DEPARTMENT OF PUBLIC SAFETY

CRIME SCENE PROCESSING GUIDEBOOK

Revised February 15, 2008

INTRODUCTION:

It is the purpose of this guidebook to provide investigators with guidelines to search for evidence, and to document, collect, package, and preserve that evidence. Documentation, collection, and preservation of evidence are crucial steps in criminal investigation and often provide the basis for effective identification, documentation, prosecution, and conviction of perpetrators, as well as the reconstruction of the events that surrounded the crime.

The protocols and procedures outlined in this book are basic guidelines. Investigators should contact the Department of Public Safety Forensic Laboratories, or members of the New Mexico State Police Crime Scene Team for additional information regarding crime scene investigations, crime scene reconstruction, or evidence-related topics.

This guidebook does not preclude officers from using new techniques based on changes or advances in the field of crime scene investigations or forensic science.

Table of Contents:

SECTION: 01 – CRIME SCENE INITIAL RESPONSE (FIRST RESPONDER DUTIES):
When responding to a report of a crime scene, the first responding officer should keep four (4) primary concerns in mind (officer safety, preservation of life, scene security, and crime scene investigation).

A. Officer safety

- Conduct a protective sweep to assist the injured, to prevent further violence, and to secure the scene.
  - Enter the scene safely.
  - Look for anyone who might do harm to the officer(s) or others, as well as anyone who might need help, in any reasonable place where someone might be hiding.
  - Identify hazards
    - Environmental
      - Blood, toxic substances, explosives, broken items that might cause injury.
    - Man-made
      - Methamphetamine labs, bombs, booby traps.
  - If possible, avoid touching or moving items of evidence.
    - If something was moved or changed, document what was moved, who moved it, and why it was moved.
    - Brief the crime scene investigators on anything that was moved during the protective sweep.
  - Once the protective sweep is completed, make sure that the scene remains secure.
    - Notify dispatchers of any hazards, and request appropriate personnel to handle the hazards.
      - Bomb Team, Methamphetamine Lab Team, etc.

B. Preservation of life

- Ensure that all reasonable and necessary steps are taken so that life can be saved.
- If Emergency Medical Services (EMS) are called to the scene:
  - Note who they are and their actions, including what they move.
  - Do not allow them to "clean up" the scene when they are done.
- If dealing with a death:
  - Control if/when/how EMS enters the scene.
  - Attempt to secure a “dying declaration” if there is a chance a victim may die.
  - If a victim or suspect is transported to a medical facility, send a law enforcement officer with the victim in order to:
    - Provide security.
    - Record any statements made by the victim.
    - To preserve clothing or other related evidence found with the victim.

C. Protection of the crime scene

- Implement the “7 Critical Tasks” found in the Incident Command System (CIMS).

1. **Identify the “kill zone”** – if there is an ongoing threat.
   - This is also called the “hot zone” if it is a Hazmat or an incident involving a weapon of mass destruction (WMD).

2. **Establish an inner perimeter**
   - This is the area where all evidence could possibly be located.
   - The officer should make this area at least 50% larger than where he/she thinks all of the evidence is located.
   - Use yellow barrier tape or other devices to mark the perimeter and establish a single entrance/exit point.
   - Once this area is established, only personnel with a legitimate investigative need should enter the inner perimeter.
   - Take appropriate steps to protect the crime scene from degradation due to weather conditions or other contaminates such as curious on-lookers, animals, etc.

3. **Establish an outer perimeter**
   - This area is an official zone where official business can take place.
   - There should not be any areas of possible evidence located within the outer perimeter.

4. **Secure communications**
   - Have dispatch clear the frequency.

5. **Establish a command post**
   - The command post should be between the inner and outer perimeters.
   - The command post does not need to be in sight of the crime scene.
   - Ideally, it should have at least two (2) telephones: one for inbound calls and one for outbound calls.
   - It should have a bathroom.

6. **Establish a staging area**
   - The staging area should be near the command post.
   - Identify a route into and out of the staging area so arriving resources understand where to park.
   - Ensure the Public Information Officer knows where the media will be staged.

7. **Identify/Request additional resources**
   - Notify supervisors
   - NMSP Tactical Team
   - NMSP Narcotics Section
   - NMSP Criminal Investigations Section
   - Obtain other checklists and/or reference materials
     - HAZMAT guidebooks
     - Sexual Assault guidebooks

