

# HCR 6: Opioids in Missouri



## Executive Summary

Opioids (e.g., heroin, fentanyl, oxycodone, etc.) are drugs that activate opioid receptors in the brain and body. Activation of these receptors suppresses pain, so opioids are often prescribed in a medical context (e.g., following surgery, or to manage chronic pain). Abuse of prescription opioids and recreational opioids such as heroin and fentanyl has dramatically increased nationwide since 1999, leading to high rates of opioid-related overdoses and deaths. In Missouri, 1.8% of deaths were the result of an opioid overdose in 2018. State-level policies such as naloxone access laws and mandatory prescription drug monitoring programs have been shown to decrease opioid-related overdose deaths overall, but may lead some opioid users to seek deadlier illicit opioids such as fentanyl. HCR 6 would designate September of each year as "Opioid and Heroin Awareness Month" in recognition of the dangers and costs of the abuse epidemic in the state of Missouri.

## Highlights

- The **amount of opioids prescribed has increased threefold nationally, and opioid-related overdose deaths have increased sixfold nationwide and in Missouri** since 1999.
- Illicit recreational opioids such as **heroin and fentanyl account for the largest increase in opioid-related deaths** over the past decade.
- Policies such as **naloxone access laws and prescription drug monitoring programs decrease opioid-related deaths.**
- Some policies that decrease prescription opioid access may cause some opioid users to seek alternatives such as heroin and fentanyl. Policies that make opioid use safer may also lead some opioid users to increase their substance use.

## Limitations

- There are few high-quality studies assessing the effectiveness and safety of long-term (>1 year) opioid use for pain management.
- Several opioid policies, including pill mill laws, have been enacted fairly recently, so studies of their effects on opioid overdose deaths may not yet have enough data to be conclusive.

---

## Research Background

### Recent trends in opioid use and abuse

The Centers for Disease Control and Prevention (CDC) reports that the amount of opioids prescribed nationwide since 1999 has tripled, even though the amount of pain reported by Americans has not changed since then.<sup>1</sup> This trend is not necessarily a problem on its own, since prescription opioids such as oxycodone and hydrocodone (commonly prescribed as OxyContin®

*This science note was prepared by MOST Policy Initiative, Inc. a nonprofit organization aimed to improve the health, sustainability, and economic growth of Missouri communities by providing objective, non-partisan information to Missouri's decisionmakers. For more information, contact Dr. Joshua Mueller, Health & Mental Health Fellow – [josh@mostpolicyinitiative.org](mailto:josh@mostpolicyinitiative.org). This was prepared 3/8/21.*

or Percocet® and Vicodin®, respectively) can be used to effectively manage pain in a variety of circumstances, such as post-surgery recovery, palliative care, or fibromyalgia. However, long-term, high-dose prescription opioid use increases the likelihood of future opioid dependence and overdose, and increases in prescription opioid availability provide more opportunities for diversion of opioids to people without a prescription.<sup>2</sup>

Since 1999, opioid-related overdose deaths in the U.S. have increased approximately sixfold. This trend was initially driven by increases in prescription opioid-related deaths, but in the past decade the largest increases in mortality have been related to the use of heroin and fentanyl, two common illicit recreational drugs.<sup>3</sup> In Missouri 1,132 opioid-related deaths (or 1.8% of all deaths) were recorded in 2018, when the most recent complete data were available.<sup>4</sup> Urban areas in Missouri have higher rates of opioid overdose overall, but urban and rural areas have similar rates of non-heroin overdoses, indicating that synthetic opioids such as fentanyl have become widely available regardless of geographic setting.<sup>5</sup> Males suffer higher rates of overdose deaths than females, and Black males are 3.5x as likely as White males to suffer an opioid overdose death.<sup>6</sup> The Missouri Department of Health and Senior Services reports that opioid-related emergency room visits cost insurers approximately \$117M in 2018, indicating that even non-fatal opioid abuse can be costly.<sup>4</sup>

### **Policy proposals to combat the opioid crisis**

Several policies have been enacted across the country and in Missouri to decrease the number of opioid-related deaths and mitigate the human and financial costs associated with opioid abuse.

