

Annual Report 2021

Drugs Information and Monitoring System (DIMS)

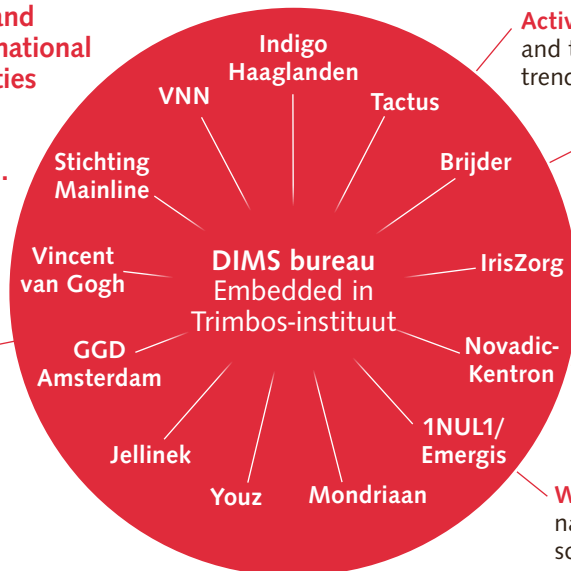
Trimbos
instituut

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 data collected are being used for education, prevention and policy interventions.

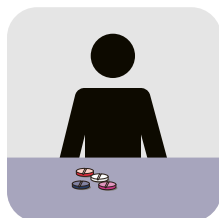
Education: The testing facilities serve a major educational purpose and provide information on effects and risks of drugs.

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

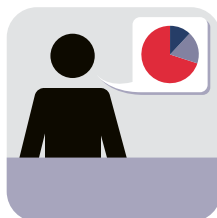
How does it work?



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 2021

Limited testing due to COVID

The COVID pandemic has had a noticeable influence on DIMS in 2021. While our testing sites have been open throughout the year, the varying nationwide restrictions have led to limited testing options compared to pre-COVID.

Less samples than pre-COVID

As a result of the pandemic, DIMS has received less samples in comparison to the last pre-COVID years. Still, with 10,302 samples received in 2021, DIMS has tested more than enough samples to sufficiently monitor the drug markets.

Little change in sample composition

Minor changes in samples composition: Compared to previous years, there are few noticeable changes in drug sample composition to report. There are noticeable changes in the contents of ecstasy tablets, the cause of which is as of yet unknown.

Less MDMA in ecstasy tablets

The average MDMA content per tablet has dropped from 166mg in 2020 to 148mg in 2021. While less extreme than previous years, this does mean that ecstasy tablets are still very strong.

Less party drugs due to COVID

Compared to other substances, DIMS has received less party drugs like ecstasy in 2021. This is likely due to the absence of festivals and the nightlife being closed for most of the year.

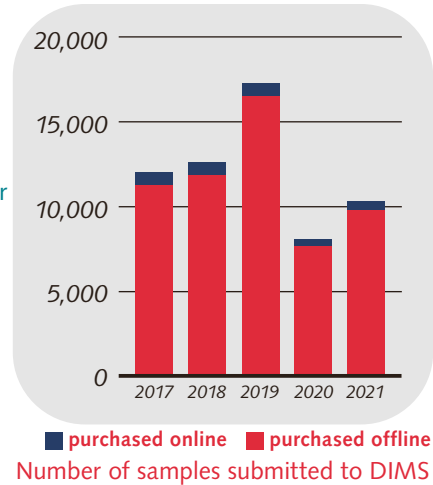
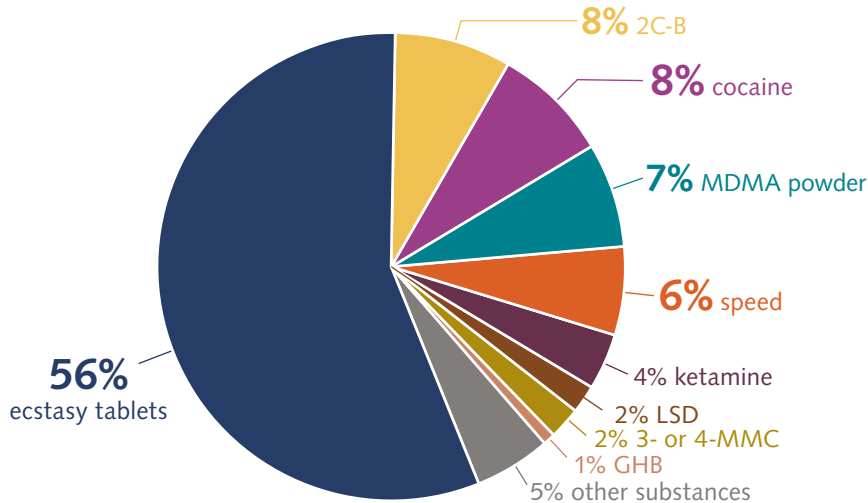
Warnings for DOC and adulterated cannabis

