



Overdose Trends in Reno County

OCTOBER 2020 TO SEPTEMBER 2021

RENO COUNTY HEALTH DEPARTMENT

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Executive Summary

In October 2020, Reno County Health Department and EMS started using a real-time overdose tracking system called ODMAP to better understand the County's substance trends. In January 2021, the Reno County Coroner joined the initiative to understand overdose fatalities, which is often undercounted in official data reports. The ODMAP project was part of the 2020 Community Health Improvement Plan. The goal is to use ODMAP to analyze and understand substance trends and accurately count the number of fatalities due to overdose.

In the first year of tracking, there were 325 suspected overdoses, 72 requiring the use of Naloxone, and 19 fatalities. While the most common substance was related to alcohol poisoning throughout the year, in the last 6 months, methamphetamines were the most prevalent substances causing an overdose.

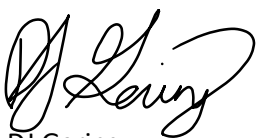
Reno County experienced 3 overdose spikes, defined by having 3 or more suspected overdoses within 24 hours. Each of these spikes was caused by different substances: heroin, oxycodone, and methamphetamine.

Co-Occurring Substance Use and Mental Disorders are highly prevalent within the County. Nearly 50% of all tracked Emergency Department visits for a drug overdose mentioned a mental health disorder, including depression, bipolar disorder, and suicidal ideation. The total cost of overdose hospitalizations and ED visits in Reno County is estimated at just above \$650,000 for the past year.

Substance use also increases the risk of infectious diseases. In 2021, Reno County responded to a Hepatitis A outbreak associated primarily with substance use contributing at least \$211,000 in additional costs due to 13 hospitalizations and 1 fatality.

Reno County Health Department provides this document to show the community what is currently happening in the County with substance trends and the various efforts taken to address this crisis. We also provide this document for our community partners to revise and update our strategies to make Reno County safer and healthier.

We start with the notion that addiction is a disease. Much like other chronic diseases, if the issue is left unaddressed, the disease exacerbates and leads to other health problems and loss of life. We also look at underlying socioeconomic issues that increase the likelihood of substance use, such as poverty, crime rates, mental health, adverse childhood experiences, and life expectancy rates. The data in these pages connect the issues and finds where one lives dramatically influences the types of choices an individual makes and the health outcomes an individual will experience.



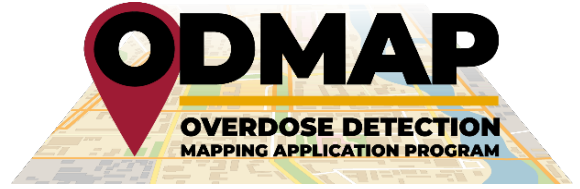
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Note on Suspected Overdose Data

In October 2020, Reno County Health Department and Reno County EMS signed up to use a national suspected overdose tracking system, the Overdose Detection Mapping Application Program (ODMAP). ODMAP is a real-time surveillance tool that allows qualified agencies to track overdose trends in their respective counties and overdoses in neighboring counties and states. In addition to ODMAP, Reno County Health Department uses a CDC emergency department surveillance system, ESSENCE, to track overdose visits at Hutchinson Regional Medical Center.



Current Organizations Involved in ODMAP

- Reno County Health Department
- Reno County EMS
- Reno County Coroner

Agencies Qualified to Participate in ODMAP

Law enforcement, fire departments, EMS, health departments, and hospitals qualify to enter and track suspected overdose data with ODMAP. Nationally, most agencies involved in ODMAP are law enforcement agencies. Reno County Health Department has held discussions with a couple of law enforcement agencies in Reno County since January 2020 and is still working to bring those respective agencies on board. ODMAP benefits law enforcement agencies, particularly in tracking spikes of overdoses. For example, users can see a spike in overdoses from Oklahoma leading to the Kansas border.

In many cases, within a couple of weeks of seeing overdose spikes in Oklahoma, Reno County experiences increases in the same types of substances. Law enforcement benefits in this scenario because it allows agencies to recognize when drug dealers are moving toward the County with illicit substances that increase the likelihood of overdoses ending in death. Sharing data between agencies, counties, and states save lives. The more agencies involved, the better prepared the County is to handle a spike in overdoses.

Overdose Tracking for the Public

Reno County Health Department has created a tool for the public, media, and organizations in the County to stay up to date with the number of suspected overdoses.

Individuals can follow the Suspected Overdose Dashboard by going to the following link:

<https://reno.maps.arcgis.com/apps/dashboards/6e5f01c85f524c08b9aea458926f8fdb>

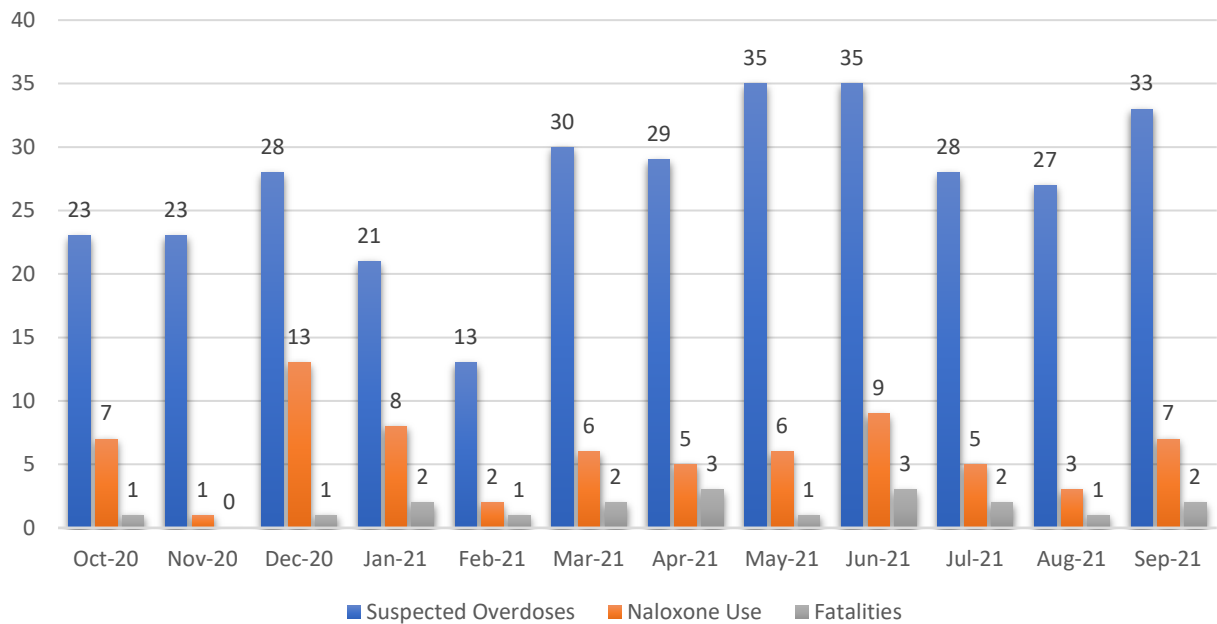
Limitations to the Data

The overdose data in this report are undercounted due to not having any law enforcement agencies entering overdoses into ODMAP.¹ ODMAP shows the drug type, naloxone use, date of overdose, and the general location where the overdoses

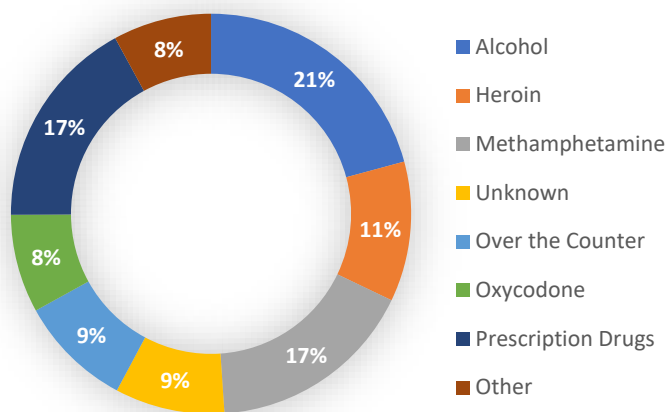
¹ Upon completion of this report, Haven Police Department onboarded to ODMAP in November 2021.

occurred. Therefore, Reno County Health Department cannot analyze suspected overdose events' age, gender, or race/ethnicity. Data from ED visits at Hutchinson Regional Medical Center may contain identical records from ODMAP. We attempted to take out all ED visits that mention EMS to reduce duplicate records. Due to only having one year of data, we cannot compare the differences between years using ODMAP.

