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United Nations Office on Drugs and Crime

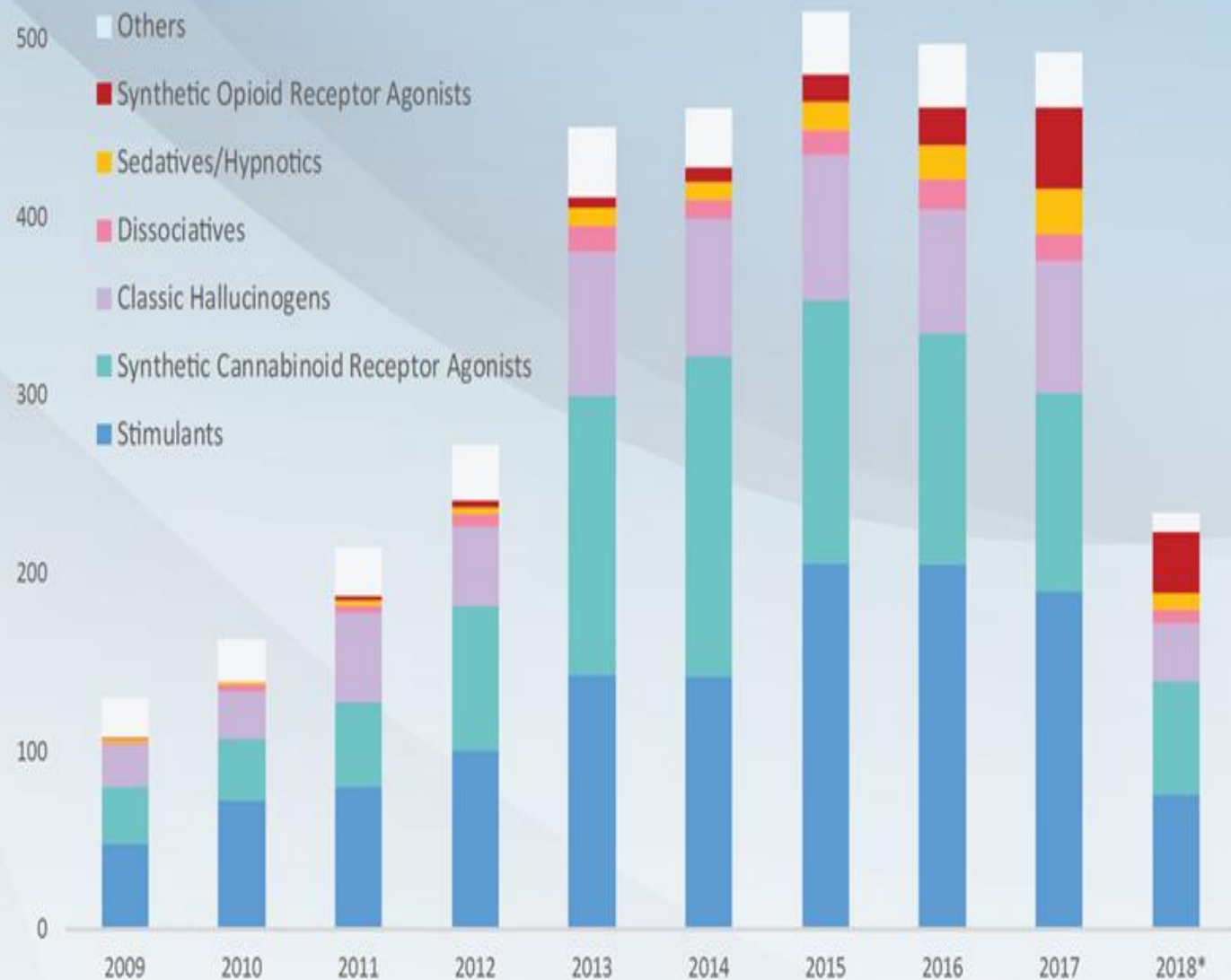


PREDICT! PREVENT! PROTECT!

