

# Report on the 2<sup>nd</sup> ACT GTM Pill Testing Pilot: a Harm Reduction Service

Prepared by Pill Testing Australia

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The Pill Testing Australia\* consortium consists of:

Harm Reduction Australia

Australian Drug Observatory, Australian National University

DanceWize, Harm Reduction Victoria

Students for Sensible Drug Policy Australia



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\* Pill Testing Australia is convened and underwritten by Harm Reduction Australia and since the 2<sup>nd</sup> Pilot was conducted has been expanded to include Family Drug Support, Australian Drug Law Reform Foundation, Law Enforcement Action Partnerships, Tim Harvey Consulting, Alcohol, Tobacco and other Drugs Council Tasmania, Canberra Alliance for Harm Minimisation and Advocacy and Directions Health ACT.

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## RECOMMENDATIONS & FUTURE DIRECTIONS

1. In light of the successes of the Australian model of a health and medically supervised pill testing, conducted pro bono on 2 consecutive years by Pill Testing Australia (PTA) in Canberra, that funds be released from the ACT Government to provide actual services at future festivals in the ACT;
2. That consideration be given to the to the implementation of pill testing services in all future ACT Government negotiations with festival promoters and other relevant stakeholders where drug-related harm might be anticipated, and that the issue of permitting appropriate signage for the service be addressed;
3. That all other Australian State and Territory governments give further considerations to accepting Pill Testing Australia's offer of one free pill testing pilot to assess the suitability of pill testing services at all festivals in their jurisdictions.
4. That the ACT Government utilise the significant practical and strategic knowledge of the Pill Testing Australia consortium to introduce a pilot fixed site pill testing service within the ACT;
5. That the Federal Government take a national leadership role in advancing and funding organisations such as Pill Testing Australia to provide pill testing services across Australia;
6. That all levels of government work together with the Pill Testing Australia consortium and other interested parties to establish a national public early warning system, including an integrated alert system, to allow important analytical information from pill testing services to be openly shared with paramedics and other health and emergency services in festivals, so as to avoid the risk of patrons' experiencing drug-related harm at festivals in real time;
7. That an Australian technical advisory group of relevant agencies from multiple jurisdictions be convened to provide the best technical advice appropriate to pill testing in the Australian environment;
8. That PTA be supported in its efforts to become part of an international network of pill testing services to ensure best practice is maintained in Australia;
9. That consideration be given by the ANU to the establishment of a Harm Reduction Centre of Excellence, building upon the experience and expertise of staff involved in the establishment and provision of this program, and;
10. That the ACT Government provide access to data and materials relating to illicit substances that will allow PTA to improve and validate pill testing methods in the lead-up to future events.

## ACKNOWLEDGEMENTS

We would like to thank the following people and organisations for their support and assistance:

- Those people at the festival who came forward and voluntarily signed waivers, utilised the testing service, participated in the data collection, and showed enormous good will for the pilot. This report could not have been written without their co-operation, support, and trust. The service has always been about putting patrons first, and we are committed to continuing that approach.
- The staff on the day – the chemists, the medical clinicians, the peer-based harm reduction workers and the evaluation teams. As was the case for the 1<sup>st</sup> Pilot Testing Pilot, no funds were requested or provided by the ACT Government, or any other government, for the development or delivery of the service. The pilot was completely self-funded by members of PTA and their supporters. This included the more than 35 volunteers funding themselves to attend and work at the festival, with volunteers coming from Canberra, Sydney, Melbourne and as far away as Perth to assist PTA. Without their dedication and commitment, the efforts of PTA would amount to nothing.
- The support of the ACT Government in sanctioning the 2<sup>nd</sup> pilot program and endorsing our access to the festival grounds.
- The *Groovin the Moo* Festival promoters, Cattleyard Promotions, and their staff and contractors who run a world class festival with robust health and safety standards. You gave us incredible support and were able to provide PTA with an increased area within the medical precinct of the festival grounds; and the site crew who assisted during the set up process.
- It is important to understand that without the incredible work done by Steph Tzanetis, David Caldicott, Mal McLeod and their respective service delivery, medical and chemist teams – the pill testing service offered would not have been possible.
- Penny Hill and Virginia McKinnon for team leading the Brief Intervention service delivery.
- Tigertail for their support and development of the PTA operational and risk assessment plans.
- The ambulance, police officers and other emergency service stakeholders who provided much needed support beforehand, and on the day.
- The many pill testing and harm reduction advocates for their commitment and drive over many years to see pill testing introduced in Australia.
- The Bruker Corporation in loaning our consortium a 2<sup>nd</sup> machine to use at the festival.
- The Perkin Elmer Corporation for providing their machine and technicians and collaborating on the offsite testing process.
- All the relevant ACT Government officials, political advisors and ministers for their on-going support to work through policy and political issues, on their merits, in a constructive and positive manner.
- The many volunteers who have signed up to provide their services in jurisdictions, where unlike the ACT, their government's support is not forthcoming at present. We greatly respect and appreciate your patience while we work very hard to ensure that your aspirations become reality.
- Those in the wider community who were donated much needed funds and were willing to show public support for a pilot and for the many who had private discussions over the merits or otherwise of such a harm reduction service within their jurisdiction, and further afield.
- The volunteers from We Are The Loop Australia, both those who attended, and those who were invited but unable to attend.
- The incredible ongoing advice and support from Tony Trimmingham, Annie Madden and the whole HRA Board, as well as Tim Harvey for always sharing his unmatched festival and marketing expertise.
- And finally, for our critics, who often can be persuaded, and occasionally raise a valid concern which allows us to refine and improve the provision of this health service.



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# OVERVIEW AND RATIONALE FOR THE PILOT

## EXECUTIVE SUMMARY

Preparations for the 1<sup>st</sup> Pill Testing Pilot in the ACT in 2018 were understandably sensitive and challenging, given it was to be the 1<sup>st</sup> government sanctioned pill testing program to ever take place in Australia. Following the success of that pilot, the preparations for the 2<sup>nd</sup> Pill Testing Pilot in the ACT were considerably easier, as all participants were more familiar with the process and the roles of the key stakeholders.

