

# CanTEST

HEALTH AND DRUG CHECKING SERVICE

2022 - 2024

the first two years



CanTEST Health and Drug Checking Service is a free and confidential drop in service, delivered by Directions Health Services in partnership with Pill Testing Australia and the Canberra Alliance for Harm Minimisation and Advocacy (CAHMA) with technical support provided by the ANU Research School of Chemistry.

# instruments and testing methods

CanTEST uses Fourier Transform Infrared Spectroscopy (FTIR), Ultra-Performance Liquid Chromatography-Photodiode Array (UPLC-PDA), fentanyl testing strips and Ehrlich reagent testing.

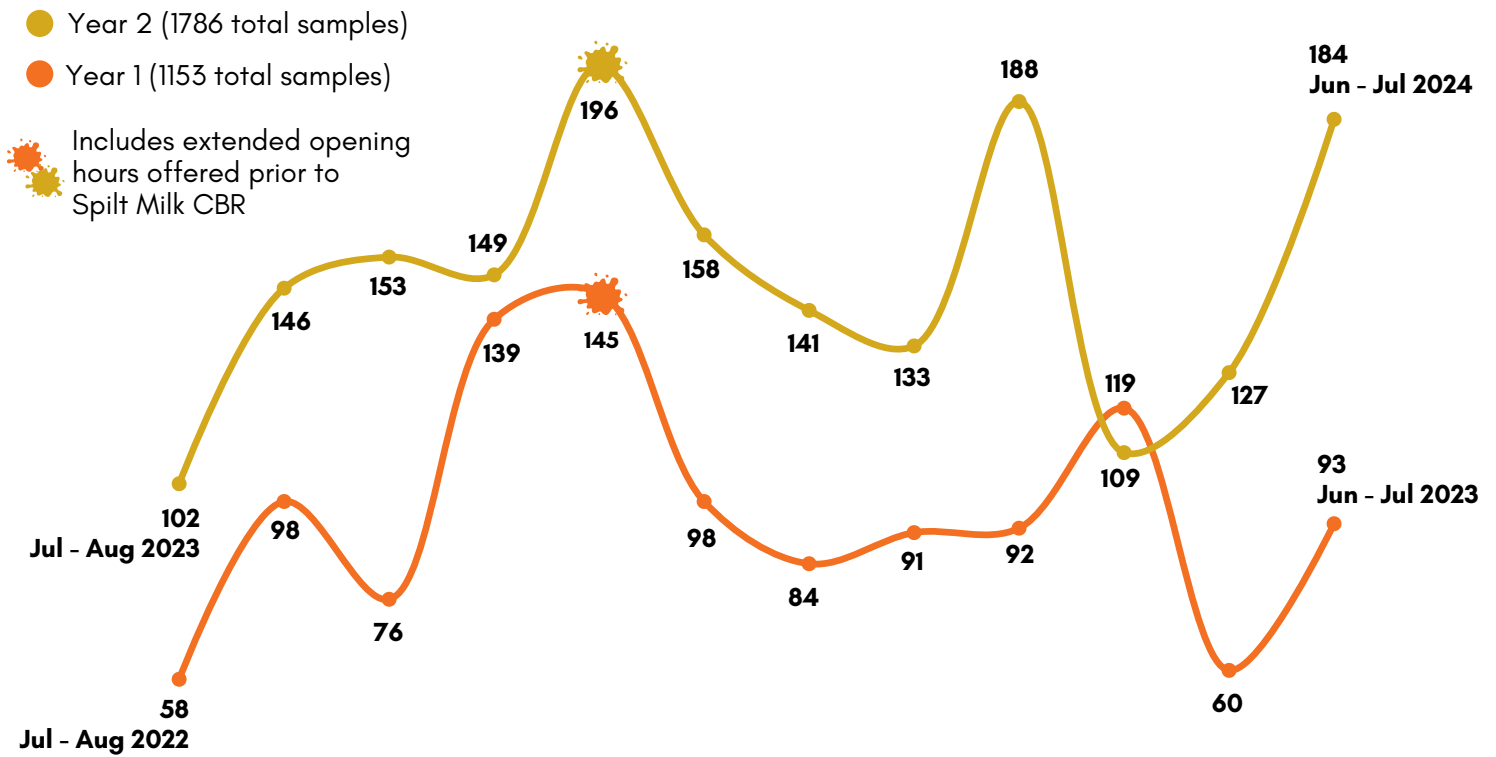
FTIR uses infrared light to detect the major compounds in a sample.

