



# Scottish Drug Checking Project summary

## What is drug checking and why is it needed in Scotland?

Drug checking is a service where people can hand in a small sample of drugs for testing, so that they can receive information about what is in their drugs. Services are confidential and anonymous. As well as providing information about what is in a drug sample, trained staff at the service can offer harm reduction support around things such as poly-substance use, safer dosage, and how drugs interact with medications. People who use drugs currently have very little reliable information

about the strength and content of what they are taking, which puts them at risk of harm. Drugs can have very different strengths and contents, and people can be ‘mis-sold’ drugs (meaning that the drugs they have bought do not contain the substance that they thought). Scotland currently has the highest level of drug-related deaths in Europe and there is a need for such services to help keep people safe. Although community-based drug checking services are set up in Europe, the US, Canada, and elsewhere, there aren’t any in Scotland.

## What was the aim of the study?

This study, which ran from January 2021-May 2023, created a programme of work to research, and plan/prepare for delivery of, drug checking services in Scotland. The study developed the evidence base on drug checking, to inform and build infrastructure for the delivery of drug checking services in three cities: Aberdeen, Dundee, and Glasgow. These cities were chosen as they were keen to support the development of drug checking services and have some of the highest drug-related death rates in Scotland.

This study involved a range of work packages, which are discussed in more detail in this briefing:

- Realist review of the international evidence
- Qualitative research to inform the most effective models of care
- Informing service planning and implementation in Aberdeen, Dundee, and Glasgow
- Creation of a range of outputs to support dissemination of learning from the study.

## Realist review: Summary and key findings

A realist review is a type of systematic review which aims to explore how complex interventions work and how they are shaped by context, specifically focusing on what works, for whom, and in what circumstances. A realist review was conducted to understand the factors influencing use of community-based drug checking services globally. In a realist review, initial programme theories are developed then tested using international evidence. Our realist review found that there were seven theories to explain the factors influencing the use of drug checking services:

**1. Legislation and regulation:** the legislation, regulation, and policies around drug checking can impact people's engagement, especially in places where drug possession is a criminal offence. Having clear legalisation and policies around drug checking services is important in providing assurances for those involved that they are safe from being searched, charged, or arrested, reducing fear, and increasing willingness to use services, as well as providing reassurance to staff. Having a supportive local police force is also important.

- 2. Drug market and drug harms:** the level of drug-related harms, or concerns about risks in the drug market, was found to be an important factor behind the increase in the number of drug checking services globally. The increase in drug-related harms, which is in part due to the increasingly complex and dangerous drug market, leads to more opportunities for harm reduction services, like drug checking, to be established.
- 3. Integrating drug checking into an existing service:** having drug checking integrated into existing harm reduction services can improve uptake, as individuals are already familiar with the service and staff. Integration can also help to engage with those who are not currently accessing the wider service, as well as allowing people to access other supports and services. Staff in existing settings are generally supportive of drug checking as they can see the potential for being able to better support people who use drugs. Considerations do need to be made in terms of capacity (time, space, and resources) for providing drug checking.
- 4. Lived/living experience ('peer') involvement at all levels:** having those with lived/living experience involved in planning, running, and delivering drug checking is important in terms of meeting the needs of people who use drugs, and ensuring services are more inclusive and responsive. However, involvement of peers can be limited, with such roles being undervalued. Reduced opportunities can be a result of fears of heightened risk and legal liability among stakeholders such as government and insurance companies.
- 5. Accessibility:** drug checking services need to be accessible to those who wish to use them, for example by being located in places near where people buy and use drugs and near other harm reduction services. Outreach, postal services, and sample drop-off points can also increase access amongst wider groups of people who use drugs, but they can face additional legal challenges.
- 6. Testing process:** drug checking involves a wide range of equipment and methods to test drug samples and provide information to service users. Equipment can vary by type, detail, and accuracy of information provided. There is often a level of uncertainty around drug

checking results which should be carefully considered and communicated to service users. Services commonly have to consider trade-offs between cost, speed of testing, and comprehensiveness of results. Considerations are needed in terms of the type of equipment and staffing expertise. A key limitation for many drug checking services is that they are often unable to provide detailed information in a short timeframe.

