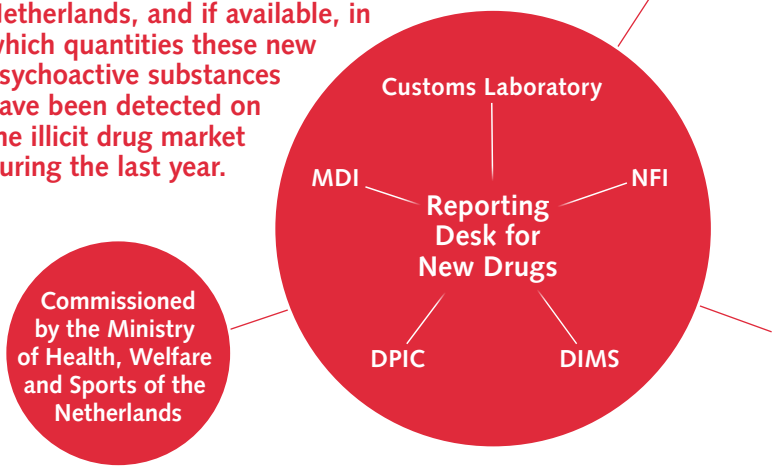
Annual Report 2022

Reporting Desk for New Drugs

Trimbos instituut
Netherlands Institute of Mental Health and Addiction

What is the Reporting Desk for New Drugs?

The Reporting Desk for New Drugs is a national surveillance study in the Netherlands, which is coordinated by the Trimbos Institute. Through this surveillance study, data are collected about new psychoactive substances in the Netherlands. The Reporting Desk for New Drugs reports on which new psychoactive substances were recently detected in the Netherlands, and if available, in which quantities these new psychoactive substances have been detected on the illicit drug market during the last year.



Organization: The Reporting Desk for New Drugs assembles, analyzes, and reports on data collected by a variety of organizations in the Netherlands about the production, trade, and consumption of new psychoactive substances. The Customs Laboratory of the Netherlands and the Netherlands Forensic Institute provide data about seized new psychoactive substances that have been sent to their laboratories for analysis. The Drugs Information and Monitoring System (DIMS) provides data about new psychoactive substances that have been detected in consumer samples submitted for laboratory analysis at a drug checking service[1]. The Monitor Drug-related Incidents (MDI) and the Dutch Poisons Information Centre (DPIC) share data about adverse health-related events related to the use of new psychoactive substances. Additional information about new psychoactive substances being used in the Netherlands is also collected from pre-selected online discussion boards about drugs.

Application: The annual report from the Reporting Desk for New Drugs is used by the Ministry of Health, Welfare and Sports in the Netherlands and the Coordination point for Assessment and Monitoring new drugs (CAM[2]) to assess the distribution and possible risks associated with the sale, transport, and use of new psychoactive substances in the Netherlands.

New psychoactive substances

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) defines new psychoactive substances as "substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat".[3]

The Reporting Desk for New Drugs focuses on substances that have been produced in and introduced to the illicit drug market for their psychoactive properties since the early 2000s or have been re-introduced after being absent on the illicit drug market for several decades.
A few substances, such as 2C-B, GHB/GBL, DMT, and ketamine, have also been included in the Reporting Desk for New Drugs. These substances are being monitored by the European Monitoring Centre for Drugs and Drug Addiction under the framework of the European Joint Action on new synthetic drugs.

New psychoactive substance groups
New psychoactive substances are usually classified according to their chemical structure or pharmacological properties. These classifications include:

- Synthetic cannabinoids
- Cathinones
- Phenethylamines
- Indole alkaloids (Tryptamines)
- Arylcyclohexylamines
- Synthetic opioids
- New b enzodiazepines
- Other new psychoactive substances

Highlights 2022

In the Netherlands, a total of 122 different new psychoactive substances were reported in 2022 to the Reporting Desk for New Drugs by the participating laboratories; 14 of these new psychoactive substances were detected on the illicit drug market in the Netherlands for the first time. Seven of these substances were reported by Netherlands Forensic Institute, two by both the Netherlands Forensic Institute and DIMS, two by DIMS only and three by the Customs Laboratory.

