

**SB**

**95**

## SENATE COMMITTEE REPORT

DATE: 2/28/05

FURTHER:

DATE TURNED  
IN TO OFFICE: \_\_\_\_\_

Judiciary Committee considered

SENATE BILL NO. 95

### SB 95 COLLECTION OF DNA/USE OF FORCE

"An Act relating to the collection of, and the use of reasonable force to collect, a deoxyribonucleic acid sample from persons convicted of or adjudicated delinquent for certain crimes."

and recommends:

- be replaced with \_\_\_\_\_ CS \_\_\_\_\_ (\_\_\_\_\_)
- adopt previous \_\_\_\_\_ CS \_\_\_\_\_ (\_\_\_\_\_)
- attached amendment(s)
- adopt Letter of Intent by \_\_\_\_\_ Committee
- further referral to \_\_\_\_\_ Committee

**Senate Bill:**  
 Same Title  
 New Title

**House Bill:**  
 Same Title  
 Technical Title Charge  
 New Title w/ SCR # \_\_\_\_\_

**NEW FISCAL NOTE(S):**

Department	Date	Fiscal	Indet.	Zero	FN#

**PREVIOUS FISCAL NOTE(S):**

Department	Date	Fiscal	Indet.	Zero	FN#

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	Do PASS	Do NOT PASS	NO REC	AMEND
<i>[Signature]</i>	X			
<i>[Signature]</i>	X			
<i>[Signature]</i>	X			
<i>[Signature]</i>	X			
CHAIR: <i>Ralph Perkins</i>	✓			



Alaska State Legislature

Senator Con Bunde  
Senate District P

Vice Chair: Senate Finance Committee  
Chair: Senate Labor & Commerce Committee

## Sponsor Statement

### Senate Bill 95

"An Act relating to the collection of, and the use of reasonable force to collect, a deoxyribonucleic acid sample from persons convicted of or adjudicated delinquent for certain crimes."

Alaska's DNA database is a tool used by law enforcement to identify perpetrators by matching DNA profiles from individuals convicted of certain offenses to DNA profiles collected from unsolved crime scenes. This bill authorizes the use of reasonable force to collect DNA from those offenders who refuse to provide samples as required by law, and also closes a loophole in the current law that allows individuals convicted of crimes charged under municipal ordinances to escape DNA collection.

Under current state law, it is felony for an offender with a qualifying conviction to refuse to provide a DNA sample. Some of Alaska's most notorious criminals who are serving life sentences are refusing to provide DNA samples, and the threat of being charged with another felony does not matter to them because their sentences will not increase. Law enforcement believes that many of these individuals were involved in criminal activity prior to their convictions, and that entering their DNA profiles could possibly solve additional crimes. Alaska's DNA database currently includes DNA profiles from unsolved crimes that date back to the 1970's.

The current law requires a defendant who is convicted of a crime against a person, or a felony under AS 11 or AS 28.35, to provide a DNA sample. However, if a defendant is convicted of a crime against a person that is charged under a municipal ordinance, the defendant is not required to provide a DNA sample. Eliminating this loophole will treat offenders convicted of crimes against persons equally and will provide additional samples for the database. This will make the database more effective in solving crimes.

I urge your support of Senate Bill 95.

24-LS0528F  
Luckhaupt  
2/28/05

CS FOR SENATE BILL NO. 95( )

IN THE LEGISLATURE OF THE STATE OF ALASKA  
TWENTY-FOURTH LEGISLATURE - FIRST SESSION

BY

Offered:  
Referred:

Sponsor(s): SENATOR BUNDE

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to the collection of, and the use of reasonable force to collect, a  
2 deoxyribonucleic acid sample from persons convicted of or adjudicated delinquent for  
3 certain crimes."

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

5 \* Section 1. AS 44.41.035(b) is amended to read:

6 (b) The Department of Public Safety shall collect for inclusion into the DNA  
7 registration system a blood sample, oral sample, or both, from (1) a person convicted  
8 in this state of a crime against a person or a felony under AS 11 or AS 28.35 or a law  
9 or ordinance with elements similar to a crime against a person or a felony under  
10 AS 11 or AS 28.35, (2) a minor 16 years of age or older, adjudicated as a delinquent  
11 in this state for an act that would be a crime against a person or a felony under AS 11  
12 or AS 28.35 [,] if committed by an adult or for an act that would violate a law or  
13 ordinance with elements similar to a crime against a person or a felony under  
14 AS 11 or AS 28.35 if committed by an adult, (3) a voluntary donor, (4) an

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anonymous DNA donor for use in forensic validation, forensic protocol development, quality control, or population or statistical data bases, and (5) a person required to register as a sex offender or child kidnapper under AS 12.63. The department also may collect for inclusion into the DNA registration system a blood sample, oral sample, or tissue sample from crime scene evidence or from unidentified human remains. The DNA identification registration system consists of the blood, oral, or tissue samples drawn under this section, any DNA or other blood grouping tests done on those samples, and the identification data related to the samples or tests. Blood samples, oral samples, and tissue samples not subject to testing under this section, and test or identification data related to those samples, may not be entered into, or made a part of, the DNA identification registration system.

\* Sec. 2. AS 44.41.035 is amended by adding new subsections to read:

(o) A juvenile or adult correctional, probation, or parole officer or a peace officer may use reasonable force to collect an oral sample for inclusion into the DNA registration system from a person required to submit to collection of a sample under this section, AS 12.55.015(h), 12.55.100(d), AS 33.16.150(a), or another law.

(p) A person may not bring a civil action against the state or a municipality, or their employees or agents, for actions arising out of DNA collection in conformity with this section.

\* Sec. 3. The uncodified law of the State of Alaska is amended by adding a new section to read:

APPLICABILITY. The changes made by this Act apply to all convictions or adjudications of delinquency included under AS 44.41.035(b), as amended by sec. 1 of this Act, that

- (1) occur on or after the effective date of sec. 1 of this Act;
- (2) occurred before the effective date of sec. 1 of this Act if the person is incarcerated or is on probation or parole for the offense on or after the effective date of sec. 1 of this Act.

*Amend #1*  
*Immediate effective date.*

## SENATE BILL NO. 95

IN THE LEGISLATURE OF THE STATE OF ALASKA  
TWENTY-FOURTH LEGISLATURE - FIRST SESSION

BY SENATOR BUNDE

Introduced: 2/7/05

Referred: State Affairs, Judiciary

## A BILL

## FOR AN ACT ENTITLED

1 "An Act relating to the collection of, and the use of reasonable force to collect, a  
2 deoxyribonucleic acid sample from persons convicted of or adjudicated delinquent for  
3 certain crimes."

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

5 \* Section 1. AS 44.41.035(b) is amended to read:

6 (b) The Department of Public Safety shall collect for inclusion into the DNA  
7 registration system a blood sample, oral sample, or both, from (1) a person convicted  
8 in this state of a crime against a person or a felony under AS 11 or AS 28.35 or a law  
9 or ordinance with elements similar to a crime against a person or a felony under  
10 AS 11 or AS 28.35, (2) a minor 16 years of age or older, adjudicated as a delinquent  
11 in this state for an act that would be a crime against a person or a felony under AS 11  
12 or AS 28.35 [,] if committed by an adult or for an act that would violate a law or  
13 ordinance with elements similar to a crime against a person or a felony under  
14 AS 11 or AS 28.35 if committed by an adult, (3) a voluntary donor, (4) an

1 anonymous DNA donor for use in forensic validation, forensic protocol development,  
 2 quality control, or population or statistical data bases, and (5) a person required to  
 3 register as a sex offender or child kidnapper under AS 12.63. The department also  
 4 may collect for inclusion into the DNA registration system a blood sample, oral  
 5 sample, or tissue sample from crime scene evidence or from unidentified human  
 6 remains. The DNA identification registration system consists of the blood, oral, or  
 7 tissue samples drawn under this section, any DNA or other blood grouping tests done  
 8 on those samples, and the identification data related to the samples or tests. Blood  
 9 samples, oral samples, and tissue samples not subject to testing under this section, and  
 10 test or identification data related to those samples, may not be entered into, or made a  
 11 part of, the DNA identification registration system.

12 Sec. 2. AS 44.41.035 is amended by adding a new subsection to read:

13 (o) A juvenile or adult correctional, probation, or parole officer or a peace  
 14 officer may use reasonable force to collect an oral sample for inclusion into the DNA  
 15 registration system from a person required to submit to collection of a sample under  
 16 this section, AS 12.55.015(h), 12.55.100(d), AS 33.16.150(a), or another law. The  
 17 state, a municipality, a juvenile or adult correctional, probation, or parole officer, or a  
 18 peace officer is immune from civil or criminal liability for using reasonable force to  
 19 collect an oral sample from a person required to submit to collection of a sample for  
 20 inclusion into the DNA registration system.

*Dep.  
 of Law's  
 language  
 to avoid frivolous  
 lawsuits*

# FISCAL NOTE

STATE OF ALASKA  
2005 LEGISLATIVE SESSION

Fiscal Note Number: \_\_\_\_\_  
Bill Version: SB 95  
( ) Publish Date: \_\_\_\_\_

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Corrections  
Title "An act relating to the collection of, and the use RDU Institutional Facilities  
of reasonable force to collect, a deoxyribonucleic acid sample" Component Institution Director's Office  
Sponsor Senator Bunde  
Requester State Affairs, Judiciary Component No. 524

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0	0.0
Contractual	0.0	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0	0.0
Land & Structures	0.0	0.0	0.0	0.0	0.0	0.0
Grants & Claims	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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<b>CHANGE IN REVENUES ( )</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1003 GF Match	0.0	0.0	0.0	0.0	0.0	0.0
1004 GF	0.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1037 GF/Mental Health	0.0	0.0	0.0	0.0	0.0	0.0
Other (Specify Type--Do not abbreviate)	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2005) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

**POSITIONS**

Full-time	0	0	0	0	0	0
Part-time	0	0	0	0	0	0
Temporary	0	0	0	0	0	0

**ANALYSIS:** (Attach a separate page if necessary)

Passage of this legislation will not have a measurable fiscal impact on the Department of Corrections.

Prepared by: Sharleen Griffin, Acting Director Phone 465-4641  
Division Administrative Services Date/Time 2/18/05 9:48 AM  
Approved by: Portia Parker, Deputy Commissioner Date 2/18/2005  
Agency Department of Corrections

# FISCAL NOTE

**STATE OF ALASKA**  
**2005 LEGISLATIVE SESSION**

Fiscal Note Number: 2  
 Bill Version: SB 95  
 (S) Publish Date: 2/28/05

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: LAW  
 Title "An Act relating to the collection of, and the use RDU CRIMINAL  
of reasonable force to collect, a deoxyribonucleic acid..." Component CDCO  
 Sponsor Senator Bunde  
 Requester Senate State Affairs Component No. \_\_\_\_\_

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2005) cost: 0.0  
 Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This bill amends AS 44.41.035(b) (DNA identification system) by both narrowing the statute to apply to convictions that occur in Alaska, and widening to apply to violations of law or ordinances with elements similar to AS 11 (Criminal Law) or AS 28.35 (Motor Vehicle Offenses and Accidents). A new subsection to AS 44.41.035 is added that allows certain officials to use reasonable force in collection of DNA.

Passage of this legislation will have no foreseeable fiscal impact on the Department of Law.

Prepared by: Kathryn Daughettee, Director Phone 465-3673  
 Division: Administrative Services Division Date/Time 2/22/05 10:35 AM  
 Approved by: K. Daughettee for Scott Nordstrand, Acting Attorney General Date 2/22/2005  
 Agency: Department of Law

# FISCAL NOTE

**STATE OF ALASKA**  
**2005 LEGISLATIVE SESSION**

Fiscal Note Number: 3  
 Bill Version: SB 95  
 (S) Publish Date: 2/28/05

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Administration  
 Title: An Act relating to collection of RDU: Legal and Advocacy Services  
DNA by force... Component: Public Defender Agency  
 Sponsor: Sen. Bunde  
 Requester: Senate State Affairs Component No.: 1631

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	0.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2005) cost: 0.0  
 Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** (Attach a separate page if necessary)

This bill allows public safety employees, including juvenile and adult probation and parole officers to use reasonable force to collect authorized DNA samples, and grants them immunity from any civil or criminal liability. This bill, if enacted, is not expected to have a significant fiscal impact on the operations of the Agency.

Prepared by: Linda K. Wilson, Deputy Director Phone: (907)334-4416  
 Division: Public Defender Agency Date/Time: 2/22/05 9:54 AM  
 Approved by: Michael Tibbles, Deputy Commissioner Date: 2/22/2005  
 Agency: Department of Administration

# FISCAL NOTE

**STATE OF ALASKA**  
**2005 LEGISLATIVE SESSION**

Fiscal Note Number: 4  
 Bill Version: SB 95  
 (S) Publish Date: 2/28/05

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Public Safety  
 Title Use of Force for DNA Collection RDU Statewide Support  
 Component Criminal Records & ID  
 Sponsor Senator Bunde  
 Requester Senate State Affairs Component No. 1190

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2005) cost: 0.0

Check this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:**

Section 1 amends AS 44.41.035(b) by expanding the types of convictions that require deoxyribonucleic acid (DNA) registration. Under this bill, upon conviction in this state of crimes similar to crimes against persons, or felonies under AS 11 or AS 28.35, DNA must be collected. "Similar crimes" will include municipal misdemeanors, and preliminary estimates, based on the Uniform Offense Citation Table, are that this would include convictions under approximately 35 municipal misdemeanors from six municipalities - Anchorage, Juneau, Fairbanks, Ketchikan, Sitka, and Petersburg. In FY 2004 there were 680 persons with convictions under those municipal offenses. This number excludes duplicates (persons who were convicted of more than one qualifying municipal offense) and persons for whom DNA has already been collected for prior convictions (for whom subsequent collections will not be necessary).

continued on page 2

Prepared by: Director David Schade Phone 269-0202  
 Division: Statewide Services Date/Time 2/22/05 3:00 PM  
 Approved by: Commissioner William Tandeske Date 2/22/2005  
 Agency: Department of Public Safety

FISCAL NOTE # 4

STATE OF ALASKA  
2005 LEGISLATIVE SESSION

BILL NO. SB 95

**ANALYSIS CONTINUATION**

Collecting DNA for municipal misdemeanors will mean that when some defendants are subsequently convicted of other qualifying offenses, their DNA will already be on file, so this does not mean the numbers are absolute additions to the DNA database overall. Basically, this bill will shift the collection of DNA to earlier in a defendant's criminal career. "Similar crimes" will also include federal or military convictions, for which no preliminary numbers are available. Adding "similar crimes" will have an impact on Statewide Services Records & Identification and Information Services due to the increase in clerical and technical tasks, such as confirming fingerprints and modifying tables in the Alaska Public Safety Information Network (APSIN). This increase in the workload can be absorbed at present, although there is a cumulative impact on the APSIN staff workload. Similarly, the crime lab can absorb the increase in DNA submissions, although there is a cumulative impact on the crime lab workload as well.

