

# What we saw at drug checking in 2024



Te Puna  
Whakaiti Pāmamae  
Kai Whakapiri  
New Zealand  
Drug Foundation

# Contents

Introduction	3
How drug checking works	4
Total samples and clinics	5
New clients	6
Overall results	7
What we found in...	
MDMA	11
Cocaine	12
Ketamine	13
Methamphetamine	14
Binders and fillers	15
Concerning substances	16
Nitazene and fentanyl test strips	18
Harm reduction	19

# 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.

The data in this report only relates to drug checking clinics operated by the NZ Drug Foundation. We have the privilege of working alongside KnowYourStuffNZ and Drug Injecting Services Canterbury (DISC) Trust, who also provide drug checking services across Aotearoa.

We are able to achieve this through the support of New Zealand's government research agency, the Institute of Environmental Science and Research (ESR), who provide confirmatory testing, equipment maintenance and scientific guidance for drug checking services. The University of Auckland also holds a drug checking license for specific projects on psychedelics.



## Acknowledgements

We acknowledge the support of Ministry of Health, Te Whatu Ora Health NZ and DIANZ/High Alert in helping us to provide this service to the community.

We would also like to acknowledge the organisations we have worked with over the last year to support us in getting drug checking into communities, including: ADIO Trust – Auckland Central, Auckland South and Whangārei, Auckland University Students' Association (AUSA), Burnett Foundation Aotearoa, CAYAD Auckland, DHDP, Hato Hone St John, Hempstore Aotearoa, Laneway Festival, NZPC: Aotearoa New Zealand Sex Workers' Collective, Odyssey, Studio One Toi Tū, Te Kaunihera o Tāmaki Makaurau | Auckland Council, Te Tāpui Atawhai Auckland City Mission, Te Whatu Ora Health New Zealand Northland, Waimanako/The Hope Centre, Te Whatu Ora Health New Zealand West Coast, Ora Toa, Whaiora Medical Centre, Tui Ora, University of Auckland Student Wellbeing Team, and the team at Rhythm and Vines Festival.

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

# 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.

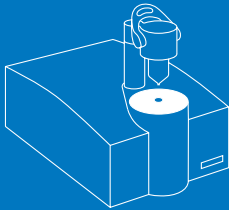
## 2 We take a sample

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.

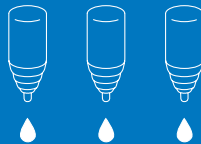
## 3 We check it

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



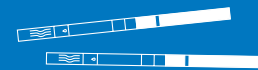
**Spectrometer**

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.

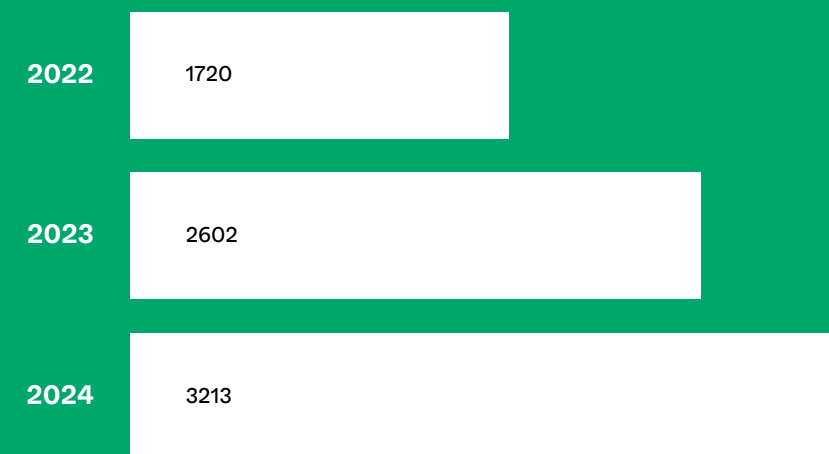
In some cases, we may ask for permission to send a sample for further checking.

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 2024?

2024 was our third full year operating as a licensed drug checking provider.

**We tested a total of 3123 samples across the year. This is compared to 2602 samples in 2023, and 1720 samples in 2022.**



Our drug checking service has increased 23.5% from last year and 87% from when we started. We are pleased to see more people accessing drug checking services in the community.

In 2024 we held 141 drug checking clinics across 19 different venues in Auckland (central, south and west), Christchurch, Gisborne, Hokitika, Masterton, New Plymouth, Porirua, and Whangārei. This is compared to 98 clinics in 2023, and 73 clinics in 2022.

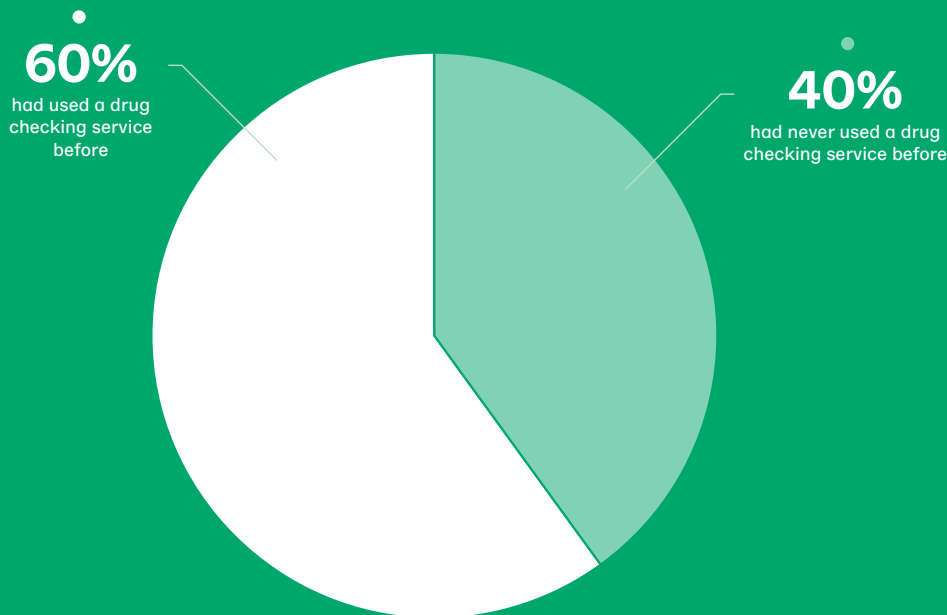
2024 was also our first year operating a 5-day-a-week service in Auckland. Since May 2024 we have offered this service on Dominion Road, Monday to Friday. Approximately 41% of our public clients came into our office to check their drugs. We are excited to grow this further in 2025.

# How many people were new to drug checking?

**In March 2024, we started recording whether people were new to drug checking or whether they had used any drug checking service in Aotearoa before.**

This helps us to understand how successfully we are growing the service.

Of the people who were comfortable answering, 40% had never used a drug checking service before and 60% had used drug checking services in Aotearoa.



“

I often help people who say it's their first time to drug checking ... It's often someone coming in on behalf of their friend group, looking to keep everyone safe. I love interacting with these beacons of harm reduction.”

— JEREMY, DRUG CHECKING STAFF MEMBER, 2024

# How often were drugs as expected?

**In 2024, 68% of drugs were what people expected, up from 64% in 2023.**

Many of these drugs contained binders or fillers, but didn't contain any other psychoactive drug or any hazardous substance.

In 16% of samples, the client did not know what type of substance they had.