#### **Prescription drug monitoring programs and pill mill laws**

The most widely enacted and well-studied opioid policy is a prescription drug monitoring program (PDMP), which is an electronic database that records the dispensation of prescription drugs, including opioids, in near-real time. To date, every state except Missouri has implemented a statewide PDMP, though St. Louis County operates a PDMP and legislation has been proposed to create such a program at the state level (SB 63). “Mandatory” PDMPs (i.e., prescribers must consult the database before dispensation) decrease opioid prescription volume by 5-20%, the number of people receiving prescriptions from multiple prescribers by 33%, and opioid-related deaths by ~1 death/100,000 people.<sup>7</sup> Relatedly, “pill mill” laws, which create specific oversight programs for pain management clinics to curtail opioid prescriptions by high-volume providers, have been shown to decrease the amount of opioids prescribed by as much as 15%, but have not decreased opioid-related deaths.<sup>8</sup>

#### **Naloxone access and Good Samaritan laws**

Two other common policies have been widely implemented to reduce the likelihood of death after an overdose has occurred. Every state has implemented some version of a law allowing dispensation of naloxone, a drug that can reverse the effects of opioid overdose when administered quickly.<sup>9</sup> Relatedly, “Good Samaritan laws” (MO passed theirs in

2017, Sections 537.037, RSMo) protect people who administer care to someone experiencing an overdose from civil or criminal liability, and may also shield those who experience or report the overdose from prosecution related to illegal drug possession or use. While naloxone access and Good Samaritan laws vary in their provisions across states, they have been shown to broadly decrease opioid-related deaths by approximately 10%.<sup>10</sup> Naloxone access laws have been associated with increased opioid-related emergency room visits (by as much as 15%), potentially due to the “moral hazard” phenomenon: when opioid use becomes less risky due to increased naloxone availability, some individuals will compensate by engaging in riskier behavior.<sup>11</sup>

### **Harm reduction programs**

In addition, harm reduction policies can prevent serious health damage associated with opioid use. Medication assisted therapy (MAT) programs use other pharmaceuticals (such as methadone) to reduce opioid dependence, ease withdrawal symptoms, and prevent future overdoses. When implemented with counseling programs and PDMPs, MAT programs have proven to be significantly more effective at preventing overdose deaths than abstinence programs or no treatment at all.<sup>12,13</sup> Syringe access programs, which provide injection drug users with sterile syringes, are another form of harm reduction for some individuals with opioid use disorder. These programs reduce the transmission of infectious diseases such as HIV and hepatitis C among people who use injection drugs, mitigating some of the potential harms associated with opioid use.<sup>14</sup> Missouri is currently considering legislation that would allow syringe access programs to operate in the state (SB 64). Research has found that while needle exchange programs reduce new HIV cases by approximately 20%, they may also increase opioid-related hospitalizations by 5-10%.<sup>11</sup>

### **Socioeconomic conditions and opioid use**

Finally, several studies have attempted to connect broader socioeconomic conditions to opioid use. While there is evidence that worse macroeconomic conditions (higher unemployment, lower wages) are associated with higher opioid use, comprehensive analysis indicates that these conditions are not the main driver of recent opioid use trends.<sup>15</sup> However, states that expanded Medicaid access experienced a 6% drop in opioid overdose deaths after implementation, indicating that broad access to health insurance can prevent opioid-related harms. Methadone-related deaths have increased in Medicaid expansion states by as much as 11%, likely due to increased access.<sup>16</sup> Missouri expanded Medicaid eligibility by ballot initiative in 2020. The COVID-19 pandemic, which has caused negative economic consequences and increased social isolation, has also led to an uptick in opioid use and deaths, worsening the opioid crisis in Missouri further.<sup>17</sup>

### **References**

1. Wilson, N., Kariisa, M., Seth, P., Smith, H. IV, Davis, N.L. (2020) Drug and Opioid-Involved Overdose Deaths – United States, 2017–2018. *MMWR Morb Mortal Wkly Rep*, 69:290–297.

