

Purpose

This procedure describes the method for the submission, receipt, protection, accountability, labeling, transfer, destruction and return of forensic evidentiary and reference materials.

Scope

This SOP applies to all technical personnel who receive, handle or process forensic materials at LSD&FC.

Guidelines & Requirements

- ISO/IEC 17025: 2017 (E) Standards
- R104 - A2LA General Requirements – ISO/IEC 17025:2017 Accreditation of Field Testing and Field Calibration Laboratories
- P113- A2LA Policy on Measurement Traceability for Life Sciences Testing and Forensic Conformity Assessment Bodies (CABs)
- P102a – A2LA Policy on Metrological Traceability for Life Sciences Testing and Forensic Conformity Assessment Bodies for all Calibrations and Verifications of Measurement and Test Equipment
- AABB's Guidelines "Guidance for Standards for Relationship Testing Laboratories", 12th Edition.

Reagents/Materials/Equipment

Forensic Evidence & Reference Materials
Chain of Custody



Procedure

Case Acceptance & Management

1. LSD&FC staff shall ensure the integrity of all items submitted to the laboratory for analysis.
2. The Center shall not permit any action which may compromise the integrity of the forensic materials, breach confidentiality or compromise safety.
3. All forensic materials submitted shall follow the procedures for receiving, handling, storing and returning to the submitter.
4. All forensic material receipts, transfers and returns shall be documented on the LSD&FC Chain of Custody Form.
5. The LSD&FC laboratory will receive and examine evidence submitted by the criminal justice community investigating a potential criminal action within Nigeria. The acceptance of evidence from other entities is at the discretion of the Director.

Submission of Materials to LSD&FC

1. Contact Information for the laboratory:

Lagos State DNA & Forensic Center (LSD&FC)

48 Broad Street, Lagos Island,
Lagos, Nigeria.

Email: Info@LSDFC.org

Phone: +234-705-393-9366

2. Evidence Intake Hours of Operation: Monday through Friday from 9:00 a.m. to 3:00 p.m.
3. The forensic evidence and reference items shall be accompanied with a Forensic Case Submission form.

Safety

1. Physical evidence being submitted for forensic testing can pose significant safety hazards to LSD&FC personnel.
2. It may not always be possible to determine if evidence poses a biological or chemical hazard, so it is imperative to follow universal safety precautions when handling all evidence.
3. According to the concept of Universal Safety Precautions, all human blood and certain body fluids are treated as if known to be infectious for human immunodeficiency virus (HIV), hepatitis B virus (HBV), and other bloodborne pathogens.
4. Any human biological fluid must be handled with caution.
5. Other potentially infectious materials include, but are not limited to semen, vaginal secretions, cerebrospinal fluid, synovial (joint) fluid, pleural (lungs) fluid, pericardial (around heart) fluid, peritoneal (abdominal) fluid, amniotic (around fetus) fluid, saliva in dental procedures, and any fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.
6. In addition, any unfixed tissue or organ (other than intact skin) from a human (living or dead).
7. Bodily fluids such as urine, sweat, tears, nasal secretions, vomit, and feces (when they are not contaminated with blood) can still transmit infectious diseases so caution is advised.
8. Evidence that consists of or may contain a potentially infectious material (e.g. a tube of blood or a shirt suspected of containing blood staining) must be plainly marked with biohazard stickers.
9. If submitting infectious evidence containing HIV, HBV, or other contagious biohazard substances, this information shall be noted on the case submission paperwork.
10. Suspected hazardous chemicals must also be marked accordingly.

General: Item Information

1. Proper item packaging, identification, and sealing of evidence is essential to its preservation and integrity.

2. In order to avoid the introduction of exogenous DNA to the item, it is necessary to wear latex or nitrile gloves when handling evidence. Gloves shall be changed between handling different items of evidence.
3. Items should be packaged separately so that cross contamination does not occur. If the potential for cross contamination does not exist, like items may be packaged together (e.g. inked elimination prints, latent print lifts from a specific collection area).
4. Each item should be completely packaged independently. This will protect from further contact with other objects and to prevent loss of trace evidence.
5. Evidence should be submitted dry (e.g. bloody clothing, plant material).
6. Evidence should be protected to avoid breakage and/or leakage.
7. Submit only the items that need analysis.

