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GAVIN NEWSOM
Governor

March 20, 2023

TO: California Local Health Officers

SUBJECT: Alert on presence of xylazine in illicit fentanyl

Xylazine, a veterinary tranquilizer with no approved human use,¹ is showing up in the nation's street drug supply, where it is also known as “tranq” and “tranq dope.” It is increasingly present in overdose deaths compounding the overdose crisis.² Philadelphia^{1,3} and other areas in the Northeast^{1,4} have been heavily impacted. In Philadelphia, xylazine was detected in 34% of all overdose deaths in 2021, a 39% increase from 2020.⁴ Nationwide, in 2019, xylazine was listed as a cause of death in 64% of deaths in which it was detected.¹

Today, I am writing to request Local Health Officers to share [the FDA xylazine alert for health professionals](#) with medical providers in their jurisdictions.

Since most jurisdictions do not routinely test for xylazine,^{2,5} its true national prevalence by region is unknown but likely underreported. There is no evidence to suggest that xylazine is currently prevalent in California's drug supply, however experts note that xylazine may be mirroring the path of fentanyl in the illicit drug market with a westward expansion.⁶ Testing for xylazine and xylazine metabolites is available through both clinical drug screens and toxicology panels. If xylazine use is suspected, testing may be appropriate. Routine screening for xylazine in post-mortem toxicology may be an effective way to monitor population trends locally and across the state.

Reported effects of xylazine in humans include central nervous system and respiratory depression,¹ low blood pressure,^{1,7} slow heart rate,^{1,7} drowsiness,⁷ and lethargy.⁷ A sedative and not an opioid, xylazine is not known to be reversed by naloxone.¹ However, since xylazine is typically combined with opioids like fentanyl and sometimes heroin,¹ administering naloxone is still recommended for reversing an overdose. When patients do not respond to naloxone, providers should consider the possibility of xylazine exposure.⁵ Xylazine use is also



associated with necrotic skin wounds located beyond the injection site.⁵ The human impact of these severe wounds, which can require amputation, has been chronicled in the news media.⁸

Some people who use drugs might be using xylazine intentionally to prolong the shorter high that results when using fentanyl. Other people might not be aware the drug they purchased contains xylazine at all. Warning people who use drugs to stay away from xylazine as the only means of prevention will have limited effectiveness given the nature of addiction. To focus on the needs of people who use drugs, harm reduction is an important approach. For xylazine-specific harm reduction strategies, see resources from:

- [The Philadelphia Department of Public Health Substance Use Prevention and Harm Reduction](#)
- [The National Harm Reduction Coalition](#)

No FDA medication is approved for xylazine withdrawal, but the Philadelphia Department of Public Health posted some [approaches](#) that are being used. Stigma associated with substance abuse and shame from the serious wounds associated with xylazine use can lead to delays in care and worse health outcomes, underscoring the need for providing compassionate care to patients.

The CDPH Overdose Prevention Initiative works with state and local partners to address the overdose epidemic through prevention and research activities. Visit the [Overdose Prevention Initiative](#) for more information, including on [xylazine](#). CDPH also issued an [issue brief on xylazine](#).

Sincerely,

A handwritten signature in blue ink that reads "Tomás Aragón". The signature is written in a cursive, flowing style.

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References

1. [Notes from the Field: Xylazine Detection and Involvement in Drug Overdose Deaths — United States, 2019](#). *MMWR Morbidity and Mortality Weekly Report*, 2021.
2. [Xylazine Spreads across the US: A Growing Component of the Increasingly Synthetic and Polysubstance Overdose Crisis](#). *Drug and Alcohol Dependence*, 2022.
3. [Increasing Presence of Xylazine in Heroin and/or Fentanyl Deaths, Philadelphia, Pennsylvania, 2010-2019](#). *Injury Prevention*, 2021.
4. [Unintentional Drug Overdose Fatalities in Philadelphia, 2021](#). *Philadelphia Department of Public Health*, 2022.
5. [FDA warns about the risk of xylazine exposure in humans](#). *Fda.gov*, 2022.
6. [The Growing Threat of Xylazine and its Mixture with Illicit Drugs](#). *dea.gov*, 2022.
7. [Xylazine Poisoning: A Systematic Review](#). *Clinical Toxicology (Philadelphia)*, 2022.
8. [Animal Sedative Mixed with Fentanyl Brings Fresh Horror to U.S. Drug Zones](#). *New York Times*, 2023.