



**JULY 2021**

**HARM REDUCTION AND  
THE PREVENTION OF  
OPIOID OVERDOSE  
DEATHS IN KANSAS**

Safe Streets Wichita

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# ABOUT THE REPORT

In October of 2020, Safe Streets Wichita received an Overdose Data 2 Action (OD2A) grant from the Kansas Department of Health and Environment (KDHE) to implement community-driven prevention initiatives that reduce opioid misuse and overdoses in Wichita and Sedgwick County. Under the leadership of Ngoc Vuong, Safe Streets Wichita developed *Harm Reduction and the Prevention of Opioid Overdose Deaths in Kansas*, a report that helps educate policymakers and community members on how Kansans can work together to address the opioid epidemic. Due to our work in substance misuse prevention and harm reduction, Safe Streets Wichita received another OD2A grant.

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# ABOUT SAFE STREETS WICHITA

The mission of Safe Streets Wichita is the prevention of drug-related harms through community collaboration, the advancement of health equity, and the promotion of mental wellness and community well-being.

We acknowledge that every community experiences substance-related harms. Some communities experience a disproportionate amount of harm. Our strategies center those impacted and systemically underserved due to poverty, class, racism, social isolation, past trauma, sexual orientation, gender identity, and other social inequities which affect people's vulnerability and capacity to effectively deal with substance-related harms. We focus on addressing disparities and promoting prevention for youth and equity for all with lived experiences.

**S A F E S T**

Uniting Neighbors Against Crime

# INTRODUCTION

## The Nationwide Story

Opioid overdose deaths have emerged as one of the most significant public health crises in the United States. Since 1999, drug overdose fatality rates have more than tripled, leading to the deaths of more than 841,000 Americans (Altekruse et al., 2020; WONDER, 2020). In recent years, an overwhelming majority of drug overdose deaths have been attributed to opioids, including prescription opioids, heroin, and synthetic opioids such as fentanyl. In 2019 alone, over 70% of drug overdose deaths were attributed to opioids--these deaths have been primarily driven by fentanyl (Mattson et al., 2021; Thakur et al., 2020). Between September 2019 to September 2020, synthetic opioid fatalities surged by 55%, and fatalities from other drugs also increased significantly due to laced concentrations of fentanyl, resulting in more than 90,000 deaths and representing the highest number of drug overdose deaths recorded in a 12-month time period. (National Vital Statistics System, 2021). The repercussions of the opioid epidemic are widespread, affecting all aspects of society. According to McCance-Katz (2018), 2.1 million Americans have an opioid use disorder (OUD) and 11.8 million Americans misused opioids. In recent years, opioid overdose deaths have increased at significantly disproportionate rates among Black and Hispanic communities, a reflection of the relation between health inequities, social injustice, and the opioid epidemic (Drake et al., 2020; Larochelle et al., 2021; Powell, 2021).

