Xylazine & Wound Care

A Primer for the Healthcare Provider

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Opioid Response Network

Working with communities

- The SAMHSA-funded *Opioid Response Network (ORN)* assists states, organizations and individuals by providing the resources and technical assistance they need locally to address the opioid crisis and stimulant use.
- Technical assistance is available to support the evidence-based prevention, treatment and recovery of opioid use disorders and stimulant use disorders.

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Working with communities

- The *Opioid Response Network (ORN)* provides local, experienced consultants in prevention, treatment and recovery to communities and organizations to help address this opioid crisis and stimulant use.
- *ORN* accepts requests for education and training.
- Each state/territory has a designated team, led by a regional Technology Transfer Specialist (TTS), who is an expert in implementing evidence-based practices.

Disclosures

AAAP is committed to presenting learners with unbiased, independent, objective, and evidence-based education in accordance with accreditation requirements and AAAP policies.

Presenter(s), planner(s), reviewer(s), and all others involved in the planning or content development of this activity were required to disclose all financial relationships within the past 24 months.

All disclosures have been reviewed and there are no relevant financial relationships with ineligible companies to disclose

Overall Mission

To provide training and technical assistance via local experts to enhance **prevention**, **treatment** (especially medications like buprenorphine, naltrexone and methadone) and **recovery** efforts across the country addressing state and local - specific needs.

Contact the Opioid Response Network

- To ask questions or submit a request for technical assistance:
  - Visit www.OpioidResponseNetwork.org
  - Email orn@aaap.org
  - Call 401-270-5900

Learning Objectives

Describe at least two characteristics of xylazine and at least two reasons why it has emerged as an adulterant in the opioid supply.

Identify at least two types of wounds that may be encountered in people who use drugs and at least two guidelines for basic first aid for wound care.

Specify at least two prevention strategies that could mitigate the adverse impact of xylazine.

This training constitutes prevention education

NOT medical advice

This training is intended to:

- Provide strategies to help mitigate adverse impacts related to drug use
- Be used for educational purposes in support of people who use drugs, acknowledging that it is less optimal than traditional care but better than no care at all

This training is NOT:

- Direct medical advice
- Substitute for seeking expert healthcare

The Origin Story

COLUMBIA | CHOSEN
Center for Healing Opioid and Other Substance Use Disorders

Empirical Assessment of Drug-Related Wounds Among People Who Use Drugs : Pilot Testing a Standardized Wound Care Assessment and Referral Protocol

- Criteria for study participation: any illicit substance use in the past 30 days
- Study protocol consisted of:
  - Interview about recent substance use
  - Wound assessment (if applicable)
  - Distribution of wound care kits
  - Provision of wound care education
  - Provision of wound care
  - Referral to treatment (brief negotiated interview using motivational interviewing)
- Distributed $10 gift card for participation

