RAPID ASSESSMENT OF CONSUMER KNOWLEDGE (RACK) & THE INTEGRATION OF DRUG CHECKING

OD2A Conference

Traci C. Green, PhD, MSc, Brandeis University
On Behalf of the RACK Project and OD2A Massachusetts teams

What is "*RACK*"?

Rapid Assessment of Consumer Knowledge (RACK) – is a mixed methods project geared toward understanding trends in overdose risk in Massachusetts.

Data Collection Elements:

Ethnographic Observations	Key Informant Interviews	Surveys with people who use drugs	Interviews with people who use drugs	Drug checking (sample collection)	Observational Notes	Reflections

15 RACKS from 2017 to today!

RACK is funded by a grant from the Centers for Disease Control and Prevention to the Massachusetts Department of Public Health, Bureau of Substance Addiction Services

Methods

Rapid Assessment, Community-Engaged, Mixed Methods

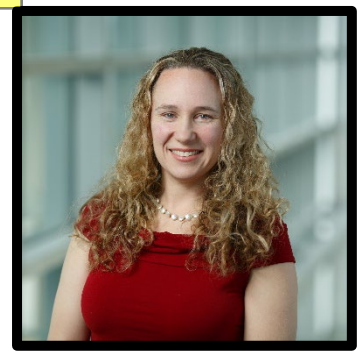
A Modern Epi-Aid

- **Rapid assessment and response framework**
- **Environmental scan, Community mapping, Policy mapping, Partner meetings:** ***Tailor plans for how, where, when***
- **Survey**: Go to where overdose burden is greatest. Ask demographics, drug use behaviors, naloxone/Narcan, overdose history, Good Samaritan Law, medications for addiction treatment, diversion and drug access.
- **Qualitative one-on-one interviews**: Questions that dove deeper into survey topics. Interview recorded or transcribed.
- **Drug Checking:** Collection and analysis of remnant drug samples from survey participants to better understand the contents of the local drug supply.
- **Compensation**: $20 for survey participation +$20 for interview participation, $5 for up to 3 referrals, and $5 for each of up to 3 remnant drug samples.

Team RACK:

For the People, Body and Soul

Brandeis University



Traci

Jackie

Trish

Tom

Shikhar

Wilson

Joe

Sabrina

Cole

Derek

Stephanie

Sharon

Becca

Community Partners and Recruitment Sites

- Syringe exchanges (e.g., Healthy Streets, Tapestry, AHOPE, Life Connections, LCHC, APW)
- Community programs (e.g., Boston Medical Center, PAACA, Seven Hills, Universal Missionary Church Brockton, HCAT)
- Police department community outreach programs (e.g., NBPD, Chicopee PD)
- Homeless shelters and soup kitchens (Rosie's Place, Pine Street Inn, Lowell Transitional Living Center, The Mustard Seed, St. John's Soup Kitchen – Worcester)

Pine Street Inn
Ending Homelessness

St. John's Food for the Poor Program
Saint John's Church
Est. 1834

Seven Hills Foundation & Affiliates

Boston Medical Center

Life Connection Center
- A Place of Hope -

tapestry

NNCC
New North Citizens' Council

Greater Lawrence Family Health Center

New Bedford Police

Rosie's Place

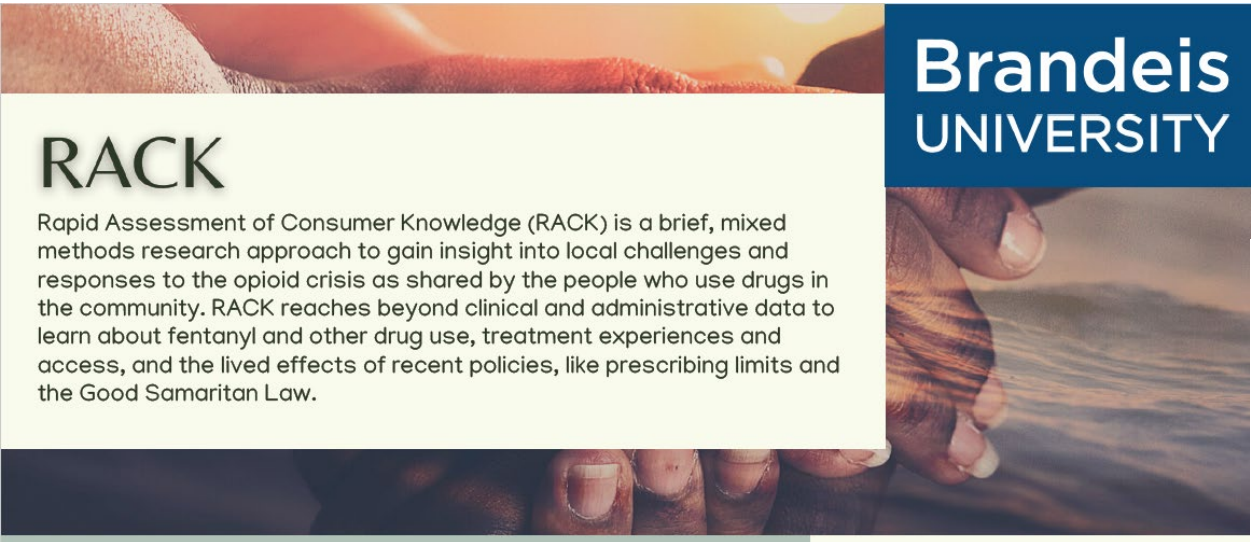
AIDS Project Worcester

Lowell Transitional Living Center
A Multi-Service Agency

PAACA
Together We Can!

AHOPE
Access, Harm Reduction Overdose Prevention and Education
Boston Public Health Commission

https://heller.brandeis.edu/opioidpolicy/community-resources/rack/



RACK

Rapid Assessment of Consumer Knowledge (RACK) is a brief, mixed methods research approach to gain insight into local challenges and responses to the opioid crisis as shared by the people who use drugs in the community. RACK reaches beyond clinical and administrative data to learn about fentanyl and other drug use, treatment experiences and access, and the lived effects of recent policies, like prescribing limits and the Good Samaritan Law.

Why focus on overdose trends among Black and African American communities?

The goal of the Black/African American RACK was to understand what is driving the increase in opioid involved overdose deaths among people in Massachusetts who identify as Black or African American. More specifically, to (1) describe the exposure to, use of, and protective behaviors associated with fentanyl among people who use drugs (PWUD) and (2) assess the impact of policy responses such as naloxone access, and opioid prescribing restrictions.

What did this RACK find?

