

**AT THE HEART  
OF THE MATTER,  
NZ DRUG  
FOUNDATION.**

Te Tūāpapa Tāru kino o Aotearoa

New Zealand Drug Foundation

# Drug checking data report 2022

**Drug checking is a free and legal process that helps people find out what's really in their drugs, so they can make informed decisions about if, when and how they take those drugs.**

2022 was our first full year as a licensed drug checking provider, and we ran 73 clinics and checked 1720 samples. That's a whole lot of harm reduction!

**Here's what we found along the way.**

# Contents

Who does drug checking and where?	3
How many drugs were what people thought?	3
What drugs did people think they had?	4
What drugs did people bring in for checking?	5
How many samples did we send for more testing?	6
What concerning substances did we find?	6
What binders and fillers did we find in the drugs?	8
What's in my... MDMA	9
Meth	9
Ketamine	9
Cocaine	10
LSD	10
If drugs weren't what people thought, would they still take them?	11
How did people plan to take drugs?	11
Would people mix drugs?	12
What actions were people taking to be safer?	12

## Who does drug checking and where?

We work alongside two other brilliant organisations that provide public drug checking – [KnowYourStuffNZ](#), who pioneered the service, and [the NZ Needle Exchange](#). Our thanks goes to these organisations for their work and support across the year.

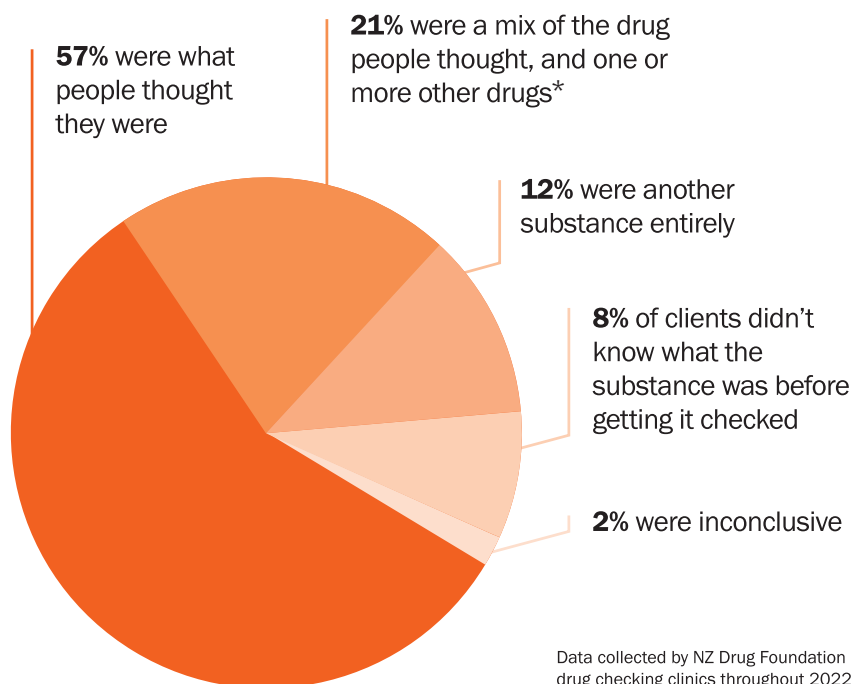
[Science lab ESR](#) provides invaluable confirmatory testing and extra scientific services.

These 1720 samples reflect only what the NZ Drug Foundation checked in 2022. We ran drug checking clinics in Auckland, Wellington, Christchurch, Masterton, Carterton, Wainuiomata, Lower Hutt, New Plymouth and Gisborne.

We worked with student unions and partner organisations, like the Burnett Foundation, Auckland Pride, ADIO and regional Needle Exchanges, University of Auckland, Victoria University, Aotearoa Sex Workers' Collective, and Downtown City Mission.

