



# INCB Precursors Control Section Precursor and chemical trends in illicit drug manufacturing

Virtual Chemical Industry Conference

22 July 2025

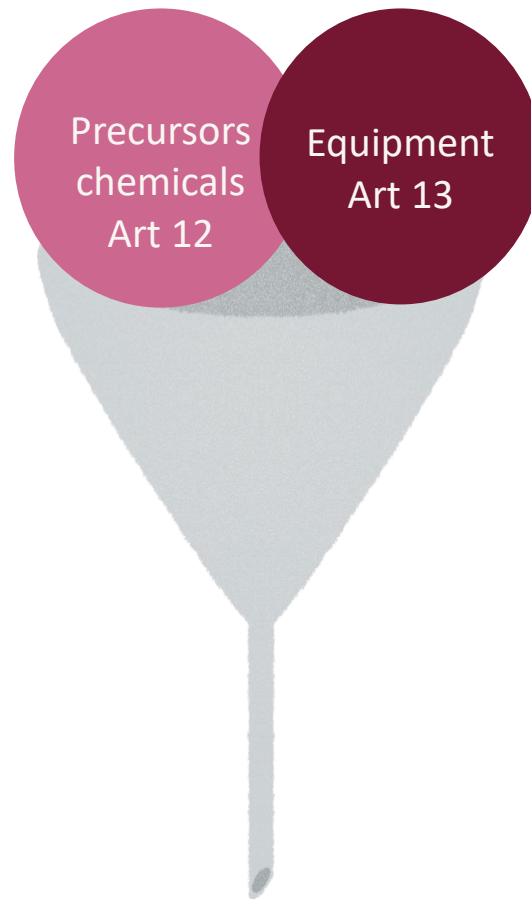
# Mandate and functions of INCB



**An independent and quasi-judicial monitoring body for the implementation of the United Nations international drug control conventions.**

- Established in 1968 by the 1961 Single Convention on Narcotic Drugs
- 13 members, elected by Economic and Social Council (ECOSOC)
  - 3 nominated by WHO
  - 10 nominated by Governments
- Term of office: 5 years, may be re-elected
- Serve impartially in their personal capacity, independently of Governments
- Secretariat in Vienna, Austria

# Illicit drug manufacture





# International drug precursor control – legal basis

- **UN Convention** against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of **1988**



191 States and EU (near universal adherence)

## Article 12

- Set of measures to monitor *international* trade; **cooperate with industry** & each other; provide for seizures; PENs upon request (*Paras.9-10*)
- Set of measures to monitor *domestic* manufacture and distribution (*Para.8*)

