



# EVIDENCE FIELD MANUAL

NEW JERSEY STATE POLICE  
INVESTIGATIONS BRANCH  
OFFICE OF FORENSIC SCIENCES

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## I. INTRODUCTION

This manual has been written by personnel from the Office of Forensic Sciences and the Evidence Management, Ballistics and Crime Scene Investigations Units of the Forensic Investigations Bureau, Special Investigations Section, Investigative Branch of the New Jersey State Police with the following objectives:

- To provide law enforcement agencies investigating matters within the State of New Jersey with an overview of forensic services offered by the New Jersey State Police.
- To offer guidelines for collecting, preserving and submitting physical evidence to the laboratory for examination.

The importance of physical evidence in a case cannot be underestimated. The credibility and integrity of the evidence are directly predicated upon the proper handling of the evidence from its initial observance through presentation in court.

The evidence procedures in this manual have been developed for the purpose of providing the investigator with a working knowledge of physical evidence handling. As such, this manual should be considered as a guideline of procedures relative to the handling of physical evidence.

It is not feasible to outline procedures for every scenario involving physical evidence. Specific information relating to the handling of evidence should be directed to the laboratory serving the submitting agency.

The evidence submitted to the laboratory will be examined in accordance with established laboratory capabilities and procedures by employing appropriate methods developed by the laboratory, other reputable organizations, or documented in published journals, scientific texts, or as specified by the manufacturer of equipment, and subjected to validation and/or performance check testing. The number of items analyzed and the location of the laboratory performing necessary analyses will be at the discretion of the Office of Forensic Sciences (OFS). This may include, when necessary, the subcontracting of evidence for analysis by OFS-approved external vendors.

## **II. FUNCTIONS OF THE OFFICE OF FORENSIC SCIENCES**

### **A. Regional Forensic Science Laboratories**

The laboratory system offers forensic analyses and subsequent expert testimony on matters relative to criminal statutes. These services are available to Federal, State, County and Local law enforcement agencies investigating matters within the State of New Jersey. Scientific examinations in areas of Criminalistics, Nuclear DNA, Mitochondrial DNA, DNA Databasing (CODIS), Drugs, and Toxicology evidence are provided by the laboratory system. Contact the regional laboratory that services your agency at the following locations:

#### **Central Regional Laboratory**

New Jersey State Police  
NJ Forensic Technology Center  
1200 Negron Drive Horizon Center  
Hamilton, NJ 08691  
Phone: (609) 584-5054  
Fax: (609) 587-8451

#### **North Regional Laboratory**

1755 Rte. 46 East  
Little Falls, NJ 07424  
Phone: (973) 256-7790  
Fax: (973) 256-0621

#### **South Regional Laboratory**

3434 South Whitehorse Pike  
Hammonton, NJ 08037  
Phone: (609) 561-2060  
Fax: (609) 561-5708

#### **East Regional Laboratory**

Sea Girt Avenue  
Sea Girt, NJ 08750  
Phone: (732) 449-0303  
Fax: (732) 974-8928

### **B. Equine Testing Laboratory**

The Equine Testing Laboratory performs toxicological analysis of blood and urine samples of standard bred and thoroughbred horses and conducts testing of drivers and jockeys licenced by the New Jersey Racing Commission. The New Jersey State Police Regional Equine Testing Laboratory is located at the Meadowlands and can be contacted at (201) 460-4125.

## **C. Forensic Anthropology Laboratory**

The Forensic Anthropology Laboratory of the Office of Forensic Sciences provides statewide forensic anthropological analysis and documentation of human skeletal remains recovered in New Jersey, serving as consultant in Forensic Anthropology to all county medical examiners and law enforcement. This analysis involves, but is not limited to, the identification and separation of human and non-human remains, non-bone items, reconstruction of fragmented bones, determination of sex, race, estimation of age, stature and other information which may contribute to cause of death and identification.

In addition, the Forensic Anthropologist can provide on-scene assistance in the search, recovery and identification of buried, hidden or scattered skeletal remains or other evidence as well as the controlled excavation and recovery of human remains. Additional assistance can include initial assessment of presumptive identification on the basis of medical and dental records and completion of N.C.I.C. reports.

The laboratory also provides facial reconstruction of unidentified remains, forensic computerized age progression images of missing children and adults, photographic/image enhancement and assistance in reconstruction composite drawings of skeletal remains based upon analysis of the skull.

In addition to the above services, the new Forensic Anthropology Human Remains Laboratory and Central Repository at the Hamilton Technology Complex is now able to provide all county medical examiners with the availability of a dedicated archival storage and retrieval facility, equipment and space to properly store, catalog, study and conserve the collection of unidentified human skeletal remains under physically secure conditions with appropriate and operational fire detection and deterrent system.

The Forensic Anthropology Laboratory is located at the NJ Forensic Technology Center and can be contacted at (609) 584-5051 extension 5656.

### **III. FUNCTIONS OF THE FORENSIC INVESTIGATIONS BUREAU, SPECIAL INVESTIGATIONS SECTION**

The Forensic Investigations Bureau consists of the following individual units which provide complete scientific and field services to law enforcement and other governmental agencies within the State of New Jersey.

#### **A. Forensic Photography/Composite Artist Unit**

The Forensic Photography Unit maintains a complete photography laboratory. Black and white, color, ultraviolet and infrared photography are utilized in conjunction with requests submitted to the Regional Laboratories.

The Forensic Photography Unit assists in the preparation of exhibits for courtroom presentation. Typical requests include, but are not limited to, microscopic particles, documents, latent fingerprints and ballistics evidence. The Forensic Photography Unit also handles field photographic assignments that are non-criminal in nature.

The services of the Composite Artist Unit are available to all law enforcement agencies. Unit members are skilled interviewers and testify as expert witnesses in all aspects concerning the preparation of a composite sketch as well as memory and perception.

A composite sketch is a drawing approximating a suspect's facial appearance. In order to enhance accuracy, the artist should be called into the investigation within several days of the incident while the memory of the eyewitness' memory is fresh. Multiple eyewitnesses that are used in describing the suspects appearance should be questioned separately and their initial descriptions filed for future reference. In addition to drawing composite sketches, this unit also does age enhancement, and sketches vehicles, jewelry, tattoos, etc. for identification purposes.

The Forensic Photography/Composite Drawing Unit is located at the NJ Forensic Technology Center and can be contacted at (609) 882-2000 extension 5796.

#### **B. Evidence Management Unit**

The Evidence Management Unit provides for the handling, storing, security, maintenance and ultimate destruction, through prosecutorial authorization, of evidence and property generated by the New Jersey State Police. Additionally, they are responsible in providing assistance to the regional laboratories with the evidence intake and distribution of submissions from the laboratory evidence vault.

The Evidence Management Unit has three regional storage sites which can be contacted through the unit's administrative offices located at Division Headquarters in West Trenton at 609-882-2000 extension 2510 or 2366.

## **C. Ballistics Unit**

The examination of firearms, discharged bullets, cartridge cases, shotgun shells and ammunition of all types is conducted by this unit. The unit also performs shooting scene reconstructions utilizing various techniques to include bullet trajectory analysis and examination of bullet strikes to objects (i.e., vehicles, windows, buildings, etc.). The Unit will respond to these scenes at the request of law enforcement agencies.

The Unit also conducts examinations of clothing in conjunction with the Regional Laboratory System, with reference to powder residues approximating the distance from which a shot was fired. The clothing is submitted to the Regional Laboratory as specified in the Evidence Guide under "Clothing". Obliterated serial numbers of weapons are restored by the Ballistics Unit. The responsibility for destruction of weaponry falls under the "Evidence Management Unit".

The Ballistics Unit is located at the NJSP Forensic Technology Center and can be contacted at (609) 584-5051 extension 5819.

## **D. Crime Scene Investigations Unit**

The Crime Scene Investigation units are available at all times to provide crime scene investigation services within the State of New Jersey. Services are offered to requesting agencies in three categories in accordance with their needs:

**Full Service** - The complete handling and processing of primary and secondary crime scenes are provided. Services include: crime scene documentation with still photography, videography and diagraming; latent fingerprint examination and comparison; recognition, documentation, collection, packaging, handling, preservation, transfer and submission of evidence according to the rules of evidence. The unit members also provide expert testimony in court.

**Partial Service** - The State Police Crime Scene Investigator can provide whatever services are necessary to meet the needs of the requesting agency by working with the Crime Scene Investigator of that agency.

