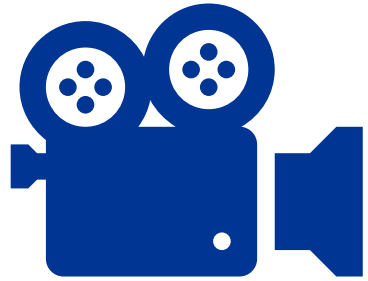
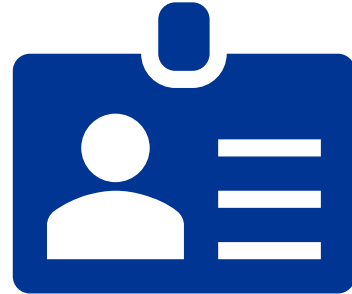


Housekeeping



This session is being recorded to **Tomorrow's Healthcare.**



If you used a forwarded link, we need your **email address.**



Pose questions in the chat to **"Everyone"**.



Please complete the post-session **evaluation.**

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In support of improving patient care, this activity has been planned and implemented by the University of Pittsburgh and The Jewish Healthcare Foundation. The University of Pittsburgh is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME) and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team. **1.25 hours is approved for this course.**

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Mutual Agreement

- Everyone on every Program Evaluation and Research Unit (PERU) webinar is **valued**. Everyone has an expectation of **mutual, positive regard** for everyone else that respects the **diversity** of everyone on the webinar.
- We operate from a **strength-based, empathetic, and supportive** framework – with the people we serve, and with each other on PERU webinars.
- We encourage the use of **affirming language** that is not discriminatory or stigmatizing.
- We treat others as **they** would like to be treated and, therefore, avoid argumentative, disruptive, and/or aggressive language.

Mutual Agreement (continued)

- We strive to **listen** to each person, avoid interrupting others, and seek to **understand** each other through the Learning Network as we work toward the highest quality services for Centers of Excellence (COE) clients.
- Information presented in Learning Network sessions has been vetted. We recognize that people have different opinions, and those **diverse perspectives** are welcomed and valued. Questions and comments should be framed as **constructive feedback**.
- The Learning Network format is **not conducive to debate**. If something happens that concerns you, **please send a chat during the session** to the panelists and we will attempt to make room to address it either during the session or by scheduling time outside of the session to process and understand it. **Alternatively, you can reach out offline to your PERU point of contact.**

Acknowledgements

- The COE project is a partnership of the University of Pittsburgh's Program Evaluation and Research Unit and the Pennsylvania Department of Human Services; and is funded by the Pennsylvania Department of Human Services, grant number 601747.
- COE vision: The Centers of Excellence will ensure care coordination, increase access to medication-assisted treatment and integrate physical and behavioral health for individuals with opioid use disorder.



Wound Care for People Who Use Drugs

COE Learning Collaborative 3-11-26

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University of Pittsburgh

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Funding & Disclosures

Disclosures:

None

Funding:

- NIDA K23

Acknowledgements:

Our patients & other individuals who have shared and taught us through their experiences

Harm reduction activists who have paved the way for our work today

Learning Objectives

By completion of this session, participants should be able to:

1

Understand common skin infections and wounds associated with drug use.


2

Recognize the barriers clients face in accessing care services and the risks of untreated skin infections and wounds.

3

Collaborate with medical partners to ensure clients receive comprehensive wound management.

The Public Health Crisis:

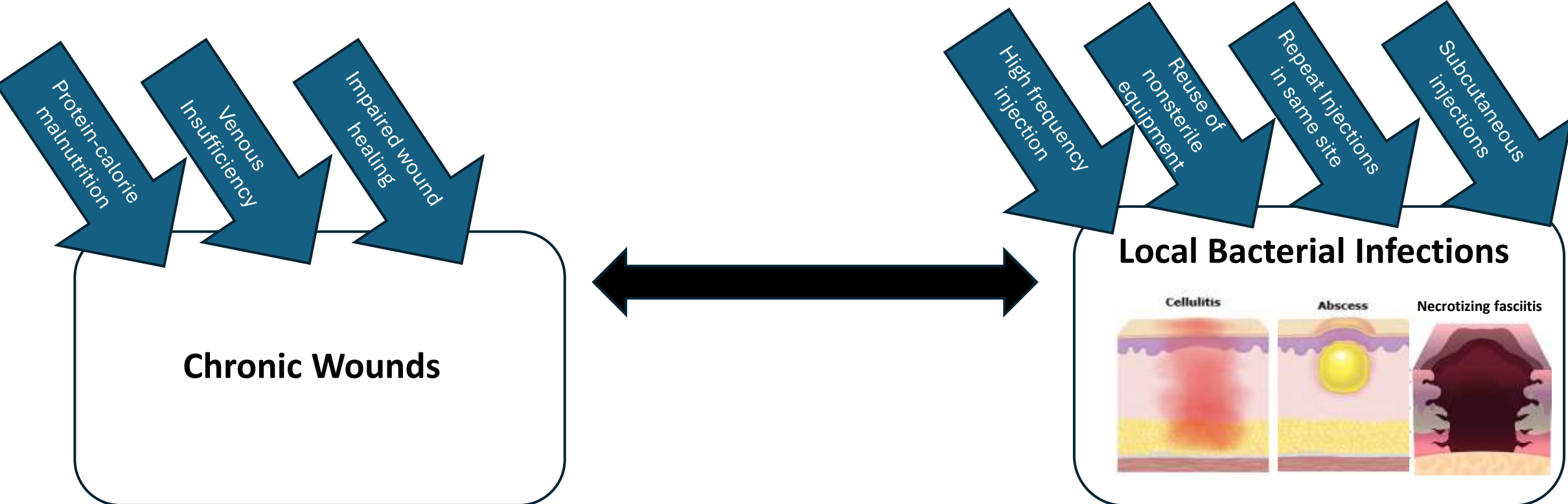


Skin and soft-tissue infections and wounds are common among people who use drugs

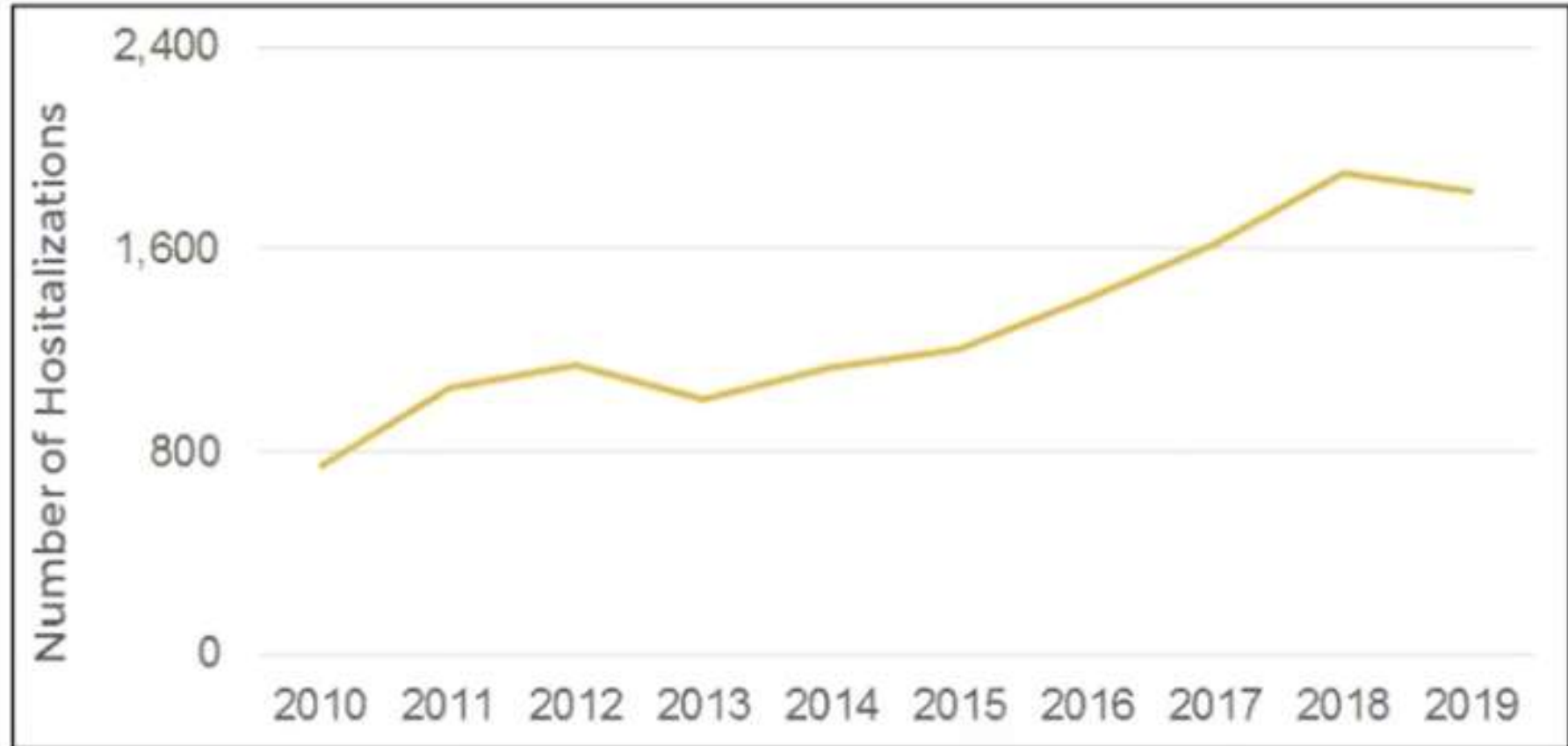
Often preventable with safer injection practices and early intervention