Section 2 provides that reasonable force may be used in the collection of oral DNA samples. This section will have no impact on the workload of Statewide Services.

Sec. 44.41.035. DNA identification system.

(a) To support criminal justice services in this state, the Department of Public Safety shall establish a deoxyribonucleic acid (DNA) identification registration system.

(b) The Department of Public Safety shall collect for inclusion into the DNA registration system a blood sample, oral sample, or both, from (1) a person convicted of a crime against a person or a felony under AS 11 or AS 28.35, (2) a minor 16 years of age or older, adjudicated as a delinquent for an act that would be a crime against a person or a felony under AS 11 or AS 28.35, if committed by an adult, (3) a voluntary donor, (4) an anonymous DNA donor for use in forensic validation, forensic protocol development, quality control, or population or statistical data bases, and (5) a person required to register as a sex offender or child kidnapper under AS 12.63. The department also may collect for inclusion into the DNA registration system a blood sample, oral sample, or tissue sample from crime scene evidence or from unidentified human remains. The DNA identification registration system consists of the blood, oral, or tissue samples drawn under this section, any DNA or other blood grouping tests done on those samples, and the identification data related to the samples or tests. Blood samples, oral samples, and tissue samples not subject to testing under this section, and test or identification data related to those samples, may not be entered into, or made a part of, the DNA identification registration system.

(c) The Department of Public Safety may

(1) analyze DNA for law enforcement agencies; and

(2) assist law enforcement officials and prosecutors in the preparation and use of DNA evidence for presentation in court.

(d) Except as provided in (e) of this section, a local law enforcement agency may not establish or operate a DNA identification registration system unless

(1) the equipment and the DNA typing method of the local system are compatible with that of the state system under (a) of this section;

(2) the local system is equipped to receive and answer inquiries from the department's DNA identification registration system and transmit data to the department's DNA identification registration system; and

(3) procedure and rules for the collection, analysis, storage, expungement, and use of DNA identification data do not conflict with this section and procedures and rules applicable to the department's DNA identification registration system.

(e) Nothing in (d) of this section prohibits a local law enforcement agency from performing DNA identification analysis in individual cases to assist law enforcement officials and prosecutors in the preparation and use of DNA evidence for presentation in court.

(f) The DNA identification registration system is confidential, is not a public record under AS 40.25.110 - 40.25.140, and may be used only for

- (1) providing DNA or other blood grouping tests for identification analysis;
- (2) criminal investigations, prosecutions, and identification of human remains;
- (3) statistical blind analysis;
- (4) improving the operation of the system; or
- (5) exoneration of the innocent.

(g) A person from whom a sample has been collected under this section may inspect and obtain a copy of the identification data regarding the person contained within the DNA identification registration system.

(h) The Department of Public Safety shall adopt reasonable procedures

(1) for the collection, analysis, storage, expungement, and use of the DNA identification registration system; and

(2) to protect the DNA identification registration system established under this section from unauthorized access and from accidental or deliberate damage by theft, sabotage, fire, flood, wind, or power failure.

(i) The Department of Public Safety shall, upon receipt of a court order, destroy the material in the system relating to a person. The court shall issue the order if it determines that

(1) the conviction or adjudication that subjected the person to having a sample taken under this section is reversed; and

(2) the person

(A) is not retried or readjudicated for the crime; or

(B) after retrial, is acquitted of the crime or after readjudication for the crime is not found to be a delinquent.

(j) The Department of Public Safety may adopt regulations to carry out the purposes of this section.

(k) The provisions of this section apply to a person from another state that this state has accepted under any interstate corrections or probation agreement or compact, regardless of whether the person is confined or released, if the person was convicted of an offense that is similar to an offense described in (b) of this section.

(l) The Department of Public Safety may not include in the DNA registration system a blood sample, oral sample, or tissue sample of the victim of a crime, unless that person would otherwise be included under (b)(1) - (5) of this section.

(m) The commissioner of public safety shall notify the president of the senate and the speaker of the house of representatives if, at any time after July 1, 2003, the federal government fails to pay the costs of the DNA identification registration system.



## Alaska State Legislature

Senate Majority Web: [www.akrepublicans.org](http://www.akrepublicans.org)

Sponsor: Senator Con Bunde  
Current Version: SB 95  
Contact: Lauren Wickersham, 465-3881

### Fact Sheet for: Senate Bill 95

**Short Title:** COLLECTION OF DNA/USE OF FORCE

**Summary:**

- Allows a peace officer, correctional, probation or parole officer to use reasonable force to collect an oral sample for inclusion into the deoxyribonucleic acid (DNA) registration system from a person required to submit a sample under current state law.
- Provides immunity for those officers from civil or criminal liability for using reasonable force to collect the sample.
- Requires the collection of DNA from a person convicted of a municipal ordinance that is similar to a state law requiring collection of DNA.

**Benefits:**

- Adds misdemeanors for crimes against a person such as assault, kidnapping or reckless endangerment to the offenses for which the state can collect DNA samples.
- Gives the state a valuable tool for solving unsettled crimes.
- Allows the state to collect DNA from persons serving long prison sentences who otherwise have no incentive to submit DNA samples.

**Background:**

- Under current law, refusal to submit a DNA sample constitutes a Class C felony. For prisoners already serving long sentences, the punishment for a Class C felony is of such little consequence it provides no incentive to comply. Statistics show that many perpetrators of crimes against a person are repeat offenders. Giving the state the ability to collect DNA samples from people who are otherwise unwilling to submit them could greatly improve the chances of solving past crimes.



# LAWS OF ALASKA

2003

**Source**  
SCS CSHB 49(JUD)

**Chapter No.**  
\_\_\_\_\_

## AN ACT

Relating to the deoxyribonucleic acid (DNA) identification registration system and testing; and providing for an effective date.

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**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

THE ACT FOLLOWS ON PAGE 1

Enrolled HB 49

AN ACT

1 Relating to the deoxyribonucleic acid (DNA) identification registration system and testing;  
2 and providing for an effective date.

3

4 \* **Section 1.** The uncodified law of the State of Alaska is amended by adding a new section  
5 to read:

6 **FINDINGS.** The legislature finds that

7 (1) the deoxyribonucleic acid (DNA) identification registration system is an  
8 important tool in the investigation of crime, both in excluding innocent persons and in  
9 detecting repeat offenders;

10 (2) the inclusion of DNA samples from all persons who are convicted of a  
11 crime against another person or of any felony under AS 11 or AS 28.35 will greatly assist law  
12 enforcement agencies in solving crimes and detecting repeat offenders;

13 (3) cooperation between the state and other criminal justice agencies improves  
14 the detection of repeat offenders, the exoneration of innocent persons, the location of missing

1 persons, and the identification of unknown human remains; and

2 (4) the federal government is paying the costs of the DNA identification  
3 registration system.

4 \* Sec. 2. AS 11.56.760(a) is amended to read:

5 (a) A person commits the crime of violating an order to submit to DNA testing  
6 if, when requested by a health care professional acting on behalf of the state to provide  
7 a blood sample, oral sample, or both, or when requested by a juvenile or adult  
8 correctional, probation, or parole officer or a peace officer to provide an oral sample,  
9 the person refuses to provide the sample or samples and the person [HAS BEEN]

10 (1) has been ordered to submit to DNA testing as part of a sentence  
11 imposed under AS 12.55.015; [OR]

12 (2) has been convicted of an offense that requires DNA testing under  
13 the provisions of AS 44.41.035; or

14 (3) is required to register as a sex offender or child kidnapper  
15 under AS 12.63.

16 \* Sec. 3. AS 11.56.760(c) is amended to read:

17 (c) Violating an order to submit to DNA testing is a class C felony [A  
18 MISDEMEANOR].

19 \* Sec. 4. AS 11.56 is amended by adding a new section to read:

20 **Sec. 11.56.762. Unlawful use of DNA samples.** (a) A person commits the  
21 crime of unlawful use of DNA samples if the person knowingly, without authorization  
22 under AS 44.41.035, possesses or allows another person access to (1) a blood, oral, or  
23 tissue sample collected for inclusion in the deoxyribonucleic identification registration  
24 system under AS 44.41.035, or (2) identification data or records derived from those  
25 samples.

26 (b) Unlawful use of DNA samples is a class C felony.

27 \* Sec. 5. AS 44.41.035(b) is amended to read:

28 (b) The Department of Public Safety shall collect for inclusion into the DNA  
29 registration system a blood sample, oral sample, or both, from (1) a person convicted  
30 of a crime against a person [, (2) A PERSON CONVICTED OF BURGLARY] or a  
31 felony under AS 11 or AS 28.35, (2) [ATTEMPT TO COMMIT BURGLARY, AND

1 (3)] a minor 16 years of age or older, adjudicated as a delinquent for an act that would  
2 be a crime against a person [, A BURGLARY,] or a felony under AS 11 or AS 28.35  
3 [ATTEMPT TO COMMIT BURGLARY], if committed by an adult, (3) a voluntary  
4 donor, (4) an anonymous DNA donor for use in forensic validation, forensic  
5 protocol development, quality control, or population or statistical data bases, and  
6 (5) a person required to register as a sex offender or child kidnapper under  
7 AS 12.63. The department also may collect for inclusion into the DNA  
8 registration system a blood sample, oral sample, or tissue sample from crime  
9 scene evidence or from unidentified human remains. The DNA identification  
10 registration system consists of the blood, [OR] oral, or tissue samples drawn under  
11 this section, any DNA or other blood grouping tests done on those samples, and the  
12 identification data related to the samples or tests. Blood samples, [AND] oral  
13 samples, and tissue samples [FROM PERSONS] not subject to testing under this  
14 section, and test or identification data related to those samples, may not be entered  
15 into, or made a part of, the DNA identification registration system.

16 \* Sec. 6. AS 44.41.035(c) is amended to read:

17 (c) The Department of Public Safety may [PROVIDE]

18 (1) analyze DNA for [ANALYSIS SERVICES TO] law enforcement  
19 agencies [THROUGHOUT THE STATE]; and

20 (2) assist [ASSISTANCE TO] law enforcement officials and  
21 prosecutors in the preparation and use [UTILIZATION] of DNA evidence for  
22 presentation in court.

23 \* Sec. 7. AS 44.41.035(f) is amended to read:

24 (f) The DNA identification registration system is confidential, is not a public  
25 record under AS 40.25.110 - 40.25.140, and may be used only for

26 (1) providing DNA or other blood grouping tests for identification  
27 analysis;

28 (2) [LAW ENFORCEMENT PURPOSES INCLUDING] criminal  
29 investigations, [AND] [PROSECUTIONS], and identification of human remains;

30 (3) statistical blind analysis; [OR]

31 (4) improving the operation of the system; or

1 (5) exoneration of the innocent.

2 \* Sec. 8. AS 44.41.035(j)(1) is amended to read:

3 (1) "crime against a person" means an [A FELONY] offense, or an [A  
4 FELONY] attempt or solicitation to commit an offense, under AS 11.41 [, OTHER  
5 THAN AS 11.41.320, OR UNDER AS 11.46.400];

6 \* Sec. 9. AS 44.41.035(j) is amended by adding a new paragraph to read:

7 (3) "convicted" means that an adult, or a juvenile charged as an adult  
8 under AS 47.12 or a similar procedure in another jurisdiction, has entered a plea of  
9 guilty, guilty but mentally ill, or nolo contendere, or has been found guilty, or guilty  
10 but mentally ill, by a court or jury, regardless of whether the judgment was set aside  
11 under AS 12.55.085 or a similar procedure in another jurisdiction or was the subject of  
12 a pardon or other executive clemency; a person is not "convicted" if the judgment  
13 against the person was reversed or vacated by a court.

14 \* Sec. 10. AS 44.41.035 is amended by adding a new subsection to read:

15 (k) The Department of Public Safety may adopt regulations to carry out the  
16 purposes of this section.

17 \* Sec. 11. AS 44.41.035 is amended by adding new subsections to read:

18 (l) The provisions of this section apply to a person from another state that this  
19 state has accepted under any interstate corrections or probation agreement or compact,  
20 regardless of whether the person is confined or released, if the person was convicted of  
21 an offense that is similar to an offense described in (b) of this section.

22 (m) The Department of Public Safety may not include in the DNA registration  
23 system a blood sample, oral sample, or tissue sample of the victim of a crime, unless  
24 that person would otherwise be included under (b)(1) - (5) of this section.

25 \* Sec. 12. The uncodified law of the State of Alaska is amended by adding a new section to  
26 read:

27 **APPLICABILITY.** The changes made by this Act apply to

28 (1) all convictions or adjudications of delinquency included under  
29 AS 44.41.035(b), as amended by sec. 5 of this Act, that

30 (A) occur on or after the effective date of sec. 5 of this Act,

31 (B) occurred before the effective date of sec. 5 of this Act if the person

1 is incarcerated or is under supervised probation or parole for the offense on or after the  
2 effective date of sec. 5 of the Act; and

3 (2) all persons required to register as a sex offender or child kidnapper under  
4 AS 12.63 before, on, or after the effective date of sec. 5 of this Act.

5 \* Sec. 13. The uncodified law of the State of Alaska is amended by adding a new section to  
6 read.

7 TRANSITION: REGULATIONS. The Department of Public Safety may proceed to  
8 adopt regulations necessary to carry out the changes made by secs. 5 - 9 and 11 of this Act.  
9 The regulations take effect under AS 44.62 (Administrative Procedure Act), but not before the  
10 effective date of the statutory changes.

11 \* Sec. 14. The uncodified law of the State of Alaska is amended by adding a new section to  
12 read:

13 INSTRUCTION TO COMMISSIONER OF PUBLIC SAFETY. The commissioner of  
14 public safety shall notify the president of the senate and the speaker of the house of  
15 representatives if, at any time after the effective date of sec. 1 of this Act, the federal  
16 government fails to pay the costs of the DNA identification registration system.

17 \* Sec. 15. Sections 10 and 13 of this Act take effect immediately under AS 01.10.070(c).

