

Xylazine

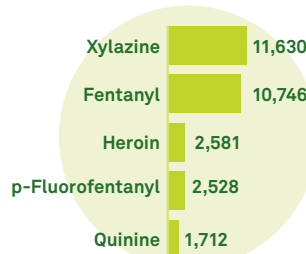
A rising threat in novel psychoactive substances

An estimated **1 in 10 people** reported recent use of **novel psychoactive substances (NPS)**,¹ and **more than half of NPS-positive specimens tested in 2024 contained xylazine**—making it the most common NPS.²

Xylazine is often combined with other NPS, significantly raising overdose risk and driving a surge in drug-related deaths.³⁻⁷ The latest analysis of NPS panel testing performed by Quest Diagnostics, in combination with data from other leading organizations, highlight alarming trends.

52% of NPS-positive specimens in 2024 contained xylazine²

52%



◀ Xylazine has been found in combination with a variety of drugs⁸

35%

◀ 35% of positive specimens contained compounds from 2 or more NPS classes²

44%

◀ 44% of NPS-positive specimens contained both xylazine and designer fentanyl analogs²

99%

99% of xylazine-related overdose deaths also involved fentanyl⁹

64%

64% of overdose deaths in which xylazine was detected listed it as the cause of death⁹

Overdose deaths from fentanyl laced with xylazine rose 276% in just 3 years¹⁰

Xylazine and other illicit additives are spreading nationwide²



Learn more at [QuestDiagnostics.com/NovelPsychoactiveSubstances](https://www.questdiagnostics.com/NovelPsychoactiveSubstances)

References

1. Neoh MJY, Carollo A, Lim M, et al. The novel psychoactive substances epidemic: A scientometric perspective. *Addiction Neuroscience*. 2023(5):100060. doi:10.1016/j.addicn.2022.100060 2. Quest Diagnostics NPS report, 2025 3. Nunez J, DeJoseph ME, Gill JR. Xylazine, a veterinary tranquilizer, detected in 42 accidental fentanyl intoxication deaths. *Am J Forensic Med Pathol*. 2021;42(1):9-11. doi:10.1097/PAF.0000000000000622 4. Kariisa M, O'Donnell J, Kumar S, et al. Illicitly manufactured fentanyl-involved overdose deaths with detected xylazine—US, January 2019–June 2022. *MMWR Morb Mortal Wkly Rep*. 2023;72(26):721–727. doi:10.15585/mmwr.mm7226a4 5. Spencer MR, Warner M, Cisevski JA, et al. Estimates of drug overdose deaths involving fentanyl, methamphetamine, cocaine, heroin, and oxycodone: US, 2021. *Vital Statistics Rapid Release*; no 27. National Center for Health Statistics; 2023. doi:10.15620/cdc:125504 6. Spencer MR, Warner M, Bastian BA, Trinidad JP, Hedegaard H. Drug overdose deaths involving fentanyl, 2011–2016. *Natl Vital Stat Rep*. 2019;68(3):1–19. https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_03-508.pdf 7. Friedman J, Montero F, Bourgois P, et al. Xylazine spreads across the US: A growing component of the increasingly synthetic and polysubstance overdose crisis. *Drug Alcohol Depend*. 2022;233:109380. doi:10.1016/j.drugalcdep.2022.109380 8. US Drug Enforcement Administration. Xylazine information. Accessed March 24, 2025. <https://www.dea.gov/xylazine-information> 9. Kariisa M, Patel P, Smith H, et al. Notes from the field: Xylazine detection and involvement in drug overdose deaths - US, 2019. *MMWR Morb Mortal Wkly Rep*. 2021;70(37):1300–1302. doi:10.15585/mmwr.mm7037a4 10. Kariisa M, O'Donnell J, Kumar S, et al. Illicitly manufactured fentanyl-involved overdose deaths with detected xylazine — US, January 2019–June 2022. *MMWR Morb Mortal Wkly Rep*. 2023;72:721–727. doi:10.15585/mmwr.mm7226a4

QuestDiagnostics.com

Quest®, Quest Diagnostics®, any associated logos, and all associated Quest Diagnostics registered or unregistered trademarks are the property of Quest Diagnostics. All third-party marks—® and ™—are the property of their respective owners. © 2025 Quest Diagnostics Incorporated. All rights reserved. IN13883 5/2025