Can escalate quickly without proper care

Spectrum of skin complications for people who use drugs



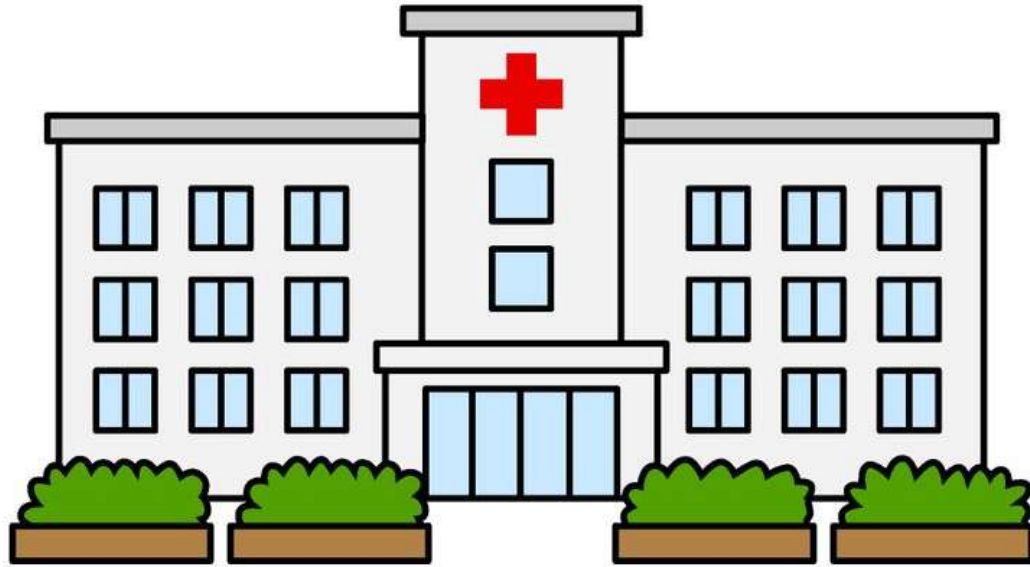
Injection drug use-skin infection hospitalizations Philadelphia, PA 2010-2019



