EVIDENCE FIELD MANUAL

QUICK REFERENCE HANDBOOK

NEW JERSEY STATE POLICE

INVESTIGATIONS BRANCH

OFFICE OF FORENSIC SCIENCES

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I. INTRODUCTION

This quick reference handbook has been written by personnel from the Office of Forensic Sciences of 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 quick reference handbook 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. REGIONAL LABORATORY CONTACT INFORMATION

<table>
<tr><td colspan="2">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</td></tr>
<tr><td>North Regional Laboratory
1755 Rte. 46 East
Little Falls, NJ 07424
Phone: (973) 256-7790
Fax: (973) 256-0621</td><td>South Regional Laboratory
3434 South Whitehorse Pike
Hammonton, NJ 08037
Phone: (609) 561-2060
Fax: (609) 561-5708</td></tr>
<tr><td>East Regional Laboratory
Sea Girt Avenue
Sea Girt, NJ 08750
Phone: (732) 449-0303
Fax: (732) 974-8928</td><td>Forensic Anthropology Laboratory
NJ Forensic Technology Center
1200 Negron Drive Horizon Center
Hamilton, NJ 08691
Phone:(609) 584-5054 x 5656</td></tr>
</table>

III. FORENSIC INVESTIGATIONS BUREAU CONTACT INFORMATION

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	**Ballistics Unit** New Jersey State Police NJ Forensic Technology Center 1200 Negron Drive Horizon Center Hamilton, NJ 08691 Phone:(609) 584-5054 x 5819
Forensic Photography/Composite Artist Unit New Jersey State Police NJ Forensic Technology Center 1200 Negron Drive Horizon Center Hamilton, NJ 08691 Phone:(609) 882-2000 x 5796	

IV. PROPER EVIDENCE PACKAGING, MARKING AND SEALING

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. 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 <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

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

For a more detailed explanation of the Laboratory's submission procedures please refer to the <u>New Jersey State Police Evidence Field Manual</u>

NARCOTICS & DANGEROUS DRUGS			
SPECIMEN	**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.
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 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 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
Bulk Seizures	Call the laboratory for specific information		Photograph at the scene & contact laboratory prior to submission
Hypodermic Syringes	Safety tubes with Bio-hazard stickers	* Call laboratory	Syringes will not be received or analyzed unless it is the only item in the case and the prosecutor has demonstrated the need for the examination.

TOXICOLOGY (ONLY LIVING SUSPECTS AND / OR VICTIMS)			
SPECIMEN	**PACKAGING**	**AMOUNT**	**COLLECTION**
Urine * Submit with Blood for drug testing. Urine is not tested for alcohol content.	Clean, plastic, leak proof containers 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 *(see below) 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 *Obtain both blood and Urine samples for Drug testing	Vials containing an anticoagulant such as EDTA or potassium oxalate (Kox) & a preservative such as sodium fluoride (NaF). These are generally grey top vials 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	Two - 10cc 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 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 control is needed for alcohol content

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.

BIOLOGICAL EVIDENCE		
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, label, and submit to the lab. **Dried Stains:** Submit stains only if entire article cannot be submitted 1. ***Preferred Method:*** 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 ***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, and submit to the lab	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 **NOTE:** ***No Plastic Bags & No Staples*** All clothing should be **individually** packaged and labeled ***** Be sure to separate victim and suspect items to avoid cross-contamination. ***** **Sharp objects:** Must be placed in an individual puncture proof container
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 when handling biological evidence! ****		

BIOLOGICAL EVIDENCE		
TYPE	**COLLECTION**	**PACKAGING**
Seminal 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:** Submit stains only if entire article cannot be submitted 1. ***Preferred Method:*** 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 ***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 isolated 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 **NOTE:** ***No Plastic Bags & No Staples*** All clothing should be **individually** 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, label, and submit to the lab **Dry Condom:** 1. Collect condom, package, label, and submit to the lab	

