

# Recommended Scope for NPS Testing in the United States

NPS  
SCOPE

Q2  
2026

**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 2026 and early Q2 2026 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 This can be challenging for scientists as information about NPS detections can be regionalized and/or out-of-date, making it difficult to determine which drugs should be prioritized at a given time.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		SEMI-SYNTHETIC CANNABINOIDS		MISCELLANEOUS	
<b>TIER ONE (STRONGLY RECOMMEND)</b>											
Bromazolam	1-10	<i>N</i> -Propionitrile Chlorphine*	<1	2/3/4-Methylmethcathinone	>10	5F-MDMB-PINACA (5F-ADB)	<1	THCP	1-10	Medetomidine	1-10
Phenazolam	1-10	Carfentanil	<1	alpha-PiHP / alpha-PHP	>10	MDMB-4en-PINACA	<1	Δ <sup>8</sup> -THC	1-10	Mitragynine	>10
Desalkylgizazepam†	1-10	Metonitazene	<1	<i>N</i> -Isopropyl Butylone	>10	MDMB-BINACA (-BUTINACA)	<1	Δ <sup>8</sup> -THC-COOH	1-10	7OH-Mitragynine	1-10
Ethylbromazolam	1-10	* <i>N</i> -Pyrrolidino Protonitazene	<1	2F-2oxo-PCE / Fluorexetamine	>10	4F-MDMB-BINACA (-BUTINACA)	<1	9(R)-HHC / 9(S)-HHC	1-10	Mitragynine Pseudoindoxyl	1-10
8-Aminoclonazolam‡	1-10	<i>o/m/p</i> -Fluorofentanyl	1-10	* <i>N</i> -sec-Butyl Butylone	>10	ADB-4en-PINACA	<1	9(R)-HHC-COOH / 9(S)-HHC-COOH	1-10	*Dihydro-7OH-Mitragynine*	1-10
<b>TIER TWO (RECOMMEND)</b>											
Clonazolam‡	<1	<i>o/m/p</i> -Methylfentanyl	1-10	*2/3/4-Chloromethcathinone	>10	*MDMB-INACA	<1	Δ <sup>10</sup> -THC	1-10	*Xylazine	1-10
Flualprazolam	1-10	Protonitazene	<1	<i>N,N</i> -Dimethylpentylone	>10	ADB-BINACA (-BUTINACA)	<1	Δ <sup>10</sup> -THC-COOH	1-10	4-AcO-DMT	1-10
Etizolam†	1-10	*5,6-Dichloro Desmethylchlorphine*	1-10	alpha-PiHP / alpha-PHP	>10	ADB-CHMINACA	<1	THC-O-Acetate	1-10	*4-AcO-MET	1-10
*Ethylflualprazolam	1-10	<i>N</i> -Pyrrolidino Metonitazene	<1	MDPHP / MDPIHP	>10	4CN-CUMYL-BINACA (-BUTINACA)	<1	HHC-O-Acetate	1-10	Kavain & Kavalactones	>10
<b>TIER THREE (CONSIDER)</b>											
*Flubromazepam	1-10	Spirochlorphine	<1	2C-B	<1	*MDMB-PINACA	<1	HHCP	1-10	*Etomidate	>10
Desalkylflurazepam†	1-10	5,6-Dichloro Brorphine	<1	<i>N</i> -Cyclohexyl Methylone	>10	AMB-4en-PINACA	<1	HHCH	1-10	Phenibut	>10
Pyrazolam	1-10	*5-Chloro Desmethylchlorphine	<1	Eutylone	>10	*5F-MDMB-PICA	<1	THCM	1-10	BTMPS	>10
4'Cl-Deschloralprazolam	1-10	*Chlorphine	<1	*Alpha-PVP	>10	ADB-INACA	<1	THCB	1-10	*Tianeptine	>10

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.

\**N*-Propionitrile Chlorphine (Cyclorphine) & \*5,6-Dichloro Desmethylchlorphine (SR-17018)

\*Dihydro-7OH-Mitragynine (MGM-15)



**Acknowledgements:** These scope 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, Kayla Ellefsen, Donna Pappun, Elisa Shoff, Svante Vikingsson, Michael Truxer, Lars Goodson, Sandrine Milette, Amy Patton, Helen Chang, Jillian Neifield, Stuart Kurtz, Christina Smith, 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 varying pharmaceutical origins.

**Funding:** CFSRE's NPS Discovery is funded in-part by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice (Award Number ISPNJ-24-GK-00981-COAP, "Novel Psychoactive Substance Discovery, Education, and Reporting Institute [NPS DiscERN]"). The opinions, findings, conclusions and/or recommendations expressed in this publication are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice.

