

WSP FLSB Newsletter

Washington State Patrol Forensic Laboratory Services Bureau

Volume 2, Issue 2

Special points of interest:

- CODIS - a national database of DNA profiles that can identify suspects, link serial cases and identify missing persons or unidentified human remains.
- The WSP database contains over 120,000 convicted offender samples and 2000 DNA casework samples.
- WA state has had over 700 hits since May 2001 when CODIS was fully implemented nationwide.
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CODIS—Combined DNA Index System

The CODIS Laboratory

The Combined DNA Index System (CODIS) is a national program developed by the FBI in the 1990's which blends forensic science and computer technology into an effective tool for solving crimes.

CODIS is composed of five different indexes:

- Offender: DNA profiles of convicted offenders
- Forensic: DNA profiles generated from crime scene evidence
- Missing Persons
- Relatives of Missing Persons
- Unidentified Human Remains

In Washington, this collection of DNA databases is maintained at the CODIS Laboratory in Seattle.

DNA samples from Washington State convicted offenders are

collected by law enforcement agencies across the state using collection kits provided by the WSP CODIS Laboratory.

Washington State allows for the collection of DNA from all felony convictions and the following non-felonies:

- stalking
- harassment
- communicating with a minor for immoral purposes
- assault 4 with sexual motivation*
- custodial misconduct 2*
- patronizing a prostitute*
- sexual misconduct with a minor 2*
- violation of a sexual assault protection order granted under chapter 7.90 RCW*
- anyone required to register as a sex or kidnapping offender*

*new qualifying offenses effective June 12, 2008

Forensic Services Guide

The FLSB evidence guide, "The Forensic Services Guide" has been revised and will be available on the WSP website (www.wsp.wa.gov).

There have been several changes to the former Physical Evidence Handbook.

- The FSG outlines the services offered by each of the functional areas as well as types of evi-

dence analyses we do not offer.

- We have redistricted areas of submission of DNA evidence across the state to provide more timely service to our customers.
- The Microanalysis section has expanded to cover more evidence types. Please see that section for more information.



Carol Vo of the CODIS Lab is interpreting data from one of the convicted offender samples submitted to the lab.

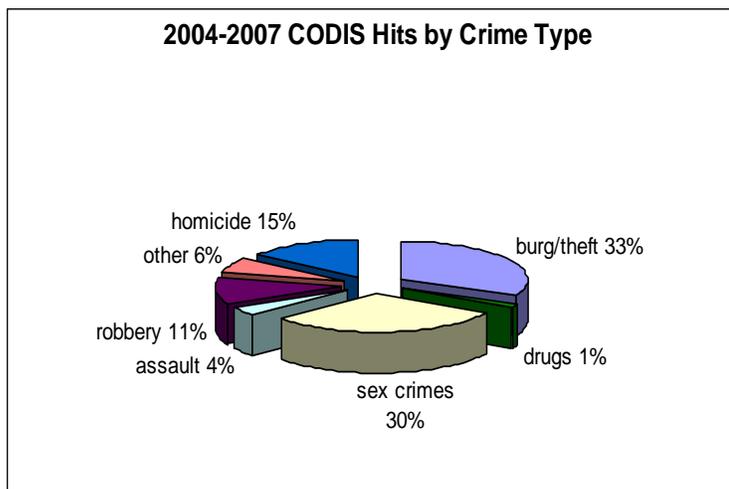
Approximately 1500 convicted offender DNA samples are received monthly which must be administratively processed, analyzed, and then entered into CODIS. As of June 2008, there were approximately 35,000 samples waiting to be analyzed and entered. To address this backlog, the CODIS Laboratory uses a combination of high throughput in-house analysis and outsources samples to a private vendor. With current staffing, it is estimated that this backlog will be eliminated by the end of the year.

Profiles for the other CODIS indexes (Forensic, Missing Persons, Relatives of Missing Persons and Unidentified Human Remains) are generated by DNA casework analysts working in the Marysville, Seattle, Spokane, Tacoma and Vancouver labs. These profiles are entered into the local level of CODIS and then subsequently uploaded to the state level where they are searched on a regular basis against samples in other indexes as appropriate.

CODIS Hits-Providing Important Investigative Leads

Washington's CODIS program has had over 700 hits since implementing STR-DNA typing technology in 2001. A hit is defined as a confirmed match between a convicted offender and a casework DNA sample (or matching casework samples) that aids the investigation. Since CODIS is a national program, hits include not only in-state confirmed matches but also matches to DNA profiles from other states.

Data collected on these hits demonstrate the value of the program. About 60% of cases producing a hit are in a violent crime such as homicide, rape, robbery or assault.



Robert Dorion is loading samples onto the high throughput robotics used to type convicted offender samples.