18 \* Sec. 16. Except as provided in sec. 15 of this Act, this Act takes effect July 1, 2003.



# Municipality of Anchorage



4801 Prudhoe Street • Anchorage, Alaska 99507-1800 • Telephone: (907) 786-4600 • <http://www.municipalityofanchorage.org>

Mayor Mark Begich

## Anchorage Police Department

February 15, 2005

Senator Con Bunde  
State Capitol, Room 506  
Juneau, AK 99801-1182

Senator:

I support the idea of SB 95, Reasonable Force DNA Collection, to better equip law enforcement in the identification, apprehension and conviction of those who commit serious crimes against the citizens of our state.

DNA forensic evidence has helped resolve such crimes as sexual assault and homicide, and the conviction of those responsible not only promotes a feeling of safety in the community but also provides closure to the victims and families of victims.

I have two pending cases, one of which is a homicide and the other a sexual assault which, I am told by the State Crime Lab, were committed by the same suspect. Unfortunately, CODIS, the DNA data bank, does not have the available match to provide us with a name yet. Experience tells me that this rapist and murderer, more than likely, committed other crimes. The enhancement of this statute, the Reasonable Force DNA Collection, would more rapidly develop the database and with our diligence, we'd be in a better position to stop that suspect before he victimizes yet again. This is just one example, and undoubtedly, other Alaskan law enforcement agencies would have similar examples of crimes that could be more easily and quickly solved with the passage of the Reasonable Force DNA Collection bill.

Sincerely,

Walt Monegan  
Chief of Police

WM/ta

*Community, Security, Prosperity*



The Empire State

# New York State Division of Criminal Justice Services

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Pataki

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George E. Pataki, Governor  
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Reducing crime and improving the effectiveness of c

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## DNA Case Highlights

**Preventable Crimes :** case studies on the potential of DNA technology to reduce crime

## Chautauqua County

On the morning of November 25, 1998, a woman was confronted by a rapist in her home in Jamestown, Chautauqua County. In June 2001, a Chautauqua County Probation officer secured a DNA sample from Andrew Tehoke who was serving a probation term for a 2000 Burglary 3rd conviction. Tehoke's DNA profile hit against the DNA profile developed from forensic evidence recovered in connection with the 1998 sexual assault and he was subsequently convicted of the offense.

## Erie County

A DNA Databank hit linked Lamont Coleman, a man with a history of sex offenses, with the sexual assault of a female professor which took place on March 31, 2000. The attack occurred in the same building on the campus where, in 1987 another female professor had been assaulted. Coleman was convicted of the attack and his DNA profile was entered in the State's DNA Databank. It matched with the profile recovered at the scene of the 2000 assault. Coleman was a national fugitive for two years and on the FBI's Most-Wanted list prior to his capture in July, 2002.

Following a DNA Databank hit in April 2000, Ishmael Saladeen was indicted for the 1982 murder of an elderly male and an 84 year-old female who were killed during a robbery in a photography studio in the commission of this crime, the owner of the studio and five other victims who entered the store and robbed. The elderly female was strangled to death and the male victim fatally shot. One of the victims was also raped and sodomized. The surviving victims all had a caustic solution splashed on them, apparently in an effort to blind them and prevent identification of the perpetrator. With the advent of the DNA Databank, the Erie County Department of Central Police Services Forensic Science Laboratory identified the perpetrator's DNA profile from evidence recovered from the victim who was sexually assaulted in the 1982 attacks. Within a year of these crimes, Saladeen was convicted for a separate incident of Attempted Murder in the Second Degree and sentenced to a lengthy prison term. Pursuant to the amendments to the DNA database law, a DNA specimen was collected from Saladeen and his DNA profile was found to match the DNA profile of the perpetrator of the sexual assault. The Statute of Limitations for the indictment of the defendant on the rape and sodomy charges; however, as a result of him being identified at the photography studio scene through the sexual assault evidence, Saladeen was convicted in a December 11, 2001 for Murder in the Second Degree.

## Madison County

In 1992, the small village of Cazenovia (20 miles east of Syracuse) was celebrating the Fourth of July carnival. A 15 year old boy left the restaurant where he worked to meet his parents for the festive five minute walk along a wooded footpath to meet his parents, the boy was abducted, sexually assaulted and murdered. His body was discovered in Cazenovia Lake the next day. Thousands of leads were put out in the country (given the fact there were so many transient people in town that weekend of the carnival). In February 2001, the case was solved when forensic evidence recovered from the victim was found to match the DNA profile sample of Jeffrey Clark. Clark's DNA specimen had been collected for inclusion in the State's DNA Databank based on his conviction for Sodomy 1st in 2000. Clark subsequently entered a plea of guilty to the murder.

## Monroe County

In November 2002 a man was killed during a failed burglary when he woke up to the sounds of a burglar at his home. The victim approached the intruder and during the ensuing struggle managed to call police. The burglar was mortally wounded. Police arrived to find the victim but no suspect in the house. Crime scene technicians collected 10 blood samples from the Gates, NY home, 9 of which matched the victim, but the burglar was not identified. The sample was loaded into the State DNA Databank in January 2003. This sample returned a hit on Bryan P

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had been required to submit a sample for inclusion in the databank for a previous Burglary conviction. As a result of the 1999 amendments to the DNA Databank law. Armed with this information police contacted Hawkins, who denied involvement in the murder, to request that he submit a sample for confirmation. Hawkins agreed and upon testing, the sample matched the DNA found at the scene. Subsequent police were able to find two witnesses that remembered seeing Hawkins with a cut finger on the night the Homicide occurred. Hawkins is now serving a term of 25 years to life for the 2nd degree murder.

Because of the variation in the ages of the victims and the modus operandi, investigators were unable to find a connection between three sexual assaults that occurred between 1997 and 1999 in Rochester, New York. In 2000, DNA testing of physical evidence recovered at the scenes of these assaults indicated that one suspect had committed the three crimes. In one of the cases, a 4 year old girl was taken from her home during the night, molested and left on a residential street miles from her home. In another case, a 10 year old girl was beaten and raped by an intruder in her home. In the third case, a 67 year old woman was raped, beaten and robbed in the parking lot of her apartment building. In March 2000, a DNA sample from Robert Griffin was taken as a result of his recent conviction for Attempted Burglary 1st and entered into the State DNA Databank. Griffin's DNA profile matched the DNA profiles developed from the sexual assaults. Griffin was convicted of these assaults following a jury trial.

#### New York City

On January 5th 2004 a serial rapist was sentenced to 35 years in prison for a series of robberies and sexual assaults covering 5 months and 3 boroughs. The attacker, Tyrone Williams, started his crime spree in early 2003 by following a woman into an apartment complex in Chelsea where he robbed and sodomized her. Days later he then followed three more women into an apartment building in the Bronx raping two and sexually assaulting the third. The following week Williams returned to Chelsea where he followed two women into an apartment, raping one victim and robbing victims number five and six. Williams then traveled to Manhattan raping one victim in a stairwell in Mid-April 2003 followed by a second Manhattan rape in the early part of May 2003. The evidence collected at the scenes of these vicious attacks was quickly analyzed by the New York City Office of the Chief Medical Examiner and submitted for a search early in 2003. Williams was arrested by the New York City Police Department the day they were notified of his DNA hit. Williams was required to provide a DNA sample for the NYS DNA Databank following a 2000 conviction for an attempted burglary.

One early morning in October 2000, a young financial analyst on her way to work in midtown Manhattan was pulled into a freight elevator and viciously choked, raped and beaten. The victim bit her assailant to bleed onto her jacket. A DNA profile was developed from the blood stain by the New York City Medical Examiner Forensic Biology Laboratory and entered into CODIS. The profile from the crime scene matched the DNA profile of Richard Navas. He was subsequently arrested and convicted for Rape 1st Degree Assault.

In the early morning hours of December 21, 1999, as an NBC Producer walked home from her job in Manhattan, she was confronted by a man who threatened to kill her. He pulled her into an open area and raped her. She lured him to an ATM machine by offering him money, hoping to capture his picture on a security camera. Unfortunately, the perpetrator could not be identified in the ATM photo. Two months after the attack, a DNA specimen was collected from Lashange Legrand who was on parole for Attempted Robbery 1st. His DNA specimen had been collected under the 1999 amendments to the DNA database law. When his DNA profile was entered into the state DNA Databank, it matched with the profile recovered from forensic evidence collected from the scene of the 1999 attack. Legrand subsequently was convicted for Rape 1st.

In 1998, a female employee of a major department store had gone into the stock room of the store to change a robe. The assailant choked her and proceeded to rape her. Using the pin of her employee badge, she stabbed him which caused him to bleed onto the robe and cardboard that covered the floor. Subsequent to the rape, the rapist fled the stock room covering his face so that he could not be identified on a security camera. In April 2002, the DNA profile developed from the blood stain hit against the DNA profile of Joe Felder. Felder provided a DNA sample for inclusion in the Databank in February 2002 when he was committed to the Department of Correctional Services for Burglary 3rd. On April 15, 2003, Felder was convicted of Rape 1st.

In November 1995, a woman was abducted, raped and terrorized in an apparent attempt to get information about drug dealers that the perpetrators viewed as competition. She was unable to identify her assailant. A DNA profile was developed from forensic evidence recovered from the scene and, when entered into the state DNA database, was found to match the DNA profile of Kyle Hardison. Hardison's DNA specimen had been collected under the 1999 amendments to the state DNA database law as a result of a Robbery conviction. He was subsequently convicted of First Degree Rape and First Degree Sodomy.

In 1991, a 17-year-old girl Harlem girl was sodomized, raped and robbed in New York City. Due to the limitations of DNA science at the time of trial, DNA could not be extracted from the rape kit evidence. At his arrest and subsequent prosecution for these crimes, a Manhattan man was convicted and sentenced to 20 to 40 years incarceration. Recently, advances in DNA science enabled law enforcement

authorities to conduct a new test on the evidence in the case, and a DNA profile from that evidence to the databank in April of this year. A subsequent comparison of the crime DNA to the DNA of a Manhattan man proved that, in fact, he had not committed the crime for which he was incarcerated. DNA was then searched against the DNA databank, and matched to another incarcerated felon whose sample was added to the databank as a result of the 1999 expansion. Sadly, the existing statute has expired for these crimes, thereby hindering the prosecution of the true perpetrator. However, the databank to exonerate the innocent, as well as implicate the guilty, is made abundantly clear and the need to eliminate the statute of limitations for such violent crimes is reaffirmed.

#### **Onondaga County**

In November 1975 a woman was found murdered on the shores of Otisco Lake just outside Syracuse. Her body police found the business card of a Madison, NY cabinetmaker, Donald Sigsbee. Sigsbee was a prime suspect for a number of years in the rape and stabbing death of the victim but police were unable to positively connect him to the crime. In 1975 the use of DNA evidence had yet to be conceived, but through the diligence of a single State Police forensic scientist, a sample of the semen from the crime scene was preserved on a microscope slide. That thoughtfulness led to the DNA profile that matched the DNA of Sigsbee on a discarded drinking straw. Now 28 years later the family of the victim has their justice and a final resting place for the death of a loved one. Sigsbee now faces a mandatory minimum of 15 years to life in prison.

In December, 1999, an individual broke into Onondaga County home of an 80 year old woman and sodomized her. She was unable to identify her assailant. Forensic evidence recovered at the scene was analyzed and the resulting DNA profile entered into the DNA Databank. The profile was found to be a match to the DNA profile of Sean Coyne who was on probation for an Attempted Robbery 2nd conviction. He is now required to provide a DNA specimen as a result of the 1999 amendments to the DNA database law.

#### **Sullivan County**

Nearly 18 years of mystery ended when Rommal Bennett pleaded guilty in August of 2004 to the murder of the owner of a diner in Monticello. A cold hit in CODIS, the national DNA Database system, linked the DNA profile recovered from a cigarette butt found in a beer bottle at the victim's residence. The cigarette butt was analyzed by the New York State Police Forensic Investigation Center in Albany. Bennett was put into the national database by the forensic laboratory in Minnesota based on a 1994 conviction for murder.

#### **Westchester County**

Thirsty? Apparently Angelo Powell was following an October 2003 burglary where he thought it would help himself to a soda from the victim's home. That thirst was the final straw in a string of burglaries that Powell had committed during his 25 year career as a criminal. The DNA that he left on the rim of a soda bottle was compared to the NYS DNA Databank and hit against a sample Powell provided in 2000 for a conviction for Burglary in the Second Degree. Based upon the DNA evidence left behind and the fact that he had no legitimate reason to be in the home of the victim, Powell pleaded guilty and was sentenced to life as a persistent violent felony offender.

The first match against the State DNA Databank solved a 21-year-old murder in Westchester County of 1979, a 22-year-old woman was brutally stabbed to death in her Mt. Vernon apartment. The suspect apparently cut himself in the commission of this offense. Bloodstains found at the scene of the crime were preserved and DNA analysis was performed in 2000 by the Westchester County Forensic Science Center. The resulting DNA profile was uploaded to the State's DNA Databank and found to match the DNA profile of Walter Gill. Mr. Gill was serving time in State prison for robbery, an offense that did not require a DNA sample until the 1999 amendment to the DNA database law. Gill was convicted of First Degree Manslaughter.

## Alaska's Crime Fighting Databases A Big Hit

By CHRIS BEHEIM AND LESLEY HAMMER

The Department of Public Safety maintains two databases that are powerful weapons in the war on crime; WIN/AAFIS, the Western Identification Network / Alaska Automated Fingerprint Information System and CODIS, the Combined DNA Index System. Unidentified latent fingerprints may be searched in AAFIS and unidentified DNA evidence may be searched in CODIS. Both of these databases have proven to be extremely effective crime fighting tools, as crime lab personnel have utilized them to generate hits on latent prints and DNA that otherwise would remain unidentified. The Scientific Crime Detection Laboratory has made the utilization of these databases a priority.

Latent fingerprints associated with a crime are first compared to suspects and persons for elimination. Remaining unidentified latent prints of sufficient quality are searched in the WIN/AAFIS system. From 1997 to 2001, the crime lab Latent Fingerprint Section averaged 24 AAFIS hits per year. The number of hits generated in 2002 went up 229% to a total of 55. Many of these hits provided investigative information, leading to the resolution of crimes, which would have otherwise re-

mained unsolved. For example, a suspect was recently generated in an unsolved homicide because one of our latent examiners decided to search the print in WIN/AAFIS in addition to comparing it to the suspects provided on the laboratory submittal. The latent print hit on a person that was not listed on the suspect list, providing a new investigative lead in the case. The trend of hits continues into 2003 with 21 hits so far this year. In the month of April alone there have been seven latent print hits; three from drug cases, two from burglary cases, and two associated with homicide cases. Later this year the crime lab will also have the capability to search latent palm impressions with the acquisition of a Palm Print Database System which is now being researched for purchase.

