

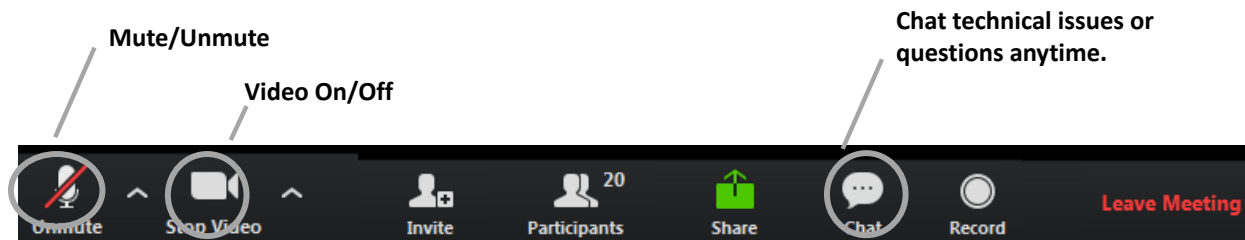


What's the Latest? A quarterly webinar series addressing current MOUD trends

February 15, 2023

Zoom Housekeeping

- This call is being recorded
- Mute when not speaking
- Audio & video controls in lower left corner





Call Agenda

- **Land Acknowledgement**
- **Introduction**
- **Xylazine: History, Emergence, and Public Health Concerns**
 - Mary Figgatt, PhD Candidate, University of North Carolina Gillings School of Global Public Health
 - Don Jackson, SSP Director, North Carolina Survivors Union
- **Questions & Discussion**



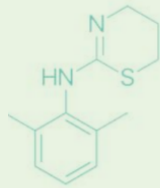
Land Acknowledgment

I would like to begin by acknowledging that as we gather today, we are on the ancestral homelands of the Indigenous Peoples who have lived on these lands since time immemorial.

Please join me in expressing our deepest respect and gratitude for our Indigenous neighbors.

Xylazine

Xylazine



What is Xylazine?

Xylazine is a veterinary anesthetic that's often used as a cut in street drugs. It's sometimes called tranq, tranq dope or sleep cut and people usually use xylazine unknowingly when their drugs are cut with it.

Uses

For humans there isn't a prescribed use because it's intended for use in animals.

Effects

Sedation, analgesia (pain killing like ibuprofen or advil but not opioids) and muscle relaxation. Strong sedative effects and excessive sleepiness without euphoria have been anecdotally reported to happen anywhere from 5 to 200mg.

Withdrawal

Withdrawal symptoms have been reported to be mild but because of the lack of human information about xylazine your results may vary.

Withdrawal Management

Research suggests that if withdrawal symptoms are present, low dose clonidine can be used to manage withdrawal symptoms.

Overdose Prevention

Treat xylazine like you would any other drug that can cause respiratory depression such as opioids, benzos or alcohol. If combining with other drugs, keep the doses low especially if they are other depressant drugs. There isn't an overdose reversal drug for xylazine so it's recommended to not to use alone and practice harm reduction if you decide to use xylazine.

<https://nextdistro.org/resources-collection/xylazine-quick-guide>



Xylazine: Local Data

- *What's happening with xylazine in Washington State?*
 - As of January 2023, data indicate xylazine is present at low levels in Washington and appears to usually be found in combination with fentanyl.



Xylazine: Local Data

- *Where has xylazine been detected in Washington?*
 - 2021 and 2022: Xylazine was identified in less than 1% of fentanyl-involved overdose deaths.
 - 2021 and 2022: Xylazine was seen in much less than 1% of police evidence that also tested positive for fentanyl.
 - Vancouver, WA 2022: In drug testing among those in treatment for opioid addiction, less than 10% of those who tested positive for fentanyl tested positive for xylazine.
- These proportions are generally much lower than seen in recent years in the Eastern United States.

Overdose response



On this page



1. Risks of the unregulated drug market
2. Potency and unknown ingredients
3. Xylazine
4. Harm reduction tips for individuals
5. What can organizations do?
6. Drug checking
7. Regulation vs. unregulated drug markets

Risks of the unregulated drug market



Visit <https://stopoverdose.org/basics/drug-market-risk/>



Xylazine:


History, Emergence, and Health Implications

Mary Figgatt

PhD Candidate in Epidemiology
UNC Gillings School of Global Public Health

Don Jackson

Syringe Service & Drug Checking Program Director
NC Survivors Union



What is xylazine?

