

Simple 
 Schooling

Forensic Science



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Forensic Science"

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"Forensic Science"

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Unit Five - Documentation of the Crime Scene, Evidence, and Witnesses



Unit Five - Documentation of the Crime Scene, Evidence, and Witnesses

The first responders and the initial assessment and documentation of the crime scene will set the stage for everything to come. Mistakes made at this juncture can greatly influence whether or not the guilty party, if found, is brought to justice, or slips free on a technicality.

You were presented with a general list of procedures detailing crime scene investigation in Unit Two. In this unit we will concentrate on the specific actions required for documenting the crime scene, collecting and documenting evidence, and interviewing the witnesses.

All of the above mentioned acts should be carried out methodically and with purpose.

The first responders should have set up a boundary of the crime scene before investigators arrive. If evidence is obvious to them, markers should be placed nearby to prevent destruction of the object or observation.

The investigator should determine where the point of entry to the crime scene took place as well as the point of exit. The point of entry is where the suspect gained access to a building, car, or a residence. It might be a window, a door, or a heating duct. It is important that the point of entry be secured so important evidence such as clothing fibers, fingerprints, or hair samples can be preserved.

The point of exit may or may not be the same as the point of entry, but again it is important to secure the area to avoid contamination of potential evidence.

The first responder should brief the investigator of any knowledge gained since arriving on the scene. It is very important that nothing in the crime scene be disturbed until there has been a thorough documentation with a video camera and photographs.

The documentation begins with the first responder interview. Once that information has been obtained the videographer should enter the scene and proceed to slowly and methodically record the area or rooms involved from every angle. This ensures that the crime scene can be reconstructed at a later date and used to formulate theories. Evidence should also be videotaped if present.

After the video is made the scene should be photographed. Evidence should be photographed in close up detail just as it was when discovered. After the photographs a sketch or map will also be made.

Everything at the crime scene should be documented for further evaluation. The documentation contains several basic parts:

- Summary
- Scene
- Processing
- Evidence collected
- Pending

The **summary** contains no opinions about the crime or the scene at hand. It is merely stated facts of the situation. It might read

something like this: "At the request of dispatch, this writer was asked to respond to a hit and run accident involving a light blue Chevy truck and a yellow Toyota at the intersection of Main Street and Center Avenue. The driver of the Chevy truck fled the scene on foot. The driver of the Toyota called 911 for assistance. Upon arrival a request for emergency medical services was made."

The **scene** is a description of the area upon arrival. For example: "The door of the Chevy truck was ajar, the radio was still on, and the engine running. There was a brown wallet on the seat, an opened coke can in the drink holder, and the windshield was cracked and had blood on it. There was blood on the steering wheel." In the scene all evidence that can be identified at the time should be noted, the weather conditions, and any other detail that might help in fitting the pieces of the crime together.

Processing is used to describe the actions of the officers and investigators while on scene.

The **Evidence collection** portion of the crime scene investigation will detail how the evidence was collected, who did the collection, where it was taken and for what purpose. Every jurisdiction can perform these steps a little differently and bigger cities might have specialized personnel who will come out to the crime scene especially for collection and documentation purposes. Physical Evidence is important because it can:

- Prove that a crime has been committed
- Establish any key elements of a crime
- Link a suspect with a scene or a victim
- Establish the identity of a victim or suspect
- Corroborate verbal witness testimony
- Exonerate the innocent

Some evidence will require careful preservation techniques such as proper temperature. This must all be documented in the report. Trace evidence, such as hair strands, clothing fibers, and the contents of a vacuum bad will also be recovered and documented.

Each type of evidence will then be sent to its proper place to be analyzed. Hair and blood will go to the DNA lab - fibers, soil, paint chips, and glass will go to trace evidence lab - and illegal drugs and unknown substances will go to the chemistry or toxicology lab.

If a crime scene is also a vehicle, it must be towed to a secure location. If the crime scene is a house the doors must be sealed. If the crime scene is an outside area crime tape is used to rope off the boundaries.

Witness statements are not considered part of the physical evidence collection. Typically the investigators will interview witnesses and document what they say. The witness will also be asked to make a written statement. Credibility of witnesses is always be a concern. Your jury will not pay much attention to a drunk homeless person who was half asleep when he witnessed something, but they will give more credence to a upstanding housewife who saw something while looking out her window as she did the dishes.

