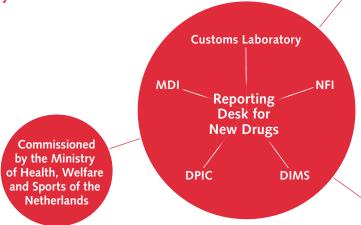
Annual Report 2020

Reporting Desk for New Drugs



What is the Reporting Desk for New Drugs?

The Reporting Desk for New Drugs is a large-scale 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 had been discovered to be present 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 after laboratory analysis of consumer samples submitted to a drug checking service¹. 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 consumer 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 (CAM²) to assess the distribution and possible risks associated with the sale, transport, and use of new psychoactive substances.

What are 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.

A few substances, such as 2C-B, GHB/GBL, DMT, and ketamine, have also been included in the Reporting Desk for New Drugs, as these substances are being monitored by the European Monitoring Centre for Drugs and Drug Addiction as well monitored under the framework of the European Joint Action on new synthetic drugs. In this Annual Report 2020 of the Reporting Desk for New Drugs, these substances are referred to as 'classic' psychoactive substances.

New psychoactive substances classified into substance groups

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

- Synthetic cannabinoids
- Cathinones
- Phenethylamines
- Tryptamines
- Piperazines
- Other new psychoactive substances:
 - arylcyclohexylamines
 - synthetic opioids (i.e. fentanyl derivatives)
 - new benzodiazepines

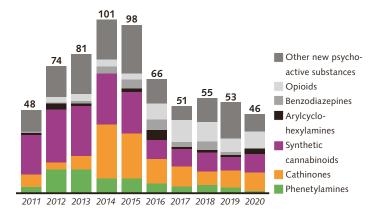
Currently, there is no nationwide surveillance system for new psychoactive substances in the Netherlands, which means that underreporting of all new psychoactive substances is likely. However, the information from the Reporting Desk for New Drugs gives an indication of the situation regarding new psychoactive substances being present in the Netherlands on the illicit drug market.

2020 Highlights

In the Netherlands, a total of 78 different new psychoactive substances were reported to the Reporting Desk for New Drugs by the participating laboratories; nine of these new psychoactive substances were detected on the illicit drug market in the Netherlands for the first time.

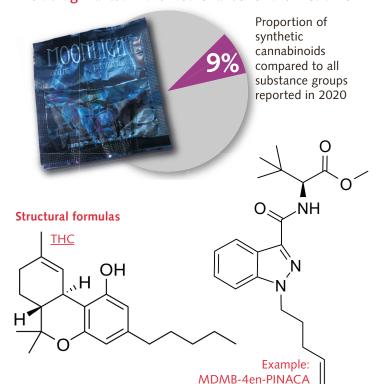
- Overall, despite the COVID-19 pandemic and its effect on international transportation, no major changes were found in the new psychoactive substances illicit drug market. However, there were less new psychoactive substances reported by each of the participating laboratories.
- In the Netherlands, as in other countries in Europe, cannabis adulterated with the synthetic cannabinoid MDMB-4en-PINACA was found for sale on the illicit drug market. This adulterated cannabis has caused adverse health-related events.
- In 2020, both the Customs Laboratory of the Netherlands and the Netherlands Forensic Institute detected 3-MMC in seized powders in high quantities (over 600 kg and 6 kg respectively). As well, the consumption of 3-MMC appears to have increased in 2020, as estimated by the increased proportion of drug samples bought as 3-MMC submitted to DIMS by consumers. The Dutch Poisons Information Centre reported a considerable increase in the number of poisonings involving 3-MMC (64 in 2020 versus 25 in 2019). In addition, the Monitor Drug-related Incidents received several reports of drug-related adverse health-related events involving either 3-MMC or 4-MMC.
- As seen in prior years, 'classic' psychoactive substances such as 2C-B, GHB/GBL, and ketamine remain the most commonly available psychoactive substances available on the illicit drug market in the Netherlands.