**Consultant Services** - The State Police Crime Scene Investigator can serve as a consultant to the Crime Scene Investigators of the requesting agencies either on the scene or by telephone. The investigator will advise on all matters dealing with the processing of the crime scene and the subsequent submission of evidence to the laboratory.

In connection with the services listed above, the State Police Crime Scene Investigator can arrange for other specialists (i.e., chemists, blood spatter experts, ballistics unit personnel, etc.) to respond to the scene if needed.

The following information is provided as contact numbers for the services of the Crime Scene Investigation Units.

**Crime Scene Investigation North Unit**  
N.J.S.P. Troop "B" Headquarters, Totowa  
(973) 785-9412 x 4321

**Crime Scene Investigation Central Unit**  
Troop "C" Headquarters, Hamilton  
(609) 584-5000 x 5255

**Crime Scene Investigation South Unit**  
N.J.S.P. Troop "A" Headquarters, Buena Vista  
(609) 561-1800 x 3361

#### **IV. COURT MATTERS**

Due to the extremely high number of court appearance requests, subpoenas for laboratory personnel must be received at least **FIVE WORKING DAYS** prior to a scheduled court appearance. It is presupposed that laboratory documents for that particular case have been proffered in accordance with 2C:35-19.

All subpoenas and laboratory correspondence must include the **LABORATORY CASE NUMBER** in order to be processed.

Prosecuting agencies are encouraged to discuss the case with the subpoenaed individual prior to court appearance. Appointments must be made to schedule pre-trial preparation meetings.

## **V. PROCEDURE FOR SUBMITTING EVIDENCE TO THE LABORATORY**

### **A. General Information**

1. Please contact the laboratory that services your area with any questions you may have prior to submitting your evidence. This can often alleviate difficulties you may encounter and expedite the evidence reception process.
2. Only submit items that need analysis.
3. Be cognizant of cross contamination with regard to your packaging. Placing multiple unsealed items in one bag may lead to the eventual elimination of that evidence.
4. All potential Bio-Hazard items must be plainly marked with Bio Hazard stickers. This is in accordance with directives set forth by PEOSH/OSHA concerning Blood borne Pathogens. These stickers are available from supply companies such as Sirchie Inc., Lightning Powder Company, Inc., VWR, etc.
  - If evidence is suspected of being contaminated with Hepatitis B, HIV, or other contagious viruses, it must be noted on the Laboratory Information Management System (LIMS) submission.
5. The laboratory will not re-analyze evidence previously analyzed by an outside laboratory for the same type of examination.

### **B. Paperwork**

1. All evidence submissions must be completed through the LIMS web page. Once the evidence is pre-logged proceed to the laboratory, ballistics, or repository depending on the type of evidence being submitted, once the information is taken off the pre-log an "Evidence Receipt" form will be printed.
2. All Bio-Chem or DNA evidence will in addition to the LIMS submission, require a completed 'Bio-Chem Questionnaire' form. (SP 648). Refer to the DNA submission section for information relating specifically to the submission of DNA cases.
3. Ballistics Cases submitted must be done separately on the LIMS web page when submitted in conjunction with other examinations.
4. The "Evidence Receipt" form printed at the laboratory will be individually signed by the person delivering the evidence.

**For an overview of the Laboratory Information Management System (LIMS) please refer to page 10**

## C. Evidence Packaging, Marking & Sealing

1. Refer to the specific areas of evidence collection in this manual for guidance on properly packaging particular evidence. Contact Laboratory Director for any questions.
2. Acceptable packaging containers (depending on the type of evidence) include:
  - a. Paper bags
  - b. Plastic bags (clear plastic is preferred for drug cases)
  - c. Boxes - sturdy cardboard
  - d. Manilla envelopes
  - e. Small glass vials (typically arson and liquid drugs)
  - f. Metal cans (typically arson)
3. Acceptable seals
  - a. Tamper proof evidence tape
  - b. Reinforced packaging tape
  - c. Heat seal

**A package is considered sealed if the contents cannot readily escape and the seal/container has not been tampered with.**

**MANILA ENVELOPE CLASPS, ZIPLOCK BAGS AND STAPLES DO NOT CONSTITUTE AN ACCEPTABLE SEAL.**

4. The individual sealing the evidence will place their initials or individual identifier across the seal or tape onto the package itself.
5. Information on each package should minimally include:
  - a. Name of the Agency
  - b. Agency case number
  - c. Item number
  - d. Date
  - e. The investigator's identifier

Additionally, packaging of criminal cases should include:

- a. Where the item was found
- b. By whom
- c. Date & time found
- d. Description of item

Blood and Urine samples must also include:

- a. Name of individual from whom sample was collected
- b. Date and Time sample was collected

## **D. Return of Evidence**

1. All State Police evidence submitted to the laboratory, will be turned over to the Evidence Management Unit upon completion of analysis and short term storage at the laboratory.
2. Evidence submitted to the laboratory by non-State Police agencies, will be returned to the submitting agency upon completion of analysis.
3. All urine and blood specimens submitted to the Toxicology Unit for Drug Facilitated Sexual Assault (DFSA) analysis will be destroyed one (1) year after the analysis is completed. All other urine and blood specimens submitted to Toxicology for analysis will be destroyed ninety (90) days after the analysis is completed. See Note on page 17 for further details.
4. Blood submitted for DNA analysis will be destroyed after preparing a suitable stain.

## **VI. LABORATORY INFORMATION MANAGEMENT SYSTEM (LIMS)**

The New Jersey State Police Laboratory Information Management System is a bar code evidence tracking system in use in the Office of Forensic Sciences and the Evidence Management Unit that is designed to track every item of evidence in the custody of the New Jersey State Police whether it is collected by the New Jersey State Police or submitted to the Forensic Laboratories by other law enforcement agencies. The LIMS is operational in the four Regional Forensic Laboratories, the three Evidence Management Unit Repositories, the Ballistics Unit, the Forensic Anthropology Laboratory and the Forensic Photography/Composite Artist Unit.

Case information about evidence that will be turned over to one of the LIMS locations will be pre-logged into the LIMS in one of three methods. Law enforcement agencies that have purchased the Porter Lee Inc. Police Evidence Tracking System can use two dimensional evidence submission bar codes. New Jersey State Police Stations/Units that use the RMS program may use the RMS/LIMS interface to pre-log the case information. All other law enforcement agencies will use the LIMSWEB web page to pre-log the case information. A computer with the LIMSWEB web page is available in the lobby of the four regional Forensic Laboratories.

For security reasons the LIMSWEB web page is only available on the New Jersey State Police Intranet and the Garden State Network. All CJIS and NCIC computers are connected to the Garden State Network. If a law enforcement agency is having difficulty connecting to the LIMSWEB web page they should contact one of the four Regional Forensic Laboratories. The LIMSWEB Web page is accessed by launching a Web Browser program like Internet Explorer on a computer that is connected to either New Jersey State Police Intranet or the Garden State Network and entering the address <http://limsweb.njsp.org>. This will bring up the LIMS logon screen where the LIMS user Id and password are entered to access the LIMS system. The LIMS user name and password can be obtained from any of the four Regional Forensic Laboratories.

All information that is entered into the LIMSWEB web page must be accurate. Also the submission to each location must be entered separately using the same case number. For example if evidence from one investigation is going to be delivered to both an Evidence Management Unit Repository and a Forensic Laboratory then it needs two separate submissions to LIMSWEB web page both with the same case number. The same holds true for subsequent submissions of additional evidence.

## **VII. LATENT PRINTS**

### **A. Examination:**

1. Latent print examinations will be conducted on evidence submitted to the regional laboratories when submitted in conjunction with other laboratory examinations.
2. Evidence being submitted for latent print examinations ONLY can be submitted directly to one of the regional Crime Scene Investigation Units.

### **B. Submission:**

1. Evidence submitted directly to the regional laboratories for latent print examination in addition to other laboratory analysis must specifically state the request for latent examination on the LIMS pre-log and indicate which items are to be examined for prints.
2. Evidence submitted directly to the regional Crime Scene Investigation Units must be accompanied by a copy of the Investigation Report associated with the items for latent print analysis.

### **C. Preservation:**

1. Evidence should be submitted for latent print examination as soon as possible after its discovery.
2. The primary precaution in all cases is the prevention of adding prints to evidence, or of destroying those already present.
3. All articles submitted should be packaged in such a way as to eliminate or minimize the surfaces of the article from contacting the packaging material.
4. Protect latent print evidence from careless and improper handling and packaging which can damage any latent prints which may be present and render them useless.