2. Chou, R., et al. (2015) The Effectiveness and Risks of Long-Term Opioid Therapy for Chronic Pain: A Systematic Review for a National Institutes of Health Pathways to Prevention Workshop. *Annals of Internal Medicine*, 162(4): 276-286.
3. National Institute on Drug Abuse. Missouri: Opioid-Involved Deaths and Related Harms. <https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/missouri-opioid-involved-deaths-related-harms>.
4. Missouri Department of Health & Senior Services. Missouri Opioids Information. <https://health.mo.gov/data/opioids/>.
5. Coffey, W., Hunter, A., Mobley, E., Vivolo-Kantor, A. (2019) Rural-Urban Trends in Opioid Overdose Discharges in Missouri Emergency Departments, 2012-2016. *The Journal of Rural Health*, 36(2): 177-186.
6. Missouri Department of Health & Senior Services. Opioid Overdose Deaths By Gender And Race. <https://health.mo.gov/information/news/pdf/opioid-death-by-gender-race.pdf>.
7. MOST Policy Initiative. SB 63: Prescription Drug Monitoring Program. [https://mostpolicyinitiative.org/wp-content/uploads/2020/12/MOST\\_Science\\_Note\\_PDMP.pdf](https://mostpolicyinitiative.org/wp-content/uploads/2020/12/MOST_Science_Note_PDMP.pdf).
8. Kaestner, R., Ziedan, E. (2020) Mortality and Socioeconomic Consequences of Prescription Opioids: Evidence from State Policies. NBER Working Paper Series, No. 26135. <http://www.nber.org/papers/w26135>.
9. Doleac, J.L., Mukherjee, A. (2018) The Moral Hazard of Lifesaving Innovations: Naloxone Access, Opioid Abuse, and Crime. *IZA Institute of Labor Economics Discussion Paper Series*, No. 11489.
10. Rees, D.I., Sabia, J.J., Argys, L.M., Latshaw, J., Dave, D. (2017) With a Little Help from my Friends: The Effects of Naloxone Access and Good Samaritan Laws on Opioid-Related Deaths. NBER Working Paper Series, No. 23171. <http://www.nber.org/papers/w23171>.
11. Packham, A. (2019) Are Syringe Exchange Programs Helpful or Harmful? New Evidence in the Wake of the Opioid Epidemic. NBER Working Paper Series, No. 26111. <http://www.nber.org/papers/w26111>.
12. Ma, J., et al. (2018) Effects of medication-assisted treatment on mortality among opioids users: a systematic review and meta-analysis. *Molecular Psychiatry*, 24: 1868-1883.
13. Lewis, L. et al. (2017) The Opioid Crisis in Missouri: A Call to Action for Physicians, Legislators, and Society. *Missouri Medicine*, 114(6): 440-446.
14. MOST Policy Initiative. SB 64: Needle Exchange Programs. [https://mostpolicyinitiative.org/wp-content/uploads/2020/12/MOST\\_Science\\_Note\\_NEPs.pdf](https://mostpolicyinitiative.org/wp-content/uploads/2020/12/MOST_Science_Note_NEPs.pdf).
15. Maclean, J.C., Mallatt, J., Ruhm, C.J., Simon, K. (2020) Economic Studies on the Opioid Crisis: A Review. NBER Working Paper Series, No. 28067. <http://www.nber.org/papers/w28067>.
16. Kravitz-Wirtz, N. et al. (2020) Association of Medicaid Expansion With Opioid Overdose Mortality in the United States. *JAMA Network Open*, 3(1): e1919066.
17. MOST Policy Initiative. COVID-19, Mental Health, & Substance Abuse. [https://mostpolicyinitiative.org/wp-content/uploads/2020/12/COVID\\_and\\_Mental\\_Health\\_Science\\_Note.pdf](https://mostpolicyinitiative.org/wp-content/uploads/2020/12/COVID_and_Mental_Health_Science_Note.pdf)