

SEXUAL ASSAULT FORENSIC EVIDENCE TRACKING DATABASE

Annual Report to the Legislature | Calendar Year 2023

SEXUAL ASSAULT FORENSIC EVIDENCE TRACKING DATABASE

CALENDAR YEAR 2023



CALIFORNIA OFFICE OF THE ATTORNEY GENERAL

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EXECUTIVE SUMMARY

Reporting Requirement

The California Department of Justice (DOJ) created the Sexual Assault Forensic Evidence Tracking (SAFE-T) database in 2015 to track the statewide collection and processing of victim sexual assault evidence (SAE) kits. In California, 46 of 58 counties send their SAE kits to DOJ's crime laboratories for processing. The remaining 12 counties¹ process their own SAE kits at their own local crime laboratories.

Law enforcement agencies (LEAs) that investigate cases involving SAE kits and public crime laboratories that analyze this evidence are required by Penal Code section 680.3 to enter certain SAE kit information into the SAFE-T database. This database allows LEAs from all 58 counties to log and track the status of SAE kits collected from victims of sexual assault. Penal Code section 680.3, subdivision (f), requires DOJ to submit an annual report to the Legislature summarizing the data entered into the SAFE-T database for the preceding calendar year.

This sixth annual report provides information collected from SAFE-T kit records created by LEAs and public crime laboratories from all 58 counties between January 1 and December 31, 2023.

Background

DOJ created the SAFE-T database to collect data on the status of victim SAE kits in the possession of LEAs and public crime laboratories. From its inception in 2015 through the end of 2017, LEAs and crime laboratories were encouraged, but not mandated, to enter their SAE kit data into the SAFE-T database. Public and legislative interest in clearing reported backlogs of untested SAE kits led to the passage in 2017 of Assembly Bill 41, which added section 680.3 to the Penal Code to mandate reporting in the SAFE-T database of all victim SAE kits collected as of January 1, 2018.

The SAE kit status information collected in the SAFE-T database and summarized in this report is as follows:

- An information record for each victim SAE kit, which must be created within 120 days of collection
- The date biological evidence samples from an SAE kit are submitted to a crime laboratory for DNA analysis or the reason for not submitting samples to a laboratory
- Whether an SAE kit generates a potentially probative DNA profile²
- The reason(s) a kit submitted to a laboratory is not tested within 120 days, and every 120 days thereafter until testing is complete.

These counties are: Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Kern, Los Angeles, Orange, Sacramento, San Bernardino, San Diego, and Ventura.

² A DNA profile that may help to identify a perpetrator in a criminal investigation.

Definitions

Terms and acronyms used in this report include:

Sexual Assault Evidence Kit (SAE kit) – An SAE kit contains evidence collected by a medical facility during a sexual assault forensic examination. The standard victim SAE kit consists of multiple body swabs that may contain the perpetrator's DNA, other items with potential evidence such as the victim's underwear and fingernail scrapings, and a buccal DNA reference swab collected from the inside of the victim's cheek.

Rapid DNA Service (RADS) – RADS refers to a DOJ-specific rapid DNA testing program available to the 46 counties in DOJ's service area. Through this program, DOJ trains medical staff to assemble a RADS kit, which contains selected swab samples that would have otherwise been included in the standard SAE kit. The medical staff sends the RADS kit directly to one of DOJ's crime laboratories for expedited DNA testing and releases the associated standard SAE kit to the LEA. Most of the 46 counties served by DOJ's laboratories participate in the RADS program, although rural medical facilities in participating counties, located far from large population centers, are not always equipped to collect RADS kits. In those cases, the LEA may submit the entire standard SAE kit to DOJ's crime laboratory for analysis. The laboratory will triage the kit in RADS fashion and add the selected swabs to the laboratory's RADS analysis workflow.

Similar rapid testing programs may also exist under different names in the twelve California counties that have their own local crime laboratories.

RADS or "Mini" Kit — A RADS kit contains up to three of the most probative evidence swabs from the standard SAE kit and a buccal DNA reference swab from the victim. Medical staff package these samples separately from the standard SAE kit and send the RADS kit directly to a DOJ laboratory for expedited DNA testing. Typically, the selected evidence swabs are the ones most likely to contain the perpetrator's DNA based on the case history. As sexual assault evidence is commonly a mixture of body fluids from the victim and the perpetrator, a DNA reference swab from the victim is included to aid with interpretation of any DNA mixtures.

