

# Welcome To

# Xylazine: What We Know About the Latest Substance Trend

NPN Conference – Birmingham, AL

August 17, 2023

8:30am-10am



Central East (HHS Region 3)

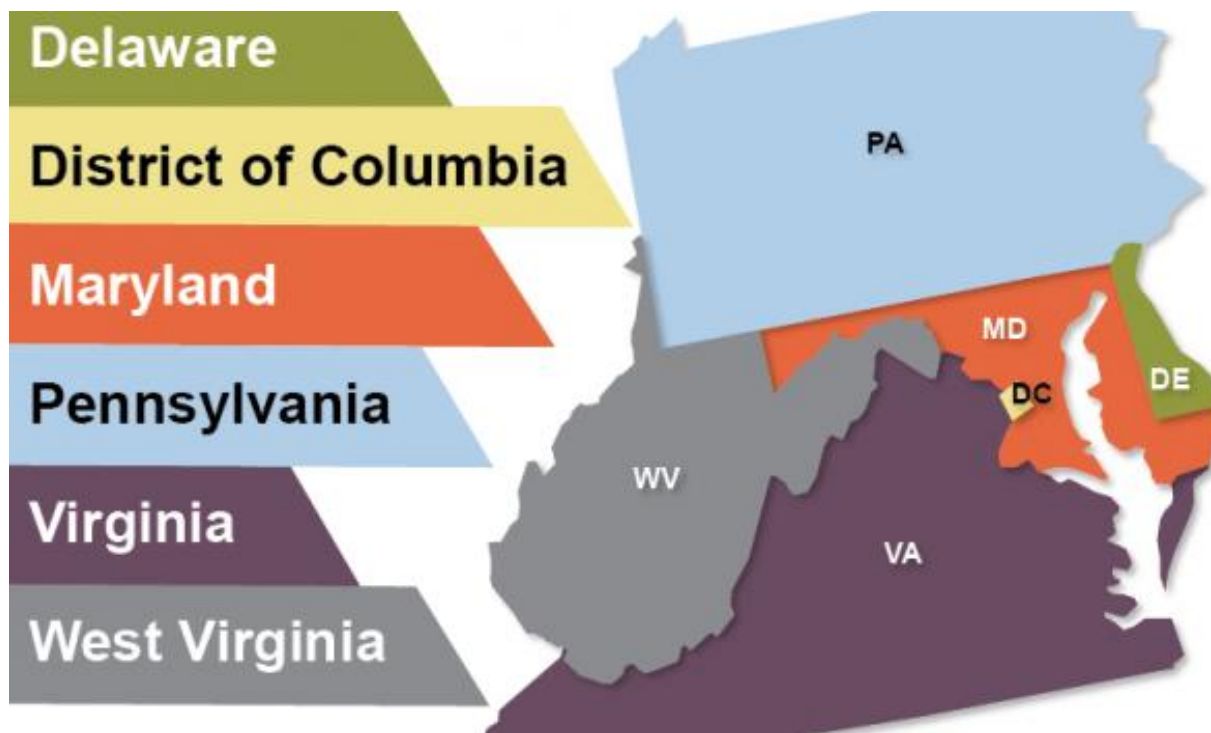
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# Central East Region

## SAMHSA REGION 3



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The use of affirming language inspires hope.

LANGUAGE MATTERS.

**Words have power.**

PEOPLE FIRST.

The PTTC Network uses affirming language to promote the application of evidence-based and culturally informed practices.

ethnicity spirituality  
orientation practices  
normalize experiences expression  
standard create  
Ethnic stories terror identity  
race share injustices  
change care Matter shootings  
Racial education  
space  
seem normal  
powerful  
NASW self Black  
gender affected Lives hate  
Diversity uncertainty  
sexual advocacy  
religious competency  
cultural  
humility



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# PTTC Mission



To Strengthen the Capacity of the Workforce

1

To Deliver Evidence-Based Prevention Strategies

2

Facilitate Opportunities for Preventionists to Pursue New Collaboration Opportunities, which include Developing Prevention Partnerships and Alliances

