HARM REDUCTION AUSTRALIA

POLICY BRIEF

PILL TESTING ('DRUG CHECKING') SERVICES IN AUSTRALIA

A public health and harm reduction priority

Executive Summary

Australia is facing a continuing crisis: people are dying, and experiencing other drug-related harms made worse by an unregulated, unpredictable and unsafe drug market. Pill testing services (also known as 'drug checking') enable people who use drugs to understand more about what is in their substances, empowering safer decisions, and connecting them with health and social supports – an intervention that is critical in our current fast-changing, landscape of novel synthetic drugs.

Pill Testing Australia (PTA), under the umbrella of Harm Reduction Australia (HRA), delivers festival-based and fixed-site pill testing services in collaboration with event health providers, non-government organisations including peer-based harm reduction organisations, chemists, and clinicians. These services are practical, person-centred, improve health outcomes, and have the potential to save lives. Evaluations from Australia and overseas show that drug checking is feasible, cost-effective and effective at monitoring emerging risks in drug markets, generates information that can prompt behaviour change, and has popular support among the community (Bowring et al, 2025; Olsen et al, 2023; Salom et al, 2025).

Despite the pressing need for and evidence in support of pill testing, access in Australia remains limited. Services are often restricted to city centres or special events, and can be subject to administrative burden, excessive oversight, and disproportionately high-cost indemnity insurance premiums, leaving most people who use drugs without the option. Progress toward implementation has been piecemeal and inconsistent, with policy advances in some areas offset by stagnation or regression in others. Pill testing must be scaled up nationally, embedded in the public health system, and underpinned by long-term investment in the infrastructure required to sustain it. New, carefully designed and clear laws are needed to ensure people can access these services without risk of prosecution, and to allow services to remain agile and responsive to a rapidly changing, unregulated drug market.

Diverse delivery models of pill-testing should be welcomed, not hindered. Australia showed international leadership in the past by pioneering a flexible and pluralistic approach to needle and syringe programs. Likewise, pill testing services based on a diverse range of models would maximise reach and strengthen effectiveness by ensuring both quality and acceptance among diverse communities of people who use drugs. This policy brief outlines recommendations for pill testing services that are accessible, available, culturally appropriate, founded on health and human rights, and delivered using high quality analytical techniques. It also calls for a national legislative framework that is recognised in the National Drug Strategy (NDS) to support the development and delivery of high-quality pill testing services across Australia.

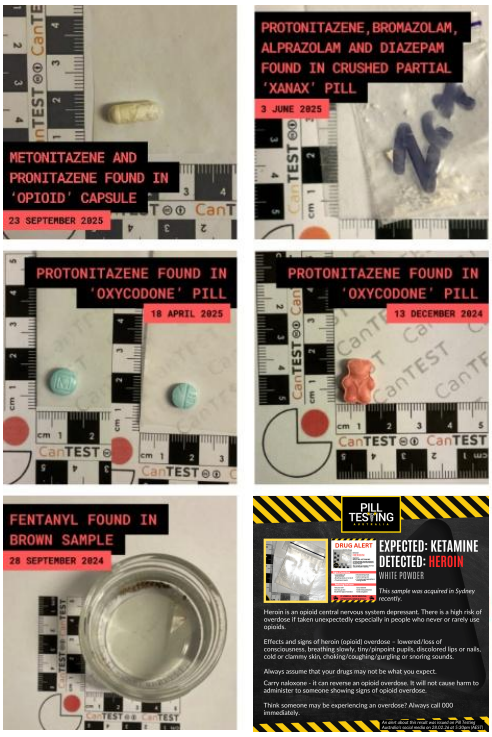
RECOMMENDATIONS

- Establish a national legislative framework for harmonised pill testing service provision
- Invest in real-time drug market monitoring
- Meaningful participation of people with lived-living experience
- Promote public awareness and health literacy

Statement of the Problem

Australia's drug market is unregulated and increasingly dangerous. Evidence of highly potent synthetic drugs, like nitazenes, novel benzodiazepines, and other novel psychoactive substances (NPS), are being detected and causing harm more frequently. These NPS may be adulterants or complete substitutes, but are being sold as MDMA, cocaine, ketamine, heroin, and methamphetamine (UNODC, 2024; UNODC, 2023). These unpredictable substances carry a high risk of overdose, severe toxicity, and death.