- An Alpha-2 agonist used in veterinary medicine, typically for surgical procedures
- Not approved for use in humans
- Little is known about the health effects of chronic exposure to xylazine



1960s: Xylazine's Origin

- 1962: Xylazine was developed as an antihypertensive medication for humans.
 - Not approved by FDA: clinical trials were shut down due to excessive central nervous system depression and hypotension.
 - Instead, it started to be used as a sedative and analgesic in veterinary use.

Greene SA, Thurmon JC. Xylazine--a review of its pharmacology and use in veterinary medicine. J Vet Pharmacol Ther. 1988 Dec;11(4):295-313.

1970s - 1980s: Case Reports of People Who Overdosed from Xylazine

- 1979: First case report of xylazine overdose among humans.
- 1980s: Additional case reports of xylazine overdoses.
 - Direct use of veterinary medication, typically among people working in veterinary settings.
 - Both intentional and unintentional overdoses.
 - Common symptoms included hypotension, bradycardia, and lethargy.

Carruthers SG et al. Xylazine hydrochloridine (Rompun) overdose in man. *Clin Toxicol*. 1979 Oct;15(3):281-5.
Ball NS et al. Xylazine poisoning: a systematic review. *Clin Toxicol (Phila)*. 2022 Aug;60(8):892-901.

Early 2000s: Emergence in Puerto Rico

- Early 2000s, Puerto Rico:
 - People reported intentional use of xylazine and unintentional use via heroin supply.
- 2005, Puerto Rico:
 - First report of skin wounds among people who regularly used xylazine.

Rodríguez N, et al. GC-MS confirmation of xylazine (Rompun), a veterinary sedative, in exchanged needles. *Drug Alcohol Depend.* 2008 Aug 1;96(3):290-3.

Torruella RA. Xylazine (veterinary sedative) use in Puerto Rico. *Subst Abuse Treat Prev Policy.* 2011 Apr 11;6:7. doi: 10.1186/1747-597X-6-7.

Ruiz-Colón K, et al. Xylazine intoxication in humans and its importance as an emerging adulterant in abused drugs: A comprehensive review of the literature. *Forensic Sci Int.* 2014 Jul;240:1-8.

Mid 2000s: Xylazine spreads (Philadelphia)

- 2006, Philadelphia: Xylazine identified in the heroin supply.
 - Identified alongside heroin and cocaine among 7 people who fatally overdosed.
 - Did not appear to be widespread in the drug supply.
- 2007 – 2018, Philadelphia: Xylazine seems to temporarily disappear.

Wong SC et al. Concurrent detection of heroin, fentanyl, and xylazine in seven drug-related deaths reported from the Philadelphia Medical Examiner's Office. *J Forensic Sci.* 2008 Mar;53(2):495-8.

2019: Xylazine Re-appears in Philadelphia

- 2019: Xylazine re-emerges.
 - In Philadelphia, xylazine was documented among nearly 1 in 3 people who fatally overdosed with heroin or fentanyl detections.

Moraff C. "Tranq Dope" – The Heroin Comb That's Been Putting Philly to Sleep. 2019. <https://filtermag.org/tranq-dope-the-heroin-combo-thats-been-putting-philly-to-sleep/>
Johnson J et al. Increasing presence of xylazine in heroin and/or fentanyl deaths, Philadelphia, Pennsylvania, 2010-2019. *Inj Prev.* 2021 Aug;27(4):395-398.



Today: Increasing Detections and Awareness

- Increasingly found in the Northeast, Mid-Atlantic, and Midwest.
- But, the true prevalence is fairly unknown.
 - Not routinely tested in clinical settings or in postmortem toxicology.
 - Drug checking not yet available in most of the US.
- Recently, there was been more awareness and alerts from FDA, DEA, and the White House.



