Advanced Implementation of the Massachusetts Drug Supply Data Stream (MADDS): A State-Wide Public Health-Public Safety Partnership Drug Checking Program

OD2A Conference
*Working Together to Reduce Harms*
June 7

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Traci Green
Drug supply is a major determinant of drug-related death.

Knowing a drug’s content informs our responses.

Only known after a death, hospitalization, arrest, and often way too late to be informative, rarely shared publicly.

A strategy that boosts samples to toxicology and forensic labs risks overwhelming and delaying an already taxed and critical structural lab system.

Field-based tools exist and people can be trained to use them.

Protecting consumer safety is a proven prevention approach.
Why do Drug Checking?

- Engagement tool for new, hard to reach populations (Evidence: RIZE MA evaluation, Peiper et al.)
- Increases in program utilization, program contacts when coupling drug checking at outreach with existing medical and harm reduction services
- Provides an opportunity for empowerment, health promotion, consumer behavior change (Evidence: FORECAST, Fentanyl Test Strip studies)
- Promotes health and dignity of people who use drugs With knowledge and interaction with harm reduction staff, people change behaviors
- Improves safety of the drug supply (Evidence: European, darknet studies)
- Decreases violence in drug transactions
- Improves consumer knowledge and confidence
- Fewer unsafe adulterants/cuts
- Stabilizes market
- Improves safety of the drug supply
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Community drug checking focuses on supply effects for people using drugs
Does drug checking save lives?

“We got us an FTIR machine and the first person’s life. It saved was mine.

Without [it], well...they changed the batch that I was using, the other stuff it had, well-- I was trying to get into a methadone clinic but I was not successful. I could not get above 40mg but the thing was, I couldn’t do what I needed to do so that [using fentanyl] seemed like the answer. One day they changed the batch, it was too strong and we had just got the machine and learned how to use it, and I told my partner, ‘I need to go to the office and I need you to test it, there is something wrong.’

And before I could, even, like within minutes, he called, and he’s like, ‘Don’t do anything else. Don’t do another drop. Flush it down the toilet. I’ll be home in a second and I’ll explain to you what’s going on. We’ve got a problem.’ And then he began to tell me all about the side effects [of xylazine] and all of the things that were happening to me and that I just didn’t understand.

Your dealer needs to know. Just like your doctor needs to know. We didn’t deal with the pill crisis and not talk to doctors and pharmacists. We cannot deal with an illicit drug crisis and not talk to people who sell drugs. It doesn’t make any sense.”

Louise Vincent, Executive Director, NC Urban Survivors Union and National Survivors Union.
Source: Narcotica podcast, April 20, 2023
Stages of Community Drug Checking Program Implementation

**Early-on**
(We want to get it!)

- Picking the instrument and parallel testing approach
- Determine level of uncertainty and reporting delay you are comfortable with
- Budgeting: machine, operator, libraries, maintenance, immunoassays (e.g., FTS, benzo strips), confirmatory lab, materials, mailing/mileage
- Determining operator, location, space and power sources

*Legal considerations, site liabilities*

- Data storage, safety and access

**Evolving**
(We've got it, now what?!)

- Secure permissions/plans
- Storing, transporting
- Training and retention of operators

**Analyzing**

- Determining processes and friends to check what is seen
- Timing and flow of collection, reporting
- Recording data, retrieving data
- When to send out for confirmatory testing
- Getting the word out in the community about drug checking service availability

**Advancing**
(Got results, now what do we do with them?)

- Managing expectations
- Validating findings and process
- Communicating results on-demand (who, how, what to provide)
- Data storage, safety and access
- What is actionable? Who do you tell?
- Defining Alerts, Bulletins, and when to notify others
- What actions would you consider?
- Communicating results: How, where and to whom
- "Translating" alerts to key community members/consumers
Community Drug Checking Program Overview
“Massachusetts style”

Samples provided from harm reduction partner site/police department and gather situational and subjective information

Scan sample with FTIR (on-site), test with fentanyl/benzo/xylazine test strips (on-site), send for additional lab testing (off-site) and review by medical toxicologist

Report out findings to partners, submitter, communities and the state
Flexible Models: Mobile and Stationery Sites

“Drug checking has been a powerful tool for those we serve to make more informed decisions around their drug use and health, and also for us as harm reduction and medical providers in order to better adapt and tailor the care we provide.”