UPLC-PDA uses ultra violet light to identify the presence of compounds and can assist with determining the amount of active free base drug in a sample (purity).

Fentanyl testing strips provide a negative or positive result for the presence of fentanyl.

Ehrlich reagent testing and UPLC-PDA was introduced in April 2023 to detect the presence of LSD.

## monthly samples



# 269,286 reached

It's not only the people we see at CanTEST who benefit...

The harm reduction information provided on our socials has had an overall reach of **269,286** and an engagement rate of **9%**.



@CanTESTCBR

# health & AOD brief interventions

Anyone can access CanTEST for free health and AOD support services, regardless of whether they have substances they would like tested.

CanTEST provided **4041** health & AOD brief interventions in the first two years of operations.

YEAR 1

1594

YEAR 2

2447

## discarded samples

12%  
year 1

136/1153 samples were voluntarily discarded by people after they received their results in year 1

10%  
year 2

170/1786 samples were voluntarily discarded by people after they received their results in year 2

225

nasal naloxone provided for free to clients in the first two years

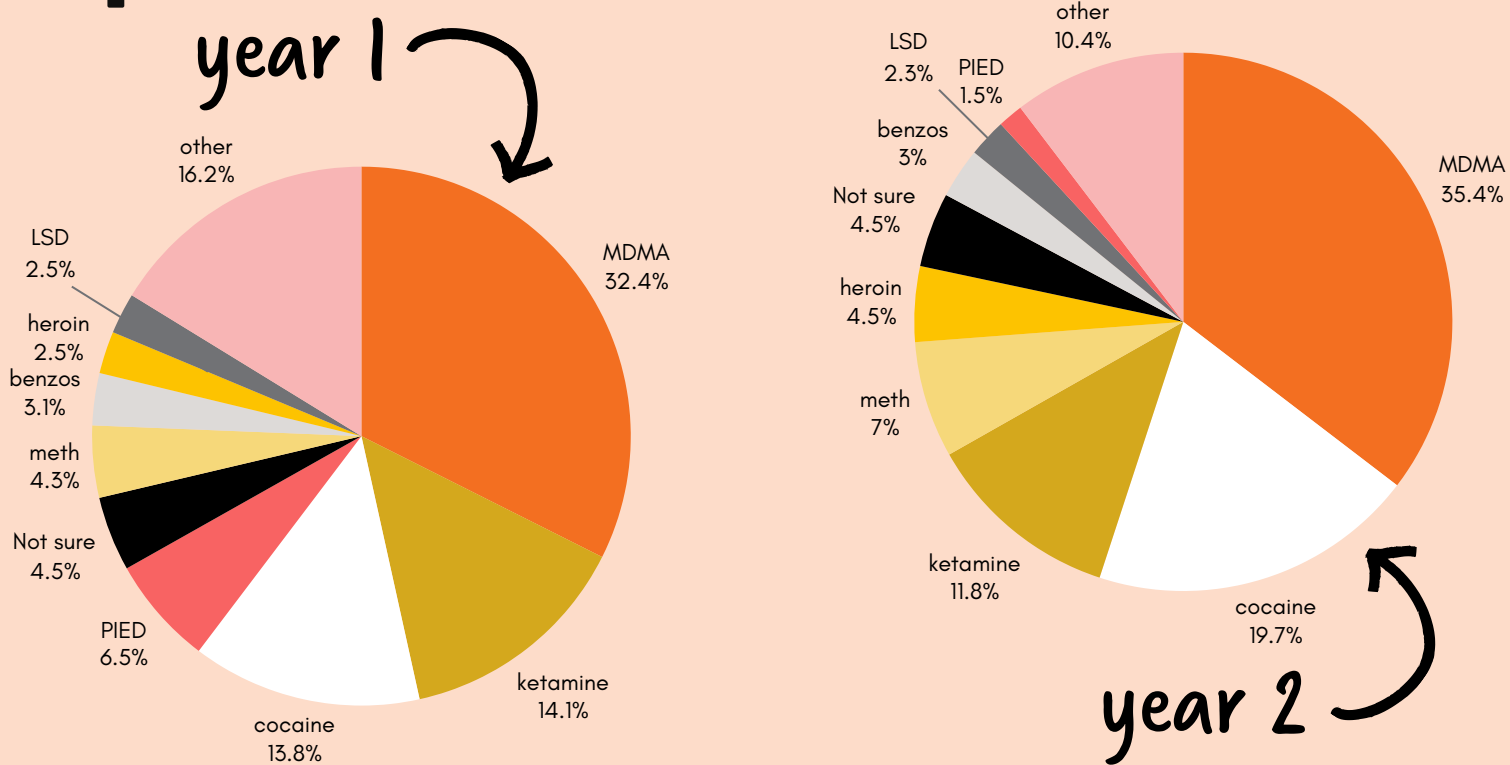


398 >

**1542** clients were invited to speak to the nurse on shift - about their drug use or any other health matter, such as mental health or sexual health.

**26% (398) said yes**

# expected substances

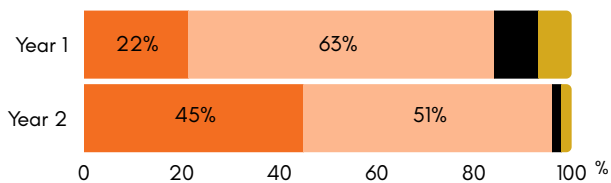


# detected substances

Substances detected below are split into expected and other substances. **'Other substances'** include all other substances (including drugs) that the testing identified. Common and remarkable **'other substances'** are listed below each graph.

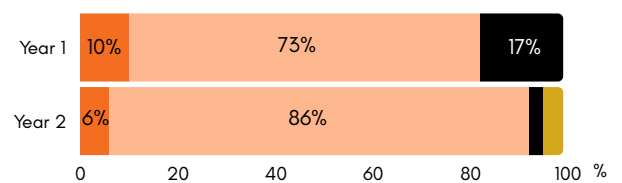
■ expected substance   
 ■ expected substance + other   
 ■ other substance/s detected   
 ■ no detection

## cocaine



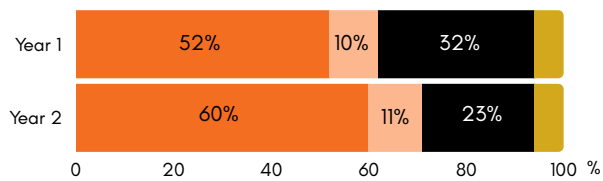
**Other substances included:** lidocaine, procaine, benzocaine, caffeine, levamisole, phenacetin, paracetamol, creatine

## heroin



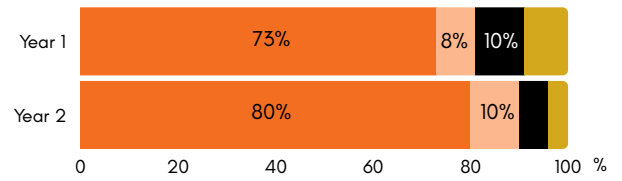
**Other substances included:** 6-MAM, acetylcodeine, protonitazene, paracetamol, monoacetyl morphine

