

OFFICE OF THE ATTORNEY GENERAL

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**SEXUAL ASSAULT FORENSIC EVIDENCE TRACKING
DATABASE ANNUAL REPORT TO THE LEGISLATURE
CALENDAR YEAR 2022**



DIVISION OF LAW ENFORCEMENT

BUREAU OF FORENSIC SERVICES

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 maintain their own local crime laboratories and process their own SAE kits.

Law enforcement agencies (LEAs) that investigate cases involving SAE kits and public crime laboratories that analyze this evidence are required 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 fifth annual report includes information collected from SAFE-T kit records created by LEAs and public crime laboratories from all 58 counties between January 1 and December 31, 2022.

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 2017 passage 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

¹ These counties are: Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Kern, Los Angeles, Orange, Sacramento, San Bernardino, San Diego, and Ventura.

- 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.

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

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

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. 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

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.

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.

2022 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, 2022 and December 31, 2022. To include later status updates for all SAE kit records, especially those collected at the end of 2022, the data for this report was extracted from SAFE-T on May 4, 2023. Any kit status updates made after May 4, 2023 are not captured in this report.

The Penal Code section 680.3 mandate only applies to victim SAE kits collected on or after January 1, 2018. A total of **6,989** kit records were created in SAFE-T in 2022, comprising **6,847** records created for SAE kits that were collected on or after January 1, 2018, as required by section 680.3, and another **142** records that were voluntarily created by LEAs and crime laboratories for kits collected prior to 2018.

2022 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 **6,989** kit records created in 2022, as of May 4, 2023 (see Figure 1):

- **6,209** kits had DNA analysis completed
- **132** 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
- **229** kits had been received by a laboratory but had not yet been analyzed
- **143** kits were undergoing DNA analysis
- **71** kits were sent to a laboratory but would not be analyzed for DNA

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.

Reported Status of 2022 SAE Kits as of May 4, 2023

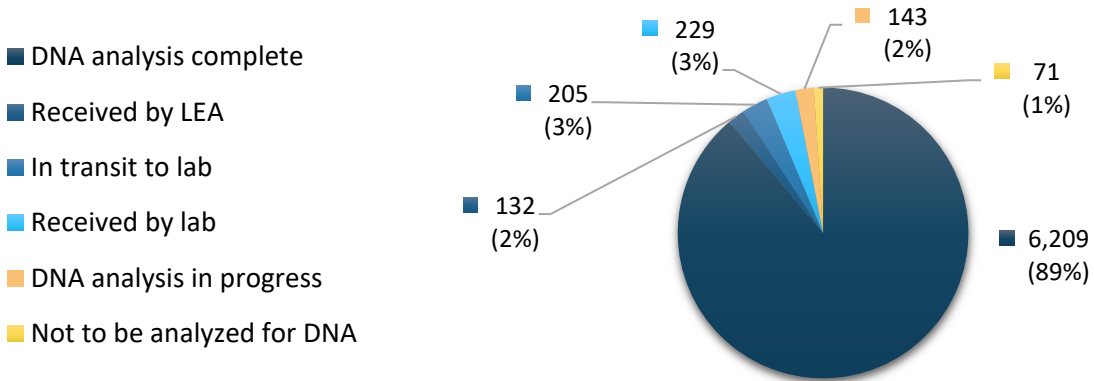


Figure 1. Point-in-Time Status of 2022 Victim SAE Kits as of May 4, 2023.

Records Created in SAFE-T

LEAs and crime laboratories created **6,989** new SAE kit records in SAFE-T between January 1, 2022 and December 31, 2022. A total of **6,064** SAE kits (87%) were collected in 2022, **732** (10%) were collected in 2021, **25** (<1%) were collected in 2020, **17** (<1%) were collected in 2019, **nine** (<1%) were collected in 2018, and **142** (2%)⁶ were collected prior to 2018.

