Pill Testing in South Australia :

A NECESSARY STEP IN THE RIGHT DIRECTION AGAINST DRUG-RELATED HARM?

SANDAS
South Australian Network of Drug & Alcohol Services

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Acknowledgements

Acknowledgement of Country

We acknowledge the land where we are today is the traditional land for the Kaurna people. We respect their spiritual relationship with their country and acknowledge the Kaurna people as the custodians of the Adelaide region, and that their cultural and heritage beliefs are still as important to the living Kaurna people today. We also pay respect to the cultural authority of Aboriginal people past, present and emerging

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South Australian Networking of Drug and Alcohol Services

SANDAS is a not-for-profit organisation that works to promote the goals of South Australia's alcohol and other drug (AOD) agencies. SANDAS works with an extensive number of member agencies and governmental entities to advance evidence-based policies, preventative measures, and treatment alternatives for those impacted by AOD concerns and improve community reactions to AOD's negative

effects. SANDAS works to increase the level of expertise and availability of services through support, education, and advocacy, with the ultimate goal of enhancing the outcomes and general well-being of individuals affected by substance use.

Magill Community Outreach Centre (COC)

The Magill Community Outreach Centre (COC) is the first community centre in the world to be placed within a social work and human services discipline in a university. COC provides valuable and diverse placement opportunities for social work and human services students, which include project and research work involving collaborative project design, grant writing, developing surveys, data collection and analysis, report writing, as well as community development and engagement activities. The projects undertaken at the Centre stem from partnerships with various community organisations, with research and project work opportunities for students. In addition, the overall project is supervised by qualified social worker staff members who also fulfil the formal supervisory standards set forth by the Community Workers Association (CWA) and the Australian Association of Social Workers (AASW).

Executive Summary

The current project explores the benefits and challenges in relation to the implementation of pill testing in South Australia as a harm reduction approach. Pill testing could be introduced as a harm reduction approach to address concerns arising from illicit drug use. Pill testing, which is also known as drug checking, is used to check the potency and chemical composition of substances provided to a service by people intending to use a substance. It allows people to check the purity of the drug and make individuals aware of its nature, allowing them to make an informed decision. Once they become aware of the chemical composition of substances. It can prevent harms up to and including deaths caused due to illicit drug use.

This project aims to evaluate the practicality, advantages and challenges of implementing pill testing in South Australia. The current project draws from international models, domestic models, public health research and analyses policies to effectively understand the implementation of pill testing.

Pill testing sites offer attendees the opportunity to interact with health professionals and peers with lived and living experience to have discussions regarding various drugs and their use. The report reviews the different pill testing services, including direct models, fixed sites, and mobile testing sites, along with indirect drug checking approaches, including wastewater analysis and postal and drop-in services, briefly highlighting their functionalities. The project includes a stakeholder analysis, outlining the key group members who are involved in establishing pill testing services, such as the government, health professionals, scientists, individuals who are using and their family members, politicians, police and the public. The report, through the lens of social theory, explores pill testing using system theory, harm reduction approaches and conflict theory. These social theories examine how society's attitudes, policy frameworks and cultural norms can manipulate behaviours surrounding drug use and policy development.

The project compares successful international pill testing models from around the world and how a pilot program was established in the Australian Capital Territory in Australia. We discuss the evolution of pill testing models and how initiatives were taken from various models to establish effective pill testing models in Australia. The report will discuss the advantages and disadvantages of implementing pill testing in South Australia. There are arguments that highlight the potential benefits of pill testing, including drug-related harm, public health, engagement with the population and spreading awareness

about drug use. Simultaneously, addressing the major challenges on the way of establishing pill testing, such as public opinion, political and legal resistance and legislation challenges. The evolution of programs such as pill testing means moving from punitive models of drug control towards more evidence-based and health-centered models.

Based on the findings and data collected, recommendations made were in support of implementing pill testing in South Australia as a state-supported pilot program. Pilot programs can most easily be initiated at music festivals, followed by mobile testing sites and fixed testing sites. Testing sites may also be introduced with safe injecting rooms and syringe programs, while collaborating with health agencies, community stakeholders. Any implementation requires cooperation and approval from law enforcement.

To conclude, this project has been developed with thorough research work, policy analysis and in collaboration with the South Australian Network of Drug and Alcohol Services. The main objective of this report was to explore the evidence for the implementation of pill testing in South Australia. The report concluded by highlighting that pill testing is a valuable approach to harm reduction reform within the drug and alcohol sector. Through this project, we aim to raise awareness and educate people about safer drug consumption and how individuals can reduce the risks of drug use, potentially leading to a reduction in drug-related harms and fatalities.

Glossary

Pill Testing / Drug Checking	Harm reduction strategy which allows service users to find content of the drug they intend to use and provides them with health advice about the risks of using those drugs
AOD	Alcohol and other drugs
Illicit Drugs	Drugs which are prohibited from manufacture, sale and distribution or use without medical prescription.
drug checking services	Drug Checking Services
PTA	Pill Testing Australia
CAHMA	Canberra Alliance for Harm Minimization and Advocacy
Recreational drug users	A person who uses substances only on a certain occasion or time for the purpose of enjoyment and to enhance mood but not on a regular basis.
PWUD	People Who Use Drugs
FTIR	Fourier Transform Infrared Spectroscopy
Abstinence	the practice of restraining oneself from indulging in something
ACIC	Australian Criminal Intelligence Commission

Polydrug use	the mixing of different drugs, or taking one drug while under the influence of another drug
MDMA	3,4-methylenedioxymethamphetamine
MDA	3,4-methylenedioxyamphetamine
Tusi	Is a recreational drug that contains a mixture of different psychoactive substances, most commonly found in a pink-dyed powder known as pink cocaine.
DOB	2,5-Dimethoxy-4-bromoamphetamine
NPS	New Psychoactive Substance

Background

Introduction

The prevalence of harmful drug and alcohol use has been rising across the globe as indicated by the World Drug Report (2019) and has severely impacted lives of many people who have been affected by the use of substances. According to the World Drug Report (Hurst, 2019), more than 35 million people are estimated to suffer from drug use disorders, and this number has increased by 56% from the previous years of data collected (Hurst, 2019). Of particular concern has been the increased use of new, predominantly synthetic drugs commonly referred to as Novel Psychoactive Substances (NPS) (Syrjanen et. al. 2023). These Drugs have evolved as substitutes to older drugs, which have become hard to access due to their illegality or price. These NPS have contributed towards increased drug-induced fatalities, and include drugs consumed along with methylenedioxymethamphetamine (MDMA), Cocaine, and gamma-hydroxybutyric acid (GHB) (Syrjanen et. al. 2023).

