

WS 19: Abused and Misused: The Importance of Prescription, Over-The-Counter, and Lesser-Discussed Drugs in Human Performance Forensic Toxicology

Audience Knowledge: Basic

Workshop Chairs

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Abstract

Traditional drugs of abuse (e.g., cannabinoids and stimulants) are well recognized for their involvement in human performance forensic toxicology casework, particularly in driving while under the influence (DWI) and drug-facilitated crime (DFC) investigations. However, less frequently discussed substances, including ketamine, zolpidem, and commonly encountered prescription or over-the-counter (OTC) medications, may also contribute to impairment and play an important role in casework. Due to stop-testing practices and laboratory backlogs, these drugs are not always included in routine toxicological testing scopes and may be underreported, but due to their impairing effects, particularly with polydrug use, it is important to monitor these drugs.

When used as directed, medications such as antihistamines and selective serotonin reuptake inhibitors (SSRIs) are rarely associated with significant impairment. However, because these drugs are widely available by prescription or OTC, users may underestimate the risks associated with misuse or concurrent use with other substances, including alcohol. Polydrug use can increase the likelihood and severity of impairment and, in some cases, may contribute to adverse outcomes such as serotonin syndrome.

In this workshop presented by the SOFT Young Forensic Toxicologists (YFT) Committee, the occurrence and potential impairing effects of antihistamines (e.g., diphenhydramine), SSRIs (e.g., sertraline and venlafaxine), methorphan, ketamine, and zolpidem will be examined in human performance toxicology casework. The impact of stop-testing practices on the detection and reporting of these substances will also be discussed.

Authentic case examples and observed trends across multiple jurisdictions, including Texas, Florida, Canada, and Luxembourg, will be presented to highlight the importance of considering these compounds when evaluating impairment and regional drug-use patterns in forensic investigations.

Speakers

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Workshop Agenda

Time	Topic	Speaker
01:30 PM - 02:00 PM	Introduction and Summary of Drugs	Brown
02:00 PM - 02:30 PM	Drug Discussion - Antihistamines	Ayala
02:30 PM - 03:00 PM	Drug Discussion - SSRIs	Desrosiers
03:00 PM - 03:30 PM	Drug Discussion - Ketamine & Zolpidem	Zumaeta
03:30 PM - 04:00 PM	Break	
04:00 PM - 04:15 PM	Drug Trends in Houston, TX	Perkins
04:15 PM - 04:30 PM	Drug Trends in Palm Beach, FL	Zumaeta
04:30 PM - 04:45 PM	Drug Trends in Canada	Desrosiers
04:45 PM - 05:00 PM	Drug Trends in Luxembourg	Oliverio
05:00 PM - 05:30 PM	Q&A	Brown, Ayala, Desrosiers, Zumaeta, Perkins, Oliverio