



XYLAZINE

What You Need To Know

What is Xylazine?

Xylazine, also known as “tranq,” “tranq dope,” or “zombie drug,” is a sedative and muscle relaxant drug that comes in a clear liquid and is used to put animals to sleep for surgery in veterinary medicine. It is not currently a federally-controlled substance and is not approved by the U.S. Food and Drug Administration (FDA) for human use.

- ▶ Xylazine is a sedative drug used by veterinarians to anesthetize animals that is increasingly present in the illicit drug supply.
- ▶ Xylazine may be included in street drugs, illicit drugs, and counterfeit pills — often without the knowledge of people using these substances.
- ▶ When taken by humans, xylazine can lower blood pressure, heart rate, and breathing rate.
- ▶ When combined with opioids like fentanyl, as is frequently the case, xylazine enhances the life-threatening effect of respiratory depression (slowing or stopping breathing) caused by opioids, increasing the risk of overdose and death.
- ▶ There is no medication or antidote to reverse xylazine overdose. Naloxone is effective against any opioids contributing to overdose but is not effective against xylazine.
- ▶ People should administer naloxone during an overdose to block any opioids involved in an overdose, even if that overdose may involve xylazine, and call 911 to ensure that the person who overdosed obtains emergency medical care.
- ▶ There is a readily available test people can use to detect xylazine, though it does not show the amount, purity, or potency of the xylazine in the sample.

Summary

The illicit drug supply in Los Angeles County increasingly includes substances with a high potential for overdose. Xylazine is now being mixed in street drugs, illicit drugs, and counterfeit pills, in addition to fentanyl. Xylazine is a cheap additive that increases potency as well as the risks for overdose and death. These newer, dangerous contaminants in the drug supply underscore the need for ongoing education to and increasing awareness in the broader community.

What does it do?

In humans, xylazine reduces pain and slows brain activity, causing a decrease in breathing rate, slows the heart rate, and lowers blood pressure in order to cause sedation and sleepiness. Clinically, it is used to put animals to sleep during veterinary surgeries. It is specifically designed for animal surgeries and was found to be too dangerous to use on humans.

Why is it so dangerous to humans?

Xylazine is not FDA-approved for human use because it causes dangerously low blood pressure, slows breathing and heart rates that can result in death. Injecting xylazine can also cause damage to tissue around the injection site, which leads to skin damage, large sores and ulcers that may develop into complex infections. For this reason, xylazine has the nickname “zombie drug.”

Why is it being cut into drugs?

Xylazine is a cheap “filler” for illicit opioids and other counterfeit pills since it increases the potency of various opioids. This effect of xylazine allows those who are creating and supplying drugs to maintain a very strong product. However, most people who are purchasing or being given illicit drugs are not seeking xylazine and likely do not know that xylazine may be cut into the drugs they are trying to obtain.



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How are people who use drugs coming into contact with Xylazine?

Liquid xylazine is cooked down and made into a powder form, then mixed with other substances — such as heroin — or pressed into counterfeit pills (fake pills that look like prescription medications) including opioids (e.g., Norco, Percocet, Vicodin, etc.), sedatives (Xanax), or even stimulants (Adderall). People who are obtaining these drugs may not be aware that xylazine is present in what they are using, which can increase the risk of a fatal overdose. As such, xylazine can be swallowed, inhaled, smoked, snorted, or injected into muscles or veins. When mixed with opioids and other central nervous system depressants, like alcohol or benzodiazepines, xylazine enhances and prolongs the effects including sedation (drowsiness leading to unresponsiveness) and respiratory depression (decreased or stopped breathing). Xylazine notably increase the risk for fatal overdose.

What are the symptoms of a xylazine overdose?

Xylazine overdose should be suspected in people presenting with symptoms of an opioid overdose including — pinpoint pupils, slowed or stopped breathing, slowed or stopped heartbeat, cold/ clammy and bluish/purplish skin — who are not responsive to naloxone.

Can we test for it?

Recently, rapid drug testing strips that will identify xylazine in a drug sample became available online through BTNX (<https://www.btnx.com/HarmReduction>). However, these rapid tests do not show the amount, purity, or potency of the xylazine found in the sample.

Xylazine can be picked up in a quantitative spectroscopy toxicology screen, such as a gas chromatography-mass spectrometry test; however, rapid drug screens available in the emergency department will neither routinely test for nor detect xylazine.

Residents of LA County can also consider bringing their drugs to be tested as part of a pilot program being run through UCLA, which uses Fourier-transform infrared spectroscopy (FTIR) machines to analyze drug samples in about 15-20 minutes, and is available for free by contacting Chelsea L. Shover, PhD via email clshover@mednet.ucla.edu.

Is there an antidote to a xylazine overdose?

There is no approved antidote for a xylazine overdose in humans. However, since xylazine is usually combined and used with opioids, naloxone may help temporarily reverse the effect of any opioids taken with xylazine. It is therefore essential that any person responding to a suspected overdose call 911 and administer naloxone quickly when someone has symptoms of a xylazine or an opioid overdose. It can save their life.

Xylazine has been found in drug samples in 36 states and the District of Columbia. In New York City, xylazine has been found in 25% of drug samples. In Philadelphia, xylazine was present in over 90% of fentanyl and heroin samples tested in 2021. And in California, xylazine has been found in drug samples in Los Angeles, San Francisco and San Diego in 2023.

How does this change substance use?

If you or someone you know are going to use illicit drugs, please remember the following:

1. Do not use alone. Use with a friend or someone who can call 911 and administer naloxone in the event of an overdose.
2. Start low and go slow: Xylazine may stay in your system for hours and can build up.
3. If someone is overdosing, still use naloxone! Xylazine is often mixed with an opioid and naloxone will still help reverse the opioid's contribution to an overdose.
4. Because of xylazine, both people who use drugs by injecting them and those who do not inject them may have an increased risk of developing wounds on various parts of the body — even in non-injection sites — so please keep an eye on your skin.