DNA evidence is searched in the CODIS database. CODIS blends forensic science and computer technology into an effective tool for solving a variety of different crimes. Alaska's DNA Identification System currently contains profiles from 3200 convicted offenders along with 300 forensic or crime scene DNA profiles. Over half of the forensic profiles are from "no-suspect" cases. As

DNA profiles are entered, they are searched against both the convicted offender index and the forensic index which contain profiles from crime scene evidence. The results produced by CODIS have been spectacular. In the past 16 months, the DNA database has generated 30 hits and aided 38 different investigations, making Alaska's CODIS program one of the most successful in the country on a per capita basis. Fifteen of the hits linked crime scene evidence to a convicted offender, and fifteen of the hits linked two or more cases together, indicating that the same perpetrator was involved. DNA profiles from Alaska are regularly uploaded into the National DNA Index System. NDIS enables federal, state, and local crime labs to exchange and compare DNA profiles electronically, thereby linking crimes to each other and to convicted offenders from other states. The National DNA Index System now contains over 1,200,000 DNA profiles.

Both WIN/AAFIS and CODIS are invaluable resources to crime lab personnel. Evidence that may have remained unidentified a few years ago is now being searched in these systems and leading to

(Alaska's Crime, continued on page 6)

### Alaska Crime, continued from page 5

the resolution of many serious crimes. As technology advances and Public Safety personnel become more aware of the operation and potential of these powerful crime-fighting tools, we will see even more crimes solved in the future as direct results of these database searches. If you have any questions, or if you have evidence in no-suspect cases that you would like searched, please contact the Crime Laboratory. For latent print evidence contact Lesley Hammer at 269-5760, and for questions regarding CODIS contact Chris Beheim at 269-5743. ■



IN

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SHORT



TOWARD CRIMINAL JUSTICE SOLUTIONS

NOV. 04

## DNA in "Minor" Crimes Yields Major Benefits in Public Safety

### THE ISSUE

Property crime offenders have high recidivism rates, their crime and violence can escalate, and property crime cases often go unsolved.<sup>1</sup> It has been estimated that each burglar in the top 10 percent of burglars commits more than 232 burglaries per year.<sup>2</sup> Several police departments in the United States are finding that they may be able to change these trends. When they analyze DNA from a burglary, they get evidence that often solves several other cases as well. And they are finding that biological evidence collected from property crime scenes can prevent future property crimes and more serious offenses.

The Miami-Dade Police Department (MDPD), Palm Beach County Sheriff's Office, and New York City Police Department (NYPD) are solving high-volume property crimes (like burglary and auto theft) and violent crimes (like sexual assault and murder) using DNA funds they received from the National Institute of Justice (NIJ). They are discovering that analyzing DNA from property crimes can have major public safety benefits.

### BACKGROUND

Biological evidence *can* be retrieved from property crime scenes. Burglars often cut themselves on broken glass as they enter a property—and blood is an obvious source of DNA evidence. Plus crime labs can get a profile from "invisible" DNA evidence police retrieve from the sweatband inside a cap, from the inside of a mask, on a cigarette butt, in chewing gum, on a drinking glass, or from a half-eaten sandwich. In New York, analysts have had great success processing this "invisible" burglary evidence from the skin cells deposited from perspiration or saliva.

Mark Dale, crime lab director at the NYPD, said that in his experience, when DNA from a no-suspect murder scene is checked against records in the Combined DNA Index System (CODIS)<sup>3</sup>, it often matches DNA from a no-suspect burglary. Review of the State's first 1,000 hits showed that the vast majority were linked to crimes like homicide and rape, but of these, 82 percent of the offenders were already in the databank as a result of a prior conviction for a "lesser" crime such as burglary or drugs.<sup>4</sup> According to a Florida State study, 52 percent of database hits against murder and sexual assault cases matched individuals who had prior convictions for burglary.<sup>5</sup>

With NIJ support, the crime labs in Miami-Dade, Palm Beach, and New York City have achieved dramatic results by analyzing biological evidence collected from property crime scenes.

**The Numbers.** In New York, biological evidence from 201 burglaries yielded 86 CODIS-acceptable DNA profiles. On the basis of these numbers, the lab has thus far been able to identify several "pattern" burglaries. One profile uncovered a five-burglary serial offender. Most of New York's DNA profiles resulted in forensic hits to multiple unsolved cases. Three were linked to more serious, violent crimes such as sexual assault and robbery. In all, 37 burglary profiles have been linked through CODIS to other unsolved cases; 31 of the newly analyzed cases were matched through CODIS to convicted offenders and are now being investigated; arrests are pending.

DNA in blood stains collected at the scenes of four household burglaries in Miami-Dade linked all cases to the same offender, who turned out to be a previously convicted burglar. DNA evidence also linked three different no-suspect vehicle and residential burglaries and identified the perpetrator—he, too, turned out to be a previously convicted burglar.

Overall, in Miami-Dade, 526 no-suspect DNA profiles produced 271 hits; in Palm Beach, 229 profiles produced 91 hits. Of the 362 CODIS hits, 56 percent came from evidence collected at burglary scenes.

**The Cost.** The cost of DNA testing depends on several factors: the number of samples tested per case, the type of DNA testing needed (nuclear or mitochondrial), and the cost to have police collect biological evidence at property crime scenes and pursue investigative leads generated by CODIS hits.

But the cost of DNA analysis must be weighed against the losses from crime incurred by the public. The Bureau of Justice Statistics estimates the average property loss from burglary is \$1,500.<sup>6</sup> Bud Stuver, who heads the DNA testing program at the MDPD, looks at affordability from the broad perspective of the costs to the justice system as a whole. "It is much more expeditious to employ DNA testing than to pay investigators."

## THE BOTTOM LINE

"We move quickly when profiles are needed for the high-priority crimes of murder and rape," says Cecilia Crouse, who supervises the DNA section of the Palm Beach County Sheriff's Office crime lab. The crime labs in New York City, Miami-Dade, and Palm Beach have shown that DNA can go a long way toward solving property crimes as well as violent crimes. Law enforcement agencies can clear even more cases when they collect biological evidence not just from the scenes of major crimes, but also from high-volume crimes, such as burglary.

Bud Stuver, who has trained many officers in the MDPD to collect DNA at property crimes, shows them "it's worth the time and effort."

Mark Dale, in the NYPD, noted his lab is "now gathering data to investigate the links between recidivism, lesser offenses, and more serious crimes." If forthcoming data can show the links, then it may be possible in some instances to prevent murder by solving burglaries.

## FOR MORE INFORMATION

Visit <http://www.dna.gov>.

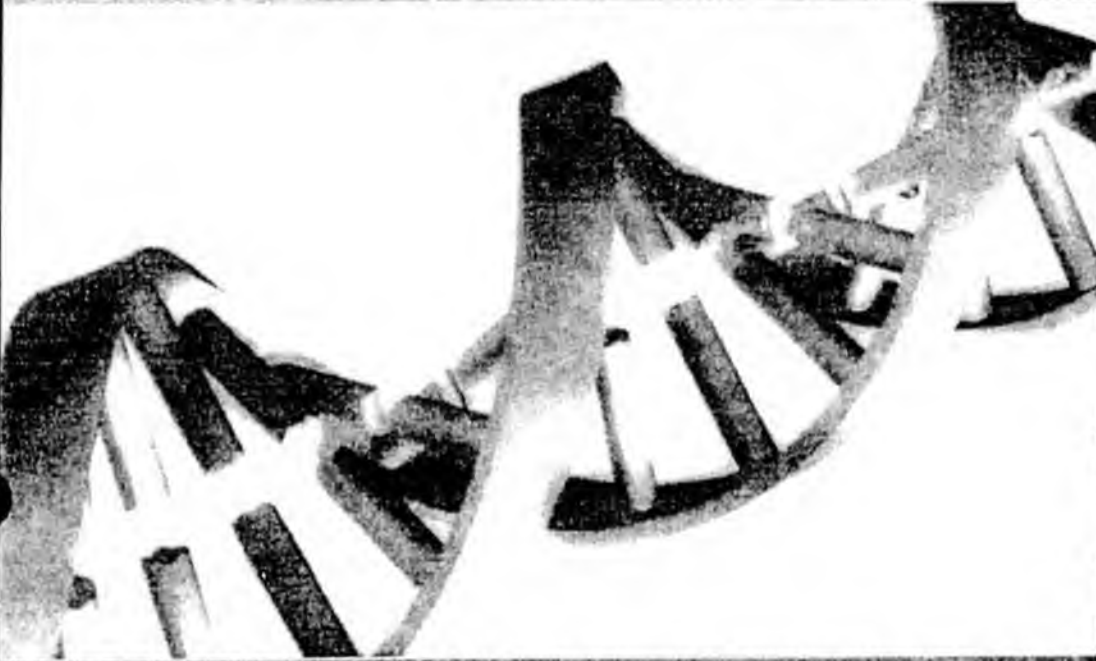
## NOTES

1. Langan, P.A., and D.J. Levin, *Recidivism of Prisoners Released in 1994*, Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2002 (NCJ 193427): 1, 8; *Crime in the United States 2002*: 221, 223. Burglary had the lowest clearance rate of any Index crime. (Violent crimes are often more rigorously investigated, which explains why their clearance rate is higher than for property crimes.)
2. Chaiken, J.M. and M.R. Chaiken, *Varieties of Criminal Behavior*, Washington, DC: U.S. Department of Justice, National Institute of Justice, 1982 (NCJ 87680): 44.
3. CODIS is an FBI-distributed database that allows Federal, State, and local crime labs to exchange and compare DNA profiles.
4. Source: <http://criminaljustice.state.ny.us/forensic/dnabrochure.htm>.
5. Source: Florida Department of Law Enforcement State DNA Database Statistics, Tallahassee, Florida.
6. Bureau of Justice Statistics, *Sourcebook of Criminal Justice Statistics, 2000*, Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2001 (NCJ 190251): 304.

**NIJ**

Special

**REPORT**



Using DNA to Solve Cold Cases



**U.S. Department of Justice**  
**Office of Justice Programs**  
810 Seventh Street N.W.  
Washington, DC 20531

**John Ashcroft**  
*Attorney General*

**Deborah J. Daniels**  
*Assistant Attorney General*

**Sarah V. Hart**  
*Director, National Institute of Justice*

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JULY 02

## Using DNA to Solve Cold Cases

NCJ 194197

**NIJ**



**Sarah V. Hart**  
*Director*  
National Institute of Justice

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The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

## National Commission on the Future of DNA Evidence

In 1995, the National Institute of Justice (NIJ) began research that would attempt to identify how often DNA had exonerated wrongfully convicted defendants. After extensive study, NIJ published the report *Convicted by Juries, Exonerated by Science: Case Studies in the Use of DNA Evidence to Establish Innocence After Trial*, which presents case studies of 28 inmates for whom DNA analysis was exculpatory.

On learning of the breadth and scope of the issues related to forensic DNA, the Attorney General asked NIJ to establish the National Commission on the Future of DNA Evidence as a means to examine the most effective use of DNA in the criminal justice system. The Commission was appointed by the NIJ Director and represented the broad spectrum of the criminal justice system. Chaired by the Honorable Shirley S. Abrahamson, Chief Justice of the Wisconsin Supreme Court, the Commission consisted of representatives from the prosecution, the defense bar, law enforcement, the scientific community, the medical examiner community, academia, and victims' rights organizations.

The Commission's charge was to submit recommendations to the Attorney General that will help ensure the best use of DNA as a crimefighting tool and foster its use throughout the entire criminal justice system. Other focal areas for the Commission's consideration included crime scene investigation and evidence

collection, laboratory funding, legal issues, and research and development. The Commission's working groups, consisting of commissioners and other experts, researched and examined various topics and reported back to the Commission. The working groups' reports were submitted to the full Commission for approval, amendment, or further discussion and provided the Commission with background for its recommendations to the Attorney General.

By nature of its representative composition and its use of numerous working groups, the Commission received valuable input from all areas of the criminal justice system. The broad scope of that input enabled the Commission to develop recommendations that both maximize the investigative value of the technology and address the issues raised by its application.

### Commission members

#### Chair

The Honorable Shirley S. Abrahamson  
Chief Justice  
Wisconsin Supreme Court

#### Members

Dwight E. Adams  
Director  
Federal Bureau of Investigation Laboratory

Jan S. Bashinski  
 Chief  
 Bureau of Forensic Services  
 California Department of Justice  
 Sacramento, California

George W. Clarke  
 Deputy District Attorney  
 San Diego, California

James F. Crow  
 Professor  
 Department of Genetics  
 University of Wisconsin

Lloyd N. Cutler  
 Wilmer, Cutler & Pickering  
 Washington, D.C.

Joseph H. Davis  
 Former Director  
 Miami-Dade Medical Examiner  
 Department

Paul B. Ferrara  
 Director  
 Division of Forensic Sciences  
 Commonwealth of Virginia

Norman Gahn  
 Assistant District Attorney  
 Milwaukee County, Wisconsin

Terrance W. Gainer  
 Executive Assistant Chief  
 Metropolitan Police Department  
 Washington, D.C.

Terry G. Hillard  
 Superintendent of Police  
 Chicago Police Department  
 Chicago, Illinois

Aaron D. Kennard  
 Sheriff  
 Salt Lake County, Utah

Philip Reilly  
 Interleukin Genetics  
 Waltham, Massachusetts

Ronald S. Reinstein  
 Associate Presiding Judge  
 Superior Court of Arizona  
 Maricopa County, Arizona

Darrell L. Sanders  
 Chief  
 Frankfort Police Department  
 Frankfort, Illinois

Barry C. Scheck  
 Professor  
 Cardozo Law School  
 New York, New York

Michael Smith  
 Professor  
 University of Wisconsin Law School

Jeffrey E. Thoma  
 Public Defender  
 Mendocino County, California

Kathryn M. Turman  
 Director  
 Office for Victim Assistance  
 Federal Bureau of Investigation

William Webster  
 Milbank, Tweed, Hadley & McCloy  
 Washington, D.C.

