Recommended Scope for NPS Testing in the United States Q1 2022

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 based on current trends and intelligence. *This report is based on information available in Q1 2022 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. This can be challenging for scientists as information about NPS detections can be regionalized and/or out-of-date, making it difficult to determine which drugs should be prioritized at a given time. **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 perspectives. Suggested cut-off concentrations or reporting limits (in ng/mL) are listed for each NPS. These values were 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)*							
Etizolam†	1-10	*N*-Pyrrolidino Etonitazene	<1	Eutylone	>10	MDMB-4en-PINACA	<1
Flualprazolam	1-10	Metonitazene	<1	*N,N*-Dimethylpentylone	>10	ADB-BINACA (-BUTINACA)	<1
Clonazolam	<1	↑Brorphine	<1	Pentylone	>10	5F-MDMB-PICA	<1
8-Aminoclonazolam	1-10	*o/m/p*-Fluorofentanyl	1-10	alpha-PHP / alpha-PiHP	>10	ADB-FUBIATA	<1
Bromazolam	1-10	Carfentanil	<1	2,3,4-Methylmethcathinone	>10	↑CH-PIATA	<1
TIER TWO *(RECOMMEND)*							
Flubromazolam	1-10	Etodesnitazene	1-10	↑*N*-Cyclohexyl Methylone	1-10	↑4F-MDMB-BICA	<1
Flubromazepam	1-10	↓Protonitazene	<1	3-HO-PCP / 4-HO-PCP	<1	↑4F-MDMB-BINACA	<1
N-Desalkylflurazepam†	1-10	↑Isotonitazene	<1	2F-Deschloroketamine	<1	↑BZO-4en-POXIZID	<1
Deschloroetizolam	1-10	2-Methyl AP-237	>10	Deschloroketamine	<1	BZO-CHMOXIZID	<1
TIER THREE *(CONSIDER)*							
Fluclotizolam	1-10	AP-238	>10	↓3Cl-PCP / 4Cl-PCP	<1	↓5F-BZO-POXIZID	<1
Meclonazepam	1-10	↓*o/m/p*-Chlorofentanyl	1-10	↓3-MeO-PCP / 4-MeO-PCP	<1	↓BZO-POXIZID	<1
↑Pyrazolam	1-10	↓Dipyanone	1-10	↑*N*-Cyclohexyl Butylone	1-10	↑ADB-5Br-INACA	<1
Metizolam	1-10	↓*N*-Piperidinyl Etonitazene	<1	↑*N*-Propyl Butylone	1-10	↑MDMB-5Br-INACA	<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.

Acknowledgements: These recommendations were developed by the Society of Forensic Toxicologists (SOFT) NPS Committee in collaboration with the Center for Forensic Science Research and Education (CFSRE) at the Fredric Rieders Family Foundation. This report was prepared by Alex Krotulski, Donna Papsun, Dani Mata, Kayla Ellefsen, Elisa Shoff, Kevin Shanks, Szabolcs Sofalvi, Wayne Lewallen, Svante Vikingsson, and Barry Logan. The authors would like to acknowledge scientists and staff at our laboratories for their related involvements and contributions.

Disclaimer: The recommendations in this report are subject to change with time as new information becomes available. †Toxicologists should consider that NPS may appear due to international pharmaceutical origins.

Funding: NPS Discovery at the CFSRE is funded in part by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice (Award Number 2020-DQ-BX-0007, "Real-Time Sample-Mining and Data-Mining Approaches for the Discovery of Novel Psychoactive Substances (NPS)"). The opinions, findings, conclusions and/or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect those of the Department of Justice.

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Website: www.npsdiscovery.org **Email:** npsdiscovery@cfsre.org