

**THE URBAN/RURAL
DIVIDE IN ACCESS TO
MEDICATION-ASSISTED
TREATMENT FOR OPIOID
USE DISORDER IN UTAH**

EXTENSION 
UtahStateUniversity[®]

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THE OPIOID CRISIS: KEY TRENDS

In 2016, a total of 42,249 persons in the US died from drug overdoses involving opioids; the age-adjusted rate was 13.3 per 100,000 (CDC, 2018a). By 2017, the national drug overdose death rate rose by another 12% (CDC, 2018b).

Death by drug poisoning is the leading cause of death due to injury in the state of Utah (UDOH, 2014). From 2013-2015, Utah ranked seventh in the nation for drug overdose deaths, the majority of which were opioid-related (CDC, 2018a). In 2017, the age-adjusted mortality rate from drug overdose in Utah was 15.5 per 100,000, putting the state above the national average of 14.9 per 100,000 (CDC, 2018b).

RURAL AREAS ARE HARD HIT

Opioid overdose death rates in most of rural Utah far exceeds rates across the urban counties of the state (see Table 1 below). The higher rates of deaths in rural Utah is indeed concerning. Evidence indicates that rural areas are particularly hard hit due to limited access to care and resources (USDA, 2019).

Distance from health services affects peoples' ability to get treatment when they need it (Stulz, Pichler, Kawohl, & Hepp, 2018). This can affect the likelihood of someone recovering from a health emergency, particularly when respiratory failure occurs (Karra, Fink, & Canning, 2017; Raknes, Hansen, & Hunskaar, 2013; Nicholl, West, Goodacre, & Turner, 2007). Opioids are known respiratory inhibitors, which means having access to nearby treatment is especially important in preventing opioid overdose deaths. Those deaths are already more common in rural U.S. regions (Mack, Jones, & Ballesteros, 2017).

Access to emergency care is not the only thing that matters in rural areas. People in recovery and seeking support also need access to ongoing evidence-based treatments in order to stay well. A key component of this is medication-assisted treatment (MAT), which is the gold standard of evidence-based treatment recommended by the Substance Abuse and Mental Health Services Administration (SAMHSA) (SAMHSA, 2014). Rural areas in the U.S. have significantly fewer medication-assisted treatment programs than urban areas (Hirschak, & Murphy, 2017).

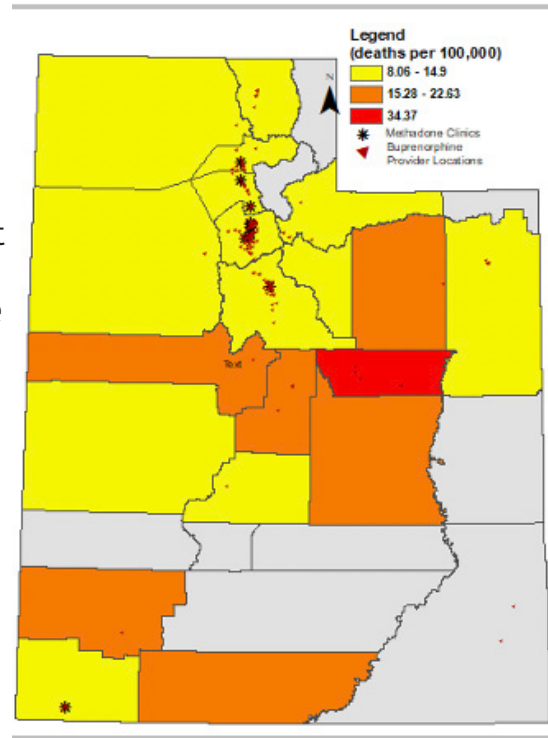
Given that roughly one-third of American Indian and Alaska Native individuals live in rural regions of the U.S. (U.S. Census Bureau, 2017), these geographic trends also disproportionately affect Native Americans living on reservations. Nationally, when compared to other racial groups, American Indian and Alaska Native populations have experienced the largest increases in drug and opioid overdose death rates between 1999 and 2015 (Joshi, Weiser, & Warren-Mears, 2015). Yet, a national analysis of treatment programs that directly serve American Indian and Alaska Native communities found that less than 30% of programs offer MAT like methadone and buprenorphine (Novins, Aarons, & Conti, et al., 2011). Utah is a large, rural state with eight tribal governments; health equity requires attention to both rural and tribal groups.

MEDICATION-ASSISTED TREATMENT ACCESS IN UTAH

We applied USDA's definition (USDA, 2019) to identify Utah counties as rural or urban. The combined 1999-2017 mortality data (CDC, 2018b) indicate that the average death rate in rural counties was 17.76 (per 100,000 population) which was higher than that in urban counties (11.99 per 100,000 population).¹ Based on statistical results, we have evidence to conclude that rural counties differed from non-rural (urban) ones in opioid-induced drug overdose death rates.² Table 1 further highlights this urban-rural divide in opioid overdose death rates in Utah.

The high rates of overdose deaths in rural Utah call for immediate intervention, namely medication-assisted treatment (MAT). MAT entails the use of FDA-approved medications to treat withdrawals and physical dependence, alongside behavioral therapy and counseling services.

Figure 1: Opioid Drug Overdose Death Rates by county (cumulative 1999-2017)



Source: Authors' analysis using CDC (2018a) data.

Access to MAT options affects overdose death rates in Utah. In Figure 1, we present the mismatch between access to MAT resources and severity of opioid overdose deaths in Utah. The red triangles indicate buprenorphine providers and the black stars indicate methadone clinics. The color gradient on this map represents the severity of overdose rates: yellow indicating the lowest rate of overdose and red indicating the highest. The counties with insufficient data are colored grey. Treatment options are most highly concentrated on the Wasatch Front (i.e., the most urban counties in Utah), which have among the lowest rates of opioid overdose deaths. MAT treatment options in rural and tribal areas are limited or virtually unavailable, but show higher rates of opioid overdose deaths.

¹ A sizeable number of counties in Utah reported mortality counts that were too small to be reliable. To address this problem of no reliable year-wise (annual) data for most counties in Utah, we combined mortality numbers between 1999 and 2017.

² We conducted a nonparametric statistical test (Mann Whitney test) to compare rural-urban county difference in mortality between 1999 and 2017.

Table 1: Age-Adjusted Death Rates (per 100,000) by counties, 1999-2017, Utah

Urban Counties		Rural Counties	
Box Elder	10.70	Beaver*	No Data
Cache	8.06	Carbon	34.37
Davis	10.84	Daggett	No Data
Salt Lake	14.88	Duchesne*	16.67
Summit	8.32	Emery	22.63
Tooele	15.28	Garfield	No Data
Utah	12.92	Grand*	No Data
Wasatch	9.88	Iron*	15.63
Washington	14.19	Juab*	17.28
Weber	14.78	Kane*	16.60
		Millard*	13.81
		Morgan	No Data
		Piute*	No Data
		Rich	No Data
		San Juan*	No Data
		Sanpete	15.93
		Sevier	13.28
		Uintah*	11.36
		Wayne	No Data
Urban Average	11.99	Rural Average	17.76

Source: CDC (2018b)

* Rural counties with reservations

WHAT CAN YOU DO AND WHAT DO YOU NEED TO KNOW?

Table 2 lists the three kinds of MAT approved for treatment of opioid use disorder (OUD): Methadone, Buprenorphine, and Naltrexone (SAMHSA, 2019a). These medications block the euphoric effect of drugs, relieve cravings, and stabilize brain chemistry without the negative side effects of the previously abused drug (SAMHSA, 2019b).

Naloxone is a lifesaving overdose reversal drug, and is an evidence-based approach to preventing opioid mortality. Any healthcare professional licensed to prescribe medications can prescribe Naloxone. Additionally, if you, or people in your life, are at risk of opioid overdose, you can become trained to administer Naloxone. Additional information is available from: <https://naloxone.utah.gov>. You can also visit the websites listed below to find additional information on MAT providers and clinics.

- Methadone Clinics: http://www.opiateaddictionresource.com/treatment/methadone_clinic_directory/ut_clinics
- Buprenorphine Prescribers: <https://www.samhsa.gov/medication-assisted-treatment/practitioner-program-data/treatment-practitioner-locator>

Table 2: Medication Assisted Treatment (MAT) Options

Type	Description	How to Obtain Treatment	Length of Treatment
Methadone	Methadone is a long-acting opioid medication used to help people with OUDs by stopping physical withdrawal and cravings. It lasts 24-36 hours, so it must be taken daily. It blocks the effects of other opioids like heroin. When taken as prescribed by a physician, it does not produce any euphoria or long-term health problems, and is a safe and effective treatment (SAMHSA, 2019c).	In the beginning stages of Methadone treatment, patients are required to receive treatment under the supervision of a physician at a SAMHSA certified opioid treatment program (OTP). When patients reach consistent stability, they may be permitted to take Methadone at their homes in between program visits (SAMHSA, 2019c).	Minimum of 12 months of daily dosing, but there is no maximum amount of time after which patients must stop methadone treatment. Stopping methadone must be done slowly over time, under the supervision of a physician (SAMHSA, 2019c).
Buprenorphine	Buprenorphine is another opioid medication used to treat physical withdrawal and cravings among people with OUDs. It is also long-acting (24-37 hours) and must be taken daily. It blocks the effects of other opioids like heroin. A common brand name type of buprenorphine is	In order to prescribe Buprenorphine, medical providers must be legally certified to prescribe Buprenorphine (SAMHSA, 2019d). Likely, a prescription <u>will not be</u> available through one's primary care provider, however, a list of providers is included in this fact sheet.	Three phases: <ol style="list-style-type: none"> 1. Introduction Phase 2. Stabilization Phase 3. Maintenance Phase The duration of each phase varies between individuals. Like methadone, there is no maximum time recommended for buprenorphine treatment. Stopping

	<p>“Suboxone,” which combines buprenorphine and naloxone. Similar to methadone, it does not produce euphoric feelings or health problems when it is dosed by a physician. It is a safe and effective treatment (SAMHSA, 2019d).</p>		<p>buprenorphine must be done slowly over time, under the supervision of a physician (SAMHSA, 2019d).</p>
Naltrexone	<p>Naltrexone is a non-opioid medication used to treat opioid use disorder and alcohol use disorder. It blocks opioid receptors in the brain, but does not stop people with OUDs from physical withdrawal symptoms, and thus is not recommended for people with physical dependence on opioids. It can be taken orally every day or injected once per month (brand name injectable medication is called “Vivitrol”) (SAMHSA, 2019e).</p>	<p>Naltrexone can be prescribed by any healthcare professional who is licensed to prescribe medications (SAMHSA, 2019e).</p>	<p>There is no maximum treatment length for naltrexone. Treatment length and cessation should be decided between a patient and their prescribing healthcare provider.</p>

Source: SAMHSA (2018c-e)

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