

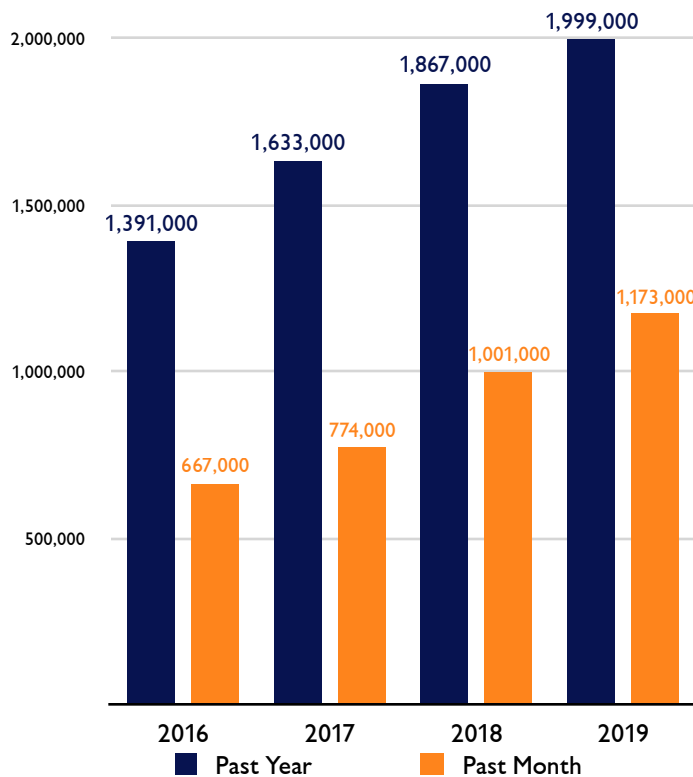
Addressing the Methamphetamine Crisis Before it Gets Worse

Without intervention, methamphetamine is poised to become a major substance use epidemic in the United States. Use has been rising since at least 2016, and fatal overdoses have risen even more dramatically – for reasons we only partly understand. This brief explores the troubling methamphetamine trends and endorses a response built upon the opioid crisis policy playbook, with the aim of acting earlier and more aggressively.

USE ON THE RISE

Methamphetamine use is growing fast. Nationally, past-month methamphetamine use increased 76% – from 667,000 users in 2016 to 1,173,000 in 2019 (see Figure 1). Use increased in 36 states, with the highest rates concentrated in the Pacific, Mountain, and East South Central census divisions. Unlike previous waves that were concentrated among young adults (ages 18 to 25), this increase appears to be driven by adults ages 30 to 44.

Figure 1. Methamphetamine Use, Ages 12+



ALARMING LOSS OF LIFE

Nationwide, fatal overdoses involving methamphetamine increased from 2,635 in 2012 to 16,167 in 2019 – an increase of 514%. The current rate of increase is unprecedented, even when considering the opioid crisis. Over the last three years, fatal methamphetamine overdoses grew more rapidly than fatal opioid overdoses at any comparable time during the epidemic. The magnitude of

the overdose crisis varies by state, but it has impacted nearly every part of the US (see Figure 2). From 2017 to 2019, fatal methamphetamine-involved overdoses increased in 44 of the 45 states with unconstrained data. Though not significant in every state, deaths increased at least 33% in 37 states and doubled in 8 states.

WHAT IS DRIVING OVERDOSES?

