End Violence Against Women International (EVAWI)

DNA Evidence, Part 6
Understanding the Role of DNA Evidence in a Sexual Assault Investigation

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Sgt. Joanne Archambault (Retired, San Diego Police Department) is the Chief Executive Officer for EVAWI. In 2003 prior to founding EVAWI, Sgt. Archambault worked for the San Diego Police Department for almost 23 years, in a wide variety of assignments. During the last 10 years of her service, she supervised the Sex Crimes Unit, which had 13 detectives and was responsible for investigating approximately 1,000 felony sexual assaults each year. Sgt. Archambault has provided training for tens of thousands of practitioners, policymakers and others – both across the country and around the world. She has been instrumental in creating system – level change through individual contacts, as well as policy initiatives and recommendations for best practice.

Dr. Patrick O’Donnell received his Bachelor of Science degree in biology from Santa Clara University in 1982 and his doctoral degree in molecular biology jointly from the University of California, San Diego and San Diego State University in 1988. In November of 1990, he was hired by the San Diego Police Department (SDPD) to design and build a DNA laboratory for the agency. Over 25 years, the SDPD Forensic Biology (DNA) Unit has established a progressive reputation with the latest focus being the implementation of GlobalFiler, using software expert systems to aid in the interpretation of complex DNA mixtures. As of September 2015, the laboratory has a staff of 18 and serves a population of 1.5 million people living within the city limits of San Diego.
In this final installment of our series of training bulletins on *Understanding DNA Evidence*, we would like to continue our application of Problem-Oriented Policing (POP) and the SARA model (Scanning – Analysis – Response – Assessment) to the problems associated with unanalyzed forensic evidence in sexual assault cases. We offer additional recommendations for practice – not only for law enforcement agencies, but also for the many other multidisciplinary professionals involved in the criminal justice and community response system for sexual assault. Our objective is to contribute to the ongoing scanning and analysis of this complex problem, as well as the development of alternative responses and an assessment of their impact. The larger goal is to reduce the funnel of attrition for sexual assault cases within the criminal justice system and improve our responses to victims.

![Graph reprinted from Lonsway and Archambault (2012)](image)

**Recommendations for Practice**

**Provide Specialized Training on the Role of DNA**

In the first four recommendations (offered in training bulletin #5), we highlighted the critical need for victim support throughout the criminal justice process. While this recommendation may not seem directly related to the challenges surrounding the use of DNA in a sexual assault investigation and unanalyzed forensic evidence, we believe it is central to the larger issue of sexual assault case attrition – because we will only be able to pursue those cases that are reported and investigated if victims can withstand the process. We also offered recommendations to ensure that criminal justice professionals have the time and resources they need to successfully investigate and prosecute these difficult cases.

Yet specialized training is also needed for police officers and investigators on the role of DNA in a sexual assault investigation. This was revealed in a national survey of 2,250 law
enforcement agencies conducted in 2007, which found – among other things – that forensic evidence had not been submitted in almost one in five (18%) of their unsolved rape cases from 2002–2007 (Strom et al., 2009). This reflects a lack of understanding regarding the role DNA can play in potentially identifying a suspect in an unsolved case.

Not Just a Prosecutorial Tool

This finding also suggests that many officers view DNA evidence as a tool for prosecutions rather than investigations, a conclusion that was also supported by other findings. For example, agencies were also asked to provide reasons why they might not submit forensic evidence for analysis in an open case. As many as 44% of respondents said that one reason they would not submit forensic evidence for analysis is because a suspect had not been identified. An additional 15% said evidence may not be submitted for analysis because it was not requested by a prosecutor, and 12% said the suspect was identified but not formally charged (Strom et al., 2009). The authors concluded that some agencies continue to have “a limited understanding of the full benefits of forensic evidence with a mindset that forensic evidence is only beneficial for prosecuting crimes, not for developing new leads in investigations” (Strom et al., 2009, p. vii).

In fact, the authors raised the possibility that there may be “standing policies or other inhibitors” specifically preventing officers from requesting analyses in some agencies:

In some jurisdictions, laboratories may require prosecutors to sign off that a case requiring forensic analyses will, in fact, go forward in order to avoid what would otherwise be viewed as an unnecessary use of laboratory resources (Strom et al., 2009, p. xv).

Such findings clearly indicate that training is needed on the role and impact of forensic evidence, including its use as a tool to assist in the investigation as well as at trial.1

One detective described how he only came to appreciate the value of forensic evidence in a sexual assault investigation after a “test all kits” policy was enacted in Los Angeles:

Having the DNA from every rape kit I book has given me investigative leads I never would have expected. I take second looks at cases I would have dismissed, and I pass along more cases to the prosecutors. I used to think I didn’t need DNA to develop a case, but it has helped me solve more cases (Tofte, 2009, p. 18).

The findings also suggest that some agencies may need to make changes in their written policies, as well as their daily practices and reinforcement systems. This is especially true if

1 Other findings also support this conclusion that more training is needed in this area. As many as 17% of respondents said one reason why forensic evidence would not be submitted for analysis would be an uncertainty regarding the usefulness of forensic evidence, and 2% said they were uncertain where to send it. The authors concluded with a call for specialized training in this area (Strom et al., 2009).
the existing policies and practices are “putting the cart before the horse,” by requiring prosecutorial review before any laboratory analyses can be requested. This means that prosecutors are making decisions on case outcomes before all of the investigative findings are compiled. One detective described how this process unfolds:

*If the state’s attorney is going to reject the case, we don’t want to put a lot of work into it until we know for sure the case is going to move forward with them. I often wait to proceed too far in a case until I know what the state’s attorney is going to do with it.* (Tofte, 2010, p. 20).

Instead, law enforcement agencies can work with prosecutors and other stakeholders to establish written policies or shared expectations that some basic number of investigative steps will be taken – at a minimum – before a case is referred to the prosecutor’s office. Although there will certainly be exceptional circumstances, these steps should include a detailed follow-up interview of the victim as well as the suspect and any potential witnesses.

Fortunately, there are some helpful tools to guide this process, developed by the Police Response to Violence Against Women Project at the International Association of Chiefs of Police (IACP). These tools include a *Model Policy on Investigating Sexual Assaults*, a supporting *Concepts and Issues Paper*, and a *Supplemental Report Form* for sexual assault that includes helpful guidelines for case documentation, effective techniques for victim and perpetrator interviews, and a pocket “tip” card for officers. They can be accessed at: [http://www.theiacp.org/Police–Response–to–Violence–Against–Women](http://www.theiacp.org/Police–Response–to–Violence–Against–Women).

**Not Just for Strangers**

Another common area of misunderstanding is the role of DNA evidence in cases where the victim and suspect know each other. This was documented by Human Rights Watch, based on focus groups conducted with law enforcement professionals and others:

*Law enforcement gave … various reasons for not sending rape kits to the lab for testing. By far the most common reason was the belief that testing was not necessary in an ‘acquaintance rape’ – when the identity of the alleged perpetrator was known to the victim no matter the history, or lack thereof, in their relationship* (Tofte, 2010, p. 32).

