

# What we saw at drug checking in 2023



Te Puna  
Whakaiti Pāmamae  
Kai Whakapiri  
New Zealand  
Drug Foundation

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# Introduction

Drug checking is a free, legal and confidential service that saves lives and reduces harm by telling people what's really in their drugs and sharing harm reduction information with them.

It also prevents harm in the wider community by alerting people to dangerous substances that are in circulation.



NZ Drug Foundation Te Puna Whakaiti Pāmamae Kai Whakapiri has been a licensed drug checking service provider since late 2021.

We have the privilege of working alongside KnowYourStuffNZ and Drug Injecting Services Canterbury (DISC) Trust who also provide drug checking services across the motu, as well as the University of Auckland who have a drug checking license for a research project.

**The data in this report only relates to drug checking clinics operated by the NZ Drug Foundation.**

New Zealand's government research agency, the Institute of Environmental Science and Research (ESR), provides invaluable confirmatory testing, equipment upkeep and scientific expertise to support the work we do in the community.



## Acknowledgements

We are thankful for support from KnowYourStuffNZ, DISC Trust, ESR, Ministry of Health | Manatū Hauora, Health New Zealand | Te Whatu Ora, High Alert and Bruker.

We are also very grateful to partner with amazing organisations who help us to get drug checking to communities, including ADIO Trust, Aotearoa Sex Workers' Collective, Auckland University Students' Association (AUSA), Burnett Foundation Aotearoa, CAYAD Hawke's Bay, DHDP, Downtown Community Ministry (DCM), Hato Hone St John, Manaaki Moves Trust, Napier City Council, New Plymouth District Council, NINE Whangārei, Odyssey House (Auckland), Studio One Toi Tū, Te Aka Taura- Victoria University Students Association (VUWSA), Te Arawa Whānau Ora, Te Kaunihera o Tāmaki Makaurau | Auckland Council, Te Whatu Ora Health New Zealand West Coast, The Hempstore, The Kitchen Project, Tui Ora, University of Auckland Student Wellbeing Team, Whaiora Medical Centre Masterton, and the team at Rhythm and Vines.

And most importantly, our clients and community of people who use drugs for their knowledge, support, and trust.

# How drug checking works

Find your nearest clinic on [thelevel.org.nz](http://thelevel.org.nz)

## 1 Check in

We give each person a code name to keep them anonymous.

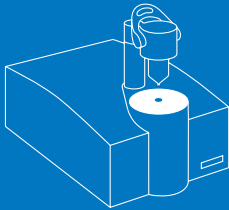
## 2 We take a sample

We ask some questions and take a small sample of the drug for checking – about 10mg, roughly the size of a match head.

We give the rest back.

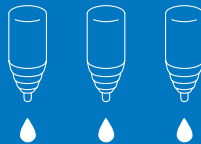
## 3 We check it

We use a range of tools to check people's drugs, including:



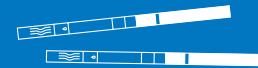
**Spectrometer**

A machine that matches a light waveform reading of a sample against a database of more than 25,000 substances.



**Reagents**

Chemicals that change colour when they react with certain drugs.



**Test strips**

Strips that show if fentanyl or benzodiazepines are present in a sample.

## 4 We say what we found

We call out a person's code name when their results are ready.

We return any remaining samples, then have a private conversation about what we've found and ways to stay safer.

In some cases, we may ask for permission to send a sample for further checking.

We can safely dispose of anything a person doesn't want to keep, but we won't confiscate drugs under any circumstances.

# How many drugs did we check in 2023?

2023 was our second year operating as a licensed drug checking provider.

**We tested 2602 samples in 2023, compared to 1720 samples in 2022.**



## That's a 51% increase!

We love to see more people accessing drug checking services in the community.

Across 2023 we held 98 drug checking clinics across 24 different venues in Auckland (central, west and south), Christchurch, Gisborne, Hokitika, Masterton, Napier, New Plymouth, Rotorua, Wellington and Whangārei. We are excited to see drug checking continue to grow in Aotearoa New Zealand.

This is compared to 73 clinics in 9 locations in 2022.

# How often were drugs what people expected?

**In 2023, 64% of drugs were what people expected.**

Some of these drugs contained binder or filler, but didn't contain any other psychoactive drug or hazardous substance.

8.5% of samples contained a completely different drug to what the person expected.

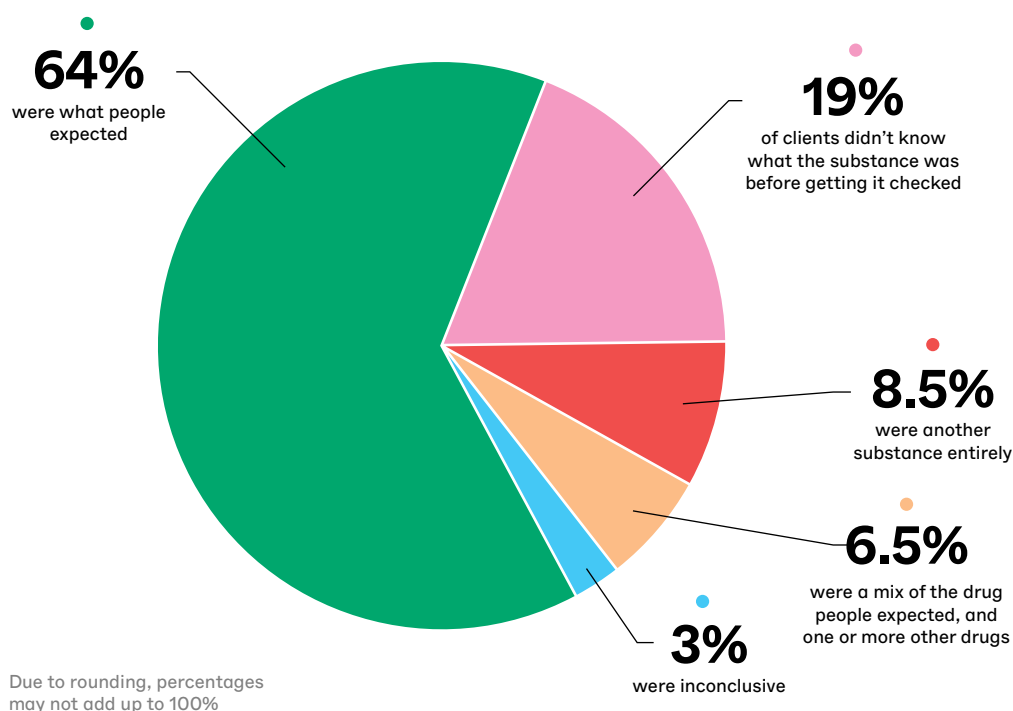
A further 6.5% contained the drug the person expected plus one or more other psychoactive or hazardous substances.

3% of samples returned inconclusive results, meaning we couldn't confirm what substances were present.

That means almost 1 in 5 samples contained a drug someone was not expecting.

