



State of Illinois  
Illinois State Police  
Brendan Kelly, Director

# FY 2025 DNA Testing Accountability Report

in accordance with ILCS 730 5/5-4-3a



Illinois State Police



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### OVERVIEW

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By statute, the Illinois State Police (ISP), through its Division of Forensic Services (DFS) Forensic Sciences Command (FSC), provides forensic science analytical services to more than 1,200 state, county, and local criminal justice agencies. The ISP forensic science laboratory system, established in 1942, has long been recognized as one of the largest crime laboratory systems in the world. The ISP system, currently comprised of seven operational (caseworking) laboratories and a Training and Applications laboratory, analyzes evidence from criminal cases in the following specialty areas: drug chemistry, trace chemistry, toxicology, biology, latent prints, firearms/toolmarks, and footwear/tiretracks. In FY24, the ISP DFS added the Digital Crimes Unit as the newest specialty area in forensic analysis. Each operational laboratory serves a specific geographical region of the state, providing forensic science analysis of evidence collected from crimes in that region. Whenever possible, the ISP laboratories assist each other in analyzing cases from other regions in an effort to provide more timely service to all Illinois agencies.

As outlined in the FY21 and FY22 reports, the most significant, and time intensive, initiative has been the completion of the development and the statewide implementation of a Laboratory Information Management System (LIMS). After years of design, development, and testing, the ISP went live with the system on December 3, 2018. Over the course of FY25, the ISP has continued to make modifications and improvements to the LIMS to ensure it continues to meet the needs of the Forensic Sciences Command and the criminal justice system. Implementation resulted in a wide variety of changes to most lab operations, including evidence receiving/returning, evidence tracking, documentation of case analysis, and reporting of results. In FY19, ISP began defining backlog as any unfinished assignment (i.e., work requested on a case) in a section, regardless of when it was submitted. In previous years, backlog was defined as unfinished cases (in-progress or unstarted) in the section *for more than 30 days*. In addition, the LIMS has enabled the ISP to better track all the work that has been requested by agencies and State's Attorneys' Offices, resulting in additional types of assignments now being included in backlog figures. As analysts grew more familiar with the new LIMS system and issues were resolved, productivity levels in all sections of the laboratory system quickly improved. In FY25, the ISP laboratory system received a total of 65,459 assignments and completed analysis on 65,236 assignments. As of the end of FY25, the total forensic assignments on the backlog were 8943; this includes assignments in all sections in all laboratories.

In FY19, ISP also began reporting Forensic Biology and DNA activities as one combined section called "Biology." This takes into account that the same personnel conduct both forensic biology (screening) and DNA analysis. In addition, a single case may include multiple assignments within

the section depending on the analysis requested by the submitting law enforcement agency. This is a more accurate representation of submissions, backlog, and completed analysis within this section.

The ISP continues to maintain its long-standing commitment to providing high quality services to the Illinois criminal justice system. To that end, the ISP forensic laboratory system adheres to an extensive Quality Assurance (QA) program. The emphasis of the QA program is on prevention and/or correction of analytical problems and providing a course of action if the quality of the work/result is questioned. A key component of the QA program is accreditation. The ISP laboratory system was the first in the world to become accredited through the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) in 1982. Since then, the laboratories have continuously maintained accreditation under the strictest criteria. In 2023, ISP laboratories successfully underwent a reaccreditation assessment and, in doing so, continued to maintain accreditation status under the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) criteria. This ISO accreditation was originally granted in 2005 by Forensic Quality Services – International (FQS-I) under ISO/IEC 17025 and FQS-I Forensic Requirements for Accreditation. ISO accreditation has been maintained since that time, currently through the American National Standards Institute-American Society of Quality (ANSI-ASQ) National Accreditation Board (ANAB), with periodic on-site assessments to ensure continued compliance. All the 356 employees assigned to the Forensic Sciences Command – including Forensic Scientists, Evidence Technicians, forensic science managers, and support staff – adhere to the ISO accreditation criteria and standards to ensure the work provided by the ISP laboratories is of the highest quality.

## ***THE BIOLOGY PROGRAM – MEETING THE NEEDS OF AGENCIES***

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The ISP Biology Program consists of two components: **casework** and **offender database**.