Suspected Overdoses by Month



Suspected Overdoses (Oct. 2020 - Sep. 2021)



Overdoses by the Numbers ODMAP Data

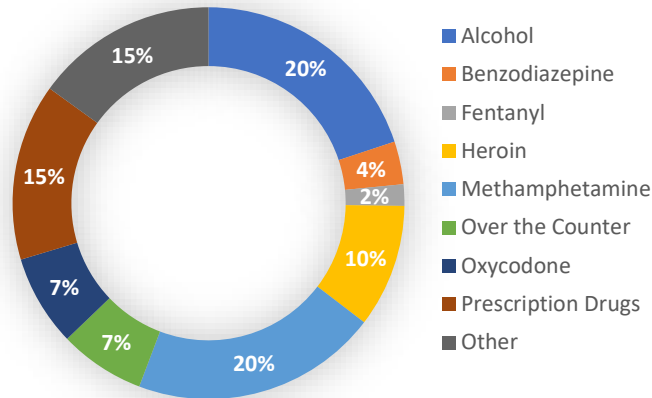
The primary drug types tracked in ODMAP are alcohol, benzodiazepines, cocaine, crack, fentanyl, heroin, LSD, ecstasy/molly, methadone, methamphetamine, over the county drugs, oxycodone, PCP, prescription drugs, suboxone, and synthetic marijuana. Over the past year, the most common overdoses occurred from alcohol, prescription drugs, methamphetamine, and heroin. Reno County saw 325 overdoses, 73 requiring Naloxone, and 19 fatalities between October 2020 and September 2021. At least 18 overdoses occurred at scenes where there were multiple victims.

Overdoses increased shortly after springtime compared to the winter season. In February, overdoses hit a yearly low of 13 while temperatures were also hitting record lows in the region. Suspected overdoses from ODMAP peaked at 35 in May and June. Naloxone use reached its highest point in December when Reno County was alerted of a spike in overdoses caused primarily by heroin. The first spike alert in the County lasted from mid-December 2020 through the beginning of January 2021. At this time, Reno County did not send out a spike alert because the software was new, and we were still finding our daily overdose threshold to ensure we only send out notifications to the public when warranted. After collecting enough data, we determined three overdoses within 24 hours constituted a spike.

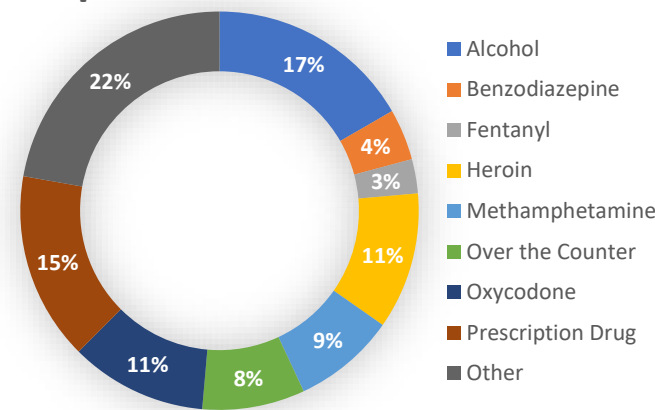
Reno County reached the threshold of a spike alert two more times in March and June. The spike in March occurred primarily due to an increase in Oxycodone overdoses. In June, the spike was related to a rise in methamphetamine overdoses. Of the 19 fatalities between October 2020 and September 2021, 1 was from benzodiazepine, 3 were from oxycodone, 3 from methamphetamine, 3 from heroin, 3 from fentanyl, and 6 from prescription drugs.

While overdoses occur more often within the 67501 zip code area, 10.5% of overdoses in the 67502 area resulted in a fatality compared with 4.0% in the 67501 zip code area. 2 out of the 7 deaths in 67502 were given Naloxone at the scene of the overdose. In contrast, someone gave Naloxone at 4 of the 9 fatality events in 67501. Excluding alcohol, administration of Naloxone occurred at 25.4% of overdose events in 67501 and 25.5% of overdoses in 67502.

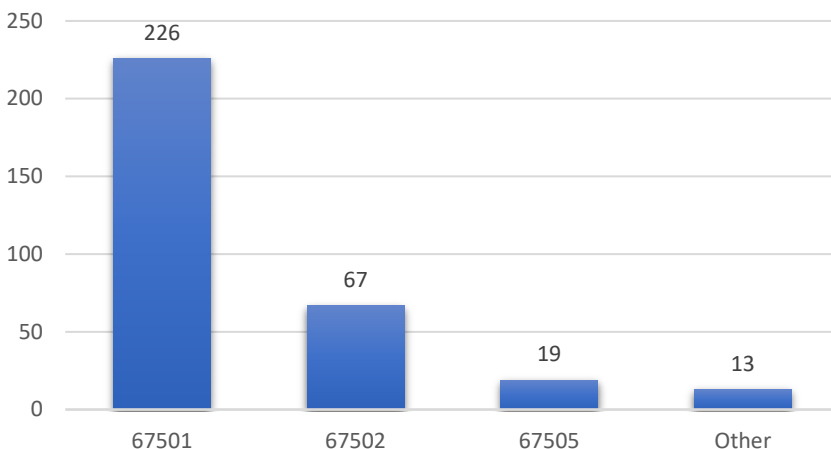
Suspected Overdoses - 67501



Suspected Overdoses - 67502



Suspected Overdoses by Zip Code



Data for Naloxone at the overdose scene is not different or significant enough to successfully explain why a higher proportion of overdoses result in a fatality in 67502 than it does in 67501. When you look at the types of drugs involved at the overdose event, 1 in 5 overdoses occurring in 67501 involve methamphetamine while nearly 1 in 10 overdoses in 67502 involve methamphetamines. In 67502, opioids such as oxycodone, heroin, and fentanyl made up 25% of overdose events compared to 19% in 67501. Heroin and oxycodone are more likely to be cut with illicit fentanyl than other drug types such as methamphetamine.

The higher usage of opioids could help explain the disparities in the fatality rate, but it is not perfect. With only one year of data, we must accept that the indicator might be an anomaly, which will become apparent over time if this is the case. Stigma may also play a role. The 67502 area is a higher socioeconomic area with far fewer persons living in poverty. There are also far fewer total overdoses in the northern part of Hutchinson. Those suffering from addiction will be afraid to call or reach out for help or are more likely to use substances alone. Using substances alone risks relying on the individual or unknown bystanders to call for help.

First 6 Months vs. Last 6 Months

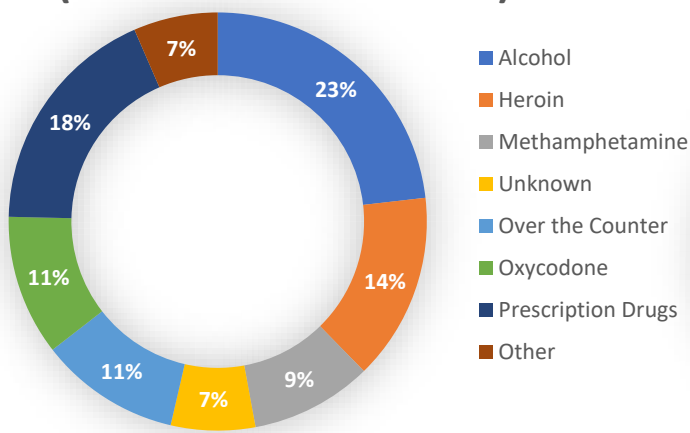
Drug overdose trends differed significantly over the first 6 months of using ODMAP compared to the latest 6 months. In the first 6 months, methamphetamine was the 6th most common overdose in Reno County, while alcohol poisoning, prescription drugs, and heroin were the top 3

causes. Between April and September, Methamphetamine was the most common cause of overdose, making up 22% of events.

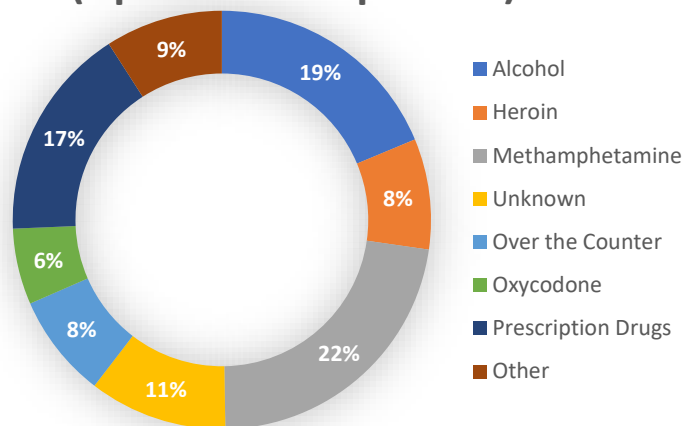
Syndromic Surveillance

Reno County Health Department uses the CDC syndromic surveillance system, ESSENSE, to supplement the ODMAP data and verify whether spikes in overdoses occur. ESSENSE is a database using hospital emergency department (ED) visit information. ESSENSE warns us if overdoses are happening far above the average, assisting in ascertaining drug overdose trends and communication to the public. The health department did not have access to ESSENSE until March 2020, rendering year-to-year comparisons incomplete for this report.

