



**Criminal Investigation**

CJA-241

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**Types of Evidence**

- We will be reviewing the required reading of chapters 2,3,4,5 & 9.
- The student will be capable of:
  - Identifying different types of evidence;
  - Identify the role of each type
  - Compare direct to Circumstantial
  - Identify the resources and the laboratory services required
  - Continue rolling fingerprint cards

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
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## Homework

- Brief summary of Supreme Court case re: surveillance
  - Use of surveillance
  - Type of invest where it may be used
  - Importance of warrant for surveillance
- California v. Beheler, 463 U.S. 1121 (1983)
- Berkemer v. California, 468 U.S. 420 (1984)
- Stanbury v. California, 511 U.S. 318 (1994)

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## Types of Evidence

- Direct Evidence – Witness that through one (or more) of the five senses, experienced something relative to the crime.
- Circumstantial Evidence – Evidence from which an inference can be drawn, such as physical evidence.

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## Types of Evidence

- Locate witnesses immediately
- Separate witnesses as soon as possible.
  - Do not permit them to discuss incident
  - Retroactive Interference
- Obtain a description of the suspect for distribution
- Obtain a description of the crime for distribution
- Record witness identities and locations.

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## Types of Evidence

- If a witness states that they are not really a witness, have them sign a paper to that effect.
  - Great for impeachment at trial later.
- When revisiting a crime scene for witnesses:
  - Visit at same time +/- one hour, every day 2 weeks
  - Visit at same time and day of week, 3-4 weeks

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## Types of Evidence

- Neighborhood Canvass
  - Friends and relatives
  - Door-to-door
    - Residents, shopkeepers and employees
    - Delivery persons, utility workers, service personnel
    - Bus and taxi drivers
- Pleas for public cooperation
  - Separate out theory calls from witness calls.

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## Types of Evidence

- Circumstantial Evidence
  - Ballistics – study and identification of firearms, bullets, cartridges, and shotgun shells.
    - Interior ballistics – functioning of firearms through the firing cycle
    - Exterior ballistics – study of projectiles in flight
  - Do NOT pick-up a gun by putting something in the barrel
    - Pick-up by the grip area

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SLOW DOWN



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## Types of Evidence

- Firearms
  - Name of manufacturer and serial number
  - Caliber and type of weapon
    - Use UNKNOWN for any uncertain items of ID
  - Never dig a bullet out with a pocket knife
  - Look for impact locations of the bullet to ascertain its correct trajectory if unknown
  - You CAN pick cartridge cases up by inserting a pencil into them.

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## Types of Evidence

- Gun Shot Residue (GSR)
  - Antimony sulfide, barium nitrate and lead styphnate with zinc or copper or nickel
  - Test only good for about one hour
- Knives
  - List blade length and style of knife
- Don't ignore common items, they can be evidence also.

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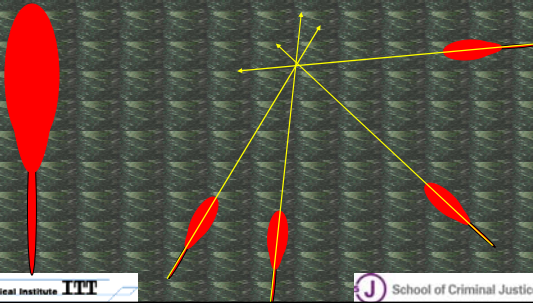
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## Types of Evidence

- Blood drops tell you location of incident.



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## Types of Evidence

- Blood Spatter can also
  - Tell angle of impact
  - Force involved
  - Type of object applying force
  - Number of blows struck
- Imprints/Impressions
  - Imprints – Markings left on a surface by a protruding part of an object

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## Types of Evidence

- Imprint examples
  - Bloody hand print
  - Oily tire mark
- Impression – pressed into a material that is softer than that making the impression
- Impression examples
  - Shoe or foot imprint in dirt or snow
  - Tire imprint in mud
  - Snow angel

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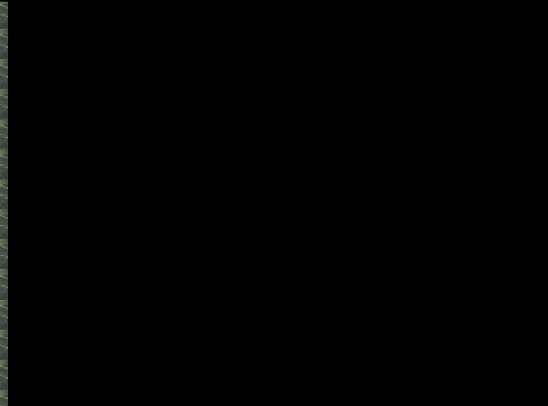
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## Types of Evidence

- NEVER attempt to match a tool to a tool mark, it destroys the evidence.
- Glass bends when force is applied
  - When that force exceeds the capability of the glass to bend, it breaks
  - When looking at a hole in a window, the force was applied from the smaller side of the hole.
  - The intruding item exits on the larger side.