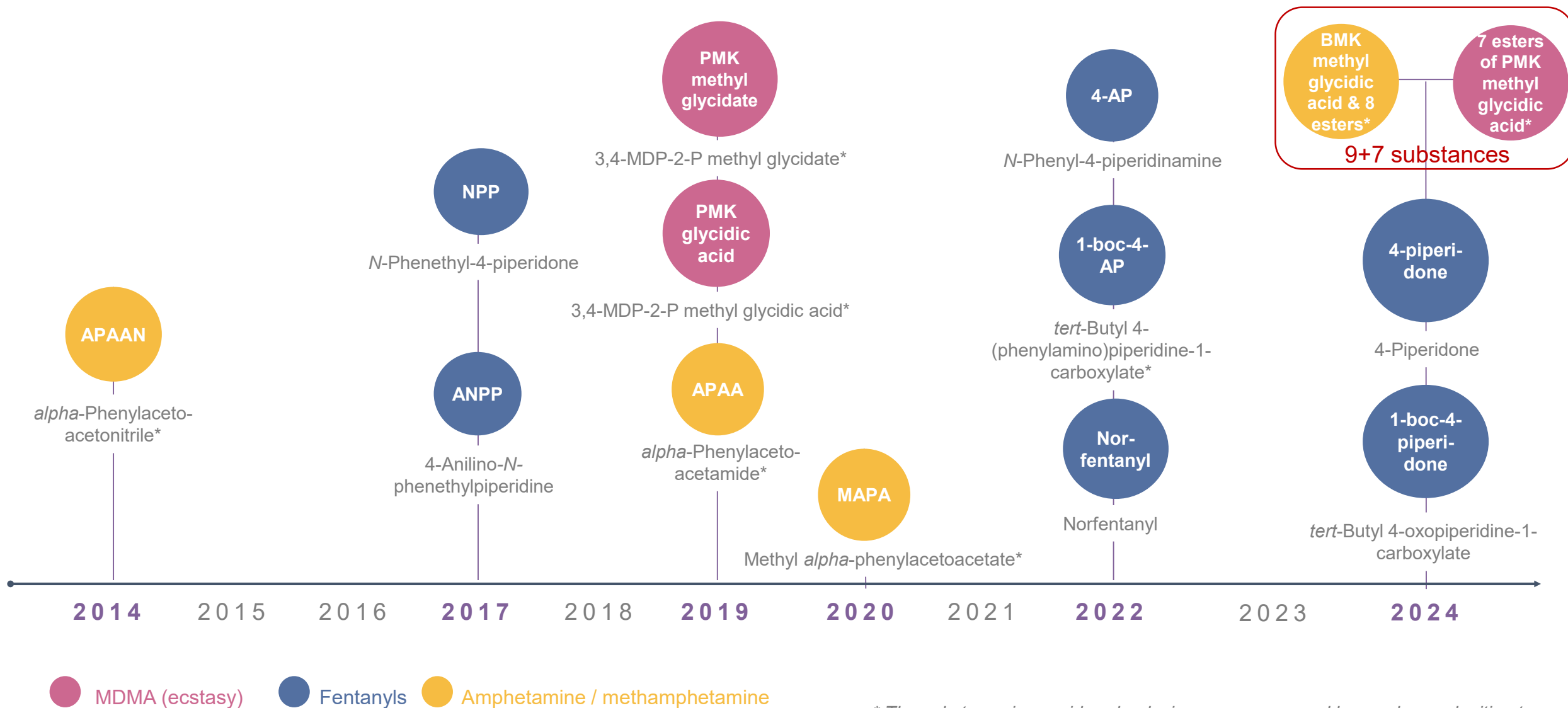
## Article 13

- Requests Parties to take such measures as they deem appropriate to prevent trade in and the diversion of **materials and equipment** for illicit production or manufacture of narcotic drugs and psychotropic substances and cooperate to this end.

- **UN resolutions** (recommended; not binding)
- **National legislation**



# International scheduling of precursors since 2014



\* The substance is considered a designer precursor and has no known legitimate use



# International trade monitoring

(Table I and Table II substances)



## Key facts

- 1 Launched in 2006
- 2 It is the **only** global system for monitoring international legitimate trade in precursors
- 3 Only available for **competent national authorities** (CNA).

## Statistics up-to-date

- 1 Registered users from **170 countries** and territories.
- 2 About **500,000 PENs** since its launch in 2006, with **85%** of notifications viewed.
- 3 30,000 - **35,000** PENs every year.



The PEN Online system is INCB's online platform for the real-time exchange of pre-export notifications (PENs) of precursor chemicals (art. 12, 1988 Convention).

## SUCCESS STORIES

In **2024**, PEN Online monitored nearly 28,000 shipments of 32,000 tons and 5 billion litres of controlled precursor chemicals.

In **2025**, 3 tons of the fentanyl precursor, 1-boc-4-piperidone, (equivalent to 1.4 - 3.3 tons of fentanyl) prevented from being diverted into illicit channels, because of use of PEN Online.



# International trade monitoring

(Chemicals **not** in Table I and Table II)



PEN Online Light allows countries to exchange, on a voluntary basis, pre-export notifications of chemicals that are not controlled under article 12 of the 1988 Convention.

## Key facts

- 1 Launched in 2022.
- 2 Focus on planned exports of **chemicals not included in Table I and II** of the 1988 Convention, but that might be controlled nationally.
- 3 **Voluntarily** used by national authorities.

## Statistics up-to-date

- 1 Active users from **80 countries** and territories.
- 2 **2,400** “light” PENs sent

## SUCCESS STORY

In 2024, the PEN Online Light tracked over 700 shipments of more than 136,000 tons and more than 3 million litres of internationally non-controlled precursor chemicals.



# Annual legitimate requirements (ALRs)

- A yardstick for exporting countries on the needs for ATS precursors in importing countries
  - Industry input: estimated annual legitimate requirements

**Annual legitimate requirements (ALR) as reported by Governments for imports of ephedrine, pseudoephedrine, 3,4-methylenedioxyphenyl-2-propanone, 1-phenyl-2-propanone and their preparations**  
(Figures rounded up)  
Status: 17 April 2025

