

Information Bulletin

DATA FROM THE EARLY WARNING SYSTEM FOR THE AMERICAS

Information Bulletin of the Inter-American Observatory on Drugs: Report of the Early Warning System for the Americas (SATA)



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01

THE VALUE OF AN EARLY WARNING SYSTEM

Synthetic drugs as a group is the second most widely used psychoactive substance worldwide, after cannabis. The United Nations Office on Drugs and Crime (UNODC)

reports that 29 million people use amphetamine-type stimulants (ATS), 24 million use synthetic opioids, and 21 million use ecstasy.¹

¹ United Nations Office on Drugs and Crime. World Drug Report 2019 (data in past year prevalence).

The Inter-American Drug Abuse Control Commission's Inter-American Observatory on Drugs (CICAD/OID) began to draw attention to the need for OAS member states to monitor synthetic drugs in 2011. This was a new area of emphasis for most national drug commissions in Latin America and the Caribbean, which had largely focused on marijuana, cocaine, and smokable forms of cocaine, such as crack and base paste. Latin American countries conscious of synthetic drugs in 2011 were most familiar with ecstasy use and efforts to control it.

Around 2013, drug monitoring systems began to flag a new set of synthetic drugs that had been growing in use in Canada, the United States, the European Union, and the Asia-Pacific region. Labeled new psychoactive substances (NPS), these drugs are not covered by international conventions but nonetheless pose a threat to public health.² The emergence of NPS challenged existing drug monitoring methods because these substances were easily synthesized, hard to detect, and -- since most NPS could be tweaked chemically -- difficult to legislate against. To control these drugs, countries needed to identify other methods to monitor their movement and use.

The United Nations Commission on Narcotic Drugs (CND) recommended that member states address this new phenomenon by creating systems that quickly and efficiently gather data on emerging trends.³ These systems, referred to as early warning systems (EWS) on drugs, should be sufficiently agile to disseminate information to professionals on the front lines -- as well as sometimes to the general public -- so that they can act quickly to prevent harm. In the public health system, such information allows health professionals to intervene more effectively on overdoses and reduce the risk of death, while in law enforcement it can lead to more rapid

detection and effective control of NPS. Early warning systems can serve the public, too, by better informing potential users and their families on the risks associated with these substances.

New psychoactive substances:

“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.”

-- UNODC

Argentina, Chile, Colombia, and Uruguay have national early warning systems for emerging drugs and related drug threats that have been in operation for at least the past two years. Barbados, Brazil, Costa Rica, Jamaica, Paraguay, Peru, and Trinidad and Tobago have taken major steps toward the creation of EWS.

In Chile, the group of experts of the National Roundtable on New Psychoactive Substances recommended that the country's Schedule 1 of controlled substances include a total of 36 NPS detected between May and December of 2017. By late 2019, the Colombian Early Warning System had detected 35 new psychoactive substances in that country. In short, this is a growing problem with a certain impact on public health and safety throughout the Americas.

In response to this growing problem, CICAD/OID established the Early Warning System for the Americas (SATA, by its Spanish language acronym) in 2019 to compile information on a regional level from national EWS.⁴

2 United Nations Office on Drugs and Crime. World Drug Report 2013.

3 In its Resolution 56/4 (March 15, 2013), entitled “Enhancing international cooperation in the identification and reporting of new psychoactive substances,” the Commission on Narcotic Drugs recognized the importance of sharing NPS-related information on a global level. It urged UNODC to continue facilitating timely and comprehensive sharing of information on new psychoactive substances, including analytical methodologies, reference documents, and mass spectra and trend-analysis data. (See https://www.incb.org/documents/Global_Projects_OPIOIDS/Resolutions/CND-Res-56-4.pdf.)

4 For more information about SATA, see the CICAD website (http://www.cicad.oas.org/Main/Template.asp?File=/oid/sata/default_eng.asp).

SATA is collecting an ever-growing number of alerts issued by the early warning systems of OAS member states, in addition to summary reports and other data. The information gathered shows that, in the past decade, synthetic drugs and new psychoactive substances have become prevalent in Latin America and the Caribbean, and now warrant the same level of monitoring and surveillance as cannabis, cocaine, smokable cocaine, and other common drugs.

Early warning systems have been identified by OAS member states as a best practice to gather data and develop quick responses to new and emerging threats. With the support of the Canadian and United States governments, the OAS has initiated a program to develop and strengthen EWS in OAS member states. As national early warning systems grow and develop, their information will in turn strengthen the SATA, providing faster and more reliable data on emerging drugs in the Hemisphere.