- A delayed exposure of fentanyl in communities of Black and African American residents, coupled with the persistence of heroin within these communities,

70.1% of participants reported that pain pills are difficult to get from hospitals and doctors in their area. However, 30.5% reported pain pills are easier to get now than one year ago. Counterfeit pill use

Community presentations of results (anywhere from 1 to 12)

One-pager synthesis of findings, implications

Policy briefings

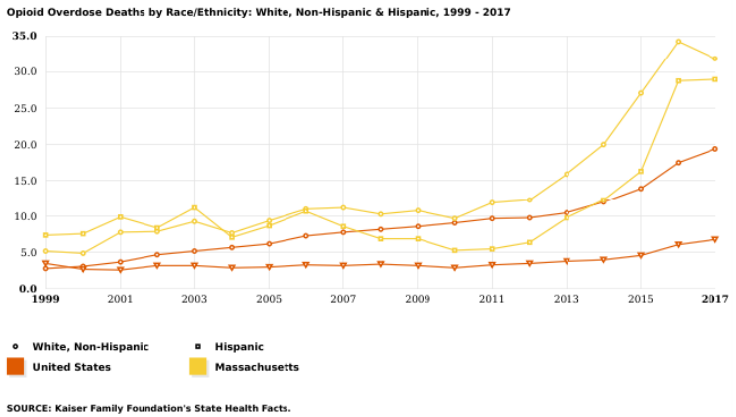
RACK: Trends in Hispanic and Latinx Communities

What is RACK?

Rapid Assessment of Consumer Knowledge (RACK) is a brief, mixed methods research approach to gain insight into local challenges and responses to the opioid crisis as shared by the people who use drugs there. RACK reaches beyond clinical and administrative data to learn about fentanyl and other drug use, treatment experiences and access, and the lived impact of recent policies, like prescribing limits and the Good Samaritan Law in Massachusetts (MA).

Why focus on overdose trends among the Hispanic/Latinx community?

- The rate of opioid overdose deaths for Hispanics has increased dramatically in MA compared with national rates.
- Recent reductions in opioid overdose deaths for white, non-Hispanics have not been observed for Hispanics.
- From analysis of past RACKs, we learned that Hispanic participants tended to use cocaine more, were less engaged in harm reduction services, and were less knowledgeable about overdose prevention tools.
- This RACK sought to understand factors contributing to these differences, cultural trends within the opioid crisis, and possible intervention points.



How did the RACK Hispanic/Latinx work?

A sampling plan was created proportional to places with the highest burden of Hispanic/Latinx overdose deaths in Massachusetts. The RACK team conducted extensive community

Drug	Reported Use n (%)	Route of Administration n (%)
Heroin	34 (65)	Snort: 9 (26) Inject: 27 (79)

Why add drug checking

?

- ✓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***
- ✓**Field-based tools exist** and **we have created a community drug checking program in Massachusetts (MADDS)**
- ✓Protecting **consumer safety is** a proven **prevention** approach
- ✓Talking with people who use drugs about **what they use and how it affects them** can give insights on new risks and safety approaches

Bruker Alpha **FTIR**

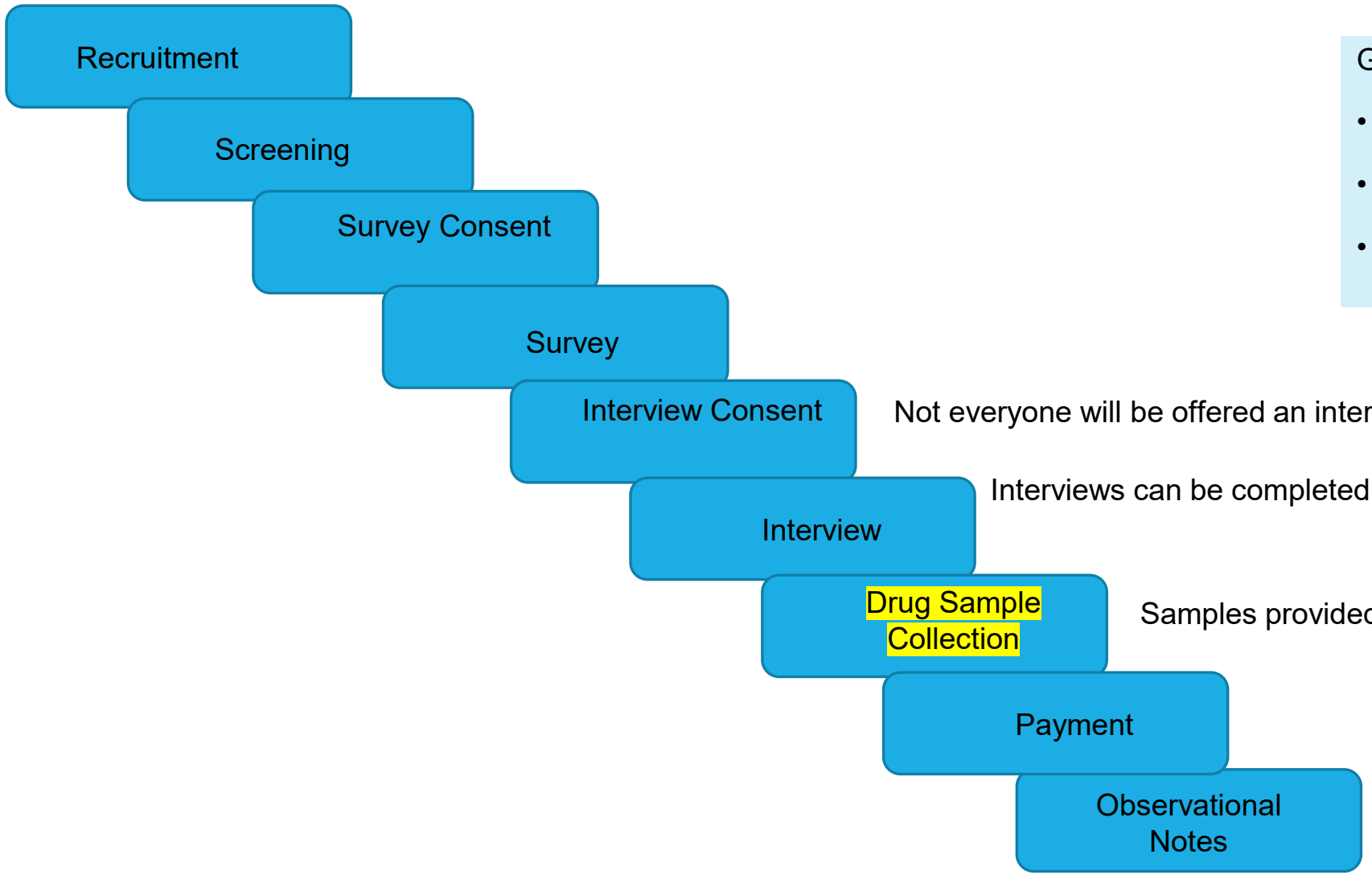
Fentanyl, Benzo, Xylazine Test Strips

GCMS/LC-QToF by off-site lab Drugsdata.org

Medical Toxicology Consultation

cfsre The Center for Forensic Science Research & Education

RACK Data Collection Process



Goal of each RACK

- 55-60 Survey Participants
- 20-22 interview participants
- Drug checking – participants can provide up to 3 samples

