

# Annual Report 2023

## Drugs Information and Monitoring System (DIMS)

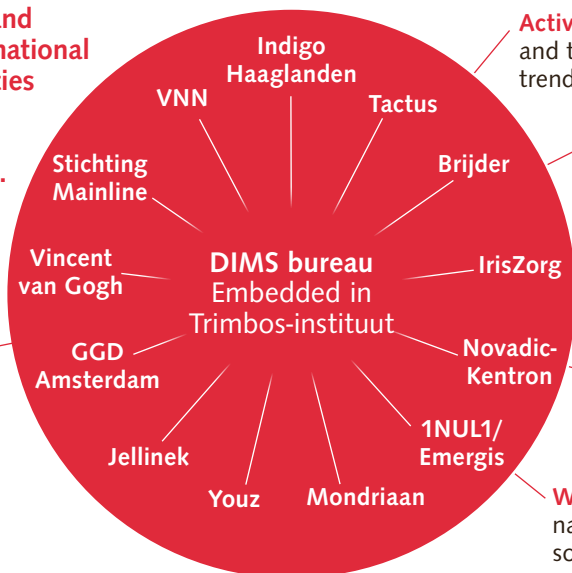
**Trimbos**  
instituut

Netherlands Institute of  
Mental Health and Addiction

### What is DIMS?

The Drugs Information and Monitoring System is a national network of testing facilities that aims at gaining insights into the market of controlled substances.

Commissioned by the Ministry of Health (VWS) and local authorities



**Activities:** DIMS examines the content of drugs and their associated health risks, and analyses trends.

**Method:** DIMS monitors the markets of scheduled substances by offering consumers the possibility to have their drugs tested.

**Application:** The collected data are used for education, prevention and policy interventions.

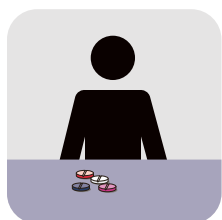
**Education:** The testing facilities serve a major educational purpose and provide information on effects and risks of drugs.

**Warnings:** DIMS occasionally warns at a national, regional or local level, or e.g. via social media for drugs involving extra risks.

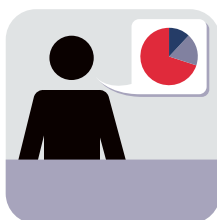
### How does it work?



DIMS-affiliated organizations have weekly consulting hours.



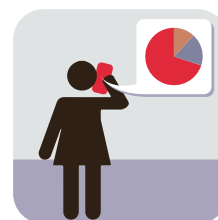
Here, users can anonymously and discreetly submit drug samples for analysis.



If the sample composition can be determined on the spot, the result is passed on directly.



If not, the sample is sent to the laboratory for further analysis.



A week later, the drugs have been analysed and the results are communicated.



Sometimes the result is so disturbing, that a warning or Red Alert is issued.

### Highlights 2023

#### Highest number of visitors recorded

In 2023, there was once again a record number of visitors at DIMS. In total, 19,622 visitors came by and submitted 19,109 samples.

#### Amount of MDMA in ecstasy pills stable

In 2023, the average amount of MDMA in an ecstasy pill was 138 mg, which is nearly the same as 136 mg in 2022.

#### Red Alert for highly potent ecstasy pill

In December 2023, DIMS issued a Red Alert for a highly potent beige-golden "Audi"-pill, which contained on average more than 300 mg MDMA. Ingesting such doses can be life-threatening.



#### Enormous increase in the number of submitted 3-MMC samples

In 2023, more than twice as many 3-MMC samples were submitted compared to 2022. Approximately 30% of these samples contained 3-MMC. All other samples contained 3-CMC, 2-MMC, dimethylpentylone, and/or other substances.

