Implementing Community Drug Checking in the United States: Considerations for Early-On, Evolving, and Advancing Programs

STREET CHECK COMMUNITY DRUG CHECKING

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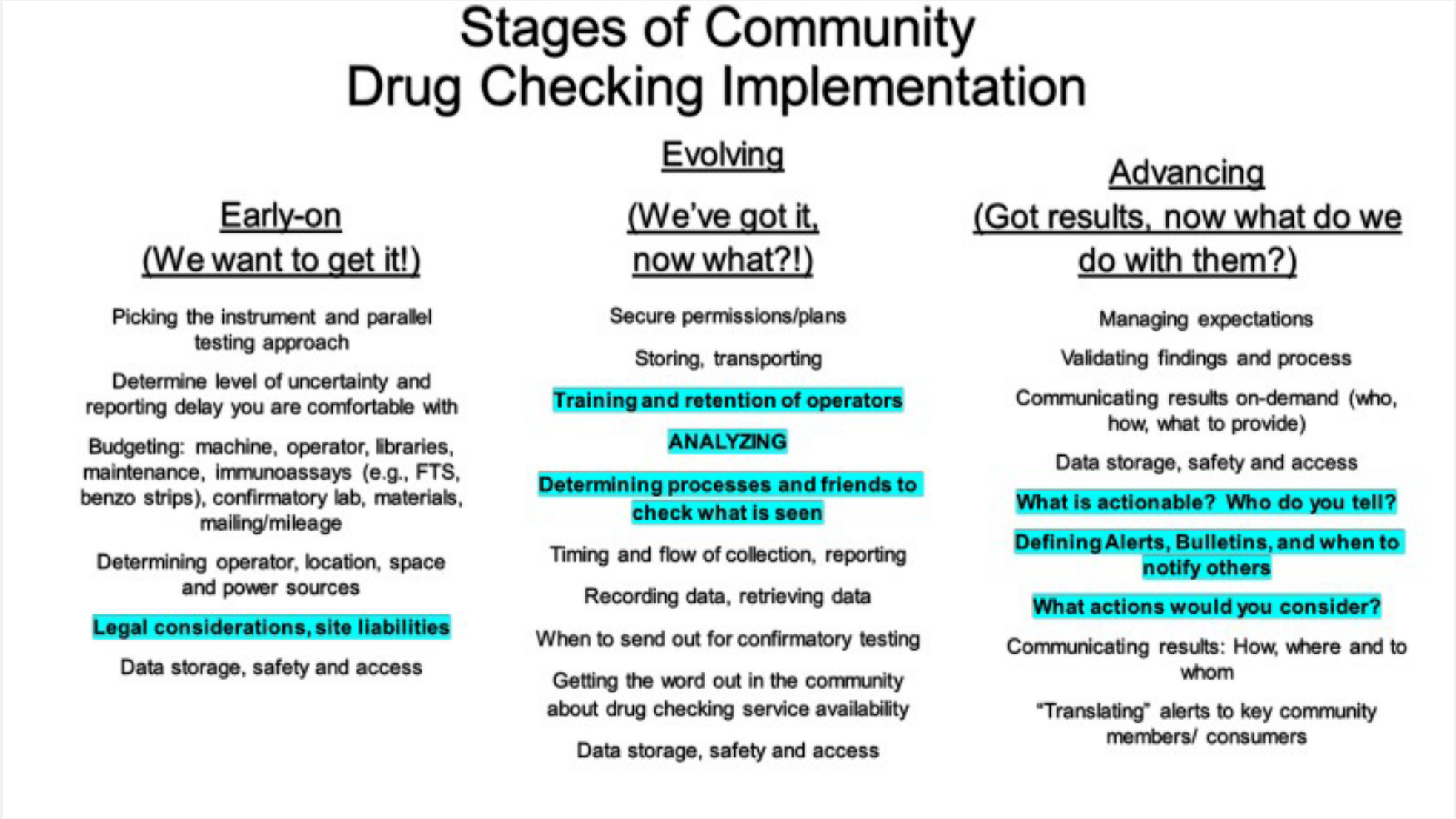
v. 1 2/14/23

Note to the Reader:

Three years of implementing the Massachusetts Drug Supply Data Stream, a statewide drug checking program, and providing technical assistance to a dozen states on community drug checking have brought many opportunities to reflect on this undertaking. This document is intended to advance the discussion of community drug checking at each stage of implementation. Our story may not be your story. There are so many ways to create a drug checking program! There are exceptional community organizations who have been practicing drug checking in the electronic dance music and concert scene for decades, both in the US and abroad. There are also amazing European partners who have been operating drug checking programs for decades, and they exist as both sources of drug supply for monitoring as well as prevention services for people who use drugs to stay safe. Our vision is their vision: an approach that helps elevate the health of people who use drugs, empowers programs to provide these services, gives much needed information to people consuming drugs, and generates information about the drug supply that is as important, if not more so, as mere counts of deaths or hospitalization involving drugs. In the US context, drug laws and institutional practices can create huge roadblocks to realizing this vision. This FAQ assumes the readers is US-based in its operation. Other constraints or permissions may be important for location outsides of the U.S.

