EVIDENCE FIELD MANUAL

NEW JERSEY STATE POLICE

INVESTIGATIONS BRANCH

OFFICE OF FORENSIC SCIENCES

JANUARY 2014

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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.

II. FUNCTIONS OF THE OFFICE OF FORENSIC SCIENCES

The Office of Forensic Sciences (OFS) is an entity of the New Jersey State Police and part of the Investigation Branch of the organization. The OFS laboratory system achieved accreditation from the American Society of Crime Laboratory Directors/Lab Accreditation Board(ASCLD/LAB) in October of 2003. In 2008 the laboratory system attained the more stringent accreditation under the ASCLD/LAB ISO 17025 International Standards.

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 Fire Debris, Drugs, and Toxicology evidence are provided by the regional laboratory system. Contact the regional laboratory that services your agency at the following regional locations:

East Regional Laboratory
Sea Girt Avenue
Sea Girt, NJ 08750
Phone: (732) 449-0303
Fax: (732) 974-8928
Serves Hudson, Middlesex, Monmouth, Union, and northern Ocean counties

South Regional Laboratory
3434 South Whitehorse Pike
Hammonton, NJ 08037
Phone: (609) 561-2060
Fax: (609) 561-5708
Serves Atlantic, Camden, Cape May, Cumberland, Gloucester, Salem, southern Burlington, and southern Ocean counties

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
Serves Hunterdon, Mercer, Somerset, northern Burlington, and southern Warren counties

North Regional Laboratory
1755 Rte. 46 East
Little Falls, NJ 07424
Phone: (973) 256-7790
Fax: (973) 256-0621
Serves Bergen, Essex, Morris, Passaic, Sussex and northern Warren counties

B. Centralized Services (DNA, Forensic Serology and Trace Evidence)

Scientific analysis for the entire state in the areas of Trace evidence examination and Biological Stain Identification (Forensic Serology) are conducted at the Central Regional Laboratory. Contact that laboratory at the address listed above. Scientific examinations in the area of DNA, including nuclear DNA, mitochondrial DNA and DNA databasing (CODIS) are conducted at the DNA Laboratory. Contact the DNA laboratory at the address listed below.

DNA 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

C. Forensic Anthropology Unit

The Forensic Anthropology Unit (FAU) 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, reconstruction of fragmented bones, determination of sex, race, estimation of age, stature and other information which may contribute to cause of death and identification. Additional assistance can include initial assessment of presumptive identification on the basis of medical and dental records, completion of N.C.I.C. reports and entry of pertinent information of all New Jersey unidentified persons into the National Missing and Unidentified Persons System (NamUS). The FAU also serves as a central repository for all dental records of New Jersey's missing and unidentified persons and serves as a repository for unidentified human remains.

The unit 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, the forensic Anthropologist can provide on-scene assistance in the search, and identification of buried skeletal remains or evidence.

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

D. Breath Testing Unit

The Breath Testing Unit (BTU) of the Office of Forensic Sciences provides scientific oversight and support for the over 575 Alcotest instruments utilized by Local and State Law enforcement agencies throughout the State of New Jersey. These instruments are used to test over 25,000 individuals each year who are suspected of driving under the influence of alcohol. The BTU certifies the concentration of ethanol present in breath alcohol standard reference solutions for simulators used by the qualified operators to assure that the instruments are working within specified tolerances and that the results generated from each instrument are accurate and reliable. In addition the BTU manages and monitors the upload of the data from each instrument to the public accessible Alcotest Inquiry Database website

(https://www.njportal.com/NJSP/Alcotest/) insuring that the data is accurate, complete and timely.

The Breath Testing Unit is located at the NJ Forensic Technology Center and can be contacted at (609) 584-5054 extension 5726.

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 NJ 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. Report Distribution

Copies of Laboratory reports will be released to authorized personnel only. All other requests for documents must be approved by the respective Laboratory Director or designee. Completed reports are mailed directly to the submitting agencies and a copy is sent to the respective prosecutor's office.

VI. Discovery Requests

A request for discovery documents will be sent via a formal letter to the respective Laboratory Director. A list of documents required must be delineated and included in this correspondence. Discoveries are handled in the normal course of business. Allow a minimum of two weeks for this request to be completed.