#### Cocaine content stable and less adulterated

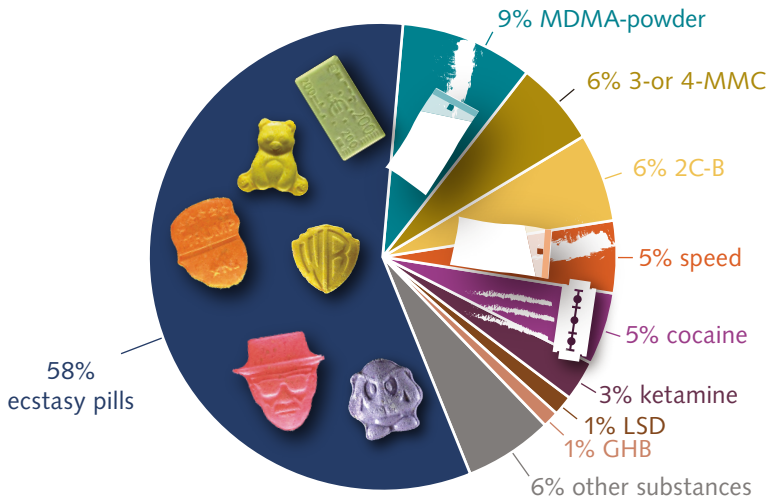
The increase in average cocaine content we saw in the past 10 years is not continuing. In 2023, cocaine samples contained an average of 72% cocaine. In 2022, 26% of cocaine samples submitted contained an adulteration, compared with 36% in 2022.

#### LSD content decreased

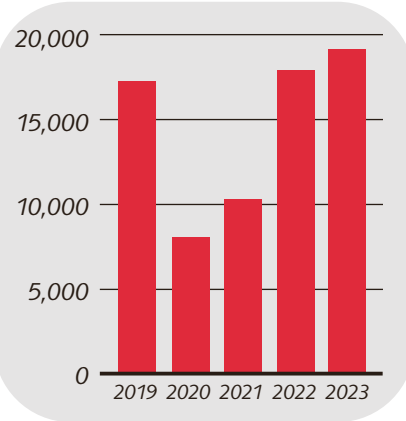
The average LSD content of blotters has decreased from 72 µg in 2022 to 54 µg in 2023.

# Submitted samples in 2023

In 2023, 19,622 visitors submitted 19,109 samples to DIMS. More than half of these samples were sold as ecstasy pills.



Number of samples submitted since 2019



## Ecstasy pills in 2023

In 2023, 58% of submitted samples were sold as ecstasy pills.

**Risks**

- Hyperthermia
- Exhaustion
- Brain damage
- Delayed fatigue

**Effects**

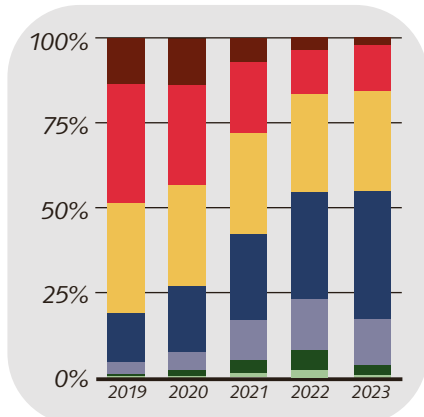
- Sense of intimacy
- Increased energy
- Euphoria

**Contains sometimes**

- Caffeine
- Amphetamine (rare)
- Cathinones
- PMMA (very rare)

**Average price per pill: €4.10**  
Half of all ecstasy pills cost between 4 and 5 euro.

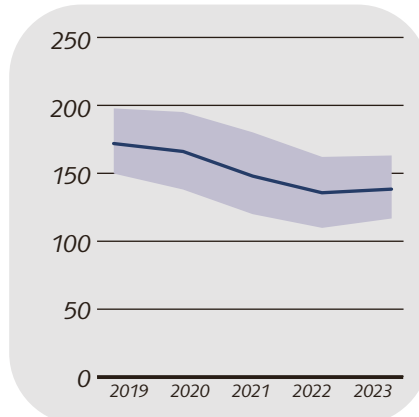
Frequency of MDMA content in ecstasy pills



Legend for MDMA content (mg):  
 1-35 (green), 36-70 (dark green), 71-105 (grey), 106-140 (dark blue), 141-175 (yellow), 176-210 (red), > 210 (dark red)

There can be large differences in the MDMA content of ecstasy pills.

MDMA content in ecstasy pills



On average, a pill contains 138 mg MDMA (→). Half of the pills contain between 117 and 163 mg MDMA (■), a quarter less, and a quarter more than that.

All contents and concentrations presented in this annual report are based on the base-variant of the respective drug. Byproducts and unknown substances that are not present as a main ingredient in samples are not included as an adulterant.

# Cocaine in 2023

In 2023, 5.2% of submitted samples were sold as cocaine.