**Suggested Citation:** Krotulski et al. (2026) Recommended Scope for NPS Testing in the United States Q1 2026, Center for Forensic Science Research and Education, United States.

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**PROVIDE FEEDBACK:** If you are interested in providing feedback to the SOFT NPS Committee and CFSRE's NPS Discovery program on specific drugs and/or drug classes, the content and formatting of our latest scope recommendations, topics related to NPS and/or NPS testing, or any other items of interest, please email us at [npsdiscovery@cfsre.org](mailto:npsdiscovery@cfsre.org).

**RECOMMENDED NPS METABOLITES:** Our recommendations now encompass metabolites of specified NPS to consider in testing scopes, when known or postulated with high certainty based on literature or prior drug similarity. Laboratories should note the following: NPS metabolize to more than one metabolite. Determining the primary metabolite can be difficult and variable based on a variety of factors. NPS metabolites are found at varying abundances in different matrices. This is not intended to be an exhaustive list. Some metabolites listed may be predictive.

## RECOMMENDED METABOLITES FOR SPECIFIC NPS

Bromazolam ▶ alpha-Hydroxy Bromazolam	<i>N</i> -Propionitrile Chlorphine ▶ Chlorphine & nor-Orphine	2/3/4-Methylmethcathinone ▶ 2/3/4-Methylcathinone	MDMB-4en-PINACA ▶ MDMB-4en-PINACA 3,3-Dimethylbutanoic Acid	Δ <sup>8</sup> -THC ▶ Δ <sup>8</sup> -THC-COOH
Desalkylgizapem ▶ 3-Hydroxy Desalkylgizapem	5,6-Dichloro Desmethylchlorphine ▶ 5,6-Dichloro nor-Orphine	<i>N</i> -Isopropyl Butylone ▶ <i>N</i> -Desalkyl Butylone	5F-MDMB-PINACA (5F-ADB) ▶ 5F-MDMB-PINACA 3,3-Dimethylbutanoic Acid	9(R)-HHC / 9(S)-HHC ▶ 9(R)-HHC-COOH / 9(S)-HHC-COOH
Flubromazepam ▶ 3-Hydroxy Flubromazepam	Metonitazene ▶ <i>N</i> -Desethyl Metonitazene & 5-Aminometonitazene	<i>N</i> -sec-Butyl Butylone ▶ <i>N</i> -Desalkyl Butylone	ADB-BINACA (-BUTINACA) ▶ ADB-BINACA <i>N</i> -Butanoic Acid & MDMB- BINACA 3,3-Dimethylbutanoic Acid	Medetomidine ▶ 3-Hydroxy Medetomidine
Phenazolam ▶ alpha-Hydroxy Phenazolam	<i>N</i> -Pyrrolidino Protonitazene & <i>N</i> -Pyrrolidino Isotonitazene ▶ <i>N</i> -Pyrrolidino 4'-OH Nitazene	2F-2-oxo-PCE ▶ 2F-Deschlornorketamine	ADB-4en-PINACA ▶ MDMB-4en-PINACA 3,3-Dimethylbutanoic Acid	Xylazine ▶ 3-Hydroxy Xylazine
Ethylbromazolam ▶ Hydroxy Ethylbromazolam	5-Chloro Desmethylchlorphine ▶ 5-Chloro nor-Orphine	<i>N,N</i> -Dimethylpentylone ▶ Pentylone	MDMB-BINACA (-BUTINACA) ▶ MDMB-BINACA 3,3-Dimethylbutanoic Acid	Mitragynine ▶ 7-Hydroxy Mitragynine & Mitragynine Pseudoindoxyl
Clonazolam ▶ 8-Aminoclonazolam	Carfentanil ▶ Norcarfentanil	2/3/4-Chloromethcathinone ▶ 2/3/4-Chlorocathinone	ADB-CHMINACA ▶ MDMB-CHMINACA 3,3-Dimethylbutanoic Acid	4-AcO-DMT ▶ Psilocin (4-HO-DMT)
<i>o/m/p</i> -Fluorofentanyl ▶ <i>o/m/p</i> -Fluoronorfentanyl	<i>o/m/p</i> -Methylfentanyl ▶ <i>o/m/p</i> -Methylnorfentanyl	alpha-PiHP / alpha-PHP ▶ beta-Hydroxy-alpha-PiHP / beta-Hydroxy-alpha-PHP	4CN-CUMYL-BINACA (-BUTINACA) ▶ 4CN-CUMYL-BINACA <i>N</i> -Butanoic Acid	4-AcO-MET ▶ 4-HO-MET