02

ALERTS REPORTED TO SATA IN 2018-2019

The following is a summary of information from OAS member states reported to the SATA to date. It is important to note that alert types vary from one country to the next. In Argentina, for example, all alerts are public and are shared through the network of the Argentine Early

Warning System for Drugs. Uruguay issues alerts through its network but distinguishes between alerts that can be made public based on whether they are deemed to pose a grave and immediate threat to public health or safety.

Table 1: Summary of alerts reported to SATA in 2018–2019 by substance and country

	ARGENTINA	CHILE	COLOMBIA	URUGUAY
Cannabis		Creepy/Cripy/Krippy	Creepy/Cripy/Krippy	
Cocaine	Injected cocaine			
Ecstasy		MDMA		MDMA

	ARGENTINA	CHILE	COLOMBIA	URUGUAY
Phenethylamines	2,5-dimethoxy-4-ethylamphetamine (2C-E) -- three alerts			
	2,5-dimethoxy-4-iodoamphetamine (DOI)			
	25I-NBOMe (2C-I-NBOMe)			
	25I-NBOH (NBOH-2CI, Cimi-27, 2-C-I-NBOH)			
LSD (Lysergic acid diethylamide)			LSD	
Nonmedical use of controlled prescription drugs	Cyclopentolate			
Opioids	Nalbuphine		Medicines	
	Remifentanyl		Other opioids	
Plant- and animal-based substances	Angel's Trumpet		DMT (N-Dimethyltryptamin)	
	Bufotenin			
Chemical substances/precursors	Butanediol			

CANNABIS

Creepy marijuana also known as “cripy” or “krippy” is a high THC content marijuana. Creepy is reported to be a genetically modified type of marijuana.

Chile, 2018: Alert for “creepy” marijuana. In its 2018 report,⁵ the Chilean Observatory on Drug Trafficking raised

concern regarding the increased number of seizures of “creepy” marijuana. The concerns were reported to the Chilean Maritime Police. The Observatory on Drug Trafficking also reported that the newly arrived creepy marijuana has supplanted marijuana of Paraguayan origin and has penetrated all regions of Chile, despite its high

5 Prosecutor’s Office, Office of the Attorney General. Observatory on Drug Trafficking in Chile, 2018 Report.

price. In 2017, Chilean authorities seized more than two tons of creepy marijuana. In December 2018, they seized more than four tons. The Navy, customs authorities, and the national police report shipments of this drug arriving by land, sea, and air. Shipping methods used include speedboats direct from Colombia, buses, and even submarines. For example, drug traffickers load buses with people invited to visit Chile free of charge; under the guise of tourism, the buses are carrying hundreds of kilos of creepy. Meanwhile, submarines unload offshore from the port of San Antonio, in the Valparaíso region. Chile's Observatory on Drug Trafficking has concluded that the supply of creepy marijuana greatly exceeded that of any other strain encountered previously.

Colombia, December 2019: Alert for “cripy” marijuana. Colombia has reported an increase in people seeking medical attention as a result of using cripy marijuana for recreational purposes. Evidence exists that there is an association between high THC cannabis and psychotic episodes.

COCAINE

Argentina, November 2018: Alert for injected cocaine. The Secretariat for Comprehensive Drug Policies of Argentina (SEDRONAR, by its Spanish language acronym) has a Local Comprehensive Treatment Mechanism (by its Spanish language acronym, DIAT), which works on prevention and treatment of problem drug use in strategically located places in each region of the country. The control area in the province of Corrientes reported a case involving someone who had been injecting cocaine for four months and had used with his partner. Given the evidence of group use of injected substances, Argentina's Early Warning System for Drugs issued a public alert on the need to employ self-care practices and refrain from sharing syringes in order to prevent transmissible diseases. It also proposed raising awareness and monitoring the risks posed by injection drug use.

ECSTASY

Chile, 2018: Alert on the high presence of ecstasy on the market. The Observatory on Drug Trafficking in Chile indicated in its 2018 report that, between March 2016 and March 2017, seizures of ecstasy or MDMA (3,4 methylenedioxy-methamphetamine) greatly outnumbered those of any other synthetic drug, accounting for more than 80% of all synthetic drugs in pill form seized in the country.

Colombia, December 2019: Alert for ecstasy with a high MDMA content. The Colombian Early Warning System, which is part of the Ministry of Justice and Law, reported the presence of ecstasy with high MDMA content. The presentation was in the form of tablets with MDMA levels as high as 233 mg. According to the information in the Colombian EWS, most ecstasy has between 80 to 140 mg. The tablets were analyzed by the Chemistry Group of the Department of Criminalistics of the Office of the Attorney General of the Nation in Bogotá.

