ANSI/ASB Standard 053, First Edition
2020

Standard for Report Content in Forensic Toxicology

Standard for Report Content in Forensic Toxicology

ASB Approved March 2020

ANSI Approved August 2020

Academy Standards Board
410 North 21st Street
Colorado Springs, CO 80904

Foreword

Forensic toxicology includes human performance toxicology, postmortem toxicology, non-regulated employment drug testing and court-ordered toxicology. As a result of forensic toxicology laboratory testing, a report is generated to communicate analytical findings to interested parties. This document delineates the standard for toxicology report content.

This document was revised, prepared, and finalized as a standard by the Toxicology Consensus Body of the AAFS Standards Board. The draft of this standard was developed by the Toxicology Subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science.

The AAFS Standards Board (ASB) is an ANSI-accredited Standards Developing Organization with the purpose of providing accessible, high quality science-based consensus forensic standards. The ASB is a wholly owned subsidiary of the American Academy of Forensic Sciences (AAFS), established in 2015 and accredited by the American National Standards Institute (ANSI) in 2016. The ASB consists of Consensus Bodies (CB), which are open to all materially interested and affected individuals, companies, and organizations; a Board of Directors; and Staff.

The following applies to all ASB documents:

the term **'shall'** indicates that a provision is mandatory, and can be audited for compliance

the term **'should'** indicates that a provision is not mandatory, but recommended as good practice.

All hyperlinks and web addresses shown in this document are current as of the publication date of this standard.

Keywords: *Report, Results, Interpretive Information, Forensic Toxicology*

Table of Contents

Standard for Report Content in Forensic Toxicology

1 Scope

This document delineates the requirements for reporting results from forensic toxicology analyses. Specifically, it is intended for the subdisciplines of human performance toxicology (e.g., driving-under-the-influence of alcohol or drugs and drug-facilitated crimes), postmortem forensic toxicology, non-regulated employment drug testing, court-ordered toxicology (e.g., probation and parole, drug courts, child services), and general forensic toxicology (e.g., non-lethal poisonings or intoxications). The document does not apply to the reporting of breath alcohol testing results.

2 Normative References

There are no normative references. Annex A. Bibliography, contains informative references.

3 Terms and Definitions

For purposes of this document, the following definitions apply.

3.1
amended report
A report used to document any subsequent modifications, particularly those that affect or correct an original result or interpretation.

3.2
inconclusive results
Results that do not meet criteria for reporting, or were unsuitable due to analytical interferences or condition of the sample.

3.3
interpretive information
Factual statements concerning detected analytes that may include, but not be limited to: drug scheduling information; pharmacokinetic/toxicokinetic information; pharmacodynamics/ toxicodynamic information; or information regarding factors that can affect detection or quantitation of the analyte.

3.4
preliminary results
Laboratory test results that are pending confirmatory analysis.

3.5
supplemental report
A report used to document additional work performed with subsequent reporting of results.

4 Elements of a Laboratory Report

4.1 Laboratory reports shall be clearly written and shall include results or a summary of all analytical testing that meets the laboratory's defined reporting criteria.

4.2 A forensic toxicology laboratory report shall include the following, if available:

a) name, address, and contact information of the laboratory where analytical testing was performed;

b) agency name and case number of the specimen submitter;

c) subject's name;

d) listing of specimen(s) tested to include type;

e) date of specimen receipt;

f) date of report issuance;

g) laboratory results;

h) name of the person responsible for the report; and

i) page numbers and case number (or other identifying information) on each page.

4.3 The following shall be included in a forensic toxicology laboratory report or documented elsewhere in the case record (when known):

a) subject's sex

b) subject's date of birth or age;

c) specimen container type(s);

d) estimate of the volume, weight, or amount of specimen received;

e) date and time of specimen collection; and

f) interpretive information.

4.4 If the condition of the specimen(s) was unsuitable for analysis and/or may have compromised the results of the testing, this shall be noted in the report.