**8% of samples contained a completely different drug to what the person expected, compared to 8.5% in 2023.**

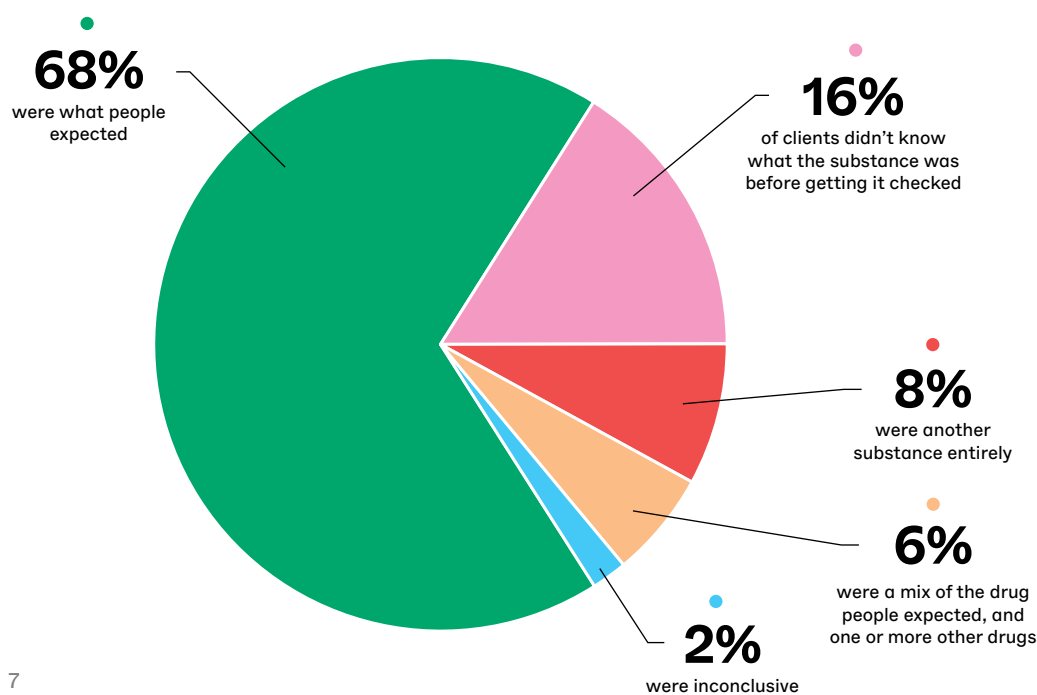
A further 6% of samples (6.5% in 2023) contained the drug the person expected plus one or more other psychoactive drugs, medications, or hazardous substances, or were completely filler with a trace amount of the presumed drug.

2% of samples (3% in 2023) returned inconclusive results, meaning we weren't able to confirm what substances were present.

“

Drug checking is an incredibly valuable asset to people who use drugs. It allows people to engage with ways to stay safer when they choose to use drugs.”

— ISRA, DRUG CHECKING STAFF MEMBER, 2024



# 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.

We've broken down the most common drugs people expected they had across all clinics and just public clinics (excluding events and festivals).

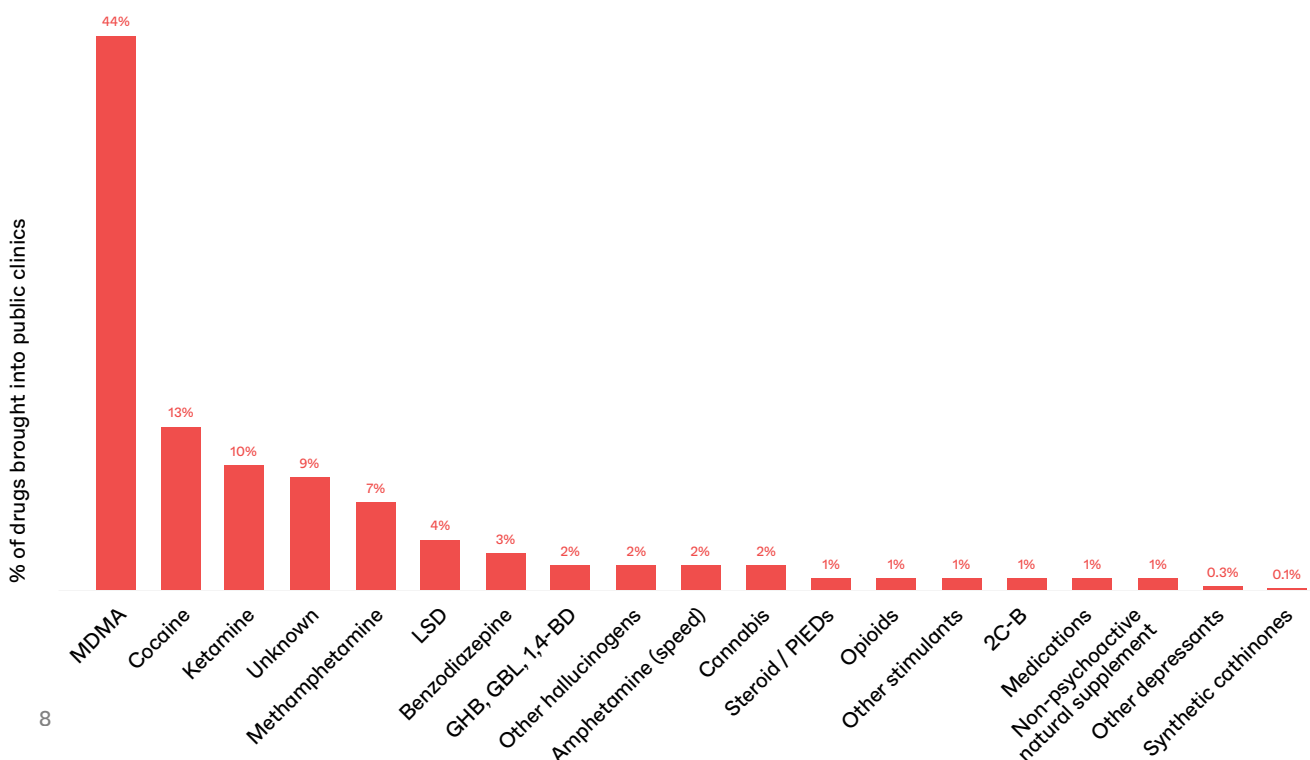
“

I was quite nervous to come here, but now that I have talked to you all I feel so understood. It's just really great to be heard.”

