Harm Reduction Australia

NATIONAL WASTEWATER DRUG MONITORING THROUGH A HARM REDUCTION LENS

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A HARM REDUCTION DILEMMA: SURVEILLANCE, PROHIBITION, AND PRAGMATISM

FOR AN ORGANISATION LIKE HARM REDUCTION AUSTRALIA (HRA), WASTEWATER DRUG MONITORING PRESENTS A FUNDAMENTAL DILEMMA.

At its core, the National Wastewater Drug Monitoring Program (NWDMP) is a surveillance-based system. It monitors population-level drug consumption without consent and sits within a broader policy environment that continues to criminalise people who use certain substances.

In doing so, it risks reinforcing the legitimacy of prohibition-based drug laws and the idea that law enforcement is an effective or appropriate primary response to drug use in society.

HRA fundamentally rejects this premise.

At HRA we believe that the current system, in which some substances are legal to produce, sell, and consume, while others are arbitrarily criminalised, is deeply contradictory. These legal distinctions are not grounded in consistent assessments of risk or harm. Instead, they are a central driver of what are commonly described as “drug-related harms” which are often more accurately understood as drug policy and law-related harms.

From this perspective, wastewater monitoring sits uncomfortably (and at times in direct opposition) to harm reduction principles. By generating data that is frequently interpreted through a criminal intelligence lens, it can contribute to narratives that justify continued prohibition and enforcement, rather than challenging the structural causes of harm.

At the same time, harm reduction is inherently pragmatic.

The NWDMP is now an established national program, with no indication that governments intend to scale it back. In this context, disengagement is not a sufficient response. Instead, there is a clear need for critical analysis that seeks to:

- expose the limitations and risks of wastewater monitoring
- challenge enforcement-dominated interpretations
- and reorient the use of this data toward health, human rights, and harm reduction outcomes.

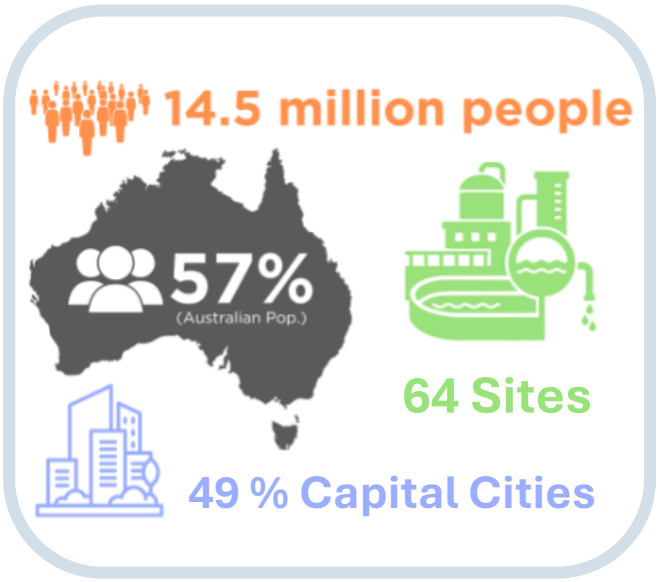
This paper therefore takes a dual position. It acknowledges that wastewater monitoring is not a neutral or benign tool, and that it may itself contribute to harm. But it also engages with the most recent report (Report 25) to minimise those harms and improve the potential for this data (while it continues to be collected) to be used in ways that provide better outcomes for people who use drugs and the broader community.

Without this intervention, there is a real risk that wastewater data will continue to entrench punitive, prohibition-based approaches and further marginalise the very populations most affected by drug policies.

HOW DOES NATIONAL WASTEWATER DRUG MONITORING PROGRAM WORK?

The NWDMP is a long-running surveillance initiative led by the Australian Criminal Intelligence Commission (ACIC). It tracks population-level drug consumption by analysing wastewater samples from sewerage treatment plants around the country. Wastewater testing is well established internationally, and Australian laboratories involved in the program meet global standards for accuracy and comparability.

Since 2017, the NWDMP reports have typically been published three times a year within the following windows: February – April, June – August and October – November. In 2025, however, only one report was published (Report 24) in August 2025. The latest ACIC wastewater report, released in April 2026, is Report 25, and this report forms the basis of this analysis. These reports are intended to provide insight into national and regional drug trends, emerging substances, and changes in illicit drug markets over time.