The **casework** component involves the forensic analysis of evidence from crime scene cases submitted to the ISP laboratories by any Illinois law enforcement agency. In order to positively impact backlogs and improve turnaround times in the Biology section, the ISP is continuously evaluating and implementing new efficiency measures. In 2018, ISP implemented the efficiency measure called the “Direct to DNA” approach, which eliminates the screening of biological material on certain types of evidence. As noted in the FY22 report, the ISP has also implemented the new efficiency of utilizing advanced robotics in the three largest laboratories. The implementation of the new robotics initially slowed the productivity of the scientists, which was expected. However, overall productivity has quickly improved as workflows were finalized and the use of the robotics became second nature to the scientists. Both efficiency measures are anticipated to continue to reduce delays in case analysis and to reduce the overall turnaround time of the case. In certain situations, screening items will still be necessary in order to identify suitable and probative (i.e., can potentially help solve the case) biological material. For example, screening a bloody bedsheet from a murder victim’s home for biological material left by the suspect may be important investigative information, while finding the victim’s blood on the victim’s clothing may not provide any probative information. Once sufficient biological material is found through the screening process, or because of the Direct to DNA process, the evidence undergoes DNA analysis. The DNA profile developed from the evidence is then compared to known standards from a victim and/or suspect to determine the source of the profile. If a suspect is not known, the evidence DNA profile may be entered, and searched against, the state and national DNA database known as the Combined DNA Index System (CODIS).

In the **offender database** component of the ISP Biology Program, all convicted felons in Illinois, as well as some other individuals as allowed by law, are required to submit a biological sample for DNA typing and inclusion in CODIS. In CODIS, when an unknown DNA profile developed from evidence matches a known offender's DNA profile, or when an unknown DNA profile from one crime matches an unknown DNA profile from another crime, the match is referred to as a "hit." A CODIS hit gives police the ability to identify possible suspects to a crime or link crime scenes, thus providing crucial investigative information to help solve the crime.

To ensure the needs of all aspects of the criminal justice system are met, each ISP laboratory works with law enforcement and criminal justice entities to prioritize assignments based on investigative and court needs. When a law enforcement agency submits case evidence to the laboratory for analysis, ISP tracks the "assignment" or work requested on the case. A single case may consist of multiple assignments, either within a section or among multiple sections in the laboratory. This is a more accurate way to track the work requested by law enforcement agencies. Upon submission of evidence, the submitting agency communicates their priority to the laboratory, including a specific date when results are needed, if applicable. When the laboratory is prioritizing assignments, factors which would warrant a higher priority include assignments which have an established court date, a subpoena, or court order associated with the forensic analysis; rush assignments to meet an urgent investigative need, such as in the instance of a suspected serial murderer; and violent (versus property) crime assignments. The ISP laboratory considers the submitting agency's requested priority for a particular assignment in conjunction with the priority of assignments already submitted by other agencies to determine the order in which assignments will be processed. For example, one agency may submit an assignment stating results are needed for court in two weeks. That same day, another agency may submit a "rush" assignment stating results are needed within 48 hours before the murder suspect is released from custody. A third agency submits a routine burglary assignment later that day. The priority order for those three assignments would be: first, the "rush" assignment needing results in 48 hours; second, the assignment needing results for court in two weeks; and third, the routine burglary assignment. This process is used to ensure court dates are met and rush assignments are completed to meet the needs of the user agencies.

These priorities are constantly reviewed by laboratory management and adjusted as needed to accommodate the submission of additional priority assignments. If necessary, ISP laboratories transfer evidence to other ISP laboratories as an internal approach to meet the priority needs of the criminal justice system.

## **BIOLOGY ASSIGNMENTS**

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As previously stated, the ISP now counts assignments in the Biology section (forensic biology and DNA together). The number of Biology assignments received in the ISP laboratories represents 26 percent of the total number of assignments received in FY25 for all forensic disciplines within the ISP forensic laboratory system. The following Table 1 compares FY24 and FY25 Biology submission figures.

