



Intermountain Forensics

SOP #

EVD-121

Revision #

01

Forensic DNA Technical Leader Approval

Issue Date

03/01/2023

Evidence Submission Guidelines

1. Purpose

This document outlines best practices for the packaging and handling of evidence, as well as submission to Intermountain Forensics.

2. Summary

The scientific analysis of test items may be significantly impacted if they are not documented, gathered, packaged, preserved, and submitted in a manner that will protect evidence from loss, cross transfer, contamination and/or deleterious change. This document contains scientifically accepted and practical recommendations for the handling and packaging of test items, and it outlines the proper procedure for submission of test items to Intermountain Forensics.

Due to the various types of test items involved in the investigation of crimes, it is not possible for this manual to cover every circumstance or condition. The suggested procedures cover the concerns and approaches for more common types of test items.

3. Procedure

1. Intermountain Forensics offers services to its customers in the following areas:

- a. Sample Collection (swabbing, MVAC Collection)
- b. Body Fluid Identification (Blood, Semen, Saliva)
- c. Bone and Hair Sample Preparation
- d. DNA Extraction (Phase 1 Testing)
- e. DNA Quantitation (Phase 1 Testing)
- f. DNA Analysis via Capillary Electrophoresis (CE) for STRs and YSTRs (Phase 2 Testing)
 - i. Could result in a profile suitable for upload to the Combined DNA Index System by an NDIS participating public laboratory
- g. DNA Analysis via Multiparallel Sequencing (MPS) for STRs, YSTRs, and SNPs (Phase 2 Testing)
 - i. Could result in a profile suitable for upload to the Combined DNA Index System by an NDIS participating public laboratory (STRs)
 - ii. Could result in a profile suitable for upload to a genetic genealogy database (SNPs)

Note: This does not constitute a list of accredited services. Refer to the laboratory's accreditation certificate and scope document for that information: [ANAB ISO/IEC 17025:217 And AR 3125 Accreditation Certificate and Scope Document](#)

2. General Evidence Shipment and Storage Guidelines

- a. When shipping to Intermountain Forensics, ensure that delivery does not occur on a weekend, to protect the chain of custody, and all evidence is shipped as quickly as possible, to reduce exposure to fluctuating environmental temperatures.
- b. Use a shipment service that requires a signature for delivery and provides a tracking number for the package shipment.
- c. Dried biological material should be stored in a temperature-controlled environment whenever possible.



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- d. Liquid or frozen biological materials should be stored frozen or refrigerated and then shipped on ice, to avoid degradation of the DNA, which could impact the quality of the DNA obtained from that item.
 - i. Frozen:
 - 1. Urine
 - 2. Wet Bloody Items
 - 3. Feces
 - 4. DNA Extracts
 - ii. Refrigerated:
 - 1. Liquid Blood
 - 2. Wet Swabs (if they cannot be air dried – though air dried is highly recommended)
 - iii. Temperature Controlled
 - 1. Dry Biological Stained Items
 - 2. Hair
 - 3. Dried Swabs with Biological Material
 - 4. Buccal Swabs

3. General Packaging Guidelines

- a. All evidence must be handled and packaged to protect it from loss, cross transfer, contamination, and/or deleterious change.
 - i. Breathable packaging (i.e., paper) is preferred, unless the item is a sharp object which **must** be packaged in a puncture proof container or a liquid/powder which **must** be submitted in a leak proof container.
 - 1. Breathable packaging material should consist of an envelope, bag, cardboard box, etc. that is sturdy and can withstand tearing or ripping as contents move or settle during transportation and storage.
- b. The outer most packaging should be no smaller than a standard business sized envelope with an approximate dimension of 4"x 9".
 - i. If the original packaging for the items is smaller than this size, it is suggested to put that envelope in a larger container that meets this recommendation and label the outside of the new container following the labeling guidelines below.