UNODC Opioid Strategy and UN Toolkit on Synthetic Drugs

Mr. Martin Raithelhuber, Illicit Synthetic Drugs Expert
Laboratory and Scientific Section, UNODC

Figure 2: Emergence of NPS reported to UNODC EWA by effect group, 2009-2018

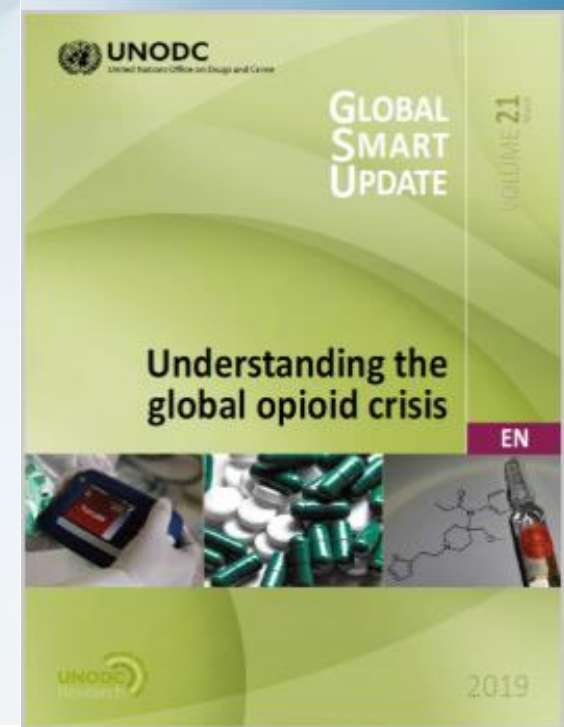


*Note: 2018 data not finalised.

From 2008 to 2019, **119** countries and territories reported a cumulative total of **899** individual NPS

62 synthetic opioids reported to UNODC EWA by 2019, **110%** increase in three years

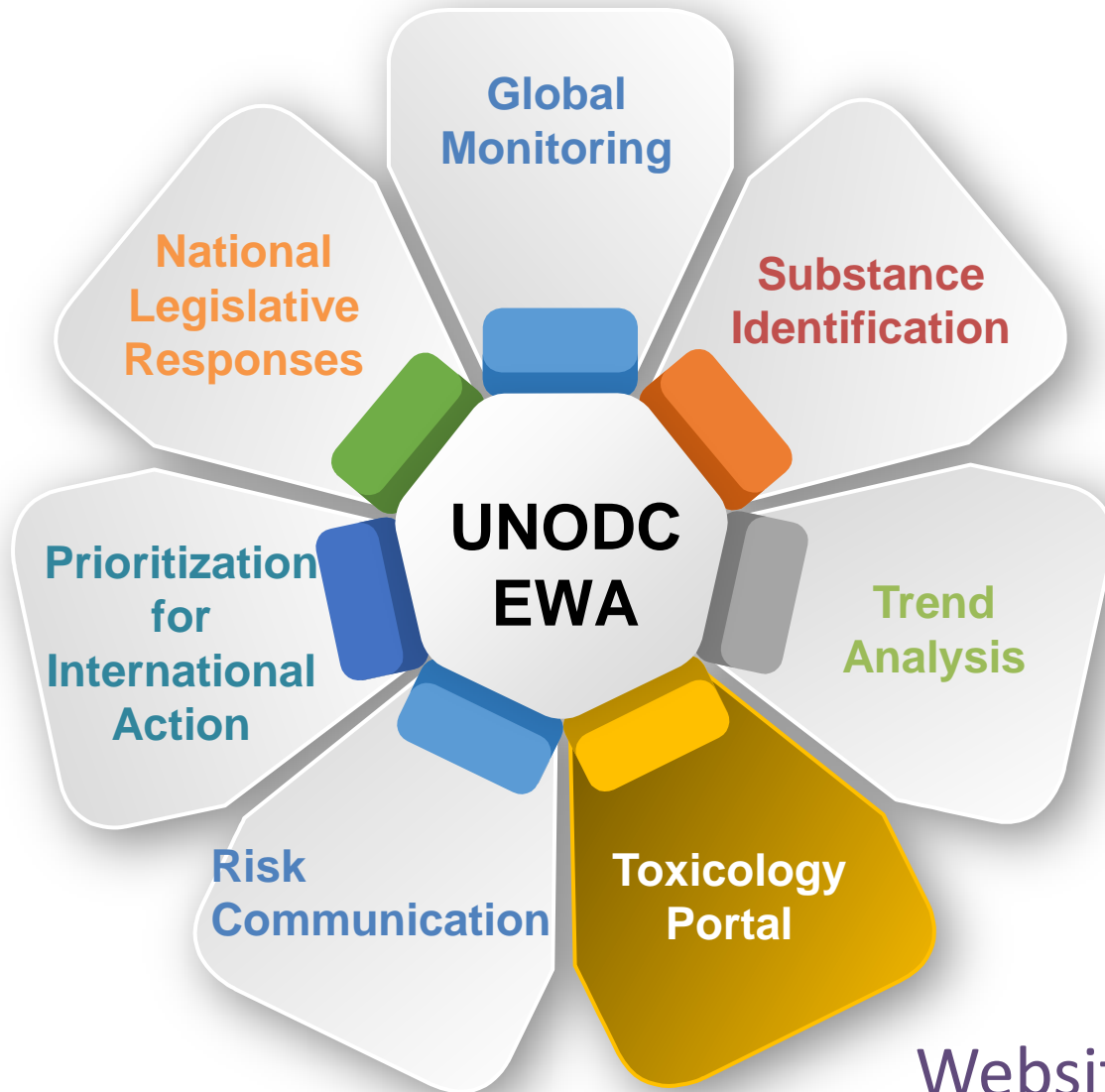
Reports of synthetic cannabinoids continue to **decrease** since **2014** but remain associated with **high rates of fatalities**