Report 25 compares consumption data from past reports with wastewater samples collected over seven days at regional and capital city sites between December 2024 and October 2025. Sampling occurred in both regional and capital cities in the December, April, and August data collections, while only capital cities were included in February, June, and October data collections. In August 2025 (the most recent data collection point that included samples from both regional areas and capital cities) the population coverage was 14.5 million people, representing 57% of the Australian population.

RECORD CONSUMPTION DOES NOT AUTOMATICALLY EQUAL RECORD HARM

The headline finding from Report 25 is that total estimated consumption of Australia's four major illicit drugs – methylamphetamine, cocaine, MDMA (ecstasy), and heroin – increased to 26.8 tonnes between August 2024 and August 2025 (when both regional and capital cities were sampled), a 21% increase from the previous year.

Reported annual increases included:

- Cocaine: ↑ 17%
- Methylamphetamine: ↑ 23%
- Heroin: ↑ 23%
- MDMA: showed a wave-like pattern, peaking in late 2024 at 20% before moderating.

Methylamphetamine consumption reached its highest recorded level since the program began, cocaine also reached a national record high, and heroin reached record levels in capital cities. In addition to the four major illicit drugs listed above, ketamine also reached record levels. Australia was reported as the second-highest consumer of methylamphetamine globally, behind only the United States, and fifth highest globally when comparing average doses of methylamphetamine, cocaine, MDMA and heroin per 1,000 people per day.

The report presents this as evidence that Australia's illicit drug markets are expanding. From a harm reduction perspective, however, these findings need to be interpreted carefully. Higher consumption may indicate market expansion, but it does not by itself tell us whether harms have increased, for whom, in what settings, or with what consequences. Wastewater data measures the presence of drug metabolites in a catchment. It does not show:

- purity
- patterns of polydrug use
- routes of administration
- overdose risk
- treatment engagement
- social, economic, legal or structural drivers
- environmental and setting factors such as heat, crowding, or availability of support.

Without that context, there is a danger that "record highs" become shorthand for enforcement urgency rather than a call to strengthen health and harm reduction responses.

WHAT WASTEWATER MONITORING CAN TELL US... AND WHAT IT CANNOT

Wastewater monitoring arguably has some strengths. It offers large population coverage, uses standardised international methodology through the SCORE network, provides a longitudinal dataset spanning almost a decade, enables city-versus-regional comparisons, and may be useful for early warning and emerging threats.

But its limitations are equally important...

First, the data is collected only at specific points in the reporting cycle, which means it can miss rapid market shifts, short-term spikes, seasonal changes, and local fluctuations.

Second, wastewater analysis is targeted. It only detects substances laboratories are already looking for. This means emerging drugs, including nitazenes and novel synthetics, may be missed. Dilution also makes it harder to detect low levels of use, especially for very potent substances. This is because these drugs can produce strong effects from extremely small doses that leave only tiny traces in wastewater, sometimes below the limits of detection even when harm in the community could be significant.

Third, wastewater analysis cannot distinguish between prevalence and intensity of use. An increase in detected consumption may indicate that more people are using a substance, that existing users are consuming larger quantities, or that they are using more frequently. These distinctions matter because each pattern has different implications for understanding and responding to potential harms.

Fourth, the data cannot distinguish between different routes of administration or motivations for use. Smoking, swallowing, snorting, and injecting can involve very different potential risk profiles, but wastewater analysis cannot capture those distinctions.

Fifth, it cannot reliably differentiate illicit from prescribed drug use in some categories. For example, prescribed dexamphetamine or lisdexamfetamine may affect interpretation of amphetamine data, while prescribed oxycodone or fentanyl may complicate interpretation of opioid-related findings.

Sixth, population fluctuations such as tourism, major festivals and events, or transient workforces may distort regional estimates.

Most importantly, wastewater monitoring does not measure harm. On its own, it cannot tell us about overdose, ambulance attendances, emergency department presentations, blood-borne virus risks, housing instability, policing impacts, or access to harm reduction services. For that reason, wastewater data should never be interpreted in isolation. It needs to be triangulated with other alcohol & other drugs, public health and community data if it is to support meaningful policy discussion.

WHY THE FRAMING OF THE WASTEWATER REPORTS MATTER

Although Report 25 states that the data can be used to "inform harm reduction strategies", its analytical emphasis sits much more heavily on supply reduction, organised crime threat narratives, and market economics.