— CLIENT, 2024

## Public clinics (excluding festivals and events)

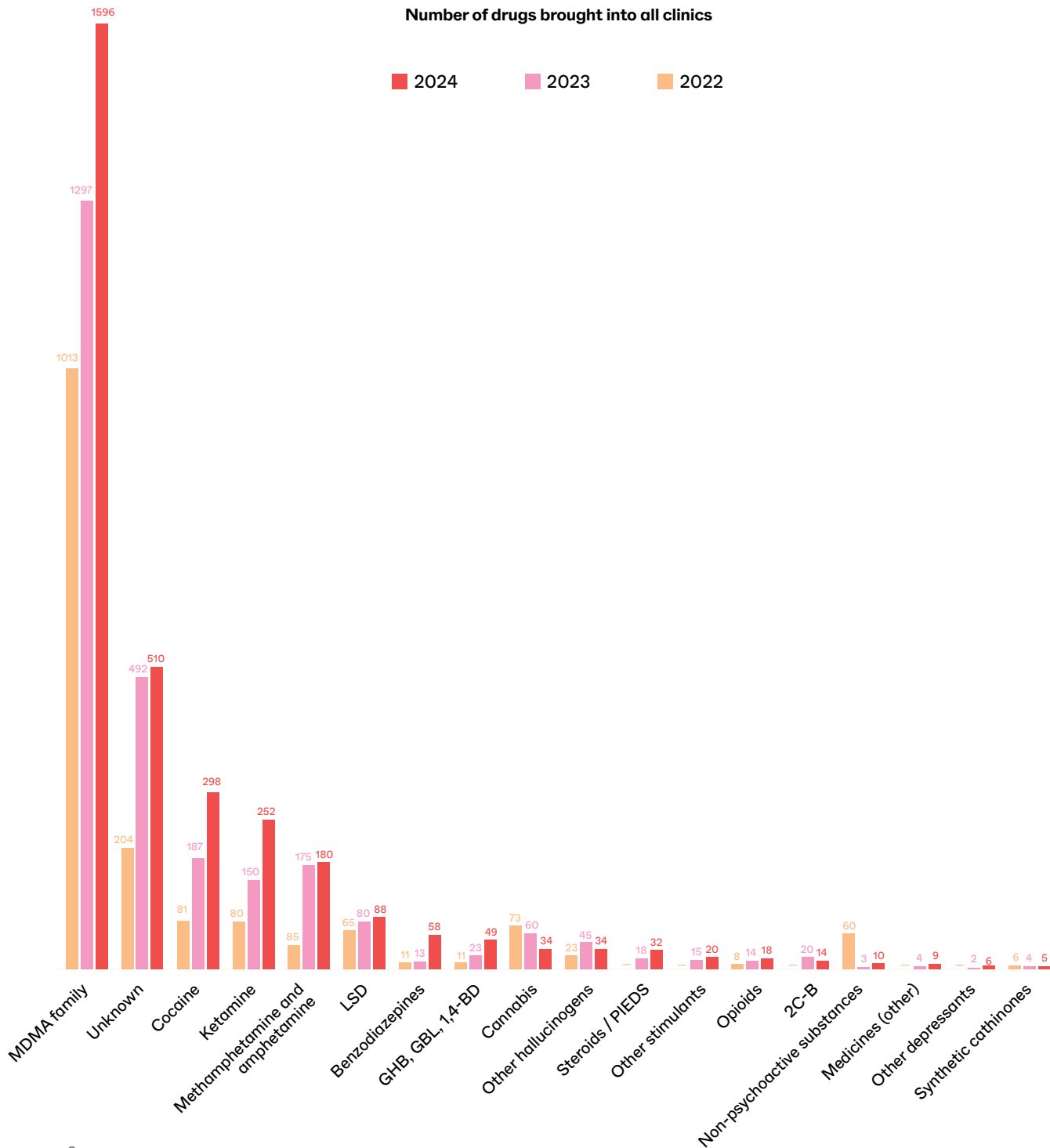
At our public clinics (excluding festivals and events), MDMA was the most common drug people thought they had. This was followed by cocaine, ketamine, methamphetamine and LSD.



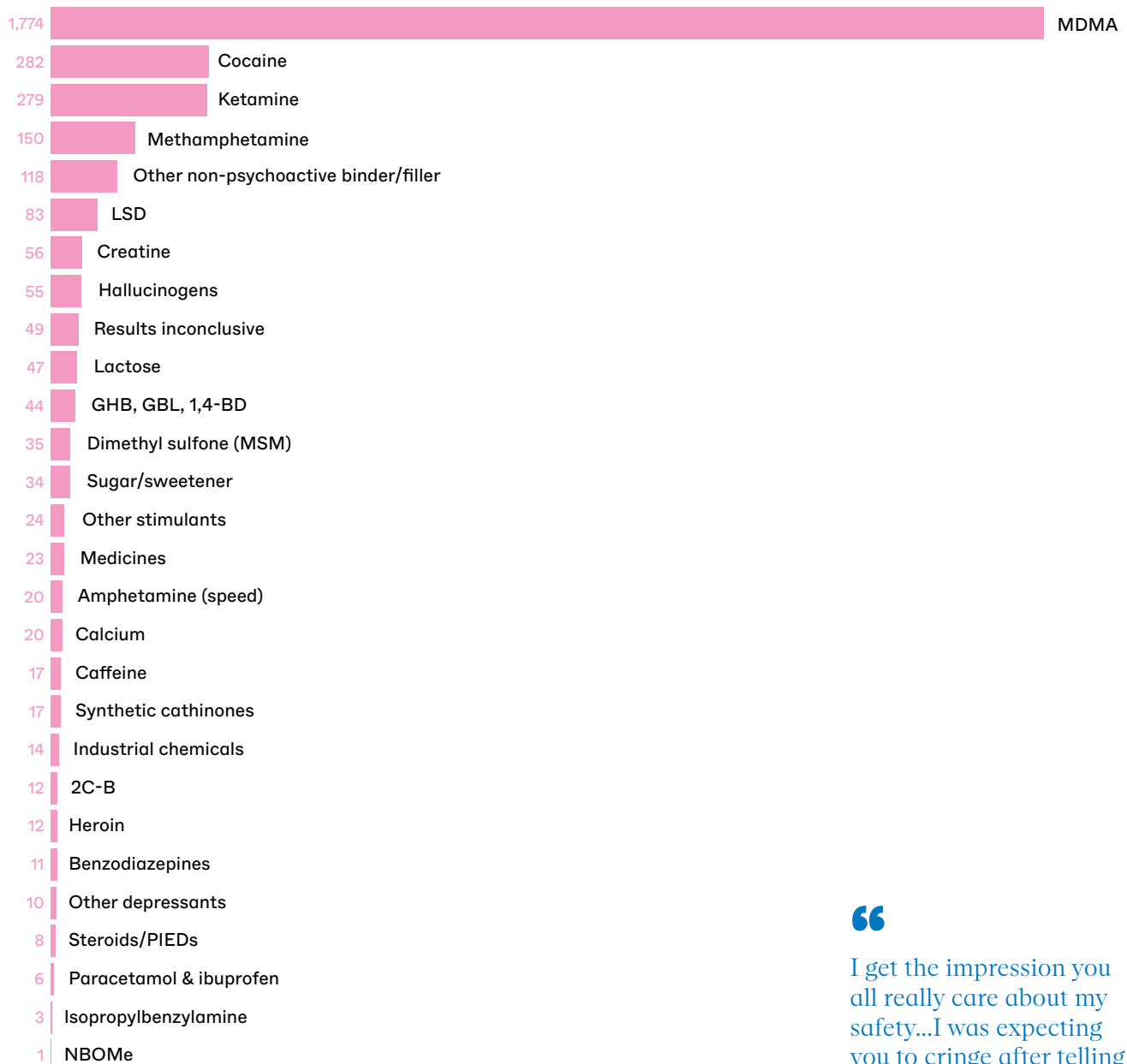
**All clinics**  
(including festivals)

MDMA was also the most common drug brought into all clinics, making up 50% of the total samples, followed by cocaine, then ketamine, methamphetamine 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.