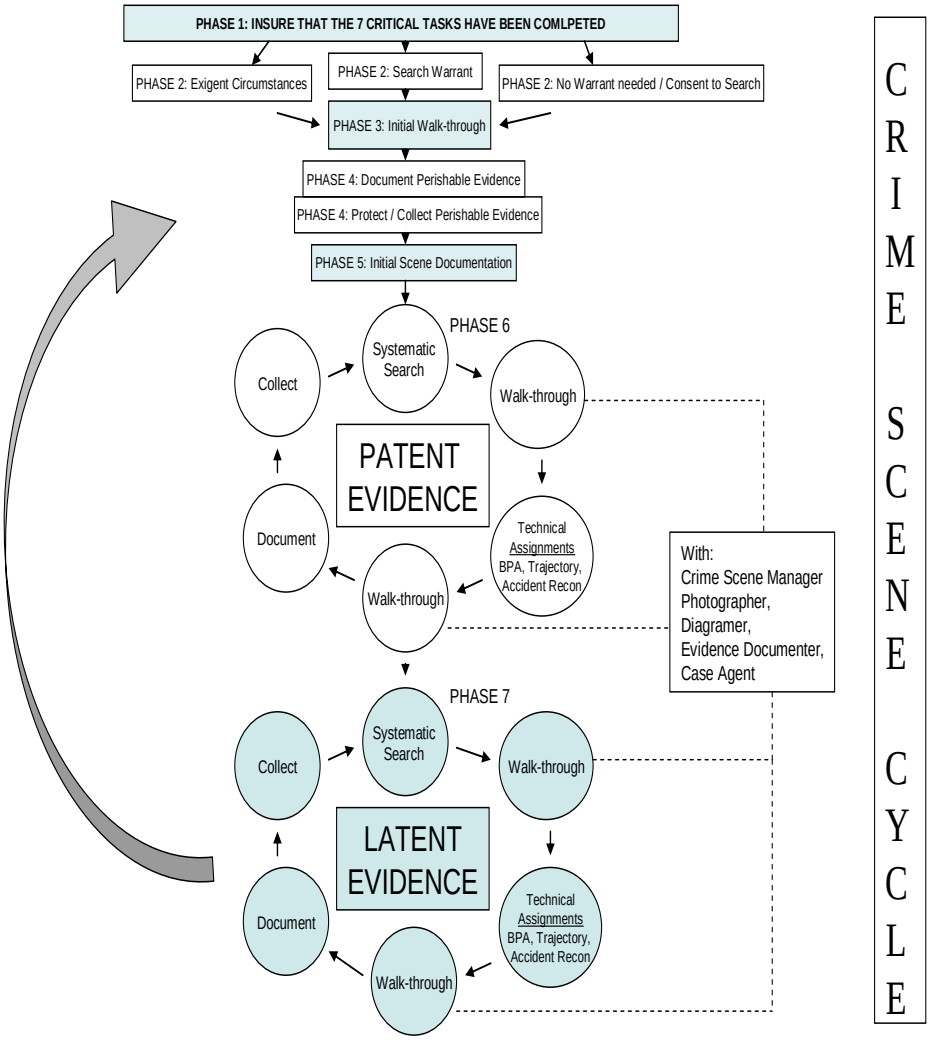
D. Immediately remove everyone from the inner perimeter, including witnesses, suspects, and victims (who are alive).
- Each of these people should be separated
  - They may remain within the outer perimeter until such time as they are no longer needed for the investigation.
  - Do not let them talk to each other or overhear each other.
  - Do not let them hear the police radio.
  - If you allow someone to use a telephone, consider documenting their conversation.

E. Start a crime scene log for the inner perimeter.
- Document everyone who was inside the scene (inner perimeter) upon the officer's arrival.
- All persons, irrespective of rank, who wish to enter the crime scene are required to secure approval from the officer in charge and log in.
- Document the times of significant events.
- Time officers arrive/depart.
- Time EMS and OMI arrive/depart.
- Supervisor notified.
- Criminal Investigations Section notified.

F. Find secondary crime scenes and secure them.
- Be aware of persons and vehicles in the vicinity. If possible, record vehicle license plate numbers in close proximity to the crime scene.
- Document/Protect perishable evidence as soon as possible.
  - Establish an evidence-free path to important areas within the scene.
    - Mark the path with string, flags, or barrier tape.
  - Unless there is an urgent safety issue, all evidence should be photographed before it is moved.
  - If evidence needs to be collected, make sure that initial evidence collection techniques do not compromise subsequent techniques.
    - Use the least intrusive means possible to document the perishable evidence.
  - Use appropriate personal protective equipment (PPE), such as latex gloves, to prevent cross contamination or evidence destruction.

G. Investigation of the crime scene
- Determine if a search warrant or consent-to-search is required, or if exigent circumstances exist that make evidence perishable and require immediate action to document, protect, and/or collect that evidence.
- The scope of crime scene investigation is dictated by the seriousness and complexity of the crime. For crimes that do not require the assistance of the Criminal Investigations Section, or where exigent circumstances demand that immediate steps be taken to preserve evidence, first responders shall be prepared to do the following:
  - Document the scene with photography and/or video.
  - Search for, preserve, and collect items that appear to be of evidentiary value.
  - Sketch the crime scene, to include measurements where warranted.
  - Transport and submit evidence for storage or for laboratory examination.
  - Identify witnesses, as well as victims and suspects.
  - Prepare the initial offense report, unless otherwise directed by a supervisor, crime scene manager, or case agent.
    - Record, at a minimum, information on the time of arrival, appearance, and conditions upon arrival, any items at the scene that are known to have been moved, modified, or touched; personal information on witnesses, victims, suspects, and any statements or comments made; and actions taken by the first responding officer or others at the scene.

