One of the roles of UNODC Laboratory and Scientific Section is to:

• Improve the national forensic capacity and capabilities of Member States to meet internationally accepted standards and ensure they are available and accessible worldwide
Precursors for amphetamine and methamphetamine

- Esters of phenylacetic acid
- P-2-P methyl glycidic acid derivatives
- alpha-Phenylacetoacetic acid methyl ester (MAPA)
- Benzaldehyde
- 2-Bromopropiophene

- Phenylacetic acid
- alpha-Phenylacetoacetamide (APAA)*
- alpha-Phenylacetoacetamide (APAAN)

- Norephedrine
- 1-Phenyl-2-propanone (P-2-P)
- Pseudoephedrine
- Ephedrine
- Chloroephedrine

- Amphetamine
- Methamphetamine

Legend:
- Blue: 1971 convention
- Green: Placed in Table 1 of 1988 convention 2010-2019
- Pink: Table 1 of 1988 convention prior to 2010
- Maroon: Not under international control

Precursors for ‘ecstasy’

- Piperonal
- Isosafrole
- Safrole

- 3,4-MDP-2-P methyl glycidate*
- 3,4-MDP-2-P methyl glycidic acid*
- 3,4-Methylenedioxyphenyl-2-propanone (3,4-MDP-2-P, PMK)

- MDA
- MDMA
- N-Ethyl MDA

Legend:
- 1971 convention
- Placed in Table 1 of 1988 convention 2010-2019
- Table 1 of 1988 convention prior to 2010
- Not under international control

Scheduling decisions 2014-2019

• 48 substances scheduled
• 20% increase in the number of substances in the 1961 and 1971 conventions
• 6 precursor chemicals added to Table I of the 1988 convention since 2014
• 40% increase in the number of precursor chemicals in Table I of the 1988 convention
Impact of scheduling decisions on law enforcement and Forensic laboratories

• How to identify these substances and precursors?

• How are these substances manufactured in clandestine laboratories?

• How to equip law enforcement to investigate and dispose of these chemicals?
Strengthening law enforcement capacity

Providing law enforcement with rapid tests for field identification of drugs and precursors

Training in the field and elearning courses
Strengthening law enforcement capacity

Training for law enforcement and forensic personnel in newly refurbished UNODC laboratory

- Laboratory equipment and handheld technology
- Simple and fast screening device
- Covers 90% of controlled precursor chemicals
- Non-destructive technique
- Increased officer safety (no exposure to chemicals)
Assistance for law enforcement and laboratory personnel

**Clandestine Manufacture of Substances under International Control**

**FENTANYL**

**Chemical name:** 1-Phenethyl-4-4-propionyloxyphenylpiperidine

**International control:** 1971 Convention - Schedule I

**CAS registry number:**
- [1454.56-6] hydrochloride salt
- [569-75-5] oxalate salt

**Preparations / manufacture**

<table>
<thead>
<tr>
<th>Precursors / raw materials</th>
<th>Formula</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Methylacetamide</td>
<td>[108-53-5]</td>
<td>[569-75-5]</td>
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<tr>
<td>4-Methyl-2-phenylpiperidine</td>
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<td>N-Hydroxyacetamide</td>
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<td>N-Methylacetamide</td>
<td>[108-53-5]</td>
<td>[569-75-5]</td>
</tr>
</tbody>
</table>

**Synthetic/processing schemes**

See Fentanyl chemistry 1-7

**References**

- Database for synthetic schemes: references available 1 196 to 207
- Supplementary information: references numbers 207-209
2017 addendum

27 NPS placed under International control 2015-2017
Safe disposal of chemicals

In development “Guidelines for the Safe Handling of Synthetic Opioids for Law Enforcement and Customs Officers”
Multilingual Dictionaries

The UNODC multilingual dictionaries provide a range of information in the six official UN languages on the narcotic drugs, psychotropic substances and precursors under international control as defined by the Single Convention on Narcotic Drugs, 1961, as amended by the 1972 Protocol, the Convention on Psychotropic Substances, 1971 and the Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

Thank you!

UNODC - Making the world safer from drugs, crime and terrorism