We will discuss this issue in more detail in a later recommendation. However, other misconceptions are also commonly seen regarding where DNA can be found and how it can be used in a sexual assault investigation. To illustrate, there are examples of investigators submitting a suspect’s underwear to the laboratory to check for semen, when this request will not advance a case in any meaningful way (there is no probative value to finding a man’s semen in his own underwear). The appropriate lab request for a sexual assault case would be to analyze the suspect’s underwear for biological evidence that came *from the victim*, including the victim’s epithelial cells or blood.
Not Just for “Winnable” Cases

Yet another area of misunderstanding stems from the strategic use of DNA analysis in a sexual assault investigation and prosecution. In the 2010 Human Right Watch report, police officials were quoted as saying that they would not submit forensic evidence for analysis in a sexual assault case unless it was perceived as “winnable” (Tofte, 2010, p. 32). DNA evidence is thus particularly under-utilized in cases that are viewed as difficult, particularly when the victim has engaged in behavior that will be perceived by some people as being high risk or damaging to her/his credibility. Two police officers articulated these concerns in reports published by Human Right Watch:

*I am not going to submit a kit when we know who the alleged perpetrator is. I am also not going to submit a kit when I don’t think the case is founded, where something about the victim’s story just doesn’t add up. As you know, some people report a rape to get back at their boyfriend, or to hide from their parents that they were having sex with their boyfriend, or all sorts of reasons. So, you don’t just test every rape kit that comes to you* (Tofte, 2009, p. 54).

*In my experience, many rape victims are lying. They come forward to hide from their parents that they had sex with their boyfriend, or they want attention. In other cases, the victim’s story doesn’t make sense, or maybe it does, but there is no way a jury is going to believe her over the suspect* (Tofte, 2010, p. 32).

Training must therefore go beyond a basic understanding of DNA evidence to address fundamental misunderstandings about the nature and dynamics of sexual assault as well as the common myth that false reporting is rampant for this particular crime.

The Need for Cross–Training

In fact, specialized training is one of the most common recommendations made to improve the use of DNA evidence in sexual assault cases, especially with respect to law enforcement personnel (Office on Violence Against Women, 2010; Strom et al., 2009; Tofte, 2009, 2010). However, cross–training is also recommended for professionals in other disciplines who respond to sexual assault (e.g., victim advocates, health care providers, prosecutors). Such cross–training can better equip these professionals to provide more accurate information to victims and improve the support they provide for victims throughout the criminal justice process.

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2 Two of the most common reasons law enforcement agencies gave for not submitting evidence to the crime laboratory were because the case had already been dismissed or adjudicated without it. These reasons were given by 24% and 19% of respondents, respectively. However, it is impossible to interpret the meaning of these findings without detailed information about the case and available resources, so it remains unknown whether the analysis of forensic evidence could have affected the outcome otherwise.
One example of this was described by Sexual Assault Nurse Examiners (SANEs) participating in the OVW Roundtable discussion on eliminating the rape kit backlog:

SANEs noted that it would be helpful if law enforcement could inform the SANE of the current turnaround times and potential next steps so the SANE can convey this information to the victim. Victims may have questions about the process before, during or after the exam, and SANEs may be unsure of how to answer such questions (Office on Violence Against Women, 2010, p. 14).

Of course, police officers and prosecutors working a case are in the best position to answer the victim’s questions regarding any developments in the ongoing investigation and prosecution. This includes questions about the submission of evidence to a crime laboratory and any resulting analysis; this information will most likely not be known by professionals outside the criminal justice system, such as victim advocates and forensic examiners (including SANEs).

However, forensic examiners and advocates play a critical role in providing information for victims, explaining general criminal justice procedures, and helping victims to weigh their options for how they might proceed. They must also be prepared to explain both the importance, and the limitations, of DNA evidence in a sexual assault case.

For example, it is not uncommon for sexual assault victims to believe that testing forensic evidence will “solve” a crime resulting in a perpetrator being charged. This fuels the idea that the primary reason why so few sexual assault cases result in a conviction is because forensic evidence was not tested. As we have highlighted throughout this training series, however, a DNA match will not typically refute the consent defense that is raised in the vast majority of sexual assault cases where the suspect is someone who is known to the victim. It is still valuable evidence that should be submitted for analysis to aid in the investigation and prosecution of sexual assault, as we have outlined previously. However, victims need to know that DNA testing will not be a “magic bullet” that will somehow guarantee that the criminal justice system can hold an offender accountable in a sexual assault case. We recommend that all professionals who interact with victims (but particularly forensic examiners and victim advocates) should receive specialized training so they can accurately relay such information to victims.

Finally, participants in the OVW Roundtable also recommended training for prosecutors on “how to employ equipment and software to create a visually effective, meaningful and informative prosecution for jurors” (OVW, 2010, p. 29). In fact, given the complex challenges of investigating and prosecuting sexual assault, many have called for more than just specialized training, but the creation of specialized units to handle these cases within police departments and prosecutor’s offices (e.g., Tofte, 2009, 2010).

Cross-training regarding the use of DNA as an investigative tool is an excellent activity for multidisciplinary teams, such as Sexual Assault Response and Resource Teams.
(SARRTs). An additional opportunity for cross-training is to provide feedback from crime laboratories to sexual assault forensic examiners, such as SANEs. Many agencies have developed procedures that allow crime laboratory personnel to document ways to improve evidence collection during sexual assault medical forensic examinations. This is often accomplished with a form that can be included within the medical forensic examination kit. When evidence is submitted to the crime laboratory, analysts can then record information on the form for quality control purposes and return it to the forensic examiner program to continuously improve the quality of their examinations and evidence collection. Two examples of such forms are those used by the San Diego Police Department and the State of Oregon.

Submit “Forensic Unknowns,” Not Just Reference Standards

Our next recommendation returns to a more specific discussion of the role of DNA evidence: It is to submit DNA profiles developed from forensic evidence to the Forensic Index within CODIS as a routine practice conducted during the course of a sexual assault investigation and laboratory analysis. (This is also described as submitting profiles developed from evidence to the Forensic Unknown index within CODIS.)

In this series of training bulletins, one of our goals has been to clearly differentiate between DNA profiles developed from forensic evidence versus reference standards. As we explained earlier, DNA profiles can be developed from forensic evidence, often described as forensic unknowns even though the identity of the possible suspect(s) may be known. This is because the only way to definitively establish whose DNA it is will be based on a match to a known reference standard. Reference standards are another source of DNA profiles. They are developed from a biological sample collected directly from a known individual, so the identity of the person is certain.

The cost to develop a forensic unknown DNA profile from evidence is typically significant, while that required to obtain one from a reference standard is minimal. Developing a DNA profile from a known reference standard is a very straightforward process that can be automated, and therefore conducted with ever-increasing speed and decreasing costs. This explains in part why the number of DNA profiles included in the Convicted Offender and Arrestee Indices in CODIS are increasing exponentially. The process of analysis only requires collecting biological samples directly from the arrestee or convicted offender (with a blood draw or buccal/cheek swab) and then conducting highly automated procedures to develop a DNA profile.