VII. Procedure for Submitting Evidence to the Laboratory

A. General Information

1. Evidence for Drug and Toxicology cases should be delivered to the appropriate regional laboratory (see above).

2. Evidence for Fire debris analysis for counties served by the North Regional Laboratory should be delivered to the Central Laboratory. All other fire debris evidence should be delivered to the appropriate regional laboratory.

3. Evidence for DNA, Forensic Serology, and Trace Examination can be delivered either to the Central Laboratory or the East or South Regional Laboratories. If evidence is delivered to the East or South Regional Laboratories, the turnaround time might be increased by up to a week.

4. Anthropology evidence should be delivered to the Anthropology Unit.

5. 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.

6. Only submit items that need analysis.

7. To avoid cross contamination, items from different sources should be placed in separate sealed containers, ie, items from the victim, suspect, or different scenes. Failure to take this precaution may lead to the evidence not being accepted or examined.

8. 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.

9. The laboratory will not re-analyze evidence previously analyzed by an outside laboratory for the same type of examination or re-examine evidence previously submitted to OFS for the same examination.

10. Please be aware that the entire evidence may be consumed for analysis.

B. Paperwork

1. 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 must 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.

2. Once the evidence is pre-logged proceed to the laboratory, ballistics, or repository depending on the type of evidence being submitted. Upon delivery of the evidence an "Evidence Receipt" form will be printed.

3. Refer to the DNA submission section for information relating specifically to the submission of DNA cases.

4. Law enforcement agencies that utilize the Porter Lee Inc. Police Evidence Tracking System must enter Ballistics evidence separately when submitted in conjunction with other examinations.

5. The "Evidence Receipt" form printed at the laboratory will be electronically signed by the person delivering the evidence.

For an overview of the Laboratory Information Management System (LIMS)
Please refer to page 13

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 the Regional 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. Manila envelopes
    e. Small glass vials (typically arson and liquid drugs)
    f. Metal cans (typically arson)
    g. Fire debris bags
3. Acceptable seals
    a. Tamper proof evidence tape
    b. Reinforced packaging tape
    c. Heat seal
    d. Evidence Sealing tags

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

<u>Staples should never be used to seal evidence</u>

MANILA ENVELOPE CLASPS, ZIPLOCK BAGS <u>DO NOT</u> 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

6. Additionally, packaging of ***Criminal Cases*** should include:
    a. Where the item was found
    b. By whom
    c. Date & time found
    d. Description of item

7. For cases containing biological evidence that have the potential to be processed for DNA, the following information is required for the evidence to be accepted and to have any subsequent DNA profiles from the forensic unknowns uploaded to the CODIS database:

    a. The crime must be listed on the evidence receipt
    b. There must be a brief history
    c. Information must be provided describing the association of any forensic unknown to the crime scene
    d. If there is a named suspect listed in the case, was the item requiring DNA testing taken from the suspect's person, residence or in his/her possession at time of collection by law enforcement agency.
    e. If samples were collected from a vehicle, the owner of said vehicle must be clearly delineated.

    Failure to provide the above listed information may jeopardize the acceptance of this evidence at the evidence reception area.

8. ***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 .

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 20 for further details.

4. Liquid blood reference samples submitted for DNA analysis will be destroyed after preparing a suitable stain.

VIII. 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 Unit 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 by one of three methods:

1. Law enforcement agencies that have purchased the Porter Lee Inc. Police Evidence Tracking System can use two dimensional evidence submission bar codes.

2. New Jersey State Police Stations/Units that use the RMS program may use the RMS/LIMS interface to pre-log the case information.

3. 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 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.

Submissions to each location need not be entered separately. Each location has the ability to redirect certain items. For example: If the case has 5 items and items 1 and 2 go to the North Regional Laboratory, items 3 and 4 need to go to the North Evidence Management Unit and item 5 needs to go to DNA, all the items can be brought to the North Regional Laboratory where they will take in items 1 and 2 and redirect items 3 and 4 to North Evidence Management Unit and redirect item 5 to DNA. The evidence can be submitted to any one of the 4 locations and it can be redirected accordingly.

IX. 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 manila 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.

X. GENERAL INFORMATION FOR SUBMITTING NARCOTICS & OTHER DANGEROUS DRUGS

A. The request should indicate which specimen was in the possession of a specific individual and specify the collection date(s) of the specimen.

