Responding to Overdoses in an Ever-Changing Environment

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HEALTH AND ADDICTION CONFERENCE

Learning Objectives

Describe syndromic surveillance and understand how it is utilized to enhance timely overdose response across local communities in Indiana.

Learn the epidemiology of xylazine and the health implications for patients exposed to xylazine in the illicit drug supply.

Describe the Fayette County Connection Café's overdose prevention strategies and evaluation as an illustration of a successful community-based approach.



Syndromic Surveillance

Ongoing collection and assessment of health-related data

- Near "real time"
- Precedes diagnosis and lab results
- Identify sufficient probability that a case or an outbreak may warrant public health response



Overdose Surveillance

<u>Electronic Surveillance System for the Early Notification</u> of <u>Community-Based Epidemics (ESSENCE)</u>

- Online database with patient records from reporting hospital and urgent care facilities
- Detection algorithm identifies increases in baseline activity across syndromes



Overdose Response

ESSENCE detects when the count of overdoserelated ED visits has exceeded the baseline

The epidemiologist validates the records and determines if the activity may warrant further public health response The epidemiologist collects and analyzes demographic, geographical, and situational information

The epidemiologist sends out an alert to local health department and other relevant local and state partners



Surveillance of Emerging Substances







On April 12, 2023, the White House designated fentanyl combined with xylazine as an emerging threat facing the United States due to its role in the ongoing opioid crisis.



What is Xylazine?

- Non-opioid tranquilizer used in veterinary medicine
 - Sedative with analgesic and muscle relaxant properties
- First approved by the FDA in 1972 for use in veterinary medicine

Commonly used as an anesthetic and pain reliever for:
Cattle
Horses
Sheep
Dogs
Cats
Exotic Animals





U.S. FDA, 2022

Xylazine, an emerging adulterant

- Xylazine is *not* approved for use in humans
- Xylazine is often mixed with illicit substances such as *heroin, fentanyl, meth, cocaine, and benzodiazepines*
- Xylazine may be used intentionally or unintentionally
- Users may ingest xylazine through smoking, snorting, or injecting

Also known by its street names: *tranq, tranq dope, sleep-cut, philly dope*



Shuda & Lam, 2022

Xylazine, clinical effects

- Rapid onset within minutes
- Development of skin ulcers and wounds
 - Often severe and painful, presenting with necrosis and black eschars
 - Commonly found among users who inject the drug

Common Clinical Effects

- Hypotension (↓ blood pressure)
- Bradycardia (↓ heart rate)
- Arrhythmias
- Hyperglycemia
- Skin lesions and necrotic ulcers
- Unconsciousness
- Drowsiness
- Coma
- Death



Xylazine, overdose risk

- Xylazine in combination with opioids or other central nervous system depressants increases the risk of an overdose
- Xylazine is not an opioid
 - Naloxone administration may not be as effective at fully reversing a xylazine overdose
 - Administer naloxone and call 911 when an overdose is suspected





Xylazine, Indiana prevalence

- From 2020 to 2023, 322 decedents in Indiana have had a positive toxicology result for xylazine
 - Xylazine is a required substance on the IDOH toxicology testing panel

Xylazine	Year					
Frequency	2020	2021	2022	2023	<null></null>	Total
Positive	47	120	120	30	5	322



Axis Toxicology, 2022

Occurrence of Xylazine, Fentanyl, Methamphetamine, Cannabinoids, and Antidepressants in 2020 to 2022 Decedents in Indiana







Access to near real-time data through syndromic surveillance allows information for rapid respond to increases in overdoses across the state

Overdose surveillance provides insight into new or emerging substances of interest, such as xylazine

Responding to overdoses in ever-changing environment requires partnership, engagement, and collaboration



Fayette County, IN

- > Rural population of 23,376
- > 15.1% have a Bachelor's degree (or higher)
- > 13.6% are in poverty
- > Median household income is \$48,101
- 62.6 deaths (per 100,000) in Fayette County due to any opioid compared to 34.1 deaths (per 100,000) in Indiana in 2021





Health: Overdose Prevention: (in.gov)

U.S. Census Bureau QuickFacts: Fayette County, IN

Project Timeline

2022

After being open for a year, the Connection Café becomes its own independent entity and a certified 501(c)3

Street outreach efforts were launched in October

2020

Awarded three-year HRSA RCORP-Implementation funding to launch prevention, treatment, and recovery interventions in Fayette County

2021

Launched Fayette County Connection Café, a harm reduction hub offering supplies and recovery coach services, with 1 employee

