The goal of crime scene investigation is to **recognize**, **document**, and **collect** evidence at the scene of a crime. Solving the crime will depend on piecing together the evidence to form a picture of what happened at the crime scene.

When discussing Locard’s Exchange Theory, the **intensity**, **duration**, and **nature** of the materials in contact determine the **extent** of the transfer.

7 S’s of Crime Scene Investigations:

1. **Secure the scene**
2. **Separate the witnesses**
3. **Scan the scene**
4. **See the scene**
5. **Sketch the scene**
6. **Search for evidence**
7. **Secure and collect evidence**

Securing the Scene

* make sure all individuals are safe & secure evidence
* Obtain medical assistance if needed
* **Arrest** suspects
* **Isolate** the area
* Exclude all unauthorized personnel
* Put up tape, ropes, **barricades**, or position guards so no one may enter/leave (keep a **security log** of all who visit scene)
* Prevent the loss of evidence

Separate the Witnesses

Witnesses must not be allowed to **talk** to one another. This prevents them from working together to create a story (**collusion**).

Scan the Scene

Forensic examiners scan the scene to see where **photos** should be taken. The primary and secondary crime scenes must be determined.

* 1. The primary crime scene is where a crime actually **occurred**.
	2. A secondary crime scene is in some way related to the crime but is not where the actual crime **took place**

See the Scene

A crime scene examiner looks at the scene. The **Photography Unit** takes photos of the overall area and close up photos with and without a measuring **ruler**.

Sketch the Scene (May be done simultaneously with photographing the scene)

* **North** should be labeled and a scale of distance should be included
* All important objects (weapon and body) should be measured from **two immovable landmarks**
* Any other objects in the vicinity of the crime should be included in the sketch (ex. Doors, windows, furniture, trees, vehicles, etc.)
* Also include: **Date**, **time**, **location**, case number, and **names** (Sketched by and Verified by)
* Later, a final copy (usually made on computer) will be made for presentation in court.

Search for Evidence

A pattern should be walked and location of evidence marked, photographed and sketched.

A **flashlight** or **black light** may be used to help find trace evidence.

|  |  |
| --- | --- |
| **Spiral:**  | **Grid:**  |
| **Linear:**  | **Quadrant or Zone:** |

Secure and Collect Evidence

* All evidence must be properly packaged, sealed and labeled using specific techniques and procedures.
* Packaging Evidence
	+ Metal or plastic **forceps** may have to be used

 to pick up small items.

* + Plastic **pill** bottles with lids or small envelopes are preferred containers for hairs, glass, fibers, and other kinds of **trace** evidence.
	+ Liquids and arson remains are stored in **airtight**, unbreakable containers.
	+ Bloodstained materials must be packaged in wrapping paper, manila envelopes, or paper bags to prevent the growth of **mold** which can destroy the evidential value of the blood. Air must be able to flow around the evidence to prevent **moisture** buildup.
	+ Charred debris from a fire must be sealed in an airtight container, such as new metal paint cans, to prevent any volatile petroleum residues from **evaporating**. This could be evidence of arson.
	+ An **evidence log** and a **chain of custody** must be attached to the evidence container.
	+ Includes description of evidence, name of suspect, name of victim, date and time of recovery, signature of person recovering the evidence, and signature of any witnesses present during collection.
	+ Chain of Custody- A list of all persons who came into **possession** of an item of evidence.
	+ Each person who comes in contact with a piece of evidence must use proper procedure and protocol in order to maintain responsible handling of evidence from crime scene to courtroom in order for the evidence to be **admissible** in court.
	+ **Control** samples should also be taken from the victim for purposes of **exclusion** (blood, hair, etc.). Control samples are from a known origin.
	+ The standard/reference samples are obtained from the victim, family members, any paramedics/police officers who may have been in the crime scene, suspects, and other known sources.
	+ When there is bloodstained evidence, a whole blood sample (withdrawn from a vein) or **buccal** (cheek) swab must be obtained from all crime scene participants.
	+ Often crime scene investigators are unaware of the importance of including standard/reference samples and substrate samples, but these are crucial to the investigation. The evidence is often meaningless without them.

Crime Scene Investigation Team Might Include:

* First Police Officer on the scene
* Backup Police and possibly the **district attorney**
* **Medics**
* Investigator/**Detective**
* **Medical Examiner**
* Photographer and/or

 Field Evidence Technician

* Lab Experts