Mercer

Government Human Services Consulting

Nevada Resiliency Fund:

Opioid Needs Assessment

State of Nevada

August 1, 2022

Contents

Section 1

Executive Summary

In 2021, it is estimated that more than 107,000 people died of drug overdose in the United States, marking the highest ever recorded annual number of overdose deaths in the nation.[1] The country's unprecedented overdose crisis, largely driven by opioids, has left no community untouched, including across the State of Nevada (State or Nevada). In response to the alarming rates of opioid misuse, opioid use disorder (OUD), and overdose, Nevada passed Senate Bill (SB) 390 in March 2021, establishing the Fund for a Resilient Nevada (referred to in this document as "the Fund") within the Nevada Department of Health and Human Services (DHHS). One of the Fund's responsibilities is the development of a Statewide Needs Assessment to identify priority investment opportunities related to addressing opioid-related harms using a data-driven and evidence-based approach.

Mercer Government Human Services Consulting (Mercer), as part of Mercer Health & Benefits LLC, was contracted by the State to develop the Needs Assessment in partnership with DHHS, the Advisory Committee for a Resilient Nevada (ACRN), and the Attorney General's Office Substance Use Response Working Group (SURG). The Needs Assessment was informed by quantitative and qualitative data, including input from people with lived experience. Between December 2021 and May 2022, Mercer staff collected and analyzed data and information from local and State agencies and organizations, including more than 50 reports provided by DHHS. Mercer staff also conducted stakeholder conversations with key informants and members of ACRN and SURG to gain a more in-depth understanding of the needs across the State.

Data and information were analyzed to better understand the impact of opioid misuse on Nevadans, including:

- The available quantitative and qualitative data related to substance use and rates of OUD, other substance use disorders (SUDs), and co-occurring disorders.
- Health equity and the identification of disparities across racial and ethnic populations, geographic regions, and special populations.
- The risk factors that contribute to opioid misuse and OUD.
- The current state of prevention, treatment, and recovery services for OUD and related issues, such as mental health and other SUDs.

Findings from the Needs Assessment demonstrate the impacts the opioid crisis has had on Nevadans, which include 788 overdose deaths occurring in 2020, an increase of 55% compared to 2019. Most overdose deaths involved opioids; however, stimulant use and stimulant-involved overdoses have also increased significantly in recent years. Needs Assessment data show that certain racial and ethnic communities, geographic locations, and other groups have been disproportionately impacted by opioid-related harms? For example, overdose rates among youth have risen 550% between 2019 and 2020, and Hispanic people

[1] Ahmad, F. B., Cisewski, J. A., Rossen, L. M., & Sutton, P. (2022, June 15). "Provisional drug overdose death counts." National Center for Health Statistics. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

faced significantly higher increases in overdose death rates compared other races and ethnicities. While a large amount of State and local data is available for some populations, trends among certain groups are unknown. For example, little data is available for youth in the juvenile justice system, people experiencing homelessness, and people who identify as lesbian, gay, bisexual, transgender, intersex, queer/questioning, or asexual.

Needs assessment findings also show that Nevada has built a strong foundation of evidence-based treatment, services, and supports across its current system of care, including prevention, treatment, and recovery supports. However, opportunities for strengthening the current system also exist across all components of care.

Primary, secondary, and tertiary prevention needs that were identified include, but are not limited to:

- School-based prevention programs with measured outcomes that are culturally sensitive
- Prescription drug disposal programs
- Collaborative practice agreements
- Increased adoption of and implementation of Screening, Brief Intervention, and Referral to Treatment (SBIRT) models in primary care and other community-based settings
- Harm reduction and treatment access trainings for people who use or misuse opioids and/or have experienced a nonfatal overdose
- Programs to decrease stigma among providers and community members
- Increased access to harm reduction services, including syringe services programs
- Community education on the use of naloxone

Treatment needs that were identified include, but are not limited to:

- Increased provider availability for pregnant women with OUD and people with co-occurring SUDs and other conditions
- Increased residential and outpatient medication-assisted treatment programs in rural and frontier areas and justice facilities
- Transportation to treatment and recovery supports
- Increased access to and utilization of Opioid Treatment Programs
- Increased access to office-based treatment for OUD
- Increased access to crisis services

Recovery needs that were identified include, but are not limited to:

- The elimination of prior authorization requirements for peer recovery support services
- Increased access to peer support services for pregnant and postpartum women
- Statewide availability of peer support services throughout the treatment and recovery system

Data gathered through the Needs Assessment were used to identify recommendations that were prioritized based on their impact, urgency, and feasibility, as well as whether they addressed a legislative target area. The nine key recommendation areas that were identified through the Needs Assessment, as required by SB 390 and recommended through Johns Hopkins School of Public Health, include:

1. Broaden access to naloxone
2. Increase use of medications to treat OUD
3. Provide treatment and supports during pregnancy and the postpartum period
4. Expand services for neonatal opioid withdrawal syndrome
5. Fund warm hand-off programs and recovery services
6. Improve treatment in jails and prisons
7. Enrich prevention strategies
8. Expand harm reduction programs
9. Support data collection and research

Mercer looks forward to working with the Nevada DHHS, ACRN, SURG, and other stakeholder groups and communities to apply findings from the Needs Assessment to strategically plan how to best apply the Fund for a Resilient Nevada to improve outcomes for all Nevadans.

Section 2
Introduction

From 2011 to 2015, opioid overdoses and prescribing rates were rising across the United States. In 2015, the State of Nevada (State or Nevada) had the second highest prescribing rates of hydrocodone and oxycodone nationally.[2] By late 2015, the Obama Administration declared the Opioid Epidemic a national emergency and began funding efforts to combat the crisis in early 2016. With the newly available federal funding, Nevada began working to address the crisis by holding a Statewide Opioid Conference and developing legislation to curb prescribing. In 2017, Nevada implemented the Drug Enforcement Administration (DEA) High-Intensity Drug Trafficking Areas (HIDTA) program to determine the critical drug-trafficking areas within the State. In 2018, methamphetamines and fentanyl use rates drastically increased; by 2019, Nevada saw opioid overdose deaths with stimulants as a contributing factor drastically increase.

Despite improvement, Nevada ranked twenty-eighth in opioid overdose deaths and twentieth in opioid prescribing in 2019.[3] In 2020, while navigating the Coronavirus Disease 2019 (COVID-19) public health emergency (PHE), the United States saw an overall increase in opioid-related overdose deaths nationwide by 30%.[4] Nevada was not spared from the sharp increase. From 2019 to 2020, opioid-related overdose deaths increased by 42% in Nevada. There was also a significant increase in fentanyl-involved overdose deaths by 227%, and opioid-related emergency department (ED) encounters also increased by 23%.[5] The percentage of drug-related overdose deaths in people of Hispanic origin has increased by 120% from 2019 to 2020, and by 227% for fentanyl-related deaths. No other race/ethnicity categories have shown such a significant increase.[6] Nevada also experienced a sharp rise in polysubstance overdoses and illicit pill consumption. Opioid use within subpopulations within Nevada also increased, such as the self-reported use of heroin and other opioids among pregnant women, which has quadrupled since 2012, while neonatal opioid exposure has doubled.

In March 2021, Nevada passed Senate Bill (SB) 390, establishing the Fund for a Resilient Nevada within the Nevada Department of Health and Human Services (DHHS).[7] Per the legislation, a Statewide Needs Assessment must be conducted to lay the foundation for developing a plan to combat the opioid epidemic in the State and set priorities for distributions from the resiliency fund. Per SB 390, the Needs Assessment must use qualitative and quantitative data and evidenced-based practices. In addition, SB 390 required the creation of the Advisory Committee for a Resilient Nevada (ACRN) to ensure those with direct knowledge of opioid use disorders (OUDs), including those with lived experience, were included in the decision-making process. Assembly Bill (AB) 374 established the Substance

[2] Nevada Overdose to Action and University of Nevada School of Community Health Sciences. *Nevada's Overdose Landscape Presentations*, July 7, 2021.

[3] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[4] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System: Report of Deaths 2019 to 2020 – Statewide,* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[5] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System, Report of Deaths 2019 to 2020 – Statewide,* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[6] Griswold, T., Packham, J., Warner, J., & Etchegoyhen, L. *Nevada rural and frontier health data book – tenth edition*. University of Nevada, Reno, 2021.

[7] Senate Bill 390 Overview. (2021). Available at: https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/8095/Overview

Use Response Working Group (SURG) under the Attorney General's Office to reflect the diversity of Nevada and its expertise in various aspects of substance misuse and substance use disorders (SUDs).[8] The SURG is responsible for making recommendations on substance misuse and SUDs. The SURG coordinates with ACRN, which is responsible for guiding the Statewide Needs Assessment and Statewide Plan, establishing the priority areas for the allocation of the Resilient Nevada Fund.

Mercer Government Human Services Consulting (Mercer), as part of Mercer Health & Benefits LLC, was contracted by the State of Nevada (State) DHHS to objectively review and assess provided documents and materials to assemble a concise Needs Assessment summary with an accompanying presentation for the State's ACRN. The State's Advisory Committee will prioritize recommendations from the Needs Assessment to submit to the DHHS, including feedback from the public and other stakeholder groups.

Following the recommendations from SURG and ACRN, Mercer will collaborate with State staff to develop the initial Statewide Plan to address program areas and target populations focused on the State-level needs identified in the Needs Assessment. This may involve recommendations on programs to implement or revise new services and other activities to address the identified needs. The Statewide Plan will define the priority in which spending of available funds will be considered. The State will support a high-level budget and evaluate the expected cost of implementing any activities contemplated in developing the Statewide Plan.

[8] Assembly Bill 374. (2021). Available at: https://www.leg.state.nv.us/Session/81st2021/Bills/AB/AB374.pdf

Section 3
Methodology

This needs assessment aims to inform the Statewide Plan to address opioid misuse and OUDs in Nevada. Per SB 390, the Needs Assessment must use qualitative and quantitative data and evidence-based practices to determine the gaps and recommendations. Nevada is also responsible for ensuring a complete and accurate reporting of all opioid litigation and settlement dollars for all programs across the State, including reports from the county and local entities.

Nevada DHHS provided key seminal reports to Mercer with information about the opioid-related issues, needs, and conditions in Nevada. These documents provided vital information on the following:

- Quantitative and qualitative data on the use of substances and the rates of an OUD, other SUDs, and co-occurring disorders in Nevada
- Health equity and identification of disparities across racial and ethnic populations, geographic regions, and special populations in Nevada
- The risk factors that contribute to opioid use
- The current state of prevention, treatment, and recovery services for OUDs and related issues such as mental health and other substances

Over 50 reports were provided by DHHS and reviewed by Mercer. A complete list of resources reviewed can be found in Appendix A. Mercer reviewed all reports to pull critical information and data for analysis and synthesis to prepare this report. Mercer presented early concepts and draft outlines of the Needs Assessment to the ACRN and SURG subcommittees for feedback. Mercer also met with various stakeholders to further discuss available reports and data.

Structure of the Report

In accordance with SB 390, the Needs Assessment report is evidence-based, uses existing data and information from existing reports, and includes an analysis of the impact of opioid use and OUD, risk factors that contribute to opioid use, use of substances, and rates of OUDs, other SUDs, and co-occurring disorders using quantitative and qualitative data concerning the State's behavioral health policy board regions, counties, and Native American tribes. The report includes a focus on health equity and identifying disparities across all racial and ethnic populations, geographic areas, and special populations. This report identifies health disparities across all racial and ethnic populations, geographic regions, and special populations, where informative data is currently available. With the support of its Office of Minority Health and Equity, Nevada will employ a health equity lens to ensure the development and implementation of strategies to combat the opioid crisis directly address the needs of communities disproportionately impacted.

This report is divided into the following sections:

- Section 4: Opioid Impact in Nevada

- Section 5: Current System Addressing Opioids in Nevada
- Section 6: Recommendations

Sections 4 and 5 present the information that is currently available and the corresponding existing gaps that. The gaps are taken from documents provided by the State. Gaps have been identified through reviews of prior reports and feedback from State staff and the ACRN. Some gaps were identified because they are implied by data but absent in the available reports (e.g., there are many prevention efforts in schools, but the use of opioids in adolescents is still relatively high). The gaps identified in sections 4 and 5 inform each recommendation in Section 6. Many of the recommendations are taken from reports submitted by the State.

Scoring Methodology

Mercer used a Likert rating scale to assign a value to the recommendations included in this report. The priority rating reflects Mercer's evaluation of the potential impact of the request, as well as urgency and feasibility. Recommendation topics prioritized in legislation for this needs assessment are identified through a Target rating.

Scoring Definitions

The impact, urgency, and feasibility scoring were facilitated by reviewing the factors listed under each area below. The ratings for the elements were averaged within each category to produce an average rating for impact, urgency, and feasibility. They were rated based on whether the recommendation fulfilled one of three legislative priorities: a zero (not responsive to legislative priorities) or a three (responsive to at least one legislative priority). The ACRN was given a copy of all ratings, with a total score comprising the sum of the impact, urgency, and feasibility ratings with the target rating added to indicate legislative priorities.

Impact

The impact was assigned based on a review of the following factors:

1. *The number of lives that would benefit or be impacted*

1	2	3	4	5
Low		Moderate		High

Low = Impacts a small proportion of the population of Nevada residents

High = Impacts almost the entire population with minimal to no exclusions

2. *The magnitude of the individual impact (i.e., improves well-being versus saving lives)*

1	2	3	4	5
Low		Moderate		High

Low = Minimal impact to health/safety/daily life

High = Saves lives or provides major improvement in quality of life or services

3. *The relative impact to health equity for special populations or underserved groups*

1 2 3 4 5
Low Moderate High

Low = Recommendation would be detrimental to health equity or result in disparities

High = Recommendation is focused on alleviating disparities/promoting equity

Urgency

The urgency was assigned based on the need for timely implementation of the recommendation according to the following factors:

1. *Availability of alternatives*

1 2 3 4 5
Low Moderate High

Low = Program or service already exists for the vast majority of those who need it

High = Program or service does not exist/is not being accessed by those who need it

2. *Negative consequence or risk of a delay in implementation*

1 2 3 4 5
Low Moderate High

Low = Minimal risk to the health/safety of the intended population

High = Imminent risk to health/safety of the intended population; target population left vulnerable to negative outcomes

Feasibility

The feasibility was assigned based on:

1. *Current infrastructure*

1 2 3 4 5
Low Moderate High

Low = Infrastructure does not currently exist

High = Existing infrastructure can support recommendation implementation

2. *Ease of implementation (effort)*

1 2 3 4 5
Low Moderate High

Low = Significant effort required, complex barriers or hurdles exist (e.g., complicated policy/regulatory changes, heavy State staff involvement), difficult to implement

High = Minimal effort required for implementation, easy to implement

3. *Availability of resources for implementation (staff, community, and relative financial resources)*

1 2 3 4 5
Low Moderate High

Low = High one-time cost and/or ongoing investment necessary with unknown resources for sustainability

High = Low one-time cost and/or small impact to current funding streams

Target

Target was assigned based on identification as one of three legislative priorities from SB 390, which are consistent with Johns Hopkins Guiding Principles for the use of opioid settlement funds.[9]

1. *Prevention of overdoses*
2. *Addressing disparities in access to health care*
3. *Prevention of substance use among youth*

Legislative Target Area	Score
Yes	3
No	0

[9] Johns Hopkins School of Public Health. *Principles for the Use of Funds from the Opioid Litigation,* 2021.

Section 4

Opioid Impact in Nevada

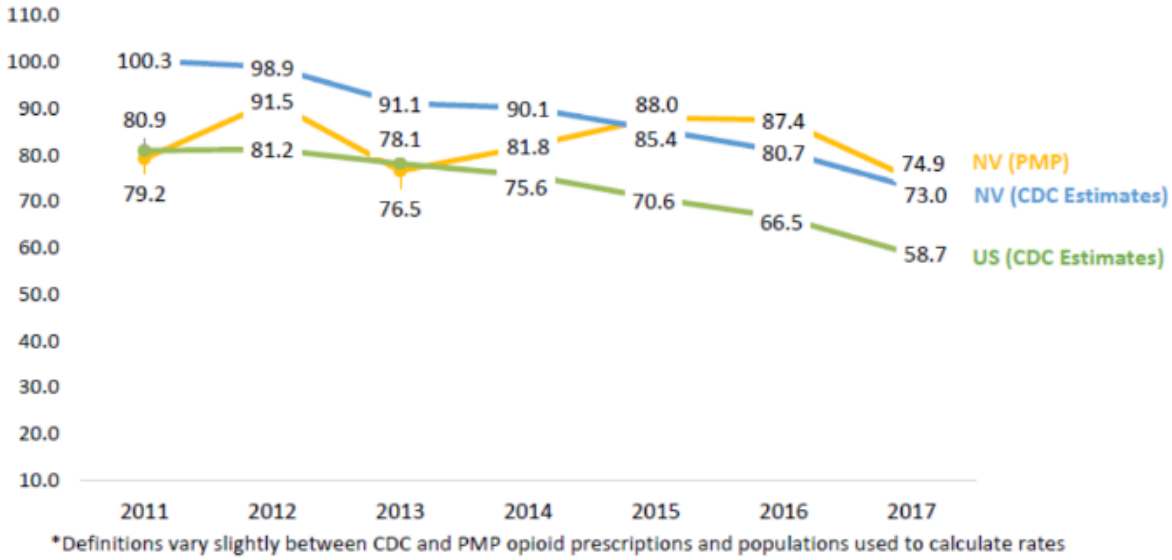
Nevada has experienced serious impacts from the opioid epidemic over the last 10 years, resulting in high rates of opioid related overdoses, increased health care utilization, escalating rates of neonatal abstinence syndrome, insufficient access to treatment, and increased family involvement within child welfare. To understand the impact of the opioid epidemic on Nevada, it is important to consider indicators of opioid use, such as prescription monitoring, survey data, criminal justice data, and overdoses, as well as co-occurring behavioral health and comorbid physical health conditions and opioid-related utilization of EDs and hospitals. Focusing on health disparities and the impact on youth within each of these areas further elucidates the impact of opioids.

Opioid Prescribing in Nevada

In 2011, estimates of Nevada's opioid dispensing was 100.3 prescriptions per 100 people, while the US average was 79.2 prescriptions per 100 people. In response to high rates of opioid prescribing, Nevada developed model legislation in 2017 focused on increased utilization of the Prescription Drug Monitoring Program (PDMP), informed decision making, and best practices for prescribing controlled substances. From January 2017 to May 2022, Nevada has seen a 31% decrease in opioid prescribing in prescriptions per 100 people and a 67% decrease in co-prescribing benzodiazepines and opioids. Opioid prescriptions with a less than 30-day supply and prescriptions with a supply greater than or equal to 90 days both decreased by 54%.[10]

[10] Nevada Prescription Drug Monitoring Dashboard, Available at: https://app.powerbigov.us/view?r=eyJrIjoiYjgyYzkyMzctNDg0OS00ZGY1LWJiMWYtM2E0NDlkZjI0MmEyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

Figure 1. Opioid Painkiller Prescriptions per 100 Population (2011–2017).[11]



While opioid-related overdoses increased during the PHE, prescribing rates decreased. In 2020, the Centers for Disease Control and Prevention (CDC) reported the national opioid dispensing rate was 43.3 per 100 persons, a decrease from 46.7 per 100 persons in 2019.[12] Nevada maintained a higher opioid dispensing rate than the national average in 2019 and 2020, with rates of 49.4 per 100 persons and 47.4 per 100 persons, respectively. Three out of Nevada's five neighboring states also had opioid dispensing rates higher than the national average in 2020. The State of Idaho, the State of Oregon, and the State of Utah had opioid dispensing rates of 49.9, 45.6, and 48.4 per 100 persons, respectively. The State of Arizona's rate was just under the national rate at 40.5 per 100 persons in 2020 and the State of California's rate was 28.5 per 100 persons, the lowest of the neighboring states.

Specific counties within Nevada also had high opioid dispensing rates in 2020. Carson City had the highest rate of opioid dispensing at 95.9 per 100 persons, over two times the national rate. Carson City's rate was almost high enough for each person in the county to have an opioid prescription. As shown in Table 4.1 below, five of the 17 counties in Nevada had opioid dispensing rates higher than the national average.[13]

[11] NRS 433.736. "Requirements and procedures for statewide needs assessment." Available at: https://www.leg.state.nv.us/NRS/NRS-433.html#NRS433Sec736

[12] Centers for Disease Control and Prevention. "Drug Overdose, U.S. State Opioid Dispensing Rates, 2020." Available at: https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html

[13] Centers for Disease Control and Prevention. "Drug Overdose, U.S. State Opioid Dispensing Rates, 2020." Available at: https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html

Table 4.1. Opioid Dispensing Rate by County in 2020[14,15]

County	Rate per 100 Persons	Difference between County and State Rate*	Difference between County and National Rate*
Carson City	95.9	48.5	52.6
Washoe	53.5	6.1	10.2
Lincoln	48.4	1	5.1
Clark	47.4	0	4.1
Mineral	46.6	−0.8	3.3
Douglas	43.2	−4.2	−0.1
Nye	38.5	−8.9	−4.8
Churchill	38.1	−9.3	−5.2
Storey	29.9	−17.5	−13.4
White Pine	28.6	−18.8	−14.7
Elko	25.2	−22.2	−18.1
Pershing	14.9	−32.5	−28.4
Lyon	10.2	−37.2	−33.1
Humboldt	9.7	−37.7	−33.6
Eureka	8.2	−39.2	−35.1
Lander	1.7	−45.7	−41.6

**Positive numbers indicate that the county rate is higher than State/national rates and negative numbers indicate that the county rate is below the State/national rates.*

Nevada's DHHS Office of Analytics maintains a PDMP dashboard.[16] This dashboard uses data from Nevada's Prescription Drug Monitoring Program (NV PDMP) to provide the rates of opioid prescription by top diagnosis, rate of opioid prescriptions by month, opioid prescription by Morphine Milligram Equivalent, days' supply, and day supplies greater than 15 days. The dashboard is updated monthly and is based solely on the number of prescriptions filled by Nevada residents.

While analytic reports are available for the prescribing rates of opioids and benzodiazepines within Nevada, limited reports are available for other drugs co-prescribed along with opioids, such as gabapentin, which is increasingly associated with overdose deaths nationally.[17]

[14] Source: CDC, IQVIA Xponent 2006–2020 Note: Xponent is based on a number of pharmacies that account for nearly 92 percent of retail prescriptions in the United States. Includes new and refill prescriptions. Opioid prescriptions, including buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, oxymorphone, propoxyphene, tapentadol, and tramadol.

[15] Centers for Disease Control and Prevention. "Drug Overdose, U.S. State Opioid Dispensing Rates, 2020." Available at: https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html

[16] State of Nevada Department of Health and Human Services Office of Analytics, *Nevada Prescription Drug Monitoring Program Nevada 2017–2022.* Available at: https://app.powerbigov.us/view?r=eyJrIjoiYjgyYzkyMzctNDg0OS00ZGY1LWJiMWYtM2E0NDlkZjI0MmEyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[17] Public Library of Science. "Gabapentin may increase risk of fatal opioid overdose." (2017, October 3). Available at: https://medicalxpress.com/news/2017-10-gabapentin-co-use-fatal-opioid-overdose.html#:~:text=Gabapentin%20co-

Because many opioid overdoses involve other drugs, such as benzodiazepines, expanding the reports available for drugs tracked by the PDMP would provide better insight into polysubstance use. Reports available through the PDMP are also limited in their description of the characteristics of the individuals receiving prescriptions.

Other Opioid Use Indicators

Survey, arrest, and overdose data are additional means of identifying the prevalence of drugs used without prescriptions. According to the 2019–2020 National Survey on Drug Use and Health (NSDUH), opioid use in Nevada is on the rise, with many substances exceeding US prevalence. The survey estimated the same or higher rates of drug misuse for most drug categories for ages 12 years and up for Nevada, as depicted in Table 4.2 below.[18]

Table 4.2. 2019–2020 NSDUH: Model-based Prevalence Estimates[19]

	Estimated percentage of those ages 12 years–17 years		Estimated percentage of those ages 18 years and older	
	Nevada	United States	Nevada	United States
Illicit Drug Use Past Month	8.35	7.71	21.16	13.79
Cocaine Past Year	0.34	0.36	2.53	2.08
Heroin Use Past Year	—	—	0.39	0.33
Methamphetamine Use Past Year	0.12	0.13	1.41	0.89
Prescription Pain Reliever Misuse Past Year	2.38	1.93	4.02	3.59
Illicit Drug Use Disorder Past Year	4.39	4.85	8.65	6.82
Prescription Pain Reliever Use Disorder Past Year	0.35	0.32	0.84	0.89

This table presents select estimated percentages of the population based on national survey data. These estimates are presented in the source document with confidence intervals to aid in accurate interpretation. These statistics are estimates based on limited survey data.

Compared to the overall US rates, Nevada is estimated to have slightly higher rates of illicit drug use for adolescents, and much higher rates for those ages 18 years and older. Prescription pain reliever misuse is also estimated to be higher for Nevada than national rates across all age groups.

In addition to survey data, opiates, especially illicit fentanyl and heroin, have been identified as high threat substances, in part due to increased availability, seizures, arrests, and overdoses.[20] Fentanyl has increased in risk, with 196% increase in fentanyl overdose deaths

use%20may%20increase%20risk%20of%20fatal%20opioid,1.49%3B%2095%25%20confidence%20interval%201.18%20to%201.88%2C%20p%3C0.001%29.

[18] Substance Abuse and Mental Health Services Administration, *2019–2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia),* 2021. Available at: https://www.samhsa.gov/data/report/2019-2020-nsduh-state-prevalence-estimates

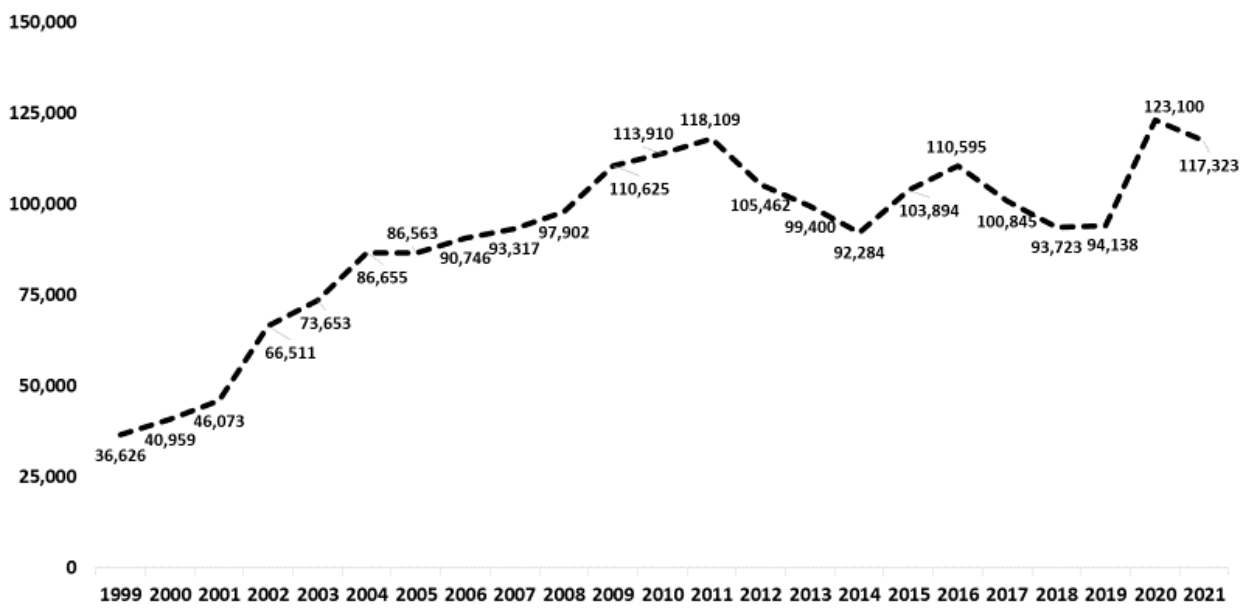
[19] Substance Abuse and Mental Health Services Administration, *2019–2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia),* 2021. Available at: https://www.samhsa.gov/data/report/2019-2020-nsduh-state-prevalence-estimates

[20] Nevada HIDTA Investigative Support Center, *2021 Threat Assessment,* 2021.

between 2019 and 2020. The 2020 Nevada HIDTA report indicates fentanyl has surpassed heroin as Nevada's second biggest threat following methamphetamines.

NSDUH is known to undercount OUDs. To determine more realistic estimates for opioid misuse and OUDs for Nevada, data analyses from other data sources were used for modeling of the prevalence of OUD. Using three different calculations, it is estimated over 117,000 individuals in Nevada met criteria for an OUD in 2021.

Figure 2. OUDs in Nevada, 1999–2021 (2021 based on provisional death count).[21]



Opioid Use in Special Populations

Special populations are defined within the legislation as veterans; homeless population; pregnant women; youth; people who identify as lesbian, gay, bisexual, transgender, intersex, queer/questioning, or asexual (LGBTQ+); juvenile justice; and children in the welfare system. Drug-related and opioid-related fatal and nonfatal overdose data are limited for these populations.

The 2019 Nevada State Health Needs Assessment noted that the populations with the highest risk for SUD include those with behavioral health issues, seniors, children, low-income families, minority populations, homeless populations, veterans, individuals with intellectual and developmental disabilities, individuals with chronic disease, young adults and transition aged youth, and victims of domestic abuse/sex trafficking.[22] These characteristics and co-occurring conditions impact individuals on both a systems and individual level, and interventions need to be planned both globally and locally.

[21] NRS 433.736. "Requirements and procedures for statewide needs assessment." Available at: https://www.leg.state.nv.us/NRS/NRS-433.html#NRS433Sec736

[22] University of Nevada, Reno, School of Public Health, *Forensic Toxicology & Nevada's Overdose Surveillance System; Needs Assessment & Recommendations.* 2020.

Veterans

Nevada's State Unintentional Drug Overdose Report System (SUDORS) data reports the rate of drug-related overdose deaths for military individuals at 6.6% in 2020 (out of 788 total overdose deaths). [23] Despite 6.2% of Nevadans being veterans, there is little additional data on this population and opioids.