3



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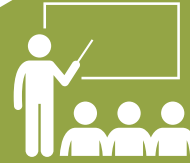
# Services Available



Online Courses



Technical Assistance



Skill Based Training



Webinar



Toolkits



Facilitate Prevention Partnership & Alliances



Research Learning Collaborative



Newsletter



Technology Driven Models



Literature Searches



Virtual Meeting



Research Publication



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# Other Resources in SAMHSA Region 3



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**ATTC**

Addiction Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration



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**MHTTC**

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

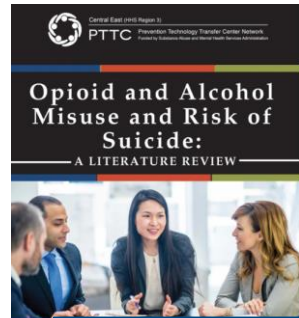
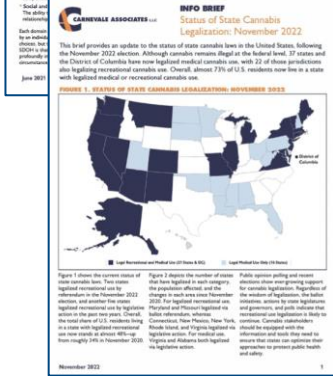
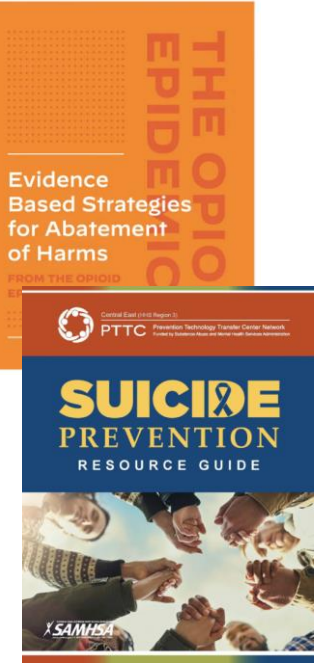


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# Carnevale Associates



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## Contact Information

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Carnevale Associates (CALLC) is an internationally recognized woman-owned small business providing strategic consulting services for more than 20 years.

### Services Include:

- Research & Evaluation
- Training & Technical Assistance (TTA)
- Performance Measurement & Management
- Policy Formulation
- Strategic Planning





# Presenters



Josh Esrick  
Speaker



Emily Patton  
*Speaker*



Deborah Nixon-Hughes  
*Speaker*



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# Learning Objectives

- Discuss the available data on xylazine use and consequences in the United States
- Describe the impacts of xylazine use
- Explain harm reduction strategies related to xylazine use
- Recommend strategies for developing a culturally responsive and relevant public health approach to xylazine use



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# What is Xylazine

FDA Non-Classified, veterinary anesthesia drug for Animals

- Non-Opioid Sedative
- Muscle Relaxant
- Analgesic

Not A Controlled Substance

Sold in Vials Or Preloaded Syringes



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# Other Names for Xylazine

Rompun *(brand name)*

AnaSed *(brand name)*

Sedazine *(brand name)*

Tranq *(street name)*

Tranq Dope *(street name)*

Zombie Drug *(street name)*

Sleep-Cut



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# Who is Xylazine For?

- Has been used for many years in veterinary care
- Short-term sedation, anesthesia, and analgesia
- Generally used for larger animals such as horses, cattle, as well as other mammals like dogs, cats etc.



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# Why Do People Use Xylazine?

- Oftentimes, consumers do not know that xylazine is in the product
- Used as adulterant by substance producers
- Produces effects similar to that of opioids
- Added to opioids to extend/amplify effects
- High lasts longer, especially when combined with fentanyl



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# Xylazine Forms



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# Route of Administration

Swallowed

Inhale

Snorted

Injected

Smoked

Rapid Onset and Can Last 8 hours or longer  
*(depending dose taken, how it is taken, and what it is mixed with)*



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# Effects On Humans

- Deep sedation and heavy nod within 20/30 minutes
- Slowing down of the central nervous system
- Slow breathing
- Low blood pressure
- Slow heart rate
- Severe painful skin ulcers & abscesses
- Slowed wound healing



- Frequent, persistent, or worsening skin infections
- Eye problems like small pupils
- Low blood sugar (hypoglycemia)
- High blood sugar (hyperglycemia)
- Drowsiness
- Amnesia



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# Graphic Warning

The next slide contains pictures of the type of wounds to look for with working with populations who frequently use Xylazine.





