Substance Use and Wound Care: What's Needed to Save a Life

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Conflict of Interest

- The authors declare that there is no conflict of interest in the presentation of information included herein.

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Objectives:

1. Discuss the impact of skin and soft tissue infections (SSTI) on population health.
2. Identify evidence-based interventions to decrease the impact of wounds in people who use drugs.
3. Discuss the role of public health nursing in harm reduction.
4. Describe the importance of cross-sectoral collaboration in addressing wounds in people who use drugs.

Skin and soft tissue infections (SSTI)

- Skin and soft tissue infections (or SSTIs) - bacterial infections such as abscesses, cotton fever, and endocarditis.
- For people who inject drugs, they can be caused by improperly cleaned skin, a missed shot, non-sterile injection equipment, or contaminated drugs.
- It’s critical to provide both the equipment and safer injection education to promote the safest possible injection every time.

National Harm Reduction Coalition, 2020

Signs and Symptoms of SSTIs

- Bad odor or smell
- Affected area getting bigger
- Redness around edges
- Swelling
- Tenderness
- Thick pus
- Fever/chills
- Pain or loss of feeling

National Harm Reduction Coalition, 2020

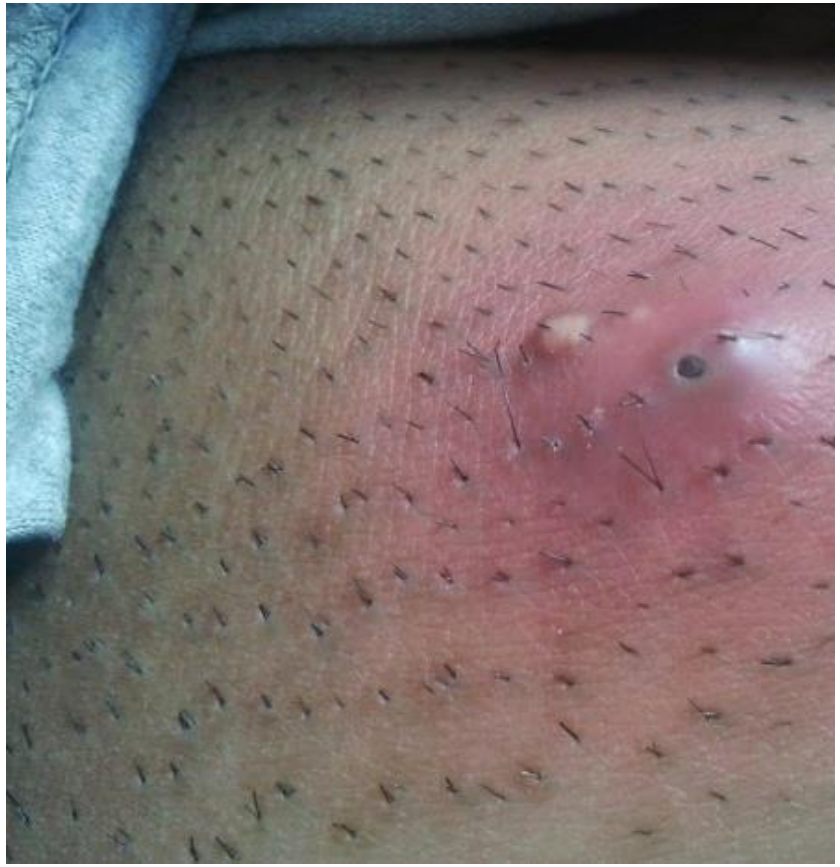
Population needs:

- Barriers to hygiene
- Small cuts abrasions
  - Living unsheltered
  - Decreased access to over-the-counter items
- Injection related abscesses
- Non-injection related xylazine – wounds not associated with injection ~ smoking, snorting

When you see wounds…

Symptom analysis ~ ask the client:

- How long have you had this?
- Is it painful?
- Is it warm?
- Is there drainage?
- Have you had something like this before?
- Have you ever seen a doctor or nurse?



Considerations:

Is the client able to see a care provider?

