



Technology Transfer Centers

Funded by Substance Abuse and Mental Health Services Administration

Xylazine: Understanding the Latest Emerging Substance

July 25, 2023

Thank you for joining us today.
We will begin promptly at **1:00 PM** Eastern.



Central East (HHS Region 3)
ATTC



Central East (HHS Region 3)
PTTC

Technical Information

LIVE

This webinar is now live.



It is being recorded.



Please remain muted unless prompted to unmute.

This training was developed under the Substance Abuse and Mental Health Services Administration's Addiction and Prevention Technology Transfer Center task orders.

For training use only.

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The use of affirming language inspires hope.

LANGUAGE MATTERS.

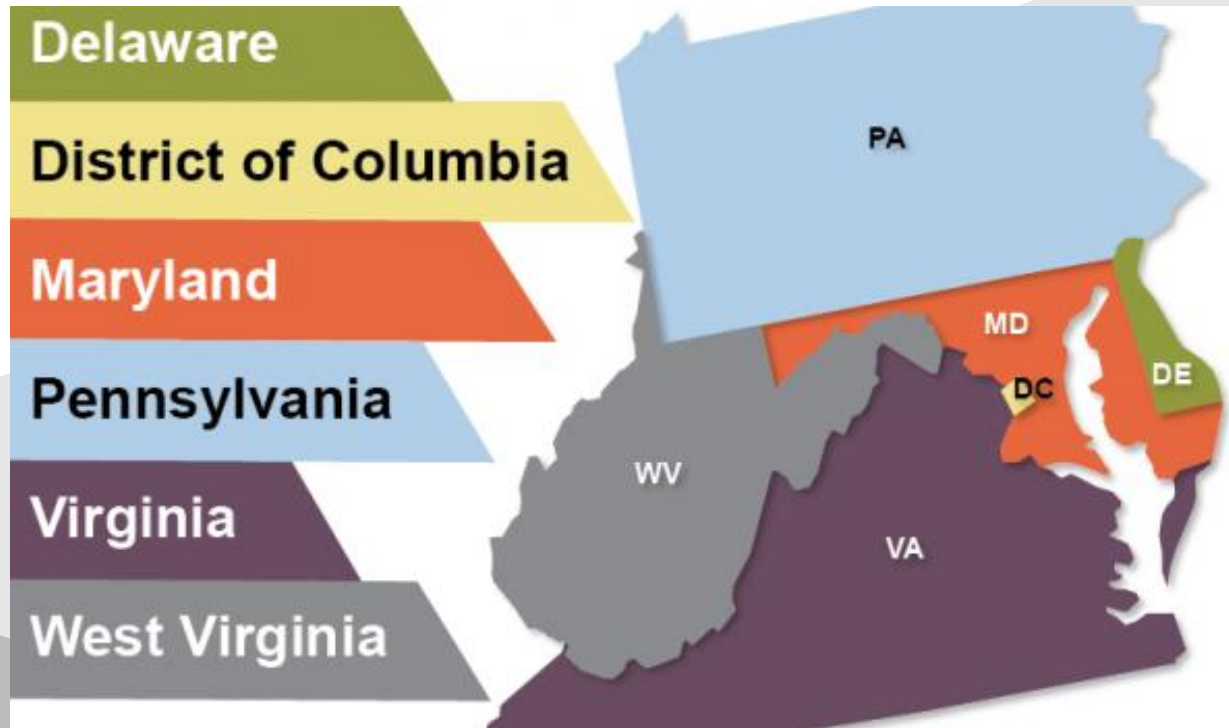
Words have power.

PEOPLE FIRST.

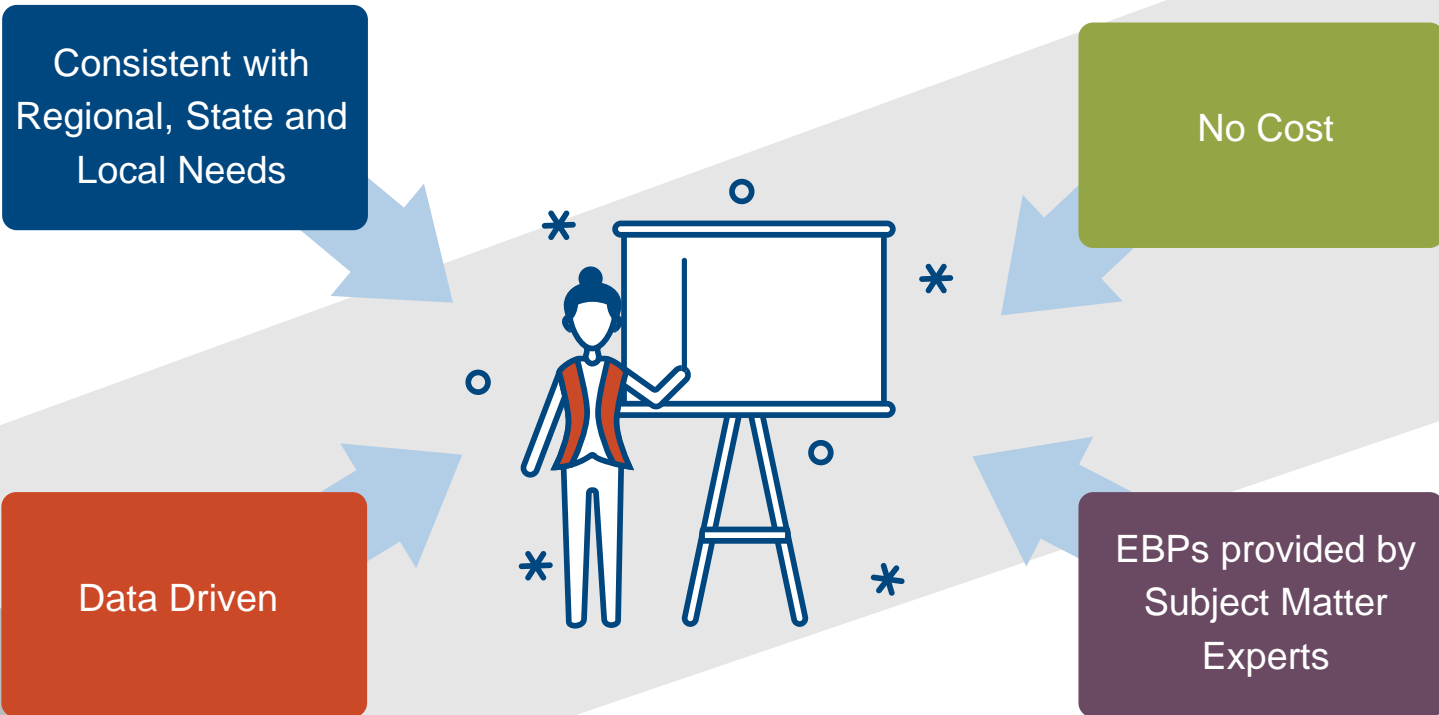
The ATTC and PTTC Networks use affirming language to promote the application of evidence-based and culturally informed practices.