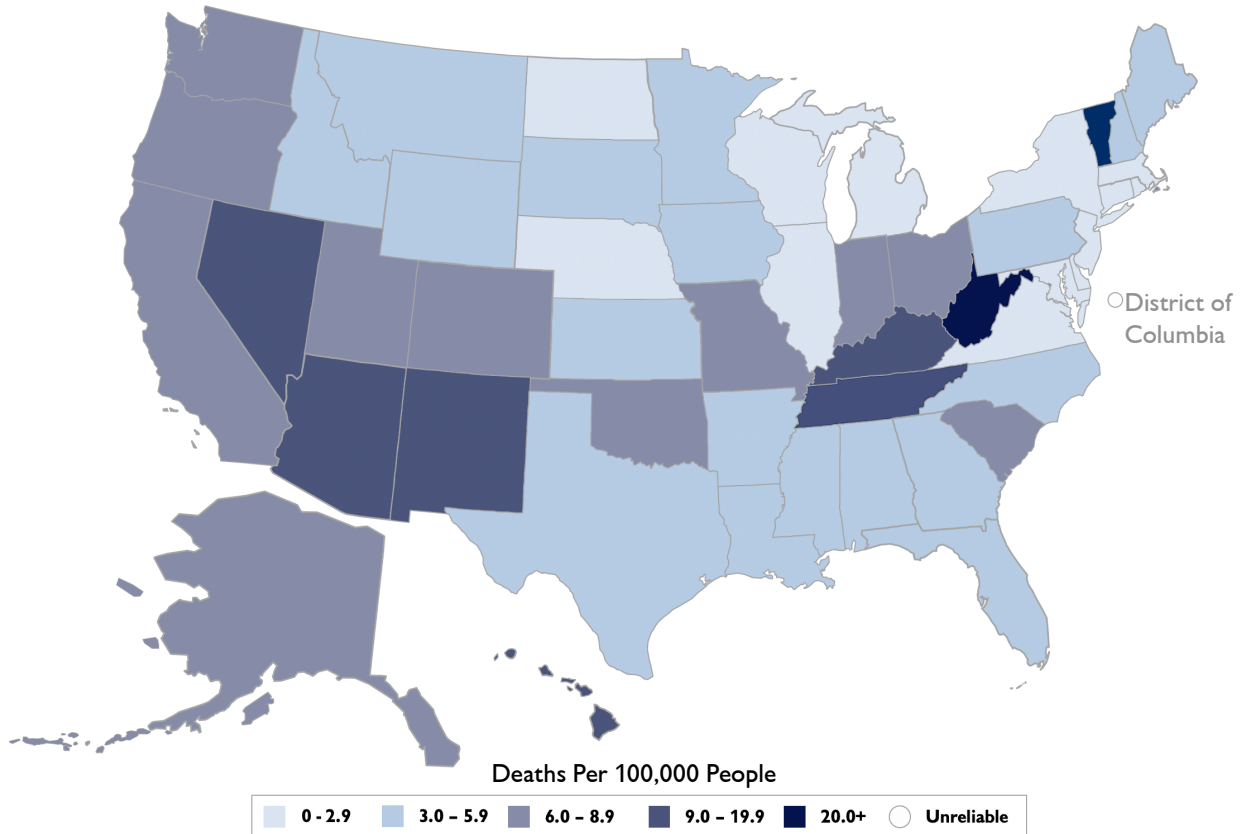
Researchers don't fully understand what's driving the rise in overdoses. At least four hypotheses have been put forward, each is likely true – but even together they may not fully account for the rise in deaths:

1. More people using leads to more overdoses,
2. People are more likely to combine methamphetamine with other substances (like opioids) than they were previously,
3. Methamphetamine is purer, more potent, and more lethal than it used to be, and
4. Methamphetamine-involved deaths are more likely to be classified as overdoses than in the past.

We would expect overdoses to rise as use rises – but not as much as they have. Methodological changes preclude direct comparisons of use before 2015, but overdoses were over 900% higher in 2019 than in 2005 – use rates alone cannot account for such a change. Likewise, fatal overdoses involving methamphetamine and other substances have increased (see Figure 3). But methamphetamine overdoses involving no other substance increased nearly 600% from 2005 to 2019. Therefore polysubstance use accounts for only some of the change.

The Drug Enforcement Administration reports that methamphetamine purity and potency has substantially increased since 2006.¹ But how much of a 900% increase in the overdose rate can that account for? Finally, wide latitude exists in the classification of cause of death, and there is evidence of past misclassification among drug-involved deaths.² It is likely that some additional deaths may now be counted as overdoses that previously were not. Ultimately, more research is needed to understand the confluence of factors – including behavioral and societal factors – contributing to the catastrophic rise in deaths.

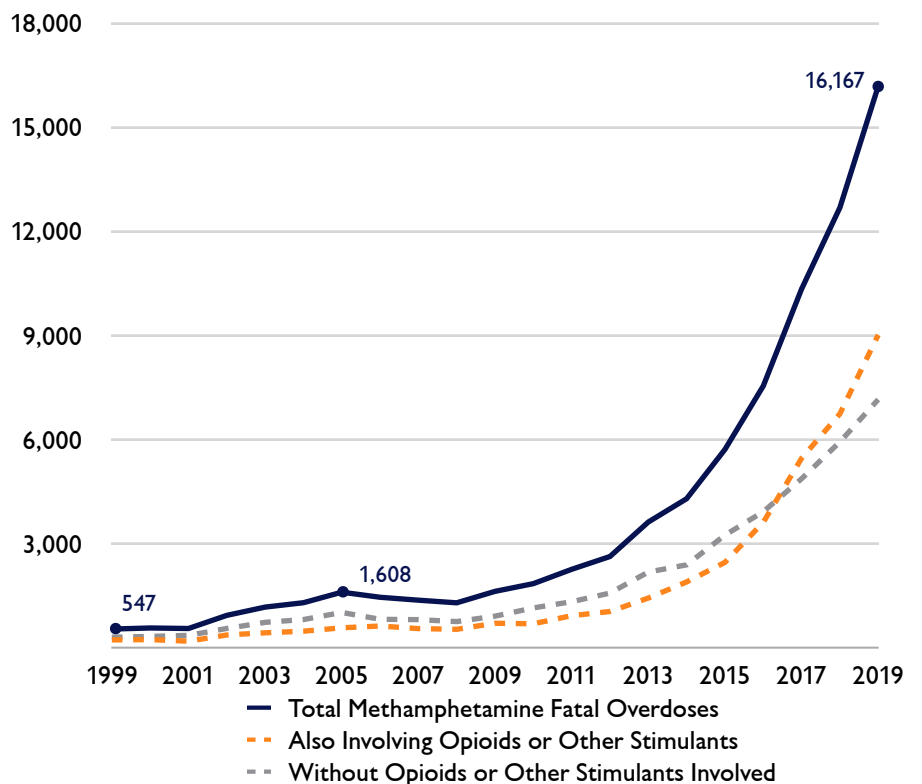
Figure 2. 2019 Fatal Methamphetamine-Involved Overdose Rate by State