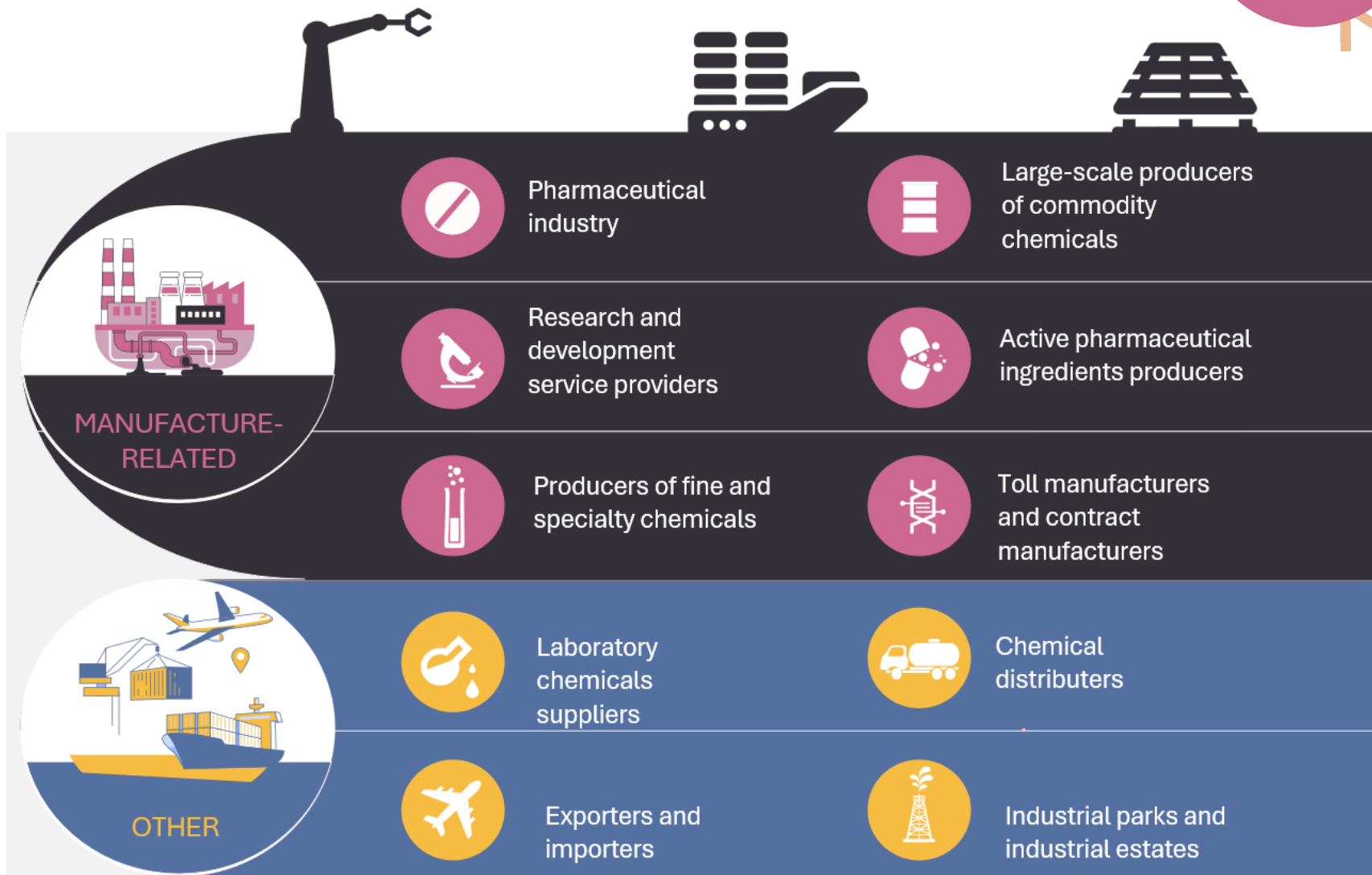
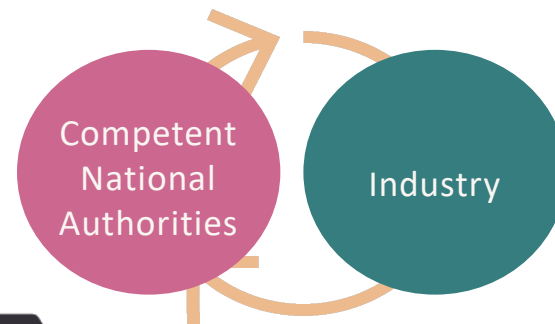
Country or territory	Ephedrine (kilograms)	Ephedrine preparations (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations (kilograms)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)
Afghanistan	0	100	600	600	0	0
Albania	35	3	100	3	0	0
Algeria	20	8	14 536	29 300	0	0
Argentina	54	0	29 000	180	0	0
Armenia	0	0	0	0	0	0
Ascension	0	0	0	0	0	0
Australia	2	14	6 600	2 400	0	1
Austria	415	123	1 474	0	1	1
Azerbaijan	20	18	10	360	0	0
Bahamas	0	10	0	250	0	0
Bahrain	1	2	1	1 000	0	0
Bangladesh	200		0		0	0
Barbados	200		200	58	0 <sup>c</sup>	
Belarus		5	10	5	0 <sup>c</sup>	
Belgium	100	100	9 000	9 000	1	1
Belize			P	P	0 <sup>e</sup>	
Benin	2	2	8	19	0 <sup>e</sup>	
Bhutan		1			0	
Bolivia (Plurinational State of)	26	1	4 833	2 227	0	0
Bosnia and Herzegovina	5	0	3 800	816	0	0
Botswana		1			0 <sup>e</sup>	
Brazil	1 000 <sup>d</sup>	0	30 000 <sup>d</sup>	1	1	1
Brunei Darussalam	0	400	0	144	0	0
Bulgaria	1 700	296	20	0	0	0
Burundi		5		15	0 <sup>e</sup>	