This approach allowed Pill Testing Australia (PTA) to better prepare for the event, and to ensure that we were able to meet the expected higher demand for the service from patrons.

In summary, PTA successfully implemented a 2<sup>nd</sup> Pill Testing Pilot at the Groovin the Moo Festival in Canberra where approximately 20,000 patrons gathered over the course of the day.

Preliminary key outcomes:

- The pill testing medical service tested 170 substances for 234 participants, some arrived individually and some as groups, twice the number of those last year;
- MDMA was the predominant substance identified and to a much lesser extent cocaine, ketamine and methamphetamine;
- Seven dangerous substances containing *N*-ethyl pentylone were also identified, with patrons being alerted to the dangers of the substance. On learning about the potential harms from the substances they possessed, all patrons used the amnesty bin to discard them;
- Health warnings and safety information were provided to all patrons presenting at the pill testing service;
- The trial had the full support of Groovin the Moo promoters, the ACT Government, including Police & Health services, as a critical harm reduction measure, and;
- The service was very well-received by patrons with many providing feedback that they would change their behaviour by reconsidering or taking less of the substances they had in their possession;

One additional key outcome of the pill testing service was its ability to work closely with ACT Medical Services at the festival. The co-location of the pill testing service within the medical facility allowed for the real time exchange of information between all parties.

PTA also conducted Key Stakeholder and Media tours on the day before the festival to allow people with significant interest in the pill testing service to meet with volunteers, see the set-up of the service and ask questions of PTA on the delivery and processes involved in the service. Both these tours were well attended, and the feedback was very positive.

## INTRODUCTION & PRINCIPLES

No matter how strong our desire for people not to use drugs or our efforts at education and prevention, people will continue to use drugs. This is not to undervalue drug education and prevention programs, but rather to be realistic about their impact and the evidence of their effectiveness, particularly in the long-term. Numerous national survey instruments, including the National Household Survey by the AIHW, consistently show that a large proportion of people in Australia use drugs at some time in their lives. The majority enjoy the experience and encounter few, if any adverse effects. However, for too many people the illegality of the drugs will significantly raise the potential for many unnecessary harms.

It is imperative to understand that first and foremost, all of us want those we care for and who may be using drugs, not to be harmed.

Criminal convictions for drug use can leave ongoing and permanent stains on people's lives. They can put an end to career prospects and severely restrict overseas travel. In the end, it is the young and the poor that disproportionately bear this burden.

When we do tackle the problems associated with some drug use, we should also emphasise the health and well-being of the person using drugs, focusing on supporting them and their families, rather than using it as an opportunity to punish. Clearly, the rapidly changing nature of drug production, availability, distribution and use requires an agile and evidence focussed response.

## AIMS

The overarching aim of the 2<sup>nd</sup> Pilot was again to provide a health service to save lives and reduce the health, social and economic costs of drug use by:

1. Providing the opportunity for people to be informed and consider a range of issues before determining whether to consume or how to reduce harm when consuming an illicit drug;
2. Reducing the number of people potentially requiring an ambulance call out, as well as attending hospitals, police holding cells and courts as a result of consuming unknown drugs - which in turn provides a range of individual, family and community based positive outcomes;
3. Obtaining a range of street samples for detailed testing that allows for both community health warnings on new compounds and assists law enforcement intelligence on illegal drug manufacturing and importations, and;
4. Provide an environment where an independent assessment of pill testing can be conducted in a manner rarely, if ever, undertaken previously.

The service is staffed by health professionals, analytical chemists and peer workers. Staff provide discreet and private advice to patrons wishing to have any pills checked for their contents.

## OPERATIONAL ASPECTS

Pill testing is a health service that is unfortunately frequently misunderstood as being mere chemical analysis. The team delivering the service is multi-disciplinary and includes doctors, peer-based harm reduction workers, and chemists; it is a medically supervised service. Pill testing at music festivals operates in a controlled environment, removed from the festival attractions, next to the on-site health provider and welfare services.

While media and other attention tends to fixate on the capacity of various technological methods in producing reliable chemical analysis, this is generally the shortest step in the overall service process, which is more focussed on providing reliable, non-discriminatory health information and service referral advice to patrons who already intend to use drugs. In such a setting, pill testing services offer a unique and efficacious opportunity to engage with young people and effect positive behavioural change to reduce the risk of drug-related harm. This cohort is unlikely to have ever had contact with health services in relation to their drug use. Substance Use Disorders (SUD) requiring intervention and treatment are rare among this cohort, and the Brief Intervention after a patron receives their analytical results can bridge the 'therapeutic gap' between this hard-to-reach key population and formalised healthcare settings.

The patron journey is as follows:

- Patrons seeking to use the pill testing service form a queue that is concealed from passers-by.
- Service users enter the first section of the controlled service delivery space and are greeted by peer-based harm reduction workers. After an initial screening for capacity to consent to using the service, visitors are led to the induction area, advised of safety guidelines and provided with an overview of what to expect throughout the service process. The greeters can refer to the medical advisors if there is any concern about the wellbeing or capacity of a patron during this stage.
- Visitors are asked to relinquish phones for duration of their time in the tent for the purposes of privacy, and sign a consent waiver, both of which are stored in a safe.
- Whilst in the induction area, visitors are assigned a unique numerical identifier; each visitor also receives a blank business card with same identifier for their own reference.
- Visitors are introduced to the independent evaluation team.
- Eligible and consenting service users are invited to participate in a survey with initial pre-test evaluation questions; these relate to demographics, the type of substance the patron expects and how they obtained it.
- Visitors are next led to chemical testing area where they provide a sample for analysis directly onto the testing equipment, as PTA staff do not handle the samples, which are destroyed following production of the results of the chemical analysis.
- The results of the chemical analysis are shared with the service user by members of the chemist and medical teams: If the result is expected (e.g. MDMA), the participant is told of the risks of MDMA consumption. If the result is an unknown/dangerous chemical, the visitors is told of the risks that this chemical provides, and it is confirmed for the service user that their sample is not the substance they had expected. In both cases, visitors are warned of the potential for adverse health consequences such as overdose or death and provided with the opportunity to discard any remaining product in the pill testing service's secure biohazard bin.