This global trend in NPS requires a response in Australia at both a whole-of-Government and whole-of-society level. Pill testing helps close the information gap by identifying drug contents, alerting users to unexpected or high-risk compounds, and providing tailored harm reduction education. Though not a cure-all for an unregulated market, it plays a crucial role in reducing risk and generating Early Warning System (EWS) data to inform public health responses (Brien, 2022; Maghsoudi et al., 2022).



In the absence of regulated markets or reliable product information, people rely on appearance, word-of-mouth, or assumptions to guess the contents and strength of substances.

Of the 3.9 million Australians who use illicit drugs each year (AIHW, 2024), most are making decisions about their drug use with little or no accurate information. In the absence of regulated markets or reliable product information, people rely on appearance, word-of-mouth, or assumptions to guess the contents and strength of substances. This information gap increases the risk of accidental poisoning, overdose, panicked reactions, and other adverse events. In 2022–23, there were 51,413 drug related hospitalisations (excluding alcohol and tobacco) in Australia (Chrzanowska et al, 2025).

As the contents of drugs are sometimes different to what a person intended to take, specialist toxicology is often required in emergency department presentations to determine the substance taken, and the appropriate care pathway (Weber, 2023). The specialist toxicology services provided by the Emerging Drug Network of Australia (EDNA), using blood samples taken from participating emergency departments, plays an important clinical role; their data demonstrate that while many patients presented believing they had taken one drug, toxicology revealed a different or additional substance. However, EDNA is the equivalent of 'an ambulance at the bottom of a cliff' and what is missing is 'the fence at the top', which is the role of pill testing.

Since Australia's first government-endorsed pill testing pilot in April 2018, public understanding and support have grown; after the second trial in 2019, attitudes shifted significantly towards supporting pill testing availability (McAllister et al., 2020). By 2022–2023, 64% of Australians aged 14 and over supported pill testing at designated sites (AIHW, 2024). However, most jurisdictions still lack services; existing programs remain limited in scale, accessibility, and vulnerable to political shifts; and harm reduction funding trails far behind that allocated for the deployment of more punitive measures (Drug Policy Modelling Program, 2024) – a missed opportunity.

Australia has a strong international reputation for harm reduction, yet pill testing, long established in Europe, remains underdeveloped here. Now is the time to expand and innovate these potentially life-saving services. Demand for postal ('low-contact') pill testing is high, with requests to test mail-in samples being the most common enquiry that PTA receives. Internationally, many programs, such as Kykeon, Energy Control, WEDINOS, Get Your Drugs Tested, and Substance, accept public mail-ins with strong uptake and fast turnaround (Brunt et al., 2017; WEDINOS, 2024).

Statement of the Problem (continued)

Partner or hub-to-lab models also enable health and community services to submit samples on clients' behalf, as seen with the UNC Street Drug Analysis Lab, New Mexico Harm Reduction's 'Drug Checking by Mail,' and New York's Drug User Health Hubs. The Test4Pay study found Australians using overseas postal services to detect substitution and adulteration, highlighting their value for market monitoring (Barratt et al., 2024). While point-of-care testing offers immediate advice, mail-in models improve access for people living far from fixed sites or in regions without on-site services.

