

Forensic Anthropology Case Report (2 of 2)

(Reflecting work performed from July 21, 2006 through December 3, 2006)

Calumet County Sheriff's Office Case # 05-0157-955
Wisconsin Department of Justice Division of Criminal Investigation (DCI) Case # 05-1776
Wisconsin State Crime Laboratory Case # M05-2467
Dane County Coroner's Office Case # 05-1681
University of Wisconsin Medical School Autopsy # W05-570-F
FBI Case # 62D-MW-44363/Title: Steven Avery; Teresa Halbach-Victim (Deceased)
Calumet County District Attorney Case # 2005CA000607
Court Case # 05-CF-381

Forensic Anthropological Profile: Adult female of undetermined ancestry and stature. Age, less than 30-35 years. A deliberate attempt was made to obscure cause and manner of death through burning, and human agency must be invoked to explain the presence of two discrete skull defects documented in this analysis whose locations correspond to the scatter of radiopaque particles adjacent to those defects in X-ray. This young adult female should be considered a victim of homicidal violence.

Continued Examination and Analysis

Because of the extreme level of detail involved in the forensic anthropological examination and the documentation of the analysis of these fragmentary and burned human remains, I refer those who may be interested in detailed bone inventories, the opening and closing times of evidence tape and containers and other such information to case notes that are on file with the undersigned. During the period covered by this report, digital photography was performed on October 15, November 4, 17, 24 and 27, 2006. All photographs taken to date are on file with the undersigned and the Calumet County District Attorney's office. None of those original photographs have been altered; each represents a true and accurate likeness of the image depicted.

In total, from the initial examination by the undersigned on November 10, 2005 to the date of this report, I examined the contents of fifty (50) separate containers of varying sizes, each labeled with a Calumet County Sheriff's Department Evidence Tag number (and, sometimes, other agency case numbers). All of the forensic anthropology work was performed at the Dane County Coroner's morgue facility located at 115 W. Doty Street, Madison, Wisconsin. A three-page spreadsheet documenting the series of evidence tag numbers examined is attached as Enclosure A. The 'Comments' column was added as a reference to help organize the massive amounts of material presented for forensic anthropological analysis and is not meant to represent an exhaustive inventory of all items examined and identified in each evidence container.

The complete range of activities performed during this forensic anthropological study included:

EXHIBIT #1

1. The recognition and separation of burned human from burned and unburned non-human bone.
2. The recognition and separation of burned human bone from burned and unburned non-biological material.
3. The identification and inventory of diagnostic burned human bone elements.
4. The recognition of any and all taphonomic factors that may have altered the bone (and other items) presented for analysis.
5. The development of a biological profile of the individual represented by the remains recovered.
6. The recognition and documentation of any and all ante-, peri-, and postmortem trauma to the burned human remains.
7. The refitting (where possible) of discrete burned human cranial and postcranial bone fragments.
8. The selection, packaging and transmittal of bone samples to the FBI, Wisconsin Crime Laboratory and Division of Criminal Investigation (WI Department of Justice).
9. Photography of the material collected, including human and non-human remains, as well as some non-biological items.
10. Off-site screening of soil collected from various scene locations.
11. Ongoing coordination with investigators.

The sex and age assessment provided in my report dated July 4, 2006 and reported above under 'Forensic Anthropological Profile' remains unchanged as a result of the work performed during this second and final report interval. Because of the degree of bone fragmentation, it is not possible to estimate stature or provide information on ancestry. While no count of the human and non-human bones and fragments was undertaken (including the many non-biological items separated out), several thousand items were sorted, examined, and documented during the course of the entire forensic anthropological analysis. Photographs were taken of the most diagnostic items and, in particular, the skull fragments; because of the extensive burning, charring and fragmentation of many of the smaller postcranial fragments, many were not amenable to photography.

On November 6, 2006 I transferred two burned cranial fragments to F.A. Richard E. Wedderspoon of the Madison office of the FBI for mitochondrial DNA (mtDNA) analysis. A copy of that three-page transmittal report is appended to this report as Enclosure B. On November 9, 2006 I received a telephone call from a Mr. Les McCurdy of the FBI indicating that given the burned condition of the bones sent for examination, it would not be possible to obtain mtDNA from those fragments.

On November 6, 2006 I transferred one possible human long bone shaft fragment (from Tag #7964) to Special Agent James C. Holmes of the Wisconsin Department of Justice Division of Criminal Investigation. A copy of Property Receipt D 6286, documenting that transfer, is attached to this report as Enclosure C.

The purpose of this report is to more fully document and describe the human cranial and postcranial bones recovered and any peri-, ante- and/or postmortem alterations observed. According to de Gruchy and Rogers (2002), the successful analysis of trauma on cremated bones is contingent upon the size and condition of the fragments which are significantly influenced by a number of variables including, but not limited to, temperature, duration of burning, agitation during burning, the presence of accelerants, the relative proportion of cortical (hard, compact) bone to less dense cancellous (trabecular) bone, and the presence of soft tissues. While identified and documented, the non-human bone collected is not the focus of this report. In general, however, the non-human bone is largely unburned while the bone recognized as human has been burned.

The Burning Episode

The human remains presented for forensic anthropological analysis would be classified as incomplete (bone pieces) by Eckert, *et al.* (1988) and as consistent with Level 5 (out of 5) in the Crow-Glassman scale. Glassman and Crow (1996) define this ultimate level of destruction when the body is cremated, little or no tissue remains, the remains are highly fragmentary and incomplete and when identification is most difficult, requiring the assistance of a forensic anthropologist and a forensic odontologist. The human bone recovered in this case is highly fragmented and is burned and blackened; many fragments exhibit hallmarks of calcined bone – colors ranging from white-to-grey-to-blue where the organic content of the bone has been lost through burning.

It is important to recognize that "... even bodies extremely destroyed by fire can still supply forensically relevant findings" (Bohnert *et al.* 2002) and that many parts of the skeleton, as well as signatures of ante- and perimortem trauma to the body, are readily identifiable even after thermal destruction (Pope and Smith 2004, Symes *et al.* 2002). The undersigned is familiar with the large body of theoretical and actualistic scientific literature that recognizes the many variables at play when human remains are exposed to fire effect (Buikstra and Swegle 1989, Mayne Correia 1997, Thompson 2002, Thompson 2005, Walker and Miller 2005). In this case, many of those variables are unknown and cannot be reconstructed anthropologically after-the-fact.

Because of the sheer volume of human bone fragments presented for examination and the difficulty of distinguishing, in some cases, whether or not non-diagnostic burned bone fragments were of human origin, I have not generated any cumulative weight estimate. There is no recognizable duplication of diagnostic human bone and no evidence to suggest that more than one individual is represented.

Cause and Manner of Death - Interpretation

A minimum number of 58 diagnostic human skull fragments of varying sizes, not including dental structures were recovered and identified anthropologically. Figure 1 (Enclosure D) presents a relative size comparison of some of those fragments. The lower image represents a composite of four refitted fragments. Bone from the frontal, parietals, occipital, sphenoid and mandible has been identified.

On page seven of my July 4, 2006 report I indicated that seven (7) skull fragments showed radiopaque signatures in the form of one or more particles denser than the bone itself. A re-examination of the digital photographs taken by me on November 17, 2005 as well as the 10 X-rays taken on the same day confirms that, in fact, a minimum of eight (8) fragments show such signatures. Of particular note, two of those skull fragments exhibit the most localized radiopaque particles immediately adjacent to and/or within two different focal bone defects, one of which was described in detail in my earlier report on pages 12 and 13; that parietal fragment highlights four hyperdense radiopaque particles and that are visible on three separate X-rays of the same two bones labeled MK/#1, MK/#2 and MK/#3 (See Figures 2, 3, and 4; Enclosures E-G)). The relative skull position of the larger bone (and the smaller fragment that can be reapproximated) can be identified as a left parietal fragment because of the unmistakable vascular impressions left by the middle meningeal vessels when the fragment is held in anatomical position (See Figure 5, upper image; Enclosure H).

The incomplete rounded defect on the inner table of the larger parietal fragment exhibits an unmistakable internal bevel (See Figure 5, upper image), measuring 10.55 mm across its opening with a maximum internal bevel width of 22.83 measured along the outer margin of the excavated defect; around the defect itself, the inner table of cranial bone is missing, exposing the *diplöe* (the trabecular bone 'sandwiched' between the inner and outer tables). From the central wall of the defect to the edge of the bevel on the internal table, the bevel measures 7.27 mm. On the corresponding edge of the outer table of the parietal fragment defect (See Figure 5, lower image; Enclosure H), a small curved area of bone is missing inferior/anterior to the defect margin that measures 3.63 mm in width. From side-to-side it measures 10.95 mm.

The second skull fragment, roughly rectangular in shape and most likely from the occipital bone, depicts a localized scattering of at least 10 radiopaque particles that can be visualized in the X-ray labeled MK/#4 (See arrow in Figure 6; Enclosure I) within a defect whose overall dimensions are impossible to measure because of fragmentation to that part of the bone that makes it impossible to delimit the edges and borders of the partial defect. The defect itself exhibits an internal bevel, exposure of the *diplöe*, with the loss of a small area the outer table of bone immediately adjacent to the defect (See Figures 7 and 8; Enclosures J and K).

The incomplete defect in the probable occipital bone fragment lies approximately to the left of the midline at the back of the skull while the defect described in the parietal bone is located above and anterior to the left side of the head in the temple area. Because of the bone fragmentation and in the inability to reconstruct the skull, it is not possible to determine in which order the two cranial defects occurred.