Over the years, thousands of Australian families have suffered harm due to their loved ones overdosing on substances. Chrzanowski et. al. (2024), developed a report on overdose and other drug-induced deaths in Australia from the years 2003-2022. The highest number of deaths recorded was in the year 2017, recording 8.3 deaths per 100,000 people (total deaths were 1,795). The rise in the number of deaths of people due to drug overdose has been concerning health professionals and health policy makers in Australia. Around 68% of overdose deaths recorded were due to unintentional drug overdose and 29% of intentional drug overdose in the year 2022 (Chrzanowski et. al. 2024). The report indicated that in South Australia, the most commonly used drugs were opioids, antiepileptics, sedative-hypnotics and amphetamine-type stimulants and total deaths in South Australia recorded were 146 (Chrzanowski et. al. 2024). NPSs have been found to be present in various common drug compositions, and similarly, new substances are being brought to market all the time. Due to the vast range of substances available, it becomes exceedingly difficult to gain accurate knowledge about the substances available in the market.

Pill testing was introduced to address these knowledge gaps by providing a scientifically valid mechanism for establishing the specific drugs or drug combinations in substances. This information can then be used to provide the individual giving a sample and the wider community with information about the drugs circulating in the marketplace. This enables people to make evidence-informed decisions about whether

and how much of a drug they may consume or whether they will dispose of the drug.

The first country to implement pill testing was the Netherlands in the early 1990s, which was followed by other European countries including Switzerland, Austria, Belgium, Germany, Spain and France. Australia's first formal pilot program of pill testing was initiated in 2017 in the Australian Capital Territory and successfully established at the Groovin the Moo festival in 2018 (PTA, 2018). The Australian Capital Territory then broke new ground in 2022, becoming the first Australian jurisdiction to offer a permanent pill testing service. Pill Testing Australia (PTA), Direction Health Services and CAHMA launched Can TEST, which was the first drug checking site established in 2022 at Canberra. Evidently, drug use has been found to have the highest rate at events such as music festivals and night dance clubs in Australia.

According to the surveys conducted at music festivals, the data collected from these music festivals has shown that 73.4% on drug taking compared to 28.2% of the general adult population. Data collected over the past years shows, Australians over the age of 14 years have been using illicit drugs over a period of twelve months that including cocaine with the percentage of (4.2%), ecstasy (3%), ketamine and methamphetamines (1,3%). Adding on, from the data released by the National Drug Strategy Household Survey, the most commonly found drug in South Australia in 2022-2023 was cannabis (11.1%), followed by cocaine (4.1%), hallucinogens (2.1%) and ecstasy (1.3%) (SA 2023). Additionally, a study conducted reveals that Australian adults aged 18 years and older (7.7%) have been viewed to have a substance use disorder (Black et.al. 2023). Substance abuse has resulted in 18 million years of healthy life lost that as surveyed in 2019.

This has resulted in a negative impact on health, social and economic outcomes for a large number of individuals. Almost 4.3% of Australia's population meets the International Classification of Diseases for active substance use disorder (Black et.al. 2023). Despite the health and socio-economic risks associated with drug use many people (17%) have used an illicit drug in the last 12 months, and 47% of Australians in their lifetime. (NHDS 2023), Consumption of drugs without having knowledge about them can risk an individual's life. According to Australia's Annual Overdose Report (AAOR, 2024), drug-induced deaths have been the leading cause in Australia across all age groups. For both males and females ages 20-29, drug-induced deaths were the third-leading cause after suicide and transport accidents (Pennington Institute, 2024).

Aim and objectives

Aim

The primary aim of this report is to provide evidence-based research to identify the benefits and challenges of implementing pill testing in South Australia.

Objectives

1. To evaluate the potential benefits and challenges of implementing pill testing services in South Australia.
2. To provide recommendations for changes in drug policy in South Australia.
3. To advocate for a proactive, evidence-based approach to drug policy that prioritizes health and safety.

What is Pill Testing?

Pill testing is an evidence-based harm reduction approach and is a well-established practice, which has been conducted for over 50 years in more than 20 countries including Austria, the Netherlands, Switzerland, Spain, the Americas, New Zealand and in recent years been available in some states of Australia (Australian Capital Territory, Victoria, Queensland and recently introduced in New South Wales). Drug checking determines the potency, purity, and chemical makeup of a substance, including the existence of any harmful contaminants. It also offers service attendees the opportunity to converse with reliable health professionals and peer support workers regarding the drug or their drug usage (Pill Testing in Australia, 2025).

The services are typically free or offered at a low cost and are confidential. Individuals utilising these services indicate alterations in their behaviour concerning their drug consumption, including reduced intake of the substance, extending the intervals between doses, and increasing their water intake (Population Health Division, 2024).

Pill testing incorporates three crucial aspects of harm reduction (White, 2023). As mentioned:

- by minimising the immediate danger by making certain that users are informed about contaminants and estimated doses of active ingredients in the illicit drugs analysed;
- by broadening chances to offer drug awareness and harm reduction education, including the dangers related to polydrug use, to individuals already intending to use drugs;
- by supplying an `early warning system' for emerging threats and aiding in the real-time collection of data regarding Australian drug consumption.

Types of Pill Testing/Drug Checking Services

- Mobile system

Mobile systems are temporary portable drug checking services, usually run through vans or tents for a specific period at certain locations such as nightclub precincts in a city or music festivals where there is a high probability of illicit drug use. These services help people attending events to safeguard themselves from unusual/unexpected substances and higher than usual doses through providing quick and effective results within as little as 20 minutes, depending on the type of substance and the testing method used (Morgan & Jones, 2019)

Patrons provide a sample of their substance (a small sample e.g., a scrape of a pill, a small amount of powder or liquid), and a qualified professional examines it using an FTIR spectrometer, which operates by directing infrared light onto a sample and evaluating the way the sample absorbs this light. The absorption pattern helps in recognising the substances in the drug through a comparison with an extensive database of FTIR spectra (Oslen et al., 2023)

Some samples require secondary analysis and are sent for additional testing at the laboratory for accurate analysis (The Loop Australia, 2025). This system is available in Switzerland, Austria and in Australia is used in Queensland, the Australian Capital Territory, Victoria, and NSW. The limitation of this

system is that it cannot guarantee the identification of all substances in a sample, as some samples may not be in the FTIR database. This is the case in relation to new and emerging drugs, which are as yet unidentified (Bruce et al., 2022).