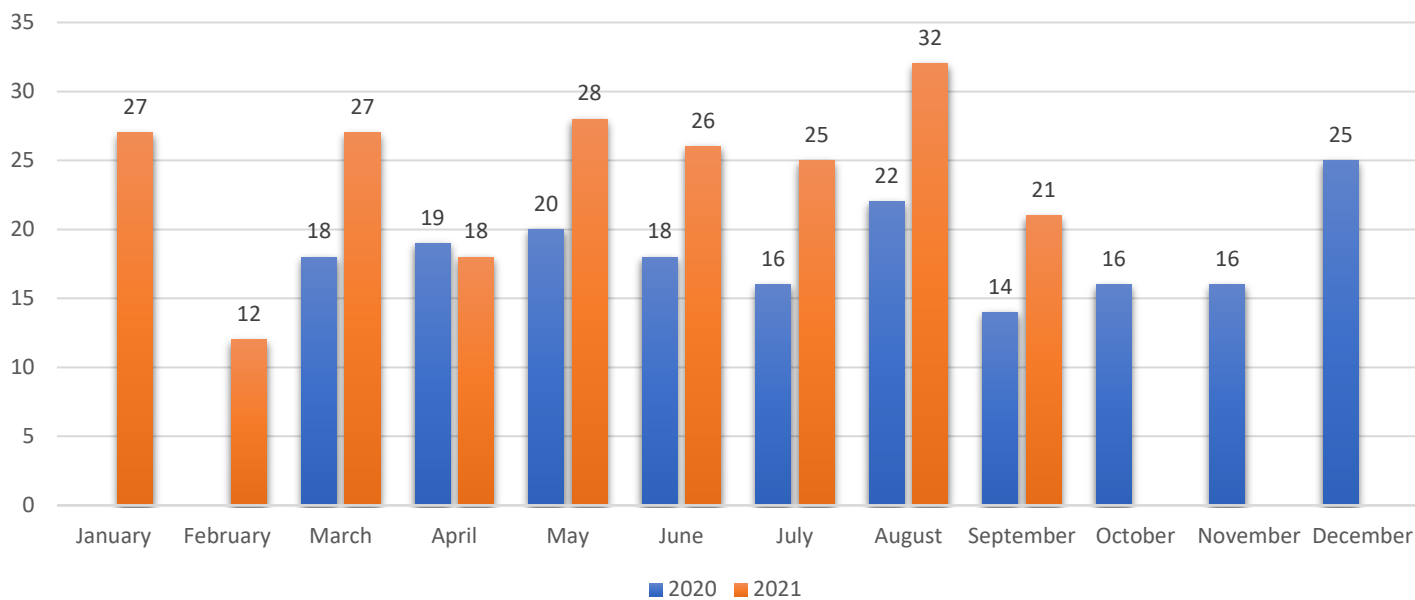
Suspected Overdoses (Oct. 2020 - Mar. 2021)



Suspected Overdoses (Apr. 2021 - Sep. 2021)

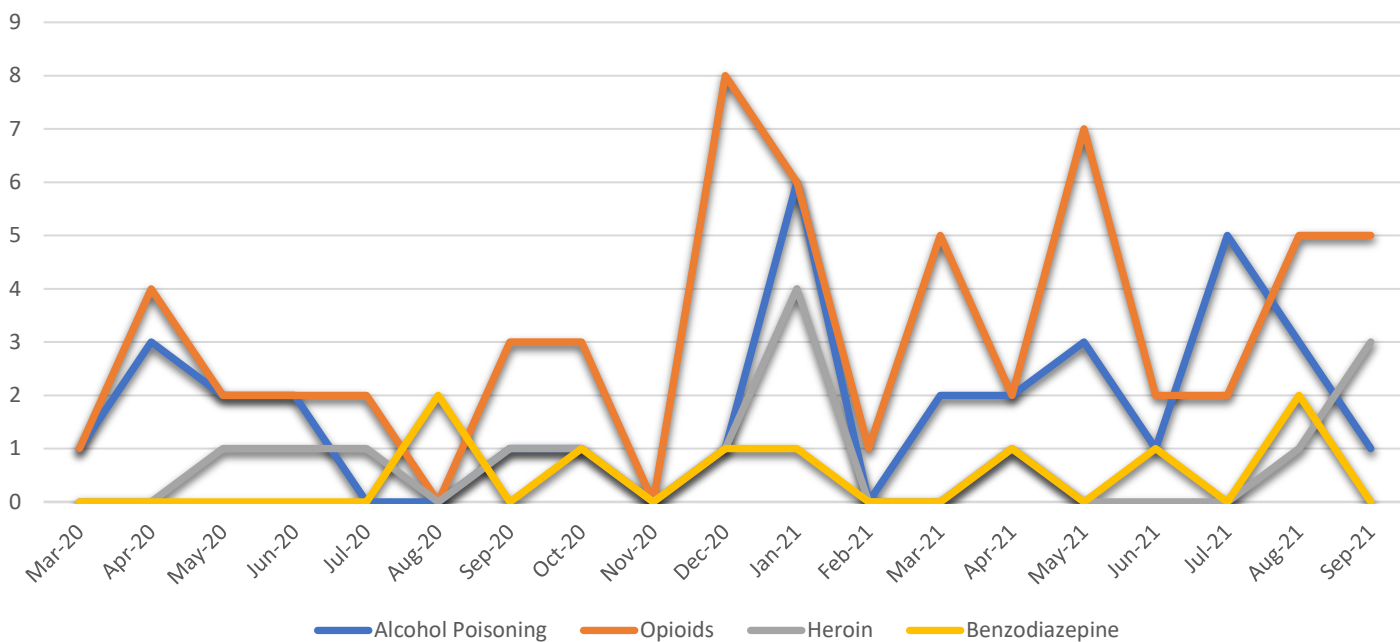


All Drug Overdoses - ED Visits by Month

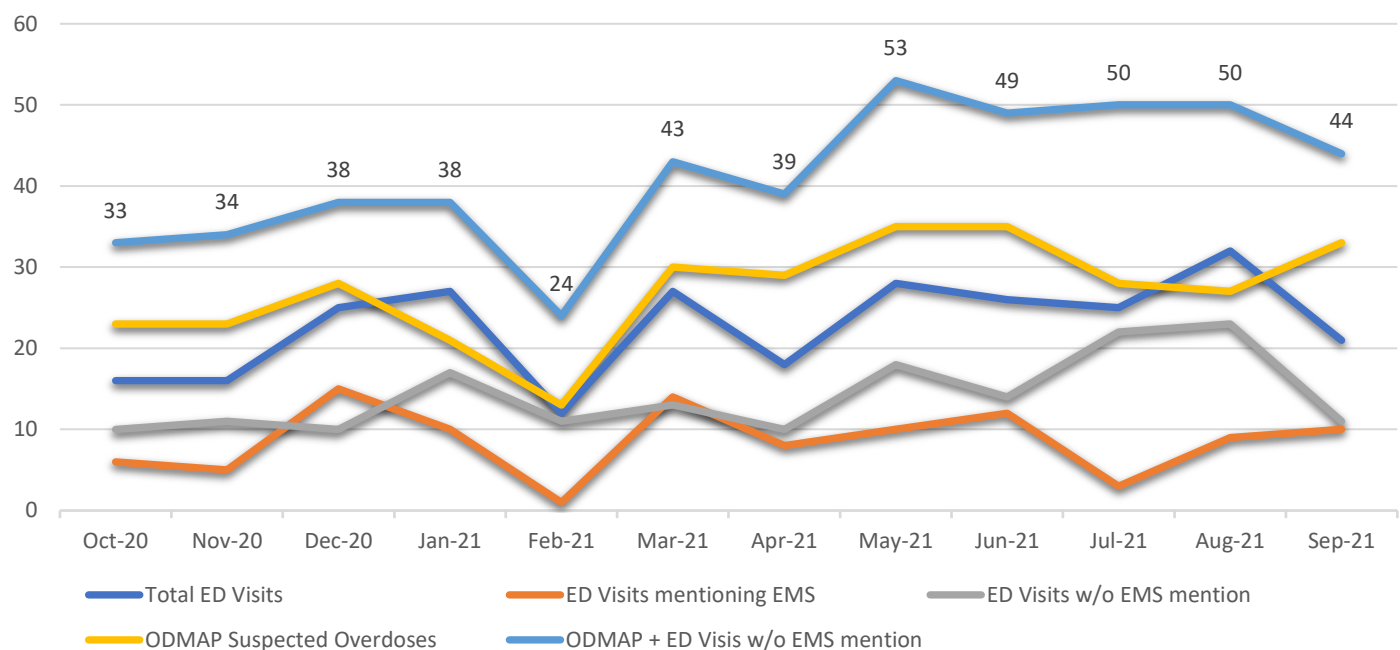


For the months that year-to-year comparisons are available, overdose events in the ED were higher than the previous year except in April 2021. Opioid overdose ED visits were most increased in December and May when Reno County Health Department received spike alerts from ODMAP for heroin and oxycodone.