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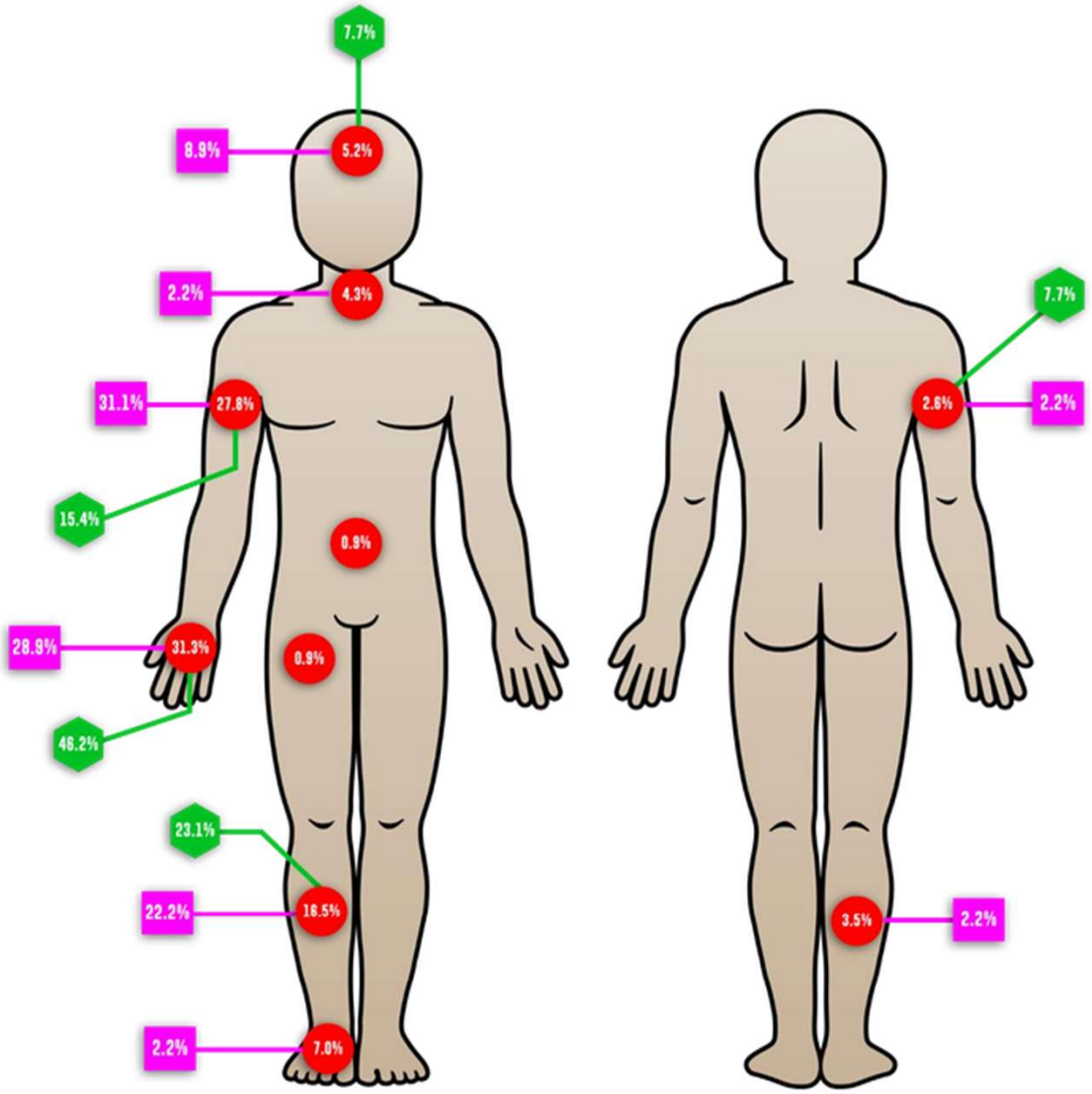
Center for Healing Opioid and Other Substance Use Disorders

Results of South Bronx Wound Care Study (2/9/22-7/25/22)

- 592 people enrolled
- Most commonly used drug:
  - Heroin/Fentanyl (65.7%)
  - Stimulants (58.3%)
  - Alcohol (39.2%)
- 23% had 1 or more wounds
- Participants reluctant to seek medical care but very willing to engage in wound care during outreach encounter

Wound Location



Primarily located on:

- Head
- Neck
- Arms
- Hands
- Legs
- Feet

Red = Primary; **Pink** = Secondary; **Green** = Tertiary

Part I
Xylazine

- What is Xylazine?
- Why Xylazine exists as an adulterant now?
- How prevalent is Xylazine?
- What are the public health implications?

Emerging Substance: Xylazine

- Xylazine is a non-opioid sedative, analgesic, and muscle relaxant used in veterinary medicine and not approved for human use.

- It has been found among people who use drugs in Puerto Rico since the early 2000s and referred to as “anestesiade caballo” (horse tranquilizer)

SOURCE: Johnson, Pizzicato, Johnson & Viner, 2021

Impacts of Xylazine

- In humans xylazine can cause hypotension, central nervous system depression, respiratory depression, and bradycardia.

- It also causes open skin ulcers among injectors who may continually inject affected areas for pain relief.

SOURCE: Johnson, Pizzicato, Johnson & Viner, 2021

History of US Street Opiate Supply

- **1991-2013:** Mexican black tar heroin west of Mississippi River; Colombian powder heroin east of the Mississippi; mixed supply in Midwestern cities like Chicago (Ciccarone&Bourgois2003)
- **2013-2019:** Mexican powder heroin displaces Colombian heroin from East Coast markets and fentanyl enters opioid supply chains primarily on the East Coast *(Ciccarone2021)*
- **Early 2000s:** As heroin adulterant, xylazine first detected in rural Puerto Rico *(Torruella, 2011)*
- **2017:** Xylazine becomes increasingly prevalent in Rustbelt region, beginning in Philadelphia as fentanyl begins to spread west (Friedman,Montero,Bourgoisetal.2022, Shoveretal, 2020)
- **2020-present:** Opioid supply on East Coast increasingly becomes a mix of **fentanyl** and **xylazine ("tranq")** as heroin disappears; Mexican methamphetamine enters East Coast/Rust Belt street markets formerly dominated by heroin and cocaine *(Montero et al. 2022)*

Why Xylazine? Why Now?