+ 1 Day



+ 5 Days



+ 4 Weeks



# Audience Question



What do you know about the prevalence of xylazine in your community?



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# Scope and History of Xylazine Use



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# History of Xylazine Use

- Use by humans originally seen 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



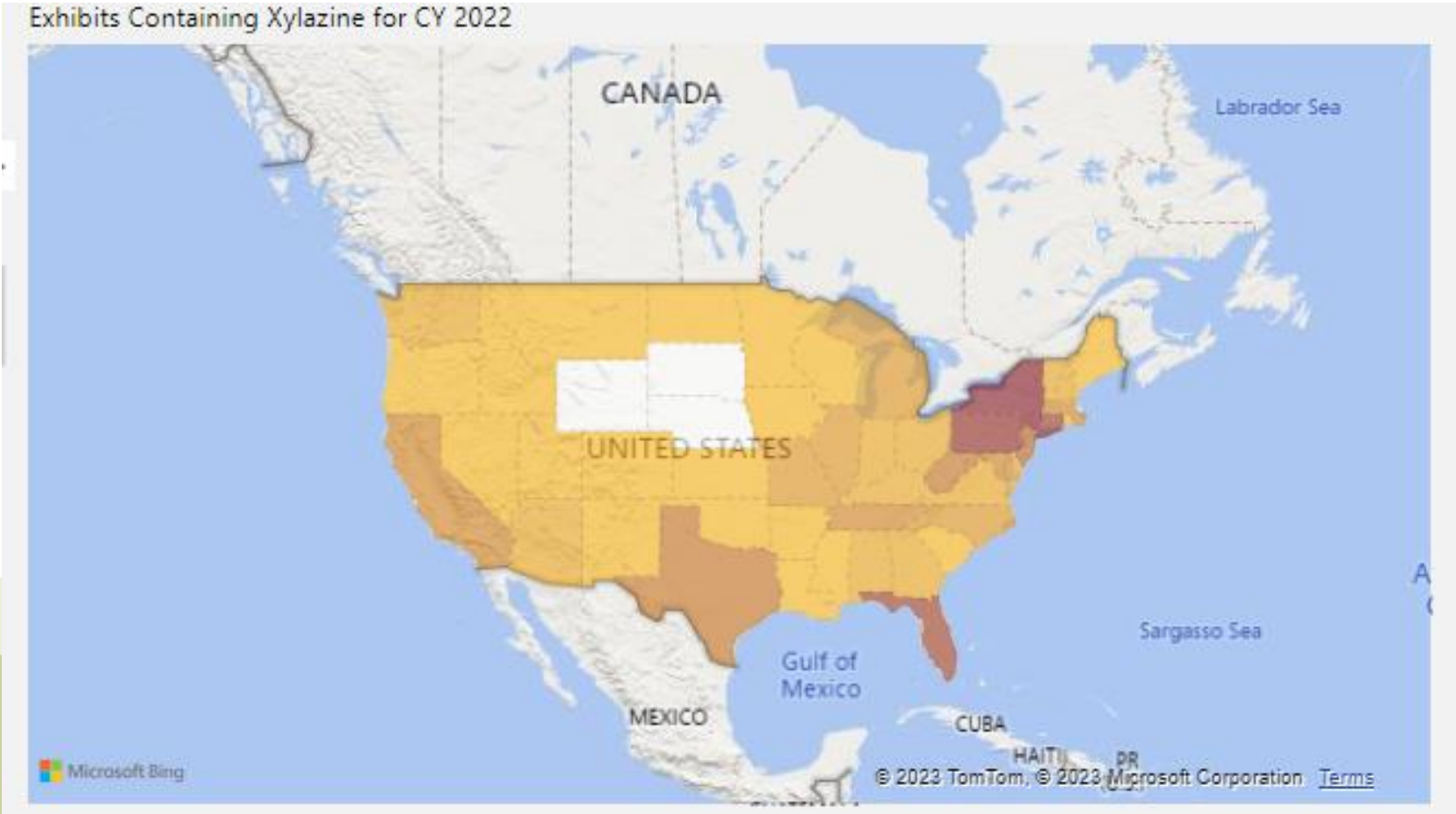
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# DEA Xylazine Seizures, 2022