B. If one bag is used to hold numerous specimens, the bag should not be given a separate item number and the bag should be designated as a container.

C. Different bags containing a number of specimens of the same type, 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")

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. (All defendants must be listed in LIMS)

H. Specimens that are only partially analyzed will have the testing procedures idenitified on he report and the box stating no further analysis will be checked.

   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 the 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 written request of the Prosecutor. Identify

which items are to be analyzed using the item numbers assigned by the laboratory personnel on the original LIMS submission.

2. Evidence re-submitted for additional analysis needs to be brought to the laboratory with original seals intact as it was returned to the agency from the laboratory. Unsealed evidence will not be accepted for analysis.

K. **SYRINGES** – Syringes will not be analyzed by the Office of Forensic Sciences. Please call the Laboratory Director if there is a special circumstance.

L. Disorderly Persons Offenses (possession of less than 50g of marijuana) 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.

N. Field tests should not be submitted with the evidence.

XI. Uncertainty of Measurement

All quantitative scientific tests have a degree of uncertainty. In most cases the uncertainty is small. To maintain ASCLD-LAB accreditation steps have been taken to calculate the degree of uncertainty regarding quantitative testing, i.e. blood alcohol level and drug weights, performed at the laboratories within the Office of Forensic Sciences. Statements are provided on the reports reflecting the uncertainty of relevant quantitative measurements.

Blood Alcohol Level

The expanded uncertainty of measurement will be reported along with the blood alcohol concentration. The reporting format is blood alcohol concentration ± (plus or minus) the uncertainty of measurement.

Drug Weights

The expanded undertainty of measurement will be reported along with the measured weight when the measured weight is equal to or greater then a critical weitht according to New Jersey Statutes. The reporting format is weight ± (plus or minus) the uncertainty of measurement.

XII. 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, Khat, 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 Reference 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
Toolmarks, Impressions, Cords/Rope/Wires etc, Knives

Table 12: Trace Evidence
Paint, Vehicle Bulbs

Table 13: Trace Evidence
Tape, Explosives

Table 14: Trace Evidence
Arson & Fire Debris

Table 15: Trace Evidence
Tear Gas/Pepper Spray

Table 16: Trace Evidence
Bullet Holes & Gunshot Residue

Table 17: Ballistics
Ammunition, Pellets, Wadding

Table 18: Ballistics
Firearms

Table 19: Computer Crimes & Other Technological Evidence
Hard Drives, Video, Computers, Cell Phones, PDA, Peripheral Devices

TABLE 1: NARCOTICS & DANGEROUS DRUGS			
ITEM TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
Powders	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.
Tablets & Capsules	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.
Liquids	Leak-proof containers	All	Refrigerate beverages or any liquids that may spoil.
Vegetation	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. Submit entire pipe.
Khat	Sealed, clear plastic or paper bag	All	Should be frozen and submitted to the Laboratory as soon as possible.
Plants	Sealed paper bags or cardboard boxes **NO PLASTIC**	Intact Plant(s) including roots and stems or If identification as a plant is **not** needed, then air dry leaves stripped from the plants	If identification of the actual plant is needed, submit up to 15 intact plants, otherwise submit dried leaves from plants. If there are greater than 15 plants contact the local laboratory for clarification on how many to submit. Photograph or video the plants at the scene Remove all loose dirt from roots and allow to air dry.
Bulk Seizures	Call the laboratory for specific information prior to submission	**** Call Laboratory ****	Photograph at the scene & contact laboratory prior to submission
Hypodermic Syringes	Not usually accepted	**** Call Laboratory ****	Refer to page 17; Section X; K

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

ITEM TYPE	PACKAGING	AMOUNT	COLLECTION
Urine *Urine is not tested for alcohol content.*	Clean, plastic, leak proof containers ***sealed around the lid*** in sealed plastic bags. Leaking containers will be refused at time of submission & returned to agency for proper packaging	Two ounces or 50ml For DFSA Cases: 100ml	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.
Blood	Vials, ***sealed across the stopper***, containing an anticoagulant such as EDTA or potassium oxalate (Kox) & a preservative such as sodium fluoride (NaF). These are generally grey top vials. For DWI testing submit only the blood vials packed in plastic bags to prevent glass to glass contact. Any packaging containing chain of custody information will be returned to submitting agency upon submission. For DFSA testing submit the entire sealed collection kit.	Two – 10ml vials needed for drug as well as alcohol analysis DFSA Cases: Three (3) 10ml grey top vials	Gently mix the sample to preserve. Properly label vials with subjects name, medical personnel name and date/time sample was drawn. Refrigerate the sample and deliver as soon as possible.
Alcoholic Beverages *(Drinks)*	New re-sealable airtight containers, such as specimen cups or amber glass bottles or original liquor bottles. Submit drinking glass and contents separately for DFSA cases	½ ounce to 3 ounce for alcohol content	Remove any solid materials or ice from the sample. Refrigerate any mixed beverage samples to avoid spoilage. No reference sample is needed for alcohol content.