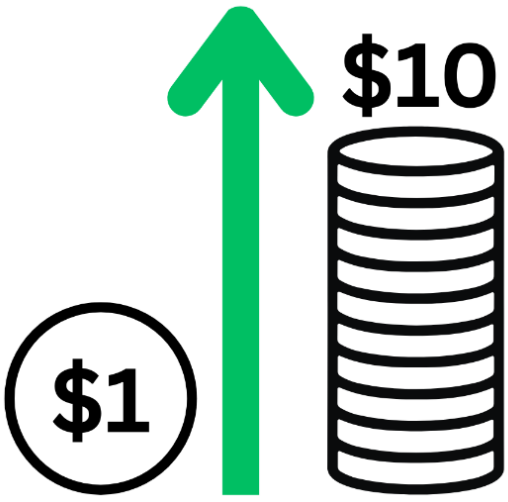
In Australia, however, posting drugs for testing is illegal. At the Commonwealth level, possession, trafficking, and carriage of prohibited substances are criminal offences under the *Criminal Code Act 1995 (Cth)* and the *Customs Act 1901 (Cth)*, which also makes it unlawful to send illicit drugs through the postal system. Licences with strict handling and chain-of-custody conditions exist for forensic and research laboratories, but there is no licensing pathway for harm-reduction pill testing of mailed-in samples.

Substance handling and management at the state and territory level is also strict. By contrast, countries such as Canada and New Zealand have granted legislative or ministerial exemptions that allow accredited facilities to receive and test mailed-in samples. Without similar reforms, Australians face the paradox of being able to access international pill testing mail-in services more easily than domestic ones, underscoring the urgent need for a national framework that can authorise and regulate postal and other low-contact models.

Policy Context & Evidence

Australia's National Drug Strategy is built on harm minimisation, which is meant to balance 'supply reduction', 'demand reduction', and 'harm reduction', but this commitment is not reflected in practical investment. The 2021–22 drug budget report reveals that harm reduction received only 1.6% of total illicit drug policy expenditure (approximately $90 million out of $5.45 billion), while law enforcement accounted for 64.3% and treatment for 27.4% (Drug Policy Modelling Program, 2024). This is despite harm reduction being consistently shown to be the most cost-effective approach to drug policy, with analyses in the ACT estimating a tenfold return on investment for existing programs (ANU & Burnet Institute, 2025).

Evidence supports pill testing as an effective harm reduction strategy. Research shows that for many people who use pill testing services, it is their first time engaging with a health service about their drug use. Individuals often change their drug use behaviour when the analytical results detect or identify unexpected, harmful substances, or high purity substances. Pill testing promotes protective strategies, like not using alone, delaying use, reducing dosage, or discarding unknown substances (Maghsoudi et al, 2022; Olsen et al, 2023). It facilitates safer drug use decisions in real time and helps people consider broader factors like mental state and setting. Importantly, the impacts of pill testing services extend beyond the individuals who access them, with service data used to educate the wider community and contribute to public health responses, including via EWSs.



High-risk detections and unexpected results can feed into EWSs, clinical guidance, and be used to generate public alerts and community notices (Freestone et al, 2025). Pill testing results can strengthen real-time EWS networks, such as the Prompt Response Network (PRN), which provide an established pathway for issuing timely alerts and informing public health campaigns at both jurisdictional and national levels. Beyond issuing alerts, these campaigns play an important role in shifting public perceptions, helping communities understand that pill testing is a preventive health measure that saves lives. By improving health literacy and normalising evidence-based harm reduction, communication strategies can build trust, increase uptake of services, and generate the broad social backing needed to sustain reform.

Common Myths & Misinformation About Pill Testing

1 Pill testing gives a 'green light' to illicit drug use.

Incorrect. Discards, that is, the number of drug samples voluntarily discarded by service users after their drugs are tested, demonstrates that far from giving a 'green light' to drug use, if anything, pill testing creates a moment for people to stop, think, and sometimes choose not to consume a substance. Indeed, the case study below shows that pill testing is promoting safety, dignity and more informed decision making in real world drug use settings.

Case Study
At the 2019 festival trial, *N*-ethyl pentylone (a potent novel stimulant) was detected in seven samples where MDMA was expected. In one example, a client who received these results believed their friend, who was out among the festival crowd, had already consumed what they thought was MDMA. The client was able to locate their friend who was starting to feel unwell, inform them of the results, and encourage them to visit the festival medical tent. The pill testing service engaged with the event medical team, an appropriate clinical response was applied early, and a potential critical incident was averted entirely. Those seven *N*-ethyl pentylone samples that were expected to be MDMA were all voluntarily discarded (Vumbaca et al, 2019). The results were shared with health authorities and the public via media reports (Lowrey, 29 April 2019). Drug checking doesn't impose decisions – it supports them. Discards are one of many outcomes that show how these services promote safety, dignity, and autonomy in real-word drug use settings.