The standard SAE kit, which contains all of the remaining swabs and evidence samples, is released to the LEA rather than the crime laboratory. If a RADS analysis yields no probative results, or an evidence sample yields insufficient foreign DNA for testing, the standard SAE kit may be submitted to the crime laboratory for additional testing.

For the purpose of this report, similar rapid testing kits collected by local agencies outside of DOJ's RADS program are referred to as "mini kits."

Combined DNA Index System (CODIS) – CODIS is the Federal Bureau of Investigation's (FBI) program and software used to store and search perpetrator DNA profiles developed from forensic evidence against the DNA profiles of qualifying convicted offenders and arrestees. CODIS comprises Local DNA Index System (LDIS), State DNA Index System (SDIS), and National DNA Index System (NDIS) databases. The three main criminal indices in CODIS are the Forensic Index, which contains perpetrator DNA profiles developed from forensic evidence, the Convicted Offender Index, and the Arrestee Index³.

³ CODIS also contains non-criminal and specialty indices; however, for the purpose of this report, the term CODIS refers to the three criminal indices.

DNA profiles may be uploaded as far as the LDIS, the SDIS, and the NDIS, provided they meet the criteria for each level and index.

Once uploaded, the DNA profiles in the three criminal indices are regularly searched against each other to identify potential matches. To link forensic evidence to a known convicted offender or arrestee, the Forensic Index is searched against the Convicted Offender Index and the Arrestee Index. The Forensic Index is also searched against itself to link evidence from different crimes to the same perpetrator (referred to as case-to-case hits).

Access to CODIS is strictly limited to law enforcement crime laboratories that comply with the requirements set forth in the Federal DNA Identification Act (42 U.S.C. 14132(c)). Private vendor laboratories do not have access to CODIS. A private DNA laboratory may analyze evidence and develop DNA profiles, but a CODIS-participating public crime laboratory must assume ownership of a DNA profile for it to be uploaded to CODIS.

Local DNA Index System (LDIS) – An LDIS is a local CODIS DNA database that feeds into the state's SDIS. An LDIS laboratory is a local public crime laboratory that participates in CODIS and uploads the perpetrator DNA profiles from forensic evidence submitted by their client LEAs.

Although some DNA profiles may be held at the LDIS level, most evidence DNA profiles entered into an LDIS laboratory's database are also uploaded to the SDIS database. Because local policies may differ from state or federal rules, some DNA profiles in an LDIS database may not be eligible for inclusion in SDIS and/or NDIS.

State DNA Index System (SDIS) — An SDIS is a state-level CODIS DNA database that feeds into NDIS. It includes all of the SDIS-qualifying DNA profiles uploaded from that state's LDIS laboratories, as well as those uploaded directly by the state (SDIS) laboratory. An SDIS laboratory is a state crime laboratory that administers CODIS for the local crime laboratories in that state and is responsible for ensuring statewide compliance with state and federal CODIS requirements. In California, the SDIS laboratory is at the California Department of Justice, Bureau of Forensic Services, Jan Bashinski DNA Laboratory located in Richmond, California.

National DNA Index System (NDIS) – NDIS is the national CODIS DNA database that is maintained by the FBI. It contains qualifying DNA profiles uploaded by local, state, and federal crime laboratories. DNA profiles uploaded from an SDIS are regularly searched against appropriate indices in NDIS.

Record – A single database record for a victim SAE kit, created in the SAFE-T database. Only one kit record is created when a forensic medical examination produces both a standard SAE kit and a RADS/mini kit. For purposes of tracking in SAFE-T, a standard SAE kit and its associated RADS/mini kit are considered the same kit.

Profile – A DNA profile is a set of DNA markers that reflects an individual's genetic makeup. It can be used to identify an individual as well as distinguish between different individuals. A DNA profile may be uploaded to CODIS if it meets specific eligibility requirements.

2023 SAFE-T Report

This report contains statistics on the progress and status of victim SAE kits that were entered into the SAFE-T database between January 1, 2023 and December 31, 2023. To include later status updates for all SAE kit records, especially those collected at the end of 2023, the data for this report was extracted from SAFE-T on May 7, 2024. Any kit status updates made after May 7, 2024 are not captured in this report.