Though incomplete, the edges of both defects are thoroughly burned and similar in color to the individual skull fragments on which they are found indicating that each defect was

already present in the skull when the body was burned. These pre-existing traumatic defects in the skull, as well as the unfused cranial sutures recovered, would have served as a portal for the release of heat during the burning episode. Without the ability to reconstruct the entire skull it is not possible to conclusively interpret and distinguish heat-related fragmentation from any additional pre-existing radiating fractures that may have been present prior to incineration (Hausmann and Betz 2002, Herrman and Bennett 1999, Smith *et al.* 1987). It is important to note, however, that of the skull fragments that could be refitted, their edges were straight and the bone was not warped. This edge characteristic is typical of that seen in fast loading trauma to the skull, and along with the unmistakable presence of internally beveled defects on two non-opposable cranial fragments from different bones, is characteristic of gunshot trauma to the skull (Betz *et al.* 1996, Quatrehomme and Iscan 1998, cf. Pope *et al.* 2006).

This second bone fragment exhibiting an internally beveled defect visible on X-ray MK/#4 exhibits a minimum of 10 hyperdense particles. I transferred this fragment to Mr. Kenneth Olson of the Wisconsin State Crime Laboratory in Madison on November 17, 2006 who was asked to perform energy dispersive X-ray (EDX) analysis on this second fragment in order to assess elemental composition of those small radiopaque particles in the immediate area of the defect. This sample, designated by the Wisconsin Crime Laboratory as Item KQ, was picked up by the undersigned on November 24, 2006 and transported directly to the Dane County Coroner's Office morgue facility.

An additional six cranial fragments exhibit small radiopaque particles (or single particle) in X-ray; the majority of those fragments can be identified as coming from somewhere on the parietal bone(s). The small size of several other cranial fragments precludes exact element identification. Because the skull cannot be reconstructed it is impossible to determine the relative relationship and anatomical positioning of these six fragments to the two separate areas of the skull that exhibit entrance defects. For that reason, it is also impossible to reconstruct the direction of fire, the pathway of the projectiles, or the order in which the cranial defects occurred.

While there is significant fragmentation to the facial bones recovered, the following areas of the face can be identified with certainty: the general contours of the left and right eye sockets, the left nasal bone, the right cheek bone, and a partial left cheek bone (See Figure 9; Enclosure L). These fragments, along with other skull fragments and dental structures, were recovered from the burn pit as were many of the postcranial shaft fragments.

The Postcranial Remains

The postcranial human remains are fragmentary, burned and sometimes calcined. Diagnostic fragments of the following postcranial elements were identified: clavicle, scapula, manubrium, upper and lower arm, ribs, hand/wrist, spine, sacrum, pelvis, lower leg bones and feet. Some anthropological identifications were made based on the presence

of anatomical landmarks specific to a particular bone, and others based on the recognizable contours of an individual bone fragment. The side of the body from which a particular bone came could only be determined in a few instances. For example, two opposable fragments from the left clavicle and the left ulna, respectively, could be refitted.

Alteration to the postcranial bone is largely related to fire effect, with the possible exception of the presence of cut marks (and a saw kerf) observed on a burned/calcined long bone shaft fragment (Tag #7964, Fig. 10; Enclosure M) as well as a sharp horizontal through-and-through cut to the superior aspect of an iliac blade and sharp vertical cuts located on either side of a right sacro-iliac articulation (Tag #8675, Fig. 11; Enclosure N). The right sacroiliac area, includes a portion of the right side of the sacrum and the still articulated auricular surface of the ilium. These fragmentary cut bones are suspected to be of possible human origin because of their observable anatomical contours as well as the expected ratio of cortical to trabecular bone. No histological examination was performed because of the burned and fragile nature of the bone and its inability to survive intact during the thin-sectioning procedure required for microscopic analysis.

The bone fragment from Tag #7964 was found in "Barrel #2" according to the description on the evidence tag. Also collected in Tag #7964 was unmodified burned and calcined human bone from the scapula, spine, long bone shaft fragments and a possible metacarpal fragment. Non-human and unidentifiable bone fragments were also recovered.

Items from Tag #8675 were found along with unburned non-human bone (See Fig. 12; Enclosure O) in "Debris pile contents (01)" that was geographically located at "N44 degrees, 14 minutes, 51 seconds and W87 degrees, 41 minutes, 51 seconds."

This examination has documented the presence of pre-incineration trauma in the form of cuts to at least two pelvic bone fragments of possible human origin. Other cut bone fragments recovered in the total assemblage may be of human origin but could not be identified as such because of their small size and undiagnostic shape.

Interpretation and Conclusions

Every attempt has been made to distinguish human from non-human bone throughout this forensic anthropological analysis but it is possible that because of the overwhelming number of bone fragments recovered, the small size and irregular shapes of most of the fragments and the recognized effects of the heat alterations to bone, some non-diagnostic fragments of human origin may not have been recognized as such. It is the opinion of the undersigned that none of those small non-diagnostic fragments would have affected the observations, interpretations or conclusions presented in this report, or in my previous report dated July 4, 2006. If anything, their recognition as human would have likely strengthened the observations made and reported here.

The vast majority of diagnostic human bone identified through this forensic anthropological analysis as human was collected from or adjacent to the burn pit on Mr.

Steven Avery's property (Calumet County Sheriff's Department Evidence Tags #7924, 7944, 8318, 9597 and 9598). Burned human bone fragments were identified from the skull (including face, lower jaw and dental), scapula, clavicle, upper arm bones, ribs, metacarpals, metatarsals, spine, sacrum, innominate (hip bone), and lower leg bones. Other non-human and non-biological items (metal, fabric, plant material and non-metal items) were also recovered and bagged separately. Human agency must be invoked to explain how these human remains were altered by fire and, possibly, how burned bone (of possible human origin) with human modification in the form of cut marks (and a saw kerf), was recovered from elsewhere on the property.

Although fragmentary and incomplete, virtually every area of the skeleton is represented (by at least one identifiable fragment). Bone fragmentation, due to fire effect and high velocity trauma to the skull, makes it impossible to provide any accurate estimation of what percentage of the entire skeleton is represented.

Rescreened soil from the charred pile (Evidence Tag #7924) yielded burned human bone fragments representing skull and dental, spine, sacrum, manubrium (upper part of the sternum, or breastbone), hand, wrist, ribs, and long bones. Other human bone fragments found east and west of the "dug out hole" (Tag #s 7943 and 7944) included tibia, spine, unidentifiable shaft fragments, ribs, ulna/radius, hand/foot, and an incomplete articular head (humerus? femur?) fragment. Other Tag #s also contained bone fragments identified as human:

7925	8118	7413	6197
7926	8148	7414	6200
7936	8150	7416	7412
7943	8675 (?)	7419	9598
7964	7411	9597	

This forensic anthropological examination and laboratory analysis has identified the burned and extremely fragmented human remains as those of an adult female less than 30-35 years of age. It is not possible to estimate stature or determine ancestry given the bone fragmentation and destruction due to the burning episode. A deliberate attempt was made to obscure the identity of the victim as well as the cause and manner of death through burning. Evidence for two high velocity gunshot wounds to the head has been documented. There are cuts to a minimum of two areas of pelvic bone that may be of human origin. Additionally, a possible human calcined long bone fragment (Tag #7964) with hesitation cut marks and a saw kerf mark has been recognized as have other undiagnostic cut bone fragments that may be of human origin. This young adult female should be considered a victim of homicidal violence with possible evidence for postmortem processing of portions of the body to facilitate disposal.

Respectfully submitted,

Leslie E. Eisenberg, Ph.D., D-ABFA
Consulting Forensic Anthropologist

Dated: 3 December 2006

Enclosures:

- A. Spreadsheet of Tag Numbers Examined (3 pages).
- B. Evidence Transmittal report dated November 5, 2006 (3 pages).
- C. WI Department of Justice Property Receipt D 6286, dated 11/6/06 (1 page).
- D. Figure 1: Two images depicting relative size comparison of selected cranial remains recovered; N.B. the lower image is a composite of four refitted fragments.
- E. Figure 2: X-ray image of two opposable parietal fragments; note four radiopaque particles in the larger fragment as well as the crescentic defect on the right side of the larger fragment (MK/#1).
- F. Figure 3: X-ray image of the same two opposable parietal fragments (MK/#2).
- G. Figure 4: X-ray image of the same two opposable parietal fragments (MK/#3).
- H. Figure 5: Inner (top) and outer (bottom) tables of left parietal bone fragment with defect (marked by star).
- I. Figure 6: X-ray image of eight cranial fragments; note the localized concentration of radiopaque particles in the defect of the rectangular fragment in the upper left of the image (MK/#4) indicated by the black arrow.
- J. Figure 7: Inner table of probable occipital fragment (arrows pointing to defect).
- K. Figure 8: Outer table of probable occipital fragment (arrows pointing to defect).
- L. Figure 9: Bones of the face identified in anatomical position (top); close-up of area above and medial to left eye socket with left nasal bone found separately. (bottom).
- M. Figure 10: Internal view (top) of long bone fragment with kerf and cuts and kerf mark visible on outside of bone (bottom).
- N. Figure 11: Cut pelvic fragments, possibly human; present is a portion of the upper aspect of an iliac blade (arrow) and a right sacro-iliac joint (in anatomical position) with a vertical cut to either side (marked by stars).
- O. Figure 12: Assemblage of unburned and burned non-human bone from Tag #8675.