Integrating drug checking

Started in New Bedford RACK in 2019

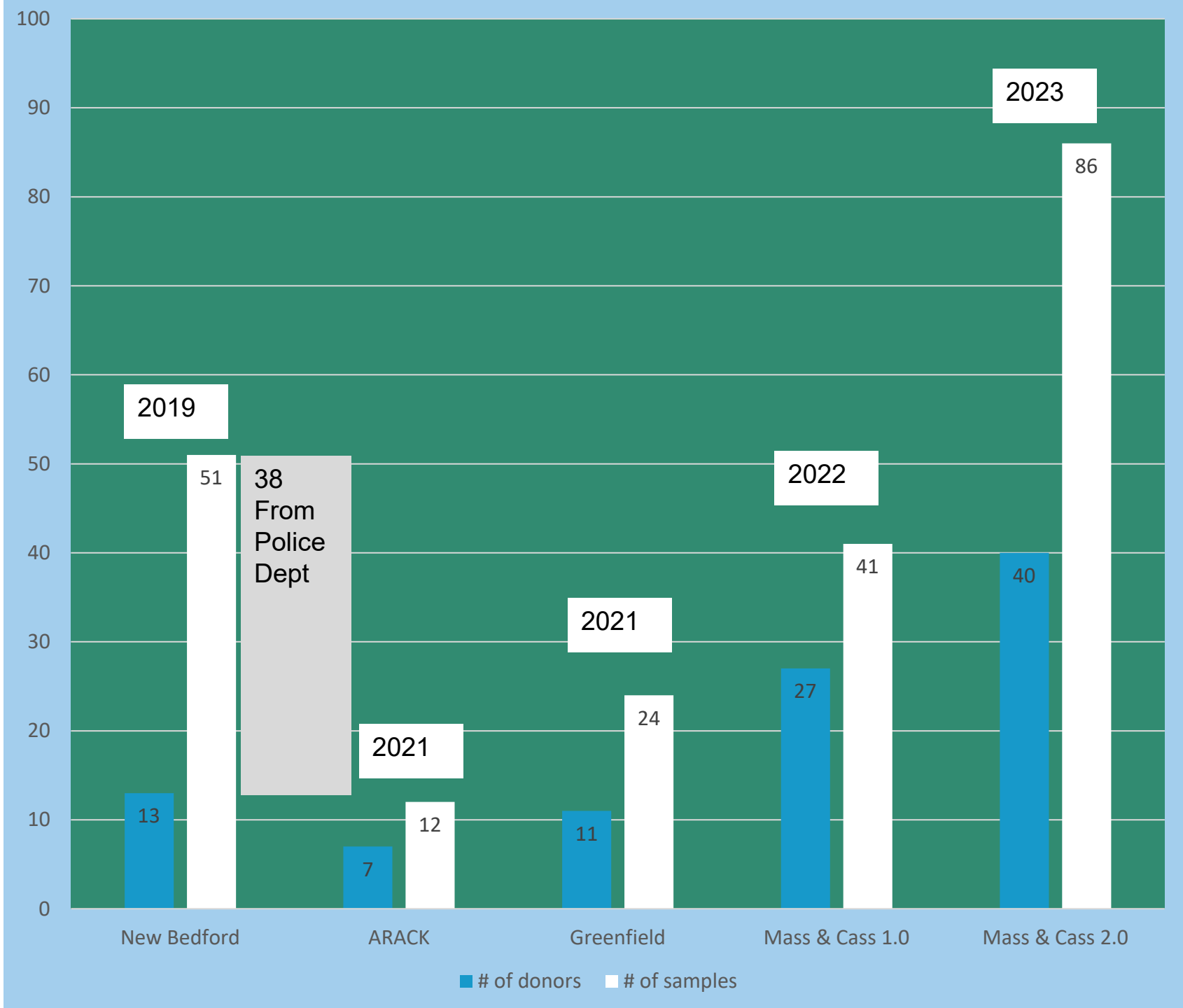
Drug packaging/detritus found in public areas

Donated used packaging from RACK respondents ($5 incentive)

Evidence marked for destruction from Police Dept

- Nonfatal/fatal overdose
- Attempted suicide
- Found property
- Confiscated property
- Controlled buy

Drug checking within RACK



RACK	What we learned from adding drug checking
New Bedford RACK	Feasibility of process; sampling through survey is possible, informative; self-reported drug use is more accurate than oral toxicological testing; drug checking sheds light on fentanyl circulating
African American-focused RACK	Counterfeit pill exposures are high; contamination of cocaine and crack with fentanyl are happening, unexpected, and harmful
Greenfield RACK	Heroin persists in the drug supply in some places; inconsistency of the drug supply creates overdose risk
Mass & Cass RACK 1.0	Unhoused and homeless individuals are at extremely high risk of supply-related harms (e.g., victimization, supplier arrest, abscess); disruptions to housing introduce drug supply risks: inconsistencies that increase overdose risk, reduced access to supplies reduce hygienic practices
Mass & Cass RACK 2.0	Xylazine presence established; use and navigating supply (wounds, sedation)

Drug market reorganization, changes in drug distribution pathways led to intensified market competition, contamination of powders/pills, more frequent distribution errors, and this continues to intensify in different municipalities. (ARACK findings)

Powder — **Sold as: Not Specified**

No Image

ID: 9672
Name: Powder
Other Names:
UniqueCode: AC2020B325
Marquis: Unknown
Mecke: Unknown
Mandelin: Unknown
GC/MS:

- Fentanyl : 10
- 4-ANPP : 5
- Phenethyl 4-ANPP : 1

Test Date: Jan 2
Pub. Date: Jan 2
Src Location: Lawre
Submitter Loc: Unitec
Color: Unkno
Size: -
Data Source: Drugs (Ecsta
Tested by: DDL
Lab's ID: 21010

Sold as: Not Specified
Expected to be: Not Specified

Lab comments:
big GC/MS response for fentanyl

Description
Sample submitted along with dollar bill presumably used to insuf powder, but no details were provided.

Experience Note: Sample associated with adverse health event.

White Powder — **Sold as: Not Specified** — **ID: 8764**

ID: 8764
Name: White Powder
Other Names:
UniqueCode: AC2020B046
Marquis: Unknown
Mecke: Unknown
Mandelin: Unknown
GC/MS:

- Fentanyl : 5
- Cocaine : 3
- Caffeine : 1

Test Date: Jul 21, 2020
Pub. Date: Jul 21, 2020
Src Location: Lynn, MA
Submitter Loc: Lynn, MA United States
Color: Off White
Size: 5 mg
Data Source: DrugsData (EcstasyData)
Tested by: DDL
Lab's ID: 20070048

Sold as: Not Specified
Expected to be: Not Specified

Description
Trace powder powder in baggie.

Cocaine — **Sold as: Cocaine**

ID: 8781
Name: Cocaine
Other Names:
UniqueCode: AC2020B075
Marquis: No Reaction
Mecke: No Reaction
Mandelin: No Reaction
GC/MS:

- Fentanyl : 4
- Cocaine : 1

Test Date: Jul 28
Pub. Date: Jul 28
Src Location: Lowell
Submitter Loc: Boston United
Color: Tan
Size: 10 mg
Data Source: DrugsI (Ecsta
Tested by: DDL
Lab's ID: 20070

Sold as: Cocaine
Expected to be: Not Specified

Lab comments:
Small GCMS response for both drugs; limited sample size.

Description
Trace tan powder and cooker.

