

AUTOPSY SAMPLE PRESERVATION

6.1 PURPOSE

To preserve autopsy samples for further analysis and/or long term storage.

6.2 RESPONSIBILITY

Forensic Science Examiners (however titled) from the Division of Scientific Services who have been trained in the discipline of physical evidence examination according to FB SOP-26 (Training Manual and Checklist) and GL-4 (LIMS/Justice Trax).

6.3 SAFETY

Use appropriate measures for the proper handling of a biohazardous material according to GL-2 (Safety Manual).

6.4 DEFINITIONS

- A. LIMS: Laboratory Information Management System
- B. OCME: Office of the Chief Medical Examiner

6.5 PROCEDURE

- A. If OCME autopsy samples are submitted as a Sexual Assault Evidence Collection Kit or includes swabs for body fluid testing, please refer to FB SOP-02 (Sexual Assault Evidence Collection Kit Examination).
- B. Fill out a Physical Evidence Coversheet (FBQR-01).
 - 1. List the items submitted as autopsy samples.
 - 2. Create barcodes, as necessary (OCME Case # as Submitting Agency Case #), Examples:
 - a. Envelope labeled w/ "Known blood sample – Victim's Name"
 - b. Envelope labeled w/ "Known head hair sample – Victim's Name"
 - c. Envelope labeled w/ "Known pubic hair sample – Victim's Name"
 - d. Envelope labeled w/ "All known body hair samples – Victim's Name"
 - e. Envelope labeled w/ "Questioned hair or other trace samples"
 - f. Envelope labeled w/ "Fingernail scrapings/clippings"
 - g. Envelope labeled w/ "Other biological samples"
 - 3. Attach an image of the original packaging's labels to the coversheet.
- C. Items being retained will be verified for package labeling prior to being transferred into storage. This verification will be conducted by a second examiner (however titled). The second examiner will date and initial the LIMS transfer sheet(s) for each storage location to document this verification.

D. Known Blood:

1. Fill out a Whole Blood worksheet (FBQR-07).
2. Label the blood vial with the Lab ID#, item # and examiner's initials.
3. Make a stain of the blood according to FB SOP-07 (Whole Blood Sample Preservation).
 - a. If a stain has already been prepared by the OCME and is included with the autopsy samples, see 6.5.I below for storage.
 - b. The known blood sample may be submitted separately as a bloodstain card which generally is handled by the DNA Unit. Then no stain needs to be created.
4. Repackage the vial in its original container. If no appropriate container is present, use a 50ml falcon tube from Laboratory stock. Seal the container with evidence tape, place the barcode on the container and initial the seal and barcode. Place into refrigerator storage.
5. If the case warrants, containerize the item # (known blood sample) into the submission # (Autopsy Samples) in LIMS. If only the OCME has submitted evidence in the case, then the known blood sample will be retained. Otherwise return the known blood sample vial and container in the original packaging to the Evidence Receiving Unit.

E. Known Hairs:

1. Place the appropriate barcode on the known head hair, known pubic hair and known body hair sample envelope(s).
2. If necessary, the known head hair, known pubic hair and known body hair envelope(s) may each be packaged in an additional, separate manila envelope.
 - a. Label each original envelope with the Lab ID# and item #.
 - b. Place the appropriate barcode on each additional manila envelope.
3. Place the envelope(s) in a larger manila envelope (approximately 9" x 12"), label with the Lab ID#, incident town, item #s and examiner's initials. After verification, seal with tape, initial the seal and place in trace storage.

F. Questioned hairs or other trace samples:

1. Place the appropriate barcode on the questioned hairs or other trace sample envelope(s).
2. If necessary, the questioned hairs or other trace sample envelope(s) may each be packaged in an additional, separate manila envelope.

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- a. Label each original envelope with the Lab ID# and item #.
 - b. Place the appropriate barcode on each additional manila envelope.
3. Place the envelope(s) in the same larger manila envelope (approximately 9" x 12") as the known hair samples (see paragraph 6.5.E.3 above).
4. If blood-like material or other body fluid-like material is present, place in freezer storage.
5. If examination is warranted, see FB SOP-02 (Sexual Assault Evidence Collection Kit Examination) and FB SOP-19 (Trace Evidence Collection/Hair-like Fiber Examination).
- G. **Fingernail samples:**
 1. Place the appropriate barcode on each fingernail sample envelope.
 2. If necessary, the fingernail sample envelope(s) may each be packaged in an additional, separate manila envelope.
 - a. Label each original envelope with the Lab ID# and item #.
 - b. Place the appropriate barcode on each additional manila envelope.
 3. Place the envelope(s) in a plastic Ziploc bag, heat seal and initial the seal. Place in freezer storage.
 4. If examination is warranted, see FB SOP-02 (Sexual Assault Evidence Collection Kit Examination) and FB SOP-27 (Fingernail Sample Examination).
- H. **Other Biological Samples: (ex. muscle, liver, bone)**
 1. If received within the autopsy sample package, remove and place the appropriate barcode on each sample container.

Place in freezer storage in designated storage bin.
 2. If received separate from the autopsy sample(s), place directly into freezer storage in designated storage bin.
- I. Create the bloodstain, all known hair samples, fingernail scrapings/clippings and other trace/biological evidence in LIMS according to GL-4 (LIMS/Justice Trax).

- J. Transfer all evidence to the appropriate storage areas and print out LIMS Transfer Sheets, as needed:
 - 1. FTA Blood Storage = known bloodstain
 - 2. Trace Storage – retained trace = known hairs, questioned trace samples and original packaging (if not returning known blood sample to Evidence Receiving)
 - 3. Freezer Storage – Fingernail scrapings/clippings = fingernail samples and other biological samples
 - 4. Refrigerator Storage – OCME Bloods = known blood sample (if not returning to Evidence Receiving)
 - 5. Freezer Storage – to be examined = other biological samples
- K. Complete all LIMS requests according to GL-4 (LIMS/Justice Trax).
- L. If no analysis is performed on these samples, no report is generated.

6.6 REFERENCES

- A. GL-2 (Safety Manual)
- B. GL-4 (LIMS/Justice Trax)