Cc: Kenneth A. Bennett, Ph.D., Forensic Anthropologist
Thomas J. Fallon, Assistant Attorney General, Wisconsin Department of Justice
Thomas Fassbender, Special Agent, Wisconsin Department of Justice
Norman A. Gahn, Assistant District Attorney, Milwaukee County
Jerome Geurts, Director, Wisconsin State Crime Laboratory-Madison
James C. Holmes, Special Agent, Wisconsin Department of Justice
Alice R. Isenberg, Evidence Control Unit, FBI, Quantico, Virginia
Kenneth R. Kratz, District Attorney, Calumet County
Gerald Mullen, Special Agent, Federal Bureau of Investigation (Green Bay)

Gerald A. Pagel, Sheriff, Calumet County

Rodney Pevytoe, Special Agent, Wisconsin Department of Justice (Arson Bureau)

Donald O. Simley II, D.D.S., Forensic Odontologist

John Stanley, Dane County Coroner

Michael A. Stier, M.D., Forensic Pathologist, University of Wisconsin Medical

School

Mark Wiegert, Investigator, Calumet County Sheriff's Office

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N.B. An extensive body of scientific literature not referenced above was consulted during the protracted forensic anthropological analysis and during the preparation of this report.



FIGURE 11
ENCLOSURE N
8675



FIGURE 11
ENCLOSURE N
close-up



FIGURE 12
ENCLOSURE O
8675

CALUMET COUNTY SHERIFF'S DEPARTMENT

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File Number

Complaint No.
05-0157-955**TYPE OF ACTIVITY: Return Items****DATE OF ACTIVITY: 09/20/11****REPORTING OFFICER: Deputy Jeremy Hawkins**

On 09/20/11 at approximately 9:00 a.m., I (Deputy JEREMY HAWKINS of the CALUMET COUNTY SHERIFF'S DEPARTMENT), along with Sgt. Inv. MARK WIEGERT of the CALUMET COUNTY SHERIFF'S DEPARTMENT, Attorney THOMAS FALLON and Attorney NORMAN GAHN, removed from evidence all property tag numbers that contained human bone. Attorney GAHN and Attorney FALLON viewed the items under the property tags and, along with Dr. LESLIE EISENBERG's report, determined which bones could be returned to the HALBACH family.

Ledger No. 05-187, Property Tag #8318, contents sifted from burn pit near STEVE's residence/garage. The human bones from Property Tag #8318 were removed from the container and photographed.

Ledger No. 05-199, Property Tag #7924, unidentified material suspected to be bone, and Property Tag #7925, unidentified material charred, were removed and photographed.

Ledger No. 05-201, Property Tag #7936, unknown material suspected to be bone, Property Tag #7943, bone fragments, and Property Tag #7944, bone fragments, were removed from storage and photographed.

Ledger No. 05-208, Property Tag #8675, the human bones were separated from the rest of the contents and photographed.

Ledger No. 05-209, Property Tag #7964, burnt bone pieces from barrel #2, the human bones were removed from the rest of the contents and photographed.

Ledger No. 05-255, Property Tag #6200, teeth, Property Tag #6197, suspected bone fragments, the separated human bone was removed. Property Tag #8118, suspected bone fragments, the separated human bones were removed. Property Tag #6200, #6197 and #8113 were photographed.

Ledger No. 05-257, Property Tag #8148, suspected bone fragments, the separated human bone fragments were removed and photographed. Property Tag #8150, teeth, was removed and photographed. Property Tag #8140, bone fragments, the separated human bones fragments were removed and photographed.

EXHIBIT #2

CALUMET COUNTY SHERIFF'S DEPARTMENT

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File Number

Complaint No.
05-0157-955

Ledger No. 06-86, Property Tag #7411, possible bone fragments, Property Tag #7412, possible bone fragments, Property Tag #7414, bone fragments, Property Tag #7416, suspected human bone fragments, Property Tag #7419, suspected human bone fragments, Property Tag #7420, suspected charred item resembling bone, Property Tag #7421, unidentified suspected bone, Property Tag #7426, bone fragments, Property Tag #7434, bone fragments, were all removed and photographed.

After all bone fragments that were determined to be able to be returned to the HALBACHS by Attorney FALLON and Attorney GAHN were completed, the items were transferred to WIETING FUNERAL HOME in the presence of Sgt. Inv. MARK WIEGERT and myself. The packaging for all the items returned was retained by the CALUMET COUNTY SHERIFF'S DEPARTMENT in secure storage.

Deputy Jeremy Hawkins
Calumet Co. Sheriff's Dept.
JH/bdg

CALUMET COUNTY SHERIFF'S DEPARTMENT

MARK R. OTT, SHERIFF
Brett J. Bowe, Chief Deputy

Radio Station - KGL 593
WI Teletype Code - CASO



COPY

206 Court Street
Chilton, WI 53014

Chilton (920) 849-2335
Appleton (920) 989-2700 Ext. 222
FAX (920) 849-1431

May 29, 2018

James Kirby
Edward R. Kirby & Associates, Inc.
909 S. Route 83, Unit 103
Elmhurst, IL 60126-1313

Re: Public Records Request dated April 19, 2018

Dear Mr. Kirby:

Enclosed please find a copy of the Calumet County Sheriff's Department complete investigative report and the post-conviction investigative report, along with the receipts for your payment of \$279.25 and \$31.58.

Sincerely,

Mark R. Ott, Sheriff
Calumet County Sheriff's Dept.

Enclosure

EXHIBIT #3

CALUMET COUNTY SHERIFF'S DEPARTMENT

MARK R. OTT, SHERIFF
Brett J. Bowe, Chief Deputy



206 Court Street
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Radio Station – KGL 593
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May 18, 2018

James Kirby
Edward R. Kirby & Associates, Inc.
909 S. Route 83, Unit 103
Elmhurst, IL 60126-1313

Re: Public Records Request dated April 19, 2018

Dear Mr. Kirby:

In receipt of your payment totaling \$279.29, we have prepared a copy of the complete investigative report. The Calumet County Sheriff's Department will also release the post-conviction investigative report, which consists of 63 pages (0.25 per page) for a total cost of \$15.75. The shipping costs for all records totaled \$15.83. Upon receipt of payment totaling \$31.58, these records will be mailed to you at the above listed address.

In regards to your request for records of the Wisconsin State Crime Laboratory, we have been advised by Wisconsin Department of Justice that the records sought in your request are not available via a public records request as they constitute records containing information, which are derived from analysis of evidence collected by law enforcement in the investigation of a crime and therefore fall within the purview of Wis. Stat. § 165.79(1).

Pursuant to Wis. Stat. § 165.79(1), "[e]vidence, information and analyses of evidence obtained from law enforcement officers by the laboratories is privileged and not available to persons other than law enforcement officers . . . prior to trial, except to the extent that the same is used by the state at a preliminary hearing and except as provided in Wis. Stat. § 971.23 [pre-trial criminal discovery]."

Pursuant to Wis. Stat. § 165.79(2), "[u]pon the termination or cessation of the criminal proceedings, the privilege of the findings obtained by a laboratory may be waived in writing by the department [DOJ] and the prosecutor involved in the proceedings." It is the requester's responsibility to request the waivers. DOJ will not consider granting a waiver until it receives a waiver from the prosecutor. It is your responsibility to obtain that waiver and forward it to DOJ.

If you have any further questions or concerns relating to your requests or the Sheriff's Department's response herein, please contact our counsel, Kimberly Tenerelli, at (920) 849-1443.

Sincerely,

Mark R. Ott, Sheriff
Calumet County Sheriff's Dept.

CALUMET COUNTY SHERIFF'S DEPARTMENT

MARK R. OTT, SHERIFF
Brett J. Bowe, Chief Deputy



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WI Teletype Code – CASO

Chilton (920) 849-2335
Appleton (920) 989-2700 Ext. 222
FAX (920) 849-1431

DATE: 05/18/18
TO: James Kirby
FAX: 630-941-1750
FROM: Calumet County Sheriff's Department

NO. OF SHEETS INCLUDING COVER SHEET: 3

COMMENTS:

CONFIDENTIALITY NOTICE

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address via the U.S. Postal Service. Thank you.

CALUMET COUNTY SHERIFF'S DEPARTMENT

MARK R. OTT, SHERIFF
Brett J. Bowe, Chief Deputy



206 Court Street
Chilton, WI 53014

Radio Station – KGL 593
WI Teletype Code – CASO

Chilton (920) 849-2335
Appleton (920) 989-2700 Ext. 222
FAX (920) 849-1431

April 20, 2018

Mr. James Kirby
909 S. Route 83, Unit 103
Elmhurst, IL 60126-1313

Re: Public Records Request dated April 19, 2018

Dear Mr. Kirby:

Please accept this correspondence as the Calumet County Sheriff's Department response to your public records request dated April 19, 2018, wherein you requested a copy of the "investigative reports" and "forensic and or laboratory result reports."

In response to your request for the investigative reports, the Calumet County Sheriff's Department will provide the complete investigative report, which consists of 1,117 pages. The Sheriff's Department will provide this document upon payment of the total sum of **\$279.25 (\$0.25 per page) plus shipping costs**. Please advise if you still wish to receive these documents and the address in which these documents should be mailed to. Once that information is received, we will determine shipping costs and provide you with an exact amount of payment that would need to be sent to our department prior to processing your request.

Please know that the investigative report will contain portions of redacted information. The report will be provided in redacted form pursuant to Wis. Stat. § 19.36(6), which provides that "[i]f a record contains information that is subject to disclosure under s. 19.35 (1) (a) or (am) and information that is not subject to such disclosure, the authority having custody of the record shall provide the information that is subject to disclosure and delete the information that is not subject to disclosure from the record before release."