Experience of fentanyl consumption (vs. heroin)

- Duration of effect / withdrawal symptoms / frequency of injection
- Quality of “high” (Montero etal. 2022; Ciccarone,Ondocsin,and Mars 2017)
- Fentanyl shapes later changes as its deficiencies open space for new additives and substances (xylazine, meth)

Why Xylazine? Why Now?

Limits of fentanyl adulteration

- Length and quality of “high”
- Fentanyl can’t serve as diluent or bulk of substance sold as dope

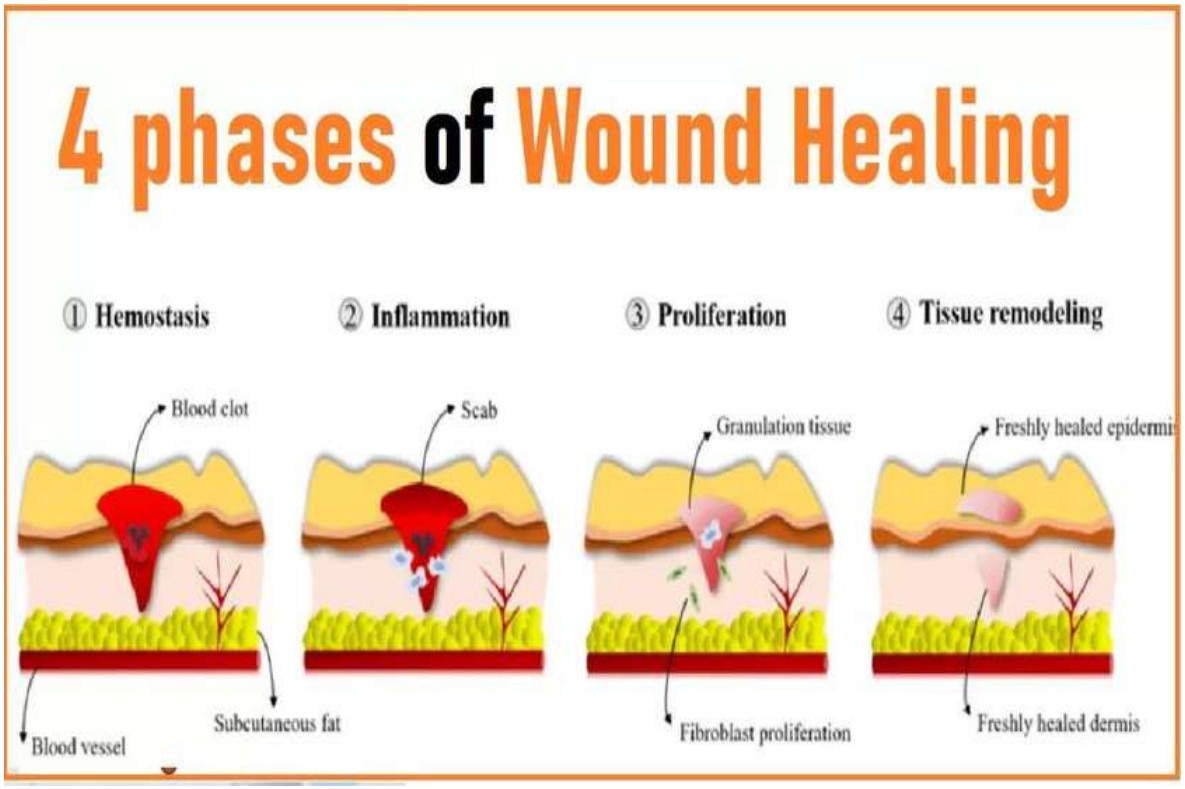
Xylazine compensates for deficiencies introduced by fentanyl

Part II
Wound Care

- What are the key characteristics of a wound?
- How to identify signs of infection?
- Best practices for the provision of wound care?