- Fixed Site system

A fixed site is located at a specific area, which could be a health centre, supervised injection room, other supervised facilities or treatment programs in the community that is accessible for individuals. These services, which offer a reliable and convenient way for people to get their drugs tested outside of event-based settings (ACT Government, 2019).

Permanent drug checking services enhance harm reduction strategies related to demand reduction, supply reduction, and harm reduction. Fixed sites provide service users with a range of services such as, chemical examination of substances, detailed harm mitigation guidance, and support based on the analysis results and any additional concerns, presented by qualified alcohol and drug professionals, along with peer support workers, walk-in nurse sessions providing general wellness, sexual health, and mental health guidance to service users, irrespective of whether they are having substances analyzed (ACT Policing et al., 2022).

Ultra-performance liquid chromatography-photo-diode-array (UPLC-PDA) is used to separate chemicals by using their UV absorbance, and Fourier transform infrared (FTIR) is used to identify components in substances based on the infrared spectra (CanTest, 2024). Data collected from this system can contribute to early warning systems, offering community members real-time updates regarding the prevailing drug of concern in local drug markets. Notifications can be issued to alert individuals if a particularly hazardous substance is in circulation. This service is available in Canada, the United Kingdom, New Zealand and the Australian Capital Territory in Australia.

- Wastewater Analysis

Wastewater analysis is a process of assessing substance intake at the community level. Since 2016, the University of South Australia and the University of Queensland has been providing data regarding drug use, which is assigned by the Australian Criminal Intelligence Commission (ACIC) . For sites in capital cities, samples are taken at wastewater treatment plants every two months; for outlying sites, samples are taken every four months (*Australian* Criminal Intelligence Commission, 2024). This analysis aids in discovering new sources of threat from severe and organised crime as well as vital information on drug

consumption trends throughout Australia. This process is effective to gain basic information relating to drug statistics, but is not sufficient to prevent individuals from harm, as it does not provide real-time data. Wastewater analysis measures the presence of the following substances:

- ★ methylamphetamine
- ★ amphetamine
- ★ cocaine
- ★ 3,4-methylenedioxymethamphetamine (MDMA)
- ★ 3,4-methylenedioxyamphetamine (MDA)
- ★ heroin
- ★ cannabis
- ★ oxycodone
- ★ fentanyl
- ★ nicotine
- ★ alcohol
- ★ ketamine

- **Postal/drop in System**

In the postal system, users anonymously mail samples of their drugs to authorised labs for examination. This system is useful in the context of regional areas where onsite testing is not feasible, but it is not as widely used in comparison to on-site and fixed-site services. This service is provided by SINTES France, Energy Control Spain and DrugsData/EcstasyData USA. This service is not free of cost as there is a certain amount of charges applied to get the testing done. Some providers provide the full results, while others only share limited information such as sources. In most of these models, to get the substance checked, a client can fill an online form with information regarding the substance they want to be tested, make a payment, post in their sample and receive results within 7 days (WEDINOS,n.d). The analysis is carried out using FTIR, LC-MS/MS or qNMR, depending on the need (SINTES System,n.d).

Advantages and Disadvantages

Advantages

To promote a healthy environment and reduce harm to drug users

Drug checking services, including pill testing, are designed to provide individuals with accurate information about the contents and potential risks of both prescribed and recreational drugs. These services aim to reduce harm by offering confidential, non-judgmental support, which is particularly valuable for People Who Use Drugs (PWUD). Pill testing serves as a point of contact between health professionals and drug users, enabling the delivery of harm reduction strategies rather than focusing solely on abstinence (Brunt, 2017).

Because these services are anonymous and trusted by many recreational users, they play a crucial role in preventing drug-related harm. They also help public health authorities monitor trends in drug circulation, which can inform timely interventions and policy decisions. By engaging PWUD in a respectful and supportive manner, drug checking services contribute to reducing stigma and promoting inclusion.

Furthermore, these services foster a sense of community and social support, improving the overall well-being of individuals who use substances. As a result, communities benefit from fewer overdoses, reduced trauma, and improved public health outcomes (Wallace et al., 2021). Ultimately, pill testing supports the development of healthier, more compassionate societies.

To prevent avoidable deaths and immediate harm

Pill testing offers individuals a valuable opportunity to discuss drug safety and access support services in a non-judgmental environment. It also plays a crucial role in identifying potentially harmful substances circulating in the drug market. This information is not only beneficial for users but also supports emergency services, such as ambulance and hospital staff, by enabling quicker and more informed responses.

In 2022, Australia recorded 2,356 drug-induced deaths (Australia's Annual Overdose Report, 2024). Pill testing can help reduce this toll by providing users with accurate information about the contents of their

substances, raising awareness about potential risks, and offering guidance on how to respond in the event of an overdose.

Life saving drug alerts

Pill testing empowers individuals to detect harmful substances in their drugs before consumption. For example, nitazenes—a class of synthetic opioids increasingly found as adulterants—are reported to be up to ten times more potent than fentanyl and can be fatal even in minute doses. By identifying such dangerous compounds, users are better equipped to make informed decisions and potentially avoid life-threatening situations.

Moreover, data gathered through pill testing services can significantly enhance the health sector's ability to monitor and analyse trends in recreational drug use. This insight allows medical professionals to better anticipate and manage adverse drug reactions. It also enables authorities to issue timely public health alerts when particularly hazardous substances are detected (Byrne et al., 2018).

Prevent people from using unusually strong or contaminated drugs

Each year, thousands of Australians are hospitalised or lose their lives due to drug-related incidents (Pennington Institute, 2024). In many of these cases, the substances consumed were either far more potent than expected, entirely different from what the user believed they were taking or contained unknown additives and contaminants.

Pill testing allows individuals to identify the actual contents and strength of a drug before using it. This knowledge can empower someone to make a safer, more informed decision, potentially choosing not to take the substance at all, and in doing so, avoiding serious harm or even death.

Monitoring drug markets

Drug checking services offer significant value in monitoring and understanding drug markets, particularly in festival settings where zero-tolerance policies are often in place. These services help counteract the misrepresentation of substances, which is more prevalent at festivals compared to other environments. They also provide critical insights into drugs that lack established reference standards.

For example, the drug known as *tusi*—often referred to as "pink cocaine"—is a recreational substance typically found as a pink-dyed powder. However, laboratory analysis of 162 samples revealed a wide range of active ingredients, including ketamine, MDMA, DOB, tramadol, lidocaine, and phenacetin (Van der Linden et al., 2022). This highlights the unpredictable and potentially dangerous composition of such substances.