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## Types of Evidence

- Burned documents are not necessarily gone, they can be restored in the lab
- Fibers can be good sources of evidence
- Hair sucks as evidence
- Seminal fluid is good evidence
- Drugs should be identified by color test

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## Types of Evidence

- Experts must be credible and non-biased
- Remember math? Remember sets?
  - (2,4,6,8,10); (4,8,12,16); matched units (4,8)
  - Identification in criminalistics is the same idea
  - The paint indicates a 1990, red, Chevy, sedan
  - Individual vs. class identification
- A reconstruction offers the “most probable” scenario based upon facts and norms.

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## Types of Evidence

- A DNA chain looks like this
  - It is called a double helix
  - It is comprised of four nucleic acids
    - Always A>T
    - Always C>G
  - Each rung is a “base pair”
  - The uprights are
    - Sugar
    - Potassium



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## Types of Evidence

- Because of this, we can make exact copies of DNA strands
  - Polymerase Chain Reaction (PCR)
    - Takes small amounts of DNA and replicates it
    - Looks for Short Tandem Repeats (STRs)
    - 2-5 base pairs long, repeated numerous times
    - FBI uses a 13 STR loci test for comparison
  - FBI DNA database is called CODIS
    - Combined DNA Index System

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## Investigative Leads

- The VICTIM'S background provides leads
  - Who would benefit
  - Who had the knowledge
  - Where was the victim just prior
  - Where do they work
  - What hobbies do they have
  - Who are their acquaintances
- The Modus Operandi (MO) provides clues

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## Investigative Leads

- Does determining the suspect end the investigation?
  - Discover all evidence (pos and neg)
  - Prove the crime
  - Identify the real perpetrator
  - Disprove defenses (when possible)
- What is the main purpose of the investigation?
  - To discover the truth of the situation

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## Investigative Leads

- Jewelry are always described by the color of the metal and stones
  - Yellow metal
  - Clear stone surrounded by blue stones
- National Crime Information Center (NCIC)
  - Run by FBI
  - 2.5 million inquiries per day
- National Integrated Ballistic Information Network (NIBIN)

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## Investigative Leads

- NIBIN maintained by B.A.T.F.E.
- A criminal's partners can be good informants
- A suspect is often injured while committing a crime
- Crime partner groupings can be good leads
- An alibi does not rule a suspect out

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## Arrests

- Where can you get info on a suspect?
- When creating a composite sketch, never change it from the original



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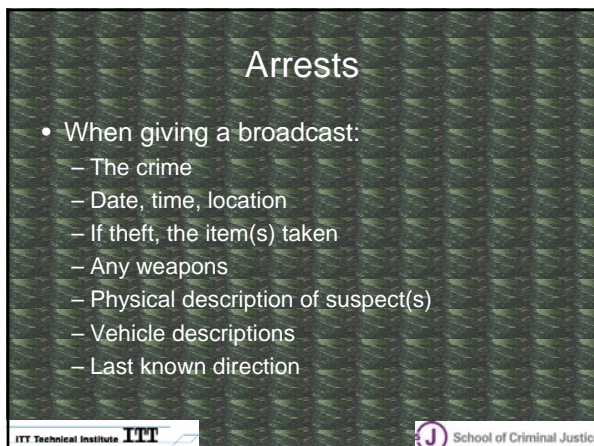
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## Arrests

- When giving a broadcast:
  - The crime
  - Date, time, location
  - If theft, the item(s) taken
  - Any weapons
  - Physical description of suspect(s)
  - Vehicle descriptions
  - Last known direction



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## Arrests

- Searches
  - Should not “shock the conscience”
  - Rochin vs. California
    - Pumped stomach to retrieve two heroin capsules
  - The immediate area of control means?
- Case preparation
  - Orderly array of information
  - Collation of the entire investigation

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## Arrests

- Accusatory Pleading shows that:
  - At a specified time, date and location
  - The named person violated a certain law
  - And that law was in force at the time
  - This is the Corpus Delicti
- Prepare the negative evidence,
  - Responses to defense assertions
    - Defendant did not commit crime
    - Defendant did commit crime, but ...
    - No crime was committed

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## Arrests

- Procedural foundations in securing evidence
  - Such as voluntary confessions
  - No suggestiveness in questioning witnesses
  - Lawful line-ups
- **THE DECISION TO CHARGE IS NOT THE CONCERN OF THE INVESTIGATOR**

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## Arrests

- In pursuing the truth, investigators must view all aspects of a case, particularly information pointing to the innocence of the accused. Presenting a case and hoping it will withstand contradiction is insufficient. The case must be prepared so that legally significant evidence will withstand attack and establish guilt beyond a reasonable doubt.

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## Sketching

- You show me yours and I will show you mine.

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