Central East Region

SAMHSA REGION 3



Eligibility



The Danya Institute

Oscar Morgan, MHSA

Executive Director, The Danya Institute

Project Director, Central East Addiction
Technology Transfer Center

Project Director, Central East Mental
Health Technology Transfer Center

Project Director, Central East
Prevention Technology Transfer Center



SAMHSA HHS REGION 3 OFFICE

Jeanne Tuono

Assistant Regional Director





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Xylazine: Understanding the Latest Emerging Substance

Josh Esrick

PTTC Prevention Specialist

Chief of Training and Technical Assistance,
Carnevale Associates

July 25, 2023



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What is Xylazine?

- Non-opioid sedative and tranquilizer (“tranq”)
- Approved for veterinary medicine only
- Not federally controlled
- Readily and cheaply available for legal purchase



Why is Xylazine Used?

- Produces effects similar to opioids
- Added to opioids to extend/amplify effects
- Used as adulterant by substance producers
- Both intentional and unintentional use

Effects of Xylazine

- Increased risk of overdose
- Addiction and dependency
- Skin and tissue damage / wounds
- Heart and blood pressure problems



History of Xylazine Use

- Originally identified in rural Puerto Rico (2001)
- Spread to mainland US cities with large Puerto Rican populations, especially Philadelphia and in Connecticut (2006)
- Relatively isolated for years, but has begun rapidly spreading across the US (2019)
- Also spreading across Canada and been found in parts of South America — Chile

Scope of Consequences

- 3,089+ fatal overdoses in 2021
 - 34% of all fatal overdoses in Philadelphia
- 40%+ rates of developing necrotizing wounds
 - 2011 study from Puerto Rico
- No data, but...
 - Use disorder
 - Use in commission of crimes
 - Amputations

Challenges for Prevention and Treatment

- Lack of comprehensive data
- Detection tests are new and not always available
- No EBPs to guide services
- Misinformation about xylazine
- Provider and community awareness



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Xylazine: Understanding the Latest Emerging Substance

Jaclyn Iera, Ph.D. and Gail Poirier,
Drug Enforcement Agency (DEA)

July 25, 2023



Xylazine Snapshot



Jaclyn Iera, Ph.D.
Office of Forensic Sciences
U.S. Drug Enforcement Administration

Gail Poirier
Office of Intelligence Programs
U.S. Drug Enforcement Administration

OVERALL CLASSIFICATION FOR THIS BRIEFING IS
UNCLASSIFIED

Faces of Fentanyl



UNCLASSIFIED

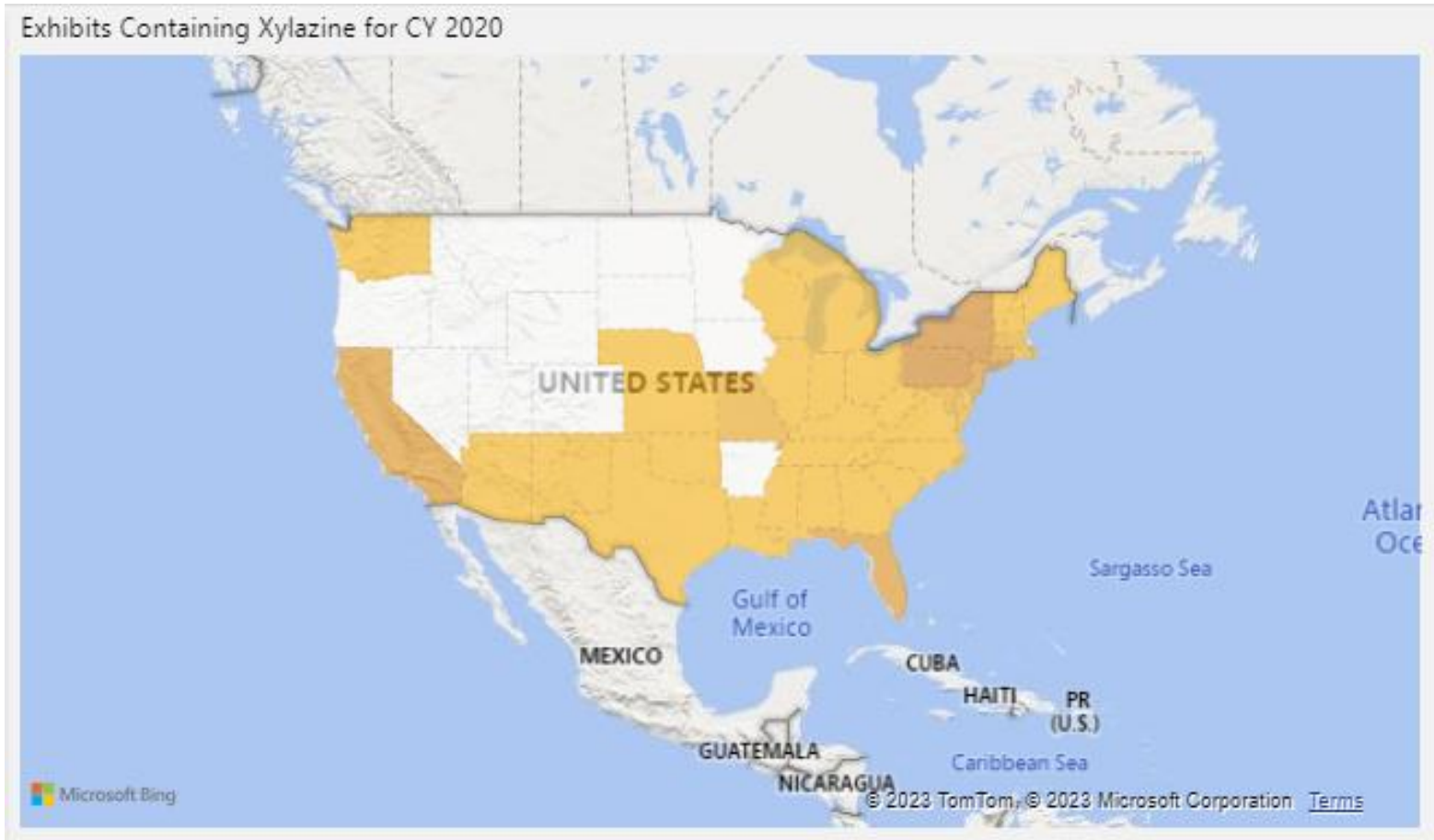
Xylazine Snapshot



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Xylazine Exhibits in the United States 2020-2022