BTNX Fentanyl Test Strip (prior to sending in sample): Positive

Tan Residue — **Sold as: Not Specified**

ID: 10331
Name: Tan Residue
Other Names:
UniqueCode: AC2021B645
Marquis: Unknown
Mecke: Unknown
Mandelin: Unknown
GC/MS:

- Fentanyl : 46.67
- Cocaine : 26.67
- 4-Fluorofentanyl : 13.33
- Phenethyl 4-ANPP : 3.33
- 4-ANPP : 1.00
- THC : 1.00

Test Date: May
Pub. Date: May
Src Location: New
Submitter Loc: Unite
Color: Tan
Size: 1 mg
Data Source: Drug (Ecs
Tested by: DDL
Lab's ID: 2104

Sold as: Not Specified
Expected to be: Not Specified

Description
Small amount of tan powder in baggie.

Sample associated with adverse health event.

Type of Substance	Reported Street Price (Average)
Buprenorphine/ Suboxone	$7.80/strip
Heroin	**$184.94/gram**
Fentanyl	**$160.80/gram**
Rx opioids	**$18.73/per pill**

Tips & Best Practices: DRUG SAMPLE COLLECTION

- Collect samples for drug checking **after** completion of the consent, survey/interview process, after already building rapport with participants.
  - This helps to mitigate – "**Paranoia Control**" of donating a sample.
- Ask where the participant may be "**most comfortable**" in providing their sample(s) to you.
  - Harm reduction space, business, hospital, semi-public/public space, etc.
  - This respects participant privacy.
- Interviewers should be context-aware, meaning knowing ***who*** and ***what*** is going on around you while collecting samples.
  - Safety first, for all.
- Best to ask for donation to be submitted right there (timing-wise) or soon (15 mins) thereafter; the more immediate the better.
  - Improves validity and quality of the sample. Reduce contamination of sample.

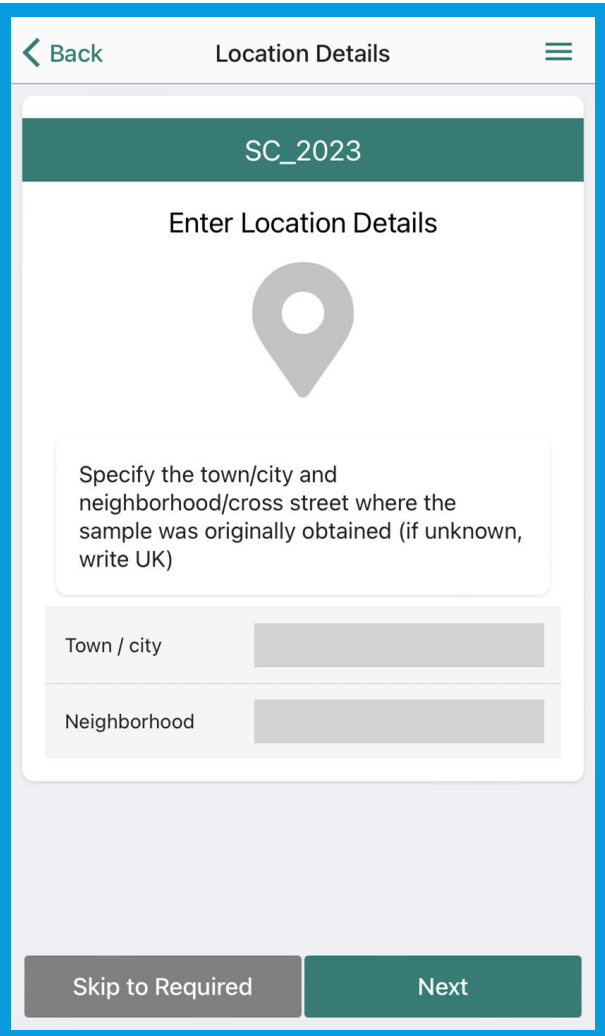
Tips & Best Practices: PROCESS & PROCEDURE

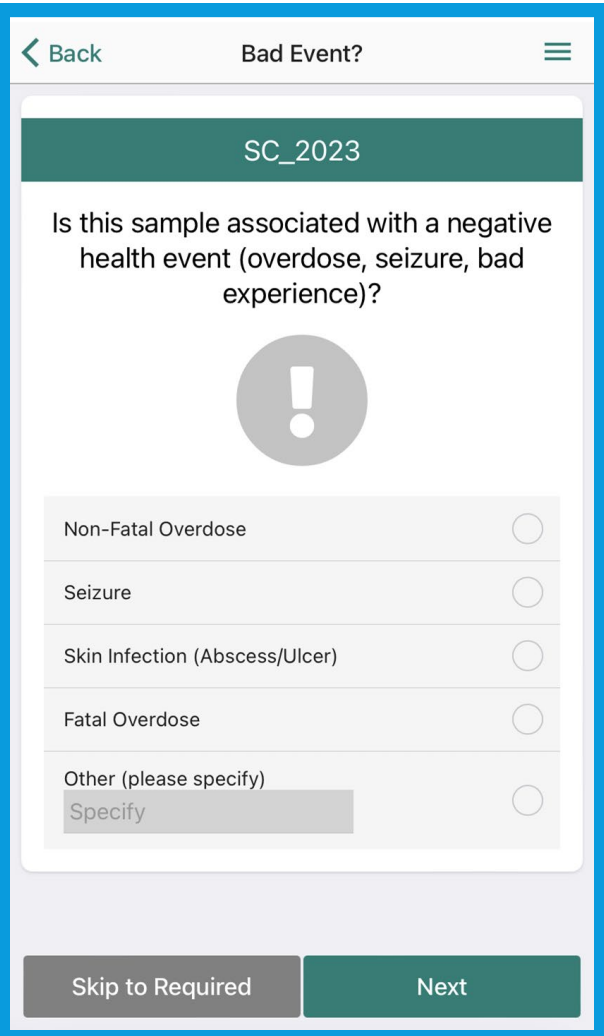
- Have clear process and procedure to ensure quality control (numbering, entry, collection, storage)
- Take photos, collect contextual information in systematic way.
  - Tools like **StreetCheck** can be helpful here! Research data collection flow options.
- Have safety protocol/monitoring in place, supervisor/coordinator in field.
- Storage, transport and disposal practices
  - If sending to off-site lab, ensure protocol in place (e.g. mail as soon as possible after collection).
  - Plan with local drug checking programs for receipt or storage and testing that is respectful of their flow and participants
- Technology snafus happen! Be prepared
  - Have a paper-based data collection back up plan or have an iPad/tablet with cellular
- Decide if drug checking results will be reported back to participants.