Uruguay, 2018: Alert for high-purity MDMA. In Uruguay, the Early Warning System on Drugs, managed by the Uruguayan Observatory on Drugs, issued an alert regarding possible cases of poisonings or deaths related to the use of ecstasy powder. It urged its partners to remain vigilant and requested timely reports from first-level health care facilities.

The Uruguayan Early Warning System cautioned that the use of MDMA in the form of crystals or powder carries a high risk of overdose. The alert cited a report from the Technical Forensic Institute (ITF, by its Spanish language acronym), which indicated the following:

1. The powder or crystal form of ecstasy has higher MDMA purity than ecstasy tablets. In the seized crystal samples, the concentration of MDMA was as high as 80% purity, compared with 40% to 50% for tablets. In addition

to the higher purity, the crystal form presents a higher risk because it is not clear how much powder goes into a single dose, unlike with a tablet. These factors, taken together, increase the risk of acute overdose. Crystals are often injected, which further increases risk.

The ITF report also noted that it is easier to add adulterants to MDMA crystals and powders than to pills, which creates the risk that additional toxic ingredients are added to the drug. The most commonly used adulterants are caffeine, acetaminophen, and meta-Chlorophenylpiperazine (mCPP), a toxic angiogenic molecule that induces dysphoria and depression.

MDMA in powder and crystal form was detected through a chemical analysis conducted by the ITF and the Pando Technological Park at the School of Chemistry of the University of the Republic (UDELAR, by its Spanish language acronym).

2. Uruguay's Toxicological Information and Guidance Center (CIAT, by its Spanish language acronym) reported cases of acute poisoning believed to result from consuming MDMA crystals, based on statements by users.

In 2018, the ITF's Seized Substances Laboratory received 33.5 kilograms of ecstasy in powder and crystal form for analysis. That amount included a large seizure made at Carrasco International Airport and reported by the National Customs Directorate.

PHENETHYLAMINES

Argentina, May 2018: Alert for 2,5-dimethoxy-4-ethylamphetamine (2C-E). SEDRONAR's Early Warning System for Drugs reported the presence of 2C-E, a medium-duration hallucinogenic phenethylamine described as one of the most powerful psychedelic substances in the 2C series. The most common presentations for 2C-E are crystal powder, capsules, tablets, and liquid preparations.

2C-E is most commonly swallowed but can also be snorted. Due to the potential harm to health posed by 2C-E, the Early Warning System for Drugs urged members to raise awareness about the need for monitoring. The presence of 2C-E has also been detected in Brazil, Chile, and Colombia.

Argentina, August 2018: Alert for 2,5-dimethoxy-4-iodoamphetamine (DOI). SEDRONAR's Early Warning System for Drugs issued an alert for the presence of DOI. DOI is a phenethylamine NPS, belonging to the family of DOx psychedelic amphetamines, and produces psychedelic effects. SEDRONAR reports that DOI is sold on blotters, similar to LSD blotters, and it is believed that consumers buy and use it believing it is LSD. In light of the potential harm that this substance could cause its users, the Argentine Early Warning System asked its stakeholders to raise awareness and monitor the presence of this drug.

Argentina, August 2018: Alert for 25I-NBOMe (2C-I-NBOMe). SEDRONAR's Early Warning System for Drugs issued an alert for the presence of 25I-NBOMe. Classified as an NPS, its effects are primarily hallucinogenic. Like DOI, it is sold on blotters, and it is believed that consumers buy and use it believing it to be LSD. In light of the potential harm that this substance could cause its users, the National Observatory on Drugs called for vigilance. Argentina first reported the presence of this drug in its territory in 2015.

Argentina, November 2018: Alert for 2C-E. SEDRONAR's Early Warning System for Drugs issued an alert following the detection of the substance 2C-E.

The substance was distributed in three forms: on sheets stamped with different colored Pacman ghosts, on sheets with a white background and black detailing, and on sheets printed on a single side. The presence of 2C-E had already been reported in May 2018 in the province of Córdoba.

Argentina, April to June 2019: Alert for 25I-NBOH (NBOH-2CI, Cimbi-27, 2-C-I-NBOH). SEDRONAR's Early Warning System for Drugs reported the seizure of a bottle sent

through the mail from Europe. An analysis of its contents revealed the presence of 25I-NBOH, an NPS with hallucinogenic effects belonging to the phenethylamine group.