SECTION 02 – CRIME SCENE CYCLE



SECTION 03 – CRIME SCENE INVESTIGATION: The Crime Scene Cycle

- The crime scene cycle is a set of protocols for investigating crime scenes.
- The reader should be aware of the challenge with protocols:
  - A set of protocols needs to be specific enough to guide the investigator(s), but it must be general enough to be utilized in a variety of scenes.
- There will also be times when parts of the cycle are not required to complete a thorough crime scene investigation (i.e. technical assignments or the latent evidence cycle).
  - Jurisdictional, logistical, and legal considerations must be considered.
  - The seriousness of the case must be considered.
- When the CST is handling a crime scene, it is the responsibility of the Crime Scene Manager, based on his/her training and experience, together with input from the case agent and supervisor, to determine what aspects of the cycle are required.
  - The Manager is ultimately responsible, based on his/her training and experience, for determining how the scene will be investigated.

1. **FIRST PHASE**: Insure that the 7 critical tasks have been completed, as well as the crime scene log. These tasks are the investigator's first priority, which insures that the scene is secured and safe.

2. **SECOND PHASE**: Determine if a search warrant or consent-to-search is required, or if exigent circumstances exist that make evidence perishable and require immediate action to document, protect, and/or collect that evidence.

3. **THIRD PHASE**: Do an initial walk-through of the scene. The initial walk-through provides an overview of the entire scene so that the manager can identify hazards, threats to scene security, and the resources required to investigate scene.
   - The initial walk-through includes ONLY the manager, photographer, first responder, and lead case agent (if available).
     - Anyone who enters the scene introduces contamination to that scene.
     - The number of people in the scene should be limited to as few investigators as possible in order to minimize that contamination, until the scene can be initially documented with photography.
     - The photographer should be shooting the photos before anyone else goes into the scene in order to minimize contamination.
     - Overview photos of the scene are required during this phase.
       - Overview photos are photos taken of the overall scene. The goal of these photos is to fill the camera frame with as much of the scene as possible.
       - A second walk-through can be done once initial photos have been taken to protect the scene.
     - Supervisors, other scene investigators, district attorneys, and everyone else should not enter the inner perimeter until the initial walk-through and initial scene photography have been completed.
       - Plan a systematic method to search for, document, and collect the evidence.
       - Establish the plan for how this systematic method will progress and be completed.
         - Plan the types of searches (line, grid, spiral, etc.).
         - Plan for the patent cycle.
         - Plan for the latent cycle (if needed).
         - Remember to be flexible – the plans might change.

- Evaluate hostile crowds/environment and ensure evidence is secure.
- Evaluate weather conditions and ensure evidence is protected.
- Identify areas that need to be processed immediately (due to safety, weather, security, high traffic areas, and scene integrity).
  - It is always better to investigate a scene from outside to inside. This allows for perimeters to shrink during the course of the scene investigation.
  - It is always better to first investigate areas of a scene that are exposed to weather, crowds, or that are difficult to secure.
  - Make sure that initial evidence collection techniques do not compromise subsequent evidence collection techniques.
- Identify areas that do not need to be processed immediately (vehicles or other areas where evidence is protected from contamination or destruction).

4. **FOURTH PHASE**: Document and collect perishable evidence
   - Photograph perishable evidence first, even before photographing the entire scene.
     - Always take photos first without any evidence markers in them, and then take additional photos with evidence markers in them.
     - Take overview photos of the area around the evidence.
     - Take midrange and close up photos of the evidence.
     - Mid range and close up photos have specific details in them. The goal of these photos is to fill the frame of the camera first with the evidence and the area immediately around the evidence (mid range); and to fill the frame of the camera with the evidence itself (close up).
       - Then protect it or collect the evidence, and mark its location.
       - This evidence might include:
         - Fingerprints on the door knobs.
         - Footwear impressions or tire impressions.
         - Trace evidence.
         - The body, or evidence on the body.
         - Bullet holes, fingerprints on the body, etc.
       - The following is a list of suggested Items and areas to document. during this phase:
         - Climate (weather, indoor, and outdoor temps).
         - Lighting (day/night).
         - Location of lights (especially outside at night).
         - Fixtures (doors, windows, shades, gates).
         - Odors, color (gas, oil, cleaners, perfumes, smoke, fire).
         - Furniture (moved, in place).
         - Personal items – missing/in place.
         - Possible entry and exit locations and routes.
         - Changing or deteriorating (transient) evidence.
         - Melting ice or ice cream, impressions in snow, sand, etc.
         - Prints in high traffic areas (door knobs, entry, exit).
         - Appliances on/off hot/cold functioning/broken.
         - Vehicles - engine hot/cold, fresh damage.
         - Counters dusty, cleaned.

- Signs that areas of the scene are cleaned, dirty.
- Items in appliances (washing machine, dish washer, oven).

5. **FIFTH PHASE**: Initial Scene Documentation
   - Overview photos were taken during the initial walk-through of the scene. The fifth phase allows for additional overview scene photos, as well as mid range and close up photos to be taken.
   - If needed, videotape the scene and/or take back-up photos.
   - A sketch/diagram of the scene should be started during this phase, but after the photography has been completed.