In 2021, DIMS has issued a warning for tablets sold as 2C-B which contained extremely high doses of the potent hallucinogenic DOC. DIMS also warned for cannabis adulterated with synthetic cannabinoids (since 2020). Normally, cannabis is not analyzed as its legal status places it outside the scope of DIMS. However, synthetic cannabinoids are of interest to DIMS.



Samples submitted to DIMS in 2021

In 2021, 9,257 visitors supplied DIMS with 10,302 samples, more than half of which were ecstasy tablets.



Ecstasy tablets in 2021

More than half of the samples submitted in 2021 were sold as ecstasy (56%). Nine out of ten ecstasy tablets contain only MDMA as active substance.

Risks

- Hyperthermia
- Exhaustion
- Brain damage

Effects

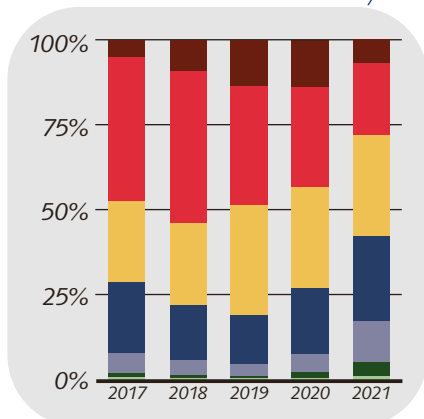
- Sense of intimacy
- Increased energy

Cutting agents

- Caffeine
- Amphetamine
- PMMA

Average price per tablet: € 4.20

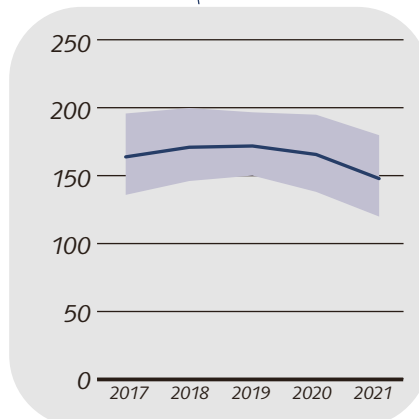
Half of all ecstasy tablets cost between 3 and 5 euro.



Legend for MDMA content (mg):

- 1-35
- 36-70
- 71-105
- 106-140
- 141-175
- 176-210
- > 210

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



On average, a tablet contains 148 mg MDMA (—). Half of the tablets contain between 120 and 180 mg MDMA (■), a quarter less, and a quarter more than that.

Cocaine in 2021

In 2021, 7.9% of all samples were sold as cocaine.

Average price per gram: € 51.80.
More than half of all cocaine costs exactly 50 euro per gram.



Risks

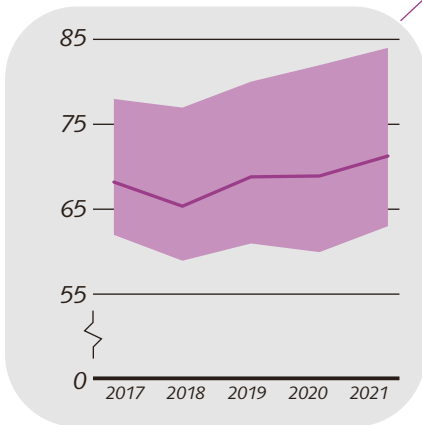
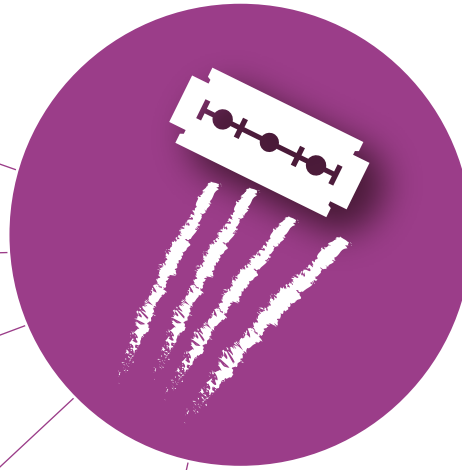
- Dependency
- Cardiovascular problems
- Damage to nasal mucosa
- Paranoia