Of the 6,989 SAE kit records created in 2022, **6,847** (98%) were required to be entered into the SAFE-T database within 120 days of collection pursuant to Penal Code section 680.3. The majority of those 6,847 kits, **6,016** (88%), were entered into the database within 120 days of the date the SAE kit was collected. Of the remaining **831** (12%) SAE kit records that were created more than 120 days after the date the kit was collected, **728** (11%) were created within one year of collection, **69** (1%) were created within two years, and **34** (<1%) were created more than two years after the kit collection date.

Kit Locations and Crime Laboratory Submission

As of May 4, 2023, **6,857** (98%) of the 6,989 kits had been sent to a laboratory and **132** kits (2%) had been retained by an LEA. Of the 6,857 kits sent for laboratory analysis, **259** kits (4%) were sent from one CODIS LDIS laboratory to a secondary LDIS laboratory and **320** kits (5%) were sent to a private vendor laboratory. Of the 6,857 kits sent to a laboratory, **5,112** (75%) were standard SAE kits, **1,539** (22%) were RADS/mini kits, and the records for **206** 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 reasons **132** SAE kits were not submitted to a laboratory are summarized as follows (see Figure 2):

The victim was not pursuing prosecution (14 kits)

This category includes kits that LEAs chose not to submit to a laboratory because the victim declined to pursue prosecution (**11** kits), wished to remain anonymous⁷ (**one** kit), recanted (**one** kit), or could not be located (**one** kit).

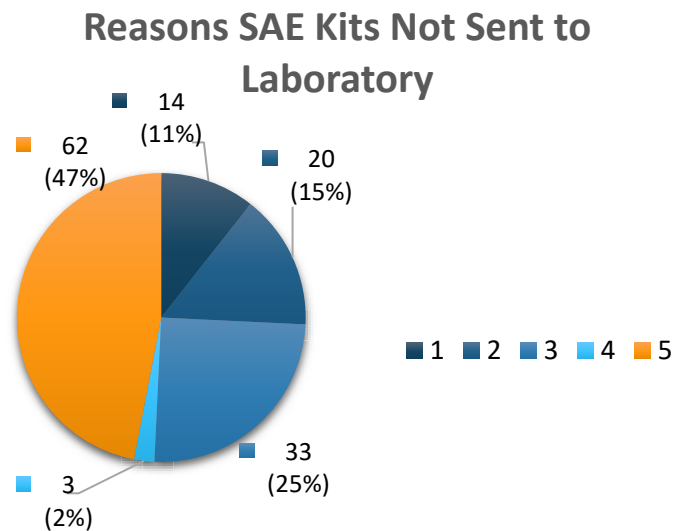


Figure 2. Reasons SAE Kits Were Not Sent to a Laboratory.

⁶ These 142 kits were collected between 1999 and 2017. They were not required to be entered into the SAFE-T database but were entered voluntarily.

⁷ Kits collected from victims who wish to remain anonymous may be retained by the medical facilities that collected them or submitted to LEAs or crime laboratories.

The investigation did not support testing (20 kits)

Kits in this category were not submitted to a laboratory because investigators could not substantiate that a crime had occurred (**12** kits), the allegations were determined to be unfounded (**four** kits), or there was insufficient evidence that a crime occurred (**four** kits).

The kit belongs to another jurisdiction (33 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 **33** kits had not been submitted to a laboratory because they were pending transfer to the correct jurisdiction.

Testing was not needed for prosecution (three kits)

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

Other reasons (62 kits)

The LEA entry screen in the SAFE-T database provides options to designate the reason a kit is not submitted to a laboratory. If none of the listed reasons apply, the agency may select “Other” and provide an optional explanation. This was the case for **35** kits that were not submitted to a laboratory. “Other” explanations commonly noted in SAFE-T may be broadly summarized as:

- The case is pending investigation/assignment or is being actively investigated
- The case was rejected by the district attorney
- The kit is unsuitable for testing

One kit was not submitted to a laboratory because it was no longer linked to an investigation. No reason was given for not submitting the remaining **26** kits to a laboratory.