Homeless

There is limited data available for individuals experiencing homelessness beyond the 8.9% of drug-related overdoses that were reported in 2020.[24]

Pregnant Women

Based on self-reported data collected by the DHHS' Office of Analytics, an average of 42 babies are born each year in Nevada with prenatal substance use specific to opioids. The rate of babies born to a mother using opioids (excluding heroin), as well as the rate born to mothers using heroin, increased from 2018 to 2019. The number of substance-exposed infants reported to the Nevada Department of Children and Families more than tripled from 2012 to 2020. Between 2012 and 2016, self-reported use of heroin among pregnant women was highest in Nye, Esmeralda, and Lincoln counties, and Elko, Eureka, and White Pine were highest for self-reported opioids.[25] Neonatal abstinence syndrome rates in Nevada were highest in Southern Nevada, with an incidence rate of 8.2 per 1,000 hospital births.[26]

Youth

On the Nevada Youth Behavior Risk Survey in 2019, 8% of high school students reported taking pain medication, such as Adderall®, codeine, OxyContin®, Percocet®, Ritalin®, Vicodin®, or Xanax®, without a prescription or differently than prescribed within the past 30 days.[27] 17% of high school students reported they thought it would be fairly easy to get prescription medication they wanted, while 11.1% thought it would be very easy. 2.2% reported ever injecting drugs.

LGBTQ+

There is evidence that anti-LGBTQ+ discrimination, marginalization, and victimization create elevated levels of stress (often conceptualized as minority stress) that can disrupt an individual's psychological processes, such as the ability to cope adaptively, regulate emotions, and achieve positive interpersonal relationships. External stigma can become internalized, leading to identity concealment, self-hate, feelings of worthlessness, and fear of rejection. To avoid or numb the resulting distress, some people belonging to LGBTQ+ communities may use opioids or other substances.

---

[23] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019–2020 — Statewide, 2019.* Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

[24] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019–2020 — Statewide, 2019.* Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

[25] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[26] Batra, K, Cruz, P, et al. "Incidence of Neonatal abstinence syndrome epidemic and associated predictors in Nevada: A statewide audit," *Int J Environ Res Public Health*, Volume 18 Issue 1 (2020).

[27] Diedrick, M., Lensch, T. Zhang, F., Peek, J., Clements-Nolle, K., Yang, W. *State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. 2019 Nevada High School Youth Risk Behavior Survey (YRBS) Report*.

Certain clinical situations specific to LGBTQ-identified people place them at increased risk of prescription opioid exposure and therefore potential misuse. For example, transgender-identified adults with Medicare health coverage were found to have an increased prevalence of chronic pain compared with cisgender (non-transgender) adults.[28]

LGBTQ-identified people appear to be at elevated risk of opioid use and misuse. According to the 2015 NSDUH, 10.4% of LGB (lesbian, gay, bisexual) adults misused prescription pain medications in the past year, compared with 4.5% of heterosexual adults. LGB adults were also more likely to have a disorder related to pain reliever use compared with heterosexual adults (2.0% vs. 0.7%), and more likely to use heroin in the past year (0.9% vs. 0.3%).[29]

Data from the 2018 NSDUH, suggests that substance use patterns reported by sexual minority adults (in this survey, sexual minority adults include individuals who describe themselves as lesbian, gay, or bisexual) are higher compared to those reported by heterosexual adults. Past year opioid use (including misuse of prescription opioids or heroin use) was also higher with 9% of sexual minority adults aged 18 years or older reporting use compared to 3.8% among the overall adult population. Additionally, 9% of sexual minority adults aged 26 years or older reported past year misuse of prescription opioids — an increase from the 6.4% who reported misuse in 2017. However, there was a significant decline in past year prescription opioid misuse among sexual minority adults aged 18 years–25 years with 8.3% reporting use in 2018.[30]

Juvenile Justice

Data are limited regarding opioid use among those involved with the juvenile justice system in Nevada. National data estimate that 20% of adolescents and young adults in the juvenile justice system are opioid-dependent, with disproportionate rates for people of color.[31]

Children in the Welfare System

In 2020, 1,892 infants were reported to the Nevada Division of Child and Family Services with substance exposure. This number has tripled since 2012.[32] A total of 11,976 Child Protective Services reports included drug or alcohol use-related characteristics. Of the 2,687 children in the foster care system in 2020, 14.2% were removed due to parental drug and/or alcohol use. Of those removed, 17.6% were under the age of one year. An additional data analysis estimated that between 2015 and 2019, 9% of child welfare cases and 14% of foster care placements.

[28] Girouard, M., Goldhammer, H., Keuroghlian, A. “Understanding and treating opioid use disorders in lesbian, gay, bisexual, transgender, and queer populations,” *Substance Abuse*, Volume 40 Issue 3 (2019), pp. 335–339

[29] Substance Abuse and Mental Health Services Administration. *2019 National Survey on Drug Use And Health: Lesbian, Gay, & Bisexual (LGB) Adults*, 2020. Available at: https://www.samhsa.gov/data/report/2019-nsduh-lesbian-gay-bisexual-lgb-adults

[30] National Institute on Drug Abuse. “Substance Use and SUDs in LGBTQ* Populations.” Available at: https://nida.nih.gov/drug-topics/substance-use-suds-in-lgbtq-populations

[31] University of Washington, School of Social Work. “SDRG looks at ways to prevent opioid dependence among incarcerated youth, (2021, May 17). Available at: https://socialwork.uw.edu/news/sdrg-looks-ways-prevent-opioid-dependence-among-incarcerated-youth#:~:text=Nationally%2C%20nearly%2020%25%20of%20adolescents%20and%20young%20adults,which%20is%20a%20strong%20predictor%20of%20subsequent%20re-incarcerations.

[32] Data received from the State of Nevada Department of Health and Human Services, January 27, 2022.

Emergency Service Utilization

Poison Control Center Services

Poison control centers provide confidential services to individuals seeking information including the identification of pills, answering questions about drug interactions, appropriate dosing, advising on responses for exposure, and response in the event of overdose. Nevada poison control center data systems indicate that between 2015 and 2019, 30.5% of informational calls and 3.6% of all exposure calls were related to prescription opioids.[33]

Opioid-Related ED and Inpatient Utilization — All Payers

In June 2019, Nevada completed a system-wide assessment using the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Calculating an Adequate System Tool (CAST).[34] The tool results indicate areas of least resources and therefore greatest overall risk for substance misuse-related hospitalizations, broken out by county and Regional Behavioral Health Policy Boards. Of Nevada's five regions, only Nevada's mostly rural Northern Region fell below the national median for risk for hospitalizations, meaning the rest of the State's regions are equal to or greater than the national median for substance use-related hospitalization risk.

From 2010 to 2020, opioid-related ED encounters increased by 96%, and inpatient admissions increased by 95%.[35] The rate of ED encounters per 100,000 Nevada residents increased from 109.5 to 184.3, and the rate per 100,000 Nevada residents of inpatient admissions increased from 161.2 to 269.7.

In terms of demographics, in 2021, the rate of opioid-related ED encounters was highest among people of Black, Non-Hispanic ethnicity, at 298.4 per 100,000.[36] Inpatient admissions were highest among those reporting White, Non-Hispanic ethnicity, at 325.0 per 100,000 Nevada residents. Rates were highest among Nevada residents ages 25 years–34 years (24%). From 2010 to 2020, opioid poisonings in the ED increased by 23%, and inpatient admissions decreased by 25%. The rate per 100,000 Nevada residents in the ED increased from 28.8 to 30.5, and inpatient rates per 100,000 Nevada residents decreased from 22.1 to 14.3.

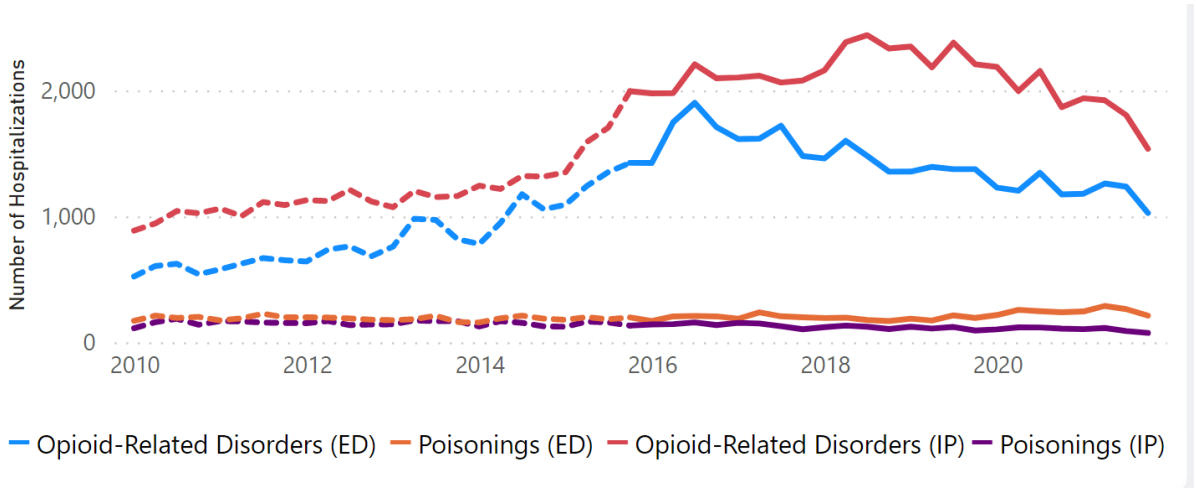
[33] NRS 433.736. "Requirements and procedures for statewide needs assessment." Available at: https://www.leg.state.nv.us/NRS/NRS-433.html#NRS433Sec736

[34] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada Substance Abuse Prevention and Treatment Agency. Capacity Assessment Report: Nevada*, 2019.

[35] State of Nevada Department of Health and Human Services Opioid Dashboard, Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[36] State of Nevada Department of Health and Human Services Opioid Dashboard, Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

Figure 3. Opioid-Related Hospitalizations by Quarter, Nevada Residents[37]



Stimulant-Related ED and Inpatient Utilization — All Payers

Nevada has seen sharp increases in methamphetamine and other stimulant use between 2011 and 2020.[38] Methamphetamine-related ED visits increased from 115.7 to 512.7 per 100,000, and inpatient admissions increased from 88.6 to 402.4 per 100,000. Carson City had the highest increases in both ED visits and inpatient utilization related to methamphetamine.

Opioid-Related ED and Inpatient Utilization — Medicaid Payers

From 2010 to 2017, opioid-related ED visits for Nevada Medicaid beneficiaries rose from 400 to 3,463 visits. From 2019 to 2020, opioid-related ED visits increased by 26% (from 2,185 to 2,755 visits), while drug-related ED visits Statewide increased by about 3% (from 8,117 visits to 8,352 visits). Table 4.3 depicts the rise in ED visits per 100,000 from 2019 to 2021 for opioid and drug-related visits.

In 2018, ED visits and hospitalizations for all opioids except heroin were highest for those aged 15 years–24 years in Humboldt County.[39] In 2021, Medicaid paid 53% of opioid-related ED encounters.[40]

[37] State of Nevada Department of Health and Human Services Opioid Dashboard, Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[38] State of Nevada Department of Health and Human Services, Office of Analytics, Methamphetamine and Stimulant Dashboard, data dated November 24, 2011. Available at: https://app.powerbigov.us/view?r=eyJrIjoiY2U2YzNlNmItZDI2OS00YTJlLTk2YmQtNzY1Nzk0MDFkZWMzIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[39] Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[40] State of Nevada Department of Health and Human Services Opioid Dashboard, Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

Table 4.3 Medicaid ED Visits per 100,000 Opioids and Other Drugs[41]

	2019 Rate per 100,000	2020 Rate per 100,000	2021 Rate per 100,000
Opioid-Related ED Visits	5.8	6.2	7.8
Drug-Related ED Visits	21.3	20.0	22.1

In 2021, Medicaid paid 44% of the opioid-related inpatient admissions in Nevada. [42] Opioid-related inpatient visits also increased by 97% from 2010–2018, with 317.2 admissions per 100,000 in 2018.[43] Part of this significant increase could be explained by Medicaid expansion in 2014, as the State saw a 25% increase in admissions from 2014 to 2015.

In 2018, 73% of opioid-related ED visits and 73% of opioid-related hospitalizations were among people who are of White, Non-Hispanic race/ethnicity.[44] White, Non-Hispanic Nevadans aged 25 years–34 years made up the largest percentage of hospitalizations at 28%.

Fatal Opioid Overdoses

Data on opioid overdoses further elucidates the picture of opioid impact in Nevada. This section provides an overview of the magnitude of opioid overdoses in Nevada, while a later section will detail demographic characteristics of those involved in overdoses.

Overdose Data Sources

In 2019, the CDC launched a multi-year Overdose Data to Action (OD2A) program through a cooperative agreement that aims to support jurisdictions in "collecting high quality, comprehensive, and timely data on nonfatal and fatal overdoses."[45] Nevada is one of the 66 recipients using the OD2A funding to capture State and county-level data. The Nevada-OD2A (NV-OD2A) program is focused on mortality data and on opioid prescribing data via NV PDMP. NV-OD2A supports Nevada's SUDORS, National Syndromic Surveillance Program (NSSP), and the NV PDMP.

SUDORS captures fatal overdose data via death certificates, as well as coroner/medical examiner reports, which include post-mortem, toxicology, death scene investigations, route of drug administration, and other risk factors that may be attributed to a fatal overdose. All coroner/medical examiner offices currently report the following:

- Overdose deaths are defined as a death occurring in Nevada where the decedent's place of residence is within the State and assigned an International Classification of Diseases

[41] State of Nevada Department of Health and Human Services, Nevada Overdose to Action, Lawson Institute. *Suspected Nevada Drug Overdose Surveillance Monthly Report: October 2021: Statewide Report.* Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/opioid-surveillance-january-2022-statewide.pdf

[42] State of Nevada Department of Health and Human Services Opioid Dashboard. Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[43] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[44] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[45] Centers for Disease Control and Prevention. "Drug Overdose, About OD2A." Available at: https://www.cdc.gov/drugoverdose/od2a/about.html

10 (ICD-10) code of X40–X44 (unintentional drug poisoning) or Y10–Y14 (drug poisoning of undetermined intent)

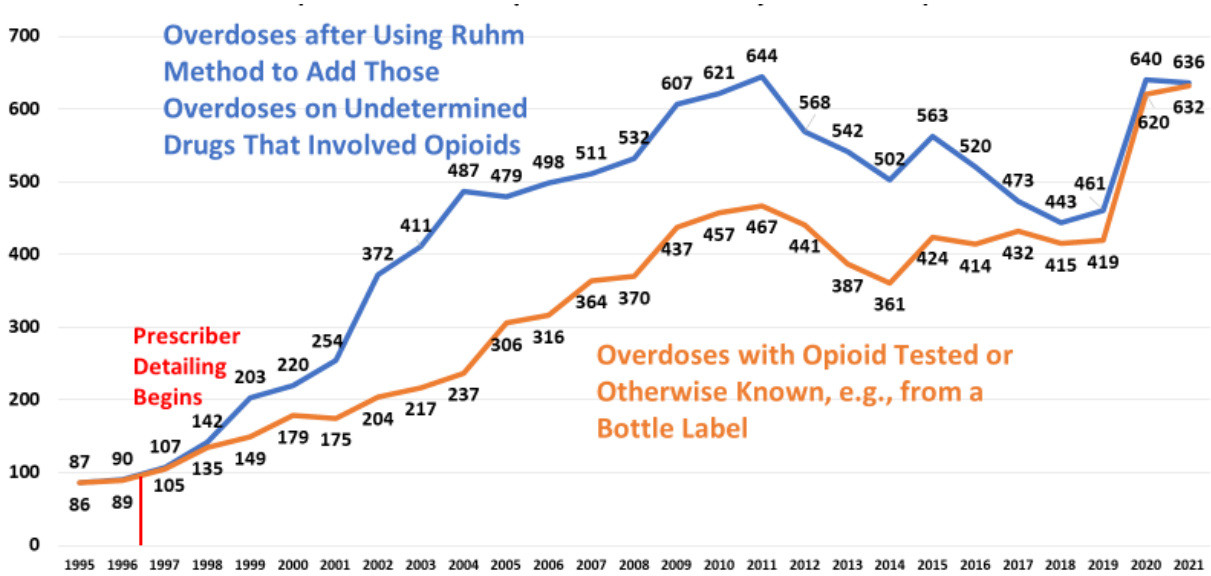
- Deaths determined to be a drug overdose death by the coroner or medical examiner.

NSSP data captures real-time non-fatal overdose data via hospital electronic health records. Overdoses are counted when the chief complaint and/or discharge diagnosis is associated with an overdose related ICD-10 code. The NSSP data captures visits from 90%–95% of all Nevada EDs. This data is limited in that it only includes individuals who can get to an ED.

Nevada Overdoses

In 2019, Nevada ranked twenty-eighth in opioid overdose deaths and twentieth in opioid prescribing.[46] In 2020, there were 541 opioid related overdose deaths among Nevada residents (rate: 17.1 per 100,000). This is a significant increase from 374 in 2019 (rate: 12.0 per 100,000). Preliminary data from 2021 show 269 opioid related overdose deaths among Nevada residents. Deaths from synthetic opioids (e.g., illicit fentanyl) increased in 2020, from less than 50 in 2010 to nearly 200 in 2020.[47] According to additional data analysis, which includes accounting for overdose deaths from undetermined drugs, it is estimated that previous opioid overdose fatalities have been undercounted.

Figure 4. Ruhm-Adjusted Opioid Death Counts and the Portion with Drugs Identified by Year, Nevada, 1995–2021.[4849]



First paralleling Keyes et al. (2022), we estimated OUD counts excluding fentanyl from 1999–2021 by dividing Nevada opioid overdose death counts, again excluding fentanyl, by the number of overdose deaths per OUD.[50] Based on a meta-analysis of

[46] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[47] Data received from the State of Nevada Department of Health and Human Services, January 27, 2022.

[48] NRS 433.736. "Requirements and procedures for statewide needs assessment." Available at: https://www.leg.state.nv.us/NRS/NRS-433.html#NRS433Sec736

[49] Ruhm CJ. "Corrected US opioid-involved drug poisoning deaths and mortality rates, 1999–2015," *Addiction*, Volume 113 Issue 7 (2018), pp. 1339–1344. Available at: https://www.ncbi.nlm.nih.gov/pubmed/29430760.

[50] Keyes KM, Rutherford C, Hamilton A, Barocas JA, Gelberg KH, Mueller PP, Feaster DJ, El-Bassel N, Cerdá M. "What is the prevalence of and trend in opioid use disorder in the United States from 2010 to 2019? Using multiplier approaches to estimate prevalence for an unknown population size." *Drug and Alcohol Dependence Reports,* Volume 3, 100052 (2022).

published ratios, we started with a divisor of 0.0052.[51] The articles underlying this divisor preceded the passage of laws that allowed Emergency Medical Services (EMS) calls for drug overdose without fear of arrest and made the overdose reversal drug naloxone available without a prescription and often without charge. When Nevada adopted those interventions under SB 459 of 2015, it lowered the divisor. We reduced the divisor post-implementation by 26.9% starting in 2016 based on a study that found a Good Samaritan Law reduces the death rate by 15% and a Naloxone access law reduces it by 14%.[52] We based a divisor for fentanyl on a study that found fatality risk among people with OUD was 1.62 times higher if the person used fentanyl. 2021 counts are provisional and may underrepresent actual numbers.[53]

Deaths resulting from methamphetamine use increased from 4.4 to 13.7 per 100,000, with the highest prevalence among Black, non-Hispanic males and those between 50 years–59 years old. Stimulant prescriptions increased from 10.1 to 14.7 per 100 residents, with the highest prevalence among females aged 30 years–39 years.[54]

In 2020, opioids contributed to 65.2% of drug-related overdose deaths.[55] Of the opioid-related overdose deaths, 32.4% were due to illicitly manufactured fentanyl (IMF), 28.2% were due to prescription opioids, 15.7% were due to heroin, and approximately 5% were due to methadone. Opioid overdose deaths due to fentanyl have increased by 227% between 2019 and 2020. Data also identified a 275% increase in amphetamine-related unintentional overdose deaths. Table 4.4 below demonstrates the significant increases contributing to death in opioids, IMF, and amphetamines.[56]

Table 4.4. Top Substances contributing to death among unintentional or undetermined overdose related deaths in Nevada, 2019 to 2020

Substance*	2019	2020	Trend*
	N=510	N=788	
Opioids			
Any opioids	292	514	↑ 76.0%
IMF	78	255	↑ 226.9%
Heroin	103	124	↓20.4%
Prescription opioids	128	180	
Non-opioids			
Methamphetamine	264	376	
Benzodiazepines	89	168	
Alcohol	79	97	

[51] Larney S, Tran LT, Leung J, Santo T Jr, Santomauro D, Hickman M, Peacock A, Stockings E, Degenhardt L. "All-Cause and Cause-Specific Mortality Among People Using Extramedical Opioids: A Systematic Review and Meta-analysis," *JAMA Psychiatry*, Volume 55 Issue 5 (2020), pp. 493–502. Note: Some ratios in the study, but not this one, count extra-medical users of drugs rather than OUDs per overdose death.

[52] McClellan C, Lambdin BH, Ali MM, Mutter R, Davis CS, Wheeler E, Pemberton M, Kral AH. "Opioid-overdose laws association with opioid use and overdose mortality," *Addict Behav*, Volume 86 (2018), pp. 90–95.

[53] Pearce L A, Min J E, Piske M, Zhou H, Homayra F, Slaunwhite A et al. "Opioid agonist treatment and risk of mortality during opioid overdose public health emergency: population based retrospective cohort study," *BMJ*, 2020; 368:m772.

[54] State of Nevada Department of Health and Human Services Opioid Dashboard. Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[55] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System: Report of Deaths 2019 to 2020 – Statewide,* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[56] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System*: *Report of Deaths 2019 to 2020 – Statewide* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

Substance*	2019	2020	Trend*
Cocaine	52	86	
Diphenhydramine	24	34	
Gabapentin	23	45	
Kratom	16	24	
Amphetamine*	8	30	↑ 275.0%
Polysubstance abuse			
Opioid + Stimulants	125	210	
Opioid + Benzos	76	149	
Opioid + Alcohol	58	71	

**Only statistically significant differences between 2019 and 2020 rates are included in this table. Source: SUDORS Statewide 2019–2020 report and 2020 regional reports. Overdose deaths were limited to Nevada resident deaths that occurred in Nevada with the underlying cause of death reported as X40–X44 or Y10–Y14. Data completeness is dependent on information documented at time of death*.

Other Substances Contributing to Overdose Deaths

There has also been an increase in overdose deaths related to multiple substances. According to the CDC, although deaths involving prescription opioids declined between 2017 (276) and 2018 (235), heroin-involved deaths and those involving synthetic opioids other than methadone (mainly fentanyl and fentanyl analytics) remained stable, with 108 heroin deaths and 85 synthetic opioid deaths in 2018.[59] Meanwhile, from 2019 to 2020, overdose deaths involving one or more substances increased by 16%, opioid and one or more substances increased by 4%, and stimulants and one or more other substances increased by 17%.[60]

Methamphetamine is one of the primary substances causing an increase in overdose deaths. In 2020, 24.5% of opioid-related overdose deaths involved opioids and stimulants, 18.9% involved opioids and benzodiazepines, and 9% involved opioids and alcohol. [61] The percentages of opioids combined with stimulants and benzodiazepines increased from 2019 to 2020, while the rate of deaths involving opioids and alcohol decreased.

While there was a 99% increase in opioid and stimulant overdose deaths in rural regions from 2019–2020, Clark County experienced a 155% increase in overdose deaths involving opioids and benzodiazepines.[62] Among the counties, Washoe County had the highest rate of overdose deaths attributable to both the combination of opioids and stimulants and the combination of opioids and benzodiazepines.[63]

[59] Wilson, N., Mbabazi, K., Puja, S., "Drug and Opioid-Involved Overdose Deaths — United States, 2017–2018," *MMWR Morb Mortal Wkly Rep*, Volume 69 (2020), pp. 290–297. Available at: https://www.cdc.gov/mmwr/volumes/69/wr/mm6911a4.htm

[60] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019-2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

[61] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019-2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

[62] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019-2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

[63] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019-2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

Routes of Drug Administration

The routes of drug administration used by Nevadans who died of an overdose should also be discussed to inform targeted prevention and harm reduction efforts. In 2020, the most common route of administration used in drug-related overdose deaths was ingestion. The percentage of overdose deaths involving ingestion rose from 43.1% in 2019 to 44.4% in 2020. The second most common route was smoking, which accounted for 21.0% of deaths in 2020. Snorting/sniffing-related overdose deaths increased by 215.4% between 2019 and 2020 from 26 deaths in 2019 to 82 in 2020.

Population Characteristics of Overdose Cases

Youth

As shown in Table 4.5, overdoses among the under-24-year-old population increased dramatically between 2019 and 2020. Overdose deaths among individuals under the age of 18 years increased from two deaths to 13 deaths (a 550% increase) and from 36 deaths to 93 deaths among those aged 18 years–24 years (a 158% increase).

Racial/Ethnic Disparities

Evidence clearly shows that Black, Indigenous, and other people of color who use drugs or have SUDs experience disproportionate negative outcomes due to discriminatory systemic policies and practices. For example, people of color have less access to evidence-based treatment, receive lower quality of care, and are more likely to be punished for their substance use, compared to white people. In 2020, Nevada's diverse population included people who are Hispanic and Latino (28.7%), Black and African American (12.1%), Asian (11.4%), American Indian and Alaska Native (3.4%), and Native Hawaiian and Other Pacific Islander (1.7%), among others. [64] Nevada is also home to many immigrants. In 2018, immigrants comprised nearly 20% of Nevada's population, half of whom were naturalized US citizens. Approximately 210,000 people in Nevada lacked a legal immigration status in 2016. 9% of individuals under the age of 65 years have disabilities, over 12% live in poverty, over 30% speak a language other than English at home, and 11% are uninsured, all of which are characteristics that also make the experience of health disparities more likely.

Nevada has 27 federally recognized tribes, each with separate reservations or colonies, and 97% of which are rural.[65] American Indian/Alaskan Native (AI/AN) make up 1.2% of Nevada's population and experience a variety of risk factors for disparities in SUDs and treatment, including higher unemployment, lower four-year high school graduation rates, and lower annual household income. According to United States Census Bureau aggregate data (2015–2019), the median income among those living on tribal lands is lower and unemployment rates and poverty rates are higher compared to Nevada overall.

The overdose death rates for AI/AN people in Nevada (14.0 per 100,000) were higher than that of Hispanic (6.3 per 100,000) or Asian/Pacific Islander (3.2 per 100,000) Nevadans.

[64] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[65] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

From 2015-2020 negative health consequences and substance use rates among AI/AN people in Nevada were consistently high.[66]

As shown in Table 4.5, from 2019–2020, the Statewide percentage of drug-related fatal overdoses increased by 119.7% for Hispanic populations and 43.7% for white populations.[67] The majority of unintentional drug-related overdoses in Nevada in 2019 and 2020 occurred in white men, 25 years–64 years of age, with a high school diploma.

It is also important to note that while the rate of growth of the Hispanic population is projected to be 21% from 2021 to 2031 (more than twice that of the overall population [9.3%]),[68] overdose deaths for this population have seen a statistically significant increase beyond that of people of Asian and Black races/ethnicities. The percentage of drug-related overdose deaths in people of Hispanic origin has increased by 120% from 2019 to 2020, and by 227% for fentanyl-related deaths. No other race/ethnicity categories have shown such a significant increase.[69]

Table 4.5. Statewide Drug-Related Overdose Death Demographics[70]

Demographics	2019 Counts	2020 Counts	Significant Relative Percentage Changes*
Sex			
Male	326	538	
Female	184	250	
Race/Ethnicity			
Asian/Pacific Islander	18	19	
Black (non-Hispanic)	72	107	
Hispanic	66	145	↑ 119.7%
White	343	493	↑ 43.7%
Other	5	9	
Age			
<18 years	2	13	↑ 550.0%
18 years–24 years	36	93	↑ 158.3%
25 years–34 years	83	149	
35 years–44 years	99	144	
45 years–54 years	120	158	

[66] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020–September 29, 2021, Annual Performance Progress Report*, 2021.

[67] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System*: *Report of Deaths 2019 to 2020 – Statewide* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[68] Griswold, T., Packham, J., Warner, J., & Etchegoyhen, L. *Nevada rural and frontier health data book – tenth edition.* University of Nevada, Reno, 2021.

[69] Larson Institute/Nevada Overdose to Action. *2020 Hispanic/Latinx Overdose*, 2021.

[70] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System*: *Report of Deaths 2019 to 2020 – Statewide* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

Demographics	2019 Counts	2020 Counts	Significant Relative Percentage Changes*
55 years–64 years	126	162	
65+ years	44	69	
Education			
Less than High School	66	118	
High School/GED	271	391	
Some College	56	101	
Associates	31	62	
Bachelors	32	47	
Masters/Doctorate	9	9	

**Only statistically significant differences between 2019 and 2020 rates are included in this table. Source: SUDORS Statewide 2019–2020 report and 2020 regional reports. Overdose deaths were limited to Nevada resident deaths that occurred in Nevada with the underlying cause of death reported as X40–X44 or Y10–Y14. Data completeness is dependent on information documented at time of death.*

Geography of Overdose Fatalities

Statewide and Regional Overdose Fatalities

From 2019–2020, the State experienced a 55% increase in drug-related overdose deaths with overdose deaths attributable to opioids increasing by 76%. In 2020, 788 drug-related overdose deaths occurred, as shown in Table 4.6. Of those deaths, 65.2% were attributable to opioids.[71] In the Northern Behavioral Health Region[72] of the State, opioids were listed as the cause of death for 61% of overdose deaths and 67% of overdose deaths in the Southern Behavioral Health Region.[73]

Table 4.6. State and Regional-Level Drug-Related Overdose Death Rates.

	2019	2020	Percentage Change
State-Level			
Drug-Related Overdose Deaths	510	788	↑ by 55%*
Overdose Deaths Attributable to Opioids	292	514	↑ by 76%*
Region-Level: Northern			
Drug-Related Overdose Deaths	172	219	↑ by 27%
Overdose Deaths Attributable to Opioids	104	133	↑ by 28%
Region-Level: Southern			

[71] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System*: *Report of Deaths 2019 to 2020 – Statewide* 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[72] Includes the following counties: Washoe, Carson City, Storey, Douglas, Lyon, Churchill, Mineral, Esmeralda, Lincoln, Humboldt, Pershing, Lander, Eureka, Elko

[73] Includes the following counties: Clark, Nye, White Pine

	2019	2020	Percentage Change
Drug-Related Overdose Deaths	338	569	↑ by 68%*
Overdose Deaths Attributable to Opioids	188	381	↑ by 103%*

**Indicates statistically significant difference between 2019 and 2020. Source: SUDORS Statewide 2019–2020 report and 2020 regional reports. Overdose deaths were limited to Nevada resident deaths that occurred in Nevada with the underlying cause of death reported as X40–X44 or Y10–Y14. Data completeness is dependent on information documented at time of death.*

County-Level Overdose Fatalities

The University of Nevada, Reno, School of Medicine, published the tenth edition of the Nevada Rural and Frontier Health Data Book in February 2021. This health data book categorizes Nevada counties as urban, rural, or frontier using the Nevada State Office of Rural Health's guidance.[74]

Of the 17 counties within Nevada, three counties are classified as urban (Carson City, Clark County, and Washoe County); another three are classified as rural (Douglas County, Lyon County, and Storey County); and the other 11 counties are classified as frontier. This means over half of the counties (64.7%) within Nevada are considered frontier. While 90.9% of Nevada's population resides in urban areas, 13.1% of the State's land, the remaining 9.1% of the population live in rural or frontier counties, which span across 86.9% of the State's land, approximately 95,431 square miles.

With almost 9.1% of the population in rural or frontier counties, the State faces many challenges when it comes to ensuring access to resources and treatment in these areas, due to unique populations with specific needs. Rural and frontier counties tend to have older populations than urban counties, which generally results in a greater risk of death and disability within those counties. These counties also have a higher percentage of Nevada-born residents, at approximately 27.7% compared 26.3% in urban counties.

While 75.5% of the population rural and frontier counties is white, 17.3% of the population in these counties is Hispanic. Approximately 13.8% of the Nevada veteran population live in rural and frontier counties. Approximately 26.5% of the current prison population are incarcerated in rural or frontier counties. Income also tends to be lower in rural and frontier counties. In 2019, the average per capita income for rural and frontier counties was lower than that of urban counties by more than $6,000 dollars per year ($47,990 versus $54,879).

The frontier counties of Mineral, Lincoln, Eureka, and Esmeralda, and the rural county of Storey, have the smallest populations (less than 5,000 persons) in Nevada. Lincoln County's opioid-related overdose death rate was 19.3 per 100,000 in 2020, one of the highest rates in Nevada. Due to low populations, the rate of opioid-related overdose death rates could not be reported for Storey, Eureka, and Esmeralda counties (see Table 4.7).[75] Of the remaining frontier counties, Douglas, Humboldt, Pershing, and Lander counties all reported increases in the rate of opioid-related drug overdoses in 2020.

The three urban counties are home to over 90% of the population. Clark County is the largest urban county by far, with a population of a little over 2.2 million persons. While Carson City

[74] University of Nevada, Reno, School of Medicine, *Nevada Rural and Frontier Health Data Book,* 2021.

[75] State of Nevada Department of Health and Human Services. *Suspected Nevada Drug Overdose Surveillance Monthly Report, January 2022: Statewide Report.*

experienced a decrease in the rate of opioid-related overdose deaths, Clark and Washoe Counties experienced increases.

Rates of drug-related and opioid-related overdoses increased in nine of the 12 counties with reportable rates from 2019 to 2020, as seen in Table 4.7 below. Douglas, Elko, and Nye counties experienced increases by at least 10 deaths per 100,000 in 2020. While the change in rate from 2019 to 2020 cannot be calculated for Lander, Lincoln, and Pershing counties, due to the 2019 rate of zero or too low to report, it can be inferred that the rates have significantly increased because 2020 data are above zero and reportable.

Table 4.7. Drug-Related and Opioid-Related Overdose Death Rates[76]

County	Drug-Related Overdose Death Rates			Opioid-Related Overdose Death Rates		
	2019	2020	Change	2019	2020	Change
Carson City	26.6	19.5	↓ 7.1	16.0	8.8	↓ 7.2
Churchill	23.3	19.3	↓ 4.0	19.4	15.5	↓ 3.9
Clark	19.2	24.5	↑ 5.3	11.0	16.6	↑ 5.6
Douglas	14.2	20.1	↑ 5.9	5.1	18.1	↑ 13.0
Elko	5.5	12.7	↑ 7.2	1.8	12.7	↑ 10.9
Esmeralda	—	—	—	—	—	—
Eureka	—	—	—	—	—	—
Humboldt	29.3	17.6	↓ 11.7	11.7	17.6	↑ 5.9
Lander	—	33.4	↑*	—	33.4	↑*
Lincoln	—	19.3	↑*	—	19.3	↑*
Lyon	33.4	20.7	↓ 12.7	21.1	12.1	↓ 9.0
Mineral	21.7	—	↓*	21.7	—	↓*
Nye	22.7	26.6	↑ 3.9	10.3	20.5	↑ 10.2
Pershing	—	14.4	↑*	—	14.4	↑*
Storey	—	—	—	—	—	—
Washoe	27.9	31.9	↑ 4.0	16.8	22.1	↑ 5.3
White Pine	28.3	28.4	↑ 0.1	18.8	9.5	↓ 9.3

Source: Suspected Nevada Drug Overdose Surveillance Monthly Report January 2022, Statewide Report. Data include accidental poisonings, intentional self-poisonings, and assault by drug poisonings, and drug poisoning of undetermined intent for drug-related overdose deaths and where any of the following opioid-related substances contributed to the cause of death: opium, heroin, natural and semi-synthetic opioids, methadone, synthetic opioids, and other/unspecified opioids.
Note: "—" indicates data where the rate may be 0 or was suppressed due to low counts. "" indicates a change in the rate could not be calculated.*

Availability of Opioids and Other Drugs

Polysubstance use in Nevada has been on the rise from 2019 to 2020.[77] The Nevada HIDTA found several polysubstance issues when reviewing both drug trafficking and use in the

[76] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting System: Report of Deaths 2019 to 2020 – Statewide 2020.* Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[77] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019-2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

State.[78] The HIDTA notes various combinations of fentanyl available. The most common combination reported was fentanyl-laced pills combined with oxycodone, as well as fentanyl-laced pills combined with Xanax. According to the DEA 2020 National Drug Threat Assessment, illicit fentanyl presents a major concern in the ongoing opioid crisis in the United States. The National Drug Helpline placed Nevada on "red alert" status for increased risk of death from overdose, and in April of 2022 the DEA released a letter warning states of mass overdose events caused by fentanyl-laced drugs which the victims do not know contain fentanyl.

Stimulants

Methamphetamine is in abundant supply due to the low cost of making the drug. Although the overall rate of methamphetamine arrests accounted for 61% of all drug-related arrests in Las Vegas, these arrests declined by 11% from 2019 to 2020.[79] As evident in Table 4.2, methamphetamine use in Nevada is estimated to be higher than national estimates.

The age range accounting for most of the methamphetamine-related arrests were adults aged 25 years–34 years, followed closely by adults aged 35 years–44 years. Data received from both the Clark County Office of the Coroner/Medical Examiner and the Washoe County Regional Medical Examiner's Office indicated that methamphetamine is still the most prevalent illicit drug encountered in overdose deaths, followed by fentanyl in 2020. They also indicated that heroin, cocaine, and methylenedioxy-methamphetamine were attributed to increases in overdose deaths.

Geography Contributing to Availability

The geography of Nevada and the surrounding areas contribute to the availability and distribution of opioids. Nevada has primarily desert landscape, with many mountain ranges. The large expanse of the interstate highway through frontier and rural areas provides a direct route for drug traffickers to move and sell drugs. Highways have minimal traffic which allow for transportation of narcotics on interstates that connect to California, Utah, Arizona, and other areas on less traveled transportation routes.

In addition, Las Vegas presents a unique challenge with its high occurrence of gaming, money laundering, and drug trafficking. Initially, the PHE slowed the pace of drug trafficking into the United States. However, the threat of illicit drugs, including the rates of overdoses, persisted as traffickers adapted and as drug compositions like fentanyl became more potent. Additionally, during the lockdown, drug dealers were able to turn to the dark web to sell and purchase drugs and other illicit commodities.

Many of the substances coming into the State originate in Mexico and are brought across the border with personal and commercial vehicles. Mexican drug trafficking organizations continue to be the predominant source of supply for the primary substance types in Nevada. It is anticipated that the Mexican drug trafficking organizations in Nevada will continue to utilize violence to expand and maintain their operations and control within an area.

[78] Nevada HIDTA Investigative Support Center. *2021 Threat Assessment,* 2021.

[79] Nevada HIDTA Investigative Support Center. *2021 Threat Assessment,* 2021.

Technology Contributing to Availability

As drug traffickers become more technologically well-informed, the use of the dark web for drug trafficking will become more common and increase access to illegal substances. Other methods of drug trafficking that continue to become increasingly common include Snapchat and Instagram, particularly for fentanyl-laced pills.

Gaps in Opioid Data

- Reports indicating duplication of individuals and appropriateness of prescribing in the PDMP
- PDMP reporting for other drugs that are being co-prescribed along with opioids, such as gabapentin
- Single-point of information-gathering for comprehensive aspects of Nevada-based opioid data, including other commonly co-occurring substances
- Demographic-based reports indicating characteristics of people more likely to receive aberrant prescriptions for opioids
- Race/ethnicity data and indicators of membership in special populations in all opioid-related data (special populations include veterans, homeless population, pregnant women, youth, LGBTQ+, juvenile justice, and children in the child welfare system)

SUD and Co-Occurring Behavioral Health and Comorbid Physical Health Conditions

Co-Occurring Behavioral Health Disorders

Co-occurring mental illness and OUDs are common in both adults and children.[80] It is unclear whether the comorbidity of the conditions results from common risk factors for both, from mental illness increasing the likelihood of developing OUD (such as through self-medication of symptom)s, or from substance use contributing to mental illness through physiological changes. Roughly half of the people who have a mental illness can expect to develop a SUD in the future, and about half of those with SUDs can expect to develop a mental illness.[81]

Although less often studied, comorbidity appears to be high between opioids and both anxiety and stress-related disorders and major depression. Numerous studies have found a higher chance of comorbidity with mental health diagnoses among people with OUDs than those without. One study reported that more than half of the annual opioid prescriptions

[80] National Institute on Drug Abuse. *Part 1: The Connection Between Substance Use Disorders and Mental Illness*, 2021. Retrieved from https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness

[81] National Institute on Drug Abuse. *Part 1: The Connection Between Substance Use Disorders and Mental Illness, 2021*. Retrieved from https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness

across the country are given to individuals with depression or anxiety. Additionally, people suffering from mental health disorders are more likely to use opioids in the long-term. SAMHSA reports that over a third of people who seek treatment for opioid use have a co-occurring mental health diagnosis.

As many as 43% of people with an OUD who are in treatment for the OUD also have symptoms of another mental health disorder such as anxiety or depression.[82] Comorbidities can affect treatment and prognosis, as well as risk for disorders. People who have bipolar disorder in particular experience more difficulty with recovery, and groups with anxiety, depression, and bipolar disorder all experience more significant physical and psychological symptoms than do people without a comorbid mental health diagnosis.[83] Conversely, having a mental disorder (e.g., personality disorder, mental illness, or another SUD) greatly increases the risk of non-medical opioid use. People who have both an OUD and a comorbid mental health condition are at higher risk of self-harm, especially when they have previously experienced trauma.

A national cross-sectional study found that approximately 19% of adults with a behavioral health disorder also used opioids, and 16% of individuals who have a behavioral health disorder receive over half of all opioids prescribed in the US in 2017.[84]

In 2020, approximately 34.5% of individuals who died due to a drug-related overdose in Nevada had a co-occurring mental health problem.[85] Of the drug-related overdose deaths of people of Hispanic origin, 25% reported a prior mental health problem while 7% reported a non-alcohol related substance use issue.[86]

Washoe County Mental Health court reported that 86% of mental health court participants had a co-occurring SUD, which is consistent with the estimate that 75% of Nevada's mentally ill offenders have co-occurring mental health and SUDs.[87] While data are available indicating whether a co-occurring mental health condition was present, information is limited on the types of behavioral health conditions and the demographics of those individuals are not available. This is primarily due to how overdose deaths are reported.

Suicide

As of 2019, Nevada ranked seventh in the nation for the highest number of suicides, with a rate of 19.8 per 100,000 persons.[88] Over 600 people die by suicide each year in Nevada, with approximately 12% occurring in youth.

---

[82] Goldner EM, Lusted A, Roerecke M, Rehm J, & Fischer B. "Prevalence of Axis-1 psychiatric (with focus on depression and anxiety) disorder and symptomatology among non-medical prescription opioid users in substance use treatment: systematic review and meta-analyses," *Addict Behav*, Volume 39 Issue 3 (2014), pp. 520–531.

[83] Zhu, Y., Mooney, L.J., Yoo, C., Evans, E.A., Kelleghan, A., Saxon, A.J., Curtis, M.E., & Hser, Y. "Psychiatric comorbidity and treatment outcomes in patients with opioid use disorder: Results from a multisite trial of buprenorphine-naloxone and methadone," *Drug Alcohol Dependence*, Volume 228 (2021).

[84] Davis, M.A., Lin, L.A., Liu, H. & Sites, B.D. "Prescription opioid use among adults with mental health disorders in the United States," *Journal of the American Board of Family Medicine*, Volume 30 Issue 4 (2017), pp. 407–417.

[85] Nevada State Opioid Response, *Nevada State Unintentional Drug Overdose Reporting System: Report of Deaths 2019 to 2020 – Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[86] Larson Institute/Nevada Overdose to Action. *2020 Hispanic/Latinx Overdose*, 2021.

[87] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[88] State of Nevada Department of Health and Human Services: Office of Analytics, *Youth Suicide: Behaviors and Circumstances, Nevada 2020*, February 2022. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Office_of_Analytics/Youth%20Suicide%20Behaviors%20and%20Circumstances%20Nevada%202020.pdf

There is limited data available for suicides that involve drugs, particularly opioid overdoses. Information about death from suicide can often be challenging due to the variation in methods hospitals use for medical record documentation.

SUDORS data demonstrates that in 2020, 9.9% of those who died due to a drug-related overdose had a history of suicidal thoughts, plans, or attempts, and 6.1% had a history of attempting suicide.[89] In 2019, suicide was the leading cause of death for those ages 10 years–17 years, and the second leading cause of death for those ages 18 years–24 years.[90] From 2017 to 2020, youth suicide rates were highest in males (75.3%), occurring mostly in White and Hispanic populations (46.8% and 28.6%, respectively).

Suicide ranks as the ninth primary cause of death among veterans in the United States. Approximately 2% of veteran deaths in Nevada were due to suicide between 2017 and 2020.[91] From 2016 to 2020, about 88% of veterans who died by suicides were White, 5% were Black, and 3% were Hispanic. Veteran suicides are occurring at the highest rate among individuals 20 years–34 years of age. SUDORS data indicated that 6.6% of drug-related overdose deaths occurred in active-duty military members or veterans, though the delineation between active and veteran cannot be delineated due to the method of data capture.

In 2019, the National Institute on Drug Abuse and the National Institute of Mental Health collaborated to highlight the relationship between suicide deaths and the opioid crisis and called for collaborative care models to treat people for both OUD and co-occurring mental illness. Nevada's consistently high rankings for suicide deaths underscores the need to attend to both.

Co-Occurring SUDs

As noted previously, polysubstance use in Nevada has been on the rise from 2019 to 2020. Overdose deaths involving one or more substances increased by 16%, with substances including opioid and one or more substances having increased by 4%, and stimulants and one or more other substances having increased by 17%.[92]

Nevada has recognized the need to address polysubstance use as part of its response to the opioid crisis. The Las Vegas-based eighth Judicial Medication-Assisted Treatment (MAT) Re-Entry Court has expanded the population that they can serve with State Opioid Response (SOR) II funds, allowing them to enroll individuals with a stimulant use disorder into the program. The first client was admitted into this program in March 2021.[93]

The need for additional treatment options for polysubstance use persists. Although initial steps have been taken, an additional review of existing treatment options for best practices for those using multiple substances will assist in improved treatment options and outcomes.

---

[89] State of Nevada Department of Health and Human Services, *Nevada State Unintentional Drug Overdose Reporting: Report of Deaths 2019 to 2020 – Statewide.* Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[90] State of Nevada Department of Health and Human Services, Office of Analytics. *Youth Suicide: Behaviors and Circumstances, Nevada, 2020, February 2022.* Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Office_of_Analytics/Youth%20Suicide%20Behaviors%20and%20Circumstances%20Nevada%202020.pdf

[91] State of Nevada Department of Health and Human Services, Office of Analytics, *Special Surveillance Report Veteran Suicide*, November 2021. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Office_of_Analytics/Veteran%20Suicide%20Report%20November%202021.pdf

[92] Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019-2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf

[93] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services, *Nevada State Opioid Response Grant II, Year 1: September 20, 2020-September 29, 2021 Annual Performance Progress Report,* 2021.

Gold standard options for treatment of opioids, such as MAT, do not address the additional needs of individuals with methamphetamine or other addictions, which will need to be addressed simultaneously during treatment.

Physical Health Comorbidities

SUD is often accompanied by physical health conditions. The National Institute of Drug Abuse found that chronic pain conditions, cancer, and heart disease are common physical health disorders in those with SUDs.[94] Chronic pain conditions, tobacco use, and infectious disease are strong contributors to SUDs, especially OUD.

Chronic Conditions

The CDC has found that individuals with chronic conditions who experience chronic pain (e.g., cancer, stroke, asthma, and obesity) have a higher likelihood of receiving one or more opioid prescriptions, and therefore are at a higher risk of developing an OUD.[95] In fact, patients with two or more chronic conditions accounted for over 90% of opioid-related hospitalizations from 2011 to 2015.[96]

More than 30% of individuals in the US have some form of an acute or chronic pain disorder.[97] Approximately 10% of people with chronic pain disorders misuse prescription opioids.[98] The Nevada DHHS Office of Analytics PDMP Dashboard provides the Top 10 ICD-10 diagnoses in which an opioid was prescribed for less than 30 days, greater than 90 days, and 30 days–90 days. As depicted in the PDMP Dashboard (Table 4.8 below), chronic pain disorders (e.g., dorsalgia, nerve pain, joint/muscle pain) are the top diagnoses for opioid prescriptions.[99] Chronic pain conditions can also be exacerbated by behavioral health conditions, such as depression and anxiety,[100] which increases a person's risk for developing SUD.

Table 4.8 Top 10 Diagnoses for Opioid Prescriptions with Supplies less than 30 Days, Greater than 90 Days, and 30 Days–90 Days[101]

Less than 30 Days	Greater than 90 Days	30 Days–90 Days
• Diseases of the nervous system, pain not elsewhere classified • Dorsalgia	• Dorsalgia • Other joint disorder, not elsewhere classified • Thoracic, thoracolumbar, and lumbosacral	• Dorsalgia • Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorders

[94] National Institute on Drug Abuse. *Common Comorbidities with Substance Use Disorders Research Report,* 2020.

[95] Rajbhandari-Thapa J, Zhang D, Padilla HM, Chung SR. "Opioid-Related Hospitalization and Its Association with Chronic Diseases: Findings from the National Inpatient Sample, 2011–2015," *Prev Chronic Dis*, Volume 16 (2019).

[96] US Department of Labor, "Risk Factors for Opioid Misuse, Addiction, and Overdose." Available at: https://www.dol.gov/agencies/owcp/opioids/riskfactors

[97] Longo, D. "Opioid Abuse in Chronic Pain – Misconceptions and Mitigation Strategies," *New England Journal of Medicine*, Issue 374 (2016), pp. 1253–1263. Available at: https://www.nejm.org/doi/pdf/10.1056/NEJMra1507771?articleTools=true

[98] National Institute on Drug Abuse, *Common Comorbidities with Substance Use Disorders Research Report*, accessed February 2022. Available at: https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-2-co-occurring-substance-use-disorder-physical-comorbidities

[99] State of Nevada Department of Health and Human Services Office of Analytics, *Nevada Prescription Drug Monitoring Program Nevada 2017–2022.* Available at: https://app.powerbigov.us/view?r=eyJrIjoiYjgyYzkyMzctNDg0OS00ZGY1LWJiMWYtM2E0NDlkZjI0MmEyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9

[100] National Institute on Drug Abuse, *Common Comorbidities with Substance Use Disorders Research Report,* 2020.

[101] State of Nevada Department of Health and Human Services Prescription Drug Monitoring Program Dashboard, data for 2021. Available at: https://modi-dark.talusanalytics.com/resource/nevada-prescription-drug-monitoring-dashboard/

Less than 30 Days	Greater than 90 Days	30 Days–90 Days
• Other joint disorder, not elsewhere classified • Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorders • Dental caries • Spondylosis • Diseases of pulp and periapical tissues • Pain, unspecified • Abdominal and pelvic pain • Opioid related disorders	intervertebral disc disorders • Diseases of the nervous system, pain not elsewhere classified • Migraine • Neuralgia • Other and unspecified osteoarthritis • Spondylosis • Other spondylopathies • Polyosteoarthritis	• Spondylosis • Diseases of the nervous system, pain not elsewhere classified • Other joint disorder, not elsewhere classified • Intraoperative and post-procedural complications and disorders of musculoskeletal system, not elsewhere classified • Cervical disc disorder with radiculopathy, unspecified cervical region • Other spondylopathies • Neuralgia • Osteoarthritis of knee

Viral Infections

Individuals suffering from OUD who inject or administer drugs intravenously have a high rate of transmission and contraction of viruses such as hepatitis C, hepatitis B, and HIV. These viruses are often found in the OUD population.[102] A recent Nevada report on HIV indicated that in 2020 there were 15 new cases of HIV through injection drug use and 14 new cases through injection drug use combined with male-to-male sexual contact (MSM), most of which occurred in Clark County.[103] Additionally, 754 Nevadans are known to be living with HIV transmitted through injection drug use, and 755 through MSM and injection drug use.

Hepatitis is a viral inflammatory disorder that often involves pain. Individuals with untreated Hepatitis C may experience joint pain, and those with Hepatitis B may experience joint and abdominal pain. Individuals who contract HIV may also experience joint and muscle pain due to inflammation. Therefore, not only are people who use opioids through injection or intravenously at risk for contracting these diseases, but chronic pain associated with the diseases increases the likelihood of opioid misuse.

Bacterial Infections

In the July 2017 edition of the CDC's Morbidity and Mortality Weekly Report, the CDC studied the bacterial and fungal infections of persons who inject or use drugs intravenously in Western New York, an area with a high rate of opioid overdoses.[104] Bacterial and fungal

[102] Centers for Disease Control and Prevention, "Persons who Inject Drugs: Infections Diseases, Opioids, and Injection Drug Use." Available at: https://www.cdc.gov/pwid/opioid-use.html#:~:text=A%20deadly%20consequence%20of%20the,cause%20heart%20infections%20(endocarditis%20).

[103] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, Office of HIV and Office of Analytics, *Nevada 2020 HIV Fast Facts, 2020*

[104] Hartnett, K., Jackson, K., et al., "Bacterial and Fungal Infections in Persons Who Inject Drugs – Western New York, 2017" *MMWR Morb Mortal Wkly Rep,* Volume 68 Issue 26 (2019), pp. 583–586. Available at: https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6826a2-H.pdf

infections such as infective endocarditis, osteomyelitis, pneumonia, empyema, septic arthritis infections, central nervous system abscesses, and skin and soft tissue infections are associated with SUDs.[105] Approximately 74% of the opioid users included in the study had infections in the skin and soft tissue. Approximately 24% of the people who use opioids with these types of infections were hospitalized for at least 30 days.[106] Data limitations of the study include an underestimate of bacterial and fungal infections because some individuals do not seek care; therefore, there is a lack of outpatient visit information. For those who do seek care, medical records do not always specify the route of drug administration.

While not specific to Nevada, the study does provide insight into the type of infections that could develop, interventions that could help to avoid these types of infections, and the cost of care that is associated with these infections. The CDC notes that while the study is limited to a small population, that does not lessen the point that these skin and tissue infections could be prevented by using proper hand hygiene and cleaning the site prior to injection. Education regarding hygiene and safe equipment could have a positive impact on these rates.

Also in Nevada, the number of annual cases of congenital syphilis, another bacterial infection commonly associated with injection drug use, has risen by 12%[107] between 2019[108] (114.7 per 100,000 live births) and 2020[109] (131.2 per 100,000 live births). Nevada has consistently ranked fourth in the nation for rates of reported congenital syphilis in 2019 and 2020.

[105] McCarthy, N., Baggs, J., See, I., Reddy, S.C., Jernigan, J.A., Gokhale, R.H. & Fiore, A.A. "Bacterial Infections Associated With Substance Use Disorders, Large Cohort of United States Hospitals, 2012–2017." *Clinical Infectious Diseases*, Volume 71 Issue 7 (2020), pp. e37–e44. Available at: https://academic.oup.com/cid/article/71/7/e37/5697426

[106] McCarthy, N., Baggs, J., See, I., Reddy, S.C., Jernigan, J.A., Gokhale, R.H. & Fiore, A.A. "Bacterial Infections Associated With Substance Use Disorders, Large Cohort of United States Hospitals, 2012–2017." *Clinical Infectious Diseases*, Volume 71 Issue 7 (2020), pp. e37–e44. Available at: https://academic.oup.com/cid/article/71/7/e37/5697426

[107] Casado, F. "Cases of babies born with syphilis rise in Nevada in 2020." Kolo TV, April 19, 2022, accessed May 2, 2022. Available at: https://www.kolotv.com/2022/04/19/cases-babies-born-with-syphilis-rise-nevada/

[108] Centers for Disease Control and Prevention, "Sexually Transmitted Disease Surveillance 2019, Table 40. Congenital Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2019." Available at: https://www.cdc.gov/std/statistics/2019/tables/40.htm

[109] Centers for Disease Control and Prevention, "Sexually Transmitted Disease Surveillance 2020, Table 20. Congenital Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2020." Available at: https://www.cdc.gov/std/statistics/2020/tables/20.htm

Gaps Related to SUD and Co-Occurring Behavioral and Physical Health Conditions

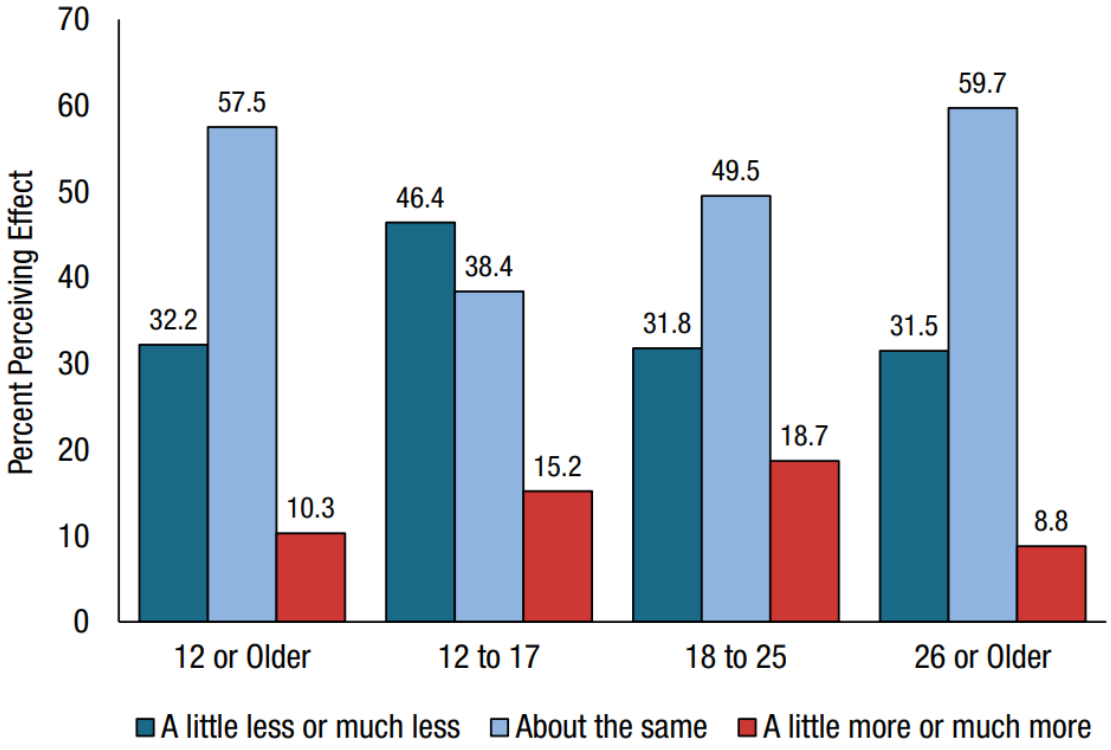
- Data that accurately capture co-occurring behavioral health and physical health conditions within Nevada's OUD population.
- Zero Suicide Initiative is progressing, but still lacking in sufficient training on suicide signs, risk factors, and evidence-based interventions applicable to suicide and substance use. Efforts are needed in the school system, for parents, for law enforcement, and for other community partners.
- Data on health outcomes, especially longitudinal data stratified according to population characteristics.
- Data on co-occurring substance use and treatment access for individuals using multiple substances.
- Capacity for crisis intervention in the community rather than in EDs and inpatient settings.

COVID-19 PHE Impact

The data presented in this report are as current as available and therefore include data collected during the COVID-19 PHE. The impact of COVID-19 on the opioid epidemic is mixed, with significant increases in overdoses and overdose deaths across the country, and yet reports of less substance use during the PHE per the 2020 NSDUH.[110] The NSDUH demonstrates that rising numbers during the PHE are not necessarily due to increasing use among those already using opioids. Figure 5 shows that most respondents reported using drugs other than alcohol about the same or less than they had prior to COVID-19.

[110] Substance Abuse and Mental Health Services Administration. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*, 2021.

Figure 5. Perceived COVID-19 PHE Effect on Drug Use: Among Past Year Users of Drugs Other than Alcohol Aged 12 or Older; Quarter 4, 2020.[111]



Note: Use of drugs other than alcohol included the use of marijuana, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine in the past year or any use (i.e., not necessarily misuse) of prescription pain relievers, tranquilizers, stimulants, or sedatives in the past year. Drugs other than alcohol did not include tobacco products or nicotine vaping.

Note: The percentages do not add to 100 percent due to rounding.

As shown in Figure 5, the Survey reported that in Quarter 4 of 2020:

- Among people aged 12 years or older who used drugs other than alcohol in the past year, about one in three perceived that they used these drugs "a little less or much less" than they did before the COVID-19 PHE began, and more than half (57.5% or 60.6 million people) perceived that they used these drugs "about the same" as they did before the COVID-19 PHE began. An estimated 10.3 percent of past year users of drugs other than alcohol (or 10.9 million people) perceived that they used these drugs "a little more or much more" during the COVID-19 PHE than they did before. It is not known, however, whether people who reduced or increased their use of these drugs will return to their earlier levels of use over time.
- Nearly half of adolescents aged 12 years to 17 years who used drugs other than alcohol in the past year (46.4% or 2.0 million people) perceived that they used these drugs "a

[111] Substance Abuse and Mental Health Services Administration. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*, 2021. (page 50). Available at: https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR1PDFW102121.pdf

little less or much less" than they did before the COVID-19 PHE began. This percentage among adolescents was higher than the corresponding percentages among young adults aged 18 years to 25 years (31.8% or 4.2 million people) and those aged 26 years or older (31.5% or 27.7 million people) who used these drugs. In relation to perceived reductions in alcohol use, these adolescents could increase their use of other drugs, as they have more opportunities to engage in social activities with peers.