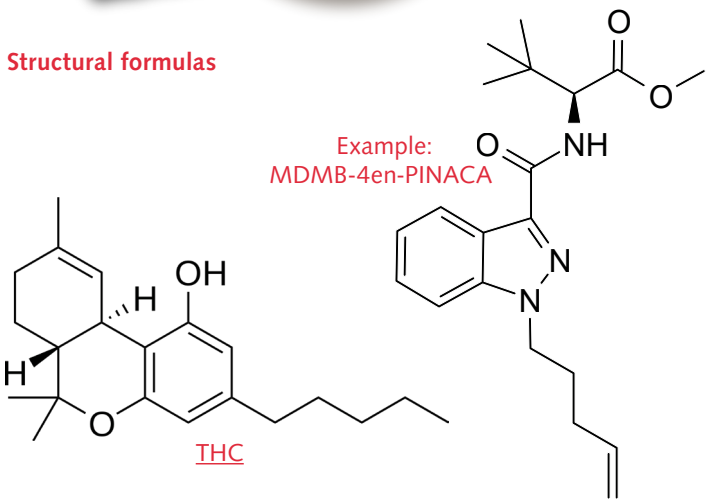
- Netherlands is an important transit country for various New Psychoactive Substances (NPS). A small portion of them is intended for the Dutch consumer market. A notable example of this are synthetic cannabinoids, which are typically primarily reported by the Customs Laboratory of the Netherlands. However, in 2022, they only observed that large quantities of JWH-210 were imported.
- Regarding cathinones, it was particularly noteworthy that the Customs Laboratory of the Netherlands detected record amounts of the substance 3-CMC. This substance was not frequently submitted to DIMS but was found in the majority of samples submitted as 3-MMC.
- What's also striking is that, in the Netherlands in 2022, there is minimal reporting of the presence of synthetic opioids, unlike other European countries. O-desmethyltramadol is the substance most commonly reported by some of the participating partners.

Synthetic cannabinoids

Synthetic cannabinoids are substances that have a similar effect as THC. In 2022, 15 different synthetic cannabinoids were reported to the Reporting Desk for New Drugs by the participating laboratories; two of these synthetic cannabinoids were detected on the illicit drug market in the Netherlands for the first time.

Proportion of synthetic cannabinoids compared to all substance groups reported in 2022

Structural formulas



Example: MDMB-4en-PINACA

THC

Developments in 2022

- The Customs Laboratory of the Netherlands detected large batches of powder (457 kg for import and 2 kg for export) containing JWH-210.
- The Netherlands Forensic Institute detected large quantities of plant material treated with MDMB-4en-PINACA (68 kg) and 5F-APINACA (1.6 kg).
- DIMS received one tablet sold as ecstasy which contained 4F-MDMB-BUTINACA. In addition, DIMS detected cannabis adulterated with the synthetic cannabinoid ADB-BUTINACA and with MDMB-4en-PINACA (two samples each).
- The Monitor Drug-related Incidents and the Dutch Poisons Information Centre only registered exposure to the synthetic cannabinoids 7-ABF en JWH-210.
- Hardly any discussions on the analysed discussion boards were related to synthetic cannabinoids. Only one topic on JWH-210 was started in 2022.
- The high amount of seized material indicate the trade of synthetic cannabinoids in the Netherlands. Consumption of synthetic cannabinoids appears to be low, with the exception of very specific settings such as prisons.