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# Scope of Consequences

- Over 3,468 fatal overdoses in 2021
  - 34% of all fatal overdoses in Philadelphia
- 40% of people in a 2011 study developed necrotizing wounds
  - Rate may be higher now
- No data, but...
  - Use disorder
  - Used in the commission of crimes
  - Use has led to amputations



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# Xylazine Overdoses, 2021

Other Substances Involved	%
Fentanyl	99.1
Cocaine	35.1
Methamphetamine	18.8

Race/Ethnicity	Deaths Per 100,000
Black, non-Hispanic	1.82
White, non-Hispanic	1.21
Multiracial, non-Hispanic	0.35
Hispanic	0.64

Age Range	Deaths Per 100,000
0-24	0.16
25-34	1.89
35-44	2.24
45-54	1.68
55-64	1.48
65+	0.28



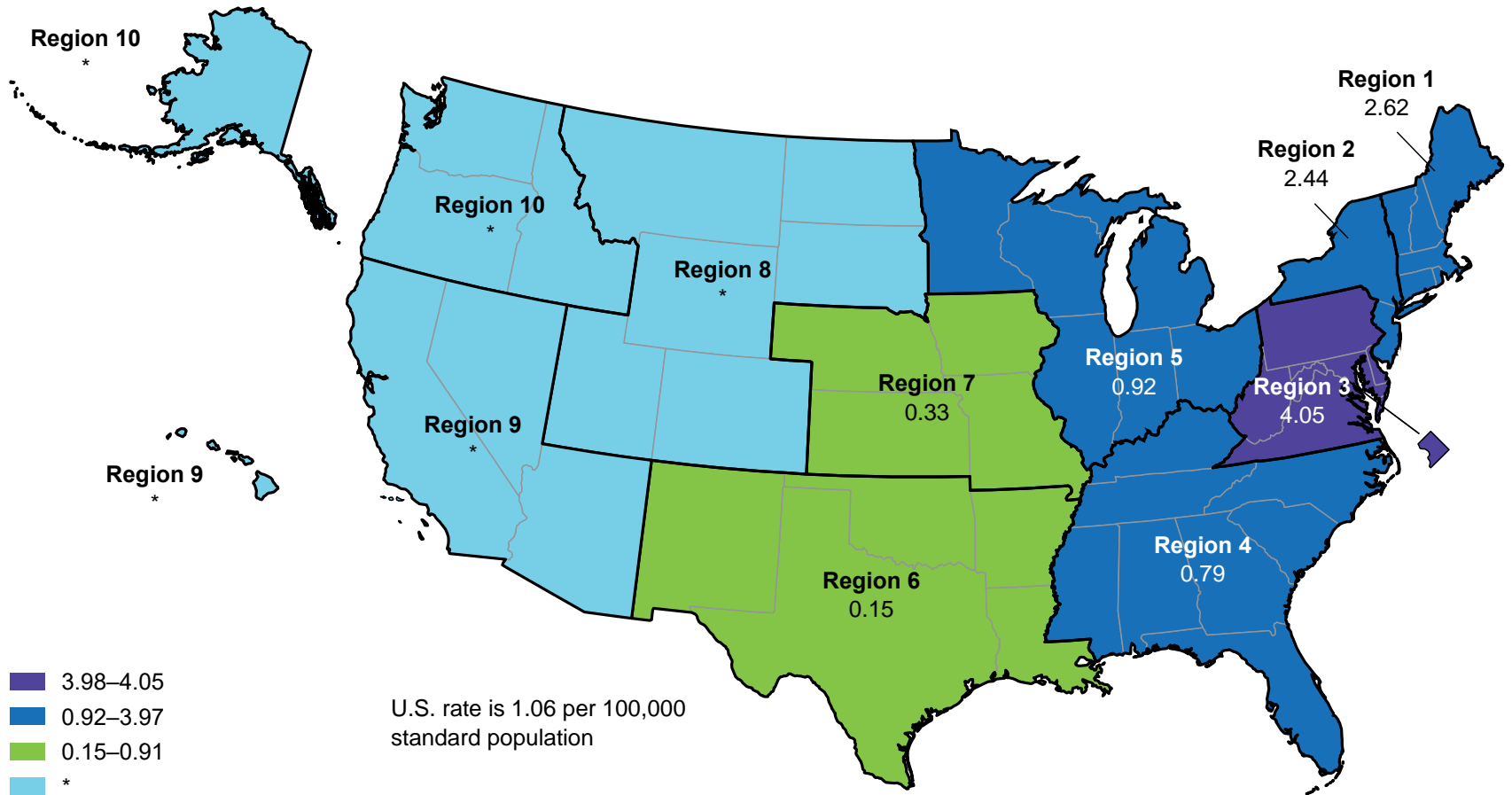
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# Xylazine Overdoses, 2021



