XYLAZINE Information for Healthcare Professionals



What is xylazine?

Xylazine is a veterinary tranquilizer, (a non-opioid), which is sometimes **mixed with fentanyl** and other illicit drugs. Xylazine is an analog of clonidine acting as an alpha-2 agonist. It is FDA-approved as a sedative in veterinary medicine but is not approved for human use. The drug is not scheduled under the Controlled Substances Act.

Why do people use xylazine?

Illicit xylazine is also known as Tranq. It may be found as an adulterant in fentanyl, heroin, cocaine, and methamphetamines. People often use the drugs that are available to them in their local supply. Similar to fentanyl, many people did not know they were being exposed to it in their supply. Some people also report purposely using xylazine-containing fentanyl to lengthen its euphoric effects.

Has xylazine been detected in San Diego County?

The San Diego Medical Examiner's Office reported one xylazine death in 2020 and no deaths in 2021. Previously, xylazine was not routinely tested for unless expanded testing was indicated. In late April 2023, xylazine testing was initiated in all routine post-mortem screenings, and of more than 1,000 screened deaths occurring between November 2022 and May 2023, six were positive for xylazine. Of the six xylazine cases, all were also positive for other drugs, including fentanyl

and methamphetamine. The San Diego Sheriff's Department Crime Lab includes xylazine testing in all drug seizure cases and has confirmed thirty-six samples where illicit drugs contained xylazine from 2021 through the first quarter of 2023. Although xylazine does not appear to be as prevalent in San Diego County as in some other jurisdictions, residents should be aware of the risks associated with xylazine and be proactive in mitigating them, particularly because national trends indicate its increasing presence in overdose deaths and the illicit drug supply.

How do you test for xylazine?

As of May 2023, there are no FDA-approved rapid tests checking for xylazine in patients in a hospital or clinic setting. Testing may be available as a send out laboratory specimen to a specialized lab that uses gas chromatography/mass spectrometry. Xylazine test strips are commercially available by BTNX for testing drug products.

What are the signs and symptoms of a xylazine-involved overdose?

The main effect of xylazine is heavy sedation, so the person who has overdosed will likely be unresponsive. When xylazine is found in combination with fentanyl or other opioids, the signs and symptoms can include blue or greyish skin and slowed breathing and heart rate.

FDA WARNING

The United States Food and Drug Administration (FDA) issued a **letter to stakeholders** providing clinical information about the risks of severe, necrotic skin ulcerations from repeated xylazine exposure, possible withdrawal symptoms, and xylazine's interference with successful treatment of opioid overdoses. **View the letter:** www.fda.gov/media/162981/download

It is not known at this time whether the xylazine is illicitly produced (unapproved) or

diverted from the animal drug supply. FDA is continuing to investigate the source of xylazine in the illicit drug supply and will provide an update when new information is available.

FDA encourages health care professionals and patients to report adverse events in humans associated with possible illicit xylazine exposure to FDA's MedWatch Adverse Event Reporting program. Complete and submit the report online at www.fda.gov/medwatch/report.htm; or download and complete the form, then submit it via fax at 1-800-FDA-0178.

XYLAZINE Information for Healthcare Professionals



Does naloxone reverse xylazine-involved overdoses?

No, xylazine is not an opioid, so naloxone will not reverse a xylazine overdose. However, because xylazine is frequently found in combination with opioids, including fentanyl, naloxone should still be administered whenever an opioid-involved overdose is suspected. Naloxone will reverse the effects of the opioids, and therefore may improve the patient's respiratory status.

How do you manage xylazine toxicity?

If clinical presentation is consistent with xylazine toxicity, it is recommended to treat the patient with supportive care.

How long does the effect of xylazine last?

The onset of xylazine is rapid, within a few minutes, and the duration can last **up to four hours**. However, pharmacology is based on injected control doses in animal studies. In human pharmacology, duration depends on the dose, modality of ingestion, individual metabolism, and whether co-ingestion with opioids exist.

What are the symptoms of xylazine withdrawal?

Xylazine withdrawal is not a well-defined syndrome and may include **anxiety**, **irritability**, **and restlessness**. Severe hypertension is also possible.

Does xylazine cause skin ulcers?

Although research has yet to definitively prove that xylazine causes skin ulcers, there appears to be an association between the two. People who regularly use xylazine often have severe skin ulcers and abscesses. Hospital systems throughout the US have reported an increase in skin and soft tissue infections. These wounds are presenting atypically, often all over the body (away from the site of injection) and appear to worsen more quickly than other skin infections. These presentations may be related to vasoconstrictor properties of xylazine. These significant wounds have been reported in individuals using xylazine even when the drug has not been injected.

What wounds are associated with xylazine?

People who inject drugs containing xylazine may develop severe skin wounds and patches of dead and rotting tissue that easily become infected and, if left untreated, may lead to amputation. These wounds can develop in areas of the body away from the injection site and may become life-threatening. Wounds can be deep and should be evaluated for possible necrotizing fasciitis and osteomyelitis.

How do you dress an ulcer wound?

Xylazine wounds should be evaluated in a similar fashion to other drug-associated wounds including possible deep infection, necrotizing fasciitis, osteomyelitis, and sepsis. After initial evaluation and determination of whether surgical intervention is needed, remove any debris or dead tissue from the ulcer, wash and dry it, and apply an appropriate dressing.

Resources for Healthcare Professionals

National Institute on Drug Abuse (NIDA) nida.nih.gov/research-topics/xylazine

For information regarding withdrawal management and treatment options, the **California Substance Use Line** is available 24/7 to California clinicians. (844) 326-2626

Harm Reduction Services

The primary goal of harm reduction is to save lives and protect the health of people who use drugs by linking them with resources and services.

National Harm Reduction Technical Assistance
Center – harmreductionhelp.cdc.gov

California Bridge – www.CABridge.org

San Diego County Access & Crisis Line 1-888-724-7240

Naloxone and Fentanyl Test Strips Resources
Call 2-1-1