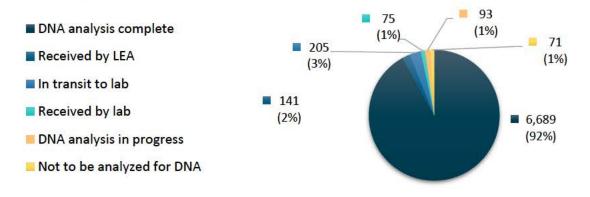
A total of **7,057** records were created in 2023 for SAE kits that were collected on or after January 1, 2018, as required by section 680.3, and another **217** records were voluntarily created by LEAs and crime laboratories for kits collected prior to 2018, for a total of **7,274** new kit records entered into the SAFE-T database in 2023.

2023 Victim Sexual Assault Evidence Kits: Status and Location

Each SAFE-T record is expected to contain current information on the status and the location of the individual SAE kit. Authorized users from LEAs and public crime laboratories may update a SAFE-T record at different points throughout the process. This section provides an overview of the reported status and location of all **7,274** kit records created in 2023, as of May 7, 2024 (see Figure 1):

- 6,689 kits had DNA analysis completed
- 141 kits had been received by an LEA but had not been submitted to a laboratory4
- 205 kits were in transit from an LEA to a laboratory⁵
- 75 kits had been received by a laboratory but had not yet been analyzed
- 93 kits were undergoing DNA analysis
- 71 kits were sent to a laboratory but would not be analyzed for DNA

Figure 1: Reported Status of 2023 SAE Kits as of May 7, 2024



⁴ See Figure 2 (page 7) for the reasons kits that had been received by an LEA were not submitted to a laboratory.

⁵ These kits were marked as having been sent to a laboratory by the LEA, but had not yet been marked received by a laboratory.

Records Created in SAFE-T

LEAs and crime laboratories created **7,274** new SAE kit records in SAFE-T between January 1, 2023 and December 31, 2023. Out of the 7,274, a total of **6,062** SAE kits (83%) were collected in 2023, **886** (12%) were collected in 2022, **40** (1%) were collected in 2021, **16** (<1%) were collected in 2020, **23** (<1%) were collected in 2019, **30** (<1%) were collected in 2018, and **217** (3%) 6 were collected prior to 2018.

Of the 7,274 SAE kit records created in 2023, **7,057** (97%) were required to be entered into the SAFE-T database within 120 days of collection pursuant to Penal Code section 680.3. **6,158** (87%) of those 7,057 kits were entered into the database within 120 days of the date the SAE kit was collected, and the remaining **899** (13%) SAE kit records were created more than 120 days after the date the kit was collected. Of those 899 kits, **730** (10%) were created after 120 days but within one year of collection, **87** (1%) were created in the second year after collection, and **82** (1%) were created more than two years after the kit collection date.

Kit Locations and Crime Laboratory Submission

As of May 7, 2024, **7,133** (98%) of the 7,274 kits had been sent to a laboratory and **141** kits (2%) had been retained by an LEA. Of the 7,133 kits sent for laboratory analysis, **392** kits (5%) were sent from one LDIS laboratory to a secondary LDIS laboratory and **392** kits (5%) were sent to a private vendor laboratory. Of the 7,133 kits sent to a laboratory, **5,194** (73%) were standard SAE kits, **1,727** (24%) were RADS/mini kits, and the records for **212** kits (3%) did not specify whether they were standard kits or RADS/mini kits.

Kits Not Submitted to Laboratory

There are many reasons an LEA may retain an SAE kit, temporarily or indefinitely, instead of submitting it to a laboratory for analysis. The LEA entry screen in the SAFE-T database provides options to designate the reason a kit is not

submitted to a laboratory. The reasons 141 SAE kits were not submitted to a laboratory are summarized as follows (see Figure 2):

The victim was not pursuing prosecution (8 kits)

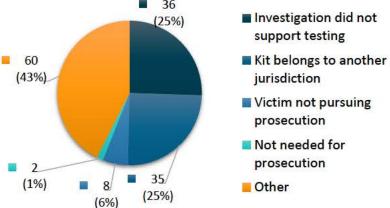
This category includes kits that LEAs chose not to submit to a laboratory because the victim declined to pursue prosecution (four kits) or recanted (four kits).