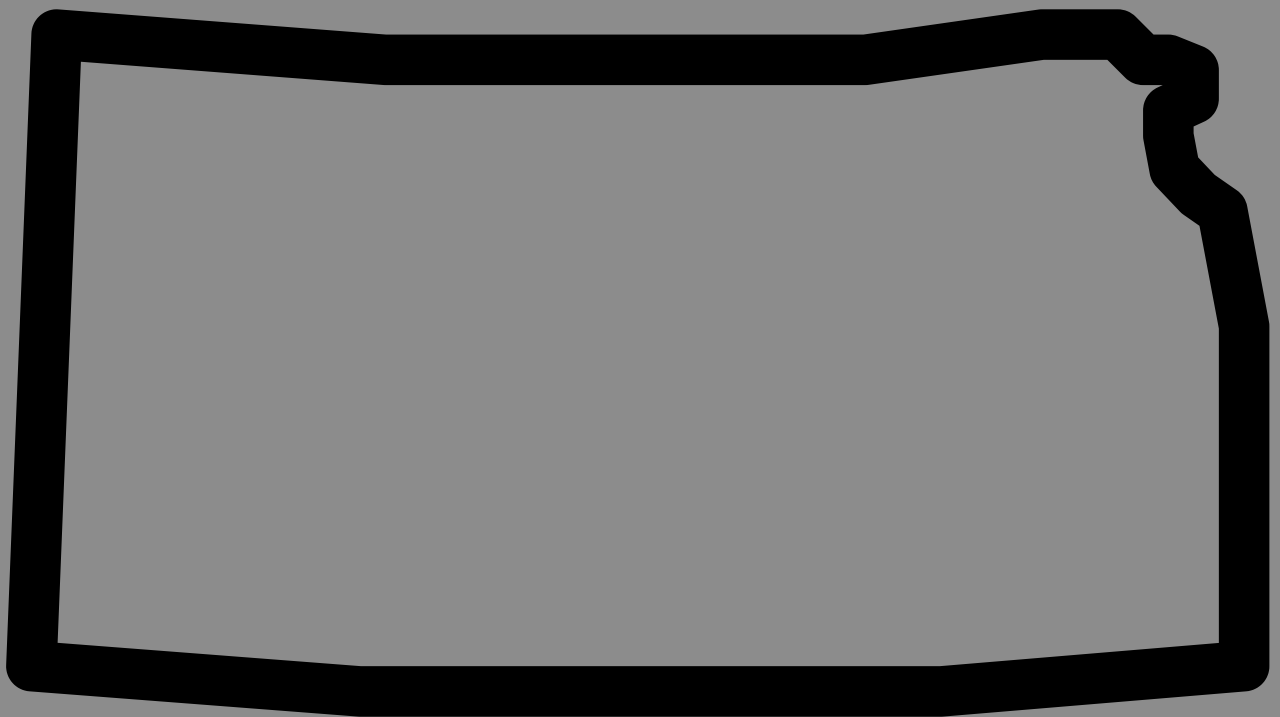
Furthermore, the economic loss of opioid use disorder (OUD) and opioid overdose fatalities in the United States--measured through loss in productivity and quality of life, behavioral health care expenses, and criminal justice involvement--was estimated to be \$471 billion and \$550 billion, respectively (Luo, Li, & Florence, 2021). As of 2017, 240,000 children had lost a parent to an opioid overdose, 10,000 children had a parent in long-term imprisonment due to opioid-related crimes, and 325,000 children were removed from their homes and placed in foster care or sent to live with relatives as a result of their parents' opioid misuse issues (United Hospital Fund, 2019). Moreover, it is estimated that one in 14 high school students currently misuse prescription opioids (Jones et al., 2020).



## The Kansas Story

Kansas is not an exception to the repercussions of the opioid epidemic. Increases in opioid overdose deaths across the state of Kansas underlie the need for comprehensive policy and legislative/administrative action. In 2017, there were 144 opioid overdose deaths in Kansas. Since then, the number of annual opioid overdose deaths increased to 156 in 2018 and to 184 in 2019 (Kaiser Family Foundation, 2021). From 2016 to 2019, the age-adjusted opioid overdose death rate increased from 5 deaths per 100,000 Kansans to 6.4 deaths per 100,000 Kansans (Kansas Prescription Drug and Opioid Advisory Committee, 2020). Preliminary data from the National Center for Health Statistics indicated that drug overdose deaths from October 2019 to October 2020 increased from 366 to 442 in Kansas, a 20.8% change (Ahmad, Rossen, & Sutton, 2021). At least 228, or 51.6%, of drug overdose deaths in Kansas during this time involved opioids (Ahmad et al., 2021). It should be noted that opioid overdose deaths both statewide and nationwide tend to be underreported. Between 2016 to 2018, over 9,000 Kansans were admitted to an emergency department for an opioid-related incident (Kansas Hospital Association, n.d.). The same data found that there were over 4,000 inpatient admissions for opioid-related concerns in 2018. Inpatient admission related to opioid use disorder appeared to be a steady trend for the prior two years as well, with over 8,000 people admitted to a Kansas hospital between 2016 and 2017.