James R. Wooley  
 Baker & Hostetler  
 Cleveland, Ohio

**Commission staff**

Christopher H. Asplen  
 Executive Director

Lisa Forman  
 Deputy Director

Robin W. Jones  
 Executive Assistant

## Crime Scene Investigation Working Group

The Crime Scene Investigation Working Group is a multidisciplinary group of criminal justice professionals from across the United States who represent both urban and rural jurisdictions. Working group members and contributors were recommended and selected for their experience in the area of criminal investigation and evidence collection from the standpoints of law enforcement, prosecution, defense, the forensic laboratory, and victim assistance.

DNA has proven to be a powerful tool in the fight against crime. DNA evidence can identify suspects, convict the guilty, and exonerate the innocent. Throughout the Nation, criminal justice professionals are discovering that advancements in DNA technology are breathing new life into old, cold, or unsolved criminal cases. Evidence that was previously unsuitable for DNA testing because a biological sample was too small or degraded may now yield a DNA profile. Development of the Combined DNA Index System (CODIS) at the State and national levels enables law enforcement to aid investigations by effectively and efficiently identifying suspects and linking serial crimes to each other. The National Commission on the Future of DNA Evidence made clear, however, that we must dedicate more resources to empower law enforcement to use this technology quickly and effectively.

*Using DNA to Solve Cold Cases* is intended for use by law enforcement and other criminal justice professionals who have the responsibility for reviewing and investigating unsolved cases. This report will provide basic information to assist agencies in the complex process of case

review with a specific emphasis on using DNA evidence to solve previously unsolvable crimes. Although DNA is not the only forensic tool that can be valuable to unsolved case investigations, advancements in DNA technology and the success of DNA database systems have inspired law enforcement agencies throughout the country to reevaluate cold cases for DNA evidence. As law enforcement professionals progress through investigations, however, they should keep in mind the array of other technology advancements, such as improved ballistics and fingerprint databases, which may substantially advance a case beyond its original level.

### Chair

Terrance W. Gainer  
Executive Assistant Chief  
Metropolitan Police Department  
Washington, D.C.

### Members

Susan Ballou  
Office of Law Enforcement Standards  
National Institute of Standards and  
Technology  
Gaithersburg, Maryland

Jan S. Bashinski  
Chief  
Bureau of Forensic Services  
California Department of Justice  
Sacramento, California

Sue Brown  
INOVA Fairfax Hospital  
SANE Program  
Falls Church, Virginia

Lee Colwell  
Director  
Criminal Justice Institute  
University of Arkansas System  
Little Rock, Arkansas

Thomas J. Cronin  
Chief  
City of Coeur d'Alene Police Department  
Coeur d'Alene, Idaho

Terry G. Hillard  
Superintendent of Police  
Chicago Police Department  
Chicago, Illinois

Mark Johnsey  
Master Sergeant (Ret.)  
Division of Forensic Services  
Illinois State Police Department  
Springfield, Illinois

Christopher Plourd  
Attorney at Law  
San Diego, California

Darrell L. Sanders  
Chief  
Frankfort Police Department  
Frankfort, Illinois

Clay Strange  
Assistant District Attorney  
Travis County District Attorney's Office  
Austin, Texas

### **Contributors**

Cheryl May  
Assistant Director  
Forensic Sciences Education Center  
Little Rock, Arkansas

William McIntyre  
Detective Sergeant (Ret.)  
Atlantic County Prosecutor's Office  
Homicide Unit  
Hammonton, New Jersey

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## Introduction



In 1990, a series of brutal attacks on elderly victims occurred in Goldsboro, North Carolina, by an unknown individual dubbed the "Night Stalker." During one such attack in March, an elderly woman was brutally raped and almost murdered. Her daughter's early arrival home was the only thing that saved the woman's life. The suspect fled, leaving behind materials intended to burn the residence and the victim in an attempt to conceal the crime. In July 1990, another elderly woman was brutally raped and murdered in her home. Three months later, a third elderly woman was raped and stabbed to death. Her husband was also murdered. Their house was burned in an attempt to cover up the crime, but fire/rescue personnel pulled the bodies from the house before it was engulfed in flames.

When DNA analysis was conducted on biological evidence collected from vaginal swabs from each victim, authorities concluded that the same perpetrator had committed all three crimes. However, there was no suspect.

For 10 years, both the Goldsboro Police Department and the crime laboratory refused to forget about these cases. With funding from the National Institute of Justice, the crime laboratory retested the biological evidence in all three cases with newer DNA technology and entered the DNA profiles into North Carolina's DNA database. This would allow the DNA profile developed from the crime scene evidence to be compared to thousands of convicted offender profiles already in the database.

In April 2001, a "cold hit" was made to the perpetrator's convicted offender DNA profile in the database. The perpetrator

had been convicted of shooting into an occupied dwelling, an offense that requires inclusion in the North Carolina DNA database. The suspect was brought into custody for questioning and was served with a search warrant to obtain a sample of his blood. That sample was analyzed and compared to the crime scene evidence, thereby confirming the DNA database match. When confronted with the DNA evidence, the suspect confessed to all three crimes.

Mark Nelson, special agent in charge of the North Carolina State Crime Laboratory, said, "Even though these terrible crimes occurred more than 10 years ago, we never gave up hope of solving them one day."

Every law enforcement department throughout the country has unsolved cases that could be solved through recent advancements in DNA technology. Today, investigators who understand which evidence may yield a DNA profile can identify a suspect in ways previously seen only on television. Evidence invisible to the naked eye can be the key to solving a residential burglary, sexual assault, or murder. The saliva on the stamp of a stalker's threatening letter, the perspiration on a rapist's mask, or the skin cells shed on the ligature of a strangled child may hold the key to solving a crime.

In Austin, Texas, for example, an investigator knowledgeable about DNA technology was able to solve the rape of a local college student. Having read about the potential for obtaining DNA evidence from the ligature used to strangle a victim, the investigator requested DNA testing on the phone cord used to choke the victim in his case. He realized that in the course of

*The successful review and investigation of unsolved cases require cooperation among law enforcement, the crime laboratory, and the prosecutor's office.*

choking someone, enough force and friction is applied to the rope or cord that the perpetrator's skin cells may rub off his hands and be left on the ligature.

The investigator's request paid off in an unanticipated way. In spite of the attacker's attempt to avoid identification through DNA evidence by wearing both a condom and rubber gloves, a reliable DNA profile was developed from the evidence. During the struggle, the attacker was forced to use one hand to hold the victim down, leaving only one hand to pull the phone cord tight. The attacker had to grab the remaining end of the cord with his mouth, thereby depositing his saliva on the cord. Although the developed profile came from saliva rather than skin, DNA not only solved the case in Austin, but also linked the perpetrator to a similar sexual assault in Waco.

Without the investigator's understanding of DNA technology and where DNA might be found, the case may have gone unsolved. The successful review and investigation of unsolved cases require the same basic elements as the investigation of new cases: cooperation among law enforcement, the crime laboratory, and the prosecutor's office. Investigators should be aware of technological advances in DNA testing that may yield profiles where previous testing was not performed or was unsuccessful. The crime laboratory can be essential to the preliminary review of unsolved cases, for example, by providing investigators with laboratory reports from previous testing and consultation regarding the investigative value of new DNA analysis techniques and DNA database search capabilities. Additionally, the prosecutor's office should be involved as soon as a case is reopened so that legal issues are addressed appropriately. It is also extremely important that case reconstruction considers the victim or victim's family and the importance of finality to closing a case.

Although DNA is not the only forensic tool available for the investigation of unsolved cases, advancements in DNA testing and the success of DNA database systems have inspired law enforcement agencies throughout the country to reevaluate cases previously thought unsolvable. The purpose of this report is to provide law enforcement with a practical resource for the review of old, cold, or unsolved cases that may be solved through DNA technology and DNA databases. "The Long and Short of DNA" and "How Can DNA Databases Aid Investigations?" will educate the reader about the science and technology of DNA testing and DNA databases. "Practical Considerations" provides important background information on legal and practical considerations regarding the application of DNA technology to old, cold, or unsolved cases. Finally, a step-by-step process is provided to help investigators select cases that would most likely be solved with DNA evidence. As investigators advance through this process, they should also keep in mind the array of other technology advancements, such as improved ballistics and fingerprint databases, that may benefit their investigation.

## **Advancements in DNA technology**

Advancements in DNA analysis, together with computer technology and the Combined DNA Index System (CODIS),<sup>1</sup> have created a powerful crimefighting tool for law enforcement. CODIS is a computer network that connects forensic DNA laboratories at the local, State, and national levels. DNA database systems that use CODIS contain two main criminal indexes and a missing persons index. When a DNA profile is developed from crime scene evidence and entered into the forensic (crime scene) index of CODIS, the database software searches thousands of convicted offender DNA profiles

(contained in the offender index) of individuals convicted of offenses such as rape and murder. Similar to the Automated Fingerprint Identification System (AFIS), CODIS can aid investigations by efficiently comparing a DNA profile generated from biological evidence left at a crime scene against convicted offender DNA profiles and forensic evidence from other cases contained in CODIS. CODIS can also aid investigations by searching the missing persons index, which contains DNA profiles of unidentified remains and DNA profiles of relatives of those who are missing. Because of the recidivistic nature of violent offenders, the power of a DNA database system is evident not only in the success of solving crimes previously thought unsolvable, but perhaps more importantly, through the *prevention* of crime.

When properly documented, collected, and stored, biological evidence can be analyzed to produce a reliable DNA profile years, even decades, after it is collected. Just as evidence collected from a crime that occurred yesterday can be analyzed for DNA, today evidence from an old rape kit, bloody shirt, or stained bedclothes may contain a valuable DNA profile. These new analysis techniques, in combination with an evolving database system, make a powerful argument for the reevaluation of unsolved crimes for potential DNA evidence.

Knowledgeable law enforcement officers are taking advantage of powerful DNA analysis techniques by investigating crime scenes with a keener eye toward biological evidence. The same new approach being applied to crime scene processing and current case investigation can be applied to older unsolved cases. Law enforcement agencies across the country are establishing cold-case squads to systematically review old cases for DNA and other new leads. This report will serve as a resource to assist law enforcement with maximizing the potential of DNA evidence

in unsolved cases by covering the basics of DNA analysis and its application to forensic casework. The report will also demonstrate how DNA database systems, advancing technology, and cooperative efforts can enhance unsolved case investigative techniques.

## New laws

Advancements in DNA technology have led to significant changes in many States' statutes, which may affect the manner in which unsolved cases are investigated, filed, and prosecuted. Advancements in the technology have been so significant that laws are being created, amended, and even repealed to take advantage of its ability to identify and convict the guilty and exonerate the innocent. Laws regarding DNA admissibility in court, its use in post-conviction appeals, the creation and expansion of databases, and the extension or elimination of statutes of limitation are examples of the quickly evolving impact of DNA on the criminal justice system. Given the legal changes occurring throughout the country, constant contact and consultation with the local prosecutor is critical not only for the investigation of older cases but for all cases in which DNA may be relevant evidence.

## Statutes of limitation

Statutes of limitation may be one of the most difficult issues to overcome when examining older cases. Statutes of limitation establish time limits under which criminal charges can be filed for a particular offense. These statutes are rooted in the protection of individuals from the use of evidence that becomes less reliable over time. For example, witnesses' memories fade as time goes by. However, although some evidence, such as eyewitness accounts, can lose credibility over time, DNA evidence has the power to determine truth 10, 15, even 20 years

*The power of a DNA database system is evident not only in the success of solving crimes previously thought unsolvable, but through the prevention of crime.*

*The reliability of DNA technology may necessitate the reevaluation of statutes of limitation.*

after an offense is committed. States are beginning to realize that the reliability of DNA technology may necessitate the reevaluation of statutes of limitation in the filing of cases.

### **Database expansion**

The use of DNA evidence and convicted offender DNA databases has expanded significantly since the first U.S. DNA database was created in 1989. Although State and local DNA databases established in the early 1990s contained only DNA profiles from convicted murderers and sex offenders, the undeniable success of DNA databases has resulted in a national trend toward database expansion. All States require at least some convicted offenders to provide a DNA sample to be collected for DNA profiling and, in 2000, the Federal Government began requiring certain offenders convicted of Federal or military crimes to also provide a DNA sample for the criminal DNA database. Recognizing that the effectiveness of the DNA database relies on the volume of data contained in both the forensic index (crime scene samples) and the convicted offender index of CODIS, many States are changing their database statutes to include less violent criminals. Many States are enacting legislation to require

all convicted felons to submit a DNA profile to the State database. The tendency for States to include all convicted felons in their databases dramatically increases the number of convicted offender DNA profiles against which forensic DNA evidence can be compared, thus making the database system a more powerful tool for law enforcement.

### **New legal approaches**

DNA technology and DNA databases have encouraged the development of new approaches to old cases. One such approach is the filing of charges by "John Doe" warrant. These warrants are based on the unique DNA profile obtained from the analysis of unsolved crime scene evidence. Although John Doe warrants are traditionally filed based on the physical description or alias of an unnamed suspect, investigators and prosecutors are now filing charges using the suspect's DNA profile as the identifier. This innovative approach has allowed charges to be filed that toll and permit old cases to be prosecuted when the person matching the John Doe DNA profile is identified. John Doe DNA warrants are one way to permit cases to remain active, allowing them the chance to be solved through the DNA database in the future.

## The Long and Short of DNA



DNA is the fundamental building block for an individual's entire genetic makeup. It is a component of virtually every cell in the human body, and a person's DNA is the same in every cell. That is, the DNA in a person's blood is the same as the DNA in his skin cells, saliva, and other biological material.

DNA analysis is a powerful tool because each person's DNA is unique (with the exception of identical twins). Therefore, DNA evidence collected from a crime scene can implicate or eliminate a suspect, similar to the use of fingerprints. It also can analyze unidentified remains through comparisons with DNA from relatives. Additionally, when evidence from one crime scene is compared with evidence from another using CODIS, those crime scenes can be linked to the same perpetrator locally, statewide, and nationally.

DNA is also a powerful tool because when biological evidence from crime scenes is collected and stored properly, forensically valuable DNA can be found on evidence that may be decades old. Therefore, old cases that were previously thought unsolvable may contain valuable DNA evidence capable of identifying the perpetrator.

### Similar to fingerprints

DNA is often compared with fingerprints in the way matches are determined. When using either DNA or fingerprints to identify a suspect, the evidence collected from the crime scene is compared with a "known" standard. If identifying features are the same, the DNA or fingerprint can be determined to be a match. However, if identifying features of the DNA profile or fingerprint are different from the known

standard, it can be determined that it did not come from that known individual.

