



A97 The Laboratory Report Project Part 1: Content Analysis of Laboratory Reports

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After attending this presentation, attendees will understand how content in typical forensic science laboratory reports are submitted as the result of the analysis of evidence.

This presentation will impact the forensic science community by informing attendees of the status of laboratory reports today in various disciplines and jurisdictions so that crime lab directors can compare their practices with those of the community at large.

This project is a result of recommendation #2 of the National Academy of Sciences (NAS) Report on Forensic Science—"that forensic science laboratory reports follow a standard, scientific format". Testimony before the NAS Forensic Science Committee indicated that too many laboratory reports were little more than "certificates of analysis" that contained only descriptive information about the evidence and the results of the analysis, without any information about the methods and procedures used, and little or no presentation of the data and how the conclusions were reached. It was felt by the Committee that this type of report wasn't reflective of the scientific nature of forensic science analysis. Before developing such a standard, it is important to know what is currently being submitted in the way of lab reports. With the help of the American Society of Crime Lab Directors, forensic science lab directors were asked to submit specimens of redacted laboratory reports and/or report format templates in several disciplines including drugs, DNA, fingerprints, questioned documents, toxicology, and trace evidence. The only demographic information that was sought was the governmental level of the laboratory (federal, state, regional, local). More than 400 laboratory reports were ultimately received. The reports were first categorized by laboratory type and then by report type. A spreadsheet was created that listed all of the sections of a model laboratory report that would be expected: demographics of submission, request for analysis, description of the evidence, methods and materials of analysis, analytical procedures, results (data), discussion of the results, and conclusions including limitations and sources as well as magnitudes of possible errors or uncertainties in the conclusions. Each of the laboratory reports was then analyzed to determine which of these sections were present in that report. After this was completed, each type of report (drugs, DNA, etc.) was examined separately to determine what sections were most commonly found and what sections were not usually present. Determinations were made to see if particular types of laboratory reports were more complete (in the sense of having the most sections) than other types of reports. The data were then analyzed to determine if there were significant differences between laboratory reports generated by federal, state, regional, or local laboratories, and, if possible, whether differences existed between public and private laboratories. On the basis of the data collected in this study, attempts will be made to determine if it is possible or desirable to develop a model template that all laboratory reports, regardless of jurisdiction and regardless of report type, or does it make more sense to develop a set of templates that reflect the type of analysis being done; that is a different type of report for a drug case from a fingerprint case. Consideration will be given to the needs of prosecutors and defense attorneys to be able to quickly determine the results of a forensic science analysis for the purposes of decision making in the adjudicative process – this might take the form of an "executive summary" of the report.

Laboratory Report, NAS, Model Lab Report