The record has been redacted to preserve the confidentiality of information related to a juvenile(s). Section 938.396, Wis. Stats., provides: "Law enforcement agency records of juveniles shall be kept separate from records of adults. Law enforcement agency records of juveniles may not be open to inspection or their contents disclosed except under par. (b) or (c), sub. (1j), (2m) (c) 1p., or (10), or s. 938.293 or by order of the court." There are no statutory exceptions that apply in this circumstance. Therefore, the portion of the requested record relating to information concerning a juvenile(s) will not be provided.

In regards to your request for "forensic and laboratory result reports, these reports will require additional time to prepare. Once the complete report is compiled, we will advise and request prepayment before those records will be provided to you.

Sincerely,

Mark R. Ott, Sheriff
Calumet County Sheriff's Dept.

Enclosure

F:\MAIL\03092411\JLV

THU 29 APR 2018 10:10:53 AM EDT

Page 2 of 2



Edward R. Kirby & Associates, Inc.
Complex Problems • Effective Solutions

909 S. Route 83, Unit 103, Elmhurst, Illinois 60126-1313

Illinois: 630-941-1700 Fax: 630-941-1750

Edward R. Kirby

Steven E. Kirby
CHAIRMAN

James R. Kirby
PRESIDENT

Kevin M. Read
VICE PRESIDENT

April 19, 2018

Katherine M. McGovern
SENIOR INVESTIGATOR

John Murray
INVESTIGATOR

Martie Paulson
INVESTIGATOR

Calumet County Sheriff's Department
Records Department
205 Court Street
Chilton, Wisconsin 53014
Facsimile (920) 849-1431

Keeper of the Records,

Pursuant to the Freedom of Information Act, I am requesting copies of any and all reports including but not limited to investigative reports, incident reports, supplemental reports, forensic and/or laboratory results reports, transcripts of recorded interviews, generated between October 31, 2005 and April 19, 2018, that are part of the file identified as Complaint Number US-0157-955.

I appreciate your assistance in this matter. Do not hesitate to contact me if you have any questions or need to discuss.

Yours very truly,
EDWARD R. KIRBY & ASSOCIATES, INC.

James R. Kirby
James R. Kirby
President



Edward R. Kirby & Associates, Inc.
Complex Problems • Effective Solutions

909 S. Route 83, Unit 103, Elmhurst, Illinois 60126-1313
Phone: 630-941-1700 fax: 630-941-1750

Edward R. Kirby
1919-1991

Steven L. Kirby
CHAIRMAN

James R. Kirby
PRESIDENT

Kevin M. Read
VICE PRESIDENT

April 23, 2018

Calumet County Sheriff's Department
206 Court Street
Chilton, Wisconsin 53014
Facsimile (920) 849-1431

Katherine M. McGovern
SENIOR INVESTIGATOR

John Murray
INVESTIGATOR

Martin Paulson
INVESTIGATOR

Sheriff Ott

I am in receipt of your letter dated April 20, 2018 responding to my FOIA request.

With this letter I am informing I wish to receive the records requested and understand the cost will be \$279.25 for copy fees and an additional charge for shipping.

Please provide me with the amount of the total costs, copy fees and shipping, and I will mail a check.

Please send the records to the address on this letterhead.

I understand that the forensic and laboratory result reports will take additional time and may result in additional costs.

I appreciate your assistance in this matter. Do not hesitate to contact me if you have any questions or need to discuss.

Yours very truly,
EDWARD R. KIRBY & ASSOCIATES, INC.

James R. Kirby
James R. Kirby
President

8



909 S. Route 83, Unit 103, Elmhurst, Illinois 60126-1313

Phone: 630-941-1700 Fax: 630-941-1750

Edward R. Kirby
1919-1991

Steven L. Kirby
CHAIRMAN

James R. Kirby
PRESIDENT

Kevin M. Read
VICE PRESIDENT

April 25, 2018

Katherine M. McGovern
SENIOR INVESTIGATOR

John Murray
INVESTIGATOR

Martin Paulson
INVESTIGATOR

Calumet County Sheriff's Department
Attention: Keeper of the Records
206 Court Street
Chilton, Wisconsin 53014

Dear Amanda:

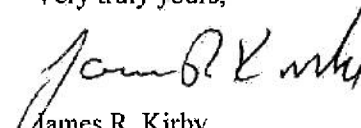
Following up on your voicemail message to my office from April 25, 2018, enclosed please find a check in the amount of \$279.25 to cover the copy charges of the records I requested in my letter to your office dated April 19, 2018.

I understand that you will wait until you have the additional reports of the forensic and laboratory results before shipping anything to me.

Once you know what the additional costs for copying the forensic and laboratory reports and the shipping fees, please contact me directly and I will forward the balance to your office.

In the interim, if you have any questions, please do not hesitate to contact me.

Very truly yours,


James R. Kirby
President

JRK/AMD

ENCLOSURE

EDWARD R. KIRBY & ASSOCIATES, INC.
 909 S. IL ROUTE 83, SUITE 103
 ELMHURST, IL 60126

Community Bank of Elmhurst
 282 W. Roosevelt Rd., Elmhurst, IL 60120
 70-2537/719

4/26/2018

PAY TO THE ORDER OF Calumet County Sheriff's Department

\$ 279.25

Two Hundred Seventy-Nine and 25/100 DOLLARS

Calumet County Sheriffs Department
 206 Court Street
 Chilton, WI 53014

MEMO

James R. Kirby
 AUTHORIZED SIGNATURE

Security Features: Details on back.

⑈014153⑈ ⑆071925376⑆ ⑈1006368⑈

EDWARD R. KIRBY & ASSOCIATES, INC.

14153

Calumet County Sheriff's Department

4/26/2018

PT-002-16

279.25

General - Community

279.25

CALUMET COUNTY SHERIFF'S DEPARTMENT

Complaint No.
05-0157-955

Page
1079
File Number

TYPE OF ACTIVITY: Return of Evidence from FBI

DATE OF ACTIVITY: 01/31/07

REPORTING OFFICER: Deputy Jeremy Hawkins

On 01/31/07, I (Deputy HAWKINS of the CALUMET COUNTY SHERIFF'S DEPARTMENT) received from FBI Agent GERALD MULLEN the following items:

- Two plastic containers containing pieces of bone from Property Tag #9597
- A plastic bag containing bone pieces from Property Tag #8675
- A cardboard box, a plastic container and a plastic container in an envelope, all containing pieces of bone from Property Tag #7964

Custody of all packages was signed over to myself by FBI Agent Gerald Mullen.

Deputy Jeremy Hawkins
Calumet Co. Sheriff's Dept.
JH/bdg

EXHIBIT #4

CALUMET COUNTY SHERIFF'S DEPARTMENT

Complaint No.
05-0157-955

Page
1076
File Number

TYPE OF ACTIVITY: **Releasing Items to FBI**

DATE OF ACTIVITY: **12/18/06**

REPORTING OFFICER: **Deputy Jeremy Hawkins**

On 12/18/06, I (Deputy JEREMY HAWKINS of the CALUMET COUNTY SHERIFF'S DEPARTMENT) released the following property tag numbers to GERALD MULLEN of the FBI for transport to Milwaukee. The items were then transferred to FBI headquarters in Virginia for possible further testing . The property tag numbers are as follows:

- Property Tag #8675, bones located in debris pile
- Property Tag #7964, burnt bone pieces from Barrel #2

Both items were signed over and released to GERALD MULLEN of the FBI.

Deputy Jeremy Hawkins
Calumet Co. Sheriff's Dept.
JH/bdg

**FBI Laboratory**2501 Investigation Parkway
Quantico, Virginia 22135**REPORT OF EXAMINATION****To: Milwaukee
Squad 6, GBRA
SA Gerald E. Mullen****Date: January 12, 2007****Case ID No.: 62D-MW-44363 - 51****Lab No.: 061108009 PM PV
061114006 PM PV
061227012 PM PV****Reference: Communications dated November 2, 2006, November 7, 2006,
and December 19, 2006****Your No.:****Title: STEVEN AVERY;
TERESA HALBACH - VICTIM (DECEASED)
DOMESTIC POLICE COOPERATION****Date specimens received: November 8, 2006, November 14, 2006, and December 27, 2006****The following items were submitted under cover of communication dated November 2, 2006,
assigned Laboratory number 061108009, and received in the DNA Analysis Unit II:****Q11 Bone fragment (1B5 E04033363)****Q12 Bone fragment (1B5 E04033363)****The following items were submitted under cover of communication dated November 7, 2006,
assigned Laboratory number 061114006, and received in the DNA Analysis Unit II:****Q13 Bone fragment (1B6, E04033388)****Q14-Q14.8 Bone fragments (1B6, E04033388)**

The following items were submitted under cover of communication dated December 19, 2006, assigned Laboratory number 061227012, and received in the DNA Analysis Unit II:

Q15-Q45 Thirty-one bone fragments (1B7, E04033589)

Remarks:

Due to the condition of the submitted Q11, Q12, Q13, Q14-Q14.8, and Q15-Q45 bone fragments, no mitochondrial DNA (mtDNA) examinations were conducted.

The submitted items will be returned under separate cover along with the processed DNA generated from the samples. The processed DNA can be found in a package marked **PROCESSED DNA SAMPLES: SHOULD BE REFRIGERATED/FROZEN**. It is recommended that these samples be stored in a refrigerator/freezer and isolated from evidence that has not been examined.