**Table 1. Biology Submissions\***

	FY24	FY25	% Difference from FY24	% of Total FY25 Assignments
<b>Biology</b>	18,049	16,765	7%	26%

\*Submission figures are based on initial submissions and do not reflect subsequent activity such as agency case cancellations or other activities.

In accordance with 730 ILCS 5/5-4-3a, the ISP is required to include in the reported backlog the number of cases still in the custody of law enforcement agencies which had not yet been submitted to an ISP laboratory (if notified by these agencies in writing by June 1 of each year). During FY25, the ISP had not received notification from any agency under this particular statute. Beginning in January 2016, pursuant to 730 ILCS 5/5-4-3a, the ISP is required to report backlog statistics quarterly, which can be found at <https://isp.illinois.gov>.

## **BIOLOGY ASSIGNMENT BACKLOG**

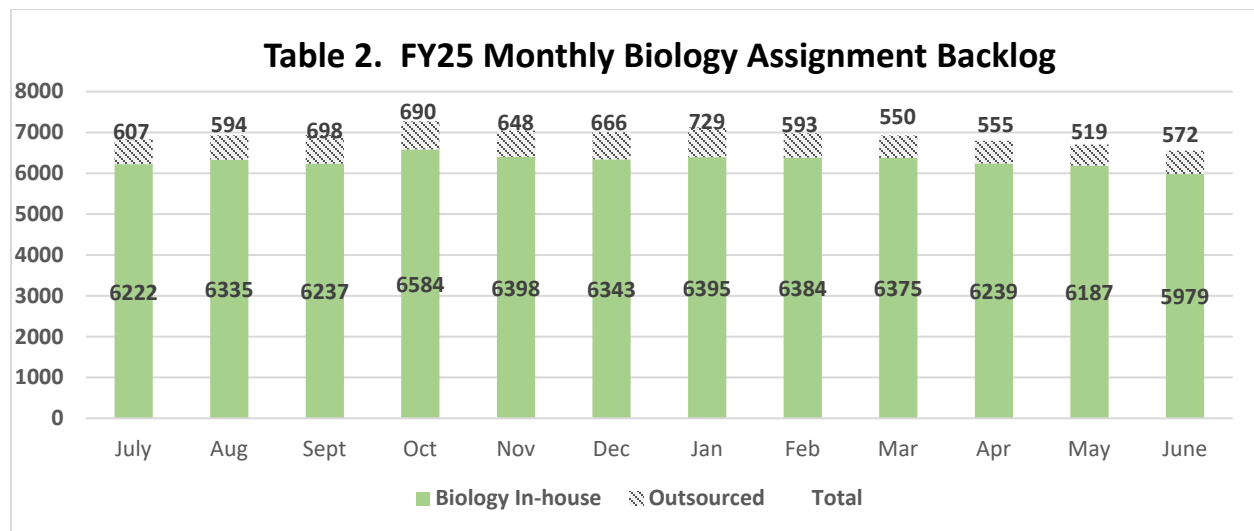
Through ongoing evaluation and implementation of various technology and efficiency measures, the Biology section continues to seek ways to enhance services while reducing backlogs and improving turnaround times of Biology assignments completed in-house. However, it must be noted that laboratories do not control the number of cases being investigated and subsequently submitted for analysis by agencies. While an agency may submit one case to the laboratory, it may result in several assignments within the laboratory. When the number of assignments received exceeds the capacity of the laboratory staff to conduct the analysis, a “backlog” occurs. Effective January 1, 2019, the ISP now defines backlog as any unfinished assignment (i.e. work requested on a case) in a section, regardless of when it was submitted. In previous years, backlog was defined as any unfinished case (in-progress or unstarted) in the section for more than 30 days. This backlog includes all assignments that are currently in-process of analysis and those, which are not yet started. The time needed to complete analysis on an assignment can vary due to any number of factors including the complexity of the case, the number of exhibits in the assignment, or the number of additional items of evidence submitted over a period of weeks or months of an ongoing investigation.

