

Substance Use Trend

Alert

August 2022

Xylazine: An Emerging Substance Increasingly Linked to Drug Overdose Deaths Nationwide

Xylazine is a veterinary tranquilizer used as a sedative and muscle relaxant for animals such as cattle, horses, sheep, etc. during surgical procedures.¹ This substance is not approved for human use, however, recent reports indicate an increase in xylazine prevalence mixed and used with substances like heroin, fentanyl, and cocaine.¹ Use of xylazine, via oral ingestion, inhalation, and, most commonly, injection may be intentional or accidental to prolong drug effects or increase street value by adding net weight.²⁻⁴ Xylazine can cause drowsiness, amnesia and slow breathing, increased heart rate, and blood pressure.²⁻⁴ Xylazine, in combination with other nervous system depressants like alcohol or benzodiazepines, increases risk of overdose.⁴ More so, xylazine is not an opioid and the effectiveness of naloxone in some overdoses may be compromised.⁴ Long-term use causes skin ulcers, abscesses, and related complications.⁴

Xylazine in the U.S.

Overdoses involving xylazine have been primarily found in the Northeast but is spreading throughout the US.^{2,3} Xylazine has become increasingly involved with overdose deaths rising nationally from 0.36% in 2015 to 6.7% in 2020.⁵ Illicitly manufactured fentanyl, cocaine, benzodiazepines, and heroin are often present in xylazine-related overdose deaths.⁶ From 2019-2020, the prevalence of overdose deaths with xylazine rose 44%.⁶ The National Forensic Laboratory Information System (NFLIS) identified xylazine in over 3,800 drug reports from 2015 through 2020, with the largest recording in 2020 with 1,492 reports.¹

Xylazine in Florida

Although not required to report xylazine death occurrences to the State of Florida Bureau of Vital Statistics, in 2020 many districts medical examiners

reported deaths with xylazine.⁷ A total of 99 occurrences were reported in Florida from January-December 2020 while the 2021 Medical Examiner's Commission Interim Report indicates that 112 occurrences were reported from district medical examiners from January- June 2021 (Figure 1).⁷ This data suggests that there could be an estimated 224 occurrences for calendar year 2021.⁷

Xylazine Occurrences in Florida

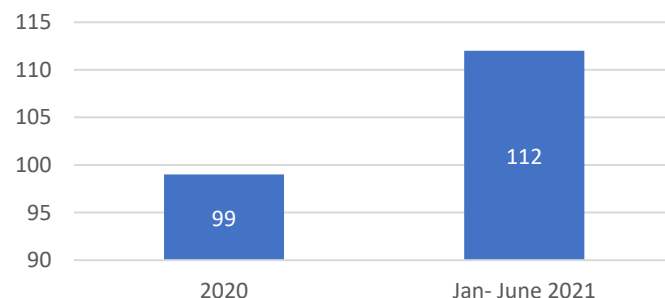


Figure 1: Number of Xylazine Occurrences in Florida from 2020 to First Half of 2021. Source: [FDLE](#)

Recommendations

Public health departments and poison control centers should be aware of this new substance.¹ In addition, medical examiners, toxicologists, and behavioral health providers should test for xylazine to determine the level of xylazine use in their communities.⁵ Further resources and services are needed for people who inject drugs who may be at risk for complications associated with xylazine.⁵ Xylazine intoxication may require resources such as blood pressure support with intravenous fluids, heart medication, and extended hospital observation due to cardiac effects.³ For more information, please visit the following websites:

Additional Information Sources:

[National Drug Early Warning System \(NDEWS\)](#)

References

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6. Psychiatric News (2022). Xylazine increasingly found in overdose deaths. Retrieved from <https://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2022.07.6.5>
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