ORGANIZATION OF AMERICAN STATES (OAS)
INTER-AMERICAN DRUG ABUSE CONTROL COMMISSION (CICAD)

EMERGING DRUGS AND EARLY WARNING SYSTEM
ON DRUGS (EWS) IN THE AMERICAS
Opioids
Drugs vaping
Controlled prescription drugs
New psychoactive substances
Internet drug sales
Response to new challenges: EWS - SATA
OPIOIDS
What are opioids?

Generic term applied to:

- Natural opiates:
  - Opium, morphine, codeine, thebaine
  - Poppy plant

- Synthetic opioids:
  - Tramadol, fentanyl, methadone, pethidine
  - Precursors

- Semi-synthetic opioids:
  - Heroin, hydrocodone, oxycodone
  - Morphine Derivative
  - Codeine or thebaine derivative
  - Thebaine derivative

- NPS with opioid effects
  - Acetyl Fentanyl
  - Precursors
SYNTHETIC OPIOIDS

- **Opioids**: Use for non-medical purposes can have serious health consequences.
- Tolerance and dependence develop very fast and can reach extreme levels.
- Each episode of use for non-medical purposes carries a high risk of overdose and death from respiratory depression.


**Carfentanil**: first synthesized in 1974. Undergoing international control in 2018. It is 10,000 times more potent than morphine. It is intended only for veterinary purposes in large animals.
Deaths from overdose. United States, 2019

In the United States, 870,000 people have died from opioid-associated deaths from the early 1990s to the present.

Number of deaths associated with opioids in Canada and the United States, 2016-2019

- United States, rate per 100,000 inhabitants: 13.3 (2016), 14.9 (2017), 14.6 (2018)

In 2019, CICAD/OID carried out a research project on opioids and other emerging drugs, in which five Latin American countries participated: Argentina, Mexico, Peru, the Dominican Republic and Uruguay.
**General conclusions**

**Low prevalence**
- In general terms and comparatively with other drugs that are produced in the region or are more traditional.

**Availability facilitates use**
- As observed in the health personnel of Argentina and Uruguay.

**Need generates a market**
- Heroin-dependent users in the Dominican Republic.

**Closeness to markets generates use**
- As seen in the border cities of Mexico with the United States.

**Opioid use exists, but has remained invisible**
- It is not recorded in large population surveys.
- Of 5 countries, in 4 of them use was observed in specific population groups.
- We also know of use in other countries that were not part of these studies:
  - Presence of the "H" in Colombia and Ecuador.
  - Increased use of opioid medications in Chile.
General conclusions (continuation)

Gender
- Higher use of opioids in men than in women in crude numbers.
- Higher proportion of women develop dependence after being treated with opioid medications.
- The supply of treatment for women is lower and does not take into account issues such as childcare.
- Important risk factor for starting opioid use in women:
  - Their partners had opioid use disorders.

Onset of heroin use
- Most began heroin use in countries and regions where heroin use is more common, such as in Europe or the United States.
- The Dominican Republic is a warning to other countries that experience signs of heroin or opioid use in specific populations.
General conclusions (continuation)

Opioid medications

- In Argentina and Uruguay, use was observed in professionals and technicians who work in healthcare.
- There is concern about use of various opioid medications via injection.
- The use of fentanyl patches or its use in injected form was also observed.
- Outside of the healthcare area, tramadol, morphine and suboxone are used without medical indication.
- Use of opioid medications in suicide attempts.

Treatment

- In Argentina and Uruguay substitute treatment with methadone, buprenorphine (generic) and suboxone is limited only to patients who work in the healthcare area.
- The interviewed patients valued the treatment in residential type programs and assisted medication with an opioid antagonist.
Recommendations

The high prevalence of opioid-related drug use, poisoning, and deaths in Canada and the United States represent new challenges not only for those countries, but also for the entire Hemisphere.

The COVID-19 pandemic has shown us the importance of anticipating and being prepared to respond adequately to an emerging epidemic that affects the health of the entire population.

