

AAFS POSITION STATEMENT

For the reasons contained in the AAFS Synthetic Opioid Ad Hoc Committee Report dated August 29, 2017, the American Academy of Forensic Sciences recommends that first responders and forensic laboratory service providers involved in the handling and analysis of suspected synthetic opioids institute a safety plan that includes hazard control methods to ensure the safe handling and analysis of fentanyl and fentanyl related samples.

Control methods should follow the hierarchy of controls concept. This begins with attempts to eliminate or reduce hazardous materials through strict evidence acceptance protocols. The use of engineering or mechanical control methods such as evidence packaging, fume hoods, and balance enclosures should be employed. The use of work practices including good lab technique and housekeeping should be followed and closely monitored. The use of personal protective equipment including skin, eye, and respiratory protection should be employed. The implementation of an emergency response plan including spill control, decontamination, first-aid, and the use of opioid antagonists should also be employed (e.g., naloxone).¹

In conjunction with the implementation of the safety plan, personnel must be trained to understand and employ the safety protocols during the course of regular business, and to deploy emergency response measures should an exposure occur.

AAFS SYNTHETIC OPIOID AD HOC COMMITTEE REPORT – SAFETY PLANS

August 29, 2017

The American Academy of Forensic Sciences recommends that first responders and forensic service providers involved in the handling, storage, and analysis of suspected synthetic opioids have and employ a structured safety plan to prevent any inadvertent and accidental opioid exposures. First responders and forensic service providers must also ensure that personnel are appropriately trained in the hazards associated with their work and that personnel understand the procedures in place to mitigate those hazards specifically related to synthetic opioids.

Background

According to the National Forensic Laboratory Information System (NFLIS), forensic laboratory service providers are currently handling and analyzing an increased number of samples either containing or contaminated with potent synthetic opioids. With 14,769 fentanyl samples submitted to forensic laboratories across the country from January through June of 2016,² law

¹ National Institute for Occupational Safety and Health Division of Health. Division of Applied Research and Technology. (2016). *Hierarchy of Controls*.

² U.S. Drug Enforcement Administration, Diversion Control Division. (2017). *National Forensic Laboratory Information System: Midyear Report 2016*. Springfield, VA: U.S. Drug Enforcement Administration.

enforcement officers and those involved in the investigation and handling of suspected synthetic opioids face a high level of personal health risks in performing their job duties. Appropriate environmental and safety procedures are required to mitigate the potential for accidental exposure to these very powerful and lethal substances.³

Seizures of illicit synthetic opioids have dramatically increased from 2014 to 2016. These powerful opioids are being seen in pure form and in deadly combinations with other substances. The high potency of these substances makes them desirable as enhancers of other drugs, like heroin, cocaine, and methamphetamine. These opioids are being manufactured in powder, liquid, and pill form that can resemble prescription drugs. On any typical workday, first responders and forensic laboratory service providers may unknowingly become exposed to a lethal synthetic opioid through interactions with forensic evidence (e.g. drug evidence, latent print evidence, or digital evidence) that has been contaminated.

Potential Risks

Guidelines and protocols are needed for first responders and forensic laboratory service providers to address the potential hazards associated with the handling of these potent and harmful synthetic opioids. These substances can be absorbed through skin contact, inhalation of airborne powder, and inadvertent ingestion due to contact with contaminated tools and surfaces, and safety protocols are required to minimize the risk of inadvertent exposure. Human health issues related to these routes of exposure have been reported.⁴

These potent and harmful synthetic opioids, like fentanyl and related substances, can and have been weaponized to create deadly environments.⁵ Thus, the storage of these substances is also of major concern and should be addressed to ensure the security and integrity of packaging to prevent inadvertent or intentional releases into the environment.

³ U.S. Drug Enforcement Administration. (2017, June). *Fentanyl: A Briefing Guide for First Responders*.

⁴ Id.

⁵ Ann. Emerg. Med 2003; 41:700-705. *J. Anal. Toxicol.* 2012; 36: 647-56