6. **SIXTH PHASE**: **The Patent Evidence Cycle**
   - Search for evidence: This cycle starts with a systematic search for evidence. The evidence is not collected during the search. Its location should be marked with items such as flags, cones, or other materials designed to mark the location of the item without contaminating or destroying that item.
     a) The method of search (line, grid, spiral, zone, etc.) is determined by the number of personnel who are available to help.
     b) The search should be from the least intrusive/destructive methods to the most intrusive/destructive methods.
     c) Be careful not to destroy latent evidence during this phase of the investigation.
   - Walk-through: Complete a walk-through of the scene after the search for patent evidence has been completed and evidence identified. This walk-through is designed to make sure that everyone who is assigned to document the evidence knows what has been found at the scene, and to make sure the evidence is properly documented. Assuming these roles are not filled by the same person, the walk-through must include:
     - The Crime Scene Manager.
     - The Photographer(s)/Videographer.
     - The Sketcher.
     - The person who is listing the item on the evidence form.
     - Any other person who is responsible for documenting the evidence.
   - Technical Assignments (if needed): These tasks include, but are not limited to:
     - Bloodstain pattern analysis.
     - Trajectory analysis.
     - Accident reconstruction.
     - Arson investigation.
     - This segment requires crime scene investigators who have specialized training in the particular task that is required. This segment may not be required at every scene.
   - Additional walk-through (if needed): After the technical assignments have been completed, everyone who is assigned to document the evidence must again walk through the scene to make sure that the evidence is properly documented.
   - Document the evidence: After the walk-through is completed, ensure everyone documents the evidence in an organized manner.
     - Photographs can be taken.
     - Video or back-up photographs can be taken.
     - Note evidence on the diagram.
     - Document the evidence on an evidence form.

- Collect the evidence: Pursuant to policies established by both the Department of Public Safety (*OPR:17 Evidence/Property Handling*), and the appropriate forensics lab that might examine that evidence.
- After the evidence has been collected: The crime scene investigator has three options:
  - Start the Patent Evidence Cycle again with another systematic search.
  - Move to the Latent Evidence Cycle.
  - Conclude the investigation at this phase.

7. SEVENTH PHASE: **The Latent Evidence Cycle**

- This cycle follows the same series as the patent evidence cycle.
  - Systematic search.
  - Walk-through.
  - Technical assignments (if needed).
  - Additional walk-through (if needed).
  - Document the evidence.
  - Collect the evidence.
  - After the evidence has been collected.
    - Start the Patent Evidence Cycle again with another systematic search.
    - Start the Latent Evidence Cycle again.
    - Conclude the investigation at this phase.

8. THE ARROW IN THIS CYCLE:

- Any time the crime scene investigation might be required to move back to any previous part of the cycle.
  - Some of the reasons might include:
    - Evidence is found that is not included in the warrant
    - Circumstances might arise that make evidence perishable
    - Investigating the scene from outside to inside might require manager to run multiple cycles (outside scene and inside scenes, etc.)
- A scene might be so large or so complex that multiple investigators will need to work in multiple shifts, and will need to move through the cycles multiple times, in order to effectively investigate the crime scene.

SECTION 04 – CRIME SCENE RECONSTRUCTION: Crime scene reconstruction can be considered as follow-up to the crime scene investigation; however, in order to properly reconstruct the scene, it is often necessary to have the properly trained crime scene investigator at the scene during the scene investigation so the investigator can ensure all the necessary data is collected for the reconstruction.

- The analytical techniques used in Crime Scene Reconstruction include, but are not limited to, bloodstain pattern analysis, trajectory analysis, or other forensic analysis that is performed in a forensic laboratory.
- When doing a crime scene investigation or crime scene reconstruction, crime scene investigators use the scientific method.
- One cannot draw a conclusion in an investigation without moving through the scientific method, or without having data to support that conclusion, in the same way that one cannot successfully win a conviction in court without the evidence that the suspect committed the crime.
- The scientific method is a set of principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses.
    - The steps in this method are as follows:
        - Define the question.
        - Collect data.
        - Posit a hypothesis.
        - Classify and organize the data.
        - Test the hypothesis.
        - Define a conclusion.
- Oftentimes an investigator may develop a hypothesis and later obtain new data that proves the hypothesis to be wrong.
    - If that hypothesis is wrong, the investigator then starts again with defining the question and moves through the scientific method with the new data until he/she finds the best explanation of what happened.
- Peer review: Peer review is an important aspect of forensic analysis and is a fundamental part of science. When data is collected in a crime scene investigation for any form of crime scene analysis, such as bloodstain pattern analysis, trajectory analysis, or crime scene reconstruction, a minimum of two (2) crime scene investigators, trained in that discipline, shall be used so the work of one (1) investigator can be checked by another.

SECTION 06 – EVIDENCE COLLECTION PROCEDURES

A. General Procedures
B. Firearms
C. DNA
D. Trace Evidence
E. Fingerprint/Footwear/Tire Impressions
F. Digital Evidence
G. Other Evidence

A. GENERAL PROCEDURES

1. Investigators collect and package items based on classroom training through the New Mexico Law Enforcement Academy, on-the-job training, DPS Forensic Laboratories procedures for packaging and submission of evidence, or procedures established by a forensic expert that will examine the evidence. Any questions regarding the collection and packaging of evidence should be referred to the Department of Public Safety's Forensic Crime Labs, or other experts in the appropriate field of forensic science.