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Toxicology Portal

UNODC-TIAFT collaboration

- ❖ NPS Use Data
- ❖ Substance Combinations
- ❖ Sharing of Toxicology Data
- ❖ Symptoms
- ❖ Information on Harm
- ❖ Threat Assessments

Website

www.unodc.org/tox



Dashboard | UNODC EWA Toxicology Portal

📊 Charts

☰ Workflow

Incidents reported in my Country **192**

Show all

Date	Patient	Type	Substances	
06/02/2018	Female 15 - 24	Other (please specify in the case commentary)	🔥 Ketamine..	View
05/04/2017	Male 25 - 44	Other (please specify in the case commentary)	🔥 Furanylfentanyl.. 🔥 U-47700.. 🔥 Despropionylfen..	View
25/05/2017	Male 15 - 24	Other (please specify in the case commentary)	🔥 Furanylfentanyl.. 🔥 U-47700..	View
12/05/2018	Female 45 - 64	Other (please specify in the case commentary)	🔥 cyclopropyl fen.. 🔥 Despropionylfen..	View
25/05/2018	Male 45 - 64	Other (please specify in the case commentary)	🔥 cyclopropyl fen..	View

Most Reported Substances





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TIAFT

The International Association of Forensic Toxicologists



Search Function | UNODC EWA Toxicology Portal



UNODC EWA - Tox-Portal

Dashboard

Search Toxicology Report

+ New Toxicology Report

About EWA-TOX

Administration

Full Text Search..

Tsega Belachew Logout

Selected filters

Furanylfentanyl

Substance

- Furanylfentanyl (22)
- U-47700 (8)
- Despropionylfentanyl (7)
- Butyrfentanyl (3)
- 4-Fluorobutyrfentanyl (2)
- Acetylfentanyl (1)

Country

- United States of America (14)
- Canada (3)

+ New Toxicology Report

items per page

10

List

Map

PUBLISHED 1 of 22 United States of America - occurred on 05/04/2017

id: 593

Patient: Male (25 - 44) Type of Event: (Other (please specify in the case commentary)) Publication Date 23/04/2019

Results

#	Substance or Metabolite	Matrix	Sampling Location	Concentration	Relative/Probable Contribution
1.	Furanylfentanyl	Urine	Urine		Causal (high)
2.	U-47700	Urine	Urine		Causal (high)
3.	Despropionylfentanyl	Urine	Urine		Undetermined (causal relationship could not be established)