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3 Dr. Patrick O’Donnell estimated the cost of analyzing an arrestee or conviction sample for inclusion in the CODIS Offender Index. Because private laboratories compete for contracts with state agencies, these costs often come in at around $40 a sample. This reflects the cost to process the sample and produce a DNA profile. There will be additional costs for the government laboratory to review the private laboratory data, conduct a site visit, and upload all of the resulting DNA profiles into CODIS. However, these costs are shared across all of the contracted analyses, so the expense associated with a single sample will increase only incrementally from the estimated unit cost of $40.
Conversely, developing a DNA profile from forensic evidence requires painstaking work manually conducted by criminalists at a crime laboratory. For example, extracting a foreign DNA profile from a vaginal swab requires separating out biological material originating from the victim from sperm of the potential suspect. Information collected from the victim will then be used to identify possible contributors of the foreign DNA and ensure that consensual sexual partners are excluded (we return to this discussion later).

For other types of evidence, the process of conducting an analysis is even more labor-intensive. For example, consider the human effort required to analyze possible evidence from items such as sofas, cars, clothing or bedding. If an investigator has submitted a pair of underwear that the victim wore immediately after the assault, or a quilt from the bed where the sexual assault was committed for analysis by the crime laboratory, a criminalist must examine the entire item, locate any and all biological samples, conduct extensive manual sample manipulations, and then conduct the final procedure to develop a DNA profile. Each of these steps requires significant time and costs. This is part of the reason why the number of DNA profiles in the Forensic Index in CODIS is increasing at a much slower pace than those taken from reference standards in the Convicted Offender and Arrestee Indices in CODIS.

4 The National Institute of Justice estimates that it costs an average of $1,000 to analyze a sexual assault evidence kit (Ritter, 2012). Actual costs will vary, as will the amount of time it takes to conduct the analysis. Again, Dr. Patrick O’Donnell estimated that his laboratory may spend about 6–7 hours of analysis time to screen a sexual assault evidence kit at their facility, yet this is for the biological samples only. If the results are negative, the laboratory will conduct an analysis of any clothing that has been submitted. O’Donnell went on to note that the San Diego laboratory analyzes all of the samples included in the kit. In an effort to deal with their backlogs, some other laboratories have streamlined the process by analyzing only the three swabs most likely to yield probative evidence. Regardless, any detection of male DNA will then require additional laboratory testing. The entire process therefore involves a considerable degree of time and effort on the part of crime laboratory personnel. It even requires a great deal of physical movement between various locations within the crime laboratory, to conduct different types of analyses. In one study, researchers found that a typical sexual assault case required criminalists to travel a total of 2.4 miles within the crime laboratory to complete their analysis (Richerd & Kupferschmid, 2011).
We will only achieve the full potential of DNA when this situation improves and evidence beyond the forensic evidence kit is analyzed when warranted by the case history.

This recommendation is also supported by data. For example, Dr. Patrick O’Donnell, supervisor of the San Diego Police Department Crime Laboratory, notes that most probative DNA is found somewhere other than samples collected during the victim’s medical forensic exam. Specifically, in approximately 25–30% of the sexual assault cases where probative DNA is found, it is not from the victim’s medical forensic exam (in the forensic evidence kit often referred to as a “rape kit”), but from the victim’s clothing, the crime scene, or the suspect’s forensic exam.

In sum, DNA profiles from various sources of evidence should be submitted to CODIS as a routine practice during the course of a law enforcement investigation, based on the assault history and case facts. This will prove more costly than simply “testing all kits,” because it requires a significant investment of time and investigative resources to identify which evidence could potentially yield probative DNA. However, this strategy is more likely to yield meaningful results in terms of successful investigations and resolutions, whether they are criminal prosecutions or suspect exonerations. Moreover, by making investments in such crime lab analyses upfront, during the course of the investigation, it will decrease the level of resources needed to test DNA later. Shortly, we will discuss how improved communication between law enforcement investigators and crime laboratory personnel can help to increase the efficiency of analyses and ensure that evidence most likely to be probative is analyzed first.

**Test Evidence Most Likely to Be Probative, Based on Case Facts**

Our recommendation is to enact policies requiring that evidence be tested based on the specific history of the assault, an analysis of case facts, and a determination regarding
which evidence is most likely to be probative for the investigation and possible prosecution or exoneration. For the sake of discussion, we will contrast this with the self-described “forklift approach” used by professionals in New York City to analyze evidence in the 17,000 untested kits that were stored in the city from 1989–1998.

The Forklift Approach

Martha Bashford, Chief of the Sex Crimes Unit in the New York County District Attorney's Office, explained their rationale for the “forklift approach” in a presentation at the 2012 EVAWI conference. When they set out to deal with the problem of untested evidence, she said, they used a strategy of testing everything for the simple reason that it was less expensive than using any screening process to triage their analysis. At that point (April 2012), their efforts had yielded a total of 49 convictions as well as one exoneration, and there are a number of very important lessons to be learned from their successes (for more information, see Bashford, 2012).

Yet it is important to keep in mind that they did not truly “test everything.” Bashford explained that New York City officials contracted with a number of private labs to analyze the swabs only. As in other communities that have sought to “test all kits,” officials in New York City focused only on biological samples developed from swabs, rather than the countless other pieces of evidence that could have potentially been collected during any sexual assault investigation. The reasons for this are understandable. As difficult as it is to imagine dealing with 17,000 untested kits, it is virtually impossible to picture the resources that would be required to process the bags and boxes of other types of evidence, including clothing and bedding … towels and bedspreads … cushions, carpet and Kleenex … not to mention condoms, lubricant, and countless other items that were most likely collected in these 17,000 cases. If all of this evidence were to be submitted for analysis, the end result would likely be to simply shift our piles of unanalyzed evidence from one place to another, with the crime laboratory becoming the new police property room. This would overwhelm crime laboratories, but it would also interfere with law enforcement’s ability to respond appropriately to crimes that continue to be reported and investigated.

Investigators are already struggling to compete for precious crime laboratory resources. One police detective described dealing this problem to Human Rights Watch:

*If the evidence is absolutely crucial to making the case, I will beg the crime lab to test the kit, and put it closer to the top of the pile. But if I am not sure the rape kit test will add anything to the case, I will save up my favors with the crime lab for another case* (Tofte, 2010, p. 33).

In fact, we also need to remember that it is not just these 17,000 cases we are talking about, because they are only the cases where a medical forensic exam was conducted. Many victims do not have an exam (primarily because their sexual assault is reported outside the timeframe where an exam is warranted), so a “test all kits” approach will do
nothing to advance the investigation and prosecution of these cases, even if other types of evidence are collected and impounded by law enforcement.

As Martha Bashford noted in her conference presentation, the forklift approach used in New York City did clear their initial “backlog,” defined in terms of swabs contained within the 17,000 untested evidence kits. Yet, this in turn led to subsequent “backlogs” for the analysis of underwear and other possible associated evidence. This is because the investigation and prosecution of these cases often resulted in requests for laboratory analyses beyond the victim’s sexual assault evidence kit. In New York City, they therefore conducted focused analysis looking at associated evidence (e.g., underwear, clothing, tissues) in stranger cases only when the swabs were negative for semen.

Evaluating Case Facts

In fact, in many of these cases – based on specific details and the history of the assault – the victim’s forensic evidence kit will be the last place investigators and criminalists should be looking for probative evidence that might identify an offender or corroborate specific acts. After a thorough history of the sexual assault is obtained and evaluated, investigators should only submit the evidence for analysis that they believe will be relevant to proving the crime.

