

90 minutes can change everything- It's time to expedite crime-solving with rapid DNA

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Agenda

- What is Rapid DNA
- Impact of Rapid DNA
- Rapid DNA Booking Station Timeline
- Funding & Resources

Rapid DNA Technology as easy as 1,2,3

RapidHIT ID System enables testing at the point of action in 90 minutes or less



Collect

Individual or evidence sample



Process

90 minutes or less



Confirm

Identify individual or link to a crime while still in custody

Unlocking a World of Rapid Intelligence

Partners in forensics, law enforcement, and public safety can benefit from Rapid DNA results in many applications



Arrestee Testing

Generate hits while still in custody and identify or exclude suspects faster



Investigative Lead Testing

Use DNA in real time to solve crimes



Disaster Victim Identification

Field deployable solution for immediate identification of disaster victims, identification of the missing, to reunite families



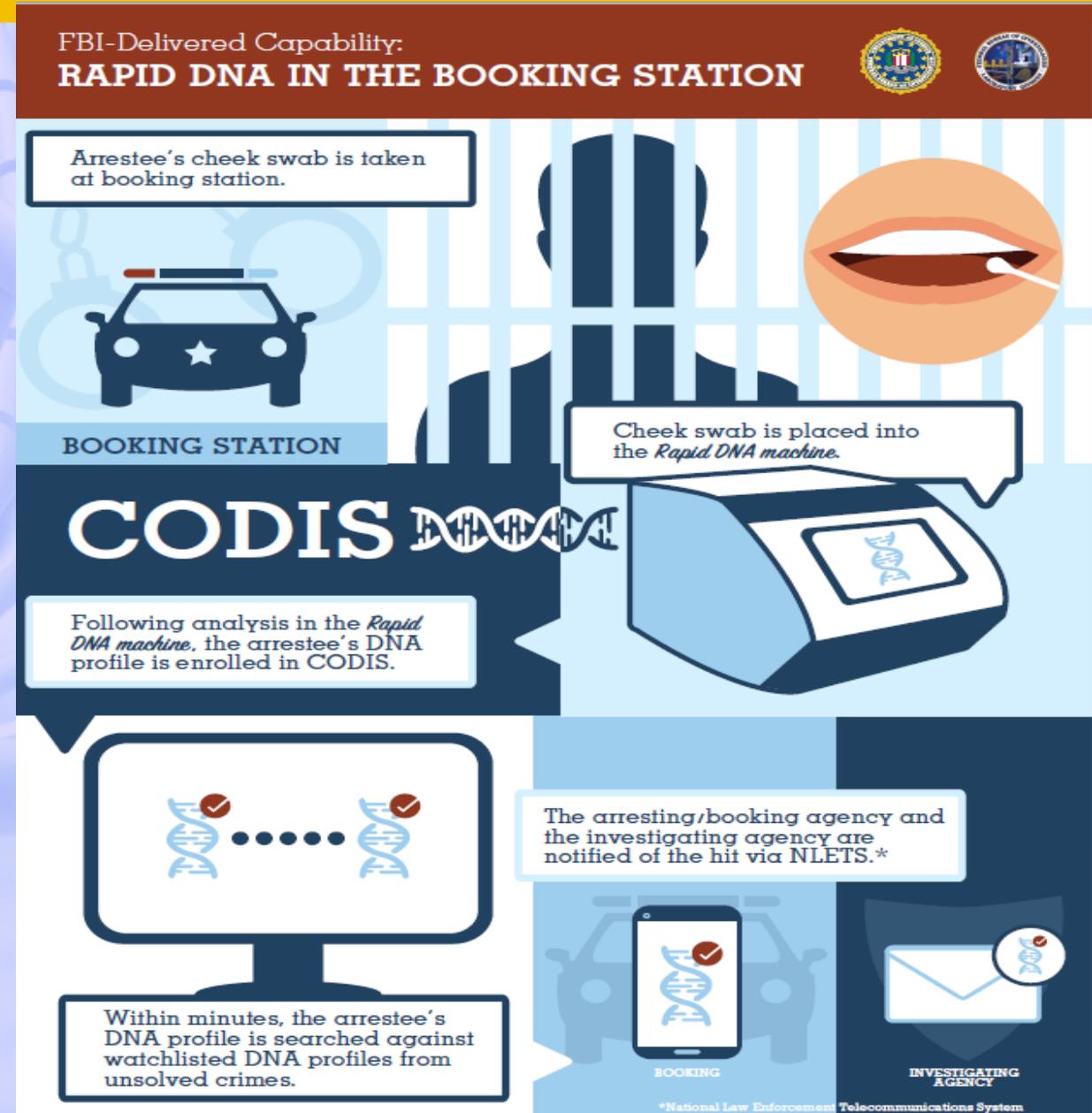
Combatting Human Trafficking

Identify unaccompanied minors, limit human trafficking and illegal immigration
Conduct family relationship verification

