

Xylazine: Zombie Drug Provides A Wakeup Call For The Dangers Of Drug Abuse

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Abstract

Xylazine, the "Zombie Drug, is a scheduled class 3 controlled substance authorized for veterinary use. However, it is now increasingly being used as an adulterant with opioids to intensify their effect. The drug's ready availability and addictive potential have made it popular among drug users. In our article we have portrayed the implications of Xylazine abuse and the need to be proactive in safeguarding against its abuse. Recent reports have shown a surge in Xylazine use in major cities in the United State causing to emerge as a public health threat. Symptoms include skin ulcerations, rotting, limb amputations, and blackouts. With no readily available antidote, effort must be taken to get the drug off the streets and prevent overdoses. There is a need for rigorous action, increase in budget and personnel to begin to overcome this rapidly rising public health threat.

Keywords: Xylazine, Veterinary tranquilizer, Drug abuse, Public health, Morbidity, Overdose prevention

Article

Over the past few months, Xylazine has proven its potential as a public health threat. The non-opioid tranquilizer is known to cause skin ulcerations, rotting, and even limb amputations, earning itself the name 'Zombie Drug.' Xylazine, tranq or tranq dope, is classified by the U.S. Drug Enforcement Administration (DEA) as a Schedule III controlled substance authorized in the United States for only veterinary uses under the brand names Rompun and Anased as a sedative, muscle relaxant, and analgesic. Over the years, Xylazine has been used as an adulterant with other drugs like fentanyl, cocaine, and heroin to lengthen and intensify the euphoric effects caused by these drugs [1]. Heroin has now been replaced by fentanyl &

in the House and Senate reflecting the necessary laws for the DEA and law enforcement to get Xylazine abuse under control. While at the same time, it continues to remain in use as a veterinary tranquilizer [7]. Increased budget, personnel, and more rigorous efforts to take the drug out of the streets is the best possible solution to improve the current scenario. Xylazine, the latest fad in drug abuse, should be targeted with a multicentric approach focused on primary prevention, in order to keep it from being misused.

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Xylazine combinations as the drug of choice for abuse by addicts in the United States.

The ready availability of the drug is yet another reason for the popularity of Xylazine. It is relatively easy to obtain as an authorized veterinary drug, unlike heroin or cocaine. It is also available for purchase online and hence sold on the streets for a heavily discounted price compared to the other compounds.

Xylazine's mechanism of action includes stimulation of central alpha two receptors to cause drowsiness and amnesia, giving an overall depressant effect on the CNS. Peripheral alpha receptor stimulation leads to a decrease in heart rate, low blood pressure, and slow breathing. Its ability to produce muscle relaxation and sedation has led to its abuse [2].

As a potential anti-hypertensive drug, Xylazine was developed in the Federal Republic of Germany by Farbenfabriken Bayer AG in 1962 [2]. The earliest reports of humans using Xylazine as an adulterated drug in a mixture with other drugs date back to the 2000s in Puerto Rico. Currently, it has been identified as an isolated drug of abuse [6].

The DEA uncovered Xylazine in a mixture with fentanyl in 48 out of the 50 states and estimates over a 100% rise in Xylazine usage across the country. The prevalence of Xylazine abuse can only be underestimated because of the lack of laboratory and diagnostic testing in many areas. [3]

Recently making headlines, Xylazine usage shot up in major cities like New York, San Francisco, and Philadelphia. Nearly one-fourth of the dope confiscated in New York tested for Xylazine, and almost ninety percent in Philadelphia [4]. People were found blacked out for hours, leaving them stuporous, high, immobile, non-reactive, and vulnerable to rape and robberies. Erosions and black-scaly wounds leading to amputations could be observed in drug users [4]. In November 2022, the Food & Drug Administration (FDA) sent out a communication to clinicians as a warning about Xylazine and its future threats [5].

While current management involves the usage of opioid antagonists to counteract the effect of opioids taken in the mixture with Xylazine, no antidote is available for the drug itself [8]. Hence, efforts should be in taking the drug off the street and preventing the number of overdoses from occurring. One such measure includes the Bipartisan legislature introduced March 28th, 2023

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