Another San Diego case is described by Joanne Archambault to illustrate this point:

A San Diego transit bus driver was kidnapped and sexually assaulted by her last passenger of the night. The suspect clearly intended to rape the victim, but he could not obtain an erection and therefore did not attempt to penetrate her. The suspect sucked on the victim’s neck and breasts and then he forced her to orally copulate his penis. The victim was able to escape and a medical forensic examination was conducted within a short period of time. Unfortunately, the forensic examiner did not obtain swabs from either the victim’s neck or breasts. It would have been ideal in this case to conduct a suspect examination to obtain swabs of the suspect’s penis and scrotum, but he fled the scene and was not taken into custody for some time.

In this case example, based on the specific history of the assault, an investigator should request that the lab first examine the victim’s bra since it was pushed up while the suspect was sucking on her breasts and then later brought back down over the moist area. The second possible source of biological evidence might be the victim’s shirt collar, because it is the location on the clothing item worn closest to the area where the suspect sucked, the victim’s neck. The third item that might offer probative evidence would be the swabs taken from the victim’s mouth if the suspect ejaculated. However, this is perhaps the least promising option of the three. Any vaginal swabs would not be considered a viable option for
analysis, because they will not yield probative evidence based on the sexual assault history.

As this case example illustrates, we must keep in mind that a solution designed to “test all kits” will actually only address the lowest hanging – and most easily definable – fruit. Relatively speaking, it is also the least expensive. It can certainly feel like the solution if we enact such policies and our storage facilities have fewer untested kits, our DNA databases expand, and we produce an increasing number of DNA matches, including CODIS hits. However, we also need to stay focused on our objective of holding more offenders accountable, as well as exonerating innocent parties. To achieve those goals, we need to improve our strategies for evaluating different forms of evidence in a sexual assault case, by determining what is most likely to assist in the investigation and possible prosecution, depending on the types of acts committed, the location(s) of the crime scene(s), and other case facts, including what defenses may be raised.

Considering Other Types of Evidence

We have highlighted a number of possible sources of evidence that could potentially be more probative in a sexual assault investigation than the evidence collected during the victim’s medical forensic examination. However, this will depend on the assault history and the facts of the case. For example, in the majority of sexual assault cases, consent is going to be the primary issue, so any evidence that provides corroboration of the victim’s account by establishing the sexual acts that took place and documents force or injury is absolutely essential.

We have also recommended expanding the practice of obtaining a forensic exam of the suspect(s) in a sexual assault case. Depending on the type of contact involved in a sexual assault offense, the suspect’s body or clothing may actually be a better source of probative evidence than the victim’s. In cases with an incapacitated victim, however, a critical source of evidence may be found in witness statements and perhaps toxicology tests. The significance of any piece of evidence can only be understood by looking at the entire context of the case. Therefore, knowledgeable and well–trained investigators must think through the history of the assault and other case facts to decide what evidence should be analyzed – and determine what impact the results may have on the investigation and potential prosecution or exoneration in the case.

An analysis of case facts will also help to reveal what sources of evidence are not likely to be probative. For example, consider a scenario where the victim reports being sexually assaulted by her boyfriend, in the bed they share. Any analysis for the suspect’s semen or the victim’s epithelial cells on the bed would be a waste of valuable crime laboratory resources, because it will not have probative value for the case. Similarly, if the sexual

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5 For more information, please see the training bulletin on Forensic Exams for the Sexual Assault Suspect. In the Appendix materials provided with this training bulletin, you will find a number of useful tools, including a sample warrant and instructions for obtaining a buccal (cheek) swab from a sexual assault suspect, for the purpose of developing DNA reference standards.
assault occurred in the suspect's own bed, the presence of his own seminal fluid is irrelevant – regardless of whether he has a relationship with the victim. There is no probative value to finding a man’s sperm in his own bed. However, when the victim's epithelial cells are found in the suspect's bed, this may have probative value by placing her in that location, in case the suspect denies that fact. In either case, lab analysis for the victim’s blood may corroborate any injuries the victim described, or the forensic examiner documented at the time of the medical forensic examination.

To encourage this type of analytic thinking, one place to start is using a standardized form that prompts investigators to carefully review the assault history in each case, including the types of acts reported, and the specific locations where evidence might be found on the items that have been collected. We have provided a sample of such a form, entitled Sexual Assault Case History and Analysis. After completing this form, investigators are better able to determine which lab analyses are most likely to be probative – and therefore advance the investigation and potential prosecution of the case. It can also be extremely helpful for investigators to communicate personally with criminalists, whether in person or on the telephone, to discuss strategies and priorities for analyzing evidence in each case. Some policies even require such communication, because it can help reduce confusion and provide better direction for the analysis.

**Requesting Laboratory Services**

We believe investigators should only complete a request for lab services after conducting such a case history and analysis. The analysis will then serve as a road map for the lab service request, guiding the investigator to think about the most probative items of evidence available. In some cases, investigators may even consider consulting with a prosecutor prior to submitting their requests. This can be especially helpful if lab analysis can determine dual elements such as penetration and force.

We have included two sample Lab Service Request Forms that can be adapted for use in your own community. Both were developed by the San Diego Police Department. One is the version that is currently in use, which asks investigators to write a brief narrative of the assault history for criminalists to prioritize the items to be analyzed and identify the locations on those items where probative evidence is most likely to be found. The version was used in the past by the San Diego Police Department, and it required investigators to review the case history themselves and then fill out the form to communicate with criminalists the order of priority for items to be analyzed and the locations on those items where probative evidence is most likely to be found.

Another difference between the two versions is the number of items listed for analysis. The lab service request form currently used by the San Diego Police Department does not limit the number of items that can be listed. However, for many years the Sex Crimes Unit included space to list up to four specific items of evidence. They were to be prioritized in terms of: (1) where DNA is most likely to be found, and (2) what the potential impact on the case will be (if DNA is found). The form also requires investigators to choose a specific
description for each item (such as “victim’s underwear” or “vaginal swab”) rather than providing vague or general descriptions (e.g., “victim’s clothing,” or “rape kit”). Investigators are also asked to provide specific information about where evidence is likely to be found on the item, based on the history of the assault.

Although the form includes space to list up to four items of evidence, Sex Crimes Detectives in the San Diego Police Department typically only request two or three items of evidence to be evaluated by the crime laboratory. This is very different from the typical request made by Sgt. Joanne Archambault at the beginning of her career with the unit, when detectives would ask the lab to: “Analyze all evidence for trace and semen.” Neither detectives nor their supervisors really understood the process set in motion as a result of such a request. With an assessment of the case history, it often quickly becomes clear which specific analyses of which items are likely to advance the case.

Such forms can prove very useful in helping investigators implement this recommendation for practice. The goal is to streamline the process of laboratory analysis, thereby reducing backlogs and wait times. Improved communication can also go a long way toward helping both analysts and investigators understand what the results mean. For example, to make sense of the samples they are provided, criminalists might need to know the answers to questions such as the following:

- Did the victim or suspect bleed during the assault and from what areas of the body?
- Was the victim menstruating?

The process of adapting such a form for use in your community is best undertaken by all the multidisciplinary professionals involved in a Sexual Assault Response and Resource Team. Of course, this effort will need to include members of the crime laboratory.