[Read more about how drug checking works on The Level.](#)

## How many drugs were what people thought?



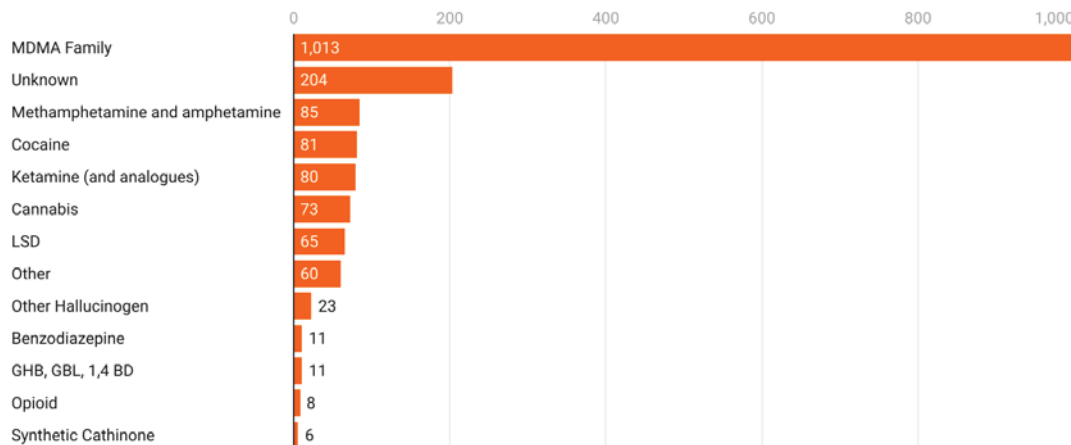
\*This figure includes samples where the presumed substance was only present in a low or trace amount.

## What drugs did people bring in for checking?

MDMA was the most common drug people thought they had - making up 59% of the total.

The other most common presumed drugs were amphetamines at 5% (methamphetamine 4%, other amphetamines 1%), cocaine at 5%, ketamine at 4%, LSD at 4% and cannabis at 4%.

Presumed drugs brought in for checking (number of samples):



*Drug checking in collaboration with Victoria University of Wellington Students Association, 2022*

## What drugs did people actually have?

This data is based on the main component of each sample. In many cases, samples were mixtures of two or more substances. See pages 9–10 for a breakdown of these for our top most tested drugs.

Drug checking results, main component (number of samples):



## How many samples did we send for further testing?

We sent 43 samples away for further testing in 2022. We work with our partners at ESR (Environmental Science and Research) who are licensed drug checking providers. ESR tests samples that we are concerned about or that our technology struggles to identify.

This may be because the amount of a drug present in a sample is so low that the spectrometer (scientific machine used for drug checking) can't accurately pick it up. This is sometimes the case for pharmaceutical drugs and those active at very low doses.

If your sample is sent away for further testing, the results can be seen on The Level at [thelevel.org.nz/drug-checking-results](https://thelevel.org.nz/drug-checking-results). If there is something particularly dangerous in what we find, you might see a notification or alert from our partners at High Alert.

## What concerning substances did we find?

### **25B-NBOH and other possible NBOMes:**

Drug checking at Rhythm & Vines festival found 25B-NBOH sold as LSD. 25B-NBOH is a potent stimulant and psychedelic related to NBOMe, a group of substances which has been linked to multiple deaths overseas.

These drugs are active at very tiny doses, making it difficult to dose accurately and increasing risk of overdose. Effects can be unpredictable and vary for different people.

### **Isopropylbenzylamine in meth:**

Isopropylbenzylamine can be mixed with or used as a substitute for meth. Isopropylbenzylamine may produce headaches and other uncomfortable effects. People who usually inject methamphetamine have told us that one way they stay safer is to smoke a small amount of the meth first, and if they notice headaches or other undesirable effects that could indicate isopropylbenzylamine is present, they don't inject the substance.