This FAQ primarily focuses on questions for programs in the early stages of drug checking implementation. Check back for Implementation FAQs for Evolving and Advancing Stages.



Early-On

FAQs on Community Drug Checking Programs

We are thinking about starting a community drug checking program. What are things we should be thinking about at this time?

First, this is an exciting time! Dream big and creatively! Here are a few things to think about as you start this journey.

1. **Purpose:** What is the goal of your drug checking program? What is the vision you want to bring to this endeavor? What is the role of public health, public safety, harm reduction, and community partners? Do you see this as primarily surveillance, prevention, service or some other or combination purpose? What do you want to be able to say about the program in a year?
2. **Permissions:** What are the legal, regulatory, and other considerations around: a) drug testing equipment, b) possession of drug paraphernalia (e.g., cookers, cottons), c) possession of personal quantities of drugs, d) transport of materials to be tested (e.g., by staff, by participants to and from the drug checking location)? If specific permissions are needed, what is the plan for obtaining them?
3. **Places:** where do you want to launch your drug checking program? Are there obvious locations in your community or state where drug checking is needed, wanted, or easiest to start? Do you need stationary or mobile capacity? Are place-based considerations (e.g., safety of staff, security and storage of instruments, sufficient space to host) addressed? Piloting small and building to bigger programming is a strategy used in many new undertakings.
4. **Partners:** Who are your collaborators and important stakeholders in starting this out? How can you communicate with them and bring them together to get this off the ground?
5. **Precision:** How precise do you want to be able to be in identifying substances? How much imprecision are you willing to accept? Is it more important to be identifying all substances or the major ones? Is quantification (% of the drug contents) critical for all, some, none of the samples?
6. **Public:** How do you want the program to be seen and understood by members of the public? Will all, some, or none of the information from your drug checking program be made public, and when? What communications are necessary to convey these messages and who will be conveying them?

My harm reduction program recently was granted some funds that I would love to put towards purchasing a spectrometer and do drug checking. I'm wondering if you could please offer me some insight on a quality spectrometer to purchase and how to implement a low barrier mobile drug checking program.

Best practice: Gather information on what is known about the local drug supply

How complex is your drug supply? A simpler drug supply with fewer mixtures will allow for easier analysis. A helpful tool to guide your journey is the TEDI Guidelines, a technical yet approachable document produced by the Trans-European Drug Information network (TEDI) that looks at instrumentation used for drug checking and considerations for program planning.

Best practice: Use scientific instruments

We currently use a Bruker Alpha II FTIR instrument. We have also worked with handheld Raman devices, most recently conducting a pilot alongside community partners with Spectra Plasmonics to compare results from our FTIR, the Spectra Plasmonics Raman Instrument, and GC/MS lab testing. At this time (January 2023), we would recommend working with an FTIR instrument, as the state of the science and the tools are still evolving but are most efficient, consistent across more substances, and durable in more settings with the FTIR. Bruker Alpha systems have been widely used in the Canadian and US drug checking communities, but there are other companies that make FTIR spectrometers as well. The Raman instruments (Spectra Plasmonics, ThermoFisher Scientific are manufacturers) are less helpful for substance identification at this time—especially fentanyl and analogs--either because they are newer and are just beginning to test their instrument/software on US-based samples, or because there are multiple, costly and time-consuming steps in the sample preparation and testing that make them less useful in community settings. New instruments are coming out all the time, so stay tuned or check back for updates to this best practice.

Best practice: Use at least two testing methods

We strongly suggest that you couple your testing with at least 2 methods. So that means a spectrometer AND colorimetric testing (immunoassays like the test strips for fentanyl, benzodiazepines, heroin, xylazine). The immunoassays are easy to use and can detect specific substances at much lower levels than the spectrometers (the Bruker Alpha II has a Limit of Detection (LOD) of around 5% concentration).

Best practice: Partner with an outside lab for advanced testing.

If feasible, we highly recommend pursuing a partner lab to send samples out for further analysis via GC/MS, LC/QToF or another lab method. This is typically very expensive ($50 - $200 per sample), so a period of testing (like during initial training), only on certain samples (like those where overdose is known to have occurred), or a randomly selected sample (based on the number your budget can afford, maybe 20%). See below FAQ regarding lab-based drug checking for some things to think about when talking with a lab partner.

We want to be able to bring the drug checking program to our mobile van unit to access community locations (e.g., encampments, nightclubs). How feasible is this?

The FTIR is easily transported and multiple groups in the US have developed methods/tips and tricks for bringing an FTIR and other drug checking instruments out into the field on a van. Take a look at the TEDI Guidelines for examples and photos of mobile set ups.

We are thinking about joining an effort that has us collecting remnant samples and sends them by mail for testing at an off-site lab. We would get the results back. What are considerations for lab-only based drug checking approaches?

