

April 4, 2022

**MEMORANDUM**

**TO:** EMS providers  
Hospitals and Clinics  
Coroners and Medical Examiners  
Harm Reduction Providers  
Local Health Departments  
Behavioral Healthcare Providers  
Substance Abuse Prevention Coalitions

**FROM:** IDPH Office of Health Promotion, Division of Emerging Health Issues  
Overdose Spike Response Working Group

**RE:** Increase in Xylazine-related overdose deaths, Illinois

**IMPORTANT INFORMATION:**

A veterinary non-opioid tranquilizer named Xylazine is increasingly involved in drug overdose deaths in Illinois, increasing from two reported deaths in 2018 to 45 in 2020 and (provisional data) 155 deaths in 2021. Per the Illinois Poison Control Center, “The drug has a similar mechanism of action of other prescription medications such as Clonidine (used to treat hypertension), Guanfacine (used to treat ADHD) and Tizanidine (used as a muscle relaxant to treat pain). Overdose will cause coma, slow heart rate and at first hypertension followed by hypotension. It does not respond to naloxone. There is no bedside, real-time clinical test to see if this is an agent on board at the time of emergency/hospital stabilization and care.”

Presentation at the Texas Substance Use Symposium from staff (Claire Zagorski, MSc, LP) working a cluster of xylazine-involved overdoses in Austin, Texas in March 2022 informed providers that “patients who use drugs (especially heroin/fentanyl) and present with symptoms like fatigue, sedation, sudden incontinence, extended immobility, bradycardia and hypotension should be considered as potentially xylazine exposed”. The Austin/Travis County MES system medical advisory released on March 5, 2022, urged EMS staff to be prepared to suction patient airways and position patients to avoid aspiration due to the large emetic properties and to consider use of calcium chloride and sodium bicarbonate administration in cardiac arrest secondary to overdose.

Although the drug is only labeled for veterinary use, there is no indication at this time of diversion of the drug from veterinary providers, clinics, or pharmacies. Law enforcement reports drug adulteration with xylazine is often called ‘tranq’ and sold mixed with cocaine or fentanyl.

**DISTRIBUTION OF DEATHS:**

The distribution of where deaths have occurred in 2021 has predominantly been in Cook county (79%) and is the focus of a [Morbidity Mortality Weekly Report](#) released April 1, 2022. Risk for exposure outside of Cook and collar counties does exist, with at least 14 additional counties reporting a Xylazine-related

death occurred there in 2021. The Cook County Medical Examiner's laboratory, NMS (and perhaps others) are able to detect and quantitate xylazine.

The Sudden Unexplained Overdose Reporting System (SUDORS) has developed a fact sheet on Xylazine-involved deaths in Illinois (attached).

Ethnographic and qualitative data of xylazine-included substance user experience was published in the April issue of [Drug and Alcohol Dependence](#).

### **HOSPITALIZATIONS:**

As part of the overdose spike protocol procedures, the IDPH syndromic surveillance system has been queried for xylazine involved emergency department visits or hospitalizations, with fewer than 5 such visits identified since 2018. Soft tissue infections at injection sites and loss of digits (fingers and toes) have been reported in the media or research literature. Given the lack of overdose patient general awareness of the inclusion of the drug in substances being used and requirement for clinical testing for the substance, under reporting is highly plausible.

### **ACTIONS:**

Knowing that xylazine-involved overdoses and deaths are increasing in Illinois:

Healthcare providers should:

- Consider xylazine in human poly drug use, especially when standard doses of naloxone are ineffective.
- Be aware of evolving treatment recommendations.
- Educate patients who use illicit drugs about the risks of xylazine exposure in fentanyl, heroin, cocaine, and 'tranq' use.

Harm Reduction programs should:

- Prepare for potentially larger naloxone distribution and use needs.
- Deliver appropriate wound care.
- Educate patients who use illicit drugs about the risks of xylazine exposure in fentanyl, heroin, cocaine, and 'tranq' use.