Figure 2: Reasons SAE Kits

Not Sent to Laboratory

36
(250)

Investigation



These 217 kits were collected between 1990 and 2017. They were not required to be entered into the SAFE-T database but were entered voluntarily.

The investigation did not support testing (36 kits)

Kits in this category were not submitted to a laboratory because investigators could not substantiate that a crime had occurred (14 kits), the allegations were determined to be unfounded (18 kits), or there was insufficient evidence that a crime occurred (four kits).

The kit belongs to another jurisdiction (35 kits)

If a victim undergoes a sexual assault examination in a jurisdiction other than the one where the alleged assault occurred, an LEA that does not have jurisdiction over the case may receive the kit and take a courtesy report. That LEA may then hold the kit in its inventory until the jurisdictional agency takes possession. A total of 35 kits had not been submitted to a laboratory because they were pending transfer to the correct jurisdiction.

Testing was not needed for prosecution (two kits)

LEAs reported **one** kit that was not submitted to a laboratory because a known suspect had claimed the interaction was consensual, and **one** kit that was not tested because the suspect had already confessed or pled guilty.

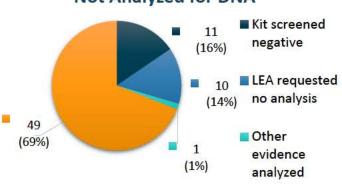
Other or No reason provided (60 kits)

If none of the listed reasons on the LEA entry screen in the SAFE-T database apply, the agency may select "Other" and provide an optional explanation. For 35 kits that were not submitted to a laboratory, the agency selected "Other." For the remaining 25 kits that were not submitted to a laboratory, the field was left blank.

Kits Analyzed for DNA

The status of the DNA analysis was reported for 6,853 (96%) of the 7,133 kits sent to a laboratory: 6,689 kits had DNA testing completed, 93 kits were pending or undergoing testing, and 71 kits were not going to have DNA typing done. Reasons provided for the 71 kits that were received by a laboratory but not typed for DNA, include: the kit screened⁷ negative⁸ (11), the LEA requested the kit not be analyzed (10), the case had other evidence analyzed (one), or "Other" (49) (see Figure 3).

Figure 3: Reasons SAE Kits Not Analyzed for DNA



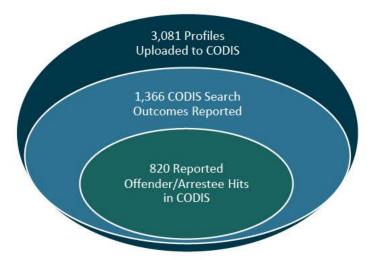
^{7 &}quot;Screening" usually refers to biological screening for the components of semen when the case history indicates a male perpetrator; this testing may not involve DNA analysis.

No DNA typing was conducted in these instances because the samples screened negative for semen or no male DNA was detected at DNA quantitation.

CODIS Profiles Generated

Of the 6,689 SAE kits for which laboratories had completed DNA analysis, 3,081 (46%) yielded potentially probative DNA profiles that were uploaded to CODIS. Out of those 3,081 records, 1,366 (44%) indicated a CODIS search outcome, i.e., whether or not there was a DNA hit to an "offender/arrestee."9 An offender/arrestee hit was reported for 820 of those 1,366 records, which accounts for 60% of the total kits for which a CODIS search outcome was reported in the SAFE-T database (see Figure 4).

Figure 4: CODIS Uploads to Reported CODIS Hits



Kits Without CODIS Profiles

The analysis of an SAE kit does not always

yield a DNA profile suitable for upload to CODIS. The data from records created in 2023 showed that no CODIS profiles were obtained from 3,607 (54%) of the 6,689 kits for which analysis was completed. Reasons were provided in 2,809 (78%) of these cases. For 2,783 of these kits, no DNA foreign to the victim was detected, or the foreign DNA was insufficient or too degraded to develop a CODIS-eligible DNA profile. The remaining 26 kits contained a complex mixture of DNA from two or more individuals that was unsuitable and/or ineligible for upload to CODIS.

Penal Code section 680.3 requires LEAs to report in the SAFE-T database if a kit generated a potentially probative DNA profile, but does not require reporting of the outcome of the CODIS search. Any data captured here was entered voluntarily.

