CYCHLORPHINE

MAY 2026

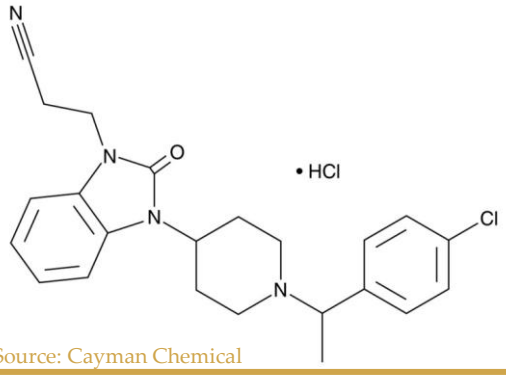
Objective: The goal of this, and subsequent bulletins, is to provide information regarding identified changes in drug trends, and/or to educate and forewarn about newly identified substances.

Subject Matter: This release provides information regarding the synthetic opioid N-propionitrile chlorphine (cychlorphine), which has been detected in the illegal drug market in the United States (U.S.), in counterfeit pills and in several overdose cases. Due to its recent emergence, this information is presented to provide guidance on understanding what cychlorphine is, and its potential threat to public health and safety.

What is Cychlorphine?

Cychlorphine (N-propionitrile chlorphine) is a synthetic opioid originally developed in research context, not for medical use. It acts as a strong opioid receptor agonist [(a)], working on the same receptors as fentanyl, heroin, and oxycodone. [1] Chemically, it is part of the emerging "orphine" or benzimidazolone-type opioid family, rather than a classic morphine-type structure. [2]

Cychlorphine appears to be more potent than fentanyl in lab tests, but there is not an exact, human-based potency ratio; all precise numbers so far come from cell-based experiments, not clinical dosing.[2][3] However, in these receptor-binding / functional cell tests, cychlorphine's potency was found to be about 10 times that of fentanyl.[2] Therefore, it should be treated as substantially more potent than fentanyl and potentially lethal at very low doses.

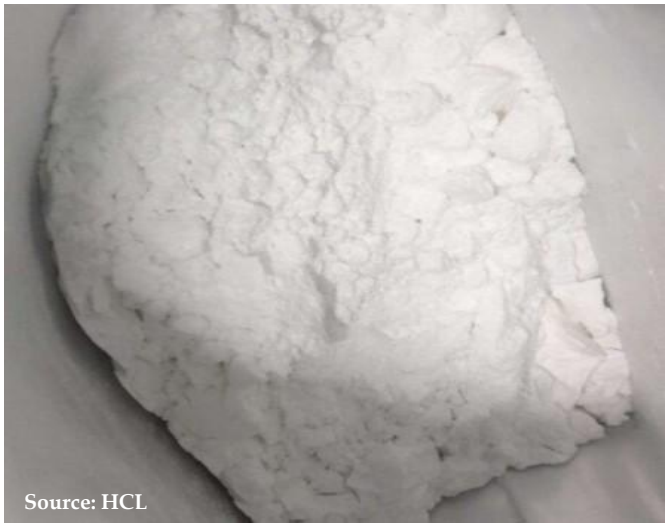


Source: Cayman Chemical

Cychlorphine's Presence in the Illicit Drug Market

European early-warning data notes that cychlorphine has been sold as a designer opioid and detected in several European countries since around 2024, linked to multiple fatal overdoses.[4]

A U.S. forensic early-warning bulletin reported fatal overdoses and non-fatal detections in the U.S. starting in 2024-2025, noting its presence in counterfeit opioid tablets and mixed drug samples.[2] Harm-reduction and drug-checking groups in North America have reported cychlorphine turning up in counterfeit "oxycodone" and "Percocet"-type pills in circulation, raising overdose risk because users have no idea the potency they are consuming.[5][6]



Source: HCL

[(a)] "a substance which initiates a physiological response when combined with a receptor."