In the case of the remaining 19% of samples, the drug was unknown when it was brought in or the person chose not to disclose it.

Note: In 2023 we changed how we classify substances as consistent and partially consistent, in line with Ministry of Health guidance. Substances containing a large amount of filler and a small amount of the presumed drug are now categorised as consistent.



# What drugs did people think they had?

As drug checking reaches new communities, we see different types of drugs brought in for us to check.

This year we've broken down the most commonly expected drugs we've seen at our public clinics (excluding festivals and events) and the most commonly expected drugs we have seen overall.

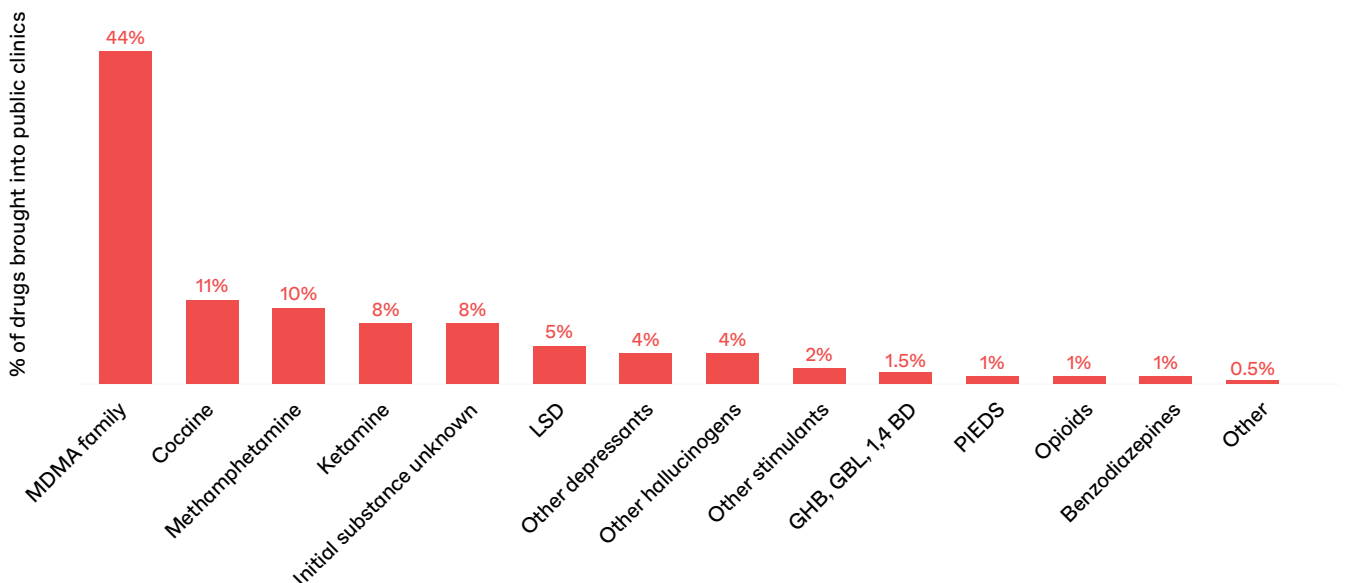
“

I just think this is the coolest thing. They should have this everywhere.

— CLIENT, RNV 2023

## Public clinics (excluding festivals and events)

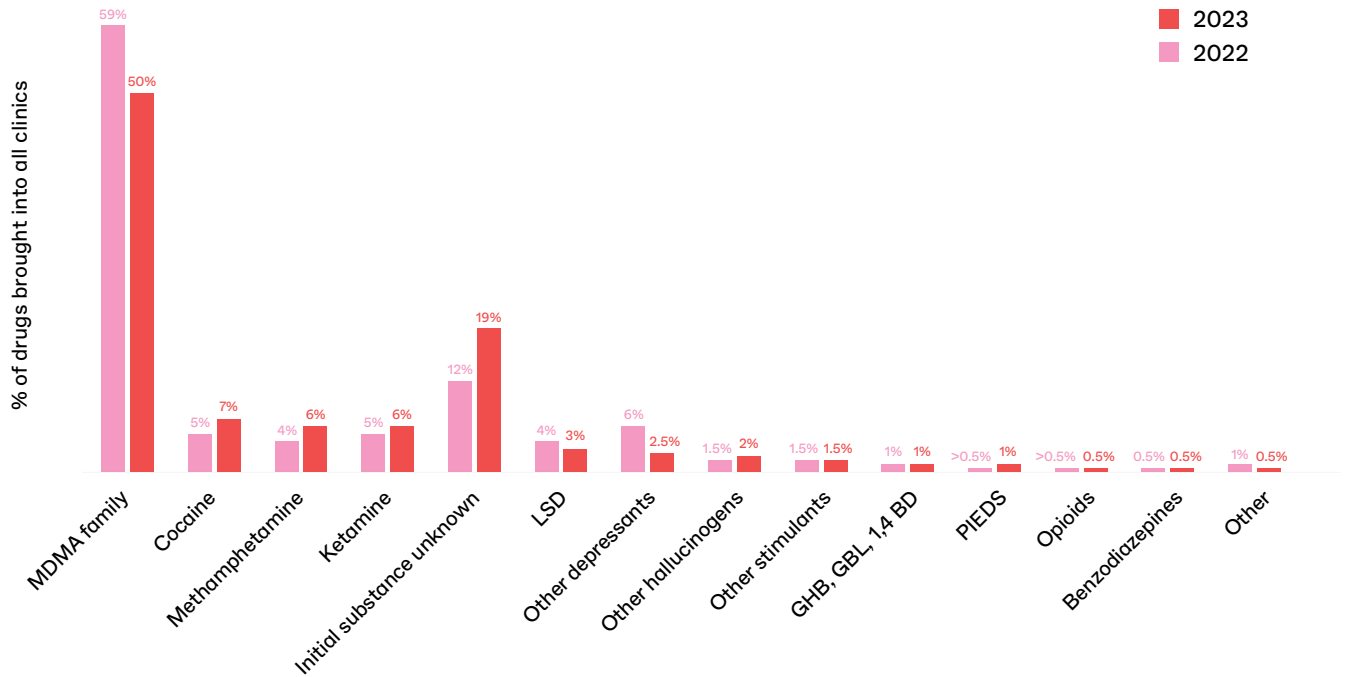
At our public clinics (excluding festivals and events), MDMA was the most common drug people thought they had. This was followed by cocaine, methamphetamine, ketamine and LSD.