Cutting agents

- Levamisole
- Caffeine
- Phenacetine

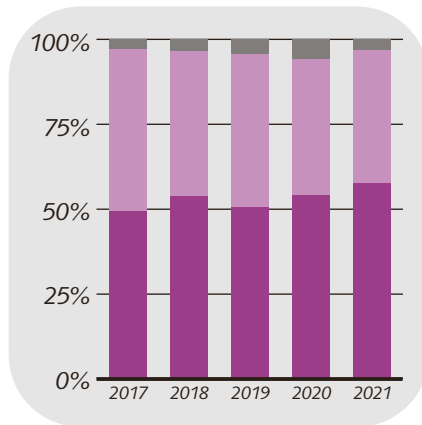
Effects

- Increased energy
- Confident feeling



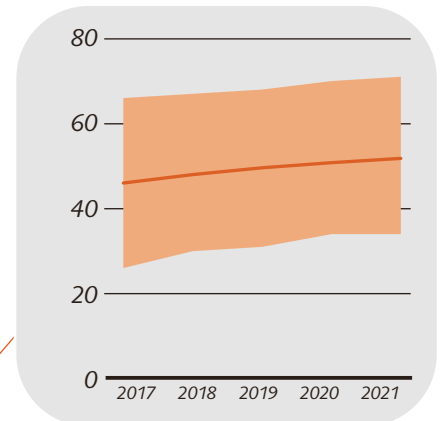
— Average cocaine concentration (%)
■ Cocaine concentration covering half of the cocaine powders (%)

At 71%, the average cocaine concentration in submitted powder samples is higher than ever.



■ Only cocaine ■ Cocaine + cutting agents ■ No cocaine

Cocaine is adulterated relatively often, usually with levamisole.



— Average amphetamine concentration (%)
■ Amphetamine concentration covering half of the speed powders (%)

A third of the speed samples also contain caffeine in addition to amphetamine. The average concentration of caffeine is relatively high if this is the case: 47%.

Speed in 2021

In 2021, 5.8% of all samples were sold as speed.

Effects

- Increased energy
- Delayed fatigue
- Appetite inhibition

Average price per gram: € 7.90.
Half of all speed powders cost between 5 and 10 euro.



Risks

- Hyperthermia
- Exhaustion
- Brain damage
- Paranoia
- Heavy physical strain

Cutting agent

- Caffeine



2C-B in 2021

2C-B is typically submitted as tablets but can also occur as powder. In 2021, 8.5% of all samples were sold as 2C-B.

Average price per tablet: € 4.60. Half of all 2C-B tablets cost between 4 and 5 euro.



The average price of a gram of 2C-B powder is € 43.60.

Effects

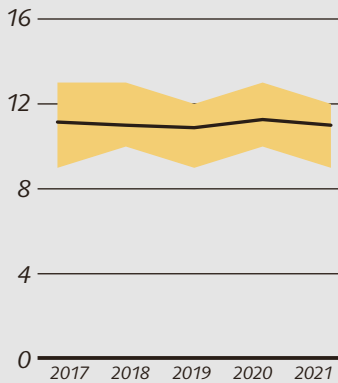
- Euphoria
- Increased energy
- Hallucinogenic

Risks

- Bad trip
- Effects stronger than expected

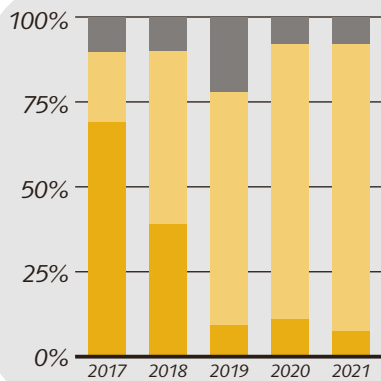
Cutting agents

- Caffeine



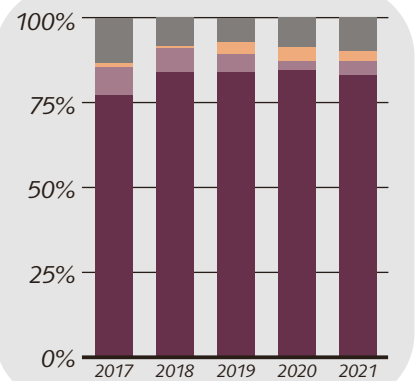
— Average 2C-B content (mg)
 ■ 2C-B content covering half of the 2C-B tablets (mg)

On average, A 2C-B tablet contains 11mg of 2C-B.