Courtesy of: Jewell Johnson

Data source: Pennsylvania Healthcare Cost Containment Council

Many Barriers to Seeking Care

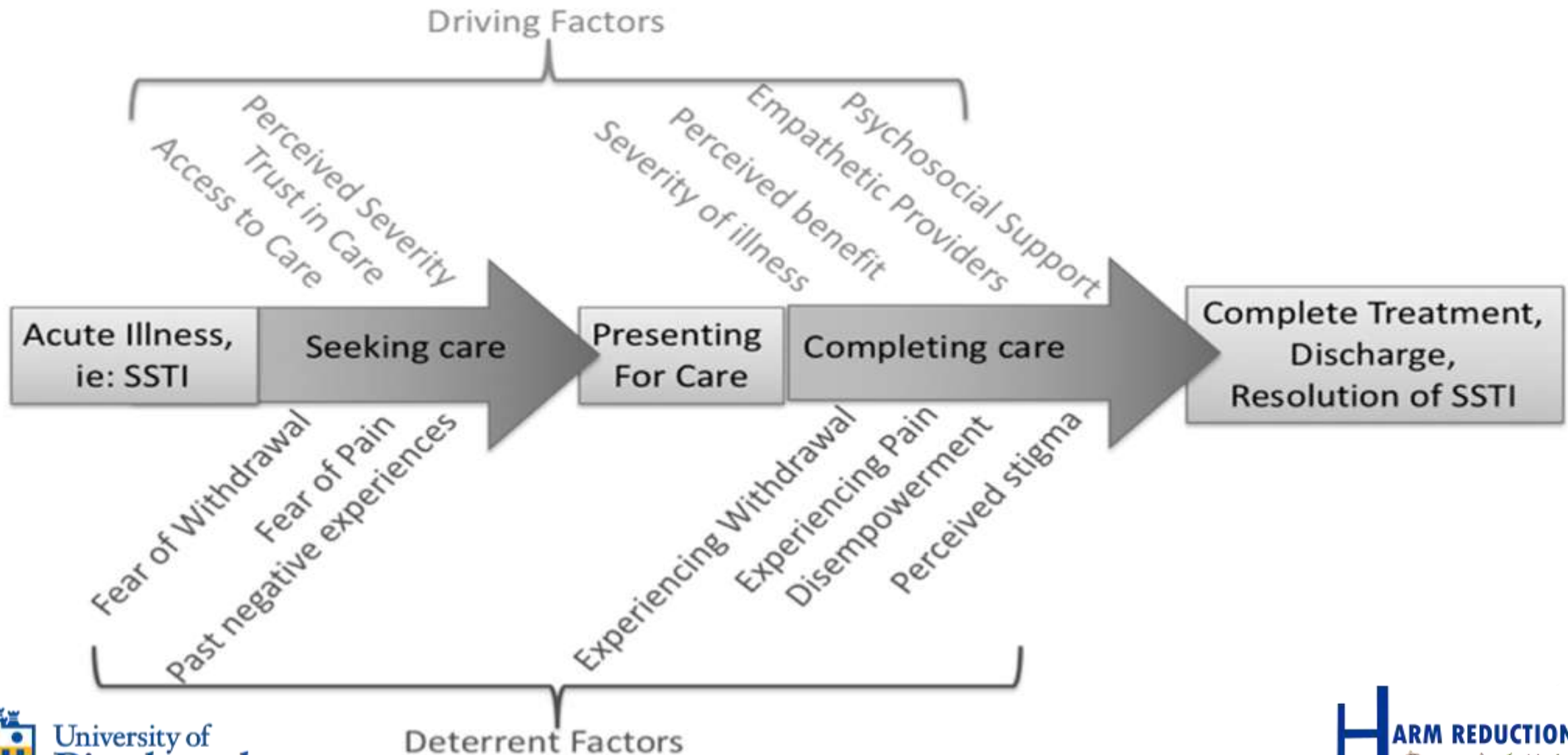


Fear of withdrawal
Fear of pain
Negative experiences
Stigma
Dehumanization

Gangrene
Bacteremia
Endocarditis
Osteomyelitis
Septic arthritis
Disability
Loss of mobility
Amputation
Venous/lymphatic damage

Biancarelli et al. DAD. 2019.
Summers et al. DAD 2018.

A Model for Care-Seeking in PWUD



Summers et al. DAD 2018.

Supporting Clients Where They Are

- Provide non-judgmental, trauma-informed support
- Review red flag symptoms signaling need for medical care:
 - Fever or chills
 - Rapidly spreading redness
 - Severe pain
 - Foul odor or large amounts of pus
 - Difficulty moving the limb
- Provide information about local urgent care / low-barrier clinics
- Maintain point-of-care antibiotics
- Stock wound care supplies: dressings, gauze, saline, bandages, tape, gloves, warm packs



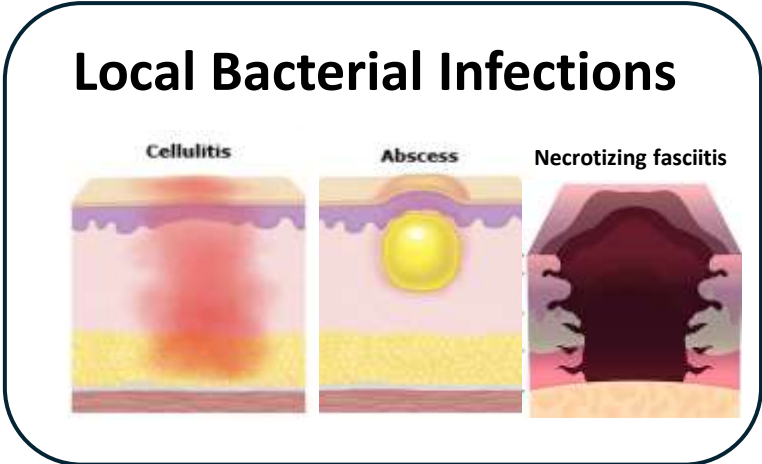
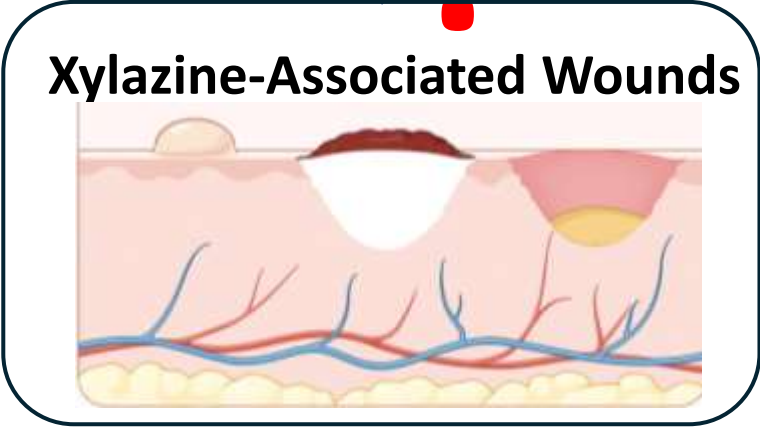
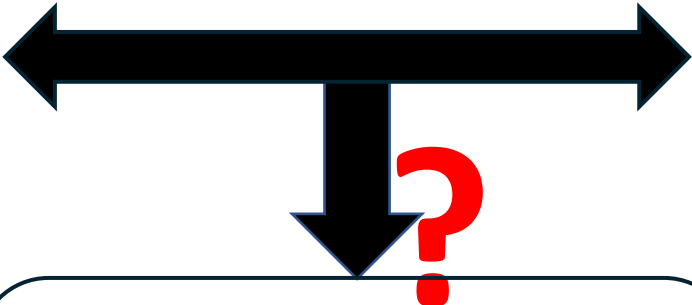
Normalize self-care and safer use

