



# ACMT

American College  
of Medical Toxicology

## **Illicit Benzodiazepine Overdose Trends Detected by the Toxicology Investigators Consortium (ToxIC)**

*The American College of Medical Toxicology (ACMT) [Toxicology Investigators Consortium \(ToxIC\) Fentanyl Analog Study](#) has detected an outbreak of illicit benzodiazepine co-exposures in patients seen in the emergency department. Data from this study contributed to findings presented in a recent Morbidity and Mortality Weekly Report (MMWR) released by the Centers for Disease Control and Prevention.*

Phoenix, AZ -- September 2, 2021. Data gathered by ToxIC's Fentanyl Analog Study was reported in the CDC's August 27, 2021 Morbidity and Mortality Weekly Report (MMWR) ["Notes from the Field: Illicit Benzodiazepines Detected in Patients Evaluated in Emergency Departments for Suspected Opioid Overdose — Four States, October 6, 2020–March 9, 2021."](#)

This publication presents a detailed evaluation of 21 suspected opioid overdoses in which illicit benzodiazepines were detected. Approximately 1/3 of cases did not respond to naloxone, the antidote for opioid overdose. With the growing death toll from illicit benzodiazepines increasing over 500% between 2019-2020, additional investigation of co-exposure in opioid overdose is critical to prevent further mortality.<sup>1</sup>

Prescription benzodiazepines are sedative drugs commonly prescribed for anxiety and seizures. According to the report's first author, Kim Aldy, DO, "illicit benzodiazepines are unlawfully manufactured. The toxicity of these illicit benzodiazepines when consumed with opioids has not been well delineated. Concurrent exposure to both illicit benzodiazepines and opioids may increase overdose risk and/or make treatment for opioid overdose increasingly difficult."

About ToxIC's [Fentanyl Analog Study](#): Funding for this study was made possible through a subcontract to the Icahn School of Medicine on a R01 grant from the National Institute on Drug Abuse. The 5-year study, entitled "Predicting Medical Consequences of Novel Fentanyl Analog Overdose Using the Toxicology Investigators Consortium (ToxIC)," includes 9 geographically diverse ToxIC sites around the country. Now in the 2<sup>nd</sup> year, this study has over 400 cases that are being utilized to characterize the novel synthetic opioids used, evaluate the optimal treatments, and track regional trends in fentanyl analog overdoses.

For more information on the ToxIC Fentanyl Analog Study and to see quarterly toxicology testing reports released by Center for Forensic Science Research and Education (CFSRE), view the [ToxIC Fentalog Study website](#).

*The American College of Medical Toxicology (ACMT) is a professional, nonprofit association of physicians with recognized expertise and board certification in medical toxicology. Our members specialize in the prevention, evaluation, treatment, and monitoring of injury and illness from exposures to drugs and chemicals, as well as biological and radiological agents. ACMT members work in clinical, academic, governmental, and public health settings, and provide poison control center leadership.*

<sup>1</sup>Liu S, O'Donnell J, Gladden RM, McGlone L, Chowdhury F. Trends in Nonfatal and Fatal Overdoses Involving Benzodiazepines — 38 States and the District of Columbia, 2019–2020. *MMWR Morb Mortal Wkly Rep* 2021;70:1136–1141. DOI: <http://dx.doi.org/10.15585/mmwr.mm7034a2>