Kits Analyzed for DNA

The status of the DNA analysis was reported for **6,423** (94%) of the 6,857 kits sent to a laboratory: **6,209** kits had DNA testing completed, **143** kits were 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 screened⁸ negative⁹ (**39**), the LEA requested the

kit not be analyzed (**four**), the district attorney requested the kit not be analyzed (**one**), the case had other evidence analyzed (**three**), or “Other” (**24**) (see Figure 3, page 8).

Reasons SAE Kits Not Analyzed for DNA

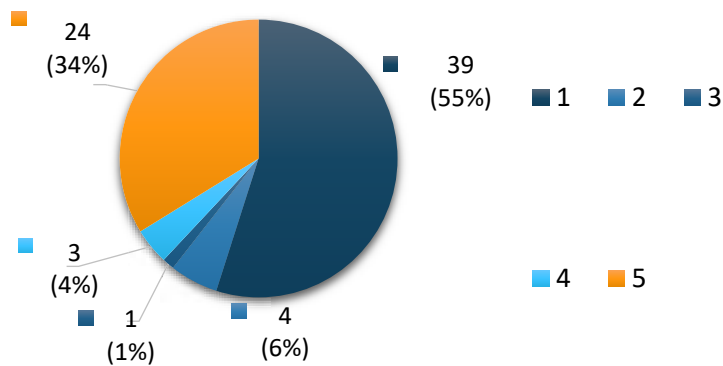


Figure 3. Reasons SAE Kits Were Not Analyzed for DNA.

CODIS Profiles Generated

Of the 6,209 SAE kits for which laboratories had completed DNA analysis, **3,046** (49%) yielded potentially probative DNA profiles that were uploaded to CODIS. Out of those 3,046 records, **1,449** (48%) indicated a CODIS search outcome, i.e., whether or not there was a DNA hit to an “offender/arrestee.”¹⁰ An offender/arrestee hit was reported for **868** of those 1,449 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).

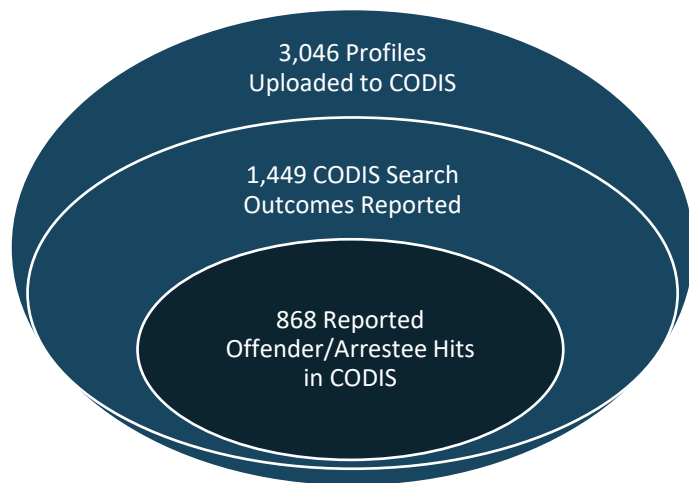


Figure 4. CODIS Uploads to Reported CODIS Hits.

Kits Without CODIS Profiles

The analysis of an SAE kit does not always yield a DNA profile suitable for upload to CODIS. The

⁸ “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.

⁹ No DNA typing was conducted in these instances because the samples screened negative for semen or no male DNA was detected at DNA quantitation.

¹⁰ 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.

data from records created in 2022 showed that no CODIS profiles were obtained from **3,163** (51%) of the 6,209 kits for which analysis was completed. Reasons were provided in **2,367** (75%) of these cases. For **2,337** 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 **30** kits contained a complex mixture of DNA from two or more individuals that was unsuitable and/or ineligible for upload to CODIS.