4.5 If low specimen amount precluded any or all testing, that shall be noted.

4.6 Laboratories shall have a list of analytes covered in their analysis schemes. This list may be included in the report, included as an appendix to the report, or may be made available to the customer on a website or via other means. This list shall be updated according to a defined schedule.

5 Reporting Laboratory Results

5.1 General

Results may be none detected/not detected, preliminary, positive (qualitative or quantitative), or inconclusive. In all instances, the following elements shall be included with each type of analytical result reported:

a) name or class of analyte, the result obtained, and the specimen(s) tested;

b) technique(s) of analysis; and

c) reporting limit or limit of detection for the analyte (in the report body, in an appendix, or made available elsewhere to the customer).

5.2 None Detected/Not Detected Results

The laboratory report shall clearly state the analytes or classes of analytes that were tested for but not detected or confirmed. As an example, results may be described as "none detected" or "not detected". Use of the term "negative" is unacceptable, except where required by legislation.

5.3 Preliminary Results

It is sometimes necessary to report preliminary analytical results. In these instances, it shall be clearly noted in the report that confirmatory testing is pending or will be performed upon request.

5.4 Positive Results—Qualitative

Qualitative toxicological results shall be reported as "detected", "identified", "present", "confirmed", or "positive", with no numerical value assigned when meeting the laboratory's requirements for detection or identification of analytes.

5.5 Positive Results—Quantitative

Quantitative toxicological results shall include both the amount and the units of measurement for each analyte meeting the laboratory's requirements for identification. When accreditation, regulation, or internal laboratory procedures require an estimated uncertainty of measurement to be calculated, it shall be included in the laboratory report. It is acceptable to report analytical results as "greater than" or "less than".

5.6 Inconclusive Results

Inconclusive analytical results shall be clearly marked as such.

6 Results from a Reference Laboratory

When all or part of the testing has been performed by an outside reference laboratory, the outside laboratory's testing shall be indicated in the report issued by the primary laboratory or the outside laboratory's report shall be provided to the customer. A complete copy of the reference laboratory's report shall be retained in the case record.

7 Supplemental and Amended Reports

7.1 General

Supplemental and amended reports shall be clearly marked as such.

7.2 Supplemental Reports

The laboratory has the two following options for issuing supplemental reports.

a) A report containing only the supplemental findings may be issued. The report shall follow the requirements in Sections 4 through 6.

b) Supplemental findings may be added to the original report, but the supplemental information shall be clearly indicated. The report shall follow the requirements in Sections 4 through 6 above.

7.3 Amended Reports

Modifications to an original report shall be clearly indicated. The report shall follow the requirements in Sections 4 through 6 and shall reference the date of the original report.

8 Interpretive Information

It may be appropriate to include interpretive information to help the reader understand the meaning of detected analytes. Interpretive information is not considered a mandatory part of the toxicological report, but is based on jurisdictional or laboratory preference to include such. This information may be included in the body of the report.

It should be made clear to the reader that the interpretive information provided is not exhaustive or meant to encompass all scenarios where toxicological results are reported. It should be further noted that the interpretive information provided is meant to serve as a general guide for the reader and that for any given case, consultation with a forensic toxicologist is recommended.

The interpretive information provided shall:

a) be factual;

b) be clear and understandable by the intended audience;

c) be supported by scientific data;

NOTE The citations of the reference(s) used to generate the information need not be in the body of the report, but must be available upon request.

d) note any specific limitations to the provided information; and

e) be appropriate to the analyzed matrix.

Annex A
(informative)

Bibliography

1] ANSI/ASB 037, *Guidelines for Opinions and Testimony in Forensic Toxicology*[a].

[a] http://www.asbstandardsboard.org/published-documents/

Academy Standards Board
410 North 21st Street
Colorado Springs, CO 80904

www.asbstandardsboard.org