Any drug checking that puts information into the hands of people who use drugs and programs that support them is a step in the right direction! One approach does not preclude the other. In fact, many community drug checking programs—including ones in North Carolina and Massachusetts--use mail-based drug checking approaches in addition to on-site drug checking services as ways to expand drug checking options for communities. Such a mixed strategy gives flexibility but it also creates complexity, so make sure you are up for the added coordination of data, materials, trainings, etc. that come with a more nuanced approach. (*Aside:* This complexity was motivation for NC and MA partners to create the StreetCheck app, to help streamline the many data collection entry points, results management, and scanning/lab results). If you go the pathway of lab-only mail-based drug checking, some things you should consider are:

- Ask about testing turnaround time. In addition to time in the mail, the lab testing time could be substantial. Gathering this information can help you manage expectations and flow. Expect a timeframe from submission to results back to you of around 2 to 3 weeks.
- Ask about costs and what is included vs. what you are responsible for. Will you be paying for packaging? For mailing? For sample trend analysis?
- What methods will the lab be using to test samples? Is this the gold standard (GC/MS) or other methods? At what level of precision is the lab testing? Testing approaches that report results that are too precise may detect so many sample components that results can be inconsequential and confusing; lab testing that is not precise enough may report results that miss important components at low levels. Make sure to review all results early on to check this out and adjust precision as your program needs.
- Will the lab be testing qualitatively (presence/absence), semi-quantitatively (presence with reported ratios of components), or quantitatively (presence and % composition)? If providing quantitative information, on which drugs will these be reported, if not all?
- What types of sample submissions are permitted and how much is needed to test accurately? What is the minimum sample amount required for the type of testing they will be doing for you?
- Will the lab be providing interpretation of findings? Who decides this and what experience does that person have in working with street drug samples?
- Will the lab be reporting on inactive substances detected too or just active substances detected? Will precursors and intermediary components of synthesis or manufacturing be reported? This is important in the age of synthetic drugs.

- Who has access to the results once the sample is tested? Will (some/all of) the results be publicly available? Are there any restrictions on public reporting of (some/all of) the results?
- Will any trends or analysis be done on the samples or collection of samples for my program or area? Who sees this? Just me or other people?
- If we decide later on to add on-site, real-time community drug checking to the lab-based mail program, how can sample results be merged, and what assistance is available to interpret the multiple test results?

Another institution (law enforcement agency, health department, hospital, university) is heavily involved in or leading the community drug checking programming in my area. What are some considerations for this kind of arrangement for drug checking?

This arrangement should center the community of people who use drugs and the programs that support them. Some possible ways to do this include:

- Create an advisory board comprised of community partners and people with lived or living experience, scientists, and other stakeholders who can review the program, policies, its communications, and data. This group should have decision-making powers that impact the direction of the community drug checking program. Composition ideally would not include the institutions or, if involved, representatives of the institution should have minimal participation. Law enforcement should not be participating on the board. Participants in this board should be compensated for their time and expertise.

- Public communications and other disseminated materials about the drug supply should originate with the community or have community input (e.g., via the advisory board). When communications are produced by a single program or person, the program or person should be offered the opportunity for recognition and acknowledgement and, as appropriate, compensated for its use.

- Assess interest in and possible collaborations with harm reduction and community organizations as partners or possible networked sites working with the institution. Fair compensation should be extended for community partners doing this work.

- Having clear role definition of who is doing what and when is essential.

****Important! Privacy protections!****

Samples are not people. Data should be collected at the sample level not the person level. If your program collects information about the sample submitter, make sure you have protections in place to protect privacy and confidentiality. This means you do not collect information like name, phone number, SSN, or address. The sample information should be requested from the submitter and collected at a level of detail that helps the lab and the program identify the substances. If you ask about and record that there was an overdose or other health event associated with the sample, make sure this is recorded in a way that protects privacy (for instance, only program staff/clinical staff see this info and can support the sample submitter during report back of results). On StreetCheck, for instance, health event information is reported in aggregate but it is not reported publicly at the sample level. Specific health event information is only viewable to the sample submitter and to people in the organization with a secure login. If you are using a different software platform (Google, etc) to track samples and results, make sure permissions on access to the results are up to date and not shared beyond your organization. Where data will be stored and maintained, by whom, and for how long are questions to consider.

Are there other resources you would recommend for getting started with community drug checking?

If you are working with a jurisdiction that receives funding through the US Centers for Disease Control and Prevention, there is technical assistance available through the TA Hub that is free. Our team works with the TA Hub and would be available to provide more specialized TA or to suggest others in the community who could meet your needs. We are also happy to work with and support community drug checking growth in organizations and jurisdictions who are not funded by CDC or who are not working with state agencies.

StreetCheck is a free web-based app for community programs, communities, and individuals. It streamlines drug checking sample data collection, organizes results, helps track and facilitate communications, and enables trend analysis of the local drug supply. Contact us to set up a portal and tools for your state and organization.

For harm reduction community programs only: If you are serious about starting a program, we would recommend joining the Alliance for Collaborative Drug Checking (ACDC) listserv. ACDC has a great list of resources and drug checking related threads that might be useful for you. Instructions to apply are here: *please complete this Membership Request form and an admin will direct-add their email address. https://forms.gle/HwCeMKVDiA7uUm5s8*

If you have further questions, reach out to communitydrugchecking@gmail.com