It is essential to generate updated information and technical guidelines to prevent or respond early to an opioid epidemic in the countries of Latin America and the Caribbean.
VAPING DRUGS
### Lifetime prevalence of nicotine and/or marijuana and/or flavoring vaping among high school students in the United States, by graders (2015-2019)

<table>
<thead>
<tr>
<th>Year</th>
<th>8th graders</th>
<th>10th graders</th>
<th>12th graders</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>21.7</td>
<td>35.5</td>
<td>32.8</td>
</tr>
<tr>
<td>2016</td>
<td>17.5</td>
<td>33.8</td>
<td>33.8</td>
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<tr>
<td>2017</td>
<td>18.5</td>
<td>35.8</td>
<td>30.9</td>
</tr>
<tr>
<td>2018</td>
<td>21.5</td>
<td>36.9</td>
<td>36.9</td>
</tr>
<tr>
<td>2019</td>
<td>24.3</td>
<td>42.5</td>
<td>45.6</td>
</tr>
</tbody>
</table>

*Source: National Institute on Drug Abuse (NIDA) - Monitoring the Future 2019 Survey Results.*

In 2017, Monitoring The Future surveys went from asking about vaping in general to asking separately about vaping nicotine, marijuana and only flavorings. As of 2017, the data presented for “Any Vaping” are based on these new questions.
**TEEN VAPING CLIMBS SIGNIFICANTLY**

*Both Nicotine and Marijuana (THC)*

**DAILY NICOTINE VAPING**

Measured for the first time in 2019

- 8th graders: 1.9%
- 10th graders: 6.9%
- 12th graders: 11.7%

**NICOTINE VAPING**

Past month use

- 2017: 9.6%
- 2018: 19.9%
- 2019: 25.5%

**THC VAPING**

Past month use

- 2017: 3.9%
- 2018: 12.6%
- 2019: 14%

**DAILY THC VAPING**

Measured for the first time in 2019

- 8th graders: 0.8%
- 10th graders: 3.0%
- 12th graders: 3.5%

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To view information on other drugs from the 2019 Survey visit:


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Source: National Institute on Drug Abuse (NIDA) - Monitoring the Future 2019 Survey Results
NICOTINE – DAILY USE

Daily Smoking
Daily Nicotine Vaping measured for the first time in 2019

11.7%

6.9%

1.9%

1.3%

2.4%

*Significant decline from 2018 (3.6%)

8th graders 10th graders 12th graders

CIGARETTE SMOKING (PAST MONTH) DECLINES OVER PAST TEN YEARS

2009 2014 2019

5.7%

3.4%

2.3%

*Significant decline from 2018 (7.6%)

TO VIEW MORE RESULTS ON VAPING VISIT:

Source: National Institute on Drug Abuse (NIDA) - Monitoring the Future 2019 Survey Results
Trend of past year prevalence of use of controlled prescription tranquilizers, among secondary school students, by graders, 2016 – 2019, United States

<table>
<thead>
<tr>
<th>Year</th>
<th>8th graders</th>
<th>10th graders</th>
<th>12th graders</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>3</td>
<td>6.1</td>
<td>7.6</td>
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<tr>
<td>2017</td>
<td>3.4</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>2018</td>
<td>3.5</td>
<td>6</td>
<td>6.6</td>
</tr>
<tr>
<td>2019</td>
<td>4</td>
<td>5.7</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: National Institute on Drug Abuse (NIDA) - Monitoring the Future 2019 Survey Results.
Past month prevalence of use of controlled prescription tranquilizers and stimulants among secondary school students, El Salvador, 2018

Trends of past year prevalence of use of controlled prescription tranquilizers and stimulants among secondary school students, El Salvador, 2008-2018

Past year prevalence of use of controlled prescription tranquilizers and stimulants among secondary school students, Peru, 2017

National Commission for Development and Life without Drugs (DEVIDA), Directorate of Technical Affairs, Peruvian Drug Observatory.
Trends of past year prevalence of use of controlled prescription tranquilizers and stimulants among secondary school students, Peru, 2007-2017

National Commission for Development and Life without Drugs (DEVIDA), Directorate of Technical Affairs, Peruvian Drug Observatory.
NEW PSYCHOACTIVE SUBSTANCES (NPS)
What are the New Psychoactive Substances?

• They are not controlled by international drug conventions.
• They have become available recently.
• They are associated with serious health risks.
• Imitate the effects of traditional drugs.
TOWARDS A SYNTHETIC WORLD

1. 294 Psychoactive substances under international control
   1961 – 2020 – 59 years

2. 1004 New Psychoactive Substances
   2009 – 2020 – 1 decade

188 millions Cannabis users (past year prevalence)
Drug with the highest use worldwide

53 millions Opioid users (past year prevalence)
Second drug with the highest use worldwide

SOURCE: UNODC – WORLD DRUG REPORT 2019
**NPS categories, according to their effects**