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

In 2021 nearly all 2C-B samples contained adulterations. These are often leftovers of production.



■ Only ketamine ■ No ketamine (and/or levamisole)
 ■ Ketamine + levamisole ■ Ketamine + adulteration

Ketamine samples are fairly pure (79% average), but sometimes contain high concentrations of levamisole (62% average).

Ketamine in 2021

In 2021, 4.1% of all samples were sold as ketamine.

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



Effects

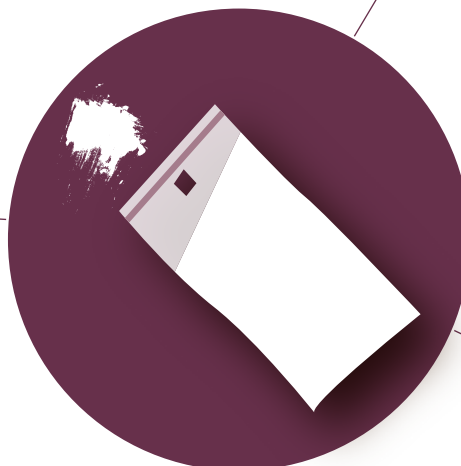
- Mind altering
- Out-of-body experience

Risks

- Bad trip (k-hole)
- Loss of coordination
- Muscle stiffening or paralysis
- Urinary tract problems

Cutting agents

- Levamisole
- Caffeine



LSD in 2021

In 2021, 3.4% of all samples were sold as LSD.

Average price per blotter:
€ 6.40. Half of all blotters
cost between 4 and 8
euro.



Risks

- Bad trip
- Nausea
- Flash backs

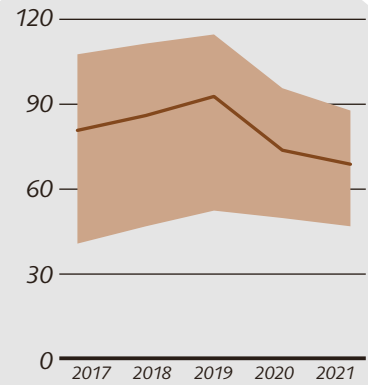


Effects

- Hallucinogenic

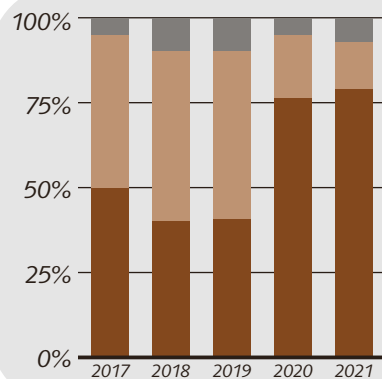
Cutting agents

- LSD-like substances
- NBOMes



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

The average LSD content per blotter has decreased to 69µg in 2021.



■ Lab-analysis ■ Color test ■ No analysis

Sometimes, DIMS only performs a qualitative test of LSD samples using a reagent test.

Drug name	Times seen at DIMS
Blue 69	26
Red	4
Hulk	2
Other names	12

Over the past years DIMS has seen an increase in the number of GHB containing mixtures that also contain other substances, specifically MDMA and amphetamine. The most popular among these mixtures is "Blue 69".

GHB in 2021

In 2021, 1.2% of all samples were sold as GHB.

Effects

- Euphoria
- Relaxation
- Loss of control
- Aphrodisiac

We gathered too little data to give a reliable average of the price of GHB.

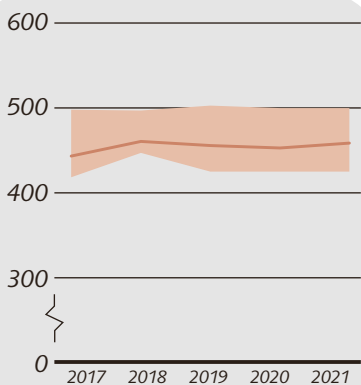
Risks

- Unconsciousness
- Potentially life-threatening if combined with alcohol
- Risk of overdosing
- Burns mouth/esophagus
- Addictive