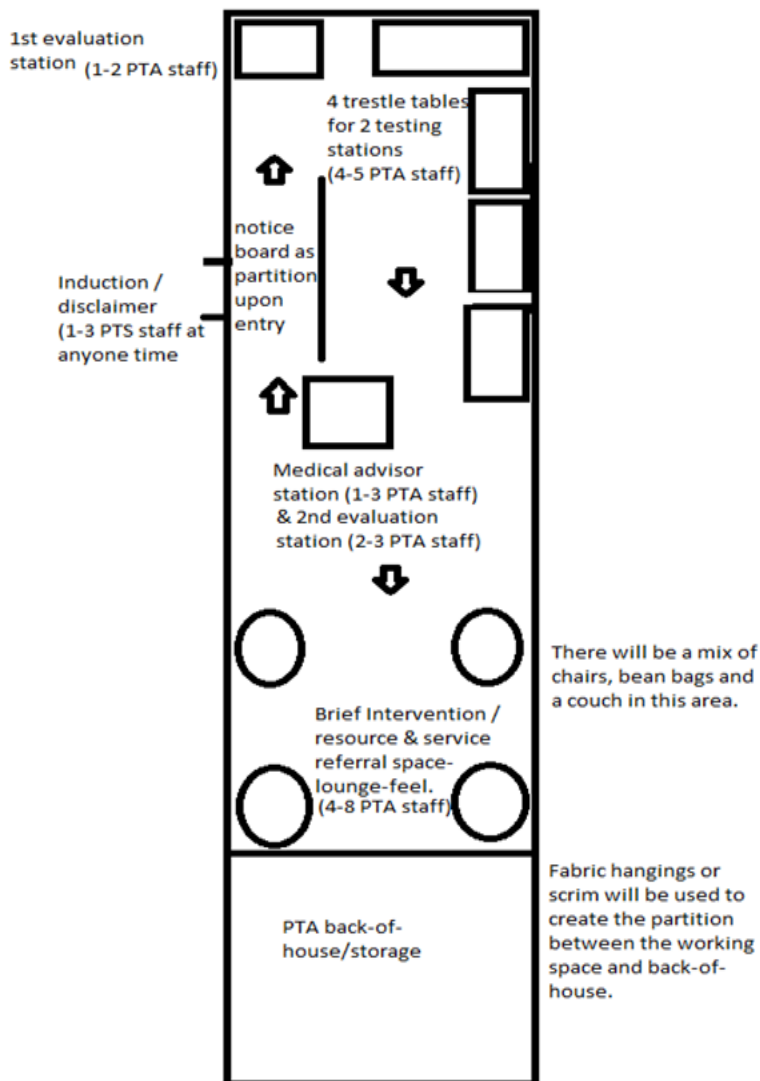


- Medical staff post colour-coded test results on bulletin board (white = expected, yellow = unexpected, red= specific hazard).
- Visitors are then shown to the health promotion and harm reduction education and referral area for a Brief Intervention with peer-based harm reduction workers. This is an opportunity to discuss the results of the chemical analysis in relation to the individual service user's bio-psychosocial risk profile.
- Those participating service users are finally invited to complete the post-test evaluation questions with the independent evaluators, which includes questions on whether the result is expected, their intention regarding the substance, and their experience of the service, including whether a follow-up is possible some weeks later.
- Visitors are led back to induction area to pick up their phones and exit via entry/exit point.

What needs to be stressed is that our pill testing service is a holistic and thorough process that engages patrons in discussions about their drug use; it is not just a simple process of testing, results and departure for patrons, as is often portrayed by those un-informed about our service. It is also often the first time that some patrons actually engage with a health professional about their drug use. The benefits of these interactions with our peers and health professionals, in terms of educating and informing patrons cannot be understated, including the potential to reduce future harm.

A comprehensive operational plan was prepared and submitted to the festival promoters and ACT Government prior to the 2<sup>nd</sup> pilot program taking place.

### PILL TESTING AREA DIAGRAM:



## RISK MANAGEMENT

A separate risk management plan had been prepared and submitted as part of the PTA operations plan in conjunction with Tigertail.

## EVALUATION

There is a growing body of literature that supports the use of pill testing at music festivals as a way of reducing drug related harm. Much of that is dependent on the self-reporting of those conducting pill-testing, and very little in the form of independent evaluation. In the spirit of open science to which Pill Testing Australia is committed and the need for further evidence of the feasibility of providing pill testing in Australia and its effectiveness for changing drug use behaviour, an external, independent evaluation of the ACT pill testing trial 2019 was conducted by researchers at the Australian National University and Social Research & Evaluation Pty Ltd, financially supported by a grant from ACT Health. This independent evaluation was approved by the ANU Human Research Ethics Committee<sup>1</sup> (Protocol 2018/648) and is also a Prescribed Study under the *Epidemiological Studies (Confidentiality) Act 1992* (ACT)<sup>2</sup>.

The findings presented in the upcoming independent evaluation report will only include data from patrons aged 18 and over. Figures presented in this operation report include data from all patrons and, as such, will differ slightly to the evaluation report.

## MANAGEMENT OF ADVERSE OCCURRENCES

The likelihood of adverse occurrences within the Service area were formally assessed as being equal or lower than uncontrolled areas of the festival site.

The following protocols were observed to manage situations outside of the pill testing process itself:

- UNRULY PATRONS – A zero tolerance approach will be maintained with unruly patrons referred to event security via event control.
- MEDICAL EMERGENCIES – The Service will be staffed with highly trained medical practitioners. Immediate first aid will be provided and maintained until ACT Ambulance services are in attendance.

## DRUG TESTING EQUIPMENT

As was the case for the 1<sup>st</sup> Pill Testing Pilot, the drug testing was undertaken by Fourier-transformed infrared spectroscopy (FTIR) using two ALPHA II machines; one supplied by Harm Reduction Australia and one supplied on loan by the Bruker Corporation<sup>3</sup>.

