



The Toxic NOSE (Novel Opioid and Stimulant Exposure)

Report #7 from Toxic's Rapid Response Program for Emerging Drugs of Abuse

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Alert: Opioid Adulterant Case Cluster

Introduction

A cluster of cases involving opioid adulterants was recently detected by the Toxic NOSE toxicosurveillance program. In a 24-hour period, seven patients presented with an opioid toxidrome after reportedly using non-opioid street drugs in Jacksonville, Florida. Substances reported to be used included cocaine, marijuana, and marijuana laced with cocaine. Ages of patients ranged from 38-72 years, 4 (57%) were female. Patients presented with recurrent and prolonged opioid toxidrome, responsive to naloxone.

The Toxic Novel Opioid and Stimulant Exposures (NOSE) Reports

As a project of the Opioid Response Network (ORN), the American College of Medical Toxicology (ACMT) Toxicology Investigators Consortium (Toxic) is using the enhanced sentinel detector field to identify and report on novel and emerging opioid and stimulant exposures reported in Toxic every quarter over a 2-year period.

The goal of this project is to disseminate this novel information to the medical toxicology community as well as the ORN as part of a Rapid Response program.

Toxic Case Cluster

Case 1: A woman became unresponsive after smoking “marijuana laced with cocaine.” A bystander called emergency medical services (EMS) and the patient arrived to the emergency department (ED) diaphoretic, somnolent but arousable, and hypertensive with a blood pressure of 230s/130s. The patient received intravenous (IV) naloxone 0.4 mg at 1 hour and 1.5 hours after arrival. The patient had aspiration pneumonia/pneumonitis and was admitted on supplemental oxygen. Twenty-five hours after arrival, the patient developed a decreased level of consciousness and hypotension and required two more doses of IV naloxone 1 mg. The patient did not require any further doses of naloxone and was discharged on day 6.

Case 2: A woman was found down in a field by EMS and was transported to the ED. En route the patient received two doses of naloxone 0.4 mg via unknown route for decreased level of consciousness. The patient arrived to the ED with a normal mental status and stated she smoked cocaine. Thirty minutes after arrival, the patient became re-sedated and required an additional dose of IV naloxone 1 mg. The patient was observed for 6 hours and was discharged.

Case 3: A woman was witnessed to become apneic and unresponsive while EMS was on scene for another overdose. The patient was given naloxone 0.4 mg via unknown route with appropriate response and then transported to the ED. The patient stated she took what she thought was cocaine. The patient then received IV naloxone 0.4 mg at 1.5 hours, 2 hours, and 4.5 hours after arrival. The patient was admitted to the observation unit. Nine hours after presentation, she received a nebulized dose of naloxone 2 mg for recurrent sedation with appropriate response. The patient was discharged after 12 hours of observation.

Case 4: A man was found by EMS unresponsive in the driver’s seat of a car that was stopped in the middle of the road. He was given naloxone 0.4 mg via an unknown route, became agitated and aggressive, requiring EMS administration of ketamine. Upon arrival to the ED, the patient was apneic with pinpoint pupils and was given IV naloxone 0.4 mg with an appropriate response. The patient required 3 subsequent doses of IV naloxone 1 mg at 1.5 hours, 4.5 hours,

and 7.5 hours after arrival. The patient was then placed on an IV naloxone infusion of 0.4 mg/kg/hr for 6 hours. The patient denied any drug use. His urine drug screen was only positive for cocaine.

Case 5: A man was snorting “laced cocaine” with his wife and they both became unresponsive. A bystander called EMS and the patient was given intranasal (IN) naloxone 0.4 mg on scene and transported to the ED. Upon arrival to the ED the patient became re-sedated and was given IV naloxone 0.4 mg with an appropriate response. The patient was observed for 5.5 hours and was discharged.

Case 6: A man was found to be in respiratory distress in a parking lot by EMS. The patient was given IN naloxone 1.5 mg with an appropriate response and transported to the ED. Upon arrival the patient stated he smoked marijuana that he got from his usual source. On arrival to the ED, the patient had a normal mental status, but was confused as to how he got to the hospital. Six hours after arrival, the patient developed bradypnea and became sedated, for which he received IV naloxone 1 mg followed by another 1 mg dose 20 minutes later. The patient was admitted to the hospital. Twelve hours after initial presentation the patient became re-sedated again and required IV naloxone 1 mg. The patient was observed for 12 hours after his last dose of naloxone and discharged.

Case 7: A female was found minimally responsive and vomiting after using “marijuana cigarettes.” EMS did not administer naloxone. The patient arrived to the ED with a decreased mental status, seizure-like activity, and rigidity. She was given IV naloxone 0.4 mg with a partial response. The patient received another dose of IV naloxone 0.4 mg 20 minutes later with a full response. Once awake, the patient admitted to taking “one hit” of marijuana and stated that it was the last thing she remembered. The patient was discharged after 3 hours of observation.

Importance

The presence of adulterants in street drugs is a known problem that can have devastating consequences. Opioid adulterant related deaths have been previously reported in the ToxIC NOSE report series ([https://www.toxicregistry.org/ Library/Toxic NOSE/ACMT ORN Brief - 3rd Quarter - Sept 2021 FINAL docx.pdf](https://www.toxicregistry.org/Library/Toxic%20NOSE/ACMT%20ORN%20Brief%20-%203rd%20Quarter%20-%20Sept%202021%20FINAL%20docx.pdf)). Agents used as adulterants can range from psychoactive substances including opioids and sedatives, to toxic substances such as levamisole without psychoactive properties. Synthetic opioid adulterants such as fentanyl and other potent or long-acting opioids may not show up on common urine drugs screens. Detection of this cluster of otherwise unrelated cases in a single area should place both the public and health care providers on high alert for unintentional opioid exposures and overdoses. These cases are notable for both prolonged effect and for the involvement of cocaine in most cases.

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About the *Opioid Response Network (ORN)*:

ORN provides free, localized training and education for states, communities, organizations and individuals in the prevention, treatment and recovery of opioid use disorders and stimulant use. Learn more and submit a request at www.OpioidResponseNetwork.org.

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