Leslie D. McCurdy, Ph.D.
DNA Analysis Unit II
(703) 632-7601

This report contains the opinions/interpretations of the examiner(s) who issued the report.

Page 2 of 2

061108009 PM PV

For Official Use Only

115TH CONGRESS } <i>1st Session</i>	HOUSE OF REPRESENTATIVES	{ REPORT 115-117
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RAPID DNA ACT OF 2017

MAY 11, 2017.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. GOODLATTE, from the Committee on the Judiciary,
submitted the following

R E P O R T

[To accompany H.R. 510]

[Including cost estimate of the Congressional Budget Office]

The Committee on the Judiciary, to whom was referred the bill (H.R. 510) to establish a system for integration of Rapid DNA instruments for use by law enforcement to reduce violent crime and reduce the current DNA analysis backlog, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

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Purpose and Summary

H.R. 510 will establish a system for integration of Rapid DNA instruments for use by law enforcement to reduce violent crime and reduce the current DNA analysis backlog.

Background and Need for the Legislation

The DNA Identification Act of 1994¹ established federal DNA labs and authorized the Federal Bureau of Investigation to begin compiling DNA information into a central database. This database is known as the National DNA Index System (NDIS) and the system for analyzing and communicating the data is the Combined DNA Index System (CODIS). The 1994 Act allowed DNA testing to be done by accredited state labs with results from state labs being uploaded to CODIS.

DNA technology has advanced a great deal in the years since the 1994 Act. Whereas it once took days or weeks, DNA testing can now be completed in a matter of hours. There is currently technology, known as Rapid DNA technology, that allows for DNA testing and identification on a small, copier-sized machine. A DNA sample—oftentimes a cheek swab—is taken, placed into a cartridge that slides into the Rapid DNA machine, and reports back the DNA profile in approximately ninety minutes. The FBI, working with the forensics community, is hopeful that this technology can be used in a booking station to help identify suspects in the same way a fingerprint is currently used. At present, Rapid DNA technology can only be used for identification purposes, not crime scene analysis.

Unfortunately, the 1994 Act creating CODIS does not allow for the use of this technology since only state labs are allowed access to CODIS. Currently, booking stations have to send their DNA samples off to state labs and wait weeks for the results. This has created a backlog that impacts all criminal investigations using forensics, not just forensics used for identification purposes. H.R. 510 would modify the current law regarding DNA testing and access to CODIS. The short turnaround time resulting from increased use of Rapid DNA technology would help to quickly eliminate potential suspects, capture those who have committed a previous crime and left DNA evidence, as well as free up current DNA profilers to do advanced forensic DNA analysis, such as crime scene analysis and rape-kits.

Hearings

The Committee on the Judiciary held no hearings on H.R. 510. However, the Judiciary Committee's Subcommittee on Crime, Terrorism, Homeland Security and Investigations held a hearing on a virtually identical bill, H.R. 320, on June 18, 2015. Testimony was received from: Ms. Amy Hess, Executive Assistant Director of Science and Technology, Federal Bureau of Investigation; Ms. Jody Wolf, Assistant Crime Laboratory Administrator, Phoenix Police Department Crime Laboratory, President, American Society of Criminal Laboratory Directors; and Ms. Natasha Alexenko, Founder, Natasha's Justice Project.

Committee Consideration

On April 27, 2017, the Committee met in open session and ordered the bill H.R. 510 favorably reported, by voice vote, a quorum being present.

¹Pub. L. No. 103-322 (1994).

Committee Votes

In compliance with clause 3(b) of rule XIII of the Rules of the House of Representatives, the Committee advises that there were no recorded votes during the Committee's consideration of H.R. 510.

Committee Oversight Findings

In compliance with clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee advises that the findings and recommendations of the Committee, based on oversight activities under clause 2(b)(1) of rule X of the Rules of the House of Representatives, are incorporated in the descriptive portions of this report.

New Budget Authority and Tax Expenditures

Clause 3(c)(2) of rule XIII of the Rules of the House of Representatives is inapplicable because this legislation does not provide new budgetary authority or increased tax expenditures.

Congressional Budget Office Cost Estimate

In compliance with clause 3(c)(3) of rule XIII of the Rules of the House of Representatives, the Committee sets forth, with respect to the bill, H.R. 510, the following estimate and comparison prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act of 1974:

MAY 9, 2017.

Hon. BOB GOODLATTE,
Chairman.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 510, the Rapid DNA Act of 2017.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Mark Grabowicz.

Sincerely,

KEITH HALL.

Enclosure.

cc: Honorable John Conyers Jr.
Ranking Member

H.R. 510—Rapid DNA Act of 2017

As ordered reported by the House Committee on the Judiciary on
April 27, 2017.

H.R. 510 would direct the Federal Bureau of Investigation (FBI) to issue standards and procedures for the use of certain automated processes to analyze DNA samples. The agency is currently undertaking activities to prepare for increased use of such enhanced analyses. Based on information from the FBI, CBO estimates that

implementing the bill would cost less than \$500,000 annually; such spending would be subject to the availability of appropriated funds.

Enacting the legislation would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. CBO estimates that enacting H.R. 510 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

H.R. 510 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not affect the budgets of state, local, or tribal governments.

The CBO staff contact for this estimate is Mark Grabowicz. The estimate was approved by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

Duplication of Federal Programs

No provision of H.R. 510 establishes or reauthorizes a program of the Federal government known to be duplicative of another Federal program, a program that was included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111 139, or a program related to a program identified in the most recent Catalog of Federal Domestic Assistance.

Disclosure of Directed Rule Makings

The Committee estimates that H.R. 510 specifically directs to be completed no specific rule makings within the meaning of 5 U.S.C. 551.

Performance Goals and Objectives

The Committee states that pursuant to clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, H.R. 510 is designed to establish a system for integration of Rapid DNA instruments for use by law enforcement to reduce violent crime and reduce the current DNA analysis backlog.

Advisory on Earmarks

In accordance with clause 9 of rule XXI of the Rules of the House of Representatives, H.R. 510 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(e), 9(f), or 9(g) of rule XXI.

Section-by-Section Analysis

The following discussion describes the bill as reported by the Committee.

Section 1. Short Title. This section cites the short title of the bill as the "Rapid DNA Act of 2016."

Section 2. Rapid DNA Instruments. This section requires the Director of the FBI to issue standards and procedures for the use of Rapid DNA instruments and resulting analyses. It also amends the DNA Identification Act of 1994 to include laboratories that are independently accredited and undergo external audits not less than every two years.

Section 3. Conforming Amendments Relating to Collection of DNA Identification Information. This section amends the DNA Analysis

Backlog Elimination Act of 2000 by allowing the Director of the FBI to waive certain requirements under the Act if the DNA samples are analyzed by means of Rapid DNA instruments and the results are included in CODIS.

Changes in Existing Law Made by the Bill, as Reported

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, and existing law in which no change is proposed is shown in roman):

DNA IDENTIFICATION ACT OF 1994

* * * * *

TITLE XXI—STATE AND LOCAL LAW ENFORCEMENT

* * * * *

Subtitle C—DNA Identification

* * * * *

SEC. 210303. QUALITY ASSURANCE AND PROFICIENCY TESTING STANDARDS.

(a) PUBLICATION OF QUALITY ASSURANCE AND PROFICIENCY TESTING STANDARDS.—(1)(A) Not later than 180 days after the date of enactment of this Act, the Director of the Federal Bureau of Investigation shall appoint an advisory board on DNA quality assurance methods from among nominations proposed by the head of the National Academy of Sciences and professional societies of crime laboratory officials.

(B) The advisory board shall include as members scientists from State, local, and private forensic laboratories, molecular geneticists and population geneticists not affiliated with a forensic laboratory, and a representative from the National Institute of Standards and Technology.

(C) The advisory board shall develop, and if appropriate, periodically revise, recommended standards for quality assurance, including standards for testing the proficiency of forensic laboratories, and forensic analysts, in conducting analyses of DNA.

(2) The Director of the Federal Bureau of Investigation, after taking into consideration such recommended standards, shall issue (and revise from time to time) standards for quality assurance, including standards for testing the proficiency of forensic laboratories, and forensic analysts, in conducting analyses of DNA.

(3) The standards described in paragraphs (1) and (2) shall specify criteria for quality assurance and proficiency tests to be applied to the various types of DNA analyses used by forensic laboratories. The standards shall also include a system for grading proficiency testing performance to determine whether a laboratory is performing acceptably.

PUBLIC LAW 115-50—AUG. 18, 2017

131 STAT. 1001

Public Law 115-50
115th Congress

An Act

To establish a system for integration of Rapid DNA instruments for use by law enforcement to reduce violent crime and reduce the current DNA analysis backlog.

Aug. 18, 2017
[H.R. 510]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Rapid DNA Act
of 2017,
42 USC 13701
note.

SECTION 1. SHORT TITLE.

This Act may be cited as the “Rapid DNA Act of 2017”.

SEC. 2. RAPID DNA INSTRUMENTS.

(a) **STANDARDS.**—Section 210303(a) of the DNA Identification Act of 1994 (42 U.S.C. 14131(a)) is amended by adding at the end the following:

“(5)(A) In addition to issuing standards as provided in paragraphs (1) through (4), the Director of the Federal Bureau of Investigation shall issue standards and procedures for the use of Rapid DNA instruments and resulting DNA analyses.

Procedures.

