DNA Evidence and Property Crime

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Denver’s DNA Project Training

- The Denver Police Department, the Denver D.A.’s office, and the Federal Government teamed up to study the impact of DNA on solving Burglary cases.
- The success of this program started with the training of the agencies involved.
Areas of Training

- Detective Bureaus/ Supervisors
- Patrol Districts
- Property Bureau
What to say and What not to say

- Do not try to explain the science of DNA (Alleles, STR, extraction techniques)
- Do tell them they do not have testify about this (that is for the attorney’s and scientists)
- Do tell them this is a proven tool
- Do not tell them it will catch everybody and can be found at every scene
- Do tell them leadership is behind it
<table>
<thead>
<tr>
<th>EVIDENCE</th>
<th>POSSIBLE LOCATION OF DNA ON EVIDENCE</th>
<th>SOURCE OF DNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>baseball bat or similar weapon</td>
<td>handle, end</td>
<td>sweat, skin, blood, tissue</td>
</tr>
<tr>
<td>hat, bandanna, or mask</td>
<td>Inside</td>
<td>sweat, hair, dandruff</td>
</tr>
<tr>
<td>eyeglasses</td>
<td>nose or ear pieces, lens</td>
<td>sweat, skin</td>
</tr>
<tr>
<td>facial tissue, cotton swab</td>
<td>surface area</td>
<td>mucus, blood, sweat, semen, ear wax</td>
</tr>
<tr>
<td>dirty laundry</td>
<td>surface area</td>
<td>blood, sweat, semen</td>
</tr>
<tr>
<td>toothpick</td>
<td>Tips</td>
<td>saliva</td>
</tr>
<tr>
<td>used cigarette</td>
<td>cigarette butt</td>
<td>saliva</td>
</tr>
<tr>
<td>stamp or envelope</td>
<td>licked area</td>
<td>saliva</td>
</tr>
<tr>
<td>tape or ligature</td>
<td>inside/outside surface</td>
<td>skin, sweat</td>
</tr>
<tr>
<td>bottle, can, or glass</td>
<td>sides, mouthpiece</td>
<td>saliva, sweat</td>
</tr>
<tr>
<td>used condom</td>
<td>inside/outside surface</td>
<td>semen, vaginal or rectal cells</td>
</tr>
<tr>
<td>blanket, pillow, sheet</td>
<td>surface area</td>
<td>sweat, hair, semen, urine, saliva</td>
</tr>
<tr>
<td>&quot;through and through&quot; bullet</td>
<td>outside surface</td>
<td>blood, tissue</td>
</tr>
<tr>
<td>bite mark</td>
<td>person's skin or clothing</td>
<td>saliva</td>
</tr>
<tr>
<td>fingernail, partial fingernail</td>
<td>scrapings</td>
<td>blood, sweat, tissue</td>
</tr>
</tbody>
</table>
1. A responding officer should ask a burglary victim whether anything in the residence appears to have been moved, handled, or touched by the burglar.

2. Additionally, an officer should inquire whether the victim has noticed anything unusual or out of the ordinary (i.e., a cigarette butt in a non-smoker’s home, a glove or mask she does not recognize, etc.).
As You Investigate Cases, Keep in Mind That DNA Evidence Does More Than Just Identify the Source of the Sample Recovered

- It can place a known individual at a crime scene, in a home, or in a room where the suspect claimed not to have been.
- It can refute a claim of self-defense and put a weapon in the suspect's hand.
- It can change a story from an alibi to one of consent.
- The more detectives know about how to use DNA, the more powerful a tool it becomes.
DNA Changes the Interrogation

- The successful prosecution of a case often relies on the defendant’s statement.
- Best: a confession in which the defendant admits the crime.
- Good: a statement in which the suspect lies and you can prove it.
- DNA is the proof that the perpetrator is lying.
Keys to Success

- Leadership
  - Buy in from the top
  - Resources to achieve goal
  - Accountability

- Training
  - New and Remedial

- Communication
  - With all parties involved
    - (Police, Lab Personnel, and District Attorney)
DNA Evidence Can Have a Strong Impact on Denver’s Burglary Rate

- Many burglars are repeat, habitual offenders.
- This husband and wife burglary team was caught by DNA on the same cigarette.
- After their arrest, burglaries in the West Washington Park neighborhood dropped significantly: by 40%.
- Success in this project will make Denver much safer and will significantly reduce your caseload.

David Weller

Dina Weller
DNA analysis is similar to fingerprint analysis in how matches are determined. When using either DNA or a fingerprint to identify a suspect, the evidence collected from the crime scene is compared with the “known” print or sample. If enough of the identifying features are the same, the DNA or fingerprint is determined to be a match.
Even if There is No CODIS Hit, We May Be Able to File a “John Doe” Case

Refers to the alleged assailant as “John Doe, an unknown male with a matching DNA profile.”
Blood: Potential DNA Evidence at Burglary Crime Scenes

- Blood
  - Point of entry glass
  - Bandages
  - Tissues
  - Bloodstains on doors, walls, other items
Audit the Work

- Crime Lab checked property submitted for analysis versus placed into Property Bureau
- Comparison of Districts submitting requests
- CODIS hits submitted to back to officers that were not filed in court