

Considerations for Optimal Timeframes for DNA Forensic Evidence Collection from Sexual Assault Cases

A SAKI Recommendation

SAKI supports the national best practice of responding to sexual assault victims in a victim-centered, trauma-informed manner. This approach includes ensuring victims receive accurate information so that they can better understand how forensic evidence collection can inform potential criminal justice outcomes. Building upon recommendations developed by the Bureau of Justice Assistance's National Sexual Assault Kit Initiative (SAKI) about best and preferred practices, this document outlines the importance of collecting sexual assault evidence samples as soon as possible, optimal timeframes for evidence collection, and ways to support victims in informed decision-making about evidence collection.*

Many forensic experts, law enforcement personnel, and victim advocates agree that sexual assault forensic evidence collection should be guided primarily by victim choice and the assault history. However, additional considerations regarding the *timing* of evidence collection are also critical in obtaining Combined DNA Index System (CODIS)–eligible DNA profiles.

Reviewing Timing-Related Considerations

Multiple factors should be considered when determining the optimal timeframe for collecting sexual assault forensic evidence from victims:

Victim preferences. A victim's choice to have forensic evidence collected during a medical forensic exam should be honored, regardless of how much time has passed since the assault. However, if considerable time has passed between the assault and the exam, then establishing clear expectations with a victim about evidence collection is important so that they can make an informed decision about undergoing the process. (See the *Partnering with Victims to Establish Expectations* section for more.)

Victim history. Research has shown that DNA evidence deteriorates more quickly on certain body surfaces.¹ For example, if an assault occurred and DNA evidence were

available from the victim's mouth only, decisions about whether to pursue forensic evidence collection may look different than if DNA evidence were available from only the victim's vagina. If a victim does not remember their assault, the maximum timeframe for collection should be used.

Available technology. Advances in research and DNA technologies may extend the timeframe for optimal collection, especially with the use of Y-STR analysis.² However, these research study results need to be interpreted with caution because study samples were obtained in a controlled collection and examination environment using testing that includes enhanced polymerase chain reaction. When such approaches are repeated using standard crime laboratory protocols, only limited or partial evidentiary results are obtained, not full DNA profiles—which yields the partial results ineligible for entry into CODIS for comparison to potential suspects.

Investigative value. The investigative value of information and evidence collected during a sexual assault nurse examiner (SANE) examination can play a critical role in case outcomes. Not all cases are resolved with—or are dependent on—this evidence; however, ensuring that forensic samples are collected and examined in a rigorous manner is important. When degradation or other reasons have the potential to reduce the value of forensic evidence to an investigation, carefully consider the burden that collecting such evidence may cause a victim before moving forward. Knowing and understanding the limitations and value that evidence collection and testing (e.g., when and how evidence is collected and tested) have on investigative outcomes are critical for law enforcement.

Resources. In situations in which the optimal collection window has passed, local communities may have different approaches to devoting resources to sexual assault evidence collection as part of a sexual assault medical exam. The amount of available resources alone should not determine if forensic evidence is collected; however, it is important when considering possible additional strain on victims. For example, some communities may not have the same infrastructure to support victims who seek evidence collection outside of the ideal timeframe. Financial implications on staffing rates should also be examined when determining whether a community can establish an extended forensic evidence collection window.

*SAKI's recommendation aligns with recommendations outlined in National Institute of Justice publications, *National Best Practices for Sexual Assault Kits: A Multidisciplinary Approach*, the Office of Violence Against Women's *A National Protocol for Sexual Assault Medical Forensic Examinations*, and the Scientific Working Group on DNA Analysis Methods *Recommendations for the Efficient DNA Processing of Sexual Assault Evidence Kits*.

Considering Recommended Timeframes for Evidence Collection

With the previously mentioned considerations in mind, **Table 1** defines the optimal sample collection timeframes for victims who are still alive. Experts from the Sexual Assault Forensic Evidence Reporting Working Group[†] created the *National Best Practices for Sexual Assault Kits: A Multidisciplinary Approach*. This guide further defines optimal sample collection timeframes, as indicated in the following table.

Table 1. Recommended Timeframes for Evidence Collection from Living Victims[^]

Recommended Timeframes for Evidence Collection	
Type of Assault	Collection Time*
Vaginal	Up to 120 hours (5 days)
Anal	Up to 72 hours (3 days)
Oral	Up to 24 hours (1 day)
Bitemarks/Saliva on Skin	Up to 96 hours (4 days)
Unknown	Collect respective samples within the time

*From time of assault

[^]Collection times vary greatly for deceased victims because of circumstances surrounding the crime and environmental factors.

Following these timeframe recommendations increases the likelihood of obtaining a CODIS-eligible DNA profile. Although some research suggests CODIS-eligible DNA profiles may be obtained by using enhanced methods up to 7 days after an assault, 5 days is currently the most recognized and supported standard. Notably, multiple research papers and studies assessing the potential of obtaining foreign DNA profiles from sexual assault examinations indicate a dramatic reduction in the ability to obtain complete CODIS-eligible DNA profiles as time passes between the assault and evidence collection.¹⁻³

Partnering with Victims to Establish Expectations

Although the potential exists for a DNA profile to be obtained from a sexual assault kit (SAK) collected more than 5 days after an assault, **an extended timeframe**

option may—if not presented accurately—promote unrealistic expectations about the investigation and the ability to collect and examine evidence, which may ultimately impact the victim and their well-being.