2019

Awarded HRSA RCORP-Planning funding to draft assessment & proposal for addressing opioid use in Fayette County

Previous SSP was under the local health department and served ~20 people/week

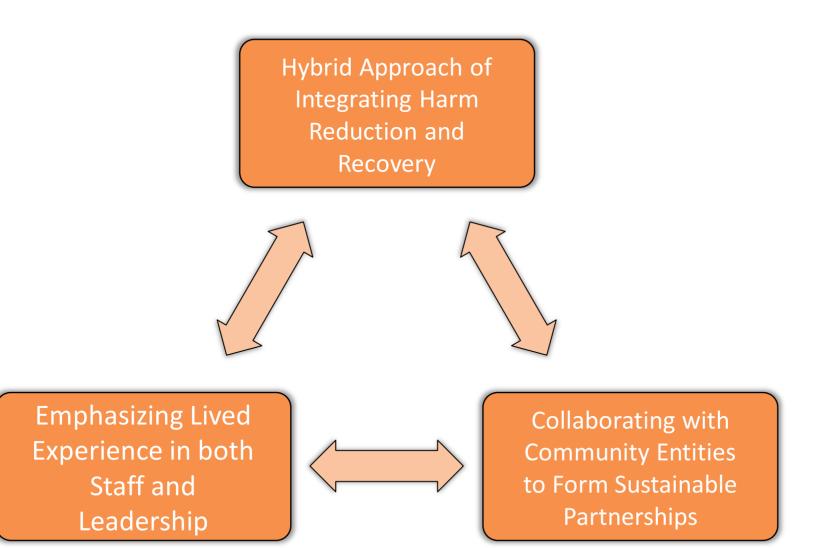
2023

Connection Café becomes a certified Recovery Community Organization (RCO)

Added a harm reduction vending machine in February for anonymous, 24-hour service



Connection Café Model







Hours, Activities, and Staffing







Schedule

- The Café is currently open 6 days/week for 32 hours/week
- The Café provides a variety of harm reduction services and support groups during these hours

Street Outreach

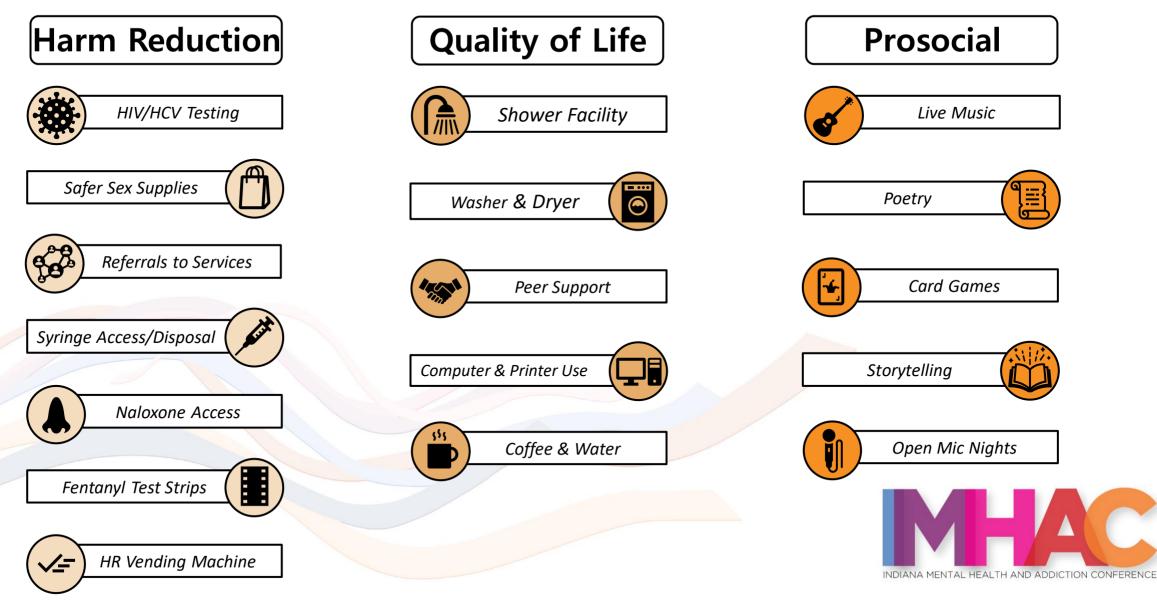
- On Mondays and Wednesdays, Café staff engage in street outreach efforts
- The goal is to bring supplies and support to those who are not engaging with the Café

<u>Staff</u>

- The Café currently has 10 employees (5 interns)
- Café staff have trained 15 community health workers
- All Café staff and over 50% of the Board have lived experience