BIOLOGICAL EVIDENCE		
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 entire article cannot be submitted</u> 1. ***Preferred Method***: 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 ***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** Rape kit should be refrigerated prior to submission to the lab Do not package Blood and/or Urine Samples in Rape 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	

BIOLOGICAL EVIDENCE		
TYPE	**COLLECTION**	**PACKAGING**
Known Control 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 <u>not</u> been Transfused:** 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, <u>NOT CUT</u>)**, package, label and submit to the lab 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) 4. If no tissue sample is available, collect an uncut long bone, (femur, tibia, ulnar), package, label and submit to the lab **Deceased Subjects who have been Transfused:** 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 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, <u>NOT CUT</u>)**, package, label and submit to Lab 4. If no tissue sample is available, collect an uncut long bone (femur, tibia, ulnar), package, label and submit to Lab	Thoroughly air dry and package in a sealed paper envelope or paper bag **Bio-Hazard labels must be affixed to package** FTA cards should be packaged 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

BIOLOGICAL EVIDENCE		
TYPE	**COLLECTION**	**PACKAGING**
Bones	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. The NJSP Forensic Anthropologist must be contacted prior to any dissection of skeletal material from human remains. 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: 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. **Each case should be transported in a separate container or box.**	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. 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		

BIOLOGICAL EVIDENCE		
TYPE	**COLLECTION**	**PACKAGING**
Teeth	Dental material must be photographed prior to 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. 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: 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		

TRACE EVIDENCE			
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/public) and collect all hairs recovered
Hairs (Control) **Note:** The laboratory will only analyze Head, Pubic and Facial hairs for comparison purpose	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 <u>not</u> acceptable
For The Recommended Collection Procedures For Hair Evidence See Appendix # 1			

TRACE EVIDENCE			
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 (Control)	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; film canisters, etc. 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 (Control)	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. 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 control 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 control

TRACE EVIDENCE			
TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
Impressions & Toolmarks *NEVER INSERT ITEM INTO IMPRESSION 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 impression or tool mark intact if practical Include keys with any lock evidence	Photograph 1:1 or from directly above with a scale at the scene Otherwise, make a mold or cast of the impression with Mikrosil or dental stone Leave any debris or dirt left on the surface of the impression intact Refer to soil & paint controls for transfer evidence
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)
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

TRACE EVIDENCE			
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
Soil	Pill box or film canister Shoes and articles of clothing should be packaged such that soil remains on the item or within the packaging	One to two tablespoons of the top soil layer	Samples should be collected at the area of interest and several areas withing a 100-yard radius Do not package wet Attempt to maintain the integrity of any layer structure present in collected samples
Explosives *Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence	All explosive evidence should be examined, identified and rendered safe by a hazardous devices technician (Bomb Technician) Evidence should be packaged as directed by the NJSP Bomb Squad	As directed by the NJSP Bomb Squad If a control 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

TRACE EVIDENCE			
TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
Paint (Questioned)	***Do not use envelopes***. 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 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 (Control)	***Do not use envelopes***. 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 Place druggist folds into a separate envelope and seal all edges with evidence tape.	Control 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

TRACE EVIDENCE			
TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
Arson & Fire Debris (Questioned) *Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence	Package each representative sample in its own clean, unused, air-tight metal container, glass jar or Kapak 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 finger 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 (Control) *Contact the NJSP Bomb Squad before attempting to submit any explosive and/or bomb residue evidence	Package each representative sample in its own clean, unused, air-tight metal container, glass jar or Kapak 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

TRACE EVIDENCE			
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 control for determining distance	Do not cut through suspected bullet holes

BALLISTICS			
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	

BALLISTICS			
TYPE	**PACKAGING**	**AMOUNT**	**COLLECTION**
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
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 manufacturers 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)

COMPUTER CRIMES EVIDENCE			
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 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

A. **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.

B. **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.

C. **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.

D. **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 (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.

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 # 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 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.