In 2017, Kansas providers wrote 69.8 opioid prescriptions for every 100 persons, compared to the national average of 58.7 for every 100 persons (National Institute on Drug Abuse, 2020). In 2016, 76.9 prescriptions for opioids were prescribed per 100 Kansas residents. This is a decrease from the highest rate in Kansas in 2012 of 90.3 prescriptions per 100 residents. Prescribing rates vary significantly by county in Kansas. In 2016, opioid prescribing rates in Kansas ranged from 0.3 to 184.8 prescriptions per 100 residents depending on the county (Kansas Pharmacy Foundation, 2017).





## Systems-Level Barriers to Opioid Overdose Death Prevention in Kansas

A wide array of strategies are being implemented across the United States to reduce the number of overdose incidents and deaths. However, Kansas has been one of the last states to research, evaluate, and implement these effective strategies. In 2017, Kansas was the next to last state in the nation to implement a naloxone bill which expanded access to the emergency drug and allows pharmacists to dispense naloxone at their discretion. No other significant harm reduction policies have been implemented since 2017. Barriers to opioid overdose prevention and harm reduction include the following:

- Lack of awareness and understanding due to the complexity of opioid use disorder (OUD) and opioid overdoses.
- Relative lack of real-time data on suspected overdoses across jurisdictions within Kansas.
- Misconceptions of harm reduction (“it will increase crime”).
- Stigma and social ramifications (“addiction is a moral failure, not a disease”).
- Misunderstanding of legal/ethical repercussions.
- Undervaluing the benefits of prevention and harm reduction.
- Concerns over capacity and sustainability due to inaccessibility of resources, including lack of grants and government funding.
- Legislative/regulatory barriers and lack of political support.

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Harm reduction is a public health approach to reduce negative consequences associated with substance use and misuse. It is to uphold dignity, respect, and compassion. Acceptance that people who use substances are entitled to basic human rights and services are tantamount to harm reduction. Harm reduction can help reduce the harmful effects of substance use and ensure that people with substance use disorders receive the help they need. Under harm reduction, decreases in overdose morbidities and mortalities, reductions in underage substance use, and improved quality of life and wellbeing for the individual and community are markers of success (Harm Reduction Coalition, n.d.).

The severity of the opioid epidemic warrants cost-effective, evidence-based policies that save lives, reduce the strain on our criminal justice and health care systems, and enhance public safety. Based on an in-depth analysis of the literature on the reduction of opioid overdose deaths, we recommend these harm reduction strategies: (1) increased access and utilization of naloxone; (2) medication-assisted treatment (MAT), particularly in criminal justice settings; (3) fentanyl contamination testing; (4) syringe services programs (SSPs); and (5) 911 Good Samaritan Laws (GSLs). The complexity of the opioid epidemic warrants a multifaceted, integrated approach. Strategies to reduce opioid overdose deaths should not be implemented in isolation but in conjunction with each other as a whole. Collaboration across stakeholders, from policymakers to prevention coalitions, from health care professionals to people with lived experience, and from first responders to business and community leaders, will be instrumental in reducing opioid overdose deaths in Kansas and increasing the access and quality of care for Kansans with an opioid use disorder.