Still, all witness statements must be taken and each one is but a single piece to the puzzle. Sometimes they will fit together and make sense, other times they will be inconsequential. Like other clues, that information can not often be determined immediately and more clues must be found before accepting or discarding a witness statement as fact.

The following are often used as physical evidence at a crime scene:

- Fingerprints
- Bite Marks on skin or other objects (a pencil maybe?)
- Broken Fingernails from a struggle
- Documents that may have a handwriting sample
- Blood and Body Fluids
- Firearms and Toolmarks (marks deemed to be made by certain tools)
- Shoeprints and Tire Tracks can be on hard surfaces or soft surfaces. Pictures should be taken of hard surface marks and impressions or castings should be taken on soft surfaces such as dirt or mud.
- Fracture Matches (such as paper torn from a book and the bits left inside the book. These two "fractures" can be "matched up" and provide a reasonable conclusion that one belongs with the other.
- Hair
- Fibers from clothes or any other material such as rope
- Paint from a car that may indicate a collision
- Glass from breaking and entering or from a car headlight in a crash
- Pills or medications used for poisoning, overdose, or drug interactions
- Illegal drugs and paraphernalia used with these drugs
- Alcohol bottles and their contents
- Other Trace Evidence which could be connected to the crime in any way

Background investigations should also be performed on all witnesses and suspects to try and find any previously unknown connections which could lead to more clues.

Read the case study evidence and answer any questions that follow.

Exercises for Unit Five

Vocabulary

Define the following terms and phrases:

1. Methodically -

2. Point of Entry -

3. Point of Exit -

4. Trace Evidence -

5. Fracture Matches -

6. Physical Evidence -

7. Crime Scene Witness -

8. Fibers -

9. Credibility -

10. Exonerate -

Short Answer

Write a brief answer to each question

How can trace evidence be used to help solve a crime?

Name a few different kinds of trace evidence and state where these bits and pieces might originate from if you found them while searching the crime scene.

What is credibility and why is it important when questioning witnesses and then using their information to fit clues together?

Why is the boundary around the crime scene important?

Name several mistakes that first responders and investigators could make when processing the crime scene and collecting evidence.

Crime Scene Summary for Miss Sally's Murder at Sunnyside Apartments

Summary:

Upon arrival this officer approached the Sunnyside apartments from the parking lot alley and noticed that the window of the northwest apartment, the one later discovered to belong to the deceased, was open. There were no foot prints beneath the window even though 3 inches of snow fell overnight and the temperature was still at 5 degrees at 6:15 AM.

Up on entering the courtyard from the parking lot alley, this officer noticed that magnesium chloride had been used to melt the snow and ice and the sidewalk slush was slightly tinted blue.

The Landlord came out of his apartment and led me to Miss Sally's door, which was ajar, and I proceeded to enter the apartment. I stopped at the front door after noticing a puddle of water, presumably from the Landlord's boots when he entered the apartment earlier. A marker was placed and a picture was taken.

No lights were turned on inside and the apartment was determined to be 17 degrees F using a Kestrel Portable Weather Station. An assessment was made and the open window was determined to be the open window.

The deceased was lying on the couch. On the coffee table was a can of Diet Pepsi and a half eaten powdered donut. Some white powder was on the coffee table next to the plate.

Investigators arrived at 6:45 AM, were briefed, and then the crime scene was video-taped and photographed. Evidence was collected by individual departments, each one approaching the scene one at a time to avoid contamination. Each piece was sent to the appropriate investigative facility after being logged and properly stored.

Witnesses were interviewed and statements were taken.

Evidence Report for Miss Sally's Murder at Sunnyside Apartments

All evidence was collected according to all department policies and procedure and in such a way as to minimize contamination of the crime scene. Each item was logged in, tracked, and stored using proper conditions.

Evidence list:

Video of crime scene

Photograph of clear liquid in front of front door

Sample of clear liquid on floor in front of the front door

Photo of open window, both inside and outside

Photo of ground in front of open window (outside)

Smudged Fingerprint photograph from bedroom light switch

Smudged fingerprint from front door

Half eaten powdered donut

White bakery bag

House keys

Sample of white powder residue from coffee table

Photograph of window locks

Photograph of front door lock

Magnesium chloride tinted snow from courtyard

Notes:
