COVID-19 AND THE RURAL OPIOID EPIDEMIC
RECOMMENDATIONS TO IMPROVE HEALTH IN ILLINOIS

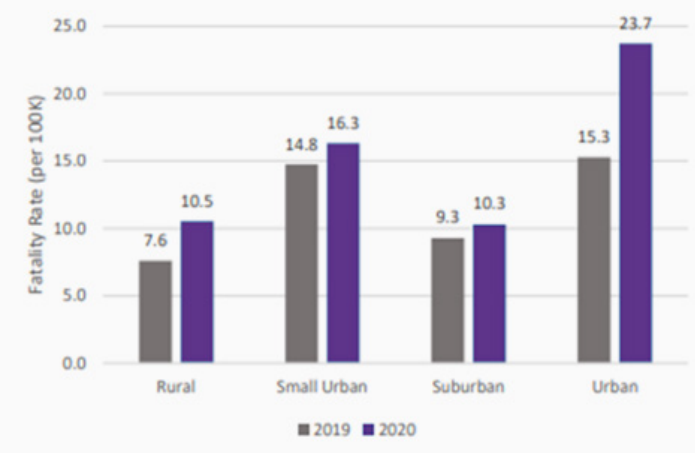
Rural Illinois is in need of sustained, sweeping change to improve the social, economic and environmental factors which determine health outcomes. Illinois' rural communities suffer from "The Five D's:" Rural communities start at a ***DISADVANTAGE*** *due to experiencing food, healthcare, social service and data* ***DESERTS****, as well as organizational and technological* ***DISCONNECTION****. Rural regions experience similar* ***DISPARITIES*** *to low-income urban areas but experience even fewer* ***DEVELOPMENT*** *opportunities than their urban counterparts. These recommendations aim to improve health equity in rural Illinois.*

PRE-EXISTING CONDITIONS

Illinois has seen a considerable increase in fatal opioid overdoses in the last decade. In 2019, Illinois recorded 2,219 opioid overdose deaths, more than twice the amount of motor vehicle crash deaths in the same year[1,2,3] And while every area of the state faces opioid misuse, overdose deaths are a significant issue in rural counties. According to the Illinois Department of Public Health, nine of the 20 Illinois counties with the highest opioid fatality rate are in rural areas.[4]

Lawmakers and the media have devoted significant coverage to the opioid epidemic and its relationship to the "diseases of despair," which include overdoses (mostly from opioids), suicides and deaths from alcoholic liver disease and cirrhosis. According to the American Journal of Managed Care, the rise in these "diseases of despair" coincide with a drop in life expectancy in rural America, predominately driven by 25-to-44-year-olds and are largely due to opioid overdoses.[5] Over the last 35 years, deaths from alcohol, drugs and suicide have skyrocketed, especially among those under age 50. As Figure 1 shows, from Q1-Q3 2019 to Q1-Q3 2020, the opioid fatality rate increased by 55 percent in urban counties, 39 percent in rural counties and 11 percent in both small urban and suburban counties in Illinois.[6]

FIGURE 1: Illinois Opioid Fatality Rate by County Grouping



RECOMMENDATIONS

- Increase the availability of Medications for Opioid Use Disorder (MOUD) centers, including virtual treatment and remote counseling options.
- Engage justice-involved populations to reduce opioid use disorder.
- Sustain and dramatically expand harm reduction services into rural areas to prevent overdoses and the spread of infectious diseases.

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ABOUT THE RURAL HEALTH SUMMIT

Southern Illinois University (SIU) Medicine Department of Population Science and Policy, SIU Paul Simon Public Policy Institute, SIU Medicine Center for Rural Health and Social Service Development and University of Illinois Chicago School of Public Health continued the work of the 2018 Illinois Rural Health Summit and convened rural stakeholders for 11 discussion forums in late 2020 to better understand and address the COVID-19 pandemic in rural Illinois. Using the 2019 report on the most pressing issues facing rural Illinois as a foundation, 80 leaders from 55 organizations in diverse fields such as public health, health care, academia, industry and government met virtually to discuss how the pandemic is creating new challenges and fostering new innovation. Forums focused on rural economic development, health workforce, children's growth and development, nutrition and fitness, mental health, opioids, public health systems, caring for an aging population and healthy housing. Discussion forums participants were also invited to an additional, overarching session to identify common challenges and synthesize impactful solutions. The information, anecdotes and issues raised in this report come from those conversations.

AN AGING POPULATION | MENTAL HEALTH | PUBLIC HEALTH SYSTEMS | NUTRITION & FITNESS | CHILDREN'S GROWTH & DEVELOPMENT | RURAL HEALTH WORKFORCE | OPIOIDS | HEALTHY HOUSING | ECONOMIC DEVELOPMENT

Opioids cause unique challenges to individuals living in rural communities. Rural areas have more community members working in jobs such as farming or mining with higher risks of injury and a subsequent need for pain management. Opioids are more commonly prescribed in rural areas as rural individuals tend to have limited access to alternative pain management techniques such as physical therapy.[7] Rural communities also have less access to Medications for Opioid Use Disorder (MOUD) centers, which are considered the gold standard for treating substance use disorder. MOUD combines medications such as buprenorphine, methadone or naltrexone with counseling and behavioral therapies to provide a "whole-patient" approach to treat addiction and help sustain long-term recovery.[8] A Congressional Research Service report notes that 45 percent of US counties without a MOUD center are classified as rural.[9] This lack of MOUD centers poses transportation and adherence challenges for people who need addiction recovery resources.

FIGURE 2: Map of Registered Naloxone Distribution Sites

Harm reduction programs are an important tool to combat the opioid epidemic. Some harm reduction strategies reduce the likelihood of fatal overdoses and result in users who are more likely to enter a treatment program. For example, needle exchange programs reduce the transmission of bloodborne diseases such as STIs, HIV, and Hepatitis B or C. Significant evidence shows that removing contaminated needles from circulation decreases the spread of certain viral infections. Naloxone, a medicine that rapidly reverses opioid overdose, reduces the likelihood of overdose fatality. However, rural areas in Illinois have limited access to both harm reduction programs and naloxone. Figure 2 shows the concentration of naloxone distribution sites in metro areas.[10]

DEFINING "RURAL" IN ILLINOIS

Of Illinois' 102 counties, 62 are considered non-metropolitan. 1.5 million Illinois residents reside in nonmetropolitan and/or rural regions. In an effort to be inclusive, this report uses "rural" to describe non-metropolitan counties.

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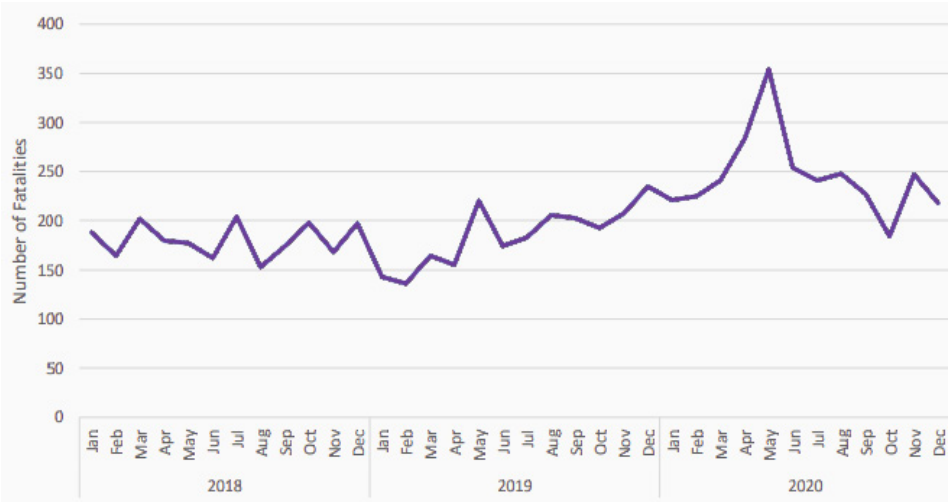
The justice-involved population is at an especially elevated risk of opioid overdose. Individuals who are leaving jails and prisons are between 10 and 40 percent more likely to die of an opioid overdose than the general population. These individuals are most at risk three to four weeks after release.[11] The increased risk can be attributed to a loss of tolerance to the drugs during incarceration, limited access to Medication-Assisted Treatment (MAT) and naloxone when released and disruption to the inmates' healthcare and social supports.[12] Providing MOUD in correctional facilities reduces overdose deaths, recidivism and opioid use after incarceration.[13,14,15] The Illinois Criminal Justice Information Authority (ICJIA) released a study in 2018 that focused on Opioid Use Disorder (OUD) and Illinois jails.[16] The ICJIA survey of 36 jails found that 22 percent of jail respondents did not have a protocol for responding to withdrawals and 61 percent did not offer a medical detox to manage the physical symptoms of withdrawal.[17] Only 22 percent of the responding jail administrators reported offering MAT to detainees.[18]

THE PANDEMIC'S IMPACT

COVID-19 has worsened the economic and social factors that lead to increased opioid use and challenges to access treatment. According to preliminary data, there was a 32.7 percent increase in opioid overdose deaths from 2019 (2,219) to 2020 (2,904).[19] National overdose rates show a significant increase in monthly overdoses coinciding with many states' stay at home orders in March, April and May 2020. Figure 3 shows this trend holding true in Illinois with those months resulting in the highest number of opioid overdose deaths in three years. This increased and accelerated rate of overdoses may be due to many factors: people who use drugs sought out alternative and less familiar drug sources as national border shutdowns impacted drug supplies, social distancing regulations cut off people who use drugs from individuals who could provide emergency services or administer naloxone in the case of an overdose and people who use drugs were isolated from important social support systems.[20,21] These issues may have led to an increased rate of relapse as well.[22]

FIGURE 3: Illinois Three-Year Opioid Death Rate



Opioid treatment centers have also been impacted by the pandemic. Many treatment centers reduced staff and restricted patient capacity which limited the ability to treat individuals who use drugs.[23] In addition to decreased capacity, treatment centers also faced new financial constraints during the height of the pandemic. Because fewer patients received treatment, centers generated less revenue and furloughed staff.[24] Federal agencies eased some regulations to allow greater access in response to restricted access and staffing issues. Stay-at-home orders affected MOUD patients who were required to visit a provider daily for a dose of methadone. In response, the Substance Abuse and Mental Health Services Administration (SAMHSA) allowed treatment programs to provide a take-home prescription of two to four weeks of methadone for patients who showed symptoms, were quarantined or diagnosed with COVID-19.[25] In March 2020, the Federal government increased flexibility of telehealth rules as well to allow the initiation of buprenorphine via telehealth.[26] Additionally, the Drug Enforcement Agency (DEA) relaxed telehealth restrictions for buprenorphine prescriptions.[27]

Suspended operations, increased demand and increased stress and burnout among staff disrupted and destabilized harm reduction organizations during the pandemic. A survey by the National

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Council for Behavioral Health found that 43 percent of national syringe service programs, community-based prevention programs that can provide a range of services reported decreased service availability and 25 percent reported one or more of their sites closed due to the pandemic.[28] Since the beginning of the pandemic, government-funded needle exchange programs cut services and closed exchange sites resulting in a 78 percent reduction in the amount of needles exchanged from March 2019 to March 2020. The result has left users to either reuse or share needles, raising the likelihood of transmission of bloodborne infections.[29] In response to the pandemic, many organizations began delivering prepackaged harm reduction kits or offering curbside pickup options to reduce contact.[30,31]

Additionally, the country is facing a shortage of naloxone. In August 2021, Pfizer announced a manufacturing issue that caused a shortage. The Buyer's Club, the single largest distributor in most states, relied solely on Pfizer for naloxone at a specially negotiated price.[32] Harm reduction groups, which could previously purchase naloxone from Pfizer to create kits that cost about $2.50 each, are now forced to pay $37 for a different generic medication or $75 for Narcan, a name brand overdose medicine. Many harm reduction groups cannot afford to purchase the naloxone they need. Pfizer expects to be fully stocked again by the end of 2021.[33]

Based on the surge of opioid overdose deaths during the pandemic, Congress allocated $30 million in the American Rescue Plan for harm reduction services, marking the first time the federal government has provided funding for such services.[34] Also, the draft Labor, Health and Human Services, Education and Related Agencies Funding Bill proposes a nearly $70 million investment in harm reduction efforts and would eliminate the federal ban on syringe service program funding.[35] In an effort to reduce opioid overdose deaths, the State of Illinois passed the Opioid Overdose Reduction Act in January 2021.[36] This law ensures that a person seeking medical assistance for an opioid overdose will not be criminally charged or prosecuted. Proponents of the law hope that more people will contact 911 when those around them suffer an opioid overdose, potentially saving lives.

Illinois has also worked to expand access as part of the 2021 State Overdose Action Plan (SOAP). State agency workgroups and members of the Governor's Opioid Overdose Prevention and Recovery Steering Committee reviewed and prioritized recommendations, resulting in $13 million invested by the Department of Human Services to expand access to naloxone, help organizations investing in community outreach to connect with individuals at risk for overdose and augment the work of hospitals treating patients experiencing overdose.

Providers in Illinois' rural communities have also had to innovate to address the challenges posed by the pandemic. Southern Illinois University School of Medicine (SIU SOM) has led innovation with various programs working to address the opioid epidemic. SIU Medicine Center for Rural Health and Social Service Development (CRHSSD) received a Health Resources Services and Administration (HRSA) grant to develop a Certified Peer Support Specialist Pipeline Program and a Regional Leadership Center for Opioid Prevention. SIU SOM's CRHSSD and SIU Medicine Department of Population Science and Policy have partnered with the Illinois Department of Human Services to better equip and analyze the Prescription Drug Monitoring Program. SIU Medicine is also the only ECHO (Extending Community Health Outcomes) hub in downstate Illinois. The hub provides training sessions for rural physicians on topics including how to better manage opioid use disorder and MAT clinics. Finally, Southern Illinois University Medicine and the University of Chicago Medicine were awarded a grant from the National Institute on Drug Abuse to investigate the factors that contribute to disease spread and treatment among people who inject drugs. The grant is also helping to develop interventions to expand services to reduce disease transmission, identify and treat those infected and increase linkages to addiction treatment and medical care.[37]

Discussion forum participants also identified innovations happening at a variety of police departments that are creating safe passage programs. One example that was specifically discussed was McLean County's mental health and substance use facility. The facility offers free training to police officers, free naloxone and operates a needle exchange program.

2021 RURAL HEALTH SUMMIT POLICY RECOMMENDATIONS:

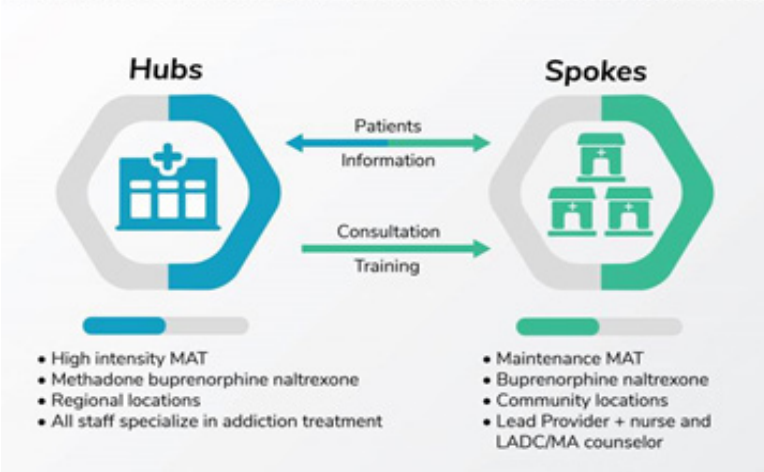
Increase the availability of Medications for Opioid Use Disorder (MOUD) centers, including virtual treatment and remote counseling options.

The combination of behavioral therapy and medication (methadone, buprenorphine or naltrexone), or MOUD, is the standard of care for individuals suffering from opioid use disorders. A Senate Finance Committee report found MOUD with buprenorphine or methadone is associated with reduced overdose risk, reduced risk of HIV infection and improved maternal and fetal outcomes in pregnancy.[38] The state should target investment in the areas most in need of MOUD treatment centers.

Rural Illinois does have a few MOUD treatment centers. However, these centers are limited and often not coordinated across the state. This lack of access and coordination makes it difficult for rural patients to access and adhere to a program. An investment in rural MOUD centers would offer health, economic and societal benefits. Studies have found that for every dollar spent on MOUD, $4 is saved on health care costs and $7 in law enforcement and other criminal justice costs.[39] Utilizing telehealth to eliminate long travel times to providers and increasing staff retention help mitigate the challenges of providing MOUD in rural areas.[40]

Vermont's "Hub-and-Spoke" model has been celebrated as an integrated system approach to combat the opioid epidemic in rural areas lacking treatment options.[41] The Vermont system of MAT features nine regional hubs and over 75 local spokes where doctors, nurses and counselors offer long-term OUD treatment.[42] Vermont's program has over 6,000 participants and has reduced general health care expenditures and utilization, such as inpatient hospital admissions and outpatient emergency department visits for Medicaid beneficiaries with opioid addiction.[43] Illinois could benefit from piloting such a model across different regional locations throughout the state.

FIGURE 4: Vermont Hub and Spoke Model



One innovation partnership to enhance availability of MOUD level care is happening in Quincy, Illinois. SIU School of Medicine is partnering with five county health departments and three substance abuse treatment centers, as part of the Western Illinois Counties Alliance (WILCA). These five rural counties are home to 146,070 people across 3,872 square miles. SIU Medicine's Department of Family and Community Medicine was awarded a $1 million Rural Communities Opioid Response Program (RCORP) grant by the Health Resources and Services Administration. RCORP-Implementation seeks to strength and expand substance use disorder (SUD) treatment, including opioid use disorder prevention, treatment and recovery services in rural areas. Award recipients will receive up to $1 million over a three-year period to implement a set of evidence-based interventions that align with the U.S. Department of Health and Human Service's Five-Point Strategy to Combat the Opioid Crisis.[44]

The efforts of SIU Medicine Department of Family and Community Medicine in Quincy is just one of the Department of Family and Community Medicine's 13 federally qualified health center locations across central and southern Illinois working to expand access to MAT and other OUD prevention programs. Each of these sites has built unique community partnerships, bringing together clinical services, public

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health and substance abuse treatment centers. These types of partnerships at SIU School of Medicine and other clinical sites could result in innovative ways to increase the availability of MOUD centers.

Additionally, opportunities exist within the infrastructure built by telehealth services expanded through the pandemic to enhance virtual treatment and remote counseling options. SIU Medicine expanded its telehealth services during the pandemic to include addiction treatment and mental health care throughout central and southern Illinois. In fact, SIU Medicine's telehealth services have reached 98 of Illinois's 102 counties. This unique reach of rural telehealth addiction and mental health treatment is a great foundation to enhance virtual treatment and remote counseling options for MOUD.

Engage justice-involved populations to reduce opioid use disorder.

More than 12 percent of the nearly 21,000 incarcerated individuals in Illinois self-reported opioid use as their most serious drug problem.[45] Additionally, a survey found that half of state and federal prisoners met criteria for substance use disorders but only 15 percent of state and 17 percent of federal prisoners reported receiving drug treatment.[46] Those receiving daily prescribed methadone or buprenorphine are forced to discontinue use upon detention, which makes them more likely to experience withdrawals and vulnerable to relapse and overdose upon release.[47] The major barriers to providing MOUD in Illinois correctional facilities include cost, implementation issues and liability concerns.[48] The State of Illinois should continue to expand its work of implementing diversion/deflection programs, increase training and education for first responders working with individuals who use drugs and referring them to treatment resources and expand the availability of MOUD in jails and prisons following the model of the Illinois Department of Corrections pilot programs in Sheridan and Southwestern Illinois Correctional Centers (SWICC).[49]

States are beginning to pilot programs to provide MOUD for opioid addiction in prison and jail systems. These programs offer all inmates who suffer from an opioid addiction, regardless of whether they were receiving treatment prior to incarceration, the choice of one of three FDA-approved medications combined with counseling.[50] A Brown University study in JAMA Psychiatry found that a statewide program can reduce the number of overdose deaths of released inmates by two-thirds in the span of one year.[51] Illinois could learn from these programs and use them as a blueprint statewide to reduce post-release overdose deaths in both urban and rural settings.

There should also be a greater degree of programs linking those being released from prison with Narcan training, as well as guiding them to dispening units. Many of those incarcerated with OUD will not continue MOUD and/or seek treatment upon release. Providing Narcan and training for its use should be incorporated into the release process, and potentially include family members and other caretakers. These individuals should also be provided a 'warm hand off' to local harm reduction organizations so that their needs for screenings, supplies and referrals can be immediately and directly addressed. Such organizations can also facilitate/provide peer navigation and support to encourage harm reduction, safer behaviors and referrals to primary and behavioral care.

SIU Medicine has established the Office of Correctional Medicine, a partnership between the School of Medicine and the Illinois Department of Corrections, to address the health needs of those in the justice system in Illinois. The Office employs a diverse team of talented providers and professionals who support and advocate for the health of incarcerated and justice-involved populations throughout Illinois. The innovative partnership provides the State of Illinois with unique opportunities to implement innovative programs that engage justice-involved populations to reduce opioid use disorder.

Sustain and dramatically expand harm reduction services into rural areas to prevent overdoses and the spread of infectious diseases.

Harm reduction services are a set of strategies that seek to reduce the negative consequences of drug use. For example, needle exchange programs reduce the spread of bloodborne illness and reduce the likelihood of fatal overdoses. Users of these programs are more likely to enter treatment. Significant evidence shows that removing contaminated needles from circulation decreases the spread of certain bloodborne viral infections. Another harm reduction strategy gaining popularity is providing training and access to naloxone, a drug which can reverse overdoses from oxycodone, fentanyl, morphine and heroin and is available as injectable, auto-injector, intranasal and nasal spray.

There are innovative models that Illinois can pilot to expand harm reduction programs. In Philadelphia, a partnership between NEXT Harm Reduction, Philadelphia-based harm reduction group SOL Collective and the Philadelphia Department of Public Health resulted in free mailed naloxone to any Philadelphian who requested it. From March 2020 through January 2021, there were 422 naloxone requests from Philadelphia alone. A study of the program found one in three individuals cited COVID-related barriers for not being able to access naloxone in person.[52] A mail-based naloxone program would immediately address naloxone deserts in nonmetropolitan counties and the stigma associated with seeking out the life-saving drug.

Some states are also using mobile vans to serve those with substance use disorder in rural areas. For example, the Colorado Department of Human Services Office of Behavioral Health operates six mobile health units in rural and underserved Colorado.[53] Each mobile unit has a nurse, licensed SUD counselor and a peer recovery coach in addition to a doctor available via telemedicine to prescribe MOUD. The mobile units provide naloxone, referrals to treatment services and needle disposal services. The Community Action Place is an example of a mobile health unit in deep southern Illinois, supported by a SIU Medicine and University of Chicago NIH grant. However, more mobile health units and organizations such as the Community Action Place are needed to address the need of rural residents.

Illinois should also build on existing investments and utilize additional funds from the American Rescue Plan Act (ARPA) to extend the reach of harm reduction programs. The ARPA allocates money for community-based overdose prevention programs, syringe service programs, harm reduction services and funds to address community-based behavioral health needs worsened by COVID-19. Illinois was awarded nearly $105 million in federal funding from the ARPA to be used to help communities grappling with mental health and addiction challenges. Illinois can utilize a portion of these funds to expand harm reduction services based on evidence of need and efficacy.

In the year and a half since COVID-19 brought the nation to a standstill, several grim records were set by the opioid epidemic: the most drug overdose deaths in a year, the most deaths from opioid overdoses and the most deaths from the deadly class of synthetic opioids known as fentanyl.[54] Forty-six states have reported increases in opioid-related deaths, with 28 states, including Illinois, seeing increases of more than 30 percent.[55] Several factors impacted the surge in deaths, including but not limited to social isolation, disruption to outreach and treatment facilities and job loss.[56]

The opportunity is now to invest, implement and expand innovative solutions to fight the opioid epidemic. Rural Illinois needs enhanced partnerships, programs and policies to help create the necessary solutions.

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