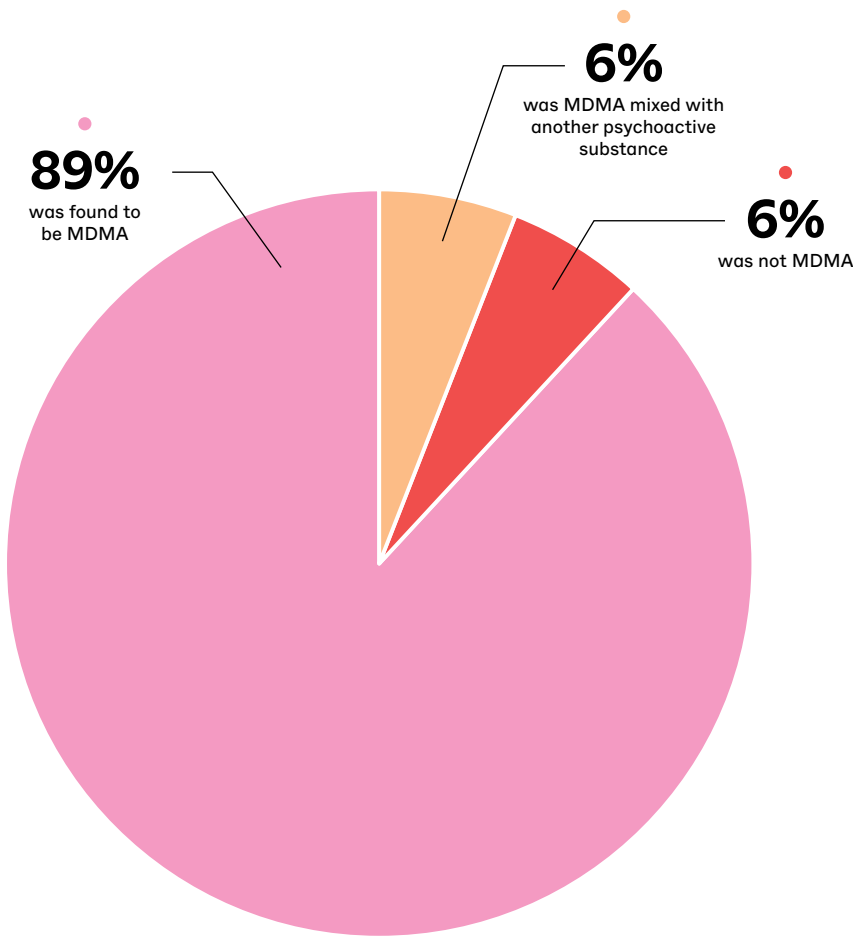
See pages 11–14 for a breakdown of these for our top most-tested drugs.

“

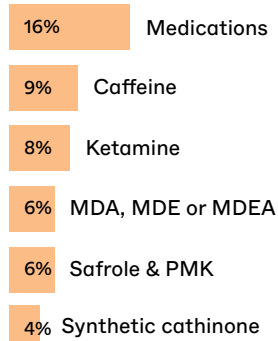
I get the impression you all really care about my safety...I was expecting you to cringe after telling you I inject my meth and was shocked that you didn't miss a beat but just said, 'thanks for sharing, are you happy with your injecting practices?'

— CLIENT, 2024

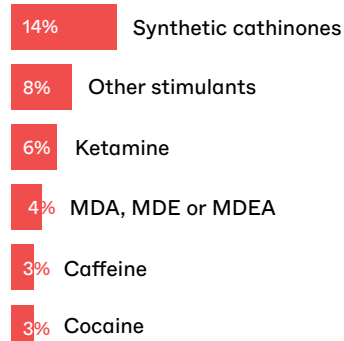
# What we found in MDMA



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



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

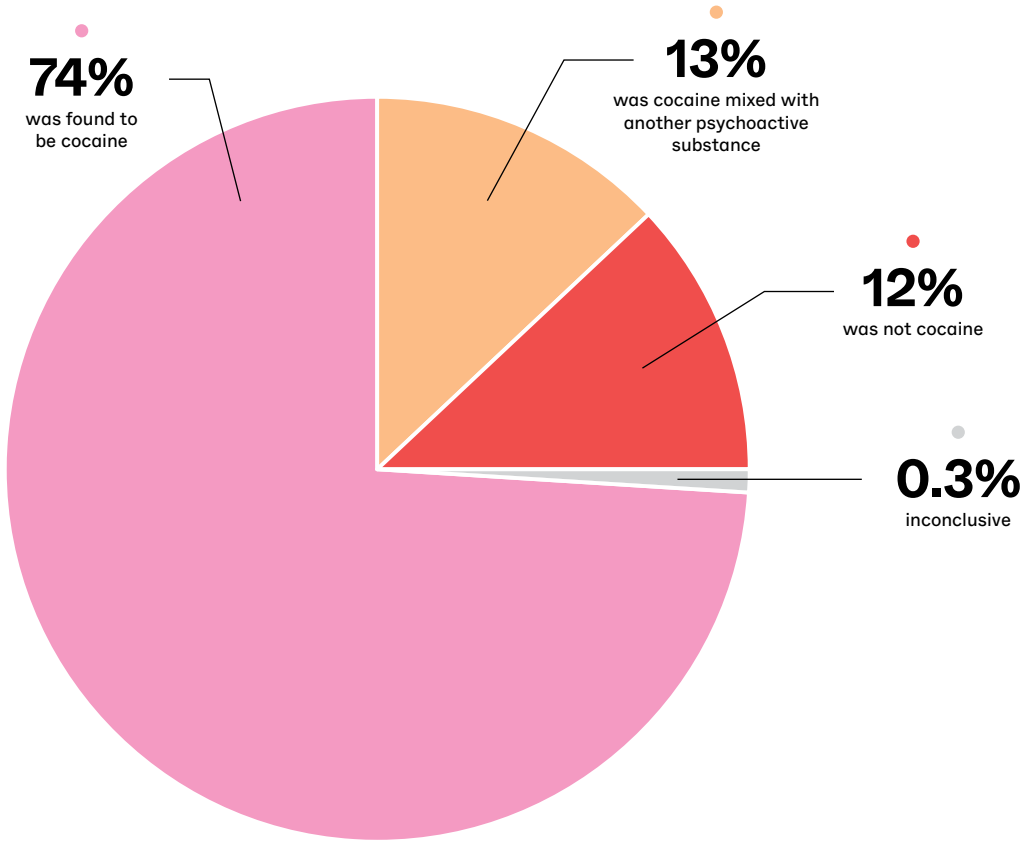


In samples where MDMA was mixed with another substance, 16% contained a medication. Medications we detected included benzocaine, quinidine, venlafaxine and dihydrostreptomycin.

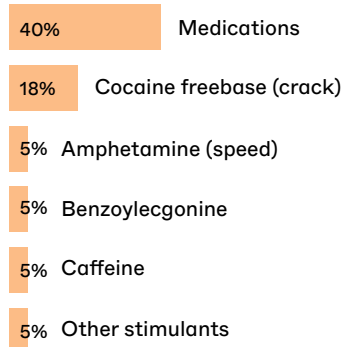
30% of all MDMA samples had binder or filler. The fillers we found most often in MDMA included sugar, calcium, creatine and dimethyl sulfone (MSM).



