

ASCLD 2020 Abstract Submission

Contact Information

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Head Shot



Speaker Biography

Mr. Robert Kirkby, CIH has over 25 years of experience in hazardous materials and occupational health management. Through his work for the Michigan State Police, Mr. Kirkby has worked extensively with other state and federal agencies to prevent hazardous drug exposures in forensics labs. Mr. Kirkby is a member of the American Industrial Hygiene Association (AIHA) Opioids Working Group and is a consulting member to the AAFS Synthetic Opioids Ad Hoc Committee. He is a Certified Industrial Hygienist (CIH) through the American Board of Industrial Hygiene (ABIH).

Abstract Title

Drug Exposures in the Forensic Laboratory: What We Know, What We Can Learn

Abstract

The recent rise in the illicit trade of highly toxic, synthetic drugs such as fentanyl has introduced a new set of potential health hazards to the forensic laboratory. Proper management of this employee health risk can be extremely challenging given that there are few published studies on forensic laboratory drug exposures and to date, no established regulatory guidelines.

The primary goal of this presentation is to provide an overview of the current body of knowledge and a set of available best practices to aid forensic laboratory leadership in managing their risk. This will be accomplished by addressing the following topics:

- 1) An overview of the known health hazards associated with occupational exposures to hazardous drugs.
- 2) A review and discussion of several important on-going research efforts by state and federal agencies. These include studies of background drug residues in forensic

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labs conducted by the National Institute of Standards and Technology (NIST), human exposure studies conducted by the National Institute for Occupational Safety and Health (NIOSH), and decontamination studies conducted by the United States Environmental Protection Agency (USEPA).

- 3) A review of accepted industrial hygiene principles and concepts that can limit employee exposures to a wide range of hazardous materials. These include laboratory and equipment design, best work practices, and the use of personal protective equipment (PPE).
- 4) An introduction to practical methods for identifying the presence of hazardous drug residues within the forensic laboratory.
- 5) A review of the gaps in knowledge and issues requiring further investigation.

At the completion of this session, participants will gain the following:

- 1) An understanding of the known risks associated with the handling of hazardous drugs.
- 2) A practical framework for the development, improvement, or assessment of laboratory safety systems.
- 3) An understanding of further research needed to better understand occupational drug exposures risks.

Abstract Keywords

Laboratory safety, occupation health, emerging issues, risk management, drugs, opioids