- Clean skin with an alcohol swab
- Veins > arteries > intramuscular > subcutaneous > intradermal
- Use tourniquets, vein finders, ultrasound
- Avoid high-risk “red zone” areas
- Rotate injection sites, Inject with bevel up, ~45° angle
- Consider smoking, snorting, or oral routes if possible



Spectrum of skin complications for people who use drugs

Chronic Wounds



Xylazine

- An adulterant in the unregulated opioid supply
- Lesions often begin as small blisters → necrotic ulcers
- Painful and distinct from typical skin infections
- Can occur regardless of route or site of drug use



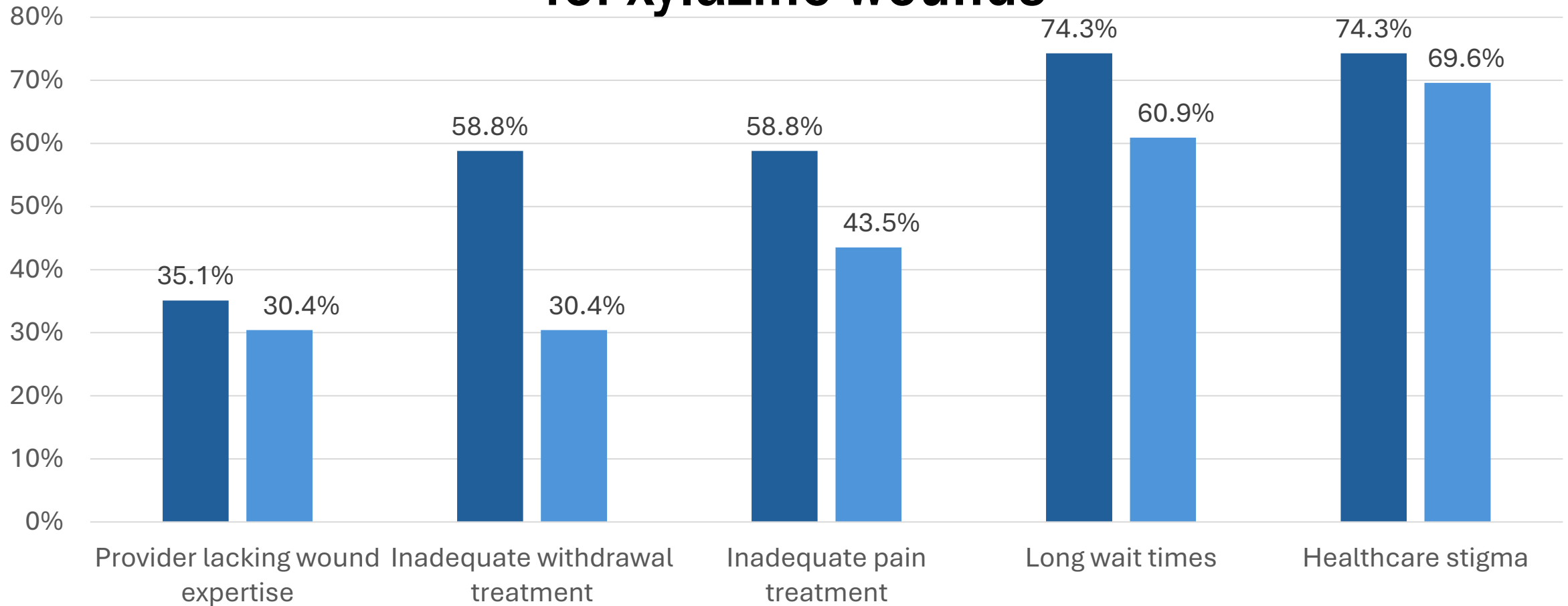
The following picture may be distressing to some individuals