NOTE: **DFSA** = Drug Facilitated Sexual Assault

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 both blood and urine samples are preferred****

****Must obtain blood and urine samples for fatal motor vehicle accidents****

TABLE 3: BIOLOGICAL EVIDENCE

ITEM TYPE	COLLECTION	PACKAGING
Blood *** Disposable latex gloves must be worn when handling biological evidence! ***	**Liquid Sample:** 1. Collect onto at least two sterile cotton swabs, air dry, package together, label, and submit to the lab. **Dried Stains:** <u>Submit stains only if the entire article cannot be submitted</u> 1. 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 unused scalpel and collected directly into a druggist fold. Seal, package, label and submit to the lab. ***This method should only be used if no loss of material will occur.*** **Bloodstained Clothing:** 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. **Bloodstained Knives, Guns, Rugs, Car Seats, Rags, Bed Clothing or other stained objects:** 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, document (photos or drawings) and submit to the lab. 2. Guns must be rendered safe before submission.	Thoroughly air dry stains and package in a sealed paper envelope, paper bag or clean paper wrapping. Bio-Hazard labels must be affixed to all packages. <u>**NOTE**</u>**:** ***No Plastic Bags & No Staples*** All clothing should be <u>**individually**</u> packaged and labeled. ***** Be sure to separate victim and suspect items to avoid cross-contamination. ***** <u>**Sharp objects:**</u> Must be placed and secured in an individual puncture proof container. Multiple swabbings from the same location (i.e. pool of blood) should be packaged in same envelope or container. **Bio-Hazard labels must be affixed to package**

NOTE: Photograph bloodstains and liquid blood samples before collecting
Blood spatter interpretation, if warranted, must be performed prior to removing any bloodstains
** **Disposable latex gloves must be worn and changed when handling biological evidence!** **

TABLE 4: BIOLOGICAL EVIDENCE

ITEM TYPE	COLLECTION	PACKAGING
Semen Stains *** Disposable latex gloves must be worn when handling biological evidence! ***	**Liquid Sample:** 1. Collect onto at least two sterile cotton swabs, air dry, package together, label, and submit to the lab **Dried Stains:** <u>Submit stains only if the entire article cannot be submitted</u> 1. 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 unused scalpel and collected directly into a druggist fold. Seal, package, label and submit to the lab. ***This method should only be used if no loss of material will occur.*** **Clothing, Rugs, Car Seats, Bedding, Rags, Towels etc.:** 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. *****Semen stains may be identified by an individual trained in utilizing an Alternate Light Source. *****	Thoroughly air dry stains and package in a sealed paper envelope, paper bag or in clean paper wrapping <u>**NOTE**</u>***: No Plastic Bags & No Staples*** All clothing should be <u>**individually**</u> packaged and labeled ***** Be sure to separate victim and suspect items to avoid cross-contamination. ***** **Bio-Hazard labels must be affixed to package**
Condoms *** Disposable latex gloves must be worn when handling biological evidence! ***	**Liquid sample present in the condom:** 1. Collect liquid onto at least two sterile cotton swabs. Air dry the condom and swabs, package, swabs together, condom separate, label, and submit to the lab **Dry Condom:** 1. Collect condom, package, label, and submit to the lab.	