- Adolescents and young adults who used drugs other than alcohol in the past year were more likely than their counterparts aged 26 years or older to perceive that they used these drugs "a little more or much more" than they did before the COVID-19 PHE. Specifically, 15.2% of adolescents (or 665,000 people) and 18.7% of young adults (or 2.5 million people) perceived that they used these drugs "a little more or much more" than they did before the COVID-19 PHE began. In comparison, 8.8% of adults aged 26 years or older who used drugs other than alcohol in the past year (or 7.7 million people) perceived that they used these drugs "a little more or much more" than they did before the COVID-19 PHE.

In 2020, health service utilization for conditions other than those related to COVID-19 decreased, particularly during the first months of the PHE and into 2021.[112] It is significant that opioid-related ED visits increased during this period when individuals were, for the most part, not accessing services. It suggests that the decreased utilization of outpatient services and/or the effects of the PHE could have driven some of the ED utilization presented later in the report. The survey above suggests that these may be among a mix of people who are new to opioid use and those who have continued use from before the PHE.

Finally, felony admissions for drug possession dropped nearly 17% during the PHE, while the justice system saw a 20% increase in admissions among people with behavioral health treatment needs.[113]

In Summary: Opioid Impact in Nevada

The impact of the opioid epidemic in Nevada, from opioid and polysubstance use, to co-occurring behavioral health and physical condition comorbidity, overdose, and ED and hospital utilization, is just beginning to be fully understood with the data and analyses that are available. The impact of the COVID-19 PHE on the opioid epidemic made trends more difficult to identify. Although the data is somewhat limited, it is feasible to identify recommendations based on gaps identified in this section.

Findings and Gaps Summary

- Nevada has experienced serious impacts of the opioid epidemic over the last 10 years. In 2019, Nevada ranked twenty-eighth in opioid overdose deaths and twentieth in opioid prescribing. Opioid and polysubstance use is increasing rapidly, with alarming increases in subsequent deaths from suicide and overdose. The National Drug Helpline placed Nevada on "red alert" status for increased risk of death from overdose.

[112] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[113] Crime and Justice Institute, Nevada Sentencing Commission Presentation: "Impact of COVID 19 on Nevada's Prison Population: Project Update," September 2021.

- Health disparities are not fully understood and require high priority attention. Capturing race/ethnicity, as well as population data, would provide insights into health equity. These insights would support prioritizing populations and developing interventions that are designed for and meet specific needs of these populations.
- There are several contributors to the availability and distribution of substances: Nevada's location and geography, the increasing use of technology and digital means, and provider prescribing patterns. While opioid prescribing rates are declining, Nevada maintained a higher dispensing rate than the national average. It will be important for Nevada to capture diagnoses and other drugs co-prescribed with opioids. This insight would assist in a better understanding of the extent of appropriate and inappropriate provider prescribing patterns. The State could then collaborate with managed care organizations (MCOs) to develop and implement outcome-based programs to support appropriate provider prescribing and curb member behaviors that contribute to seeking multiple prescribers.
- Those with co-occurring behavioral health disorders and/or physical health comorbidities have a greater likelihood of receiving one or more opioid prescriptions and subsequently at greater risk of developing OUD. Access to behavioral and physical health services in the State could be further assessed to assure these services are available to those who need them in the way that they need to access them to proactively manage these types of conditions.

Section 5

Current System Addressing Opioids in Nevada

Nevada's multiple agencies and stakeholder groups are responsible for reducing harms related to opioid misuse, opioid overdose, and OUD through prevention, treatment, harm reduction, and recovery supports. The following section reviews the current system and identifies gaps in access and availability of programs and services that are likely contributing to vulnerabilities leading to adverse impacts of opioid misuse, opioid overdose, and OUD on the residents of Nevada.

Prevention

The SAMHSA recommends five steps and two guiding principles within its Strategic Prevention Framework ("Framework") that should be applied when planning prevention interventions and programs to decrease substance use-related risks and harm. The Framework's five steps include assessment, capacity, planning, implementation, and evaluation. Cultural competence and sustainability should be considered key principles in the five steps. The Framework offers jurisdictions a systematic approach to identifying and prioritizing specific problems, affected populations, protective factors, and resources; building community awareness, engagement, and capacity; selecting appropriate interventions and developing comprehensive project plans; implementing programs with fidelity and appropriate adaptations; and evaluating prevention programs.[114]

A range of evidence-based prevention strategies can be applied to reduce risks across a continuum of substance use, including preventing opioid misuse and OUD. Additionally, prevention efforts may be designed to offer universal, selective, or individualized interventions. For purposes of this report, three categories of prevention efforts are discussed: primary, secondary, and tertiary. Tertiary prevention efforts are primarily addressed in the context of harm reduction. Overall, the 2019 assessment of the overall Nevada behavioral health care system identified that prevention is at 84% unmet need/insufficient capacity Statewide.[115]

Primary Prevention: Preventing Misuse and New Cases of OUD

Primary prevention aims to prevent disease or injury by avoiding exposure to the hazards that cause the disease or damage, altering behaviors that increase risks, and increasing resistance to disease or injury if exposure does occur.[116] In the context of OUD, primary

[114] Substance Abuse and Mental Health Services Administration. *A Guide to SAMHSA's Strategic Prevention Framework*, 2019. Available at: https://www.samhsa.gov/sites/default/files/20190620-samhsa-strategic-prevention-framework-guide.pdf

[115] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[116] Substance Abuse and Mental Health Services Administration, Center for the Application of Prevention Technologies. "Primary, Secondary and Tertiary Prevention Strategies & Interventions for Preventing NMUPD and Opioid Overdose across the IOM Continuum of Care," (n.d.). Available at: https://cadcaworkstation.org/public/DEA360/Shared%20Resources/Root%20Causes%20and%20other%20research/Crosswalk%20PST_USI_models%20with%20NMUPD_PDO__%20examples_9_27_2016_revised.pdf

prevention includes efforts to prevent opioid misuse and reduce risk of OUD if misuse does occur. Examples of primary prevention efforts include identifying and addressing adverse childhood experiences (ACEs), offering school-based prevention education, educating providers on safe prescribing practices, and implementing public education campaigns to increase awareness of ways to prevent opioid misuse and OUD. Nevada is implementing several evidence-based primary prevention efforts to prevent opioid misuse, opioid overdose, and OUD, which are discussed below; however, opportunities to expand prevention efforts in the State also exist. The 2019 system-wide assessment using SAMHSA's CAST identified prevention services as the second highest collective need for Nevada, based on a comparison of regional priorities.[117]

Identifying and Addressing ACEs

A large body of evidence clearly shows that ACEs, such as physical and emotional abuse, neglect, or household dysfunction, are strongly correlated to a higher risk of substance misuse, SUDs, and other substance use-related harms.[118,119,120,121] Among people with OUD, ACEs are positively correlated with overdose, injection drug use, and earlier age of opioid initiation.[122] ACEs impact people across the lifespan and can lead to an earlier death.[123] Prevention and early identification of ACEs and interventions to address childhood trauma are recommended to prevent substance use and other health-related risks among youth and adults across the lifespan.[124]

Impact of ACEs on Youth in Nevada[125]

The Youth Risk Behavior Survey (YRBS) is a national surveillance system established in 1991 by the CDC to monitor the prevalence of health risk behaviors among youth.[126] In Nevada, YRBS data are routinely collected from high school and middle school students. Concerningly, Nevada YRBS data show that among students with three or more ACEs, rates of ever taking prescription pain medicine without a prescription or differently than prescribed are high and are similar to rates of ever smoking cigarettes. Among high school students, rates of ever taking prescription pain medicine are higher than ever smoking cigarettes

[117] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada Substance Abuse Prevention and Treatment Agency. Capacity Assessment Report: Nevada*, 2019.

[118] Rogers, C. J., Pakdaman, S., Forster, M., Sussman, S., Grigsby, T. J., Victoria, J., & Unger, J. B. "Effects of multiple adverse childhood experiences on substance use in young adults: A review of the literature," *Drug and Alcohol Dependence*, Volume 234 Issue 109407 (2022).

[119] Bryant, D. J., Coman, E. N., & Damian, A. J. "Association of adverse childhood experiences (ACEs) and substance use disorders (SUDs) in a multi-site safety net healthcare setting," *Addictive Behaviors Reports*, Volume 12 Issue 100293 (2020).

[120] Stein, M. D., Conti, M. T., Kenney, S., Anderson, B. J., Flori, J. N., Risi, M. M., & Bailey, G. L. "Adverse childhood experience effects on opioid use initiation, injection drug use, and overdose among persons with opioid use disorder," *Drug and Alcohol Dependence*, Volume 179 (2017), pp. 325–329.

[121] Felitti, V. J., Anda, R. F., Nordenberg, M. C., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study," *American Journal of Preventive Medicine*, Volume 13 Issue 4 (1998), pp. 245–258.

[122] Stein, M. D., Conti, M. T., Kenney, S., Anderson, B. J., Flori, J. N., Risi, M. M., & Bailey, G. L. "Adverse childhood experience effects on opioid use initiation, injection drug use, and overdose among persons with opioid use disorder," *Drug and Alcohol Dependence*, Volume 179 (2017), pp. 325–329.

[123] Felitti, V. J., Anda, R. F., Nordenberg, M. C., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study," *American Journal of Preventive Medicine*, Volume 13 Issue 4 (1998), pp. 245–258.

[124] Centers for Disease Control and Prevention. *Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence*, 2019. Available at: https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf

[125] Additional results from ACEs and YRBS are included in Appendix D.

[126] Starcevich, K., Zhang, F., Clements-Nolle, K., Zhang, F., & Yang, W. University of Nevada, Reno. 2018 and 2020 Nevada Behavioral Risk Factor Surveillance System (BRFSS): Adverse Childhood Experiences (ACEs) Special Report.

(among high school students, 33.6% ever took prescription pain medicine compared to 31.7% who ever smoked cigarettes).[127]

The Nevada Middle School YRBS is an anonymous and voluntary biennial survey of students in grades six through eight in public, charter, and alternative school. The 2019 Nevada Middle School YRBS ACEs Special Report compared students' exposure to ACEs to health behaviors across five categories: behaviors that lead to unintentional injuries and violence, tobacco use, alcohol and other drug use, unhealthy dietary behaviors, and physical inactivity. Survey results showed that ACEs exposure was positively correlated to any substance use and substance use before the age of 11 years. Risk of suicide was also positively correlated to ACEs exposure among middle school students. Among students with three or more ACEs, 52% seriously considered dying by suicide, 34.7% made a plan for how they would die by suicide, and 25.5% attempted suicide in the 12 months prior to the survey. A graded dose response between the number of ACEs and likelihood of substance use and other health risk behaviors was present in the results; as the number of ACEs exposure increased, so did the likelihood of engaging in health risk behaviors.[128]

The Nevada Middle School YRBS results showed that among middle school students with three or more ACEs:

- 62.3% ever drank alcohol and 29.8% drank alcohol for the first time before age 11 years
- 34.7% ever used marijuana and 8.4% tried marijuana for the first time before age 11 years
- 29.2% ever smoked cigarettes and 14.9% smoked cigarettes for the first time before age 11 years
- 25.9% ever took prescription pain medicine without a doctor's prescription or differently than prescribed
- 7.3% ever used synthetic marijuana
- 4.9% ever used ecstasy
- 4.7% ever used cocaine
- 3.2% ever used methamphetamines
- 2.5% ever used heroin[129]

Similarly, exposure to ACEs was positively correlated to health risk behaviors, including substance use, among high school students in Nevada. The 2019 Nevada High School YRBS ACEs Special Report described survey data from a random sample of students in 99 high schools. ACEs scores were calculated for 4,939 youth who answered at least one

[127] Maxson, C. Lensch, T., Diedrick, M., Zhang, F., Peek, J., Clements-Nolle, K., & Yang, W. State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. (2019). 2019 Nevada Middle School Youth Risk Behavior Survey (YRBS): Adverse Childhood Experiences (ACEs) Special Report. https://scholarworks-dev.unr.edu/handle/11714/3254

[128] Maxson, C. Lensch, T., Diedrick, M., Zhang, F., Peek, J., Clements-Nolle, K., & Yang, W. State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. (2019). "2019 Nevada Middle School Youth Risk Behavior Survey (YRBS): Adverse Childhood Experiences (ACEs) Special Report." https://scholarworks-dev.unr.edu/handle/11714/3254

[129] Maxson, C. Lensch, T., Diedrick, M., Zhang, F., Peek, J., Clements-Nolle, K., & Yang, W. State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. (2019). 2019 Nevada Middle School Youth Risk Behavior Survey (YRBS): Adverse Childhood Experiences (ACEs) Special Report. https://scholarworks-dev.unr.edu/handle/11714/3254

ACEs-related question. Risk of suicide among high school students was positively correlated to ACEs exposure. Among high school students with three or more ACEs, 38.5% seriously considered dying by suicide, 33.7% made a plan for how they would die by suicide, and 19.7% attempted suicide in the 12 months prior to survey.

The High School YRBS results show that among high school students with three or more ACEs:

- 77.9% ever drank alcohol and 30.5% drank alcohol for the first time before age 13 years
- 56.3% ever used marijuana and 13.3% tried marijuana for the first time before age 13 years
- 33.6% ever took prescription pain medicine without a doctor's prescription or differently than prescribed
- 31.7% ever smoked cigarettes and 12.3% smoked cigarettes for the first time before age 13 years
- 13.5% ever used synthetic marijuana
- 9.9% ever used cocaine
- 8.6% ever used ecstasy
- 4.7% ever used methamphetamines
- 4.5% ever used heroin
- 3.2% ever injected illegal drugs[130]

Impact of ACEs on Adults in Nevada

The Behavioral Risk Factor Surveillance System (BRFSS), established by the CDC, collects data to monitor and assess the prevalence of chronic disease, health risk behaviors, and use of preventive services among adults through a national system of telephone surveys.[131] The Nevada BRFSS is an annual anonymous voluntary telephone survey of adults aged 18 years or older. Like the Nevada YRBS ACEs Special Reports on middle and high school students, the 2018 and 2020 Nevada BRFSS ACEs Special Reports compared exposure to ACEs with health risk behaviors among Nevadan adults.

The BRFSS ACEs Special Report data show that 36.1% of all respondents experienced at least one ACE and 29.9% experienced three or more. Black non-Hispanic respondents (33.3%) and people who identified their race as Other (41.9%) were more likely to experience three or more ACEs compared to white, Asian, or Hispanic respondents. Adults ages 18 years to 34 years were more likely to experience three or more ACEs compared to people 35 years and older.[132]

[130] Maxson, C. Lensch, T., Diedrick, M., Zhang, F., Peek, J., Clements-Nolle, K., & Yang, W. State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. (2019). "2019 Nevada Middle School Youth Risk Behavior Survey (YRBS): Adverse Childhood Experiences (ACEs) Special Report." https://scholarworks-dev.unr.edu/handle/11714/3254

[131] Centers for Disease Control and Prevention, *2020 BRFSS Data*, 2020.

[132] Starcevich, K., Zhang, F., Clements-Nolle, K., Zhang, F., & Yang, W. University of Nevada, Reno. (n.d.). 2018 and 2020 Nevada Behavioral Risk Factor Surveillance System (BRFSS): Adverse Childhood Experiences (ACEs) Special Report.

Among adults with three or more ACEs:

- 28.6% reported ever using a prescription pain reliever in a way not directed by a doctor
- 24.9% reported they used marijuana or cannabis in the past 30 days
- 21.5% reported they binge drink
- 21.1% reported they took a prescription drug without a doctor's prescription
- 20.2% reported being current smokers
- 10.1% reported they drank heavily
- 3% reported using any illegal drug, not including marijuana, in the past 30 days[133]

From 2003 to 2020, approximately 53% of Nevadans under the age of 35 years experienced at least one ACE, totaling over 1.7M aggregate ACEs. It is estimated that 17.3% of Nevada residents ages 0–34 years have experienced the ACE of non-recreational opioid misuse by an immediate family member. 38% of all Nevada residents have experienced at least one ACE related to the opioid crisis.[134]

Enhanced supports utilizing evidence-based practices, such as home visitation, and strategies to address trauma and ACEs are necessary, for children and families impacted by substance misuse and SUDs, including OUD or stimulant use disorder. Growing evidence shows that providing a family-focused approach will have beneficial effects on family members to support the recovery process and build resiliency and protective factors within the family structure. Family-focused programs that are being implemented in Nevada include SUD prevention and treatment, in-home skills-based parenting programs that include skills training, education, and counseling, Kinship Navigator Programs, residential parent-child substance use treatment programs, and developmentally-appropriate transition supports with older youth and adolescents.[135]

Additionally, addressing unmet social needs are important to build stability among families. Housing, income, and employment instability worsen risk factors related to substance misuse and SUDs. The 2019 system-wide assessment using SAMHSA's CAST identified that housing vouchers and affordable housing programs are needed in the Northern and Southern regions of Clark County and Washoe County.[136]

Suicide Prevention

Suicide prevention efforts are an important part of Nevada's overall prevention strategy due to the complex relationship between childhood trauma and ACEs, depression and substance use, and intentional overdose. Nevada has implemented several initiatives to prevent

[133] Starcevich, K., Zhang, F., Clements-Nolle, K., Zhang, F., & Yang, W. University of Nevada, Reno. (n.d.). 2018 and 2020 Nevada Behavioral Risk Factor Surveillance System (BRFSS): Adverse Childhood Experiences (ACEs) Special Report. https://dpbh.nv.gov/uploadedFiles/dpbh.nv.gov/content/Programs/ClinicalSAPTA/Meetings/5c%20-%20BRFSS%2018%2020%20ACEs%20report_8-17-21.pdf

[134] NRS 433.736. "Requirements and procedures for statewide needs assessment." Available at: https://www.leg.state.nv.us/NRS/NRS-433.html#NRS433Sec736

[135] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services, *Nevada State Opioid Response Grant II, Year 1: September 20, 2020-September 29, 2021 Annual Performance Progress Report,* 2021.

[136] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, *Nevada Substance Abuse Prevention and Treatment Agency. Capacity Assessment Report: Nevada*, 2019.

suicide.[137] Two coordinator positions within the Nevada Office of Suicide Prevention were established to coordinate with hospitals throughout the State to initiate the adoption and implementation of Zero Suicide and to begin to introduce the new crisis continuum to communities. The coordinators provided technical assistance to nine of 12 hospital systems from April 2021 to August 2021. They also held Community of Practice meetings monthly to provide formalized technical assistance for participating hospital systems and personalized intensive technical assistance. More work remains to be done to fully implement the Zero Suicide Initiative.

School-Based Education

Preventing opioid misuse among youth is critically important, as early initiation of substance use is a risk factor for developing a SUD.[138] Analysis of adolescent data from the NSDUH from 2004 to 2011 show that youth initiating non-medical use of prescription opioids at 10 years to 12 years old had the highest risk of transitioning to heroin use in young adulthood and the most frequently reported initiation age of non-medical prescription opioid use was 16 years to 18 years old.[139]

Alarmingly, drug overdose and poisoning deaths among youth 18 years and younger have increased in Nevada by 550% between 2019 and 2020.[140] During the same time period, nationwide drug overdose deaths and poisonings among children and adolescents have increased by 83.6%. Drug overdose and poisoning is currently the third leading cause of death among children and adolescents in the United States.[141] Rates of illicit drug use among youth in Nevada are slightly higher than the national average, with 8.35% of Nevadan youth ages 12 years to 17 years reporting they used an illicit drug in the past month, compared to 7.71% of youth nationwide.[142] Additionally, compared to the national average, youth in Nevada report lower perceived risk of harm from using cocaine monthly and trying heroin (see Table 5.1).[143]

[137] Nevada Center for the Application of Substance Abuse Technologies, *Nevada State Opioid Response, and Nevada Department of Health and Human Services, Nevada State Opioid Response Grant II, Year 1: September 20, 2020-September 29, 2021 Annual Performance Progress Report*, 2021.

[138] US Department of Health and Human Services, Office of the Surgeon General. *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*, 2016. Available at: https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf

[139] Cerda, M., Santaella, J., Marshall, B. D., Kim, J. H., & Martins, S. "Nonmedical Prescription Opioid Use in Childhood and Early Adolescence Predicts Transitions to Heroin Use in Young Adulthood: A National Study," *Journal of Pediatrics*, Volume 167 Issue 3 (2016), pp. 605-12.e1-2.

[140] State of Nevada Department of Health and Human Services. *Nevada State Unintentional Drug Overdose Reporting System: Report of Deaths 2019 to 2020 – Statewide*, 2020. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

[141] Goldstick, J. E., Cunningham, R. M., & Carter, P. M. "Current Causes of Death in Children and Adolescents in the United States," *New England Journal of Medicine*, Volume 386 (2022), pp. 1955–1956.

[142] Substance Abuse and Mental Health Services Administration. *2019–2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia)*, 2021. Available at: https://www.samhsa.gov/data/report/2019-2020-nsduh-state-prevalence-estimates

[143] Substance Abuse and Mental Health Services Administration. *2019–2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia)*, 2021. Available at: https://www.samhsa.gov/data/report/2019-2020-nsduh-state-prevalence-estimates

Table 5.1. 2019–2020 NSDUH: Perceived Risk Estimates[144]

	Percentage of those ages 12 years–17 years		Percentage of those ages 18 years and older	
	Nevada	United States	Nevada	United States
Perceive great risk from using cocaine monthly	51.59	53.29	69.3	70.08
Perceive great risk from trying heroin	59.29	62.03	86.4	86.33

In 2017, the Washoe County School District reported that approximately 35% of students in grades nine to 12 lived with someone who misused alcohol, had an alcohol use disorder, or misused drugs.[145] Family history of substance use is a risk factor for high-risk substance use among youth.[146] To reduce substance use-related harms among youth, the Healthier Nevada Youth Educational Modules, a substance misuse prevention curriculum, was created by medical students from University of Nevada, Reno, School of Medicine. The curriculum was implemented in the Washoe County School District with students in grades nine to 12 and was designed to educate youth on SUDs, the opioid epidemic, and naloxone.

To assess the impact of the curriculum on students' knowledge and attitudes related to substance use and comfort discussing substance use-related issues with health care providers, a pre- and post-survey was administered. Results from the survey, conducted with 682 students, showed that the curriculum substantially increased students' knowledge and awareness about SUDs, the opioid epidemic, and naloxone. Prior to receiving the curriculum, 65% of students reported that their understanding and awareness of naloxone was very poor or poor, and 33% reported that their understanding of the opioid epidemic was very poor or poor. Following the presentation of the curriculum, only 6% of students reported their understanding and awareness of naloxone was very poor or poor, and 3% reported their understanding of the opioid epidemic was very poor or poor. Students' comfort level discussing substance use-related issues with health care providers also improved following the curriculum presentation. 28% of students strongly agreed they would feel comfortable discussing substance use-related information with their doctor following receiving the curriculum, compared to 19% prior to receiving the curriculum presentation.[147]

In Lyon County, prevention efforts in schools are aided by youth-led peer-to-peer prevention teams, as well as school Resource Officers that are also Community Health Workers as part of their effort to approach treatment and prevention as whole person, integrated care, and to include nutrition and wellness activities as part of prevention and harm reduction. The Healthy Communities Coalition of Lyon and Storey County used similar data to other local coalitions of YRBS and community stakeholder data to develop similar recommendations around local partnerships, local educational efforts in the school and the community on

[144] Substance Abuse and Mental Health Services Administration. *2019–2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia)*, 2021. Available at: https://www.samhsa.gov/data/report/2019-2020-nsduh-state-prevalence-estimates

[145] Rescigno, M., Allen, A., & Meyer, D. "Substance Use and Addiction Education For Northern Nevada Youth," *Pediatrics*, Volume 147 (2021), pp. 222–223.

[146] Centers for Disease Control and Prevention, "High-Risk Substance Use Among Youth," 2020. Available at: https://www.cdc.gov/healthyyouth/substance-use/index.htm

[147] Rescigno, M., Allen, A., & Meyer, D. "Substance Use and Addiction Education For Northern Nevada Youth," *Pediatrics*, Volume 147 (2021), pp. 222–223.

prevention and opportunities for treatment, and the importance of cross-section participation in the coalition and delivering services to the community.[148]

Other school-based prevention opportunities in Nevada have also been identified. The Prevention, Advocacy, Choices, Teamwork (PACT) Coalition identified several prevention needs in Southern Nevada, including engaging students in high-risk environments in after-school programming for youth empowerment, and implementing strategies to reduce binge drinking and drug use among youth ages 18 years to 21 years.[149] Additionally, the 2019 system-wide assessment using SAMHSA's CAST included a review of prevention capacity across several categories, including school-based prevention programs. Among the five regions assessed, only one was rated to have sufficient capacity for school-based prevention programs (Southern Rural Behavioral Health Region).[150]

Public Education

Funding supported by the CDC's Prevention for States program has supported a prescription awareness campaign titled, *Wake up Nevada*. Additional efforts include the Southern Nevada Health District's (SNHD's) OD2A project in collaboration with the PACT Coalition called *Back to Life*, a targeted campaign to reduce naloxone stigma among law enforcement. Several additional opportunities for public education efforts have been identified through local data collection and coalition efforts focused on preventing substance use-related harms. The 2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey identified two areas of action in the public education category.[151] Based on survey data, both educational prevention initiatives in the community for youth and providers and community awareness initiatives on how to prevent drug use and misuse and reduce stigma should be implemented in communities. Additionally, the PACT Coalition identified the need to work with cross-system agencies such as educational institutions, first responders, and law enforcement to leverage opportunities for community level change. Efforts noted included developing and strengthening linkages to available resources. Preventing prescription drug use for non-medical purposes, with or without a prescription, was also identified as a priority by the Coalition.[152]

Despite demonstrated needs related to primary prevention programming, public perception supporting the use of State resources to promote prevention appears to be limited according to the 2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey.[153] The survey found that only 35.2% of respondents agreed or strongly agreed that taxpayer money spent to prevent the misuse of drugs is money well-spent.

Provider Education

Safe and appropriate prescribing is also essential to reduce risk of opioid misuse and OUD. In 2018, Nevada's person-level prescribing rates were highest among the older population.

---

[148] Healthy Communities Coalition Lyon and Storey Counties. *Comprehensive Community Prevention Plan 2019–2021*.

[149] PACT Coalition. *2019–2021 Comprehensive Community Substance Abuse Prevention Plan*.

[150] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, *Nevada Substance Abuse Prevention and Treatment Agency. Capacity Assessment Report: Nevada*, 2019.

[151] Nevada Institute for Children's Research and Policy and the Cannon Survey Center. *2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey Report*, 2020.

[152] PACT Coalition. 2019–2021 Comprehensive Community Substance Abuse Prevention Plan.

[153] Nevada Institute for Children's Research and Policy and the Cannon Survey Center. *2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey Report*, 2020.

Nationally, approximately 26.8% of persons 65 years and older had filled at least one prescription for an opioid.[154] The Nevada legislature passed AB 474 in 2018 to address over-prescribing of opioids, resulting in a 39% reduction in prescriptions for opioids and a 56% reduction in co-administration. The legislation also requires mandatory checking of the PDMP.

A continued challenge is the expectation of patients to receive interventions that completely eradicate pain and the establishment of pain as a fifth vital sign, the only one which is subjective. Continued education is needed for prescribers to utilize or refer to options other than opioids for pain management, such as chiropractic intervention, acupuncture, nerve blocking, and mindfulness and meditation.[155]

SOR grant funding is also being used in Nevada to enhance the skill of prescribers through in-person and online trainings, webinars, and Project Extension for Community Healthcare Outcomes (ECHO) sessions.[156] Project ECHO, currently offered by the University of Nevada, Reno, School of Medicine, provides a biweekly clinic on alternative pain management treatments. Topics of the trainings include:

- Mental Health Implications of Pain
- Motivational Interviewing for Patients with Chronic Pain
- Emergency Department Discharge Scenarios
- Cognitive-Behavioral Therapy and Pain Management
- Strategies for Pain Patients
- How to Integrate Behavioral Health in the Primary Care Setting
- CDC Guidelines for Opiate Prescribing
- Informed Consent and Treatment Agreements

Additionally, the Pacific Southwest Prevention Technology Transfer Center (PTTC), funded by SAMHSA, is located at the Center for the Application of Substance Abuse Technologies at the University of Nevada, Reno. The PTTC provides training and technical assistance to substance use prevention, treatment, and recovery organizations in the US Department of Health and Human Services Region Nine. The PTTC is a regional resource that offers information, guidance, training, and technical assistance to increase the adoption of efforts related to preventing substance use-related harms, including opioid misuse and OUD.

Increasing participation in provider education programs will help to ensure prescribers are safely and appropriately prescribing opioids while improving continuity of care. Providers understand how to identify early opioid misuse and OUD and offer evidence-based prevention and treatment services and education to patients.

[154] University of Nevada Las Vegas, Nevada Institute of Children's Research and Policy. *Comprehensive community substance abuse prevention plan*, 2019.

[155] University of Nevada Las Vegas, Nevada Institute of Children's Research and Policy. *Comprehensive community substance abuse prevention plan,* 2019

[156] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020–September 29, 2021 Annual Performance Progress Report*, 2021.

Provider Collaboration

Nevada has an ongoing need for collaboration between pharmacists and physicians to reduce misuse of opioids and other prescription medications. One need is the establishment of Collaborative Practice Agreements, allowing all members of a person's care team to use and share information to improve care delivery. Communication between practitioners can also assist in consolidating information that may be shared by the patient with each practitioner to ensure medications are being prescribed and taken appropriately. This increases patient adherence and improves outcomes. Education for physicians on the corporate policies of pharmacies would also be a useful component of collaboration, as pharmacies may have policies on detailed ICD-10 codes or safety concerns about liability for overdose. Provider collaboration can also help to identify individuals who see multiple doctors to obtain prescriptions. While time constraints may inhibit communication between practitioners, telephonic communication and consistent use of the PDMP can assist in the communication and improvement of prescribing protocols.