# SOLUTIONS TO REDUCE OPIOID OVERDOSE DEATHS IN KANSAS

## **Increase Accessibility and Utilization of Naloxone**

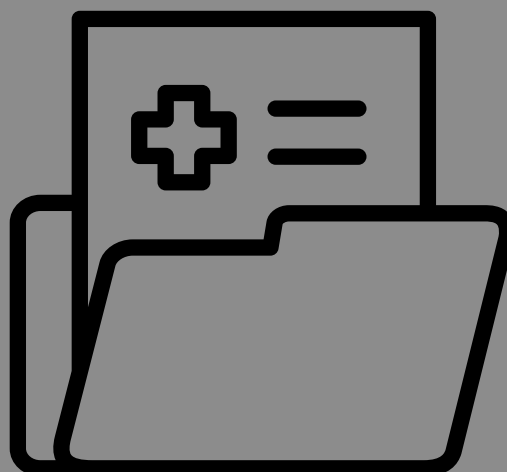
Naloxone (trade name: Narcan®) is an FDA-approved medication that is used to reverse an opioid overdose. Naloxone rarely causes side effects, is not psychoactive, and has little potential for misuse or dependency (Drug Policy Alliance, 2012, 2020; Hanson, Porter, Zöld, & Terhorst-Miller, 2020; Wermeling, 2015). Naloxone has been used for many years by emergency medical services, first responders, and community-based overdose prevention programs. Current efforts have focused on expanding access to naloxone through prescribing and pharmacy-based distribution. In 2017, Kansas passed KAR-68-7-23, which allowed first responders to administer naloxone to people who are experiencing overdose symptoms. The legislation also allows pharmacists to dispense naloxone at their discretion to patients, family members and bystanders, law enforcement and emergency medical services (EMS), and school nurses, pursuant to a pharmacist-specific statewide protocol (Kansas Board of Pharmacy, n.d.).

While there has been an increase in naloxone dispensing, many barriers to the accessibility of naloxone in Kansas still exist. These barriers include the high cost of naloxone (Gupta, Shah, & Ross, 2016), lack of access to naloxone in rural areas (Kansas Board of Pharmacy, 2020), and the fact that only 1 in 4 Kansas pharmacists have signed the statewide naloxone protocol (Kansas Board of Pharmacy, 2020). The CDC reported in 2018 that just one naloxone prescription was dispensed for every 69 high-dose opioid prescriptions. Naloxone saves lives but remains underutilized. People who witness an opioid overdose often do not administer naloxone due to liability fears. The following strategies can increase the accessibility and utilization of naloxone:

- Expand and ensure funding for opioid overdose prevention and education programs that include the training and distribution of naloxone.
- Protect first responders and community members from civil or criminal liability for participating in naloxone programs or for emergency administration of naloxone by supporting appropriate legislation.
- Support uniform training of first responders on opioid overdose prevention and management and on the proper administration of naloxone.
- Shield first responders from liability should the administration of naloxone be ineffective.
- Encourage doctors to prescribe naloxone to opioid pain patients and better educate their patients about the risks inherent to opioids.
- Encourage pharmacists to sign the Kansas Board of Pharmacy naloxone protocol and become naloxone dispensers.
- Allocate funds for the provision and distribution of no-cost naloxone to the community and first responders.
- Help remove cost-sharing and administrative barriers for individuals who seek a naloxone prescription.

## **Facilitate Access to Medication-Assisted Treatment (MAT) After Incarceration**

Substance use disorders (SUD) are highly prevalent among incarcerated people. While there is variance in the literature on the exact percentages and rates of SUDs among individuals involved in the criminal justice system, it is estimated that 58% of state prisoners and 63% of sentenced jail inmates met the medical criteria for a SUD compared to 5% of the general population (Bronson, Stroop, Zimmer, & Berzofsky, 2020). In another study, upwards of 65% of incarcerated individuals met the medical criteria for a SUD (The National Center on Addiction and Substance Abuse at Columbia University, 2010), and 15% of individuals in prisons and jails met the medical criteria for an opioid use disorder (National Academies of Science, Engineering, and Medicine, 2019). There exists a significant unmet need statewide and nationwide for adequate substance use treatment for incarcerated and formerly incarcerated individuals with an OUD. In Kansas, 75% of individuals who are released from prison need substance use treatment and recovery programming; just half of those needs were met (Zmuda, 2019).