CYCHLORPHINE

MAY 2026

How Cychlorphone Entered the U.S. Illicit Drug Market

The United Nations Office on Drugs and Crime (UNODC) and the Center for Forensic Science Research and Education (CFSRE) note that cychlorphine and related "orphine" analogues are often found in counterfeit prescription-style tablets and powder mixes, suggesting import from non-U.S. labs rather than domestic pharmaceutical leakage.[2][7]

Cychlorphine's distribution path can be traced from early detections and fatalities in London, to community drug-checking hits in Toronto, and then to counterfeit pills and seized samples in the U.S. and Canada, indicating spread along existing synthetic-opioid trafficking routes.[6][8]

Source: KTLA

Overdose Patterns in the United States

In January 2026, a CFSRE Novel Psychoactive Substance (NPS) Discovery alert reported 25 fatal overdoses where cychlorphine was identified in blood, mostly from late 2025 and early 2026, with over 100 additional toxicology cases tentatively positive at National Medical Services (NMS) Labs.[2] In those 25 deaths, cychlorphine was the only opioid in 11 cases; in the remainder it co-occurred with opioids like fentanyl or oxycodone and stimulants such as methamphetamine or cocaine, indicating both sole-agent and poly-drug overdose patterns.[2]

Multi-state Spread: According to the CFSRE and media citing its data, cychlorphine-positive toxicology cases or seized samples have now been documented in at least eleven U.S. states, with specific mentions of Missouri, Tennessee, Kentucky, Illinois, California, Texas, and states on the East Coast, plus multiple Canadian provinces.[2][8]

Detailed Local Pattern: In Eastern Tennessee, regional forensic officials reported between July 2025 and February 2026, cychlorphine was referenced in the toxicology reports of 41 death investigations.[9] Most cases involved multiple substances (often methamphetamine and fentanyl), but at least one fatality had cychlorphine as the only detected drug at extremely low blood concentrations (≈0.5 ng/mL), consistent with very high potency.[8]

Overall Pattern:

- Initial small clusters of deaths (often misattributed or "unknown" until advanced testing) [8]
- First reported in late 2025, with cases involving cychlorphine increasing in 2026 [10]
- Concentration so far in certain regions (especially East Tennessee and parts of the Midwest) but with signs of broader geographic spread.[8]

Source: Adobe Stock

Detection Challenges

- **Not on routine panels:** Many forensic labs' standard opioid screens do not yet include cychlorphine, so early cases produced "unknown peaks" or negative opioid screens, which is not uncommon when dealing with emerging synthetic opioids.[11]
- **Need for advanced instrumentation:** Confirming cychlorphine has required high-resolution mass spectrometry and, in early European work, even nuclear magnetic resonance to characterize the compound; it was initially absent from spectral libraries.[10][11]
- **Lab capacity:** Detection of cychlorphine relies almost exclusively on laboratory testing, as it is not detectable through most field test kits. In Tennessee, the Knox County Regional Forensic Center (KCRFC) was among the first to detect cychlorphine, leveraging partnership resources for identification. Though initially traced to November 2025, the drug has now been linked to earlier deaths through continued research. KCRFC director Chris Thomas notes that while his facility and state agencies, such as the Tennessee Bureau of Investigation, test for cychlorphine, many other states currently cannot, though this is expected to change. Due to these testing capacity gaps, some cychlorphine-related deaths may still be coded as "undetermined" or attributed only to co-occurring substances.[9][12]
- **Drug field testing limits:** Community drug-checking programs and rapid test strips (e.g. fentanyl strips) do not specifically detect cychlorphone, so people checking pills may get a negative result even if a potent non-fentanyl opioid is present. DEA and local officials in Chicago emphasize that cychlorphine is "extremely difficult to detect" with current field test kits, amplifying the risk of unrecognized exposure.[10]

Naloxone and Other Agonists

Naloxone **should be** given for a suspected cychlorphine overdose. However, Tennessee forensic authorities have cautioned that naloxone might be "less effective" in counteracting a cychlorphine overdose, given its strength, and several doses could be required.[8][12] The individual receiving naloxone should be monitored, due to naloxone's effects potentially dissipating faster than those of numerous potent opiates (including cycholorphine), which could cause the person to overdose again once the naloxone effects diminish.[8]

Source: Police 1

Scheduling Status and Legal Classification of Cychlorphine

Cychlorphine is not yet named in DEA's published federal schedules, but in practice it is treated as an illegal Schedule I–type "controlled substance analogue" of existing opioids under the Controlled Substances Act (CSA), due to it being structurally or pharmacologically substantially similar to a Schedule I or II drug and intended for human consumption.[13]

Although some states are now moving to explicitly schedule it. For example, a recent Kentucky bill titled "AN ACT relating to cychlorphine" was introduced to expressly control it under state law, reflecting concern over its local emergence and treating it as a high-risk synthetic opioid.[14]

Despite it not being named as a line item in the CSA tables, the manufacture, distribution, or possession with intent to distribute cychlorphine for human use can be a federal felony, if the controlled substance analogue requirements are met.[13]