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TIAFT

The International Association
of Forensic Toxicologists



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Current NPS Threats

Volume I
March 2019

Number of NPS reported by country, December 2018*



Source: UNODC Early Warning Advisory on NPS

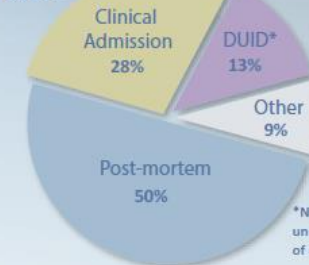
UNODC Early Warning Advisory Toxicology Highlights

- Synthetic cannabinoids, synthetic opioids and stimulants account for the majority of NPS reported to the UNODC EWA Toxicology Portal
- Synthetic cannabinoids, in particular remain harmful, persistent and prevalent with more reports in 2018 than synthetic opioids
- Poly-drug use continues to be a factor and an important consideration in NPS fatalities
- Benzodiazepine-type NPS feature highly in driving under the influence of drugs

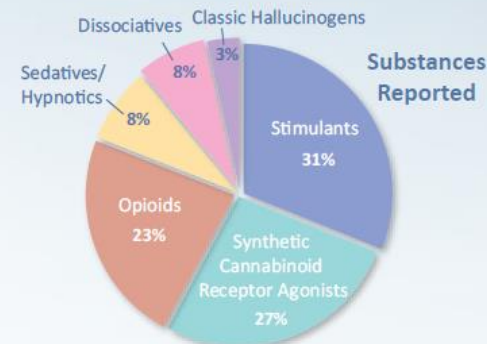
UNODC Early Warning Advisory Toxicology Highlights

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Type of Event



*Note: DUID = Driving under the influence of drugs



RESPONSE TO THE OPIOID CRISIS



Tweets by @UN_OPIOIDS

UNODC Opioid Strategy @UN_OPIOIDS

In @LRCFS Annual Lecture, @jina_tettey presents #OpioidStrategy & UN Toolkit on #SyntheticDrugs, e.g. of how @UNODC is leading an inter-agency response 2 make 🌍 safer from #drugs

Learn more about #OpioidStrategy bit.ly/2OHIGBY

support from @StateINL @Canada_INT_VIE

Jun 19, 201

UNODC Opioid Strategy @UN_OPIOIDS

Chief of @unodc_lab @jina_tettey spoke yesterday @dundeeuni @lrcfs about how to create a world safe from 🌍

Jun 19, 201

Embed View on Twitter



- THE STRATEGY
- HIGHLIGHTS
- RESOURCES AND TOOLS
- CONTACT US
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Opioids Strategy

- 1** Early Warning and Trend Analysis

Generating evidence in support of effective policy decisions and operational responses
- 2** Rationale Prescribing and Access to Opioids for Medical and Scientific Use

Expand programmes with WHO and INCB on access to pain medication
- 3** Prevention and Treatment Programmes

Strengthening and supporting prevention and treatment programmes related to opioids
- 4** International LE Operations to Disrupt Trafficking

Enhancing operational activities to prevent diversion and trafficking of synthetic opioids
- 5** Strengthening National and International Counternarcotic Capacity

Raising awareness, sharing best practices and promoting international cooperation

Website www.unodc.org/opioidstrategy
 Twitter UNODC Opioid Strategy
 Email unodc.opioid.strategy@un.org



**World Health
Organization**



Organization of American States

Inter-American Drug Abuse Control Commission

Current NPS Threats

Volume I
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Synthetic Drugs in East and South-East Asia