Developments in 2022

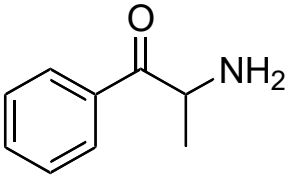
- The Customs Laboratory of the Netherlands detected a number of exceptional large batches of the cathinones 3-CMC (18.657 kg), 2-MMC (1508 kg) and α-PiHP (257 kg).
- The Netherlands Forensic Institute detected large quantities of 4-CMC (19.9 kg) and 4-MMC (25.9 kg). Furthermore, the Netherlands Forensic Institute reported a number of substantial seizures of MDMA tablets either with 4-MMC or 4-CMC (15782 pieces). Also, tablets only containing 4-CMC (3670 pieces) were reported.
- Regarding cathinones, DIMS received mainly 3-MMC from consumers. However, most of the samples that were purchased by consumers as 3-MMC were found to contain other cathinones instead. Cathinones that were detected by DIMS include 3-CMC (152), 3-MMC (143) and 4-MMC (99). Dimethylpentylone was reported for the first time to the Reporting Desk for New Drugs.
- The Dutch Poisons Information Centre registered a considerable number of poisonings with cathinones (224). Also, the Monitor Drug-related Incidents received a large number of reports of adverse health-related events involving cathinones (351). In most of the cases it was reported as 3-MMC or 4-MMC. However, in 2022 the Dutch Poisons Information Centre also registered poisonings with 3-CMC and α-PiHP.
- Most of the discussions on the analysed discussion boards in 2022 were related to 3-MMC (13%), but in addition topics were started on 4-MMC (5%) and 3-CMC (4%).

Cathinones

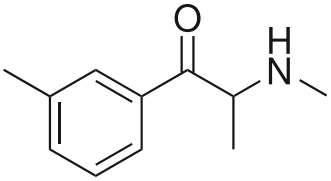
Cathinones are chemically related to cathinone, which is one of the active substances in the plant qat. In 2022, 32 different cathinones were reported to the Reporting Desk for New Drugs by the participating laboratories; six of these cathinones were detected on the illicit drug market in the Netherlands for the first time.

Proportion of cathinones compared to all substance groups reported in 2022

Structural formulas



Cathinone



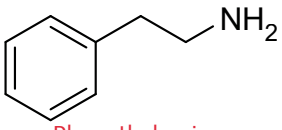
Example: 3-MMC

Phenethylamines

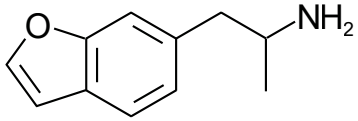
Well-known phenethylamines are mescaline, (meth)-amphetamine and MDMA. Many other phenethylamines mimic the effects of these drugs. In 2022, 36 different phenethylamines were reported to the Reporting Desk for New Drugs by the participating laboratories; four of these phenetylamines were detected on the illicit drug market in the Netherlands for the first time.

Proportion of phenethylamines compared to all substance groups reported in 2022

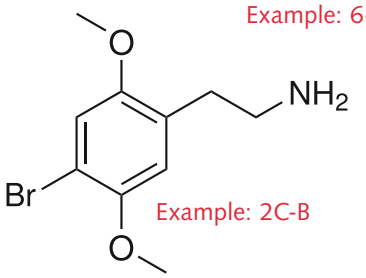
Structural formulas



Phenethylamine



Example: 6-APB



Example: 2C-B

Developments in 2022

- 2C-B has been frequently reported by both the Netherlands Forensic Institute and DIMS. In 2022, the Netherlands Forensic Institute reported a number of substantial seizures of 2C-B tablets (46179 pieces). In addition, they reported a large quantity of 6-Br-DMPEA tablets (46179 pieces). In 2022, DIMS only detected 2C-B, 6-Br-DMPEA was only reported by DIMS in previous years.
- In addition to 2C-B, DIMS detected a few times the presence of the potent substances 25B-NBOMe and 25I-NBOMe. Both the Netherlands Forensic Institute and DIMS also detected three different types of methylphenidate-like substances.
- The Dutch Poisons Information Centre registered a total of (72) poisonings with phenylethylamines. Also, the Monitor Drug-related Incidents received a large number of reports of adverse health-related events involving phenylethylamines (123). In most of the cases it concerned 2C-B. However, in 2022 the Dutch Poisons Information Centre also registered poisonings with 2-FMA or 2-FA, while the Monitor Drug-related Incidents received reports of adverse health-related events involving 4-FMA or 4-FA.
- Most of the discussions on the analysed discussion boards in 2022 were related to 2C-B (5%), but in addition topics were started on 5/6 APB (Benzofury) (5%) and 3-CMC (4%).