TABLE 5: BIOLOGICAL EVIDENCE

ITEM TYPE	COLLECTION	PACKAGING
Saliva Stains *** Disposable latex gloves must be worn when handling biological evidence! ***	**Liquid Sample:** 1. Collect onto at least two sterile cotton swabs, air dry, package, label, and submit to the lab. **Dried Stains:** <u>Submit stains only if the entire article cannot be submitted</u> 1. 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 unused scalpel and collected directly into a druggist fold. Seal, package, label and submit to the lab. ***This method should only be used if no loss of material will occur.*** **Cigarette Butts, Chewing Gum, Envelopes, Stamps, Ski Masks, etc.:** 1. Allow to air dry, package, label, and submit to the lab.	Thoroughly air dry stains and package in a sealed paper envelope, paper bag or in clean paper wrapping. <u>**NOTE**</u>: ***No Plastic Bags & No Staples*** All clothing should be <u>**individually**</u> packaged and labeled. ***** Be sure to separate victim and suspect items to avoid cross-contamination. ***** **Bio-Hazard labels must be affixed to package** Sexual Assault Evidence Kits should be refrigerated prior to submission to the lab. Do not package liquid blood and/or urine samples in Sexual Assault Evidence Kits.
Sexual Assault Evidence Kits *** Disposable latex gloves must be worn when handling biological evidence! ***	**Sexual Assault Victim:** 1. The victim should be transported to the hospital as soon as possible. 2. Examination should be conducted by medical personnel trained in sexual assault evidence collection utilizing the sexual assault protocol present in kit. 3. Label, seal and submit kit to the lab. 4. List the entire kit as a single item in LIMS.	
Fingernail Swabs *** Disposable latex gloves must be worn when handling biological evidence! ***	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. **During an autopsy of a homicide victim the medical examiner may find it advantageous to cut the fingernails. Nails should be segregated by each hand, packaged, labeled and submitted to the lab.**	

TABLE 6: BIOLOGICAL EVIDENCE

ITEM TYPE	COLLECTION	PACKAGING
Known Reference Samples *** Disposable latex gloves must be worn when handling biological evidence! *****	**Living Subjects & Deceased Subjects (without blood in the oral cavity):** **Buccal Swabs:** 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. **Deceased Subjects who have not had a transfusion:** 1) **FTA Card:** 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. 2) If no blood sample is available, collect at least 50 head or pubic hairs, **(PULLED, NOT CUT),** package, label and submit to the lab. 3) If no hair sample is available, collect an approximate ½ inch square piece of the least degraded tissue sample available, (muscle is preferred, brain, pink tissue), package, label and submit to the lab. If none are available see next section for proper submission of bones. **Deceased Subjects who have had a transfusion:** 1. If available, procure the pre-transfusion sample taken at the hospital, package, label and submit to lab. 2. If pre-transfusion sample is unavailable, a buccal swab control may be taken if there is no bleeding in or around the mouth region. Dry swabs, package, label and submit to lab. 3. If no buccal swab is available, collect at least 50 head or pubic hairs **(PULLED, NOT CUT),** package, label and submit to lab.	Thoroughly air dry and package swabs together in a sealed paper envelope or paper bag. **Bio-Hazard labels must be affixed to package.** FTA cards should be packaged, after drying, in the barrier envelope available through the manufacturer of the FTA card. Hairs should be packaged in druggist folds. Place the tissue specimen in a leak proof container and keep frozen prior to submission to the lab.

TABLE 7: BIOLOGICAL EVIDENCE

ITEM TYPE	COLLECTION	PACKAGING
Bones (see appendix #3)	Complete, uncut bones should be collected. If this is not feasible (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: 1) Femur or other long bones (tibia, humerus, fibula, ulna or radius) 2) Ribs 3) Foot bones 4) Hand bones 5) Vertebrae 6) Pelvis 7) Skull **If possible, three whole bones should be submitted.** 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 cases of advanced decompositon, submitted skeletal material with tissue should be packaged in plastic (to prevent leakage) and frozen. Mummified tissue present on the submitted bone is acceptable. **Each case should be transported in a separate container or box.**	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: 1) Name of bone 2) Determination of right or left bone 3) Sex of victim 4) Name of victim Due to limited storage space, please use the smallest container possible.
For Additional Collection Procedures For Bone Evidence - See Appendix # 2 On Page 40		