General: Packaging

1. Use new packaging material when preparing evidence to be submitted to the LSD&FC. This will avoid the possibility of the evidence encountering a contaminant within the previously used material.
2. Packaging material is available in a variety of shapes and sizes. Choose a size that is appropriate for the evidence (e.g. coin envelopes for trace items).
4. Appropriate packaging includes but is not limited to: paper bags or envelopes, sturdy cardboard boxes, plastic bags, metal cans, and glass vials.
5. Paper material is suitable for a variety of evidence given its porous property which allows residual moisture to escape. Paper bags are appropriate to use when submitting clothing evidence. Manila envelopes are the preferred material when submitting trace samples or swabs. Envelopes with windows allow for the evidence to be viewed without disturbing the seals.
6. New and clean metal cans with tight fitting friction lids are the standard packaging preference for volatile, non-biological samples. The metal can traps the hydrocarbon vapors inside, preventing evaporation. Most commonly encountered samples submitted in metal cans are flammable liquid accelerants found in fire debris (e.g. lighter fluid, gasoline).
7. Glass containers are ideal for packaging liquid samples (e.g. clandestine laboratory samples). Ensure that the glass container has a well fitted top. Once the evidence is contained within the glass container, make certain it is protected from breakage and/or leakage.

General: Item Seals

1. Evidence must be properly sealed prior to acceptance by LSD&FC.
2. Evidence is considered properly sealed when its packaging is secured to prevent loss, cross-contamination, cross-transfer, deleterious change, and/or detectable unauthorized access to the contents.
3. An acceptable seal covers the entire opening on the packaging container.
 - Manila envelope clasps, ziplocked plastic bags, and staples alone do not constitute an acceptable seal. They must be accompanied by a tape or heat seal.
 - A proper seal includes the initials of the sealer.
 - Initials must be permanent in nature.
4. Oversized items or evidence with other characteristics making its placement into a sealable package impractical (e.g. window, door jamb, furniture, etc.) need to have at minimum the area of interest covered to protect from loss or alteration.
 - Some sort of marking or identifier must be in place so the item of evidence can later be shown to be the item examined.
 - Identification of this sort can be accomplished using an indelible marking, engraved marking, or a unique number (e.g. serial number) attached to the item.
5. If it is determined that the items cannot be accepted by LSD&FC for examination due to an improper seal, the customer will be contacted to return the item(s) improperly submitted.

General: Case Submission Information

1. When submitting new or additional evidence, it is recommended to use the LSD&FC Case Submission Form.
2. The case submission form details case specific information needed for our records and to ensure that the appropriate types of forensic testing will be employed.
3. Make sure the request form is legible by hand printing or typing. If there are special circumstances (e.g. rush analysis needed for court) note this on the submission form.



4. In addition to our form, we suggest that you send a copy of any case related information or photographs which provide useful information to the personnel performing the forensic testing.
5. We require the following information in order to process your case:
 - Submitting Agency Name, Address, Phone, Fax & Email
 - Case number
 - Primary point(s) of Contact: Name, Address, Phone, Fax & Email
 - Other Authorized Point(s) of Contact: Name, Address, Phone, Fax & Email
 - Case type
 - Reference Item Name and Item #
 - Victim Name (s)
 - Suspect Name (s)
 - Elimination Name(s)
 - Evidence Item Description(s) and Item #(s)
 - Examinations requested
 - Court date, if known
 - New Submission
 - Resubmission
 - RUSH Submission

Packaging of Items Containing Biological Material

The following recommendations are provided as guidance for customers who ask for instructions regarding packaging items for submission.

Liquid Materials

Items for submission that are in liquid form (whole blood, urine etc.) must be collected in containers that do not leak. The sealed container should be placed into a plastic bag which must also be sealed.

Wet Materials

Ensure that the sample is dry. If the sample is wet, allow the specimen to air dry. Heating the sample to quicken the drying time is NOT recommended.

Packaging should be paper, not plastic. Samples that are wet and packaged in containers which limits the air exchange will cause the DNA within the sample to degrade.