Developments in 2022

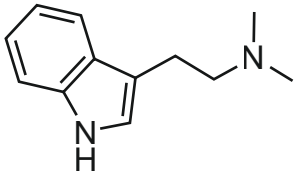
- The Netherlands Forensic Institute reported large batches ETH-LAD blotters (966), in addition to large seizures of DMT.
- In addition to DMT, which consumers had submitted to DIMS in 2022 most frequently, 4-HO-MET, 4-AcO-MET, 5-MeO-DMT, 5-MeO-N,N-MiPT and N-methyltryptamine were detected in consumer samples.
- Adverse health-related events after consumption of indole alkaloids is usually very rare. However, in 2022, the Dutch Poisons Information Centre registered 14 poisonings with indole alkaloids. The Monitor Drug-related Incidents received three reports of adverse health-related events involving indole alkaloids.
- Most of the discussions on the analysed discussion boards in 2022 were related to 1P-LSD (3%), but in addition topics were started on 5-MeO-DMT (2%) and DMT (2%).

Indole alkaloids (Tryptamines)

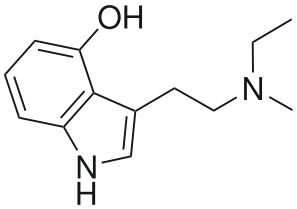
The group of indole alkaloids includes psychedelics of which the structure resembles serotonin and of which the chemical structure contains a tryptamine-group (2-(3-indolyl)ethylamine). In 2022, 13 different phenethylamines were reported to the Reporting Desk for New Drugs by the participating laboratories; none of these indole alkaloids were detected on the illicit drug market in the Netherlands for the first time.

Proportion of indole alkaloids compared to all substance groups reported in 2022

Structural formulas



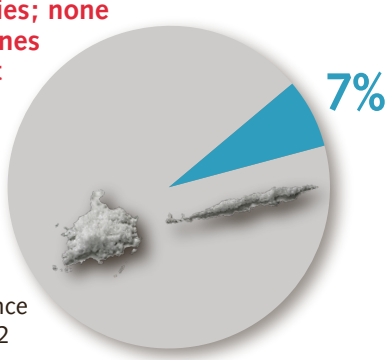
Example: DMT



Example: 4-HO-MET

Arylcyclohexylamines

Arylcyclohexylamines are substances of which the chemical structure contains a cyclohexylamine with an aryl-group. In 2022, eight different arylcyclohexylamines were reported to the Reporting Desk for New Drugs by the participating laboratories; none of these arylcyclohexylamines were detected on the illicit drug market in the Netherlands for the first time.

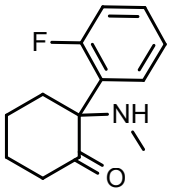


Proportion of arylcyclohexylamines compared to all substance groups reported in 2022

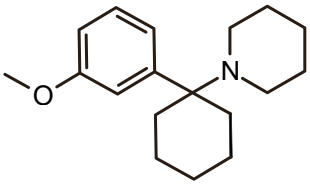
Developments in 2022

- The Customs Laboratory of the Netherlands reported large batches of powder containing ketamine (1586 kg).
- The Netherlands Forensic Institute mainly detected large quantities of ketamine (217 kg) and 2-Fluorodeschloroketamine (2-FDCK) (1 kg).
- Arylcyclohexylamines that were detected by DIMS include ketamine (460), 2-Fluorodeschloroketamine (7), 3-MeO-PCP (3), deschloroketamine (8) and MXPR (1).
- The Dutch Poisons Information Centre registered a total of (101) poisonings with arylcyclohexylamines. Also, the Monitor Drug-related Incidents received a large number of reports of adverse health-related events involving arylcyclohexylamines (410). In most of the cases it concerned ketamine, but both the Dutch Poisons Information Centre and the Monitor Drug-related Incidents also registered a few intoxications related to 2-Fluorodeschloroketamine.
- Most of the discussions on the analysed discussion boards in 2022 were related to ketamine (6%), but in addition topics were started on 2-Fluorodeschloroketamine (2%) and DMXE (1%).