Information on the workings and rationale for the use of FTIR technology is provided in detail in the report from 1<sup>st</sup> Pill Testing Pilot<sup>4</sup>.

A gas chromatograph/mass spectrometer provided by Perkin Elmer, including two technicians to operate the equipment, was also made available for use on the day of the pill testing service. Unfortunately, the equipment was not field deployable following damage when being transported from the USA and could not be used in real time. Instead, it was deployed for urgent offsite substance validation.

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<sup>1</sup> Australian National University 2019

<sup>2</sup> ACT Government 1992

<sup>3</sup> Bukoswki E. J. and J. Monti 2007

<sup>4</sup> Makkai et al. 2018

## ANALYTICAL PROCESS

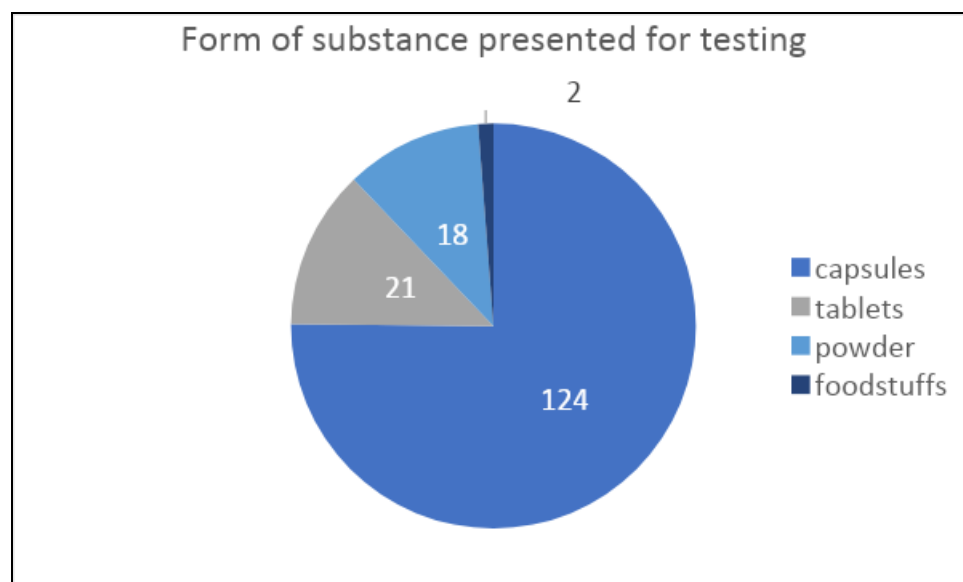
When the substance is submitted, it is weighed (gross weight) and photographed, then a small sample is obtained from the pill, capsule or powder. This is placed in scientific weighing paper and then transferred to the FTIR machine for spectrum measurement. A background spectrum is acquired immediately before each sample spectrum to ensure the data acquired relates to the sample submitted. The query spectrum is then matched to the library spectra and a ranked list of scored matches is produced that aims to identify the major component. Further analysis of the query spectrum was also conducted by subtraction of the major component and re-matching to the library.

After the samples are analysed, they are destroyed by disposal in a locked and secured contaminated waste container that also contains bleach to render all contents inert. The container is then disposed of in accordance with ACT regulations after the event.

## TESTING SERVICE RESULTS

In total 170 substances were submitted for testing. This comprised of 159 patron samples and 11 orphan samples presented by event medical staff for analysis. The majority of substances tested (**Figure 1**) were capsules (127, 75%), followed by tablets (22, 13%) and powders (19, 11%). Two foodstuffs were submitted by interested parties in order to observe the testing process. Gross sample masses for non-foodstuff samples ranged from 10 mg to 1.2 g (median 171 mg).

**Figure 1.**



Patrons were asked what they expected the sample to contain and this was recorded prior to substance analysis (**Table 1**). The majority of patrons believed the samples contained 3,4-methylenedioxymethamphetamine (MDMA; 86.4%), with isolated instances of cocaine (0.6%), ketamine (0.6%) and methamphetamine (0.6%). The majority of the orphan samples (10) and a number of patron samples (8) were listed as unknown indicating that the presenters did not know or were unsure of the contents of the sample.

Table 1	Expected	
	N	%
MDMA	147	86.4
Cocaine	2	1.2
Ketamine	1	0.6
Methamphetamine	1	0.6
Foodstuff	1	0.6
Unknown	18	10.6
Total	170	

Samples were analysed using FTIR on two Bruker Alpha II instruments. One of these instruments was supplied by Bruker and contained potassium bromide optics (machine A). The second instrument was supplied by Harm Reduction Australia and contained zinc selenide optics (machine B). Both instruments were operated using OPUS DrugID Wizard and against the full range of available libraries. During the analysis, the software compared the measured spectrum against the library spectra and provided a list of matches, which were scored out of 1000 to indicate the quality of the match. On this occasion, prior to the event, instrument cut-offs were established by the replicate analysis of certified reference materials of known purity sourced from the National Measurement Institute (North Ryde, NSW). This approach is similar to that used by the DIMS system in The Netherlands. These cut-offs were determined for each instrument, and for the four compounds patrons were anticipated to present or expect at the event: MDMA, cocaine, ketamine and methamphetamine. Instrument cut-offs were typically higher than the 750 cut-off previously used at the earlier trial at GTM 2018. Where instrument cut-offs were not available for reported matches the 750 cut-off was employed. Cut-off values were used to assess the quality of the sample and library spectra match and provide confidence that the major components had been correctly identified.

Of the 170 samples analysed, 113 returned a match score above instrument cut-offs (**Table 2**) and were identified as MDMA (111), cocaine (1) and methamphetamine (1). Using a 750 cut-off returned similar results. Where no cut-off is applied, the FTIR analysis found a match for each substance tested but it should be noted that scores substantially below the cut-off decrease the confidence that the substance has been correctly identified. Of the 170 samples analysed, 142 (83.5%) were identified as MDMA without the application of a cut-off and of these 111 (78%) were observed above instrument cut-offs. Several other drugs were also tentatively identified by the FTIR analysis including 3,4-methylenedioxyamphetamine (MDA), *N*-ethyl pentylone (7) and other cathinone drugs (3). Irrespective of the testing results, the limitations of the FTIR testing methodology were outlined to all patrons. This included that the testing methods could not provide reliable information on drug dose or purity, and that the samples could contain other substances not identified by the FTIR analysis with the potential to cause harm.

