601 **with another OCME toxicology employee present in the room.**
 - 6.8.2. Put Medication in chronological order (newest first) date/time
 - 6.8.3. On “Medication Inventory” form: Name, Dr. Name, Amount, Date Filled, Dosage, Remaining, Pharmacy
 - 6.8.4. Change comment to “Prescription product was counted and documented on _____ by _____.” in Ingress.

7. Physical Evidence

- 7.1. Examples: pipes, leafy green vegetable-like matter, white powder, any color powder, strange misc. drug paraphernalia
- 7.2. Write “Physical Evidence described as” followed by the evidence description on the TRF and give the line an S#*
- 7.3. Place the remaining S# on the container (plastic bag, test tube in plastic bag, box, etc.)
- 7.4. Put evidence tape on the outer container and initial/date across the evidence tape



- 7.4.1.
- 7.5. Place in evidence storage room ([TOX-P3](#))

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8. Loose unidentified tablets and capsules

- 8.1. Examples: intact tablets and capsules found in clothing or stomach
- 8.2. Write Tablet or Capsule on the TRF and give the line an S#*
- 8.3. Place the remaining S# on the container (usually an envelope.)
- 8.4. If the evidence is loose, place in a plastic zip-lock bag.
- 8.5. If possible visually identify the drug by its markings, write “Pills visually identified as” followed by the drug and dose information (if known) on the TRF and enter this information as a specimen comment.
 - 8.5.1. If the pills remain unidentified, write “Pills – unable to identify” followed by number of pills on the TRF and enter this information as a specimen comment.
- 8.6. Seal the envelope or bag of evidence and place evidence tape over the seal so that the envelope/bag cannot be opened without tearing the tape.
- 8.7. Initial and date across the evidence tape (7.4.1).
- 8.8. Place the envelope/bag in the evidence storage room.

9. Clinical Histories

- 9.1.1. TRF - Examples: (qualitative/quantitative) alcohol, acetaminophen, salicylates, carbon monoxide - qualitative immunoassay results are not reported
- 9.1.2. Highlight the clinical finding on the TRF
- 9.1.3. Write “History” on the back (page 2) of TRF and provide an S#
- 9.1.4. Enter Specimen into 4GL Database (Section 5)
 - 9.1.4.1. In step 5.9, enter “History” instead of “Specimen”
 - 9.1.4.2. Leave all other entries blank and tab until 4GL returns to the beginning of the same entry.
 - 9.1.4.3. Select the “Results” button at the bottom of the page.
 - 9.1.4.4. On the “RESULTS” page enter “H” for Class of test.

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- 9.1.4.5. Enter “Ethanol” or other analyte for which you have a history. A screen will pop up with the analyte listed. You must turn off the “Num Lock” in order to select the analyte in this box. Double click on the analyte to select it.
- 9.1.4.6. Type “Less than,” “Present,” or “None Detected” if appropriate in the “Rpt Prefix” field (leave blank otherwise). Tab
- 9.1.4.7. Type the numerical result (if applicable) in the “Rpt Amount” field. Tab
- 9.1.4.8. Enter the appropriate units in the “Rpt Amount Units” field. If units are not given, type “not prov.” Tab to the next line.
- 9.1.4.9. Select the “Save” button at the bottom of the page to save the entry and exit the screen
- 9.1.4.10. If the folder was originally a “Hold,” select the “No analyses requested, specimen(s) held” Comment in the REPORT COMMENT box.
- 9.1.4.11. If the folder contains only the History information select the “History only, no specimen received” comment in the REPORT COMMENT box.
- 9.1.4.12. Click the “Save/Next” button to save the entry.
- 9.1.4.13. A Confirmation PopUp will appear “No alcohols requested, Hold?”, Select the “Cancel” button.
- 9.1.4.14. Print a Provisional Report and color the folder Tab orange with a highlighter to indicate a History has been entered.

9.2. Clinical Histories from the *Report of Investigation by Medical Examiner*

- 9.2.1. Case management will make a copy of the *Report of Investigation by Medical Examiner* (yellow sheet) if a clinical result is reported. The copy will be placed in the toxicology mailbox.
- 9.2.2. The Forensic Document Specialist will check to see if T # already exists for this decedent.
 - 9.2.2.1. If yes, the Forensic Document Specialist will see if the history is already recorded.
 - 9.2.2.1.1. If yes, the history will be labeled “Already Entered” and returned to Case Management.

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9.2.2.1.2. If no, an L# and S#'s will be obtained from the Evidence Technician. All 4 barcodes will be placed on the paperwork and history will be entered in 4GL as a new specimen (see 9.1.4).

9.2.2.1.3. Create a report and give to a certifying scientist or toxicologist with the authority to sign the provisional report.

9.2.2.2. If no, a folder with T # should be obtained to enter the history, create a report and give to a certifying scientist or toxicologist with the authority to sign the provisional report.

10. References

- 10.1. Levine, Barry. "Postmortem Forensic Toxicology." *Principles of Forensic Toxicology*. 2nd ed. Washington, DC: AACCPress, 2006. 3-13. Print.
- 10.2. Bishop-Freeman, Sandra. *ACCESSIONING AND EVIDENCE HANDLING*. Raleigh, NC: NC OCME Toxicology, 21 May 2013. PowerPoint.