## ketamine



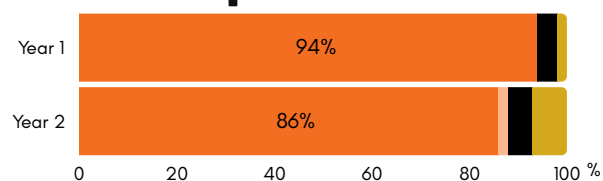
**Other substances included:** 2-Fluorodeschloroketamine (2-FDCK), 2'-fluoro-2-oxo-PCE (2F-NENDCK), procaine, tiletamine, MDMA

## MDMA



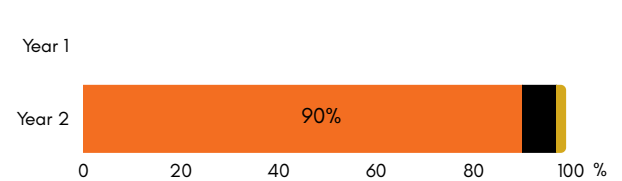
**Other substances included:** dipentylone, caffeine, MDA, methamphetamine, sucrose, dimethylpentylone, 4-MMC

## methamphetamine



**Other substances included:** MDMA, MSM, sucrose

## LSD



**Other substances included:** 25I-NBOMe, 25D-NBOMe

# drug purity

CanTEST can determine the amount of **ACTIVE FREE BASE DRUG** in a sample using UPLC-PDA analysis if the drug detected is one of the substances the instrument is calibrated to target.

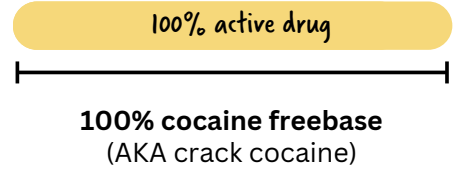
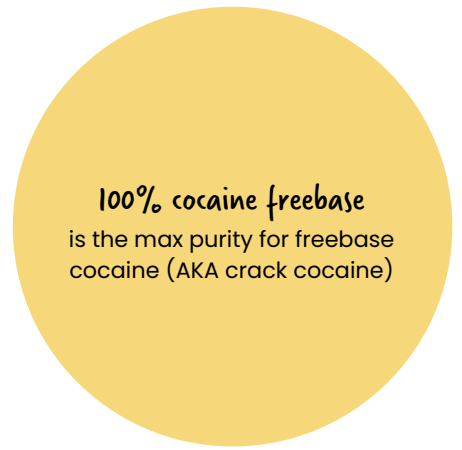
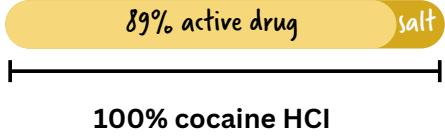
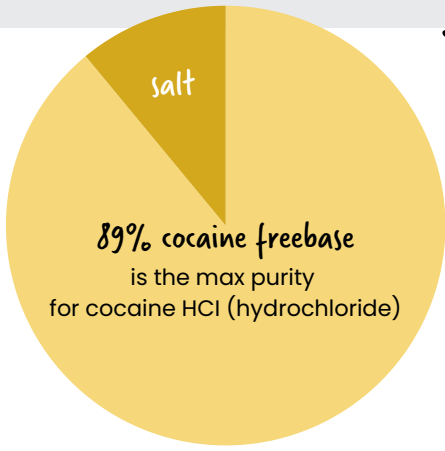
We do not report the purity percentage in salt form because CanTEST does not determine what kind of salt the active free base is bound to and we don't want to assume it's HCl salt (even though this is common).

for example...

Some drugs occur in different salt forms or even as the free base.