Drug checking also helps identify discrepancies between what people who use drugs (PWUD) believe they are taking and what they are actually consuming. Monitoring has shown a rise in the use of new psychoactive substances (NPS) as adulterants in traditional drugs like MDMA. In the UK, on-site forensic testing at festivals by organisations such as The Loop has successfully identified the infiltration of NPS into the market, functioning as an early warning system for emerging drug trends.

Additionally, drug checking services are instrumental in tracking the quality and composition of substances sold through crypto markets and online platforms. For instance, Spain's Energy Control program reported 50 and 82 new NPS identifications in 2015 and 2016, respectively, contributing to the national early warning system (Giné et al., 2017).

Beyond chemical analysis, these services also gather valuable user-reported data on risks and adverse effects, which supports the development of targeted health warnings and harm reduction strategies.

Disadvantages

Lack of funding

Despite their critical role in harm reduction, many drug checking services face significant limitations due to resource constraints. These limitations often prevent the use of advanced analytical technologies, resulting in qualitative or incomplete results. As global drug trends evolve, particularly with the proliferation of new psychoactive substances (NPS) driven by globalization, basic methods like colourimetric tests are increasingly inadequate (Bruce et al., 2022).

Adequate funding enables drug checking services to implement more sophisticated techniques capable of identifying and quantifying multiple substances within a single sample. However, the financial burden

of adopting such technologies remains a major concern for many community organizations. For instance, Fourier-transform infrared spectroscopy (FTIR), while effective, involves high equipment costs and requires trained personnel, which adds to operational expenses. Staff shortages further exacerbate the issue, often leading to burnout among existing employees (Chayama et al., 2024).

The chronic underfunding of harm reduction services continues to undermine efforts to address the drug poisoning crisis, both locally and globally. Without sustained investment, the capacity of drug checking services to respond effectively to emerging drug threats remains severely limited (Harm Reduction International, n.d.).

Multiple Barriers

Despite the growing need for harm reduction services, several barriers continue to limit the effectiveness and accessibility of Drug Checking Services (DCS). One major issue is the limited involvement of individuals with lived experience, who are often best positioned to interpret and communicate feedback to service users (Bruce et al., 2022).

In the United States, paraphernalia laws create legal obstacles that discourage engagement with these services (Lieberman, 2022). Similarly, while the United Kingdom and Canada have granted legal exemptions allowing individuals to travel to and from drug checking sites, users are still subject to criminalisation, which undermines the intent of these policies. A significant 60% of participants in the Netherlands study cited fear of criminalisation as the primary barrier to accessing drug services, reflecting widespread concern about legal repercussions (Masterton et al., 2020). This fear is compounded by stigma, which can deter individuals from seeking help due to concerns about being identified as drug users. In smaller communities, where privacy is harder to maintain, the lack of confidential settings further discourages participation (Wallace et al., 2022)

Limited Accessibility

Access to drug checking services remains uneven, particularly for individuals living outside urban centers. While some services offer mail-in or online options, these are limited in scope and often operate in legal grey areas, making integration into public health systems challenging (Bruce et al., 2022). Community-based drug checking is a promising innovation, especially in response to the

unpredictable and increasingly toxic synthetic opioid market. These services can provide low-cost, accessible tools—such as fentanyl test strips—and valuable information about drug composition. However, current strategies are not reaching enough people to make a significant impact at the population level. In Australia test strips can be distributed by needle and syringe programs but as these services are often poorly funded, cost remains a significant barrier (Wallace et al., 2022). Supervised consumption sites, though effective, are typically located in inner-city areas and are not available in smaller or rural communities. This geographic disparity creates significant barriers, particularly for individuals with mobility issues or limited access to transportation. As a result, many people who could benefit from these services are unable to access them (Wallace et al., 2022).

Stakeholders

Successful implementation of pill testing involves a wide number of stakeholders each with unique roles, viewpoints, and duties. Some of the important stakeholders are Individuals, Family , Community, Politicians, Media & Police and their power dynamics regarding pill testing are presented in table below;

Stakeholder	Role	Viewpoint on Pill Testing	Duties/ Responsibilities	Power Dynamics
Individuals who intend to use drugs	Primary user of services (Pill Testing)	Overly supportive, consider it a means for harm reduction and safety	Make knowledgeable choices regarding substance use; responsibly utilize testing services	While they have limited institutional power, they are important for the success of service. Effectiveness of the harm reduction will determine their behaviour (Olsen et al.,2019).
Families	Emotionally and practically provide support network	Giving support if it provides safety to the individuals as they might have cultural awareness and morals	Advocating for the relative's well-being and safety Giving a room for personal decisions	Balancing power through advocacy, community and public influence for example, Sue Higginson, a public figure whose brother uses cannabis and methamphetamine, has been instrumental in advocating for him and shaping policy reforms (McClelland, 2025).

Community	Broader Societal	Having mixed support of the safety of the individuals and fear of normalising drug testing.	Leadership on health support for promoting local policy change and public discussion	Impacting the shape of public attitude and indirectly having a change of political will (ADF, 2025).
Politicians	Policy and Decision makers	Having a division of support and opposition of legal, morals that is based on the evidence.	Create laws, funding programs and influence national strategy	Having more power that can implement or restrict pill testing into legislation and Funding (ADF,2025).
Media	Capturing attention of the public and shapes public opinion	Broadly gives view of harm reduction angle, risks, and panics	influencing the perception of risk and public behaviour	High influence on acting like agenda setters for pill testing (Lancaster et al.,2011).
Police	Administering the drug laws and public safety	Often judicious over enhancing the legality and public message	Enforcing the existing laws and collaborating harm reduction services. Targeting drug suppliers and individuals which involves PWUD for seizing large quantities of substances. Providing health and social support to the community (Zakimi et al,.2022).	Having higher institutional power to enhance implementation of the legislation.

Research methods

To inform this report, a comprehensive review of both academic and grey literature was conducted. The literature search focused on sources published from 2017 to the present to ensure the inclusion of the most current findings. Academic databases such as PubMed, Scopus, Web of Science, Wiley, Springer, Sage, and university library systems were utilized to identify peer-reviewed articles. Grey literature was sourced through platforms including Google Scholar, OVAL, legal libraries, and reports from established harm reduction organizations actively involved in drug checking services (drug checking services) and pill testing.

The review process took place between March and May 2025. In addition to database searches, hand-searching of reference lists from relevant articles was performed to identify additional sources. Experts and authors in the fields of harm reduction and drug checking were also contacted to uncover any unpublished or hard-to-find materials not captured through formal search strategies.