- 7. Service users' previous experiences:** there is some evidence that those who have experienced an adverse drug event (such as an overdose) or received overdose awareness training are more willing to use drug checking services. However, there's also evidence that contradicts this, with those who are dependent on drugs, and who face a lot of health and social challenges, being ambivalent to drug-related harms or risks. They may feel that they have enough knowledge and therefore do not need to use drug checking services.

The findings of our realist review provide insight into the key barriers and facilitators of drug checking services, at the individual, local, national, and international levels.

## Qualitative research: Summary and findings

The qualitative part of the project aimed to explore the opportunities and challenges connected to setting up drug checking services in Scotland. A total of 43 participants were interviewed: staff from third sector services, the NHS, and the police (n=27); people currently using drugs or had done so in the last 12 months (n=11); and family members of people who were using drugs or had done so in the last 12 months (n=5) across Aberdeen, Dundee, and Glasgow. Participants were asked about lots of different issues around drug checking. We have presented the findings below across a range of topics: policing challenges, service models, service design considerations, and the wider impacts.

- 1. Policing challenges:** We interviewed 10 police officers to understand the policing and legal challenges surrounding the operation of drug checking services in Scotland. These participants were generally supportive of drug checking, although significant challenges were noted. Participants highlighted that their role

was to keep individuals and communities safe, enabling policing support for drug checking alongside their role in enforcing drug laws. Participants thought there would generally be widespread support for drug checking locally and nationally, particularly in the context of a wider cultural shift towards a public health-oriented approach to policing. Participants discussed legislative change, national strategic guidance, enhanced support zones, and officer discretion in relation to drug checking. These findings provide insight into opportunities for developing approaches to policing that can facilitate the operation of drug checking.

- 2. Service models:** All participants were asked about three hypothetical models of drug checking: a fixed-site service in a third sector setting, alongside a van; delivery within an NHS substance use service; and having the service based within a pharmacy setting. Participants generally preferred the first model, viewing it as a low barrier, safe space, with existing high footfall. While NHS services were seen as having highly specialised staff, many participants described a mistrust of such services amongst people who use drugs. Pharmacies were also a popular option, again with high footfall, specialised staff, and accessible locations, but concerns were raised about some pharmacy staff having poor relationships with their clients, small service areas and general staffing capacity to do something new. Participants also discussed ways of increasing access, including distributed models, outreach, and postal services. These findings provide insight into the different potential service models for drug checking in Scotland.

- 3. Service design considerations:** Participants also described a range of factors influencing service delivery: key service design features (including provision of information about drugs tested, wider communication about drug use, service environment, non-judgemental staff, quick turnaround for results, and clear protocols); available resources; networks and communication; concerns about policing and criminalisation; public and community attitudes; use of drug checking services; staff skills, knowledge and values; involving relevant stakeholders in dialogue; and evaluation of services. These findings provide insight into a range of implementation barriers and facilitators.

**4. Wider impacts:** Participants discussed the potential wider harm reduction impacts of drug checking services in Scotland for: individual service users; harm reduction services and staff; drug market monitoring structures and networks; and wider groups of people who use and sell drugs, in shaping their interactions with the drug market. Participants also mentioned the importance of evaluating individual health behaviours as a result of using drug checking services, but also wider evaluation of processes such as: information sharing across a range of parties; engagement with harm reduction and treatment services; knowledge building; and increased awareness/knowledge about drugs and drug use.

**Study limitations:** While we captured the views of 11 people with experience of drug use across three cities, they were self-selecting and therefore their views will not reflect everyone who may use drug checking services. We were unable to identify people who used drugs in nightlife and leisure settings who may have had different views on the service models than our participants. While we tried to recruit a range of participants with lived and living experience from numerous settings, we experienced challenges due to the research being conducted during COVID-19 restrictions.

## Informing service planning and implementation in Aberdeen, Dundee, and Glasgow

A key part of this study was to inform service planning and implementation, by working closely with those the three cities who were developing drug checking services. We established a 'city leads' group at the very start of the project comprised of the individuals involved in service planning and implementation in Aberdeen, Glasgow, and Dundee and met regularly to inform their decision making. Each city put in place different local decision making infrastructure to support the national work. In May 2023 a national implementation group was established to take forward the work nationally led by Scottish Government. This group aims to ensure good communication across the three cities and also deal with arising challenges such as transportation across the country.