Overdoses - ED Visits by Drug Type



Suspected Overdoses (ODMAP & ESSENSE)



Due to only having 3 entities entering in data to ODMAP, suspected overdose events are likely undercounted. Suppose we measure the number of ED visits mentioning Reno County EMS and subtract those records from the total ED visits and

add them to the ODMAP data. In that case, we get an estimated total of overdose events. The data may still be undercounted due to no law enforcement agency participation in ODMAP.

With the combined dataset, suspected overdoses peaked in May 2021 but remained near 50 or above 50 until September 2021. These totals are significantly higher than the estimated events between October 2020 and April 2021.

The Cost of Addiction

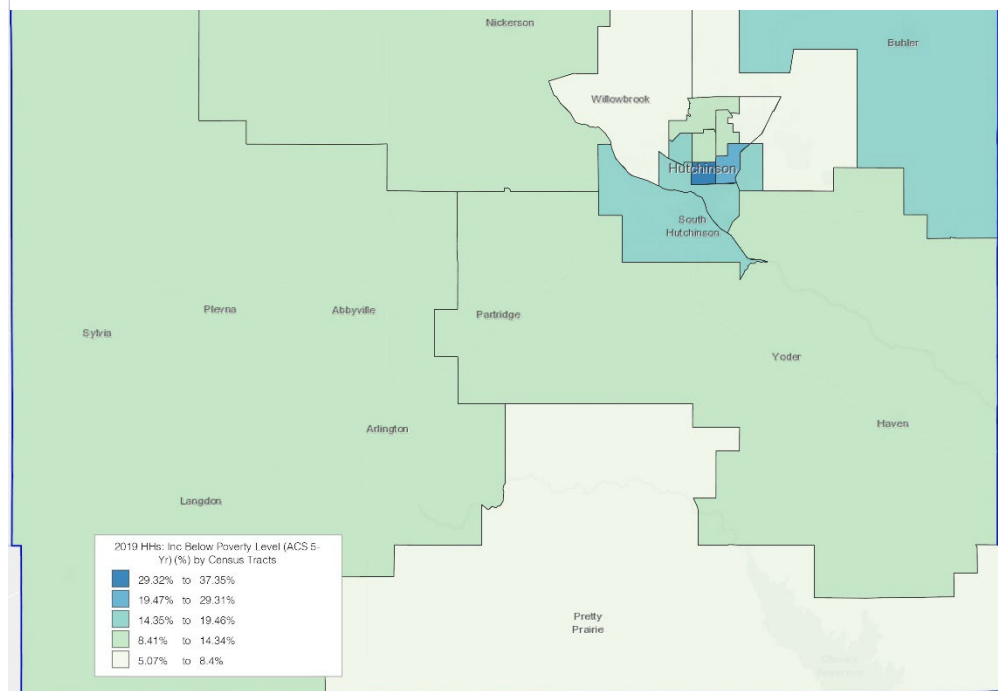
Around three out of four deaths nationally involve an opioid.² Oxycodone costs about \$20 per pill on the street. If an individual takes 3 capsules a day for a year, the cost of an oxycodone addiction amounts to \$21,900 per year. At 1 pill a day for a year, the cost comes to \$7,300 per year. Heroin addiction can cost between \$22,810 and \$91,250 per year, depending on its street price.³ Someone with a severe methamphetamine addiction may spend between \$12,775 and \$38,825 a year.⁴

It is unclear if cost and geographic disparities in Reno County are related to each other. However, the price can explain why certain drug types are more common than others and assist in explaining crime rates. For example, an individual with heroin addiction is less likely to afford the habit, and therefore, more likely to turn to income-generating crime to pay for it.

In Hutchinson, the geographic area that experienced the highest rates of heroin overdoses is also the same area where the crime rate is nearly 4 times higher than the national average.⁵ Additionally, almost 38% of households in the area are below the federal poverty level, and life expectancy rates are among the lowest in Kansas at 70 years.⁶

While there is not enough evidence to conclude a causal relationship between poverty and addiction, we can conclude that substance misuse is more common in Reno County areas with higher poverty rates. Studies also show the risk for first-time homelessness increases independently with both substance use disorders and poverty.⁷ Based on the geography of suspected overdoses, overdose fatalities are also likely to contribute to both census tracts with the lowest life

Figure 1: Households Below Poverty



² Addiction Center, 2019, "How Much Drugs Cost Affects Addiction," <https://www.addictioncenter.com/drugs/how-much-do-drugs-cost/>, accessed 6 October 2021.

³ Ibid.

⁴ Ibid.

⁵ Applied Geographic Solutions' Crime Index (2021)

⁶ American Community Survey (2015-2019); U.S. Small-area Life Expectancy Estimates Project (2010-2015)

⁷ Thompson, Ronald G., Melanie M. Wall, Eliana Greenstein, et al., 2013, "Substance-Use Disorders and Poverty as Prospective Predictors of First-Time Homelessness in the United States," *American Journal of Public Health* 103 (S2): 4.

expectancy rates in Hutchinson while not contributing to the low life expectancy South Hutchinson census tract. These results show addiction's human and social costs and the need for neighborhood-based initiatives to link people to treatment and prevent younger populations from falling into the addiction cycle caused by neighborhood pressures (see *Youth Intervention and Prevention* section).

Aside from the cost of addiction on an individual or their family, there are additional costs for the taxpayers. The average annual cost of incarceration in the State of Kansas is \$30,100 per resident and \$30,320 per resident at Hutchinson Correctional Facility, according to Fiscal Year 2020 numbers released by the Department of Corrections.⁸ Meanwhile, yearlong methadone treatment for heroin users costs around \$4,700, and outpatient rehab for three months costs \$5,000.⁹ Only 1.5% of incarceration costs goes toward offender programs such as substance abuse treatment and educational and vocational programs, while 24.7% goes toward health care and 68.2% toward housing and security.¹⁰ These numbers mean an estimated annual average of \$450 per inmate at Hutchinson Correctional Facility goes toward offender programs.

The cost of substance misuse also impacts hospitals. Where substance use disorder is the primary cause of a hospital visit, an opioid disorder costs an average of \$1,736 per encounter in the emergency

Figure 2: Total Crime Index

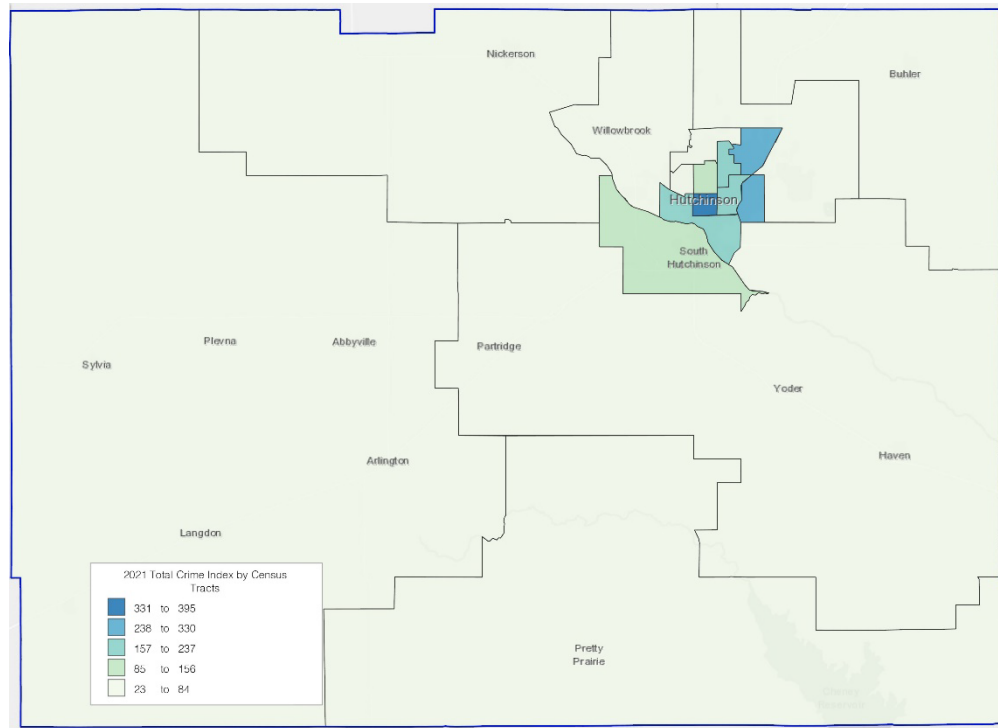
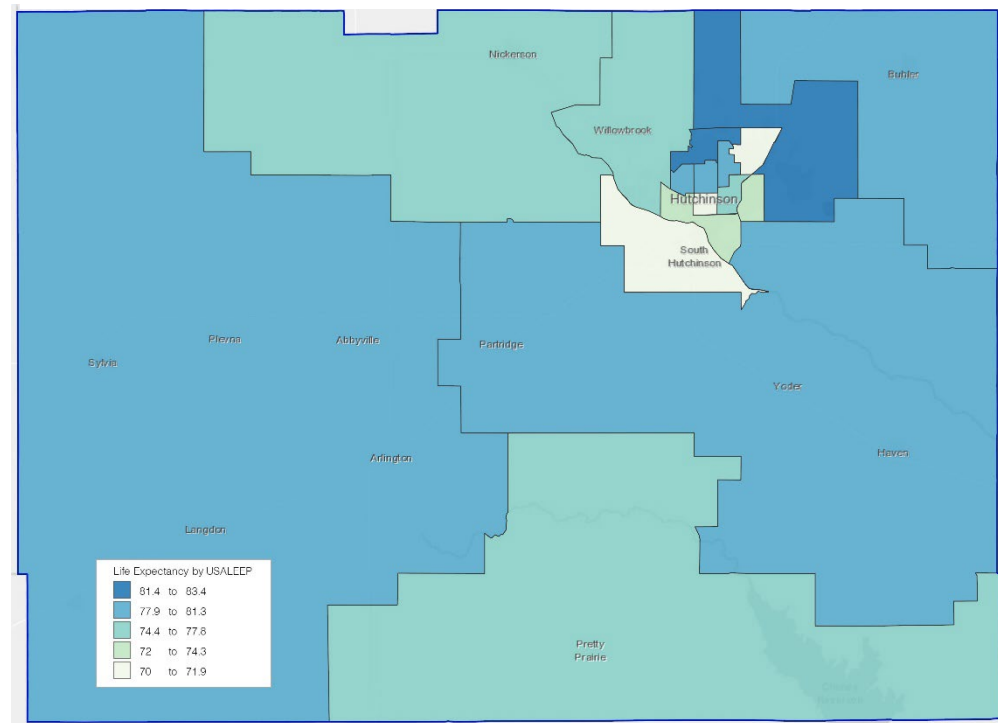


Figure 3: Life Expectancy Rates



⁸ Kansas Legislative Research Department, 2021, "Follow-Up Information: Cost Per Inmate and Age of Correctional Facilities," http://kslegislature.org/li/b2021_22/committees/ctte_h_apprprtns_1/documents/testimony/20210224_05.pdf, accessed 25 October 2021.

⁹ Addiction Center, 2021, "Cost of Drug and Alcohol Rehab," <https://www.addictioncenter.com/rehab-questions/cost-of-drug-and-alcohol-treatment/>, accessed 25 October 2021.

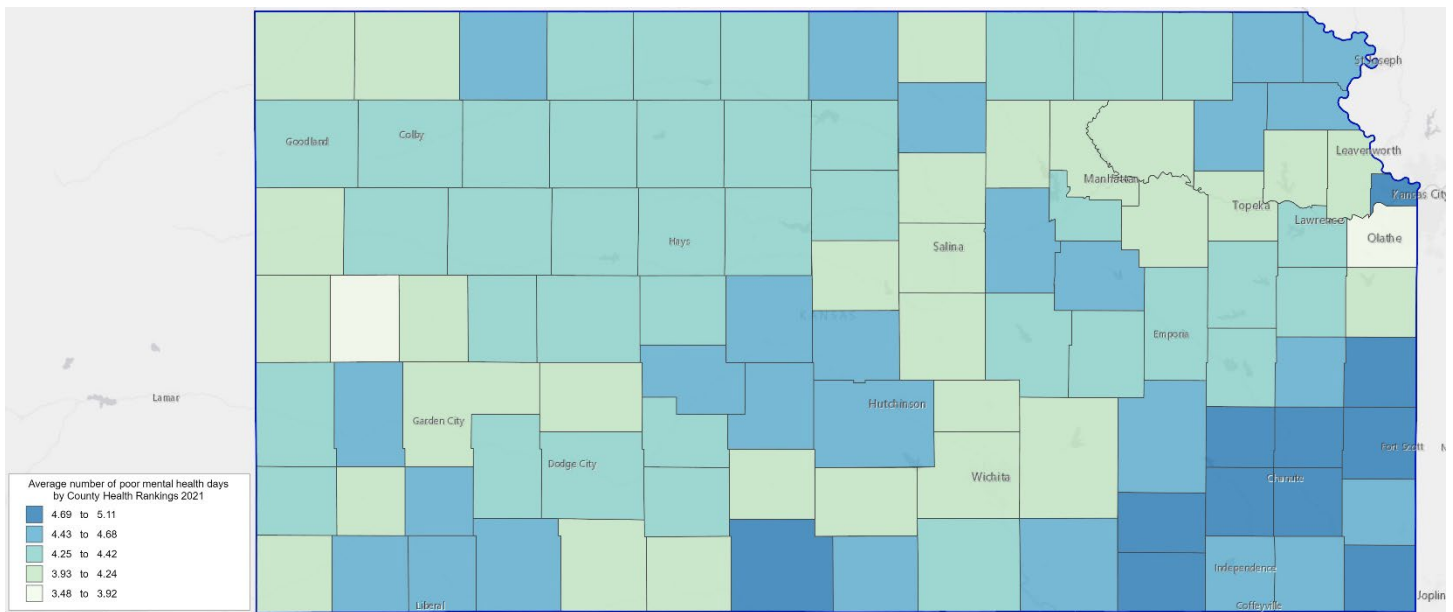
¹⁰ Ibid.

department nationwide. In contrast, alcohol poisoning ED visits cost an average of \$2,082 per encounter and stimulants cost \$2,058 per encounter.¹¹ Between October 2020 and September 2021, there were 46 opioid-related ED visits for Reno County residents—according to ESSENSE—resulting in an estimated cost of \$79,586. The 29 alcohol-related ED visits for Reno County residents amounts to an estimated cost of \$60,378 between October 2020 and September 2021. Over the same period, 13 stimulant overdoses cost an estimated \$26,754. An additional 185 drug-related ED visits estimates to be \$1,985 per visit or \$367,225 in total.¹² Inpatient costs are about 4 times higher than ED visits for substance use. Still, Reno County Health Department can only track the number of ED visits admitted as an inpatient. 13 individuals were admitted to the hospital for an additional estimated cost of \$126,009, bringing the total expenditure on the hospital system to \$659,497 within the 1-year timeframe.¹³

Mental Health and Substance Misuse

Substance use disorder and mental health problems share underlying causes such as “early exposure to stress or trauma.” Nearly 25% of people with a mental health issue also have a substance use disorder.¹⁴ Suspected overdose trends in Reno

Figure 4: Average Number of Poor Mental Health Days in Kansas



¹¹ Peterson, Cora, Mengyao Li, Likang Xu, et al., 2021, “Assessment of Annual Cost of Substance Use Disorder,” *JAMA Network Open* 4(3): 8.

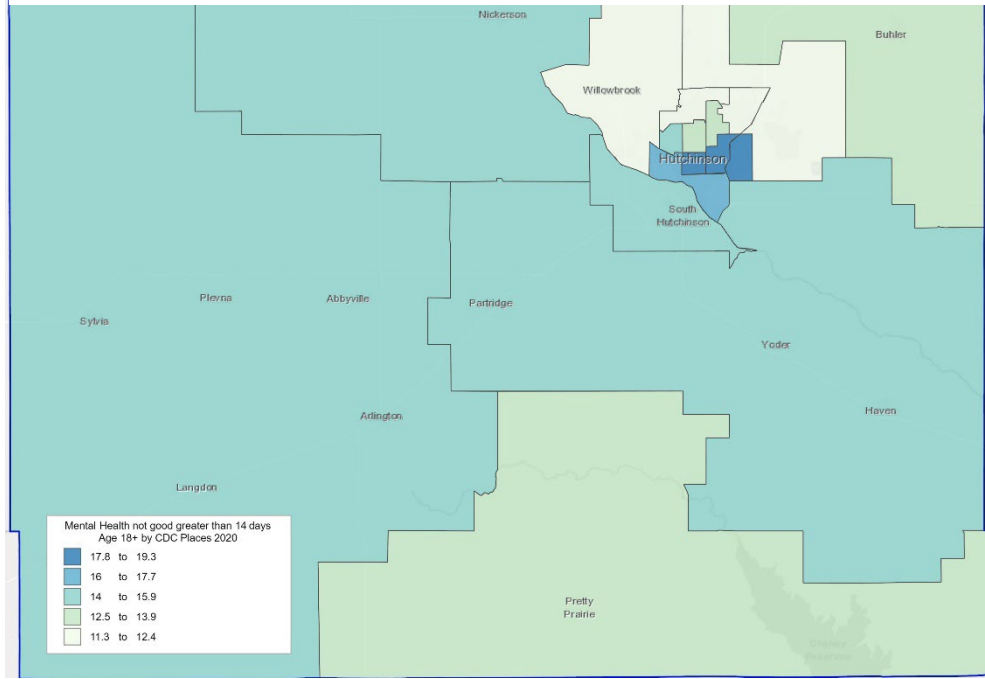
¹² Ibid.