THE NEED FOR SWIFT ACTION

Opioids illustrate the danger of delay. The opioid epidemic was officially declared more than 10 years after the scope of the problem became apparent in the data. The surge in federal funding did not begin for another 5 years – a full 15 years after the opioid crisis truly began. Policymakers should act now to reduce the scope and severity of these methamphetamine trends. Indeed, HHS has begun to do just that. Many recent federal opioid grants are allowing communities to use opioid funds to address methamphetamine use, dictated by local needs. Further action is needed now, recognizing that methamphetamine is a distinct issue and earlier action better the chances of “bending the curve” of use, consequences, and death.

Figure 3. 2019 Fatal Methamphetamine-Involved Overdoses 1999-2019



BUILDING ON WHAT WORKS: USING THE OPIOID PLAYBOOK

Policymakers can draw from the experience of the opioid epidemic response – mimicking the successful elements that are transferable and identifying areas unique to methamphetamine that may require special attention. Key components could include the following:

Adopt and Expand Opioid Interventions with Crossover Potential: Though methamphetamine and opioid use differ in many ways, specific programs and policies enacted under the opioid response can be expanded to address the methamphetamine problem, such as expanding Good Samaritan laws to apply to methamphetamine overdoses. Unfortunately, many successful interventions – like naloxone training and distribution and medication assisted treatment (MAT) – lack a direct methamphetamine analog. If such programs could be developed, dissemination strategies could follow the opioid model. In the meantime, funding should focus on the most effective interventions.

Expand Research on Evidence-Based Services for Methamphetamine Use. The opioid crisis response benefited from the wealth of research on proven evidence-based practices around opioids – across treatment and prevention. Most notably, MAT for opioid use and naloxone for overdose reversal. The state of methamphetamine research is less robust. Research should focus on:

- MAT for methamphetamine use disorder and other evidence-based treatment
- Overdose reversal medications for methamphetamine
- Prevention, recovery support services, and delivery mechanisms/implementation

Some of this work has already begun, such as an NIH-funded study finding that a combination of injectable naltrexone and oral bupropion may be an effective form of MAT for methamphetamine use disorder.³ Such research should be encouraged and expanded.

Expand Access & Availability to Evidence-Based Prevention, Treatment, and Recovery Supports: A key success of the opioid response was ensuring that funding improved the availability and use of the best-known interventions. Part of this effort involves improvements in treatment and prevention service infrastructure and processes—much of which have already occurred with the backdrop of the opioid epidemic. Beyond that, it is crucial to improve access to and use of evidence-based

treatment services that revolve around behavioral therapy. Currently recommended treatment options include Cognitive Behavioral Therapy, the Matrix Model, and Contingency Management, all of which have shown some effectiveness in the treatment of methamphetamine use.⁴ Prevention interventions that have shown evidence of effectiveness, such as the Substance Abuse and Suicide Prevention Program, the Strengthening Families Program, and the Life Skills Training Program, should be expanded as well. Finally, the expansion of harm reduction strategies, such as needle exchange programs,⁵ can help reduce the consequences of use.

CONCLUSION

Methamphetamine is not yet a public health crisis on par with the opioid epidemic or COVID-19. Understandably, it has not received the same level of attention given those competing priorities. But the stark trajectory of the data – particularly the fatalities – illustrates a clear need for swift action. The opioid crisis response offers a solid but imperfect guide to governmental action.

NOTES:

1. Drug Enforcement Administration (2011). 2010 National Drug Threat Assessment. Available at <https://www.justice.gov/archive/ndic/pubs38/38661/38661p.pdf> & Drug Enforcement Administration (2021). 2020 National Drug Threat Assessment. Available at https://www.dea.gov/sites/default/files/2021-02/DIR-008-21%202020%20National%20Drug%20Threat%20Assessment_WEB.pdf
2. Bohnert, A. et al (2013). Misclassification of suicide deaths: Examining the psychiatric history of overdose decedents. *Injury Prevention* 19: 326-330
3. Trivedi, M. et al (2021). Bupropion and Naltrexone in Methamphetamine Use Disorder. *New England Journal of Medicine* 384: 140-153. Available at <https://www.nejm.org/doi/full/10.1056/NEJMoa2020214>
4. De Crescenzo, F. et al (2018). Comparative efficacy and acceptability of psychosocial interventions for individuals with cocaine and amphetamine addiction: A systematic review and network meta-analysis. *PLoS medicine*, 15(12), e1002715. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6306153/>
5. Jones, C. et al (2020). Patterns and Characteristics of Methamphetamine Use Among Adults – United States, 2015–2018. *MMWR and Morbidity and Mortality Weekly Report*, 69, 317-323. Available at <http://dx.doi.org/10.15585/mmwr.mm6912a1>



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