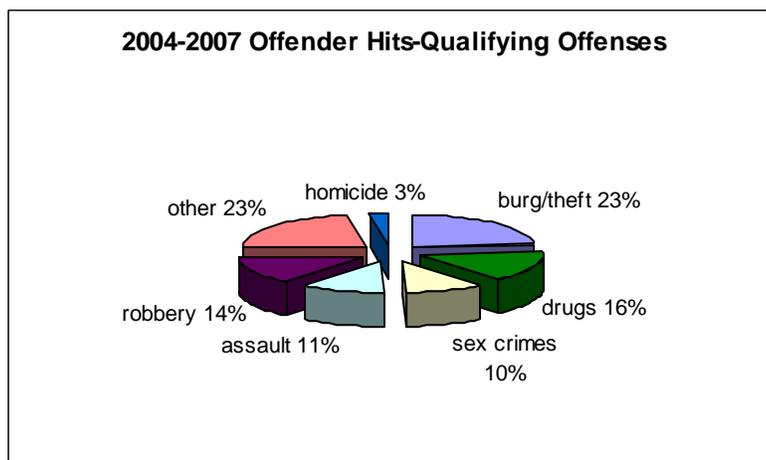
Over 700 CODIS hits since 2001 to criminal cases!

CODIS Hits-Qualifying Criminal Offenses

Equally significant are the statistics demonstrating that over 60% of CODIS hits are to a convicted offender in the database for a "minor" crime such as drug possession or burglary.

This data demonstrates the impact of the "All Felons" law that was passed in 2002 which requires that all convicted felons provide a DNA sample for CODIS use. Prior to the passage of the "All Felons" law, the size of Washington's con-

victed offender database was about 35,000 profiles and it took approximately 2 ½ years to achieve 100 CODIS hits. The database has now grown to over 120,000 profiles; in 2008, it took only three months to reach 100 hits!



FLSB Odds 'n Ends

* CODIS also has a newsletter and a training presentation geared to collectors. You can find these at the CLD website (<http://www.wsp.wa.gov/crime/crimlabs.htm#codis>)

* If you are interested in previous FLSB newsletters, contact us at wspcrimelab@wsp.wa.gov. We hope to have all of the

newsletters available on the WSP website in the near future.

* The **Questioned Documents** Handwriting Exemplar has been revised; look for it in the near future or contact the Seattle lab at (206) 262-6020 for more information.

* Reminder - if you are interested in specific training topics, please contact your local lab. Our

Latent Prints Lab offers training in latent prints processing at your agency.

* The FLSB is preparing for our next national accreditation/quality assessment to be completed in 2009.

* Lastly, thank you for your comments on the newsletter, and please let us know if there are other topics we can cover.



Tacoma Narrows and Mt. Rainier



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*Forensic Services Guide
available through the WSP
website after July 4th.
(www.wsp.wa.gov)*

Motto: Service With Humility

Mission: The Washington State Patrol makes a difference every day, enhancing the safety and security of our state by providing the best in public safety services.

Vision: To be the best public safety agency in the United States.

Values: Every employee is a critical member of a team committed to:

- Strong leadership**
- Acting with integrity and accountability**
- Effective partnerships**
- Respecting and protecting individual rights**
- Professional excellence**
- Earning the trust and confidence of the public**

CODIS - Interesting Cases

- In 1968, 16 year old Sandra Bowman was brutally murdered and the case remained unsolved for decades. Years later, due to scientific advances, the Crime Lab was able to develop a male profile from crime scene evidence. The male profile was searched against the CODIS database and produced a hit to John Canaday, a convicted murderer serving a life sentence. When confronted with the evidence, Canaday pled guilty to the murder of Sandra Bowman, making this case one of the oldest in the nation solved by the use of the CODIS database.
- In 2004, Shane Allen Herzog was convicted for the sexual assault of a school girl in 2000. Herzog's DNA sample was in the CODIS convicted offender database because of an unrelated felony drug offense. If the 2002 "All Felons Law" had not been passed, his DNA sample would not have been in the convicted offender database and this case likely would have remained unsolved.

CODIS—Frequently Asked Questions

How can I find out if the CODIS Lab has a DNA sample from a convicted offender and if it is in the database?

For individuals with an assigned State ID number, this information is readily available on the criminal history record. A DNA TAKEN/DNA TYPED line with either a "Y" (Yes) or "N" (No) noted is listed on this record. Samples listed as DNA TAKEN "Y", DNA TYPED "N" are in the backlog but you may call (206) 262-6020 and ask a member of the CODIS staff to expedite typing of the sample.

- Juveniles who aren't assigned a State ID number will not have a criminal history record. You may call (206) 262-6020 and ask for a CODIS staff

member to find out if we have a DNA sample from the juvenile and if it is in the database.

Members of the criminal justice community may contact CODIS staff at confel@wsp.wa.gov to find out how to gain access to searching criminal history records if they do not already have this ability.

Can I use the Convicted Offender DNA Collection Kits to obtain a reference sample from a suspect or victim on a case?

No—please do not use a convicted offender DNA collection kit for obtaining known case-work reference samples. A sterile cotton swab will suffice for these types of samples.

Why is it necessary to submit a reference sample from the suspect after a CODIS hit is reported?

Convicted offender DNA samples are not subject to the strict chain of custody policies which apply to casework evidence exhibits. The information released in a CODIS hit can be used as probable cause to obtain a reference sample from the suspect. The casework scientist can then type the reference sample and compare it directly to the evidence sample and provide statistical information on the significance of the match.