Medical care is indicated if the wound has:

- Hardness (induration)
- Redness
- Warmth
- Drainage
- Depth

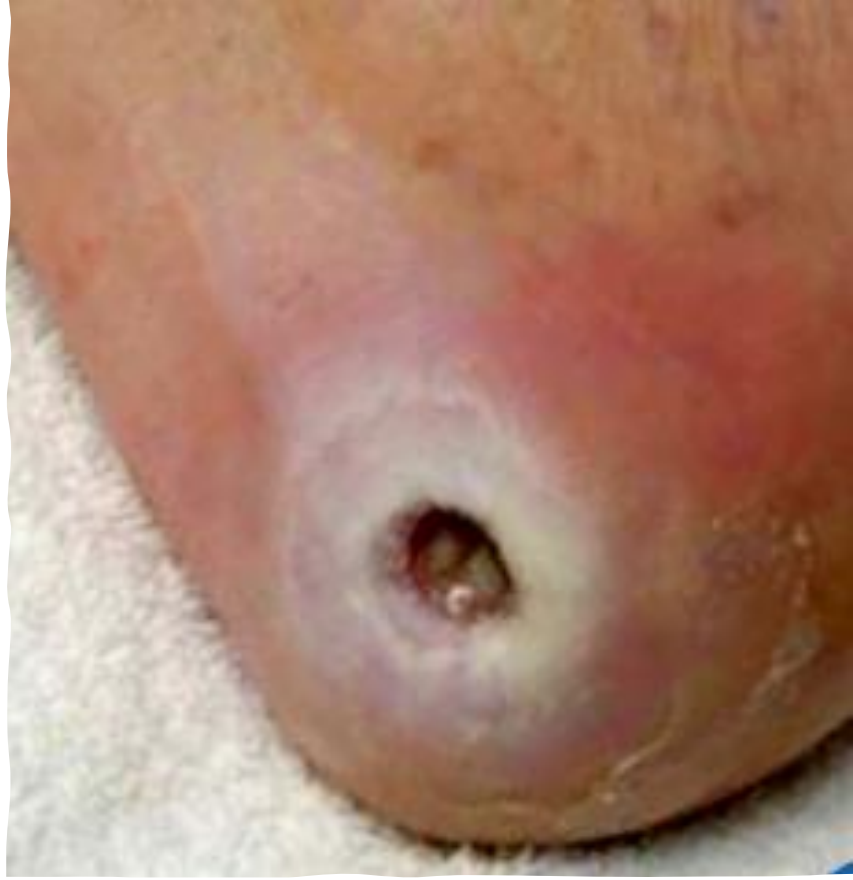
The purpose of wound dressing:

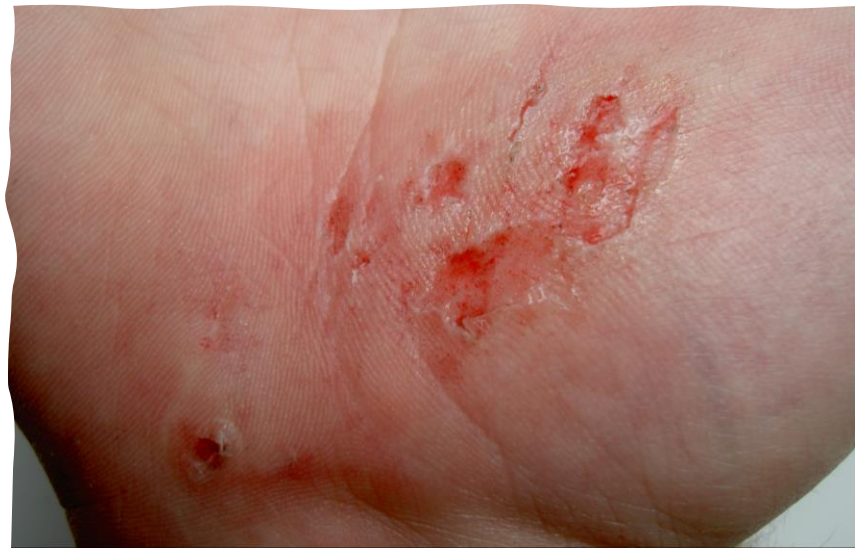
- Protect the wound from the environment
  "cover it"
- Provide a moist wound environment – encourage wound healing
- Debridement – to pull out exudate, slough, damaged tissue
- Provider (MD, DO, NP) ordered wound care – medicated dressings that facilitate wound healing with medicated dressings – often can be left on for a couple days