## All clinics (including festivals)

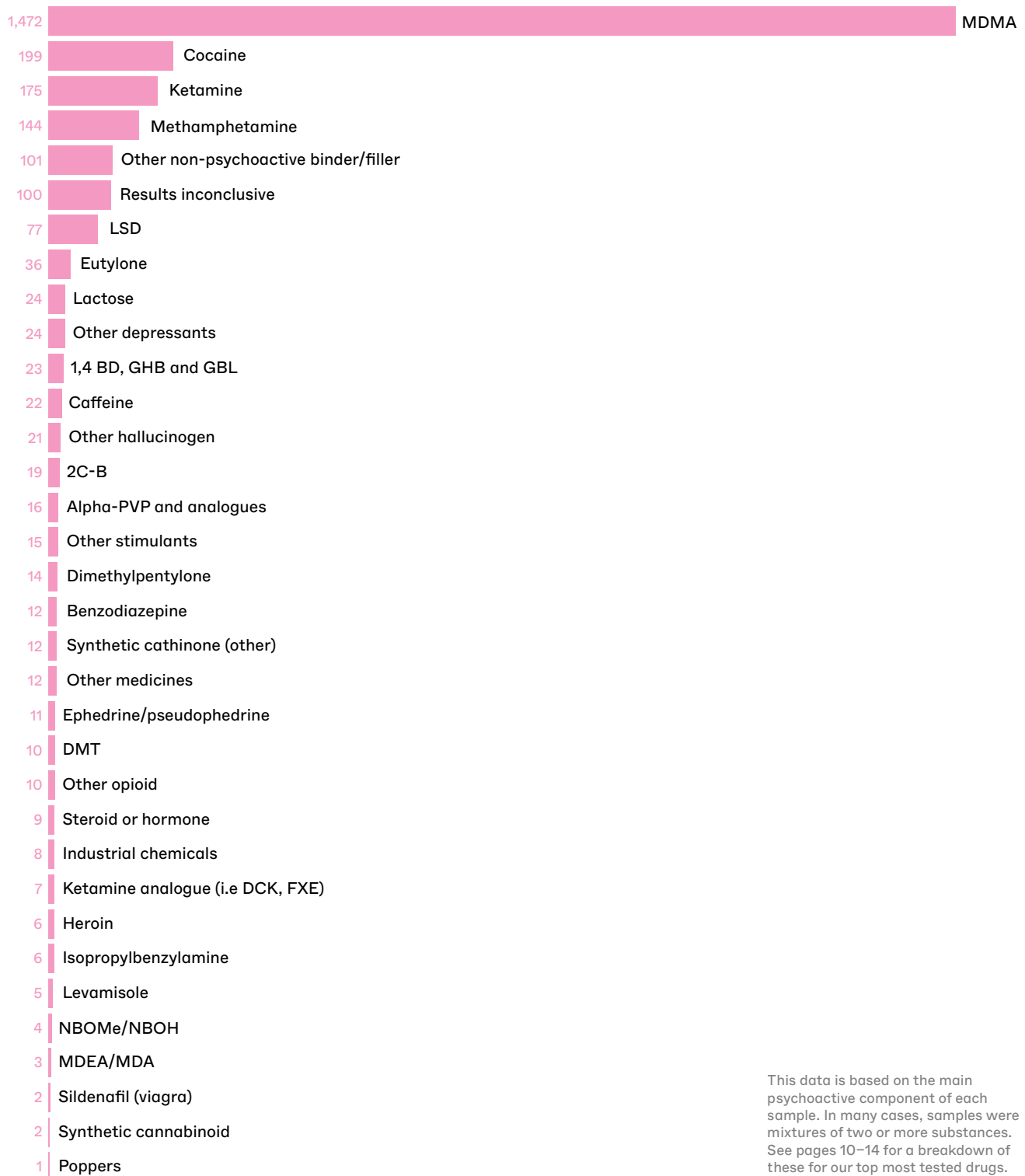
MDMA was also the most common drug brought into all clinics (including festivals and events), making up 50% of the total samples. Followed by cocaine, then methamphetamine, ketamine and LSD.

In 2022, MDMA made up 59% of the total samples.



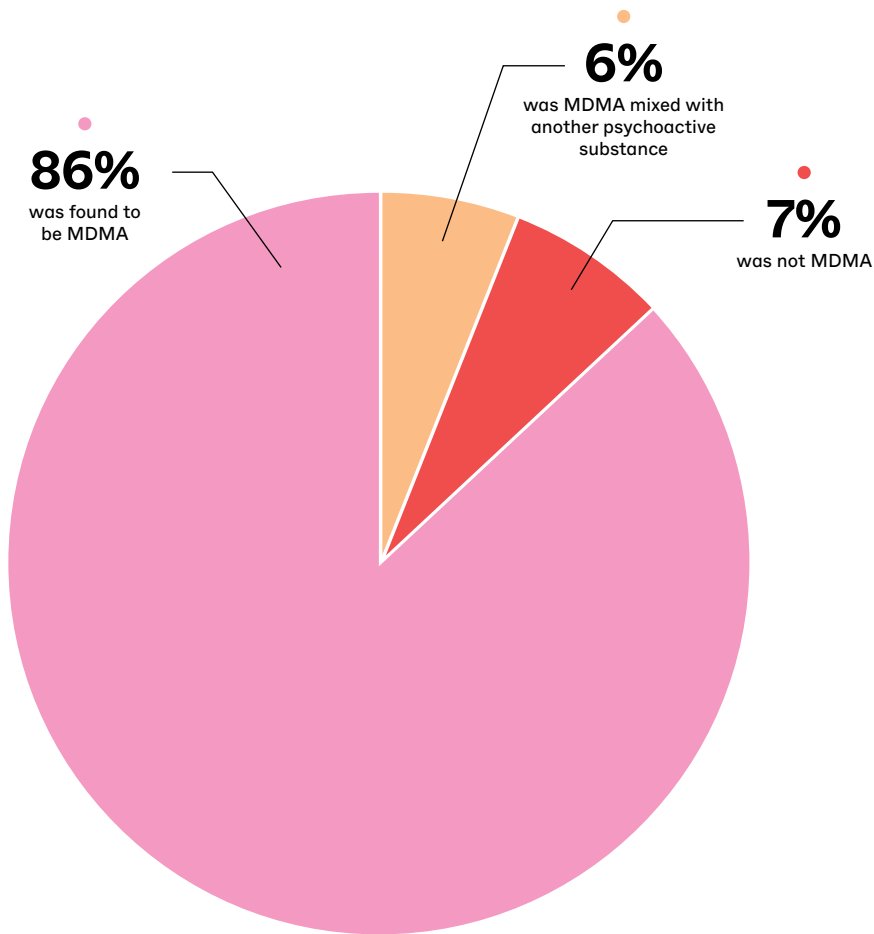


# What drugs did people actually have?

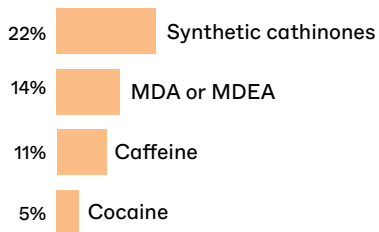


This data is based on the main psychoactive component of each sample. In many cases, samples were mixtures of two or more substances. See pages 10–14 for a breakdown of these for our top most tested drugs.