The repercussions of opioid use disorder, especially when left untreated, on justice-involved individuals are overwhelmingly negative. 75% of formerly incarcerated individuals with an OUD relapsed within the first three months of release (Fox et al., 2015). Formerly incarcerated individuals are 10 to 40 times more likely to die from an opioid overdose than the general population (Substance Abuse and Mental Health Services Administration, 2019). The significantly increased likelihood of recidivism as well as opioid-related overdose and mortality for justice-involved individuals with an OUD underlies the need for more robust, cost-effective behavioral health care within criminal justice settings.

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Medication-assisted treatment (MAT) entails the utilization of FDA-approved medications in coordination with the provision of psychosocial interventions for the treatment of substance use disorders (Deyo-Svendsen et al., 2020). Three medications have been approved by the FDA to treat opioid use disorder: (1) methadone; (2) buprenorphine; and (3) naltrexone. These medications act on opioid receptors in the brain in different ways that are beneficial in treatment. The effective provision of MAT can reduce the risk of opioid misuse, nonfatal and fatal opioid overdoses, criminal activity, and re-entry into the criminal justice system (Bone et al., 2018; Malta et al., 2019). Furthermore, MAT can increase the likelihood that individuals previously involved in the justice system participate and engage in treatment for their opioid use disorder following their release (Substance Abuse and Mental Health Services Administration, 2019). Every dollar spent on MAT programs can yield up to \$4 to \$10 in savings for society, an indication of its cost-effectiveness (Center for Health Program Development and Management, 2007).



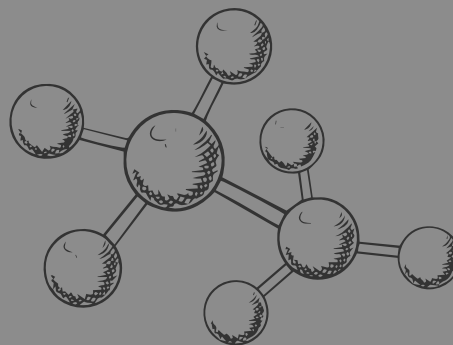
Despite the strong empirical support for methadone, buprenorphine, and naltrexone in the treatment of opioid use disorder, the majority of jails and prisons in the United States do not offer medication-assisted treatment (Malta et al., 2019). Only 5% of individuals with an OUD who are involved in the criminal justice system receive MAT (National Academies of Science, Engineering, and Medicine, 2019). And only two states--Rhode Island and Vermont--offer all three FDA-approved medications for the treatment of opioid use disorder to state inmates (Prescription Drug Abuse Policy System, 2019). Most states significantly limit MAT or do not offer it in their correctional facilities. Therefore, we recommend that policymakers consider how the following strategies can increase access to medication-assisted treatment in order to reduce illicit opioid use, increase the likelihood of engagement with substance use treatment, and reduce opioid overdoses and deaths:

- Ensure that correctional facilities in Kansas have the ability to systematically screen for substance use disorders, including history of withdrawal.
- Facilitate access to and provision of MAT programs in correctional facilities and upon release.
- Ensure that correctional facilities have sufficient infrastructure to track treatment outcomes of medications for opioid use disorder (MOUD).
- Help facilitate close collaboration between Medicaid agencies, state substance use and mental health agencies, and other state and local entities to ensure seamless linkages to community-based OUD treatment and other services.
- Review Medicaid suspension/termination rules.

## Fentanyl Contamination Testing

There has been an increase in drugs contaminated by illicitly-manufactured synthetic opioids such as fentanyl and carfentanil. (CDC, 2020; Mattson et al., 2021). Fentanyl is 50 to 100 times stronger than morphine and carfentanil (otherwise known as “elephant tranquilizer”) is 10,000 times more potent than morphine. (Volpe et al., 2011; Zawiliska et al., 2021). Contamination has been found in heroin, methamphetamine, cocaine, and counterfeit illicit tablets such as oxycodone and Xanax. Fentanyl test strips (FTS) are utilized in urine drug screens and are used off-label for testing illicit drug sources (Amlani, 2015). Education is needed to effectively use FTS, and there are issues with false positive results. (Bergh et al., 2021) However, changes in drug use behavior have been observed when FTS have found positive samples (Goldman et al., 2019; Peiper et al., 2019). The following strategies can help identify lethal concentrations of fentanyl and other illicit substances and therefore reduce opioid overdoses and deaths:

- Allow and facilitate the provision of fentanyl test strip programs.
- Expand and ensure funding for fentanyl test strip programs that include the procurement, training of proper usage, and distribution of fentanyl test strips for testing illicit drug samples.