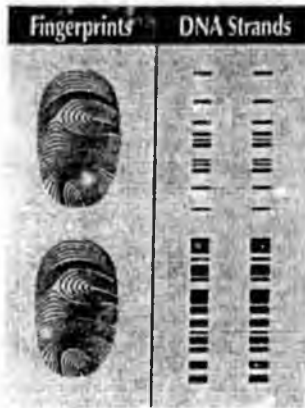
### DNA technology advancements

Recent advancements in DNA technology have improved law enforcement's ability to use DNA to solve old cases. Original forensic applications of DNA analysis were developed using a technology called restriction fragment length polymorphism (RFLP). Although very old cases (more than 10 years) may not have had RFLP analysis done, this kind of DNA testing may have been attempted on more recent unsolved cases. However, because RFLP analysis required a relatively large quantity of DNA, testing may not have been successful. Similarly, biological evidence deemed insufficient in size for testing may not have been previously submitted for testing. Also, if a biological sample was degraded by environmental factors such as dirt or mold, RFLP analysis may have been unsuccessful at yielding a result. Newer technologies could now be successful in obtaining results.

Newer DNA analysis techniques enable laboratories to develop profiles from biological evidence invisible to the naked eye, such as skin cells left on ligatures or weapons. Unsolved cases should be evaluated by investigating both traditional and nontraditional sources of DNA. Valuable DNA evidence might be available that previously went undetected in the original investigation.

If biological evidence is available for testing or retesting in unsolved case investigations, it is important that law enforcement and the crime laboratory work together to review evidence. Logistical issues

*If biological evidence is available for testing or retesting in unsolved case investigations, it is important that law enforcement and the crime laboratory work together to review evidence.*



*If the convicted offender or forensic index of CODIS is to be used in the investigative stages of an unsolved case, DNA profiles must be generated using STR analysis.*

regarding access to and the cost of DNA analysis will be a factor, as well as issues that relate to the discriminating power of each technology and that might affect the outcome of the results. Laboratory personnel can also provide a valuable perspective on which evidence might yield valuable and probative DNA results. Finally, if previously tested biological evidence produced a DNA profile but excluded the original suspect, revisiting those "exclusion" cases in the context of comparing them with DNA databases might prove to be very valuable to solving old cases.

### PCR analysis

PCR (polymerase chain reaction) enhances DNA analysis and has enabled laboratories to develop DNA profiles from extremely small samples of biological evidence. The PCR technique replicates exact copies of DNA contained in a biological evidence sample without affecting the original, much like a copy machine. RFLP analysis requires a biological sample about the size of a quarter, but PCR can be used to reproduce millions of copies of the DNA contained in a few skin cells. Since PCR analysis requires only a minute quantity of DNA, it can enable the laboratory to analyze highly degraded evidence for DNA. On the other hand, because the sensitive PCR technique replicates any and all of the DNA contained in an evidence sample, greater attention to contamination issues is necessary when identifying, collecting, and preserving DNA evidence. These factors may be particularly important in the evaluation of unsolved cases in which evidence might have been improperly collected or stored.

### STR analysis

Short tandem repeat (STR) technology is a forensic analysis that evaluates specific regions (loci) that are found on nuclear DNA. The variable (polymorphic) nature of

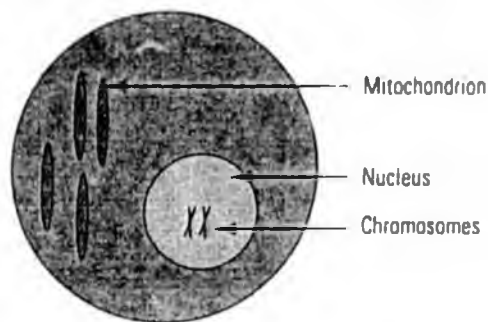
the STR regions that are analyzed for forensic testing intensifies the discrimination between one DNA profile and another. For example, the likelihood that any two individuals (except identical twins) will have the same 13-loci DNA profile can be as high as 1 in 1 billion or greater. The Federal Bureau of Investigation (FBI) has chosen 13 specific STR loci to serve as the standard for CODIS. The purpose of establishing a core set of STR loci is to ensure that all forensic laboratories can establish uniform DNA databases and, more importantly, share valuable forensic information. If the forensic or convicted offender CODIS index is to be used in the investigative stages of unsolved cases, DNA profiles must be generated by using STR technology and the specific 13 core STR loci selected by the FBI.

### Mitochondrial DNA analysis

Mitochondrial DNA (mtDNA) analysis allows forensic laboratories to develop DNA profiles from evidence that may not be suitable for RFLP or STR analysis. While RFLP and PCR techniques analyze DNA extracted from the nucleus of a cell, mtDNA technology analyzes DNA found in a different part of the cell, the mitochondrion (see exhibit 1). Old remains and evidence lacking nucleated cells—such as hair shafts, bones, and teeth—that are unamenable to STR and RFLP testing may yield results if mtDNA analysis is performed. For this reason, mtDNA testing can be very valuable to the investigation of an unsolved case. For example, a cold case log may show that biological evidence in the form of blood, semen, and hair was collected in a particular case, but that all were improperly stored for a long period of time. Although PCR analysis sometimes enables the crime laboratory to generate a DNA profile from very degraded evidence, it is possible that the blood and semen would be so highly degraded that nuclear DNA analysis would not yield a DNA profile. However, the hair

shaft could be subjected to mtDNA analysis and thus be the key to solving the case. Finally, it is important to note that all maternal relatives (for example, a person's mother or maternal grandmother) have identical mtDNA. This enables unidentified remains to be analyzed and compared to the mtDNA profile of any maternal relative for the purpose of aiding missing persons or unidentified remains investigations. Although mtDNA analysis can be very valuable to the investigation of criminal cases, laboratory personnel should always be involved in the process.

Exhibit 1. Cell diagram



### Y-chromosome analysis

Several genetic markers have been identified on the Y chromosome that can be used in forensic applications. Y-chromosome markers target only the male fraction of a biological sample. Therefore, this technique can be very valuable if the laboratory detects complex mixtures (multiple male contributors) within a biological evidence sample. Because the Y chromosome is transmitted directly from a father to all of his sons, it can also be used to trace family relationships among males. Advancements in Y-chromosome testing may eventually eliminate the need for laboratories to extract and separate semen and vaginal cells (for example, from a vaginal swab of a rape kit) prior to analysis.

Cooperative efforts with the crime laboratory are essential to deciding which analysis methods will be most valuable in a particular case. It is important to note, however, that while RFLP and mtDNA testing may be valuable to the investigation of an old case, current DNA databases are being populated with DNA profiles that are generated using STR analysis. RFLP and mtDNA profiles are not compatible with the convicted offender or forensic indexes of CODIS.<sup>2</sup>

## How Can DNA Databases Aid Investigations?

The development and expansion of databases that contain DNA profiles at the local, State, and national levels have greatly enhanced law enforcement's ability to solve cold cases with DNA. Convicted offender databases store hundreds of thousands of potential suspect DNA profiles, against which DNA profiles developed from crime scene evidence can be compared.

### SUCCESS STORY

*A "forensic hit" occurred in the National DNA Index System (NDIS) that linked a dead Florida man's DNA profile to eight serial unsolved rapes in Washington, D.C. and three offenses in Florida.*

In 1999, Leon Dundas was killed in a drug deal. Investigators remembered Dundas refusing to give a blood sample in connection with a rape investigation in 1998. They were able to obtain Dundas' blood sample through the medical examiner's office and forwarded it to the DNA lab at the Florida Department of Law Enforcement. Dundas' DNA profile was compared with the national forensic index and a match was made between Dundas and DNA evidence from a rape victim in Washington, D.C.

The FBI then entered DNA evidence from additional unsolved rapes committed in Washington. Dundas' DNA matched seven additional rapes in Washington and three more in Jacksonville, Florida. Police in Washington said that without DNA, they would have never identified Dundas, who had no prior recorded history of violent crime.

Given the recidivistic nature of many crimes, such as sexual assault and burglary, a likelihood exists that the individual who committed the crime being investigated was convicted of a similar crime and already has his or her DNA profile in a DNA database that can be searched by CODIS. Moreover, CODIS also permits the cross-comparison of DNA profiles developed from biological evidence found at crime scenes. Even if a perpetrator is not identified through the database, crimes

may be linked to each other, thereby aiding an investigation, which may eventually lead to the identification of a suspect.

### What is CODIS?

CODIS is a computer software program that operates local, State, and national databases of DNA profiles from convicted offenders, unsolved crime scene evidence, and missing persons. Every State in the Nation has a statutory provision for the establishment of a DNA database that allows for the collection of DNA profiles from offenders convicted of particular crimes. CODIS software enables State, local, and national law enforcement crime laboratories to compare DNA profiles electronically, thereby linking serial crimes to each other and identifying suspects by matching DNA profiles from crime scenes with profiles from convicted offenders. The success of CODIS is demonstrated by the thousands of matches that have linked serial cases to each other and cases that have been solved by matching crime scene evidence to known convicted offenders.

The missing persons index consists of the unidentified persons index and the reference index. The unidentified persons index contains DNA profiles from recovered remains, such as bone, teeth, or hair. The reference index contains DNA profiles from related individuals of missing persons so that they can be periodically compared to the unidentified persons index. All samples for this index are typed using mtDNA and STR DNA analysis (if possible) to maximize the power of advancing technology.

*The offender index contains DNA profiles of individuals convicted of certain crimes. The forensic index contains DNA profiles obtained from crime scene evidence.*

### How does CODIS work?

CODIS uses two indexes to generate investigative leads in crimes for which biological evidence is recovered from a crime scene. The convicted offender index contains DNA profiles of individuals convicted of certain crimes ranging from certain misdemeanors to sexual assault and murder. Each State has different "qualifying offenses" for which persons convicted of them must submit a biological sample for inclusion in the DNA database. The forensic index contains DNA profiles obtained from crime scene evidence, such as semen, saliva, or blood. CODIS uses computer software to automatically search across these indexes for a potential match.

A match made between profiles in the forensic index can link crime scenes to each other, possibly identifying serial offenders. Based on these "forensic hits," police in multiple jurisdictions or States can coordinate their respective investigations and share leads they have developed independent of each other. Matches made between the forensic and convicted offender indexes can provide investigators with the identity of a suspect(s). It is important to note that if an "offender hit" is obtained, that information typically is used as probable cause to obtain a new DNA sample from that suspect so the match can be confirmed by the crime laboratory before an arrest is made.

### LDIS, SDIS, and NDIS

CODIS is implemented as a distributed database with three hierarchical levels (or tiers)—local, State, and national. All three levels contain forensic and convicted offender indexes and a population file (used to generate statistics). The hierarchical design provides State and local laboratories with the flexibility to configure CODIS to meet their specific legislative and technical needs.

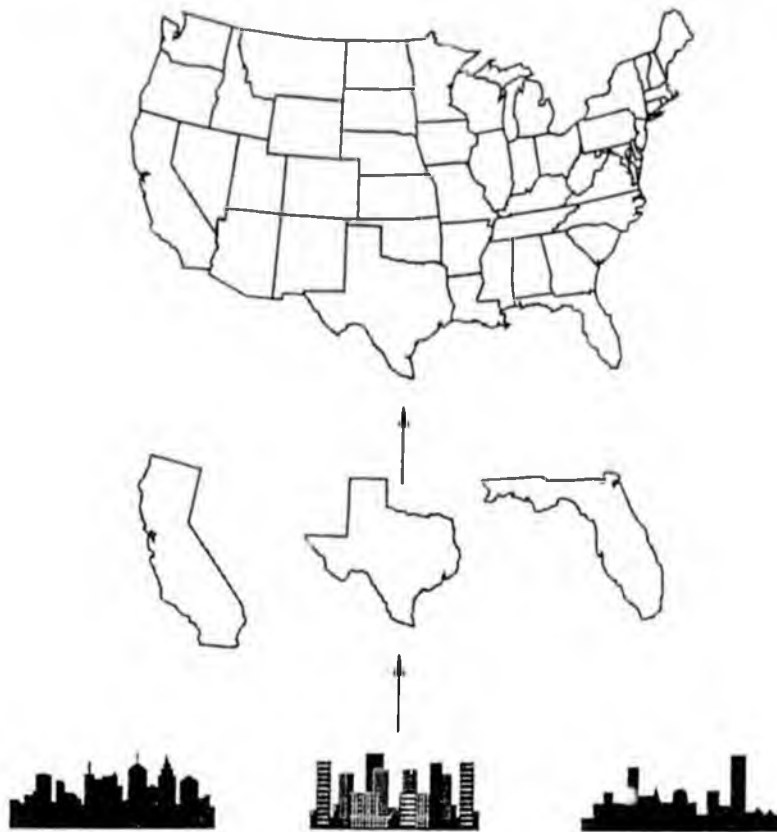
A description of the three CODIS tiers follows (see exhibit 2).

- **Local.** Typically, the Local DNA Index System (LDIS) installed at crime laboratories is operated by police departments or sheriffs' offices. DNA profiles originated at the local level can be transmitted to the State and national levels.
- **State.** Each State has a designated laboratory that operates the State DNA Index System (SDIS). SDIS allows local laboratories within that State to compare DNA profiles. SDIS also is the communication path between the local and national tiers. SDIS is typically operated by the agency responsible for implementing and monitoring compliance with the State's convicted offender statute.
- **National.** The National DNA Index System (NDIS) is the highest level of the CODIS hierarchy and enables qualified State laboratories that are actively participating in CODIS to compare DNA profiles. NDIS is maintained by the FBI under the authority of the DNA Identification Act of 1994.

### Limitations of using the DNA database

The more data contained in the forensic and offender indexes of CODIS, the more powerful a tool it becomes for law enforcement, especially in its application to unsolved case investigation. However, because many jurisdictions are in the process of developing and populating their DNA databases, convicted offender and forensic casework backlogs have been created over time and continue to grow for several reasons. First, as States recognize the crime-solving potential of DNA databases, they continue to expand the scope of their convicted offender legislation, which increases the number of

Exhibit 2. CODIS tiers



samples to be collected and analyzed by the DNA laboratory. As a result, more than 1 million uncollected convicted offender DNA profiles are "owed" to the system.

An equally important but more difficult problem to quantify is that of unprocessed casework that contains biological evidence. This casework backlog may include nonsuspect or unsolved cases that could be analyzed and solved as a result of advancements in DNA technology.

