

K51 The National Forensic Laboratory Information System (NFLIS) Survey Findings: Toxicology Testing Practices by Toxicology Laboratories and Medical Examiner and Coroner Offices

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Learning Overview: After attending this presentation, attendees will understand the findings from the Drug Enforcement Administration's (DEA's) 2017 NFLIS Survey that were not previously published.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing toxicology laboratories and medical examiner, and coroner offices information regarding toxicology testing practices for opiates, opioids, amphetamines, cocaine, marijuana/Tetrahydrocannabinol (THC), phencyclidine, phenethylamines, piperazines, synthetic cannabinoids, and synthetic cathinones. This presentation will also report on respondents' use of toxicology reference laboratories.

The NFLIS is a program of the Drug Enforcement Administration (DEA), Diversion Control Division. DEA conducted a 2017 NFLIS Medical Examiner and Coroner (MEC) Office Survey and a Toxicology Laboratory (TL) Survey between June and October of 2017. These results were published on the NFLIS website. Survey results highlighted findings related to operation, caseloads, turnaround times, toxicology testing practices, accreditation, and information management systems. The purpose of this presentation is to provide the community with information on toxicology testing practices that were not reported in these publications. This information can benefit laboratory management decisions as well as aid interpretation of national statistics.

MEC and TL respondents were asked to report their testing frequency as always, sometimes, or never for specific drugs and drug classes. Further, they were asked to report their frequency of quantifying these drugs and drug classes using the same measures. Data from TLs are reported by laboratory ownership (public or private) and by caseload size of the responding laboratory. Data from MECs are reported by type of office and jurisdiction size if reported by the responding MEC.

TLs reported "always" conducting toxicology testing for the following drugs or drug classes more than 75% of the time: alcohol, amphetamines, barbiturates, benzodiazepines, carisoprodol, cocaine, heroin, marijuana, opiates and opioids, phencyclidine, and Z-drugs (e.g., zolpidem). TLs reported opiates or opioids other than heroin or fentanyl as the least likely drug class to never be quantified (11%), whereas fentanyl-related substances were most likely to never be quantified (52%). Higher percentages of small and public TLs (both greater than 30%) than medium, large, and private TLs (each less than 25%) reported never quantifying fentanyl.

MECs reported "always" conducting toxicology testing for the following drugs or drug classes more than 75% of the time: alcohol, amphetamines, cocaine, and opiates or opioids other than heroin and fentanyl. Overall, less than 13% of MECs reported never quantifying buprenorphine, fentanyl, fentanyl-related substances, heroin, and opiates or opioids other than heroin or fentanyl.

NFLIS publicly shares data through various reports throughout the year, including midyear and annual reports. As NFLIS expands into other data collections such as toxicology laboratory data, additional reports such as on the toxicology laboratory survey will be provided to the community.

NFLIS, DEA, Toxicology