ALRs for over 180 countries

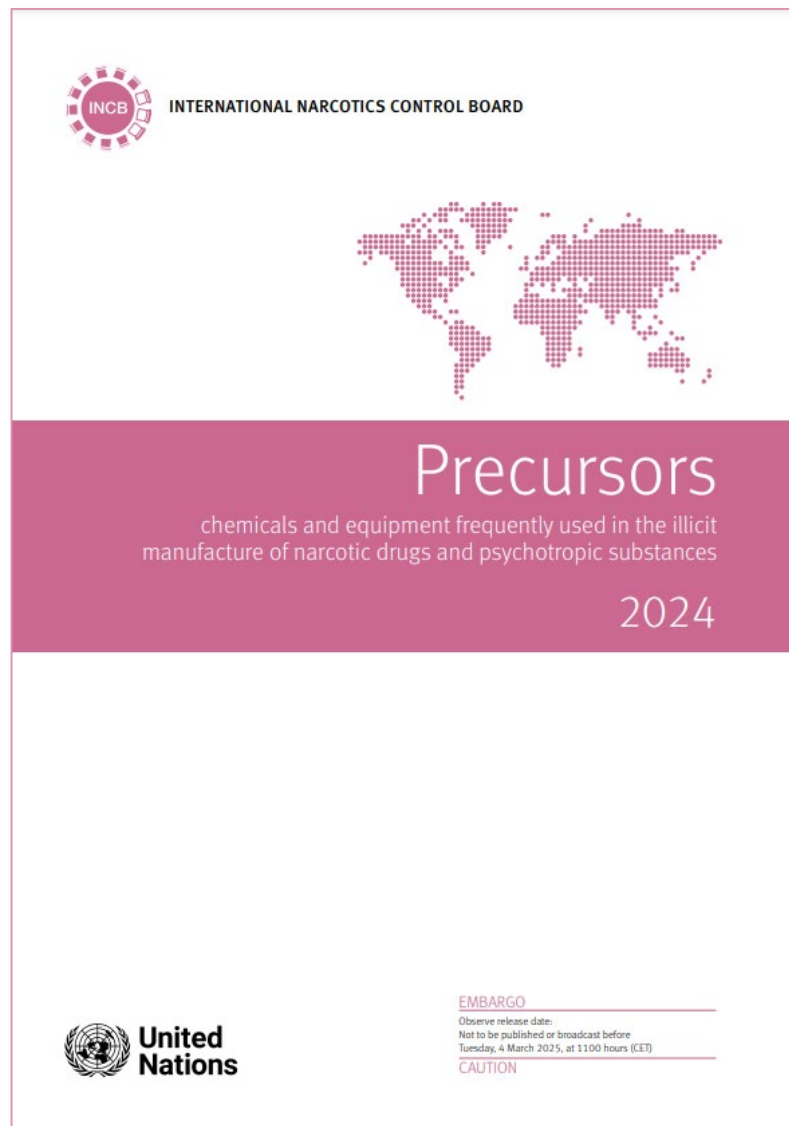




# Cooperation with industry



# Trends in illicit drug manufacturing



# PRECURSORS OF AMPHETAMINE-TYPE STIMULANTS (ATS) EPHEDRINE, PSEUDOEPHEDRINE AND PREPARATIONS



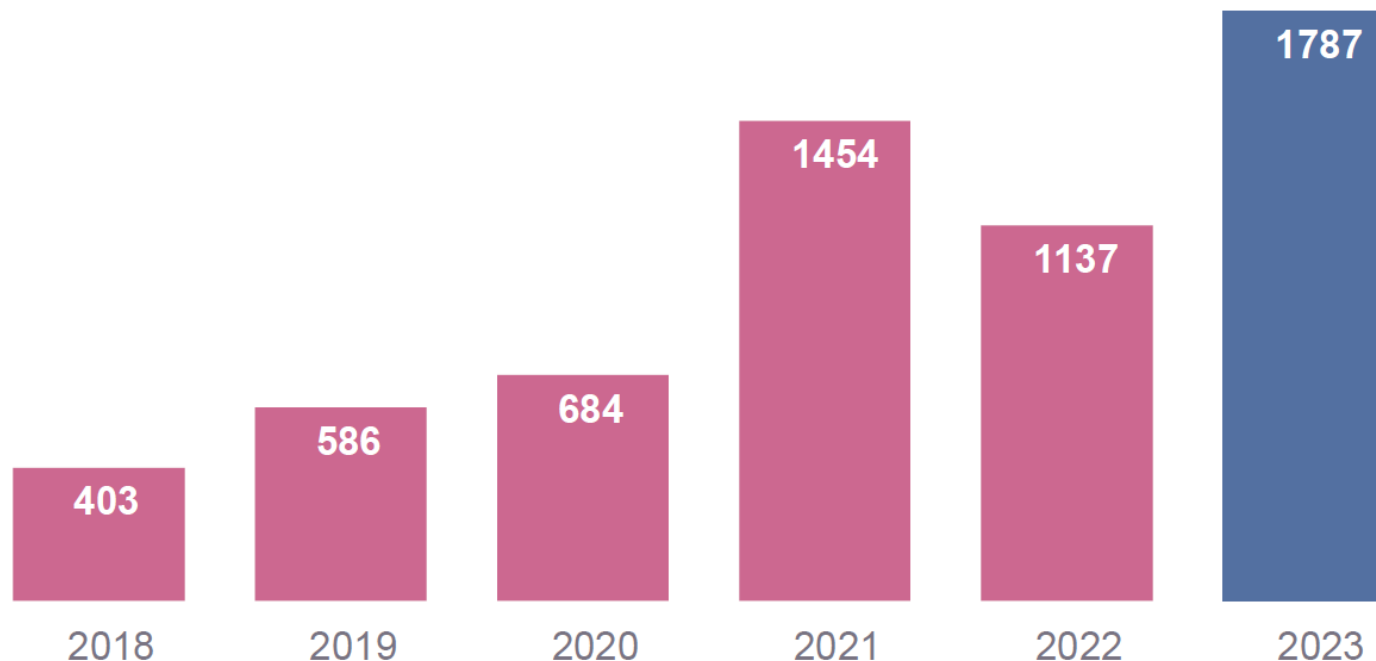
## MAJOR TRENDS

- Quantities of pharmaceutical preparations containing pseudoephedrine seized continue to increase. [See graph→](#).
- At over 15 tons, the global quantity of ephedrines (i.e. ephedrine and pseudoephedrine in all forms) seized in 2023 surpasses the quantities seized in the previous two years combined.

## ACTION

In view of incidents related to the diversion of and trafficking in ephedrine and