As of December 2020, approximately 830 new psychoactive substances are monitored by the Early Warning System of the European Monitoring Centre for Drugs and Drug Addiction, according to the European Drug Report 2021: Trends and Developments⁴.



Synthetic cannabinoids

Synthetic cannabinoids are substances that have a similar effect as THC. In 2020, seven different synthetic cannabinoids were reported to the Reporting Desk for New Drugs by the participating laboratories; four of these synthetic cannabinoids were detected on the illicit drug market in the Netherlands for the first time.



Developments in 2020

- The Customs Laboratory of the Netherlands detected two batches of powder; combined, these batches contained more than one kilogram of different synthetic cannabinoids. One of these detected powders contained the substance MDMB-4en-PINACA.
- In addition to two other synthetic cannabinoids, the National Forensic Institute also found MDMB-4en-PINACA.
- At DIMS, only three drug samples bought as different synthetic cannabinoids in powder form were submitted by consumers.
- DIMS received a total of 11 cannabis samples adulterated with MDMB-4en-PINACA submitted by consumers who experienced serious adverse health-related effects after use since November 2020. This synthetic cannabinoid has also been detected by other laboratories in cannabis samples outside of the Netherlands. However, neither the Monitor Drug-related Incidents nor the Dutch Poisons Information Centre have received any analytically confirmed reports of adverse health-events events after the use of adulterated cannabis.
- Given the high amounts of seized material, there is trade of synthetic cannabinoids in the Netherlands. Consumption of synthetic cannabinoids appears to be low, based on the low number of drug samples submitted by consumers and the low number of adverse health-related events.

Developments in 2020

- The Customs Laboratory of the Netherlands detected four very large batches of powders which contained the substances alpha-PHP (95 kg), 3-MMC (605 kg), 3-CMC (694 kg), and N-ethylhexedrone (1064.5 kg).
- In addition to a large seizure of 3-MMC powder (over 6 kg), the National Forensic Institute reported a seizure of a little over five hundred thousand 4-MMC tablets, some of which also contained MDMA.
- Regarding cathinones, DIMS received mainly 3-MMC and 4-MMC from consumers. About half of the samples that were purchased by consumers as 4-MMC were found to only contain 3-MMC which is still legally available in the Netherlands in contrast to 4-MMC.
- Given the high amounts of seized material, there is production and trade of cathinones in the Netherlands. The consumption of 3-MMC appears to be on the increase based on the number of drug samples submitted by consumers. The Dutch Poisons Information Centre also registered a considerable increase in the number of poisonings with 3-MMC; 64 poisonings were reported in 2020, compared to 25 reported in 2019.

Cathinones

Cathinones are chemically related to cathinone, which is one of the active substances in the plant qat. In 2020, 16 different cathinones were reported to the Reporting Desk for New Drugs by the participating laboratories; three 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 2020

Structural formulas

Example: 3-MMC

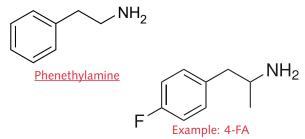
Phenethylamines

Well-known phenethylamines are mescaline and (meth)amphetamine. Many other phenethylamines mimic the effects of MDMA. In 2020, 24 different phenethylamines were reported to the Reporting Desk for New Drugs by the participating laboratories; one of these phenetylamines was detected on the illicit drug market in the Netherlands for the first time.



Proportion of phenethylamines compared to all substance groups reported in 2020

Structural formulas



Developments in 2020

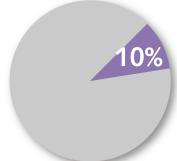
- The Customs Laboratory of the Netherlands rarely reports the detection of phenethylamines. In 2020, however, the Customs Laboratory reported that a very large amount of 6-APB powder (30 kg) was seized.
- The Netherlands Forensic Institute seized a large quantity of tablets of 2C-B (almost 57,000 tablets) and 4-FA (over 25,000 tablets). They also reported a seizure of more than 57,000 blotters; these blotters contained 25C-NBOMe and 25B-NBOMe.
- In addition to 2C-B, DIMS receives mainly 5/6-APB (Benzofury) from consumers.
- The Dutch Poisons Information Centre registered a total of 26 poisonings related to the reported use of 2C-B.
- Given the high amounts of seized material, there is trade of phenetylamines in the Netherlands. Consumption of phenetylamines and in particular 2C-B appears to be relatively high, based on the number of drug samples submitted by consumers and the number of adverse health-related events.