“(B) In this Act, the term ‘Rapid DNA instruments’ means instrumentation that carries out a fully automated process to derive a DNA analysis from a DNA sample.”

Definition.

(b) **INDEX.**—Paragraph (2) of section 210304(b) of the DNA Identification Act of 1994 (42 U.S.C. 14132(b)(2)) is amended to read as follows:

“(2) prepared by—

“(A) laboratories that—

“(i) have been accredited by a nonprofit professional association of persons actively involved in forensic science that is nationally recognized within the forensic science community; and

“(ii) undergo external audits, not less than once every 2 years, that demonstrate compliance with standards established by the Director of the Federal Bureau of Investigation; or

Deadline.

“(B) criminal justice agencies using Rapid DNA instruments approved by the Director of the Federal Bureau of Investigation in compliance with the standards and procedures issued by the Director under section 210303(a)(5); and”.

SEC. 3. CONFORMING AMENDMENTS RELATING TO COLLECTION OF DNA IDENTIFICATION INFORMATION.

Waiver authority.
Definition.

(a) **FROM CERTAIN FEDERAL OFFENDERS.**—Section 3 of the DNA Analysis Backlog Elimination Act of 2000 (42 U.S.C. 14135a) is amended—

EXHIBIT #6

131 STAT. 1002

PUBLIC LAW 115-50—AUG. 18, 2017

(1) in subsection (b), by adding at the end the following:
“The Director of the Federal Bureau of Investigation may waive the requirements under this subsection if DNA samples are analyzed by means of Rapid DNA instruments and the results are included in CODIS.”; and

(2) in subsection (c), by adding at the end the following:

“(3) The term ‘Rapid DNA instruments’ means instrumentation that carries out a fully automated process to derive a DNA analysis from a DNA sample.”.

(b) FROM CERTAIN DISTRICT OF COLUMBIA OFFENDERS.—Section 4 of the DNA Analysis Backlog Elimination Act of 2000 (42 U.S.C. 14135b) is amended—

(1) in subsection (b), by adding at the end the following:
“The Director of the Federal Bureau of Investigation may waive the requirements under this subsection if DNA samples are analyzed by means of Rapid DNA instruments and the results are included in CODIS.”; and

(2) in subsection (c), by adding at the end the following:

“(3) The term ‘Rapid DNA instruments’ means instrumentation that carries out a fully automated process to derive a DNA analysis from a DNA sample.”.

Approved August 18, 2017.

LEGISLATIVE HISTORY—H.R. 510 (S. 139):

HOUSE REPORTS: No. 115-117 (Comm. on the Judiciary).

CONGRESSIONAL RECORD, Vol. 163 (2017):

May 16, considered and passed House.

Aug. 1, considered and passed Senate.

○

Rapid DNA

General Information

Rapid DNA (<https://www.fbi.gov/file-repository/rapid-dna-executive-summary-9-25-17-final.pdf/view>), or Rapid DNA analysis, is a term used to describe the fully automated (hands free) process of developing a DNA profile from a reference sample buccal (cheek) swab without human intervention. The goal of the FBI's Rapid DNA Initiative is to link FBI approved commercial instruments capable of producing a CODIS core loci DNA profile within two hours to the existing CODIS infrastructure in order to search unsolved crimes of special concern while a qualifying arrestee is in police custody during the booking process.

The FBI Laboratory Division has been working with the FBI Criminal Justice Information Services (CJIS) Division and the CJIS Advisory Policy Board (CJIS APB) Rapid DNA Task Force to plan the effective integration of Rapid DNA into the booking station process. To use Rapid DNA analysis effectively during the booking process, the Bureau is developing the necessary interfaces for such booking stations to communicate with CODIS. As part of these development efforts, the FBI will begin testing and evaluation of the Rapid DNA booking communications infrastructure in 2018. The Bureau plans to initiate pilot testing in 2019 with select federal, state, and local law enforcement for the uploading and CODIS searching of arrestee Rapid DNA records during the booking process.

The use of the term "reference sample buccal (cheek) swab" is intentional. The FBI's current development and validation efforts have been focused on the DNA samples obtained from known individuals (e.g., persons under arrest). Because known reference samples are taken directly from the individual, they contain sufficient amounts of DNA, and there are no mixed DNA profiles that would require a scientist to interpret them. **For purposes of uploading or searching CODIS, Rapid DNA systems are not authorized for use on crime scene samples.** All crime scene samples must be processed by an accredited forensic DNA laboratory that follows the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories to be eligible for upload and/or search in CODIS.

The Rapid DNA Act of 2017 (Public Law 115-50) was signed by the president on August 18, 2017. The act authorizes the FBI Director to "issue standards and procedures for the use of Rapid DNA instruments and resulting DNA analyses." Now that the law is in place, the Bureau will be working toward the testing and implementation of this new technology and is poised to deliver the capability to process a Rapid DNA upload and search in the CODIS software within 2018. The FBI anticipates testing of components to begin in 2019. Integration into the booking process of states that are authorized to collect DNA samples at arrest, as well as the federal system, will follow.

The FBI is currently working with the Scientific Working Group for DNA Analysis Methods (SWGDM) and other stakeholders to develop standards and procedures for the FBI approval and operation of the Rapid DNA systems in booking agencies. The Bureau recognizes that National DNA Index System (NDIS) approval of the Rapid DNA systems and training of law enforcement personnel using the approved systems are integral to ensuring that Rapid DNA is used in a manner that maintains the quality and integrity of CODIS and NDIS.

There is no Rapid DNA system currently approved for use at NDIS (NDIS-approved) by law enforcement booking agencies. The FBI will consider and approve, as appropriate, Rapid DNA systems for booking agencies once the relevant standards and procedures required by the Rapid DNA Act of 2017 are issued and all required IT communication enhancements for CODIS compatibility are implemented.

Background on FBI Rapid DNA Efforts

The FBI established the Rapid DNA Program Office in 2010 to facilitate the development and integration of Rapid DNA technology for use by law enforcement. The program office works with the Department of Defense, the National Institute of Standards and Technology, the National Institute of Justice, and other federal agencies to ensure the coordinated development of this new technology among federal agencies. The program office also works with state and local law enforcement agencies and state bureaus of identification through the FBI's Criminal Justice Information Services Division Advisory Policy Board to facilitate the effective and efficient integration of Rapid DNA in the booking environment.

Several instruments have been developed for Rapid DNA analysis. These instruments have been, and continue to be, tested and evaluated by the FBI Laboratory and other federal agencies, such as the National Institute of Standards and Technology (NIST) and the Defense Forensic Science Center (formerly the Army Crime Laboratory). In January 2013, the manufacturers of the instruments attended

a SWGDAM meeting to discuss their instruments and obtain feedback on validation. Because developmental validation is a crucial first step in the commercial use of these instruments, SWGDAM, through its Rapid DNA Committee, established a dialog with the manufacturers to assist them in their validation efforts (see SWGDAM FAQs (<https://www.swgdam.org/faq>)).

Prerequisites for Rapid DNA in the Booking Environment

IT enhancements, including Live Scan and criminal history information integration, are necessary for a booking station to input DNA profiles from Rapid DNA systems into CODIS. In 2018, the FBI intends to deliver new CODIS software and other necessary CODIS interfaces for booking stations to communicate with CODIS. As part of these development efforts, the FBI will begin testing and evaluation of the Rapid DNA booking communications infrastructure and within select federal, state and local law enforcement for the uploading and searching of DNA records through CODIS during the booking process.

Below is a list of prerequisites for federal, state, and local booking agencies to participate in Rapid DNA:

- The state must have implemented an arrestee DNA collection law that authorizes DNA analysis at the time of arrest. Federal booking agencies already meet this prerequisite.
- Electronic Fingerprint (Live Scan) integration during the booking process for obtaining State Identification Numbers (SID) (UCN for federal booking agencies) from the State Identification Bureau (FBI for federal) in near real time.
- The booking agency must have network connectivity with the State Identification Bureau (SIB)/CJIS Systems Agency (CSA).

It will be critical for booking agencies to work with their State CODIS Administrator to ensure all requirements are met for participation in Rapid DNA (see Rapid DNA Requirements (<https://www.fbi.gov/file-repository/rdna-requirements-9-20-17-final.pdf/view>)).

Crime Scene (Forensic) Samples Analyzed using Rapid DNA Systems are Not Authorized for CODIS

For purposes of uploading and/or searching CODIS, Rapid DNA systems are not authorized for use on crime scene samples. The analysis of forensic samples by a Rapid DNA system is not compliant with the FBI Director's Quality Assurance Standards (QAS) for Forensic DNA Testing Laboratories and therefore is not permitted to be uploaded and/or searched in CODIS at this time. Cheek swabs are ideal for Rapid DNA machines, as they contain large amounts of fresh DNA from one individual. Forensic samples vary widely, from the age, exposure and nature of the sample to the amount and quality of DNA it may contain. Most critically, forensic samples often contain mixtures of DNA from more than one individual that requires interpretation by a trained scientist. For these reasons, all crime scene samples must be processed by an accredited forensic DNA Laboratory that follows the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories to be uploaded and/or searched in the CODIS system.

There are many challenges that must be overcome before the FBI can consider the use of Rapid DNA systems for crime scene sample analysis. The Bureau continues to assess how these challenges can be addressed to include monitoring enhancements to Rapid DNA technology. Among the major challenges is the requirement to determine the amount of DNA present in a sample (necessary to maximize the resulting quality of the DNA profile, assess for contamination, etc.) and the development of expert systems for crime scene sample analysis.