### **New synthetic cathinones like cypuylone and d-tertylone:**

Cathinones are a group of stimulants, often sold as MDMA. We're used to seeing cathinones like eutylone in New Zealand, but we're seeing more new synthetic cathinones coming through drug checking. This is concerning because we don't know a lot about these new substances. Synthetic cathinones can have a much lower dosage rate than MDMA, so if someone takes a substance thinking it's MDMA when it's a cathinone, they could be at risk of overdose, or an unexpected and unpleasant time.

### **Novel benzodiazepines:**

Benzodiazepines are a group of depressant drugs. Some benzodiazepines can be prescribed by doctors, but we're seeing a lot of new benzos coming onto the black market, which may have been recently developed (referred to as novel benzos). They may be sold as other prescription benzos. With novel benzos, we often don't have info about dosing, and these may be active in incredibly tiny doses – meaning the risk of overdose is high.

### **Novel opioids:**

While we didn't detect these substances via drug checking in 2022, we know these are circulating in the community. Opioids are a group of depressant drugs. Novel opioids such as nitazenes are extremely potent – as little as a few grains of salt could cause overdose.



*NZ Drug Foundation and ESR drug checking team at Rhythm & Vines festival, 2022-2023*

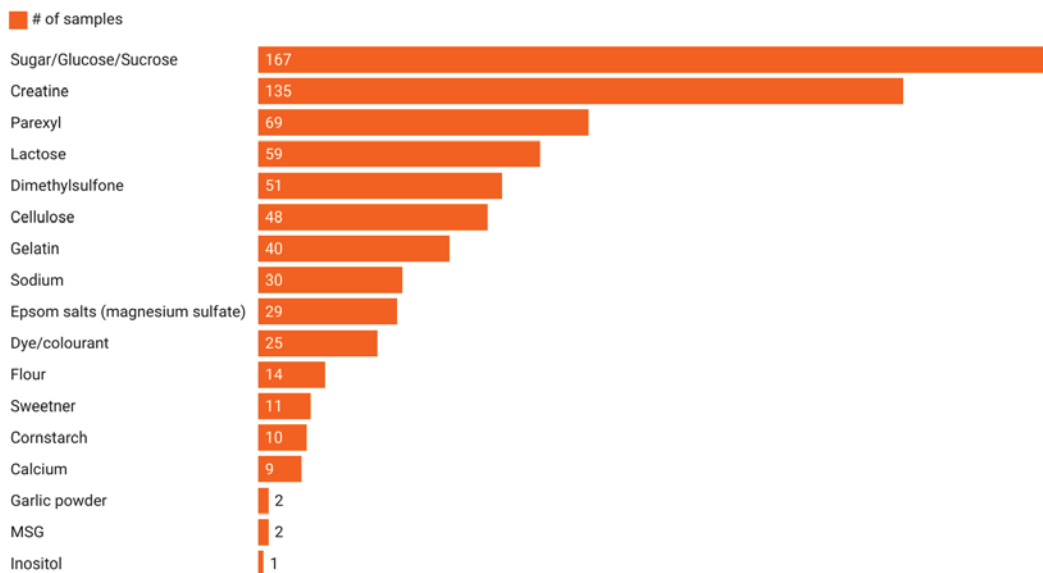
# What binders and fillers did we find in drugs?

Lots of the drugs we test contain non-psychoactive binders and fillers. These are things like flour or gelatine that don't have psychoactive properties like drugs but might be used to bulk out what you are sold.

It is still important for people to know what fillers are in a drug they're planning to take – especially if they're planning to inject or snort it, as some fillers can be harmful to take in these ways.

It's also important to remember that just because one part of a drug has filler, doesn't mean this is evenly distributed throughout the whole bag - that means someone may get a weaker dose, and another person a much stronger one!

Common fillers found in 2022 (number of samples):





## What's in my...

### MDMA

82% of MDMA we checked was found to be MDMA, or was MDMA mixed with non-psychoactive fillers (things like sugar or parexyl that may be used to bulk out a baggie or pill).

12% wasn't MDMA at all, and of that, 37% were synthetic cathinones.