The monthly Biology backlog for FY25 is shown in the following Table 2. The ISP has been outsourcing Biology assignments for several years as part of its efforts to reduce backlogs. The ISP shipped a total of 2,373 assignments from various case types such as sexual assault and other types of cases to the outsourcing vendor during FY25. At the end of FY25, the Biology backlog was 6,551 assignments; of these, 572 assignments were outsourced assignments currently in-progress at the outsourcing vendor laboratory or back at ISP pending final laboratory review. The FY25 Biology backlog was 2 percent lower than the FY24 amount (6,677 cases). It should be noted that during FY25 there was a 7 percent decrease in submissions. This was the primary factor for the decrease in the backlog during FY25 because there was also a 6.5 percent reduction of forensic scientists in the Biology section. Although there was a decrease in personnel, there was only a 2 percent decrease in productivity with the Biology section completing 16,395 assignments in FY25. The LIMS system, efficiencies previously implemented, and the full implementation of new technologies will continue to aid in reducing the Biology backlogs. New technologies require training of forensic scientists, time for scientists to become familiar with the



new systems, completion of pilot projects and competency testing, all of which impact the completion of casework. However, these new technologies are critical to implement since they improve the ability of the laboratory system to conduct and provide state-of-the art DNA analysis to the citizens of Illinois.

During FY23, the Biology section reached a major milestone by achieving compliance with 725 ILCS 202/15 (Sexual Assault Evidence Submission Act). This was the first time since the passing of this law back in 2010 that the ISP met the goal of processing sexual assault evidence in under 180 days. During FY25, the ISP continued to process all sexual assault evidence in under 180 days. The ISP is committed to reducing the overall analysis time for sexual assault evidence and will continue to strive to reduce the overall analytical time for all cases.



As noted in Table 3 below, during FY25, the ISP analyzed 16,395 Biology assignments within the laboratory system. The ISP is committed to reducing the backlog and continues to pursue various avenues to accomplish this while still maintaining the highest quality standards of casework. These avenues included fully implementing probabilistic genotyping which allows for automating the time-consuming interpretation of mixture samples. It allows for consistent, reliable interpretations in shorter time frames. In addition, as resources allow in FY25, the ISP will continue to outsource Biology assignments as an effort in reducing the overall Biology backlog. However, any outsourcing program requires significant non-analytical time on the part of forensic scientists to perform various tasks associated with the effort. Such tasks include receiving, triaging, and preparing evidence for shipment; performing quality assurance checks of the vendor's analysis; technically reviewing the analytical data received from the vendor; and uploading appropriate DNA profiles into CODIS. Once all outsourcing initiatives are completed, the scientists assigned to perform those duties can be redirected to assist in reducing the in-house case backlog. Furthermore, the ISP is in the process of implementing other initiatives such as placing additional automated instruments into service and streamlining the workflow by triaging evidence as further ways to reduce the backlog and improve the turnaround time of the analysis of evidence.

### Table 3. Biology Backlog and Outsourcing Analysis

NOTE: Comparisons between past case figures and current assignment figures are difficult because a single case may consist of multiple assignments. LIMS has enabled the ISP to better track all the work that has been requested, resulting in additional types of assignments now being included in backlog figures, which had not been previously included. Backlog is defined as all in-progress or unstarted assignments in the section regardless of when they were submitted.

	Biology	
	FY24	FY25
Total pending assignments as of June of the previous fiscal year	5,925	6,677
Assignments submitted to the labs	18,049	16,765
Assignments worked (in-house and outsourced)	16,731	16,395
Assignments outsourced with grant funding*	1,622	71
Assignments outsourced with state funding*	650	2,350
Total number of backlog assignments at ISP (in-house)	5,989	5,979
Total number of backlog assignments at vendor laboratory (outsourced but not yet completed)	688	572
TOTAL BACKLOG* Assignments (in-house and outsourced)	6,677	6,551

\* Table reflects outsourced cases completed during the specified fiscal year as reflected in LIMS.

### **Funding**

NOTE: With one exception, funding figures included in this section of the report are estimates from February 2025 budget projections since FY25 accounting records were not yet closed as of the date of this report.

During FY25, the ISP expended a total of \$31.3 million in state funds on the Biology program, including both casework and offender samples. This figure is a 37.9 percent increase from the \$22.7 million expended in FY24. During FY25, laboratories were able to purchase additional automated equipment for the Biology section. Furthermore, during this fiscal year there was a 39% decrease in grant funding available, therefore state funds were used to cover outsourcing costs. Also included in the FY25 total is \$9.8 million from the State Crime Laboratory Fund.