Packaging of Sharp Materials

1. It is recommended that items be immobilized for items such as:
 - Sharp edged item(s)
 - i. Knives
 - ii. Broken glass
 - Items that could be easily dislodged
2. Use a cardboard box to immobilize sharp items to protect both individuals who come in contact with the item as well as maintain the integrity of the biological evidence on the item.
3. Collect and package items separately so that biological materials from one item does not come into contact with another item.
4. While packaging up items for submission make sure that no foreign DNA is introduced to the item being packaged. The work space surfaces should be cleaned with 10% bleach and the individual handling the evidence should wear gloves.

Packaging of Trace Materials

1. Trace evidence can easily be lost if not packaged properly.
2. Trace evidence includes hairs, fibers, glass fragments and flakes of biological evidence.
3. Trace items may be placed in a paper bindle and then sealed and placed within an envelope or rigid box.
4. Hairs and fibers may be placed on a post it notes and then placed within an envelope.

Packaging of Fragile Materials

1. Items that are delicate (i.e. light bulbs, thin glass material, etc.) must be placed in a container that is rigid and marked **Fragile** on the outer packaging.



Submission of Firearm Materials (Guns, Bullets & Cartridges)

1. Firearms must be submitted to the laboratory unloaded with the magazine removed.
 - Never insert anything into the barrel of the gun. This could alter the interior of the gun barrel and potentially remove any biological evidence.
 - Once the firearm has been rendered safe, it can be placed into a cardboard box and immobilized with plastic ties.
 - Fired bullets need to be carefully handled to protect the critical markings on the bullet surface and any potential biological material.
 - Never mark a bullet. A paper bindle may be utilized for packaging and then sealed and placed within an envelope or rigid box.
 - Package loose cartridges in paper envelopes.

Item Receipt at LSD&FC

1. Cases can be submitted via a method with tracking (e.g., FedEx, UPS, DHL, USPS etc.) or may be submitted by hand delivery.
2. On occasion our forensic experts may be asked to pick up items for hand delivery to our laboratory.
3. Upon receipt of a case, the individual accepting the package shall date and initial the item.
4. Initiate a chain of custody document. Follow the procedure for the initiation of the Chain of Custody (COC) Form.
5. The condition of the package shall be recorded on the COC Form.
6. Any condition which is questionable (signs of tampering or damage) shall be brought to the attention of the Section Director.
7. The submitter will be notified of any unsatisfactory conditions (e.g., tampering, damage, commingling of items, poor outer packaging, etc.).
8. Any conditions which are averse to the quality shall be recorded on the chain of custody document and by photograph and will be returned to the submitter.

Assignment of a Case Number

1. The outer packaging shall be photo-documented to capture the condition upon receipt.



2. Once the case is received, it is logged into the Forensic Case Log and given a case number.
3. Information regarding assigning a case number can be found in SOP: Forensic Casework Numerical Designations within the subsection case number assignment.
4. Each case number is unique and shall be placed on all case submission documents.
5. Note on the chain of custody the assigned case number.

Assignment of an Item Number

1. Carefully open the package and photo-document the inner package(s) as received.
2. Item numbering follows the procedure Forensic Casework Numerical Designations within the subsection item number assignment. Each item shall be inventoried and assigned a unique item number.
3. No duplicate numbers shall exist within a case.
4. Verify the items submitted are correctly identified by item number and description within the case submission form. If any discrepancies are noted, contact the submitter to resolve. All documentation regarding the discrepancy shall be noted and kept within the case file.

Item Integrity

1. LSD&FC staff shall ensure as far as reasonably possible, items do not experience loss, cross contamination or change in quality while in the possession or our laboratory.
 - a. If an employee recognizes that an items integrity has been compromised or lost, the employee shall notify the Director and initiate the proper corrective action.
2. Items shall be stored at the proper temperature to maintain the quality of the item as received.
 - a. Items that are dry shall be stored at room temperature.
 - b. Items that are wet shall be stored refrigerated or frozen.
 - c. Whole blood tubes shall be refrigerated.
 - d. Bone and tissue shall be stored frozen.