pseudoephedrine, three-month long INCB's Operation "Pseudonym" was carried out from October to December 2024. The operation focused on international and, where possible, domestic trade in ephedrine and pseudoephedrine. 60 countries and territories, and four international or regional organisations participated in the operation.

SEIZURES OF PHARMACEUTICAL PREPARATIONS CONTAINING PSEUDOEPHEDRINE (KG)



Read the full report on [www.incb.org](http://www.incb.org)

# PRECURSORS OF AMPHETAMINE-TYPE STIMULANTS (ATS)

## CLOSELY RELATED ATS DESIGNER PRECURSORS



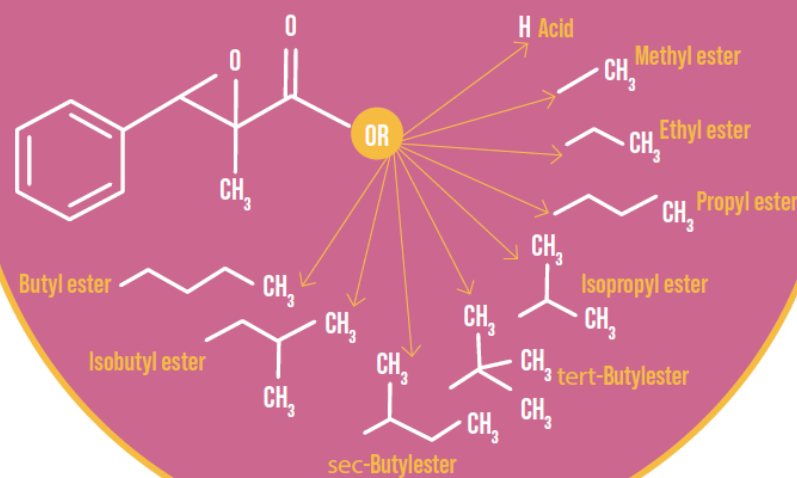
### FACT

Several closely related chemicals could potentially be used by drug traffickers to circumvent existing controls.