**Cold Case Review Protocols**

When developing a cold case team, other steps will also be required so this general strategy is supported with policy statements and standard operating procedures, as well as supervisory and management practices. For example, a case review protocol is essential

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6 Some crime laboratories are establishing policies limiting the number of analyses that can be requested per case, typically between five and ten (for example, see Kovner, 2012 in Connecticut and Forensic Resources Blog, 2013 in North Carolina). If probative evidence is not located on the first set of items, additional analyses can be requested. In North Carolina, the State Crime Lab issued new Evidence Submission Guidelines effective September 1, 2013. For sexual assault cases, the first submission is restricted to the sexual assault evidence kit, one pair of underwear (if not in the kit), and a condom if applicable. Subsequent submissions can then include up to three items of clothing and/or bed linens.

7 A case may pose a question about whether evidence collected was menstrual blood or the result of an injury. While most crime laboratories will not be able to differentiate between these two sources of blood, a sophisticated medical laboratory could potentially test for a hormone or other marker. This and other specialized analysis should be considered by investigators and prosecutors when relevant, though it is likely to be cost-prohibitive in many cases.
for ensuring consistency by helping investigators to organize their case information, track investigative steps, and evaluate evidence. A sample tool is available to assist in this process, which we developed in collaboration with Sgt. Jim Markey who retired as supervisor of the Cold Case Unit of the Phoenix Police Department. This Cold Case Investigation Checklist can be used to evaluate what evidence is available from the original investigation as well as the subsequent investigation conducted following a cold case review or CODIS hit. It also helps to keep the laboratory analyses in context, to ensure that investigators are thinking well beyond the evidence that might be available from the victim’s medical forensic examination.

Computer databases are also recommended for investigative case management. In the Phoenix Police Department Cold Case Unit, for example, a computerized system known as “SCAT” is used (for Sex Crime Analysis and Tracking). While other programs may be available, many sex crimes investigators rely on their agency’s records management system which is unlikely to be sufficient for this purpose. Whether commercially purchased or developed in–house, a comprehensive tracking system can allow members of the police department, prosecutor’s office, and crime laboratory to share information. For a more detailed discussion of this issue, please see a later recommendation.

**Improve Communication Between Law Enforcement and Crime Laboratories**

A related recommendation is to improve communication between law enforcement and crime laboratory personnel. In too many agencies, evidence is sent to criminalists without any communication from investigators regarding where DNA might be found on a specific piece of evidence – and how to prioritize the analyses requested. The laboratory also needs to be aware of whether the victim was incapacitated, whether or one or more suspects might be involved, whether consent or identity is the issue, and the timeframe for any consensual sexual activity that might have taken place.

For some evidence types, a lack of communication will not create a significant problem; for example, a vaginal swab will simply be analyzed to develop any foreign DNA profiles (assuming consensual partners are excluded). The meaning of any resulting DNA profiles will be interpreted within the context of case facts but testing a vaginal swab will generally be the same from one case to another.

For other types of evidence, however, communication from law enforcement may be able to improve the efficiency of analysis rather significantly. We have previously mentioned the example where a sexual assault is committed on the victim’s bed, and a quilt is submitted to the crime lab for analysis. In that scenario, there may be a number of stains and biological samples on it. Because bedding is very time-consuming bench work, it is often not a first priority for laboratory analysis. However, depending on the case facts, it can be an important option. For example, a sexual assault involving a beds spread from a hotel or a dorm room would be a much lower priority than an assault where a victim has not been sexually active for some time and washes her/his sheets every two weeks.
A great deal of time can be wasted if criminalists are provided no communication as to where specifically they might look for biological evidence. It is much more efficient if they are provided with information that the sexual assault took place— for example — on the top, left-hand corner of the bed and the quilt is marked to identify which is the top and bottom, versus the right and left-hand side. Alternatively, the crime scene investigator could simply use a marker or a piece of masking to tape to indicate the spot where the act took place or the area that was still wet or stained when the quilt was collected. While this stain may be clearly visible at the time of the initial report, by the time the quilt is analyzed in a crime laboratory, it will typically be much more difficult to identify as the probative stain.

As another possibility, with appropriate training, crime scene investigators could collect a swab from the wet stain while at the scene, to submit directly for analysis. For many agencies, this goes against the traditional thinking that officers and crime scene investigators should never handle or mark evidence for fear of contamination or outright destruction. These concerns are well-grounded, but they can be balanced with common sense and the reality that DNA evidence is simply not that fragile. The advantage of marking the area surrounding a wet stain on a quilt may far outweigh concerns over contamination as long as appropriate precautions are taken.

As with any other piece of evidence, such handling will be documented in the crime scene report and accompanied by photographs. By consulting with a prosecutor as early as possible during the course of an investigation, investigators can ensure that their efforts to improve communication and efficiency with the crime lab are easily explainable in court and not counterproductive to holding offenders accountable.

Implementing this recommendation requires a number of documentation tools. One has already been mentioned—a Lab Service Request Form that improves communication regarding the priority of requested analyses and the specific locations where evidence might be found. Another tool is a Clothing Documentation Form to be used by law enforcement investigators as well as forensic examiners, as an addendum to their standard reporting forms. Again, this tool can potentially help improve communication between law enforcement and the crime laboratory by documenting exactly what items were collected, indicating whether they were worn during or immediately after the assault and describing specifically where evidence might be found on each item. It can help investigators and forensic examiners answer questions such as the following:

- Was clothing removed during the assault? If so, it might still contain pre-ejaculate fluids, saliva stains, or trace evidence.

- Was clothing used to wipe the genitals following a sex act? This is a common source of biological evidence following a sexual assault.

- What clothing did the victim put on after the assault? Especially relevant will be any clothing worn closest to the genital structures.
Most officers are not taught to identify these various items of clothing separately in their documentation. However, it is critical to the criminalist screening a large amount of evidence to know what they are looking for and where (specifically) they are most likely to find it. There is also space on the Clothing Documentation Form to record observations by the law enforcement investigator, forensic examiner, and even the victim, regarding any visible signs of foreign material as well as the general condition of the item (e.g., whether there are any tears, stretched out material, or missing buttons).

As we have previously noted, documentation tools are only one way to communicate information from investigators to the crime laboratories. Comprehensive policies can also require that the investigator personally talk with the analyst working on a case, either on the telephone or in person. Again, this is one of the most effective ways of prioritizing analyses to make the most efficient use of crime lab resources.

**Submit Forensic Evidence DNA Profiles to CODIS in Non–Stranger Sexual Assault Cases**

This recommendation has already been offered in a general way, but we reiterate it here because we want to ensure that investigators/laboratories are submitting forensic evidence DNA profiles in CODIS in all cases of sexual assault, including those perpetrated by non–strangers. The only cases where this would not typically be appropriate would be if the investigation determines that no crime occurred or perhaps if the victim does not want the case pursued. We will return to this point shortly.

However, we want to emphasize here that this practice should be routinely followed in sexual assault cases, regardless of whether the identity of the suspect is actually known and even in those cases where the suspect admits that there was sexual contact but claims that it was consensual. This is because the primary purpose of DNA in a non–stranger sexual assault case is not to confirm the identity of a suspect. Rather, a key purpose is to link cases together, which may be critical to the investigation and prosecution. Unfortunately, this point is sometimes missed by investigators who view identification as the primary purpose of DNA evidence. As one police official described:

> We don’t need the DNA test when we know who the suspect is already without it. It would be a waste of everyone’s time and money (Tofte, 2010, p. 32).

