

Recommended Scope for NPS Testing in the United States

Q2 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 Q2 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 This can be challenging for scientists as information about NPS detections can be regionalized and/or out-of-date, making it difficult to determine which drugs should be prioritized at a given time.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** at the CFSRE 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	<i>N</i> -Pyrrolidino Etonitazene	<1	<i>N,N</i> -Dimethylpentylone	>10	MDMB-4en-PINACA	<1
Flualprazolam	1-10	Metonitazene	<1	Pentylone	>10	ADB-BINACA (-BUTINACA)	<1
Bromazolam	1-10	[†] Etodesnitazene	1-10	Eutylone	>10	5F-MDMB-PICA	<1
[†] Flubromazepam	1-10	<i>o/m/p</i> -Fluorofentanyl	1-10	[†] <i>N</i> -Propyl Butylone	>10	[†] ADB-5'Br-BINACA	<1
Clonazolam [‡]	<1	Carfentanil	<1	[†] <i>N</i> -Cyclohexyl Butylone	>10	ADB-FUBIATA	<1
TIER TWO (RECOMMEND)							
8-Aminoclonazolam [‡]	1-10	[↓] Brorphine	<1	[↓] alpha-PHP / alpha-PiHP	>10	4F-MDMB-BICA	<1
[†] 4'Cl-Deschloroalprazolam	1-10	Protonitazene	<1	<i>N</i> -Cyclohexyl Methylone	1-10	4F-MDMB-BINACA	<1
Flubromazolam	1-10	Isotonitazene	<1	3-HO-PCP / 4-HO-PCP	<1	[†] CH-FUBIATA	<1
Deschloroetizolam	1-10	2-Methyl AP-237	>10	2F-Deschloroketamine	<1	[↓] CH-PIATA	<1
TIER THREE (CONSIDER)							
[↓] <i>N</i> -Desalkylflurazepam [†]	1-10	<i>N</i> -Piperidinyl Etonitazene	<1	[↓] 2,3,4-Methylmethcathinone	1-10	[↓] BZO-4en-POXIZID	<1
Fluclotizolam	1-10	[†] 5-Methyl Etodesnitazene	1-10	3-MeO-PCP / 4-MeO-PCP	<1	[↓] BZO-CHMOXIZID	<1
Pyrazolam	1-10	AP-238	>10	[†] MDPHP	>10	5F-BZO-POXIZID	<1
Metizolam	1-10	Dipyanone	1-10	[↓] Deschloroketamine	<1	BZO-POXIZID	<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.

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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.

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