- **Sedative-Hypnotics**
  - Benzodiazepines
  - Phenazepam, Etizolam
- **Dissociative-Anaesthetics**
  - Phencyclidine
  - Ketamine, Methoxetamine
  - 25B-NBoMe, NBoMe
- **Hallucinogens**
  - LSD & 2C-B
  - 25B-NBoMe, NBoMe
  - Mephedrone, BZP, Alpha-PVP
- **Stimulants**
  - Cocaine & ATS
  - Mephedrone, BZP, Alpha-PVP
  - AM-2201, Synthetic cannabinoids
  - AH-7921, MT-45, Acetyl fentanyl
- **Cannabinoids**
  - Cannabis
  - Cannabis
- **Cannabinoids**
  - Cannabis
  - Cannabis
  - Cannabis
- **Cannabinoids**
  - Cannabis
  - Cannabis
  - Cannabis
- **Opioids**
  - Morphine & Heroin
  - Morphine & Heroin
- **Opioids**
  - Morphine & Heroin
  - Morphine & Heroin
  - Morphine & Heroin

*Substances in black are already under control, and substances in red have been recommended to international control by the WHO Expert Committee on Drug Dependence.*

Source: UNODC
NPS - Classification according to its effects: Global and Sub-regional

Distribution of NPSs notified to UNODC EWA until 2018

Opioids, stimulants and synthetic cannabinoids: 87%

Source: UNODC - 2020
NPS categories, according to chemical composition

- Synthetic cannabinoids
- Aminooindanes
- Piperazines
- Phencyclidine-type substances
- Tryptamines
- Synthetic cathinones
- Phenelethylamines
- Plant-based substances
- Other substances

South America: 96%
Main alerts reported to SATA in 2018 and 2019

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Chile</th>
<th>Colombia</th>
<th>Uruguay</th>
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</thead>
<tbody>
<tr>
<td>Cannabis</td>
<td></td>
<td>Creepy/Crippy</td>
<td>Crippy</td>
<td></td>
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<tr>
<td>Cocaine</td>
<td>Injected cocaine</td>
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<tr>
<td>Ecstasy</td>
<td></td>
<td>MDMA</td>
<td>MDMA</td>
<td></td>
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<tr>
<td>Phenethylamines</td>
<td>2,5-dimethoxy-4-ethylamphetamine (2C-E) (three alerts)</td>
<td></td>
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<tr>
<td></td>
<td>2,5-dimethoxy-4-iodoamphetamine (DOI)</td>
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<tr>
<td></td>
<td>25I-NBOMe (2C-I-NBOMe)</td>
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<tr>
<td></td>
<td>25I-NBOH (NBOH-2CI, Cimi-27, 2-C-I-NBOH)</td>
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<tr>
<td>LSD (Lysergic acid diethylamide)</td>
<td></td>
<td></td>
<td>LSD</td>
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<tr>
<td>Controlled prescription drugs</td>
<td>Cyclopentolate</td>
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<tr>
<td>Opioids</td>
<td>Nalbuphine</td>
<td>Medicines</td>
<td>Other opioids</td>
<td></td>
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<tr>
<td></td>
<td>Remifentanil</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Plant- and animal-based substances</td>
<td>Angel’s trumpet</td>
<td>DMT (N-Dimethyltryptamine)</td>
<td></td>
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<tr>
<td></td>
<td>Bufotenin</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Chemical substances/precursors</td>
<td>Butanediol</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
SALE OF DRUGS THROUGH THE DARKNET
Synthetic drugs: Easy to produce, transport, send (Courier), camouflage and sell - purchase / sell drugs through the darknet
Sale of drugs through the darknet

• The purchase of drugs through the Internet, in particular the "dark network", has increased in recent years.
• As the "dark network" cannot be accessed through traditional web searches, buyers and sellers access through the "Onion Router" (TOR) to ensure that their identities remain hidden.
• Products are typically paid in bitcoins or in other crypto-currencies and are often delivered through postal services.
• The content circulates in encrypted networks, which use the World Wide Web, but which require special access programs or authorizations.

2.50 minutos: Video: https://youtu.be/Dj8cSYoV5qA
RESPONSE TO NEW CHALLENGES
EARLY WARNING SYSTEM (EWS)

DEFINITION

"It is a low cost mechanism to share information about new threats and trends".