As part of the research process, we interviewed a few professionals; Steve Lymb from Drug and Alcohol Services South Australia and Sally Glover from Family Drug Support, through a zoom meeting. We prepared a set of questions relevant to our report and then scheduled a time limit of 15-20 minutes to administer questions to the professionals. We prepared a set of six questions that we felt were necessary for us to get insight on from social service workers. The interview began with an introduction, we briefed them with the project's aim and the purpose of conducting these interviews. Our main aim was to conduct an interview with a semi-formal structure in which we began the interview by asking the professionals regarding their experience and their job title at their work organisations. We strictly adhered to the ethical guidelines of the Community Workers Association and continued the interview professionally.

The following questions were asked in the interview:

1. What were the main driving factors behind introducing pill testing as a harm reduction strategy?
2. What ethical factors must be considered when offering pill testing services, particularly concerning individual privacy and consent?
3. What are your personal/ professional views about implementing pill testing?
4. Could you please share any notable success stories or positive outcomes from pill testing.

5. Could you please tell us about the challenges that can come in the way of initiating pill testing in South Australia?
6. Are you in support of implementing pill testing in South Australia?

(The interview section includes a brief summary of the professionals' responses)

Interview 1-

The first interview was with Steve Lymb, who is the Clinical Manager at Drugs and Alcohol Services South Australia (DASSA). Steve has been working in the Alcohol and Drug sector with SA Health for more than twenty-five years. Since Steve has been working in the field for a long time, he has a lot of insight to share with us regarding our project on pill testing. According to Steve, pill testing can be an efficient way to prevent harm, and early detection and testing before consumption can inform people and act as an early warning system. Moving on, Steve covered the privacy and confidentiality section, in which he elaborated that professionals at these sites provide reassurance about client privacy. As the entire process is confidential, it is essential to have an informed discussion with the attendees and to make them aware of the process for their safety. Personally, and professionally, Steve mentioned that pill testing can be a highly effective model that can help individuals make an informed decision on drug use. Pill testing provides information and acts as a harm reduction approach, which can prevent harm and save lives. He also spoke about the success of the European drug approach in 2019 which has increased safe drug usage. With regard to challenges, Steve spoke about how several factors are involved in the implementation of a new policy. He pointed to the challenges that may come in the way of implementing pill testing, such as political permission, funding for resources, and the community's view. Towards the end Steve expressed his opinion on the implementation of pill testing, and he was in support of it. He explained how pill testing can be beneficial for drug users and as well as the healthcare professionals and law enforcement, as they will become aware of new substances in the market. This will help in quality control of drugs in the market and promote awareness regarding the chemical composition of these substances.

Interview 2-

The second interview was with Sally Glover, she is the manager at Family Drug Support, SA. To begin with Sally expressed her views on pill testing and said that it is a highly effective method to check the potency of various substances and detect the harmful substances before someone can consume them.

Pill testing can help the safety of people and reduce the number of deaths that may be caused due to the adulterants present in drugs. Promoting the informed choice of individuals after they know what the makeup of the drugs is before they consume it. Moving on to the confidentiality and privacy part, Sally highlighted how people may be afraid of their privacy and also be afraid of being criminalised. As in South Australia, any amount of drug possession is illegal and therefore, individuals will be reluctant to voluntarily come in for drug checking with the fear of being arrested or questioned by the police. Therefore, it is necessary to ensure that pill testing sites have an environment that invites people to come in without fear and get the substances tested. Among the success stories, Sally pointed out to various families that she had heard of and learned that parents became aware of new substances and what they are actually comprised of. As a result, many people were able to recognise contaminated substances and felt fortunate to have gained this knowledge before using them.

Speaking about the challenges, Sally discussed similar hurdles as Steve did, additionally emphasising the influence of media coverage and how the media portrays the issue of pill testing. There can be instances where pill testing may be portrayed as a move towards accepting the existence of drug use openly in society and stigmatising this initiative. To conclude, Sally personally expressed how beneficial it will be to implement pill testing in South Australia. However, she also noted that overcoming the challenges involved could be a lengthy process, potentially delaying the initiative.

Social theory/ Approach lenses

System Theory and Pill Testing

Systems theory is a multidisciplinary framework that addresses the interplay of various layers of an individual's environment (Schirmer & Michailakis, 2019). Systems theory offers a hypothetical guide to analyse, comprehend and pinpoint social issues. For social service providers, system theory helps to gain a deeper understanding of an individual's environment and the influence it has on them. At a systems level, strategy such as pill testing not only involves an individual or their family members but also Governments (State, Federal and Local), legislation and regulation, AOD service providers, health workers, the justice and courts system, police, the media and the general public. Each of these parties

have a stake in and may take a position on whether or not pill testing is an appropriate response to the risks of harm arising from the use of illicit drugs.

Working through the lens of the ecological system perspective, implementing pill testing could be useful in saving lives, promoting public awareness regarding prevailing drugs in the community, giving service providers an early warning for any new drugs or adulterated substances in drugs, which will be checked by the health professionals. It may also help workers engage with clients, building trust and demonstrating empathy, and enable workers to provide non-judgmental feedback on risk-taking behaviours. Once the result of the drug test is ready, service users will get a chance to evaluate if this drug is what they thought it was and can decide to not to take it ever again which will be the beginning of making a change in an individual's microsystem.

Gradually moving towards altering the effects on the macro space such as mesosystem and exosystem which includes policy making, legislation and AOD sector health workers, the justice and courts system, police, the media and the general public who will address the problem and come up with a better solution, new policy in AOD sector to protect and provide a better safer choice for people using substances.

Commonly, there have been two effective systems of practice in use for pill testing in Australia which are: Mobile (on-site at venue and festival) and Fixed(permanent) site systems. Mobile systems are temporary portable drug checking services, run through pop-up vans or tents for a specific period at certain locations such as nightclubs or music festivals, where there is a high probability of illicit drug use. This system helps people attending these events to safeguard themselves from unusual/unexpected substances and higher than usual doses through quick and effective results within 15 to 30 minutes (Morgan & Jones, 2019)

Whereas, a fixed site is located at a specific area, such as health centers, supervised injection rooms and other supervised facilities in the community that is accessible for individuals. Data collected from both systems can contribute to early warning systems, offering community members real-time updates regarding the prevailing drug of concern in local drug markets. Notifications can be issued to alert individuals if a particularly hazardous substance is in circulation. Understanding whether drug samples include unforeseen novel synthetic substances provides communities, health and justice services, and

government with essential information that is presently absent. Both systems involve a number of stakeholders, including service users, medical professionals, event planners, law enforcement bodies and the community to function. Good interconnection between stakeholders promotes the strengthening of the pill testing service. In comparison of the services mobile service is quick in result, whereas the fixed site might take a longer time and provides more broader information regarding the sample provided for the test.