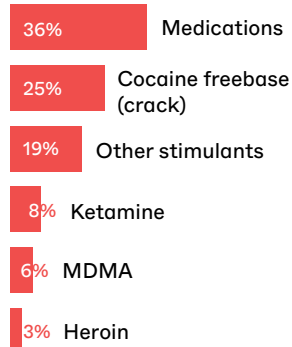
# What we found in Cocaine



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



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



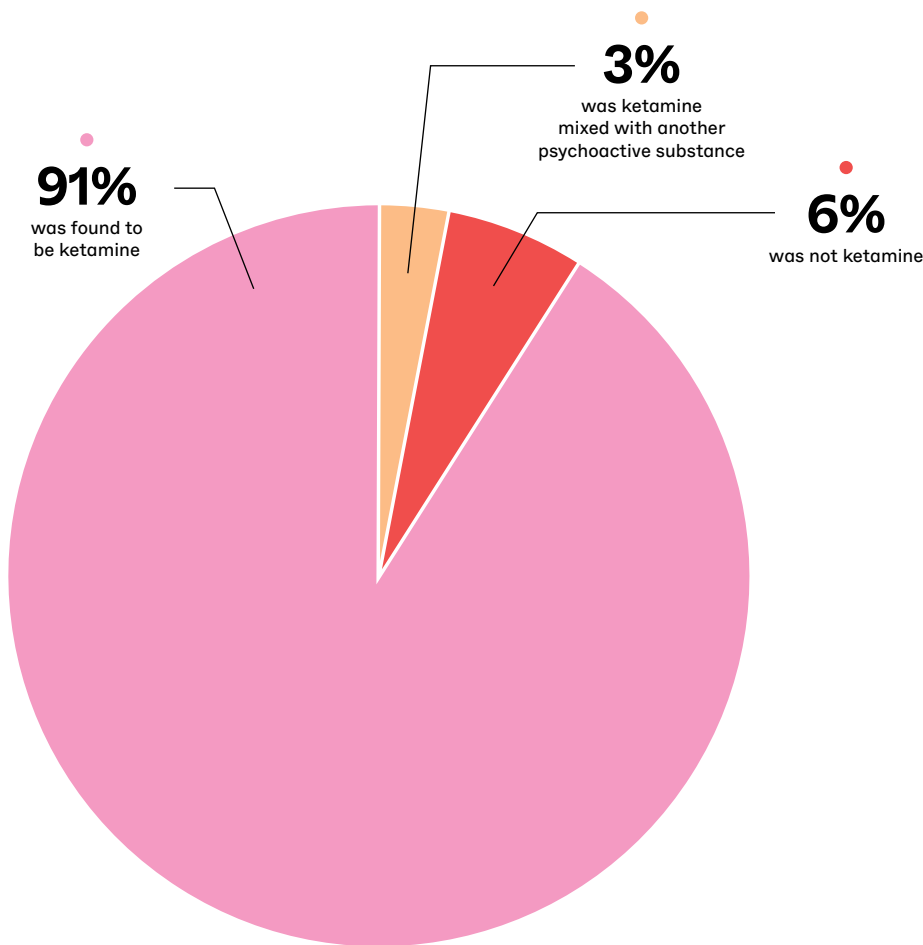
44% of cocaine samples also contained some binder or filler. The fillers we found most often in cocaine included creatine, lactose and sugar.

2% of cocaine samples contained substances harmful to ingest, including boric acid and colocynth. 11% of cocaine samples contained a medication, including phenacetin, paracetamol, Novocain and levamisole.

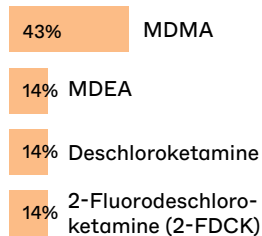


What we found in

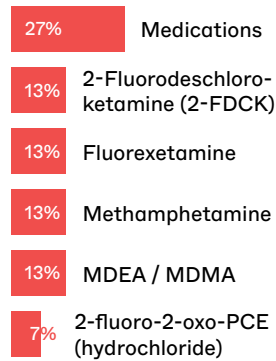
# Ketamine



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



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



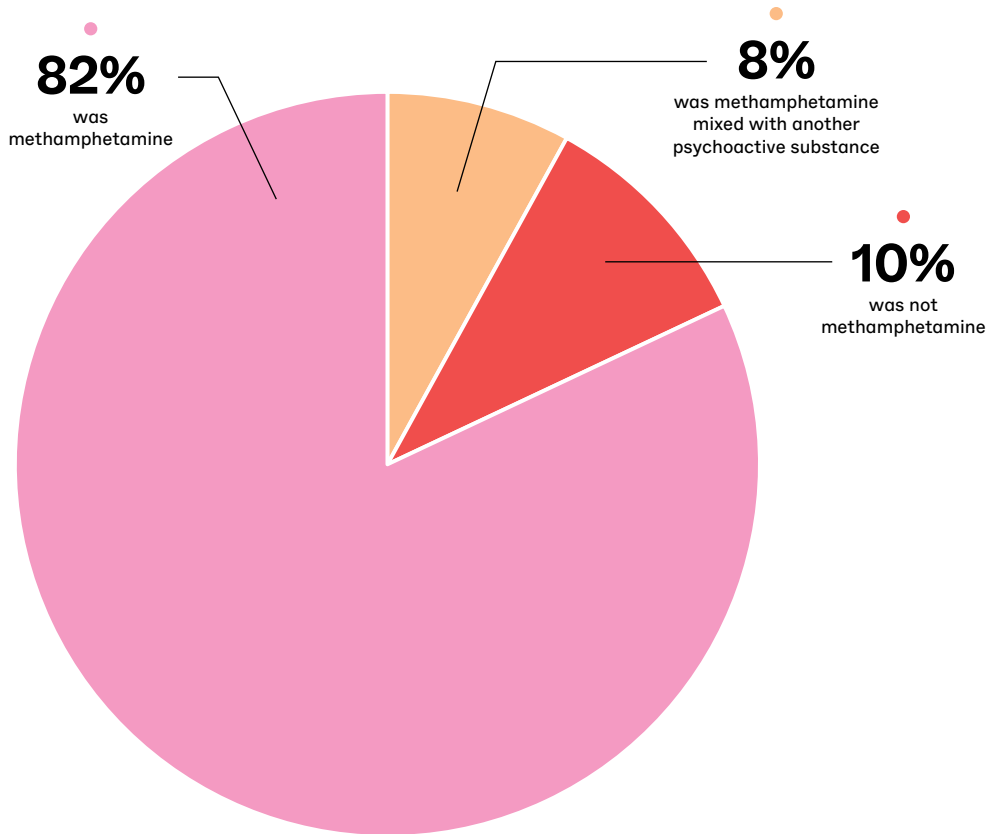
## Binders and fillers

16% of ketamine we tested also contained some binder or filler. The fillers we found most often in ketamine were monosodium glutamate (MSG), dimethyl sulfone (MSM) and creatine.

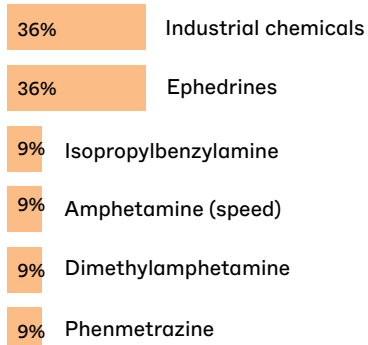


What we found in

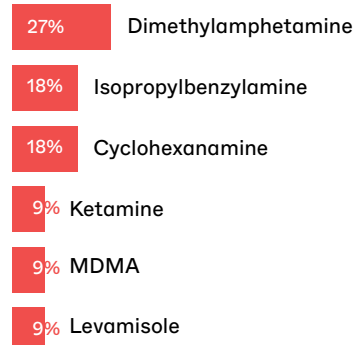
# Methamphetamine



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



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



## Binders and fillers

12% of methamphetamine we tested also contained some binder or filler. The fillers we found most often in methamphetamine were dimethyl sulfone (MSM) and sugar.



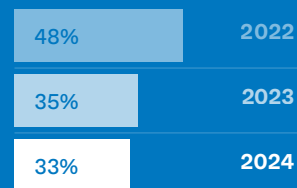
# What binders and fillers did we find?

**Binders and fillers 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 gelatin, 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.

