

# The Rise of Xylazine Shows Why Local Data Must Inform Policy and Spending Decisions

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Local governments have been given direct control over a substantial amount of opioid settlement funding. While state-level data sources are valuable inputs, city and county leaders should consider local data sources when making decisions to ensure timely responses to emerging threats, as is exemplified by the rise of xylazine.

## Introduction

The national opioid settlements are an historic opportunity to enhance and expand prevention, treatment, and recovery support nationwide, but there are widespread concerns that the chance to make a meaningful impact on the overdose crisis could be squandered if funds are mismanaged. Because the settlement agreements themselves stipulate what the funds can and cannot be spent on (alongside reporting requirements, national attention, and political pressure), and since significant portions of the funds are going directly to county and municipal governments with only 15% on average going to state budgets, there seems to be a reduced risk of repeating the mistakes of the Tobacco Master Settlement era [1]. However, most county and municipal governments have little or no direct experience in managing funding earmarked for opioid abatement at this scale and the spending rules are rather open-ended, meaning the risk of misappropriation remains, regardless of the intentions of the governing body. As such, effective spending of the national opioid settlements relies on the effective use of timely, local data in the policymaking process. Fortunately, the overdose crisis has also revealed that no entity is better equipped to collect and utilize local data than local stakeholders.

Statewide data dashboards and annual reports, such as those managed by the North Carolina Department of Health and Human Services or the Tennessee Department of Health, are robust examinations of the crisis and are indispensable tools for measuring progress and potential challenges [2, 3]. However, because the data presented at this level are usually aggregated, focused on the most commonly involved substances, and are at least two years out of date, a local governing body that depends solely on such data sources would be making decisions that do not fully account for their specific local context, and opportunities for

effective intervention would be missed. In other words, policymakers should not be forming their decisions based solely on the funerals from yesterday's crisis—they might miss the warning signs of tomorrow's.

## Xylazine: The Drug That Took Communities by Surprise

Consider xylazine, the veterinary tranquilizer that has been increasingly found in the street supply of fentanyl, cocaine, and other substances [4]. Mixing xylazine with opioids or other substances does not just increase the likelihood of fatal overdose; there are ramifications for survivors of nonfatal overdoses that complicate response, treatment, and recovery. Xylazine causes vasoconstriction and decreased skin perfusion, leading to severe, necrotic ulcers that may not even be near the site of injection, significantly increasing the chances of septic cellulitis or other potentially fatal conditions [5]. Because it is not an opioid, xylazine does not respond to naloxone. In addition to increasing the likelihood of death, this can lead to bystanders and first responders administering excessive doses of naloxone, which may precipitate opioid withdrawal [6]. Xylazine itself also causes withdrawal symptoms, but these do not respond to medications for opioid use disorder (despite a high co-occurrence with opioid use disorder that certainly does respond to that treatment), and due to a lack of research there persists a lack of effective treatment options available to clinicians [5]. Worse still, people who use drugs have reported that xylazine makes withdrawal symptoms worse [7], which may increase the rate of attrition in rehabilitation and recovery programs. Harm reduction organizations, first responders, emergency departments, and other stakeholders must be equipped to respond to these challenges. This requires policy responses such as funding for the effective distribution of wound care kits, xylazine testing strips, education on the specifics of administering naloxone to people who may have

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also consumed xylazine, and support for recovery programs, as well as other potential responses.

## Lessons from Tennessee

In Tennessee, the incidence of xylazine-involved overdose has been rapidly increasing, particularly in the Appalachian region, from 23 deaths statewide in 2019 to 192 in 2022 [8]. Despite that, the most recent annual fatal overdose report for the state, which covers 2022 data, does not contain the word “xylazine.” This is not due to negligence; the data are dependent on the ICD-10 system and there is no ICD-10 code that specifically corresponds to xylazine toxicity [9]. More important, however, is the reality that funding, testing capacity, and screening practices vary across forensic laboratories [10], to say the least of the fact that there is no FDA-approved point-of-care test available for xylazine [11]. Testing for xylazine is occurring in clinical, forensic, harm reduction, and law enforcement settings, but practices are not standardized across the state, let alone the nation, and despite Tennessee state agencies ringing the alarm bell there has not been widespread adoption of local xylazine-ready policy responses.