Cutting agents

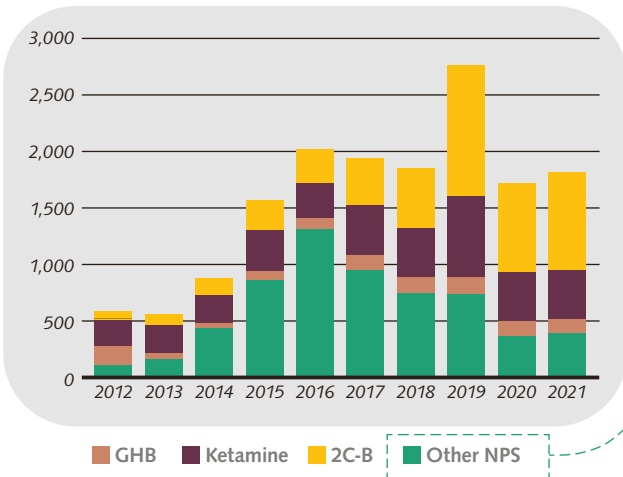
- GBL



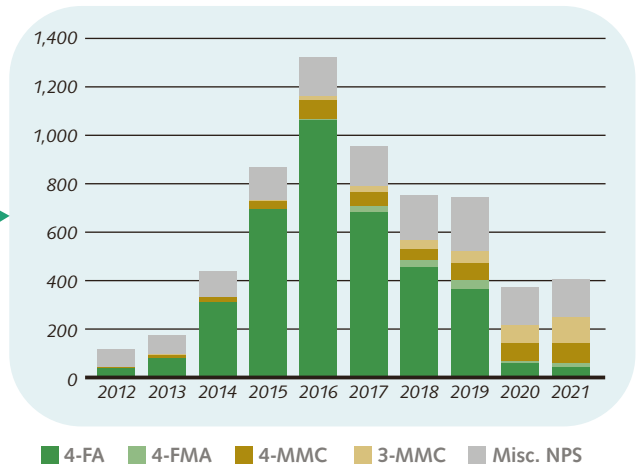
— Average GHB content (mg/ml)
■ GHB content covering half of the GHB liquid (mg/ml)

The average GHB content is fairly stable. In 2021, liquid GHB samples contained 459 mg/ml GHB on average.

Number of NPS submitted to DIMS (total)



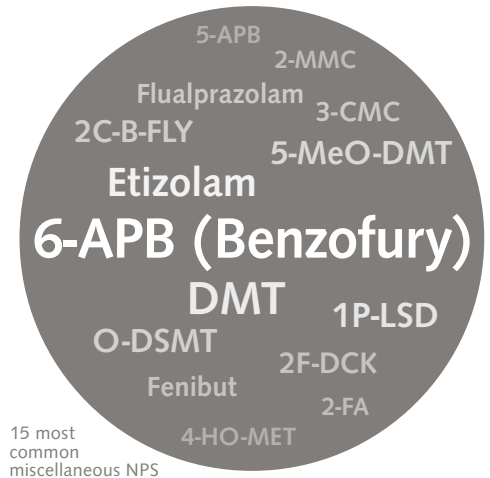
Number of NPS submitted to DIMS (not yet covered in the annual report)



NPS (New Psychoactive Substances) are also known as “designer drugs” and “research chemicals”. The substances ketamine, GHB, and 2C-B have already been covered in previous paragraphs, therefore we will only focus on NPS that have not yet been discussed. These NPS are often semi-legal or recently scheduled substances that are generally being used by relatively small groups of users with an interest in NPS. Sometimes these substances become popular among a wider audience: prime examples in recent years being 4-FA and 3-MMC. 4-FA in particular showed a huge surge in popularity around 2016, before being banned in 2017.

	4-MMC versus 3-MMC		4-FA versus 4-FMA	
Legal status	Illegal (2012)	Illegal (10-2021)	Illegal (2017)	Legal
Relative popularity at DIMS	Less popular (42%)	More popular (58%)	More popular (69%)	Less popular (31%)
Variant detected in sample	Often contains 3-MMC (48%)	Never contains 4-MMC	Often contains 4-FMA (59%)	Never contains 4-FA

It regularly happens that NPS are banned in the Netherlands because of the risks to the public health associated with them. Examples of these are 4-MMC and 4-FA, with 4-FA in particular causing a lot of commotion around 2016 due to a number of fatal incidents. When these kinds of substances are banned, we see that there are often legal potential substitutes, in this case 3-MMC and 4-FMA. These substitutes usually fail to become as popular as their predecessor on the short term, with the demand for the now illegal substance somewhat continuing to persist. On the long term however, the “new” legal substance can gain in popularity, in recent years this has happened with the drug 3-MMC. Often, it turns out that the risks of the legal replacements are similar to those of the illegal substances, resulting in scheduling of these substitutes as well.



15 most common miscellaneous NPS