Data Monitoring

The Prescription Drug Abuse Prevention Act, which went into effect on January 1, 2018, implemented a series of requirements that support OUD prevention efforts. The Act requires doctors and hospitals to report drug overdoses to the State, allows licensing boards access to PDMP data to review inappropriate prescribing and dispensing of controlled substances, and requires providers to conduct a risk assessment before prescribing a controlled substance. In addition, for prescriptions over 30 days, an agreement must be created with the patient and patient utilization must be reviewed every 90 days. The system prohibits patients from receiving more than 365 consecutive days of opioid medication.

Additionally, Nevada's Office of Public Health Informatics and Epidemiology (OPHIE) collects and analyzes disease information, making recommendations concerning prevention and education in collaboration with multiple agencies in the State. The OPHIE has access to multiple databases of information and provides the National Outcome Measures data for the State's reports to SAMHSA. Collected information includes social determinants of health (SDOH) factors, such as housing, that play a role in both prevention efforts and treatment outcomes.[157] Data monitoring does not include other important medications, such as gabapentin, and demographic information to better identify those at-risk for misuse.

Community Prescription Drug Disposal

Evidence suggests that prescription drug disposal programs may reduce illicit drug use and unintentional drug poisoning, as well as reduce water pollution.[158] The Churchill County Coalition has planned prescription drug round ups as an initiative, as have many of the other coalitions in the State. Prescription drug drop off boxes at the Sheriff's Office and lock boxes in the home are common prevention initiatives either in place or planned in Churchill County.[159] The 2019 system-wide assessment using SAMHSA's CAST found that three of five behavioral health regions in Nevada — Northern, Rural, and Southern Rural — were

[157] State of Nevada Department of Health and Human Services. *Section 1115 Demonstration Waiver: Nevada's Treatment of Opioid Use Disorders (OUDs) and Substance Use Disorders (SUDs) Transformation Project,* September 2021. Available at: https://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Public/AdminSupport/MeetingArchive/PublicHearings/2021/SPA_PH_10_26_21_NV_1115_Waiver.pdf

[158] County Health Rankings & Roadmaps. "Proper drug disposal programs," 2017. Available at: https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/proper-drug-disposal-programs

[159] Churchill Community Coalition. *Churchill Community Coalition Comprehensive Community Prevention Plan*, 2018.

rated to have sufficient capacity in prescription drug disposal events and locations; however, opportunities to grow these programs exist in two regions.[160]

Culturally Centered Prevention Efforts

Applying the Strategic Prevention Framework's principle of cultural competence, prevention programming and efforts should be developed in a culturally centered and competent manner, in partnership with members of the community the intervention or program is intended to reach. The PACT Coalition identified the need for culturally centered prevention efforts in Southern Nevada, especially for Native American communities, LGBTQ+ communities, older adults, and people who speak languages other than English.[161]

Gaps in Primary Prevention[162]

- Community-based prevention programs across all counties, especially for families and youth
- Full implementation of the Zero Suicide Initiative
- School-based prevention programs with measured outcomes that are implemented Statewide and are culturally sensitive
- Prescription drug disposal programs
- Patient education on the addictive potential of opioids and alternative therapies for chronic pain and chronic illness
- Education among high school students around SUDs, awareness of the opioid epidemic and naloxone use, and attitudes about discussing these topics with health care providers
- Anxiety over seeking help, especially among veterans and tribal members
- Homeless encampment outreach
- Collaborative practice agreements and communication between prescribing providers
- Culturally competent and culturally centered prevention efforts targeted at underserved populations

[160] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, *Nevada Substance Abuse Prevention and Treatment Agency. Capacity Assessment Report: Nevada*, 2019.

[161] Nevada Public Health Foundation, State of Nevada Department of Health and Human Services, and PACT Coalition. *Final Report of Nevada's Summit Proceedings*, 2019.

[162] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

Gaps in Provider Education

- Education and monitoring with additional metrics and demographic information
- Participation in Project ECHO
- Education of patients on pain management expectations
- Utilization of/referrals to other pain management options
- Pre-treatment screening and care plans that include alternative pain management
- Insufficient screening for SUDs, especially in Medicaid managed care and in rural areas

Secondary Prevention: Identify Opioid Misuse and Potential OUDs Early and Prevent Overdose

The goal of secondary prevention is to reduce the impact of an injury or illness that has already occurred by identifying and treating the condition or injury as soon as possible, preventing re-injury or recurrence, and preventing long-term problems.[163] In the context of OUD, secondary prevention includes early identification of opioid misuse and OUD and preventing opioid overdose. Examples of secondary prevention efforts include addressing stigma and discrimination, Screening, Brief Intervention, and Referral to Treatment (SBIRT), educating people engaged in opioid misuse or who have OUD, and community coalition building, among others.

Addressing Stigma and Discrimination

Stigma and discrimination against people who use drugs and people with SUDs are persistent barriers for individuals seeking services across the continuum of care, including health care, treatment for SUDs, and harm reduction services. Stigma and discrimination also act as systemic barriers that delay or prevent the implementation of evidence-based services for people who use drugs, such as syringe services programs or Opioid Treatment Programs (OTPs).[164] For example, according to the 2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey, only 35.2% of respondents strongly agreed or agreed that spending taxpayer money to prevent the misuse of drugs is money well-spent.

Despite efforts, many people still report that stigma and the emotional toll it takes on their lives is a major barrier to recovery.[165] Stigma in the community also makes it more difficult to

[163] Substance Abuse and Mental Health Services Administration, Center for the Application of Prevention Technologies. "Primary, Secondary and Tertiary Prevention Strategies & Interventions for Preventing NMUPD and Opioid Overdose across the IOM Continuum of Care," (n.d.). Available at: https://cadcaworkstation.org/public/DEA360/Shared%20Resources/Root%20Causes%20and%20other%20research/Crosswalk%20PST_USI_models%20with%20NMUPD_PDO__%20examples_9_27_2016_revised.pdf

[164] Tsai, A. C., Kiang, M. V., Barnett, M. L., Beletsky, L., Keyes, K. M., McGinty, E. E., Smith, L. R., Strathdee, S. A., Wakeman, S. E., & Venkataramani, A. S. "Stigma as a fundamental hindrance to the United States opioid overdose crisis response," *PLoS Medicine*, Volume 16 Issue 11 (2019), e1002969.

[165] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada*, 2022.

reintegrate into society because obtaining housing and employment is difficult when employers and property owners do not fully understand treatment and recovery. Stigma and shame contribute to anxiety over seeking help, especially among veterans and tribal members.

A social media campaign launched in Fall 2020 to address community-wide stigma and treatment awareness that will need to be assessed for effectiveness in addressing stigma as a barrier. A new campaign targeting stigma was released in late 2021 and early 2022, which should be built upon the previous campaign to improve effectiveness. It will include collecting provider testimonials and success stories from the field.[166]

According to information provided in a 2019 report by the Nevada Public Health Training Center that summarizes Nevada's current efforts according to the Johns Hopkins Bloomberg School of Public Health recommendations, the Nevada SOR program supported a campaign to reduce stigma by increasing awareness about addiction being a disease. Nevada OD2A also partnered with Nevada Broadcasters Association to launch an anti-stigma campaign.

Finally, stigma can be a significant problem in health care settings, especially among providers who do not specialize in substance use care.[167] The Nevada Minority Health and Equity Coalition reported that many respondents with lived experience reported avoiding seeking necessary health care because of the negative, even belittling, treatment they received from health care providers.

Screening and Referral for Opioid Misuse

Screening for unhealthy substance use, including opioid misuse, should occur regularly to identify and address risks of OUD and other substance-use related harms early. Nevada offers American Society of Addiction Medicine (ASAM) level 0.5 with no prior authorization, although there is a limit to one screening per 90 days. Nevada notes in its Section 1115 SUD Demonstration Waiver application that the 0.5 ASAM level of care is both early intervention and prevention. This level of care assists providers in identifying individuals to be screened for referral to treatment.

Utilization of SBIRT is necessary for ensuring that people are screened for SUDs, with brief intervention and/or referral to treatment, as appropriate. Although it is difficult to assess how much screening and referral is occurring in Nevada, Medicaid claims for SBIRT are very low, especially in managed care. According to 2020 Medicaid data, there is not likely sufficient screening for SUDs, especially under the State's Medicaid managed care system and in rural areas. Billing encounters indicate that for SBIRT, which encompasses substance use and alcohol screening, most screening is being done under fee-for-service (FFS) in Clark County (690 claims). Only 91 claims were reported for SBIRT under MCOs, almost all in Clark County. Rural areas only had 28 total SBIRT claims for the year.[168] There is no evidence that adequate screening in primary care and other settings is being accomplished. Such low screening rates indicate a likely underutilization of screening and referral to treatment, therefore limiting access for those who may not be aware of treatment options.

[166] State of Nevada Division of Health Care Financing and Policy. *Nevada's Sustainability Plan to Support Expansion of SUD and OUD Treatment and Recovery Provider Capacity,* 2021.

[167] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada,* 2022.

[168] Data obtained from the Nevada Department of Health and Human Services on January 11, 2022.

Screening is only effective when providers know to whom they should refer. A lack of knowledge of available SUD coverage benefits and treatment options has also been cited as a reason providers are not linking consumers to appropriate treatment services. This suggests a lack of sufficient provider education and sensitization on SUDs, treatment options, and benefits, such as through a targeted Statewide public education campaign.

Patient Education

Offering people who misuse opioids, are at high risk of OUD, or are in the early stages of OUD prevention education and information is a secondary prevention strategy to reduce and prevent disease progression or other related harms, such as overdose. Tailored education and information interventions for friends and family of people at risk of OUD and overdose can also help to prevent future harms. A small qualitative study of people who had or were currently using opioids revealed that many were unaware of their treatment options and the resources available for payment, such as Medicaid, as well as how to access treatment and funding resources.[169] They expressed a lack of knowledge about the various facets of MAT, from what it is to how to access it. There are multiple training curricula available from federal agencies for use both in the public and for school systems and providers. One resource is SAMHSA, which provides tools such as the Opioid Overdose Prevention Toolkit[170] that can assist with education and outreach.

The 2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey of 669 respondents included questions around prescribing, 12.1% of the respondents reported being prescribed an opioid drug in the past year. Of those respondents, 85.3% were in Nevada at the time the drug was prescribed and 72.6% reported that their doctor and/or pharmacist provided them with information regarding the risks of becoming addicted to opioids.

Community Coalition Building

Community coalitions that bring together diverse stakeholders are excellent vehicles to help implement the five steps in the Strategic Prevention Framework: assessment, capacity, planning, implementation, and evaluation. Community coalitions can identify specific communities' prevention needs, engage community members in prevention efforts, build resource capacity, and successfully implement prevention programs in a manner that is culturally relevant to the community being served. There are several examples of community coalitions in Nevada that have developed and advanced efforts to prevent and address opioid misuse and OUD-related harms.

The Douglas County's Community Prevention Plan utilized several different data sources, including the YRBS, local suicide completion data, and local data on ED visits and inpatient hospitalizations for SUD and behavioral health to develop a prevention plan that includes targeted education interventions. Planned interventions include education to families and individuals needing behavioral health services through health fairs and public media

[169] Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations,* 2021.

[170] Substance Abuse and Mental Health Services Administration. *Opioid Overdose Prevention Toolkit,* accessed February 2022. Available at: https://www.samhsa.gov/resource/ebp/opioid-overdose-prevention-toolkit

campaigns, education for providers on crisis intervention and trauma-informed care, and public presentations specific to high-risk populations.[171]

The Partners Allied for Community Excellence (PACE) Coalition, serving Elko, Eureka, and White Pines Counties, also used YRBS data, community stakeholder input, and the matrix of Risk and Protective Factors from the National Institutes of Health and the National Institute on Drug Abuse to organize information and set priorities for activities, including prevention and education. Early intervention and prevention efforts present as one of the Coalition's priorities and include engagement such as office space in the Elko County School District to assist the School Resource Officer Program, participation in PACE rural provider meetings from the Head Start of Northeastern Nevada, work with the Head Start in Ely, and work with charter schools in the area. The Coalition has identified the need to improve its relationship with the Great Basin College for prevention efforts. They also fund training and resources for School Resource Officers, who also provide real-time data on substances seized within schools.[172]

The Join Together Northern Nevada Coalition also used YRBS data and key informant interviews in developing a needs assessment and plan around relapse prevention and community resource deployment. The Coalition formed similar priorities as the other coalitions, including standardized initiatives in schools and inclusiveness in messaging to include community partners, parents, youth, and people who previously used opioids. Plans to do so include programming in school twice a year, workshops about drugs and paraphernalia, and public education campaigns, especially about the dangers of marijuana, which was a key risk in the community. The Coalition did note that funding for opioid campaigns has not been effective, as there is now increased stigma around the use of opioids in the community's perception.[173]

Frontier Community Coalitions also found that interventions in the school present an essential part of prevention efforts for Humboldt, Lander, and Pershing Counties. Efforts noted included ensuring that formal parent education classes have recommendations for monitoring children and clear communication with children. Other options noted included exploring opportunities to include parenting messages during events where parents naturally gather, such as sporting events and school orientation, as well as documenting that opportunities for a more significant number of children to become involved with peers in a positive social setting and working toward a common goal will reduce substance abuse rates. Also of note was a desire of surveyed stakeholders for opportunities to visit larger communities to help young people understand where they may fit into the larger world and help them set future goals, as will collaboration with school districts to support tutoring programs to help increase academic performance. Another item of note was to organize alcohol-free events to help people create positive connections with one another and for youth to see positive examples of adult behavior.[174]

The CARE Coalition also identified education and targeting youth as critical components in an effective prevention program, as youth are one of the most vulnerable populations for substance use, especially marijuana. They also noted a lack of funding as a barrier to deliver prevention services effectively. The Coalition suggested reaching out to specific agencies

[171] Partnership Douglas County. *Douglas County's Community Prevention Plan 2019*.

[172] PACE Coalition Serving Elko, Eureka, and White Pine. *Comprehensive Community Prevention Plan 2020–2023*.

[173] Join Together Northern Nevada. *Comprehensive Community Prevention Plan for Washoe County 2020–2022*.

[174] Impact and Frontier Community Coalition. *Comprehensive Community Prevention Plan 2020–2023*.

willing to assist in substance misuse prevention for direct funding. State and grant funding may require a greater lift for application and wait time to receive funds. Increased partnership with other agencies to address SDOH, such as housing and transportation, was noted as a priority, as was providing education and resources to vulnerable populations such as LGBTQ+ individuals, Native Americans, and the elderly, in addition to the youth population.[175]

The Churchill Community Coalition also found that a community-wide system of programs and services were a key resource in the Coalition's prevention plan for Churchill County.[176] The Coalition flagged the need to support research-based programming with the goal of reducing risk factors and increasing protective factors. Education and marketing also presented as tools for prevention planning, including a counter/truth marketing campaign to "glamorize and reaffirm-teen sobriety is the norm."

Similar results were found by the Nevada Minority Health and Equity Coalition report from forums and interviews with 51 people with lived experience.[177] Not only did people in more rural areas report less knowledge of the risks of prescription opioids and recovery resources, but the family members of people who were in treatment experienced a great deal of anxiety due to a lack of understanding of MAT and other recovery and treatment options. Overall, participants underscored the need for more public education and community understanding of the nature of addiction and the treatment process to combat stigma. Encouragement and a sense of community was felt to be necessary for the public to better respond to addiction and decrease stigma.

Gaps in Secondary Prevention[178]

- Broad adoption and implementation of SBIRT models, including in primary care and other community-based health care settings
- School-based secondary prevention
- Trainings for people who use or misuse opioids and/or have experienced a nonfatal overdose and their family members, including overdose prevention and reversal strategies
- Programs to decrease stigma among medical providers
- Programs to decrease stigma among community members likely to interact with people in recovery
- Statewide programs to address stigma in the public
- Education on treatment options for OUDs
- Education for family members on treatment of OUDs

[175] CARE Coalition. *Comprehensive Community Action Plan*. 2019

[176] Churchill Community Coalition. *Churchill Community Coalition Comprehensive Community Prevention Plan*, 2018.

[177] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada*, 2022.

[178] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

Tertiary Prevention: Reducing Harm and Restoring Health

Tertiary prevention involves limiting harm from substance dependence through effective rehabilitation and long-term aftercare. Tertiary prevention is generally offered through specialized outpatient or residential programs focused on restoring a person's health to the most optimal level that can be achieved and is then maintained through sustained supports over time. This section is primarily focused on harm reduction efforts while specialized outpatient and residential services are discussed in the prior section regarding access to treatment.

Community Perceptions Regarding Harm Reduction

Fifty-one individuals from Nevada participated in a Community-Based Participatory Research (CBPR) project by Nevada Minority Health and Equity Coalition, as part of the requirements for this Needs Assessment in SB 390.[179] CBPR is a unique framework for gathering information from those in the community with lived experience, ensuring community members are empowered to not only respond with the requested information, but to also work as partners in both the research and resulting efforts toward improving health and impacting change in their communities. Urban respondents made up 75% of the participants, while 23.5% were from rural areas. In the area of harm reduction, participants reported that they found harm reduction resources useful. However, barriers in urban areas included limited hours of operation and lack of education for the use of naloxone. In rural areas, participants reported a significant lack of education on harm reduction resources and methods, harm reduction resources lacking privacy from the public and from law enforcement, and lack of education on the addictive potential of opioids and alternative therapies for chronic pain and chronic illness.

Harm Reduction Resources

Syringe Service Programs

Nevada has made progress in Integrated Opioid Treatment and Recovery Centers (IOTRCs), which build services around individuals, allowing for a more integrated care model that addresses SDOH and other comprehensive treatment needs.[180] Other innovative practices in harm reduction include peer support services and syringe vending machines. In 2013, syringe service programs (SSPs) were enacted, two of which serve Nevada's Urban Centers through mobile and storefront exchange, Trac B and Change Point. SNHD supports Trac B on efforts including vending expansion and technical assistance for other jurisdictions to implement public health vending, collaboration on outreach, rural expansion of harm reduction initiatives, linkage to care and peer support services, and alliance work, but does not fund the purchase of syringes. The syringe vending machines have allowed conversations with individuals around harm reduction and treatment. However, results of the 2019 Statewide assessment using SAMHSA's CAST indicate that needle exchange capacity is low relative to need in all regions of the State.[181] Qualitative data from a 2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey underscores this finding,

[179] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas, *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada,* 2022.

[180] Nevada Institute of Children's Research and Policy, University of Nevada. *Comprehensive Community Substance Abuse Prevention Plan*, 2019.

[181] Nevada Department of Health and Human Services, Division of Public and Behavioral Health, *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada,* 2019.

with approximately one in four (25.1%) respondents reporting seeing discarded needles in their community. However, respondents of the survey did not link needle exchanges with positive outcomes. In the same survey, half of the respondents (50.0%) agreed or strongly agreed that a needle exchange program would **increase** the number of discarded needles on the street that some drug users can reuse, and 32.2% of respondents agreed or strongly agreed that needle exchange programs would **increase** overall injection use in the community. Nevada needs both expanded syringe exchange programs and efforts to educate the public on the true impact and benefit of such programs.

Peer Supports for Harm Reduction

Peer supports are an essential component of tertiary prevention and recovery programs for SUDs. Peer supports promote a workforce that can build relationships with individuals to encourage harm reduction efforts and understanding of issues such as stigma, allowing for self-determination in the harm reduction, treatment, and recovery process. Peer support services can also assist with outreach to underserved populations and promote an increase in cultural competency through their lived experiences. Expansion of peer supports would allow for greater outreach to individuals living with SUDs, although implementation especially in rural and frontier areas can be challenging due to lack of available providers and programming.[182]

Overdose Reversal

The Nevada Rural Opioid Overdose Reversal grant provided Desert View Hospital and five other critical access hospitals, Project ECHO Nevada, Nevada Rural Hospital Partners, and DHHS the resources needed to train emergency medical providers on the administration of naloxone after SB 459 authorized its use by first responders.[183] Opioid State Targeted Response (STR)/SOR grants have funded naloxone and overdose education for first responders.

Naloxone is currently available without a prescription and community-based organizations can distribute naloxone for free. Nevada, in partnership with Salesforce, implemented an innovative naloxone inventory management program, the Naloxone Virtual Dispensary, that ensures that naloxone is available statewide. Naloxone is funded primarily through federal grants. It is required to be available at all Integrated Outpatient Treatment and Recovery Centers and Certified Community Behavioral Health Centers. The State has also successfully collected data on naloxone distribution, including to whom naloxone is being distributed. In 2018, Nevada developed a provider's guide to prescribing naloxone.[184] Nevada has made great strides in ensuring naloxone is available and that providers and first responders know how to use it. However, a survey of people with current or past OUD identified that individuals in the community, especially those experiencing homelessness, need more education about naloxone and how to use it.[185]

---

[182] Nevada Public Health Foundation, State of Nevada Department of Health and Human Services, and PACT Coalition, *Final Report of Nevada's Summit Proceedings,* 2019.

[183] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[184] State of Nevada Division of Public and Behavioral Health. *Naloxone for Opioid Safety: A Nevada Provider's Guide to Prescribing Naloxone to Patients Who Use Opioids,* 2018. Available at: https://dpbh.nv.gov/uploadedFiles/dpbhnvgov/content/Resources/opioids/naloxone_toolkit_color.pdf

[185] Nevada Public Health Training Center, *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations,* 2021.

Gaps in Tertiary Prevention and Harm Reduction[186]

- Limited hours of operation for harm reduction services
- Community education for the use of Naloxone
- Education on harm reduction resources and methods in rural areas
- Privacy from the public and from law enforcement when using harm reduction resources, especially in rural areas
- Education in encampment communities
- Needle exchange capacity is low relative to need in all regions of the State
- Prohibitive prior authorization requirements for peer recovery support services

Treatment of OUD

Access to treatment and service utilization can be difficult to measure Statewide across all payers, and particularly hard to estimate for special populations, such as those living in underserved communities, pregnant women, transition-age youth, people experiencing homelessness, and others who might experience disparities. Until Nevada establishes its multi-payer claims database, reliable information on the number of people with SUD or OUD diagnoses and/or receiving treatment is limited. Most gaps in treatment reported in this Needs Assessment summary are identified through the CAST results and Medicaid data provided by the Nevada DHHS Office of Analytics. Overall, the CAST identified a 70% unmet need/insufficient capacity of services Statewide.[187]

Treatment availability was found to be the most significant and critical need for residents with OUDs across the State.[188] A July 2019 report estimated that 400,000 Nevadans who need substance use treatment in a year do not receive it.[189]

Trends in Nevada Medicaid have identified an overall increase in SUD service utilization. The number of Medicaid members with SUD claims has steadily increased from 44,275 in 2017 to 79,940 members in 2020.[190] Of the 79,940 members, 27% had claims related to OUD. The highest number of members with claims related to OUD were members 25 years–34 years old. However, as of 2018, only 31.5% of those with an SUD diagnosis received treatment or recovery services, indicating a lack of access or engagement despite an increase year to year.[191]

---

[186] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

[187] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[188] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada*, 2019.

[189] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[190] Data received from the State of Nevada Department of Health and Human Services Office of Analytics, January 7, 2022.

[191] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

Statewide from 2015 to 2020, the number of individuals diagnosed with an OUD increased from 7,050 to 16,433 (a 133% increase).[192] Of those individuals diagnosed with an OUD, those who received outpatient treatment increased from 37% to 47%. This increase could be due in part to the expansion of Medicaid eligibility in 2014, in addition to overall increases in opioid use over recent decades. People of American Indian and Alaskan Native ethnicity account for 1.1% to 1.3% of OUD diagnoses, 0.3% to 0.5% of those in outpatient treatment, and 0.1% to 0.2% of those on MAT, indicating an underutilization of outpatient services.

Trends are difficult to identify because recent data reflect utilization during the COVID-19 PHE restrictions, as mentioned in the prior section. Treatment utilization in Nevada's Substance Abuse Prevention and Treatment Agency (SAPTA) facilities specializing in SUDs fell by 31% between 2019 and 2020, likely due to COVID-19 restrictions and concerns in the community about the transmissibility of the virus. Not only has the PHE exacerbated mental health and substance use issues, it has also likely contributed to a pent-up demand now that vaccines are available and treatment providers have increased their in-office availability.

General Treatment Issues

Special Populations and Health Equity

Minority Populations

Nevada is currently lacking sufficient data to draw strong and actionable conclusions about disparities in access and treatment for minority populations. However, Medicaid data suggests decreased treatment for Hispanic and Black Nevadans. Approximately 84% of Medicaid members receiving SUD and OUD services were White, 9% were Black, 1% were American Indian/Alaskan Native, and 15% identified as Hispanic. Since Black Nevadans make up 12.1% (versus 9% receiving treatment) of the total population and Hispanics 28.7% (versus 15% receiving treatment), there is likely a significant disparity based on available data.[193] It is not clear why such disparities might exist.

While Nevada-specific Statewide data is not available, literature reviews and national data suggest significant disparities for racial/ethnic minority youth. In a national study, Black youth with SUDs reported having received fewer specialty services.[194] Both Black and Hispanic youth reported receiving fewer informal treatment supports due to several possible factors involving providers, environmental context, and community resources.

Health disparities are likely a significant gap. More detailed data on SUD in these populations could clearly point to effective strategies to better address unmet prevention, treatment, and recovery needs. Nevada's Office of Minority Health and Equity was recently awarded funds by DHHS to continue to build health equity, which will need to be based on strong and informative health equity data.

[192] Data received from the State of Nevada Department of Health and Human Services Office of Analytics, January 7, 2022.

[193] Ideally these comparisons should be made within the Medicaid population rather than comparing treatment within Medicaid to the entire population.

[194] Alegria, M.I., Carson, M., et al. "Disparities in Treatment for Substance Use Disorders and Co-Occurring Disorders for Ethnic/Racial Minority Youth," *Journal of the American Academy of Child & Adolescent Psychiatry*, Volume 50 Issue 1 (2011).

American Indian/Alaskan Native Populations

Nevada has 27 federally recognized tribes, with 32 reservations or colonies.[195] 97% of Nevada's Tribal Nations are rural. American Indian/Alaska Natives (AI/AN) make up 1.2% of Nevada's population. AI/AN experience a variety of risk factors for SUDs, including higher unemployment, lower four-year high school graduation rates, and lower annual household income. According to United States Census Bureau aggregate data (2015–2019), the median income among those living on tribal lands is lower and unemployment rates and poverty rates are higher compared to Nevada overall. All these factors tend to increase the likelihood of health disparities.

The health care delivery system for Nevada and parts of Utah and Arizona are overseen by the Phoenix Area Indian Health Service (PAIHS).[196] The system includes health care facilities operated by local tribes and AI/AN health programs and encompasses primary care, tertiary care, and specialty services. PAIHS is leading numerous behavioral health-related initiatives. Four health facilities or service units offer either purchased/referred treatment in the local community (Schurz Service Unit) or directly provided treatment in the community that involves some level of substance use-related interventions. There are also two substance use treatment facilities, one of which is for males aged 12 years–18 years.

One of the efforts made by Nevada to address the opioid epidemic in the Tribal Nations was to offer two requests for applications (RFAs) offered through the SOR grant to increase available substance use services. There were no responses from tribal organizations to the RFAs, but the SOR team continues to have ongoing conversations with interested tribal clinics about increasing the accessibility of MAT services, various training opportunities, and support for implementation. The SOR team participates in the Nevada Tribal Council on request and maintains relationships with organizations currently distributing naloxone to their communities.[197] The lack of response to the SOR RFAs indicates an opportunity to further engage with the Tribal Nations to determine what sort of funding or technical assistance might be the most well-received by the population.

The SOR II Tribal Needs Assessment found that there are no mutual support meetings (e.g., Alcoholics/Narcotics Anonymous) in Las Vegas or Northern Nevada that are AI/AN-specific or located in tribal locations. They did find that Elko, Garnerville, and Owyhee communities near tribal areas did have meetings available.[198] Additionally, only four of the 14 Indian Health Service clinics have a practitioner who is DATA 2000 waivered. Residents of other areas without waivered providers need to drive long distances to receive MAT treatment.

Pregnant Women

Pregnant women in Nevada are much less likely to receive needed opioid treatment. One study found that only 15% of women with an OUD who are covered under Medicaid received

[195] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[196] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[197] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services, *Nevada State Opioid Response Grant II, Year 1: September 20, 2020-September 29, 2021 Annual Performance Progress Report,* 2021.

[198] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020–September 29, 2021 Annual Performance Progress Report*, 2021.

treatment.[199] The underlying causes of a lack of treatment are complex and difficult to measure. Most often, the barriers to treatment for pregnant women include a lack of providers willing to provide MAT to pregnant women due to perceived and actual risks, stigma, and fear of losing custody of the child or other children in the household. During the June 2022 meeting of the ACRN, a provider of comprehensive specialty services for pregnant women reported that their services are underutilized, likely because of stigma in the community, both on the part of referral sources and individuals needing treatment.[200]

Youth

Programming targeted to young adults and transition-age youth is lacking. There is only one facility for youth treatment in the State outside of the PAIHS. Additionally, adolescent beds, certified to treat co-occurring disorders, are lacking. Nevada currently ranks number 51 in the nation among states and US Territories for the prevalence of mental health disorders and access to treatment.[201] SAPTA performed a needs assessment and found there is a critical need for treatment for youth with co-occurring disorders, especially for inpatient facilities, as which there is only one in the State that treats youth, making this a difficult service to access for both youth and their families.[202]

The University of Nevada, Reno, School of Social Work was awarded a grant to train primary care and other providers on key elements needed to work with children, adolescents, transition-age youth, and their families.[203] However, shortages of providers to treat substance use in youth remain, and are especially problematic in rural areas. A 2019 Nevada DHHS survey found that State and community-level stakeholders prioritized young adults and transition-aged youth as among the highest risk for substance use.

While data on youth treatment and follow-up in the juvenile justice system in Nevada is sparse, one national study found that about half of youth who had been in detention did not receive needed treatment for substance use.[204]

Rural and Frontier Nevada Residents

Rural and frontier areas are greatly impacted by the lack of local treatment programs, while also experiencing higher rates of youth alcohol use, opioid prescribing, and prescription-related overdose deaths. The State is investigating the purchase of mobile RVs to increase the presence of MAT opportunities in high-need communities. Both residential treatment programs and outpatient MAT are concentrated in urban areas of Nevada. A lack of transportation, especially for the long distances people must travel for specialized treatment, only exacerbates the disparity. The Nevada Infrastructure Assessment Report

[199] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[200] State of Nevada Department of Health and Human Services. "Advisory Committee for a Resilient Nevada (ACRN)." Available at: https://dhhs.nv.gov/Programs/Grants/Advisory_Committees/ACRN/Home/

[201] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[202] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[203] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[204] Welty, L., Harrison, M., Abram, K., et. Al. "Health Disparities in Drug and Alcohol-Use Disorders: A 12-year Longitudinal Study of Youths After Detention," *American Journal of Public Health*, Volume 16 (2016), pp. 872–880.

summarized that rural and frontier residents have "little to no access to mental health services."[205]

Services for Co-Occurring Mental Health and SUDs

Access to mental health care also impacts opioid treatment access and recovery, making the capacity of the mental health treatment system important to the State's opioid response. Unfortunately, Nevada has been ranked number 42 compared to all other states for low access to care and high prevalence of mental illness in adults.[206] For youth, Nevada is ranked number 51 in the country for mental health prevalence and treatment access.