2. Refer to OPR: 17 *(Evidence/Property Handling)* for specifics.
   - Careful attention must be given to collect materials and substances from known sources whenever available, in order to submit samples to the forensic laboratory for comparison with physical evidence. Examples of known sources include, but are not limited to, fingerprints and palm prints, footwear patterns, tire patterns, DNA standards, hairs, fibers, fabrics, paint, glass, wood, soil, and tool marks.
     - Refer to the DNA section below for further directions on how to collect DNA samples.
     - When collecting known standards from an individual, such as blood, hair, saliva or fingerprints, a warrant or consent to search may be required.
     - If a DNA standard is required, one of two methods of collection can be used. Contact the forensic laboratory to determine which method is preferred by that lab.
       - Buccal swab - a sterile swab rubbed against the inside of the mouth (cheek).
       - Blood spot.

3. Photographs and/or videotape of the overall crime scene shall be taken in the following fashion:
   - Photos should be taken with and without evidence markers in the pictures, when possible.
   - **Overview photos** – Overview photos are usually the first photos taken of the scene or evidence. The goal of these photos is to fill the camera frame with as much of the scene as possible. The photos do not require a lot of individual detail.
   - **Midrange photos -** Midrange photos have specific details in them. The goal of these photos is to fill the frame of the camera with not only the piece of evidence, but also the area immediately around that evidence as a point of reference, so that the evidence can be located in the scene.
   - **Close-up photos** – Close-up photos have specific details in them. The goal of these photos is to fill the frame of the camera with the piece of evidence itself.

- This photo should be taken from an angle of 90 degrees to the item, when possible.
- A **ruler scale** should be placed next to items that will not be collected. They must be used to document pattern evidence, such as fingerprints, footwear impressions, tire impressions, bloodstain patterns, fracture patterns, and areas of damage to surfaces, objects, or body parts.
- These photos should be taken from an angle of 90 degrees to the evidence.
  - Once the items of evidence are identified, each item should be given a specific identifier (evidence number). The evidence number should consist of letters, numbers, or both, to distinguish one piece of evidence from another.

4. Sketches should be drawn to accurately depict the location of the evidence in the scene. Sketches should be made in addition to any photographs or videotapes made of the crime scene, or as directed by the crime scene manager. Sketches shall include the following information:
   - General layout.
   - Offense or case number.
   - Title or description of area.
   - Date.
   - Sketcher's name.
   - If drawn to scale, note the scale of measurement.
     - If not a scale, diagram, indicate "**not to scale.**"
   - Location of each item of evidence.
   - Location of significant features at the scene.
   - Compass direction.
   - Names of streets or landmarks or both.
   - Person who prepared the final diagram.
   - Person(s) who took the measurements.

5. Evidence containers will be marked when evidence is placed in them. The evidence manager, or officer who collected the item, should package each item of evidence separately and place the following information on the package in a way that will not damage the evidence inside:
   - Evidence number.
     - If the investigation includes multiple scenes, or locations from where evidence is collected, a unique series of letters/numbers must be used for evidence collected from each scene, to avoid the confusion caused by evidence from different scenes having the same evidence numbers.
   - Description of each item.
   - Date of collection.
   - Name of the person who collected the item.
   - Address/location where the item was collected.
   - Case number or incident number.

6. Evidence containers are sealed in a manner that prevents evidence from falling out of, cutting out of, or breaking out of the package.
   - The person who seals the package shall put his/her initials across the seal, and the date the package was sealed.

- If the package must be opened after it was sealed, the package will be opened in a different location from the original seal. When it is resealed, the person who reseals the package places his/her initials and the date over the new seal.
- Large items should be packaged with butcher paper or other suitable packaging. Smaller items should be packaged in paper bags or boxes.
  - Exceptions to this include:
    - Cash – in clear plastic bags
    - Drugs (other than Marijuana) – in clear plastic bags
    - Marijuana is packaged in paper bags or boxes.

B. FIREARMS: The collection of firearms and related evidence shall be conducted in a manner that will ensure the safety of all personnel involved and that will maintain the integrity of evidentiary items.

1. The condition of the weapon, the number of cartridges contained, and the position of the safety should be recorded, when possible.

2. If the weapon is a revolver, identify which cartridge, casing, or chamber is under the hammer, **before opening the cylinder,** as well as the order of the other cartridges or casings in the cylinder.

3. A sharpie or other fine tipped marker can be used to place a line in both flutes (grooves) of the cylinder, on either side of the chamber in question. Usually, there are no latent prints of value within in the flutes.
   - If the weapon is a semi-automatic, do not remove any cartridges from the magazine. Only remove the cartridge from the chamber.
   - Do not place anything through the barrel of the gun when securing the weapon.

4. When moving the weapon, avoid touching any location on the gun where fingerprints might be located.

5. Generally, firearms shall be unloaded before being transported as evidence. If it must be transported loaded, it shall be conspicuously tagged to indicate this fact, and sealed (if possible) in a rigid container that is also marked to indicate that the firearm has not been unloaded.
   - Contact the Forensic Lab Firearms Section prior to attempting to submit a weapon that cannot be unloaded.

6. All ammunition must be packaged in separate containers from the weapon.

7. Bullets should not be pried from objects or surfaces. Portions of the objects in which they are embedded should be removed with the bullet intact.

C. DNA: Evidence suitable for DNA analysis can be found at many crime scenes and is a powerful investigative tool for linking suspects to crimes, eliminating suspects, and identifying victims. All personnel should be aware of common sources of DNA evidence, ways to protect against contamination of samples, and basic collection and packaging guidelines.