### **D. Materials and Surfaces:**

1. Non-Porous/Hard Surface Items (i.e., metal, glass, plastic, etc.)  
Package in paper bags, cardboard boxes to avoid movement (no plastic bags)
2. Porous/Absorbent Items (i.e., paper, cardboard, currency, checks, etc.)  
Package in manilla envelopes, paper and/or plastic bags.
3. Soft/Pliable Items (i.e., vinyl, leather, rubber, wax, caulk, putty, etc.)  
Package secured to a fixed surface to avoid movement, crinkling, or folding (no plastic bags).
4. Visible Print Items (i.e., blood, dust, adhesive coated surfaces, etc.)

Package secured to a fixed surface to avoid movement, crinkling, folding or adhesion to packaging (no plastic bags).

**Note:** Any print in blood or the like needs to be air dried before packaging and submission. In addition, visible prints should be documented and photographed prior to submission.

5. Special Surfaces/Conditions  
Contact your regional Crime Scene Investigations Unit for instructions on submissions and preservation.

## **E. Comparison:**

1. Comparison examinations between any latent prints obtained and suspect and/or elimination prints will be conducted by detectives from the regional Crime Scene Investigation Units.
2. Elimination and /or suspect prints, or suspect names with and S.B.I. number should be submitted with the case. When applicable, dead person prints should also be submitted for comparison.
3. All supplied print cards or inked impressions should be treated as items of evidence and contain all of the descriptive information of the subjects to be compared.
4. Any prints obtained which remain unidentified will be forwarded to the New Jersey State Police Automated Fingerprint Identification System (AFIS) where a search against a fingerprint database will be conducted in an attempt to identify a potential candidate.

## VIII. GENERAL INFORMATION FOR SUBMITTING NARCOTICS & OTHER DANGEROUS DRUGS

- A. The request should indicate which specimen was in the possession of a specific individual.
- B. If one bag is used to hold numerous specimens, the bag should not be given a separate item number.
- C. Different bags containing a number of specimens found in the same place or on the same person should have the same item number with sequential sub-numbers, e.g. item 1-1, 1-2, 1-3, etc.
- D. Separate drugs by type. Do not mix specimens with other unlike drugs. Each item submitted must list the count of the samples (i.e. 50 glassines or 25 red tablets, not just “a deck of glassines” or “numerous tablets”), when practicable.
- E. Be sure to distinguish between ‘Possession’, ‘Possession with Intent to Distribute’ and ‘Distribution’ charges on the LIMS submission.
- F. List what you believe the CDS is suspected of being.
- G. In order to facilitate pre-trial disposition of cases involving non-critical weights,
  - 1. For single defendant cases, only one sample from one specimen will be analyzed.
  - 2. For multiple defendant cases, only one sample from one specimen per defendant will be analyzed.

**Note:** If needed for trial, additional samples selected at random and consisting of a representative sampling will be analyzed upon written request.

- I. The agency may request that a specific item be tested (Ex. Probable cause). Note that item and reasons for analysis on the LIMS submission.
- J. Re-submissions:
  - \*\*Note: Telephone the laboratory before re-submitting the evidence\*\***
  - 1. Evidence will not be re-analyzed for the same tests. Unexamined evidence which needs to be analyzed will be at the request of the Prosecutor in writing.
  - 2. Unsealed evidence will not be accepted into the laboratory for reexamination. The entire sealed bag and its contents, as it was returned to the agency from the laboratory, is to be resubmitted with a new LIMS submission. Identify which items are to be analyzed using the item numbers assigned by the laboratory personnel on the original LIMS submission.

- K. **SYRINGES** - For the safety & health of all personnel, do not submit syringes without prior authorization of the Laboratory Director. Syringes will not be received or analyzed unless it is the only item in the case or the prosecutor has demonstrated the need for the examination.
- L. Disorderly Persons Offenses (possession of less than 50g of marihuana) will not be accepted unless a not guilty plea is entered and a court date is scheduled.
- M. Estimated weights of drugs should not be documented on the LIMS submission.

## **IX. THE COLLECTION, PACKAGING AND SUBMISSION OF EVIDENCE**

The following tables detail by item type how to properly collect and package items of evidence for submission to the New Jersey State Police - Office of Forensic Sciences Laboratory System.

**Table 1: Narcotics & Dangerous Drugs**

Powders, Tablets & Capsules, Liquids, Vegetation, Plants, Bulk Seizures,  
Hypodermic Syringes

**Table 2: Toxicology (Only Living Suspects and / or Victims)**

Urine, Blood, Alcoholic Beverages

**Table 3: Biological Evidence**

Blood

**Table 4: Biological Evidence**

Seminal Stains, Condoms

**Table 5: Biological Evidence**

Saliva Stains, Sexual Assault Evidence Kits, Fingernail Swabs

**Table 6: Biological Evidence**

Known Control Samples

**Table 7: Biological Evidence**

Bones

**Table 8: Biological Evidence**

Teeth

**Table 9: Trace Evidence**

Hairs

**Table 10: Trace Evidence**

Fibers, Glass

**Table 11: Trace Evidence**

Impressions & Toolmarks, Cords/Rope/Wires etc, Vehicle Bulbs

**Table 12: Trace Evidence**

Tape, Soil, Explosives

**Table 13: Trace Evidence**

Paint

**Table 14: Trace Evidence**

Arson & Fire Debris

**Table 15: Trace Evidence**

Bullet Holes & Gunshot Residue

**Table 16: Ballistics**

Ammunition, Pellets

**Table 17: Ballistics**

Wadding, Firearms

**Table 18: Computer Crimes & Other Technological Evidence**

Hard Drives, Video, Computers, Cell Phones, PDA, Peripheral Devices

**TABLE 1: NARCOTICS & DANGEROUS DRUGS**

SPECIMEN	PACKAGING	AMOUNT	COLLECTION
<b>Powders</b>	Sealed clear plastic bags; druggist folds, sealed pill box or vial, glassine or foil envelopes	All	Separate by suspect to include type of drug, appearance and different locations where the items were found and package each individually
<b>Tablets &amp; Capsules</b>	Sealed clear plastic bag or original containers	All	Do not write on tablets or capsules. Separate by suspect to include type of drug, appearance and different locations where the items were found and package each individually
<b>Liquids</b>	Leak-proof containers	All	Refrigerate beverages or any liquids that may spoil
<b>Vegetation</b>	Sealed, clear plastic or paper bag	All	Must be AIR DRIED prior to placing in sealed bags Submit used bowls only from pipes and package separately.
<b>Plants</b>	Sealed paper bags or cardboard boxes <b><u>NO PLASTIC</u></b>	Intact Plant(s) including roots and stems or If identification as a plant is <b>not</b> needed, then all air dried, leaves stripped from the plants	If identification of the actual plant is needed, Submit up to 4 intact plants, otherwise submit dried leaves from plants.  Indicate in comments whether the submitted items are the entire specimen or if they are a sampling of a larger unit (i.e. "Four plants submitted from 51 plants confiscated")  Photograph or video the plants at the scene  Remove all loose dirt from roots
<b>Bulk Seizures</b>	Call the laboratory for specific information		Photograph at the scene & contact laboratory prior to submission
<b>Hypodermic Syringes</b>	Safety tubes with Bio-hazard stickers	* Call laboratory	Refer to page 14; Section VIII; K.

**TABLE 2: TOXICOLOGY (ONLY LIVING SUSPECTS AND / OR VICTIMS)**

SPECIMEN	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Urine</b></p> <p>* Submit with Blood for drug testing. Urine is not tested for alcohol content.</p>	<p>Clean, plastic, leak proof containers in sealed plastic bags</p> <p>Leaking containers will be refused at time of submission &amp; returned to agency for proper packaging</p>	<p>Two ounces or 50ml</p> <p>For DFSA *(see below) Cases: 100ml</p>	<p>Urine samples should be refrigerated as soon as possible and may be frozen prior to submission. The container must be labeled with subjects name and date/time sample was collected.</p>
<p align="center"><b>Blood</b></p> <p>*Obtain both blood and Urine samples for Drug testing</p>	<p>Vials containing an anticoagulant such as EDTA or potassium oxalate (Kox) &amp; a preservative such as sodium fluoride (NaF). These are generally grey top vials</p> <p>Submit entire blood collection kit for analysis. Vials will be removed upon submission and the packaging will be returned for the evidence chain of custody</p>	<p>Two - 10cc vials needed for drug as well as alcohol analysis</p> <p>DFSA Cases: Three (3) 10ml grey top vials</p>	<p>Gently mix the sample to preserve</p> <p>Properly label vials with subjects name, medical personnel name and date/time sample was drawn</p> <p>Refrigerate the sample and deliver as soon as possible</p>
<p align="center"><b>Alcoholic Beverages</b> (Drinks)</p>	<p>New re-sealable airtight containers, such as specimen cups or amber glass bottles</p> <p>Submit drinking glass and contents separately for DFSA cases</p>	<p>½ ounce to 3 ounce for alcohol content</p>	<p>Remove any solid materials or ice from the sample</p> <p>Refrigerate any mixed beverage samples to avoid spoilage</p> <p>No control is needed for alcohol content</p>

**NOTE:**

For Toxicology Cases: Ninety days after analysis has been completed the urine & blood specimens and their containers are DESTROYED.