Argentina, April to June 2019: Alert for 2C-E. SEDRONAR's Early Warning System for Drugs reported that blotter sheets of 2C-E were detected in two locations in the province of Buenos Aires. The same substance was also found in the province of Córdoba, with multiple seizures of sheets with different illustrations. Previous reports, in May and November 2018, indicated that the substance had been detected on blotters and in tablets in the provinces of Buenos Aires and Córdoba, respectively.

LSD (Lysergic acid diethylamide)

Colombia, December 2019: Alert for 1P – LSD (lysergic acid diethylamide). The Colombian Early Warning System reported the presence in the country of a chemical variant of LSD known as 1-propionyl-d-lysergic acid diethylamide (1P-LSD). The effects of 1P-LSD on humans are not known, but scientific studies demonstrate that the substance produces effects in mice similar to LSD and consistent with its classification as a serotonergic hallucinogen.⁶

NONMEDICAL USE OF CONTROLLED PRESCRIPTION DRUGS (CPD)

CYCLOPENTOLATE

Argentina, August 2018: Alert for cyclopentolate. This is an ophthalmological medication belonging to the

anticholinergic group: medicines used to reduce or block the effects of acetylcholine on the central and peripheral nervous systems. The alert was issued after a woman from the province of Buenos Aires reported that she had given up cocaine and replaced it with cyclopentolate, through nasal administration. In 2014, alerts had been issued for cyclopentolate intoxication among users who consumed the substance for long periods.

OPIOIDS

Argentina, August 2018: Alert for nalbuphine. SEDRONAR's Early Warning System for Drugs issued an alert regarding the presence of a strictly controlled opioid analgesic. It was being used by a 38-year-old woman in the province of Buenos Aires, who stated she had been injecting herself with it for four years. The Argentine Early Warning System considered that, because of its low level of toxicity and low frequency of abuse, nalbuphine did not pose a significant risk to public health; nevertheless, it urged its members to raise awareness and monitor the nonmedical use of this substance and its availability on the illegal market.

Argentina, November 2018: Alert for remifentanyl. SEDRONAR's Early Warning System for Drugs issued an alert after bottles containing remifentanyl were found, along with other psychoactive substances, during a house search. Remifentanyl is a powerful, fast-acting synthetic opioid, primarily used as an anesthetic. Nonmedical use can lead to addiction or death by overdose.

Colombia, January 2019: Alert about the use of psychoactive substances and preparations used to control pain (opioids). According to the 2013 National Study on Psychoactive Substance Use in Colombia, 1.1% of the population stated it had used a prescription opioid analgesic at some point in their lives. Reports about poisonings and deaths related to prescribed opioid use lodged with the

6 *Drug Testing and Analysis* 2016 Sep;8(9):891-902. doi: 10.1002/dta.1884. Epub 2015 Oct 12. Return of the lysergamides. Part I: Analytical and behavioural characterization of 1-propionyl-d-lysergic acid diethylamide (1P-LSD).

National Public Health Monitoring System (SIVIGILA, by its Spanish language acronym) indicate a stable pattern over the past three years, as shown in Table 2.

At the same time, the System of Centers and Services for Psychoactive Substance Users (SUICAD, by its Spanish

language acronym) reports that opioid medicines and opioids without approved medical uses are among the substances that give rise to requests for treatment (Table 3). The records of people given treatment for psychoactive substance use include 99 individuals treated for addiction to prescription opioids.

Table 2. Poisonings and deaths, by exposure type, reported to SIVIGILA, 2016–20

Substance type*	POISONINGS				ATTRIBUTABLE DEATHS			
	2016	2017	2018	2019	2016	2017	2018	2019
Opioid psychoactive substances (including heroin and CPD opioids)	88	101	95	32	2	3	1	0
Prescription opioids	384	512	348	120	2	2	2	0
Total	472	613	443	152	4	5	3	0

Note: *Reported as of April 24, 2019

Table 3. Reported numbers of treatment requests for substance use

SUBSTANCE TYPE	NUMBER OF TREATMENT REQUESTS MOTIVATED BY OPIOIDS	
Prescription opioids	Morphine	23
	Codeine	22
	Tramadol	19
	Methadone	18
	Oxycodone	10
	Hydrocodone	7
Illegal Opioids	Heroin	2316

Source: SUICAD, 2018

Colombia, January 2019: Opioids alert. The Colombian Early Warning System issued an alert on the risks associated with using medicines without a prescription, as well as medications prepared in an artisanal way. Although

there is currently no evidence pointing to the emergence of an illegal market in Colombia for opioid medicines such as oxycodone, fentanyl, or their derivatives, in 2019 the Colombian Early Warning System reported two

seizures of prescription opioids in the cities of Cali and Pereira. Evidence exists that there is an illicit market for methadone in some Colombian cities. Methadone is an opioid substance that is used to treat heroin addiction; however, illicit sales of methadone are made to heroin users.