What is lost from this perspective is that by entering the forensic evidence profile into CODIS, the investigator will be conducting a comparison to all sexual assault cases submitted to CODIS nationwide. In fact, the match could be with any type of criminal offense included in the database, not only sexual assaults. The current trend on a national and indeed international level is to continue to expand the number of qualifying offenses for CODIS submissions. Therefore, as we move forward we may see an increasing number of matches, even with misdemeanor offenses such as peeping and indecent exposure.
Any matching cases are likely to be unknown to investigators and prosecutors and these may prove critical to a successful investigation and prosecution. For example, the additional case may demonstrate the same pattern used to commit that crime (e.g., a series of sexual assaults perpetrated against women in prostitution). Or it may reveal a more general pattern of deviant sexual behavior, not rising to the level of felony sexual assaults. This can be particularly helpful in cases that could not otherwise be successfully prosecuted. An example from the New York City initiative is described by one of the prosecutors interviewed by Human Rights Watch:

*We had an assailant who raped drug addicts coming to him to buy drugs. These are women who may be particularly vulnerable to rape because of their addictions or their socioeconomic status, but whose cases are hard to get a jury to believe. But when we could connect the same guy to a number of rapes, we could get a conviction* (Tofte, 2009, p. 55).

DNA evidence may also be critical for corroborating the victim’s version of events and the specific sexual acts that were committed (e.g., vaginal swabs that test positive for the suspect’s DNA establish the element of penile–vaginal penetration) – as opposed to merely proving the origin of the biological sample. A prosecutor describes an example where this type of corroboration evidence was needed but not available, because the physician conducting the medical forensic exam did not swab all of the locations on the victim’s body where she said that the suspect had ejaculated:

*The victim claimed that the suspect had ejaculated in her belly button [but] the suspect … denied ejaculating in the victim’s belly button. I had hoped to test a swab taken from the victim’s belly button in order to back up the victim’s version of events and discredit the suspect at trial…. [However,] the lab informed me that the doctor had not swabbed the victim’s belly button … it was incredibly frustrating to move forward without crucial evidence* (Tofte, 2010, p. 29).

Linking cases together can help with their investigation and prosecution, by demonstrating a pattern of similar past behavior. It might also help to solve and prosecute past cases, if the identity of the suspect was unknown at the time or the case could not be successfully prosecuted for other reasons. This was illustrated with the case example presented earlier in this series of training bulletins, where James Allen Selby was finally convicted after committing a series of brutal sexual assaults of women and children across five states. While he had been identified as a suspect in several cases, he was not successfully prosecuted, either because he could not be located or due to limitations with DNA testing and the requirements for uploading profiles to CODIS at the time. Selby was even acquitted in one case, on charges of the attempted sexual assault of an adult woman, aggravated assault with a deadly weapon, false imprisonment, and kidnapping. In that case, he was acquitted on all the charges except for simple assault, despite evidence documenting significant injuries sustained by the victim – on her head, wrists, and other locations.
Linking cases can thus help to solve and prosecute any future crimes, if the suspect re–offends. If DNA profiles developed from forensic evidence are only submitted in cases involving strangers, investigators and prosecutors will miss a critical opportunity to identify any other cases involving the same suspect. This is especially significant, because research indicates that rapists commit an average of six rapes (Lisak & Miller, 2002; McWhorter et al., 2009). In other words, one failed opportunity to hold an offender accountable can equal five or more additional victims.

Historically, one of the reasons this practice has not been followed has been a lack of understanding. This training material is designed to address this barrier, by contributing to the growing recognition of the benefits of investigating non–stranger sexual assaults and the opportunities for connecting cases and corroborating the history of the assault. Yet another reason has been a lack of resources available to law enforcement to support investigations, particularly sexual assault investigations. In many communities, there is a traditional hierarchy among law enforcement agencies and prosecutor’s offices whereby homicides are given higher priority in resources over other crimes, and cases pending trial are given higher priority over ongoing investigations. Hopefully this barrier will also continue to diminish as DNA testing becomes less expensive, faster, and/or more resources become available.

**Identify and Exclude DNA Profiles from Consensual Partners**

Our next recommendation is to ensure that investigators obtain DNA reference standards from any consensual partners identified by victims, so their DNA profiles can be excluded and therefore not submitted to CODIS as a forensic unknown. This is necessary not only in cases where the victim has a medical forensic exam, but anytime the consensual partner’s DNA may be found on evidentiary items (e.g., the victim’s bed or clothing). It is best to obtain these reference standards from any consensual partner as soon as possible during an investigation, because it may become more difficult over time. This is especially true if the person’s relationship with the victim deteriorates.

To understand the significance of this recommendation, it is helpful to consider what would happen if the DNA profile from a consensual partner is entered into CODIS. First, there might be no match in CODIS, leading investigators to believe that the suspect’s profile is not yet in the database, when it might in fact be in there. (In this scenario, it is the consensual partner’s DNA profile that is not in the database.) This could potentially deter investigators from using more traditional law enforcement techniques designed to identify the correct suspect (e.g., searching for registered sex offenders in the area, conducting witness interviews, obtaining phone records and search warrants).

Second, the consensual partner’s DNA profile could yield a “hit” with a forensic or offender profile already in the database for having committed another crime. This could derail the course of the investigation if the victim is distressed over the discovery that her/his partner may have an undisclosed criminal history.
Therefore, the recommended practice in all cases of sexual assault is to identify and exclude the DNA profile from any consensual partner identified by the victim. Federal policy concerning CODIS requires that laboratories make every attempt to ensure that only legitimate case evidence DNA profiles are entered in the CODIS database. This requires asking victims sensitive questions about any consensual sex they might have had in the past few days, either before the assault or even during the time frame between the assault and the medical forensic examination. Asking the questions can be difficult, but this process can be facilitated by explaining their very important purpose.

This is also another reason why it can be helpful to involve the prosecutor as early as possible during an investigation. Prosecutors can answer questions the victim may have about what will happen as a result of submitting the consensual partner’s DNA – specifically, whether this means that a victim’s sexual past will be introduced at trial. Typically, rape shield laws exclude a discussion of prior consensual sexual activity at trial, unless this can potentially explain injuries that the prosecution wants to introduce. However, the specific answers to such questions will of course vary by jurisdiction; the prosecutor will be able to answer these questions with a jurisdiction–specific response.

Do Not Submit Evidence if the Victim Has Not Talked with Law Enforcement

While we have repeatedly recommended that evidence be submitted for analysis in all sexual assault cases where appropriate, we need to be very clear that this does not apply when victims have a medical forensic exam but have not yet personally reported to law enforcement. In other words, the victim has not yet talked with police.

In this situation, the evidence should not be submitted to the crime lab for analysis, nor should any foreign DNA profile that might have been developed be entered into CODIS. The reasons for this were outlined in a training bulletin titled, Should We “Test Anonymous Kits”? However, they can be summarized as follows:

1. Victims have not (yet) consented to having their evidence analyzed.
2. No crime report has been documented by law enforcement (yet).
3. Consensual partners have not been excluded.