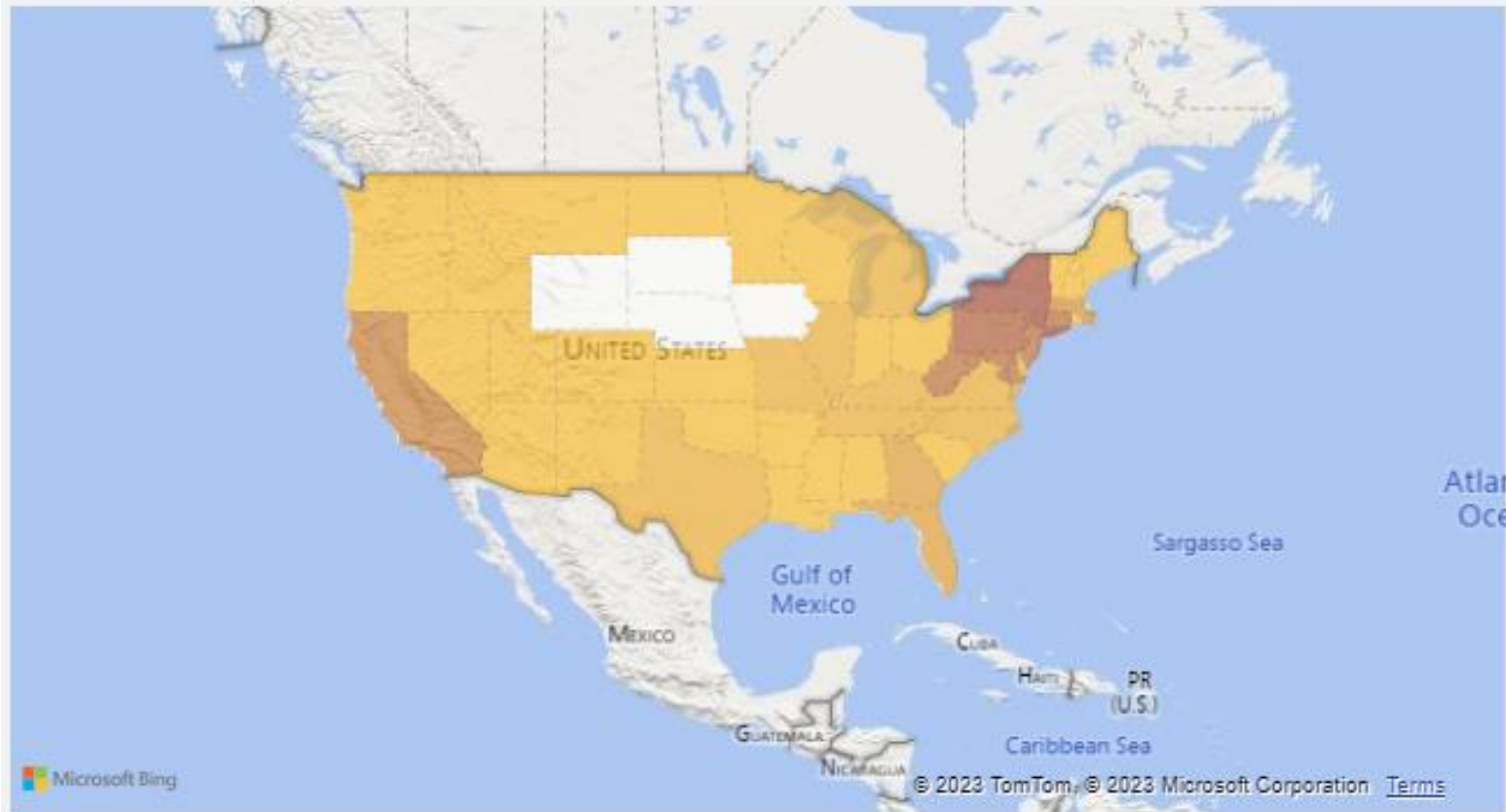


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Xylazine Exhibits in the United States 2020-2022



