Recommended Scope for NPS Testing in the United States

NPS SCOPE

Q1 2024

PURPOSE: The objective of this report is to provide updated guidance in developing an appropriate analytical scope of testing for novel psychoactive substances (NPS) in the United States (and around the world) based on current trends and intelligence. This report is based on information available in Q4 2023 and early Q1 2024 and is subject to change along with the drug market.

SUMMARY: The NPS landscape is changing rapidly, requiring laboratories to constantly remain abreast of new and emerging drugs locally, nationally, and internationally. To meet individualized needs, laboratories amend existing methods or develop new ones for detection and confirmation of NPS. This can be challenging for scientists as information about NPS detections can be regionalized and/or out-of-date, making it difficult to determine which drugs should be prioritized at a given time. **CFSRE**'s **NPS Discovery** and the **SOFT NPS Committee** have established the below recommendations for NPS scope based on information from extensive collaborations, partnerships, and initiatives which yield national and international perspectives. Suggested cut-off concentrations or reporting limits (in ng/mL) are listed for each NPS. These values are categorized (i.e., <1, 1-10, and >10 ng/mL) and determined based on currently available quantitative data and/or comparison to structurally similar NPS within the given sub-class.

BENZODIAZEPINES		OPIOIDS		STIMULANTS & HALLUCINOGENS		SYNTHETIC CANNABINOIDS	
TIER ONE (STRONGLY RECOMMEND)							
Bromazolam	1-10	Protonitazene	<]	N,N-Dimethylpentylone	>10	MDMB-4en-PINACA	<]
Desalkylgidazepam†	1-10	N-Pyrrolidino Protonitazene	<]	Pentylone	>10	ADB-BINACA (-BUTINACA)	<]
Flubromazepam	1-10	Metonitazene	<]	alpha-PiHP/alpha-PHP	>10	MDMB-BINACA (-BUTINACA)	<1
Etizolam†	1-10	*N-Desethyl Isotonitazene	<]	2F-2-oxo-PCE / Fluorexetamine	1-10	ADB-5'Br-BINACA	<1
Flualprazolam	1-10	o/m/p-Fluorofentanyl	1-10	Eutylone	>10	MDMB-PICA	<1
TIER TWO (RECOMMEND)							
Clonazolam‡	<1	Carfentanil	<]	N-Propyl Butylone	>10	*5F-MDMB-PICA	<]
8-Aminoclonazolam‡	1-10	*o/m/p-Methylfentanyl	<]	2/3/4-Methylmethcathinone	1-10	*5F-MDMB-PINACA (5F-ADB)	<]
Desalkylflurazepam†	1-10	*N-Pyrrolidino Metonitazene	<]	2C-B	<]	ADB-4en-PINACA	<]
Pyrazolam	1-10	N-Pyrrolidino Etonitazene	<]	N-Cyclohexyl Butylone	>10	ADB-5'Br-PINACA	<]
TIER THREE (CONSIDER)							
Rilmazafone ► Rilmazolam	1-10	*N-Desethyl Etonitazene	<]	N-Cyclohexyl Methylone	>10	*4F-MDMB-BICA	<]
Flubromazolam	1-10	'Isotonitazene	<1	2F-Deschloroketamine	<]	ADB-FUBIATA	<]
4'Cl-Deschloroalprazolam	1-10	Brorphine	<1	3-MeO-PCP / 4-MeO-PCP	<]	*CHO-4'Me-5'Br-FUBOXPYRA	<1
Deschloroetizolam	1-10	Etodesnitazene	1-10	MDPHP	>10	4F-MDMB-BINACA	<1

Note: This may not be an all-inclusive list. Laboratories should consider additional NPS for inclusion (or exclusion) based on local, national, and/or international trends.



by the Society of Forensic Toxicologists (SOFT) MFS Committee in collaboration with the Centre for Forensic Science Research and Education (FCSRE) at the Fredic Reders Family Foundation. This report was prepared by Aeer Korduski, Kayla Bilderen, Dani Mata, Donna Papsum, Ellias Shoff, Szabolcs Sofaki, Svante Vikingson, Michael Truver, Cella Modell, Lana Goodson, Sandrine Metter, Amy Potton, and Barry Logan. The authors would like to acknowledge scientists and staff at our aboratorises for their related involvements and contributions.

Disclaimer: The recommendations in this report are subject to chan with time as new information becomes available. Toxicologists show the subject to the s

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