1. Areas or objects that might contain DNA include locations where the individual might have left skin cells, hairs, or bodily fluids (such as semen, saliva, or blood) in sufficient quantities for a DNA profile to be obtained.

2. DNA is particularly sensitive and subject to contamination. Therefore, first responders in particular must be familiar with situations that will degrade, destroy, or contaminate DNA evidence, and observe the following precautions when possible. Personnel who have received classroom instruction and/or on-the-job training regarding evidence collection are responsible for collecting and packaging DNA evidence.
   - Wear latex or similar type gloves when dealing with possible sources of DNA.
   - Change gloves often.
   - Use clean or disposable instruments, sterile swabs or gauze, or clean gloves to collect the item, depending on what it is.
   - Clean instruments thoroughly with a 10 percent bleach solution or other appropriate cleaning method.
   - Wear a mask, if needed, to avoid contamination through sneezing or coughing over evidence.
   - Package evidence in paper bags or envelopes.

3. Never package DNA evidence in plastic bags.

4. Use sterile swabs to collect wet bloodstains on a large surface (such as a wall or the ground) that cannot be collected or packaged itself without contaminating the stain or destroying the bloodstain pattern.
   - Other biological substances, such as semen or saliva can be collected in the same way.

5. If the blood is dry, use one drop of distilled water on the end of the sterile swab, then place the end of the swab on the stain, allowing the moisture in the swab to soak up the blood.
   - Other biological substances, such as semen or saliva can be collected in the same way.

6. Materials, such as clothing with dried bloodstains, should be wrapped in paper so that the bloodstains are not dislodged or disturbed. Avoid folding the materials through the stain patterns. Smaller objects can be placed in envelopes or cardboard boxes.
   - Place a clean piece of paper between the folds of cloth to protect and isolate the stain from the unstained material.
   - Other biological substances, such as semen or saliva can be collected in the same way.

7. Air-dry wet evidence thoroughly before packaging. If it cannot be air dried, contact the forensic laboratory for recommendations.

8. Wet bloodstained materials should be dried prior to submission to a laboratory. Officers and agents should <u>not</u> use heaters, free-standing room fans, or intense light to facilitate drying as this may destroy the evidentiary value of the samples

9. If exigent circumstances dictate immediate action to prevent destruction of evidence, wet bloodstained materials may be rolled or folded in paper until they can be taken to a location where they can be dried.

10. Folding garments through stains should be avoided, if possible.

11. Bloodstained articles and blood samples should be transported as soon as possible to an evidence storage facility and should never be exposed to intense heat.

12. As in the case of bloodstains, clothing and bedding that may retain semen or other biological fluids should be air-dried (if wet), and are packaged separately in paper containers if possible.

D. TRACE EVIDENCE: Evidence almost always requires standards for comparison in order to be of value. The following are examples of possible sources of trace evidence.

1. If evidence, such as hairs or fibers, is embedded with other evidence, such as dried bloodstains on fabric, do not attempt to separate the evidence. Note its location in stain or on the object and package the entire item.

2. Pulled pubic hair from a suspect to compare with hair evidence\combed from a victim.
   - Check with the forensic lab before doing this, DNA might be a better alternative.

3. Paint chips or paint transfer from a car as a result of a collision or other damage.
   - Before collecting a control sample, contact the appropriate forensic lab to determine the best method for collection.

4. Vegetation or soil near the scene of a homicide to compare with the seedpods or soil found with a suspect.

5. Package trace evidence in paper, or package it in a manner that prevents the evidence from being lost from the package.

6. Collection of hairs or fibers:
   - Use a gloved hand or tweezers to collect hairs or fibers and place them in a paper envelope.
   - Tape-lifts are also and effective way to collect hairs or fibers.

7. Collection of insects on and around a body for entomology.
   - Contact a crime scene investigator or a forensic entomologist for guidelines on the collection of insects.

E. LATENT FINGERPRINTS AND FOOTWEAR / TIRE PATTERNS/IMPRESSIONS - Latent fingerprints can be found on weapons, stolen property, and on many different types of surfaces at crime scenes. Footwear patterns and impressions are often found in areas, such as entrances or exits, on doors that were kicked, and on items or surfaces that were stepped on during the crime.

1. Fingerprints
   - Fingerprint powder can be used on smooth non-porous surfaces.
   - It is preferable to treat the items with superglue fumes to fix the print before powdering the surface.
   - If the item is small enough to be packaged, it is often preferable to send it to the forensic lab to be processed for fingerprints.
     - Package the item loosely in a paper bag or box to prevent fingerprints from being rubbed off the item.
   - Objects that have a rough surface and those that have porous surfaces require specialized methods for fingerprinting. Contact the forensic lab or a crime scene

investigator for advice on how to process these items, or send them to the lab to be processed.
- Fingerprints are often found on pieces of paper. Contact the forensic lab or a crime scene investigator for advice on how to process these items, or send them to the lab to be processed.
- Fingerprints can also be found on packaging material (plastic bags, tape, etc.) that contains drugs.
- In order to preserve latent fingerprints, the packaging material should be put loosely in paper bags or boxes.
- Contact the forensic lab to answer any additional questions on proper packaging to preserve fingerprints.