During the full project we worked closely with four advisors involved in drug checking research and

service delivery in the UK and Canada. Their role was to support the study team and city leads in these decisions and to answer questions regarding the process. For example, we worked with the city leads to create standard operating procedures and other relevant documents, sharing learning from other drug checking services, including those our advisors are involved in (Substance, in Victoria, Canada, and The Loop, in England). We also established a project advisory group of individuals with relevant experience to drug checking, and a lived experience reference group, consisting of people across the three cities with experience of drug use.

Another element of the study involved exploring key issues identified by the city leads to inform implementation. These included service profiles, equipment needs/choices, and national considerations on confirmatory testing (double checking the results that were provided by the city services). Information was gathered from three drug checking services to create an overview of equipment and method profiles to inform service delivery. This briefing can be found [here](#). A detailed [briefing](#) was also created to provide information about point of care and lab-based settings in terms of drug checking equipment, describing the advantages and disadvantages of each. Information was also gathered to provide detail about the key considerations of lab-based testing at the local and national level, which can be found [here](#). We also developed a document focusing on the initial considerations for evaluating drug checking services in Scotland, which can be found [here](#).

The three cities are in the process of developing Home Office licences and are also making progress in terms of the required building changes for the Home Office licences.

## Study outputs

In May 2023 we launched the Scottish Drug Checking Project online hub which is hosted by Crew. This online hub contains information about drug checking, videos, key research findings and implementation documents, news articles. There is an option for people to subscribe to the mailing list. The online hub can be accessed [here](#). We have presented at various academic conferences and events. We hosted a final face to face event in March 2023 with more than 40 attendees made up of people with lived experience and family

members, Scottish Government, Public Health Scotland, local councils, third sector services, Police Scotland, NHS staff and researchers. The focus of this event was to facilitate dialogue on key issues relating to drug checking implementation. Presentations were provided by The Loop (UK drug checking organisation) and Substance (Canadian drug checking service) on the learning gained from their services. Delegates discussed implementation challenges, key parties, and logistics; communication; data collection; and evaluation. The report from the event can be found [here](#).

The team also hosted a webinar in June 2023 with more than 50 attendees (the recording of which can be found [here](#)) and a webinar was also delivered to the Alcohol and Drug Partnerships national group in June 2023. We will continue to present at relevant conferences and events and are exploring a number of options to speak to national decision maker audiences in Scotland.

In addition to producing the briefings above the team have also published a range of academic papers which are all open access:

- Falzon et al. (2022) Challenges for drug checking services in Scotland: A qualitative exploration of police perceptions. *Harm Reduction Journal*, 19: 105. Available from: <https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-022-00686-6>
- Masterton et al. (2022) A realist review of how community-based drug checking services could be designed and implemented to promote engagement of people who use drugs. *International Journal of Environmental Research and Public Health*, 19:19. Available from: <https://www.mdpi.com/1660-4601/19/19/11960>
- Carver et al. (2023) 'It's not going to be a one size fits all': A qualitative exploration of the potential utility of three drug checking service models in Scotland. *Harm Reduction Journal*, 20:94. Available from: <https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-023-00830-w>

- Falzon et al. (2023) "It would really support the wider harm reduction agenda across the board": A qualitative study of the potential impacts of drug checking service delivery in Scotland. *PLoS ONE*, 18(12):e0292812. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0292812>
- Falzon et al. (2024) Planning and implementing community-based drug checking services in Scotland: A qualitative exploration using the Consolidated Framework for Implementation Research. *Substance Abuse Treatment, Prevention, and Policy*, 19:7. Available from: <https://substanceabusepolicy.biomedcentral.com/articles/10.1186/s13011-023-00590-7>

Relatedly, members of the team were also Editors of a Special Issue of the International Journal of Environmental Research and Public Health on 'community drug checking to reduce harms'. A total of six papers were published in this Special Issue and can be found [here](#).

To join the mailing list, please sign up via the [online hub](#).

For more information about the research, please email [SACASR@stir.ac.uk](mailto:SACASR@stir.ac.uk)

The painting featured in this briefing was created by Linda McGowan, an artist from Glasgow. Linda can be contacted by email at [mcgowan.linda5@yahoo.co.uk](mailto:mcgowan.linda5@yahoo.co.uk) Linda was supported by Stu Duffy, Gallery Manager at Unexpected Spaces ([stuarduffy@gmail.com](mailto:stuarduffy@gmail.com)).