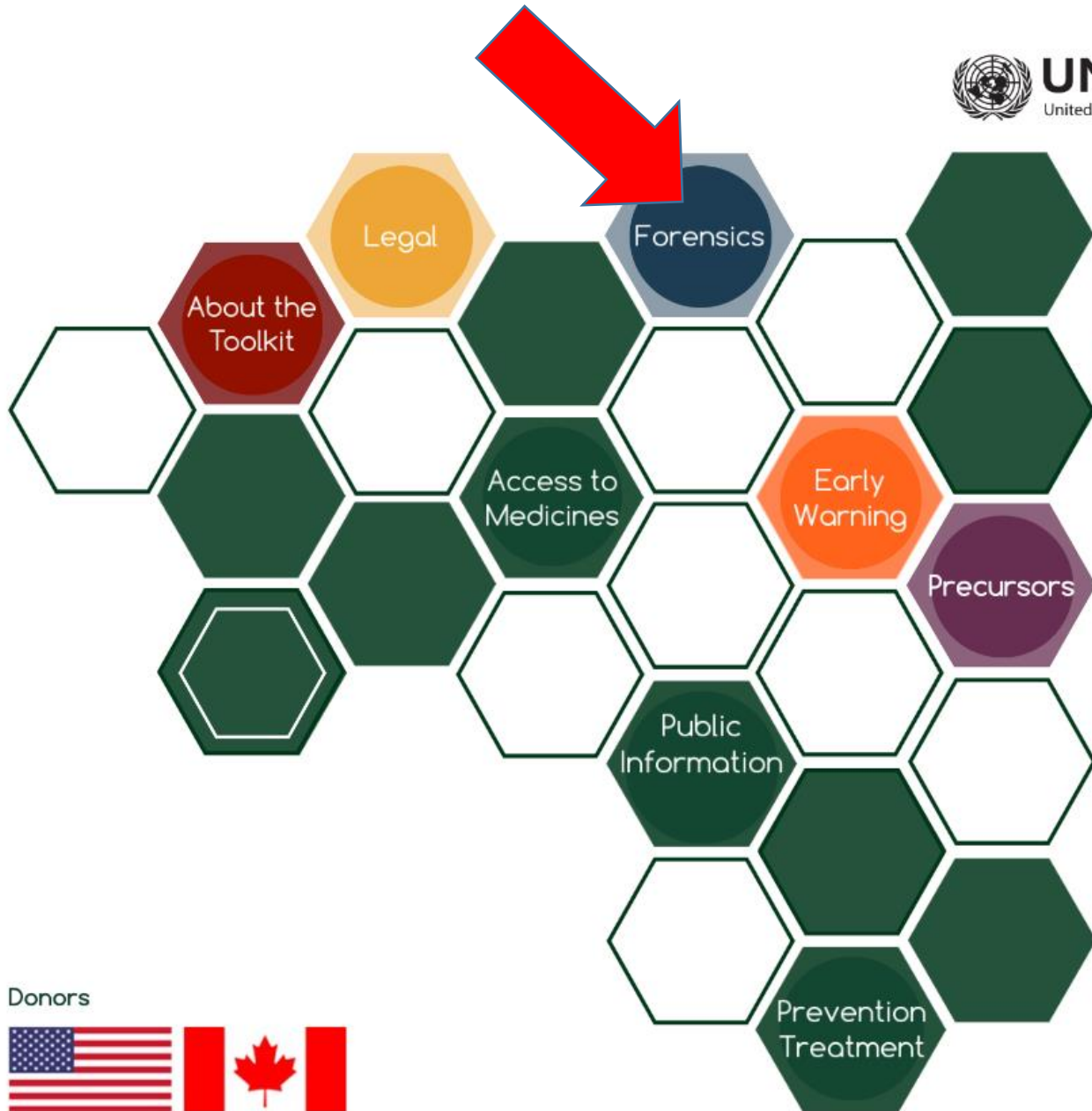
Trends and Patterns of Amphetamine-type Stimulants and Psychoactive Substances



United Nations 100 on Synthetic Drugs



Understanding the global opioid crisis



United Nations Toolkit on Synthetic Drugs



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www.unodc.org/opioidstrategy

Enable pop-ups!

Forensics Module

developed by UNODC

- o Do I have the forensic capacity to detect and identify NPS?
- o Is there access to equipment, training or human resources?

Drug Identification

- o How reliable are the results of my analysis?

Quality Assurance

Overview of this Module

Precursors

Other resources

Early Warning

International Drug Control Conventions

- o What are NPS?
- o Have NPS emerged in my country?