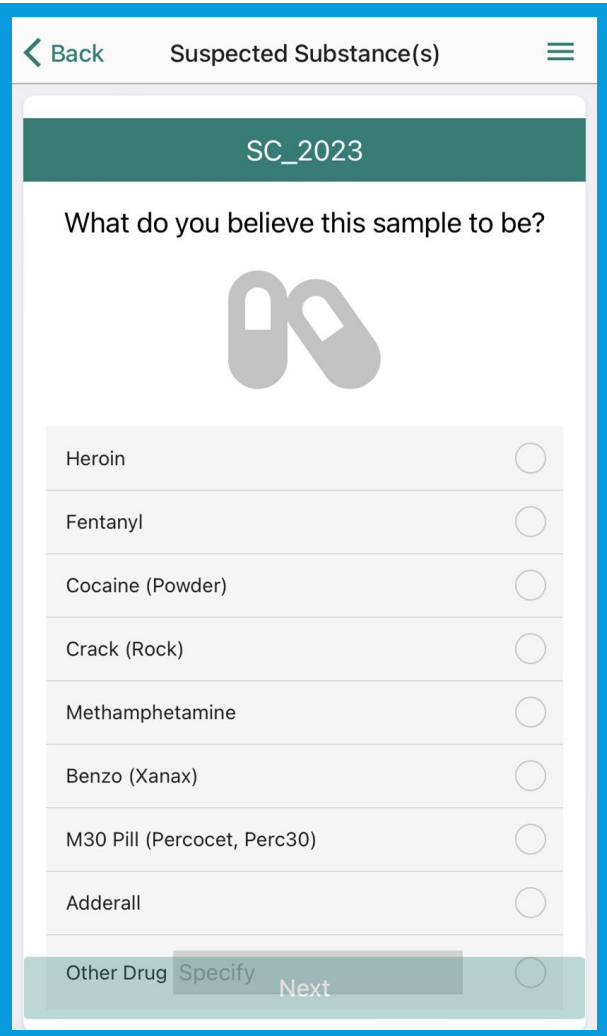
Accountability. Transparency. Replicability.