2 Pill testing can't guarantee that a person's drugs are safe.

Correct, it can't – and that's why no pill testing site, or anyone working at it, will ever tell anyone that their drugs are 'safe'. All drug use, even prescribed medicines, comes with a certain degree of risk. Pill testers will only ever tell people what's in a drug and the potential harm they could experience if they or another person were to take it.

3 What happens if pill testing calls a drug 'safe' and the person then has a bad reaction?

No pill testing service will ever declare a drug 'safe'. They will always have a conversation with potential consumers about how to reduce potential drug-related harms. In that discussion, everyone, without exception, is advised that if they want to be 100% certain of avoiding any harms associated with drugs, they'd be better off not taking any drugs.

4 The medical profession is not in favour of pill testing.

Incorrect. As far back as 2005, the Australian Medical Association (AMA) passed a resolution in support of pill testing. The AMA has reiterated this support many times since then.

5 Pill testing is just 'quality assurance' for drug dealers.

Incorrect. Far from providing quality assurance, it shows potential consumers - in front of their eyes, and in real time, the unreliability and variability of the modern illicit drug market. People selling toxic and/or dangerous products are quickly exposed thereby reducing the likelihood that you or someone you know will buy a dangerous pill.

6 Pill testing at music festivals sends the wrong message to people about drug use.

Pill testing only sends 2 messages – both of which are correct.

1. There is no 100% safe way to use drugs.
2. The better informed you are, the better your chance of avoiding harm.

Pill testing does not encourage drug use.

Policy Recommendations

The following recommendations are intended to be complementary and should be considered together, rather than in any order of priority.

1

Establish a National Legislative Framework for Harmonised Pill Testing Service Provision.

Australia requires consistent baseline duties and protections, while jurisdictions and services retain freedom to implement models suited to their communities, as long as they meet the agreed framework. This framework should:

- Indemnify services that operate in compliance with agreed national standards.
- Remove legal barriers to mobile, fixed-site, festival-based, postal and other low-contact models.
- Establish national guidelines, accreditation, and data-sharing protocols, to ensure service quality and consistency across jurisdictions (co-developed with community).

2

Invest in Real-Time Drug Market Monitoring.

Enabling pill testing is an investment in real-time drug market monitoring. Results provide early signals of emerging drug trends, often before harm has occurred, which can feed directly into EWS, inform jurisdictional and national harm reduction alerts, and support evidence-based clinical guidance for emergency departments and alcohol and other drug services.

Drug checking and EWS should go hand-in-hand and be fully integrated into broader public health surveillance and policy tools. While EWS may seem more politically palatable, they are only as effective as the data they draw on. Pill testing provides that data, while also offering a uniquely preventive intervention. Expected benefits and outputs include:

- Strengthening real-time early warning networks and innovations, such as the Prompt Response Network and the “Night Coach” App.
- Ensuring timely, targeted harm reduction alerts and public health campaigns at jurisdictional and national levels.
- Developing and disseminating clinical guidance for frontline health and AOD services informed by pill testing data.

3

Meaningful participation of People with Lived-Living Experience.

If pill testing services are to be effective, people with lived-living experience of drug use are essential to the design, delivery, and evaluation. The involvement of people with lived-living experience should be prioritised in:

- Representation in governance structures and oversight bodies.
- Active roles in health education and peer-based harm reduction outreach.
- Participation in service co-design, training, and evaluation processes.
- Exploration of pathways beyond mere consultation, towards genuine collaboration and empowered participation.

4

Promote Public Awareness and Health Literacy.

