



Annual Report to the Illinois Forensic Commission

Significant Non-Conformities of 2023

Provided by the Quality System Subcommittee, April 16, 2024

20 ILCS 2605/2605-615 (f) – *Reporting by publicly funded forensic laboratories*, calls for an annual report from each laboratory summarizing its significant non-conformities with the efficient delivery of forensic services and the sound practice of forensic science.

The following are categories of significant non-conformities identified by the quality subcommittee:

1. *Use/Discovery of an invalid method for the analysis of evidence*
e.g., after implementation of a method it is discovered that the method validation did not include appropriate studies to distinguish between the compound of interest and interfering non-target compounds.
2. *Internal and External Audit non-conformities*
e.g., during an audit, it is found that a recently implemented procedure isn't being followed as intended. Newly required case-related documentation was not included in the case file.
3. *Proficiency Test Results (non-administrative errors)*
e.g., it was discovered that a result was reported that did not correspond to the established answer developed by the test provider. A gunshot distance determination range was incorrectly generated and reported.
4. *Missing Evidence/Data/Information*
e.g., data integral to forming a conclusion or opinion related to an item of evidence was not present in the case record after the testing report was issued.
5. *Issues of an individual analyst's technical competence.*
e.g., an analyst was found to not be properly interpreting data. The interpretation should include the understanding of data artifacts and their impact on the result. Should artifacts not be well understood, the reported results could be in error.
6. *Any error which compromises the ability to report results on an item of evidence or impedes the progress of court proceedings.*
e.g., a DNA item required consumption (there is nothing left of the item to test) and the associated negative control became contaminated. As such the resulting DNA item profile may not be reported.
7. *Any other significant event or significant nonconformity related to an accreditation requirement for which there is a reasonable expectation that knowledge of the event or nonconformity by interested parties external to the forensic service provider would call into question the quality of the forensic service provider's work or the integrity of its personnel.*

The three laboratories providing reports: the DuPage County Sheriff's Office - DuPage County Forensic Science Center (DP-FSC), the Illinois State Police - Division of Forensic Services (ISP), and the Northeastern Illinois Regional Crime Laboratory (NIRCL) are currently accredited by the ANSI National Accreditation Board (ANAB) to ISO/IEC 17025:2017, ANAB Accreditation Requirements for Forensic



Testing and Calibration (2023) and FBI Quality Assurance Standards for Forensic DNA Testing Laboratories:2020.

As a condition of accreditation, a laboratory system must adhere to the requirements on handling non-conforming work as specified by the standards. Additionally, to meet these requirements, corrective action documentation that meets the standard must be provided to and reviewed by external assessors during monitoring and assessments.

Attached are the summary reports from each of the three laboratories. The abbreviations for the tables are as follows:

Section Abbreviations	
Biology	Biology/DNA
DC	Drug Chemistry
DNA	DNA
FA	Firearms
Indexing	DNA Indexing
LP	Latent Prints
TOX	Toxicology

DuPage County Forensic Science Center

The DuPage County Sheriff's Office - DuPage County Forensic Science Center (DP-FSC), upon identification of a significant non-conformity initiates a corrective action process. In 2023 the DP-FSC had no completed significant non-conformities.

Illinois State Police, Division of Forensic Services (DFS), Forensic Sciences Command (FSC)

The Illinois State Police, Division of Forensic Services (DFS), Forensic Sciences Command (FSC) uses a document called a Quality Issue Report (QIR) to document confirmed quality issues requiring cause analyses and corrective action. In 2023, the DFS completed fourteen (14) of these documents. A spreadsheet is shown below with information regarding each incident. The incidents were categorized by issue type and are summarized below.

Non-conforming Work

The Illinois State Police completed two (2) QIRs related to non-conforming work in 2023. In both instances of non-conforming work, methods and procedures were not followed during case analyses. As necessary, amended reports were issued, and additional cases were reviewed to ensure the incidents were isolated.

Audit Non-conformity

The Illinois State Police completed five (5) QIRs related to external, FBI DNA Quality Assurance Standards audits conducted. None of the audit findings impacted the quality or accuracy of casework performed. Changes were made to policies, as necessary, to address the identified findings.



Proficiency Test Issue

In 2023, the Illinois State Police completed one (1) QIR related to proficiency test results that were not concordant with the vendor's expected results. Non-conforming work was the primary cause of the quality issue, and additional cases were reviewed to ensure the incident was isolated.