## Risks

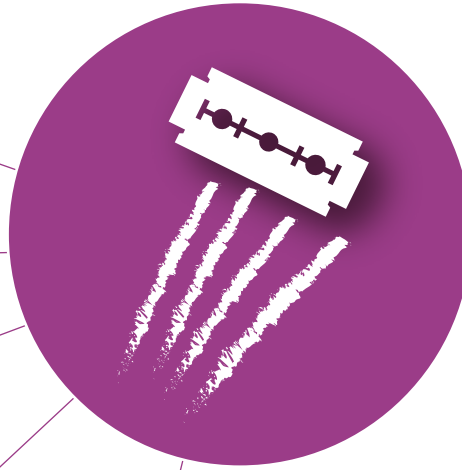
- Dependency
- Cardiovascular problems
- Damage to nasal mucosa
- Paranoia

## Contains sometimes

- Levamisole
- Phenacetine
- Caffeine

## Effects

- Increased energy
- Confident feeling

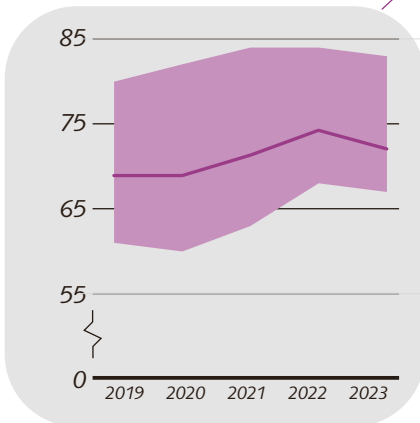


Average price per gram:  
€ 51.70.

Half of the submitted cocaine samples cost between 50 and 60 euro.



## Cocaine content in cocaine powders



- Average cocaine content (%)
- Cocaine content covering half of the cocaine powders (%)

The average cocaine content in 2023 is 72%.

## Content of powders sold as cocaine



- Only cocaine
- Cocaine + adulteration
- No cocaine

In 2023, 26% of the submitted cocaine samples contained an adulterant. Levamisole was found in 11% of the cocaine samples.

## Risks

- Hyperthermia
- Exhaustion
- Brain damage
- Paranoia
- Dependency



## Contains sometimes

- Caffeine

# Speed in 2023

In 2023, 5.2% of submitted samples were sold as speed.

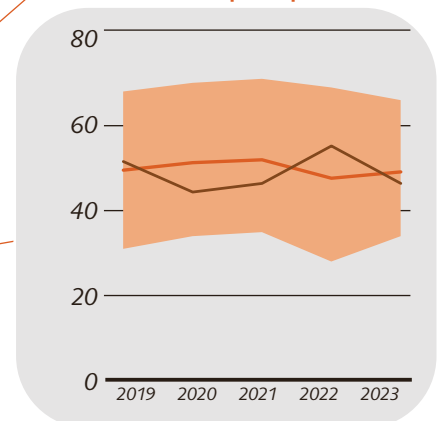
## Effects

- Increased energy
- Delayed fatigue
- Appetite suppression

Average price per gram: € 9.30.  
Half of all speed powders cost between 5 and 10 euro.



## Content in speed powder



- Average amphetamine content (%)
- Average caffeine content (%)
- Amphetamine content covering half of the speed powders (%)

In 2023, caffeine was the most frequent adulterant found in submitted speed powders.

## 2C-B in 2023

In 2023, 5.8% of submitted samples were sold as 2C-B.

Average price per pill: € 4.40.  
Half of all 2C-B pills cost between 4 and 5 euro.



### Effects

- At low dose: euphoria, increased energy
- At high dose: hallucinogenic

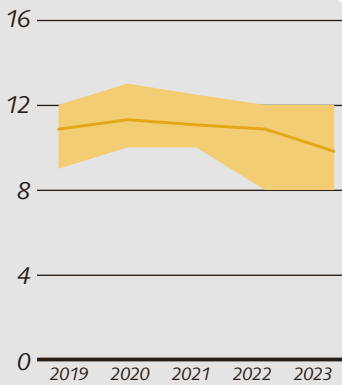
### Risks

- Bad trip
- Panic
- Effects stronger than expected

### Contains sometimes

- Caffeine
- Ketamine (rare)

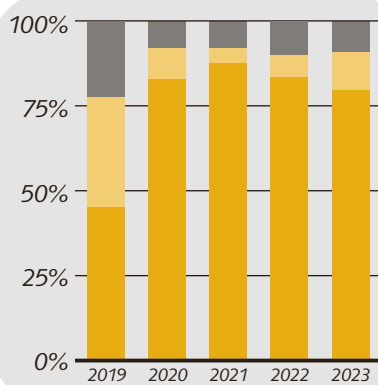
2C-B content of 2C-B pills



- Average 2C-B content (mg)
- 2C-B content covering half of all the 2C-B pills (mg)

On average, the content of 2C-B in 2023 is 10 milligrams per pill

Content of pills sold as 2C-B



- Only 2C-B
- 2C-B + adulteration
- No 2C-B

In 2023, 11% of the 2C-B samples contained an adulterant alongside 2C-B

## Ketamine in 2023

In 2023, 3.2% of submitted samples were sold as ketamine.