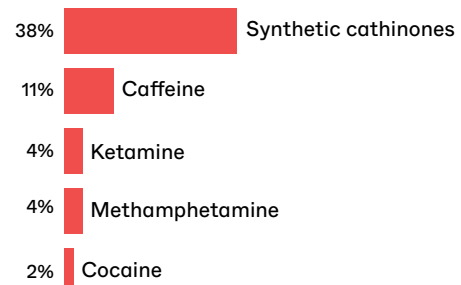
# What we found in MDMA



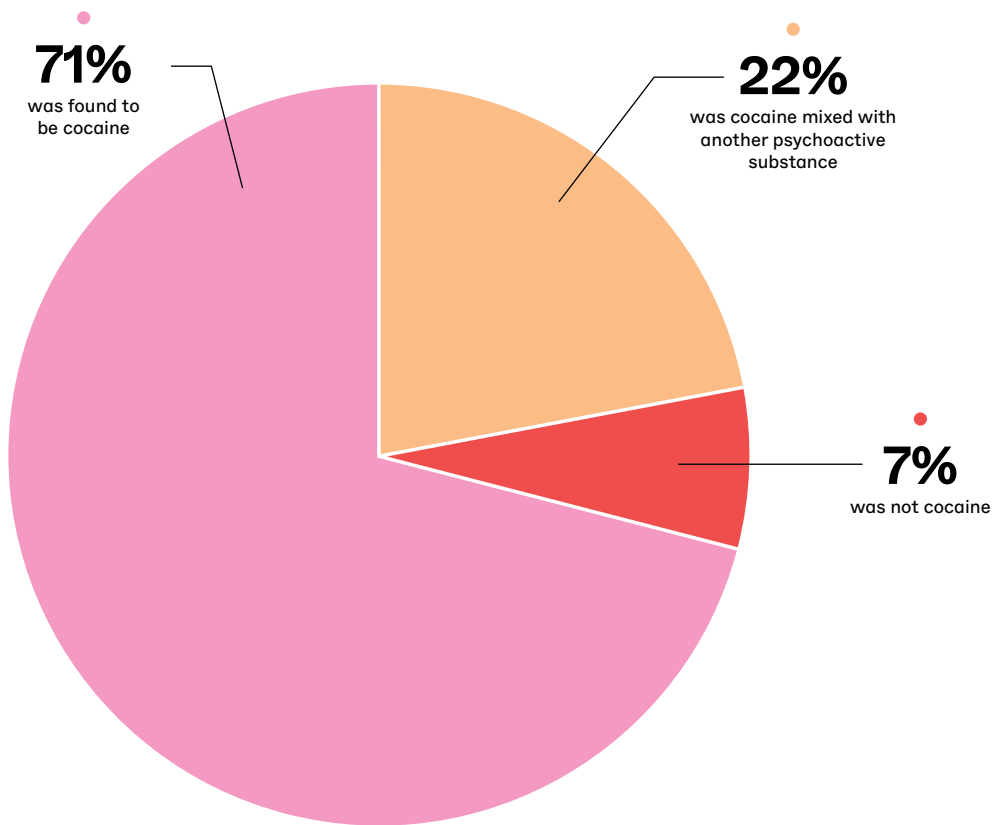
## When MDMA was mixed with another psychoactive substance, we found:



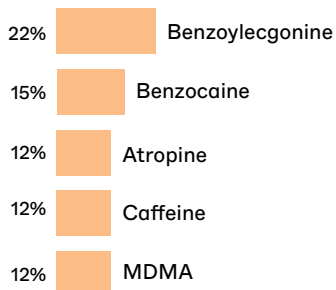
## When a sample contained no MDMA, we found:



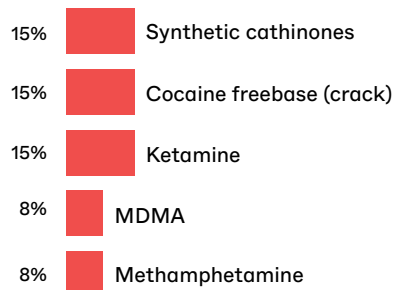
# What we found in Cocaine



## When cocaine was mixed with another psychoactive substance, we found:

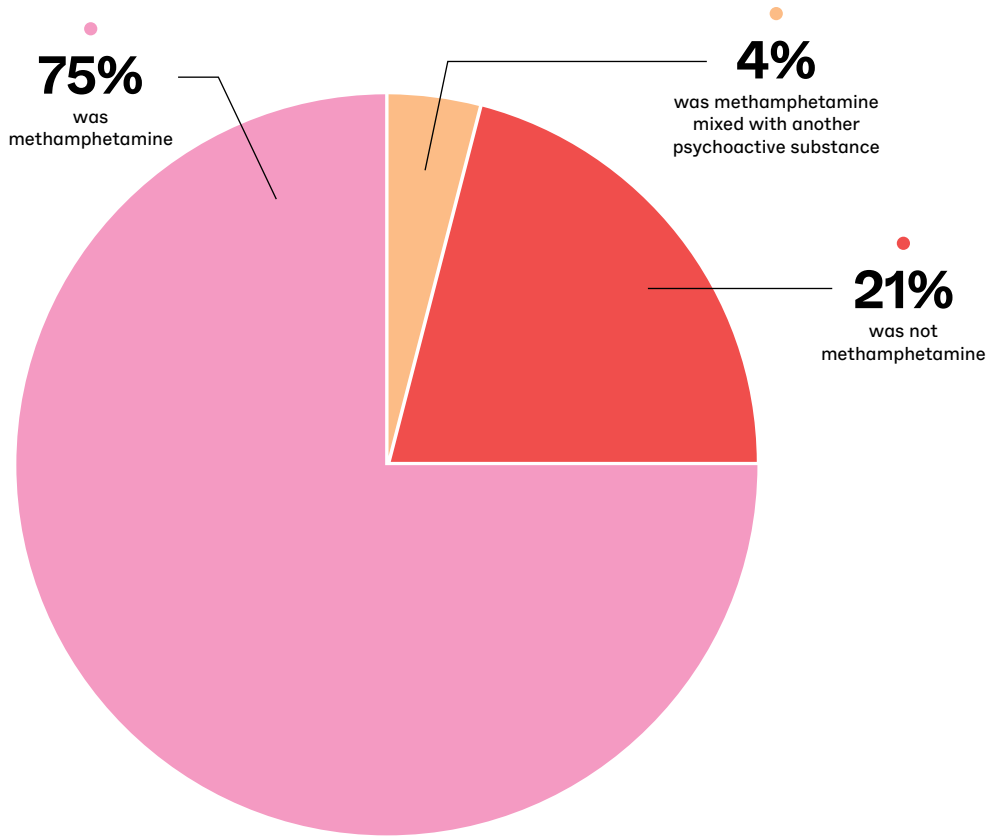


## When a sample contained no cocaine, we found:

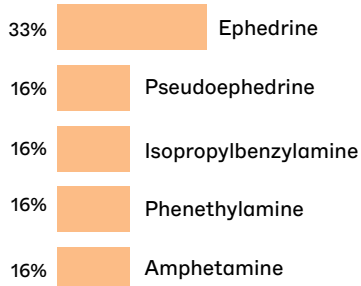


What we found in

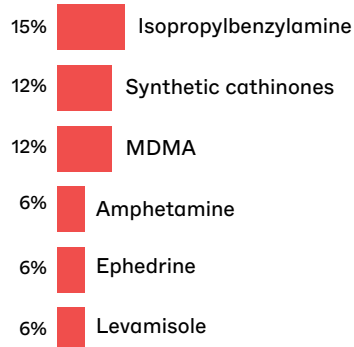
# Methamphetamine



## When methamphetamine was mixed with another psychoactive substance, we found:

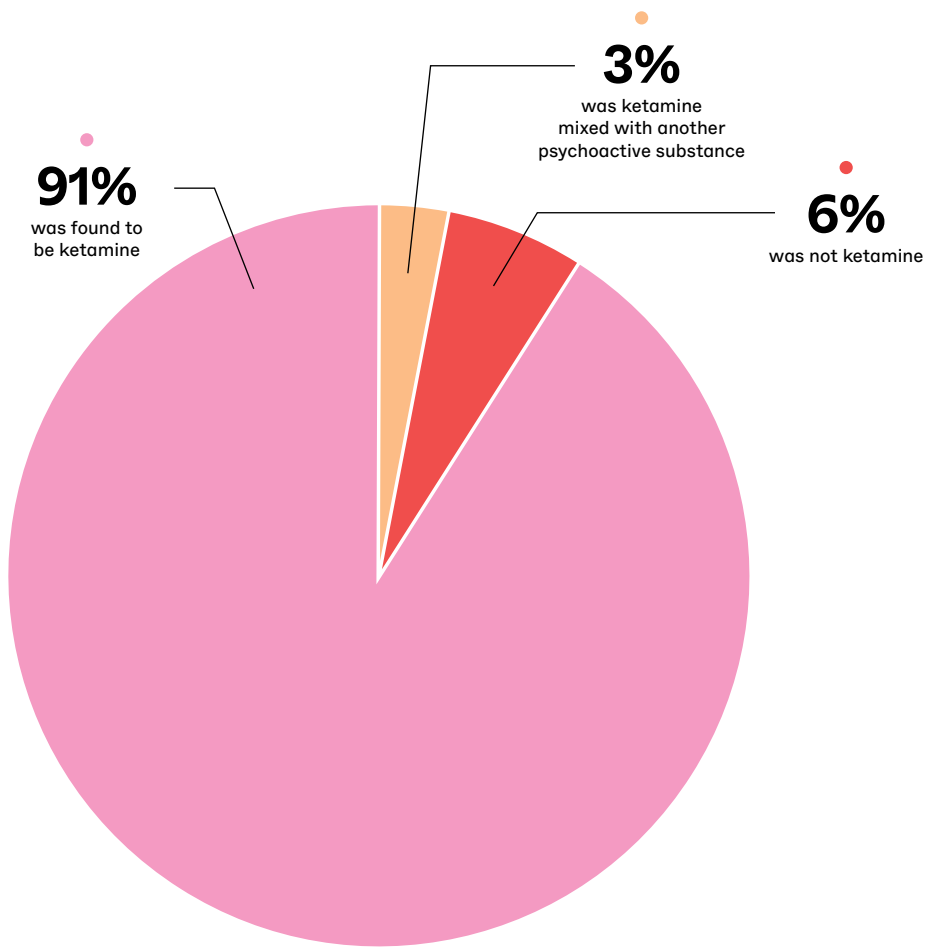


## When a sample contained no methamphetamine, we found:

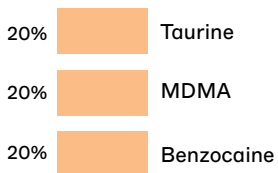


What we found in

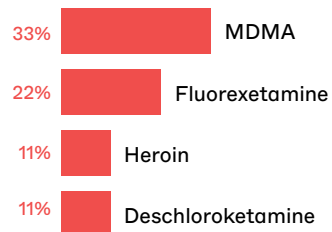
# Ketamine



## When ketamine was mixed with another psychoactive substance, we found:



## When a sample contained no ketamine, we found:



What we found in

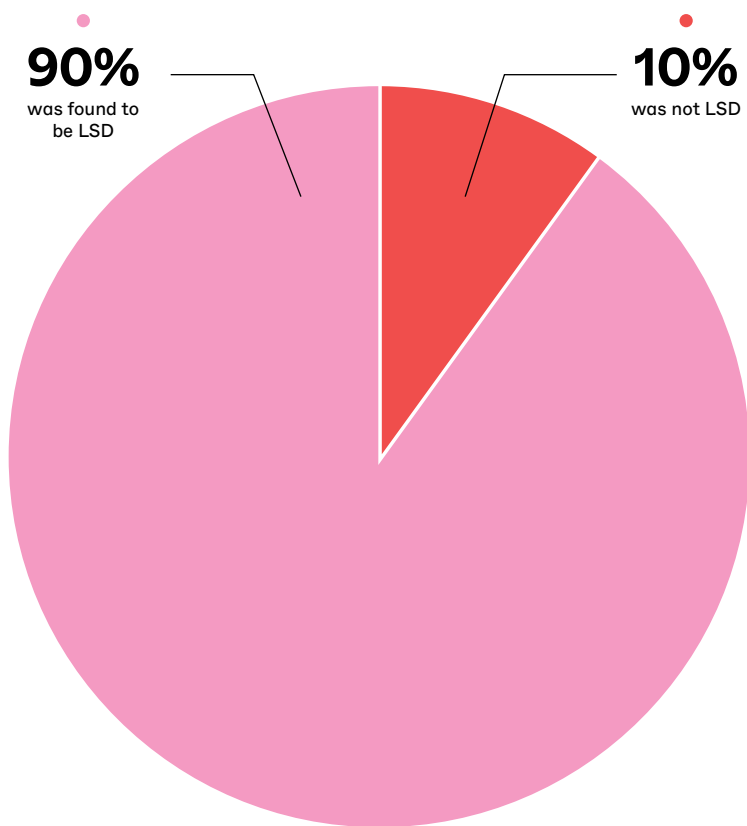
# LSD

LSD on blotter paper cannot be checked with the FTIR spectrometer we use for other drugs. We use a reagent called Ehrlich's which turns purple in the presence of an indole\* such as LSD.

90% of LSD samples we checked were found to contain an indole.

10% did not react with Ehrlich's, most of which were classified as NBOMe-type substances.

We also saw presumed LSD samples actually contain: etizolam, MDMA, and one case of a mix of FDCK, cylopentamine and 4F-EPH.



\*A family which includes LSD, DMT and psilocybin.