Table 8: Biological Evidence

Item Type	Collection	Packaging
Teeth	Dental material must be photographed before and after removal from the remains. Dental material must be X-rayed by a forensic odontologist. 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. Teeth and dental material must be accompanied by a forensic odontologist report and/or a completed N.C.I.C. Unidentified Person Dental Report. 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: 1) Unrestored Molar (no dental work associated with the tooth) 2) Unrestored Premolar 3) Unrestored Canine 4) Unrestored Anterior Tooth 5) Restored Molar (dental work associated with the tooth) 6) Restored Premolar 7) Restored Canine 8) Restored Anterior Tooth **Each case should be transported in a separate container or box.**	Dental material should not be placed in a caustic or formalin solution and must be dry before packaging. 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: 1) Name and location of tooth (maxillary or mandibular) 2) Sex of victim 3) Name of victim Due to limited storage space, please use the smallest container possible

For Additional Collection Procedures For Teeth Evidence - See Appendix # 2 On Page 40

Table 9: Trace Evidence

Item Type	Packaging	Amount	Collection
Hairs (Questioned) {Found at a Scene}	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 Be sure to keep each article separate from each other Air dry if wet, prior to packaging	All from the scene that have possible evidential value	Leave attached to object and submit intact if possible. Note position of hairs Use clean forceps or gloves to collect Clear tape or a forensic filter vacuum can be used Avoid damaging the root of the hair
Hairs (Questioned) {Combings}	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	All	Using clean exam paper and comb thoroughly and vigorously comb questioned region (head/pubic) and collect all hairs recovered
Hairs (Reference Sample) **Note:** The laboratory will only analyze head, pubic and facial hairs for comparison purposes	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 Head hairs, pubic hairs, and facial hairs should be packaged separately and clearly labeled as to origin	**Head:** At least 50 pulled and combed hairs representing all areas of the head (front, back, sides and top) **Pubic:** At least 25 pulled and combed hairs should be submitted from different regions of the pubic area **Facial:** At least 25 pulled and combed hairs should be submitted from different regions of the facial area	Use clean comb and forceps to collect Avoid damaging the root of the hair Cut hair is not acceptable

For The Recommended Collection Procedures For Hair Evidence
See Appendix # 1 On Page 37

Table 10: Trace Evidence

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

TABLE 11: TRACE EVIDENCE

ITEM TYPE	PACKAGING	AMOUNT	COLLECTION
Toolmarks ****NEVER INSERT ITEM INTO TOOLMARK FOR FIT****	Sturdy cardboard boxes if practical Package tool and impressions separately and carefully so as not to distort evidence	All Submit the entire article with the tool mark intact if practical Include keys with any lock evidence	Photograph (with scale) at the scene Otherwise, make a mold or cast of the impression with Mikrosil or dental stone Refer to paint reference samples for transfer evidence
Impressions (Footwear, Tires and Fabric) ****NEVER PLACE ITEM ONTO IMPRESSION FOR FIT****	Sturdy cardboard boxes if practical Package the questioned impressions separately and carefully so as not to distort evidence	All Submit the entire article with the impression intact if practical **Remember to photograph the impression before attempting any recovery method**	Photograph (with scale) at the scene Photographs should be taken perpendicular to the impression with the scale at the same level as the impression A tape or gel lift may be made of impressions on smooth surfaces An electrostatic lift may be made of impressions on carpet or fabric A dental stone cast may be made of impressions in soil. Leave any debris or dirt left on the surface of the impression intact
Cords, Ropes, Wires, etc.	Preserve cut / broken ends. Label questioned cut ends Separate items, package in sealed plastic or paper bags; plastic containers or cardboard boxes	Submit entire length of line (if possible)	Attempt to leave in its current state (knots tied, tape wrapped around an object)
Knives	Need to be packaged in individual puncture proof container	All	Attempt to leave in its current state, if there is risk of losing any trace evidence collect it separately