2. Footwear and Tire impressions
   - Footwear/tire patterns can be documented with photography.
   - Footwear/tire impressions can be documented with photography and casts can often be made of the impressions.
   - Contact the forensic lab or a crime scene investigator for advice on how to process these items.

F. DIGITAL EVIDENCE - Computers and digital media are increasingly involved in unlawful activities. The computer may be contraband, fruits of the crime, a tool of the offense, or a storage container holding evidence of the offense. Investigation of any criminal activity may produce electronic evidence. Computers and related evidence range from the mainframe computer to the pocket-sized personal data assistant to the floppy diskette, CD or the smallest electronic chip device. Images, audio, text and other data on these media are easily altered or destroyed. It is imperative that law enforcement officers recognize, protect, seize and search such devices in accordance with applicable statutes, policies and best practices and guidelines.

1. **Recognizing Potential Evidence**

   A. Answers to the following questions will better determine the role of the computer in the crime:
      - Is the computer contraband of fruits of a crime?
        For example, was the computer software or hardware stolen?
      - Is the computer system a tool of the offense?
        For example, was the system actively used by the defendant to commit the offense? Were fake IDs or other counterfeit documents prepared using the computer, scanner, and color printer?
      - Is the computer system only incidental to the offense, i.e., being used to store evidence of the offense?
        For example, is a drug dealer maintaining his trafficking records in his computer?
      - Is the computer system both instrumental to the offense and a storage device for evidence? For example did the computer hacker use her computer to attack other systems and also use it to store stolen credit card information?

   B. Once the computer's role is understood, the following essential questions should be answered:
      - Is there probable cause to seize hardware?
      - Is there probable cause to seize software?

- Is there probable cause to seize data?
- Where will this search be conducted?

- For example, is it practical to search the computer system on site or must the examination be conducted at a field office or lab?
- If law enforcement officers remove the system from the premises to conduct the search, must they return the computer system, or copies of the seized date, to its owner/user before trial?
- Considering the incredible storage capacities of computers, how will experts search this data in an efficient, timely manner?

2. **Preparing for the Search and/or Seizure -** Using evidence obtained from a computer in a legal proceeding requires:
   - Probable cause for issuance of a warrant or an exception to the warrant requirement.
     Caution: If you encounter potential evidence that may be outside the scope of your existing warrant or legal authority, contact your agency's legal advisor or prosecutor as an additional warrant may be necessary.
   - Use of appropriate collection techniques so as not to alter or destroy evidence.
   - Forensic examination of the system completed by trained personnel in a speedy fashion, with expert testimony available at trial.

3. **Conducting the Search and/or Seizure -** Once the computer's role is understood and legal requirements are fulfilled:

   A. **Secure the Scene**
   - Officer safety is paramount.
   - Preserve area for potential fingerprints.
   - Immediately restrict access to computer(s).
     Isolate from phone lines (because data on the computer can be access remotely).

   B**. Secure the Computer as Evidence**
   - If computer is "OFF", do not turn "ON".
   - If computer is "ON"
   - Stand-alone computer (non-networked)
   - Consult computer specialist
   - If specialist is not available
   - Photograph screen, then disconnect all power sources; unplug from the wall AND the back of the computer.
   - Place evidence tape over each drive slot.
   - Photograph/diagram and label back of computer components with existing connections.
   - Label all connectors/cable ends to allow reassembly as needed.
   - If transport is required, package components and transport/store components as fragile cargo.
   - Keep away from magnets, radio transmitters and otherwise hostile environments.
   - Networked or business computers
   - Consult a Computer Specialist for further assistance
   - Pulling the plug could:

- Severely damage the system
- Disrupt legitimate business
- Create officer and department liability

4. **Other Electronic Storage Devices -** Electronic devices may contain viable evidence associated with criminal activity. Unless an emergency exists, the device should not be accessed. Should it be necessary to access the device, all actions associated with the manipulation of the device should be noted in order to document the chain of custody and insure its admission in court.

   A**. Wireless Telephones**
   - Potential Evidence Contained in Wireless Devices
     - Numbers called
     - Numbers stored for speed dial
     - Caller ID for incoming calls
     - Other information contained in the memory of wireless telephones:
       - Phone/pager numbers
       - Names and addresses
       - PIN numbers
       - Voice mail access number
       - Voice mail password
       - Debit card numbers
       - Calling card numbers
       - E-mail/Internet access information
       - The on screen image may contain other valuable information
   - On/Off Rule
     - If the device is "ON", do NOT turn it "OFF".
     - Turning it "OFF" could activate lockout feature.
     - Write down all information on display (photograph if possible).
     - Power down prior to transport.
     - Collect all power and connection cables for the device.
     - Collect all software related to the device.
     - If the device is "OFF", leave it "OFF".
     - Turning it on could alter evidence on device (same as computers).
     - Upon seizure get it to an expert as soon as possible or contact local service provider.
     - If an expert is unavailable, USE A DIFFERENT TELEPHONE and contact 1-800-LAWBUST (a 24:7 service provided by the cellular telephone industry).
     - Make every effort to locate any instruction manuals pertaining to the device.

