Recommended Scope for NPS Testing in the United States

NPS SCOPE

Q2 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 Q1 2024 and early Q2 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 This can be challenging for scientists as information about NPS detections can be regionalized and/or out-of-date, making it difficult to determine which drugs should be prioritized at a given time.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	Metonitazene	<]	N,N-Dimethylpentylone	>10	MDMB-4en-PINACA	<]
Desalkylgidazepam†	1-10	Protonitazene	<]	Pentylone	>10	ADB-BINACA (-BUTINACA)	<7
Flubromazepam	1-10	*Carfentanil	<7	alpha-PiHP / alpha-PHP	>10	MDMB-BINACA (-BUTINACA)	<]
Etizolam [†]	1-10	*N-Pyrrolidino Etonitazene	<1	2F-2-oxo-PCE / Fluorexetamine	1-10	*5F-MDMB-PINACA (5F-ADB)	<]
Flualprazolam	1-10	o/m/p-Fluorofentanyl	1-10	Eutylone	>10	*ADB-4en-PINACA	<7
TIER TWO (RECOMMEND)							
Clonazolam‡	<]	o/m/p-Methylfentanyl	1-10	2/3/4-Methylmethcathinone	>10	5F-MDMB-PICA	<]
8-Aminoclonazolam‡	1-10	*N-Pyrrolidino Protonitazene	<]	*2/3/4-Chloromethcathinone	>10	*ADB-5'Br-BINACA	<]
Desalkylflurazepam†	1-10	*N-Desethyl Isotonitazene	<]	*MDPHP	>10	*MDMB-PICA	<]
Pyrazolam	1-10	N-Pyrrolidino Metonitazene	<]	*N-Cyclohexyl Methylone	>10	ADB-5'Br-PINACA	<]
TIER THREE (CONSIDER)							
*Desalkylquazepam	1-10	N-Desethyl Etonitazene	<]	*2C-B	<]	*MMB-4en-PINACA	<]
Flubromazolam	1-10	Etodesnitazene	1-10	*N-Cyclohexyl Butylone	>10	*AB-CHMINACA	<]
4'Cl-Deschloroalprazolam	1-10	*5-Methyl Etodesnitazene	<1	*N-Propyl Butylone	>10	4F-MDMB-BICA	<]
Deschloroetizolam	1-10	*Methylenedioxynitazene	<1	*3-Methyl-PCP / 4-Methyl-PCP	<1	4F-MDMB-BINACA	<]

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 (CFSIEs) at the Fredic Reders Family Foundation. This report was prepared by Aex (Vortulsik, 480)al Bildere, Dani Mata, Donna Papsum, Elias Shoff, Szabolcs Sofalk, Swante Wikingson, Michael Truver, Cella Modell, Lana Goodson, Sandrine Metter, Amy Pation, and Barry Logan. The authors would like to acknowledge scientists and staff at our aboratorise for their related involvements and contributions.

Disclaiment The recommendations in this report are subject to chan with time as new information becomes available. ¹Toxicologists sho Statistics of Justice Office of Justice Programs, LS Department of statistice of Justice Office of Justice Programs, LS Department of statistice (Justice Office of Justice Programs, LS Department of NPS Discovery - American Statistics of NPS Discovery - American Statistics of surrelliance, Monitoring, Reportes, and Forecasting using Dug statistics and Statistics of statistics and Statistics of surrelliance of the subhorist of surrelliance surrelliance

Fuggested Citations Krotulski et al. (2024) Recommended Scope fit NPS Testing in the United States Q2 2024, Center for Forensic Science Department and Education United States.