SAMHSA reports that over a third of people who seek treatment for opioid use have a co-occurring mental health diagnosis.[207] Additionally, people who have both an OUD and a comorbid mental health condition are at higher risk of self-harm, especially when they have previously experienced trauma.

Although mental health and SUDs co-occur at a high rate, not all providers of SUD services are willing or trained to simultaneously treat both mental illness and SUDs, leaving people with co-occurring disorders at a disadvantage when seeking treatment. Fortunately, Nevada SAPTA offers certifications to providers who meet specific criteria for treating co-occurring disorders, with 108 such certified facilities for adults and only 39 for adolescents. This type of certification can help individuals identify treatment providers who will better meet their needs.

However, according to numerous reports, there are still not enough of these certified providers to meet community needs. The Nevada Minority Health and Equity Coalition qualitative study noted that respondents with lived substance abuse experience reported the need for more mental health treatment during and after MAT to improve recovery outcomes.[208] A State needs assessment also identified the critical need for the treatment of youth with co-occurring disorders. [209]

Finally, although some efforts have been made, such as the expansion of individuals able to be served by the Las Vegas-based Eighth Judicial MAT Re-Entry Court to include those with a stimulant disorder, interventions for people who use multiple substances should be available Statewide. Continued focus on solely addressing OUDs will not be as effective if treatment protocols for co-occurring use of stimulants and other substances is not a part of an integrated treatment approach.

Evidence-Based Care

While access to treatment is essential, it is also important that the treatment available be evidence-based and oriented toward evaluating outcomes for treatment recipients. Nevada lacks a standard measure or monitoring capability to ensure treatment across all settings is delivered according to evidence-based standards and that outcomes are tracked. Training in and implementation of evidence-based models is mainly left to the discretion of individual

---

[205] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report, p. 76,* 2020.

[206] Mental Health America. "The State of Mental Health in America," 2021. Available at: https://mhanational.org/issues/state-mental-health-america

[207] Substance Abuse and Mental Health Services Administration. *Treatment Improvement Protocol (TIP) 42: Substance Use Disorder Treatment for People with Co-Occurring Disorders,* 2020.

[208] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada,* 2022.

[209] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

providers and agencies. However, Integrated Outpatient Treatment and Recovery Centers and Certified Community Behavioral Health Clinics are comprehensive treatment provider types that are required to have training in evidence-based practices and monitor outcomes.

Discharge and Transition of Care

The 2020 Medicaid data shows a need for improvement in both seven-day and 30-day Healthcare Effectiveness Data and Information Set measures of follow-up after an ED visit for alcohol and other drug use or dependence.[210] While the average national Medicaid managed care rates were 13.8 for seven-day follow-up and 20.2 for 30-day follow-up in 2020, Nevada's MCOs ranged 10 to 16.9 for seven-day follow-up and 14.7 to 22.2 for 30-day follow-up, with a trend downward since the second quarter of 2020. The downward trend in the second quarter is consistent with the timing of the COVID-19-related PHE restrictions and the associated drop in outpatient services. For Medicaid FFS, which is mostly in the rural counties, rates were flat at a range of 8.5 to 11.3 for seven-day follow-up and 13.2 to 17.4 for 30-day follow-up, with the highest rates in the third quarter of 2020. Additionally, re-admissions among beneficiaries with a SUD totaled 1,933 among FFS Medicaid and 2,732 for Medicaid members in managed care. This data should be carefully interpreted due to the timing of the COVID-19 PHE. It generally supports the need for better discharge planning and transition for the SUD population.

Qualitative data also supports this need. The 2021 study of people with lived experience with opioids reported a significant need for better coordination among different levels of treatment programs and better supports upon discharge back to the community.[211]

Workforce Shortages

The National Drug Helpline cited factors contributing to the risk of overdose fatalities, such as reduced access to treatment programs, including EDs, and lost health care capacities due to staff falling sick, among others. The COVID-19 PHE has amplified the workforce shortage across sectors. Rural health development continues to be limited by staffing shortfalls and limited resources while states are trying to expand MAT services. Nevada continues to lack behavioral health and medical providers, especially in the rural and frontier areas.[212] All but one of Nevada's counties (Washoe) are designated Mental Health Professional Shortage Areas.

Workforce shortages present a key risk factor for individuals seeking treatment. Federal data from 2021 indicates that over 2,445,000 Nevadans live in designated mental health care Health Provider Shortage Areas (HPSAs), with 52 HPSA designation areas as measured by available psychiatrists.[213] Only 35.4% of the estimated need for mental health providers is currently being met, with 111 additional providers needed in order to remove the HPSA designation.[214] HRSA estimates that by 2030, the national supply of adult psychiatrists will

[210] Data received from the State of Nevada Department of Health and Human Services, April 2022.

[211] Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative Research to Investigate Barriers and Facilitators to Accessing Services Among Current and Former Opioid Users in Nevada: Report of Key Findings and Recommendations,* 2021.

[212] Nevada Public Health Foundation, Nevada Department of Health and Human Services, and PACT Coalition. *Final Report of Nevada's Summit Proceedings,* 2019.

[213] Kaiser Family Foundation. "Mental Health Care Professional Shortage Areas (HPSAs)," accessed for September 30, 2021. Available at: https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22desc%22%7D

[214] The calculation of HPSA is primarily based on psychiatrist availability, not on other mental health providers such as psychologists, clinical social workers, psychiatric nurse practitioners, and marriage and family therapists.

decrease by 20%, which indicates a trend in the wrong direction compared to Nevada's needs.[215] Additionally, 100% of all Nevada counties (except Washoe) are designated mental health care shortage areas, again as pertains primarily to psychiatrists.[216]

While nationally the average number of SUD providers is 32 per 1,000, Nevada currently averages 11 providers per 1,000.[217] HRSA estimates that by 2030, the national supply of addiction counselors will only increase by 3%, and demand is expected to increase by 15%.[218] The lack of providers presents challenges when individuals attempt to access services and support.

With more providers also concentrated in urban areas, access limitations experienced by rural residents are even more pronounced. At the June 2022 ACRN meeting, one rural community leader reported that rural areas lack paid internship opportunities that would not only keep local residents in the areas as they train and work but promote more people choosing to work in behavioral health because they do not have to relocate to complete their training.[219]

CAST results indicated a significant shortage in outpatient treatment capacity for psychiatrists and psychologists throughout Nevada.[220] Northern and Rural Behavioral Health Regions reported significant deficits in licensed counselors. The CAST report suggested that the shortages varied by region, with poverty and insurance status limiting available providers in urban areas and distance to providers/provider availability limiting capacity in rural and frontier areas.

Telehealth

Telehealth offers opportunities to close some of the gaps in access to care in rural and frontier areas if those areas have access to technology and internet service in their homes or nearby. Nevada providers and other entities have awarded numerous federal grants to strengthen telehealth infrastructure.[221]

Nevada is considered to have progressive telehealth regulations.[222] AB 181, filed in September of 2020, ensures that any insurer, or other organization providing health coverage through Medicaid, provides benefits for mental health or SUDs at fair coverage as that of medical and surgical needs. SB 5, effective October 1, 2021, has instituted the requirement that telehealth data is collected and analyzed to improve equity. The federal SUPPORT Act Section 2001 now allows people covered by Medicare to receive telehealth services in their homes rather than having to travel to a facility. This incentivizes more

[215] Health Resources & Services Administration Health Workforce. "Behavioral Health Workforce Projections," accessed April 2022. Available at: https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/behavioral-health

[216] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[217] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[218] Health Resources & Services Administration Health Workforce. "Behavioral Health Workforce Projections," accessed April 2022. Available at: https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/behavioral-health

[219] State of Nevada Department of Health and Human Services. "Advisory Committee for a Resilient Nevada (ACRN)." Available at: https://dhhs.nv.gov/Programs/Grants/Advisory_Committees/ACRN/Home/

[220] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada,* 2019.

[221] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[222] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020

providers to continue or expand their telehealth services, benefiting the rural and frontier communities. Telehealth in Nevada is a strength that could be built upon to bolster treatment access in all areas of the State. COVID-19 flexibilities further promoted the use of telehealth, with the additional benefit of increasing access in rural communities through suspension of the telephonic restrictions, allowing telehealth for group therapy and allowing people to receive telehealth in their homes.

Outpatient Treatment

Certified Community Behavioral Health Clinics

Nevada is expanding its Certified Community Behavioral Health Clinic (CCBHC) capacity, with six CCBHCs under the Medicaid State Plan, three under a Centers for Medicare & Medicaid Services (CMS) demonstration, and six supported by a SAMHSA grant. CCBHCs offer critical outpatient services that can fill gaps in the service system, including opioid treatment, physical and behavioral health care integration, and 24/7 crisis services. The CCBHCs are expected to improve the quality of community-based treatment through attention to data-based outcomes and monitoring and additional training requirements in best practice treatment models. However, currently the CCBHCs do not cover every geographical area. Many providers are relatively new to this model, so over time, the impact on individuals with OUD is likely to increase as they gain more experience and more clients.

IOTRCs

The State has built a hub-and-spoke infrastructure through IOTRCs. Nevada has three hubs with nine locations and more than 190 spokes serving the counties of Clark, Washoe, Elko, and Carson City. More than 4,000 patients are receiving OUD treatment and recovery support services through this system.[223]

IOTRCs provide regional expertise and comprehensive outpatient services, including MAT, referral to community resources, care coordination, and recovery supports. IOTRC hubs can only be Federally Qualified Health Centers (FQHCs), CCBHCs, and OTPs.[224] The intent for IOTRCs is that individuals only need to come to the central hub on a minimal basis while receiving MAT, with other treatment and support resources at the spokes of the hub more frequently utilized. The spokes will be in more areas, making it more likely that they will be closer to the individual's home to make adherence to treatment more manageable where issues such as childcare or transportation may present a challenge.

While IOTRCs play an essential role in improving access, reports indicate that there may not be sufficient spokes in rural and frontier areas and that reimbursement and overall infrastructure need to be enhanced.

MAT

Qualitative data from the study conducted by the Nevada Minority Health and Equity Coalition also indicates difficulty accessing MAT services, especially in rural areas and on

[223] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[224] State of Nevada Division of Health Care Financing and Policy, *Nevada's Sustainability Plan to Support Expansion of SUD and OUD Treatment and Recovery Provider Capacity*, 2021.

reservations.[225] In 2020, the Nevada State Medicaid Services Manual was updated to include a separate chapter for MAT services, making information on providing the service more accessible to interested providers and signaling the increasing dedication of Nevada to opioid treatment services. OTP and Office-Based Opioid Treatment (OBOT) treatments are not widely available in rural and frontier areas, in part because the volume of the population in these areas is too small to sustain brick-and-mortar programs and to indicate a need for IOTRC expansion.

OTP

Nevada has 15 OTPs offering MAT in outpatient settings, but only in Clark, Washoe, and Carson City Counties, leaving 13 counties without any OTP.[226] In a State survey, most OTPs reported that they have additional treatment capacity, indicating that either the people who need treatment are not able to access it (due to transportation, lack of knowledge of the system, or stigma) or the treatment programs are not located in the areas where residents need them.

OBOT

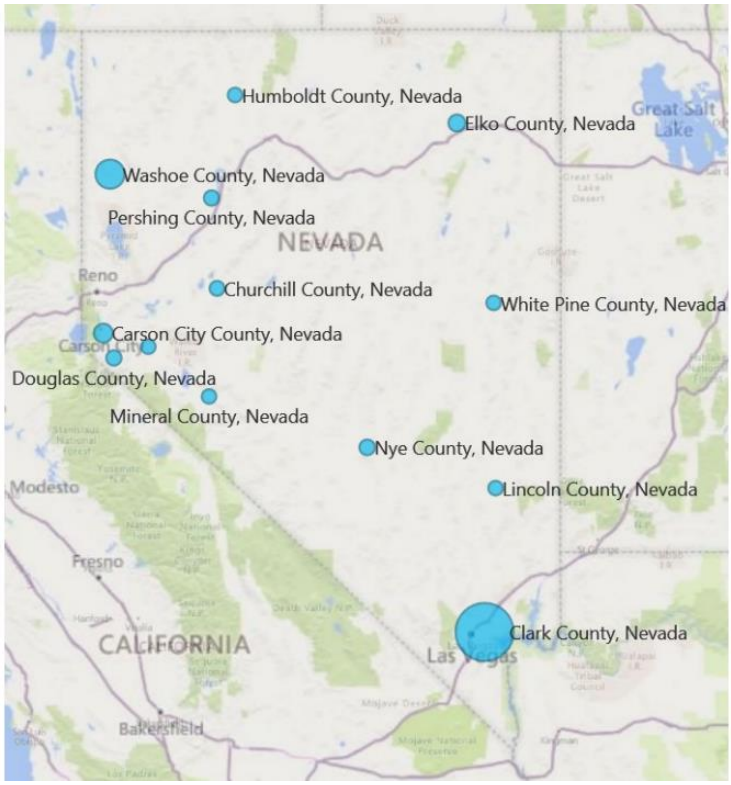
13 counties in Nevada have OBOT. Only Nevada's urban areas, Carson City, Clark and Washoe counties, have more than 10 providers, and eight of the 13 counties have less than five providers.[227] Nevada's analysis of OBOT providers found that only a few of the OBOT providers were prescribing up to their DATA 2000 waiver capacity. The most significant barriers to serving more people were reimbursement, lack of time, and referrals. In addition, only about one-fourth of the OBOTs that responded to the State's survey reported offering counseling, which is a best practice for MAT. Additionally, at least part of every county in Nevada is designated as a HPSA, so the baseline availability of providers who could potentially become DATA 2000 waivered is lacking

[225] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada,* 2022.

[226] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[227] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

Figure 6. Distribution of OBOT.[228]



[228] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

Gaps in Outpatient Treatment[229]

- Data on equity and disparities in treatment outcomes for racial and ethnic minorities
- Provider availability for pregnant women with OUD
- Treatment/provider availability for individuals with co-occurring disorders, especially youth, and serving youth in inpatient and residential facilities
- Access to mental health care as compared with disease prevalence and demand for treatment
- Residential and outpatient MAT programs in rural and frontier areas
- Transportation to treatment and recovery supports, especially in rural and frontier areas and for non-Medicaid populations
- Withdrawal management services with seamless transfer to treatment after detoxification
- Utilization of existing OTPs to capacity
- Availability of OTPs in most counties
- OBOT in rural and frontier areas
- Counseling for individuals receiving OBOT
- Psychiatrists and psychologists specializing in SUD psychotherapy
- Outpatient detoxification and licensed drug and alcohol counselors in rural regions
- MAT and other treatment interventions in justice facilities
- Evidence based treatment protocols for those using multiple substances and for those with co-occurring mental health and physical health disorders
- Formal collaborative care for those at risk for suicide
- Evidence-based treatment modalities across the service continuum

Inpatient, Residential, and Detoxification/Withdrawal

Higher levels of care, such as inpatient, withdrawal management, and residential services, can also be particularly skewed toward urban areas and difficult to expand due to infrastructure costs. The CAST inpatient categories of short-term rehabilitation (less than 30 days) and long-term rehabilitation (more than 30 days) were identified as lacking capacity relative to need in all regions of the State.[230] In June 2021, the State reported having 929 licensed residential and withdrawal management inpatient/residential beds classified as

[229] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

[230] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada,* 2019.

Institutions for Mental Disease (IMD), 95% of which are in Las Vegas, Reno, or Carson City. Nevada identified that 86% of withdrawal management and residential treatment beds are not eligible for Medicaid reimbursement for most adults under 65 years, due to their classification as IMDs under federal regulations.[231] In the absence of these services for many Medicaid beneficiaries, beneficiaries have likely defaulted to either more expensive and potentially less effective care through multiple ED visits and regular inpatient hospital stays or under-treatment and less recovery, resulting in higher crisis utilization.

In 2021, Nevada's plan to address significant gaps in the substance use system through the 1115 waiver for SUD services was submitted for approval to CMS.[232] The pending waiver includes adding residential and withdrawal management services for SUD (ASAM levels 3.1: Clinically Managed Low-Intensity Residential Program, 3.2: Clinically Managed Residential Withdrawal Management, 3.5: Clinically Managed Medium Intensity Residential Program, and 3.7: Medically-Monitored Inpatient Programs). Currently, 86% of Nevada's withdrawal and inpatient resources are not reimbursable by Medicaid because of the Federal IMD exclusion. The waiver also opens the 929 IMD beds for Medicaid payment for an average stay of 30 days for beneficiaries between the ages of 22 years–64 years, a previously excluded benefit for IMDs, and provides case management for beneficiaries in IMD facilities which do not have a co-occurring mental health diagnosis (co-occurring diagnoses are already eligible for case management). Pending approval, the waiver's effective date could be January 1, 2023. While the release only affects care funded by Medicaid, expanded funding for these services is likely to result in better sustainability and growth options for those already established.

While the State is addressing gaps in substance use services related to the need for community-based residential treatment and withdrawal management, implementation is not likely to begin until 2023 and is mostly focused on Medicaid beneficiaries. Resources may be needed to help with the infrastructure providers will need to create or expand into the new services anticipated to be approved under the 1115 SUD waiver.

[231] State of Nevada Department of Health and Human Services. *Section 1115 Demonstration Waiver Nevada's Treatment of Opioid Use Disorders (OUDs) and Substance Use Disorders (SUDs) Transformation Project,* September 2021. Available at: https://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Public/AdminSupport/MeetingArchive/PublicHearings/2021/SPA_PH_10_26_21_NV_1115_Waiver.pdf

[232] State of Nevada Department of Health and Human Services. *Section 1115 Demonstration Waiver Nevada's Treatment of Opioid Use Disorders (OUDs) and Substance Use Disorders (SUDs) Transformation Project,* September 2021. Available at: https://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Public/AdminSupport/MeetingArchive/PublicHearings/2021/SPA_PH_10_26_21_NV_1115_Waiver.pdf

Gaps in Inpatient, Residential, and Detoxification/Withdrawal

- Short- and long-term rehabilitation in all regions of the State
- Funding for withdrawal and residential treatment beds for Medicaid beneficiaries (ages 22 years–64 years) and the uninsured
- Supports for people who have completed detoxification but are awaiting treatment
- Short-term Rehabilitation (< 30 days) and long-term rehabilitation (30+ days) statewide
- Access to inpatient, residential, and withdrawal management services in rural areas
- Funding for infrastructure to expand withdrawal and other levels of care

Crisis Services

In addition to inpatient and outpatient, a robust continuum of crisis services is essential for responding to opioid-related crises and ensuring recipients are effectively connected to treatment after the crisis. Significant gaps do exist across the State with respect to crisis services, as indicated in the Nevada Crisis Care Response System: Assets and Gaps report.[233] One indicator of the need for better community-based crisis response capacity is ED utilization for substance use problems, which are not best addressed in that setting. Most recently, Medicaid data from the first quarter of 2021 shows a rate of 352.1 per 1,000 FFS beneficiaries and 408.4 under managed care. [234] In Medicaid, 2,408 people received a crisis service outside of the ED or inpatient setting in 2020. Nevada's crisis system could be enhanced to decrease some of the ED utilization for substance use and increase crisis response capacity.

In addition to mental health and substance use comorbidity, opioid use alone creates crises that can be addressed by the behavioral health crisis system. Along with the work being accomplished to implement 9-8-8 by the summer of 2022, and implementation of crisis stabilization units (CSUs), expansion of mobile crisis teams that are trained in harm reduction and can carry naloxone are also essential to addressing the opioid crisis.

9-8-8 Crisis Hotline

As recommended by SAMHSA's National Guidelines for Behavioral Health Crisis Care Best Practice Toolkit,[235] Nevada has done a great deal of work to assess and improve the current crisis system. Planning is underway for the State's new 9-8-8 framework, for a consistent

[233] State of Nevada Department of Health and Human Services. *Nevada's Crisis Care Response System: 2020 Statewide Assets and Gaps Analysis,* 2020.

[234] Data received from the State of Nevada Department of Health and Human Services, January 10, 2022.

[235] Substance Abuse and Mental Health Agency, *National Guidelines for Behavioral Health Crisis Care: Best Practice Toolkit*, 2020.

evidence-based model for mobile crisis that includes a multi-disciplinary team of clinicians and peers and 24/7 in-person response, and for CSUs. Nevada already has a robust regional crisis call system through Crisis Support Services of Nevada, but the system cannot independently dispatch mobile crisis-type teams. There are crisis lines specific to regions and targeted to children and adolescents that do have the ability to dispatch specialized child mobile crisis teams in Reno and Las Vegas. Furthermore, the mobile crisis element of CCBHCs is dispatched by their local CCBHC crisis line rather than through one of the other crisis lines, unless they happen to be contacted by 9-1-1 for co-response with law enforcement. Nevada is progressing in their system by planning for a more robust 9-8-8 service that is comprehensive, a single point of contact for behavioral health crisis, and can potentially dispatch mobile crisis teams across the State. The crisis line is intended to address both substance use and mental health crises.

Mobile Crisis Teams

Nevada's CCBHCs fill gaps in mobile crisis in more populated regions, and many carry naloxone and other harm reduction tools and educational materials. The State's efforts to increase the availability of mobile crisis services, along with additional resources, to the whole community, should help decrease ED utilization and help those in an SUD-related crisis to connect to treatment and recovery resources. However, Nevada's CCBHCs are in various stages of refinement of their mobile crisis teams, are not yet serving their communities to the capacity needed and are not uniformly covering rural and frontier areas. Therefore, Nevada lacks a consistent and coordinated, in-person, evidence-informed 24/7 Statewide mobile crisis response system. Such a response system is essential for saving lives in overdose situations, as well as ensuring people receive appropriate follow-up care.

Nevada has some innovative mobile crisis-type teams, including child mobile crisis teams that can respond in person in Reno and Las Vegas. However, their capacity is limited and backed up by telephonic crisis line resources. Rural areas of Nevada have access to telephonic and tele-video crisis care for adults and children, but the intervention is more like that of a crisis call center.

Law enforcement co-responder models with embedded behavioral health clinicians exist in Douglas and Lyon counties, Sparks City, Carson City, and Reno, but in most cases the behavioral health clinician is dressed in a uniform, which is not a preferred model of response, and due to limited team hours, the response is not usually immediate. Two agencies have developed and are staffing Mobile Recovery Outreach Teams to engage within emergency rooms and community agencies in Northern and Southern Nevada through SOR funding.[236]

Las Vegas has a unique ambulance-based mobile crisis model through Las Vegas Fire and Rescue that is available only in a specific downtown area and is available nearly 24 hours per day. Due to the paramedics' advanced scope of practice, transportation can be offered directly to behavioral health facilities rather than going through an ED for medical clearance, but it is limited in capacity. Reno has recently implemented a similar program.

Overall, the current in-person response resources have limited capacity to respond quickly and robustly to everyone in their local communities. Some current in-person crisis teams

[236] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020-September 29, 2021 Annual Performance Progress Report,* 2021.

(CCBHCs in particular) appear to be underutilized at this time, with low per-month requests for mobile services compared to the size of the population where they are located. If more people took advantage of this resource, the community needs would quickly outstrip the teams' capacities. In areas such as Southern Nevada, where there is no in-person mobile crisis response, resources are needed to set up models that can adequately serve the sparsely populated, but expansive, geographic region. As the providers and the State increase education to the community about this resource, providers of mobile crisis may need assistance increasing their own capacity to respond. Additional staff, which are difficult to find due to workforce shortages, training, and adjustment to a "firehouse model" where staff are available 24/7/365, are challenges with which providers are likely to need technical assistance. Reimbursement for current crisis codes is not likely to support this always-available, in-person model.

SB 390 affirmed the State's commitment to expanding their mobile crisis system and included the requirement that peers be an essential part of mobile crisis teams.[237] Therefore, more peers will be necessary to help staff these teams than the State currently has available.

CSUs

Nevada is currently working on developing and expanding CSUs, the "somewhere to go" element of the Crisis Now model of comprehensive crisis services. Ensuring these units can serve individuals with OUDs is essential for rounding out the mobile crisis response system. CSUs only exist in urban areas, and they offer one bed per 100,000 residents rather than the recommended three beds per 100,000 residents. Urban areas have the infrastructure to expand to the recommended three beds per 100,000 residents likely needed to serve local residents.[238] The Rural, Clark, Southern, and Washoe Behavioral Health Regions lack dedicated acute stabilizations units within a reasonable distance from most residents. Instead, residents are transported long distances to facilities by limited public safety resources (ambulances and flight) at great cost. Nevada calculated that 123 crisis beds are needed to adequately serve the State. Due to the rural and frontier nature of Nevada, they would need to be somewhat geographically distributed.

Secure Behavioral Health Transportation

One intervention Nevada has undertaken to address SDOH as a barrier has been to enable non-emergency Secure Behavioral Health Transport in the Medicaid State Plan to transport a person in a mental health crisis or other behavioral health condition to be taken to a treatment site. This effort should assist in increasing available transportation access to individuals who require a treatment intervention but do not need an ambulance for transport.[239] However, as of the publication date of this report, no providers have been certified to provide this service, although a few are in the application process.

[237] Senate Bill 390. Available at: https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/8095/Text

[238] State of Nevada Department of Health and Human Services. *Nevada's Crisis Care Response System: 2020 Statewide Assets and Gaps Analysis,* 2020.

[239] Nevada Division of Health Care Financing and Policy. *Nevada's Sustainability Plan to Support Expansion of SUD and OUD Treatment and Recovery Provider Capacity*, 2021.

Gaps in Crisis Services

- Statewide, consistent and coordinated, in-person, 24/7 mobile crisis response system
- Single point of contact for behavioral health crises
- Dispatch independent mobile crisis teams through central crisis call center
- Mobile crisis teams that are trained in harm reduction and carry naloxone
- CSUs, especially accessible to rural and frontier areas
- Staffing for crisis system

Treatment in Criminal Justice Settings

Criminal justice programming presents another area of need. Access to MAT and other treatment interventions within the jails and prisons is very limited, and individuals transitioning from incarceration to the community have limited access to treatment or care management in the community.[240] Although progress has been made through drug treatment courts and similar interventions, these opportunities uniformly available in all criminal detention centers.

Drug Courts

Drug courts can improve SUD treatment and recovery in the criminal justice population. MAT is utilized across all courts with opioid programming and is now considered the standard of care. Youth offender and re-entry programs have been incorporated into drug courts, addressing the needs of youth as well as adults. A strong relationship between probation/parole and the courts ensures access to treatment, case management, and supports necessary to maintain recovery. Drug courts have also become increasingly invested in trauma-informed care and SDOH to allow judges a full picture of the needs of the individual and to assist in a focus on recovery rather than punishment. For the Washoe County Second Judicial Court, 92% of graduates of the State recidivism program remained arrest-free.[241] A gap in services currently exists for this population, as drug courts and services ranging from treatment to housing are not universally available, leading to a cycle of relapse and oftentimes re-incarceration.

Re-Entry and Post-Release

Engagement during incarceration is crucial, as individuals incarcerated are in a forced state of abstinence and therefore more likely to relapse and overdose upon release. A warm hand-off makes a significant difference, as does the education of and the relationship with

[240] State of Nevada Division of Health Care Financing and Policy, *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[241] Nevada Overdose to Action and University of Nevada School of Community Health Sciences. *Nevada's Overdose Landscape Presentations*, July 7, 2021.

parole and probation officers about the needs of an individual struggling with substance use upon release.

Insufficient support upon re-entry presents a leading cause of relapse and opioid overdose. Among Hispanic Nevadans who died of opioid overdoses, 5% had been recently released from the criminal justice system.[242] A small qualitative study of people who are currently using or have used opioids indicated that some individuals experience a lack of community-based, accessible resources post-release, which they feel contributes to the cycle of drug use and justice involvement. [243] The survey concluded that there is a significant need for transitional and clinical services for the justice population, citing long waiting lists, poor coordination in programs, an overall lack of programs, difficulties reinstating Medicaid, and other challenges people leaving justice settings have in transitioning to care and housing in the community. Washoe County and Mineral County jail facilities have implemented a program for naloxone distribution upon release, and Washoe County provides naloxone to parole officers trained in harm reduction. However, these programs are not Statewide and consistent warm hand-offs with the community are still needed.

Public Perception of Justice-Based Interventions

The 2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey, which included 669 respondents, included questions regarding public perceptions of drug misuse and justice involvement.[244] 79% of the respondents agreed or strongly agreed that youth who use drugs are likely to commit crimes, and 54.9% of respondents agreed or strongly agreed that non-violent criminal drug offenders should have access to various drug rehabilitation programs in Nevada. Half of the respondents (50.5%) agreed or strongly agreed that Southern Nevada should have a program that allows individuals to go to drug treatment therapy rather than jail if they have committed a non-violent minor crime. Only 48.7% agreed or strongly agreed that treatment should be available to all individuals who misuse drugs. This data highlights the need for public education and sensitization to the importance and impact of treatment and prevention services for individuals re-integrating into the community post-incarceration. Without public support, funding to fully implement these important programs will be difficult to obtain.

[242] Larson Institute/Nevada Overdose to Action. *2020 Hispanic/Latinx Overdose*, 2021.

[243] Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations,* 2021.

[244] Nevada Institute for Children's Research and Policy and the Cannon Survey Center. *2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey Report*, 2020.

Gaps in Treatment in the Criminal Justice System[245]

- Post-release bridging services to offer engagement during incarceration and transitional support into the community
- Knowledge base of probation/parole offices on the needs of individuals on release/community re-entry regarding treatment support options and harm reduction
- Statewide availability of drug courts and transitional/re-entry services and supports ranging from treatment to housing
- Public support for treatment and prevention services for individuals re-integrating into the community post-incarceration
- Access to MAT and other treatment interventions within the jails and prisons

Recovery Supports

A Recovery Oriented System of Care "…is a coordinated network of community-based services and supports that is person-centered and builds on the strengths and resiliencies of individuals, families, and communities to achieve abstinence and improved health, wellness, and quality of life for those with or at risk of alcohol and drug problems."[246] Recovery supports are an essential component of relapse prevention, as well as for good treatment engagement and outcomes. Overall, Nevada's 2019 assessment identified that the category of recovery has a 63% unmet need/insufficient capacity Statewide.[247]

Recovery supports vary greatly by region, as they are often less structured, less formal, and tailored to individual support needs. There are several recovery resources funded by grants and State funds across the State.[248] Foundations for Recovery offers outreach in several settings, including women in Washoe County Corrections, local and rural hospitals in Northern Nevada, and in the community focused on populations experiencing homelessness. SOR funding has provided support for two peer-led programs, mobile recovery teams, peer recovery support services, and peer-led warmlines. Within these services, individuals are helped with housing, employment, transportation, legal issues, and other supports that promote recovery and well-being. While impressive, these programs are limited in scope and availability. The State also appears to lack Statewide community-based recovery supports such as recovery centers. Documents reviewed did not mention recovery supports targeted at children, adolescents, or transition-age youth.