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 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 of the **6,989** kit records created in 2022 include both the incident and medical exam dates. For **5,108** kits (73%), 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 **827** kits (12%), **three days** for **492** kits (7%), and **more than three days** for **562** 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 **4,403** kits had both recorded medical exam dates and LEA receipt dates. **One** kit was 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 **6,487** kits that included both the medical exam date and the date the kit was received by the first laboratory. **One** kit was 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 3,046 kits that yielded CODIS-eligible profiles, **2,926** had both the date received by the first laboratory and the date a DNA profile was uploaded to CODIS. **Three** 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 **88** days to develop a CODIS-eligible DNA profile from an SAE kit sample and upload it to CODIS.

Duration from the medical exam to the release of the DNA report. There were **6,207** 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 **95 days** (see Figure 5).

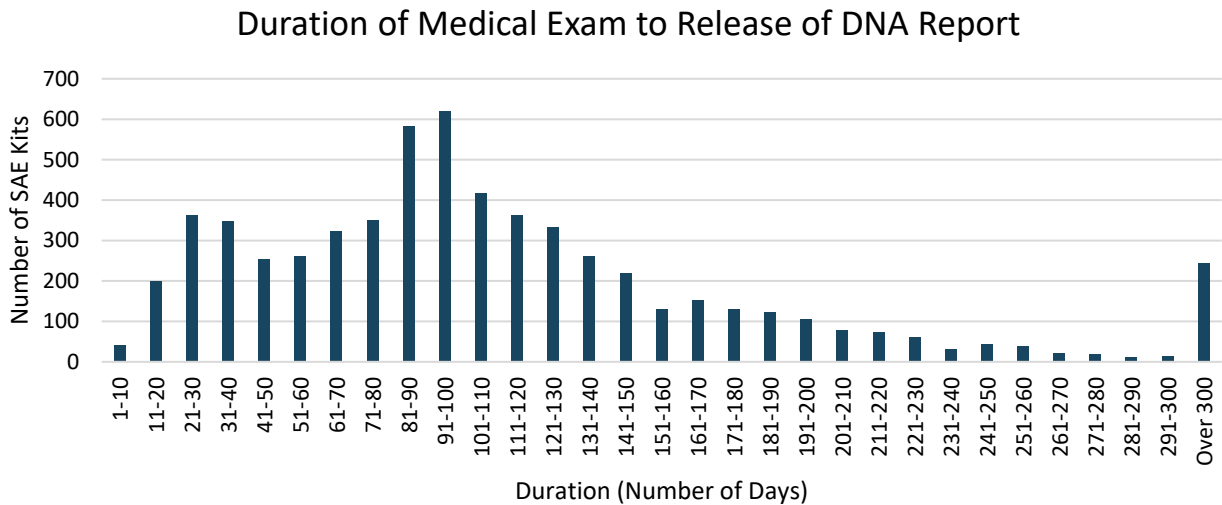


Figure 5. Histogram of Duration from Medical Exam to DNA Report Release.

Duration of Sexual Assault Evidence Kit Processes, in Days

Process	Number of Records	Median	Mode	Average	Standard Deviation	Min	Max
Incident to Medical Exam	6,989	1	0	4	169	0	13,881
Medical Exam to LEA	4,403	1	0	9	108	0	5,766
LEA to Send to Lab	3,374	4	0	16	90	0	3,294
LEA Sent to Lab Receipt	2,869	0	0	8	173	0	6,873
Medical Exam to Lab Receipt	6,487	5	2	71	499	0	7,698
Lab Receipt to CODIS Upload	2,926	88	87	101	77	0	1,046
Lab Receipt to DNA Report	6,045	85	85	93	65	0	1,332
Medical Exam to DNA Report	6,207	95	91	167	519	0	7,798

