The Crime Scene

**The First Steps**

* The officer to arrive at the scene is responsible for securing the crime scene.
* First priority should be given to obtaining for individuals in need of it and to arresting the .
* As soon as it is possible, extensive efforts must be made to exclude all from the scene.
* Once the scene is secured, the must begin.
* Recording of the crime scene becomes a critical piece to the investigation process.

**Recording Methods**

* are the three methods for crime-scene recording.
* Ideally all three should be employed; however, as is often the case, personnel and monetary limitations may prohibit the utilization of photography at every crime site.

**The Search**

* The search for physical evidence at a crime scene must be thorough and .
* The search pattern selected will normally depend on the size and locale of the scene and the number of collectors participating in the search.
* For a factual, unbiased reconstruction of the crime, the investigator, relying upon his or her training and experience, must not overlook any .
* Physical evidence can be anything from massive to microscopic .
* Often, many items of evidence are clearly visible but others may be detected only through examination at the crime laboratory.
* For this reason, it is important to collect possible carriers of trace evidence, such as , in addition to more discernible items.

**Beyond the Crime Scene**

* The search for physical evidence must extend beyond the crime scene to the room of a deceased victim.
* Here, the will carefully examine the victim to establish a cause and manner of death.
* As a matter of routine, tissues and organs will be retained for and examination.
* At the same time, arrangements must be made between the examiner and to secure a variety of items that may be obtainable from the body for laboratory examination.
* The following are to be collected and sent to the forensic laboratory:

2. Fingernail scrapings
3. Head and pubic hairs
5. Vaginal, anal, and oral swabs (in sex-related crimes)
7. Hand swabs from shooting victims (for gunshot residue analysis)

**Packaging**

* Each different item or similar items collected at different locations must be placed in containers. Packaging evidence separately prevents damage through contact and prevents .
* The well-prepared evidence collector will arrive at a crime scene with a large of packaging materials and tools ready to encounter any type of situation.
* and similar tools may have to be used to pick up small items.
* Unbreakable with pressure lids are excellent containers for hairs, glass, fibers, and various other kinds of small or trace evidence.
* Alternatively, , or cardboard pillboxes are adequate containers for most trace evidence encountered at crime sites.
* Ordinary should not be used as evidence containers because powders and fine particles will leak out of their corners.
* Small amounts of trace evidence can also be conveniently packaged in a carefully folded paper, using what is known as a
* Although pill bottles, vials, pillboxes, or manila envelopes are good universal containers for most trace evidence, two frequent finds at crime scenes warrant special attention.
  + If are stored in airtight containers, the accumulation of moisture may encourage the growth of mold, which can destroy the evidential value of blood.
  + In these instances, wrapping paper, manila envelopes, or paper bags are recommended packaging materials.

**Chain of Custody**

* Chain of Custody*—*
* Continuity of , or the chain of custody, must be established whenever evidence is presented in court as an exhibit.
* Adherence to standard procedures in recording the of evidence, it for identification, and properly completing evidence submission forms for laboratory analysis is critical to chain of custody.
* This means that every person who handled or the evidence and where it is at all times must be accounted for.

**Obtaining Reference Samples**

* Standard/Reference Sample*—Physical evidence whose origin is , such as blood or hair from a suspect, that can be compared to .*
* The examination of evidence, whether it is soil, blood, glass, hair, fibers, and so on, often requires with a known standard/reference sample.
* Although most investigators have little difficulty recognizing and collecting relevant crime-scene evidence, few seem aware of the necessity and importance of providing the crime lab with a thorough sampling of materials.

**Special Forensic Science Services**

* After a human body expires there are several stages of death.
  + results in the shortening of muscle tissue and the stiffening of body parts in the position at death (occurs within the first 24 hrs. and disappears within 36 hrs.).
  + results in the settling of blood in areas of the body closest to the ground (begins immediately on death and continues up to 12 hrs.).
  + results in the loss of heat by a body (a general rule, beginning about an hour after death, the body loses heat by Fahrenheit per hour until the body reaches the environmental temperature).