The cathinone drug *N*-ethyl pentylone was tentatively identified in two orphan samples and five samples presented by patrons as MDMA (4) or as an unknown substance (1). This drug has been associated with deaths and mass casualty events in the USA and New Zealand. An additional three patron samples presented as MDMA (2) or unknown (1) were also tentatively identified as cathinone drugs.

Over the course of the event, the testing service analysed 11 orphan samples presented by medical personnel, with analytical findings provided in a timely manner with the goal of aiding patient treatment. In the majority of cases, orphan samples were presented in groups of capsules obtained from the same source (4, 3, 2, 1 and 1 substances) and in these cases all substances were tested. In total nine samples were identified as MDMA with scores above instrument cut-off and as noted above two samples were tentatively identified as *N*-ethyl pentylone with scores below cut-off.

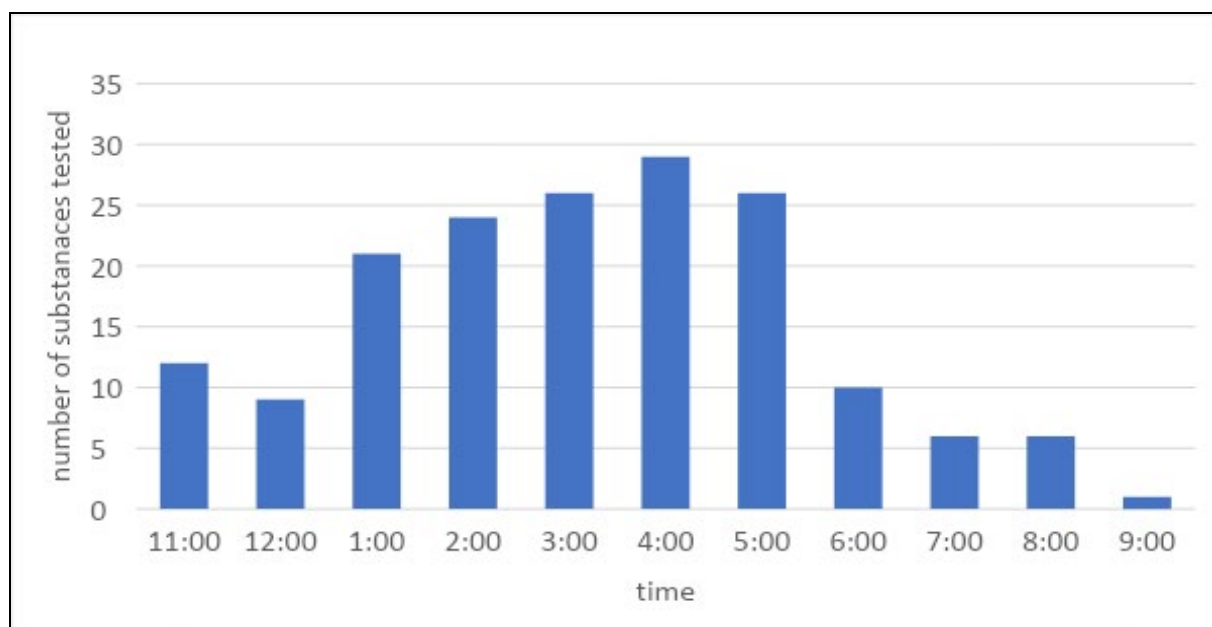
Table 2	Found					
	Score > inst. cut-off		Score > 750 cut-off		No cut-off	
	N	%	N	%	N	%
MDMA	111	98.2	114	96.6	142	83.5
Cocaine	1	0.9	1	0.85	1	0.6
Ketamine	0	0.00	1	0.85	1	0.6
Methamphetamine	1	0.9	1	0.85	1	0.6
Foodstuff	n/a	n/a	1	0.85	4	2.3
MDA					3	1.8
Cathinone					10	5.9
Filler					5	2.9
Other					3	1.8
Total	113		118		170	

Patron expectations and analytical findings were also compared. Of the 147 samples expected to contain MDMA, 98 (67%) were identified as that substance based on instrument cut-off (**Table 3**). The remaining 49 samples (33%) returned nothing above cut-off, with 31 of these samples tentatively identified as MDMA with scores below cut-off. Of the 18 unknown substances, 12 (67%) were also identified as MDMA above instrument cut-off. A comparison of expectations and analytical findings using the 750 cut-off provided similar results. In this instance of the 147 samples expected to contain MDMA, 101 samples (69%) were identified as that substance based on cut-off. The remaining 46 samples (31%) returned nothing above cut-off, with 28 of these samples tentatively identified as MDMA with scores below cut-off. In comparison, the earlier trial held in 2018 reported that of the 69 samples expected to contain MDMA, only 31 (45%) were identified as that substance using the 750 cut-off.

Table 3		Expected									
		MDMA		Cocaine		Ketamine		Meth		Unknown	
		N	%	N	%	N	%	N	%	N	%
F o u n d	Score > inst. cut-off										
	MDMA	98	67					1	100	12	67
	Cocaine			1	50						
	Ketamine					0	0				
	Methamphetamine			1	50			0	0		
	Nothing above cut-off	49	33			1	100			6	33
	Total	147		2		1		1		18	
F o u n d	Score >750 cut-off										
	MDMA	101	69					1	100	12	67
	Cocaine			1	50						
	Ketamine					1	100				
	Methamphetamine			1	50			0	0		
	Nothing above cut-off	46	31							6	33
	Total	147		2		1		1		18	

The testing service operated between 11:00 am to 9:30 pm on the day of the event. Peak times for the service were between 1:00 pm and 6:00 pm where 126 samples were analysed at an average rate of one sample every 2-3 min (Figure 2). This rate of testing was close to capacity for two FTIR instruments staffed by four qualified chemists. Greater public awareness of the service peak periods may lead to patrons more evenly spreading demand over the day and allow an increase in number of samples evaluated with available resources.