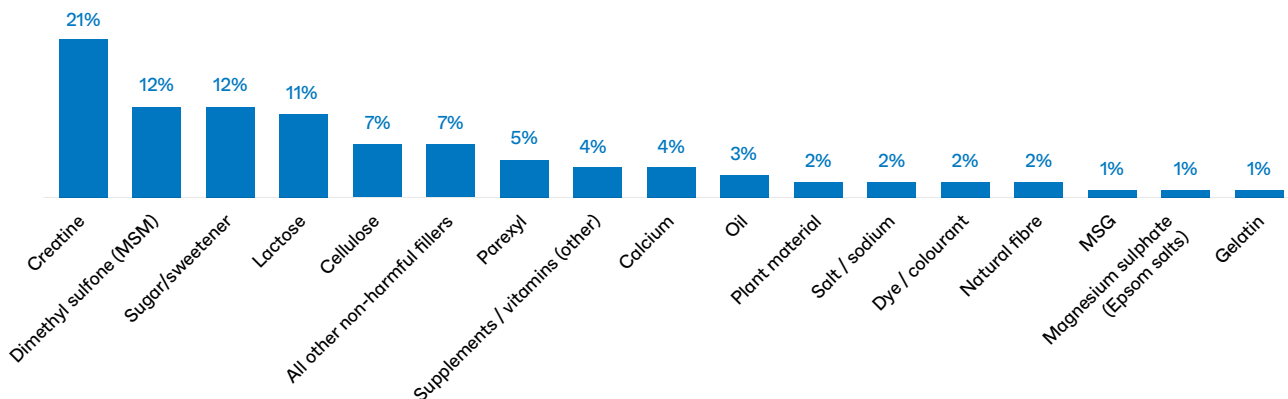
Just because one part of a drug has filler, that doesn't mean it is evenly distributed throughout the whole bag or pill. We always recommend that people crush, mix and measure their drugs before splitting up doses to try and get the most even distribution and minimise the risk of overdosing.

33% of the drugs we tested in 2024 contained one or more binder or filler.



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

% of total samples with filler



# What concerning substances did we find?

In 2024, 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 Aotearoa 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.



1.5% of the samples brought into our clinics in 2024 were reported to be related to a harm incident before they were brought in for checking.

**Drug checking is the best way to know what drug you have so you can avoid taking a substance you aren't expecting to.**

1

## Potent opioids

Opioids are a group of depressant drugs that slow a person's heart rate and breathing. Many opioids, including ultra potent opioids like fentanyl and nitazenes, have been found by drug checking providers to be circulating in our communities. Due to their potency, these substances can be extremely difficult to dose, and are very easy to overdose on. We have seen instances where these drugs were sold as other substances, such as cocaine, benzodiazepines or weaker opioids like oxycodone.

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

2

## Industrial chemicals and medications

In 2024 we saw lots of unexpected things popping up in our drug supply. This included industrial chemicals mixed into or sold as other drugs such as methamphetamine or cocaine. We saw a variety of things, from boric acid to insecticides to industrial solvents (and not the GHB kind!). The effects of these drugs vary greatly, from skin irritation, to vomiting to potentially life-threatening poisonings.

We have also seen medications added as filler, such as levamisole, phenacetin and local anesthetics. These additives may interact with psychoactive drugs or other medications a person is taking. Not to mention the unwanted and unpleasant side effects of taking these substances.

3

## Novel and adulterated benzodiazepines

Benzodiazepines are drugs that we often see adulterated with other substances in Aotearoa.

This year we saw several cases of benzodiazepines being something completely different to what they were sold as, including synthetic cathinones, synthetic cannabinoids, nitazenes and stimulant drugs.

We also found that counterfeit benzos that are made to look like pharmaceutical pills, such as Xanax bars, often contain a completely different benzo than what they claim to be. These 'novel' benzos such as bromazolam and etizolam are often more potent than prescription benzos. They are also much harder to dose, as these pills contain unknown doses of benzos that are unevenly distributed across the pill.

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

4

## Synthetic cathinones

Every year we seem to mention synthetic cathinones. And whilst the situation has improved since the summer of 20/21, we still continue to see them popping up in our drug supply.

In 2024 we saw new synthetic cathinones popping up in drug checking, including cyputylone and N-isopropyl butylone. We also saw some synthetic cathinones that have been around for a while in our drug supply, including eutylone, dimethylpentylone and Alpha-PVP analogues.

These synthetic cathinones have lower dosage amounts than the drugs they are sold as, such as MDMA, and this can result in unknowingly taking too much.

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)

5

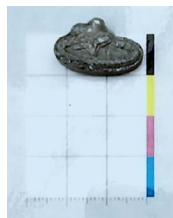
## High-dose MDMA pressed pills

People often think 1 pill = 1 dose of MDMA, but this is simply not the case. In fact, many of the pressed pills that we see in drug checking contain more than one dose of MDMA (some have contained as much as 1 gram of MDMA!).

We have also found a difference in the amount of MDMA in very similar-looking pressed pills. The same pressie shape and colour can contain totally different amounts of MDMA. On top of this, the MDMA is almost never evenly distributed across the pill, meaning that one side can have a lot of MDMA, and the other side can have very little. This is why it is so important to crush, mix and measure your pills.