The screenshot shows the top navigation bar of the FDA website with the FDA logo, a search box, and a menu icon. Below this is a section titled "IN THIS SECTION" with a dropdown arrow. A link for "Drug Safety and Availability" is visible. The main content area features a bold headline: "FDA alerts health care professionals of risks to patients exposed to xylazine in illicit drugs". Below the headline is the White House logo and the text "THE WHITE HOUSE". The date "JANUARY 18, 2023" is displayed. The main title of the press release is "Readout of Evolving and Emerging Drug Threats Committee Meeting Regarding Xylazine". At the bottom of the press release, there is a navigation bar with icons and links for "ONDCP", "BRIEFING ROOM", and "PRESS RELEASES".

Friedman J et al. Xylazine spreads across the US: A growing component of the increasingly synthetic and polysubstance overdose crisis. Drug Alcohol Depend. 2022 Apr 1;233:109380.

Health Effects

Heavy Sedation

- Causes central nervous system depression, respiratory depression, hypotension, bradycardia.
- Acute toxicity from xylazine can be similar to opioid overdoses.
- Symptoms present for several hours (exceeds duration of fentanyl's effects).
- Risk of injuries associated with heavy sedation:
 - Hyper or hypothermia
 - Injuries from external causes (falls)

Skin Wounds

- Xylazine is thought to cause peripheral vasoconstriction leading to poor blood flow to the tissues.
- Xylazine-related wounds are distinct from injection-related abscesses:
 - Necrotic wounds
 - Can become extensive in size
 - Can be chronic and very difficult to heal on their own

Philadelphia Department of Public Health. Health Alert: Risks of Xylazine Use and Withdrawal in People Who Use Drugs in Philadelphia. 2022.

https://hip.phila.gov/document/2524/PDPH-HAN_Alert_1_Xylazine_03.16.2022.pdf/

Malayala SV, Papudesi BN, Bobb R, Wimbush A. Xylazine-Induced Skin Ulcers in a Person Who Injects Drugs in Philadelphia, Pennsylvania, USA. *Cureus*. 2022 Aug 19;14(8):e28160.

Skin Wounds



(Left photo) Moraff C. <https://filtermag.org/new-drugs-bad-policies-leave-philly-harm-reduction-groping-in-the-dark/>

(Right photo) McNinch et al 2021. <https://shmabstracts.org/abstract/a-case-of-skin-necrosis-caused-by-intravenous-xylazine-abuse/>

Treatment Experiences Among People With Skin Infections

-
- In 2020, we surveyed 105 syringe service program participants at 5 different sites across North Carolina.
 - 2 in 3 people had a lifetime history of skin and soft tissue infections.
 - 1 in 2 people had a history skin and soft tissue infections in the past 12 months.

For the most recent infections experienced by participants:

- 9 in 10 people received antibiotic pills
- 7 in 10 people sought care at an emergency room
- 4 in 10 people were hospitalized

Treatment Experiences Among People With Skin Infections

Of those with a history of infections, nearly all people (98%) had ever delayed or not sought care for an infection.

Main reasons for doing so included:

- Judgment or mistreatment by medical staff
- Self-treatment
- Takes too much time
- Legal concerns

Table 3 Main reasons participants had delayed or not sought care for a SSTI (N = 46)

	Number of Participants	Percent of Participants, %
Judgement or mistreatment by medical staff	25	54.3
Self-treatment	24	52.2
Too busy or it takes too much time	17	37.0
Legal concerns (e.g., warrants, child protective services)	14	30.4
Bad experiences when sought care other times	13	28.3
Costs too much	7	15.2
Wanting to avoid withdrawal from being in the hospital	6	13.0
Transportation barriers	6	13.0
Thought it would go away on its own	6	13.0
Afraid of finding out the infection is serious	5	10.9
Worried about the medical procedures (e.g., drainage)	3	6.5

Treatment Experiences Among People With Skin Infections

—
What helps? Having access to a trusted doctor.

- Having a doctor people trusted with drug use-related concerns was associated with fewer recent infections, even after accounting for health insurance coverage.
- Yet, only 3 in 10 participants had access to a trusted doctor.

To improve skin infection-related treatment, participants suggested:

- Increased access to free antibiotics for infections and
- On-site wound care at syringe service programs.

Xylazine's Emergence in North Carolina

How Xylazine was Detected in North Carolina: Community-Led Drug Checking Services

Drug checking is a process to identify what substances are present in drug samples, including adulterants such as xylazine.