Table 12: Trace Evidence

Item Type	Packaging	Amount	Collection
Paint (Questioned)	***Do not use envelopes.*** Small chips and scrapings should be packaged in druggist folds, pill boxes, etc. and secured to prevent further breakage, for clothing use brown paper bags Place druggist folds into a separate envelope and seal all edges with evidence tape Package entire items or materials submitted for transfer examination separately	All chips present at the scene All outer layers of clothing Entire area where transfer occurred from both surfaces if practical	Obtain chips of paint down to the bare surface level Alternatively, flake off chips into druggist fold or cut out a one square inch portion of the surface Obtain samples from areas as close to damaged and/or contacted areas adjacent to where paint may have originally come from
Paint (Reference Sample)	***Do not use envelopes.*** Small chips and scrapings should be packaged in druggist folds, pill boxes, etc. and secured to prevent further breakage Place druggist folds into a separate envelope and seal all edges with evidence tape	Reference Sample samples must include all layers of paint present to the substrate and be from at least 1 square inch area	Vehicles may have different paints on different parts of the vehicle (repaints/repairs) Obtain samples from areas as close to damaged and/or contacted areas adjacent to where paint may have originally come from
Vehicle Bulbs	Preserve in order to avoid damage by using cushioned containers, i.e., Styrofoam coffee cups	All Collect any glass fragments from a lens housing or from the scene If possible, submit an identical undamaged bulb from the vehicle	Mark top or bottom of bulb Attempt to recover filament at scene if bulb is broken

Table 13: Trace Evidence

Item Type	Packaging	Amount	Collection
Tape (Adhesive, Duct, Masking etc.)	Place on transparency sheet or clean glass	All Recover any roll of tape that may have been the source of pieces collected as evidence	Do not cut, wad, distort or separate tapes that are stuck together
Explosives * The Central Laboratory will only accept evidence involving low explosives. The laboratory will not examine firecrackers, commercial pyrotechnics or chemical reaction bomb cases without a suspect. All explosive cases must be determined to be or have been a "Destructive Device" by the Arson/Bomb Unit or a Certified Member of the NJ Render Safe Task Force, prior to submission to the laboratory.	All explosive evidence should be examined, identified and rendered safe by a Hazardous Devices/Bomb Technician from either the NJSP Arson/Bomb Unit or a Certified Member of the NJ Render Safe Task Force. Evidence should be packaged as directed by the Hazardous Devices /Bomb Technician ***The name of the Hazardous Devices/Bomb Technician who rendered the device safe and the date it was completed must be included in the request for examination***	As directed by the NJSP Bomb Squad If a reference sample of identical material to suspect specimen is submitted ensure it is uncontaminated	Care must be taken not to damage evidence further and hand protection (double glove) should always be utilized during collection

Table 14: Trace Evidence

Item Type	Packaging	Amount	Collection
Arson & Fire Debris (Questioned/Unkown) **Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence*	Fire debris evidence is very volatile, therefore package each sample in its own clean, unused, air-tight container, such as a metal can, glass jar or a fire debris approved heat-sealable plastic bag. Clearly label complete location information. Avoid ANY contamination Do not package collection gloves inside the same container as the evidence	1 ounce of suspect liquid Can ½ filled with material	Transfer 1 oz sample of volatile liquids into clean sealed containers Retain containers for possible latent print analysis Collect specimens identified by vapor detector, accelerant canine or personal observation Clean all tools (using water and dish detergent) between different points of origin Soil containing suspected volatile liquids should be frozen until submission to the laboratory
Arson & Fire Debris (Reference Sample/ Known) **Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence*	Fire debris evidence is very volatile, therefore package each sample in its own clean, unused, air-tight container, such as a metal can, glass jar or a fire debris approved heat-sealable plastic bag. Clearly label complete location information. Avoid ANY contamination Do not package collection gloves inside the same container as the evidence	1 ounce of liquid in sealed metal or glass container Material identical to suspect specimen but ensure it is uncontaminated	Transfer 1 oz sample of volatile liquids into clean sealed containers Clean all tools (using water and dish detergent) between different points of origin

Table 15: Trace Evidence			
Item Type	**Packaging**	**Amount**	**Collection**
Tear Gas/Pepper Spray (Questioned/Unknown)	Tear Gas evidence is very volatile, therefore package each sample in its own clean, unused, air-tight container, such as a metal can or a fire debris approved heat-sealable plastic bag. Clearly label complete location information. Avoid ANY contamination	Entire item to be examined	Do not fill can more than ½ with material if possible. Do not package collection gloves inside the same container as the evidence Clean all tools (using water and dish detergent) between different points of origin
Tear Gas/Pepper Spray (Reference Sample/ Known)	Tear Gas evidence is very volatile, therefore package each sample in its own clean, unused, air-tight container, such as a metal can or a fire debris approved heat-sealable plastic bag. Clearly label complete location information. Avoid ANY contamination	Submit the entire canister to be examined	If the reference sample of tear gas is to be compared to a questioned specimen, please ensure that both are properly identified and that they are packaged separately.