3–4 doses of MDMA and cellulose filler



Between 1.5–2 doses of MDMA, cellulose and calcium filler



Approx. 2.5–3 doses of MDMA with lactose, sodium phosphate, and starch as filler



1–2 doses of MDMA and cellulose filler

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

# Nitazene and fentanyl test strips

In 2024 we distributed

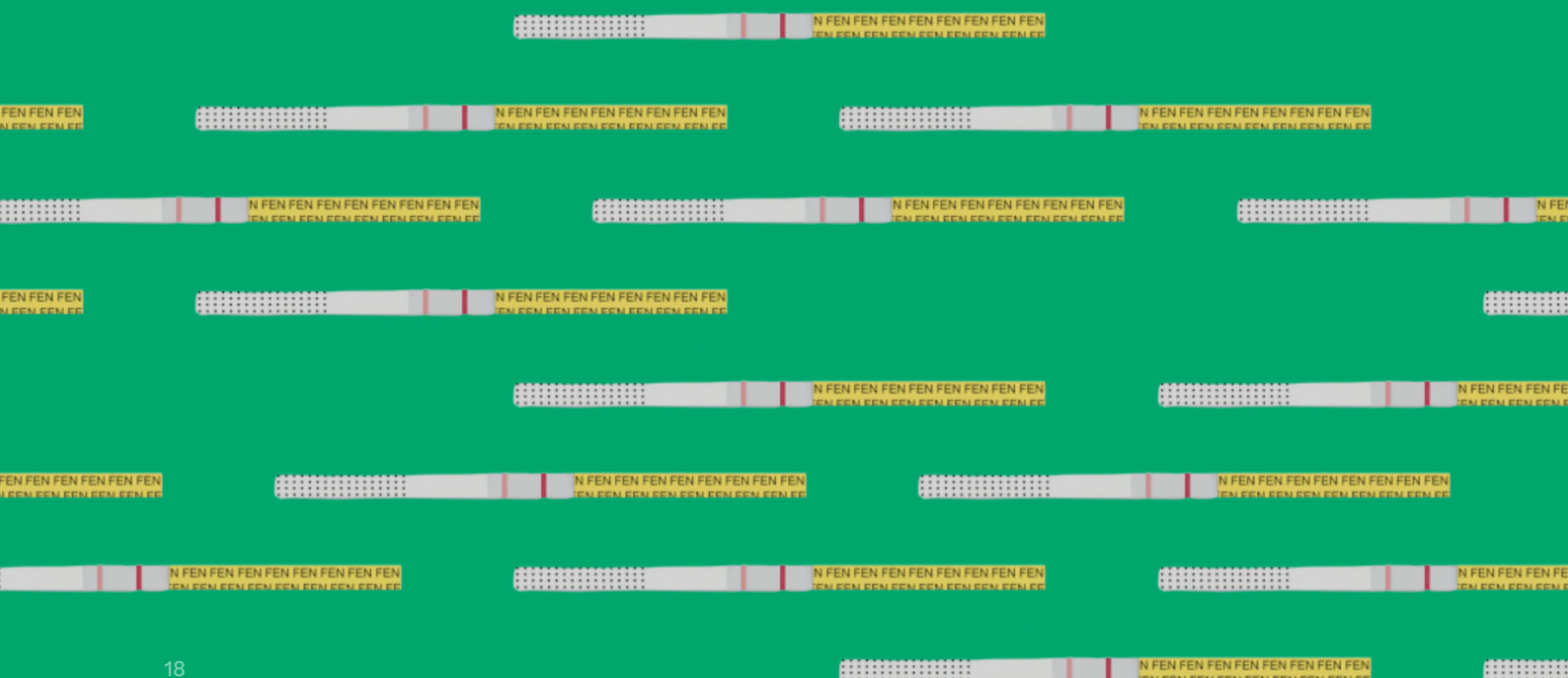
# 18,494

free nitazene and fentanyl test strips to people across Aotearoa via our website, front line partners and drug checking clinics.

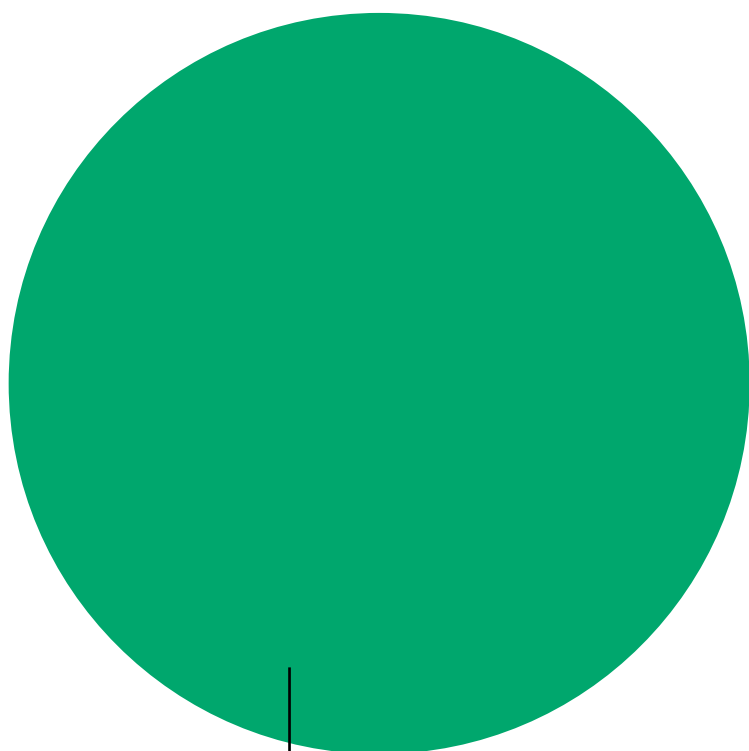
These test strips allow people to check their drugs at home for potent synthetic opioids.

They are a key harm reduction tool, especially for people who can't get to a drug checking clinic.

You can order free test strips at [resources.drugfoundation.org.nz](https://resources.drugfoundation.org.nz)



# 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.

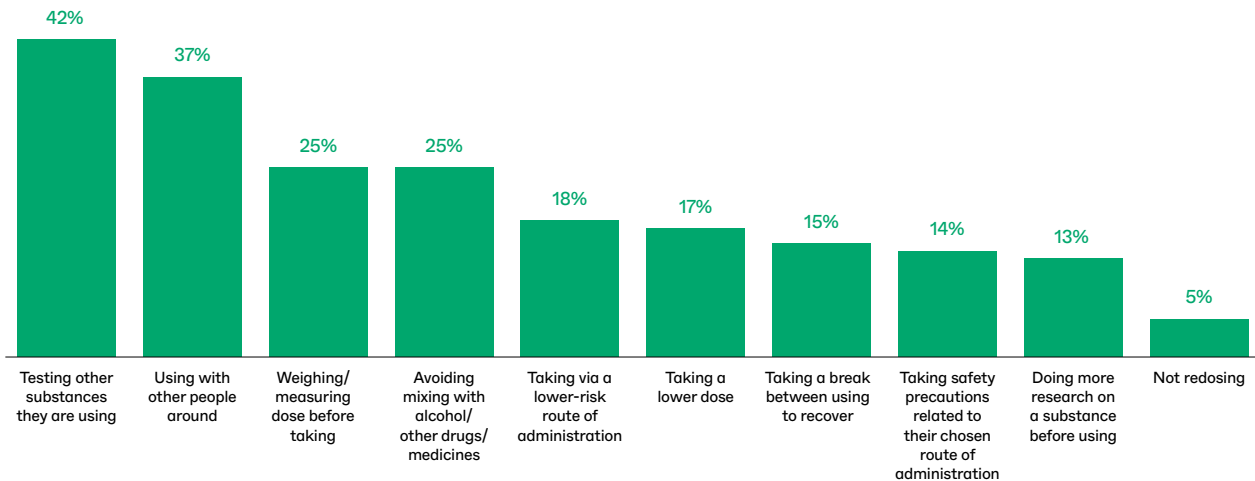
“

People are very open to hearing harm reduction suggestions; our clients want to be safe, and they want their friends to be safe too.”

— ISRA, DRUG CHECKING  
STAFF MEMBER, 2024

# 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 stay safer.

Other tips to stay safer that people told us in 2024 included:

*“I always plan a cut-off time for doing extra bumps, so I don’t get too wrapped up in redosing.”*

*“Make sure you’re in a good ‘set’ or mindset, and good setting”.*

*“Sunshine, exercise, good food, hydration.”*

*“When injecting, I always use a new needle that I get from the needle exchange, and a sharps container to dispose of them.”*

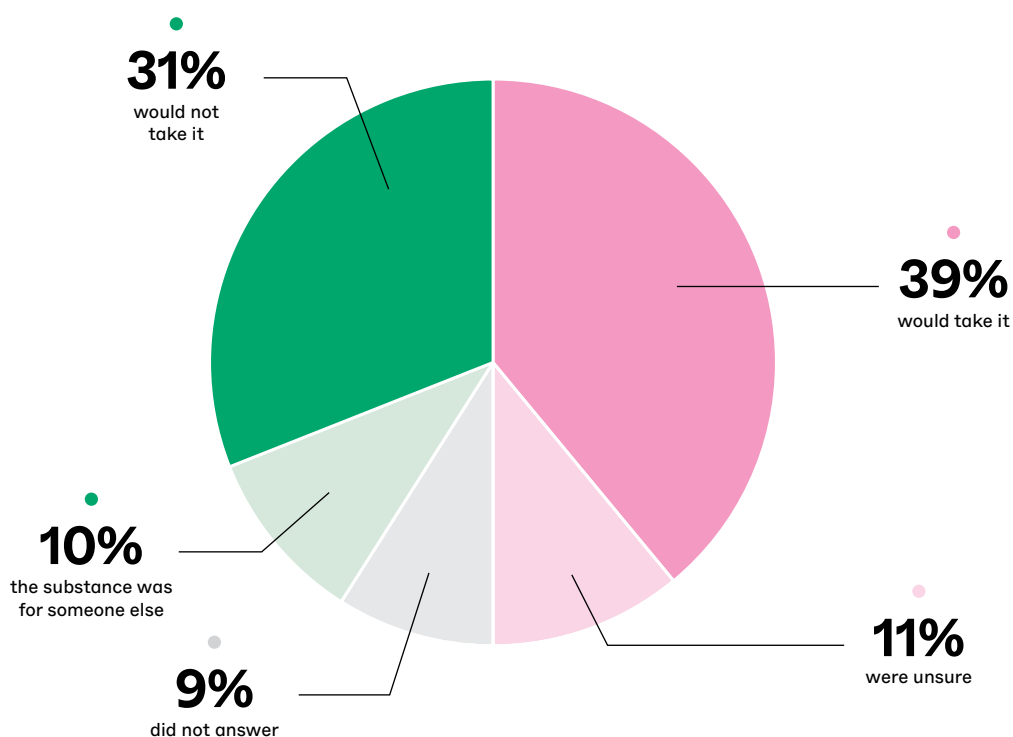
*“I take a long break between the times I use MDMA, at least 3 months and sometimes up to 6 months.”*