Structural formulas



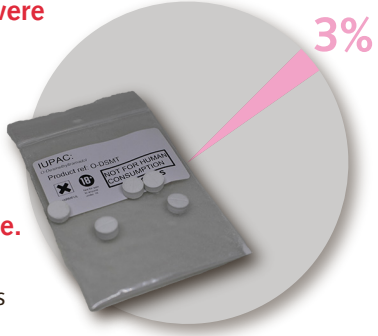
Example: 2-Fluorodeschloroketamine



Example: 3-MeO-PCP

Synthetic opioids

Synthetic opioids are substances with strong analgesic properties that have recently emerged on the illicit drug market. Various subcategories have been described such as fentanyl analogues and, more recently, benzimidazole opioids (nitazenes). In 2022, four different synthetic opioids were reported to the Reporting Desk for New Drugs by the participating laboratories; none of these synthetic opioids were detected on the illicit drug market in the Netherlands for the first time.

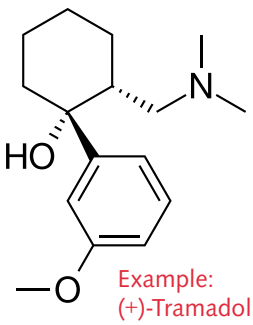


Proportion of synthetic opioids compared to all substance groups reported in 2022

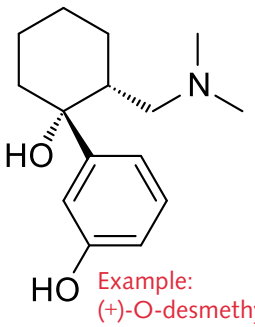
Developments in 2022

- Only DIMS detected synthetic opioids in consumer samples. The synthetic opioids despropionylfentanyl, O-desmethyltramadol (O-DSMT), tramadol and U-47700 were alle detected once in 2022.
- The Dutch Poisons Information Centre registered a total of (22) poisonings with synthetic opioids. The Monitor Drug-related Incidents received a total number of (17) reports of adverse health-related events involving synthetic opioids. In both cases it mainly concerned O-desmethyltramadol (DPIC 21 and MDI 16).
- Most of the discussions on the analysed discussion boards in 2022 were related to O-desmethyltramadol (1%).

Structural formulas



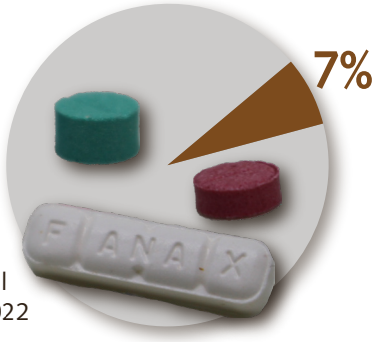
Example: (+)-Tramadol



Example: (+)-O-desmethyltramadol

New benzodiazepines

The term new benzodiazepines refers to substances that are being sold as "legal" replacements of prescription benzodiazepines such as diazepam, oxazepam and alprazolam. In 2022, eight different new benzodiazepines were reported to the Reporting Desk for New Drugs by the participating laboratories; two of these new benzodiazepines were detected on the illicit drug market in the Netherlands for the first time.