Figure 2



## MEDICAL INTERVENTION

The co-location of the pill-testing facility within the medical precinct had both intended and unintended benefits. Importantly, it signals to wary festival patrons, particularly those travelling from other jurisdictions, that their issues with drug related harm are considered as health related, and not legal or moral issues. It is generally accepted that well-organised festivals do not require the presence of law enforcement at medical facilities unless specifically requested. It is certainly not considered to be best practice to assign police at medical facilities as part of any Standard Operating Procedures, as it has a tendency to discourage patrons, who may be rapidly deteriorating, from seeking medical care.

In addition, the close proximity of the pill testing facility to the medical tent allowed for easy and rapid exchange of findings. Patrons presenting to the pill testing facility with obvious impairment were able to be triaged rapidly by the senior emergency doctors on site and escorted to the medical tent for further assessment and care, often with a presumptive analysis of what had been consumed. The medical tent was constantly informed of the nature of products being identified, and the different presentations that they may expect. In the other direction, patrons who had arrived at the medical tent unwell as a consequence of illicit drug use, were asked whether they would be amenable to having the substances in their possession analysed, and overwhelmingly, their response was positive.

A third interaction, less direct but equally desirable, was the response of those who had had their substances tested, to find them containing products other than what they had expected. In many cases they represented a broader group of individuals who had earlier consumed what was regarded to have been samples from a similar batch. With the advice that had been provided by the peer workers, and in the manner, it had been provided, they knew that they would be welcome to return with other patrons about whom they were concerned. This happened on several occasions during the day, on which occasions, all parties were escorted to the medical tent for further evaluation.

## SUMMARY OF PEER-BASED HARM REDUCTION WORKERS ENGAGEMENT WITH SERVICE USERS

Peer-based health promotion and harm reduction emerged as an effective strategy for communicating health messages in the 1980s health rights movement, as key affected populations demanded a rights-based and more patient-centred approach to health.<sup>5</sup> Australia has a long-standing and well-established network of peer-based drug user organisations, with the Australian Injecting & Illicit Drug Users League (AIVL) being the peak national body,<sup>6</sup> and Harm Reduction Victoria's (HRVic) DanceWize program is part of this network. Pill Testing Australia's peer-based harm reduction workers were recruited primarily from DanceWize.

DanceWize started as a grassroots initiative to promote harm reduction messages within the dance music community in 1995. DanceWize has been a program of Harm Reduction Victoria since 1999 and HRVic is a Victorian Department of Health and Human Services-funded health promotion charity. DanceWize NSW began in 2017 and is administered by the NSW Users and AIDS Association, a member of the national network too. The DanceWize program has evolved as a specialised alcohol and other drug (AOD) outreach service, utilising peer-based harm reduction education and support to provide resources and referrals about safer drug use and related health and welfare issues at music events and festivals. Peer-based harm reduction does not promote drug use, nor does it condemn it, due to the harm caused by such stigmatisation.<sup>7</sup> Instead, peer-based approaches accept that drug use occurs,<sup>8</sup> and that drug-related harm is better reduced when a non-discriminatory health-focused approach is prioritised over punishment. This is consistent with the intended interpretation of international drug policies.<sup>9</sup> In 2016 HRVic's DanceWize won the Minister of Health's award for Outstanding Achievement by Volunteers Supporting Diversity and this was in part due to the program's work to address the harm caused by stigmatisation.

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<sup>5</sup> People With AIDS Coalition 1983

<sup>6</sup> AIVL 2019

<sup>7</sup> Lancaster et al. 2017; Kelly, J. and C. M. Westerhoff 2010

<sup>8</sup> Australian Institute of Health and Welfare 2017: note, more than 8 million Australians have used an illicit drug in their lifetime

<sup>9</sup> *Ibid.*

The efficacy of peer-based approaches is due to factors such as the pre-existing rapport between peer networks and the unique insight available due to lived-experience. This is especially valuable when a key population is marginalised and therefore hard-to-reach, like people who use drugs (PWUD) who commonly experience stigmatisation. DanceWize utilises a peer-based approach to reach communities of people who use drugs directly in a setting where they are contemplating/intending use—these are people who are unlikely to have ever had contact with health services in relation to their drug use, who don't have a substance use disorder or current concern regarding their use. Contact with peer-based harm reduction workers can bridge the 'therapeutic gap' between the community and formalised healthcare settings. The efficacy of this peer education program model is evidence-based<sup>10</sup>. Harm Reduction Victoria is a partner organisation in La Trobe University's Australian Research Centre in Sex, Health & Society (ARCSHS) *W3 Project* that studies what works and why with regard to peer-based programs.<sup>11</sup> Following this framework, people who use drugs become partners or active participants in the policy and service initiatives that serve to promote their own and their community's health interests.

## GREETING AND INDUCTION SUMMARY

As described in the 'Operational Aspects' section above, upon entering the pill testing controlled space, service users are greeted and inducted by peer-based harm reduction workers. In total, 234 people were inducted and signed disclaimer forms before being referred to the next phase of the pill testing service. The total number of samples is less because some service users were in a group and other inductees did not present a sample and just wanted a tour, but still needed to complete the induction for the sake of safety and privacy standards.

## BRIEF INTERVENTIONS

As described above, an integral part of the pill testing service is that it provides an opportunity for service users to speak about their drug use with tailored consideration for their risk profile with relation to bio-psychosocial factors and the analytical test results. Peer-based harm reduction workers facilitate this effectively due to their ability to establish rapport, empathise, and be non-judgmental when engaging with service users. Brief Interventions are an opportunity to discuss potential risks, harm reduction strategies to mitigate those risks, raise awareness about the health services available to patrons on-site at the event and in the broader community, and offer educational resources and other referrals.

The topics covered in the interactions with patrons ranged from general information about drug use risks and harms, to specific discussions about a range of topics including polydrug use, mental health, sexual health, and transport safety from the event.