FBI's Vision for Booking Station

Rapid DNA Testing at the Booking Station

<https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna>



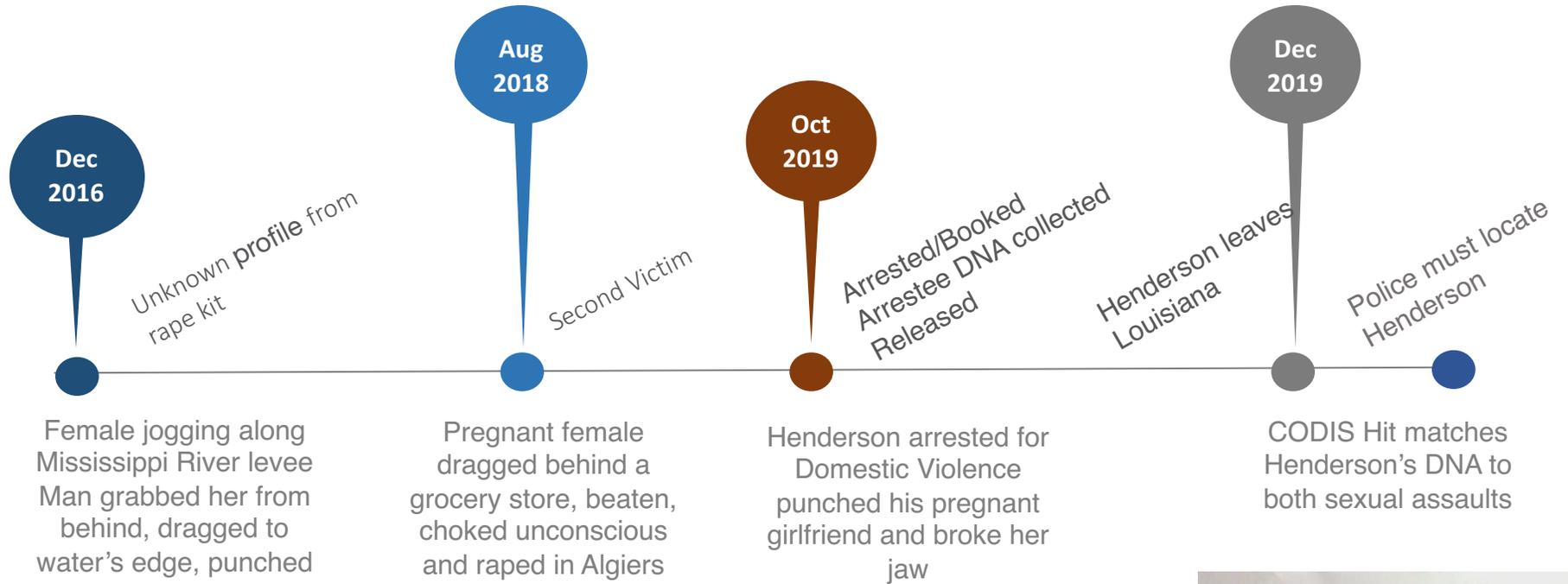


Impact of Rapid DNA in the Booking Station

Why arrestee testing in a booking station?

A DNA match led to Henderson's capture and arrest, but faster DNA results could have prevented his release.

A lot can happen between collection and results



Suspected Algiers Rapist - Navarri Henderson

'Fallen through the cracks:' Overdue DNA swabs link to murders, sexual assaults

-Rachel Dissell, Cleveland Plain Dealer, May 13, 2018

One Story

1997

- 1997, Antonio Huffman, sexual assaulted 17-year-old female (rape kit collected, not tested until Sexual Assault Kit Initiative)

2012, 2015

- 2012, Huffman arrested, charged with felonious assault. No swab.
- 2015, Huffman arrested, charged for illegally possessing firearm. No swab.