The opioid epidemic has major repercussions beyond the number of overdose hospitalizations and deaths. The last decade has seen increases in injection drug use driven primarily by opioid misuse among people between the ages of 20 to 39 from rural areas (Liang & Ward, 2018; Zibbell et al., 2018). Unsafe injections of opioids have been implicated in the spread of bloodborne infectious diseases, and in turn, have reversed the trend of notable decreases in viral hepatitis and human immunodeficiency virus (HIV) infections in the United States (Ko et al., 2019; Holtzman, Asher, & Schillie, 2021; Patrick et al., 2017; Zibbell et al., 2018). Following a major decline of newly diagnosed hepatitis C (HCV) cases from 2014 to 2016, HCV cases have since increased from 6.95 cases to 9.73 cases per 100,000 Kansans between 2016 to 2017 (Opioid & Health Indicators Database, 2021). Between 2017 to 2018, new HIV diagnoses increased from a rate of 5 cases to 6.4 cases per 100,000 Kansans (Opioid & Health Indicators Database, 2021). Infectious diseases compound the health, social, and economic impacts of opioid overdoses. It is estimated that lifetime treatment costs exceed \$200,000 for someone living with HCV and \$400,000 for someone living with HIV (Razavi et al., 2013; Bingham et al., 2021). Preventing infectious diseases, increasing linkage to behavioral health care, and ensuring public safety are goals in alignment with reducing opioid overdoses in Kansas. While the best way to reduce the risk of infectious diseases is to not inject drugs in the first place, many people refuse or are unable to do so, particularly due to the lack of access to effective substance use treatment. In that regard, syringe services programs (SSPs), otherwise known as needle exchange programs (NEPs), are a cost-effective strategy that could meaningfully reduce the number of bloodborne infectious diseases and opioid overdoses.

Syringe services programs (SSPs) help “provide access to sterile needles and syringes” in order to “facilitate safe disposal of used needles and syringes,” protecting first responders and community members from needlestick injuries (Teshale et al., 2019, p. 2). SSPs are able to reach people who inject drugs (PWID) in a way that traditional substance use treatment programs may be unable to, increasing the likelihood that individuals with opioid misuse issues access substance use treatment. Contrary to concerns that SSPs increase illicit substance use, crime, and the number of used needles discarded in public locations, research has found that SSPs do not increase illicit substance use, criminal activity, or lead to increased presence of needles in communities (Adams, 2020; Aspinall et al., 2014; The Pew Charitable Trusts, 2021). SSPs can significantly reduce opioid overdose deaths through the promotion of safe practices and providing substance use treatment (Fernández-Viña et al., 2020). Furthermore, SSPs have demonstrated cost effectiveness, especially when coupled with other harm reduction strategies, in helping reduce the transmission of HIV and HCV (Aspinall et al., 2014; Fernandes et al., 2017; Ijioma et al., 2021).