Minor cuts, abrasions

Minimal to no depth to the wound

- Irrigate the wound – pour water over the wound
- Cleanse with mild soap and water
- Keep clean and dry
- Cover if needed to keep free of dirt and debris
    - If the wound becomes macerated leave open to air
        - *Maceration - soften or become softened by soaking in a liquid*

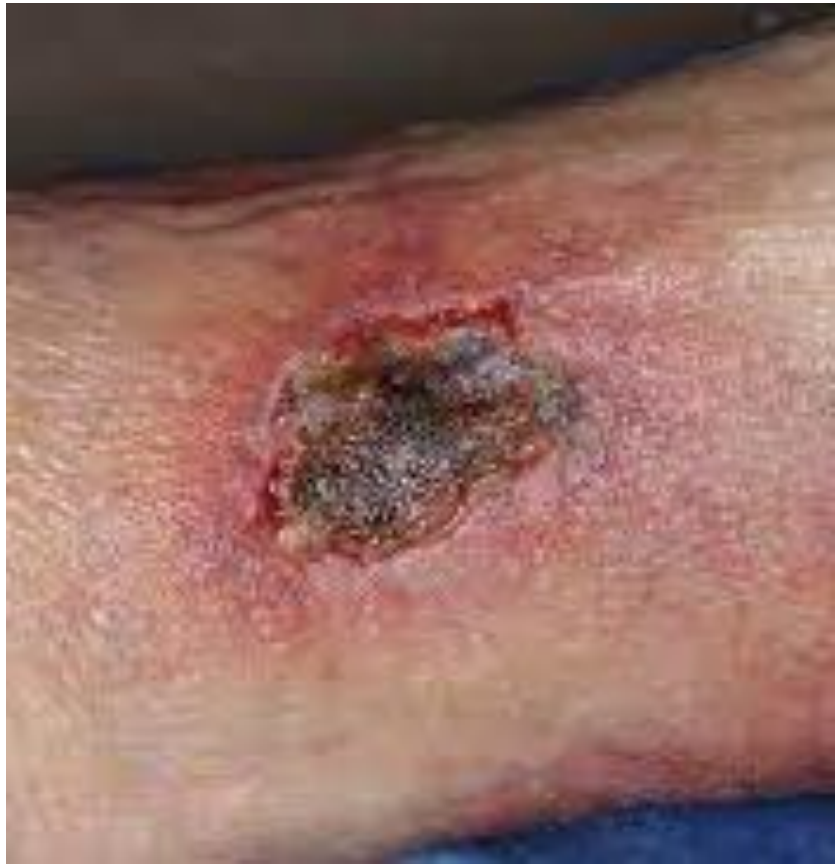




More serious wounds:

- Red, raw open wounds that are missing skin and oozing liquid – will heal with proper care
- Wounds with ”slough” a white or yellow layer in the wound bed
- Dry hard open wounds with necrotic skin (black, eschar)
- Tendon and/or bone can be visualized

Keep in mind- eschar will have to be removed – by wound care or surgical debridement – it will not heal



Harm Reduction Wound Care Tips

Durable Dressings	• Choosing dressings that do not need frequent changes • ACE wraps, coban to keep the dressing secured • Individualized dressing change plans
Cleansing Tips	• Normal saline, tap water of drinkable quality and soap
Minimize Pain – patient led dressing changes, time out	• Soak dressings with normal saline before removal • Adaptic or xeroform can help decrease pain with dressing changes
Protect wound and periwound skin	• A&D ointment, skin protectant for folks who can't change frequently

Basic Supplies (non-Rx!)
Cleanse

- Saline Bullets
- Sterile Gauze
- Antibiotic ointment packets
- A&D ointment packets (periwound)
- Cotton tipped applicators

Topical ** Rx needed

ADDRESS BACTERIA

Medihoney

Silvadene

Mupirocin 2%: topical antibiotic, effective against MRSA, beta-hemolytic strep, strep pyogenes
*Contraindicated in large burns

ABSORB EXUDATE

Island Dressing
ABD Pads

Calcium Alginate

Aquacel:
More absorbent than alginate
*comes with silver impregnation

DEBRIDE

Medihoney
exudate

Santyl collagenase

MOIST WOUND BED

Xeroform dressing
Prevents sticking, antimicrobrial
Adaptic dressing
Vaseline gauze
Prevents sticking

Medihoney

Hydrogel
Supply moisture to wounds for low-medium exudate
*can be used on necrotic tissue

Cover

Non-adherent Pads

- Scant drainage

ABD Pads

- Moderate to high drainage

Rolled Gauze

- Secures supplies, extra absorption

Surgical tape

- Preferred to paper tape

Secure

Coban

- Protects for several days
- Slight compression supports blood flow

Ace wrap

- Velcro vs. metal clasp
- can be hot in summer

Tubigrip

- “sleeve” over dressing

SOCKS!