Overall, the strength of both system services is harm minimisation focused on advocacy to people regarding their substance use through health professionals and changing the perspective regarding the AOD sector. Therefore, pill testing to be successful requires working on various factors which are connected directly and indirectly.

Harm reduction Approach and Pill Testing

Harm reduction is an approach that prioritises reducing the negative consequences of potentially risky behaviours while maintaining respect for the individual (Chavda et al., 2022). Australia has implemented a harm minimisation approach since 1985, known as the National Drug Strategy, to address issues linked to use of tobacco, alcohol, and other drugs. This approach acknowledges that drug usage is a complicated phenomenon that will never be completely eradicated, and that individuals who utilize drugs should be assisted in gradually minimising harms to themselves and the broader community (AIHW, 2025). The National Drug Strategy (2017-2026) emphasizes harm minimisation through three approaches: demand reduction, supply reduction and harm reduction.

Pill testing is a clear example of harm reduction strategy, which focuses on preventive measures to provide people with a safer and confidential environment to get information about their sample of drugs and also provides service attendees the chance to speak to trusted health professionals and peer workers about the drug or their drug use (AIHW, 2025). As it is well known, there has been so much effort regarding treatment measures for drug users on the national and international level, but it has not had a great impact for change (National Drug Strategy, 2017-2026).

Pill testing is not totally a new approach as it has been implemented in other countries as well as different states of Australia like Victoria, Queensland (now ceased) and the Australian Capital Territory and their reports provide evidence on the effectiveness of pill testing as a harm reduction measure

(Olsen et., 2023). Harm reduction measures not only emphasise preventing a certain harm but also promote awareness among service users about what they are consuming and the harmful effect it has on them. Initiating pill testing will provide information regarding risk of drug overdose, new drug trends and adulteration of drugs. If more people know about the service available and its purpose, there will be a shift in attitude towards the view of drug and alcohol users, making them more inclined to focus on positive aspects and a more inclusive environment for everyone.

Conflict Theory and Pill Testing

Conflict theory centres on the idea that society is structured around inequalities in wealth, power, and status, which lead to ongoing conflict between dominant and marginalized groups. It emphasises how disparities in material conditions—such as those based on class, race, and gender—shape social relations and institutional practices. In social work and the social sciences, conflict theory is valuable because it draws attention to the material realities that influence people's lives and the systemic forces that perpetuate inequality. For practitioners working with vulnerable populations, this perspective reinforces the ethical responsibility to advocate for equity and justice (Ingleby, 2018).

Applying conflict theory to the issue of pill testing reveals the power dynamics and competing interests among various social actors. Although pill testing services have been introduced in jurisdictions such as Victoria, Canberra, Queensland (now ceased), and New South Wales, the practice remains controversial in other states like South Australia. In SA, drug policy is overseen by the Department of Health, but laws are enacted by Parliament and enforced by police. Individuals suspected of drug offenses are prosecuted through the courts, which may impose penalties or offer diversion to treatment (Legal Services Commission South Australia (LSC, 2023).

Pill testing challenges this punitive framework by offering a preventative, health-based intervention that occurs before law enforcement becomes involved. It requires police to temporarily suspend enforcement to allow individuals to test substances and make informed decisions. This shift in approach can be seen as a threat to traditional policing strategies rooted in criminalization and prohibition (Alcohol and Drug Foundation, 2025).

From a conflict theory perspective, opposition from law enforcement and some policymakers may stem from a desire to maintain control and uphold the status quo (Ingleby, 2018). Pill testing could be

perceived as legitimizing drug use and undermining the authority of institutions tasked with enforcing drug laws. Conversely, advocates and social service providers often view pill testing as a tool for empowerment and harm reduction, particularly for marginalized individuals who are disproportionately affected by punitive drug policies (Caldicot et.al, 2023).

Moreover, those with monetary interests in the illicit drug trade may oppose pill testing, as it could reduce profits by exposing adulterated or dangerous substances. Supporters argue that drug use is often linked to broader social and economic conditions, and that harm minimization strategies, such as pill testing, are more effective than punishment in addressing these complex issues (Groves, 2018).

International and national research supports the effectiveness of drug checking in increasing awareness and reducing harm among users (Caluzzi et. al., 2023). By highlighting the structural inequalities and institutional resistance that shape drug policy, conflict theory provides a critical lens through which to understand the ongoing debate around pill testing in Australia.

Models of Pill Testing Available Around The World

Country	Service Provider	Collection Model	Analysis Model	Analysis Methods	Target Population
Australia	NSW Health (Trial)	Mobile	Onsite	FTIR	Festival Goers
Australia	Youth Support and Advocacy Service	Mobile	Onsite	FTIR	Festival Goers
Australia	Queensland Injectors Health Network (QuIHN)	Mobile	Onsite	FTIR and Raman specto	PWUD (**Closed)**
Australia	Queensland Injectors Health Network (QuIHN)	Fixed	Onsite	FTIR	Partygoers
Australia	Pill Testing Australia	Mobile	Onsite	FTIR	
Australia		Fixed	On-site		
Australia	Direction Health Services			UPLC PDA or FTS	PWUD
Australia	Enlighten	Mobile	Off-site; on-site	GC–MS; reagents	Partygoers

Country	Service Provider	Collection Model	Analysis Model	Analysis Methods	Target Population
Austria	Checkit!	Mobile	Off-site; on-site	GC–MS; HP-LC; LC-DAD; UV spectroscopy	Partygoers
Belgium	Modus Fiesta	Fixed; mobile	Off-site; on-site	GC–MS; reagents; TLC	Partygoers
Canada	ANKORS (AIDS Network Outreach and Support Society)	Mobile	On-site	Fentanyl test strips; GC–MS; Raman spectroscopy; reagents	Partygoers
Canada	BCCSU (British Columbia Centre on Substance Use)	Fixed; mobile	On-site	Fentanyl test strips; FTIR	Structurally vulnerable people who use/inject drugs; partygoers
France	SINTES (National Identification System for Drugs and Other Substances)	Mobile	Off-site	GC–MS	PWUD
Germany	Hanover Drobs	Fixed; mobile	On-site	Reagents	Partygoers
Italy	BAONPS (Be Aware On Night Pleasure Safety)	Mobile	Off-site; on-site	GC–MS; LC–MS; Raman spectroscopy	Partygoers

