



Cocaine and Alcohol – DUID Cases

2024 IACT Workshop Sponsored by the SOFT/AAFS Drugs and Driving Committee

Location: Hyatt Regency, La Jolla, CA
Date: Friday, April 26th, 2024 (Half Day)
Time: 8:00 AM – 12:00 PM

Workshop Chairs: Curt E. Harper and Corissa Rodgers
Target Audience: Forensic practitioners and law enforcement of all levels of experience.

Abstract:

Cocaine, a potent central nervous system stimulant, is commonly abused recreationally. Derived from coca plant leaves native to South America, this highly addictive substance has been categorized by the Drug Enforcement Agency as a Schedule II drug. Combining cocaine and alcohol significantly increases the dangerous effects on the body (e.g., the cardiovascular system). The metabolite cocaethylene prolongs the effects and enhances the toxicity of cocaine and alcohol. Toxicological analysis of cocaine involves various methods (e.g., EIA, GC/MS, LC/MS/MS) to detect and quantify the presence of cocaine and its metabolites in biological samples (e.g., blood, urine, oral fluid). The benefits of oral fluid drug testing include detection of active, parent drugs likely reflecting recent use, high concentration of most drugs in oral fluid compared to blood, the availability and use of roadside screening devices at the time of the traffic stop or crash, and a rapid, non-invasive collection that does not require medical professionals.

This workshop will explore the following learning objectives:

- Understand the pharmacology and toxicity associated with cocaine.
- Explore the effects of combining cocaine with alcohol on behavior & driving w/ example case studies
- Discuss methods for detecting cocaine and its metabolites in biological samples
- Highlight the practical benefits of oral fluid drug testing, emphasizing rapid detection and its relevance in roadside screening

Course Specifics: The course fee includes registration, all course materials, attendance certificate, and breaks. Attendees will be responsible for travel, lodging, and meal expenses.

Agenda:

8:00-9:15 AM - A Primer on Cocaine Pharmacology and Analytical Considerations (Dan Isenschmid, Ph.D. – NMS Labs)

9:15-10:00 AM - Cocaine and Alcohol DUID cases in Houston, Including Drug Recognition Expert Case Studies (Corissa Rodgers – Houston Forensic Science Center)

10:00-10:15 AM – Break

10:15-10:30 AM - Cocaine and Alcohol DUID cases in Houston, Including Drug Recognition Expert Case Studies (Corissa Rodgers – Houston Forensic Science Center) [Continued]

10:30-11:30 AM - The Detection of Cocaine in Blood and Oral Fluid from DUID Cases in Alabama (Curt Harper, Ph.D. – Alabama Department of Forensic Sciences)

11:30 AM – 12:00 PM – Q &A, Participant Case Studies