

# THE UNIVERSITY OF KENTUCKY HARM REDUCTION HUB: A COMMUNITY-ACADEMIC MODEL OF COMMUNITY-DRIVEN DRUG CHECKING AND INFORMATION SHARING

## Authors:

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## Background:

The United States faces an overdose crisis driven by an increasingly adulterated street drug supply. Restrictive laws prohibiting direct drug-checking hinder efforts to provide timely information. To overcome these barriers, we established the University of Kentucky Harm Reduction Hub (“The Hub”), which analyzes residues from used syringes to provide timely insights into the local drug supply.

## Description of model of care/intervention/program:

The Hub collects used syringes in partnership with harm reduction programs for residue analysis. A steering committee, predominantly comprising individuals with living/lived experience, alongside clinicians, policymakers, and community organization representatives, governs this initiative. The Hub’s unique approach is multisectoral collaboration, translating analytical findings rapidly into tailored messages: safer usage practices for people who use drugs, clinical insights for healthcare providers, and actionable recommendations for policymakers to allocate resources and enact supportive laws.

## Effectiveness:

In an initial pilot study of 73 syringes from Kentucky’s largest cities, we identified methamphetamine (63%), xylazine (62%), fentanyl (58%), and diphenhydramine (38%). Subsequent testing of 31 syringes identified bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (BTMPS), an industrial chemical used in plastics manufacturing with potentially severe toxic effects. These findings were among the first to demonstrate xylazine’s widespread presence and the first identification of BTMPS in the Kentucky street drug supply. These findings allowed rapid dissemination of tailored messages to key stakeholders, enhancing local awareness and preparedness.

## Conclusion and next steps:

Residue analysis conducted by The Hub offers critical, timely, and actionable insights into the local drug supply. This unique community-academic partnership leverages university infrastructure and resources, the cross-cutting expertise of stakeholders on the steering committee, and robust community partnerships to enhance community-driven information-sharing. Future steps include expanding geographic coverage, refining rapid dissemination techniques, and systematically evaluating whether and how tailored messages impact relevant outcomes such as resource allocation and overdose reduction.

## Disclosure of Interest Statement:

Amanda Fallin-Bennett is a co-founder of Voices of Hope, a University of Kentucky Harm Reduction Hub partner site. No other authors have interests to disclose.