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# Harm Reduction



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# Prevention and Treatment Face Challenges

- Lack of data
- No EBPs
- Access barriers to treatment/detox
- Misinformation about xylazine
- Lack of awareness

*But there are some harm reduction strategies we know of!*



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# Harm Reduction Strategies

- Administering naloxone in case of overdose
- Importance of rescue breathing
- Xylazine test strips
- Lab testing
- Wound care best practices



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# Other Harm Reduction That May Show Promise

- Fentanyl test strips
- Safe injection sites (rare, but do exist)
- Safe supply programs (Canada only, so far)



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# What Else Can Prevention Do?



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# Other Potential Strategies for Prevention

- Continue focusing on core prevention strategies, but beyond that you can:
  - Raise awareness about Xylazine
  - Draw from lessons-learned about fentanyl messaging campaigns
  - Pilot new programs/adapt existing programs and publish results
  - Continue to build cultural humility and culturally responsive practices



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# Audience Question



What are some steps that you're taking to address xylazine use?

Or that you will take if xylazine becomes an issue in your community?



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# Follow Principles of Cultural Competence

“The integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services; thereby producing better outcomes”

- CDC



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# Engage in Cultural Humility

- Cultural Humility focuses on differences and acceptance of those differences
  - It also means that we reflect on our own culture, our own values, our own limitations
- Cultural Humility uses the tools of Cultural Competence, but we use those tools to be open to others' values and beliefs and experiences and use them to collaborate in solving our communities' challenges



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# Key Attributes of Cultural Humility

- Openness
- Self-Reflection/Awareness
- Lifelong Learning
- Institutional Accountability
- Empathy and Compassion
- To Be “Other-Oriented”
- Acknowledging Power Imbalances and Balancing Power Imbalances



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# Practicing Cultural Humility

- **A**sk questions in a humble, safe manner
- **S**eek self-awareness
- **S**uspend judgement
- **E**xpress kindness and compassion
- **S**upport a safe and welcoming environment
- **S**tart where the patient is at



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# Importance of Cultural Humility to Xylazine Prevention



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# Importance of Cultural Humility

- Xylazine is (relatively) new, for most of the US
- But it doesn't represent a new issue, it's a continuation/expansion of the opioid epidemic
- Opioid misuse has been an issue since the mid-1990s and was declared a public health emergency in 2017
- Prevention has many accomplishments, but its clear we need to do more



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# Overdose Disparities Within the Opioid Epidemic, Region 3

Race/Ethnicity	Per 100,000 People
African American	51.3
White	33.8
Hispanic/Latino Origin	21.2
Multiracial	9.3
Asian American	2.9

Age Range	Per 100K People
15 - 24	16.3
25 -34	60.9
35 -44	69.5
45 - 54	57.6
55 -64	47.4
65 -74	15.7
75 - 84	1.9

Gender	Per 100K People
Male	49.8
Female	19.8



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# Cultural Humility Can Unlock New Approaches

**Reflection - Respect - Regard  
Relevance - Resiliency**

- Everyone who misuses opioids or xylazine is a person
- Need to learn more about what factors led to misuse
- And what prevention strategies could be most effective



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# What Might This Look Like?