As it has been for many years, the ISP continues to aggressively pursue federal grant dollars to supplement state funding to aid in addressing the Biology backlog and to build in-house capacity. In FY25 this practice helped the ISP address the Biology backlog through outsourcing, the use of overtime, and the purchase of additional commodities and equipment. In this way, the ISP was able to ensure more cases were analyzed than would have been worked using state funds alone. In FY25, the ISP spent \$2.2 million in federal grant funds, which is a 38.9 percent decrease from FY24 (\$3.6 million). Table 4 below lists estimated FY25 grant expenditures. Additional grant funding is currently being pursued.

**Table 4. FY25 Biology Grant Expenditures**

Grant	Funds Expended
BJA 2023 DNA Capacity and Backlog Reduction Grant	\$1,664,611
BJA 2024 DNA Capacity and Backlog Reduction Grant	\$547,400

Commodity and equipment costs for DNA analysis are very high. If significant cuts to the state budget are mandated or the ability to spend federal grant money is curbed, there will be insufficient funds to purchase necessary supplies, resulting in unworked assignments and an increase in the backlog.

As in past fiscal years, one hindrance to the timely purchase of forensic equipment and commodities continues to be the lengthy and complex state procurement process. As additional steps continue to be added to the procurement process, this exacerbates the delays in obtaining necessary supplies and equipment. The expensive DNA commodities have a short shelf life before expiration; therefore, large quantities cannot be maintained in the laboratories but need to be ordered as necessary. Any delays in the procurement approval process can have an immediate impact on laboratory operations, causing laboratories to run out of critical supplies, stopping analysis, and causing an increase in the backlog or even missed court dates. Additionally, the ISP has experienced delays in the procurement of services (e.g., training scientists in new techniques or attending training opportunities required by laboratory accreditation), which have a direct impact on ISP's ability to quickly obtain and implement new technology and efficiency measures.

### **Personnel**

As of June 30, 2025, the ISP employed a total of 58 fully trained forensic scientists working on Biology assignments or performing analytical-related activities. This figure is down from the FY24 staffing levels of 60. The current staffing level is insufficient to address the current number of assignments submitted by law enforcement agencies. Based on the number of submissions and current technology, the ISP has determined a staffing level of 90 scientists in the Biology section is needed, supported by evidence technicians, technical DNA managers, clerical, and maintenance personnel, to not only address additional submissions, but to also continue to reduce the backlog in the Biology section. In FY24, ISP hired 13 Biology trainees and their expected release date is May 2026. While the ISP was given approval to hire 12 experienced forensic scientists in FY23, two experienced analysts will start their ISP employment in the first quarter of FY26. In the latter half of FY24 and most of FY25, ISP experienced significant delays in the hiring process which impacted ISP's ability to fill these positions. Individuals who initially expressed interest in the positions declined or some were determined to be ineligible.

It should be noted that ISP's Forensic Scientists in the Biology section are well qualified and highly trained, but the process of hiring and training them takes significant time; thus, the impact of any new hires is not immediate. The ISP cannot fill forensic science vacancies as they occur; and once approval is given, the hiring process generally takes 12 to 18 months. Full training of a Forensic Scientist in both screening of biological fluids and DNA techniques currently takes approximately 19-24 months. In order to meet increase training capacity while maintaining the quality of training, the ISP hired a second Biology Training Coordinator to increase training capacity. Additionally, for FY26, ISP will procure classes in statistics and the foundations of probabilistic genotyping to assist with reducing the training timeline.



To aid in the further reduction of the Biology section backlog in FY22, the ISP developed and implemented a new training plan for the expanded use of Biology/DNA Evidence Technicians (ETs) and non-DNA forensic scientists in DNA evidence processing. The first phase of the training plan expanded the ability of ETs and non-DNA scientists to inventory evidence samples utilizing a clean technique approach. The second phase of the plan trained the ETs and non-DNA scientists to swab and/or cut evidence samples for DNA analysis. At the end of FY25 a total of 49 individuals had been trained to assist the Biology section with evidence processing. It is anticipated that another 10 individuals will be trained in this process in FY26.