To shift public perceptions and support uptake of services, investment is needed in clear, accessible, and inclusive communication strategies. These should include:

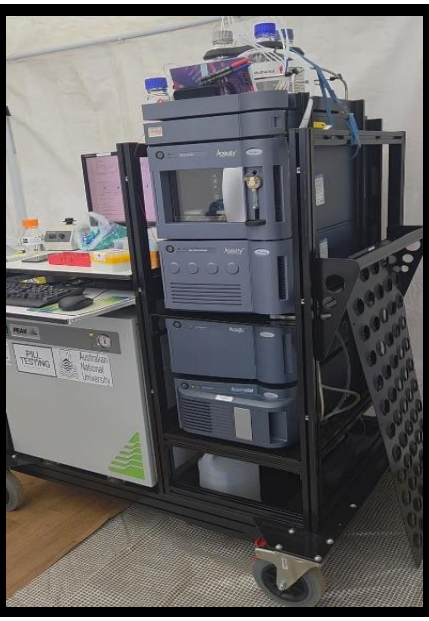
- Campaigns that highlight the role of pill testing in preventing harm and saving lives.
- Educational resources co-designed with people who use drugs, health professionals, and community stakeholders.

Implementation Considerations

To date, pill testing in Australia has only been delivered in limited contexts. Moving forward requires more than isolated trials. A nationally coordinated approach should provide the legislative clarity, investment, and quality standards needed to support diverse delivery models, to scale, across jurisdictions.

Integration with real-time monitoring and early warning systems would strengthen public health intelligence and allow for timely responses to new drug trends. Embedding people with lived and living experience in governance, co-design, and service delivery will ensure services remain credible, accessible, and culturally appropriate. Public communication strategies can further improve health literacy and shift perceptions, building trust and acceptance of drug checking as a preventive health measure.

With Commonwealth leadership and sustained partnership across states, territories, clinicians, chemists, and peer-based organisations, Australia can establish a coherent, credible, and life-saving national system.



5 Ways Our Recommendations Deliver Public and Policy Wins

- **Prevents Drug-Related Overdoses and Other Harms** by supporting people to make more informed decisions through identifying dangerous and unexpected substances, high purity and the provision of real-time, life-saving information.
- **Delivers Better Value for Health Spending** by preventing drug-related emergencies, pill testing reduces pressure on hospitals, ambulance services and frontline services.
- **Strengthens Public Health Intelligence and Early Warnings** through high-quality, real-time data that can inform alerts and shape proactive responses to emerging drug trends – especially critical in a fast-changing synthetic drug landscape.
- **Demonstrates Political Leadership in Evidence-Based Reform** via practical, proven, and politically achievable reform that aligns with the National Drug Strategy and meets growing public demand for pragmatic, health-led approaches.
- **Builds Trust and Engagement with People Who Use Drugs** by investing in peer-led, culturally safe pill testing services that strengthen the relationship between health systems and communities.

References

Australian Institute of Health and Welfare 'AIHW' (2025) 'National Household Drug Survey 2022-23' <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/contents/about>

Barratt, M. J., Ball, M., Wong, G. T. W., & Quinton, A. (2024). 'Adulteration and substitution of drugs purchased in Australia from cryptomarkets: Findings from the Test4Pay study' *Drug and Alcohol Review*. https://doi.org/10.1111/dar.13825

Bowring A, Olsen A, Tidhar T, Bourke K, Bailey C, Keane H, Dietze P, Scott N. (2025) Australian Capital Territory harm reduction cost-benefit analysis. Canberra ACT: Australian National University and Burnet Institute

Brunt, T. M., Nagy, C., Bücheli, A., Martins, D., Ugarte, M., Beduwe, C., & Ventura Vilamala, M. (2017). *Drug testing in Europe: Monitoring results of the Trans European Drug Information (TEDI) project*. Drug Testing and Analysis, 9(2), 188–198. https://doi.org/10.1002/dta.1954

CanTEST, 'Test Results' available from monthly summaries from 21 July 2022-20 April 2025 <https://cantest.com.au/results/>

Chrzanowska, A., Man, N., Sutherland, R., Degenhardt, L., & Peacock, A. (2025). *Trends in drug-related hospitalisations in Australia, 2003–2023: Executive summary*. National Drug & Alcohol Research Centre, UNSW Sydney.