Missing Evidence

The Illinois State Police completed two (2) QIRs related to missing evidence in 2023. Missing evidence may be identified by a law enforcement agency, staff, or during the periodic FSC evidence vault inspections. Staff immediately initiated searches to locate the evidence without success. If necessary, the law enforcement agency was contacted about submitting alternative items for testing.

Technical Competency

The Illinois State Police completed three (4) QIRs related to technical competency issues in 2023. Technical competency quality issues arise when the primary cause of the issue involves noncompliance with minimum standards and controls during analytical analyses. As necessary, amended reports were issued. Additional cases were reviewed to ensure the incidents were isolated, or to assess potential avenues for corrective actions such as focused technical reviews, mentoring, and/or performance improvement plans.

Section(s)	ISP Category	Commission Category	Date Closed	Audit Finding
DC	Non-Conforming Work	Non-Conforming Work	9/6/2023	No
DC	Non-Conforming Work	Technical Competency	9/6/2023	No
Biology	External Audit non-conformities	External Audit non-conformities	7/31/2023	Yes
Indexing	External Audit non-conformities	External Audit non-conformities	7/31/2023	Yes
Biology	External Audit non-conformities	External Audit non-conformities	7/31/2023	Yes
Biology	External Audit non-conformities	External Audit non-conformities	9/26/2023	Yes
Biology	External Audit non-conformities	External Audit non-conformities	8/2/2023	Yes
DC	Non-Conforming Work	Technical Competency	7/17/2023	No
Biology	Missing Evidence	Missing Evidence	9/27/2023	No
TOX	Proficiency Test Results	Proficiency Test Results	9/28/2023	No
TOX	Evidence Handling	Non-Conforming Work	9/6/2023	No
DC	Missing Evidence	Missing Evidence	9/5/2023	No
TOX	Non-Conforming Work	Technical Competency	9/28/2023	No
Indexing	Non-Conforming Work	Technical Competency	1/9/2023	No

Northeastern Illinois Regional Crime Laboratory (NIRCL)

The Northeastern Illinois Regional Crime Laboratory (NIRCL) upon identification of a significant non-conformity initiates a corrective action process. In 2023 NIRCL completed six corrective actions for significant non-conformities. A spreadsheet is included with information regarding each incident. The incidents were categorized by issue type and are summarized below.



Technical Competency

The NIRCL completed one (1) corrective action related to an internally identified technical competency finding. It resulted from an incorrect interpretation on a proficiency test which was caught during the technical review. No casework was impacted and a corrective version of the results were sent to the proficiency test provider.

Missing Evidence

The NIRCL completed two (2) corrective actions related to missing evidence. The first occurrence of missing evidence was a non-probative fragment of a bullet. An exhaustive search for the missing evidence was unsuccessful. Law enforcement and the State's Attorney's Office were notified. After a brief review, the State's Attorney's Office didn't feel it would impact the prosecution of the case. A modified worksheet was developed for the analyst and was implemented. No further occurrences have been reported with the analyst.

The second occurrence was discovered during the internal audit. An exhaustive search for the missing evidence was unsuccessful. Law enforcement was notified and if any charges are filed the State's Attorney's Office will be notified. Procedural changes were implemented following this incident. No further occurrences have occurred.

Audit Non-Conformity

The NIRCL completed one (1) corrective action related to an internal audit finding. During the QAS internal audit it was discovered that an analyst did not complete a competency test prior to resuming mixture interpretation casework. A competency test was administered which the analyst completed. No casework was affected.

Proficiency Test Issue

The NIRCL completed one (1) corrective action related to a proficiency test issue. During the latent print processing proficiency test an analyst failed to develop a latent on a submitted item. Procedural changes were implemented following this incident.

Non-Conforming Work

The NIRCL completed one (1) corrective action related to non-conforming work. It was discovered that a DNA analyst was not following protocol for male-on-male anal swabs. Additionally, the protocol for male-on-male protocol was not in the procedural manual but was available in the notes from a DNA meeting. The analyst was placed on supervised casework and successfully completed four supervised DNA batches. The protocol was implemented into the procedural manual. No casework was affected.

Section(s)	Lab Category	Commission Category	Date Closed	Audit Finding
FA	Missing Evidence	Missing Evidence	4/24/2023	No
DNA	Non-Concordant Proficiency Test	Technical Competency	10/4/2023	No
DNA	Non-Conforming Work	Non-Conforming Work	8/28/2023	No
Evidence Receiving	Internal Audit Finding	Missing Evidence	1/8/2023	Yes
LP	Non-Concordant Proficiency Test	Proficiency Test Issue	10/4/2023	No
DNA	Internal Audit Finding	Audit Non-Conformity	12/26/2023	No