Implementation Status

Rapid DNA instrumentation will be implemented in two settings: (1) law enforcement booking station; and (2) accredited forensic DNA laboratory for reference sample analysis. Much of the preparation for using Rapid DNA in a laboratory setting has been completed and the FBI's efforts are now focused on the standards and procedures for use of this technology in a law enforcement booking environment. The FBI plans to approve Rapid DNA systems for buccal swab use in accredited labs first and then approve systems for booking station use based on the experience gained from accredited lab use and lessons learned from the pilot testing in 2019.

A Rapid DNA system is the collection of components that together performs a Rapid DNA analysis consisting of a Rapid DNA instrument, the PCR STR typing kit/Rapid DNA cartridge, and an integrated expert system used to develop a CODIS acceptable STR profile from a database, known, or casework reference buccal sample. A Rapid DNA system validation study must be submitted to the FBI by an NDIS participating laboratory for NDIS approval in order to upload DNA profiles generated from the Rapid DNA system to NDIS.

Please check this site for frequent updates on the status of the standards and procedures for Rapid DNA systems for use by law enforcement booking stations.

Booking Station and Laboratory Implementation Status

	Law Enforcement Booking Station	Accredited Forensic DNA Laboratory
Type of Sample Eligible for Upload and Searching	Known reference buccal DNA sample	Known reference buccal DNA sample
Equipment	NDIS-approved Rapid DNA system	Validated Rapid DNA instrument or NDIS-approved Rapid DNA system
Personnel	Trained law enforcement personnel	Qualified analyst or trained laboratory personnel
Standards	In progress	FBI Director's Quality Assurance Standards for DNA Databasing Laboratories Rapid DNA Addendum (https://www.fbi.gov/file-repository/addendum-to-qas-for-rapid-dna.pdf/view)
Procedures	In progress	NDIS Operational Procedures (https://www.fbi.gov/file-repository/ndis-operational-procedures-manual.pdf/view)
CODIS Communication Specifications	Rapid AEF (https://www.fbi.gov/file-repository/codis-arrestee-enrollment-format-interface-specification-r24-170925-508.pdf/view) and Rapid CMF (https://www.fbi.gov/file-repository/codis-rapid-import-cmf-interface-specification-r16-170925-508.pdf/view)	CODIS CMF
NDIS Approved Rapid DNA Systems	None	ANDE 6C Rapid DNA System for Accredited Laboratory Use (effective June 1, 2018)

Accredited DNA Laboratory Use

DNA profiles generated by an NDIS-approved Rapid DNA system performing Rapid DNA analysis in an NDIS participating laboratory are eligible for upload and/or search in NDIS. NDIS-participating laboratories seeking approval of a Rapid DNA system should contact the NDIS custodian early in the validation process to discuss the approval criteria and process. For example, developmental validation must be conducted on all Rapid DNA systems where either the Rapid DNA instrument, PCR STR typing kit/Rapid DNA cartridge, and/or expert system was not previously approved for use at NDIS. Once NDIS-approved, the Rapid DNA system cannot have changes or modifications to the following: (1) Rapid DNA Instrument; (2) the chemistries and/or concentrations of the PCR STR typing kit/Rapid DNA cartridge; or (3) the settings of the expert system. An NDIS-participating laboratory seeking to change any corresponding component of an NDIS-approved Rapid DNA system must submit such request to the NDIS custodian for approval before implementation in the NDIS-approved Rapid DNA system.

Accredited DNA laboratories have the ability to use NDIS-approved Rapid DNA systems as well as Rapid DNA instruments that require DNA analyst interpretation. Rapid DNA analysis using a Rapid DNA system consists of automated extraction, amplification, separation, detection, and allele calling without human intervention. The term "modified Rapid DNA analysis" is used to describe when the Rapid DNA

Instrument is used and there is human interpretation and technical review of the resulting DNA analyses. An accredited forensic DNA laboratory has used a Rapid DNA Instrument to perform modified Rapid DNA analysis on known reference samples in accordance with the quality assurance requirements and the resulting DNA analyses have been uploaded to NDIS.

Additionally, an NDIS-participating laboratory may upload authorized known or reference DNA profiles developed with a Rapid DNA Instrument performing modified Rapid DNA analysis to NDIS if the QAS requirements described in the table below are satisfied. If using an NDIS-approved PCR STR typing test kit with the same chemistries and concentrations and all of the requirements in table below have been satisfied by the NDIS participating laboratory, the Rapid DNA instrument does not require NDIS approval to be used to perform modified Rapid DNA analysis.

NDIS-participating laboratories using a Rapid DNA instrument or system must be in compliance with the following quality assurance requirements: the FBI Director's Quality Assurance Standards for DNA Databasing Laboratories and the Addendum to the Quality Assurance Standards for DNA Databasing Laboratories performing Rapid DNA Analysis and Modified Rapid DNA Analysis Using a Rapid DNA Instrument.

Rapid and Modified Rapid DNA Analysis in an Accredited DNA Laboratory

	Rapid DNA analysis	Modified Rapid DNA analysis
What It Is	Automated extraction, amplification, separation, detection and interpretation with no human interpretation	Automated extraction, amplification, separation, detection with human interpretation and technical review of the resulting DNA analyses
Equipment	Rapid DNA system	Rapid DNA instrument
Approval by	FBI (referred to as NDIS-approved)	Formal approval not required if validated in accordance with the FBI Director's Quality Assurance Standards
DNA Profiles Eligible for NDIS	Yes, for accredited forensic DNA laboratories using an NDIS- approved Rapid DNA system and documentation is maintained of the following: (No Rapid DNA system is currently approved for CODIS/NDIS)	Yes, for accredited forensic DNA laboratories using Rapid DNA instruments as long as in compliance with the following:
	✓ Compliance with the FBI's QAS, including but not limited to, the use of controls and quarterly recertification/performance checks;	✓ Compliance with the FBI's QAS, including but not limited to, the use of controls and quarterly recertification/performance checks;

	<p>✓ Developmental and internal validation for the Rapid DNA system in accordance with the FBI's QAS, except that an NDIS participating laboratory using an NDIS-approved Rapid DNA system is not required to perform a separate internal validation of the Expert System being used by the NDIS-approved Rapid DNA system.</p>	<p>✓ Documentation of the developmental and internal validations for the Rapid DNA instrument in accordance with FBI QAS;</p> <p>✓ The Rapid DNA instrument is using an NDIS-approved PCR STR typing test kit (DNA typing kit with corresponding part number or catalogue number) and there is documentation that the chemistries and concentrations are exactly the same as the NDIS-approved PCR STR typing kit; and</p>
	<p>✓ Yes, for booking stations in accordance with standards and procedures of the FBI Director (pending development).</p>	<p>✓ Performance of manual interpretation and review by a qualified DNA analyst as required by FBI QAS.</p>

Effective June 1, 2018, the following Rapid DNA system is approved for use at NDIS by an accredited forensic DNA laboratory:

Rapid DNA Analysis System for Accredited Laboratory Use

Component	Name	Part/Version Number
Rapid DNA Instrument	ANDE 6C Instrument	A0120001003
Typing Kit	FlexPlex27	FlexPlex27
Cartridge	ANDE A-Chip (FlexPlex)	A0210001057
System Software	ANDE System Software	2.0.6
Expert System Software	ANDE Expert System	2.0.5



SCIENTIFIC WORKING GROUP

DNA ANALYSIS METHODS

Scientific Working Group on DNA Analysis Methods Position Statement on Rapid DNA Analysis

The Scientific Working Group on DNA Analysis Methods, better known by its acronym of SWGDAM, is a group of scientists representing federal, state, and local forensic DNA laboratories in the United States and Canada. During meetings, which are held twice a year, subcommittees discuss topics of interest to the forensic DNA community and often develop documents to provide direction and guidance for the community. The SWGDAM Rapid DNA Committee drafted this statement for the SWGDAM membership and it was approved by the SWGDAM Executive Board and membership on October 23, 2017.

Rapid DNA, or Rapid DNA analysis, describes the fully automated (hands free) process of developing a CODIS DNA profile from a reference sample buccal swab¹ without human intervention or interpretation in less than two hours. **Currently available Rapid DNA instruments were specifically developed for reference sample buccal swabs taken from persons during the booking process.** Reference sample buccal swabs contain high quality single source DNA which makes them ideal for this application. The profiles generated from these samples can be interpreted by an onboard expert system, as opposed to a qualified DNA analyst, making the process “fully automated”.

Rapid DNA technology is not currently suitable for crime scene samples as they can present many challenges. Crime scene samples are often irreplaceable, and Rapid DNA instruments consume the entire sample.² Crime scene samples often have low amounts of DNA present, contain DNA from more than one person (mixtures), and may have damaged or degraded DNA thereby necessitating that those DNA results are evaluated by a trained forensic DNA analyst. Many software tools exist to aid in the interpretation of DNA mixtures, but all of these require a trained forensic DNA analyst to interpret and make decisions based on the data before moving forward. Because a trained forensic DNA analyst is required to interpret complex evidence samples, the analysis

¹ Reference sample buccal swab refers to a DNA sample obtained directly from a known individual and not a DNA sample obtained through abandonment or surreptitiously, without the individual's knowledge.

² Federal law and many state laws require the retention of biological material under specified circumstances (see generally 18 U.S.C. §3600A, Evidence Retention Laws: A State-by-State Comparison (2013) available at <http://victimsofcrime.org/docs/default-source/dna-resource-center-documents/evidence-retention-check-chart-9-5.pdf?sfvrsn=2>). These biological evidence retention laws operate in conjunction with Federal/State post-conviction DNA testing laws to ensure the availability of biological material for further testing.