For DFSA Toxicology Cases: One year after analysis has been completed the urine & blood specimens and their containers are DESTROYED.

It is **incumbent upon the submitting agency** to notify the laboratory if a “HOLD” on that destruction is necessary

It is also necessary for the submitting agency to retain all records necessary to show chain of custody, and specimen identification

**\*\*For Drug Testing obtain both Blood and Urine samples\*\***

**DFSA = Drug Facilitated Sexual Assault**

**Poison Cases** - If the submitting agency suspects poisoning agents, they must call in advance prior to submitting the case to determine if analysis is within established laboratory capabilities.

**TABLE 3: BIOLOGICAL EVIDENCE**

TYPE	COLLECTION	PACKAGING
<p align="center"><b>Blood</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p><b>Liquid Sample:</b> 1. Collect onto at least two sterile cotton swabs, air dry, package, label, and submit to the lab.</p> <p><b>Dried Stains:</b> <u>Submit stains only if entire article cannot be submitted</u> 1. <b>Preferred Method:</b> Collect onto cotton swabs moistened with a minimal amount of distilled water, air dry, package, label and submit to the lab 2. Stains on non-porous items (glass, tile, metal) may be scraped with a clean scalpel and collected directly into a druggist fold. Seal, package, label and submit to the lab <b>This method should only be used if no loss of material will occur.</b></p> <p><b>Bloodstained Clothing:</b> 1. Thoroughly air dry clothing over clean paper, out of direct sunlight and heat sources, package, label, and submit to the lab. Paper which evidence was dried over should be collected, packaged and labeled to preserve any potential trace evidence, and submit to the lab</p> <p><b>Bloodstained Knives, Guns, Rugs, Car Seats, Rags, Bed Clothing or other stained objects:</b> 1. Submit the entire item to the laboratory. If not possible to submit entire item, isolate stained area, remove (cut out, scrape or swab), package, label, and submit to the lab</p>	<p>Thoroughly air dry stains and package in a sealed paper envelope, paper bag or clean paper wrapping. Bio-Hazard labels must be affixed to package</p> <p align="center"><b><u>NOTE:</u> No Plastic Bags &amp; No Staples</b></p> <p>All clothing should be <b>individually</b> packaged and labeled</p> <p><b>** Be sure to separate victim and suspect items to avoid cross-contamination. **</b></p> <p><b><u>Sharp objects:</u></b> Must be placed in an individual puncture proof container</p>
<p align="center"><b>NOTE:</b> Photograph bloodstains and liquid blood samples before collecting</p> <p align="center">Blood spatter interpretation, if warranted, must be performed prior to removing any bloodstains</p> <p align="center"><b>** Disposable latex gloves must be worn when handling biological evidence! **</b></p>		

**TABLE 4: BIOLOGICAL EVIDENCE**

TYPE	COLLECTION	PACKAGING
<p align="center"><b>Seminal Stains</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p><b>Liquid Sample:</b> 1. Collect onto at least two sterile cotton swabs, air dry, package, label, and submit to the lab</p> <p><b>Dried Stains:</b> <u>Submit stains only if entire article cannot be submitted</u> <i>1. Preferred Method:</i> Collect onto cotton swabs moistened with a minimal amount of distilled water, air dry, package, label and submit to the lab</p> <p>2. Stains on non-porous items (glass, tile, metal) may be scraped with a clean scalpel and collected directly into a druggist fold. Seal, package, label and submit to the lab <i>This method should only be used if no loss of material will occur.</i></p> <p><b>Clothing, Rugs, Car Seats, Bedding, Rags, Towels etc.:</b> 1. Submit the entire item to the laboratory. If not possible to submit the entire item, isolate stained area, remove, (cut out or swab), package, label, and submit to the lab</p> <p align="center"><i>**Semen stains may be isolated by an individual trained in utilizing an Alternate Light Source. **</i></p>	<p>Thoroughly air dry stains and package in a sealed paper envelope, paper bag or in clean paper wrapping</p> <p align="center"><b><u>NOTE:</u> No Plastic Bags &amp; No Staples</b></p> <p>All clothing should be <u>individually</u> packaged and labeled</p> <p align="center"><i>** Be sure to separate victim and suspect items to avoid cross-contamination. **</i></p> <p align="center"><b>Bio-Hazard labels must be affixed to package</b></p>
<p align="center"><b>Condoms</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p><b>Liquid sample present in the condom:</b> 1. Collect liquid onto at least two sterile cotton swabs. Air dry the condom and swabs, package, label, and submit to the lab</p> <p><b>Dry Condom:</b> 1. Collect condom, package, label, and submit to the lab</p>	

**TABLE 5: BIOLOGICAL EVIDENCE**

TYPE	COLLECTION	PACKAGING
<p align="center"><b>Saliva Stains</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p><b>Liquid Sample:</b> 1. Collect onto at least two sterile cotton swabs, air dry, package, label, and submit to the lab.</p> <p><b>Dried Stains:</b> <u>Submit stains only if entire article cannot be submitted</u> <b>1. Preferred Method:</b> Collect onto cotton swabs moistened with a minimal amount of distilled water, air dry, package, label and submit to the lab</p> <p>2. Stains on non-porous items (glass, tile, metal) may be scraped with a clean scalpel and collected directly into a druggist fold. Seal, package, label and submit to the lab <b><i>This method should only be used if no loss of material will occur.</i></b></p> <p><b>Cigarette Butts, Chewing Gum, Envelopes, Stamps, Ski Masks, etc.:</b> 1. Allow to air dry, package, label, and submit to the lab</p>	<p>Thoroughly air dry stains and package in a sealed paper envelope, paper bag or in clean paper wrapping</p> <p align="center"><b><u>NOTE:</u> No Plastic Bags &amp; No Staples</b></p> <p>All clothing should be <b><u>individually</u></b> packaged and labeled</p>
<p align="center"><b>Sexual Assault Evidence Kits</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p><b>Sexual Assault Victim:</b></p> <ol style="list-style-type: none"> <li>The victim should be transported to the hospital as soon as possible</li> <li>Examination should be conducted by medical personnel trained in sexual assault evidence collection utilizing the Sexual Assault protocol present in kit</li> <li>Label, seal and submit kit to the lab</li> <li>List the entire Kit as a single item in LIMS</li> </ol>	<p><b><i>** Be sure to separate victim and suspect items to avoid cross-contamination. **</i></b></p> <p align="center"><b>Bio-Hazard labels must be affixed to package</b></p>
<p align="center"><b>Fingernail Swabs</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p>Moisten a sterile cotton swab with distilled water and swab under fingernails, (one swab per hand). Allow to air dry, package, label, and submit to the lab</p>	<p>Rape kit should be refrigerated prior to submission to the lab</p> <p>Do not package Blood and/or Urine Samples in Rape Kits</p>

