

Annual Report to the Illinois Forensic Commission

Significant Non-Conformities for 2022

Provided by the Quality System Subcommittee, April 28, 2023

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 17025:2017 Forensic Science Testing and

Calibration Laboratories Accreditation Requirements 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

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 2022 DP-FSC completed one (1) corrective action for a significant non-conformity. A spreadsheet with the incident categorized by issue type is shown below.

Non-Conforming Work

The DPC-FSC completed one (1) corrective action related to an incident of non-conforming work. Staff identified a failed quality check on an instrument during the performance of casework. The issue was identified prior to the completion of that casework. Samples run during the incident period were re-run after re-performing quality checks and verifying compliance with laboratory standards. A tool was created to assist analysts in the evaluation of quality checks to ensure future compliance with requirements.

Section(s)	DP-FSC Category	Commission Category	Date Closed	Audit Finding
DC	Non-conforming work	Non-conforming work	2/7/2022	No

The Illinois State Police, Division of Forensic Services (DFS) uses a document called a Quality Issue Report (QIR) to document significant issues and the steps taken to identify causes and take corrective actions. The DFS completed 31 of these documents in 2022. A spreadsheet is attached with information regarding each incident. The incidents were categorized by issue type and are summarized below.

Non-conforming Work

The Illinois State Police completed twenty (20) QIRs related to non-conforming work in 2022. Non-Conforming work can be described as when methods and procedures are not followed, quality controls do not meet analytical criteria, or when equipment fails or is out of specification.

Missing Evidence

The Illinois State Police completed five (5) QIRs related to missing evidence in 2022. Items are considered missing and documented when identified by either notification from an agency or staff or when an item is identified as missing during normal and periodic ISP vault inspections. ISP conducts a 100% inventory of all evidence items annually as well as more limited intermittent audits.

Proficiency Test Issue

The Illinois State Police completed three (3) QIRs related to proficiency test issues in 2022. Proficiency test issues arise when ISP reports answers to a proficiency test provider that are not concordant with the vendor's expected results. These non-concordant answers can be due to either vendor sample preparation issues, differences in reporting between the ISP laboratories and vendor expectations or due to an instance of non-conforming work by the ISP analyst and/or laboratory.

Technical Competency

The Illinois State Police completed three (3) QIRs related to technical competency issues in 2022. Technical competency issues arise when an analyst is identified who is not meeting the minimum standards and controls for analytical analysis. An analyst may be removed from casework and placed on a performance improvement plan to re-establish the skills and competency necessary to perform the required analyses.

If necessary, any issues related to reported findings resulted in updated amended reports to the user agency. In an effort to assess issues pertaining to analysis performed, targeted mechanisms including the reanalysis of additional casework and testing for competency to provide insight on potential causes of the issue was performed. All issues are vetted with a subsequent reassessment at appropriate intervals.

Location	Section(s)	ISP Category	Commission Category	Date_Closed	Audit Finding
Chicago	LP	Missing Evidence	Missing Evidence	1/31/2022	No
Chicago	Biology	Missing Evidence	Missing Evidence	2/13/2022	No
Chicago	DC	Missing Evidence	Missing Evidence	2/13/2022	No
Springfield	Biology	Missing Evidence	Missing Evidence	5/4/2022	No
TA	LP	Missing Evidence	Missing Evidence	11/14/2022	No
Rockford	Biology	DNA Interpretation	Non-Conforming Work	10/6/2022	No
Chicago	TOX	External Complaint	Non-Conforming Work	3/15/2022	No
Chicago	Biology	Non-Conforming Work	Non-Conforming Work	2/13/2022	No
Chicago	Biology	DNA Interpretation	Non-Conforming Work	2/10/2022	No
Chicago	DC	Inaccurate Report	Non-Conforming Work	7/10/2022	No
Chicago	Biology	Non-Conforming Work	Non-Conforming Work	10/7/2022	No
Chicago	FA	Non-Conforming Work	Non-Conforming Work	2/15/2022	No
Joliet	LP	Missed Database Correlation	Non-Conforming Work	6/7/2022	No
Command	TOX	Inaccurate Report	Non-Conforming Work	7/10/2022	No
Chicago	DC	Non-Conforming Work	Non-Conforming Work	9/22/2022	No
Chicago	LP	Non-Conforming Work	Non-Conforming Work	1/31/2022	No
Chicago	LP	Suitability	Non-Conforming Work	2/22/2022	No
Chicago	Biology	Non-Conforming Work	Non-Conforming Work	7/18/2022	No
Springfield	TOX	Non-Conforming Work	Non-Conforming Work	4/21/2022	No
Joliet	Biology	Timeliness of Reporting Results	Non-Conforming Work	11/10/2022	No
Chicago	DC	Equipment Malfunction	Non-Conforming Work	7/10/2022	No
Command	TOX	Inaccurate Report	Non-Conforming Work	7/10/2022	No
Springfield	FA	Contamination of Evidence	Non-Conforming Work	9/22/2022	No
Springfield	Indexing	Non-Conforming Work	Non-Conforming Work	9/20/2022	No
Springfield	Biology	DNA Interpretation	Non-Conforming Work	11/22/2022	No
Command	Trace	Non-Concordant Proficiency Test	Proficiency Test Issue	3/14/2022	No
MetroEast	FA	Non-Concordant Proficiency Test	Proficiency Test Issue	10/5/2022	No
Chicago	Biology	Non-Concordant Proficiency Test	Proficiency Test Issue	10/7/2022	No
Joliet	LP	Non-Conforming Work	Technical Competency	12/12/2022	No
Chicago	DC	Non-Conforming Work	Technical Competency	4/18/2022	No
MetroEast	DC	Non-Conforming Work	Technical Competency	10/4/2022	No

The Northeastern Illinois Regional Crime Laboratory (NIRCL) upon identification of a significant non-conformity initiates a corrective action process. In 2022 NIRCL completed eight 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. All casework related to any of the impacted incidences was evaluated for appropriate action which included either no action, the issuing of additional reports, or reworking of evidence resulting in additional reports. Incident documentation was added to all casefiles impacted, regardless of subsequent action taken. Based on the results of the investigation the analyst was terminated.

Audit Non-Conformity

The NIRCL completed seven (7) corrective actions related to one (1) internal audit non-conformity and six (6) external audit non-conformities. None of the audit findings impacted the quality or accuracy of casework performed. Changes were made as necessary to respective analytical section operations to address the identified findings.

Section(s)	NIRCL Category	Commission Category	Date Closed	Audit Finding
DNA	Internal competency finding	Technical Competency	3/15/2022	No
DNA	Internal audit finding	Audit Non-conformity	10/5/2022	Yes
FA	External audit finding	Audit Non-conformity	11/2/2022	Yes
FA	External audit finding	Audit Non-conformity	11/2/2022	Yes
FA	External audit finding	Audit Non-conformity	11/2/2022	Yes
DNA	External audit finding	Audit Non-conformity	11/4/2022	Yes
DNA	External audit finding	Audit Non-conformity	11/4/2022	Yes
DNA	External audit finding	Audit Non-conformity	12/7/2022	Yes