Item & Package Seals

1. All evidence and reference items shall be sealed properly.
2. Items may be sealed by the following:
 - a. Heat seal
 - b. Tape seal
 - c. Lock seal
3. LSD&FC uses evidence tape which is temper evident. Where possible, items shall be sealed with temper evident tape.
4. When items are received, employees shall check to ensure proper seals at receipt.
5. The seal on the item shall bear the initials of the LSD&FC employee placing the item under seal and dated to indicate when the evidence was sealed.
6. Seals should completely close the item
7. When opening items submitted to our laboratory for analysis, when possible, it is preferred to leave prior seals intact. If the previous label must be broken label the broken seal with your initials and date.
8. All initials placed on seals by LSD&FC employees shall bear the initials under the tape, on the tape or span across the tape onto the outer packaging.
9. The outer packaging which surrounds the sealed item is also known as the convenience package. It may contain multiple sealed items for analysis. This package while in secure storage does not need to maintain an intact seal during case processing. A temporary seal of laboratory tape or by staple may be utilized to contain the sealed items within the package. Once analysis commences and prior to returning the items to the submitter, a permanent seal shall be placed on the outer convenience package.

Items Storage

1. Items in the process of being examined shall be maintained in a manner to avoid loss, contamination or changes in quality.
2. Items in the custody of Forensic Analysts shall be stored in the evidence room or within the secure extraction laboratory. Access to these areas is limited to only designated personnel.
3. Items shall be replaced in the original container and/or packaging when possible.
4. It is not desired to have items submitted to LSD&FC for indefinite storage.
5. Once case processing has completed the submitter should be contacted and the items returned.



Chain of Custody

1. All receipts, transfers and returns shall be documented within the chain of custody.
2. Certain items of evidence (large sums of money, large amounts of drugs) will be sampled with a witness. Both the lead analyst and the witness shall be documented on the chain of custody.

Return of Item(s) to the Submitter

1. All items shall be inventoried and confirmed for accountability.
2. All seals shall be verified to be intact, dated and initialed.
3. An evidence return letter shall be drafted.
4. The submitter shall be contacted to notify that the item(s) are being returned and the method and tracking provided. If the items are being retained for pick up the submitter will be notified that the items are ready.
5. The laboratory shall return evidence a cost effective, appropriate and lawful method of return, via the following:
 - a. First Class or Certified Mail
 - b. Commercial Carriers
 - i. United Parcel Service (UPS)
 - ii. Federal Express (FedEx)
 - iii. DHL
 - c. Personal Pickup
6. The laboratory personnel release the evidence for return shall record the final disposition as transfer to the external source (USPS, UPS, DHL, FedEx, Pickup etc.).

Destruction of Items

1. All requests for the destruction of an item or items must be in writing. If legal authorization is needed a copy of the court order is required.
2. All requests for destruction shall be retained within the case file.
3. Once the item is properly destroyed, the chain of custody document shall be updated.

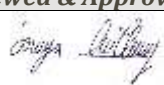
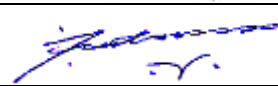
Evidence Inventory

1. An inventory of all evidence stored at LSD&FC shall be conducted on an annual basis where the inventory is started and completed in its entirety at the end of the calendar year and all items in the evidence room (long-term storage) and in the laboratory (short-term storage) are accounted for and verified.
2. An inventory shall be performed prior to the end of the calendar year under any of the following condition:
 - Per request of the Center Director
 - Upon discovery of a missing item
 - When an audit uncovers non-conformities that rise to the level of a corrective action
3. The inventory shall be conducted by the evidence technician assigned to the Section. Other staff members maybe assigned to the evidence inventory at the discretion of the Section Director.
4. The evidence inventory for each case shall be matched to the list of packages and package unique identifier listed in the case file records. All packages shall be checked for proper seals and identification (i.e., packaging number, contents, analyst initials, and date). If a seal is broken, then contents shall be inspected and matched to the case file documentation. The individuals conducting the inventory shall not break evidentiary seals to check the contents of packages. Any missing package or item of evidence shall be brought immediately to the attention of the analyst assigned to the case or the Quality Manager if the case is unassigned.
5. The inventory shall be recorded on the Evidence Inventory Form (LSDFC Form # For 021). The results (e.g. matched/unmatched results) and any non-conformity such as improper seal or missing information on the packaging shall be recorded on this form. The Evidence Inventory Form shall be forwarded to the Quality Manager with a memorandum indicating the date and the name of the individual(s) who performed the inventory.



Do Not Copy

Procedure Review, Sign Off & Effective Date

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Review History			
Reviewed By	Date	Version	



Evidence Management

LSD&FC Property - Do Not C