Malayala et al. Cureus. 2022

Bowles JM et al IJDP 2024

Jawa, R et al. Drug and Alcohol Dependence. 2024

Negative treatment experiences when seeking medical care for xylazine wounds



■ Xylazine wounds (n=148) ■ Non-xylazine wounds (n=23)

Self-Treatment of xylazine wounds was common

~80% self-treat their wounds

75% got wound care at syringe service programs

Past 90-day
self-treatment
practices

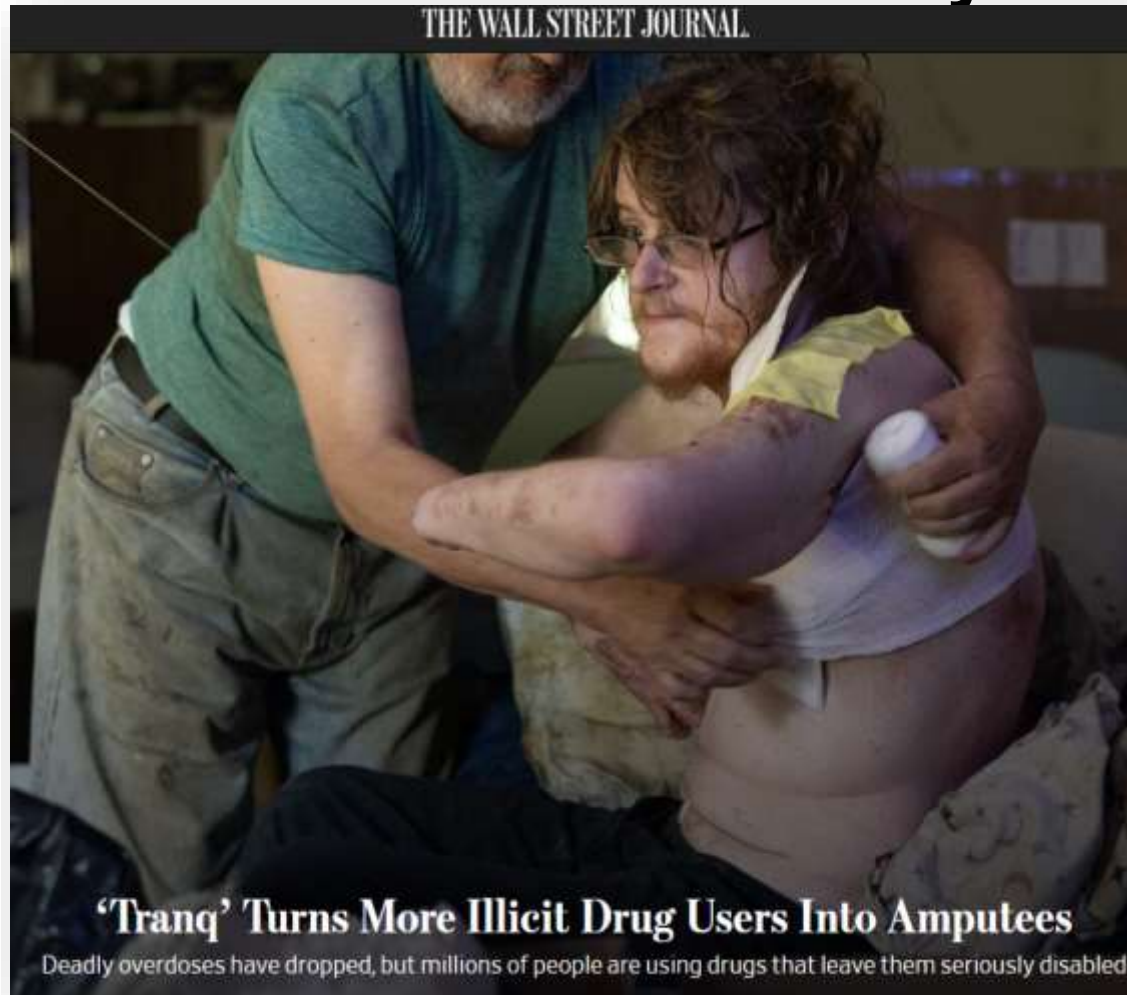
Cleaning

71% water or saline
56% alcohol-based sanitizers
41% hydrogen peroxide
35% wound wash

Coverage

66% bandages or gauze
18% NO coverage

Xylazine-associated wounds are associated with increased mortality



Wernau J. Wall Street Journal. 6/2024

Xylazine wounds CAN HEAL!