The main results from the Brief Interventions were as follows:

- 208 anonymous Brief Interventions records were written up for those who engaged with the peer-based harm reduction workers.
  - The average duration of a Brief Intervention was 9 minutes (range: 2-26 minutes)
- 206/208 gave their age during Brief Intervention
  - The average age was 19.7 years (range: 15-40 years)
- 160/208 disclosed they had used drugs previously
- 27/208 disclosed a health condition and/or being on medications
  - The most common disclosure was being on selective serotonin reuptake inhibitor antidepressant (service users that disclosed being on a current SSRI prescription: 10/27). Note, despite the National Household Survey 2016<sup>12</sup> reporting that 11% people had tried MDMA/'ecstasy' at some point in their lives, with the number increasing to 19% of those aged between 20 and 29, none of the PTA service users who disclosed being on a SSRI script stated that they had received forthcoming harm reduction information from their prescribing doctor about potential contraindication risks with SSRIs and any illicit drug, nor had they felt comfortable disclosing their illicit drug use to their doctor.

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<sup>10</sup> UNDP 2019

<sup>11</sup> Brown et al. 2018; Rule, J. and J. Ellard 2018: note, references the framework for the W3 project

<sup>12</sup> Australian Institute of Health and Welfare 2017

- 41/208 took a total of 51 hard copy resources as part of the Brief Intervention. The following resources were on display:
  - Australian Drug Foundation, 'Information Services' resource<sup>13</sup>
  - Headspace, 'How Headspace can Help' resource<sup>14</sup>
  - HRVic DanceWize's series of substance-specific harm reduction resources<sup>15</sup>

## SIGNAGE

It is important to note that as a condition of providing pill testing services at the Groovin the Moo Festival in 2019, there was no signage to advertise the pill testing services permitted.

This was a condition that Pill Testing Australia agreed to uphold.

This could in some cases have led to some patrons being unaware of where to locate our service and potentially affected the number of patrons being able to access our service.

## CONCLUSIONS

The independent evaluation of the pill testing service is due for completing and release in late-2019. In addition to the service data presented here, the evaluation will provide further information on the effectiveness of the program.

Notwithstanding the results of the independent evaluation, the ability of PTA and its members and volunteers to deliver a world class pill testing service for patrons cannot be challenged.

PTA was able to provide evidence on a number of key indicators including:

1. An ability to work collaboratively with a range of stakeholders in government, health, law enforcement and the music festival industry;
2. An ability to put together a comprehensive team of medical practitioners, analytical chemists, peer workers and brief intervention teams to deliver pill testing services at festivals;
3. A pill testing service that was able to attract a number of festival patrons despite a lack of promotion and signage on the service being available;
4. Successfully provide a pill testing service without incident in a festival environment;
5. An ability to detect and facilitate the removal of a number of potentially dangerous substances from the festival environment;
6. An ability to provide critical drug education and harm reduction information to persons just prior to their potential consumption of an illicit substance, and;
7. An ability to collaborate closely and effectively with other medical services at the festival.

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<sup>13</sup> ADF 2019

<sup>14</sup> National Youth Mental Health Foundation 2019

<sup>15</sup> Harm Reduction Victoria 2019



## **APPENDIX 1: THE EVIDENCE**

### **PILL TESTING CAN PREVENT DEATHS.**

In 2014, the Netherlands' official pill testing service, DIMS, found a lethal batch of pills containing the toxic chemical PMA. This immediately triggered a national mass media campaign, including radio and television broadcasts, social media posts, and alerts at live music events. There were no deaths. In the UK, where no such service was in place at the time, four people died after consuming pills from the same batch

In Switzerland, it has been reported that since the implementation of the pill testing service SaferParty in Zurich, there have been no ecstasy-related deaths.

### **PILL TESTING CAN REDUCE HOSPITALISATIONS.**

The introduction of pill testing at one UK festival in 2016 occurred during a time when festival drug-related incidents in the UK were at their highest on record. The number of drug-related hospitalisations at this festival reduced by 95% from the previous year, from 19 hospitalisations to one.

### **PILL TESTING CAN LEAD TO A REDUCTION IN DRUG USE.**

Data collected in 2015 by the Canadian organisation ANKORS found that, of those accessing pill testing services in Canada, one-third (31%) of individuals were more likely to discard their substance when the result indicated it contained harmful chemicals. Similarly, a survey by Check It, Austria's largest pill testing service, found that two-thirds of people who accessed pill testing services decided they would not consume a substance if it was found to contain harmful chemicals.

In the UK, one-third of festivalgoers and 30% of night club attendees said they would most likely or definitely not consume a substance if the test result was unexpected. This was followed up by findings from UK service The Loop and North American service DanceSafe, which have reported a 25-100% discard rate of substances that yielded an unexpected test result.

And a recent joint study by researchers in Australia and the United States, which surveyed individuals at electronic dance events in New York City, found a majority of recipients reported they would be less likely to use ecstasy if testing found it contained 'bath salts' or methamphetamine (54.8% and 54.3% respectively).

A comparison of countries with and without pill testing services indicated no evidence of an increase in rates of drug use or mortality in countries with these services.

### **PILL TESTING CAN FACILITATE ACCESS TO HEALTH CARE INFORMATION.**

People – particularly young people – are more likely to be receptive to a service with a 'peer-to-peer' style of health care provision, such as pill testing than compared to campaigns promoting "just say no". Research shows young Australians are highly supportive of pill testing; a survey of over 2,300 young people by the Australian National Council on Drugs revealed 82% of recipients support implementing pill testing in Australia.

Evidence from research conducted by Austrian pill testing service Check It found 58% of people who use the service would not otherwise seek out harm reduction information, and about 75% are more likely to access harm reduction services if pill testing is included.

There are similar reports from Spanish service, Energy Control<sup>16</sup> and UK service, The Loop, both of which found that a great majority of people who visit pill testing services have never accessed this type of service before.

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<sup>16</sup> Energy Control 2011

Indeed, contrary to the opinion of many commentators, young Australians are sensible when they are presented with information that they believe and know that they can trust. Part of the problem in Australia right now is that young people are ignoring advice that they see to be unsubstantiated and morally driven. Providing a pill testing service serves to reverse that opinion, and re-engage a demographic that regards current messaging as not being credible.