### *How Breaking Down Data Silos Created Governmental Response to Xylazine*

There are examples of successful xylazine-ready policy responses in Tennessee, and the success is owed to the utilization of local data shared through effective communication both between stakeholders and with multiple levels of government. In January 2024, the Metro Nashville Police Department seized over 120,000 blue pills, typical of the current era of fentanyl-laced counterfeit prescription opioids. However, infrared spectrometry analysis of random samples of pills from different bags in the seizure all consistently showed both fentanyl and xylazine [12]. The officer who conducted the analysis, Sergeant Mike Hotz, contacted Trevor Henderson of the University of Tennessee Substance Misuse and Addiction Resource for Tennessee (SMART) Initiative, and the findings were widely shared with numerous governmental bodies, emergency departments, harm reduction organizations, and other community stakeholders. Community partners then marshaled resources to purchase and distribute xylazine test strips and wound care kits, and educational materials were developed and disseminated. The Metro Nashville City Council then allocated funding to replenish and expand these efforts in response to the mobilization. At the state level, the Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) has also paid for the distribution of thousands of xylazine test strips, facilitated by the Tennessee Association of Alcohol, Drug and other Addiction Services (TAADAS) [8].

The key takeaways from the Nashville example are the breaking down of data silos, based on a communicative partnership between public health and public safety, and the

importance of engaging both the private and public sectors at the local and state level. Regional forensic center data had been showing that xylazine was a growing threat across the state, and harm reduction activists had already discussed the importance of providing wound care kits, but there had been resistance to investing in xylazine readiness due to a lack of data showing an overdose spike in the city. However, once law enforcement showed conclusively that large shipments of pills containing fentanyl and xylazine had been found, with trends indicating a steady then abrupt rise in trafficking, this coalition of law enforcement, harm reduction, and public health was able to argue that a response should be made based on the recent drug seizure data instead of waiting for body bags to pile up.

### *Opioid Settlements are Structured to Empower Local Decision-making*

The structure of the opioid settlements facilitates this type of governmental reaction. In Tennessee, 15% went directly to the state, where it was placed into its own account and used to purchase naloxone and expand treatment bed capacity in state-funded facilities, among other programs [13]. Another 15% went directly to the subdivisions (both counties and municipalities) that had participated in the litigation directly [13]. These portions can be spent on new or expanded programs, but they can also be used to reimburse past expenditures on approved remediation strategies. In one example, a county government funded a reentry program with money that had originally been intended for another budget item; they can reimburse for the reentry program with subdivision funds. Importantly, these funds do not have a spending deadline and can be kept on hand for emergency funding for unexpected overdose spikes or novel threats, both of which are highly plausible scenarios that governments should be prepared to address. Counties also received direct funding, which is overseen by the statewide Tennessee Opioid Abatement Council (OAC), and this funding—alongside the other funds the OAC makes available to the public in the form of grants—must be spent on future remediation efforts, and there are deadlines and reporting requirements. North Carolina has similarly endowed local governments with significant funding powers: 85% of all the funding goes directly to the state’s 100 counties and 17 municipalities that participated in the litigation (or had a population of at least 75,000) [14].

The settlements have provided an opportunity to have the entire recovery ecosystem represented in the halls of local government at the same time [15]. Local governments should form substance use disorder task forces to determine the best ways to spend these funds, composed of representatives from prevention, harm reduction, health care, the local school system, law enforcement, criminal justice, and those with lived experience. They should seek data from all of these sectors, as well as their regional forensic centers,

and compare these findings to statewide trends and data sources. Even if a local government is not directly receiving settlement funding, such a task force should be formed regardless; the tools needed to have an impact are all based in the community, from the services to the data sources themselves. After all, the statewide data reporting already being used is pulled from local sources; the delay comes from the large-scale collection and analysis.

