



K8 Characteristics of Toxicology Laboratories Performing Drug-Impaired Driving Casework

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After attending this presentation, attendees will be able to describe the characteristics of U.S. laboratories performing toxicological analysis in drug-impaired driving cases, focusing on their size, workload, turnaround time, and level of engagement in training. The purpose of presenting this data is to allow attendees to evaluate the findings of a survey of toxicology laboratory users and compare how their own laboratory performs relative to others in terms of size, requests for testimony, and available instrumentation.

This presentation will impact the forensic science community by improving the understanding of expectations and needs of clients of Driving Under the Influence of Drugs (DUID) testing laboratories and standards of service delivery within the field.

Cases involving suspected DUID contain several important elements, including: an officer trained in documenting observations regarding the driving and subject behavior as well as the collection of a biological specimen for comprehensive toxicology testing; a toxicology lab to analyze the specimen for illicit substances; and a prosecutor to utilize the data in the court system. Three surveys were conducted, in collaboration with the National Safety Council, to poll State's Drug Recognition Experts (DREs), Traffic Safety Resource Prosecutors (TSRPs), and toxicology labs with the purpose of gathering information about the needs of the traffic-safety community regarding drug testing and testimony in DUID/DRE cases. TSRPs, DREs, and toxicology lab directors from each state at various jurisdictional levels were surveyed to identify areas of need in the scope and sensitivity of testing available, turnaround time, training, expertise for trial or preparation, meeting court-imposed deadlines, and other service factors of unmet need in training and research for scientists, law enforcement, and prosecutors.

In terms of staffing, the reported mean (median) size of the labs surveyed was 8 (6.5) analysts per lab (range 1-200), with a reported mean (median) of 74 (25) DUID/DRE cases each month per laboratory (range 1-1800). As expected, the size of the lab and the resources available affected the average. In terms of turnaround time, both DREs and TSRPs reported an average turnaround time of eight weeks with respect to drug analysis, and corresponding satisfaction ratings started to decrease among the DREs and TSRPs when turnaround time reached six to eight weeks. According to prosecutors, toxicologist's testimony affects trial outcome a reported average of 63% of the time, and there has been an increase in toxicologist appearances in court due to the confrontation clause issues which in turn contributes to an increase in the analytical backlog in the lab due to analysts being called to testify.

When asked about whether toxicologists are involved in DRE or TRSP training, only 53% of the respondents said they were involved. This type of training entails educating the DREs and prosecutors of what type of testing is provided, specific drugs that are tested for, understanding reports, statistics on drugged driving, and, for prosecutors in particular, how results in a given case are interpreted. When asked why a toxicologist isn't involved in DRE or prosecutor training, the majority reported that they haven't been asked, while others reported that it wasn't seen as necessary or there is insufficient staffing, funds, or resources. In addition to training among the DREs and prosecutors, toxicology labs also reported an additional need for training among the staff. The greatest areas of need for training include instrumentation, uncertainty determination, confirmation testing, and mock-trial training. Other high priorities for additional resources reported by the toxicology laboratories include additional staffing, instrumentation for confirmation, and upgrading or obtaining a new facility.

DUID, Lab Management, Testimony