



DEPARTMENT OF
HEALTH AND HUMAN SERVICES

Promoting and protecting health, well-being, self-sufficiency, and safety of all in Marin County.

April 27, 2023



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PUBLIC HEALTH ADVISORY: Xylazine Presence in Illicit Drug Supply

Xylazine, a non-opioid agent developed as a veterinary tranquilizer, has been increasingly detected in the regional illicit opioid supply. Medical providers in Marin County should therefore be aware of the signs and symptoms of xylazine toxicity to treat and counsel patients appropriately.

This advisory provides information about xylazine, signs and symptoms of toxicity, and guidance for management and counseling.

Xylazine has been associated with fatal overdoses and chronic wounds, with Northeastern States being most heavily impacted. [A westward expansion of xylazine](#) has led to an increasing number of xylazine overdose events in the Bay Area. While no xylazine-associated events have yet been reported in Marin County, local wastewater sampling has revealed the presence of xylazine, suggesting its use within Marin.

Xylazine use, and overdose, frequently occurs in combination with the high potency opioid fentanyl. The U.S. Drug Enforcement Administration (DEA) [reported](#) that in 2022, approximately 23% of fentanyl powder and 7% of fentanyl pills tested from the illicit market contained xylazine. The population at highest risk for xylazine overdose are those who use illicit opioids, especially fentanyl.

Actions requested of clinicians:

1. Provide information about xylazine to patients who use drugs.
2. Consider xylazine as a cause or contributor in drug overdoses and severe, necrotic skin ulceration, especially at sites of injection.
3. Continue to prescribe and administer naloxone to reverse the effects of opioids and reduce harm from mixed drug overdoses.
4. Use [harm reduction strategies](#) to educate patients and refer patients who use opioids to receive Medications for Opioid Use Disorder (MOUD).
5. Be informed about xylazine. [The FDA](#) and [CDPH](#) have released health alerts which provide more information about xylazine.

What is xylazine?

Xylazine, also known as “tranq” or “tranq dope”, has no approved use in humans. It is a non-opioid agent that acts as a central alpha-2-adrenergic receptor agonist in the brainstem and may share some clinical effects with levamisole, clonidine, and tizanidine. Xylazine may be added to fentanyl to extend the euphoric effects of fentanyl. However, in many cases, people are not aware that xylazine has been added to their drug supply.

What are the signs of xylazine toxicity?

Acute xylazine toxicity signs include CNS and respiratory depression, hypotension, bradycardia, hypothermia, or high blood glucose levels. Xylazine exposure should be considered if patients are not responding when naloxone is administered in the setting of an overdose. However, given the frequent co-use of xylazine and opioids, **naloxone should still be administered to patients suspected of drug overdose potentially involving xylazine.**

Severe, necrotic skin ulcerations, sometimes requiring amputations, have also been reported with repeated exposure to xylazine. Xylazine dependence can also occur with repeated exposures and abrupt cessation may result in withdrawal symptoms such as agitation or anxiety.

How can xylazine overdose or toxicity be managed?

Naloxone should still be administered in the setting of a suspected overdose. There are no reversal agents specific to xylazine and individuals may remain sedated due to xylazine even after naloxone administration. Supportive care such as airway management and supplemental oxygen should be provided. Xylazine-associated wounds may require debridement, long-term dressings (e.g. Xeroform® covered by absorbent dressing), and follow up with access to clean water and housing.

How can xylazine withdrawal be managed?

There is no specific treatment for xylazine withdrawal. The Philadelphia Department of Public Health [has listed strategies](#) which include replacement therapy with alpha-2-adrenergic agonists such as clonidine, pain, sleep and anxiety management.

How should healthcare providers counsel patients?

Harm reduction strategies should be used by healthcare providers to educate patients about the harms of xylazine and potential ways to protect themselves.

How can I support local overdose prevention efforts?

OD Free Marin is a community coalition dedicated to reducing overdoses in our community. Visit our website to learn more and to join us: odfreemarin.org.

For additional information regarding Harm Reduction, please visit [National Harm Reduction Coalition](#).

References:

1. [FDA warns about the risk of xylazine exposure in humans](#). FDA. gov. 2022
2. [Alert on presence of xylazine in illicit fentanyl](#). California Department of Public Health. 2023.
3. [Unintentional Drug Overdose Fatalities in Philadelphia, 2021](#). Philadelphia Department of Public Health. 2022.
4. [Xylazine spreads across the US: A growing component of the increasingly synthetic and polysubstance overdose crisis](#). Drug and Alcohol Dependence 2022.
5. [DEA Reports Widespread Threat of Fentanyl Mixed with Xylazine](#). U.S. Drug Enforcement Administration. 2023.
6. [Xylazine \(trang\) exposure among people who use substances in Philadelphia](#). Philadelphia Department of Public Health. 2022.

7. [The Growing Threat of Xylazine and its Mixture with Illicit Drugs \(dea.gov\)](#). dea.gov, 2022.
8. [Xylazine: What Clinicians Need to Know \(ny.gov\)](#). New York State Department of Health. 2023