- o What substances are under international control?
- o What are the Conventions?

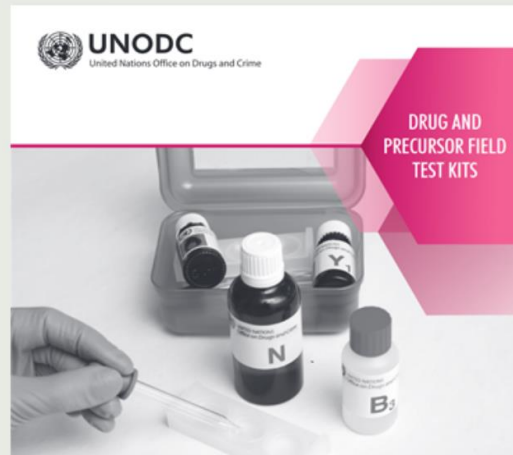


Forensic Module developed by UNODC

Presumptive or preliminary testing

UNODC drug and precursor test kits

These are kits containing necessary reagents, tools and easy step-by-step instructions to conduct approximately 200 rapid and simple colour tests for the preliminary field identification of drugs and precursors most commonly encountered in the illicit traffic. A range of presumptive test kits of this type is also available from commercial sources.



DRUG AND PRECURSOR FIELD TEST KITS

<https://bit.ly/2lkngYQ>

What are the UNODC drug and precursor field test kits?

They are kits containing necessary reagents, tools and easy step-by-step instructions to conduct approximately 200 rapid and simple colour tests for the preliminary field identification of drugs and precursors most commonly encountered in the illicit traffic.

These portable, shock-proof and water resistant kits assist front-line officers to interdict the trafficking of drugs and precursors.



Presumptive testing in the field

Information about how to access these kits is available at the following: <https://bit.ly/2GVib7l>

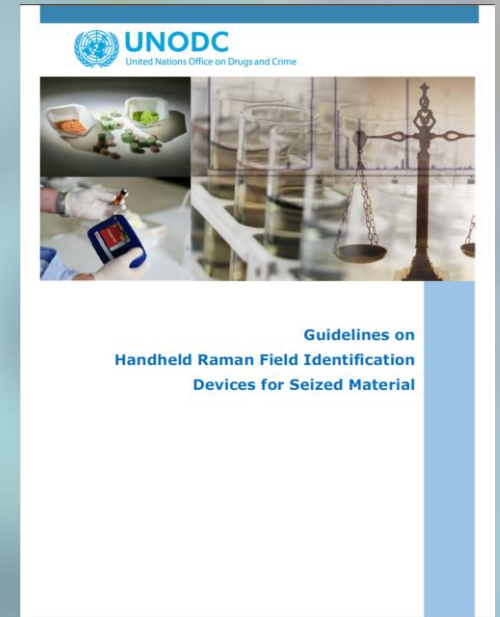
Information about experimental procedures for rapid testing of drugs of abuse can be found at: <https://bit.ly/2V4hXhH>

Forensic Module developed by UNODC

Presumptive testing in the field

Handheld devices for presumptive testing

A practical guide to the use of Raman handheld devices for field identification of drugs, precursors, essential chemicals and cutting agents by front-line law enforcement officers and forensic drug analysts. The guidelines highlights its strength as a rapid and non-destructive device which enables samples to be analyzed directly through transparent or translucent containers. The limitations of the device along with safety precautions are also outlined. In addition, the guidelines specifically provides step-by-step instructions on the use of one type of Raman handheld device.