## **Data Starts Local; Policy is A Question of Stakeholder Engagement**

Everything we know about the overdose crisis is generated locally: EMS and first responder calls, law enforcement encounters, emergency department visits, treatment center utilization, harm reduction services, even confessions to the local pastor. Acting on the data just requires representation and stakeholder engagement.

Overdose fatality review (OFR), which is a promising but underutilized recent strategy of breaking down public health and public safety data silos [16], is a useful illustration of this dynamic of local data-sharing. OFR teams are ideally composed of local, community-specific representatives from the entire recovery ecosystem, so that data ranging from emergency department visits and arrest records to mental health care utilization and even social media habits can be analyzed on a case-by-case basis in order to identify system gaps and missed opportunities. OFR teams can then develop community-specific response plans, which can then serve as the backbone of policy, or perhaps even spending recommendations for opioid settlement funds.

Another potential option is to increase engagement with the Overdose Response Strategy (ORS), a joint project by the Centers for Disease Control and Prevention (CDC) and the Department of Justice High Intensity Drug Trafficking Areas program (HIDTA). The ORS connects anti-overdose efforts to a nationwide, multidisciplinary network of resources and information that reaches down to the county-specific EMS level. As it pertains to the sudden rise of xylazine, ORS stakeholders in West Virginia started noticing an uptick in overdose calls to EMS among people who previously had been revived “under the table”—in other words, they had previously been receiving naloxone from associates without engaging emergency or medical services, and thus had not previously shown up in overdose data despite being known to local prevention and recovery organizations. The increased calls to EMS came from the fact that naloxone seemed to not be fully reversing overdoses; people were not waking up. Reports of necrotic flesh wounds and worsening withdrawal symptoms soon followed. The internal conversation among public health and public safety personnel within the ORS led to the formation of the I-81 workgroup, which facilitated data and lessons along a major drug trafficking corridor that traversed Appalachia, and this work helped influence the response to xylazine in Nashville. The I-81 workgroup has also identified several actionable tar-

gets, such as gaps in regional testing data across multiple states, strategies for effective community education and harm reduction practices, and more. Similar work is now being undertaken to respond to a recently identified trend of unusually heightened aggression associated with stimulant use (beyond even what has been seen with this era of high-potency methamphetamine) throughout the mountainous region of Northeast Tennessee, near the North Carolina border.

## **Conclusion**

The street usually already knows what is happening before the government does, so it is thus the responsibility of the latter to access the knowledge of the former. The community in turn has a responsibility to engage the government, and a good first step is to attend public meetings. The next step would be to develop relationships with public officials and offer your data and insight.

A good model for this type of engagement at the local or state level can be seen in Tennessee, through the work of Karen Pershing of the Knoxville-based Metro Drug Coalition (MDC). During her time as the executive director of MDC, Pershing engaged the state legislature on numerous bills including syringe service program legalization, fentanyl test strip decriminalization, and more, providing up-to-date data and research to ensure that state law and policy were informed by evidence. Some takeaways from her approach include starting with the big picture—identify where your state fares compared to others—then working down to the local level. Data from the greater East Tennessee area, considering that Appalachia was hit so hard by the opioid epidemic, is often highly detailed and compelling and can be used to consider options for other regions. Pershing often took these highly detailed data and broke down trends that could be generalized to other parts of the state. Data from the hardest hit areas of any state can be comparably compelling, if only to compare and contrast at the state level. Of course, this is less about a specific region and more about data accessibility. For example, in North Carolina, the University of North Carolina Street Drug Analysis Lab is a public service that has been analyzing anonymously submitted drug samples since 2021 [17]. As it pertains to xylazine, the lab encountered the drug in 22 of the state’s 48 counties, first originating in the Triad area, followed by the East and then the West regions of the state [18].

Whether working at the county, city, or township level, data from EMS, medical, mental health, law enforcement, and harm reduction sources can help with identifying overdose “hotspots,” and from that data come compelling stories: who is overdosing, what they are overdosing on, and where they are dying or nearly dying? With these same stakeholders at the table, identify what resources you have, and what you lack. From there, the gaps become clear and decisions on policy and funding become much easier to make. NCMJ

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