Country	Service Provider	Collection Model	Analysis Model	Analysis Methods	Target Population
Netherlands	DIMS (Drug Information and Monitoring System)	Fixed	Off-site; on-site	GC–MS; GC-NPD; LC-DAD; NMR spectroscopy; reagents; TLC	PWUD recreationally
Portugal	Check!n	Mobile	On-site	Reagents; TLC	Partygoers
Portugal	Kosmicare Association	Mobile	On-site	Reagents; TLC	Partygoers
Slovenia	DrogArt	Fixed	Off-site	Unspecified	'High-risk' PWUD; partygoers
Spain	Ailaket	Mobile	Unspecified	TLC	PWUD recreationally
Spain	Energy control	Fixed; mobile; postal	Off-site	GC–MS; LC–MS; TLC; UV spectroscopy	PWUD recreationally
Switzerland	Streetwork	Fixed; mobile	On-site	GC–MS; HP-LC; LC-DAD; UV spectroscopy	Partygoers
United Kingdom	The Loop	Mobile	On-site	FTIR; mass loss analysis; reagents	Partygoers

Country	Service Provider	Collection Model	Analysis Model	Analysis Methods	Target Population
United States	DanceSafe	Mobile	On-site	Reagents	Partygoers
United States	EcstasyData	Postal	Off-site	GC–MS; reagents	PWUD; drug sellers; club owners; parents
United States	Organizations in Rhode Island	Personal use	Off-site	Fentanyl test strips	Young PWUD
United States	SAC (Syringe Access Collaborative)	Fixed; personal use	On-site; off-site	Fentanyl test strips	PWUD
United States	Syringe services programs in Boston	Personal use	Off-site	Fentanyl test strips	Street-based PWUD
United States	Syringe services programmes in New York City	Personal use	Off-site	Fentanyl test strips	People physically dependent on opioids
United States	Urban Survivors Union	Personal use	Off-site	Fentanyl test strips	People who inject drugs

Table 1: This table has been generated by authors in reference to Maghsoudi et al., 2022.

Drug policy and analysis

International Drug Checking Models

North America Drug overdoses remain a significant cause of premature death in North America. In 2022, the United States reported 109,680 opioid overdose deaths, while Canada recorded 7,537 fatalities, with 2,410 occurring in British Columbia (Falzon et al.,2022). According to the BC Coroners Service, fentanyl and its synthetic analogs accounted for 82% of these deaths, underscoring the dangerous and unpredictable nature of the unregulated drug supply (Falzon et al., 2022).

To combat this public health crisis, various regions in North America have implemented harm reduction strategies, including drug checking services. In Canada, several areas have sought federal legal exemptions from the Controlled Drugs and Substances Act to enable the decriminalisation of personal drug use and possession (Nazlee et al.,2021). However, many people who use drugs (PWUD) remain hesitant to engage with these services, due to privacy concerns and distrust in service providers (Nazlee et al., 2021).

Despite these challenges, drug checking services have expanded their reach and provided growing evidence of their effectiveness. In Canada and the United States, these services play a crucial role in monitoring the unregulated drug market for contaminants and emerging substances, while providing direct benefits to at-risk populations (Maghsoudi et al., 2022). Innovative harm reduction measures, including British Columbia' overdose prevention sites (established in 2016), the safer supply initiative (launched in 2020), and integrating slow-release oral morphine into the provincial PharmaCare plan (since 2017), reflect ongoing efforts to address the evolving crisis (Maghsoudi et al., 2022).

Beyond clinical and community contexts, drug checking services are now accessible at music festivals and specific locations. These services not only reduce the risks of overdose but also serve a wider public health function by identifying changes in the drug supply and informing public health strategies (Falzon et al., 2022).

Europe

Drug checking services were introduced in Europe, targeting young people who used drugs recreationally. To facilitate the implementation of drug checking services, the legal frameworks in some countries enforce paraphernalia laws that create barriers to drug-checking services and reduce the likelihood of users accessing them. In contrast, jurisdictions in the UK and Canada may allow drug-checking services to operate within regulations that enable them to function without fear of police disruption. Individuals travelling to and from these services face the possibility of criminalisation. Those who use drug checking services encounter disadvantages related to varying practices influenced by factors such as policing and service users. In Portugal, individual possession is decriminalised, while Italy has passed legislation allowing local drug-checking services. In the Netherlands, there is an agreement with the public prosecutor that individuals will not be charged when entering and leaving drug-checking services.

Countries like the Netherlands and Austria have established drug checking services as scientific projects to enhance customer service acceptability. According to the Dutch Second Chamber, States General (1999), an official agreement in the Netherlands ensures individuals possessing illicit drugs at testing sites will not face arrest. This agreement enables a testing system that is respected by the police. Brunt (2017) notes that Austria is among the few countries with multiple drug testing services operating in five cities: Bludenz, Dornbirn, Graz, Innsbruck, and Vienna. These services provide drug checking services, counselling hubs, including mobile drug checking at events, primarily focusing on music festivals and clubgoers in Vienna. Results are typically available within an hour at designated drop-off sites (Karden et al.,2017).

New Zealand

New Zealand has established clear legal frameworks that explicitly permit drug checking services while providing strong protections for users. When these services operate in an officially sanctioned and secure environment, individuals are more likely to engage without fearing criminal penalties. This legal assurance is vital for fostering trust and encouraging participation. Conversely, the effectiveness of drug checking services may be undermined in contexts where users perceive a risk of legal repercussions (Hutton, 2022).

In many countries, an increase in drug-related deaths linked to unpredictable and illicit substances has led to the development of community-based drug checking services as part of broader harm reduction strategies. However, legal, and systemic challenges, such as strict regulations on drug paraphernalia, can limit access to these crucial services. Beyond legal hurdles, differences in policing practices and community relationships may further deter individuals from seeking harm reduction assistance (Hutton, 2022).

In contrast, the Netherlands has established an agreement with the public prosecutor ensuring individuals will not be prosecuted for using or visiting drug checking services. This legal clarity supports operations at both music festivals and permanent sites, allowing authorities to monitor the drug supply and address broader public health issues. These services not only provide direct benefits to users but also enhance community safety and health outcomes (Falzon et al., 2022). International examples like this highlight the importance of supportive legal frameworks and offer significant lessons for future advocacy and policy development in harm reduction.

Drug-checking services now offer harm reduction at music festivals and community-based services with fixed permanent sites. They enable monitoring of the drug supply and public health issues, potentially extending the benefits of drug checking beyond those accessing the services (Falzon et al., 2022).