**TABLE 6: BIOLOGICAL EVIDENCE**

TYPE	COLLECTION	PACKAGING
<p><b>Known Control Samples</b></p> <p><i>** Disposable latex gloves must be worn when handling biological evidence! **</i></p>	<p><b>Living Subjects &amp; Deceased Subjects (without blood in the oral cavity):</b></p> <p><b>Buccal Swabs:</b> Prior to collecting, rinse the mouth with water. Utilizing two sterile cotton swabs, rub the inside cheek area of the mouth at least twelve times. Allow swabs to air dry, package, label and submit to the lab. No medical personnel are needed for this collection.</p> <p><b>Deceased Subjects who have <u>not</u> been Transfused:</b></p> <ol style="list-style-type: none"> <li>1. <b>FTA Card:</b> Liquid blood sample removed from body at time of autopsy must be spotted onto FTA card. Allow card to air dry, package, label and submit to the lab</li> <li>2. If no blood sample is available, collect at least 50 head or pubic hairs, <b>(PULLED, NOT CUT)</b>, package, label and submit to the lab</li> <li>3. If no hair sample is available, collect an approximate ½ inch square piece of the best tissue sample available, (liver, spleen, stomach), package, label and submit to the lab (not fixed in formalin)</li> <li>4. If no tissue sample is available, collect an uncut long bone, (femur, tibia, ulnar), package, label and submit to the lab</li> </ol> <p><b>Deceased Subjects who have been Transfused:</b></p> <ol style="list-style-type: none"> <li>1. If available, procure the pre-transfusion sample taken at the hospital, package, label and submit to lab</li> <li>2. If pre-transfusion sample is unavailable, a buccal swab control may be taken if there is no bleeding in the mouth region. Dry swabs, package, label and submit to lab</li> <li>3. If no buccal swab is available, collect at least 50 head or pubic hairs <b>(PULLED, NOT CUT)</b>, package, label and submit to Lab</li> <li>4. If no tissue sample is available, collect an uncut long bone (femur, tibia, ulnar), package, label and submit to Lab</li> </ol>	<p>Thoroughly air dry and package in a sealed paper envelope or paper bag</p> <p><b>Bio-Hazard labels must be affixed to package</b></p> <p>FTA cards should be packaged in the barrier envelope available through the manufacturer of the FTA card</p> <p>Hairs should be packaged in druggist folds</p> <p>Place the tissue specimen in a leak proof container and keep frozen prior to submission to the lab</p>

**TABLE 7: BIOLOGICAL EVIDENCE**

TYPE	COLLECTION	PACKAGING
<p align="center"><b>Bones</b></p>	<p>Skeletal material must be photographed prior to and after removal from the remains and must be X-rayed by the County Medical Examiner's Office.</p> <p>The NJSP Forensic Anthropologist must be contacted prior to any dissection of skeletal material from human remains.</p> <p>Due to the possibility of contamination, complete, uncut bones should be collected. If this is not feasible (such as in dismemberment cases), what bone is available should be collected in its entirety.</p> <p>The following bones are listed in order of preference for DNA extraction:</p> <ol style="list-style-type: none"> <li>1) Femur or other long bones (tibia, humerus, fibula, ulna or radius)</li> <li>2) Ribs</li> <li>3) Foot bones</li> <li>4) Hand bones</li> <li>5) Vertebrae</li> <li>6) Pelvis</li> <li>7) Skull</li> </ol> <p align="center"><b>If possible, three whole bones should be submitted.</b></p> <p>Preparation of skeletal material should not include any heat (boiling) or caustic chemicals, e.g. bleach.  <b>Each case should be transported in a separate container or box.</b></p>	<p>Skeletal material should not be stored in a formalin solution. In advanced decomposed cases, submitted skeletal material with tissue should be packaged in plastic (to prevent leakage) and frozen. Mummified tissue present on the submitted bone is acceptable.</p> <p>Each individual sample shall be packaged appropriately, i.e., in a paper bag, cardboard box, etc., prior to submission. The packaging should be sealed with evidence tape, initialed and dated over the seal, and protected with padding prior to transport.</p> <p>The outside of the packaging should always be labeled with the Medical Examiner Case Number and the following information when applicable:</p> <ol style="list-style-type: none"> <li>1) Name of bone</li> <li>2) Determination of right or left bone</li> <li>3) Sex of victim</li> <li>4) Name of victim</li> </ol> <p>Due to limited storage space, please use the smallest container possible.</p>

**For Additional Collection Procedures For Bone Evidence - See Appendix # 3**

**TABLE 8: BIOLOGICAL EVIDENCE**

TYPE	COLLECTION	PACKAGING
<p align="center"><b>Teeth</b></p>	<p>Dental material must be photographed prior to and after removal from the remains.</p> <p>Dental material must be X-rayed by a Forensic Odontologist.</p> <p>Any removal of dental material from human remains will be done in the presence of (or in consultation with) a Forensic Odontologist or the NJSP Forensic Anthropologist.</p> <p>Teeth and dental material must be accompanied by a Forensic Odontologist report and/or a completed N.C.I.C. Unidentified Person Dental Report.</p> <p>Due to the possibility of contamination, complete, uncut, whole teeth should be collected. If this is not feasible, what dental material is available should be collected in its entirety. The following teeth are listed in order of preference for DNA extraction:</p> <ol style="list-style-type: none"> <li>1) Unrestored Molar (no dental work associated with the tooth)</li> <li>2) Unrestored Premolar</li> <li>3) Unrestored Canine</li> <li>4) Unrestored Anterior Tooth</li> <li>5) Restored Molar (dental work associated with the tooth)</li> <li>6) Restored Premolar</li> <li>7) Restored Canine</li> <li>8) Restored Anterior Tooth</li> </ol> <p><b>Each case should be transported in a separate container or box.</b></p>	<p>Dental material should not be placed in a caustic or formalin solution and must be dry before packaging.</p> <p>Teeth and dental material should be placed into small coin envelopes when dry. The envelopes should be sealed with evidence tape, initialed and dated over the seal and protected with padding prior to transport.</p> <p>The outside of the envelope should always be labeled with the Medical Examiner Case Number and the following information when applicable:</p> <ol style="list-style-type: none"> <li>1) Name and location of tooth (maxillary or mandibular)</li> <li>2) Sex of victim</li> <li>3) Name of victim</li> </ol> <p>Due to limited storage space, please use the smallest container possible</p>
<p align="center"><b>For Additional Collection Procedures For Teeth Evidence - See Appendix # 3</b></p>		

**TABLE 9: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Hairs</b> (Questioned) {Found at a Scene}</p>	<p>Small pill boxes or druggist folds; try not to bend samples. Place druggist folds into a separate envelope and seal all edges with evidence tape</p> <p>Be sure to keep each article separate from each other</p> <p>Air dry if wet, prior to packaging</p>	<p align="center">All from the scene that have possible evidential value</p>	<p>Leave attached to object and submit intact if possible. Note position of hairs</p> <p>Use clean forceps or gloves to collect</p> <p>Clear tape or a forensic filter vacuum can be used</p> <p>Avoid damaging the root of the hair</p>
<p align="center"><b>Hairs</b> (Questioned) {Combings}</p>	<p>Small pill boxes or druggist folds; try not to bend samples. Place druggist folds into a separate envelope and seal all edges with evidence tape</p>	<p align="center">All</p>	<p>Using clean exam paper and comb thoroughly and vigorously comb questioned region (head/pubic) and collect all hairs recovered</p>
<p align="center"><b>Hairs</b> (Control)</p> <p><b>Note:</b> The laboratory will only analyze Head, Pubic and Facial hairs for comparison purpose</p>	<p>Small pill boxes or druggist folds; try not to bend samples. Place druggist folds into a separate envelope and seal all edges with evidence tape</p> <p>Head hairs, pubic hairs, and facial hairs should be packaged separately and clearly labeled as to origin</p>	<p><b>Head:</b> At least 50 pulled and combed hairs representing all areas of the head (front, back, sides and top)</p> <p><b>Pubic:</b> At least 25 pulled and combed hairs should be submitted from different regions of the pubic area</p> <p><b>Facial:</b> At least 25 pulled and combed hairs should be submitted from different regions of the facial area</p>	<p>Use clean comb and forceps to collect</p> <p>Avoid damaging the root of the hair</p> <p>Cut hair is <u>not</u> acceptable</p>
<p align="center"><b>For The Recommended Collection Procedures For Hair Evidence See Appendix # 2</b></p>			