- Shoes, clean clothing access

Client Education - early intervention

Maintaining hygiene – handwashing, cleansing wound via irrigation, gentle washing with mild soap and water – *be sure to pat dry*!! Can they see a care provider?

Medical attention – if condition worsens or doesn't improve in 3 days – need to see a care provider

Seeing Care Provider/Nurse Practitioner now could avoid hospital stay later!

Why are adulterants in the illicit drug supply:

Drug adulteration

"components or ingredients are typically added in illicit noncommercial laboratories and are commonly known as cutting agents or adulterants. These adulterants come from a wide range of pharmacological categories, and many are toxic when ingested alone or in combination with other drugs." (NIH, 2020)

Availability of additives (fentanyl, xylazine, nitazenes, etc.)

- Cheap and easy to access

Unregulated market

- Illicit drug market is unregulated and highly adaptable

Who is impacted

People who use drugs, their families, friends, loved ones

Emergency departments/Emergency responders

- Increased incidence and severity of wounds
- Increased sedation/overdose

Recovery

- May not be eligible for inpatient treatment with open wound
- Xylazine withdrawal – can be difficult to manage

Harm Reduction Outreach

- Availability of first aid/wound assessment/wound treatment
- Coordination of care

Impact on Population Health

- Increase risk of overdose death
- Increase in Skin and Soft Tissue Infections
  - Increased morbidity
  - Impact of wound deterioration – limb loss
  - Cost to societal productivity
- Severe withdrawal symptoms
  - Perpetuate continued use
  - Initial treatment efforts may not be effective
- Recovery requires xylazine-specific treatment approach
  - Little education for providers
  - Lack of strong body of research evidence

Evidence-based Practice in Harm Reduction Service Delivery

- Healing-centered approach
- Culturally affirming services
- Trauma-informed care
- Equity-centered
- Interventions to address social determinants of health
  - Food insecurity
  - Housing
  - Income stability

Evidence-based interventions to decrease the impact of wounds in people who use drugs:

- Drug checking
  - Test strips
  - Continued/improved monitoring and surveillance
- Low-barrier healthcare services
  - Street medicine/nursing
  - Mobile units
  - Syringe service programs
- Xylazine-aware treatment and recovery services
- Naloxone - continued education and distribution

Evidence-based Interventions

- Need for ongoing wound care treatment
  - ***Wounds will not be healed with an ER visit or brief hospitalization***
- Access to low-threshold medical care
  - Walk-in appointments
  - Assistance with Medicaid enrollment
  - Embedded in harm reduction service delivery
  - Cross-sectoral collaboration

Evidence-based Interventions:

- Concurrently run SSPs and wound care clinics are uniquely positioned to facilitate care to PWUD. Providing new, sterile equipment as well as early wound care intervention can reduce morbidity and mortality as well as health care expenditures by reducing the number of SSTI and injection-related wounds that require hospital admission. Establishment of wound care clinics as part of an SSP represents an untapped potential to reduce harm. (!!!!)

Sanhez, D. P., Tookes, H., Pastar, I., & Lev-Tov, H. (2021)

The Role of Public Health Nursing in harm reduction

- Non-judgmental patient-centered engagement
- Evidence-based Practice
- Health Promotion
- Health Education
- Screening
- Assessment
- Referrals
- Care Coordination

Why embed clinical in Harm Reduction Services…

- Improves health outcomes
- Client centered approach
  - In their own environment
  - On their own terms
- Saves healthcare dollars
  - Average visit to ER in Ohio- $1435
  - Community-based care - $ 120
- Diverts nonemergent care from ER
- Societal Productivity