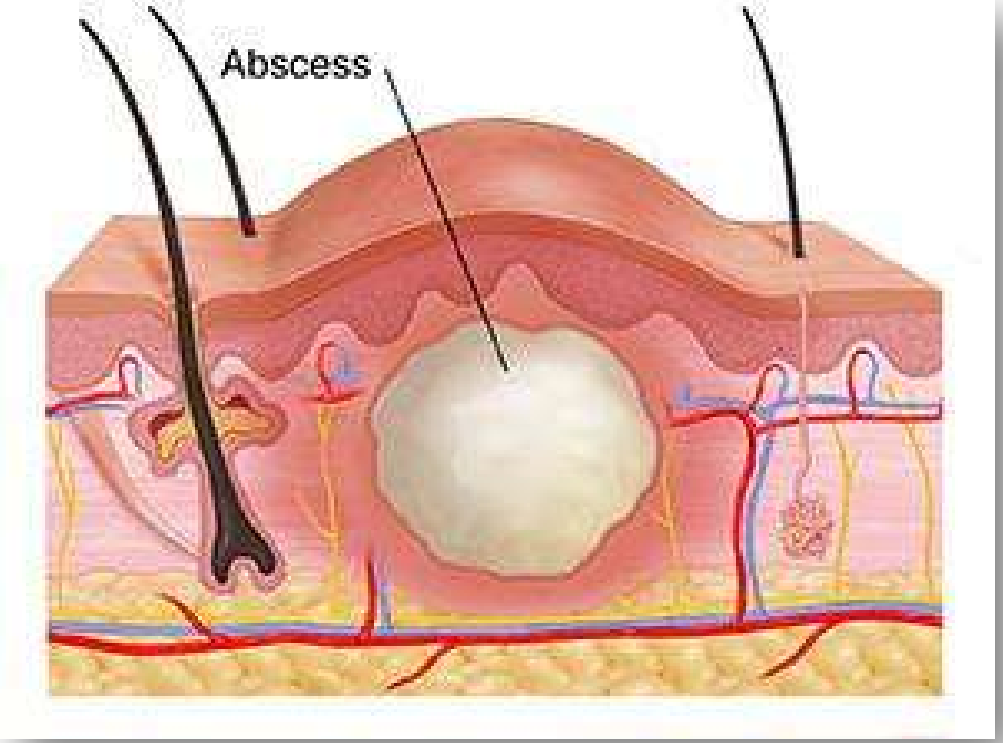
Phases of Wound Healing

1. **Hemostasis**–formation of blood clot to stop bleeding.
2. **Inflammatory**–begins 10-15 minutes after trauma. Destroy bacteria and remove debris. Infected wounds are stuck in this phase.
3. **Proliferative**–fill in and cover wound.
4. **Maturation/Remodeling** – wound gains flexibility and strength.



Abscess

- Collection of pus
- Often occurs at injection site.
- Can appear as a hard bump, painful and warm to touch
- Closed abscess
  - Warm moist compresses
  - 20 minutes on and off
  - Warmth brings red blood cells and help open
- If it opens –keep it draining, dry and clean
- Consider seeking medical treatment if wound grows quickly or any signs of sepsis



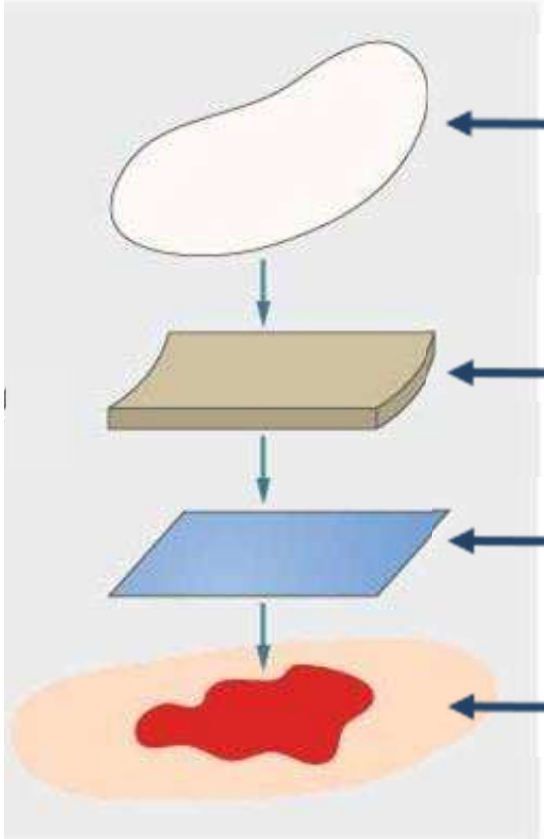
Symptoms of Wound Infection

- Swelling
- Pain
- Redness around wound
- Warm to the touch
- Foul smelling drainage
- Pus drainage
- Increase in amount of drainage
- Skin becomes hard and thick