**TABLE 10: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Fibers</b> (Questioned)</p>	<p>Small pill boxes or druggist folds; try not to bend samples. Place druggist folds into a separate envelope and seal all edges with evidence tape</p> <p>Be sure to keep each article separate from each other</p> <p>Air dry if wet, prior to packaging</p>	<p align="center">All from the scene that have possible evidential value</p>	<p>Leave attached to object and submit intact if possible. Note position of fibers</p> <p>Use clean forceps or gloves to collect</p> <p>Clear tape or a forensic filter vacuum can be used</p>
<p align="center"><b>Fibers</b> (Control)</p>	<p>Brown Paper Bag or Manila Envelope</p> <p>Seal all edges with evidence tape</p> <p>Be sure to keep each article separate from each other</p>	<p align="center">Entire garment or adequate sample of textile that specimen could have originated from</p>	<p align="center">Air dry if wet, prior to packaging</p>
<p align="center"><b>Glass</b> (Questioned)</p>	<p>Preserve in order to avoid further breakage. Use druggist folds; cushioned pill boxes; film canisters, etc. Place druggist folds into a separate envelope and seal all edges with evidence tape</p>	<p>1. All from hit &amp; run scenes</p> <p>2. Submit both sections of glass for matching edges &amp; breaks</p>	<p align="center">Shoes and clothing containing glass fragments should be submitted intact</p>
<p align="center"><b>Glass</b> (Control)</p>	<p>Preserve in order to avoid further breakage. Use druggist folds; cushioned pill boxes; film canisters, etc. Place druggist folds into a separate envelope and seal all edges with evidence tape</p> <p>Secure large pieces of glass between layers of cardboard</p> <p>Use tape labels showing inside/outside surfaces, and list the area where sample was taken from</p>	<p align="center">Obtain samples from all areas which glass fragments may have originated from</p> <p><b>Note:</b> Automobile windshields are double layered and as such a control should be taken from both the outside and inside layer</p>	<p align="center">Submit object intact if possible if not than obtain at least a one square inch specimen as a control</p>

**TABLE 11: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Impressions &amp; Toolmarks</b></p> <p align="center">*NEVER INSERT ITEM INTO IMPRESSION FOR FIT!</p>	<p>Sturdy cardboard boxes if practical</p> <p>Package tool and impressions separately and carefully so as not to distort evidence</p>	<p align="center">All</p> <p>Submit the entire article with the impression or tool mark intact if practical</p> <p align="center">Include keys with any lock evidence</p>	<p>Photograph 1:1 or from directly above with a scale at the scene</p> <p>Otherwise, make a mold or cast of the impression with Mikrosil or dental stone</p> <p>Leave any debris or dirt left on the surface of the impression intact</p> <p>Refer to soil &amp; paint controls for transfer evidence</p>
<p align="center"><b>Cords, Ropes, Wires, etc.</b></p>	<p>Preserve cut / broken ends. Label questioned cut ends</p> <p>Separate items, package in sealed plastic or paper bags; plastic containers or cardboard boxes</p>	<p align="center">Submit entire length of line (if possible)</p>	<p>Attempt to leave in its current state (knots tied, tape wrapped around an object)</p>
<p align="center"><b>Vehicle Bulbs</b></p>	<p>Preserve in order to avoid damage by using cushioned containers, i.e., Styrofoam coffee cups</p>	<p align="center">All</p> <p>Collect any glass fragments from a lens housing or from the scene</p> <p align="center">If possible, submit an identical undamaged bulb from the vehicle</p>	<p>Mark top or bottom of bulb</p> <p>Attempt to recover filament at scene if bulb is broken</p>

**TABLE 12: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Tape</b> (Adhesive, Duct, Masking etc.)</p>	<p>Place on transparency sheet or clean glass</p>	<p align="center">All</p> <p>Recover any roll of tape that may have been the source of pieces collected as evidence</p>	<p>Do not cut, wad, distort or separate tapes that are stuck together</p>
<p align="center"><b>Soil</b></p>	<p>Pill box or film canister</p> <p>Shoes and articles of clothing should be packaged such that soil remains on the item or within the packaging</p>	<p align="center">One to two tablespoons of the top soil layer</p>	<p>Samples should be collected at the area of interest and several areas within a 100-yard radius</p> <p>Do not package wet</p> <p>Attempt to maintain the integrity of any layer structure present in collected samples</p>
<p align="center"><b>Explosives</b></p> <p>*Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence</p>	<p>All explosive evidence should be examined, identified and rendered safe by a hazardous devices technician (Bomb Technician)</p> <p>Evidence should be packaged as directed by the NJSP Bomb Squad</p>	<p>As directed by the NJSP Bomb Squad</p> <p>If a control of identical material to suspect specimen is submitted ensure it is uncontaminated</p>	<p>Care must be taken not to damage evidence further and hand protection (double glove) should always be utilized during collection</p>

**TABLE 13: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Paint</b> (Questioned)</p>	<p><i>Do not use envelopes.</i> Small chips and scrapings should be packaged in druggist folds, pill boxes, film canisters etc. and secured to prevent further breakage, for clothing use brown paper bags</p> <p>Place druggist folds into a separate envelope and seal all edges with evidence tape</p> <p>Package entire items or materials submitted for transfer examination separately</p>	<p>All chips present at the scene</p> <p>All outer layers of clothing</p> <p>Entire area where transfer occurred from both surfaces if practical</p>	<p>Obtain chips of paint down to the bare surface level</p> <p>Alternatively, flake off chips into druggist fold or cut out a one square inch portion of the surface</p> <p>Obtain samples from areas as close to damaged and/or contacted areas adjacent to where paint may have originally come from</p>
<p align="center"><b>Paint</b> (Control)</p>	<p><i>Do not use envelopes.</i> Small chips and scrapings should be packaged in druggist folds, pill boxes, film canisters etc. and secured to prevent further breakage</p> <p>Place druggist folds into a separate envelope and seal all edges with evidence tape</p>	<p>Control samples must include all layers of paint present to the substrate and be from at least 1 square inch area</p>	<p>Vehicles may have different paints on different parts of the vehicle (repaints/repairs)</p> <p>Obtain samples from areas as close to damaged and/or contacted areas adjacent to where paint may have originally come from</p>

**TABLE 14: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p><b>Arson &amp; Fire Debris</b> (Questioned)</p> <p>*Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence</p>	<p>Package each representative sample in its own clean, unused, air-tight metal container, glass jar or Kapak bag</p> <p>Clearly label complete location information.</p> <p>Avoid ANY contamination</p> <p>Do not package collection gloves inside the same container as the evidence</p>	<p>1 ounce of suspect liquid</p> <p>Can ½ filled with material</p>	<p>Transfer 1 oz sample of volatile liquids into clean sealed containers</p> <p>Retain containers for possible finger print analysis</p> <p>Collect specimens identified by vapor detector, accelerant canine or personal observation</p> <p>Clean all tools (using water and dish detergent) between different points of origin</p> <p>Soil containing suspected volatile liquids should be frozen until submission to the laboratory</p>
<p><b>Arson &amp; Fire Debris</b> (Control)</p> <p>*Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence</p>	<p>Package each representative sample in its own clean, unused, air-tight metal container, glass jar or Kapak bag</p> <p>Clearly label complete location information.</p> <p>Avoid ANY contamination</p> <p>Do not package collection gloves inside the same container as the evidence</p>	<p>1 ounce of liquid in sealed metal or glass container</p> <p>Material identical to suspect specimen but ensure it is uncontaminated</p>	<p>Transfer 1 oz sample of volatile liquids into clean sealed containers</p> <p>Clean all tools (using water and dish detergent) between different points of origin</p>

**TABLE 15: TRACE EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Bullet Holes &amp; Gunshot Residue</b></p>	<p>Clothing or Other Biological Fluid Stained Objects should be submitted dry in separate (individual) paper bags</p> <p>Call the laboratory for information on submitting other types of items with suspected bullet holes</p>	<p>Entire article should be submitted</p> <p>An identical garment may be needed as a control for determining distance</p>	<p>Do not cut through suspected bullet holes</p>

**TABLE 16: BALLISTICS**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p align="center"><b>Ammunition</b></p> <p>Discharged Bullets &amp; Shells, Unfired Cartridges &amp; Shells</p>	<p>Separate sealed envelope for each specimen found</p> <p>Label packaging completely</p> <p>Protect items from damage which may occur during handling</p>	<p align="center">All found</p>	<p>Do not mark bullets, they will be marked at the lab during examination</p> <p>Mark each envelope with full information at time of collection</p>
<p align="center"><b>Pellets</b></p>	<p>Submit pellets together and mark envelope as one item</p>	<p><b>Buckshot</b> - All <b>Birdshot</b> - Random sampling of good specimens</p>	<p>Submit items found in the gun separately from other items located</p>