- Can't generalize, that's the point. But likely in many cases to involve:
  - More focus on addressing discrimination and its impacts
  - More tailoring of population-specific services
  - More trauma-informed services



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# Audience Question



How are you using the principles of cultural humility to better address the opioid epidemic and/or xylazine use?



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# Central East PTTC & ATTC Product on Xylazine

## Understanding Xylazine: An Emerging Concern



Published on April 27, 2023  
Revised on June 5, 2023

Xylazine (“tranq”) is a non-opioid sedative and tranquilizer, often found in powder or liquid form. In the United States, it is only approved as medicine for veterinary use.<sup>1</sup> However, human consumption of xylazine—often injected in combination with opioids—is a growing trend across much of the country.<sup>2</sup> Xylazine can amplify the effects of opioids and cause an opioid high to last longer, which makes it desirable to producers, distributors, and consumers.<sup>3</sup> Xylazine presents many dangers, including increased risk of overdose, and SAMHSA has issued an alert to raise awareness of its growing use.

### KEY CONCERNS

#### Overdose Risk

Xylazine can cause severe respiratory depression. It presents a risk of overdose when used alone and further increases the risk of overdose when used in combination with opioids.<sup>4</sup>

#### Heart & Blood Pressure Problems

Xylazine is associated with hypertension, hypotension, tachycardia, bradycardia, and dysrhythmia. Other documented effects include hypothermia and hyperglycemia.<sup>5</sup>

#### Skin & Tissue Damage

Xylazine can cause severe skin ulcers and necrotic tissue damage at injection sites and elsewhere on the body. One study found that almost 40% of people who inject xylazine experience skin and tissue problems.<sup>6</sup>

#### Treatment Challenges

There are no medications approved to treat xylazine withdrawal.<sup>7</sup> But replacement therapy with adrenergic agonist medications has shown some effectiveness at treating withdrawal symptoms.<sup>8</sup>

#### Harm Reduction Barriers

Xylazine tests exist but widespread accessibility remains limited, making detection within substances difficult.<sup>9</sup> And no overdose reversal medication exists. **Administering naloxone is recommended—as opioids are often involved.**<sup>10</sup>

#### Research & Surveillance Difficulties

Xylazine is not a federally controlled substance. However, it is not approved or intended for use in humans.<sup>11</sup> Since it is unregulated, comprehensive data on xylazine use do not exist and available data are likely to be undercounts.<sup>12</sup>

## WHAT IS KNOWN ABOUT THE SCOPE OF USE

**98%**

**Seizure increase**

Among DEA substance seizures involving xylazine, 2020 to 2021<sup>13</sup>

**282%**

**Fatal overdose increase**

Among fatal xylazine-involved overdoses, 2020 to 2021<sup>14</sup>

**3,089+**

**Fatal overdoses**

In 2021,<sup>15</sup> with epicenters including:<sup>16</sup>

- Philadelphia: 34%<sup>16</sup>
- Connecticut: 19%<sup>17</sup>
- Maryland: 19%<sup>18</sup>

*\*% of all fatal overdoses involved xylazine*

**64%**

**States report xylazine in outpatient screens**

All five Central East states + DC (and 25 of 39 states overall) report positive xylazine urine screenings among outpatient provider clients<sup>19</sup>



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## Understanding Xylazine: An Emerging Concern

### WHAT PREVENTION & TREATMENT PROFESSIONALS CAN DO

#### AWARENESS

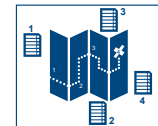


Raise awareness about xylazine use and its risks among public health stakeholders and communities

#### OVERDOSE RESPONSE

Pursue a comprehensive overdose response strategy, including:

- Provide access to and training on naloxone
- Communicate that naloxone will address the opioid component of a multi substance overdose<sup>20</sup>
- Teach rescue breathing techniques and the importance of rescue breathing<sup>21</sup>
- Promote contacting emergency medical services<sup>22</sup>