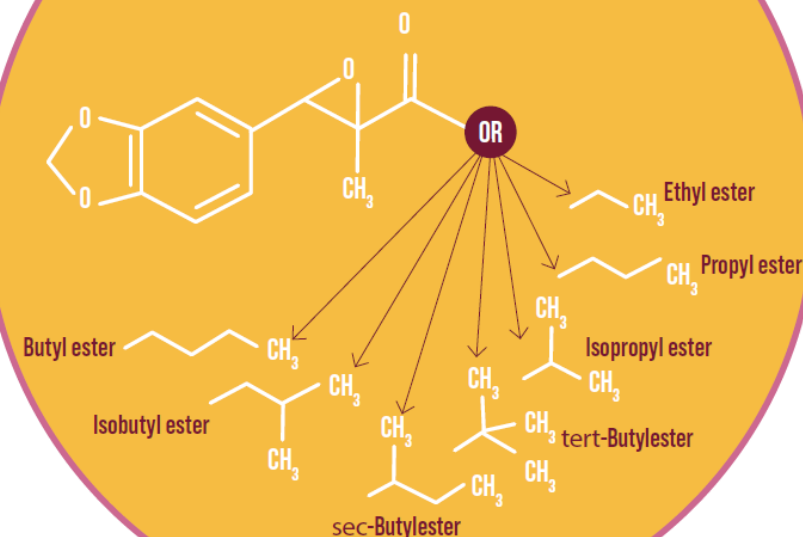
### ACTION

Following an INCB recommendation, two groups of closely related ATS designer precursors - 16 substances in total- were placed into Table I of the 1988 Convention on 3 December 2024 following unanimous decisions by the Commission on Narcotic Drugs. **See graph→.**

Designer precursors for  
methamphetamine and amphetamine:  
9 closely related substances



Designer precursors for  
“ecstasy”/MDMA:  
7\* closely related substances



\* The acid and methyl ester have been under international control since November 2019.

Read the full report on [www.incb.org](http://www.incb.org)