**TABLE 17: BALLISTICS**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p><b>Wadding</b></p>	<p>Separate envelope for each specimen</p> <p>Air dry before packaging if taken from body</p>	<p>All found</p>	<p>Mark each envelope with full information at time of collection</p>
<p><b>Firearms</b></p> <p>Revolvers, Automatic Pistols, Rifles, Shotguns, etc.</p>	<p><b><u>UNLOAD THE WEAPON!</u></b></p> <p>Indicate on packaging if weapon is loaded or unloaded</p> <p>If presence of other evidence (i.e., blood, latent prints, hairs, etc) prohibit unloading, contact the Crime Scene Investigation Unit, Ballistics Unit or the Central Laboratory for information on how to proceed</p> <p>Carefully package the item in a cardboard box in order to preserve the evidence</p> <p>Weapons not involving other types of physical evidence may be placed in a cardboard carrier, heavy-duty envelope or carried by hand</p>	<p>All</p>	<p>Do not mark firearms that have the complete manufacturers serial number. Mark those items using an evidence tag securely attached to the weapon</p> <p>Physically mark the container in which the firearm is stored or mark the tag attached to the firearm for items with serial numbers that have been removed or defaced, or older firearms manufactured without a serial number</p> <p>Special care should be exercised to preserve other evidence on the weapon at the time of collection. The request for examination should specify if the weapon needs to be examined for other types of evidence (i.e., blood, hairs, latent prints, etc)</p>

**TABLE 18: COMPUTER CRIMES & OTHER TECHNOLOGICAL EVIDENCE**

TYPE	PACKAGING	AMOUNT	COLLECTION
<p><b>Hard Drives</b> Zip Drives Jazz Drives Removable Media Flash Media Memory Modules</p>	<p>Use bubble wrap or clamshell containers to secure each hard drive. Groups of like media should be banded together and stored in heat sealed anti-static bags.</p> <p>Protect items from damage which may occur from handling</p>	All	<p>Mark each envelope with full information at time of collection</p> <p>Note make, model and serial number</p>
<p><b>Video</b>  Re-writable compact disks DVD-ROMs</p>	<p>Use clamshell containers for CD/DVDs. Use bubble wrap to secure video hard drives. Secure media in heat sealed anti-static bags.</p> <p>Protect items from damage which may occur from handling</p>	All	<p>Mark each envelope with full information at time of collection</p> <p>Note make, model and serial number</p>
<p><b>Computers</b> Cell Phones Personal Data Assistants (PDA) Peripheral devices and components</p>	<p>Tag large devices such as computers. Place evidence tape over the power supply or place the entire device in a sealed container.</p> <p>Use bubble wrap for cellular phones, PDAs and similar handheld computing devices. Place in anti-static or Faraday bag. Power off device however, insure the device is charged while in evidence storage.</p> <p>Tag small peripheral devices and bag separately. Seize all cell phone and PDA wiring harnesses, synchronization cradles and power cords.</p>	All	<p>Mark each envelope with full information at time of collection</p> <p>Note make, model and serial number</p>

**NOTE:** Computers that are running should be photographed when possible and then placed through the normal shutdown process for that operating system. If in doubt as to proper procedures for collecting computer evidence at a scene, contact the New Jersey Regional Computer Forensic Laboratory (NJRCFL) at (609) 631-8777

# APPENDIX # 1

## BIOCHEMICAL ANALYSIS QUESTIONNAIRE (SP-648)

<b>NEW JERSEY STATE POLICE OFFICE OF FORENSIC SCIENCES BIOCHEMICAL ANALYSIS QUESTIONNAIRE</b>		Laboratory Number  Submitting Agency
<b>Questionnaire to be submitted with cases involving blood and other body fluid stains for analysis. WHERE APPLICABLE, ANSWER THE FOLLOWING QUESTIONS</b>		
<b>1A</b> Where did the crime occur ( <i>victim/suspect residence, vehicle, other</i> )? _____		
<b>1B</b> What is the relationship between victim and suspect? <input type="checkbox"/> Live together <input type="checkbox"/> Frequent visitor <input type="checkbox"/> None <input type="checkbox"/> Other ( <i>explain</i> ) _____		
<b>1C</b> Indicate if any of the individuals involved have known contagious diseases such as hepatitis, venereal, HIV, etc. <input type="checkbox"/> Yes <input type="checkbox"/> No    If Yes, Who/What? _____		
<b>1D</b> Number of hours between sexual assault and medical exam: _____		
<b>2</b>	Indicate whether victim(s) and/or suspect(s) were bleeding and from what source ( <i>menstrual, nose, mouth, wounds, etc.</i> )	Explain:
<b>3</b>	Have any of the individuals whose blood is being analyzed ( <i>whether stains, controls or otherwise</i> ) had a transfusion within the last eight (8) weeks? <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, indicate who and when:
<b>4</b>	Indicate, if known, the specimen numbers that show a transfer of blood from: Victim to suspect: _____    Suspect to victim: _____    Other ( <i>suspect to scene, victim to scene, etc.</i> ): _____	
<b>5</b>	If a weapon was used, indicate the weapon and injuries it may have caused and to whom:	
<b>6</b>	If any stains (blood, semen, saliva, etc.) submitted on the specimens for analysis can be attributed to anyone other than the suspect(s) and/or victim(s) (boyfriend, girlfriend, husband, wife, children, pets, etc.), remember to submit the proper control sample from this person.	What stains?  From Whom?
<b>7</b>	A. If victim is dead, how long?  B. Was body decomposed? <input type="checkbox"/> Yes <input type="checkbox"/> No	C. Where was body discovered?  E. When submitting fingernail clippings, was blood on the hands of the: Victim: <input type="checkbox"/> Yes <input type="checkbox"/> No                      Suspect: <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>8A</b>	Which suspect(s) had sexual relations or contact with the victim? <b>8B</b> Did the suspect(s) ejaculate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure <b>8C</b> If yes, indicate where <input type="checkbox"/> Vaginal <input type="checkbox"/> Oral <input type="checkbox"/> Anal <input type="checkbox"/> Other	Who?  Explain:
<b>9</b>	Between the assault and medical exam, did the victim: <input type="checkbox"/> Deuche <input type="checkbox"/> Bathe <input type="checkbox"/> Defecate <input type="checkbox"/> Urinate <input type="checkbox"/> Brush teeth <input type="checkbox"/> Use mouthwash <input type="checkbox"/> Drunk <input type="checkbox"/> Unknown	
<b>10</b>	Was a prophylactic, jelly, foam or lubricant used? <input type="checkbox"/> Yes <input type="checkbox"/> No	Explain:
<b>11</b>	Was oral contact made by suspect(s) upon the victim? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, indicate body location:
<b>12</b>	Was oral contact made by the victim upon the suspect? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, indicate body location:
<b>13</b>	Was any foreign object inserted into the: <input type="checkbox"/> Vagina <input type="checkbox"/> Anus <input type="checkbox"/> Oral Cavities	If yes, explain:

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If additional space is required, use back of form.

### HAIR COLLECTION PROCEDURES

#### I. Introduction

These procedures have been written to offer guidelines for collecting, preserving and submitting hair evidence and hair controls to the laboratory for examination.

- The importance of hair evidence in a case cannot be underestimated.
- The credibility and integrity of the hair evidence is directly predicated upon the proper handling of the evidence from its initial observance through presentation in court.
- The usefulness of hair evidence is directly related to the timely and proper collection of adequate controls.

This reference should be considered as a guideline relative to the handling of hair evidence. Specific information requests relating to the handling of hair evidence should be directed to the Laboratory Director of the Central Regional Laboratory at 609-584-5054.

#### II. Hair Controls

The physical and microscopic characteristics of a person's hair changes with the passage of time, this being said it is the policy of the New Jersey State Police Office of Forensic Sciences to request that proper hair controls be collected in a timely manner. A proper hair control consists of a combination of combed and pulled hairs collected as soon as practical after the commission of the crime.

##### **Cut Hairs Do Not Constitute a Proper Control and Should Be Avoided**

- Head Hairs** - It is requested that approximately fifty (50) full-length head hairs be collected. These fifty hairs should consist of a combination of combed and pulled hairs collected from different regions of the head.
- Pubic Hairs** - It is requested that approximately twenty-five (25) full-length pubic hairs be collected. These twenty-five hairs should consist of a combination of combed and pulled hairs collected from different regions of the pubic area.
- Facial Hairs** - It is requested that approximately twenty-five (25) full-length hairs be collected. These twenty-five hairs should consist of a combination of combed and pulled hairs collected from different regions of the face.
- Animal Hairs** - It is requested that approximately fifty (50) full-length hairs be collected. These fifty hairs should consist of a combination of combed and pulled hairs collected from different regions of the animal.