This is visible in the report's focus on:

- record global supply of cocaine and methamphetamine
- new drugs in new forms, including liquids and impregnated materials
- domestic manufacture of methamphetamine and possible growth in MDMA production
- falling wholesale prices due to oversupply
- the resilience and sophistication of organised criminal networks
- the estimated street value of drugs consumed.

The report states that the combined estimated street value of the four major illicit drugs monitored through wastewater analysis increased from $11.5 billion to $14.3 billion, with methylamphetamine representing 77% of total expenditure.

HRA recommends caution with these kinds of "street value" claims because illicit markets are inherently unstable and hard to quantify, and such figures often reinforce alarmist or enforcement-led narratives rather than improving understanding of actual drug and drug policy-related harm. These inflated estimates can also be used to justify substantial public expenditure on supply reduction and law enforcement responses, despite ongoing debate about the effectiveness and cost-effectiveness of such approaches in reducing drug-related harm. The figures are also far removed from the actual cost incurred by organised crime from interdictions of drugs often highlighted by law enforcement.

What is largely missing from the report is sustained attention to the importance of:

- overdose prevention and response
- pre-consumptive analysis and contextual data available from drug checking (pill testing)
- safer supply
- supervised consumption infrastructure
- peer-led harm reduction services
- community-level impacts
- equity issues, especially in regional and remote areas
- the broader socio-legal conditions that produce drug-related harm.

From a harm reduction perspective, this imbalance matters. The issue is not simply that the report contains enforcement language; it is that an enforcement-centred reading of wastewater data risks obscuring the health and social responses most needed.

THE NATIONAL FINDINGS, VIEWED THROUGH A HARM REDUCTION LENS

Report 25 contains strong evidence that Australian drug markets have not only recovered from COVID-related disruptions but have continued to grow and diversify. The strongest signal is the sustained growth in stimulant consumption, particularly methylamphetamine and cocaine.

The report links these trends to global and domestic supply-side factors, including record production in the Americas and Asia, diversified trafficking routes, sophisticated criminal networks, domestic methamphetamine manufacture, and possible growth in MDMA production. It also identifies demand-side drivers such as resilient demand, stable or expanding user demographics, limited treatment options for methamphetamine dependence, and socio-economic, legal, and structural conditions that perpetuate drug-related harms.

These findings are important, particularly the lack of treatment options acknowledged by the report is compounded by the lack of any real increase in funding for demand and harm reduction across Australia. But from a harm reduction standpoint, it is the policy implications of these findings that are most important, and this is where the report's analysis gets it wrong...

If consumption is rising across multiple drug classes despite decades of supply-side enforcement, then the evidence points not to the need to do more of the same, but to the failure of enforcement-led approaches to reduce supply, demand or prevent harm. Record consumption should therefore be read as evidence of the urgency of scaling up non-punitive, evidence and rights-based harm reduction and drug policy reform responses rather than as a reason to simply "double-down on the status quo".

GEOGRAPHIC TRENDS SHOW WHY PLACE-BASED HARM REDUCTION MATTERS

Report 25 identifies clear geographical differences.

In capital cities, the report found:

- higher consumption of cocaine, heroin, and ketamine
- record capital-city heroin consumption in October 2025
- consistently higher ketamine consumption than regional areas.

In regional areas, it found:

- higher per capita consumption of methylamphetamine, cannabis, and oxycodone
- both capital city and regional methylamphetamine consumption exceeding all previous annual averages
- regional heroin consumption in August 2025 was the second highest on record.

The report also highlights several jurisdictional changes that reinforce the need for place-based responses. Tasmania recorded the largest annual increase in methylamphetamine consumption, followed by the Northern Territory and the ACT. Cocaine increased sharply in the Northern Territory and Western Australia, heroin rose substantially in the Northern Territory, and MDMA increased significantly in New South Wales.

These differences matter because they point to distinct local environments and contexts for the emergence of potential risks and harms. They support the case for place-based harm reduction responses rather than a one-size-fits-all national approach.

Although better access to the types of harm reduction services outlined below are needed in across the board, for regional areas in particular, the findings underscore the need for:

- mobile harm reduction services
- broader take-home naloxone access
- culturally safe responses for Aboriginal communities
- improved access to drug treatment services
- stronger peer-based and community-led service infrastructure.

A harm reduction reading of these trends asks not just where consumption is highest, but where support is thinnest, where service access is poorest, and where structural disadvantage compounds potential risks.