The important part of any dose is the free base drug.

$$\text{Drug mass} \times \text{purity} = \text{the dose of active free base drug}$$

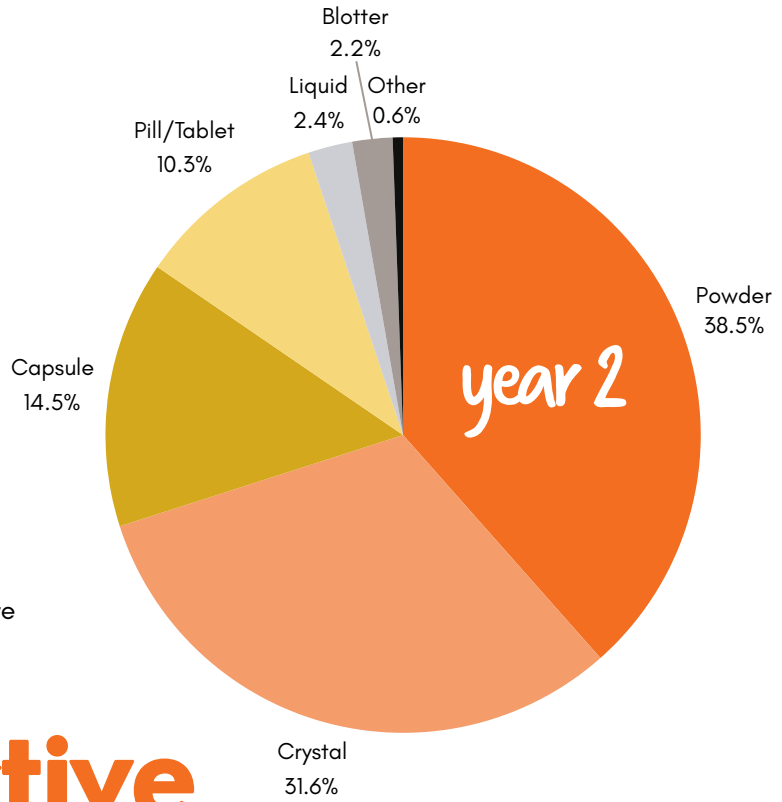
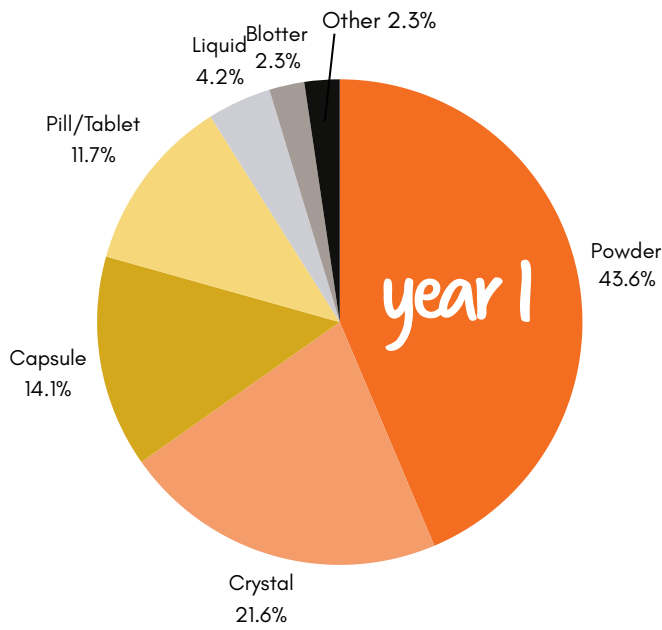


# median purity

	cocaine	heroin	ketamine	MDMA	meth
YEAR 1	23%	44%	68%	58%	72%
YEAR 2*	76%	72%	79%	69%	77%

\*CanTEST have seen an increase in mean purity in year 2 for samples presented to the service

# sample form



CanTEST can test drugs in many forms - pills, capsules, powders, crystals, liquids and blotters. The most commonly tested forms in our first two years were powders and crystals.