#### HARM REDUCTION



Share wound care information and harm reduction strategies, including:<sup>23</sup>

- Wounds start small and can appear anywhere, not only at injection sites
- Keep wounds moist with petroleum jelly or similar products
- Wrap wounds in burn dressings or similar materials
- Do not use alcohol, peroxide, or bleach to clean wounds
- Seek medical attention for wounds

### NOTES

<sup>1</sup> NIDA (n.d). Xylazine. <https://nida.nih.gov/research-topics/xylazine>  
<sup>2</sup> DEA (2022). The Growing Threat of Xylazine and its Mixture with Illicit Drugs. <https://www.dea.gov/documents/2022/2022-12/2022-12-21-growing-threat-xylazine-and-its-mixture-illicit-drugs>  
<sup>3</sup> Ibid  
<sup>4</sup> Ibid  
<sup>5</sup> Ibid  
<sup>6</sup> Reyes, J.C. et al (2011). The Emerging of Xylazine as a New Drug of Abuse and its Health Consequences among Drug Users in Puerto Rico. *Journal of Urban Health* 89(3), doi:10.1007/s11524-011-9662-6  
<sup>7</sup> Philadelphia Department of Public Health (2022). Health Update: Xylazine (tranq) exposure among people who use substances in Philadelphia  
<sup>8</sup> Ehrman-Dupre, R. et al (2022). Management of Xylazine Withdrawal in a Hospitalized Patient: A Case Report. *Journal of Addiction Medicine* 19(6), 595-598  
<sup>9</sup> Facher, L. (2023). Newly available test strips can detect lethal ‘tranq’ in drug supply. STAT news. <https://www.statnews.com/2023/03/27/tranq-xylazine-test-strips-now-available/>  
<sup>10</sup> NIDA (n.d). Xylazine. <https://nida.nih.gov/research-topics/xylazine>  
<sup>11</sup> Congressional Research Service (2023). Xylazine: Considerations for Federal Control  
<sup>12</sup> DEA (2022). The Growing Threat of Xylazine and its Mixture with Illicit Drugs.

<sup>13</sup> DEA (2022). The Growing Threat of Xylazine and its Mixture with Illicit Drugs.  
<sup>14</sup> Ibid  
<sup>15</sup> Ibid  
<sup>16</sup> Philadelphia Department of Public Health (2022). Unintentional Drug Overdose Fatalities in Philadelphia, 2021. <https://www.phila.gov/media/2022/10/21-2548-CHART-V233.pdf>  
<sup>17</sup> Connecticut Department of Public Health (2022). Drug Overdose Monthly Report.  
<sup>18</sup> Friedman, J. et al (2022). Xylazine spreads across the US: A Growing Component of the Increasingly Synthetic and Poly-substance Overdose Crisis. *Drug and Alcohol Dependence* 233 <https://doi.org/10.1016/j.drugalcdep.2022.109390>  
<sup>19</sup> Holt, A. et al (2022). Widespread Distribution of Xylazine Detected Throughout the United States in Healthcare Patient Samples. *Journal of Addiction Medicine* DOI: 10.1093/ADM/000/000/001132  
<sup>20</sup> NIDA (n.d). Xylazine. <https://nida.nih.gov/research-topics/xylazine>  
<sup>21</sup> Brandeis University (n.d). Street Narcotics Alert: Xylazine.  
<sup>22</sup> Delaware Health and Social Services (2023). Delaware Partner Information Bulletin: Xylazine  
<sup>23</sup> Beinert, J. (2023). Webinar: Beyond the Alerts: Practical Guidance for Responding to Xylazine. <https://nastad.org/events/webinar-beyond-alerts-practical-guidance-responding-xylazine>



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# Conclusion

- Xylazine use is a growing issue across the United States
- Prevalence is likely still relatively low, outside of certain localities
- Important for prevention and public health to prepare and act before trends worsen
- Cultural humility and other best practices learned throughout the course of the opioid epidemic can help



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# Let's Hear From You!



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