WS08: Beyond the Pill Bottle: Prescription Drugs' Hidden Impacts on Driving, Work, and Life Date: Monday, October 27 Time: 1:30 – 5:30 PM Audience Knowledge Level: All levels Rates:

| Membership | Early Bird (June 25 - Sep 10) | Late (Begins Sept 11) | Onsite (Begins Oct 9) |
|------------|----------------------------------|--------------------------|--------------------------|
| Member | \$150 | \$175 | \$200 |
| Student | \$150 | \$175 | \$200 |
| Non-Member | \$200 | \$225 | \$250 |

Workshop Chairs:

Kristen Burke <u>kristen@soft-tox-org</u> SOFT- Western Region Regional Toxicology Liaison

Sabra Jones <u>sabra@soft-tox.org</u> SOFT- Northeast Region Regional Toxicology Liaison

Abstract

This half-day workshop examines the rise in prescription medication use and its far-reaching implications beyond just driving impairment. Participants will explore why we've seen such dramatic increases in potentially impairing pharmaceuticals over the past decade, with particular attention to opioids, benzodiazepines, and other central nervous system depressants. The session will critically examine whether the correlation between increased prescription drug use and impaired driving represents causation or merely coincidence – a fundamental question that shapes both research approaches and policy responses. The workshop will comprehensively address how these medications impact not only driving safety but also workplace performance, daily functioning, and overall quality of life.

Special attention will be given to the often-overlooked challenges faced by both pharmacists and physicians. Pharmacists struggle with systems limitations in alerting prescribers about potentially dangerous drug-drug interactions, alert fatigue among providers, fragmented prescription records across multiple pharmacies, and communication barriers with prescribers. Physicians face their own pressures including patient satisfaction metrics tied to reimbursement, time constraints during appointments, pharmaceutical marketing influence, institutional prescribing protocols, and fear of undertreating legitimate conditions. These systemic challenges contribute significantly to the prescription drug problem and must be addressed in any comprehensive solution.

Critical questions about the educational gap will be explored: Are healthcare providers adequately informed about the cognitive and physiological effects of these medications? Are they effectively communicating these risks to patients across all life domains? How is forensic toxicological data being used to understand and address the challenges with prescription drugs and downstream effects such as impaired driving and substance abuse disorders. The workshop will also tackle the often-overlooked dangers of drug-drug interactions, which can amplify impairment effects even at therapeutic doses. Through examination of prescribing patterns, toxicological data, and real-world case studies from roadways, workplaces, and everyday settings, attendees will gain insights into the complex relationships between medication management and impairment. The session will conclude with practical strategies for improving education among healthcare providers and patients, innovative policy approaches, and effective intervention methods that balance treatment needs with safety concerns in multiple environments.

Benefits for Forensic Toxicologists: This workshop offers value to forensic toxicologists who routinely analyze biological samples in impaired driving cases. By better understanding prescription drug trends, testing limitations, emerging drugs of concern like gabapentin, and pharmacological mechanisms of impairment, toxicologists will enhance their ability to interpret complex analytical findings and provide more accurate expert testimony. It will also enable toxicologists to better address testimony related to the impact prescription drugs have on drug-impaired driving and toxicological analysis. Resources for tracking drug trends will also be discussed, including FARS, NFLIS reports, OD2A maps, Poison Control Center data, and ClinCalc Drug Stats Database.

Learning Objectives

1. This half-day workshop examines the rise in prescription medication use and its far-reaching implications beyond just driving impairment. Participants will explore why we've seen such dramatic increases in potentially impairing pharmaceuticals over the past decade, with particular attention to opioids, benzodiazepines, and other central nervous system depressants. The session will critically examine whether the correlation between increased prescription drug use and impaired driving represents causation or merely coincidence – a fundamental question that shapes both research approaches and policy responses. The workshop will comprehensively address how these medications impact not only driving safety but also workplace performance, daily functioning, and overall quality of life.

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2. Analyze the factors driving the significant increase in prescriptions for potentially impairing medications over the last decade, including the relationships between prescribing patterns, mental health treatment approaches, pharmaceutical marketing influences, and the pressures faced by healthcare providers in prescribing decisions.

Identify the systemic challenges faced by pharmacists in monitoring drug-drug interactions and by physicians in making appropriate prescribing decisions, including alert fatigue, communication barriers, time constraints, and institutional pressures.

3. Evaluate whether the relationship between prescription drug use and impaired driving represents correlation or causation through critical examination of toxicological data, crash statistics, and confounding variables.

Evaluate the scope, limitations, and impact of current toxicological testing strategies for prescription medications in impaired driving cases, including emerging drug trends and recommendations for comprehensive approaches.

Speakers

Kristen Burke, MS, MBA Regional Toxicology Liaison SOFT Western Region

Sabra Jones, PhD Regional Toxicology Liaison SOFT Northeast Region

Joey Jones, PhD System Director North Louisiana Criminalistics Laboratory

Mandi Mohr, MS Director The Center for Forensic Science Research & Education

Workshop Agenda

| Time 1:30 – 1:45 PM | Topic Welcome and Introduction | Speaker Kristen Burke |
|------------------------|---|--------------------------|
| 1:45 – 2:20 PM | Prescription Drug Trends and Clinical Challenges Current trends in potentially impairing prescription medications Challenges pharmacists face with drug-drug interaction alerts Alert fatigue and communication barriers between providers Physician pressures including time constraints and satisfaction metrics Institutional and pharmaceutical marketing influences | Kristen Burke |
| 2:20 – 2:55 PM | on prescribing Toxicological Testing Strategies and Drug Trends: Scope and limitations of current testing methods • Analytical challenges in prescription drug detection • Current drug trends emerging in toxicology data • Case studies demonstrating testing impact • Recommendations for comprehensive testing approaches | Mandi Mohr |
| 2:55 – 3:30 PM | Correlation, Causation, and Emerging Drugs of Concern: Evaluating evidence linking prescription drugs to impairment Research limitations and knowledge gaps Gabapentin: pharmacology, detection challenges, and impairment concerns Other emerging prescription drugs requiring attention Research needs to establish clearer causation | Joey Jones |
| 2.20 1.00 DM | Prook | |

3:30 – 4:00 PM Break

- 4:00 4:35 PM Pharmacological Effects on Driving Performance: Mechanisms Sabra Jones of impairment for major prescription drug classes
 - Drug-drug interactions that amplify impairment
 - Evidence from driving simulation and roadside studies
 - Real-world crash data and case examples
 - Differentiating therapeutic from impairing levels

4:35 – 5:15 PMRoundtable Discussion: Broader Impacts and Strategies:All SpeakersImpact on workplace performance and safety

- Effects on daily activities and quality of life
- Strategies to Improve Challenges: Healthcare provider education initiatives
- Patient counseling approaches
- Policy and regulatory solutions
- Cross-disciplinary collaboration opportunities
- Future research priorities

5:15 – 5:30 PM Closing Remarks

Sabra Jones