# What binders and fillers did we find?

**35% of the drugs we tested in 2023 contained a binder or filler. These are substances that are not psychoactive and are often used to 'bulk out' drugs.**

It's important that people know what binders and fillers are in their drugs. Some binders such as gelatine are dangerous to inject and can cause serious injury. Fillers such as Epsom salts can hurt your nose if snorted. Other fillers are common allergens for people such as lactose or wheat flour.

Remember, just because one part of a drug has filler, that doesn't mean this is evenly distributed throughout the whole bag or pill. We always recommend that people crush, mix and measure their drugs before splitting up doses to try and get the most even distribution and minimise the risk of overdosing.

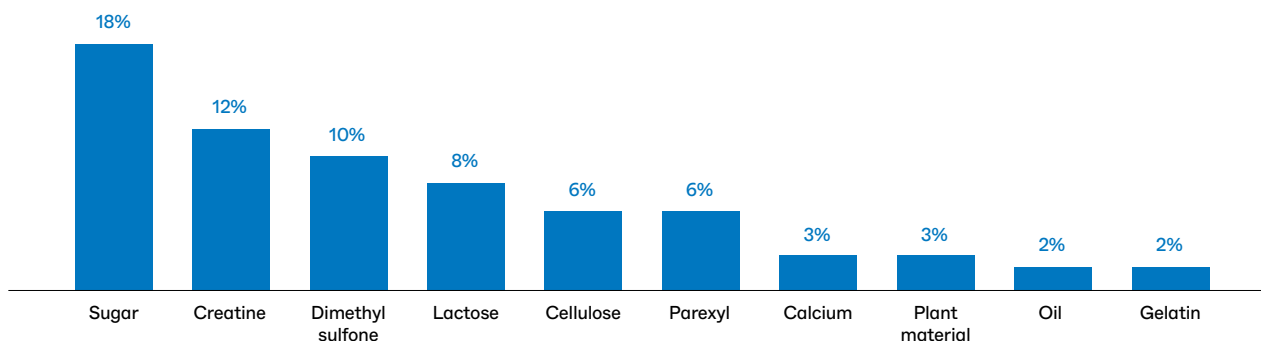
“

All my friends told me that this is probably a set up, but now that I am here, I am like 'why did I not do this sooner?' You guys are awesome.

— CLIENT, AUCKLAND

## The most common binders and fillers we found were:

% of total samples with filler



# What concerning substances did we find?

In 2023, drug checking providers continued to identify concerning substances.

These substances are more dangerous if people do not know they are consuming them, for example if they have been misrepresented as, or mixed in with, another drug.

As the New Zealand drug market continues to change, we see more and more new psychoactive substances appearing in our market.

Most of the time when people bring in their drugs to be checked, we can detect a dangerous substance before someone takes it.

77 of our 2602 samples (or 3%) were reported to be related to a harm incident before they were brought in for checking.

1

## Nitazenes

Nitazenes are a family of potent synthetic opioids that can be stronger than fentanyl. They have been detected by drug checking providers in substances sold as other weaker opioids, such as oxycodone. Nitazenes are very difficult to dose, even if you know which one you have, making them easy to overdose on. If someone takes a nitazene thinking it is a different weaker opioid, this is very likely to result in overdose.

To learn how to be safer when using nitazenes, visit [thelevel.org.nz/drug-information/fentanyl-and-nitazenes](https://thelevel.org.nz/drug-information/fentanyl-and-nitazenes)

2

## Novel benzos

Many of the benzodiazepines that we saw at drug checking this year were sold as a different benzo than they actually were. We saw a variety of different 'novel' benzos this year including bromazolam, flualprazolam, etizolam, flubromazepam and flubromazolam. These were often counterfeit pills, i.e sold as Xanax bars. Counterfeit benzos are not made the same as pharmaceuticals. These benzos can be stronger and the active ingredient is often unevenly distributed across the pill.

To learn how to be safer when using benzos, visit [thelevel.org.nz/drug-information/benzodiazepines](https://thelevel.org.nz/drug-information/benzodiazepines)



3

## Alpha PVP and other synthetic cathinones

In 2023 we saw more synthetic cathinones arrive on the scene, usually sold to people as MDMA. This included a few we have seen in recent years, such as eutylone and dimethylpentylone, and some we haven't seen in a while, such as alpha-PVP.

We also saw some new, strong cathinones such as alpha-D2PV, cyputylone and new cathinones we haven't been able to identify yet. Synthetic cathinones often have lower dosage amounts than MDMA that tend to result in less euphoric effects. They can have more unpleasant and unpredictable effects. This can result in an overdose if someone takes them unknowingly or takes more thinking that they are weak MDMA.

To learn how to be safer when using synthetic cathinones, visit [thelevel.org.nz/drug-information/synthetic-cathinones](https://thelevel.org.nz/drug-information/synthetic-cathinones)

4

## NBOMes / NBOHs

We continued to see NBOMes and newer synthetic hallucinogens, NBOHs, sold as LSD. These drugs are stronger than LSD and are much more likely to result in physiological overdose and psychological distress than LSD itself.

To learn how to be safer when using NBOMes and NBOHs, visit [thelevel.org.nz/drug-information/nbome](https://thelevel.org.nz/drug-information/nbome)

5

## Cyclohexanamine and other industrial chemicals

In 2023 we saw some concerning non-psychoactive chemicals sold as various drugs. We have seen several samples that people thought were methamphetamine that actually contained a chemical called cyclohexanamine, a research chemical that is likely quite toxic to humans.

We've also seen 2-methyl-4'-(methylthio)-2-morpholinopropiophenone, a chemical unsafe for human consumption, sold as MDMA, among other things. These drugs won't make you feel high but are very likely to make you unwell.

Keep an eye out on The Level ([thelevel.org.nz](https://thelevel.org.nz)) and High Alert ([highalert.org.nz](https://highalert.org.nz)) for updates on when we find dangerous substances circulating in New Zealand.

# High Alert notifications

**All of the drug checking providers in New Zealand help to inform our early warning system High Alert about dangerous substances circulating in the community.**

In 2023 NZ Drug Foundation's drug checking services identified three substances that resulted in notifications. These notifications help us to get the word out to the wider community and prevent future harm.

## 4-en-MDMB sold as DMT

A sample brought to us was implicated in a serious harm incident and turned out to be the potent synthetic cannabinoid 4-en-MDMB, which was sold as DMT. High Alert quickly released the notification on 4th May 2023.

[highalert.org.nz/alerts-and-notifications/synthetic-cannabinoid-misrepresented-as-dmt/](https://highalert.org.nz/alerts-and-notifications/synthetic-cannabinoid-misrepresented-as-dmt/)

## Alpha-PVP sold as MDMA

We tested a sample sold as MDMA that was actually Alpha-PVP, a very potent synthetic cathinone. We let High Alert know and they put the word out to the community right away on 6th April 2023.