Participant-facing

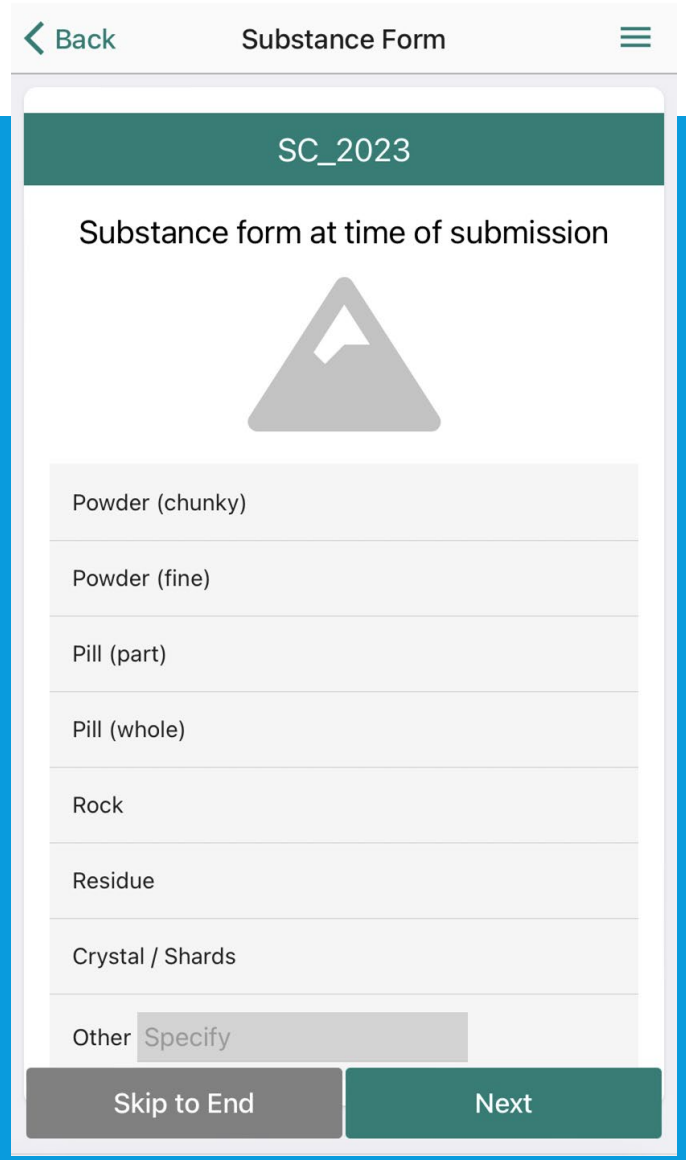
COLLECTION TOOLS - StreetCheck

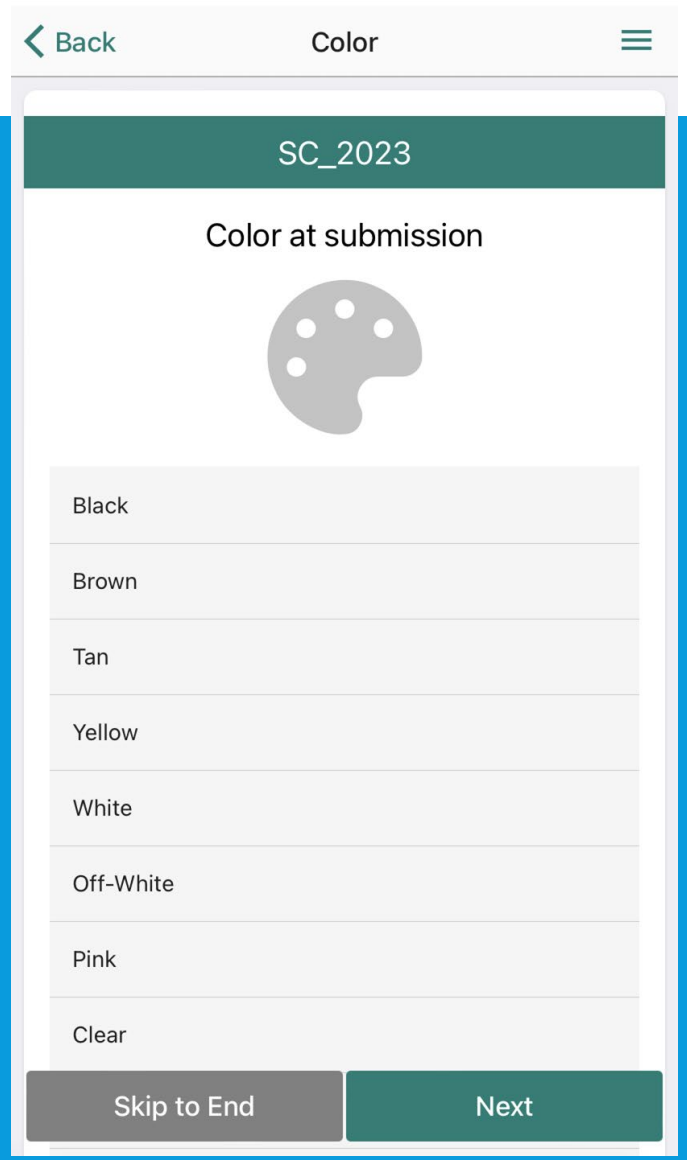


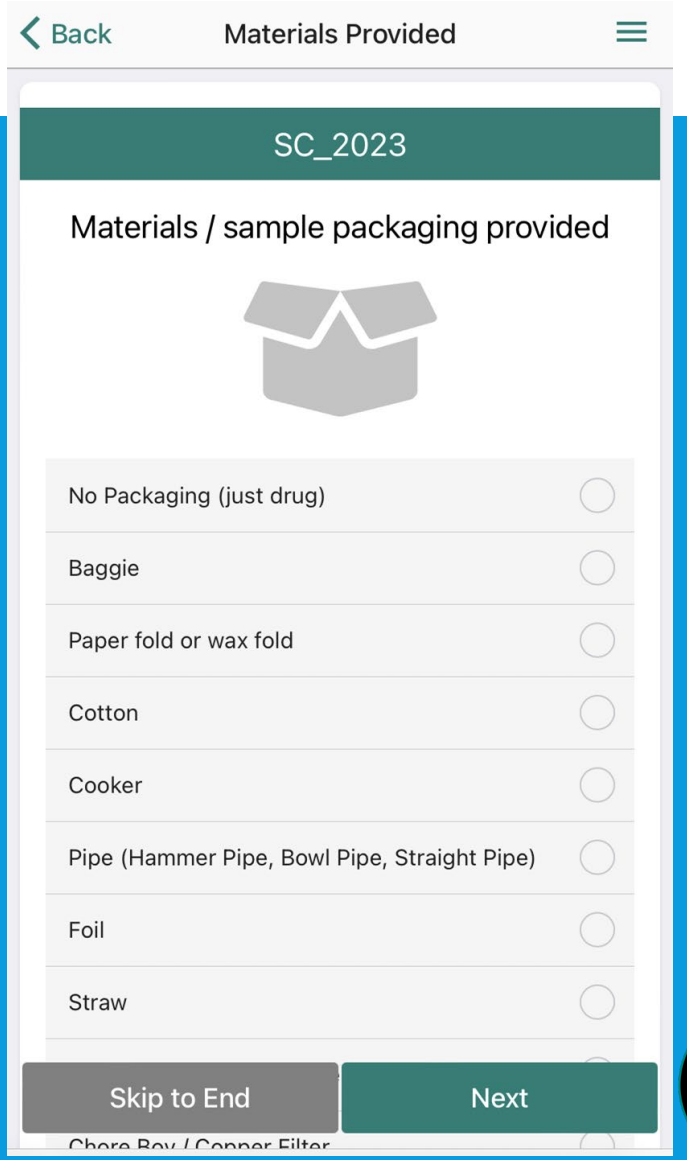




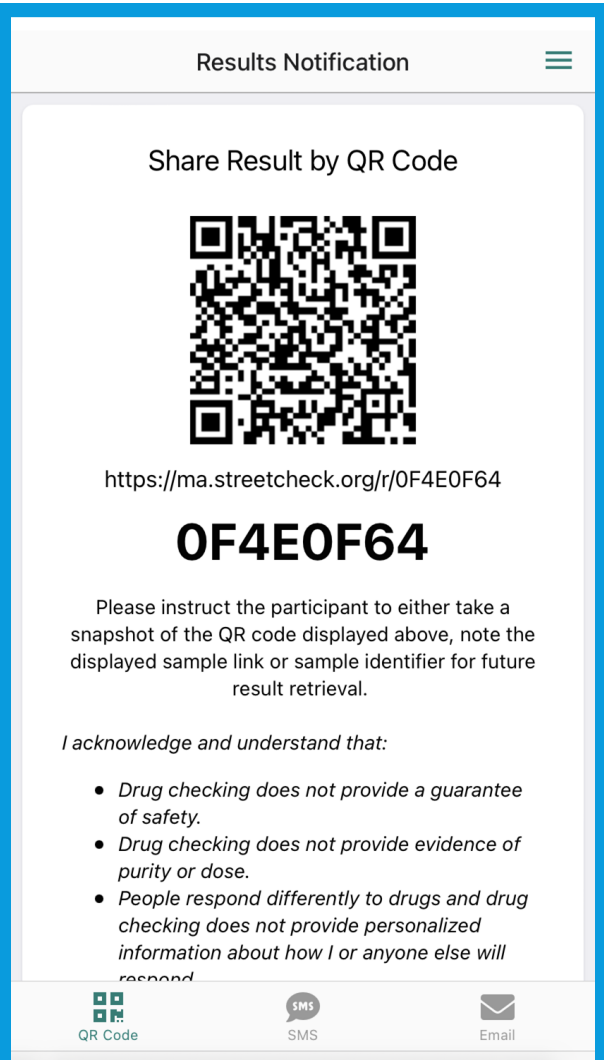
COLLECTION TOOLS - StreetCheck

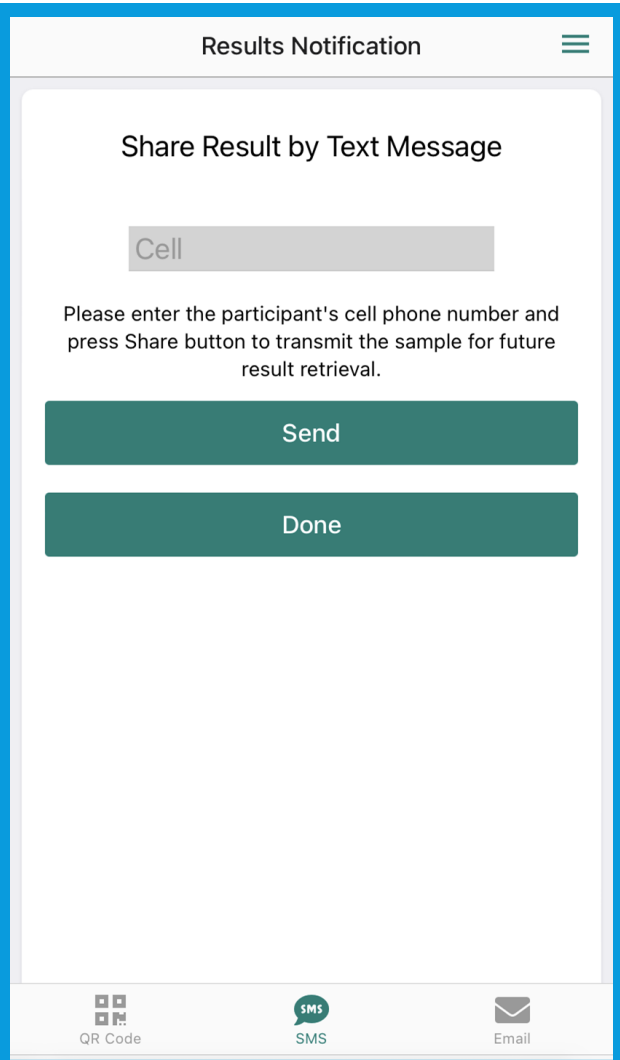


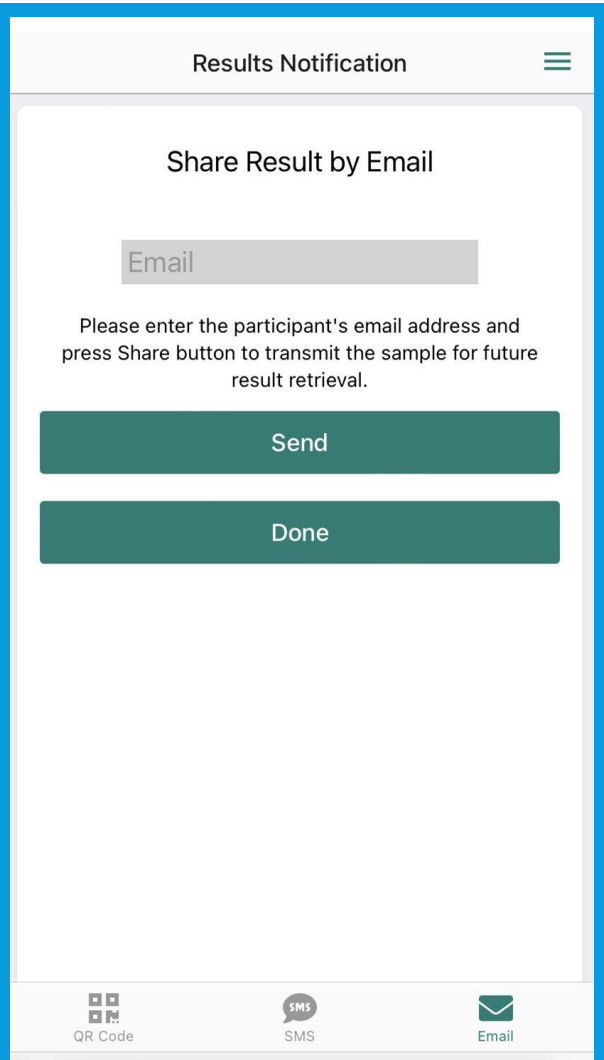




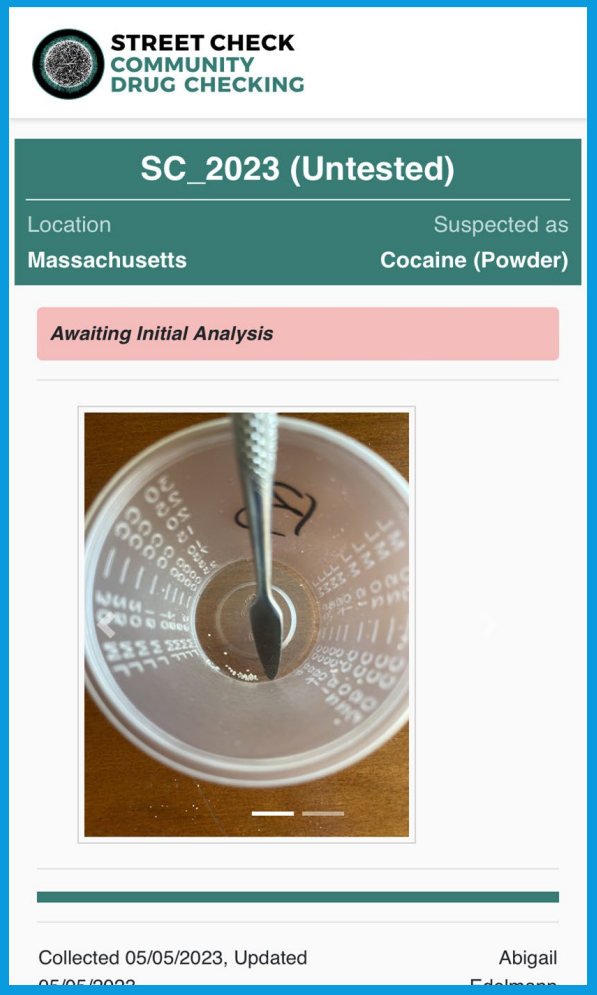
NOTIFYING THE PARTICIPANT

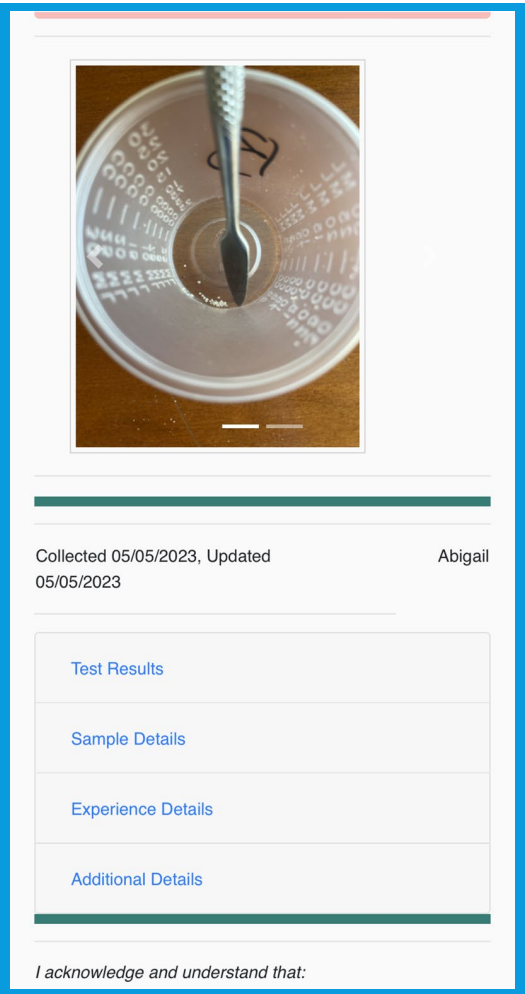


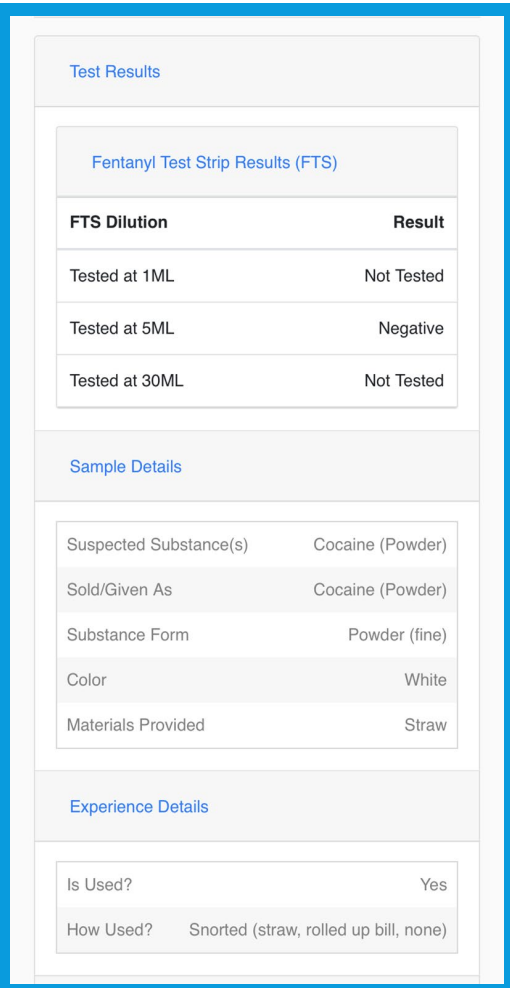




SAMPLE VIEWER





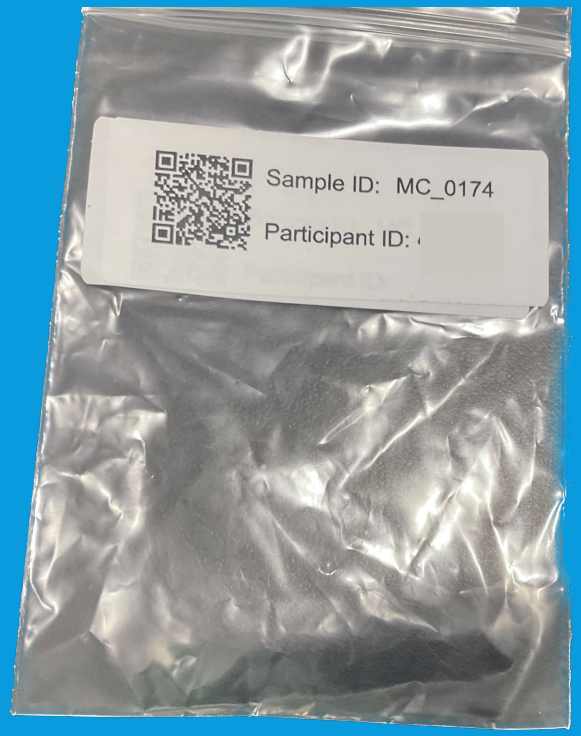


Tips & Best Practices: SAMPLE MANAGEMENT & INCENTIVES

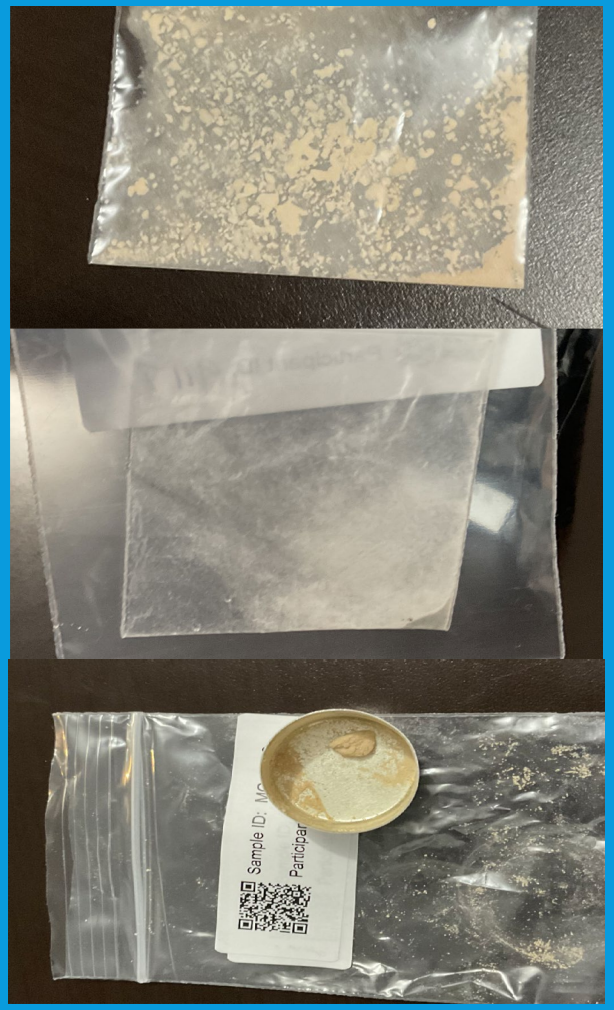
- Pre-prepare sample bags you will be using for collection from participants
  - Use scoops to place in small bags (glassine) in mylar bag with envelopes/larger bag
- Identification—**never put identifying information on the bag** – creating sample ID numbers is helpful for sample tracking and data management.