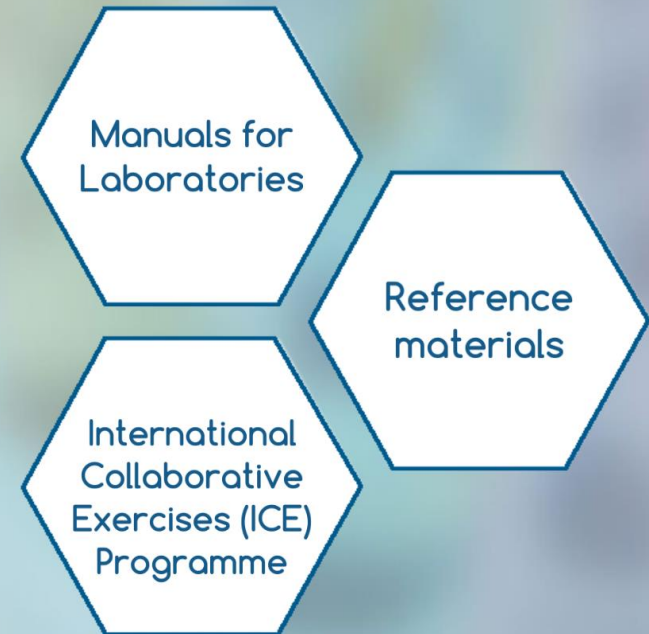
<https://bit.ly/2ExDYin>

Forensic Module developed by UNODC

Quality Assurance

Quality assurance and quality management are essential elements in the work of all drug-testing laboratories and the role they play in ensuring the quality of test results, in particular the identification of drugs cannot be underestimated. The quality and reliability of these results are a matter of safeguarding human rights and fundamental freedoms and ensuring public safety and effective law enforcement.

The UNODC International Quality Assurance Programme has been operating since 1995 and forms part of the Scientific and Forensic and Services provided to enhance quality assurance in forensic drug testing laboratories worldwide.



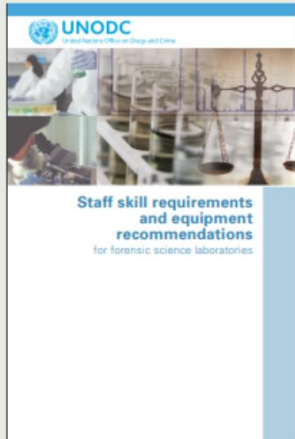
Forensic Module

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Quality Assurance

Manuals for Laboratories

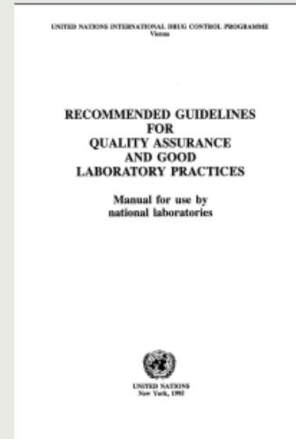
As part of the UNODC International Quality Assurance Programme and used in conjunction and in parallel with the manuals for the identification and analysis of drugs, the following manuals have been prepared to assist forensic laboratories in the development and implementation of quality management systems.



<https://bit.ly/2lBckqf>



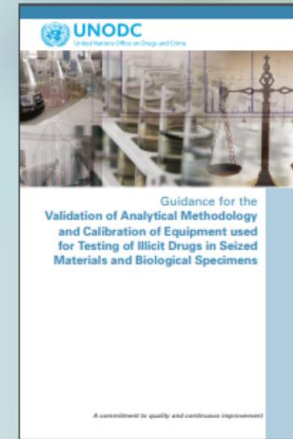
<https://bit.ly/2Ek2u7X>



<https://bit.ly/2SeODDw>



<https://bit.ly/2VcIPfR>



<https://bit.ly/2GAFHH2>

Forensic Module

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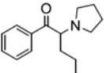
Quality Assurance

Reference materials



Another essential tool in the work of forensic drug testing laboratories is access to and use of reference materials. These are used not only for reliable and accurate identification of drugs but can also be used to determine the purity of the drug in a sample. In recognition of the importance of reference standards in drug analysis, laboratories should dedicate financial resources annually to procure appropriate amounts of relevant substances.