Factors that Delay Wound Healing

- Reusing or sharing needles
- Soiled skin
- Advance age
- Smoking closes the blood vessels
- Poor diet-lack of protein and vitamins to help with healing
- Delayed or no wound care
- Wrong wound dressing
- Heart problems, kidney disease, diabetes, infection
- Medications such as steroids & chemotherapy

Layers to a Dressings



The outer layer makes sure the dressing stays in place and protects from dirt and moisture (Coban/kerlix)

Absorbent layer absorbs drainage (abd pad, sponge, gauze)

The contact layer touches the wound (xeroform, honey, A&D)

Rinse wound (saline, soap & water, wound wash [Vashe])

Wound Care Kit Recommendations

Cleanse

Contact Layer

Xeroform

A&D ointment

Dressing

Gauze

ABD Pad

Secure

Kerlix

Coban

Wounds Heal Best When Moist

If the wound is dry - add moisture	Apply xeroform, A&D ointment, or petroleum
If the wound is too wet - decrease drainage	ABD pad or baby diaper, frequent dressing changes
If the wound is infected – kill bacteria	Medical treatment, antibiotics
If the wound is necrotic – remove dead tissue	Medihoney, Debridement

Dos and Don’ts of Wound Care

- Remember you are taking care of a person, not a wound
- Provide privacy
- Establish a rapport, explain all steps during wound care
- Removing dressing can be painful, proceed with caution.
- Moisten dressing with water if stuck to skin
- Avoid use of hydrogen peroxide or alcohol
- Use motivational interviewing techniques to enhance intrinsic motivation when referring individuals for medical treatment

Part III

Prevention Strategies

- Screening and referral to treatment
- Strategies to promote wound treatment
- Prevention strategies for xylazine and other drugs

Standardized Approach to Wound Screening

- Limited justification for using standardized wound care assessments.
- Recommended brief screening procedures:
  - **Observe** exposed areas of skin (head, neck, arms, hands, legs).
  - **Inquire** about any wounds client/patient may have developed.
  - **Follow-up** regularly with those who have and have not reported wounds.
- Develop policies and procedures to support routine implementation.
- Train staff accordingly: provide the tools necessary and set expectations.

Providing Wound Care Kits & Supplies

- Custom “kits” provide substantially more flexibility to prioritize products most effective / necessary while keeping costs down.

- Pre-packaged wound care kits are likely to be expensive, contain excess, or not include recommended supplies at the right cost.

Providing Wound Care Education

- It doesn't stop with the initial provision of wound care.
- Help the patient understand and replicate recommended process.
- Provide written guidance (we all need to refer back to instructions).
- Encourage individual to consider a referral to appropriate care.
- Offer prevention strategies to help ensure that their continued use does not lead to new infections or exacerbate existing wounds.

Engaging the Patient/Client

- Important to meet them where they are at.
- Conceptualize success from a prevention perspective (risk mitigation).
- Employ Motivational Interviewing (MI) techniques when engaging patient/client in conversation.
- Be prepared to make a referral and know the process.

Developing a Referral Network

- Develop a list of trusted medical providers for wound care referral.
- Consider developing a memorandum of understanding (MOU).
- Have a procedure for warm handoff to care (face-to-face meeting involving both providers with the client present).
- Goal is to ensure our patients/clients have a positive experience.

Patient Education: Safer Use Practices for Xylazine

- Never use alone: If using substances that may contain xylazine, have someone with you or utilize Never Use Alone Hotline
- Start low and go slow:Use a small test dose to assess potency/effects, especially w/unpredictable nature of the illicit drug supply
- Try to avoid mixing substances
- Get your drugs tested or utilize test strips
- Try alternative routes of administration (smoking or snorting can reduce risk of injection-related wounds but they can still occur)
- Use in a safe location where you can be checked on
- Be aware of your surroundings (vulnerability)
- Try to be in a comfortable seated position that doesn't cut off circulation
- If you are using alone, double down on other strategies
- If you are using in a group, stagger your use so someone is alert
- Carry naloxone and know how to use it (xylazine is often mixed with fentanyl)
- Call 911 (xylazine overdose may need more care than naloxone
- Be sure airway is open (breathing blocked in slumped positions)
- Learn reduce breathing (critical for overdose response)

ORN Evaluation Survey Link

Please scan the below QR code or use the link below to access a very brief survey.

Post-Event Survey URL: https://lanitek.com/P?s=276167

The survey will ask about your satisfaction with the training program you just completed as well as some basic demographic information. Your responses will help the Opioid Response Network improve the services they provide.

Thank you in advance for completing this survey!