People can be given the results in about 5-10 minutes, either when they are on site or called later on.

Using this information, they can make informed decisions to reduce potential risks, like overdose or skin infections.

Our community-led program has been operating since 2016 and started a drug checking program in 2020.



2021: Xylazine Emerges in North Carolina

People had been noticing changes: severe wounds, heavy sedation, and staying well for longer.

Early 2021: We identified xylazine in a sample using our drug checking machine.

At the time, no other reports or regular testing of xylazine was happening in North Carolina.

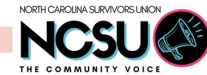
We began researching xylazine: The symptoms from the case reports matched what we were seeing in the community.



Experiences in North Carolina

- Many people had no idea they were using xylazine. Without the drug checking machine, we probably wouldn't have discovered it until much later on.
- The drug checking machine made it possible for us to:
 - Increase access to our drug checking services and
 - Raise awareness about xylazine and other adulterants across the region.

XYLAZINE

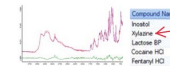


XYLAZINE, A VETERINARY TRANQUILIZER, IS SHOWING UP IN HEROIN AND FENTANYL.



To keep our people safe, we got a machine that tells us what's in drug samples.





When people came to us with really bad symptoms, we used our drug checking machine and identified a substance called **xylazine**.



This substance has been showing up in the drug supply in other places, too. **In Philly, 1 out of every 3 people who fatally overdosed in 2020 had xylazine in their system.**

WHAT WE KNOW

Xylazine can be very dangerous. If you think you have been using this drug, seeking medical attention can make the difference between life and death.

- Xylazine causes central nervous system depression. You may experience a low blood pressure, slowed breathing, and a slowed heart rate.
→ **Tip: Go slow. Use with a friend if you can.** 
- Xylazine can cause painful skin ulcers.
→ **Tip: Keep wounds clean. Ask us for help if you're worried.** 
- Naloxone works on opioids. It may work on xylazine, but the evidence is unclear.
→ **Tip: Always use naloxone in the event of an overdose.** 
- Xylazine may make people out of breath and feel really tired.
→ **Tip: Come talk to us if you are experiencing either of these symptoms.** 

Please contact North Carolina Survivors Union if you believe you have drugs that are poisoned with xylazine. We will test them for you.

Experiences in North Carolina: What the Community and Healthcare Providers Are Saying

Many people don't know what do to about xylazine-related wounds.

For people with wounds, many don't want to go to the doctor because of bad experiences they've had in the past.

Even a lot of doctors and nurses are often unsure of what do. There isn't clear guidance on how to treat or prevent these complicated and severe wounds. Some are treating them like burns.

Community Needs

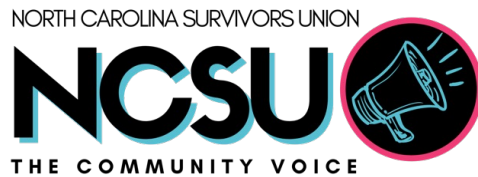
-
- Expand access to community-based drug checking services.
 - Develop wound care guidance specific to xylazine-related wounds.
 - Create xylazine overdose reversal drug.
 - In the healthcare system, improve compassionate care between providers and patients. Make it a safe, respectful place for people who use drugs.
 - In the community (syringe services programs), increase access to wound care, antibiotics for infections, and training for people to care for their wounds.

Summary

-
- Xylazine has become prevalent in the drug supply. Though it appears to be more heavily concentrated in specific regions of the United States.
 - It can cause heavy sedation and severe skin wounds.
 - But, we still don't know the full health impact of xylazine in our communities.
 - Strategies going forward should focus on compassionate and accessible care for people who use drugs.
 - More research is needed to understand and treat the side effects of xylazine.

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Acknowledgements: Louise Vincent, Nabarun Dasgupta, Nan Goldin, and the ACDC group

Overdose response

Select Language [Find Naloxone Near You](#)

STOP OVERDOSE.org [Basics](#) [Getting Help](#) [For Professionals](#) [Resources](#) [About](#) [Q](#)

Minutes Count in an Opioid Overdose

Learn what to do, watch an opioid overdose training video, and download a brochure.