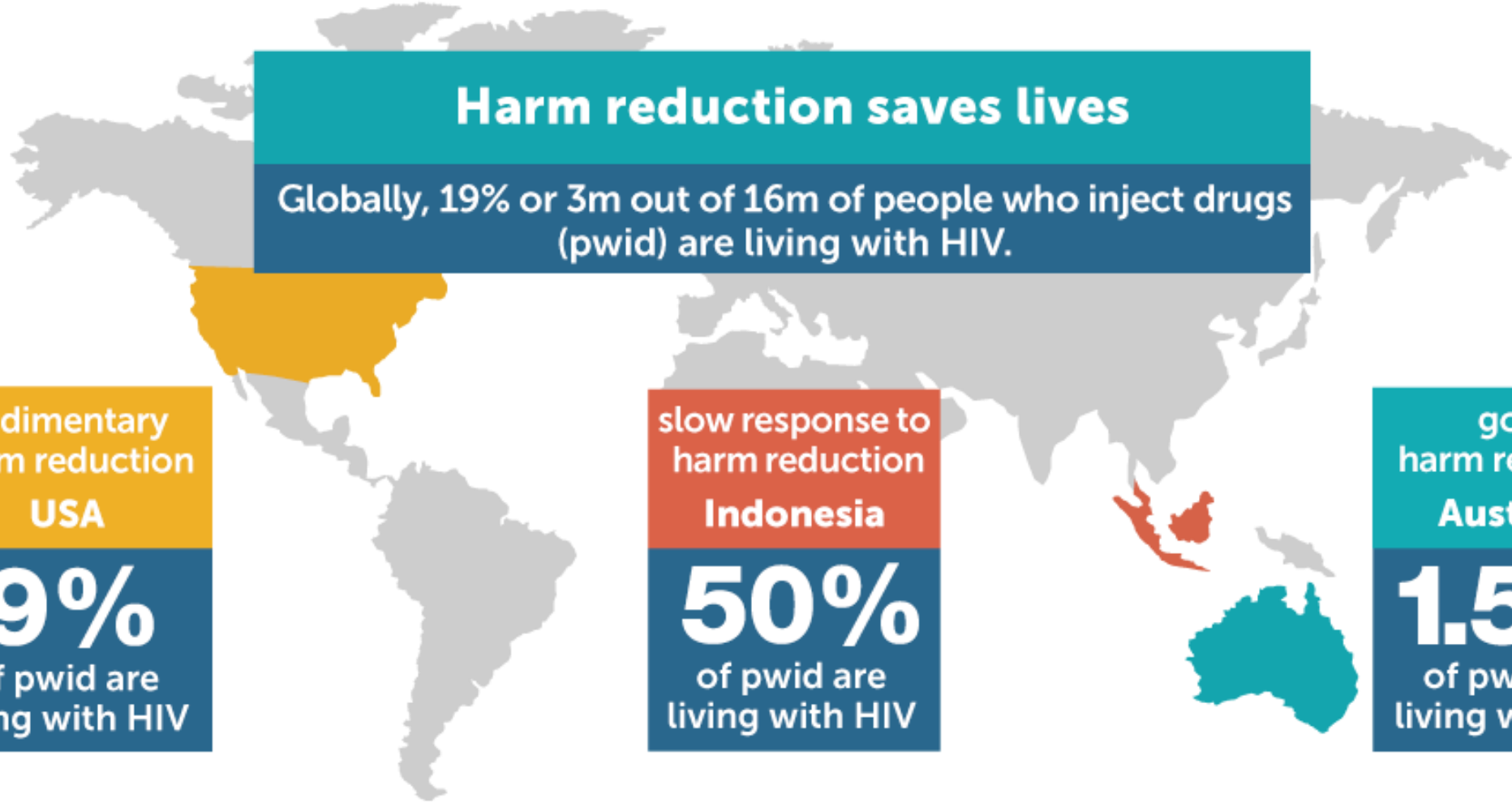
How do we do it…

- Community-Academic Partnerships
  - Leverage experience and expertise
  - Bringing care to the people who need it
- Interdisciplinary teams
  - Nursing
  - Social Work
  - Pharmacy
  - Medicine
- Investment in community-based harm reduction strategies
- Improved drug supply surveillance

Zagorski et al., 2023

Harm reduction saves lives

Globally, 19% or 3m out of 16m of people who inject drugs (pwid) are living with HIV.



rudimentary harm reduction

USA

9%

of pwid are living with HIV

slow response to harm reduction

Indonesia

50%

of pwid are living with HIV

good harm reduction

Australia

1.5%

of pwid are living with HIV

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