## MILLENNIUM HEALTH SIGNALS ALERT™

## **Xylazine Spreads West in Year Following Emerging Threat Designation Published July 2024**

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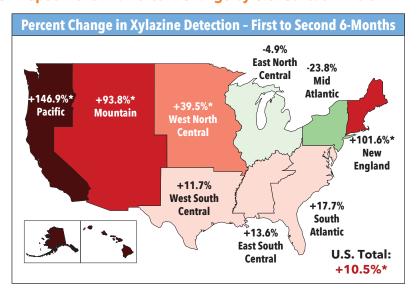


Urine drug testing (UDT) data show significant uptick in xylazine detections in the West and New England, rates remain highest in the East

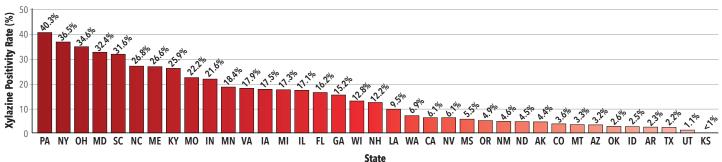
- Xylazine or "tranq" is a powerful, non-opioid, veterinary tranquilizer that is reportedly added to illicit fentanyl to prolong and enhance its euphoric effects. It may diminish responses to naloxone and increase fatal overdose risk. Repeated use is associated with the development of severe necrotic skin lesions. 1,2,3,4
- Here we describe national, regional, and state xylazine positivity rates in fentanyl-positive UDT samples <u>during the year</u> following the April 12, 2023
   White House Office of National Drug Control Policy (ONDCP) designation of fentanyl combined with xylazine as an emerging threat.<sup>5</sup>
- The greatest gains in xylazine use were largely in the western half of the U.S.; the Pacific, Mountain, and West North Central Census Divisions all increased significantly; New England also increased significantly (see Map).
- Xylazine use among those who use fentanyl remains highest in the East. Rates in ALL eastern U.S. Census Divisions are approximately double the national rate of 15.6% (see Table).
- PA, NY, and OH had the highest xylazine positivity rates nationally over the year; the top 20 states were primarily located in the East (see Figure bottom).
- Xylazine remains a significant concern in the eastern U.S., and a growing concern out West. Clinicians across the U.S. should be aware of and prepared to address the use of fentanyl adulterated with xylazine in their communities.

## **Xylazine Positivity Rates in Fentanyl-Positive UDT Specimens and Percent Change by U.S. Census Division**

Xylazine Positivity Rate (%) by U.S. Census Division		
Census Division	First 6-Months (4/12/23 - 10/10/23)	Second 6-Months (10/11/23 - 4/11/24)
U.S. Total	14.1%	15.6%
Pacific	3.3%	8.1%
Mountain	2.2%	4.2%
West North Central	14.9%	20.7%
West South Central	7.1%	7.9%
East North Central	32.0%	30.4%
East South Central	23.5%	26.7%
Mid Atlantic	43.5%	33.2%
South Atlantic	22.3%	26.3%
New England	14.0%	28.3%



## Ranked State-Level Positivity Rates for Xylazine in Fentanyl-Positive UDT Specimens



**TOP:** Xylazine positivity rate in fentanyl-positive UDT specimens by U.S. Census Division. The analysis was stratified by xylazine detection in the 1st 6-months (April 12, 2023 thru October 10, 2023) and 2st 6-months of the study period (October 11, 2023 thru April 11, 2024). Percent change was calculated as: (2st 6-month positivity - 1st 6-month positivity) / 1st 6-month positivity × 100. Asterisks (st) denote significant changes based on non-overlapping 95% confidence intervals for 1st and 2st 6-month positivity rates. **BOTTOM:** Xylazine positivity rate from April 12, 2023 to April 11, 2024 in fentanyl-positive results for accurate xylazine positivity rate determination.

Methods and References available at millenniumhealth.com/signalsalert/xylazine

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