

B16 Benzodiazepine Drug Chemistry Analysis Results Submitted to the National Forensic Laboratory Information System (NFLIS-Drug): 2015 to 2018

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Learning Overview: After attending this presentation, attendees will understand the findings from the Drug Enforcement Agency's (DEA) benzodiazepine drug chemistry results submitted to the NFLIS-Drug from 2015 to 2018.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing forensic laboratories, toxicology laboratories, and medical examiner and coroner offices information regarding trends in benzodiazepines and emerging benzodiazepines submitted to NFLIS-Drug.

The NFLIS is a program of the Drug Enforcement Administration, Diversion Control Division. NFLIS-Drug systematically collects drug identification results and associated information from drug cases submitted to and analyzed by federal, state, and local forensic laboratories. These laboratories analyze controlled and non-controlled substances secured in law enforcement operations across the country. The NFLIS-Drug data are used to support drug scheduling decisions and to inform drug policy and drug enforcement initiatives nationally and in local communities around the country.

Results of national estimates of selected benzodiazepine drug cases that were submitted to state and local laboratories from January 1, 2015, through December 31, 2018, and were analyzed by March 31, 2019, will be presented. This presentation will also highlight selected benzodiazepines of interest, reports of selected benzodiazepines by state, regional trends, and counts of alprazolam and etizolam reported with other drugs in the same item (e.g., not necessarily true drug combinations).

Alprazolam and clonazepam are the top prescribed benzodiazepines in the United States. NFLIS-Drug also shows this trend because these two are the most common benzodiazepines reported by participating laboratories. From 2015 to 2018, an estimated 263,538 benzodiazepine reports were identified by state and local laboratories. Estimated benzodiazepine reports decreased by 14% between 2015 and 2018. Alprazolam and clonazepam accounted for 87% of benzodiazepine reports between 2015 and 2018.

Benzodiazepines are prescribed with narcotic analgesics and are co-involved in overdose deaths. Of the narcotic analgesics reported in the same item as alprazolam (16%), fentanyl (43 reports), fentanyl-related compounds (42 reports), and oxycodone (31 reports) accounted for the majority of substances. Some benzodiazepines have emerged that are not prescribed for therapeutic use in the United States and can be seen in NFLIS-Drug data. Some of these substances include phenazepam, etizolam, clonazepam, flubromazolam, and flualprazolam. Etizolam has been one of the most prominent emerging benzodiazepines over the years; it increased 99% between 2018 and 2019. An emerging benzodiazepine, flualprazolam, increased 1,565% between 2018 and 2019. Some of these emerging benzodiazepines have been reported in toxicology by the United Nations Office on Drugs and Crime in its *Current NPS Threats* report.¹

Attendees will gain an understanding of the trends in benzodiazepines across the United States and how those trends complement other data sources. They will also recognize NFLIS-Drug as a comprehensive information system that includes data from laboratories that handle the nation's drug analysis cases. NFLIS publicly shares aggregated and analyzed data through various publications throughout the year, including national and regional trends of drugs submitted to state and local laboratories, as discussed in this presentation. These publications can benefit laboratories, law enforcement, public health agencies, and other stakeholders by increasing their awareness of emerging substances and other drug trends.

Reference(s):

¹. United Nations Office on Drugs and Crime. *Current NPS Threats*. <https://www.unodc.org/unodc/en/scientists/current-nps-threats.html>.

Benzodiazepines, Drug Trends, NFLIS