[Read More](#)

HELPING INDIVIDUALS AND COMMUNITIES IN WASHINGTON STATE RESPOND TO PREVENT OPIOID OVERDOSE



LearnAboutTreatment.org

LEARN ABOUT TREATMENT

ABOUT

THE BASICS

TREATMENT

PROFESSIONALS

FAMILY/FRIENDS

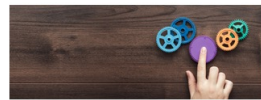
RESOURCES

LEARN ABOUT TREATMENT

for you, your family member or friend, or your community

ABOUT US

GET STARTED



Treatment Options

This section provides information about the treatments for opioid use disorder and stimulant use disorder. Learn more about these options and what might work for you.



For Professionals

This section features resources, tools, and information for professionals who work with people who have opioid or stimulant use disorder.



For Family/Friends

This page provides information and tools to help you better understand opioid or stimulant use disorder and how you can support someone you care about.

Educational materials

Don't be faked out.



Knock-off pills sold on the street or online contain the deadly substance **fentanyl.**

Be ready to help your friends. Always use the word "Overdose" or "Narc" and the Naloxone logo when you call for help.



11" x 17" poster
Don't be faked out.


Narcan saves lives

Naloxone, or "Narcan", can be used to stop an overdose.



Anyone can get Narcan without a prescription.

Be ready to help your friends. Always use the word "Overdose" or "Narc" and the Naloxone logo when you call for help.



11" x 17" poster
Narcan saves lives

Look for these signs of an **opioid overdose**

ABNORMAL BREATHING		
CAN'T BE WOKEN UP		
SKIN CHANGES		

Look for these signs of opioid overdose
Reconozca las señales de una sobredosis de opioides (Spanish)

WARNING

FENTANYL IS KILLING KING COUNTY RESIDENTS

"Oxycodone" and "Percocet" pills sold on the street or online are **FAKE** and likely contain fentanyl.

Fentanyl can also be found in **white powders.**

HOW TO PREVENT OVERDOSE

- Don't use pills/powders from the street or online
- Don't mix drugs
- Don't use alone
- Have Naloxone (Narcan) ready just in case
- Call 911 if someone overdoses

- Fentanyl warning poster
- Fentanyl warning postcards
- Order printed copies of "Fentanyl is Killing King County Residents"

FENTANYL WARNING

FENTANYL FOUND LOCALLY IN FAKE PILLS

- Fentanyl may be in your drugs—pills, powder & heroin.
- You can't smell or taste fentanyl.
- Fentanyl can get you at greater risk for overdose and death.

HOW TO AVOID OVERDOSE

- **DO NOT USE ALONE.**
- **START WITH A TESTER SHOT.**
- **WATCH AND WAIT BEFORE THE NEXT PERSON USES.**
- **HAVE NALOXONE READY.**
- **AN OPIOID OVERDOSE IS A MEDICAL EMERGENCY. CALL 911 RIGHT AWAY.**

TREATMENT WORKS. CALL THE RECOVERY HELPLINE

Fentanyl warning infographic

THE RISK IS REAL

FENTANYL-LACED PILLS ARE FLOODING THE PNW

THESE PILLBOTTLES ARE THE SAME AS THE ONE YOU SEE IN THE PHOTOS ABOVE. THEY CONTAIN FENTANYL AND ARE EXTREMELY DANGEROUS. PLEASE DON'T TAKE THEM. PLEASE REPORT THEM TO THE POLICE.

CARRY NALOXONE

SAVE A LIFE

AVOID USING ALONE

The Risk is Real: Fentanyl-laced pills are flooding the Pacific Northwest

FENTANYL-LACED PILLS IN KING COUNTY

Your contacts may be the same. But the drug supply in the PNW has changed. Between 2018 and 2020, fentanyl-related overdose deaths in King County rose 194% (over 1,000). Report what you find, prevent and save lives.

GET NALOXONE

Now, you and your community can quickly receive quality naloxone. In 2020, you can get quality naloxone at no cost. You can also get naloxone at a low cost. Visit www.kingcounty.gov/overdose-prevention for more information.




3 Naloxone stickers
(PDF samples only; Use the order form above to order professionally.)

Available in English and Spanish at
<https://kingcounty.gov/depts/health/overdose-prevention/order.aspx>

<https://kingcounty.gov/overdose>

Educational materials

What's up with fentanyl?