- Provide a 'thank you gift' for samples provided
  - $5 gift cards or cash per sample
  - non-monetary gifts (e.g., first aid kits, handwarmers, manicure kits, candy, backpacks)
- Notify participants about nearby drug checking program and/or harm reduction resources.

MATERIALS FOR COLLECTION

- Sample bag stickered with QR code + ID
- PPE: gloves, mask
- 5mg microscoop



BEST, GOOD, NOT SO GOOD SAMPLES

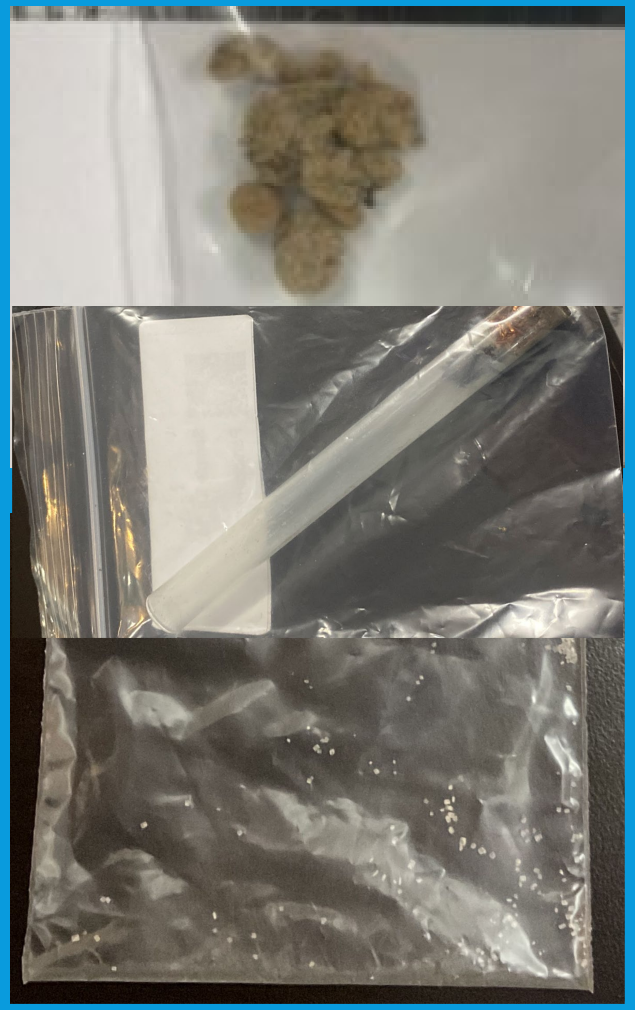


Best Samples:

- Powder, crystal, rock in sufficient quantities (~5-15 mg)

Good Samples:

- Cookers with significant residue



~5 mg of sample required for FTIR analysis

Bad Samples:

- Cotton and pipes*
- Samples of insufficient quantity (<5 mg)*
- Note: Static will inhibit sample removal from bag

*Initial results typically poor, but laboratory testing not affected

TRAINING STAFF ON DRUG SAMPLE COLLECTION

- Training!
  - Training happens both in the "**classroom**" and in the "**field**"
- Practice and role play consenting and explaining the purpose of sample collection and drug checking.
- Practice and role play sample collection, data entry, payment/thank you gifts transactions.
- Anticipate and practice handling errors that may come up

Take-home points

- Surveys and interviews with people who use drugs are critical to understanding the changing landscape of risk and response to the opioid crisis.
- Adding drug checking to ongoing data collection is feasible and informative.
  - Unique use experiences shed light on the drug supply and overdose risk
  - Enable better monitoring of the supply
  - Help in raising awareness
  - Refine local response and intervention

THANK YOU

Questions?

Traci Green

- tracigreen@brandeis.edu

Joe Silcox

- joesilcox@brandeis.edu

https://heller.brandeis.edu/opioid-policy/

www.streetcheck.org