   B. **Electronic Paging Devices**
   - Potential Evidence Contained in Paging Devices
     - Numeric pagers (receives only numeric digits; can be used to communicate numbers and code)
     - Alpha numeric pagers (receives numbers and letters and can carry full text)
     - Voice Pagers (can transmit voice communications (sometimes in addition to alpha numeric)

- 2-way pagers (containing incoming and outgoing messages)
- Best Practices
  - Once pager is no longer in proximity to suspect - turn it off. Continued access to electron communication over pager without proper authorization can be construed as unlawful interception of electronic communication.
- Search of stored contents of pager.
  - Incident to arrest
  - With probable cause + exception
  - With consent

C. **Facsimile Machines**
- Fax machines can contain:
  - Speed dial lists
  - Stored faxes (incoming and outgoing)
  - Fax transmission logs (incoming and outgoing)
  - Header line
  - Clock setting
- Best practices
  - If fax machine is found "ON", powering down may cause loss of last number dialed and/or stored faxes.
- Other Considerations
  - Search issues
    - Record telephone line number fax is plugged into
    - Header line should be the same as the phone line; user sets header line.
    - All manuals should be seized with equipment, if possible.

D. **Caller ID Devices**
- May contain telephone and subscriber information from incoming telephone calls.
- Interruption of the power supply to the device may cause loss of data if not protected by internal battery backup.
- Document all stored data prior to seizure or loss of data may occur.

G. OTHER EVIDENCE

1. **NEEDLES** – Hypodermic syringes or other sharp objects must be packaged in a puncture proof container, placed inside an evidence envelope/package, properly sealed and labeled with a universal biohazard symbol (when applicable).
   - Do not attempt to replace a cover on a needle. Place it in a sharps container or break the needle off before packaging the syringe.

2. **KNIVES AND SHARP WEAPONS –** Secure knives and sharp weapons in cardboard evidence boxes (or appropriate plastic containers) covering the sharp end.

3. **OTHER SHARP ITEMS –** Glass, razor blades or other similar hazardous items will also be placed in a suitable container.

4. **Arson and Explosive Evidence** is normally collected by either an arson investigator or a bomb technician. If the evidence must be collected prior to it being collected by an expert, the evidence must be sealed in an unlined unused paint can or other appropriate container.
   - Contact the appropriate expert for advice on the collection of this type of evidence.

SECTION 06 – EVIDENCE MANAGER/CUSTODIAN AND TRANSFER OF EVIDENCE

A. Evidence Manager

- An **Evidence Manager** is one person at each scene who manages the evidence that is collected by the investigators. This evidence is secured at the scene in a manner that prevents its loss or contamination, until it can be transported to an appropriate storage facility.
- It is not always feasible for the **Evidence Manager** to physically collect each piece of evidence at a scene; however, the evidence should be collected in the presence of the Evidence Manager.
- Evidence that is not collected in the presence of the **Evidence Manager** is transferred to the **Evidence Manager**, pursuant to DPS policy *OPR: 17 (Evidence/Property Handling).*

B. Evidence Custodian

- During large crime scene investigations where there are multiple crime scenes in different locations, the task of **Evidence Custodian** should be assigned to personnel who are responsible for coordinating a central location where all of the evidence can be taken when the various scene investigations are completed.
- The position of **Evidence Custodian** is particularly effective when multiple agencies are involved with the investigation, or when multiple investigators are working at multiple locations at the same time.
- This central location for evidence is a secure location that prevents the degradation or contamination of the evidence from each of the scenes.
- Once all of the scene investigations are completed, and all of the evidence is at the central location, all of the evidence can be transported from this central location to a formal evidence storage facility.
  - For cases that are handled by the Department of Public safety, the formal evidence storage facility is a department-approved evidence storage location.
  - For cases in which investigators assist another agency, the formal evidence storage facility is the location where the other agency takes custody of the evidence from DPS personnel.
- The **Evidence Custodian** must ensure that each piece of evidence collected from different crime scenes has a unique evidence number assigned to that particular item, so that two pieces of evidence do not have the same number.
  - If the **Evidence Custodian** has to renumber a piece of evidence from one scene that has the same number as evidence from another scene, the **Evidence Custodian** must document the change of number on the package that contains the item of evidence and on the DPS receipt for property/evidence (chain-of-custody) form.
  - Documentation of this change includes both the original number assigned to the evidence at the scene, as well as the new number assigned to the evidence by the **Evidence Custodian.**

SECTION 07 – RELEASING THE CRIME SCENE

- Prior to releasing the scene, the Crime Scene Manager, in concurrence with the supervisor and case agent, should ensure that the following steps are taken:

  1. Complete overall measurements and photographs of the crime scene.
  2. Conduct a debriefing with the other crime scene investigators to share information and identify priorities for follow-up investigation, including the supervisor and case agent in the debriefing, if possible. Review evidence collected, discuss preliminary findings, and identify potential forensic tests and any actions needed to complete the crime scene investigation.
  3. If possible, conduct any at scene work that is required for the crime scene reconstruction, such as reenactments or illustrations of the particular analysis used for that reconstruction (bloodstain pattern analysis, trajectory analysis, etc.) before the scene is released.
  4. Conduct a final walk-through of the crime scene to determine if any items of evidentiary value were overlooked and to double check for equipment or materials that may have been left behind.
  5. Determine if the scene needs to be held until the autopsy is completed.
  6. Ensure that a copy of the search warrant and return and inventory are left with the appropriate person or in the appropriate location.
  7. Determine when the crime scene can be released.