WHAT THE FINDINGS IMPLY FOR CURRENT AND EMERGING HARMS

The report's stimulant findings are especially significant. Highest recorded levels of methamphetamine and cocaine, together with high levels of MDMA and ketamine consumption, suggest the potential for increases in stimulant-related harms, including cardiovascular complications, overamping, hyperthermia, sleep deprivation, acute distress, and riskier patterns of repeated use. Like all drug-related harms, the risk of these stimulant related harms can be reduced, yet stimulant-specific harm reduction infrastructure remains severely underdeveloped and under-resourced in Australia.

Similarly, rising heroin consumption, particularly in capital cities, may point to changing opioid market dynamics. This strengthens the case for overdose prevention and response measures, including naloxone access, peer-based outreach, drug checking (pill testing) services and supervised consumption services, and better linkage to voluntary, evidence-based treatment and support.

Again, wastewater data cannot prove these harms directly. But it can help identify where harm reduction preparedness may be most urgent – provided the data is interpreted through a harm reduction lens rather than used mainly to reinforce criminal market narratives.

TOP 5 IMPLICATIONS FOR HARM REDUCTION POLICY AND ADVOCACY

From a harm reduction perspective, the most important implications of Report 25 extend beyond the findings themselves to the broader policy environment in which they are being interpreted.

1. **Rising consumption strengthens the case for harm reduction and exposes the failure of prohibition.**

   Record consumption across multiple substances demonstrates that enforcement-led approaches are not reducing demand. Instead, they sustain unregulated markets and associated harms. This reinforces the need for drug law reform, safer supply models, supervised consumption services, drug checking (pill testing), naloxone expansion, and accessible, evidence-based treatment.

2. **Wastewater monitoring must be understood as a political tool, not a neutral dataset.**

   The program's surveillance basis and its positioning within a criminal intelligence framework mean that its outputs are not value-free. Without critical interpretation, wastewater data risks reinforcing prohibition, legitimising enforcement responses, and obscuring the role of drug laws themselves in producing harm.

3. **Drug-related harms are primarily policy-driven harms.**

   The criminalisation of some drugs and not others creates unsafe markets, drives stigma, limits access to care, and increases risk. Wastewater data that focuses only on consumption, without acknowledging these structural drivers, risks misdiagnosing the problem and reinforcing harmful policy settings

4. **Regional inequity is a central harm reduction issue.**

   Higher consumption of several substances in regional areas, combined with reduced access to services, highlights the need for targeted investment in:
   - mobile harm reduction services
   - take-home naloxone distribution
   - culturally safe responses for Aboriginal communities
   - expanded rural and remote treatment access.

5. **Harm reduction must be embedded in how wastewater data is interpreted and used.**

   If wastewater monitoring is to continue, it must be reframed to include:
   - overdose prevention and response
   - drug checking (pill testing) and early warning systems
   - safer supply considerations
   - community-level impacts
   - socio-legal determinants of health
   - lived and living experience perspectives.

Without this shift, wastewater monitoring will continue to amplify enforcement narratives and deepen the harms associated with prohibition.

CONCLUSION: WASTEWATER MONITORING, PROHIBITION, AND THE NEED FOR A HARM REDUCTION LENS

On its face, Report 25 appears to provide strong evidence that Australia's drug markets are continuing to grow and diversify, with record methylamphetamine consumption, record national cocaine and ketamine consumption, and record capital-city heroin consumption. But the most critical issue is not simply what the data shows – it is how that data is used.

From a harm reduction perspective, wastewater monitoring cannot be separated from the broader policy context in which it operates. As a surveillance-based tool embedded within a prohibition framework, it risks reinforcing the very systems that produce drug-related harm.

In this context, wastewater monitoring sits in tension with harm reduction principles. However, as long as the program continues to operate, there is a responsibility to engage with it critically and pragmatically. For HRA this means:

- challenging enforcement-led interpretations
- exposing the limits of consumption-based data
- and advocating for its use in ways that prioritise health, dignity, and human rights.

Without this intervention, wastewater data will continue to be used to justify punitive responses that have already proven ineffective. With it, there is at least the potential to redirect the conversation away from surveillance and punishment, and toward evidence-based, non-judgemental, and health-centred approaches.

Harm Reduction Australia (HRA) is a leading national, not-for-profit advocacy organisation with a primary focus on reducing the potential harms associated both with illicit drug use and our drug laws and policies.