Developments in 2020

- The Customs Laboratory of the Netherlands reported very large seized quantities of DMT. In total, 126 kg of powder containing DMT and 1110 kg of plant parts were detected.
- The Netherlands Forensic Institute reported a total of 12.5 kg of seized powder containing DMT.
- In addition to DMT which consumers had submitted to DIMS, six other tryptamines were detected in consumer samples; 4-HO-MET was the most common detected substance in these submitted samples.
- Adverse health-related events after consumption of tryptamines is very rare. In 2020, the Dutch Poisons Information Centre registered two poisonings with DMT. They also registered two poisonings with two other tryptamines.
- Given the high amounts of seized DMT, there is trade of DMT in the Netherlands. Production, trade and consumption of other tryptamines is very low.

Tryptamines

Tryptamines are both natural and synthetic organic compounds which have a hallucinogenic effect after consumption. In 2020, 8 different tryptamines were reported to the Reporting Desk for New Drugs; one of these tryptamines was detected on the illicit drug market in the Netherlands for the first time.

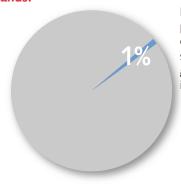


Proportion of tryptamines compared to all substance groups reported in 2020

Structural formulas

Piperazines

Piperazines are substances that contain a so-called piperazine ring and usually have a stimulating effect. In 2020, 1 piperazine was reported to the Reporting Desk for New Drugs; this was not the first time that this substance had been detected on the illicit drug market in the Netherlands.

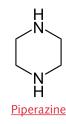


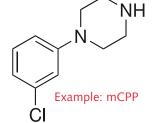
Proportion of piperazines compared to all substance groups reported in 2020

Developments in 2020

- Both the Customs Laboratory of the Netherlands and the Netherlands Forensic Insitutute did not detect any piperazines. Only DIMS detected the piperazine mCPP in two submitted consumer samples. mCPP has finally disappeared from the illicit drug market in the Netherlands.
- Other piperazines are rarely detected by the participating laboratories. In the last few years, no adverse health-related events relating to the consumption of piperazines have been reported.

Structural formulas





Developments in 2020

- 'Classic' new psychoactive substances such as GHB/GBL and ketamine are frequently detected by the participating laboratories of the Reporting Desk for New Drugs. The most reported adverse health-related events by the Monitor Drug-related Incidents are related to GHB, followed by ketamine.
- The Dutch Poisons Information Centre registered 13
 poisonings related to arylcyclohexylamines; the Monitor
 Drug-related Incidents reported only one adverse
 health-related event related to the use of an
 arylcyclohexylamine.
- The Customs Laboratory of the Netherlands detected large amounts of GHB liquid and ketamine powder. Large quantities of 2-Fluoro-Deschloroketamine (2-FDCK) (80 kg powder) and phenibut (126 kg powder) were detected.
- The Netherlands Forensic Institute also detected GHB and ketamine. More alarming was the seizure containing fentanyl (1.28 kg powder).
- A substantial proportion of the consumer samples submitted to DIMS had been bought as GHB or ketamine.
 Consumers also submitted several arylcyclohexylamines and new benzodiazepines for analysis.
- In total, the participating laboratories of the Reporting Desk for New Drugs detected five different types of new benzodiazepines, of which etizolam was the most commonly detected.
- In 2020, the Dutch Poisons Information Centre registered 65 poisonings with new benzodiazepines; of these, 25 concerned etizolam.
- Production, trade and consumption of other new psychoactive substances is limited. To this date, synthetic opioids (such as the fentanyl derivatives and benzimidazole opioids) have very rarely been detected by one of the participating laboratories in the Netherlands.