### Effects

- Mind-altering
- Separation of body and mind

Average price per gram: € 23.80.  
Half of all ketamine samples cost between 20 and 30 euro.



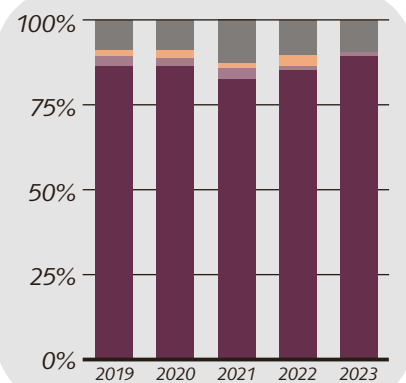
### Contains sometimes

- Levamisole (very rare)
- Caffeine (very rare)

### Risks

- Effects stronger than expected
- Loss of coordination
- Muscle stiffening or paralysis
- Nausea
- Urinary tract problems

Content of powders sold as ketamine



- Only ketamine
- Ketamine + levamisole
- Ketamine + adulteration

Ketamine samples are fairly pure (79% average), but sometimes contain high contents of levamisole (43% average).

# LSD in 2023

In 2023, 1.4% of submitted samples were sold as LSD.

Average price per blotter:  
€ 5.90.  
Half of all blotters cost  
between 4 and 8 euro.



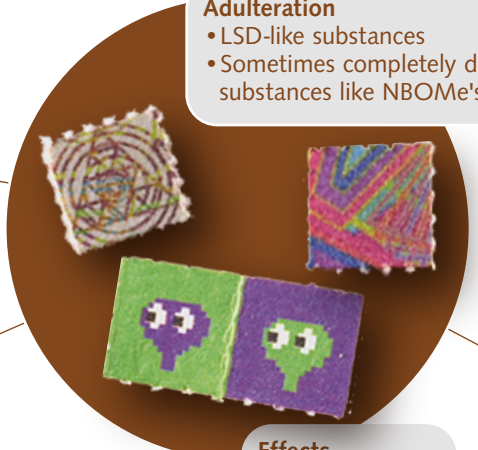
### Risks

- Bad trip
- Nausea



### Adulteration

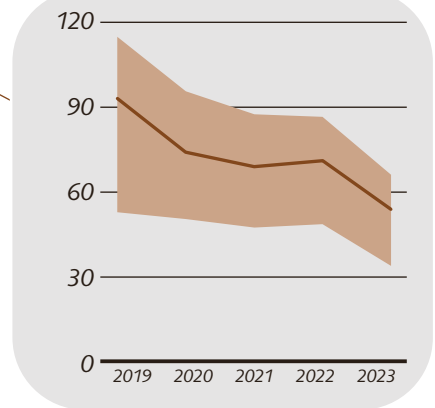
- LSD-like substances
- Sometimes completely different substances like NBOMe's



### Effects

- Hallucinogenic

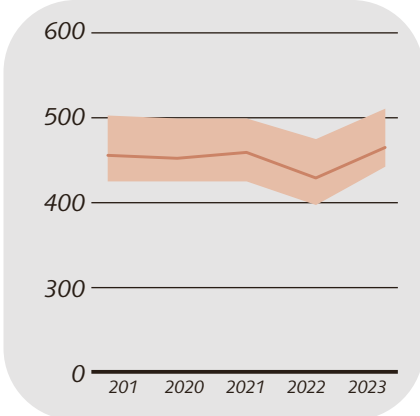
### LSD content in LSD blotters



- Average LSD content (µg)
- LSD content covering half of all the LSD blotters (µg)

The average LSD content has decreased in 2023 to 54 µg per blotter.

### GHB concentration in GHB liquid



- Average GHB concentration (mg/ml)
- GHB concentration covering half of the GHB liquid (mg/ml)

The average GHB concentration is fairly stable; a sample contained 469 mg/ml GHB on average in 2023.

# GHB in 2023

In 2023, 0.9% of submitted samples were sold as GHB.