# FENTANYL PRECURSORS



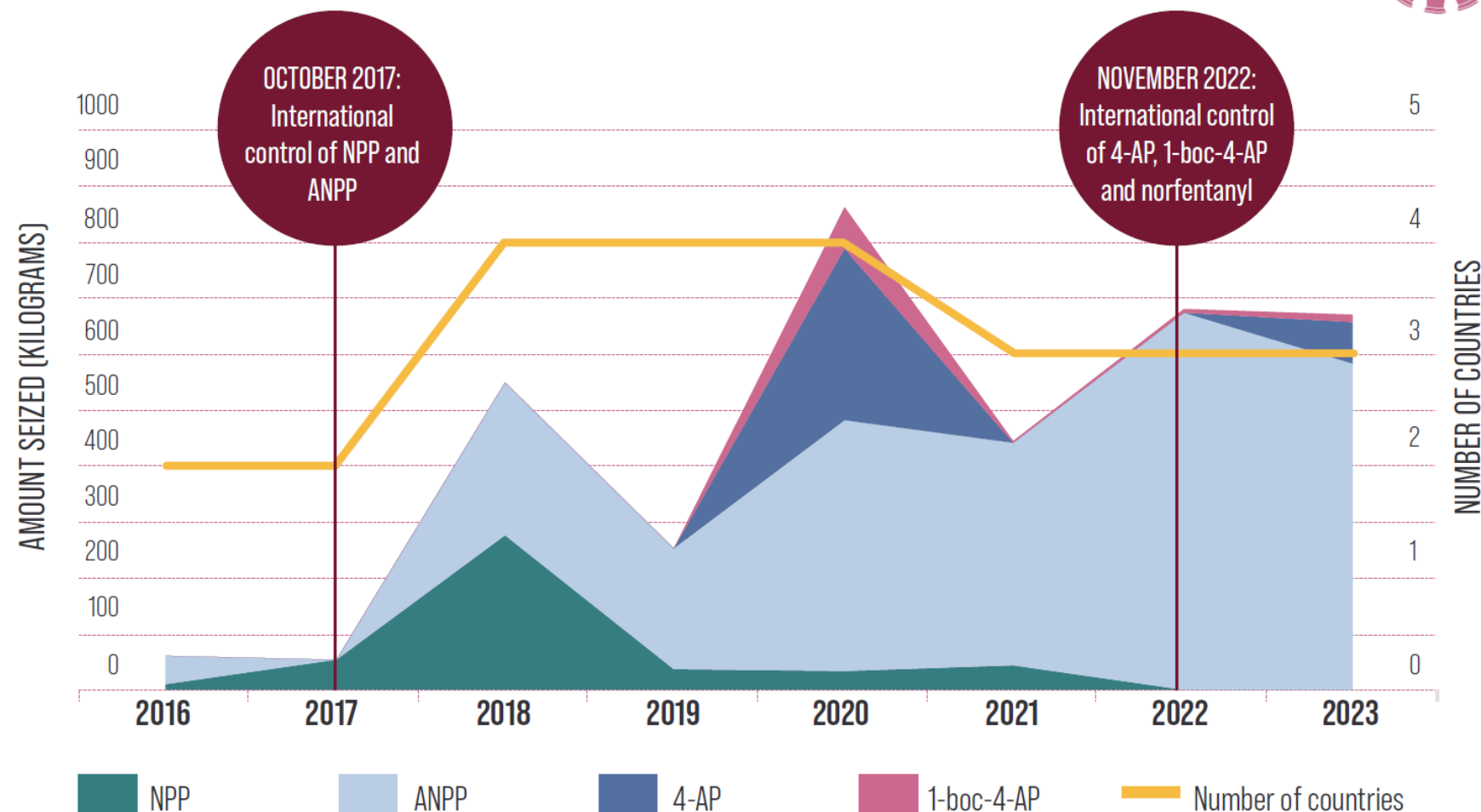
SEIZURES OF FENTANYL PRECURSORS AS REPORTED BY GOVERNMENTS ON FORM D, 2016-2023

## MAJOR TRENDS

- ANPP was the most frequently seized fentanyl precursor under international control, with a total of more than 580 kg seized.  
**See graph→**
- Seizures of fentanyl precursors are no longer limited to North America. In 2024, first seizures reported in Europe.

## ACTION

Two fentanyl precursors were placed in Table I of the 1988 Convention on 3 December 2024 following unanimous decisions by the CND.



Read the full report on [www.incb.org](http://www.incb.org)

# HEROIN AND COCAINE PRECURSORS



## TRENDS IN HEROIN PRECURSORS

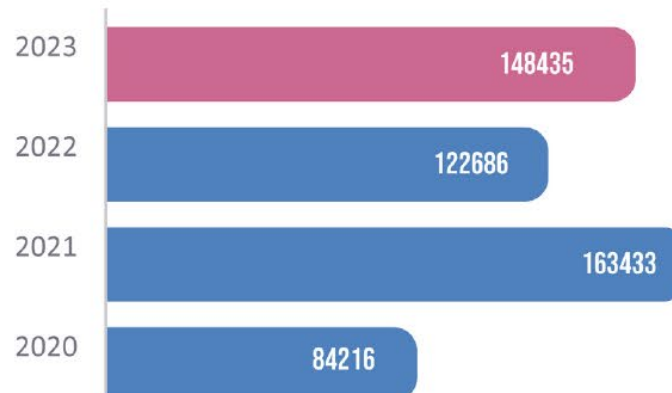
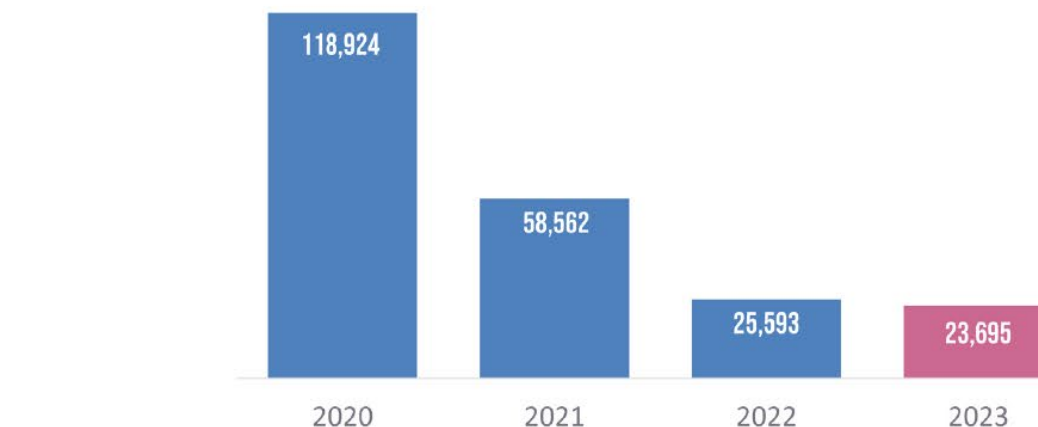
- The total amount of acetic anhydride seized worldwide, according to information provided by Governments on form D, has continued to decline. [See graph→](#)
- Trafficking in acetic anhydride destined for Afghanistan continues, albeit on a smaller scale. There is a lack of data on this matter.