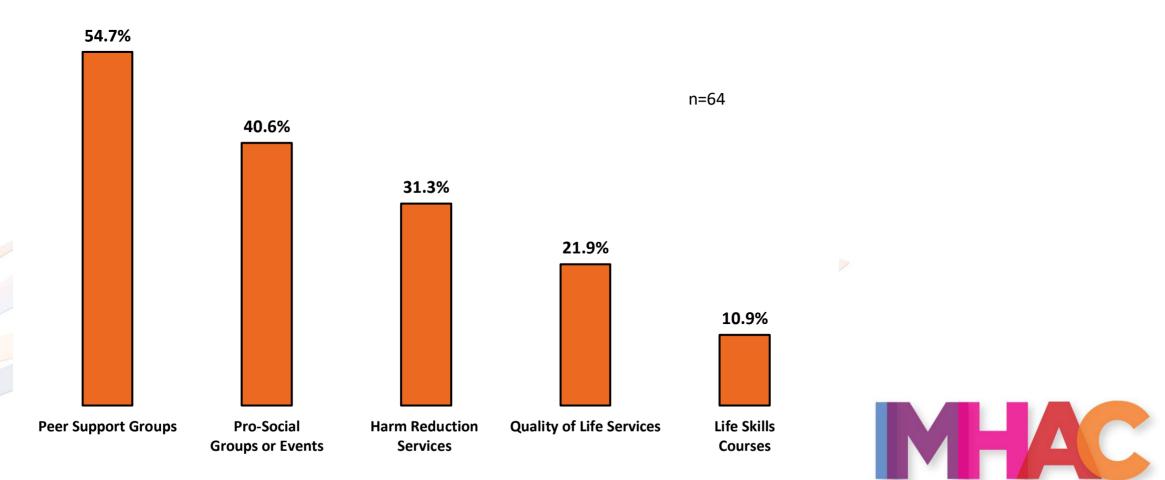


Connection Café Services



Connection Café Survey Results

What Services Are Connection Café Participants Using?

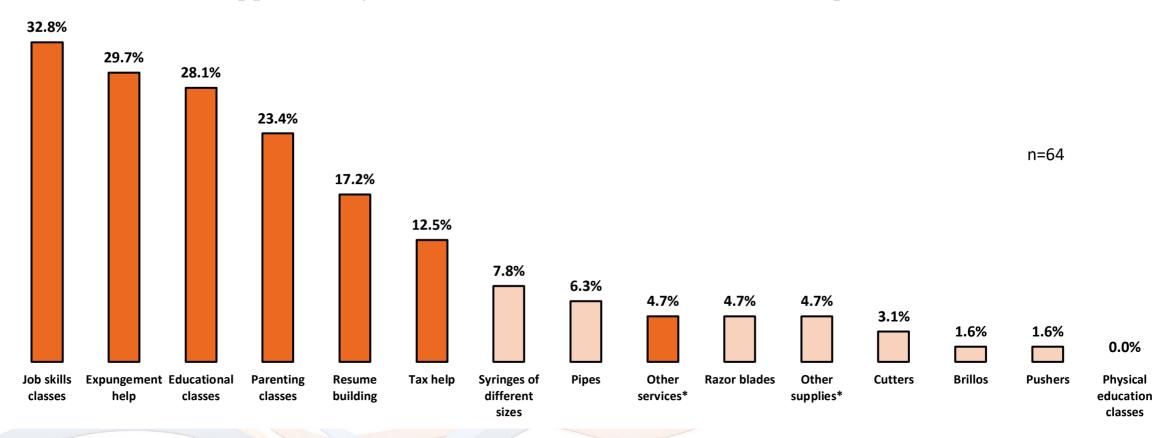


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* Participants could select more than one service

Connection Café Survey Results

What Supplies And/Or Services Do Connection Café Participants Need?



* Other supplies included 1) Clothing and 2) Food

* Participants could select more than one supply/service



* Other services included 1) PTSD support, 2) Financial assistance for legal matters, and 3) Emotional regulation courses

Fayette County Naloxone & Overdose Data

6,449 Naloxone Doses Distributed Since January 2020

1,883 Reported Naloxone Doses Used on Self

1,001 Reported Naloxone Doses Used on Others 91.9 Opioid Overdoses
in Fayette County in
2019 (per 100,000)

62.2 Opioid Overdosesin Fayette County in2021 (per 100,000)

Health: Overdose Prevention: (in.gov)



ISDH Syringe Service Program Database; data from 1/1/2020 through 5/31/2023

Thank you!

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