Strong

Fentanyl is a very strong opioid, **50x stronger** than heroin.

Fast

Overdose can happen in **seconds or minutes**.

Higher Risk

Most overdose deaths in WA State now involve fentanyl.

What does it look like?

In WA State, most fentanyl has been in blue pills with a "M30" stamp. It's sometimes in drugs that look like powder, or a rock like crack cocaine.

Fentanyl could be in any drug you buy on the street or online. What fentanyl looks like will continue to change.

What's the risk?

The amount and strength of fentanyl **can vary a lot**.

One pill might have a deadly amount.

Another pill might have very little, if any, fentanyl.

Naloxone works on fentanyl.

Carry naloxone. Tell people you have it and how to use it. Because fentanyl is so strong, it may take more than one dose to work. Keep extra kits around.

Meth does not protect from OD.

Using meth along with fentanyl actually **increases the chance of overdose**.

If you use both meth and fentanyl, use one at a time, and pace yourself slowly with small amounts.

Mythbusting Facts

- 1** You can overdose on fentanyl **however you use it**, if you smoke, swallow, snort, or inject.
- 2** It's safe to respond to a fentanyl overdose. You can't overdose just by touching fentanyl or drugs that contain fentanyl.

ADAI CENTER FOR COMMUNITY ENGAGED DRUG EDUCATION, EPIDEMIOLOGY AND RESEARCH

UNIVERSITY of WASHINGTON PREVENTION & INTERVENTIONAL SERVICES School of Medicine

Want to learn more? Visit stopoverdose.org

What can I do?

- Start with a **small amount** and **go slow**. Use one drug at a time.
- When you can, **use around other people**. Use one person a time. That way, if someone overdoses, one person can respond.
- If you do use alone, **let a friend know they should check on you**.

Try neverusealone.com or call (800) 484-3731. You provide some basic info, and they stay on the phone with you for a few minutes after you use. If you stop responding, they call 911.

- Watch your tolerance.** If you take a break from using fentanyl or other opioids, use way less when you start again.

Signs of a fentanyl OD:

- Not breathing, Gurgling or heavy snoring.
- Won't wake up.
- Blue or gray skin, lips or fingernails.
- Chest muscles may get stiff.

What to do in an OD:

- Call 911 right away.** You don't have to say there's been an overdose, just that someone is not breathing.
- Give a dose of naloxone.** You may need to give another dose every 2 minutes. Do rescue breathing until they start to breathe on their own.

Learn more about fentanyl and find naloxone at:
StopOverdose.org & LacedAndLethal.com

STOPOVERDOSE.org

LACED & LETHAL

Available in English and Spanish

Programs in WA State can order copies at <http://adaiclearinghouse.net/>

<http://stopoverdose.org/wp-content/uploads/2022/10/Fentanyl-Handout-2022-10-Final-web.pdf>



Questions, comments?

- Please write in the chat



Upcoming Training

- **Next Statewide Webinar**
 - Date in May/June | 12-1pm PST



- **UPCOMING: Foundational Nurse Care Manager Series**
 - First Wednesday Apr – Sep | 9-10am PT

Monthly Topics

- April – Opioid Use Disorder & Medications for Opioid Use Disorder
- May – Opioid Use Disorder Care Management & Team Based Care
- June – Patient Engagement & Retention
- July – Addressing Ongoing & Return to Use
- August – Clinical Factors & Comorbid Conditions
- September – Self-Care & Boundaries

Registration: Email Ali Lenox, alilenox@uw.edu



Ongoing ADAI Trainings

- **Monthly Care Navigator Call**
 - Second Wednesday of the month | 10-11am PT
- **Monthly Jail MOUD Call**
 - Second Tuesday of the month | 11am-12pm
- **Emergency Department Quarterly Learning Collaborative**
 - Fourth Tuesday Jan, Apr, July, Oct | 9-10am PT
- **NEW: Emerging Approaches to Treating Fentanyl Use Disorder Learning Collaborative**
 - First Wednesday Feb, May, Aug, Nov | 12–1:30pm PT

To register email Ali Lenox, alilenox@uw.edu