## TRENDS IN COCAINE PRECURSORS

- On form D, 15 countries and territories reported seizures of potassium permanganate amounting to more than 148 tons. [See graph→](#)
- As in previous years, the largest seizures of potassium permanganate were reported by countries in South America, which cumulatively accounted for around 98 per cent.

Read the full report on [www.incb.org](http://www.incb.org)

Seizures of acetic anhydride (in litres), as reported by Governments on form D, 2020–2023



Seizures of potassium permanganate (in kilograms), as reported by Governments on form D, 2020–2023



# Monitoring/ surveillance lists (non-scheduled chemicals)

## ISSL

- **Precursors, reagents and other chemicals** used in the illicit manufacture of synthetic drugs, cocaine and heroin
- **Extended definitions** that capture common derivatives as well as other related substances that can be converted into one of the scheduled precursors
- **List of recommended actions** to be taken by CNAs and industry to prevent the diversion of substances included on the list
- **Provisions of the three drug control conventions** and relevant resolutions of intergovernmental bodies that might be applied to non-scheduled chemicals
- **Latest additions (2024/2025):**
  - Frequently seen precursors for NPS
  - Frequently seen cutting agents, adulterants and excipients
  - Nitazene precursors

Version: 2025\_01  
(Includes updates received  
until 30 April 2025)

For official use only – not for public distribution

Information package  
on the  
**CONTROL OF PRECURSORS**

*Part B:*  
*Limited International Special  
Surveillance List*







## Latest resources and tools

- Conference room paper submitted by INCB : “**Guiding Industry Partnerships: A Policy Framework for Preventing Chemical Diversion**”

(Publicly available: [https://www.unodc.org/documents/commissions/CND/CND\\_Sessions/CND\\_68/CRP/ECN72025\\_CRP8\\_e.pdf](https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_68/CRP/ECN72025_CRP8_e.pdf))

- **Compendium** of national drug precursor legislation and domestic controls

(Available to and through CNAs: <https://www.incb.org/incb/en/precursors/information-package-part-a.html>)


- **List of chemical relatives of controlled precursors and substitute chemicals**

(Available to and through CNAs: <https://www.incb.org/incb/en/precursors/information-package-part-b-issl.html>)





## INCB TOOLS AND RESOURCES ON IMPLEMENTING ARTICLE 12 OF THE 1988 CONVENTION

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to learn more



PEN Online and model  
forms invoking article  
12, para 10 (a)



CNA Reference Material,  
including Information  
Package and ISSL



Annual Legitimate  
Requirements (ALRs),  
related guidance notes  
and e-learning module



Precursors Annual  
Report



Form D and Red List



PICS, Projects Cohesion  
and Prism



Precursors module in the  
UN Toolkit on Synthetic  
Drugs



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**INCB TOOLS AND  
RESOURCES ON  
NON-SCHEDULED  
CHEMICALS  
AND DESIGNER  
PRECURSORS**

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**INCB guidance  
document on non-  
scheduled chemicals**



**Pre-Export Notification  
Light (PEN Online Light)  
system**



**Precursors Incident  
Communication System  
(PICS)**



**International Special  
Surveillance List (ISSL)  
and chemicals under  
national control (Table 4)**



**Industry guidelines  
package**



**Precursor Chemical  
Monographs 2020**



**Precursors Module of the  
UN Toolkit on Synthetic  
Drugs**





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## INCB TOOLS AND RESOURCES ON PUBLIC-PRIVATE PARTNERSHIPS (PPP) AND INDUSTRY COOPERATION



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Brochure on public-private  
partnerships: concept  
and related activities in  
precursor control



Guidelines for a voluntary  
code of practice for the  
chemical industry



Practical notes for  
implementing the INCB  
guidelines for a voluntary  
code of practice for the  
chemical industry, and a  
model MoU



ISSL and Precursor  
Chemical Monographs  
2020



Quick guide for  
development and  
implementation of a  
voluntary code of practice  
for the chemical industry



Global review of categories  
of industries involved in  
the manufacture, trade and  
distribution of chemicals  
used in the illicit manufacture  
of drugs



National practices related to  
public-private partnerships  
(PPP) in the area of drug  
precursors and non-  
scheduled chemicals





# Thank you

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