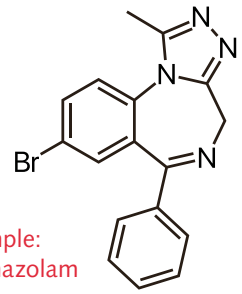


Proportion of new benzodiazepines compared to all substance groups reported in 2022

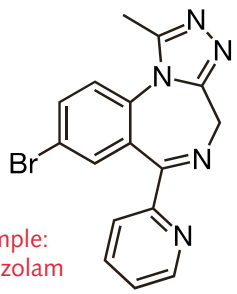
Developments in 2022

- The Netherlands Forensic Institute reported large seizures of bromazolam (2.1 litres and 174 bottles) and etizolam (3.5 litres and 1.39 kg dissolved in liquid).
- Both substances were also detected by DIMS in consumer samples. DIMS received three tablets sold as bromazolam. Etizolam was submitted seven times in different forms.
- In 2022, the Dutch Poisons Information Centre registered 195 poisonings with new benzodiazepines. The Monitor Drug-related Incidents received 34 reports of adverse health-related events involving new benzodiazepines. In total, 15 different new benzodiazepines were registered. Most of the cases it concerned bromazolam (DPIC 44 and MDI 7) and pyrazolam (DPIC 35 and MDI 10).
- Most of the discussions on the analysed discussion boards in 2022 were related to bromazolam(2%), followed by pyrazolam (1%).

Structural formulas



Example: Bromazolam



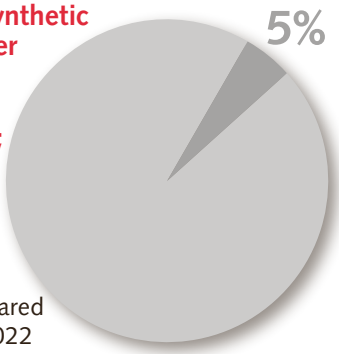
Example: Pyrazolam

Developments in 2022

- The Customs Laboratory of the Netherlands reported a total of 1.08 kg phenibut. Furthermore, they detected ten tablets containing a mixture of 2-FMA, 5-MAPB and 5-MeO-MiPT sold as Pink Star.
- The Netherlands Forensic Institute reported mainly GBL (630 litres) and GHB (1409 litres).
- DIMS received mainly GHB from consumers. However, also DIMS received a few tablets sold as 'Pink Star' besides several liquid mixtures containing different names and compositions. Some of them were sold as Alegria.
- The Dutch Poisons Information Centre registered three poisonings with 'Alegria'. Also, the Monitor Drug-related Incidents received 15 reports of adverse health-related events involving Alegria. In addition, the Dutch Poisons Information Centre also registered a poisonings with Pink Star.
- Most of the discussions on the analysed discussion boards in 2022 were related to GHB/GBL (9%), but in addition topics were started on phenibut (2%).

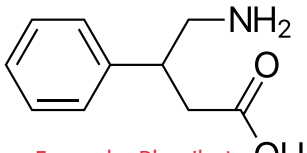
Other substances

This category covers all other new psychoactive substances including piperazines, cocaine-like substances (pyrrolidines) and other substances such as GHB/GBL that are being monitored by the Reporting Desk for New Drugs under the framework of the European Joint Action on new synthetic drugs. In 2022, six different other substances were reported to the Reporting Desk for New Drugs by the participating laboratories; none of these other substances were detected on the illicit drug market in the Netherlands for the first time.



Proportion of other substances compared to all substance groups reported in 2022

Structural formula



Example: Phenibut

Analysis of online discussions of NPS in 2022

By collecting data on the number of new topics, number of posts and views related to new psychoactive substances started on the most important discussion boards on drugs in the Netherlands, the Reporting Desk for New Drugs is able to report on the interest of new psychoactive substances in the Netherlands.