These can be procured from a number of commercial companies, however, UNODC recognizes the financial commitment this can involve and reference samples of substances and precursors under international control and selected NPS are made available free of charge in small quantities (usually in the range of 20-50 mg) to national drug testing laboratories in countries with limited resources and actively participating in the UNODC ICE programme. Information regarding access to reference materials can be found at the following: <https://bit.ly/2ttENDZ>

Certificate of Analysis Reference Material		
Lipomed Document QC-CA-1546 Version 001-12.Jun.2013		
		Supersedes: new
Chemical name:	α-Pyrrolidinovalerophenone.HCl (α-PVP.HCl) (RS)-1-Phenyl-2-(1-pyrrolidinyl)-1-pentanone.hydrochloride	
Lot No: 1546.1B1.1 Art. Nr. PVP-1546-HC		Release date: June 12, 2013 Retest date: June 2018
Chemical formula:	$C_{19}H_{21}NO$ Hydrochloride	Molwt: 231.33 267.79
CAS Registry Nr:	5485-65-4	
		
TEST	SPECIFICATIONS	RESULTS
1. Appearance	white to off-white crystalline powder	conforms
2. Purity	HPLC > 98.5 % <small>The purity is calculated from the distribution of 6 HPLC analyses with a 95% level of confidence.</small>	99.921 \pm 0.003 %
3. Free base content <small>(Corrected from purity and water)</small>	> 84.2 %	85.7 %
4. Optical rotation	N/A (racemic mixture)	N/A
5. Water content	Karl Fischer < 1 %	0.7 %
6. Calculated hydrochloride content		13.6 %
Following on next page		
FOR ANALYTICAL PURPOSES ONLY: NOT FOR HUMAN OR ANIMAL USE!		
Storage conditions:	For maximum stability store air-tight at 2 - 8 °C in a dark location.	
<small>Lipomed certifies that this standard meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the retest date when stored unopened as recommended.</small>		

Forensic Module

developed by UNODC

Quality Assurance



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Forensic Module developed by UNODC

Quality Assurance

International Collaborative Exercises (ICE) Programme

Another essential element for the implementation of quality management systems and ultimately accreditation is participation in proficiency tests and inter laboratory collaborative exercises. An important part of the UNODC International Quality Assurance Programme (IQAP) is the International Collaborative Exercises (ICE) programme. The biennial rounds of the ICE programme have options available both in the analysis of seized drugs and biological specimens and allowed over 280 laboratories, from more than 80 countries to continuously monitor their performance in drug testing on a truly global scale in 2018. Participation in the ICE programme is provided free of charge to national drug testing and toxicology laboratories. Information about the programme, eligibility and registration can be found at the following:

<https://bit.ly/2DSqXzN>

<https://bit.ly/2TKO0Dh>



United Nations Toolkit on Synthetic Drugs



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Precursors Module

developed by INCB



International Narcotics Control Board

International Precursor Control

This module of the toolkit provides information about drug precursors and the international precursors control system, as well as the two key elements critical to prevent chemicals from reaching clandestine laboratories for the illicit manufacture of drugs:

- monitoring of legitimate international trade, and
- investigations into suspicious shipments, attempted diversions and seizures of precursors.





United Nations Toolkit on Synthetic Drugs



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Boîte à outils des Nations Unies sur les drogues synthétiques

Kit de herramientas de Naciones Unidas sobre drogas sintéticas

**Beyond 2020:
Arabic / Chinese / Russian**

RESPONSE TO THE OPIOID CRISIS



United Nations Toolkit on Synthetic Drugs

- THE STRATEGY
- RESOURCES
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Further **develop UN Toolkit on Synthetic Drugs** with new modules and easier accessibility.

Strengthen **inter-agency and across UNODC partnerships** to strengthen field responses with a focus: **SEAP/ WAF / LAC**

Comprehensive communications plan and outreach activities, including **speaker series and Regional workshops on the Strategy**

Develop guidelines for **profiling of mail parcels & enhanced control** of mail parcels used for drug trafficking

Strengthen capacity of **detection, identification and safe handling** of synthetic drugs including synthetic opioids for law enforcement and border control officers

Enhanced **capacity of judiciary to prosecute** synthetic opioid cases

Strengthen **operational responses** to disrupt flow and manufacture of **synthetic drugs and their related precursor chemicals**

Strengthen **private public partnership with chemical and pharmaceutical industry** to prevent diversion of precursors at source



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Thank you!

UNODC Opioid Strategy – Leading the global response to the Opioid Crisis

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