2017

- 2017: SAK Task Force indicted DNA profile (from kit), named "John Doe 124"
- 2017: Swabbed while on probation for 2015 firearms charge at our request. "John Doe 124" becomes Antonio Huffman.

Why arrestee testing in a booking station?

Collection up front improves submission, solvability and safety

- FY2016 SAKI solicitation purpose area for the **collection of lawfully owed DNA.**
- Conduct a **census of convicted offenders who lawfully owed DNA** and develop a plan to improve collection protocols to ensure sample collection policies adherence
- **Cuyahoga County (OH) Prosecutor's Office** was the **first jurisdiction** to receive funding.
 - Nevada Office of the Attorney General
 - Washington (OR), State Attorney's Office 4th Judicial Circuit (FL),
 - Charlotte-Mecklenburg Police Department
 - West Virginia Division of Justice and Community Services.
 - Tennessee Bureau of Investigation
 - City of Duluth (MN)
 - Washington State Attorney General's Office received -2nd

The data metrics below are specific to lawfully owed DNA samples and are mutually exclusive from the unsubmitted SAK metrics on the Performance Metrics and Research page.

As of September 2020*:

- ◇ **105,626** samples identified
- ◇ **6,353** samples collected
- ◇ **5,988** samples submitted for testing
- ◇ **4,788** samples tested to completion
- ◇ **4,423** profiles uploaded to CODIS
- ◇ **116** CODIS hits
- ◇ **33** CODIS hits to sex offenders
- ◇ **6** CODIS hits to serial sex offenders
- ◇ **55** CODIS hits to other crimes
- ◇ **17** cases charged
- ◇ **10** convictions **

* Cumulative performance metrics are updated quarterly based on state and local level reports. Therefore they do not reflect real-time data.

** Also includes plea bargains

<https://sakitta.org/beyond-the-kit>

[Collecting Lawfully Owed DNA to Assist with Sexual Assault Investigations/](#)

2008 – END OF 2016: 15,000+ OWED DNA SAMPLES IN CUYAHOGA COUNTY

What does this mean? 15,370 individuals should have had their DNA collected (either at arrest or at conviction) to be entered into CODIS (DNA database), but did not.

WHY MISSED?

THE PROCESS:



Collect sample



Submit for testing



Follow up on hits in CODIS

14.9%

[n = 2,293] additional individuals now have their DNA in CODIS

2/3 were 'cold hits' – meaning the individual was not previously named as a suspect