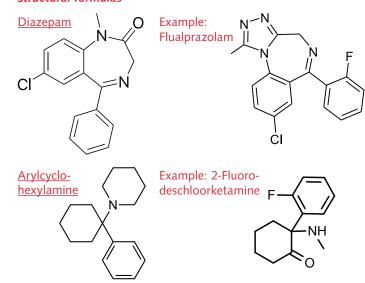
Other substances

This category covers all other new psychoactive substances including synthetic opioids (including fentanyl derivates), new benzodiazepines, arylcyclohexylamines, and GHB/GBL. In 2020, 22 different other substances



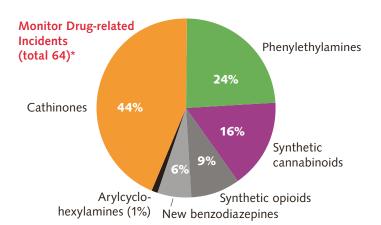
Proportion of the group 'Other substances' compared to all substance groups reported in 2020

Structural formulas

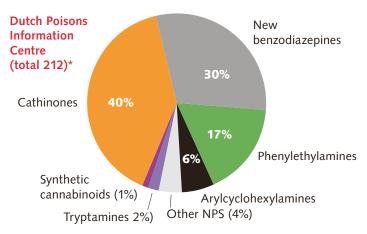


Adverse health-related events in 2020

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.







^{*} Excluding GHB/GBL (72) and ketamine (45)

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 have or are suspected to have played a role, as well as the poisonings registered by the Dutch Poisons Information Centre in 2020.

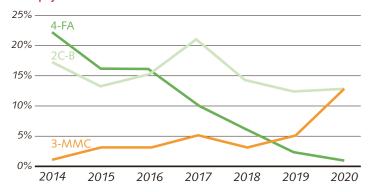
Analysis of online discussions of new psychoactive substances

By collecting data from the most important consumer discussion boards on drugs in the Netherlands, the Reporting Desk for New Drugs is able to report on the interest in and reported consumption of specific new psychoactive substances in the Netherlands.

Developments in 2020

- As seen in prior years, the 'classic' new psychoactive substances such as 2C-B, GHB/GBL, and ketamine have been discussed most on the consumer discussion boards that were reviewed by the Reporting Desk for New Drugs. In 2020, most new topics on these discussion boards were about GHB (69 topics) and 2C-B (68 topics).
- Based on the number of new topics about 3-MMC on the analyzed consumer discussion boards, it appears that the consumption of 3-MMC has increased in the Netherlands; in 2020, there were 67 new postings about 3-MMC on the boards, while there were 29 new postings about 3-MMC in 2019.
- In 2020, only a few new topics about 4-FA (7) or 4-FMA (9) were initiated on the analyzed discussion boards.
- Most of the new psychoactive substances that have been submitted by consumers to DIMS or which have been registered by the Dutch Poisons Information Centre in 2020 were also discussed online. Compared to previous years, 2-FCDK, 3-MeO-PCP, and etizolam were relatively new topics of discussion on the boards.

Trends in new topics: proportion of three selected substances compared to the total number of new topics about new psychoactive substances



Ranking by the number of new topics about new psychoactive substances that were initiated per year.

Rank	2017	2018	2019	2020
1	2C-B	Ketamine	2C-B	GHB
2	Ketamine	GHB	Ketamine	2C-B
3	4-FA	2C-B	NPS in general	3-MMC
4	GHB	6-APB	GHB	Ketamine
5	3-MMC	DMT	3-MMC	NPS in general
6	NPS in general	4-FA	DMT	DMT
7	DMT	Kratom	5/6-APB	4-MMC
8	Phenibut	NPS in general	1P-LSD	1P-LSD
9	6-APB	1P-LSD	4-FMA	2-FDCK
10	Kratom	3-MMC	2C-B-FLY	Etizolam
11	1P-LSD	Etizolam	2-FDCK	5/6-APB
12	ALD-52	4-FMA	4-FA	3-MeO-PCP

References:

- 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
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