Any progress the ISP makes in reducing backlogs can be immediately impacted when any Forensic Scientist vacancy occurs. More significantly, without the timely filling of non-scientific laboratory support and forensic supervisory positions, fully trained Forensic Scientists have to perform critical evidence technician, managerial, and clerical duties rather than analyze cases. This specific situation was recognized in Recommendation #5 in the Office of the Auditor General (OAG) report released in March 2009. Specifically, the OAG stated on page 38, "Failure to maintain the necessary staffing levels results in cases remaining unsolved and serial criminals could remain free to commit additional crimes. The ISP's inability to fill lost forensic positions has resulted in staff performing work outside of their official duties, which increases the backlog of forensic cases submitted to the labs."

As noted in previous reports, this situation continues to occur in the Biology section, as well as in all the different forensic disciplines in the ISP laboratory system. A review of staffing levels from 2009 through 2024 shows that through normal attrition, the ISP loses an average of 13 (5.8 percent of total) experienced Forensic Scientists each year. Managerial and support staff attrition has averaged 12 individuals lost (approximately 8.6 percent of such positions) annually. In recent past years, the managerial/support vacancies had not been approved for filling as readily as the scientist vacancies, so Forensic Scientists had to be reassigned to perform the critical duties of these vacant managerial/support positions. As a result, fewer cases were analyzed, contributing to higher backlogs. Generally speaking, high backlogs equate to an increased risk to public safety as criminals remain unidentified and able to commit additional crimes, and innocent individuals remain incarcerated as they await forensic results which could clear them.

For over 10 months, beginning in the latter part of FY24, ISP experienced significant delays in filling any vacant position. The hindrances to hiring were the implementation of a new statewide human capital management program and a lengthy, complex hiring process. In addition, as steps in the hiring process continue to be modified, delays in filling positions are exacerbated because previously completed tasks must be reworked. As previously noted, the inability to fill any vacant forensic position – including managers and support staff - has a negative effect on backlog reduction efforts.

## **OFFENDER DATABASE SAMPLE BACKLOG**

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CODIS is a DNA database program administered by the FBI and implemented by the ISP at the state level. The offender portion of this system contains DNA profiles of individuals convicted of felonies, as well as a few other eligible offenses, in accordance with Illinois statutes. All samples collected from eligible offenders from across the state are submitted to the DNA Indexing Unit of the Springfield Forensic Science Laboratory. That unit is responsible for analyzing and uploading to the CODIS database all such submitted DNA samples for the entire state.

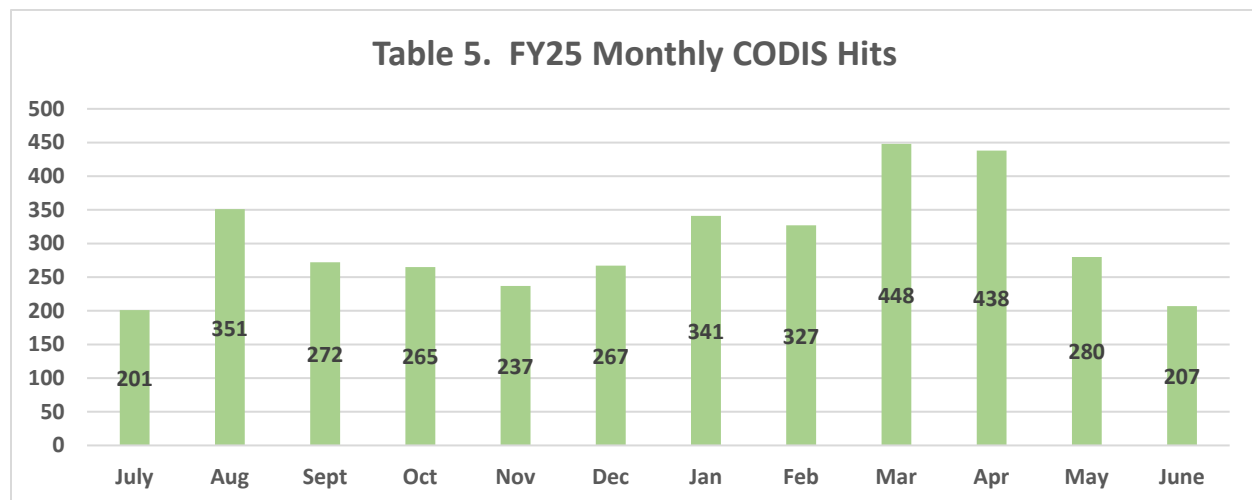
During FY25, the ISP received 18,118 new offender samples and submitted 19,343 samples to CODIS. Additional samples were either in-process of analysis/backlogged or were not uploaded for various reasons (e.g., were duplicates, were ineligible, etc.).