[245] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

[246] Substance Abuse and Mental Health Services Administration. *Recovery-Oriented Systems of Care Resource Guide,* 2010. Available at: https://www.samhsa.gov/sites/default/files/rosc_resource_guide_book.pdf

[247] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[248] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

Nevada's June 2019 Statewide assessment using SAMHSA's CAST reviewed the capacity of recovery supports and identified needs, which varied by region, in the following categories:[249]

- Religious or spiritual advisors
- 12-step groups
- Transportation
- Employment support
- Educational support for those who have completed treatment
- Parenting education
- Assistance obtaining housing
- Assistance obtaining health insurance

A lack of capacity was identified for religious or spiritual advisors in all regions of the State, and the categories of employment support for those receiving treatment, assistance obtaining housing, and assistance obtaining health insurance were also noted to lack capacity relative to need in four out of five behavioral health regions of the State.[250] 12-step groups, transportation for those receiving treatment, and parenting education for individuals with an SUD were identified as having adequate capacity at the State level, with a few regions noting gaps in those categories. Overall, the CAST prioritized housing and transportation as the most significant, foundational needs, considering that other recovery supports were being addressed by other entities. A small qualitative study of current and former opioid users indicated that the various treatment and support programs are fragmented and inadequate for the complexities of SUD. [251] These individuals expressed a desire to be more integrated into the community and identified a need for more employment support, volunteer opportunities, recovery centers, and faith-based organizations to round out a recovery-oriented system of care.

The qualitative study of Nevadans with lived experience noted that peer supports are essential, not only in gaining trust for those in treatment, but also in offering recovery employment or volunteer opportunities. [252] They additionally noted that upon discharge from treatment, they were not educated on resources that would help maintain recovery.

Peer Support

Peer and Recovery Support Specialists (PRSS) have increasingly been shown to be an effective component of a substance use treatment continuum and should be woven throughout prevention, treatment, and recovery. In Nevada, peer supports have also been highlighted as a priority area for supporting pregnant and postpartum women and as a vital

[249] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada,* 2019.

[250] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report,* 2020.

[251] Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations,* 2021.

[252] Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations,* 2021.

component of a successful crisis care response system, and prioritized by those with lived experience as an area of recommended growth:

- The Perinatal Health Action Plan, Goal 1, Primary Priority 1: Development of Services, includes advocacy for the development of programs that build in peer support, removal or modification of prior authorization requirements for peer recovery support services to increase access to care, promotion of 24/7 peer-led warmlines, and continued State support of scholarships for peer recovery and support specialists working towards certification.[253] These issues are also noted more generally in the 2020 "Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report"[254] and flagged for expansion in the related 2021 plan to expand capacity, "Nevada's Sustainability Plan to Support Expansion of SUD and OUD Treatment and Recovery Provider Capacity."[255]
- The 2020 report, "Nevada's Crisis Care Response System: Assets and Gaps,"[256] highlights peers as an element of a successful crisis response system, through employment in Mobile Crisis Teams and Crisis Stabilization Facilities. Peer involvement in mobile crisis response was noted as a gap in Northern Behavioral Health Region counties, whereas Washoe County was highlighted as having peer support integrated in all but one crisis stabilization facility, although peers are not yet integrated into mobile response teams. The Southern Region was also flagged as lacking in mobile crisis response overall, as well as lacking in peer resources. For call center hubs, the need for peer staffing was highlighted as a priority by the Northern and Rural regions. Overall, the significant role of peers was noted as one of the top three gaps in essential principles and practices in all regions of the State.
- Themes identified through the 2022 report "Voices of the Opioid Epidemic, Perspectives of Those with Lived Experience in Nevada"[257] include the recommendation for peer support for individuals who use/used and for families of those who use/used, as well as increasing availability of support groups to help both individuals who use/used and for families of those who use/used

The second round of SOR funding expanded peer support services, resulting in 608 new clients receiving peer support assistance.[258] Nevada is using SOR funding to place PRSS in the hospitals to assist with opioid emergencies. The first hospital to implement this was in Reno in June 2021, with brief mid-day shifts on weekends. By the end of the first month of services, day shifts were added. In August 2021, the team expanded operations in the hospital to provide 24/7 support. The team received 177 referrals or hand- offs from the hospitals, completed 133 assessments, referred 109 people to treatment, transported 73 people to treatment, and successfully followed up with 49 people. The hospital has shown openness and acceptance of the team, with physicians, nurses, and a hospital Alert Team requesting the PRSS opinion in developing treatment plans and discharge plans. A second

[253] State of Nevada Department of Health and Human Services. *Perinatal Health Initiative & SUPPORT Act*, 2020.

[254] State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.

[255] State of Nevada Division of Health Care Financing and Policy. *Nevada's Sustainability Plan to Support Expansion of SUD and OUD Treatment and Recovery Provider Capacity,* 2021.

[256] State of Nevada Department of Health and Human Services. *Nevada's Crisis Care Response System: 2020 Statewide Assets and Gaps Analysis,* 2020.

[257] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada.* 2022

[258] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020–September 29, 2021 Annual Performance Progress Report,* 2021.

hospital, in Las Vegas, began using this model in November of 2021. Additionally, a peer warmline in Southern Nevada helps connect individuals to care, support, and information.[259]

Gaps in Recovery Supports[260]

- Access to desired peer supports for pregnant and postpartum women
- Statewide availability of peer supports throughout the treatment and recovery system

SDOH

SDOH are "…conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes."[261] SDOH factors include financial resources, social and community factors, education access and quality, health care access and quality, and the neighborhood and environment in which a person lives, including transportation, crime, and environmental quality. SDOH play an important part in health outcomes, and outcomes related to substance use prevention and treatment are no exception.

The 2019 Nevada State Health Needs Assessment flagged SDOH as a factor in SUD outcomes across all counties. SDOH barriers included lack of transportation, quality education, and vocational opportunities, while housing and lack of internet access were also highlighted.[262] A small qualitative study of 35 Nevadans with current or past opioid use reporting a lack of housing, transportation, food insecurity, and financial difficulties accessing services as barriers to recovery confirmed the importance of SDOH. People who have been involved in the justice system can also experience significant barriers to accessing post-release resources such as housing, which can contribute to the cycle of drug use and justice involvement.[263]

The Nevada Minority Health Equity Coalition's qualitative study reiterated the importance of transportation, work, and stable housing in recovery.[264] Respondents with lived experience were unanimous in their agreement that housing "is one of — if not the most — important indicator of success through recovery." Participants reported difficulty obtaining stable housing due to unfavorable background checks and long waits for housing that does not require background checks. They also noted that recovery takes a significant investment of time and requires consistency, as does holding down a job, and many times treatment and work requirements conflict with each other, putting income for housing at risk. Lack of

[259] Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020-September 29, 2021 Annual Performance Progress Report,* 2021.

[260] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

[261] Centers for Disease Control and Prevention. "About Social Determinants of Health (SDOH)," accessed May 2022. Available at: https://www.cdc.gov/socialdeterminants/about.html

[262] State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada*, 2019.

[263] Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of key findings and recommendations*, 2021.

[264] Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada,* 2022.

transportation to treatment centers and an inability to pay for public transportation are further barriers. Additionally, participants cited the lack of a telephone and/or internet as major barriers to public education and communication with both case workers and family members, both of which could have increased their access to treatment and additional recovery supports.

Gaps in housing and transportation present a key issue for the population of individuals experiencing homelessness, as a lack of the necessities can prevent self-care, both regarding managing their own physical health and in mental health and substance use treatment engagement.

Nevada does have Non-Emergency Medical Transportation benefit for the Medicaid population. However, transportation resources for individuals not covered under Medicaid are less available. In addition, tenancy supports have been explored as a potential method to assist individuals in recovery to remain in stable housing.

Gaps in SDOH[265]

- Lower income and higher unemployment and poverty for those living on tribal lands
- Housing vouchers and housing assistance for at-risk populations (especially Northern and Southern regions and Clark and Washoe counties)
- Transportation for both treatment and recovery support activities
- Employment for those receiving treatment
- Volunteer and vocational opportunities for those in recovery
- Internet access for people engaging in treatment
- Financial resources for people in treatment and recovery

[265] The designation of a gap does not mean the service or program does not exist, but that it is currently insufficient in scope, geographic coverage, resources for sustainability, or populations covered.

Section 6

Recommendations

Nevada has chosen to align efforts to expend settlement funds with the five Principles for the Use of Funds from the Opioid Litigation developed by Johns Hopkins School of Public Health:[266]

- Spend money to save lives.
- Use evidence to guide spending.
- Invest in youth prevention.
- Focus on racial equality.
- Develop a fair and transparent process for deciding where to spend the funding.

The Needs Assessment was developed as part of the fair and transparent process for deciding where to spend the funding. Gaps identified in the Needs Assessment have driven the development of the recommendations listed below, as have the following nine core abatement strategies developed by Johns Hopkins[267]:

- Broaden access to naloxone
- Increase use of medications to treat opioid use disorder
- Provide treatment and supports during pregnancy and the postpartum period
- Expand services for neonatal opioid withdrawal syndrome
- Fund warm hand-off programs and recovery services
- Improve treatment in jails and prisons
- Enrich prevention strategies
- Expand harm reduction programs
- Support data collection and research

Mercer developed an initial list of potential recommendations which were refined through results from a survey of Nevada State agencies and through feedback from the ACRN.

As part of the fulfillment of the first and second principles for the use of funds, spending money to save lives and using evidence to guide spending, Nevada is urged to utilize the SAMHSA Evidence-Based Resource Center[268] and the Evidence Based Strategies for

[266] Johns Hopkins Bloomberg School of Public Health. *Principles for the Use of Funds from the Opioid Litigation,* 2021. Available at: https://opioidprinciples.jhsph.edu/wp-content/uploads/2021/01/Litigation-Principles.pdf

[267] Johns Hopkins Bloomberg School of Public Health. *Primer on Spending Funds from the Opioid Litigation: A Guide for State and Local Decision Makers,* 2021.

[268] Substance Abuse and Mental Health Services Administration. "Evidence-Based Practices Resource Center." Available at: https://www.samhsa.gov/resource-search/ebp

Abatement of Harms[269] in identifying specific programs to fund that fulfill these recommendations and any others considered. Not all potential solutions have available evidence, so any programs or activities selected without an evidence base should implement a robust quality improvement structure so that the State can routinely monitor outcomes and the effectiveness of the investment. All programs and activities should be actively monitored for outcomes regardless of their evidence-based standards.

Although data on health disparities is lacking, the current evidence suggests that significant disparities do exist across the State. The availability of funds to expand current programs or support new efforts serves as a prime choice point where Nevada can be intentional about addressing disparities in marginalized populations. When prioritizing and implementing programs under the Resilient Nevada Fund, Nevada should apply the Health Equity Lens as recommended by the Nevada Office of Minority Health and Equity.[270]

To further ensure that the decision-making process for funding projects is fair and transparent, Mercer was contracted to develop a rating system to indicate the urgency, feasibility, and potential impact that the following recommendations could have on the intended populations. Mercer also included an indicator as to whether each recommendation is responsive to three legislative priorities that are also suggested in the Johns Hopkins principles: overdose prevention, youth prevention, and health equity. Details of the rating methodology are presented in the Methodology Section. Nevada may use the ratings as a tool to prioritize the recommendations according to the ratings to identify top potential priorities for funding.

[269] Harvard Medical School, Blavatnik Institute for Health Care Policy. *Evidence Based Strategies for Abatement of Harms from the Opioid Epidemic.* Available at: https://www.lac.org/assets/files/TheOpioidEbatement-v3.pdf

[270] State of Nevada Department of Health and Human Services, Office of Minority Health and Equity. *Choice Point Thinking: A Guide to Applying Nevada's Health Equity Lens.* 2022. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Grants/Advisory_Committees/ACRN/NOMHE's.HealthEquityLens%203_12April2022.pdf

Data Recommendations

Data Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Establish Nevada all-payer claims database (APCD). The State is currently making progress on this recommendation. The database is intended to and should include claims for all medical, dental, and pharmacy benefits. The advisory committee that will make recommendations on the analysis and reporting of the data should ensure that key data elements are maintained through the de-identification process to ensure the data remain meaningful. Critical needs include the ability to stratify by special population characteristics (race/ethnicity, geography, LGBTQ+ status, pregnancy, etc.), and enough detail to identify physical and behavioral health comorbidities.	Data	4.0	4.0	3.7	3.0	**14.7**
Develop a/an overdose fatality review committee(s).	Data	3.3	3.5	3.7	3.0	**13.5**
Support the application programming interface (API) connection to EMS/Image Trend for data collection and reporting through the overdose mapping and application program (ODMAP).	Data	3.0	3.5	4.0	3.0	**13.5**
Support Poison Control hotline and data collection/reporting to track and trend; establish a communications system and dashboard.	Data	3.0	3.5	4.0	3.0	**13.5**
Expand reporting to the prescription drug monitoring program to include methadone to increase patient safety and reduce prescribing risk.	Data	2.3	2.5	4.7	3.0	**12.5**
Share standardized data between public safety agencies and those monitoring local overdose spike response plans. This will support local partners so they may act quickly when needed.	Data	3.0	3.0	3.0	3.0	**12.0**
Evaluate the outcomes from the Association of State and Territorial Health Officials Opioid Use, Maternal Outcomes, and Neonatal Abstinence Syndrome Initiative and State Opioid Response grant projects for pregnant and postpartum women and their infants and implement lessons learned. Ensure that outcome data is detailed and stratified by important demographic characteristics in order to detect and address health disparities. Review of the outcomes from these projects will allow Nevada to analyze lessons learned and apply successes for future initiatives addressing SUD in additional identified special populations.	Data	2.7	2.0	3.7	3.0	**11.3**

Data Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Establish a minimum data set for suspected opioid use and overdose death data collection to standardize data across the State and better prevent overdoses. The NV-OD2A program has identified a minimum data set from law enforcement and other first responder agencies. The minimum data set relates to indicators that law enforcement agencies can collect and report on, although at the time the report was written none were using the full minimum data points.	Data	3.3	2.0	3.3	3.0	**11.7**
Improve and standardize forensic toxicology testing and data. There are additional ways the State could get toxicology information to inform public health and public safety agencies about what is in the drug supply, and what the potential risk for an overdose may be. These methods include testing of seized drugs, through a lab or by field test, testing of syringes, wastewater testing, and urinalysis of people who have experienced a nonfatal overdose.	Data	2.7	1.5	2.7	3.0	**9.8**
Develop data tools to collect and report racial, ethnic, housing status, sexual orientation, and gender identity across datasets.	Data	2.0	3.5	4.0	0.0	**9.5**
Develop a Statewide forensic toxicology lab that can support surveillance sample testing and other types of toxicology testing that may increase the amount of information used to inform community awareness of overdose risk, including substances involved in suicides.	Data	3.0	1.5	1.7	3.0	**9.2**
Increase data sharing using the HIE. Promote the use of HealtHIE Nevada chart provider portal at no cost to providers. Funding should be provided to providers in need of system updates or changes to allow for participation. This will increase the ability to share data across behavioral and physical health providers.	Data	3.0	2.5	3.3	0.0	**8.8**
Develop and maintain consistent query code and query logic for reporting on standard metrics across agencies to facilitate consistent reporting and monitoring of priority indicators related to the opioid epidemic. Develop and maintain a consistent timeline for when metrics should be run and reported. Develop a standard process for quality control and consistencies, as well as reporting caveats.	Data	2.7	2.0	3.7	0.0	**8.3**
Increase reporting of Treatment Episode Data Set (TEDS) for all certified providers.	Data	2.7	2.5	3.0	0.0	**8.2**

Data Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Increase availability and access to real-time substance use disorder (SUD) and opioid use disorder (OUD) reports. The State of Nevada has multiple sources that could provide real-time data. The health information exchange (HIE), electronic health record (EHR) systems, birth registries, the Prescription Drug Monitoring Program (PDMP), and OpenBeds should be evaluated for interoperability-based use cases that will provide the needed data for analysis. Non-claims-based data sources should also be utilized to ensure the capture of all necessary data.	Data	2.7	2.5	2.7	0.0	**7.8**
Partner with local Coroner/Medical Examiner, Medical Schools, and other relevant stakeholders to develop an accredited forensic pathology program.	Data	2.7	2.0	2.3	0.0	**7.0**
Expand surveillance testing. This will require a new funding formula for forensic toxicology, as well as better leveraging of federal funds.	Data	2.7	1.5	2.7	0.0	**6.8**

Prevention Recommendations

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Establish a "bad batch" communications program to alert communities to prevent mass casualty events.	Reduce Harm	4.0	4.5	4.0	3.0	**15.5**
Establish a disease investigation model for non-fatal overdoses to identify and mitigate risk.	Prevention/Treatment/Recovery	3.3	4.5	4.0	3.0	**14.8**
Utilize an education and awareness campaign focused on identification of the need for treatment and treatment options, targeted to people using opioids and their families. The campaign should be tailored for different populations in order to promote health equity. Populations targeted should include those without housing.	Education/Awareness Campaign	3.3	4.5	3.3	3.0	**14.2**
Increase education to decrease stigma and enhance understanding of recovery for employers and landlords through the Recovery Friendly Workplace Initiative.	Education/Awareness Campaign	3.3	4.5	3.3	3.0	**14.2**
Implement Mobile Crisis Teams with harm reduction training and naloxone leave-behind.	Reduce Harm	3.3	3.5	4.3	3.0	**14.2**
Increase education on the safe use and storage of opioids. Statewide campaign should be developed to provide consistent education and standardized guidance on the use and storage of opioids, such as the Office of Suicide Prevention's Safe Storage Efforts. This campaign should also include resources for safe disposal of opioids, which should include engaging law enforcement, the State, and pharmacies to develop easily accessible safe disposal resources.	Education/Awareness Campaign	3.7	3.5	4.0	3.0	**14.2**
Develop no-barrier access to overdose prevention/harm reduction services, including naloxone and fentanyl testing.	Reduce Harm	3.0	4.0	4.0	3.0	**14.0**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Purchase and distribute hand-held drug testing equipment (mass spectrometers) to allow for rapid testing of substances.	Reduce Harm	3.3	5.0	2.7	3.0	**14.0**
Implement an education campaign on the addictive potential of opioids and alternative therapies for chronic pain and chronic illness, especially in rural areas, that is tailored to geography and underserved populations.	Education/Awareness Campaign	3.7	3.5	3.7	3.0	**13.8**
Maintain distribution of naloxone kits. Although naloxone is available and public education on the benefits and use have increased, the funding for current efforts is primarily driven by grants and subsidies and a long-term sustainability plan is needed to ensure continued access is available. It is also essential to ensure that further educational efforts are targeted at special populations and groups experiencing disproportionate overdoses.	Reduce Harm	3.7	3.5	3.7	3.0	**13.8**
Implement Universal Screening for ACEs and SBIRT in pediatric care settings. Reimburse in Medicaid under early periodic screening, diagnosis, and referral to treatment provision (EPSDT).	Prevention/Treatment/Recovery	3.3	4.0	3.3	3.0	**13.7**
Fund the integrated care training program. Training in the integration of physical and behavioral health can not only help to identify substance use and potential misuse earlier, but it can address other problems, such as mental health issues, before they contribute to substance use. Training should consider the unique landscape of rural, frontier, and tribal communities. Training should also include a focus on Social Determinants of Health (SDOH) and can be tailored for opioid issues in special populations, such as adolescents and transition-age youth or pregnant and postpartum women, and underserved individuals such as people of color.	Develop Workforce	4.0	3.0	3.7	3.0	**13.7**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Develop and implement parent education opportunities, resources, and supports for SUD prevention.	Prevention/Treatment/Recovery	3.0	4.0	3.7	3.0	**13.7**
Implement public messaging campaign on the prevention and impact of ACEs.	Prevent ACEs	3.0	4.0	3.7	3.0	**13.7**
Provide parent education on ACEs prevention and intervention.	Prevent ACEs	3.0	4.0	3.3	3.0	**13.3**
Implement initiatives prior to release from prison that provide information on and connection to post-release treatment and housing, as well as education on the risks of overdose after periods of abstinence.	Justice Programs	3.0	4.0	3.3	3.0	**13.3**
Provide support for commercially sexually exploited children through receiving centers and on-going treatment.	Prevention/Treatment/Recovery	2.7	4.0	3.7	3.0	**13.3**
Prioritize naloxone and fentanyl test strip distribution to people who use drugs and to clinics that provide MAT services.	Reduce Harm	3.0	3.0	4.3	3.0	**13.3**
Train providers and pharmacists on how to educate patients about pain management expectations and the risk of opioids. Provide tools and patient education materials for Statewide use as well as materials tailored for underserved populations. Collaborative care agreements should fully utilize pharmacists as part of the care team.	Develop Workforce	3.3	3.5	3.3	3.0	**13.2**
Expand access to harm reduction products through the purchase and distribution of vending machines Statewide.	Reduce Harm	3.3	3.5	3.3	3.0	**13.2**
Promote youth substance misuse interventions.	Prevention/Treatment/Recovery	3.0	3.5	3.7	3.0	**13.2**
Provide Prevention Specialists for schools to support implementation of evidence-based practices in grades K–12.	Prevention/Treatment/Recovery	3.0	3.0	4.0	3.0	**13.0**
Implement Trauma Informed Schools.	Prevention/Treatment/Recovery	3.3	3.0	3.7	3.0	**13.0**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Prioritize naloxone distribution to people at highest risk for overdose death. This will require a more systematic data collection effort to drive allocation of resources towards the people and communities with high death rates, as well as innovative efforts to connect with people at highest risk (e.g., people who are housed, living alone, or living in settings where drug use is hidden)	Reduce Harm	3.0	3.0	4.0	3.0	**13.0**
Expand educational efforts in the schools to promote early intervention and reduce stigma. Curricula such as Mental Health First Aid can be an effective method of assisting youth in identifying the signs of suicidality in their peers in a way that reduces stigma and increases knowledge of how to promote intervention. Continued training on the signs and interventions of suicide and substance use in the school system for parents, law enforcement, and other community partners will assist in reducing stigma and assisting in identifying individuals at risk, allowing for potential earlier intervention and decreased risk for lethality.	Education/Awareness Campaign	3.3	3.5	3.0	3.0	**12.8**
Continue the use of comprehensive preventive services rooted in harm reduction principles. Harm reduction can be an effective way of decreasing risk in multiple areas, from overdose to reduction of HIV and other diseases. It allows for education and intervention with active users who may be in the early stages of change and assists with linkage to treatment. Efforts should include community members, organizations, volunteers, professionals, and other stakeholders to become engaged members of the harm reduction and prevention workforce. Planning, implementation, and monitoring should meaningfully involve people with lived experience.	Reduce Harm	3.0	3.5	3.3	3.0	**12.8**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Increase the number of providers trained to offer trauma-informed treatment. There is a connection between exposure to childhood trauma and risky behaviors such as substance abuse. Nevada should consider offering trauma-informed training to all provider types, from primary care physicians to OB/GYNs, as well as to school personnel. Mental Health First Aid could be used in the school setting, as well as in primary care settings, to educate individuals on the effects of childhood trauma and available resources. Education on recognizing the signs of trauma and appropriate treatment will allow for earlier intervention and prevention efforts.	Prevention/Treatment/Recovery	3.7	3.5	2.7	3.0	**12.8**
Provide reports or analytics from the PDMP that allow the State to identify demographic characteristics of those prescribed controlled substances for prevention of future overdoses.	Data	3.0	2.5	4.3	3.0	**12.8**
Standardize clinical guidelines for non-pharmacological treatments, such as physical therapy, cognitive-behavioral therapy, and chiropractic care. A workgroup should be established with representation from the medical and pharmacy State boards, as well as Medicaid leadership and managed care organization (MCO) leadership. The workgroup could focus on education on non-pharmacological treatment and work to improve formulary coverage and reimbursements for non-pharmacological treatments and multidisciplinary pain management treatment models. This must include physical and behavioral health services.	Treatment/Early Intervention/Recovery Support	3.0	3.0	3.7	3.0	**12.7**
Increase access to Afterschool, Summer Recreation, and Intermural Programs in grades K–12.	Prevention/Treatment/Recovery	3.0	3.0	3.7	3.0	**12.7**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Implement a school screening tool to identify adverse childhood experiences and provide early intervention for children and their families. Provide appropriate referrals for treatment/counseling services.	Prevent ACEs	2.7	4.0	3.0	3.0	**12.7**
Implement Multi-tiered Systems of Support (Tier 1 and 2) and Social-Emotional Learning in all K–12 Schools.	Prevention/Treatment/Recovery	3.0	3.0	3.7	3.0	**12.7**
Implement Multi-tiered Systems of Support (Tier 3) in all K–12 schools.	Prevention/Treatment/Recovery	3.0	3.0	3.7	3.0	**12.7**
Implement family-based prevention strategies, especially for transition-age youth and young adults.	Education/Awareness Campaign	3.3	3.5	2.7	3.0	**12.5**
Invest in Families First Prevention Act activities to reduce risk for child welfare involvement.	Prevent ACEs	2.7	3.5	3.3	3.0	**12.5**
Work in concert with the Nevada public and private school districts for the development of mandatory age-appropriate prevention education and educator training for K–12th grades (specific to the SAMHSA strategic prevention framework, good behavior model, evidence-based curriculum), to include use of naloxone and how to talk with healthcare providers when age-appropriate.	Prevention/Treatment/Recovery	3.0	3.0	3.3	3.0	**12.3**
Implement Child Welfare best practices for supporting families impacted by substance use.	Prevent ACEs	2.7	3.0	3.3	3.0	**12.0**
Increase prescriber training in graduate school. Training would be more effective if mandated as a part of graduate school education. Medical school curriculum should include education around buprenorphine, naloxone, and methadone, in addition to training of safe opioid prescribing and pain management practices.	Develop Workforce	3.0	2.5	3.3	3.0	**11.8**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Support an increase in needle exchanges across the State. Many non-profit organizations provide needle exchange services, but more sites are needed in locations where those using them feels safe and anonymous. In addition, sites could expand services to include distribution of naloxone, and to provide education regarding recovery and treatment as well as public health services. In areas that are currently not receptive to initiating needle exchange programs, increased education needs to be provided to help the community recognize and accept the importance of these programs and the long-term impacts for not only the communities but those with OUD.	Reduce Harm	3.0	3.0	2.7	3.0	**11.7**
Develop special medical school programs. Work with medical schools to offer specialized residencies or free or subsidized tuition for students who enter into the behavioral health field and serve in rural and frontier communities or with underserved populations for a specified number of years.	Develop Workforce	3.7	2.5	2.3	3.0	**11.5**
Train Statewide law enforcement personnel on the protections in the 911 Good Samaritan Law and the revised statute on paraphernalia possession so they are enforced as intended. Currently the fear of law enforcement intervention may put people at risk for drug overdose, HIV infections, and other health harms.	Justice Programs	2.3	3.5	2.7	3.0	**11.5**
Align priorities of 911 Good Samaritan Law protections with the enforcement of drug induced homicide (DIH) laws by de-prioritizing enforcement of the DIH law.	Justice Programs	2.3	3.5	2.7	3.0	**11.5**
Fully implement the Zero Suicide framework Statewide, including leading system-wide culture change, training the workforce, identification, client	Prevention/Treatment/Recovery	4.3	4.0	2.7	0.0	**11.0**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
engagement, treatment, transition to lower levels of care, and quality monitoring and improvement.						
Promote neonatal abstinence syndrome prevention programs through home visits and parenting programs for pregnant and parenting persons with OUD.	Reduce Neonatal Abstinence Syndrome	3.0	3.5	3.7	0.0	**10.2**
Incentivize and implement SBIRT in OB/GYN settings.	Reduce Neonatal Abstinence Syndrome	2.7	3.5	3.7	0.0	**9.8**
Create an office/positions that can increase education, adoption, support for SBIRT in all health care settings (i.e., inpatient, outpatient, etc.) similar to Zero Suicide Initiative.	Prevention/Treatment/Recovery	3.3	2.5	3.7	0.0	**9.5**
Provide analytics from the PDMP to providers to identify polysubstance use. The PDMP can be used to identify trends in stimulant prescriptions issued and dispensed. Replicating some of the work done with opioid reporting to address prescribing practices would assist in addressing issues of stimulant prescribing.	Prevention/Treatment/Recovery	3.0	3.0	3.3	0.0	**9.3**
Conduct anonymous school survey targeted to principals and staff to identify specific drug trends/issues in their schools. Results could inform additional training/resources for their students and parents.	Prevention/Treatment/Recovery	3.0	3.0	3.3	0.0	**9.3**
Implement Safe Baby Courts for families impacted by substance use.	Justice Programs	2.3	4.0	3.0	0.0	**9.3**
Create an Office of Strategic Initiatives as recommended by the DHHS task force to coordinate activities across DHHS for programs supporting families impacted by parental substance use.	Prevention/Treatment/Recovery	2.7	3.0	3.7	0.0	**9.3**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Offer MAT providers training and incentives for participation in the patient-centered opioid addiction treatment (PCOAT) model. Incentivize treatment recruitment and retention for individuals with OUD through the PCOAT Model in Medicaid. Implement procedures and policies necessary to operate the model.	Prevention/Treatment/Recovery	2.7	2.5	4.0	0.0	**9.2**
Partner with surrounding states to share PDMP data. State leadership should work with neighboring states to establish a way to share PDMP data across state lines. Nevada has PDMP partnerships with 34 states and shares data with four of the bordering five states' PDMPs. California does not share data with Nevada, creating a significant barrier for monitoring and harm reduction efforts along the Nevada-California border.	Data	3.0	3.0	3.0	0.0	**9.0**
Promote Screening, Brief Intervention, and Referral to Treatment (SBIRT) for primary care. Utilizing SBIRT screenings in primary care visits for all populations, including adolescents, pregnant women, and other populations, will allow for increased early identification of potential substance use problems and allow for a more preventative, early intervention model of treatment. Nevada may also wish to increase awareness of the availability of SBIRT Training, and coordinate with the MCOs, as well as other health care providers, to increase training opportunities.	Prevention/Treatment/Recovery	3.0	3.0	3.0	0.0	**9.0**
Promote careers in behavioral health through early education. Workforce development can begin as early as high school to engage students, especially in rural and frontier communities, to pursue a career in behavioral health. Possible resources could include ambassador programs, virtual mentoring, student training, scholarships, and mentorship.	Develop Workforce	3.3	2.5	3.0	0.0	**8.8**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Address stigma among providers of all types. Enhanced educational and training practices with strategies to influence provider attitudes and reduce stigma can increase provider willingness to offer SUD treatment and recovery services. Anti-stigma training can also benefit primary care, dental, and emergency department providers by promoting more compassion when interacting with people with SUD and in recovery.	Prevention/Treatment/Recovery	3.0	3.0	2.7	0.0	**8.7**
Establish supervised drug consumption sites.	Reduce Harm	2.7	4.0	2.0	0.0	**8.7**
Implement marketing and communications campaigns to combat stigma in the general public. Campaigns should be tailored to address stigma toward different groups, such as pregnant women, criminal justice involved people, and youth, and can be delivered in a variety of ways, from online/social media videos to curricula in school health classes, to target different audiences. People with lived experience and those in the target audience can be of assistance in tailoring material to have a meaningful impact. In addition, utilizing success stories from individuals in recovery can be a powerful part of a marketing campaign.	Education/Awareness Campaign	2.7	2.5	3.3	0.0	**8.5**
Establish an advisory board that informs implementation of harm reduction services that includes people in recovery, people with lived experience of substance use, and people currently using drugs. The board can provide oversight and inform the equitable and ethical integration of harm reduction into routine public health services.	Reduce Harm	2.7	2.5	3.3	0.0	**8.5**
Establish home visiting programs for families at risk for or impacted by OUD.	Prevention/Treatment/Recovery	2.3	3.0	3.0	0.0	**8.3**