#### Top five drugs found mixed with MDMA:

Caffeine (11 samples)  
Eutylone (4 samples)  
Methylone (4 samples)  
MDEA (4 samples)  
Paracetamol/phenmetrazine/quinine sulfate (3 samples each)

#### Top five drugs found sold as MDMA:

Synthetic cathinones (47 samples)  
Caffeine (7 samples)  
Ketamine (4 samples)  
Cocaine (2 samples)  
Amphetamine, ephedrine, MDA, MDEA, procaine (1 sample each)

### Methamphetamine (meth)

75% of methamphetamine we checked was found to be meth, or meth mixed with a non-psychoactive filler. 3% contained meth and another psychoactive drug. 20% wasn't meth at all.

#### Top three drugs sold as meth:

Isopropylbenzylamine (4 samples)  
Pseudoephedrine (2 samples)  
Inconclusive (2 samples)

### Ketamine

93% of ketamine we checked was found to be ketamine, or ketamine mixed with a non-psychoactive filler. 4% contained ketamine with another psychoactive drug. 3% wasn't ketamine at all.

The samples that weren't ketamine were found to be dimethylsulfone and methamphetamine.

## Cocaine

71% of cocaine we checked was found to be cocaine, or cocaine mixed with a non-psychoactive filler.

10% contained cocaine and another psychoactive drug.

19% wasn't cocaine at all.

### Top three drugs sold as cocaine:

MDMA (4 samples)

Eutylone (2 samples)

Ketamine, caffeine, methamphetamine, phenmetrizene, ephedrine (1 sample each)

## LSD

78% of LSD we checked was found to be an indole (a family which includes LSD, DMT and psilocybin).

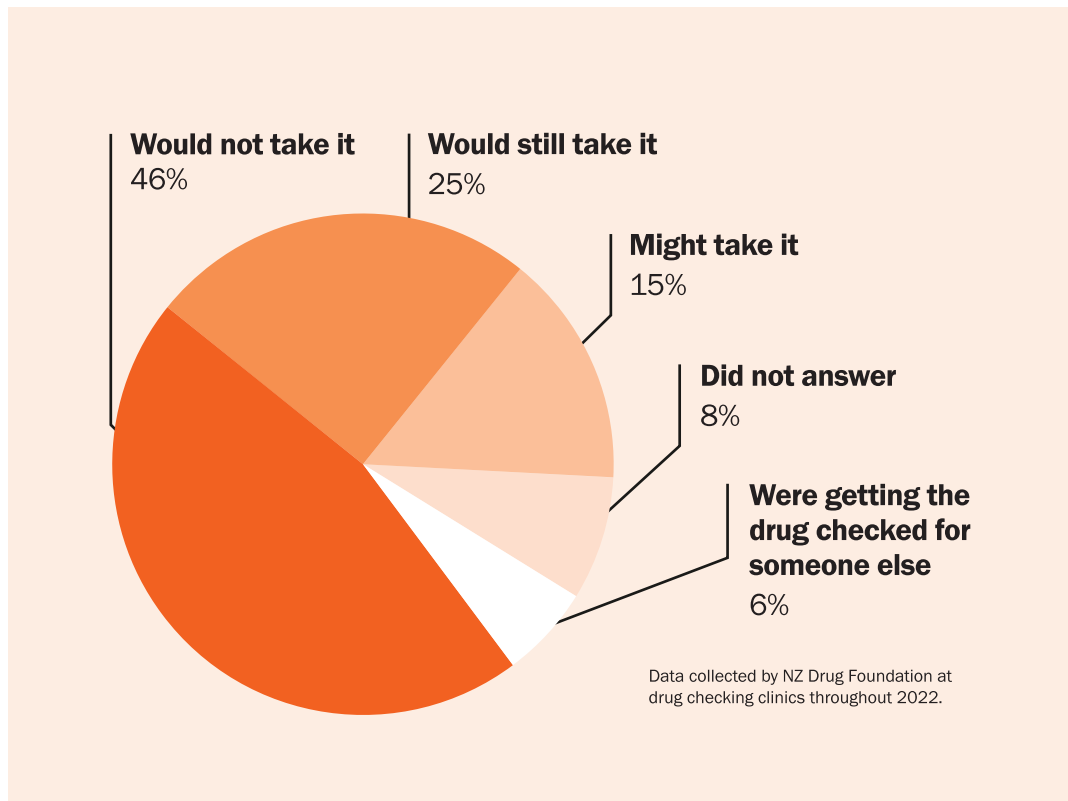
As LSD is active at very low doses, we can't use the spectrometer machine to check for LSD. Instead, we use Ehrlich's reagent test which changes colour to indicate the presence of LSD or another indole.

