

January 27

CRIME SCENE EVIDENCE

Crime Scene evidence

- ➔ Physical evidence : establish a crime has been committed or provides a link between crime and its victim or a crime and its perpetrator
- ➔ If used effectively, physical evidence need to be first recognized at the crime scene
- ➔ If the investigator cannot recognize physical evidence or cannot properly preserve it for laboratory examination, no amount of sophisticated laboratory instrumentation or technical expertise can salvage the situation and thus the evidence needs to be preserved carefully.

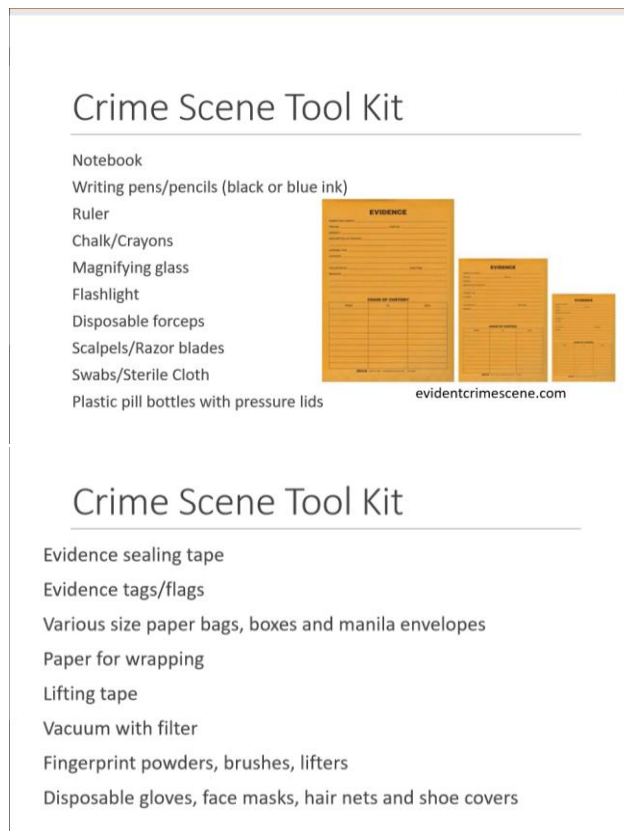
Collection Procedures :

Hair , powder residues, drugs : may not be readily visible. Thus we need containers that can carry them like clothing, vacuum sweeping, fingernail scraping, in addition to more discernible items.

- ➔ Also, we need to make sure that the evidence doesn't get tampered with – no folding, scraping, changing, any contamination.
- ➔ Use latex or nitrile gloves, disposable forceps, sanitised equipment.
- ➔ Try and keep evidence as natural and original condition as possible.

Packaging

- ➔ Similar items or each different items collected in different locations should be stored in separate containers.
- ➔ The well-prepared evidence collector will arrive at a crime scene with a large assortment of packaging materials and tools ready to encounter any type of situation.



➔ For biological evidence collection – Disposable gloves, face masks, hair nets and shoe cover

➔ Forceps – small evidence (hair, fibres)

➔ manila envelopes, screw-cap glass vials, or cardboard pillboxes are adequate containers for most trace evidence encountered at crime sites. We cannot use ordinary mailing envelopes since they are a little open from the side and hence chances of contamination or leakage.

➔ Small amounts of trace evidence can also be conveniently packaged in a carefully folded paper, using what is known as a “druggist fold”.

➔ Arson – Evidence from arson scenes should be packaged in airtight metal or glass to prevent any loss of accelerant vapors

➔ If biological or bloodstained materials are stored in airtight containers, the accumulation of moisture may encourage the growth of mold, which can destroy the evidential value. In these instances, the material should be allowed to air-dry before being packaged in wrapping paper, manila envelopes, or paper bags.

If collecting blood or any DNA containing specimens, we need to be careful to not touch with bare hands, or cough and sneeze and leave our DNA there. So use face masks, gloves, forceps.

Chain of custody

List of all persons who came into the possession of an item of evidence

→ The knowledge of where the evidence has been all the time should be known and maintained. This is called the chain of custody.

Obtaining Reference Samples

→ Standard/Reference Sample - Physical evidence whose origin is known, such as blood or hair from a suspect, that can be compared to crime-scene evidence.

Even soil, fibres, glass and not only hair, blood - they need to have a reference. Like soil, can have reference of the same soil from outside of the crime scene.

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 standard/reference materials

Submitting Evidence :

Either personal delivery or of mailing then no damage should happen. Care must be taken to prevent any breakage or other accidental destruction during transit to the laboratory.

Many laboratories have the evidence submission form that accompanies all evidence submitted. Case information provided on this form enables the laboratory analyst to make an intelligent and complete examination of the evidence.

Crime scene safety

- It is recommended by the International Association for Identification Safety Committee that crime scene personnel wear a minimum of latex/nitrile gloves (double gloved) and protective shoe covers. In cases of large contamination areas, coveralls are also recommended.