Sexual Assault Evidence Kits: Processing Times

Penal Code section 680, subdivision (c) sets timelines for the processing of DNA evidence in sexual assault cases. Though these timelines were merely recommendations through the end of 2019, they became mandates on January 1, 2020. LEAs are required to either submit SAE kits to crime laboratories within 20 days of booking the kits into evidence, or to ensure that their crime laboratory has a rapid turnaround DNA program in place. Crime laboratories are required to process SAE kits for DNA within 120 days of receipt at the laboratory or send the kit to another laboratory as soon as possible, but no later than 30 days after receipt. These mandatory processing times apply to sexual assault evidence booked into evidence by an LEA or received by a crime laboratory on or after January 1, 2016.

This section discusses the duration between various milestones. See Table 1 (page 11) for descriptive statistics for process durations and Figure 6 (page 12) for an illustration of the SAE kit lifecycle.

Duration from the incident to the medical exam. All **7,274** kit records created in 2023 include both the incident and medical exam dates. For **5,425** kits (75%), the alleged assault incident and the medical exam took place on the **same or following day**. The interval between the incident and medical exam was **two days** for **812** kits (11%), **three days** for **481** kits (6%), and **more than three days** for **556** kits (8%). As the time interval between the incident and the kit collection increases, the likelihood of obtaining the perpetrator's DNA diminishes rapidly.

Duration from the medical exam to the LEA's receipt of the kit. The SAFE-T records for **4,108** kits had both recorded medical exam dates and LEA receipt dates. **Six** kits were excluded from analysis because the reported date of receipt by the LEA preceded the exam date. SAE kits were typically released to an LEA within **one day** of the medical exam.

Duration from the medical exam to the receipt of the kit by the laboratory. There were **6,829** kits that included both the medical exam date and the date the kit was received by the first laboratory. **Two** kits were excluded from analysis because the reported date of receipt by the laboratory preceded the exam date. The median duration from the date the medical exam was completed to the date the kit was received by the laboratory was **five days**.

Duration from the laboratory's receipt of the kit to upload of a DNA profile to CODIS. Of the 3,081 kits that yielded CODIS-eligible profiles, **3,010** had both the date received by the first laboratory and the date a DNA profile was uploaded to CODIS. Six kits were excluded from analysis because the reported CODIS upload date preceded the date the kit was received by the laboratory. It took a laboratory a median of **89** days to develop a CODIS-eligible DNA profile from an SAE kit sample and upload it to CODIS.

Duration from the laboratory's receipt of the kit to release of the DNA report. There were 6,592 kit records that included both the date the laboratory received the kit and the date the DNA report was released. The median duration from the date the laboratory received the kit to the date the DNA report was released was 85 days (see Figure 5).

Duration from the medical exam to the release of the DNA report. There were 6,682 kit records that included both the date of the medical exam and the date the DNA report was released. The median duration of the overall process, from the date of the medical exam to the laboratory's release of a DNA report, was 99 days (see Figure 5).

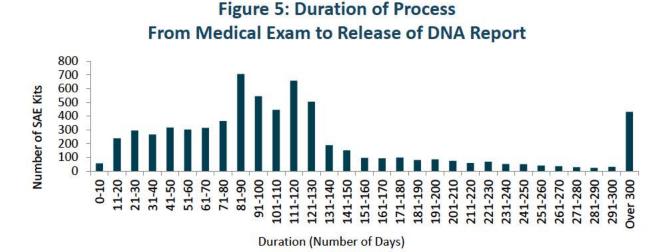


Table 1: Duration of Sexual Assault Evidence Kit Processes, in Days

Process	Number of Records	Median	Mode	Average	Standard Deviation	Min	Max
Incident to Medical Exam	7,274	1	0	3	120	0	9,920
Medical Exam to LEA	4,108	1	0	14	189	0	7,065
LEA to Send to Lab	3,012	3	0	48	339	0	6,295
LEA Sent to Lab Receipt	2,623	0	0	9	116	0	2,314
Medical Exam to Lab Receipt	6,829	5	2	132	836	0	12,026
Lab Receipt to CODIS Upload	3,010	89	87	185	628	3	6,467
Lab Receipt to DNA Report	6,592	85	83	138	446	0	6,364
Medical Exam to DNA Report	6,682	99	87	269	966	0	12,189

Figure 6: Lifecycle of SAE Kit with Typical Duration in Median Days