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Unfortunately, Kansas is one of the last states in the country to prohibit the provision of syringe services programs. The provision of clean needles through SSPs could be considered as the distribution of paraphernalia under subsections (c) and (d) of KSA 21-5710, which prohibits “the manufacturing or distribution of paraphernalia when one “knows or under circumstances where one should know” the paraphernalia will be used to inject illegal drugs” (Kansas Prescription Drug and Opioid Advisory Committee, 2020, p. 21). In addition to reducing opioid overdose deaths, the following strategies can reduce the spread of bloodborne infectious diseases, promote public safety, and increase linkage to substance use treatment:

- Local health departments and the Kansas Department of Health and Environment should request a consultation from the CDC to determine whether certain counties and the state of Kansas at large are at risk for significant increases in HIV and hepatitis outbreaks due to injection drug use (IDU).
- Allow and facilitate the provision of comprehensive SSPs to increase access to substance use treatment and improve treatment outcomes; reduce opioid overdoses; and reduce the transmission of infection.
- Collaborate with law enforcement and first responders, faith-based communities, prevention and treatment organizations, those in the recovery community, media, and other key stakeholders, to (1) promote safe needle disposal and injection drug use (IDU) practices and (2) increase awareness and understanding of SSPs.

Accidental, or unintentional, drug overdoses have become a leading cause of preventable death in the United States. In an overdose crisis situation, the potential for lifesaving treatment is often deterred because bystanders avoid calling for medical help due to fear of prosecution for affiliation with a drug-related event or crime, including the fear of drug-induced homicide prosecutions (Peterson et al., 2019). As a result of the sharp increases in opioid overdoses that are not reported to first responders, 48 jurisdictions (47 states and Washington D.C.) have passed Good Samaritan Laws (GSLs). The enactment of Good Samaritan laws has helped create immunities and other legal protections for people who call first responders in the event of a drug overdose, although the extent and circumstances of legal protections vary by state (Prescription Drug Abuse Policy System, 2018). Nevertheless, a Congressional report from the United States Government Accountability Office (2021) found that states that have enacted Good Samaritan Laws have lower rates of opioid overdose deaths.



Although every state has a Good Samaritan Law in place, not all have a comprehensive Good Samaritan 911 Law which helps provide legal protections and immunities for people who call 911 in the event of a drug overdose. Thus, the willingness to call 911 in the event of an opioid overdose situation remains a challenge. This is primarily due to the lack of awareness and understanding of comprehensive GSLs-- few states allocate funding toward educating the public about GSLs. As such, people who witness an opioid overdose often do not call 911 out of fear of arrest for possession of illicit substances. Furthermore, there may be a lack of awareness of a GSL among first responders. However, when community members are informed of GSLs, they are more likely to call 911 in the event of an overdose situation (Jakubowski et al., 2018; Watson et al., 2018). The enactment of a Good Samaritan law should therefore be coupled with statewide efforts to increase knowledge regarding the protections of a GSL, which would help to alleviate fears of calling for medical help and save lives.

While a comprehensive Good Samaritan law can help better ensure that people who have overdosed on opioids, or any substance, are more likely to receive emergency care, Kansas is one of the last states in the country to not have a Good Samaritan law for drug overdoses (GAO, 2021). We therefore recommend policymakers to consider the following:

- Consider a comprehensive Good Samaritan 911 law in Kansas.
- Fund prevention and education efforts focused on increasing awareness and knowledge of Good Samaritan Laws and their legal protections among law enforcement, first responders, health care professionals, and the general public.

# CONCLUSION

In summary, based on a literature review on the effectiveness of various strategies to reduce and prevent opioid overdose deaths in Kansas, we recommended five harm reduction interventions: (1) increase accessibility and utilization of naloxone; (2) medication-assisted treatment (MAT) for justice-involved individuals; (3) fentanyl contamination testing; (4) syringe services programs (SSPs); and (5) Good Samaritan 911 laws. These strategies were selected based on their empirical support, especially as it pertains to addressing opioid overdose deaths, increasing public safety and public health, reducing costs, and facilitating access to substance use treatment. Moreover, these strategies were selected based on an identification of current barriers to efforts that address opioid overdose deaths. For optimization, these strategies should not be implemented in isolation but in coordination with each other. Furthermore, communities and leaders must be cognizant of addressing supply and demand factors that influence opioid overdoses, unintended consequences of policies designed to address the opioid epidemic, and the crucial role social determinants of health play in the proliferation of opioid use disorder (OUD) and opioid overdoses.



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