If an LSD sample does not produce a colour change with Ehrlich's reagent, we ask the client if we're able to send it for confirmatory testing.

14% of LSD samples did not produce a colour change with Ehrlich's reagent, but did not get confirmatory testing.

8% underwent confirmatory testing and were found to contain substances other than LSD. These included 25B-NBOH, etizolam, ketamine and NBOMe.

## If drugs weren't what people thought, would they still take them?



## How did people plan to take drugs?

People choose to use drugs in all sorts of ways. One of the questions we ask people is how they might use their drug if they choose to take it. There's no judgement here - we just want to make sure we can give you the best advice to stay safer!

Of the people who said they would take the drug, most people (61%) said they would swallow it - either by itself, in a capsule, in a drink or parachuting (wrapping the substance in something like rice paper and swallowing it).

19% said they would snort the drug. 5 would smoke or vape, 5% did not answer, 4% would take sublingually (under the tongue), 3% would inject, 2.5% were unsure and 0.5% would take transdermally (on the skin, with substances that can be absorbed this way).

Remember, most of our samples were of MDMA - which affects the overall stats on how people are taking drugs.

## Would people mix drugs?

Combining different drugs, including alcohol and medication, can make the effects of each more unpredictable and risky. Some drug combinations can have dangerous interactions that could put you at risk.

When people who brought drugs in for checking were asked if they would mix with other drugs, 53% said yes. Most often, people said they would mix their drug with a few alcoholic drinks throughout the evening. 29% said they didn't intend to mix drugs, while 10% did not answer and 8% said they were unsure.

When someone tells us they will mix their drugs with alcohol or other drugs, or medicines and supplements, it's a great opportunity to have a conversation about potentially dangerous interactions.

## What actions were people taking to be safer?

Every client who accesses our service has a harm reduction conversation with our team. This is the most important part of our service - whether you choose to take what you have or not, there are always ways you can be safer.

Those who said they would take the substance or were unsure if they would take it let us know after the conversation what harm reduction measures, they planned on taking to stay safer. Here were some of the most common ones:

- 29% of people told us that they would test any other substances they were using
- 29% of people told us that they would now take a lower dose than they had originally thought
- 27% of people told us that they would avoid mixing with alcohol, other drugs or medicines
- 23% of people told us they would use with other people around or a 'trip sitter'
- 19% of people told us they would now use a lower risk method of use
- 15% of people told us that they would do more research on the substance before taking it
- 8% of people told us that they would not re-dose at all

### **We had lots of other great tips too that didn't make the top 7 most common. Some we really loved were:**

Planning for recovery before you use. Some people told us that they scheduled a day off, other people told us about supplements they'd take to feel better. And others shared the benefit of having your fave comedown food and drinks ready to go for the next day.

Having a pre-chat with the people you are with before using. Some people told us about how they had consent conversations with sexual partners before they took any drugs, to lay out boundaries and expectations.

Doing a nasal rinse after snorting, or the morning after.

Having naloxone/Nyxoid (an opioid overdose reversal drug) on hand when going out. Lots of people received fentanyl test strips from drug checking clinics, or learned how to use them from the team.

Lots of people talked to us about the importance of set and setting - and the things that made them comfortable, especially when they were experiencing unsettling or unpleasant feelings.