Table 16: Trace Evidence			
Item Type	**Packaging**	**Amount**	**Collection**
Bullet Holes & Gunshot Residue	Clothing or Other Biological Fluid Stained Objects should be submitted dry in separate (individual) paper bags Call the laboratory for information on submitting other types of items with suspected bullet holes	Entire article should be submitted An identical garment may be needed as a reference sample for determining distance	Do not cut through suspected bullet holes

Table 17: Ballistics Evidence			
Item Type	**Packaging**	**Amount**	**Collection**
Ammunition Discharged Bullets & Shells, Unfired Cartridges & Shells	Separate sealed envelope for each specimen found Label packaging completely Protect items from damage which may occur during handling	All found	Do not mark bullets, they will be marked at the lab during examination Mark each envelope with full information at time of collection Submit items found in the gun separately from other items located
Pellets	Submit pellets together and mark envelope as one item	**Buckshot** All **Birdshot** Random sampling of good specimens	
Wadding	Separate envelope for each specimen Air dry before packaging if taken from body	All found	Mark each envelope with full information at time of collection

TABLE 18: BALLISTICS EVIDENCE			
ITEM TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
Firearms Revolvers, Automatic Pistols, Rifles, Shotguns, etc.	**UNLOAD THE WEAPON!** Indicate on packaging if weapon is loaded or unloaded 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 Carefully package the item in a cardboard box in order to preserve the evidence Weapons not involving other types of physical evidence may be placed in a cardboard carrier, heavy-duty envelope or carried by hand	All	Do not mark firearms that have the complete manufacturer's serial number. Mark those items using an evidence tag securely attached to the weapon 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 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)

TABLE 19: Computer Crimes & Other Technological Evidence			
ITEM TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
Hard Drives Zip Drives Jazz Drives Removable Media Flash Media Memory Modules	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. Protect items from damage which may occur from handling	All	Mark each envelope with full information at time of collection Note make, model and serial number
Video Re-writable compact disks DVD-ROMs	Use clamshell containers for CD/DVDs. Use bubble wrap to secure video hard drives. Secure media in heat sealed anti-static bags. Protect items from damage which may occur from handling	All	Mark each envelope with full information at time of collection Note make, model and serial number
Computers Cell Phones Personal Data Assistants (PDA) Peripheral devices and components	Tag large devices such as computers. Place evidence tape over the power supply or place the entire device in a sealed container. 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. Tag small peripheral devices and bag separately. Seize all cell phone and PDA wiring harnesses, synchronization cradles and power cords	All	Mark each envelope with full information at time of collection Note make, model and serial number
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

Hair Collection Procedures

I. Introduction

These procedures have been written to offer guidelines for collecting, preserving and submitting hair evidence and hair Reference Samples 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 Reference Samples.

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. Questioned Head and Pubic Hair Collection (Combings)

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 Combings”.
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 Combings”.
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.

III. Known Head and Pubic Hair Collection (Reference Samples)

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 Reference Samples be collected in a timely manner. A proper hair Reference Sample consists of a combination of combed and pulled hairs collected as soon as practical after the commission of the crime.

In order to reduce the chance of foreign hairs in the sample perform the steps listed in Section II (Combings) before collecting Reference Sample samples. In essence the hair is combed through first before collecting the known reference sample.

Cut Hairs Do Not Constitute a Proper Reference Sample and Should Be Avoided

A. Head Hair Reference Samples

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 Reference Samples”
7. The labeling information should then be completed and the envelope sealed with tape.

B. Pubic Hair Reference Samples

1. A second comb should be used to collect the pubic hairs Reference Samples. 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 Reference Samples”
7. The labeling information should then be completed and the envelope sealed with tape.

C. Facial Hair Reference Samples

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 Reference Samples”
7. The labeling information should then be completed and the envelope sealed with tape.

D. Animal Hair Reference Samples

1. It is requested that approximately fifty (50) full-length hairs be collected. These fifty hairs should consist of a combination of hairs collected from different regions of the animal.
2. 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.
3. The combings and the comb are folded into the paper.
4. The paper fold is placed in an envelope marked “Animal Hair Reference Samples”
5. The labeling information should then be completed and the envelope sealed with tape.

IV. 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 Reference Sample and should be avoided.

APPENDIX # 2

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.

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. 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.