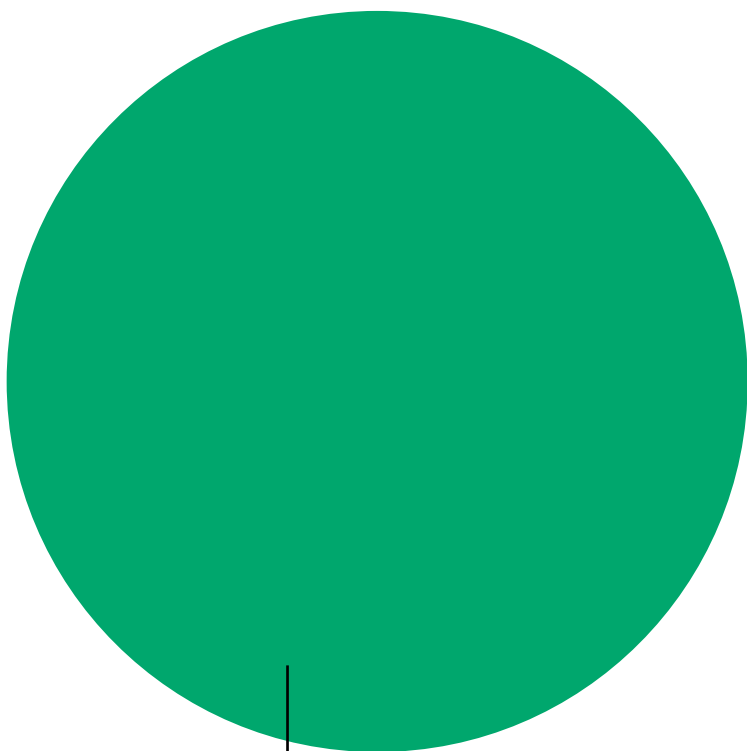
[highalert.org.nz/alerts-and-notifications/potent-stimulant-alpha-pvp/](https://highalert.org.nz/alerts-and-notifications/potent-stimulant-alpha-pvp/)

## Heroin sold as ketamine

We had a concerning sample brought into us that was linked with serious harm. It was sold as ketamine but tested as heroin, a very concerning misrepresentation. High Alert worked with us to put a notification out on the same day on the 25th of November 2023.

[highalert.org.nz/alerts-and-notifications/heroin-sold-as-ketamine-in-auckland-region/](https://highalert.org.nz/alerts-and-notifications/heroin-sold-as-ketamine-in-auckland-region/)

# Harm reduction



# 100%

**of people who used our drug checking service had a harm reduction conversation.**

Drug checking isn't just about telling people what's in their drugs. A key part of delivering the service in Aotearoa is having a harm reduction conversation and sharing information about how to stay safer. This happens whether or not a drug is what the person expected, and whether they choose to take it or not.

Our harm reduction conversations are non-judgemental and are tailored to a person's results, experiences and understanding. We love to hear people's tips about how they stay safer so that we can pass these on to others.

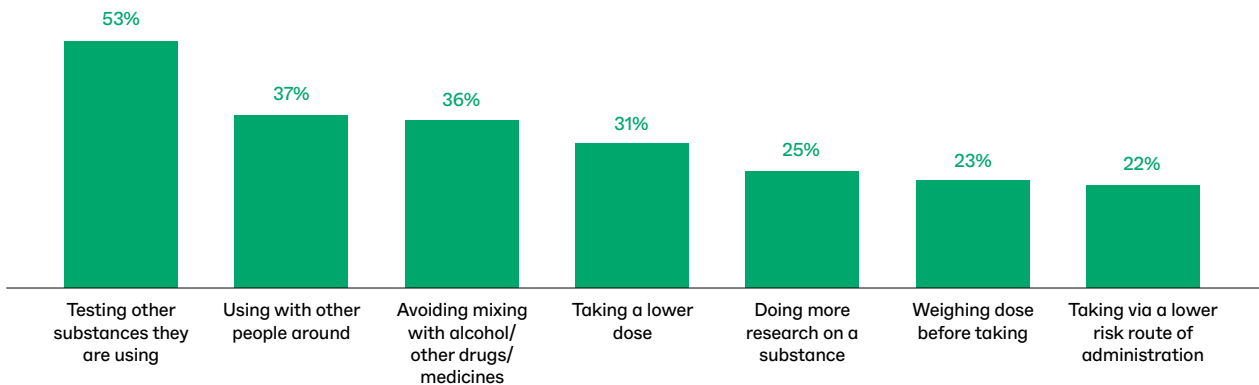
“

I really wish this was around when I was a teenager.

— CLIENT, AUCKLAND

# How do people stay safer?

The most common techniques people say they use to be safer:



As part of our harm reduction conversations, we ask people what they do to say safer.

Other tips to stay safer that people told us in 2023 included:

*“Crush all crystals up and mix so that your bag is consistent.”*

*“Drink water & eat food before taking drugs. Stay hydrated during a trip!”*

*“Prepare for the day after – have good food available, supplements if you take them.”*

*“The set (person, body, experience) and setting (environment) matter just as much to a good experience as the drug does.”*

*“Get it tested, don’t assume it will be fine every time.”*

*“Know drug interactions.”*

*“I make sure I use a clean needle, every time.”*

“

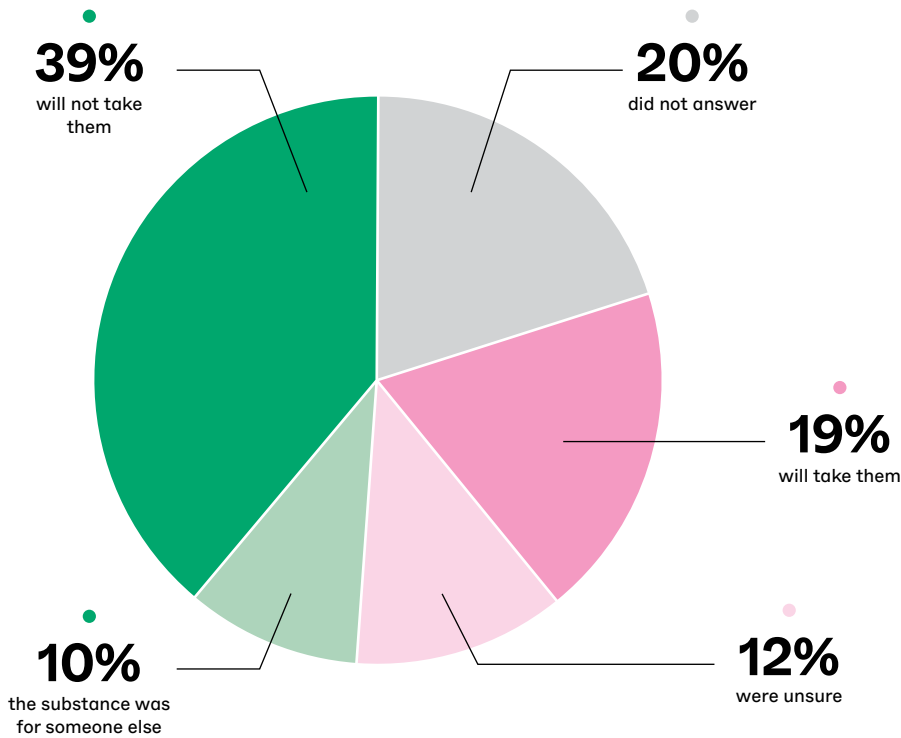
The NZDF are keeping people safer, and we should all be grateful and supportive of this.