→ Since, we have no idea that the person from whom the bodily fluids come from can be infected with some disease.

→ For areas with infected dust, we need more safety items like goggles, face masks, respirator, face shield.

→ Personnel should be alerted to sharp objects, knives, hypodermic syringes, razor blades, and similar items.

→ Personnel should maintain a red biohazard plastic bag for the disposal of contaminated gloves, clothing, masks, pencils, wrapping paper, and so on. : because all the gloves and stuff we used is contaminated.

→ HIV and hepatitis B

Collection Techniques

- 1) Foot/tool impressions
- 2) Latent fingerprints (eg in dust)
 - ➔Developing techniques include dusting powders, chemical agents, lifting tape & fingerprint cards
- 3) Hair, fibres, glass particles
 - ➔disposable forceps
 - ➔lifting tape
 - ➔vacuum with filter
- 4) Biological evidence (blood, saliva, semen, unknown fluids)
 - ➔sterile swabs
 - ➔scalpels
 - object cut away
- 5) Powders, Soils and Unknown Granular Particulate Matter ◦ Sterile scoopulas /popsicle sticks to transfer to packaging
- 6) Weapons/tools
 - ➔Often large enough to collect by hand and place directly into preservation packaging

Search and Seizure Protocols USA

- The removal of any evidence from a person or from the scene of a crime must be done in conformity with Fourth Amendment privileges: "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizure, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."

In USA we can collect evidence without warrant under 4 circumstances

- 1) In case of emergencies
- 2) To prevent immediate loss or destruction
- 3) Search of person and property within the immediate control of the person provided it is made incident to a lawful arrest

However, if person is in car, we can't search the house. Similarly, if the person is in a car in garage, we probably want a warrant to search the house.

- 4) A search made by consent of the parties involved.

Few examples :-

Search and Seizure Landmark Cases USA

- In the case of *Mincey v. Arizona*, the Court dealt with the legality of a four-day search at a homicide scene and determined that the evidence was illegally seized because a warrant was never issued and the circumstances of the case did not justify a warrantless search.

SO they should have given a reason to go back before just going back and collecting without warrant.

EXAMPLE #2 SIMPSON TRIAL

O.J. Simpson Case: The Crime

- Some time between 10:15pm and 10:40pm on June 12, 1994, Nicole Brown Simpson and Ronald Goldman were stabbed to death outside Nicole's condominium in Brentwood, L.A.

O.J. Simpson Case



The O.J. Simpson Case: An Investigative Nightmare



Simpson's Highly Publicized Involvement

Simpson was an early suspect

In front of a televised audience, police cars and helicopters chased Simpson's white Ford Bronco at 100km/h across Route 405 in southern California

The car was driven by A. C. Cowlings, a friend and an ex-football player teammate, while Simpson sat in the back seat with a gun.

Simpson had failed to show up for his arraignment on the charges of the double murder

At the end of the car chase, his Rockingham Avenue estate, Simpson was arrested

The Evidence

- DNA from hair samples found on Goldman's body could not be excluded as being the same as the DNA retrieved from O. J. Simpson

- A trail of bloody shoeprints near the murder scene were estimated to be made by a man's shoe, size 12—the same size that Simpson wears

- DNA from a pair of bloody socks found in O. J. Simpson's bedroom could not be excluded as being the same as Nicole's DNA

- Blood found on Simpson's Ford Bronco could not be excluded as being the same as the DNA from both victims

- Blood found at the crime scene could not be excluded from that of O. J. Simpson •Simpson had a cut on his left hand

- A leather glove found near both of the victims had blood on it that could not be excluded from being the same as that of both Simpsons and, separately, of Goldman

- A matching glove, with bloodstains on it, was also recovered on Simpson's own estate

☐ Ms. Simpson bought Simpson two pair of such gloves in 1990

☐ A long strand of blond hair similar to Ms. Simpson's was also found on that glove

Hairs and Fibres

- Hairs found in a dark knit cap were similar to Simpson's hairs; fibres on a cap were similar to those in the carpeting of Simpson's Ford Bronco; dark blue cotton fibres were found on Goldman

But Simpson had an alibi : Simpson's alibi was that he was hitting golf balls in his own backyard • But no witnesses could confirm his alibi

➔ But the case unravelled because, after collecting blood from Simpson after collecting was taken to the crime scene to give to the crime scene investigators and not the laboratories.

➔ And so he said he was being framed, even after having so many evidences against him. Thus he was not charged of the murders

➔ This case shows why we need guidelines and importance of handling of the evidence. Thus, it became

evidently clear that investigation protocols were required, particularly the DNA analysis and the footwear impression examination.

➔ Detailed guidelines for the investigations of homicides, crime scene processing, and arson investigation have since been drafted by the National Institute for Justice.