4. General Labeling Guidelines

- a. All items of evidence should be marked to identify the following:
 - i. Investigating Agency name
 - ii. Investigating Agency Case Number (or equivalent)
 - iii. Description of package contents
- b. Labeling should be done directly on the outer packaging.
 - i. Note: A paper with content description and identifying marks stapled or taped to outer packaging may be lost or separated from the packaging in transport and storage and are discouraged.
- c. The packaging of items possibly containing physiological fluids (i.e., blood, semen, saliva, urine) should be labeled "BIOHAZARD".



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- i. The labeling can be done by handwriting the word on the packaging if stickers are not readily available.

5. General Sealing Guidelines

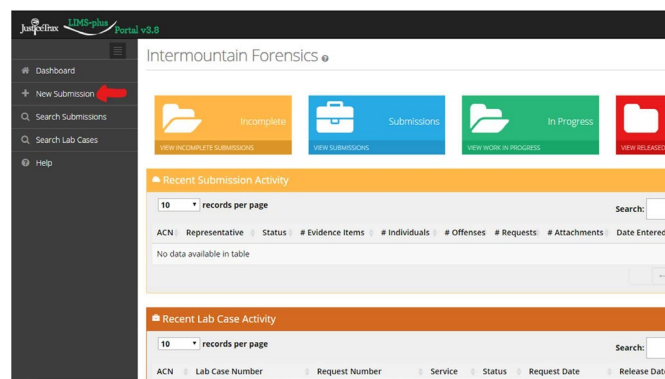
- a. Seals should be fashioned such that the integrity of the item is ensured. An item is properly sealed only if its contents cannot readily escape or be contaminated.
- b. All seals should also include the sealer's initials/signature across the evidence seal, to the extent that the packaging cannot be opened without disrupting the placement of the initials across the seal.
 - i. Note: If the seal is not initialed/signed at the time of collection, it is recommended that it be initialed/signed and dated (with the date that the initials were added), prior to transport to Intermountain Forensics
 1. This addition helps to protect the integrity of the evidence.

6. Initiation of a Case with Intermountain Forensics

- a. A submission form must be completed prior to submitting evidence through the portal, unless a contract or MOU for testing has been previously established with Intermountain Forensics.
- b. A submission form may be obtained on the Intermountain Forensics website ([Submission | Intermountain Forensics](#)) or directly from a representative of Intermountain Forensics.
- c. After completing the submission form, email it to info@intermountainforensics.com.
- d. An employee of Intermountain Forensics will contact you within 1-2 business days of receipt of the form(s).

7. Submitting Evidence to the Portal

- a. Click the Submission tab on the Intermountain Forensics website ([Submission | Intermountain Forensics](#))
- b. Click on the Submit a Case – IMF Portal button at the top of the page
- c. Enter your login information.
 - i. If you do not have a login, refer to Section 8 of this document for further direction.
- d. Click on New Submission



- e. Add enter the follow information into the pop-up screen:
 - i. Agency Case Number
 - ii. Agency Representative
 1. This name will appear on the issued reports.



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2. If the agency representation for this case is not an option, contact Intermountain Forensics to add an agency representative.
 - iii. Case Synopsis
 1. Please include any case details you feel would help guide our testing.
- f. Click **Save**

The screenshot shows a web interface for 'Submission Details'. At the top, there are three buttons: 'Edit', 'Submit to LIMS', and 'Print Evidence List'. Below this is a blue header for 'Submission Details' with tabs for 'Evidence', 'Individuals', 'Offenses', and 'Requests'. Under the 'Evidence' tab, there is a dropdown menu set to '5 records per page' and a search box. Below the search box is a table with columns: 'Agency Evid #', 'Item Type', 'Description', 'Notes', and 'Options'. The table is currently empty, with the text 'No data available in table' centered below the header. At the bottom of the table area, there are two buttons: 'Add Evidence' and 'Delete Multiple', and a 'Previous' button on the right.