### **III. Evidence Packaging/Marking & Sealing**

- A. Acceptable packaging for hair evidence is a paper fold placed inside either a regular white envelope (not with window) or a manila envelope.
- B. Acceptable seals of the outer envelope include:
  - 1. Tamper proof evidence tape
  - 2. Heat seal
- C. The individual sealing the evidence will place their initials across the seal or tape onto the package itself.
- D. Information on each package should minimally include:
  - 1. Name of the Agency
  - 2. Agency case number
  - 3. Item number
  - 4. Date
  - 5. The investigator's identifier
- E. Additionally, packaging of criminal cases should include:
  - 1. Where the item was found
  - 2. By whom
  - 3. Date & time found
  - 4. Description of item

**A PACKAGE IS CONSIDERED SEALED IF THE CONTENTS CANNOT ESCAPE AND THE SEAL/CONTAINER HAS NOT BEEN TAMPERED WITH.**

**MANILA ENVELOPE CLASPS, ZIPLOCK BAGS AND STAPLES DO NOT CONSTITUTE AN ACCEPTABLE SEAL.**

### **IV. Questioned Head and Pubic Hair Collection (Combing)**

- A. The top, back, front and sides of the patient's head hair should be combed over a clean piece of paper to collect all loose hairs and fibers.
- B. The combings and the comb are folded into the paper and placed in an envelope marked "Head Hair Combing".
- C. The labeling information should then be completed and the envelope sealed with tape.
- D. A second comb should be used to collect any loose hairs or fibers from the pubic area over a clean piece of paper or paper towel. The pubic hair combings and the comb are folded into the paper and placed in a second envelope marked "Pubic Hair Combing".
- E. After the labeling information is completed the envelope should be sealed with tape.

**Combing should be done vigorously and thoroughly to lessen the chance that valuable evidence may be missed.**

## **V. Known Head and Pubic Hair Collection (Controls)**

In order to reduce the chance of foreign hairs in the sample perform the steps listed in Section IV (Combings) before collecting control samples.

### **A. Head Hair Controls**

1. The top, back, front and sides of the patient's head hair should be combed over a clean piece of paper to collect as many loose hairs as possible.
2. The combings and the comb are placed into the paper.
3. Visually inspect the collection paper and approximate the number of hairs recovered. Using this number as a reference, approximate the number of hairs still to be collected.
4. The remaining head hairs should be pulled from various regions of the head (front, back, top, left side and right side).
5. These hairs are added to the hairs recovered in step 2.
6. Fold the collection paper shut and then place into an envelope marked "Head Hair Controls"
7. The labeling information should then be completed and the envelope sealed with tape.

### **B. Pubic Hair Controls**

1. A second comb should be used to collect the pubic hairs controls. The patient's pubic area should be combed over a clean piece of paper to collect as many loose hairs as possible.
2. The combings and the comb are placed into the paper.
3. Visually inspect the collection paper and approximate the number of hairs recovered. Using this number as a reference, approximate the number of hairs still to be collected.
4. The remaining pubic hairs should be pulled from various regions of the pubic area.
5. These hairs are added to the hairs recovered in step 2.
6. Fold the collection paper shut and then place into an envelope marked "Pubic Hair Controls"
7. The labeling information should then be completed and the envelope sealed with tape.

### **C. Facial Hair Controls**

1. The beard, mustache and sideburns should be combed over a clean piece of paper to collect all loose hairs and fibers.
2. The combings and the comb are folded into the paper.
3. Visually inspect the collection paper and approximate the number of hairs recovered. Using this number as a reference, approximate the number of hairs still to be collected.
4. The remaining facial hairs should be pulled from various regions of the face.
5. These hairs are added to the hairs recovered in step 2.
6. Fold the collection paper shut and then place into an envelope marked "Facial Hair Controls"
7. The labeling information should then be completed and the envelope sealed with tape.

**D. Animal Hair Controls**

1. The top, back, sides and belly of the animal should be combed over a clean piece of paper to collect all loose hairs and fibers.
2. The combings and the comb are folded into the paper.
3. The paper fold is placed in an envelope marked "Animal Hair Controls"
4. The labeling information should then be completed and the envelope sealed with tape.

**VI. Additional Information**

- A. To minimize discomfort, the hairs can be pulled two or three at a time, using the thumb and forefinger.
- B. A topical anesthetic can be used if warranted.
- C. It is necessary that the pulled hairs possess roots for a complete and accurate comparison.
- D. Only if the length of the hair makes it impossible to pull with the fingertips can flat- surface forceps be used to pull the hairs. This is due to the fact that forceps can break or cause damage to the hair shaft. If forceps are used this should be noted on the envelope.
- E. The absence of pubic or head hairs should be noted.
- F. Cut hairs do not constitute a proper control and should be avoided.

### APPENDIX # 3

## Submission of Material from Skeletonized or Decomposed Remains for Nuclear and Mitochondrial DNA Analysis

The New Jersey State Police (NJSP) DNA laboratory is capable of analyzing bone marrow and hard bone/dental material from skeletonized or decomposed human remains. Before the laboratory will accept such evidence, the New Jersey State Police Forensic Anthropologist MUST be contacted and the following required protocols must be performed:

#### A. Initial Assessment of Skeletal Material

1. Skeletal material must be photographed prior to and after removal from the remains.
2. Skeletal material must be X-rayed by the County Medical Examiner's Office.
3. Any dissection of skeletal material from human remains will be done in the presence of (or in consultation with) the NJSP Forensic Anthropologist.
4. The NJSP Forensic Anthropologist will perform a forensic anthropological examination with measurements.
5. Skeletal material submissions will be accompanied by a report from the NJSP Forensic Anthropologist along with the Unidentified Person N.C.I.C Number (NIC #).
6. Due to the possibility of contamination, complete, uncut bones should be collected. If this is not feasible (such as in dismemberment cases), what bone is available should be collected in its entirety. The following bones are listed in order of preference for DNA extraction:
  - a) Femur or other long bones (tibia, humerus, fibula, ulna or radius)
  - b) Ribs
  - c) Foot bones
  - d) Hand bones
  - e) Vertebrae
  - f) Pelvis
  - g) Skull

**If possible, three whole bones should be submitted.**

7. Preparation of skeletal material should not include any heat (boiling) or caustic chemicals, e.g. bleach, which could have a negative effect on the DNA. Also, skeletal material should not be stored in a formalin solution. In advanced decomposed cases, submitted skeletal material with tissue should be packaged in plastic (to prevent leakage) and frozen. Mummified tissue present on the submitted bone is acceptable.
8. Each individual sample shall be packaged appropriately, i.e., in a paper bag,

cardboard box, etc., prior to submission. The packaging should be sealed with evidence tape, initialed and dated over the seal, and protected with padding prior to transport. The outside of the packaging should always be labeled with the Medical Examiner Case Number and the following information when applicable:

- a) Name of bone
  - b) Determination of right or left bone
  - c) Sex of victim
  - d) Name of victim
9. Each case should be transported in a separate container or box. Due to limited storage space, please use the smallest container possible.
  10. Submission to the laboratory should follow standard protocols required for evidence submission to the NJSP Office of Forensic Sciences Laboratory System.

#### **B. Initial Assessment of Dental Material**

1. Dental material must be photographed prior to and after removal from the remains.
2. Dental material must be X-rayed by a Forensic Odontologist.
3. Any removal of dental material from human remains will be done in the presence of (or in consultation with) a Forensic Odontologist or the NJSP Forensic Anthropologist.
4. The Forensic Odontologist will perform a forensic odontological examination of the dental material.
5. Teeth and dental material must be accompanied by a Forensic Odontologist report and/or a completed N.C.I.C. Unidentified Person Dental Report.
6. Due to the possibility of contamination, complete, uncut, whole teeth should be collected. If this is not feasible, what dental material is available should be collected in its entirety. The following teeth are listed in order of preference for DNA extraction:
  - a) Unrestored Molar (no dental work associated with the tooth)
  - b) Unrestored Premolar
  - c) Unrestored Canine
  - d) Unrestored Anterior Tooth
  - e) Restored Molar (dental work associated with the tooth)
  - f) Restored Premolar
  - g) Restored Canine
  - h) Restored Anterior Tooth
7. Dental material should not be placed in a caustic or formalin solution and must be dry before packaging.
8. Teeth and dental material should be placed into small coin envelopes when dry. The envelopes should be sealed with evidence tape, initialed and dated over the seal and protected with padding prior to transport. The outside of the envelope should always be labeled with the Medical Examiner Case Number and the

following information when applicable:

- a) Name and location of tooth (maxillary or mandibular)
  - b) Sex of victim
  - c) Name of victim
9. Each case should be transported in a separate container or box. Due to limited storage space, please use the smallest container possible.
  10. Submission to the laboratory should follow standard protocols required for evidence submission to the NJSP Office of Forensic Sciences Laboratory System.