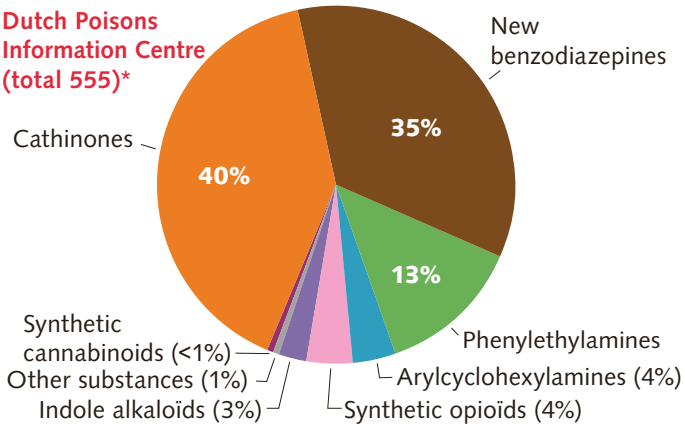
Top 20 ranking by the number of new topics about new psychoactive substances

Substance	Topics	%	Sustance	Topics	%
1. 3-MMC	107	13	**11.** Bromazolam	20	2
2. NPS Common	78	10	**12.** 2F-DCK	17	2
3. GHB	75	9	**13.** 5-MeO-DMT	17	2
4. Ketamine	52	6	**14.** DMT	16	2
5. 2C-B	40	5	**15.** 4F-MPH	15	2
6. 5/6APB	39	5	**16.** Phenibut	14	2
7. 4-MMC	37	5	**17.** DMXE	10	1
8. 3-CMC	31	4	**18.** 2-MMC	9	1
9. 1P-LSD	26	3	**19.** O-DSMT	9	1
10. 4-FMA	22	3	**20.** 3-FA	8	1

Adverse health-related events in 2022

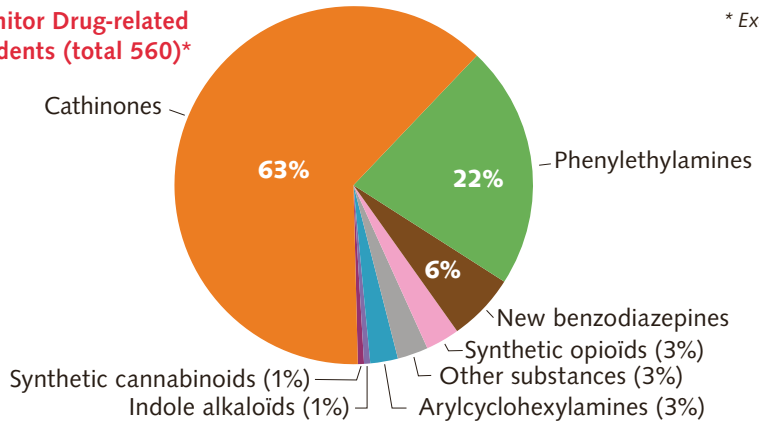
The Monitor Drug-related Incidents collects data on drug-related adverse health-related events reported by hospital emergency departments, ambulance services, forensic doctors, and organizations that staff first aid posts at events. The Dutch Poisons Information Centre informs doctors, pharmacists, and other professional care providers about the possible negative health effects and treatment options in case of a poisoning. The pie charts illustrate the distribution of adverse health-related events reported to the Monitor Drug-related Incidents per substance group in which new psychoactive substances are suspected to have played a role, as well as the poisonings registered by the Dutch Poisons Information Centre in 2022. Suspected, since toxicological confirmation is lacking and because in several cases it concerned the intake of multiple drugs per occasion.

Dutch Poisons Information Centre (total 555)*



** Excluding GHB/GBL (88) and ketamine (79)*

Monitor Drug-related Incidents (total 560)*



** Excluding GHB/GBL (827) and ketamine (396)*

References:

1. The Drugs Information and Monitoring System. Factsheet on drug checking in the Netherlands. 2019. Trimbos institute. AF1677. TrimbosAF1677. Available at URL: *https://www.trimbos.nl/aanbod/webwinkel/product/af1677-the-drugs-information-and-monitoring-system-dims*
2. *https://www.rivm.nl/publicaties/basisnotitie-coordinatiepunt-assessment-en-monitoring-nieuwe-drugs*
3. *https://www.emcdda.europa.eu/topics/nps_en*

Artikelnummer: AF2132
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