### Convicted offender backlogs

Although all 50 States have passed DNA database legislation, many States have backlogs of convicted offender samples

that have been collected but have not yet been analyzed. Although Federal funding has played an important role in reducing existing backlogs, the crimefighting potential of DNA has prompted many States to revise their statutes to require nonviolent convicted offenders to provide a DNA sample for analysis and upload into CODIS. The trend toward expanding convicted offender DNA statutes to include nonviolent offenders has significantly increased the number of DNA samples requiring collection and analysis. Although the success of using the DNA database as a crime-solving and crime-prevention tool can easily be demonstrated once convicted offender backlogs are reduced, it should be recognized that new backlogs

are instantly created by the passage of expanded DNA legislation laws. Convicted offender backlogs are an ongoing logistical issue that can compound the complexity of investigating cold cases by using the DNA database.

### **Forensic casework backlogs**

Addressing issues that affect the efficient and effective use of DNA databases in the United States is complicated further by the existence of casework backlogs. This refers to biological evidence in perhaps tens of thousands of criminal cases, including violent and nonviolent crimes, that has not been tested or retested for DNA.

Unprocessed rape kits are a clear example of this kind of backlog. Despite the established fact that rape typically yields biological evidence, as of October 1999, at least 180,000 rape kits remained on shelves across the country, unprocessed, because no suspects have been identified. The DNA evidence from these and other criminal cases often is not analyzed and entered into the DNA database because forensic laboratories have to prioritize their work and cases scheduled for trial take precedence over cases in which no suspect is known. In most jurisdictions, non-suspect criminal cases that contain

biological evidence are not being analyzed and entered into the DNA database. In many jurisdictions, DNA from crime scenes is still primarily used to prosecute offenders, not to investigate crimes. The convicted offender backlog and limited resources for casework going to trial preclude State forensic laboratories from analyzing all biological evidence for DNA, which in turn prevents law enforcement from being able to realize the full crime-solving potential of CODIS.

The backlog of forensic cases has practical consequences for most law enforcement agencies in the United States. Laboratory capacity limitations result in the ability to process crime scene samples from only the most serious of offenses. More and more, however, agencies such as those in the United Kingdom are discovering the value of DNA technology in solving property crimes. Blood left on a broken apartment window or saliva found on a discarded beer bottle can be used to identify burglars, and the skin cells rubbed off onto the steering wheel of a stolen vehicle can solve car thefts. However, as long as forensic laboratories remain able to process only the most serious cases, the full potential of DNA technology to solve crime will remain untapped.

*Local prosecutors can provide valuable insight into legal issues. Victim/witness units or advocates can help locate, educate, and encourage witnesses. Consultation with representatives from the crime laboratory is critical.*

## Practical Considerations

A broad range of considerations must be made long before any DNA testing is actually attempted in older, unsolved cases. These include—

- Legal considerations, such as the application or expiration of statutes of limitation.
- Technological considerations, such as the nature and condition of the evidence as originally collected, stored, and in some instances subjected to other forensic tests.
- Practical considerations, such as the availability of witnesses in the event DNA testing would identify a suspect and lead to an arrest and a trial.
- Resource issues, such as the time and money available for investigation and forensic analysis.

The nature and scope of these issues require that any approach to reexamining old cases for potential DNA evidence be collaborative, whether by an individual investigator or by a specialized unit developed specifically for cold case review. Local prosecutors can provide valuable insight into legal issues that might prevent or help a future prosecution. Victim/witness units or advocates can provide valuable assistance with locating, educating, and encouraging witnesses. Consultation with representatives from the crime laboratory is critical to ensuring that potential DNA evidence can be successfully analyzed.

### Evidence considerations

When collecting unsolved case evidence from storage facilities, the case investigator should be ready to handle all types of packaging disasters. Evidence may be stored in heavy-duty plastic bags, stapled

shut as the past form of "sealing."

Multiple items may be sealed in one plastic bag, or even unpackaged in large, open, cardboard boxes. Unprotected microscope slides from medical facilities might also be found as a result of investigating old cases. No attempt should be made on the part of the investigator to separate and repackage evidence. The condition and position that the evidence has been stored in could provide valuable clues to the forensic scientist for testability of evidence. Only when evidence is found unpackaged should the investigator properly package and label the item(s) to minimize the possibility for contamination from that point forward. It is important that any evidence items are handled minimally and only by individuals wearing disposable gloves. As always, it is also very important that all actions taken as a result of opening, evaluating, packaging, or repackaging evidence are documented thoroughly in the case folder.

### Degraded evidence

Prior to the frequent use of DNA technology, biological evidence may have been collected and stored in ways that were not necessarily the best methods for preserving samples for future DNA testing. For example, evidence containing biological fluids that were originally collected for ABO Blood Typing analysis or other serology methods may have been packaged or stored in ways that can limit DNA testing. Some methods of collection and storage may promote the growth of bacteria and mold on the evidence. Bacteria can seriously damage or degrade DNA contained in biological material and inhibit the ability to develop a DNA profile; however, evidence can still sometimes yield DNA results. For example, PCR technology can allow the laboratory to develop profiles

from some moldy biological samples, whereas other evidence may fail to yield a usable DNA profile, even when no mold is visible. Therefore, close consultation with the laboratory is important to determine the type of DNA testing most likely to yield results on the available evidence.

### Contamination issues

Because of the particularly sensitive nature of DNA technology, the potential contamination of evidence should be carefully considered. Technologies used to analyze evidence prior to the forensic application of DNA were not always sensitive to contaminants. Evidence in older cases may have been collected in ways that lacked appropriate contamination or cross-contamination safeguards, which can make the DNA results less useful or even misleading. In these cases, clarifying results by identifying the contributor of an additional profile can determine whether the DNA results may now be used. When a mixture is detected, a careful reconstruction of the evidence collection, storage, and analysis process must be undertaken. It may be determined that DNA profiles will be required from on-scene officers, evidence technicians, or laboratory scientists who had access to the evidence for comparison with evidence results. In these instances, proper chain-of-custody reconstruction is critical.

### EVIDENCE HANDLING RECOMMENDATIONS

- Wear gloves. Change them between handling each item of evidence.
- Use disposable instruments or clean instruments thoroughly before and after handling each evidence sample.
- Avoid touching the area where you believe DNA may exist.
- Avoid touching your face, nose, and mouth when examining and repackaging evidence.
- Put dry evidence into new paper bags or envelopes; do not use plastic bags.
- Do not use staples.
- If repackaging of evidence is necessary, consult with laboratory personnel.

It is also important to avoid contamination when handling biological evidence during the course of the current review. If evidence that may contain biological material is already sealed, do not reopen it before sending it to the laboratory. (See Evidence Handling Recommendations.)

### Legal considerations

Numerous legal issues might arise when examining older cases for potential DNA evidence. These issues are most likely jurisdictionally specific and may differ from State to State. Although most jurisdictions maintain no statute of limitation for filing charges in a homicide case, States can vary widely in the time allowed for filing charges in other cases, such as rape and other sexual assault crimes. Furthermore, in recognition of DNA technology's ability to solve old cases, many States are extending or even eliminating statutes of limitation for certain crimes.

### Chain of custody

When a case remains unsolved for a long period of time, evidence is usually handled by an increased number of individuals. Many unsolved cases to be reviewed for DNA evidence may have been previously reinvestigated or handled by several different investigators as a result of new leads or periodic, systematic reviews. Furthermore, as cases age, the likelihood increases that evidence may be moved to new or remote storage locations as evidence from newer cases fills police department shelves.

Many cases may also have had evidence submitted to the laboratory for various forms of forensic testing. Evidence in older cases may have been submitted for standard serological testing, but can now be tested for DNA with much greater success. Hair previously submitted for standard microscopic hair analysis may now

be submitted for mtDNA testing. As with all criminal investigations, chain-of-custody issues are critical to maintaining the integrity of the evidence. In all cases, the ultimate ability to use DNA evidence will depend on the ability to prove that the chain of custody was maintained.

### Statutes of limitation

One of the first issues to address when reviewing an unsolved case is whether the statutes of limitation on a case have run out. Several considerations arise when addressing a statute of limitation issue. Good communication between law enforcement and local prosecutors is critical when examining these legal questions.

**Changes in statutes.** Advances in DNA technology and the creation of DNA databases are leading many criminal justice professionals to rethink time limits placed on the filing of criminal charges. Because biological evidence can yield reliable DNA analysis results years after the commission of a crime, many State legislatures have begun to extend, and in some cases eliminate, the statutes of limitation for some crimes and in certain circumstances. Many States have extended the length of time for which a complaint can be filed, other States have eliminated statutes of limitation for certain crimes, and some legislation is retroactive.

**Exceptions to statutes.** Exceptions often exist under existing and new statutes. Under such exceptions, time can be added to the statute of limitation, giving police the legal authority to arrest even if it appears as though the statute has run out. For example, many jurisdictions have exceptions for a suspect's flight from jurisdiction. In a case for which there is a 5-year statute of limitation, if the government can prove that the suspect has been absent from the jurisdiction for 2 years, the State can still file against the suspect

for up to 7 years after the commission of the crime. Exceptions also exist for cases in which child victims are assaulted by a family member, which can be valuable in the context of a current investigation.

### Victim and witness considerations

Another important consideration to be made early in the process is the willingness of victims and witnesses to proceed. Although many victims may continuously monitor the progress of their investigations, some choose to detach from the process over time. Reinvestigating a case may cause renewed psychological trauma to the victim and victim's family. It should not be assumed that victims and witnesses, even if they were eager to pursue the case when it occurred, are still interested in pursuing the case. A phone call from an investigator years later may not be a welcome event. Whenever possible, enlist the aid of victim service providers. If a new officer is handling the investigation, enlisting the assistance of the original investigator to make the first contact with the victim may also be helpful.

The older a case is, the more difficult it may be to locate witnesses. However, early identification of victim and witness availability may ultimately save significant resources. Consultation with prosecutors is mandatory when considering whether a witness would be necessary at trial.

*It should not be assumed that victims and witnesses are still interested in pursuing the case. Whenever possible, enlist the aid of victim service providers.*

### STATUTE OF LIMITATION RECOMMENDATIONS

- Know the original statute of limitation.
- Determine whether the law has changed regarding time limits for filing. If so, is the law retroactive?
- Determine whether there are exceptions to the statute.
- Consult with the prosecutor.

## Identifying, Analyzing, and Prioritizing Cases

*Good communication between police, laboratories, and prosecutors can help identify and convict serious offenders and save valuable time and resources.*

Whether the process of reviewing unsolved cases is initiated by a single officer or by a specialized unit, it must ultimately be a team effort. At all stages of the process, investigators should avail themselves of the scientific advice of the laboratory and the legal expertise of the local prosecutor's office. Close consultation with the laboratory can ensure that evidence integrity is maintained and that limited laboratory resources are allocated effectively. Similarly, prosecutors can help identify issues that might occur at trial if a suspect is identified and arrested upon successful DNA testing. Good communication between police, laboratories, and prosecutors can help identify and convict serious offenders and save valuable time and resources.

### Identify potential cases for review

An initial step in the DNA review of unsolved cases is to identify cases that might be amenable to DNA testing. While the cases considered for this kind of review will vary from jurisdiction to jurisdiction, it is important to define minimum requirements that will likely benefit from this approach. Issues such as statutes of limitation and solvability factors should be thoroughly examined in cooperation with a prosecutor and the forensic laboratory to establish guidelines for case selection. It also will be important to identify the ultimate goals of the program so that the selection criteria can be tailored to meet those specific goals.

Cases that could benefit from a review for potential DNA evidence can be identified from numerous sources. In some instances a single police officer or investigator may remember an unsolved case

from years ago. In some departments a formalized cold-case unit may systematically review cases for the potential of DNA testing. Other cases may be identified by coordinated, interdepartmental efforts, victims or witnesses who have heard about the potential of DNA evidence, and laboratories taking inventory of their storage facilities. If a department is pursuing a systematic review of cases, either by one or two officers or by a formal unit, there are many sources that can be consulted for valuable investigative information, such as—

- Autopsy, laboratory, prosecutor, and local agency logbooks.
- Retired investigators.
- Computer databases.

### Identify statute of limitation issues

Statute of limitation issues might affect the ultimate ability to prosecute a case. Cases should be preliminarily reviewed by investigators in conjunction with the prosecutor's office to identify which prosecutions would be barred by the statutes of limitation. If the goal of the unsolved case review program is to obtain convictions and statutes of limitation have expired on a particular case, a department may wish to save its resources for cases likely to yield convictions. However, if the goal of the program is to solve and close unsolved cases regardless of whether a conviction could be obtained, a jurisdiction may decide to review all cases that qualify under its guidelines. This is an important consideration in the context of investigating serial offenders whose criminal acts might span the course of years or decades.

### Define categories of cases— solvability factors

Because the number of cases that qualify for reinvestigation might be very large, it may be beneficial for a jurisdiction to define cases according to several solvability factors. Solvability factors include facts and circumstances of a case that influence the likelihood that it might be solved through advancements in DNA technology. For example, a high probability exists that analysis of nonsuspect rape kits will yield valuable DNA results. Profiles generated as a result of DNA analysis can now be entered into CODIS, which can solve a case by matching to a convicted offender, or aid investigations by linking serial rapes to each other. Additionally, if an unsolved murder case contains biological evidence foreign to the victim that did not produce viable results from ABO blood typing or RFLP DNA analysis, evidence could be reanalyzed with the more discriminating and powerful STR technology. It is also important to recognize and sort out cases that might not be as likely to be solved with DNA technology. An example might be an unsolved drive-by homicide because the perpetrator most likely would not have left biological evidence at this kind of crime scene.

### Case review— establish priorities

Once solvability factors and statute of limitation issues are addressed, it is important to continue the process by identifying the cases to be reviewed first. To preserve investigative resources when considering a larger number of unsolved cases for review, jurisdictions may prioritize according to the likelihood that cases will be solved or the likelihood that investigations will be aided. In establishing this priority, the following criteria can be considered:

- How many qualifying cases are there?
- Where are the case files located?
- Are case summaries available?
- How many cases will be assigned to an investigator?

To establish an investigative hierarchy, qualifying cases should be reviewed by experienced, proficient investigators. A checklist can be used throughout the review process so that managers can decide which cases will be worked first. A checklist can also provide review process consistency throughout the agency. (See Sample Checklist at the end of this report.) The following categories may serve as a model for a hierarchy in prioritizing cases:

- There is a known suspect and physical evidence appears to have been preserved in a manner consistent with successful DNA testing and use of CODIS.
- There is no known suspect but physical evidence has been preserved in a manner consistent with successful DNA testing and use of CODIS.
- There is no known suspect and evidence was collected and preserved in a manner that may make it difficult to obtain a DNA profile.