Exhibits Containing Xylazine for CY 2021

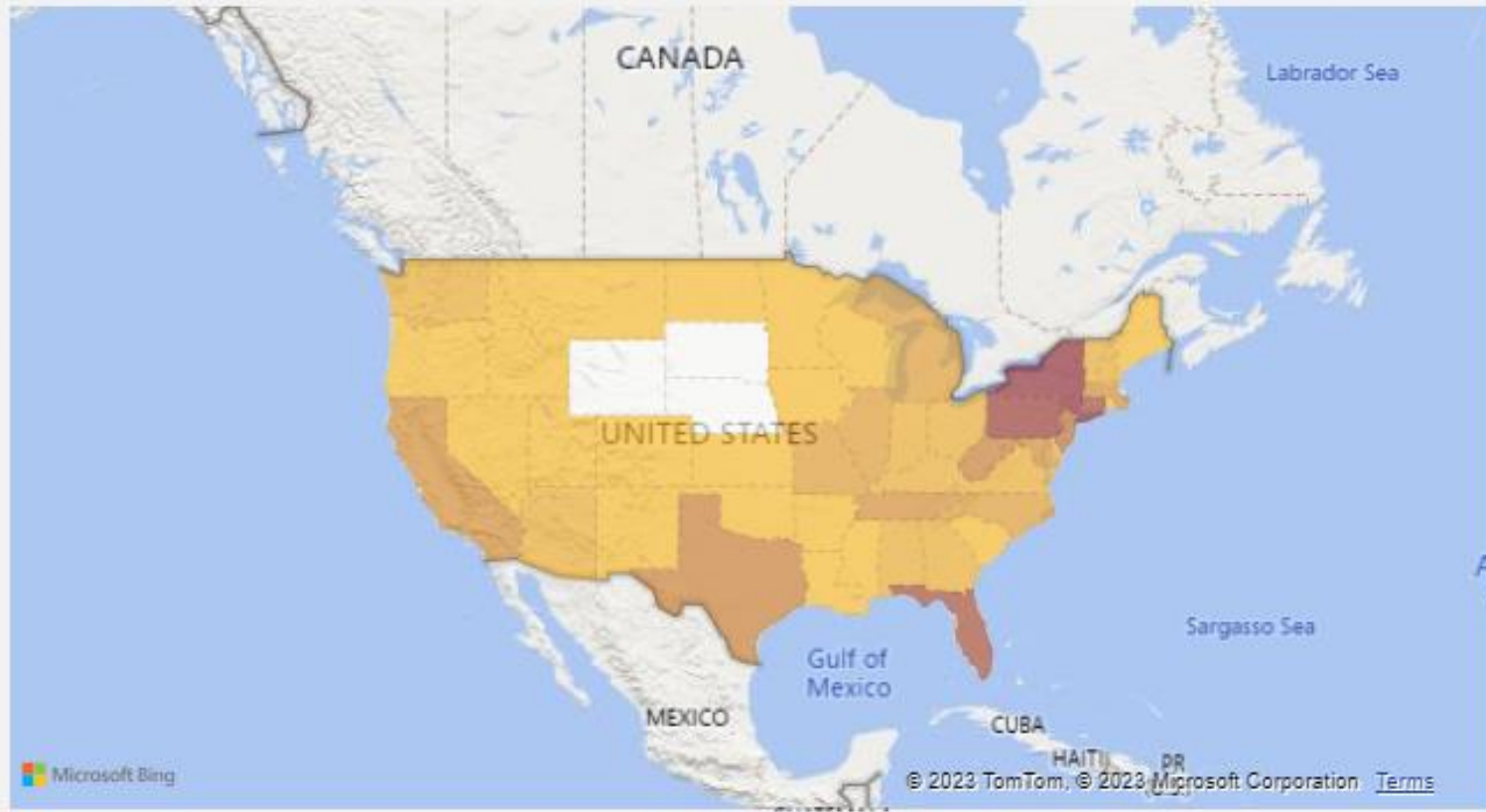


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Xylazine Exhibits in the United States 2020-2022



Exhibits Containing Xylazine for CY 2022



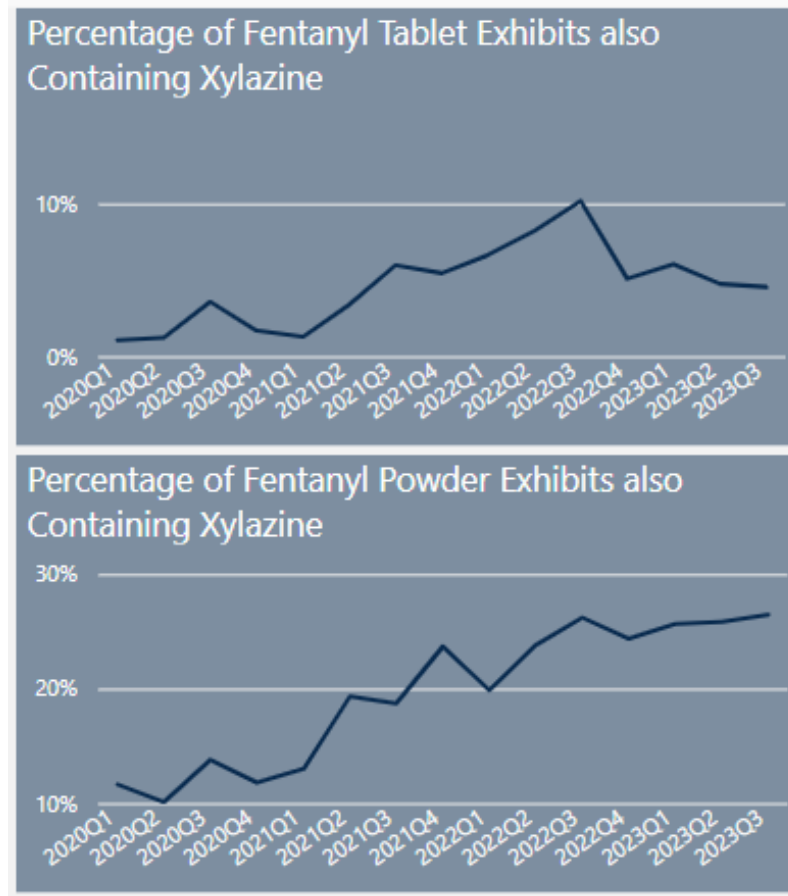
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Percentage of Drug Exhibits Containing Fentanyl and Xylazine

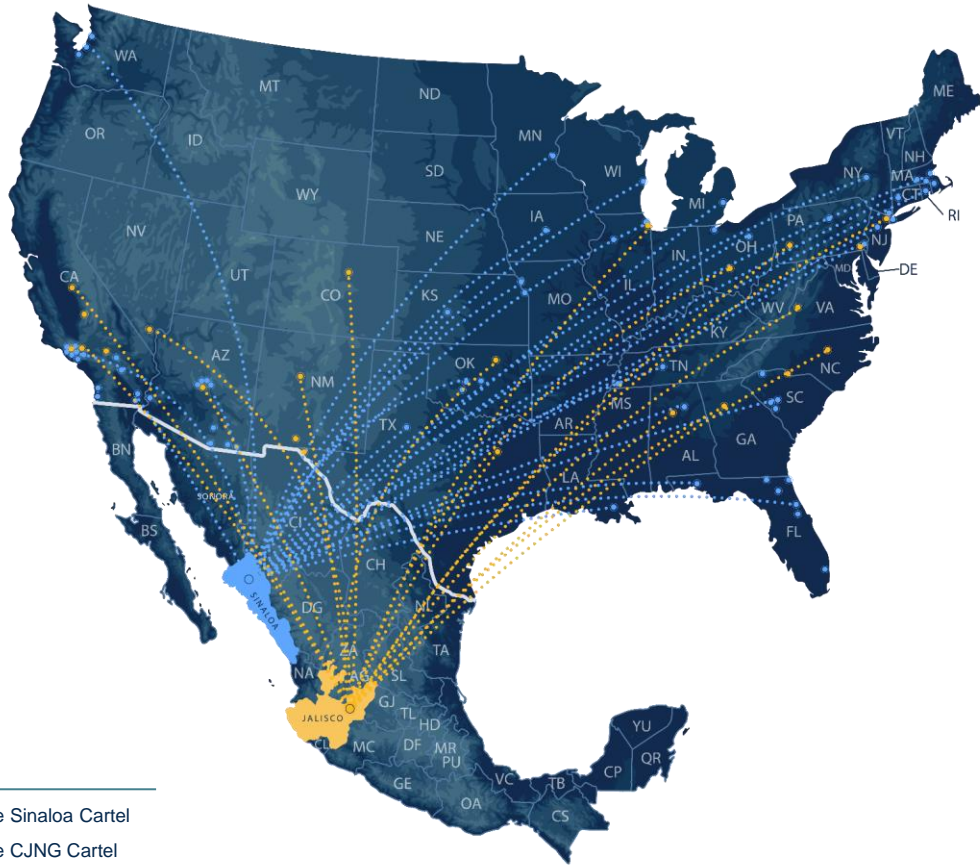


- The percentage of drug exhibits found to contain fentanyl and xylazine has been increasing
- Xylazine is identified in a greater percentage of powder drug exhibits containing illicit fentanyl than tablet drug exhibits containing illicit fentanyl



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Identifying the Adversary



- Linked to the Sinaloa Cartel
- Linked to the CJNG Cartel

Sinaloa and CJNG are the primary Mexican criminal networks trafficking the illicit fentanyl and methamphetamine killing Americans today.