Forensic and Clinical Toxicology Association (FACTA) Drug Checking Committee, 'FACTA Best Practice Guidelines for Drug Checking v 1.6' (16 April 2023) <https://www.facta.org.au/wp-content/uploads/FACTA-Best-Practice-Guidelines-for-Drug-Checking_2023FINAL.pdf>

Freestone J, Franklin E, Broadbent E, Brown J, Harvey C, Barrat MJ, Lyons T, Camilleri A, Mason C, Ezard N, Clifford B. Emerging Best Practices in the Design and Dissemination of Public Drug Warnings. National Centre for Clinical Research on Emerging Drugs, UNSW Sydney; 2025. DOI: https://doi.org/10.26190/unsworks/30774

Lowrey, Tom, 'Second pill-testing trial at Groovin the Moo hailed a success as partygoers dump dangerous drugs', *ABC News* (29 April 2019) <https://www.abc.net.au/news/2019-04-29/pill-testing-trial-at-groovin-the-moo-for-second-time/11053350>

Maghsoudi N, Tanguay J, Scarfone K, Rammohan I, Ziegler C, Werb D, et al. Drug checking services for people who use drugs: a systematic review. *Addiction*. 2022; 117: 532–544. https://doi.org/10.1111/add.15734

Mcallister, Ian & Makkai, T.. (2020). The effect of public opinion and politics on attitudes towards pill testing: Results from the 2019 Australian Election Study. Drug and Alcohol Review. 40. 10.1111/dar.13211.

Olsen A, Baillie G, Bruno R, McDonald D, Hammoud M, Peacock A (2023). CanTEST Health and Drug Checking Service Program Evaluation: Final Report. Australian National University: Canberra, ACT. <https://directionshealth.com/wp-content/uploads/2023/10/CanTEST-Final-Evaluation-Report_2023.pdf>

Olsen A, Wong G, McDonald D. (2019). ACT Pill Testing Trial 2019: Program Evaluation. Australian National University: Canberra ACT.

Pill Testing Australia, 'Evaluation & Reports' https://pilltestingaustralia.com.au/evaluation-reports/

Salom, CL, Thomas, N, Kocar, S, Lilly, K, Barber, T, Juckel, J, McLachlan, J, Robinson, M, Peacock, A, Bruno, R and Olsen, A. (2025). Final Report: Evaluation of Queensland Drug Checking Services 2025. Institute for Social Science Research, The University of Queensland. Brisbane, Australia.

UNODC, 'World Drug Report 2024: Key Findings and Conclusions': <https://www.unodc.org/documents/data-and-analysis/WDR_2024/WDR24_Key_findings_and_conclusions.pdf>

UNODC 'Synthetic Drug Phenomenon' (2023) <https://www.unodc.org/res/WDR-2023/WDR23_B3_CH1_Synthetic_drugs.pdf>

Vumbaca, G., Tzanetis, S., McLeod, M., Caldicott, D. (2019). Report on the 2nd Canberra GTM Pill Testing Service. Harm Reduction Australia.

Weber C, Smith J, Soderstrom J, et al. Analytically confirmed illicit and novel psychoactive drug use in Western Australian emergency departments: initial results from EDNA. Clinical Toxicology. 2023;61(7):500–508.

WEDINOS. (2024). *PHILTRE annual report April 2023 – March 2024*. Cardiff: Public Health Wales/WEDINOS. (Annual surveillance via postal submissions) <https://phw.nhs.wales/publications/publications1/wedinos-philtre-april-2023-march-2024/?utm>

Date Adopted: March 2026

Due for Review: September 2026

This policy brief is part of a series that provides summaries of evidence-based best practices and/or policy options on key harm reduction issues. Find the rest of the series here: https://www.harmreductionaustralia.org.au/