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

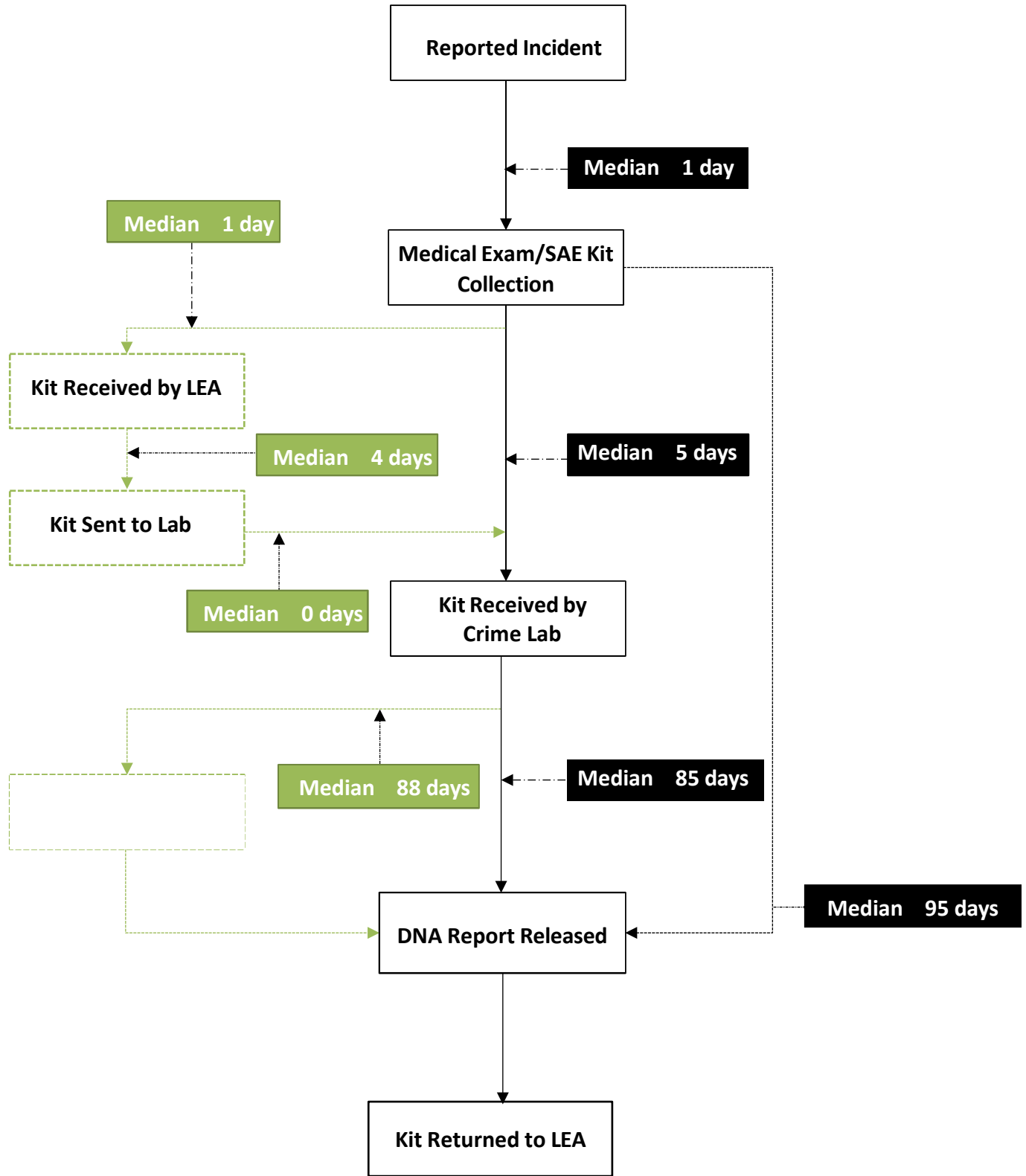


Figure 6. Lifecycle of SAE Kit with Typical Duration in Median Days.