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Treachery Powered By Technology



ADVERTISE

COMMON EMOJI CODES

FAKE PRESCRIPTION DRUGS

PERCOCET & OXYCODONE 🟡🟢🟠🟡	XANAX 🟡🟢🔪🚚	ADDERALL 🟡🟢 A-🚂
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OTHER DRUGS

METH 🧊💙💎🖋️	HEROIN 💔🐍	COCAINE ❄️☁️🧑‍🎅💎🕒🔑😄🍖	
MDMA & MOLLIES ❤️⚡✖️💊🍄	MUSHROOMS 🍄	COUGH SYRUP 🍇💜🖋️	MARIJUANA 👐🔥🌴🌲😞👐🍀

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CONNECT



& PAY



- **Data-driven, intelligence-informed investigations targeting entire network and supply chain**
- **Strategic targeting teams**
- **Drug poisoning response teams**
- **Increase public awareness**
- **Family Summits**

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TTC

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Xylazine: Understanding the Latest Emerging Substance

Jason Bienert RN CWCN

Johns Hopkins Bloomberg School Of Public
Health

July 25, 2023

Xylazine: (Zai-lah-zeen)

A practical guide to xylazine during the
apocalypse

Jason Bienert RN CWCN

Johns Hopkins Bloomberg School Of Public Health

Purpose

- **Xylazine today**
- **Xylazine Complications**
 - Overdose
 - Wounds
 - Treatment Considerations

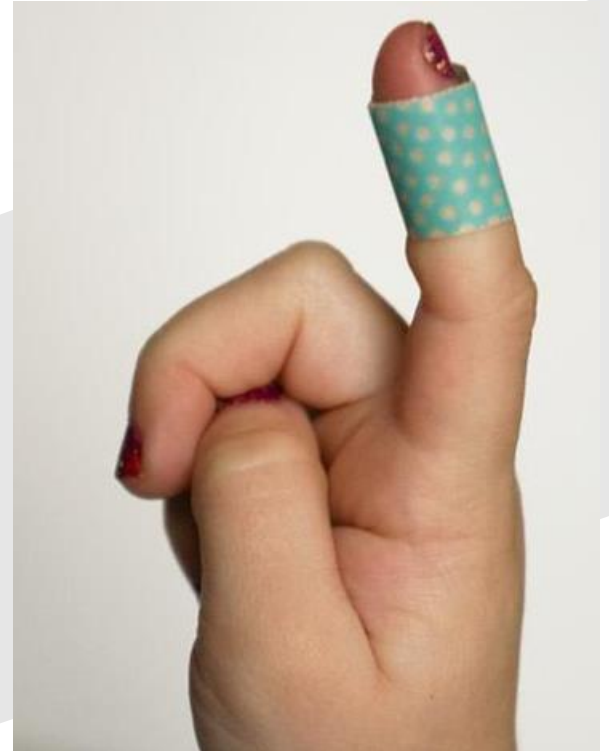
A bit about me

- Registered Nurse - RN
 - 6 yrs Intensive and Emergency Care
- Certified Wound Care Nurse - CWCN
 - 9 yrs Wound Care
- Past 3 yrs developing a novel wound care program from the ground up in a nonprofit world

What I do...

Short definition:

I provide wound care to people who use drugs

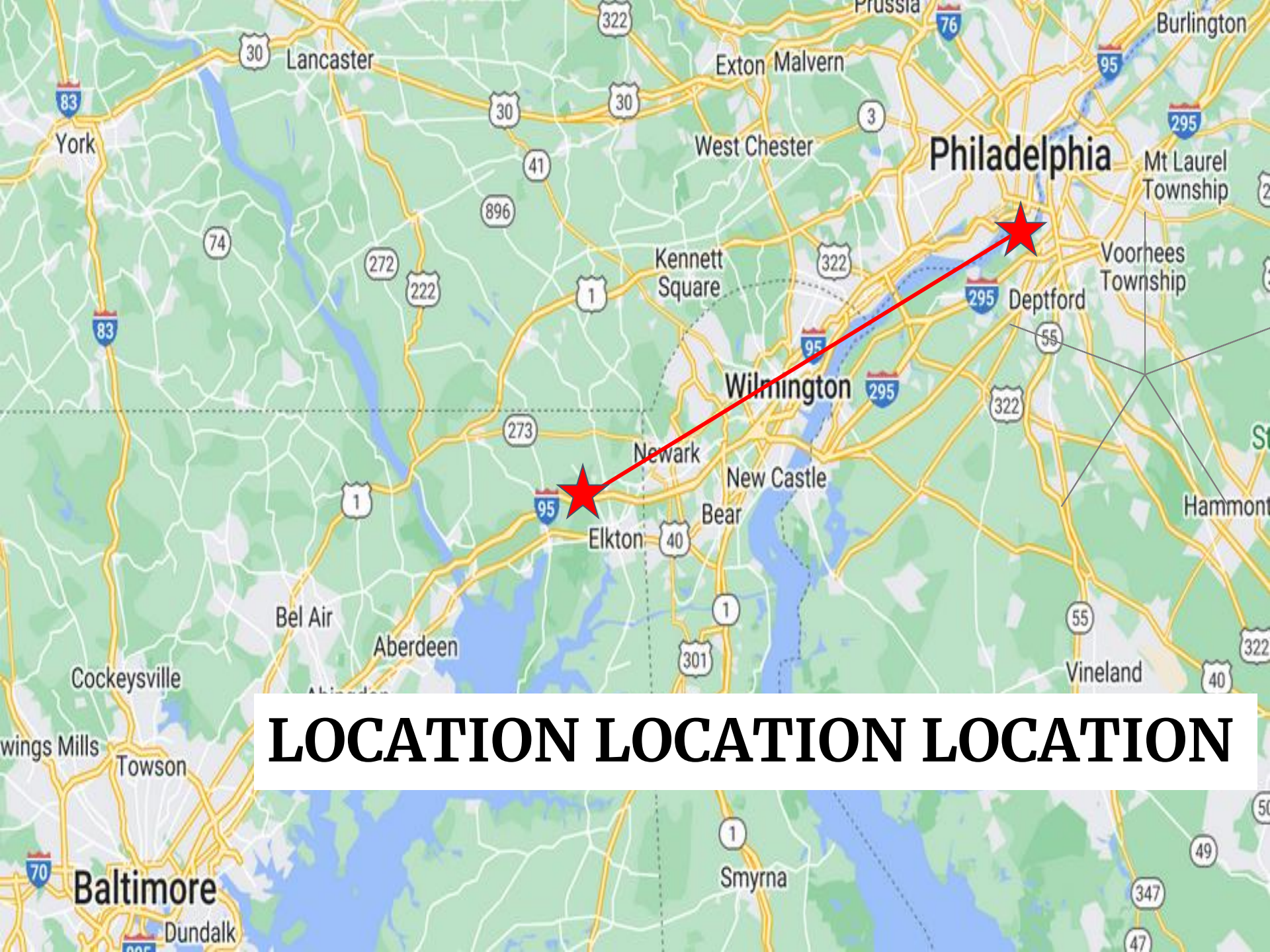


What I Really Do...

I am part of a team providing:

- Advanced Wound Care
- Harm Reduction Services
- Addiction Support
- Emotional Support
- Recovery Support
- Non Transactional Compassion





LOCATION LOCATION LOCATION

There are graphic photos
of xylazine wounds

FUN FACT



100%

of people who suffer from Opioid Use Disorder
are Human

**These humans have
contributed to my
understanding**

They Are My How...



Photo : Matt Hubbard - Cecil Whig



Photos: Alyssa Schukar WSJ



Photo : Matt Hubbard - Cecil Whig



Photos: Alyssa Schukar WSJ

By treating the **WHOLE** person we
discovered a way to provide care
WITH and not just **TO** the human

Total wound visits Jan 1 to Dec 31 '22 - **636**

As a Drug Xylazine is...

- a strong synthetic alpha2-adrenergic agonist
- structurally similar to phenothiazines, tricyclic antidepressants, clonidine, and dexmedetomidine

Why?

It gets you high...

Initial Effects Start Immediately

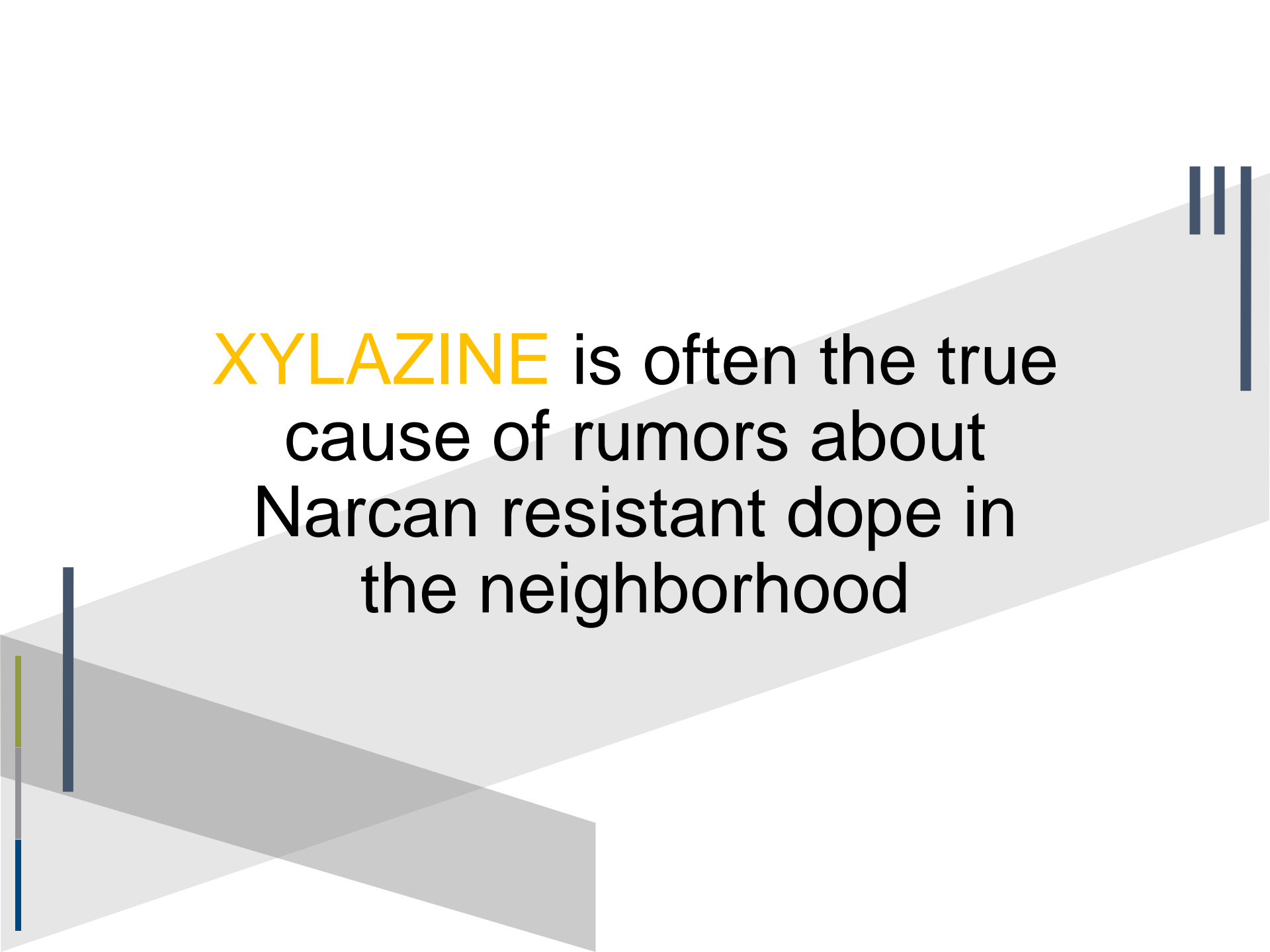
- 30-45 mins for full onset of effect
- Ramp up happens when fentanyl ramps down
- Effects can last for hours
 - 4-6 is commonly reported