Sexual assault was the most common crime

3.7%

[n = 85] forensic hits to crimes

73% of forensic hits are being or have been reviewed

14.5% of reviewed cases resulted in prosecution; an additional 29% ongoing

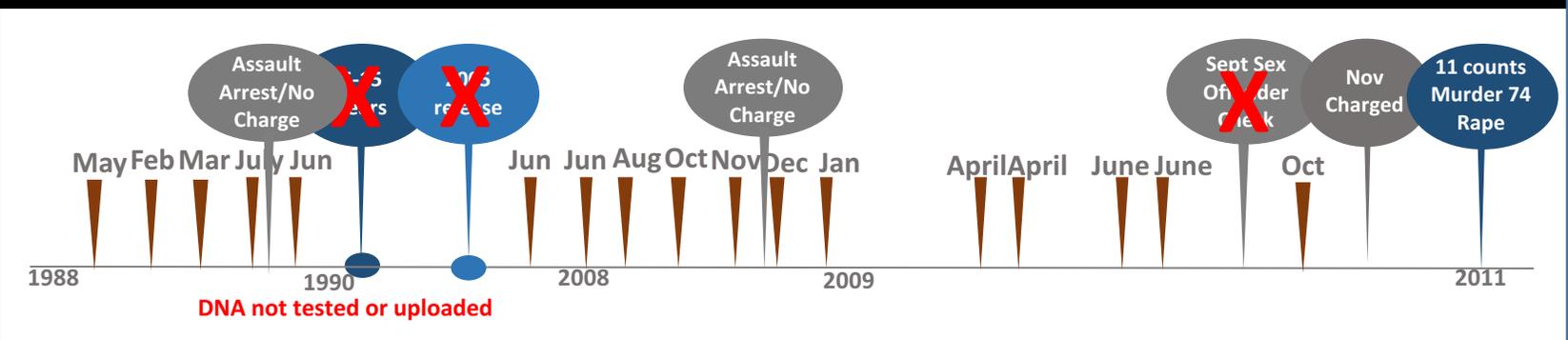
569

Estimated Total Hits

BOTTOM LINE: COLLECTING LAWFULLY OWED DNA SOLVES AND PREVENTS VIOLENT CRIMES

'Fallen through the cracks:' Overdue DNA swabs link to murders, sexual assaults

- Rachel Dissell, Cleveland Plain Dealer, May 13, 2018



U.S. *The New York Times*

With Homicides Rising, Cities Brace for a Violent Summer

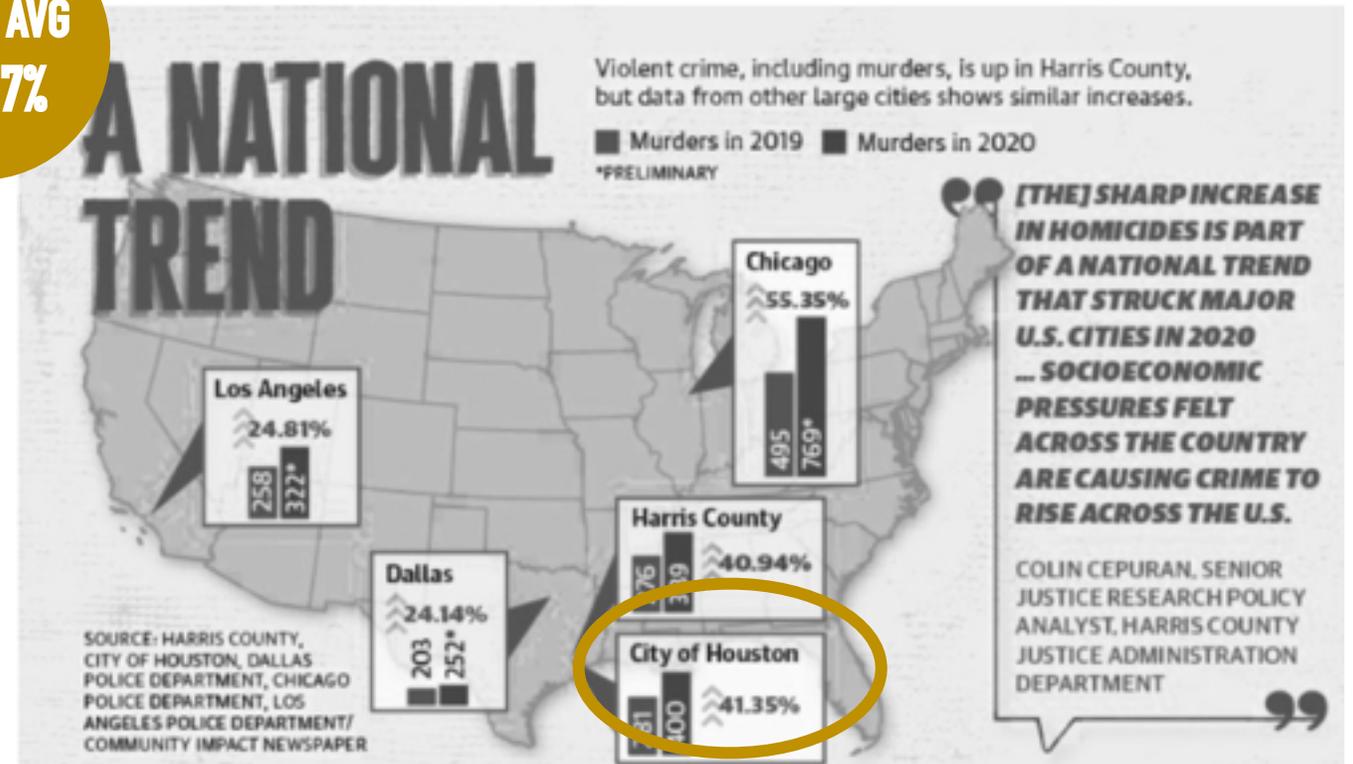
Homicide rates in large cities were up more than 30 percent on average last year, and up another 24 percent for the beginning of this year, according to criminologists.