Allyson Pinkhover, Director of Substance Use Services, Brockton Neighborhood Health Center
Current Community drug checking program sites*

PURPLE=**MADDS**, Massachusetts Public Health Dept - 15+ sites

GREY= Sites in progress

YELLOW= NIH- and FORE-funded research projects

RED=I-91 project (Overdose Response Strategy, ONDCP/CDC Foundation) - 5 sites

*Data from all sites pooled on StreetCheck for transparency and sharing
Test with tools, interpret with care
Talk to the donor to learn more!

Information from people who use drugs can help us get better and quicker results. We ask:

- What was the sample expected to be?
- How was it used? (injected, sniffed, etc.)
- Expected OR unexpected reactions (how “normal” was it)?
- Context information
- Health problems experienced after use (abscess, seizure, overdose)
- Anything else you/they think is important

What was it like? Tell us more!
In-person Trainings: Essential!
• Hands-on
• Interactive
• Tips, tricks, process
• Creating a cohort
• Ongoing supports, touch-base
• Refreshers, re-trainings
Input data, receive results with a community designed application

**Collector-Operator-Administrator**

Groups (community programs), Tenants (states)

+Public-facing trends, limited anonymous sample data
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Results

All community partner sites fully operational
Over 1000 samples collected and tested across the MA project sites per year
All data and quick reports publicly accessible on Streetcheck.org by location, or together
Xylazine Prevalence in Opioids

- Across CT, MA, VT samples
- Primarily opioid samples over time
- Detected as pills (M30, Percocet) and powders (heroin/dope/fentanyl)
- Some local trends: brown or color used to differentiate from white powders
Typical sample

- Injected: normal, nothing out of the ordinary
- Weaker than old dealer but consistent with new dealer
- Normal experience, all from same dealer, same day use

*Drug checking: more than just alerts*

What is “normal”, what can be expected

Promotes dignity, awareness, self-care

Learning opportunity
Atypical samples

March 2023

Wk 1: Not yet used
Wk 2: Used, stronger than usual, developed abscesses

April 2023

Wk 5: Multiple overdoses (nonfatal, fatal)

- Injected: stronger than usual, tasted and smelled like CHEMICALS.
- No “dope rush”, just went out. Only used 3 bags vs. usual 5-10. On second use, felt foggy, hard time walking.

### FTIR Results

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HST_0712 (Complete)

Completed Analysis: This sample was confirmed by the laboratory to contain Xylazine (8), Fentanyl (2), 4-ANPP (1)

Key Findings:

Note that this stamp is associated with several severe overdoses in the local area. Please take care and keep plenty of naloxone with you!

Xylazine is a strong sedative and high amounts of a strong sedative can be harmful. Learn more [here](#).
MADDS
Advisory Board

• 6 people, independent of MADDS
• People who use drugs, harm reduction providers, analytic chemist, drug suppliers
• Compensated, confidential, on-call
• Has own charter, coordinator
• Can task MADDS team for further study
• Meets regularly and as needed, reviews data and trends
• Recommends and reviews all alerts, bulletins
• Defines audience
• Points to next steps
“We are using our drug trash checking results to create different forms of communication to people who are at risk of overdose to inform them about what is in their substances. In addition to testing samples for people who use drugs, there is also value to testing samples and sharing results with people who sell drugs. For example, during a nationwide Adderall shortage, one person who took part in the drug checking initiative learned that what they were selling were pressed meth pills. Since learning this, the person informed the people purchasing the Adderall pills what is actually in them. In turn, the people purchasing them are now better equipped with understanding what they are putting in their body and how it will affect their body differently.”
How people use the data

“We use our results to inform participants of trends, monitor above average fentanyl surges, and tailor or pivot our outreach (ex. adding more wound care or focusing on an area with high overdose rates).”

Supply caretaking: To explore local drug market trends (dilution, adulterating), reflect back anomalies, and also share helpful actions that suppliers are taking or could take.
How people use the data

Developing new partnerships, reaching new demographics of PWUD to share information, drug checking services, and connecting to other harm reduction services and materials:

• More racially and geographically diverse groups of PWUD
• PWUD by different routes of administration (oral, insufflation) who may not otherwise attend SSPs
Request TA on the OD2A-TAC website’s Technical Assistance page

Scan this to take you to the TA page now.
Thank you!

Questions? Contact tracigreen@brandeis.edu Beccaolson@brandeis.edu

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https://journals.lww.com/jphmp/Fulltext/2022/11001/Implementation_and_Uptake_of_the_Massachusetts.15.aspx