Complications - Overdose

How its changes the story

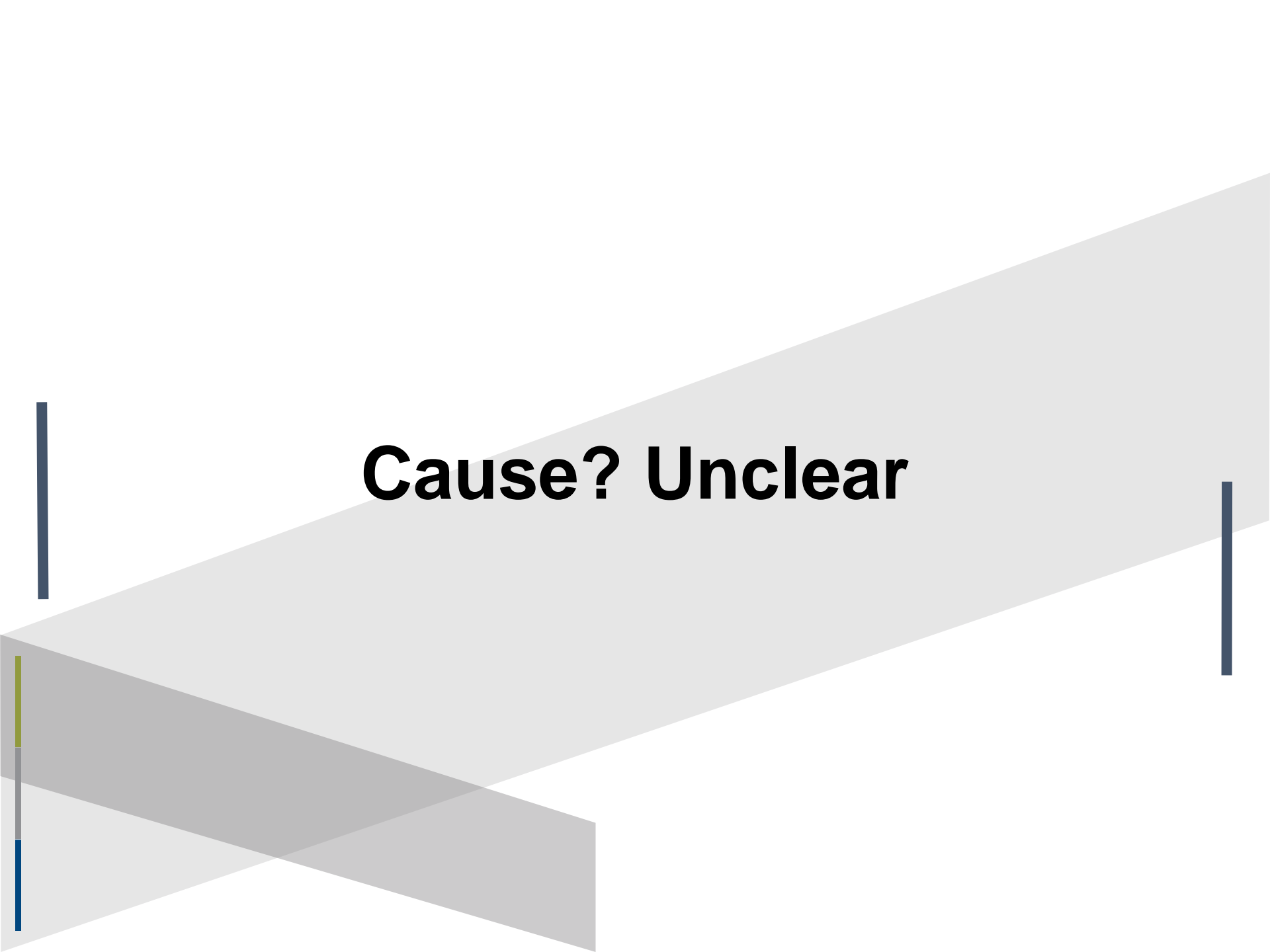
- Sedative effects intensify opioid overdose
- Sedation lasts for hours
- Person may no longer wake up - return to normal breathing may be all you get
- Rescue breathing is part of the plan



XYLAZINE is often the true
cause of rumors about
Narcan resistant dope in
the neighborhood



Wounds Caused by Xylazine



Cause? Unclear

Sores... What we know

- Can occur in areas not injected
 - Different limbs
 - Not common on trunk
- Putting it up your nose can cause sores
- Starts as a small spot that is usually
 - Darkened area with odd border
 - Purple or red blister may be present
 - Spots may not hurt

?Smoking it? ...intra rectal/vaginal?

Sores... More of what we know

- Typically not infected
- Sores can be healed - **Early care is the key**
- Wounds do not start as big sores
- Simple wound care can make a big difference
 - Does not need to be aired out
 - Do not inject into wound or edges
 - If possible let the limb cool down - rotate injection sites

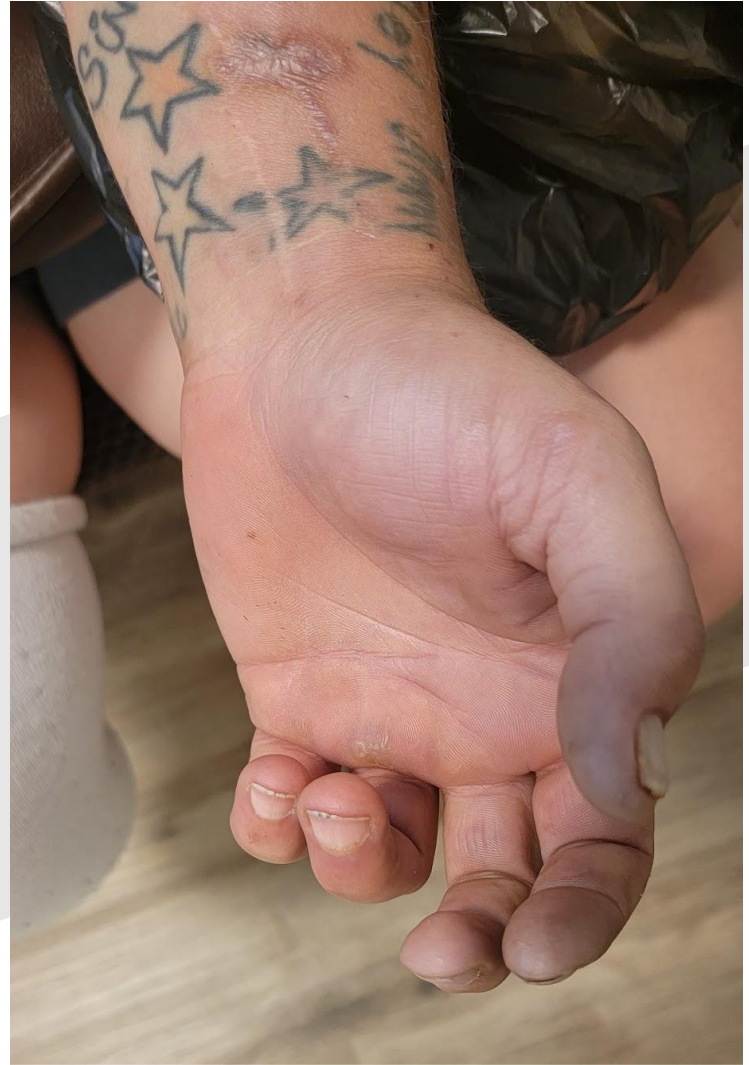
Pictures...