- It is a **system** that **quickly** collects and disseminates information on **threats** to public health and safety, posed by new or existing psychoactive substances, so that **rapid** and **effective responses** can be developed and implemented.
EARLY WARNING SYSTEM ON DRUGS
HISTORY

• They originate in Europe in response to "designer drugs".
• They try to deal with the lack of regulation of these new drugs.
• In Europe, the EWS addresses 3 specific actions:
  1. Exchange of information
  2. Risks evaluation
  3. Control / Decision Making
EARLY WARNING SYSTEM ON NPS

1. Exchange of information

- The member states of the European Union share information with EMCDDA and EUROPOL once NPS is detected.

- Based on the information shared, the level of risk detected and the persistence of the NPS, a decision is made as to whether or not to move on to the next stage of the process.

2. Risks evaluation

- The EU Council may decide to initiate a risk assessment procedure to determine the possible social and health threats of the NPS or drug identified.

- The implications of putting the NPS under control are also analyzed.

- At least a quarter of the Member States or the Commission have to approve this.

1. Control / Decision Making

- Actions are implemented to control the problem of the NPS detected.

- In the EU, these actions can result in the creation of criminal laws and penalties, which are applied by all member states.

- It is also decided if the NPS is included in the list of scheduled substances of the member countries.

The network consolidates, analyzes and disseminates drug information.
EXAMPLE OF EWS - CHILE
Dear partners,

We have received information from Argentina and in particular from the field of the organization of electronic parties, on the circulation of adulterated pills, which are urged not to use.

**Description:**
- Blue "Superman" logo
- Light Blue Royce Roll
- Ultra red

From the EWS, work is being carried out to verify this information, for which we are grateful to take into account the statement and remain alert to any case of intoxication that is associated with such substances, immediately informing CIAT and the EWS.

Thank you very much for your help.

Sincerely,

Uruguayan Observatory on Drugs- National Drug Board
DIN vs EWS

EWS

* Focused on short-term responses (Rapid response to identified threats)
* National Coverage
* Some data sources are the same
* Continuous monitoring
* The stakeholders are usually the same

DIN

* Focused on the long term (Trends, policies and actions)
DIN vs EWS - PRODUCTS

- The main result of a DIN is typically an annual drug report that presents a consolidation of all the information generated during the year in question:
The main result of an EWS is usually an alert or message that can be shared publicly or restricted to specific stakeholders.
HOW CICAD/OID PLAN TO ADDRESS THE DEVELOPMENT OF A EWS?

• Training and capacity building
• Technical support
• Tool delivery: training modules
• Development of a Hemispheric Early Warning System (SATA, by its Spanish acronym*)

*SATA: Early Warning System for the Americas.
Early Warning System for the Americas

SATA
(by its Spanish acronym)
VISION OF THE REGIONAL EWS (SATA)

Exchange of information

Once a new psychoactive substance or a new market trend is detected, the Member State ensures that information on the manufacture, traffic and/or drug use is transmitted to its National EWS and then to CICAD/OID /SATA, through the National Observatories or some equivalent institution.
PROGRESS IN THE EARLY WARNING SYSTEMS OF THE COUNTRIES OF Latin America
RECOMMENDATIONS TO THE GOVERNMENT INSTITUTIONS TO HAVE INFORMATION THAT CONTRIBUTES TO SATA

- Establish an Inter-Institutional Working Group on the drug problem, focused on the problem of emerging drugs.
- This Working Group should meet periodically.
- The coordination of the Bureau should be at the National Observatory on Drugs, linked to the National EWS.
- To the extent that emerging drugs are detected, alerts should be generated.
- The EWS can also determine which drugs pose a greater risk to public health and propose the relevant control mechanisms.
STRATEGIC PRIORITIES IN THE HEMISPHERE

• New psychoactive substances -NPS- in the Hemisphere.
• Heroin, fentanyl, tramadol and other opioids.
• Strengthen the OID data collection system.
• Expand the work on drug supply control indicators.
• Training and capacity building.
• Generation of hemispheric reports and information bulletins - periodically.
STRATEGIC PRIORITIES IN THE HEMISPHERE

• Regional efforts, in particular to support national drug observatories and the development of DINs and EWSs.
• Extension of the treatment data protocol.
• Additional studies on the use of psychoactive substances in secondary school students and university students.
• Other national studies on drug use.
STRENGTHENING OF LABORATORIES

- Improve infrastructure and laboratory analysis capacity.
- Training for professionals who work in laboratories.
- Modernize drug analysis equipment.
- Report findings on NPS and other emerging drugs.
- Contribute to the generation of alerts and work in coordination with the National EWS.
Juan Carlos Araneda (MS Social Psychology)

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- Inter-American Drug Abuse Control Commission (CICAD)
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