In fact, national policy for CODIS requires that law enforcement must establish that a crime has occurred in order to utilize the database for searching purposes. Therefore, this recommendation is actually a statement of CODIS policy: No DNA profile should be submitted to CODIS unless the victim has personally talked with law enforcement and a crime report completed. Rather, evidence should simply be stored in accordance with established standards for the length of time established by policy. These policies should also spell out what procedures will be followed for the collection, documentation, transfer, storage, and potential destruction of evidence in these cases.
This is particularly relevant for jurisdictions enacting laws or policies to “test all kits,” especially those with a deadline for evidence submission. What will happen to evidence collected from a victim who has not personally reported to law enforcement, to ensure that it is not submitted for analysis as a matter of routine procedure? Victims may need more time to make a decision regarding criminal justice participation than the timeframe established for evidence submission. Careful discussions will be required among law enforcement, health care providers, victim advocates, prosecutors, and other stakeholders to craft policies to appropriately address this issue.8

Long Range Strategies

Beyond these recommendations for the investigation and prosecution of individual cases, there are also a number of longer range strategies for creating positive change.

Invest in Crime Laboratories

Still other concerns were revealed in the national survey of law enforcement agencies. When asked to provide reasons why forensic evidence might not be submitted for analysis in an open case, 11% of respondents cited the concern that they would not get a timely result, 9% referred to insufficient funding, and 6% said the crime laboratory was not accepting new evidence because of a backlog at their facility (Strom et al., 2009). Any imbalance in the supply and demand for laboratory resources will obviously limit the potential for meaningful impact on the investigation and prosecution of criminal cases, including sexual assault. This creates a situation where investigators and prosecutors have to be strategic in their requests for services from the crime laboratory. This was described by a police detective:

You have to be careful about not getting on the lab’s bad side by bothering them, because you need them for your next case (Tofte, 2009, p. 6).

Many people have therefore issued a call for increased capacity, personnel, and training for the nation’s crime laboratories (e.g., Strom et al., 2009), and funding has been increasingly dedicated to this task over the past decade. For example, in response to their legislation requiring all sexual assault evidence kits be submitted for analysis, Illinois has invested considerable resources in their state crime laboratory. Since the law passed, they have seen an average of 60 more evidence kits submitted per month, or 720 more per year than was submitted on average before the law was passed. Illinois has also reduced the time required to complete the analysis, from an average of 6–9 months before the legislation to 3–4 months afterward (Reiss, 2012).

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8 For more information on these issues, please see Module #14 in the OnLine Training Institute (OLTI), entitled, The Earthquake in Sexual Assault Response: Implementing VAWA Forensic Compliance.
Develop Policies for Evidence Retention, Storage, and Destruction

However, beyond capacity and staffing there is a need to ensure that the policies, procedures, and documentation used by crime laboratories are aligned with the recommendations offered here. For example, laboratory personnel will need to work with law enforcement and other stakeholders to develop the forms and communication procedures described in our previous recommendations.

Collaborative work will also be needed to develop or review evidence retention policies, to ensure that evidence in sexual assault cases is being stored as long as possible – at least for the statute of limitations and ideally indefinitely for sexual assault cases that remain unsolved. This is particularly critical for associated evidence such as clothing and bedding, because it will be needed if the results of the evidence kit are negative. This may mean that law enforcement agencies will need to expand their storage capacity, since the need for sexual assault evidence has increased with the dramatic improvements in DNA technology and the national trend toward eliminating the statute of limitations for sexual assault.

Even in states that retain a statute of limitations, the evidence in a sexual assault case can often be used to issue a “John Doe” indictment. John Doe indictments use DNA profiles instead of names to identify individual suspects as a way of commencing the case within the statute of limitations. Because the suspect does not appear at his or her scheduled hearing, a warrant issues (often referred to as a “John Doe” warrant), and the case is on warrant status until the suspect is located. In some states, the statute of limitations is suspended or extended once a foreign DNA profile is obtained and until the suspect is taken into custody. In California for example, once the suspect is identified and located, the prosecutor has one year to file the appropriate charges.

These policies will potentially affect both police storage facilities as well as crime laboratories, and they need to address the question of evidence that is analyzed versus unanalyzed, as well as cases that have been adjudicated or remain open. Many agencies are lacking written policies in some of these areas. For example, Strom et al. (2009) found in his national survey of over 2,000 law enforcement agencies that fewer than half had “a policy in place for preserving biological evidence for cases in which the defendant is found guilty. In addition, “about one in five agencies reported they were unsure if their agency had such a policy or not” (Strom et al., 2009, p. xvi).

Evidence retention policies and agency procedures will also need to address the question of how long evidence will be stored in cases where the victim has had a medical forensic exam but not yet personally talked with law enforcement. We will return to address this point in a later recommendation.

On the other end of the spectrum, evidence retention policies and agency procedures must also address how to properly identify and discard evidence that is no longer required to be maintained. Again, this will require multidisciplinary collaboration with the range of relevant stakeholders, to ensure that tracking systems appropriately flag evidence when it is eligible for destruction (Strom et al., 2009).

**Establish Computerized Tracking Systems**

There is a particular need for computerized information management systems, to record the status, progress, and outcomes of all reported sexual assaults and their associated evidence. In fact, improved tracking is one of the most common recommendations for the problems associated with forensic evidence in police departments, crime laboratories, and other criminal justice agencies (McEwan, 2011; Office on Violence Against Women, 2010; Peterson et al., 2012; Tofte, 2009, 2010).

Of course, this need extends beyond sexual assaults, but it has been particularly challenging in this area given the number of unanalyzed evidence kits as well as other types of associated evidence.

> Law enforcement desperately needs information management systems that will allow them to better track evidence from sexual assault cases that are stored in property rooms and warehouses (Office on Violence Against Women, 2010, p. 21–22).

This need was highlighted in the national survey of 2,250 law enforcement agencies, which found that over 60% had no computerized system for tracking evidence (Strom et al., 2009). The authors concluded that this needed to be remedied, by enhancing law enforcement information systems so they can “systematically track and monitor forensic evidence associated with criminal cases” (Strom et al., 2009, p. xv–xvi). Such a system could be used by law enforcement as well as crime laboratory personnel and prosecutors, to track the physical location of evidence and its testing status. However, it could also be used to record the outcomes of cases, in terms of investigations, arrests, charges, prosecutions, dismissals, convictions, and exonerations (Tofte, 2009, 2010). This could potentially help all of the relevant stakeholders to understand what happens to cases as well as analyzing what factors are associated with one path versus another. For example, data could be captured to understand why a decision is made in a particular case not to submit evidence to the crime laboratory for analysis (Ritter, 2012).

To ensure that these goals are met, all of the relevant stakeholders should be involved in the process of determining what information will be recorded in the database. This can be accomplished using a multidisciplinary advisory committee, which increases the transparency of the decision–making process in criminal cases and facilitates evaluation of the quality of investigative and forensic services (McEwan, 2011; Ritter, 2012).
Prioritize Analysis of Untested Evidence

For those jurisdictions not adopting a “test all kits” approach to deal with unanalyzed evidence from past sexual assault cases, there may be a need to develop some alternative strategy for reviewing these cases and prioritizing laboratory analysis.

Establishing a Cold Case Team

One possibility is to establish a specialized unit to investigate and prosecute cold cases. The Phoenix Police Department provides an example of this approach, with their Cold Case Sex Crime Team that was established in 2000 and included four full–time detectives and a supervisor assigned to investigate and review these cases, as well as two prosecutors to pursue them. The team also works collaboratively with forensic scientists and victim advocates, to ensure that cases are pursued with all of the resources available.