PLANT- AND ANIMAL-BASED PSYCHOACTIVE SUBSTANCES

Argentina, 2018: Alert for Angel's Trumpet (*Brugmansia arborea*). SEDRONAR's Early Warning System for Drugs issued alerts regarding two cases of intoxications caused by consuming Angel's Trumpet (*Brugmansia arborea*) in the province of Misiones. The use occurred during a gathering of young people. Angel's Trumpet is usually ingested as an infusion⁷ and produces powerful, long-duration hallucinogenic effects. It can lead to severe intoxication and even death. The Argentine Early Warning System recommended raising awareness among health personnel about Angel Trumpet use among young people and provided information on how to recognize and respond to its toxicological symptoms.

Argentina, 2019: Alert for bufotenin (5-HO-DMT, 5-hydroxy-dimethyltryptamine). SEDRONAR's Early Warning System for Drugs publicized the presence of bufotenin in samples of toad glands seized in two localities in the province of Buenos Aires in late 2018 and early 2019. Bufotenin is an alkaloid with hallucinogenic effects. It is found on the skin of toads in the genus *Bufo*, such as *Bufo marinus*, and in at least two species of *Anadenanthera*, a tree that grows in northwest Argentina, southern Bolivia, Peru, and Colombia. It is a powerful hallucinogen that acts on receptors in the cerebral cortex when inhaled, smoked, or otherwise ingested. Smoking produces longer-lasting effects than other forms of ingestion and is the most common mode of use. People experiencing toxic effects

of bufotenin often arrive at health centers unaware of what substance they consumed.

Colombia, December 2019: Alert for DMT (N-dimethyltryptamine). The Colombian Early Warning System issued an alert about the presence of DMT in liquid form, possibly intended for trafficking. DMT is found in *chacruna* and *chagropanga*, which are plants used to prepare *yagé*, a traditional indigenous beverage used for ritual and cultural purposes. Its consumption outside those contexts can pose health risks. The effects of dissociative hallucinogens can begin within minutes. The effects can last for several hours and include numbness, disorientation and loss of coordination, hallucinations, and elevated blood pressure, heart rate, and body temperature. Persistent psychosis and flashbacks are long-term effects associated with some hallucinogens. Evidence suggests a few hallucinogens can be addictive, and most or all of them can produce tolerance.⁸

Based on the Colombian Early Warning System's findings, the authorities have taken steps to bolster law enforcement controls. In the affected territories, calls were made for efforts to reduce the risk and harm associated with the use of DMT.

CHEMICAL SUBSTANCES/ PRECURSORS

BUTANEDIOL

Argentina, April to June 2019: Alert for butanediol. SEDRONAR's Early Warning System for Drugs reported a clinical case of a poly-drug user who was receiving treatment and who reported to treatment professionals he had used butanediol because he was unable to

⁷ An infusion is a drink, remedy, or extract prepared by soaking the leaves of a plant or herb in liquid.

⁸ National Institute on Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services. Hallucinogens, updated April 2019.

obtain gamma-hydroxybutyric acid (GHB) or gamma-Butyrolactone (GBL).

Butanediol -- a chemical used in floor strippers, paint thinners, and other solvent products -- is a precursor to GHB and is readily converted to GHB upon its ingestion, producing the same clinical effects. GHB's euphoric effects led to it becoming a drug of abuse.⁹ GBL is chemically similar to GHB and produces similar effects when consumed.¹⁰

Like GHB and GBL, butanediol is highly toxic. Based on case reports, patients known to have ingested 1,4-butanediol have suffered numerous medical and psychological consequences, including agitation, combativeness, respiratory depression, unstable level of consciousness, vomiting, seizures, and death.¹¹

9 World Health Organization. 1,4-Butanediol (1,4 BD) Critical Review Report. Expert Committee on Drug Dependence, Thirty-sixth Meeting, Geneva, June 16-20, 2014.

10 World Health Organization. Gamma-butyrolactone (GBL) Critical Review Report. Expert Committee on Drug Dependence, Thirty-sixth Meeting, Geneva, June 16-20, 2014.

11 Australian Government, Department of Health. National Industrial Chemicals Notification and Assessment Scheme (NICNAS). May 2013.