### Effects

- Euphoria
- Relaxation
- Loss of control
- Aphrodisiac



### GHB containing mixtures

- Blue69
- Hulk

### Risks

- Loss of consciousness
- Very dangerous in combination with alcohol
- Difficult to dose
- Burns mouth/esophagus
- Dependency





# 3-MMC in 2023

In 2023, 4.8% of submitted samples were sold as 3-MMC.

## Risks

- Compulsive re-dosing
- Dependency
- Anxiety/paranoia
- Cardiovascular problems

## Contains sometimes

- 3-CMC
- 2-MMC
- Dimethylpentylone

Average price per gram:  
€ 18.60.

Half of all 3-MMC samples  
cost between 15 and 25 euro.

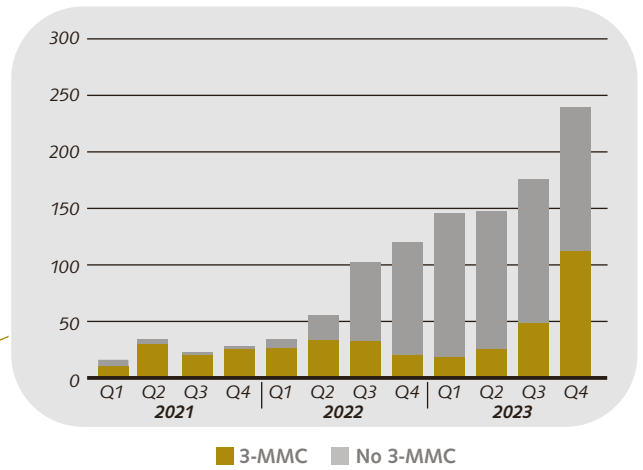


## Effects

- Stimulating
- Euphoria
- Increased energy



## Presence of 3-MMC in samples sold as 3-MMC

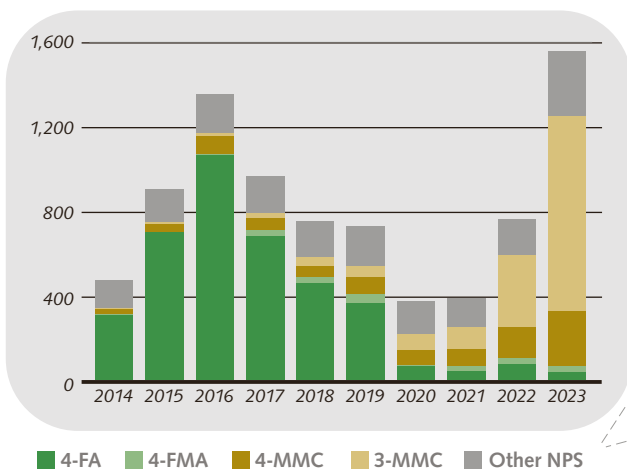


In 2023, starting from the second quarter (Q2), an increase was observed in the number of submitted samples sold as 3-MMC. In 2023, approximately 30% of these samples actually contained 3-MMC. All other samples contained 3-CMC, 2-MMC, dimethylpentylone, and/or other substances.

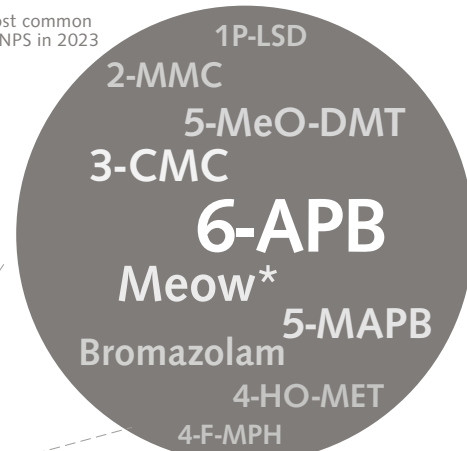
# NPS in 2023

New Psychoactive Substances (NPS) termed legal variations of popular illegal drugs. Other names commonly used are "designer drugs" and "research chemicals". In reality, different definitions are used. DIMS uses the definition of NPS as formulated by UNODC and EMCDDA as a starting point. According to the UNDOC and the EMCDDA, the term NPS includes all psychoactive substances not covered by the regime of any of the UN conventions. These are conventions that cover all classic drugs. Relatively new substances, or substances that appear on the market (again) as recreational substances after absence, may be added after a risk assessment if the substance in question is found to be harmful to public health.

## Number of NPS submitted to DIMS



10 most common  
other NPS in 2023



\*Meow represents a group of substances that fall under the substance category of cathinones. Well-known examples are 3-MMC and 4-MMC. In this case, users do not know exactly which cathinone it is.