¹³ Ibid.

¹⁴ MentalHealth.gov, 2019, “Mental Health and Substance Use Disorders,” <https://www.mentalhealth.gov/what-to-look-for/mental-health-substance-use-disorders>, accessed 26 October 2021.

County also overwhelmingly share the same geographic makeup and socioeconomic conditions as individuals who struggle with mental health issues. Reno County is 24th in the State of Kansas for an average number of poor mental health days reported by adults over one month at 4.58 days.¹⁵ Within the County, 2 of the census tracts with the highest rates of adults reporting 14 or more poor mental health days over 30 days are in the same census tracts with the highest suspected overdose rates. Therefore, poverty rates are higher, and life expectancy rates are lower on average in these poor mental health rate areas as in the high overdose rate areas.

Figure 5: Mental Health Not Good 14+ Days

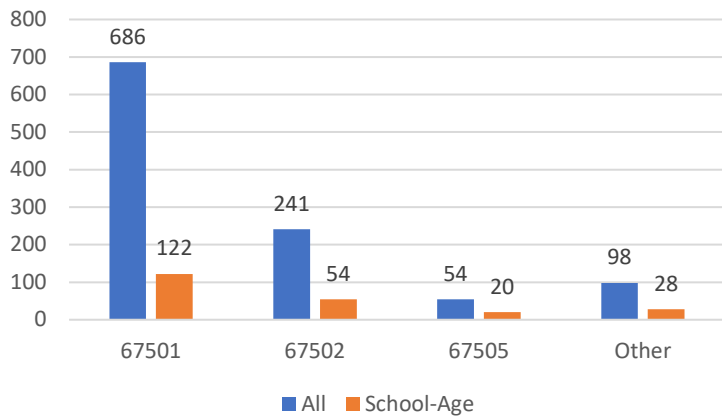


Of the 400 drug-related ED visits between March 2020 and September 2021, 49.5% mentioned a diagnosed mental health disorder—such as depressive disorder—or suicide ideation, or suicide attempt. Mental health-related ED visits are much more common among residents living in the 67501 zip code than any other zip code, similar to the trends found in suspected overdoses discussed earlier (see *Overdoses by the Numbers* section).

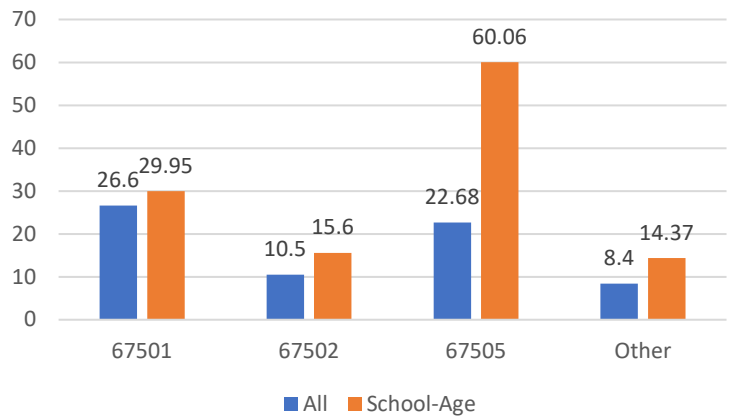
An effort is being made in Reno County to divert individuals away from correctional facilities. In 2021, the Hutchinson Police Department formed the Crisis Response Team in partnership with Horizons Mental Health Center and Mirror, Inc. This program works to help individuals in crisis get pre-trial diversion opportunities. There are 3 classification codes: Crisis with no crime, crisis plus crime but no arrest, and crisis plus crime with an arrest. When a crisis occurs in association with a crime and no arrest is made, a referral connects the individual to resources, medications, and treatment. If they stick to the referred plan, a report is never filed, and the person never enters the criminal justice system. When a crisis with an arrest happens, the Crisis Response Team follows up with a plan. The team works with the prosecutor to divert the arrestee to the referred program instead of further legal action. The Crisis Response Team works to alleviate the root cause of the issue, refer the individual to the correct services, and not have additional barriers placed upon the individual that come with being charged, such as difficulty finding employment.

¹⁵ County Health Rankings, 2021.

Suicide-Related ED Visits by Zip Code
(March 2020-September 2021)



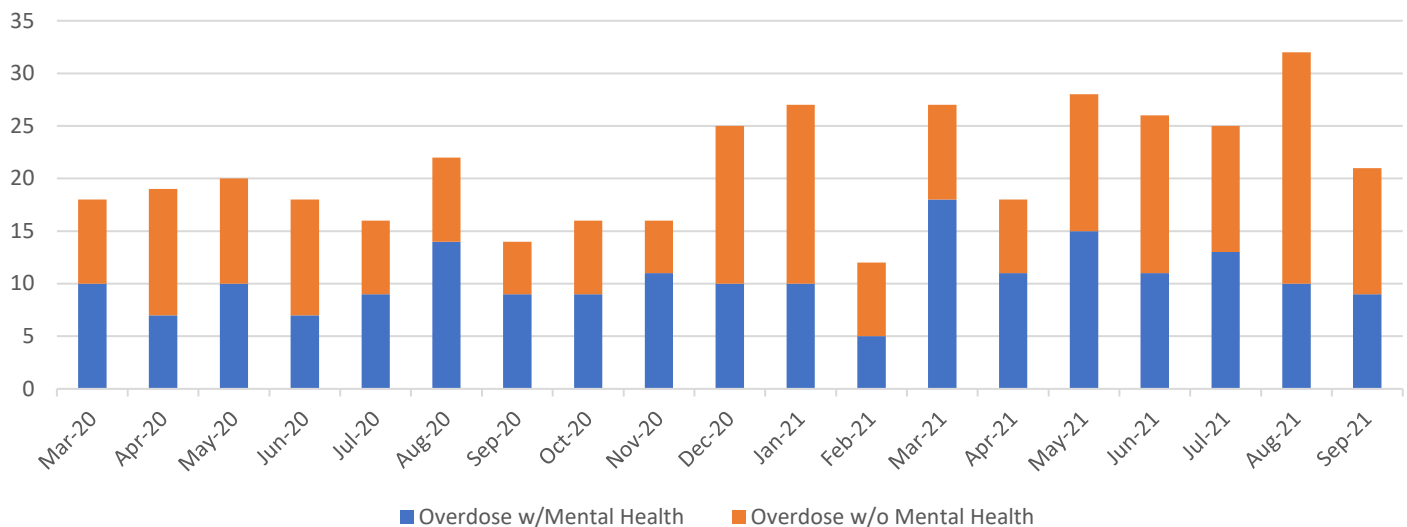
Suicide-Related ED Rates by Zip Code
(March 2020-September 2021)



For school-aged children in the Hutchinson area, suicide-related ED visits were also most common in the 67501 zip code making up 54.5% of visits compared to 24.1% for the 67502 zip code. Since there are also more children in 67501, we must compare the case rates for more accuracy. When looking at case rates, there are 29.95 suicide-related ED visits per 1,000 school-aged children in 67501 (or roughly 3% of all children in the area). Suicide-related ED visits are nearly twice as high as the 67502 zip code, where the rate is 1.56 per 1,000 school-aged children.¹⁶ In the South Hutchinson 67505 zip code, the proportion of school-aged children experiencing suicide-related ED visits are nearly twice as high as the 67501 zip code. Studies show children who experience at least one mental health disorder are more prone to develop a substance use disorder later on in life.¹⁷ While most tracked overdoses in Reno County are among adults, prevention must start with at-risk youth, such as those with mental illness (see *Youth Intervention and Prevention* section).

Harm Reduction

ED Visits for Overdose and Mental Health



¹⁶ Case rates were calculated using ED Visits from ESSENSE and population data from ESRI (2021)

¹⁷ Conway, Kevin, Joel Swendsen, Mathilde Husky, Jian-Ping He, 2016, "Association of Lifetime Mental Disorders and Subsequent Alcohol and Illicit Drug Use: Results From the National Comorbidity Survey—Adolescent Supplement," *Journal of the American Academy of Child & Adolescent Psychiatry* 55 (4): 9.

Harm reduction is a set of practical ideas and strategies to mitigate the negative consequences associated with human behavior. Examples in everyday life include seat belts, cigarette filters, masks, and sunscreen. People are often unaware that those everyday items are considered harm reduction tools. The premise of keeping individuals safe also applies to substance misuse. With ODMAP, Reno County Health Department can assess the environment and adapt strategies and messaging to the current overdose trends. Therefore, messaging remains in real-time along with the data rather than basing messaging off delayed results. For example, official fatality and drug poisoning data can take more than a year to release.