With the implementation of the new LIMS in December 2018, the ISP now defines backlog as an unfinished offender sample (in-progress or unstarted) at the Indexing Unit. In previous years, backlog was defined for the Indexing Unit as the samples that were not uploaded to CODIS within 30 days of when they were eligible for CODIS upload. Based on the past definition of backlog, for the past decade, the ISP had been able to maintain a zero backlog in offender samples, until January 2017. The Indexing unit was able to continue to decrease the time required to analyze samples and reduce the backlog. After five fiscal years the Indexing section was able achieve a CODIS sample backlog of zero at the end of FY23. At the end of FY25, the Indexing unit was able to maintain their CODIS sample backlog at zero.

On January 1, 2012, PA 97-383 became effective. This law closed several loopholes in previous legislation by requiring a DNA sample from all registered sex offenders, regardless of conviction date. The law also added three reasons for collection of DNA: a court order with no other restrictions, sex offenders from other states that are not required to be supervised by parole or probation, and limited “indictees” for First Degree Murder, Home Invasion, Predatory Criminal Sexual Assault, Aggravated Criminal Sexual Assault, and Criminal Sexual Assault. Since the passing of this law, no other changes to the offender statutes have passed that impact the number of offender samples being submitted to the DNA Indexing Unit.

The funding for the CODIS program is sufficient to address current needs. However, in the event of unfilled vacancies, significant budgetary cuts, equipment problems, and/or additional immediate changes to offender statutes (such as a law that would require all felony arrestees to submit a DNA sample for CODIS), this could change. Any one of these situations will result in the development of a backlog, which will require additional time and resources to address.

In FY25, there were 3,632 CODIS hits, compared to the 3,297 CODIS hits in FY24. The following Table 5 gives a monthly account of CODIS hits during FY25. This figure has increased over past years due to additional unknown DNA case profiles being uploaded into CODIS as a result of the outsourcing effort and the increase in the number of DNA cases being analyzed. The significance of any of the CODIS hits, however, is not known and cannot be determined by the ISP; it is only determined by the law enforcement agency after additional investigation is conducted.



On June 30, 2025, there were totals of 725,991 offender profiles and 84,687 crime scene (or “forensic unknown”) profiles in the Illinois DNA database. There were also cumulative totals of 42,078 CODIS hits, with 32,796 offender-to-case hits, and 9,383 case-to-case hits detected. In an offender-to-case hit, a convicted offender’s known DNA profile is associated with an unknown DNA profile from a case. This information can provide investigators with the identity of the possible perpetrator. In a case-to-case hit, unknown DNA profiles from two or more cases are associated, thereby linking cases, and providing additional leads for investigators to pursue. There have been 6,324 national associations, which are CODIS hits of DNA profiles from Illinois to DNA profiles from other states. All 50 states, plus the FBI and US Army laboratories, participate in CODIS. Through April 2025 (last data available), Illinois ranks sixth in the nation, behind only California, Florida, Texas, Ohio, and New York in the number of investigations aided by CODIS (38,909), according to FBI statistics.

NOTE REGARDING STATISTICS PROVIDED IN THIS REPORT:

- All reasonable efforts have been made to ensure the accuracy of the data in this report within the limitations of the current Laboratory Information Management System (LIMS).
- With both Biology casework, as well as with offender database samples, the reported backlog is just a snapshot of the workload at a given point in time. Legislation, crime rates, new technology, and available resources all impact this statistic.



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