Just as we’ve normalised knowing your HIV status, let’s normalize and encourage drug checking to reduce harm in all our communities.

— LUKE, HEALTH PROMOTER AND COMMUNITY SERVICE PROVIDER

# What did people plan to do if their drug wasn't as expected?

Harm reduction



**When a drug turns out to be different from what a person expected, we ask them whether they still plan on taking it.**

There is no judgement whether they choose to take a drug or not — no matter what they decide, we can chat about ways to be safer.

Many of the people we see at our clinics share the information we give them with friends who may have the same substance, so we check they have everything they need to have that conversation.

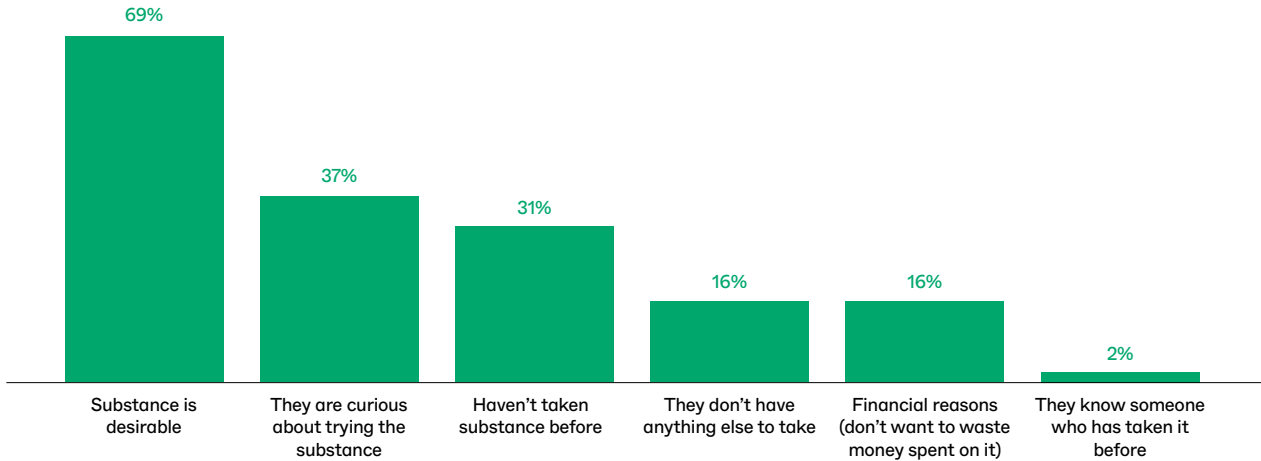
“

In my opinion, drug checking is the MOST important harm reduction piece to saving lives and reducing harms.

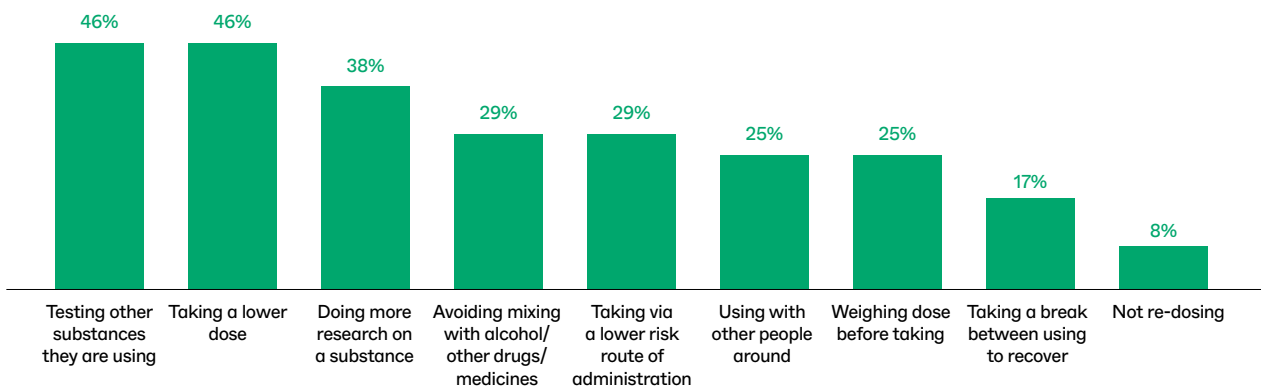
— TRISH DRIBNENKI-PENNOCK, NATIONAL HARM REDUCTION LEAD ADIO/NZNEP

## Reasons why people said they would still take a drug if it was different to what they expected:

Harm reduction



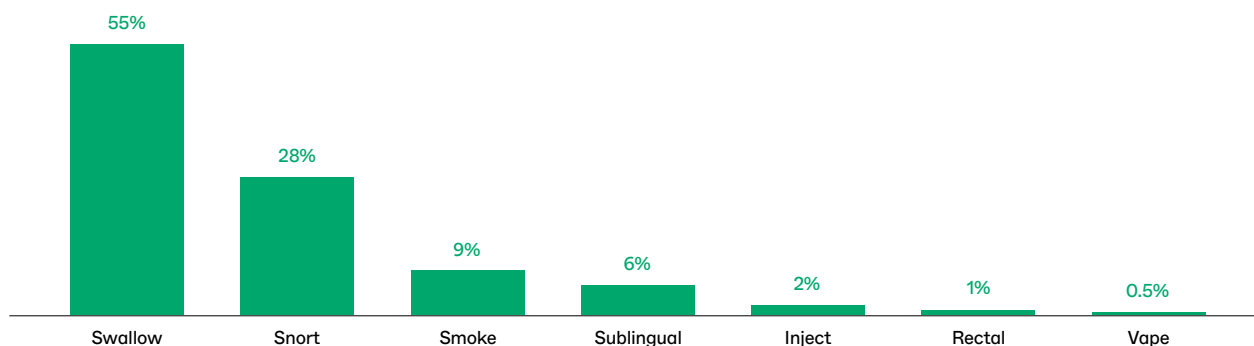
## Harm reduction measures of people taking a substance that was different to what they expected:



People also shared other tips about staying safer. The most common was discussing safer practices for snorting, smoking, and injecting.

# How would people take their drugs?

The most common ways people said they would take their drugs in 2023 were:



**For those clients that told us how they would take a drug, the most common route of administration (ROA) was taking orally (55%) — such as swallowing in a cap or drinking in a drink.**

Of the people who discussed the ROA they planned to take with us, 17% said they would use a lower risk ROA after the harm reduction conversation.

“

I absolutely love coming to work; the highlight of my week is interacting with our clients.

I wish something like this was around when I was younger, it prevents so much harm!

— JANIS, DRUG CHECKING SERVICE PROVIDER



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