The image features a minimalist design with overlapping, semi-transparent gray geometric shapes. A prominent dark blue horizontal line spans across the middle of the frame. The text "Pictures..." is centered in a bold, black, sans-serif font. In the bottom-left corner, there is a vertical stack of three thin lines: a yellow one at the top, a gray one in the middle, and a blue one at the bottom.

Arterial Thrombosis

Initial effect of xylazine injection
is constriction then dilation





Typical progression

- **Initial presentation**
- **Blister (+-)**
- **Sore forms**
 - moist
 - dry
 - infected

Initial Presentation





Soft discoloration or
light bruise

Ankle Wound after blister was opened by participant





Open & covered & moist

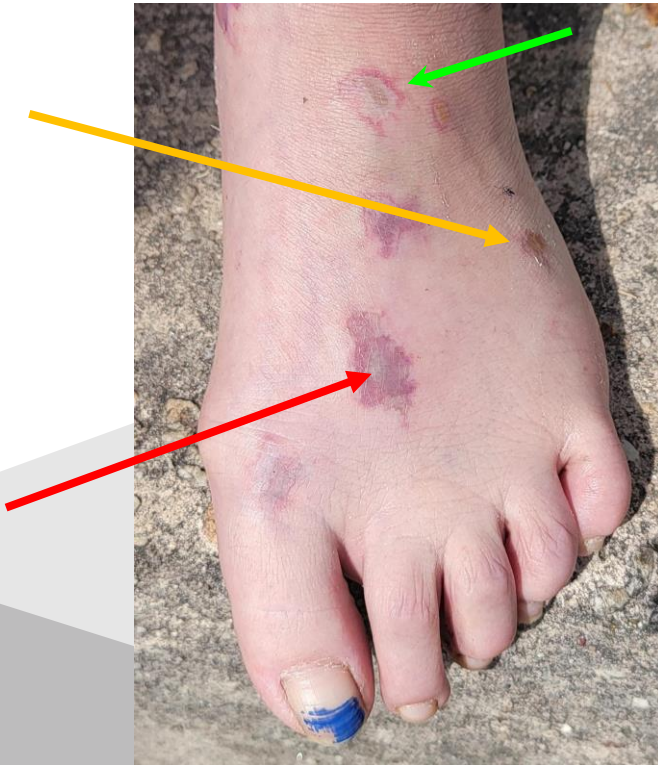


Open & uncovered & dry

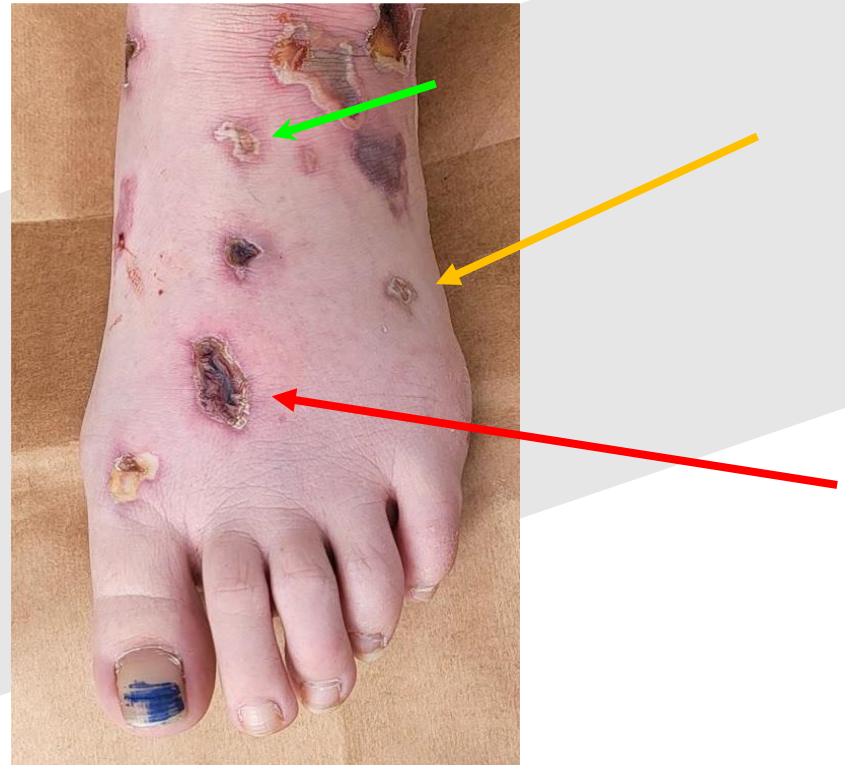
Infected Xylazine Sores



+ - One Day



+ - Five Days





Approximately 4 weeks later

Dressings used w/ instructions

Xeroform to cover wound

ABD pad or soft gauze pads on top of xeroform

Coban self-adherent wrap to secure

Changed every other day.

Soap, water with a washcloth to clean

Rinse well with clean water

She had loose compliance during that time

Withdrawal

Poorly defined syndrome

- Extreme Anxiety and dysphoria
- Critically high BP also known as rebound hypertension
- Psychiatric symptoms
 - head zaps, tactile sensations, the feeling that you cannot sit still
- May last months

Studies and Research

- Research is mostly limited to single case studies
- Noted in literature:
 - Increased agitation, extreme anxiety, shaking, chills
 - Changes in heart conductivity, hallucinations, dysphoria
- Long term use has shown to cause a decline in IQ scores in a few cases

Treatment Concerns

Hard to place participants with open wounds into treatment or detox

Medicine is just catching up with the xylazine fact sheet -


Even when being treated with MAT, we are not treating xylazine

Participants may still be unaware that they are consuming it

Dealers always swear they have the best supply...



Xylazine doesn't have to be scary...

- Xylazine should be respected and understood
 - Understand the issues
 - Learn from the problems
 - Adapt and adjust known solutions
- 

Xylazine cost me my hand but may also have given me my life

Post op three weeks

On methadone now - working
towards stable dose

Decreasing street drug
consumption by over half

He requested for this picture to
be included along with his story
to end on a positive note....



THANK YOU FOR YOUR TIME AND ATTENTION

“every Saint has a past
and every Sinner has a future”

OSCAR WILDE

Q & A

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