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DNA ANALYSIS METHODS

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and interpretation of casework samples cannot be “fully automated”. In addition to the many challenges associated with crime scene samples, in order for the crime scene DNA profiles to be eligible for the National DNA Index System (NDIS), Federal law requires that such profiles be developed in accordance with the FBI’s Quality Assurance Standards (QAS). These QAS require that the amount of human DNA present in a crime scene sample be quantified as a critical step in determining the quality of the crime scene sample. Rapid DNA instruments do not currently quantify the amount of DNA present; therefore any crime scene profile developed solely utilizing a Rapid DNA instrument cannot be maintained (searched or stored) in CODIS. This step is not required, however, for reference sample buccal swabs as there is an abundance of high quality DNA present in such samples.

This differentiation between known reference samples and crime scene samples is not new. During its deliberations in the late 1990s, the Federal DNA Advisory Board recognized that distinctions were warranted between these two types of samples in their determination to recommend two sets of Quality Assurance Standards (QAS) to the FBI Director. The Introduction to the original Convicted Offender DNA Databasing QAS explained it as follows: “Forensic DNA identification analysis currently involves forensic casework and convicted offender analysis. These complementary functions demand adherence to the highest analytical standards possible to protect both public safety and individual rights. Separate standards have been drafted for laboratories performing these functions. This separation is an acknowledgement of the difference in the nature or type of sample, the typical sample quantity and potential for reanalysis, and specialization that may exist in a laboratory. Standards for convicted offender laboratories, in some instances, are less stringent than those for performing forensic casework analyses, but in no case should the two documents be interpreted as conflicting.” During its current review of the QAS, SWGDAM endorses and supports the need for different Standards governing crime scene and known reference sample forensic DNA analyses.

It is important to note that while Federal lawmakers see the advances of Rapid DNA technology as a positive note for the community, they also agree that Rapid DNA analysis should only be performed on reference sample buccal swabs as is explained in the House Report for H.R. 510. Specifically, the Report (House Report 115-117) states, “DNA technology has advanced a great deal in the years since the 1994 Act. Whereas it once took days or weeks, DNA testing can now be completed in a matter of hours. There is currently technology, known as Rapid DNA technology, that allows for DNA



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testing and identification on a small, copier-sized machine. A DNA sample—oftentimes a cheek swab—is taken, placed into a cartridge that slides into the Rapid DNA machine, and reports back the DNA profile in approximately ninety minutes. The FBI, working with the forensics community, is hopeful that this technology can be used in a booking station to help identify suspects in the same way a fingerprint is currently used. At present, Rapid DNA technology can only be used for identification purposes, not crime scene analysis... The short turnaround time resulting from increased use of Rapid DNA technology would help to quickly eliminate potential suspects, capture those who have committed a previous crime and left DNA evidence, as well as free up current DNA profilers to do advanced forensic DNA analysis, such as crime scene analysis and rape-kits.” This distinction on the use of the Rapid DNA instruments on known reference samples was reiterated during the House debate on the bill: “Rapid DNA could not at this time be used for rape kits, but the implementation of Rapid DNA will allow forensic labs to focus on forensic samples, not on identification samples which can easily be handled by Rapid DNA machines.” (Congressional Record, May 16, 2017 at H4205).

It is of the utmost importance that the CODIS database contains high quality data, and that the public’s faith and confidence in forensic DNA analysis is maintained. SWGDAM will continue to monitor developments with Rapid DNA and if appropriate, will recommend changes regarding the use of these instruments in the future.



**AMERICAN SOCIETY OF
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November 15, 2017

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ASCLD Position Statement

The reduced timeline for data generated by Rapid DNA instrumentation from biological material provides an excellent opportunity for increased public safety through quick identification of individuals. Rapid instruments are not yet approved for use on forensic evidence samples for direct CODIS access (1-3). Many DNA profiles generated at crime scenes have the potential of containing DNA mixtures. Data from single source reference samples has been demonstrated to be reliable (4,5). Therefore, at this time, ASCLD supports a position for database inclusion of single source known reference profiles only.

ASCLD supports a position for continued database inclusion of crime scene samples after expert review, as provided by current DNA testing protocols in an accredited crime laboratory. We recommend that Forensic Science Service Providers determine whether it is appropriate to use Rapid DNA technology for investigative leads on crime scene DNA samples as long as there is sufficient sample to ensure the ability to test the samples in an accredited laboratory, using existing infrastructure to access CODIS and provide expert review, quality control measures and testimony. As Rapid instrumentation, software and implementation progresses, ASCLD will re-evaluate its position on crime scene samples inclusion in CODIS.

1. FBI Rapid DNA, <https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna>
2. FBI Rapid DNA Executive Summary – FBI’s Vision of Rapid DNA, <https://www.fbi.gov/file-repository/rapid-dna-executive-summary-9-25-17-final.pdf/view>
3. SWGDAM Position Statement on Rapid DNA Analysis, https://docs.wixstatic.com/ugd/4344b0_f84df0465a2243218757fac1a1ccffea.pdf, October 23, 2017
4. Date-Chong, M., Hudlow, W.R., and Buoncristiani, M.R., Evaluation of the RapidHIT 200 and RapidHIT GlobalFiler Express kit for fully automated STR Typing, For Sci Int; Genetics 23 (2016) 1-8
5. Moreno, L.I., Brown, A.L., and Callahan, T.F., Internal Validation of the DNAScan/ANDE Rapid DNA Analysis Platform and Its Associated PowerPlex 16 High Content DNA Biochip Cassette for Use as an Expert System with Reference Buccal Swabs, For Sci Int: Genetics 29 (2017) 100-108



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January 30, 2018

NDAAs Position Statement on Use of Rapid DNA Technology

The National District Attorneys Association (NDAAs) supported passage of the Rapid DNA Act of 2017 and continues to support the scientifically responsible use of Rapid DNA technology to investigate crimes, prosecute the guilty, and exonerate the innocent.

The Rapid DNA Act of 2017 was signed into law in August 2017. The legislation was groundbreaking in that it allows law enforcement officers to use Rapid DNA instruments at booking stations and authorizes criminal justice agencies to upload arrestee DNA profiles directly into the Combined DNA Index System (CODIS). Law enforcement officers and other criminal justice agencies using Rapid DNA instruments must comply with the Rapid DNA standards and procedures issued by the Director of the Federal Bureau of Investigation (FBI).

NDAAs supports the implementation of Rapid DNA instruments in booking stations utilizing single source arrestee samples; however, NDAAs does not support the use of Rapid DNA technology for crime scene DNA samples unless the samples are analyzed by experienced DNA analysts using that technology working in an accredited forensic DNA laboratory. Crime scene samples can contain degraded DNA, and often contain mixtures which are very different from pristine known arrestee DNA samples. DNA analysts working in an accredited forensic laboratory are experienced in analyzing crime scene samples involving complex mixtures, low-level DNA and/or degraded DNA. Law enforcement officers at the crime scene do not have the education, training, or experience necessary to evaluate whether a crime scene sample(s) is appropriate for Rapid DNA analysis and subsequent upload to CODIS or to determine, for example, what type of DNA testing should be attempted to maximize the potential of optimal results. Because the crime scene sample is not replaceable, valuable evidence could be lost when a low-template DNA crime scene sample is analyzed by a Rapid DNA instrument in a law enforcement environment when it should have been analyzed in an accredited forensic laboratory using standard DNA testing methods.

There is currently no substitute for the DNA analyst's trained assessment and evaluation of the crime scene sample(s). Probative DNA evidence may be lost if the appropriate DNA testing methods are not utilized. Furthermore, law enforcement officers are not qualified DNA analysts, and a case could be critically compromised should a law enforcement officer be exposed to cross-examination at trial regarding scientific methods and principles with which he/she is not familiar. Equally concerning is the potential for differing results if two crime scene DNA samples are collected at the same time and one is analyzed by Rapid DNA technology and the other by an accredited crime laboratory using standard DNA testing methods. The apparent discrepancy in results from the two samples would be viewed as legally "exculpatory" even though no true discrepancy exists. Thus, the law would require a prosecutor to turn over results

that could be viewed as exculpatory even though, from the scientific viewpoint, they are not. This, in turn, could unjustifiably diminish the significance of the DNA results in a jury's eyes.

In the NDAA's view, CODIS regulations pertaining to the use of Rapid DNA technology to analyze crime scene samples should not be relaxed. Quality and privacy have been foundational requirements for the National DNA Index System (NDIS) since inception in 1998 and will continue to be maintained through the use of approved Rapid DNA instruments and compliance with FBI procedures and standards. Despite arguments to the contrary, uploading DNA profiles into CODIS using Rapid DNA technology is not analogous to uploading a fingerprint to the Automated Fingerprint Identification System (AFIS). Fingerprints reliably can be searched immediately because a fingerprint, by definition, cannot contain a mixture of more than one print. Crime scene DNA profiles uploaded to CODIS by the accredited crime laboratory can be searched only after the accredited laboratory has analyzed the profile and determined that it is a single source or identified the sample as containing a DNA mixture and resolving that mixture.

Accordingly, at this time, current Rapid DNA technology should only be used in booking stations for the single source reference samples for which the instruments were specifically designed. Therefore, the NDAA does not support law enforcement agencies' use of Rapid DNA instruments to analyze crime scene samples for upload to CODIS unless the samples are analyzed by experienced DNA analysts using that technology working in an accredited forensic DNA laboratory.