*“I follow The Level and High Alert on social media, so I get the information when there is a dangerous substance going around.”*

*“I don’t overdo it – I only take out what I want to use, and I only take one drug at a time, no mixing.”*

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

Harm reduction

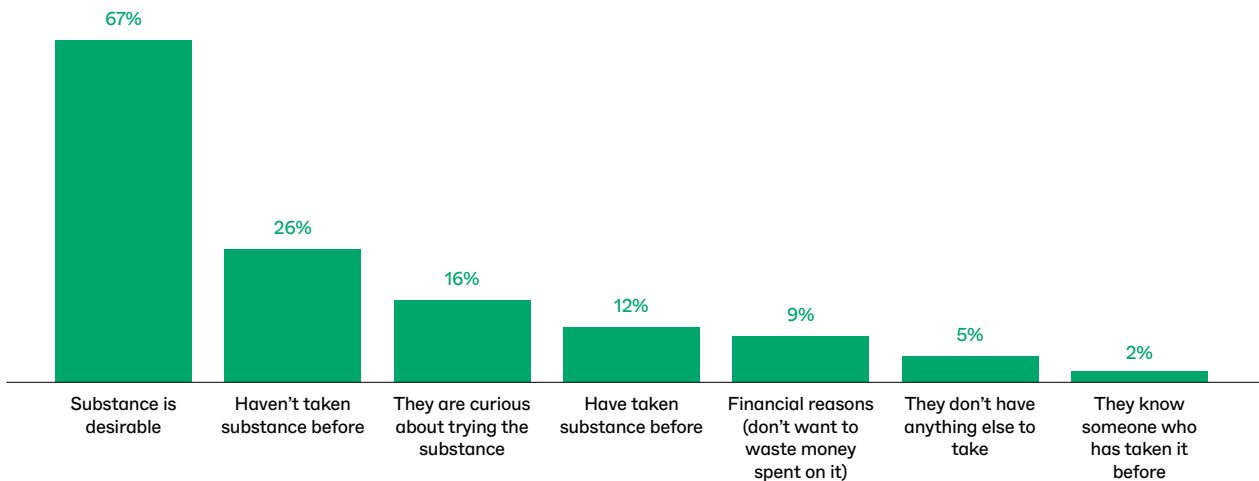


When a drug turns out to be different to what a person expected, we ask whether they still plan on taking it.

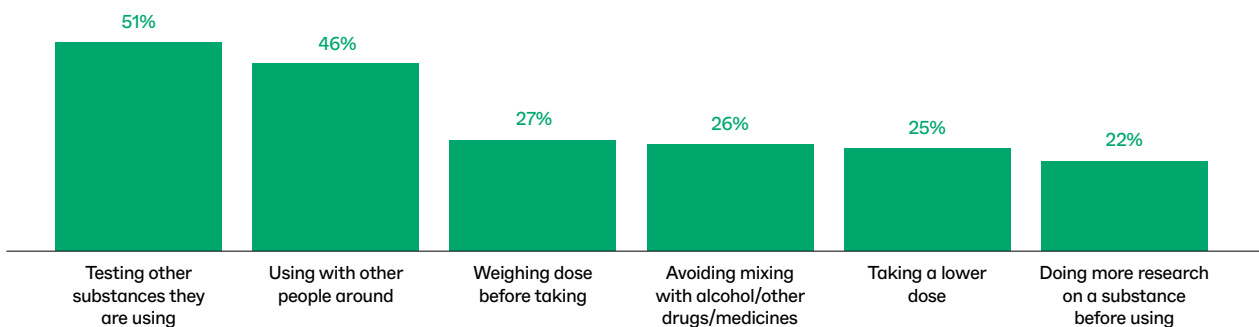
We don't judge whether they choose to take a drug or not – no matter what they decide, we chat about ways to be safer.

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

— Harm reduction



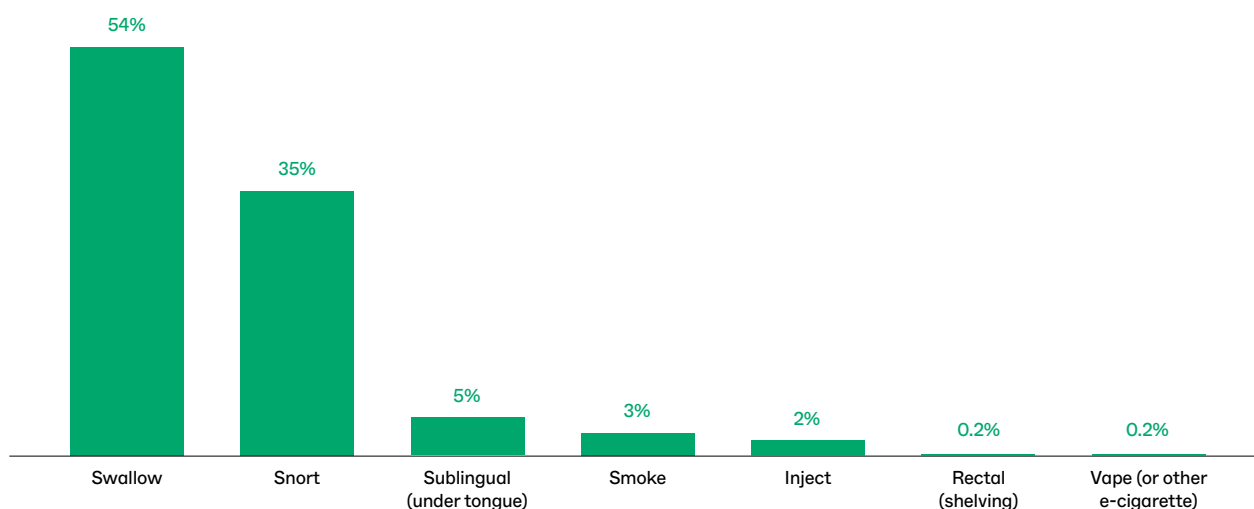
## Harm reduction measures of people taking a substance that was different to what they expected:



# How would people take their drugs?

Harm reduction

The most common ways people said they would take their drugs in 2024 were:



**For those clients that told us how they would take a drug, the most common route of administration (ROA) was taking orally (54%) – such as swallowing in a cap or drinking in a drink.**

Of the people who discussed the ROA they planned to take with us, 25% said they would use a lower-risk ROA after the harm reduction conversation, and 19% of people said they would take safety precautions related to their ROA.

No matter how you plan on using a drug, there are lots of things you can do to stay safer.



**Te Puna  
Whakaiti Pāmamae  
Kai Whakapiri  
New Zealand  
Drug Foundation**