When agencies have a large number of cases with unanalyzed evidence, some system will be needed to prioritize which ones to pursue with investigative resources. Screening is likely to be based on the factors that affect an investigation’s potential for successful prosecution, including the availability of the victim and the victim’s willingness to participate in the process. It will also take into account the availability of official records, including police reports, photographs, and other evidence from the original investigation. Multidisciplinary collaboration will be needed to develop the process and criteria for screening, in order to guide the cold case unit in triaging cases for further investigation.

Screening Criteria

If a cold case team is not established, a multidisciplinary committee or oversight board can still be used to establish criteria for submitting previously unanalyzed evidence to the crime laboratory (Peterson et al., 2012; Ritter 2012). This group could include, for example, representatives from law enforcement, public and private crime laboratories, prosecutors, public defenders, private defense lawyers, victim advocates, judges, and other nongovernmental organizations and social service agencies (Tofte, 2009).

Based on their review, such a group may determine that evidence does not need to be submitted for analysis if the case has already been adjudicated, the victim has withdrawn the complaint, the prosecutor has declined to file charges, or the charges have been dropped (Nelson, 2010; Office on Violence Against Women, 2010). In fact, this criteria is likely to exclude a number of cases from potential analysis. In both Los Angeles and New York City, the use of a “forklift approach” resulted in quite a few redundant CODIS hits – matches with DNA profiles in the Offender Index, indicating that the suspect was arrested or convicted without the analysis of the victim’s evidence kit.

Other cases may be screened out of the analysis if the evidence is not likely to be probative (Office on Violence Against Women, 2010). On the other hand, “open, active cases” might be given the highest priority for submission when “the analysis of the evidence may provide
important investigative leads to solve the case” (Nelson, 2010, p. 5). While the creation of such screening criteria will not necessarily be easy or straightforward, a multidisciplinary process involving relevant stakeholders will help to increase transparency and ensure that decisions reflect varying perspectives.

**Conduct Evaluation Research**

Finally, we return where we began, with a call to evaluate the responses we enact and determine whether they are reducing the problems we are seeking to address. Research is therefore needed in a number of areas.

As discussed in the OVW Roundtable, we need more information on the decision-making process currently used in law enforcement agencies to determine whether evidence will be submitted to the crime laboratory in a sexual assault case, and which specific analyses will be requested (Office on Violence Against Women, 2010).

In fact, the field is in desperate need of improved tracking for all kinds of case–related information. This will help not only to document the progress and outcomes of individual cases, including the location and status of evidence, but also the probative value of various types of evidence and their impact on cases. These recommendations were outlined by the researchers who studied the impact of the Los Angeles initiative:

> All associated criminal justice agencies should share and compile data at key decision points and work toward the development of more comprehensive databases and models that can predict successful case outcomes. Sexual assault databases, or additional new fields in existing data bases, are needed that maintain offense characteristics, investigator files, victim sexual [assault medical forensic] examination, laboratory results, and prosecutor information. The effects of forensic DNA testing on sexual assaults cannot be accurately estimated until there are better data maintained by all the various agencies in the criminal justice system handling sexual assault cases and consolidated into a single forensic sexual assault database.

> A range of quantitative and qualitative data are needed from investigators and prosecutors, in particular, to determine the value of scientific evidence in securing arrests, filings, convictions, and sentencing. The quantitative data would collect basic discrete factors on every sexual assault case, its investigation, prosecution, adjudication and sentencing. Qualitative data would include the persuasiveness of various factors that influenced arrest, charging, plea bargaining, trial verdict (including interviews with jurors after verdict), and sentencing (Peterson et al., 2012, p. 106).

This information can be combined with a review of the specific facts in a particular case, to make decisions regarding which analyses to request. A cost–benefit analysis would also be
beneficial, to make an empirically based comparison between various protocols for evidence testing protocols (Peterson et al., 2012). However, participants in the OVW Roundtable remind us that criminal justice outcomes are not the only ones that matter:

Researchers and policymakers should be cautioned against relying exclusively on imperfect performance measures, such as successful convictions, given the numerous ways cases can be resolved in the legal system (Office on Violence Against Women, 2010, p. 26).

**Conclusion**

Attrition data for the US criminal justice system suggest that only a small fraction of the sexual assaults committed in this country ultimately lead to the conviction and incarceration of the perpetrator. The problem of untested evidence is both a cause and a symptom of this failure. By widening our view of the problem and enacting the practices recommended here, we can begin to address both the symptoms and the root cause, which will be more important for creating positive change over the long term.

Returning to the SARA model, there is clearly a problem with unanalyzed evidence in sexual assault cases, but each agency/jurisdiction should conduct its own process of Scanning and Analysis before crafting a response. An effective analysis will include input from all of the stakeholders involved, including representatives from law enforcement, prosecutors’ offices, sexual assault (or dual service) advocacy agencies or coalitions, crime laboratories, and others. In many states and communities, Responses have already been initiated to address the problem as they have defined it in their jurisdiction. For those jurisdictions that have already initiated responses, it is important to Assess these initiatives to see if there has been any improvement. If not, continued analysis should be continued to determine if there is a more appropriate and potentially effective response. If so, a new response should be crafted, and another assessment conducted to determine whether the new strategy worked to reduce the problem.

We know this type of assessment is being pursued in communities such as New York City, Detroit, and Houston. A policy response consisting solely of a requirement to analyze all evidence kits is not likely to prove the best option available. These communities can lead the way toward more comprehensive response strategies.

As we have watched the media coverage and public discourse in this area unfold, the terminology has evolved from a focus on the “DNA backlog” to the problem of “untested rape kits” and eventually “unanalyzed evidence in sexual assault cases.” This evolution in terminology reflects a widening focus on the actual problem, which demonstrates a maturing view of the issue. However, the time has come to widen the focus even further.

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10 See, for example: Frazier, Candell, Arikian, & Tofteland, 1994; Horney & Spohn, 1990; Koss, 2006; Lisak & Miller, 2002; Lonsway & Archambault, 2012; Matoesian, 1993; McWhorter et al., 2009; Senate Judiciary Committee, 1993; Tjaden & Thoennes, 2000.
and frame the discussion in terms of improving law enforcement investigations, criminal prosecutions, and more timely exonerations.

Collectively, we can probably agree that our real goal is to improve the response to all cases of sexual assault – so all reports are thoroughly investigated and vigorously prosecuted where appropriate. Yet meeting this goal will require a commitment of resources far beyond simply “testing all kits.”

In fact, solving this problem will require dedicating sufficient funding for personnel, training, supervision, and leadership – to ensure that law enforcement agencies can conduct thorough investigations and prosecutors’ offices can pursue challenging cases. It will also require significant investments in our crime laboratories, so criminalists can conduct the labor-intensive benchwork needed to develop DNA profiles from evidence submitted during the course of an ongoing investigation.

A comprehensive solution will also involve coordination between all of the professionals involved in responding to sexual assault victims, to ensure that victims have the support they need to remain engaged in the criminal justice process. This may be particularly true for victims who are contacted in cold cases, because they may be faced with the heartbreaking prospect of re-engaging with a system that they might feel failed them the first time. These measures go beyond the current focus on only analyzing evidence from medical forensic exams to improving the larger criminal justice and community response to sexual assault.

References