- Low-barrier wound care with empathetic providers
- Adequate supplies for daily dressing changes
- Avoiding xylazine adulterated opioids
- Co-management of addiction and harm reduction services

The following picture may be distressing to some individuals

Xylazine Wound Management



Image courtesy of Jen Shinefeld 2023

01

Document all areas with wounds

02

Remove any dressings

03

Clean wounds to remove surface bacteria/debris

04

Apply treatment/dressing to wounds

05

Secure dressings with Surginet or ACE wrap

06

Educate patients on wound care pearls

Goal = **Avoid aggressive surgical management**

Nurse-Driven Wound Care Protocol

Wound Type	Treatment and Dressings
Clean wound bed without non-viable tissue (Pink granulation tissue, NO eschar/slough AND NO signs of infection)	Xeroform (Cut dressing to the wound size to prevent skin maceration), Change daily and PRN
	Pick 1: Small drainage: Composite (Gentac) dressing, Change daily and PRN Moderate to large drainage: ABD and kerlix, Change daily and PRN
Nonviable tissue in wound bed (Eschar/slough AND NO signs of infection)	Apply Medihoney gel in nickel thick layer to wound bed daily + Xeroform (Cut dressing to the wound size to prevent skin maceration), Change daily and PRN
	Pick 1: Small drainage: Composite (Gentac) dressing, Change daily and PRN Moderate to large drainage: ABD and kerlix, Change daily and PRN
Concern for infection (Purulent drainage, odor, surrounding warmth, erythema, or induration)	¼ strength Dakins dampened gauze
	Pick 1: Small drainage: Composite (Gentac) dressing, Change daily and PRN Moderate to large drainage: ABD and kerlix, Δ q12 and PRN
Multiple small wounds	For intact or partial superficial scabs: apply A+D ointment daily For small wounds with drainage: Xeroform + Composite (Gentac) dressing, Change daily For small wounds with slough: Medihoney + Composite (Gentac) dressing, Change daily
Peri-wound area	For small drainage: Apply A+D ointment to periwound daily For moderate to large drainage: Vaseline to periwound daily

Other Treatment Recommendations

THE CURB SIDERS
ADDICTION
MEDICINE

#26 ADDRESSING
ADULTERANTS
(XYLAZINE) IN THE
DRUG SUPPLY

WITH DR. RAAGINI JAWA
AND TEHYA JOHNSON, NP

XXXX

Department of
Public Health
CITY OF PHILADELPHIA

**RECOMMENDATIONS FOR CARING FOR
INDIVIDUALS WITH XYLAZINE-ASSOCIATED
WOUNDS**

January 8th, 2024

SUPHR HEALTH FEDERATION
OF PHILADELPHIA

COMMENTARY

OPEN

Xylazine-associated Wounds: Clinical Experience From a Low-barrier Wound Care Clinic in Philadelphia

Rachel McFadden, MPH, BSN, RN, Sara Wallace-Keehan, FNP-BC, Kristi Petrillo Struab, AGNP-C, Rebecca A. Hawey, MPH, BSN, RN, Rachel Neuwach, MSN, RN, Kara McNulty, BSN, RN, and Ashish P. Thakur, MD, MS

Abstract: The veterinary sedative xylazine is spreading in unregulated opioid supplies across North America. Among people who use drugs with repeated exposure to xylazine, a distinct wound type has emerged. Here, we describe these wounds and share our experience treating them in a nurse-led, low-barrier wound care clinic in Philadelphia, PA. We propose a reimagining of wound treatment across settings to better serve people who use drugs, and we advocate for stronger protections against the harms of an increasingly adulterated drug supply. Our perspective from the epicenter of the xylazine crisis can inform the response of communities across the country who are starting to face harms associated with xylazine.

Keywords: substance-related disorders, wounds and injuries, xylazine
Q.Aabir Med 2024;18: 9-12.

Xylazine, a veterinary sedative colloquially known as “traz,” is spreading in unregulated opioid supplies across North America.¹ Xylazine (not oxycodone) in unregulated drug supplies in Puerto Rico in the 2000s, when people who use drugs (PWUDs) and researchers noted an association between repeated xylazine exposure and a distinctive soft tissue wound.²⁻⁴ More recently, clinicians in the United States have described the same phenomenon.^{5,6}

WHAT ARE XYLAZINE-ASSOCIATED WOUNDS?

Before the emergence of xylazine, most wounds treated at the WCC were SSTIs characterized by classic signs of infection including erythema and swelling around sites of injection. As fentanyl adulterated and then replaced heroin in the local drug supply through the 2010s, WCC patients who inject drugs reported more lacerant injuries, and we subsequently observed an increase in SSTIs. Then, in early 2020, patients began presenting with a new wound type, which they associated with certain “trags” or brands of nonpharmaceutical fentanyl.