When spike alerts occur, Reno County Health Department relays information to the public about current substance trends and whether these substances are likely pressed pills or laced stimulants. During the spike, Reno County Health Department urges substance users to go slow, never use alone, carry Naloxone (Narcan), and have friends and family regularly check up on their loved ones. The community receives a list of prevention and harm reduction resources available in each press release to encourage the utilization of these resources.

Naloxone is a medication that rapidly reverses an opioid overdose. Reno County Health Department works closely with a local harm reduction coalition, Kansas Recovery Network (formerly Addicts Against Overdose), to host Naloxone distribution events and pass out feminine hygiene products, wound care kits, and additional supplies. These events provide an opportunity to speak to at-risk individuals, build trust, and offer different options to those who need other resources such as treatment or housing to help get clean. This strategy recognizes that addiction is a disease. Once that recognition is made, the process changes from punishment to harm reduction and prevention.

Community-based naloxone distribution programs help lower opioid overdose fatalities.¹⁸ Between October 2020 and September 2021, Naloxone was used at 72 overdose events in Reno County, helping save lives. Naloxone is also a proven, cost-effective method for avoiding overdose fatalities. In a study from North Carolina, for each dollar spent on community-based naloxone distribution programs, there was an estimated \$2,742 of benefit due to preventing opioid overdose deaths.¹⁹

Infectious Diseases

Between January and June 2021, Reno County Health Department responded to a Hepatitis A outbreak that saw 26 total infections, including 1 fatality. Half of these cases reported a history of drug use, and 7 patients refused to answer any questions about how they acquired the infection. There were 2 cases likely not part of the cluster as the probable source of infection was food-borne. There were 4 cases with an undetermined source of infection after the interview concluded.

Hepatitis A is one type of infectious disease that affects those using substances. Hepatitis A is a vaccine-preventable liver infection that can last up to 2 months. The source of infection is often through contaminated food or drink, close personal contact, sexual contact, or sharing of syringes for injection drug use.²⁰ Hospitalizations due to Hepatitis A are also expensive. In 2017, the average Hepatitis A hospitalization in the United States cost \$16,232 per patient.²¹ With 13 hospitalizations, the total hospitalization cost for Reno County residents with Hepatitis A amounts to around \$211,016. This estimate does not include the time the Kansas Department of Health and Environment spent in Reno County to vaccinate at-risk individuals for Hepatitis A or the cost of the vaccines themselves.

¹⁸ Naumann, Rebecca B., Christine Piette Durrance, Shabbar I. Ranapurwala, et al., 2019, "Impact of a Community-Based Naloxone Distribution Program on Opioid Overdose Death Rates," *Drug and Alcohol Dependence* 204.

¹⁹ Ibid.

²⁰ Centers for Disease Control and Prevention, 2020, "Hepatitis A," <https://www.cdc.gov/hepatitis/hav/index.htm>, accessed 27 October 2021.

²¹ Hofmeister, Megan G., Shaoman Yin, Maria V. Aslam, et al., 2020, "Hepatitis A Hospitalization Costs, United States, 2017," *Emerging Infectious Diseases* 26 (5), https://wwwnc.cdc.gov/eid/article/26/5/19-1224_article, accessed 25 October 2021.

At the end of 2017, Reno County had 38 individuals living with HIV in the County.²² HIV is a sexually transmitted infection but can also be transmitted through injection drug use. Unlike hepatitis infections, HIV is a lifelong infection requiring regular checkups and testing to ensure the individual is virally suppressed. An undetectable viral load means the HIV is untransmittable.²³ The antiretroviral therapy (ART) medications required to achieve viral suppression can cost an average of \$36,080 per year.²⁴ The estimate does not include the viral load and CD4 testing needed to determine viral suppression and the immune system's strength. CD4 is also known as a T Cell, which is a type of white blood cell that helps the body fight infections.

A lower CD4 count makes an individual more prone to opportunistic infections such as pneumocystis carinii pneumonia (PCP), which is found primarily in patients with advanced immunodeficiency virus (AIDS). AIDS is diagnosed when the CD4 is less than 200 cells per cubic millimeter or with the presence of an opportunistic infection.²⁵ The lower the CD4 count, the higher in cost medical care will be. Life expectancy also changes based on the CD4 count at diagnosis ranging from around 30 to 38 years after diagnosis.²⁶ For the 38 individuals living in Reno County with HIV, the ART medication costs an estimated total of \$1,371,040 per year. In the Reno County region, 18% of prevalent HIV infections have injection drug use listed as their exposure.²⁷

One way to prevent the spread of infectious disease due to injection drug use and lower the costs associated with their relationship is through a syringe service program, which is currently illegal in Kansas. Reno County Health Department continues to advocate for a change in the law, which would open additional grant funding to both the State and Reno County. Syringe Service Programs (SSPs) reduce HIV incidence by 58% among persons who inject drugs.²⁸ SSPs vary in cost, but SSPs start out at \$1 per syringe or \$700 per year per client in larger rural areas.²⁹ Costs of SSPs are often paid for through grant funding. Reno County Health Department misses out on several harm reduction and prevention grants requiring an SSP due to Kansas law. This results in missed opportunities for more funding to combat addiction and infectious diseases in Reno County.

²²VandeVelde, Jennifer, Stephanie Green, DJ Gering, et al., 2019, "Integrated Epidemiological Profile: An Analysis of the HIV Epidemic in Kansas from 2013-2017," *STI/HIV Surveillance Section*, https://www.kdheks.gov/sti_hiv/download/Epi_Profile_CY_2017.pdf, accessed 18 October 2021.

²³Eisinger, Robert W., Carl W. Dieffenbach, Anthony S. Fauci, 2019, "HIV Viral Load and Transmissibility of HIV Infection: Undetectable Equals Untransmittable," *Journal of the American Medical Association* 321 (5): 2, doi:10.1001/jama.2018.21167.

²⁴McCann, Nicole C., Tim H. Horn, Emily P. Hyle, et al., 2020, "HIV Antiretroviral Therapy Costs in the United States, 2012-2018," *JAMA Intern Med* 180 (4): 3, doi:10.1001/jamainternmed.2019.7108.

²⁵Mayo Clinic, 2021, "HIV/AIDS," <https://www.mayoclinic.org/diseases-conditions/hiv-aids/diagnosis-treatment/drc-20373531>, accessed 27 October 2021.

²⁶Farnham, Paul G., Chaitra Gopalappa, Stephanie L. Sansom, et al., 2013, "Updates of Lifetime Costs of Care and Quality-of-Life Estimates for HIV-Infected Persons in the United States: Late Versus Early Diagnosis and Entry Into Care," *Journal of Acquired Immune Deficiency Syndromes* 64 (2): 7, doi: 10.1097/QAI.0b013e3182973966.

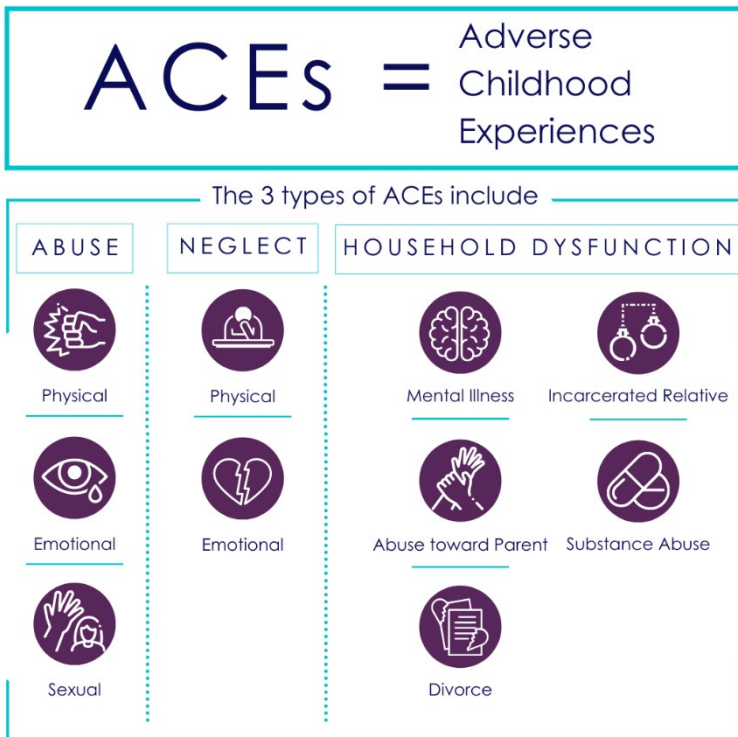
²⁷VandeVelde, Jennifer, et al., 2019, "Integrated Epidemiological Profile."

²⁸Lambdin, Barrot H., Ricky N. Bluthenthal, Lynn D. Wenger, et al., 2020, "Overdose Education and Naloxone Distribution Within Syringe Service Programs—United States, 2019," *Morbidity and Mortality Weekly Report* 69 (33): 5.