By Neil MacFarquhar



↑ 2020 AVG
36.7%

- 2021 another Increase > 20%
- 1st time violent offenders
 - Greatest, positive impact from DNA collection & processing
 - Results in lower recidivism, higher employment, education*



*Anne Sofie, Tegner Anker, Jennifer L. Doleac, and Rasmus Landersø (April 2020) The effects of DNA databases on the deterrence and detection of offenders, *American Economic Journal* http://jenniferdoleac.com/wp-content/uploads/2020/07/Anker_Doleac_Landerso_DNA.pdf

Houston Leaders Grapple With Continued Rise In Violent Crime

- [FLORIAN MARTIN](#) | POSTED ON MARCH 16, 2021, HOUSTON PUBLIC MEDIA

Rapid DNA tests expected to help Houston police with rising murder investigations

December 30, 2020 | Nicole Hensley Houston Chronicle

- 403 murders in 2020 - 43% increase vs 2019 - 2021, 35% increase from 2020 Highest since 1990
- Average DNA Analysis TAT = 211 day
- Phased approach - reference samples to crime scene samples w/crime scene investigators licensed by the Texas Forensic Science Commission

*“Every minute counts in an investigation and if we can more quickly provide good scientific information that helps catch the **right suspect** we will do that... This is about **the right answer at the right time** and **Rapid DNA is a technology that provides an opportunity to do this if we use it responsibly.**”*
-Peter Stout, HFSC, CEO and president.

<https://www.houstonpublicmedia.org/articles/news/criminal-justice/2021/03/16/393606/houston-leaders-grapple-with-continued-rise-in-violent-crime/>

<https://houstonforensicscience.org/event/60082d27zMn16y%202021.pdf>

<https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna>

Why Arrestee Testing in the Booking Station?

BENEFITS

Results in 90 minutes vs weeks - months

Cost effective, scalable, efficient crime fighting tool

Objective identification and **elimination**

Improved DNA tracking & submission compliance

Suspect remains in custody

IMPACTS

Every profile added results in a cost savings
\$1.5K to \$19K

Deter and prevent future crimes

Law Enforcement safety and **manpower**

Reduce offender **sample load** on crime labs

Guards against racial bias, incorrect identifications and exonerations with objective data

Closure for victims and families



Rapid DNA Timeline

Rapid DNA Major Milestones

2017

Rapid DNA Act

Authorizes the FBI Director to “issue standards and procedures for the use of Rapid DNA instruments and resulting DNA analyses.”

01

2019

Pilot Testing Starts

“FBI 5” States include Arizona, Florida, California, Texas, Louisiana.

03

2021*

1st Agencies Go Live

After receiving Authority to Operate from FBI to use an Approved Rapid DNA Booking System

05

2018

CODIS Updates

New CODIS software and other necessary interfaces for booking stations to communicate with CODIS.

02

2020

Standards & Procedures Published

QA Standards & Operational Procedures made effective September 1, 2020

04

Booking Station First Steps

STANDARD AFIS LIVESCAN BOOKING PROCESS

The individual is booked and fingerprints collected

Within MINUTES the following occurs:

- Fingerprint Verification
- Biographical Data Verification
- State Identification Number (SID) generated or verified

**UPGRADE & INTEGRATE DNA INTO THE SYSTEM
THAT ALREADY EXISTS!**





Funding and Resources

Funding and Resources

- **Federal grants:** Monitor opportunities at Bureau of Justice Assistance (BJA) and National Institute of Justice (NIJ)

BJA FY21 references funding to implement Rapid DNA technology in to booking stations*

- **Federal earmarks**

- **State and Local Budgets:** Engage with state law enforcement associations and local leadership to establish business case for Rapid DNA investments

U.S. Department of Justice
Office of Justice Programs
Bureau of Justice Assistance



BJA FY 21 Edward Byrne Memorial Justice Assistance Grant (JAG) Program - State Solicitation

Assistance Listing Number #	16.738
Grants.gov Opportunity Number:	O-BJA-2021-135005
Solicitation Release Date:	June 08, 2021 3:00 PM
Version:	2
Grants.gov Deadline:	July 08, 2021 11:59 PM
Application JustGrants Deadline:	July 22, 2021 11:59 PM

<https://bj.a.ojp.gov/sites/g/files/xyckuh186/files/media/document/O-BJA-2021-135005.pdf>

For more information www.policegrantshelp.com
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