- g. Add Evidence that is included in the submission in the following screen.
- i. The information entered should include:
 1. Evidence type (drop down list)
 - a. This is a pre-populated drop-down list. Choose the most applicable option.
 - b. If multiple items are located within the evidence packaging or your item is not listed, select Other.
 2. Your agency's evidence number
 - a. This could also be entered as the evidence number of a laboratory that performed previous examinations of the evidence.
 3. A description of the evidence item
 - a. The description should match the description provided on the submission form in the first step of this process.
 - b. **The description entered here is the description that will appear on the report.**
 - c. The description should include the type of item, quantity of the item, and other identifying features, if available. (i.e., One Sexual Assault Evidence Collection kit; Two Swabs collected from the entry door; One black shirt)
 4. Agency Representative



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Add Evidence

Evidence Type: -- Please select --

Evidence Number: []

* Description: []

Note: []

* Agency Rep: Cutler, Derek

Save Save Changes & Add Another Cancel

- ii. Click **Save** if you have entered all evidence items or **Save Changes & Add Another** if you have additional items of evidence to submit.
 1. Note: **DO NOT** click on Submit to LIMS until all information is entered.
- h. Add names of Individuals Associated with the Case
 - i. Ensure that full first and last names are provided, if available (enter John Smith, not J. Smith)
 - ii. Click **Save**.
- i. Add Offenses associated with this case.
 - i. Click **Save**.
- j. Add a Request, which is the type of testing you need for your evidence.
 - i. Note: You may have multiple request types based on the evidence you are submitting. Direction will be given to you by an Intermountain Forensics employee, at the time that the initial submission form is reviewed.
 - ii. The information entered should include:
 1. Lab: Intermountain Forensic Lab
 2. Department: Select from one of the following options
 - a. Amendments: This is an internal request type only to amend reports, as necessary. If you identify an error in a report, contact Intermountain Forensics directly to discuss your concerns.
 - b. Case Review: A review of case file documentation by an expert to determine the suitability of previous testing and/or make recommendations for additional testing.
 - c. DNA: Select for any type of body fluid identification or sample processing is required, other than attempting to generate a genealogy upload file.
 - d. Genealogy: sample processing required to generate a genealogy upload file
 - e. MVAC: MVAC collection from items of evidence only
 3. Service Type: Select from one of the following options below if the Department



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chosen is DNA. All other Departments are limited to a single Service Type.

- a. Non-Accredited Prelim/Non-Accredited Final: **Do not select.** This is an internal service type only for the use of issuing reports without an accreditation logo to maintain accreditation compliance for certain testing methods.
 - b. Preliminary DNA: Select when a consultation **is** required prior to proceeding on the genetic analysis (CE) or sequencing (NGS)
 - c. Final DNA: Requested when consultation **is not** required prior to proceeding on the genetic analysis (CE) or sequencing (NGS)
 4. Agency Rep: Should be the same individual entered into previous fields.
 5. Due Date: Enter only if you have a court date.
 - iii. Click **Save** if you have entered requests for all evidence items or **Save Changes & Add Another** if you have additional requests to submit.
 - k. After all requests have been entered, you can choose to Print the Evidence List to review your entries.
 - i. This is recommended. Any discrepancies between the evidence submitted and the evidence received by the laboratory will result in discrepancy documentation being included in the casefile and possible delays in testing, while the discrepancy is resolved.
 - l. Click **Submit to LIMS**
 - i. **If you do not click this button, the portal entry will not be viewable to IMF staff to accept evidence upon arrival and will delay the start of the chain of custody.**
- 8. Obtaining a Portal Username and Password**
- a. Click the Submission tab on the Intermountain Forensics website ([Submission | Intermountain Forensics](#))
 - b. Fill out the New Client Registration and click the submit button.
 - i. An Intermountain Forensics representative will contact you with your username and temporary password.
 - c. The password provided is a temporary password and will need to be changed on your first login.

4. References

The Biological Evidence Preservation Handbook: Best Practices for Evidence Handlers. NISTIR7892.

5. Definitions

N/A