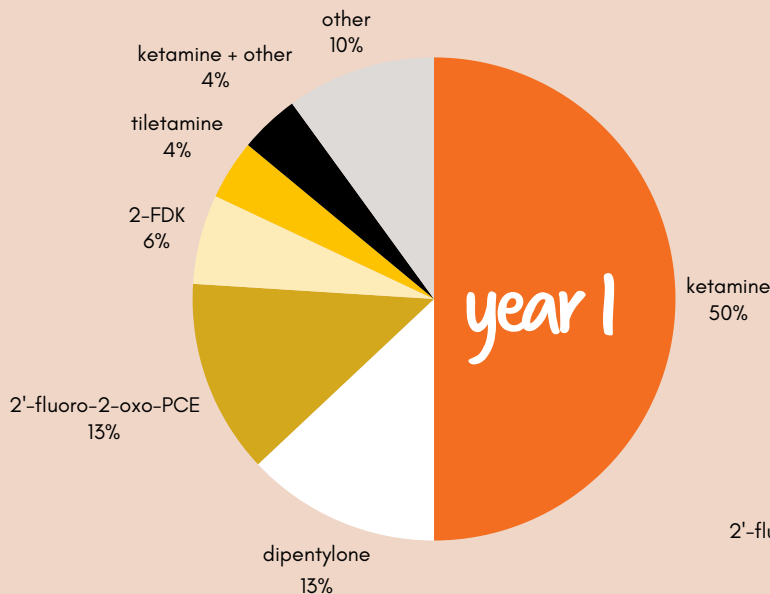
**Drug checking is more than just pill testing!**

## new psychoactive substances

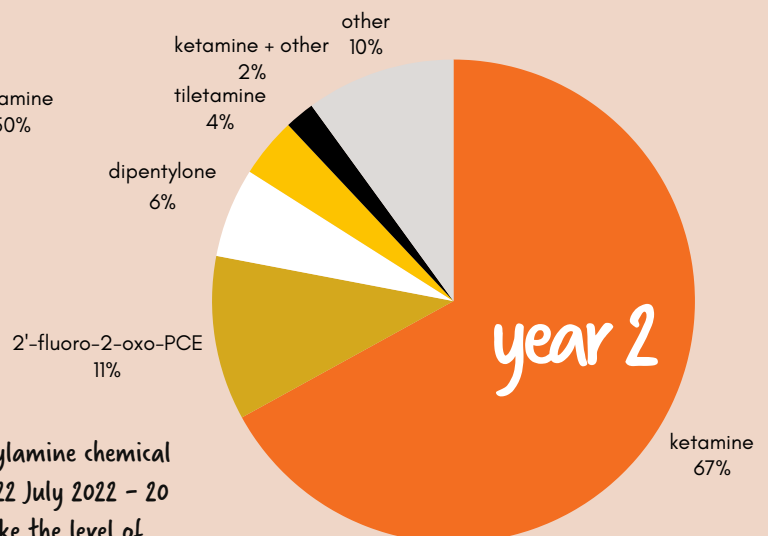
Of the total 2939 samples brought to CanTEST during the first 24 months, 456 were expected to be a New Psychoactive Substance (NPS) and 252 NPS were found.

CanTEST uses a definition of NPS as drugs not subject to international control on what is known as the International Narcotics Control Board (INCB) 'green list' or 'yellow list'. This means that some drugs like 2C-B, 4MMC and 3MMC, are not included as NPS, because they are on the 'green list'. But this also means ketamine and tiletamine are defined as NPS.

Sometimes NPS drugs detected included a variety of arylcyclohexylamines (dissociative anaesthetics), cathinones, phenethylamines and tryptamines.



## NPS detected



"I think the story here is that dissociative drugs [of the arylcyclohexylamine chemical class] are the most significant class of NPS. Also comparing year 1 [22 July 2022 - 20 July 2023] and year 2 [21 July 2023 - 20 July 2024] it does look like the level of substitution and adulteration of ketamine has reduced a little".



# CanTEST

HEALTH AND DRUG CHECKING SERVICE

CanTEST Health and Drug Checking Service is funded by ACT Health.

[www.cantest.com.au](http://www.cantest.com.au)

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TESTING**  
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Health Services

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Canberra Alliance for Harm Minimisation & Advocacy