### Locating case files, obtaining evidence logs, and other documentation

Locating the case file and original evidence for the investigation may be a challenging endeavor. Changes in personnel, procedure, and facilities and the passage of time may complicate the process. When searching for a case file or evidence, an investigator may need to look in numerous

places. Potential locations include, but are not limited to, the following:

- Police department property rooms (case files, evidence logs, whole evidence).
- Property warehouses (case files, evidence logs, whole evidence).
- Public crime laboratories (previously tested/submitted evidence, lab reports).
- Private laboratories (previously tested evidence, lab reports).
- Hospital/medical facilities (rape kits, medical reports, slides).
- Coroner/medical examiners' offices (autopsy reports).
- Courthouse property rooms.
- Prosecutors' offices (previous trial or suspect investigation).
- Retired investigators' files (case notes and details not contained in file).
- Other investigating agency offices (investigative leads—serial offender).

### Forensic testing reports and previously tested evidence

Because advancements in DNA technology enable laboratories to successfully analyze old evidence that might have been improperly stored or subjected to previous forensic analysis, it will be very valuable to locate any and all forensic reports that were produced as a result of previous analysis and/or testing. ABO blood typing, microscopic hair analysis, RFLP DNA analysis, or fingerprint analysis (among others) might have been performed in the course of the original investigation. The original case file should indicate whether and which types of forensic analysis were attempted. These reports also serve to

memorialize proper chain of custody. Cooperation with the crime laboratory is crucial to locate and interpret existing forensic reports and to determine whether evidence would be amenable to reanalysis with new DNA techniques.

Many combinations of options are available to investigators and laboratory personnel if biological evidence was available and previously tested. Exhibit 3 may serve to help investigators as they work with the laboratory to discuss options throughout the course of the investigation.

### Locate biological evidence

When reviewing the case file for potential DNA evidence, it is important to know what kinds of evidence may yield a DNA profile. Given the power and sensitivity of newer DNA testing techniques, DNA can be collected from virtually anywhere. Only a few cells can be sufficient to obtain useful DNA information to help solve a case. Exhibit 4 identifies some common items of evidence that may have been collected previously but not analyzed for the presence of DNA evidence. Remember, if a stain is not visible it does not mean that there are not enough cells for DNA typing. Further, DNA does more than just identify the source of the sample; 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

### DNA CAN DO MORE . . .

. . . than identify a suspect. It can also—

- Place a known individual at a crime scene.
- Refute a claim of self-defense.
- Put a weapon in a suspect's hand.
- Change a suspect's story from an alibi to one of consent.

hand. It can also provide irrefutable evidence that can change a suspect's story from an alibi to one of consent.

### Evaluate for probative DNA evidence

On completion of reviewing the case file, reports, and evidence in consultation with the laboratory, it will be necessary to identify which evidentiary items will be amenable to DNA analysis. Consultation with the laboratory will be essential to determine the likelihood of obtaining results from DNA analysis, and consultation with a prosecutor is very important to determine which evidence will be probative to the case. Building the new investi-

gation on cooperative efforts between the laboratory and prosecutor can save valuable resources, develop leads, and identify previously overlooked evidence that may yield a DNA profile.

### Continue investigative protocol

If DNA analysis is to be conducted, it may be important to obtain reference samples from prior suspects, and it might be necessary to be creative when obtaining these samples. While a biological sample in the form of blood or saliva can be obtained voluntarily through a consent form, a standard reference sample might already exist if previous forensic analysis,

Exhibit 3. Investigative options

Test conducted	Original results	Original interpretation	Options for investigators
RFLP/PCR	Obtained profiles	No suspects identified	Is the original extract remaining? 1. If so, retest using STR technique and submit to CODIS. 2. If not, reextract the original sample using STR technique and submit to CODIS.
RFLP	Inconclusive or no results obtained	Sample size may have been insufficient or not concentrated enough	Is the original extract remaining? 1. If so, retest using STR technique and submit to CODIS 2. If not, reextract the original sample using STR technique and submit to CODIS
PCR	Inconclusive or result intensity below "S" and "C" dots	Sample size may have been insufficient	Is the original extract remaining? 1. If so, retest using STR technique and submit to CODIS. 2. If not, reextract the original sample using STR technique and submit to CODIS
Conventional serology (ABO, secretor status, enzymes such as EsD, PGM, GLO!, EAP, ADA, AK)	Obtained a type in these systems	Poor statistics and no searching capability	If original evidence still exists, extract the sample using STR technique and submit to CODIS.
None		1. Limited sample size 2. No suspects, did not process further. 3. No request at the time of analysis	If original evidence still exists, extract the sample using STR technique and submit to CODIS.

such as serological testing, was performed during the course of the original investigation.

Additionally, elimination samples from anyone who had lawful access to the crime scene, such as family members, may be required if the laboratory determines that there is more than one DNA profile present in the evidence sample. Early identification of the location and status of persons who might be requested to submit an elimination sample could save valuable time and resources if the laboratory needs such information. Consultation with the laboratory is essential to properly coordinating this process.

### Follow agency procedures for submitting the DNA profile to CODIS

On successful laboratory analysis resulting in a DNA profile developed from crime scene evidence, existing and/or new suspect DNA profiles should be compared with the evidence profile. If the laboratory determines a match between a suspect and the evidence, the prosecutor's office should be consulted on how to proceed. However, if a match is not found, agency procedures should be followed, in accordance with the crime laboratory, to submit the crime scene evidence DNA profile into CODIS.

Exhibit 4. Common items of evidence

Evidence	Possible location of DNA on the evidence	Source of DNA
Baseball bat	Handle	Skin cells, sweat, blood, tissue
Hat, bandanna, or mask	Inside surfaces	Sweat, hair, skin cells, dandruff, saliva
Eyeglasses	Nose or ear piece, lens	Sweat, skin cells
Facial tissue, cotton swab	Surface	Mucus, blood, sweat, semen, ear wax
Dirty laundry	Surface	Blood, sweat, semen, saliva
Toothpick	Surface	Saliva
Used cigarette	Cigarette butt (filter area)	Saliva
Used stamp/envelope seal	Moistened area	Saliva
Tape or ligature	Inside or outside surface	Skin cells, sweat, saliva
Bottle, can, or glass	Mouthpiece, rim, outer surface	Saliva, sweat, skin cells
Used condom	Inside/outside surface	Semen, vaginal or rectal cells
Bed linens	Surface	Sweat, hair, semen, saliva, blood
"Through and through" bullet	Outside surface	Blood, tissue
Bite mark	Surface of skin	Saliva
Fingernail/partial fingernail	Scrapings	Blood, sweat, tissue, skin cells

Note: When reviewing evidence, it is important to maintain chain of custody, consult with laboratory personnel, and take all appropriate precautions against contamination, including wearing gloves and changing them between handling of different pieces of evidence.

Because CODIS contains hundreds of thousands of convicted offender DNA profiles, it is possible that the person who committed the unsolved crime being investigated was convicted of a qualifying offense that required submission of a DNA profile to the database. If that person has not previously been convicted of a qualifying offense, especially in light of expanding database law, it is possible that they will be convicted in the future. Further, because the forensic index of CODIS contains thousands of crime scene evidence profiles, the investigation could be aided if a match is made to another forensic DNA profile already in the database. Finally, an investigator should not assume that a new DNA profile generated from unsolved case evidence and submitted to the laboratory for entry into CODIS will be compared with every possible convicted offender or crime scene index profile. The investigator may need to proactively request that his CODIS administrator search the new profile against the local, State, and national DNA databases.

### Prepare a John Doe warrant

CODIS is a powerful crime-solving and crime-prevention tool, but many cases will not be solved as a result of entering a DNA profile into the forensic index of the database. Additionally, many cases will

have statute of limitation issues that might prevent the prosecution of the case if a match is not determined in a timely manner. Therefore, if no offender match occurs in cases in which statutes of limitation are an issue, consideration may be given, in consultation with the prosecutor, to preparing a John Doe warrant. These types of warrants can identify the perpetrator according to his or her DNA profile. The 13-loci profile generated by the crime laboratory should be clearly printed on the face of the warrant. The John Doe warrant is not novel; however, the unconventional method of describing an individual by his or her DNA profile may allow for prosecution of a case if a DNA match is determined in the course of future investigations or as a result of the CODIS system being populated with more convicted offender and forensic DNA profiles.

### Notes

1. CODIS uses two indexes—the forensic index and the offender index—to generate investigative leads in crimes where biological evidence is recovered from crime scenes. The forensic index contains DNA profiles of biological crime scene evidence and the offender index contains DNA profiles of individuals convicted of a qualifying offense.
2. CODIS has a missing persons index that exclusively contains mtDNA profiles; the convicted offender and forensic indexes of CODIS exclusively contain STR DNA profiles.

## SAMPLE CHECKLIST

- Identify potential cases.
  - Identify any statute of limitation issues (consult with prosecutors).
  - Define case categories according to solvability factors.
- Prioritize cases (consider solvability factors).
- Locate and review the case file; obtain evidence logs and other documentation such as laboratory and autopsy reports.
- Locate previous forensic testing reports and location of previously tested evidence.  
For example—
  - Blood previously ABO typed.
  - Hair analyzed microscopically.
  - Fingerprint evidence.
- Locate crime scene evidence containing biological material.
- Evaluate the case and evidence for potential probative DNA. Be sure to—
  - Consider all evidentiary possibilities.
  - Take appropriate precautions against contamination.
- In consultation with the laboratory and prosecutors, submit appropriate (probative) evidence to the laboratory for testing.
- Continue investigative protocol. If needed, obtain reference samples from suspects—
  - Voluntarily using a consent form.
  - By using a previously obtained sample (e.g., if a reference sample was used for standard serological testing).
- Identify witness issues—
  - Legal availability.
  - Willingness to proceed.
  - Location.
- If a profile does not match suspect profiles, follow agency procedures for submitting the evidence profile to CODIS.
- If no offender match occurs in cases in which statutes of limitation are an issue, prepare a John Doe warrant.

## About the National Institute of Justice

NIJ is the research, development, and evaluation agency of the U.S. Department of Justice and is solely dedicated to researching crime control and justice issues. NIJ provides objective, independent, nonpartisan, evidence-based knowledge and tools to meet the challenges of crime and justice, particularly at the State and local levels. NIJ's principal authorities are derived from the Omnibus Crime Control and Safe Streets Act of 1968, as amended (42 U.S.C. §§ 3721-3722).

### NIJ's Mission

In partnership with others, NIJ's mission is to prevent and reduce crime, improve law enforcement and the administration of justice, and promote public safety. By applying the disciplines of the social and physical sciences, NIJ—

- Researches the nature and impact of crime and delinquency.
- Develops applied technologies, standards, and tools for criminal justice practitioners.
- Evaluates existing programs and responses to crime.
- Tests innovative concepts and program models in the field.
- Assists policymakers, program partners, and justice agencies.
- Disseminates knowledge to many audiences.

### NIJ's Strategic Direction and Program Areas

NIJ is committed to five challenges as part of its strategic plan: 1) *rethinking* justice and the processes that create just communities; 2) *understanding* the nexus between social conditions and crime; 3) *breaking* the cycle of crime by testing research-based interventions; 4) *creating* the tools and technologies that meet the needs of practitioners; and 5) *expanding* horizons through interdisciplinary and international perspectives. In addressing these strategic challenges, the Institute is involved in the following program areas: crime control and prevention, drugs and crime, justice systems and offender behavior, violence and victimization, communications and information technologies, critical incident response, investigative and forensic sciences (including DNA), less-than-lethal technologies, officer protection, education and training technologies, testing and standards, technology assistance to law enforcement and corrections agencies, field testing of promising programs, and international crime control. NIJ communicates its findings through conferences and print and electronic media.

### NIJ's Structure

The NIJ Director is appointed by the President and confirmed by the Senate. The NIJ Director establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the U.S. Department of Justice, and the needs of the field. NIJ actively solicits the views of criminal justice and other professionals and researchers to inform its search for the knowledge and tools to guide policy and practice.

NIJ has three operating units. The Office of Research and Evaluation manages social science research and evaluation and crime mapping research. The Office of Science and Technology manages technology research and development, standards development, and technology assistance to State and local law enforcement and corrections agencies. The Office of Development and Communications manages field tests of model programs, international research, and knowledge dissemination programs. NIJ is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

To find out more about the National Institute of Justice, please contact

National Criminal Justice  
Reference Service  
PO Box 6000  
Rockville, MD 20849-6000  
800-851-3420  
e-mail: [askncjrs@ncjrs.org](mailto:askncjrs@ncjrs.org)

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JULY 02

## **MODEL LEGISLATION DNA COLLECTION USE OF FORCE**

### **Some Other States that have "reasonable forces" statutes:**

Pennsylvania, California, Illinois, Arkansas, South Dakota, Wyoming, Florida, Idaho, Colorado, Ohio

### **2003 Enacted "reasonable force" statutes:**

#### **Illinois SB 280 b**

Allows agencies designated by the Department of State Police to contract with third parties to provide for the collection or analysis of offender DNA. Provides that duly authorized law enforcement and corrections personnel may employ reasonable force when an individual refuses to provide required DNA samples.

Statutory language:

<http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=093-0216>

#### **Louisiana SB 346 b**

Expands DNA data base to include all persons arrested for or convicted of a felony, including felony-grade delinquent acts. Allows reasonable use of force as needed to collect such samples. Provides for implementation of arrestee samples only to the extent that funding is available. Allows prosecution of sex crimes within three years of statutory statute of limitations when the identity of the offender is established thereafter with a DNA profile, with retroactive application. Establishes that detention, arrest or conviction of a person based on a data base match is not invalidated if it is determined that the sample was obtained or placed in the database by mistake.

### **2002 Enacted "reasonable force" statutes:**

#### **California SB 1242**

Allows law enforcement, custodial or corrections personnel to employ reasonable force to collect required specimens, samples or print impressions from persons convicted of specified offenses.

#### **Utah HB 5015E**

Requires collection of DNA from all state felonies. Clarifies statutory authority for agencies to collect specimens; requires agencies establish guidelines and procedures; and authorizes use of reasonable force if necessary to collect the specimen; and allows the \$75 fee be waived if the collecting agency determines the offender is unable to pay.

Provided by Senator Bunde