²⁹Teshale, Eyasau, Alice Asher, Maria V. Aslam, et al., 2019, "Estimated Cost of Comprehensive Syringe Service Program in the United States," *PLoS One* 14 (4): 10.

Youth Intervention and Prevention

Figure 6: Types of ACEs



Rise Up Reno does a significant portion of the youth prevention work in Reno County, including education on substances, building resilience, and improving mental health. Building resilience introduces the effects of Positive & Adverse Childhood Experiences (PACES) into education and prevention (see Figure 6 for the types of Adverse Childhood Experiences).

An increase in cumulative Adverse Childhood Experiences (ACEs) is associated with negative outcomes in adulthood such as mental health problems, substance misuse, poor work performance, obesity, and a lower life expectancy.³⁰ Children with more ACEs are more likely to experience ADHD, early sexual activity, and adolescent pregnancy, among other issues.³¹

One way to combat ACEs is through childhood resilience, including problem-solving skills, self-regulation, and relationships with caring adults.³² If a child lacks a supportive parent, other adults such as teachers,

religious leaders, or other mentors can serve as an adult role model and build positive experiences in the child's life. Organizations in Reno County that connect children to positive role models and help children achieve their full potential include Boys & Girls Clubs of America and Big Brothers Big Sisters. Big Brothers Big Sisters always need new Bigs to help mentor kids and serve as facilitators for building resilience and positive outcomes in a kid's life. Boys & Girls Club of America uses ACEs to guide their work on reducing substance use among youth by:

- Providing high-quality youth development
- Following and promoting a whole-child health approach
- Implementing trauma-informed and promising prevention staff practices
- Building stronger community linkages that support substance use prevention³³

³⁰ Advokids, 2021, "Adverse Child Experience Study (ACES)," <https://advokids.org/adverse-childhood-experience-study-aces/>, accessed 8 November 2021.

³¹Ibid.

³² Substance Abuse and Mental Health Services Administration, 2019, "Childhood Resilience," <https://www.samhsa.gov/homelessness-programs-resources/hpr-resources/childhood-resilience>, accessed 8 November 2021.

³³ Boys & Girls Club of America, 2018, "Opioid and Substance Use Prevention," <https://www.bgca.org/-/media/Documents/external/OpioidResource-Guide-web.pdf>, accessed 9 November 2021.

Nationally, 94% of Boys & Girls Club 12th graders report abstaining from substances compared to 82% of all 12th graders.³⁴

Rise Up Reno features Youth Leadership groups in all public high schools within the County. These groups meet once a week to go over upcoming events, learn new skills, and strengthen the skills they already have. Students will participate in several activities during the year, including community service, helping with carnivals, and presenting and inspiring grade school students. The presentations feature alcohol, tobacco, and drug prevention, bullying awareness, and making good choices. Students who stay involved in the program and connected have a greater likelihood of staying in school and achieving tremendous success.

Rise Up Reno also contributes to prevention through a Mentoring program, a school-based effort linking caring adult volunteers from the community with students. This program is open to all students grades K-12 within participating school districts. Activities take place on school grounds during school hours. Mentoring volunteers will typically visit a school for one hour or less each week to have lunch with a student, help with reading or tutoring, share an interest in a hobby, or listen to the student. The mentors provide a positive role model that gives the students a greater chance of making it into adulthood and beyond substance-free.

PACEs guide the way the Reno County Health Department educates businesses and industries about substance misuse in the workplace and the reasons why some individuals are more prone to using substances. The education empowers employers with an understanding of underlying issues influencing an individual's choices. With information from the National Safety Council, Reno County Health Department helps employers examine their policies regarding substance misuse and substance-free workplaces and assists employees in finding help if they are struggling with addiction and recovery.

Treatment and Recovery

In Reno County, there is a thriving recovery community with various support groups and recovery houses keeping people active in recovery and showing others recovery is possible. Recovery begins with withdrawal or detox, which involves physical and psychological symptoms, and is often supported with medications.³⁵ Over the last couple of years, Reno County has added medically assisted treatment/recovery services (MAT/MAR) provided by Horizons Mental Health Center, Summit at BreakThru, and Prairie Star that uses suboxone (buprenorphine) to help with opioid withdraw and cravings. Suboxone is an opioid used as an opioid replacement with gradually fewer doses, typically over 5 days, to assist with the detox and withdrawal.³⁶

The Substance Abuse Center of Kansas (SACK) runs a residential treatment facility in Hutchinson that holds 20 beds for men. SACK also runs a detox unit that holds up to 6 men or women that opened in 2021 to divert individuals from the hospital or jail to detox, reducing the burden on the hospital and law enforcement agencies.

Reno County also has multiple Alcoholics Anonymous and Narcotics Anonymous groups with a recent expansion in Cocaine Anonymous meetings. These are 12-step recovery programs designed for people to help one another in their recovery journey. Additional faith-based recovery programs such as Celebrate Recovery and Life Recovery use a faith-based approach to the 12 steps.

³⁴ Boys & Girls Club of America, 2020, "Youth Opioid Prevention," https://www.bgca.org/-/media/Documents/GetInvolved/Advocacy/2020/BGCAGR_OnePager_YouthOpioid_NOASK_2-18-20.ashx, accessed 9 November 2021.

³⁵ Worley, Julie, 2021, "Substance Use Withdrawal and Detox Strategies That Work," *Journal of Psychological Nursing* 59 (9).

³⁶ Ibid.

The time between the meetings is often the most challenging time for people seeking recovery. Usually, a safe, supportive living environment is proven to be the missing link. In Reno County, there are 10 Oxford Houses. Oxford Houses are democratically self-supportive homes for recovery. 3 of the 10 houses are for women, 1 of those 3 are for women and their children, which supports the reintegration process with families. 7 of the houses are for men, with 1 of those 7 for men and their children. Places designated for children set different rules and guidelines to make the home more family-friendly and to help foster connections between those in recovery and their children.

Horizons Mental Health Center also formed the Recovery Response Team in 2021 to respond to the rise in overdoses. The response team holds a 2-fold purpose:

1. Contact high-risk individuals who have experienced a non-fatal overdose or relapse and connect them with community resources.
2. Get individuals connected to resources within 24-48 hours of the overdose event.

This goal is accomplished by leaving “calling cards” with individuals experiencing an overdose or relapse. These cards are passed out by first responders such as EMS and by Hutchinson Regional Medical Center staff when an overdose visit comes through the Emergency Room.

Reno Recovery Collaborative

The Reno Recovery Collaborative started as the Drug Impact Task Force in April 2015 by Hutchinson Mayor Jade Piros de Carvalho to address substance use and misuse in Reno County after a rise in overdose fatalities occurred. The task force consists of stakeholders from multiple sectors, including schools, businesses, law enforcement, the recovery community, family members impacted by substance misuse, public health, and residents in the community. In 2020, the group changed its name to the Reno Recovery Collaborative to better encompass its makeup and purpose.

The subcommittees of the Reno Recovery Collaborative are prevention/education, treatment/healthcare, recovery/recovery supports, and backbone organization (Reno County Health Department). The group assists in determining new strategies and the direction of the work implemented in a short-term and long-term capacity. The Reno Recovery Collaborative meets on the 3rd Tuesday of every month. If one wishes to be involved, they can call the health department at 620-694-2900.

Every 3 years Reno County Health Department and Hutchinson Regional Medical Center conduct a Community Health Needs Assessment (CHNA), which helps determine the priorities and direction for the next 3 years in the Community Health Improvement Plan (CHIP). In 2019, the CHNA showed mental health and substance use as some of the top concerns in the community. These were the topics pursued in the 2020 CHIP. The Reno Recovery Collaborative and its subcommittees met to discuss the next steps and goals for the 3 years. Some of these goals are complete, such as opening the detox facility and tracking overdoses in real-time. Other activities are currently in progress. The next CHNA will occur in the Spring of 2022, and the next CHIP will be released in 2023. You can view the 2020 CHIP here: <https://www.renogov.org/DocumentCenter/View/3285/Reno-CHIP-2020?bidId=>

List of Resources

Find a Treatment Facility

<https://findtreatment.gov>

National Treatment Hotline

1-800-662-4357

Kansas Substance Use Disorder Treatment Referral Line

1-866-645-8216

Hutchinson Narcan Resource

<https://hutchinsonnarcan.8b.io/>

Crossover Recovery

<http://www.sackansas.org/crossover-recovery-center/>

620-669-9024

Substance Abuse Center of Kansas Detox Unit

620-259-2063

Mirror, Inc.

<https://mirrorinc.org/>

620-665-7750

BreakThru

<http://summitks.com/breakthru-medical/>

620-218-0636

Recovery Response Team

620-663-7595

Crisis Line

1-800-794-0163

Reno ASAP Alcohol and Drug Services

620-665-6446

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