In our experience, these new wounds are distinct from typical injection-related SSTIs in two key ways. First, they have a unique appearance and progression. Starting as dark purple intact skin, they commonly progress to a post-lacer laceration (Fig. 1, inset often coalesce (photo 2) later, sometimes opening into a deep ulcer (photo 3)).

From the Prevention Point Philadelphia, Philadelphia, PA (RM, SW-K, EPN, RH, KMD); Center for Addiction Medicine and Policy (CAMP), University of Pennsylvania, Philadelphia, PA (RM, APT); Stephen Klein, Wellness Center, Project HOPE, Philadelphia, PA (SW-K); Leonard A. Lander University Case Nurse Practitioner Program, University of Pennsylvania School of Nursing, Philadelphia, PA (RH); Division of Substance Use Prevention and Harm Reduction, Philadelphia Department of Public Health, Philadelphia, PA (RN); and Division of General Internal Medicine, Department of Medicine, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA (APT).

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The authors report no conflicts of interest.

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Education, screening, and early wound management is critical

- Screen for wounds and start care ASAP.
- Proactively treat pain and withdrawal.
- Keep wounds covered; avoid corrosive cleaners and injecting near wounds.
- Discuss access to sterile equipment and wound care supplies.
- Provide pamphlets, xylazine test strips, and 5 days of wound care supplies.
- Schedule a followup appointment within a week and link to outpatient care.

XYLAZINE WOUNDS

Xylazine wounds can appear anywhere on the body regardless of where you are injecting, particularly in **YELLOW** areas.

Check these areas regularly for any wounds that may develop.

Wounds can occur even if you're just snorting or smoking.

RED FLAGS to SEEK MEDICAL CARE

- Fever or chills
- Skin turns dark or black
- Skin is red, hard, & hot to touch
- Thick, smelly yellow or green drainage
- Severe or worsening pain at wound site
- Pain & decreased ability to move joint
- Pieces of tissue falling off
- Exposed bone or tendon
- New numbness

Xylazine wounds can look like a combination of:

- Blisters
- Large ulcers
- Small scabs
- Eschar (dark/black pieces of dead tissue)

HELPFUL TIPS

- Keep your skin moisturized with A+D ointment
- Avoid using alcohol/hydrogen peroxide on wounds
- Keep wounds covered with a clean bandage
- Wear long sleeves, pants, socks, and gloves to prevent yourself from scratching your skin
- Eat protein & stay hydrated to help with healing
- Avoid injecting into or around your wounds
- Use new supplies every time and avoid sharing
- Not every wound is infected. Avoid taking non-prescribed antibiotics

Even though xylazine isn't an opioid, you should still give naloxone in an overdose as opioids are often present.

XYLAZINE

// zai · loh · zeen //

AKA "Tranq" or "Tranq Dope"

A cutting agent making its way into the drug supply. Contamination with xylazine increases risk of sedation, overdose, and wounds that are hard to heal.

This guide focuses on xylazine wounds >>>

University of Pittsburgh | Grayken Center for Addiction Training & Technical Assistance | Boston Medical Center

XYLAZINE 102: FOCUS ON WOUND CARE

Roojini Jawa MD, MPH, FASAM & Samantha Blakenore, MPH BMC

Grayken Center for Addiction Training & Technical Assistance
Boston Medical Center

University of Pittsburgh

1. Wash hands with soap and water or with hand sanitizer
2. Cleanse wound with saline or water
3. Cover wound with a clean bandage
4. Wrap wound with kerlix and secure with medical tape. Make sure wrap is not too tight
5. Cover dressing with ACE wrap or coban or with long sleeves/pants if no other option
6. Change dressing every 1-3 days. Watch for redness

Collaborating With Medical Partners is Key

Key Partners

- Street medicine teams
- Mobile clinics
- Community health centers
- Urgent care / ED (when necessary)
- Visiting nurses
- Telemedicine options (where available)

Core Components of Effective Collaboration

- Clear communication pathways across teams
- Warm hand-offs, not referrals alone
- Shared commitment to low-barrier, harm-reduction-informed care
- Coordinated follow-up for chronic and complex wounds
- Consent-driven information sharing to support continuity and trust

Example Case

A client presents with a swollen, warm abscess on the arm but fears going to the hospital due to stigma.



Key Takeaways

- Drug-related skin infections and wounds are common but highly treatable
- Early, compassionate care prevents serious complications
- Barriers—especially stigma and access—strongly impact outcomes
- Collaboration patients and medical partners is essential

Wrap up and Next Session

- Please complete the **session evaluation**
- Slides and recording available on [Tomorrow's Healthcare](#)
- **Next Session: Addressing Community Stigma- March 25th 2026**



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