SAKI TTA recognizes that some communities might create policy that doesn't directly align with the recommendations for forensic evidence collection presented in this brief. For agencies with a multidisciplinary team (MDT) that has decided to create policy supporting forensic evidence collection *beyond* 5 days, SAKI TTA strongly encourages these agencies to develop mechanisms to sensitively discuss potential limitations and challenges of obtaining useable DNA and potential testing results with victims.

Have conversations with victims to establish expectations. With a victim-centered approach in mind, the purpose of any discussion regarding the timing of evidence collection is to ensure the victim receives pertinent information about the scientifically relevant potential outcomes of DNA evidence collected more than 5 days after an assault. **The purpose of such conversations is not to discourage the victim from reporting or seeking medical attention.**

Ideally, relevant information would be communicated in-person, prior to the forensic exam and the collection of any forensic samples. This conversation should include advocates, SANEs, and/or trained law enforcement. If at all possible, first responders should not discuss collection timeframes with victims, as such conversations require specialized knowledge of the forensic collection process.

Understand the value of medical forensic exams.

Independent of forensic evidence collection and policy indicating DNA forensic evidence collection parameters, victims should always have the option for a medical exam to be conducted. When a SANE conducts the medical exam, the victim has an opportunity to receive important medical care and resources for support services that promote healing. Agencies should ensure that MDT-informed policies emphasize the importance of the sexual assault medical exam, even when forensic evidence is not collected.

Developing Key Considerations for DNA Forensic Evidence Collection Policy

SAKI TTA recommends creating a sexual assault response policy that clearly

- ◆ indicates the importance of the medical exam conducted by a SANE, regardless of the time since the assault;
- ◆ supports the collection of forensic DNA evidence no more than 5 days after the assault; and

[†]These experts have been empaneled by the National Institute of Justice.

- ◆ provides trauma-informed communication about the potential loss of
 - forensic DNA evidence, if collected more than 5 days after the assault and
 - other investigative information as more time passes after the assault.

The following list provides agencies with considerations to review prior to creating policy associated with collection time for DNA forensic evidence:

- ◆ Ensure the sexual assault response team and other relevant stakeholders agree on the forensic evidence collection timeline parameters. Document the decision in policy or a memorandum of understanding.
- ◆ Ensure all individual organizational policies
 - align with each other and
 - do not conflict with recommended timelines for the medical examination and forensic evidence.
- ◆ Ensure first responders (e.g., patrol officers, police communications personnel) understand and implement the policy as needed.
- ◆ Ensure relevant key personnel provide accurate information to victims about how the timeline impacts collecting forensic evidence and investigating the case.

Frequently Asked Questions for DNA Forensic Evidence Collection

What is the optimal collection time for DNA forensic evidence collected from SAKs?

5 days

Can DNA forensic evidence be collected after 5 days?

Yes. A majority of recent research indicates that there is a dramatic reduction in quality CODIS-eligible samples that may be obtained through forensic evidence collection the more time that passes between the assault and evidence collection. However, available technology, purpose of collecting samples, and resources should be considered when developing local policy. Most importantly, the wishes of an informed victim should always be honored.

Should a victim have a medical forensic exam, even if forensic evidence won't be collected?

Yes. If a victim wishes to have a medical forensic exam, this wish should always be honored.

Conclusions

Although certain advances in research associated with forensic DNA technology have indicated the potential to obtain forensic DNA evidence from a SAK collected more than 5 days after an assault, SAKI wants to remind readers that these studies should be interpreted with caution. The majority of current research indicates the optimal collection time that maximizes the ability to obtain a CODIS-eligible profile is no more than 5 days after the assault.

SAKI TTA recommends that agencies recognize 5 days as the optimal collection time when creating policy related to SAK collection. If a victim presents for an exam more than 5 days after their assault, SAKI TTA recommends that the victim be informed about the reduced possibility of obtaining DNA forensic evidence. In such situations, the investigating agency and partners should collaborate to establish clear expectations. If an exam is completed outside the optimal evidence collection window, communication with the crime laboratory is critical to determine the best approach for testing any potential evidence collected. Regardless of when the victim presents, a medical or forensic exam should still be offered and conducted at a victim's request.

Additional Reading

A National Protocol for Sexual Assault Medical Forensic Examinations: Adults/Adolescents (Second Edition), published by U.S. Department of Justice Office on Violence Against Women. <https://www.ncjrs.gov/pdffiles1/ovw/241903.pdf>

Recommendations for the Efficient DNA Processing of Sexual Assault Evidence Kits, published by the Scientific Working Group on DNA Analysis Methods. https://1ecb9588-ea6f-4feb-971a-73265dbf079c.filesusr.com/ugd/4344b0_4daf2bb5512b4e2582f895c4a133a0ed.pdf

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