We are dealing with a group of people who are attending a music festival in possession of drugs that they already have the intent of consuming. In the absence of any other intervention, the presence of a pill testing service won't make it any more likely that they would consume the drugs they have brought into or bought at the festival. The idea that most people, when provided with information about the content of their drugs, will ignore that information, regardless of its nature, greatly underestimates the inclination of this generation to preserve their health. Pill testing may not be able to stop all consumers from taking their drugs, but it can certainly alter 'how' they take their drugs (taking fewer drugs, mixing fewer drugs...) in such a way as to avoid them coming to harm.

In addition, 'fear-based' health policy has little credence today. We have a far better idea of what actually works, and that's a collaborative approach with the target population, providing them with information that is context specific to them, to allow them to make their own decisions.

## **APPENDIX 2: MYTH BUSTING**

### **UNSKILLED PEOPLE ARE CONDUCTING PILL TESTING**

The testing is conducted by qualified chemists, who volunteer their time and expertise to provide the service. At GTM 2019, the testing team was led by Associate Professor Mal McLeod, a senior chemist from the Research School of Chemistry at the Australian National University, who is an expert in analytical chemistry and drug metabolism. Together the testing team is one of the most qualified in the country. In Vienna, it is the biomedical chemists from the University of Vienna that conduct the testing.

### **IT'S THE ECSTASY KILLING THE KIDS**

That's not always the case but even when it is, that's why having a health and medical team in a tent beats hoping and praying. Ecstasy can be variable purity and our chemistry and medical experts can warn the young people about the risks of encountering high purity drug. People, particularly young people, are more likely to be receptive to a service with a "peer-to-peer" style of health care provision, such as pill testing, than to campaigns promoting "just say no". Evidence from research conducted by Austrian pill testing service Check It found 58% of people who use the service would not otherwise seek out harm reduction information, and about 75% are more likely to access harm reduction services if pill testing is included.

### **BODIES ARE DIFFERENT AND WILL RESPOND IN DIFFERENT WAYS**

True. And that's why having an emergency doctor at a festival reviewing the testing and consulting the young people is better than the current regime of "just say no." We explain that the safest way to use drugs is not at all. Sometimes that works but sometimes it doesn't. When it doesn't, the next safety net we set up is to remind them again that drugs have the potential to kill.

### **AND IF THEY SAY THEY WILL TAKE THE DRUG?**

Our health team runs through the next precautions – e.g. in some cases, to crush and dab the pill; to see how they are feeling within 20 minutes; to ask anyone – a police officer or a paramedic – or to get back to the tent if they are feeling in trouble.

### **PILL TESTING WILL LEAD TO MORE DRUG USE**

A comparison of countries with and without pill testing services indicated no evidence of an increase in rates of drug use or mortality in countries with these services.

## REFERENCES

Alcohol and Drug Foundation (ADF) (2019) *Resources*, available at: <https://adf.org.au/resources/>

Australian Injecting and Illicit Drug Users League (AIVL) (2019) *Welcome to AIVL*, available at: <http://aivl.org.au>

Australian Institute of Health and Welfare (2019) 'National Drug Strategy Household Survey 2018: detailed findings', *Drug Statistics*, Canberra: AIHW

Australian National University (2019) *Human Ethics Research Committee*, available at: <https://services.anu.edu.au/planning-governance/governance/human-research-ethics-committee>

Brown, G., D. Reeders, A. Cogle, A. Madden, J. Kim, and D. O'Donnell (2018) 'A Systems Thinking Approach to Understanding and Demonstrating the Role of Peer-Led Programs and Leadership in the Response to HIV and Hepatitis C: Findings From the W3 Project' *Frontiers in Public Health* 31 August 2018, available at: <https://www.frontiersin.org/article/10.3389/fpubh.2018.00231>

Bukowski E. J. and J. Monti (2007) 'FTIR-ATR Spectroscopy for Identification of Illicit Drugs Seized from Clandestine Laboratories', *American Laboratory* 1 Nov 2007, available at: <https://www.americanlaboratory.com/914-Application-Notes/1449-FTIR-ATR-Spectroscopy-for-Identification-of-Illicit-Drugs-Seized-From-Clandestine-Laboratories/>

Energy Control (2011) 'Drug Checking Report', available at: [https://energycontrol.org/files/analysis/Annual\\_Drug\\_Checking\\_Report\\_Energy\\_Control\\_2011.pdf](https://energycontrol.org/files/analysis/Annual_Drug_Checking_Report_Energy_Control_2011.pdf)

*Epidemiological Studies (Confidentiality) Act 1992*, (ACT Government)

Harm Reduction Victoria (2019) *Resources*, available at: <https://www.hrvic.org.au/resources>

Kelly, J. and C. M. Westerhoff (2010) 'Does it matter how we refer to individuals with substance-related conditions? A randomised study of two commonly used terms.' *International Journal of Drug Policy* 21: 202 - 207

Lancaster, K., K. Seear, and A. Ritter (2017) 'Reducing stigma and discrimination for people experiencing problematic alcohol and other drug use', Queensland: National Drug and Alcohol Research Centre

Makkai T., M. Macleod, G. Vumbaca, P. Hill, D. Caldicott, M. Noffs, S. Tzanetis, and F. Hansen (2018) 'Report on Canberra GTM Harm Reduction Service' *Harm Reduction Australia*, available at: <https://www.harmreductionaustralia.org.au/wp-content/uploads/2018/06/Pill-Testing-Pilot-ACT-June-2018-Final-Report.pdf>

National Youth Mental Health Foundation (2019) *How Headspace Can Help*, available at: <https://headspace.org.au/assets/Uploads/Resource-library/Young-people/How-headspace-can-help-web.pdf>

People With AIDS Coalition (1983) *The Denver Principles*.

Rule, J. and J. Ellard (2018) 'DanceWise NSW Evaluation Report', NDARC

United Nations Development Program (UNDP) (2019) *International Guidelines on Human Rights and Drug Policy*