Australia

The Global Commission on Drug Policy has called on the Australian government to adopt comprehensive harm reduction strategies, particularly by improving drug checking services (Buxton et al., 2020). In response to these recommendations, Australia has made notable progress. In 2022, a permanent fixed-site drug checking service was opened in Canberra. Furthermore, in February 2023, the Queensland Government initiated the Drug Harm Checking (DHC) program, a crucial measure designed to reduce drug-related harm and address health inequalities.

These developments reflect an increasing recognition of the social and environmental factors influencing substance use, especially at events such as music festivals. For instance, the Australian Capital Territory (ACT) Government has approved regulated drug checking trials at events such as the Canberra Groovin' the Moo festival (Camilleri et al., 2021). These trials demonstrated the effectiveness of drug checking as a public health strategy to reduce risks and promote safer consumption practices.

Research emphasises the necessity of aligning public health policies with the actual experiences of drug users, particularly those who use anabolic-androgenic steroids (AAS). Many AAS users rely on informal networks to verify the authenticity of their substances due to the prevalence of counterfeit products. Some individuals have faced arrest because of police actions against fake substances, highlighting the shortcomings of current enforcement-focused strategies (Piatkowski et al., 2023).

Additionally, social networks are crucial for harm reduction as they facilitate informal substance testing, information sharing, and establish trust among drug suppliers. Online forums have emerged as vital platforms for users to share testing results, assess brand reliability, and make more informed choices. These community-led initiatives underscore the importance of public health strategies that integrate official drug checking services while also recognising and strengthening peer-driven harm reduction efforts.

Public Opinion

Public opinion has a significant influence on government policy by highlighting important issues, directing political participation, and shaping perceptions of policy effectiveness. Historically, public sentiment has fueled harm reduction initiatives, particularly in tobacco and alcohol regulations. For instance, since the 1990s, substantial public support for reducing tobacco advertising and prohibiting smoking in public areas has led to significant legislative changes across many countries (McAllister et al., 2021). These instances demonstrate how shifts in societal attitudes can lead to meaningful policy reforms.

Public opinion frequently functions like a thermostat, adjusting the course and intensity of policy decisions as societal norms evolve. Increased public concern about issues such as drunk driving and public intoxication has prompted governments to amend alcohol-related laws, reflecting a societal shift toward zero tolerance for harmful or reckless behaviour (McAllister et al., 2021).

The interplay between media and policy is reciprocal. Policy decisions shape media narratives, while media coverage influences public discourse and can either uphold or challenge existing policies. Concerning anabolic-androgenic steroids (AAS), media depictions often underline serious health risks and moral failings, portraying users as outliers. This sensationalised portrayal intensifies public stigma and may misrepresent the complex realities of AAS use (Piatkowski et al., 2025). Such narratives generally oversimplify intricate behaviours, ultimately influencing responses from both the public and policymakers.

Conversely, the discourse on cannabis reform illustrates a more dynamic relationship between public opinion and legislative developments. As public perspectives on cannabis have shifted, so too have the laws, indicating a feedback loop in which citizens react to policy changes, prompting governments to align with public sentiment. Soroka and Wlezien (2010) argue that democratic systems enable this mutual influence, allowing public preferences to shape policy-making within responsive governance frameworks.

Therefore, understanding public opinion is crucial for evaluating the legitimacy and potential impact of public policies. In scenarios where law enforcement finds it challenging to oversee individual behaviors, such as personal drug use, broad public support becomes essential to ensure adherence to policies. Media narratives often reflect public opinions, providing insights into how the broader community perceives new or contentious policies (Matthew, 2011). Therefore, analysing public sentiment through the media can be an effective strategy for predicting policy outcomes.

Analysis

Drug checking services (drug checking services) are essential globally in addressing increasing drug-related issues, particularly the opioid epidemic in North America. In 2022, the United States reported over 109,000 overdose deaths, primarily from fentanyl and its derivatives (Falzon et al.,2022). Similarly, Canada, especially British Columbia, is witnessing a rise in overdose fatalities, prompting public health actions like overdose prevention sites, safer supply initiatives, and community-based drug checking services. However, many people who use drugs (PWUD) hesitate to engage with these services due to fears of criminalisation and concerns regarding their confidentiality. In contrast, European countries such as the Netherlands and Austria have embedded drug checking services within legal frameworks that protect users from prosecution, fostering higher participation levels. Portugal and Italy have embraced progressive approaches, including decriminalizing drug possession, and establishing localised testing programs (Karden et al.,2017). New Zealand stands out for explicitly legalising drug checking services, illustrating how supportive legal settings can reduce perceived risks and boost user confidence.

Australia is also making progress, as evidenced by Queensland's short-lived fixed-site drug checking services, which represent a turn towards more inclusive harm reduction strategies. The presence of drug checking services varies not only with legal setups but also with broader socio-political factors, such as law enforcement strategies, public perceptions, and media representations. The media often perpetuates stigma, particularly regarding drug use (including anabolic-androgenic steroid use), which affects public attitudes toward these services. When legal protections, public education, and user-centered policies align, drug checking services can effectively function as public health interventions, rebuilding trust between PWUD and healthcare systems. To enhance their efficacy, governments must address the structural and cultural barriers that obstruct access to and engagement with these crucial services (Piatkowski et al.,2025).

Recommendations

In addition to being evidence-based, we propose that drug checking must also focus on generating evidence (Trans European Drug Information, 2022; Wallace et al., 2022). This approach enables drug checking services to learn from the evolving drug market, achieve their goals, broaden the scientific foundation of drug checking, conduct thorough evaluations, and enhance their reliability with policymakers. Such local evidence can be crucial in gaining the support of policymakers (Hutton, 2022).

Numerous countries need to reassess the legal status of drug checking to eliminate ongoing grey areas. This uncertainty jeopardises both staff and service users regarding potential legal repercussions and complicates the operations of professionals (Barratt and Measham, 2022) because actions associated with the possession, distribution, management, and transport of illegal drugs may be deemed offences. Additionally, harm reduction consultations that include drug checking could be viewed as promoting future illegal activities. Nonetheless, it is vital to ensure that initiatives aimed at formalizing drug checking do not create excessively high barriers, which could exclude drug checking services (drug checking services), especially for those with limited resources or involving peer support (Hutton, 2022). A range of strategies is essential to address the diverse needs of the various groups that drug checking seeks to assist (Kushakov et al., 2022; Wallace et al., 2022).

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