Key Takeaways

- **Cychlorphine has been reported to be 10 times more potent than fentanyl, making it one of the most dangerous substances in the illicit drug supply with microscopic amounts potentially lethal.[2]**
- **The drug evades standard detection methods - it's odorless, colorless, and does not show up on typical drug tests, meaning users often consume it unknowingly.[8]**
- **Multiple naloxone doses may be required to reverse overdoses due to cychlorphine's potency, though Narcan remains effective for emergency response.[8]**
- **Geographic spread is accelerating rapidly - first detected in Florida in April 2024, it has now been identified in at least eleven states and linked to dozens of deaths.[2][8]**

References:

1. "What is Cychlorphine," https://cychlorphine.com/what-is-cychlorphine/
2. Center for Forensic Science Research and Education, Public Alert (January 2026), *Increase in Fatal Overdoses Linked to Novel Synthetic Opioid N-Propionitrile Chlorphine (Cychlorphine);* https://www.cfsre.org/nps-discovery/public-alerts/increase-in-fatal-overdoses-linked-to-novel-synthetic-opioid-n-propionitrile-chlorphine-cychlorphine
3. Medrano, K. (March 5, 2026), Filter, *No, Synthetic Opioid Cychlorphine Has Not Proved Narcan "Ineffective,"* https://filtermag.org/novel-synthetic-opioid-cychlorphine/
4. United Nations Office on Drugs and Crime Laboratory and Scientific Service Portals, News (May 2025) – Emerging Analogues of Brorphine; https://www.unodc.org/LSS/Announcement/Details/55d787ca-cec7-4204-90b0-68236305dcaa
5. Ontario's Drug Checking Community (April 7, 2026), *"New" Opioids Circulating in Ontario's Unregulated Opioid Supply: Etodezitramide and Cychlorphine;* https://drugchecking.community/drug-information/etodezitramide-and-cychlorphine/
6. Lehman, J. (Nov 6, 2025) Discover, *New Synthetic Opioid Cychlorphine Found in Toronto, Raising Fentanyl-Level Concerns,"* https://www.discovermagazine.com/new-synthetic-opioid-cychlorphine-found-in-toronto-raising-fentanyl-level-concerns-48234
7. Department of Justice, Drug Enforcement Administration, Drug Fact Sheet, December 2024, *Synthetic Opioids;* https://www.dea.gov/sites/default/files/2025-01/Synthetic-Opioids-Drug-Fact-Sheet.pdf
8. Sweet, T. Psy. D (March 22, 2026), Holon Health, *Cychlorphine: A New Synthetic Opioid 10x Stronger than Fentanyl;* https://www.holonhealth.com/cychlorphine-a-new-synthetic-opioid-10x-stronger-than-fentanyl/
9. Knox County Regional Forensic Center, Media Release (April 6, 2026); *New Drug Cychlorphine Appearing in Other Deaths Across East Tennessee;* https://www.knoxcounty.org/rfc/pdfs/mediarelease/2026/2026.04.06NewDrugCychlorphineAppearinginOtherDeathsAcrossEastTennessee.pdf
10. Sumbul MBBS, MD (March 7, 2026), MedBoundTimes, *Cychlorphine: New Synthetic Opioid Linked to Overdose Deaths Detected Across Multiple U.S. States, Health Officials Warn;* https://www.medboundtimes.com/usa/what-is-cychlorphine-new-opioid-detected-in-us-deaths
11. Dugues P, Robin T, Bellouard M, Chenorhokian S, Triguel M, Pfau G, Feng C, Cherki S, Herbette G, Alvarez JC, Larabi IA. Multi-analytical identification of the synthetic opioids cychlorphine and methiodone (IC-26) in drug seizures: first detection in Europe. Clin Chem Lab Med. 2026 Jan 12. doi: 10.1515/cclm-2025-1428. Epub ahead of print. PMID: 41507112; https://pubmed.ncbi.nlm.nih.gov/41507112/
12. Coil, K. (April 6, 2026), Tennessee Town & City, *State Officials Expressing Concern Over Spread of New, Deadly Synthetic Opioid;* https://ttc.tml1.org/2026/04/06/state-officials-expressing-concern-over-spread-new-deadly-synthetic-opioid
13. Drug Scheduling (April 15, 2026); https://www.dea.gov/drug-information/drug-scheduling
14. General Assembly of the Commonwealth of Kentucky, Legislative Research Commission (Feb 25, 2026), *An ACT relating to cychlorphine; https://apps.legislature.ky.gov/recorddocuments/bill/26RS/hb750/orig_bill.pdf*