Prevention Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Evaluate key partnerships. Nevada can work with CASAT and targeted organizations to identify physician-champions with addiction treatment experience to serve as consultants or mentors to peers.	Develop Workforce	2.7	2.0	3.7	0.0	**8.3**

Treatment Recommendations

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Engage non-traditional community resources to expand treatment access in rural or underserved areas and targeting populations that experience health disparities. Encourage non-traditional community resources such as churches or community centers to serve as spokes in the Medication Assisted Treatment (MAT) hub-and-spoke model. The State should also consider population-specific programs and resources to target the provision of services through existing efforts like women's health programs.	Prevention/Treatment/Recovery	3.7	3.5	3.7	3.0	**13.8**
Incentivize providers for OBOT through bonuses. Targeted incentives may be used in rural areas to assist in increasing the workforce base. Other incentives may include bonuses to providers who meet pre-defined threshold(s) for providing SUD and OUD treatment and recovery services for those who participate in Project ECHO.	Develop Workforce	3.3	3.5	3.7	3.0	**13.5**
Implement plan for expansion of mobile MAT treatment for rural and frontier communities. Nevada has been exploring purchasing vans to enable mobile MAT treatment for more rural areas, which will assist in providing treatment in areas where it may not be financially feasible for a provider to open a brick-and-mortar facility. Implementation of the plan for mobile services will assist in increased access in these underserved communities.	Prevention/Treatment/Recovery	3.3	4.0	3.0	3.0	**13.3**
Expand adolescent treatment options across all American Society of Addition Medicine levels of care for OUD with co-occurring disorder integration.	Prevention/Treatment/Recovery	2.7	4.0	3.7	3.0	**13.3**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Improve upon evidence-based SUD and OUD treatment and recovery support training and resources for providers. Enhance trainings to include culturally-tailored and linguistically-appropriate services in an effort to decrease health disparities and evaluate current services to determine any possible expansions. Trainings may also include tools to determine the level of risk for relapse.	Develop Workforce	3.0	3.0	4.0	3.0	**13.0**
Increase evidence-based suicide interventions to help decrease intentional overdoses.	Prevention/Treatment/Recovery	3.0	4.0	3.0	3.0	**13.0**
Work with parole and probation officers to educate them on the need for treatment and recovery, and assist individuals returning to the community to have increased support in achieving and maintaining sobriety in the community, as supported in AB 236. Treatment planning for these individuals should also include housing and employment interventions to ensure resources are in place to support the individual in the community.	Justice Programs	3.0	3.5	3.3	3.0	**12.8**
Directly fund people either at tribes or through the Nevada Indian Commission. To the extent that a tribe, the Inter-Tribal Council of Nevada, Nevada Urban Indians, or the Las Vegas Indian Center want direct funding, provide them with direct funding.	Prevention/Treatment/Recovery	3.0	2.5	4.3	3.0	**12.8**
Continue efforts to work with tribal communities to meet their needs for prevention, harm reduction, and treatment. Continue to build relationships with the tribal populations by collaborating with their representatives and pursuing outreach to tribal communities through channels such as survey and focus groups.	Prevention/Treatment/Recovery	3.3	3.0	3.3	3.0	**12.7**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Accurately identify capacity of SUD and OUD treatment providers. Due to the fact that many providers such as Opioid Treatment Programs (OTPs) and Office-Based Opioid Treatments (OBOTs) are not delivering services to capacity, a review of available data sources such as Medicaid claims and information from the Office of Analytics, Primary Care Association and other entities can be used to determine the current provider network array and determine where there are gaps, especially in the Fee for Service system. Developing a provider gap and needs assessment will allow the State to target specific areas and provider types as part of the effort to provide as full a continuum of care as possible. Managed care contracts should include provider adequacy requirements for MAT. Information should include the patient capacity of providers. The gaps analysis should include culturally relevant indicators, such as the availability of tribal providers and distance of underserved populations from existing providers.	Develop Workforce	3.3	3.0	3.3	3.0	**12.7**
Expand the Integrated Opioid Treatment and Recovery Centers (IOTRC) hub classification beyond Certified Community Behavioral Health Clinic (CCBHC), FQHC, and OTP. This will allow a broader category for hub designation to better accommodate underserved communities. Additionally, encourage the inclusion of non-traditional community resources to serve as spokes and consider population-specific programs and resources to target the provision of services through existing efforts like women's health programs.	Prevention/Treatment/Recovery	3.3	3.0	3.3	3.0	**12.7**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Expand MAT into adult correctional and juvenile justice facilities. Expand current pilot efforts to provide MAT services within correctional facilities prior to release to help remove lapses in treatment. This would require collaboration and engagement effort with counterparts in the State and local criminal justice systems.	Justice Programs	3.0	4.0	2.7	3.0	**12.7**
Partner with a TeleMAT service provider. TeleMAT programs have been increasingly utilized during the public health emergency and have been shown to be as effective as in-person programs and have yielded increased retention rates among patients. Some payers, including Anthem, have partnered with TeleMAT service providers to expand access to MAT in rural populations. A TeleMAT program in conjunction with the extension of COVID-19 flexibilities could greatly expand access to and participation in MAT Statewide.	Prevention/Treatment/Recovery	3.0	2.5	4.0	3.0	**12.5**
Develop and implement a Statewide plan for prevention, screening, and treatment for Adverse Childhood Experiences (ACEs) across State agencies and provider settings. Train providers and organizations on EBP's for mitigating harm from exposure to ACE's/resiliency training	Prevent ACEs	3.3	3.0	3.0	3.0	**12.3**
Ensure funding for the array of OUD services for uninsured and underinsured Nevadans	Prevention/Treatment/Recovery	3.0	3.5	2.7	3.0	**12.2**
Create street outreach teams to provide street medicine programs, harm reduction, psychiatry, and care management.	Prevention/Treatment/Recovery	2.7	3.5	3.0	3.0	**12.2**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Address transportation needs as a SDOH. Nevada's new, Medicaid-funded non-emergency Secure Behavioral Health Transport service is equipped and staffed by an accredited individual to transport individuals in mental health crisis, including those on a legal hold. Resources may be needed to help providers with start-up costs as well as to fund transportation for people not covered by Medicaid. Additional transportation solutions need to be considered for the non-Medicaid population, especially in rural areas.	Prevention/Treatment/Recovery	3.0	3.0	3.0	3.0	**12.0**
Increase provider training and education on the effective use of telehealth. The State currently supports telehealth utilization and billing. Providers may require training as increased flexibility due to COVID-19 has led to an increase in the use of telehealth and a need for training on how to use this modality to deliver treatment. Utilization of federal resources such as the American Medical Association's provider playbook can assist in these efforts. In addition, use of telehealth can assist in expanding services to rural and frontier areas, provide greater access to specialists such as eating disorder specialists, and assist individuals in finding providers with similar cultural backgrounds.	Develop Workforce	3.0	2.0	4.0	3.0	**12.0**
Increase the availability of evidence-based treatment for co-occurring disorders for adults and children through promotion of training, enhanced reimbursement for use of specific evidence-based models, and State-sponsored training. Ensure training opportunities are marketed and available to providers in rural and frontier areas.	Prevention/Treatment/Recovery	3.0	3.0	3.0	3.0	**12.0**
Implement ages zero to three years programming to support families impacted by substance use.	Prevent ACEs	3.0	3.0	3.0	3.0	**12.0**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Expand access to long-acting buprenorphine medications.	Prevention/Treatment/Recovery	2.7	2.5	3.7	3.0	**11.8**
Expand current 211 website to include successful recovery stories and outcome data that has been deidentified to assist in reducing the stigma both amongst providers and the general public toward people with SUD. The website could also link to available MAT providers, including OB-GYNs, as well as resources for SDOH and other factors in recovery. A section for families to inform them about supporting a family member in treatment and recovery would be helpful. Nevada may feature a family and consumer social marketing campaign on the website to include risks associate with use that is tailored to different populations experiencing health disparities.	Education/Awareness Campaign	3.3	2.0	3.3	3.0	**11.7**
Establish a Medicaid benefit that supports the hub-and-spoke model. Use of the hub-and-spoke model will decrease travel time and the barrier of transportation for those in rural and frontier areas in accessing substance use services. Implementation of the model should also include establishing bundled payments, enhanced rates, or Medicaid health homes to sustainably fund the model and maintain existing gain, support building infrastructure for rural and frontier hubs, and specifically target providers who can be designated as hubs.	Prevention/Treatment/Recovery	3.0	3.0	2.7	3.0	**11.7**
Ensure adequate funding of the State 988 crisis line such that mobile crisis can be connected by GPS and dispatched by the crisis line.	Crisis Services	3.3	4.5	3.7	0.0	**11.5**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Evaluate the outcomes from the Association of State and Territorial Health Officials Opioid Use, Maternal Outcomes, and Neonatal Abstinence Syndrome Initiative and State Opioid Response grant projects for pregnant and postpartum women and their infants and implement lessons learned. Ensure that outcome data is detailed and stratified by important demographic characteristics in order to detect and address health disparities. Review of the outcomes from these projects will allow Nevada to analyze lessons learned and apply successes for future initiatives addressing SUD in additional identified special populations.	Evaluate Programs	2.7	2.0	3.7	3.0	**11.3**
Expand Mobile Crisis and ensure that the service is of consistently high quality, leverages federal matching funds, and is available for individuals not covered under Medicaid. Mobile crisis is an important alternative in substance-related crisis situations where the service can offer effective interventions and follow-up that includes referral and connection to post-crisis treatment.	Crisis Services	3.3	4.0	3.3	0.0	**10.7**
Increase education, adoption, and support for buprenorphine as a first-line treatment for reproductive/birthing/pregnant, etc., patients with OUD.	Reduce Neonatal Abstinence Syndrome	2.7	4.0	4.0	0.0	**10.7**
Support crisis stabilization units across the State that can serve Nevada residents and offer critical diversion from EDs and jails for those with OUD.	Crisis Services	2.7	4.5	3.3	0.0	**10.5**
Evaluate outcomes from efforts to support SUD treatment for the criminal justice-involved population. Monitor outcomes of criminal justice-involved individuals. This may include individuals who are inducted onto MAT prior to discharge, or other interventions such as drug courts for individuals with polysubstance conditions, and working with probation and parole officers to	Evaluate Programs	3.0	2.0	2.3	3.0	**10.3**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
support the needs of individuals in treatment and recovery to determine best practices for improvements in outcomes in this population.						
Expand use of referral mechanisms. Receive periodic updates from University of Nevada — Reno (UNR), State owner of OpenBeds. Update the referral process to include use of the eligibility checklist to enable referring providers to confirm Medicaid eligibility and initiate enrollment. Develop a user-friendly standardized form that providers can complete and send with referrals to improve coordination of care. Planning and implementation of this recommendation should ensure process is as streamlined as possible and results in decreased burden to providers. Provider stakeholdering may assist in ensuring further improvements.	Prevention/Treatment/Recovery	2.7	3.5	4.0	0.0	**10.2**
Continue to support expansion of substance use services such as MAT in Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs), which could increase the availability of services in rural areas, as well as increase the coordination of behavioral and physical health for individuals in treatment. This effort would include an analysis of data and working with providers to determine how many individuals in their service area they may be able to accommodate. Key stakeholders and champions will be a necessary component for expansion of MAT, including change management in perception of MAT as addiction medicine being difficult and unappealing. Tracking outcomes to provide success stories of MAT services may also assist in this endeavor.	Prevention/Treatment/Recovery	3.3	3.0	3.7	0.0	**10.0**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Incentivize providers to initiate buprenorphine in the emergency department (ED), as well as during inpatient hospital stays. All EDs and hospitals should have providers that will provide buprenorphine induction as well as involve case managers to assist with setting up outpatient resources for continued care and management.	Prevention/Treatment/Recovery	2.7	4.0	3.3	0.0	**10.0**
Increase withdrawal management services in the context of comprehensive treatment programs.	Prevention/Treatment/Recovery	3.0	4.0	3.0	0.0	**10.0**
Implement CARA Plans of Care with resource navigation and peer support.	Reduce Neonatal Abstinence Syndrome	3.0	3.0	4.0	0.0	**10.0**
Incorporate screening for standard SDOH needs as a routine intake procedure for all services.	Prevention/Treatment/Recovery	3.7	3.5	2.7	0.0	**9.8**
Evaluate provider enrollment process to ensure the process of becoming a Medicaid provider is not deterring providers from enrollment. The State should evaluate current enrollment procedures, using available data including provider stakeholder group input to determine where there are opportunities to improve the provider enrollment process, encouraging more providers to join the Medicaid program.	Develop Workforce	2.7	2.5	4.7	0.0	**9.8**
Expand treatment options for transitional age youth.	Prevention/Treatment/Recovery	2.7	3.5	3.7	0.0	**9.8**
Expand access to medication-based OUD treatment options for youth with OUD in primary and behavioral health settings.	Prevention/Treatment/Recovery	2.7	3.5	3.7	0.0	**9.8**
Increase longer-term rehabilitation program capacity.	Prevention/Treatment/Recovery	2.7	4.0	3.0	0.0	**9.7**
Provide specialty care for adolescents in the child welfare and juvenile justice systems.	Justice Programs	3.0	4.0	2.7	0.0	**9.7**
Support the implementation of low threshold prescribing for buprenorphine treatment.	Prevention/Treatment/Recovery	2.7	3.0	4.0	0.0	**9.7**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Establish IOTRCs in Department of Healthcare Financing and Policy/Nevada Medicaid policy with funding.	Prevention/Treatment/Recovery	3.0	3.0	3.7	0.0	**9.7**
Use braided or blended funding, which merges multiple sources of funding for treatment that may not be fully covered by one individual funding source. Braided funding combines State, federal, and private funding streams for a united goal, ensuring individual funding sources are separately tracked and reported. Blended funding is the same principle, with the exception that all blended funding sources are combined and not tracked and reported on individually.	Prevention/Treatment/Recovery	3.0	3.5	3.0	0.0	**9.5**
Fully implement Nevada's Hub and Spoke System for MAT regardless of payer.	Prevention/Treatment/Recovery	3.0	2.5	4.0	0.0	**9.5**
Ensure the accuracy of the Nevada health professional shortage area designation process. Per the Health Resources and Services Administration (HRSA), states should routinely collect supplemental information (e.g., provider specialty, patient care hours). Improving the HRSA designations process will impact eligibility for organizations such as the Indian Health Service Loan Repayment Program, Centers for Medicare & Medicaid Services (CMS) HRSA Bonus Payment Program, and Nursing Corp.	Develop Workforce	3.3	2.0	4.0	0.0	**9.3**
Expand drug court treatment availability as well as treatment protocols to include treatment for multiple substances, including stimulants. Although some efforts have been made, such as the expansion of individuals able to be served by the Las Vegas-based 8th Judicial MAT Re-Entry Court to include those with a stimulant disorder, interventions for those who use multiple substances should be available Statewide.	Justice Programs	2.3	4.0	3.0	0.0	**9.3**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Enforce parity across physical and mental health. For example, a pregnant patient who presents for delivery should receive all of the necessary substance use treatment and physical health care for the patient and newborn which would include labor and delivery, pediatrician, NICU, etc., as well in evaluation. Enforce the same for infectious disease specialists.	Prevention/Treatment/Recovery	3.0	3.0	3.3	0.0	**9.3**
Train providers on evidence-based practices for family-focused SUD treatment interventions.	Develop Workforce	3.0	3.0	3.3	0.0	**9.3**
Promote Eat, Sleep, Console for mother/baby dyads for treating withdrawal.	Prevention/Treatment/Recovery	2.3	3.0	4.0	0.0	**9.3**
Expand use of Project ECHO® and participate in Opioid ECHO to increase provider capacity. Nevada should seek to expand the current program, using data from Project ECHO regarding current MAT and pain management clinics to evaluate reach and effectiveness. Participant feedback can be used to address any areas of opportunity and current known barriers to becoming an OUD treatment services provider. Opioid ECHO, a main supporting hub at the ECHO Institute, provides expert specialist teams to state spoke sites. The model offers tools and resources to meet the need for prevention, screening, and treatment of OUD.	Develop Workforce	2.7	3.0	3.7	0.0	**9.3**
Expand access to child care options for families seeking treatment/recovery supports.	Prevention/Treatment/Recovery	2.7	3.5	3.0	0.0	**9.2**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Modify or remove prior authorization requirement for select outpatient behavioral health services. Several therapy services such as individual, group, and family therapy do not require prior authorization from in-network providers through Medicaid managed care. Nevada should consider removing these requirements from their Fee for Service System, which will decrease administrative burden for both providers and the State. Nevada currently requires prior authorization for Intensive Outpatient Programs (IOPs). While the State may not wish to remove prior authorization completely for this service, they may wish to consider modifying the prior authorization requirements. The benefit of requiring prior authorization after an initial time period supports the State in ensuring IOP level of care is appropriate for a beneficiary and encourages providers to revisit how and whether a patient should be advanced on the care continuum based on a real-time assessment.	Prevention/Treatment/Recovery	3.0	2.5	3.7	0.0	**9.2**
Increase adolescent beds certified to treat young adolescent and transition-age youth, as well as capable of treating co-occurring disorders. Ensure facilities are accessible to populations most in need.	Prevention/Treatment/Recovery	3.0	3.5	2.7	0.0	**9.2**
Engage OB/GYNs in an ECHO project to encourage and improve OUD screening, referral, and treatment for pregnant women.	Prevention/Treatment/Recovery	2.7	3.5	3.0	0.0	**9.2**
Increase parent/baby/child treatment options, including recovery housing and residential treatment, that allow the family to remain together.	Prevention/Treatment/Recovery	2.7	3.5	3.0	0.0	**9.2**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Address housing needs as a SDOH. Nevada may utilize tenancy supports as an intervention to allow individuals to maintain housing as they go through the recovery process. In addition, development of sober housing resources and affordable housing through partners such as the Public Housing Authority can assist individuals in recovery in finding and maintaining affordable housing to enable ongoing recovery.	Housing	3.0	3.0	3.0	0.0	**9.0**
Increase provider rates for treatment in rural areas to incentivize providers to serve in rural communities. Work with licensure boards to ensure licensure and supervision rules do not pose barriers to practice and supervision in rural areas.	Develop Workforce	2.7	3.0	3.3	0.0	**9.0**
Establish Community Health Worker/Peer Navigator program for pregnant and parenting persons with OUD.	Prevention/Treatment/Recovery	2.7	3.0	3.3	0.0	**9.0**
Provide grief counseling and support for those impacted by the fatal overdose by a family or friend.	Prevention/Treatment/Recovery	2.3	3.0	3.7	0.0	**9.0**
Provide housing and recovery supports for homeless youth with OUD.	Prevention/Treatment/Recovery	2.3	3.5	3.0	0.0	**8.8**
Capture data on workforce through the licensure renewal processes. Licensure renewal is another opportunity to capture workforce information from the State's 26 health licensing boards. There are opportunities to efficiently collect standardized, longitudinal employment, demographic, and practice data on any health profession licensed by the State of Nevada. Such information can be used to capture existing and calculate projected clinical full-time equivalent (FTE) capacity needed to meet the demand for SUD. Combined with the data from the gap analysis, the information collected can help the State's strategic allocation of resources.	Develop Workforce	3.0	2.5	3.3	0.0	**8.8**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Provide continuity of care (CoC) between levels of care. Nevada's CCBHCs currently provide care coordination across various providers to ensure whole person treatment is available for both physical and behavioral health. These programs may need to be expanded to meet the needs of the State's OUD population for those not served by CCBHCs.	Prevention/Treatment/Recovery	2.7	2.5	3.7	0.0	**8.8**
Require the use of evidenced-based practices to address and treat polysubstance use in all treatment protocols and expand Statewide access to interventions for those who use multiple substances (including through drug courts).	Prevention/Treatment/Recovery	2.7	2.5	3.7	0.0	**8.8**
Increase availability of peer recovery support services. Peer supports are a valuable component of treatment, harm reduction, and recovery systems. Consider expanding internship programs, offering scholarships to pursue peer support certification, and promoting 24/7 peer-staffed call centers.	Develop Workforce	2.3	3.0	3.3	0.0	**8.7**
Develop employment supports for those in treatment and in recovery.	Prevention/Treatment/Recovery	3.0	3.0	2.7	0.0	**8.7**
Increase access to evidence-based family therapy practices through training availability and increased funding/reimbursement.	Prevention/Treatment/Recovery	3.0	3.0	2.7	0.0	**8.7**
Establish policies and funding to support evidence-based recovery housing using National Alliance for Recovery Residences criteria.	Prevention/Treatment/Recovery	3.0	2.5	3.0	0.0	**8.5**
Align utilization management policies between Medicaid managed care and Fee for Service, such as preferred drug lists and under- and over-utilization reports for consistency in review of the overall system.	Prevention/Treatment/Recovery	2.7	2.5	3.3	0.0	**8.5**
Establish addiction medicine fellowships.	Develop Workforce	3.0	3.0	2.3	0.0	**8.3**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Ensure all delivery hospitals and health care systems taking care of reproductive age, pregnant, and postpartum patients utilize currently available programming for pregnant patients that prioritizes best practices for patient, family/caregivers, and neonate/infant (i.e., SBIRT, outpatient care, inpatient care, delivery, reproductive planning, care coordination, Comprehensive Addiction and Recovery Act of 2016 [CARA] plan of care, treatment, NAS, etc.).	Reduce Neonatal Abstinence Syndrome	2.7	3.0	2.7	0.0	**8.3**
Expand 2-1-1 to identify and match individuals to resources for SDOH. As part of expanding resources, current partnerships should be reviewed to see if there is an opportunity for expansion or additional collaboration.	Prevention/Treatment/Recovery	3.0	1.5	3.7	0.0	**8.2**
Implement a reimbursement model that reduces the administrative burden of administering grant funds for organizations not accustomed to handling grant payments. One way to do this would be to run the reimbursement payments through the edits built into the Medicaid Managed Information System (MMIS); when the reimbursement is not a Medicaid expense it would filter down to the Division of Public and Behavioral Health (DPBH) code and be paid from State or federal grant money.	Prevention/Treatment/Recovery	2.7	2.5	3.0	0.0	**8.2**
Require all SUD treatment programs to measure standard patient outcomes and implement best practices. Monitor for adherence to best practices, standards of care, and outcomes.	Evaluate Programs	3.0	2.5	2.7	0.0	**8.2**
Identify opportunities for faith-based organizations to provide recovery supports in local communities. Local communities should develop coalitions to work together to ensure recovery supports are available, including the development of local recovery centers.	Prevention/Treatment/Recovery	2.3	3.0	2.7	0.0	**8.0**

Treatment Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Nevada has submitted an 1115 Demonstration SUD Waiver that will allow for payment of SUD services in Institutions for Mental Disease. Utilize FRN funding for states share for 1115 SUD Waiver, room and board, and uncompensated care.	Prevention/Treatment/Recovery	2.0	2.0	4.0	0.0	**8.0**
Increase short-term rehabilitation program capacity.	Prevention/Treatment/Recovery	2.3	3.0	2.7	0.0	**8.0**
Create non-commercially sponsored meeting forum for treatment and other resource providers to share practices, concerns, scholarship, and other topical information.	Prevention/Treatment/Recovery	3.0	2.0	3.0	0.0	**8.0**
Create a scholarship fund dedicated to individuals directly affected by the epidemic.	Develop Workforce	2.0	2.5	3.3	0.0	**7.8**
Implement a workforce of community health workers throughout recovery supports, behavioral health, and social service agencies. This will potentially require planning, a new Medicaid service definition and associated budget expansion, and funds for the uninsured and underinsured to access these services.	Prevention/Treatment/Recovery	2.7	2.5	2.0	0.0	**7.2**

SDOH and Recovery Support Recommendations

SDOH and Recovery Support Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Work with parole and probation officers to educate them on the need for treatment and recovery, and assist individuals returning to the community to have increased support in achieving and maintaining sobriety in the community, as supported in AB 236. Treatment planning for these individuals should also include housing and employment interventions to ensure resources are in place to support the individual in the community.	Justice Programs	3.0	3.5	3.3	3.0	**12.8**
Address transportation needs as a SDOH. Nevada's new, Medicaid-funded non-emergency Secure Behavioral Health Transport service is equipped and staffed by an accredited individual to transport individuals in mental health crisis, including those on a legal hold. Resources may be needed to help providers with start-up costs as well as to fund transportation for people not covered by Medicaid. Additional transportation solutions need to be considered for the non-Medicaid population, especially in rural areas.	Prevention/Treatment/Recovery	3.0	3.0	3.0	3.0	**12.0**
Expand current 211 website to include successful recovery stories and outcome data that has been deidentified to assist in reducing the stigma both amongst providers and the general public toward people with SUD. The website could also link to available MAT providers, including OB-GYNs, as well as resources for SDOH and other factors in recovery. A section for families to inform them about supporting a family member in treatment and recovery would be helpful. Nevada may feature a family and consumer social marketing campaign on the website to include risks associate with use that is tailored to different populations experiencing health disparities.	Education/Awareness Campaign	3.3	2.0	3.3	3.0	**11.7**

SDOH and Recovery Support Recommendations	Category	Impact Score	Urgency Score	Feasibility Score	Leg. Target	Total Score
Incorporate screening for standard SDOH needs as a routine intake procedure for all services.	Prevention/Treatment/Recovery	3.7	3.5	2.7	0.0	**9.8**
Expand access to child care options for families seeking treatment/recovery supports.	Prevention/Treatment/Recovery	2.7	3.5	3.0	0.0	**9.2**
Address housing needs as a SDOH. Nevada may utilize tenancy supports as an intervention to allow individuals to maintain housing as they go through the recovery process. In addition, development of sober housing resources and affordable housing through partners such as the Public Housing Authority can assist individuals in recovery in finding and maintaining affordable housing to enable ongoing recovery.	Housing	3.0	3.0	3.0	0.0	**9.0**
Develop housing and recovery supports for homeless youth with OUD.	Housing	2.3	3.5	3.0	0.0	**8.8**
Develop employment supports for those in treatment and in recovery.	Prevention/Treatment/Recovery	3.0	3.0	2.7	0.0	**8.7**
Establish policies and funding to support evidence-based recovery housing using National Alliance for Recovery Residences criteria.	Prevention/Treatment/Recovery	3.0	2.5	3.0	0.0	**8.5**
Expand 2-1-1 to identify and match individuals to resources for SDOH. As part of expanding resources, current partnerships should be reviewed to see if there is an opportunity for expansion or additional collaboration.	Prevention/Treatment/Recovery	3.0	1.5	3.7	0.0	**8.2**
Identify opportunities for faith-based organizations to provide recovery supports in local communities. Local communities should develop coalitions to work together to ensure recovery supports are available, including the development of local recovery centers.	Prevention/Treatment/Recovery	2.3	3.0	2.7	0.0	**8.0**

Section 7

Acknowledgments

This Statewide Opioid Needs Assessment was prepared by Mercer for the State of Nevada Department of Health and Human Services and the Advisory Committee for a Resilient Nevada, with funding from the Fund for Resilient Nevada. The report is a result of generous input and support by numerous stakeholders, listed below, who identified health priorities, provided or evaluated data, provided insight, and reviewed methods and content of the report.

Advisory Committee for a Resilient Nevada

Center for the Application of Substance Abuse Technologies, University of Nevada, Reno

Director's Office, Nevada Department of Health and Human Services

Nevada Attorney General's Office

Nevada Minority Health & Equity Coalition at University of Nevada, Las Vegas, School of Public Health

Nevada Office Minority Health and Equity

Nevada Substance Use Response Working Group

Office of Public Health Investigations and Epidemiology, Department of Health and Human Services, Nevada Division of Public and Behavioral Health

Office of Analytics, Nevada Department of Health and Human Services

Senior Advisor on Behavioral Health, Nevada Department of Health and Human Services

Social Entrepreneurs, Inc.

Southern Nevada Health District

Appendix A
Data Sources

To understand the gaps in data, it is important to understand each of the various sources collecting and reporting data within the State of Nevada. Currently, the State has multiple sources providing data and reporting rates of fatal and non-fatal opioid overdoses, SUD, OUD, and the corresponding demographic data. Each data set follows its own data collection protocols, criteria, and standards, which leads to different rates being reported for impact topic areas depending on the source being used. Each source also has its own limitations, as detailed below in Table A1.1.

Table A1.1: Current Data Sources and Limitations

Source	Description	Limitations
Syndromic Surveillance	Utilizes hospital emergency room (ER) data from the NSSP to report on the suspected overdose morbidity in the State.[271]	• NSSP data is only available from 80% of the State's hospitals. • The data system only captures non-fatal overdoses that made it to the ER. • Chief complaint: ICD-10 codes that are reported as an overdose from a substance are "suspected" due to the lack of a urine drug screen or blood test to confirm substances.
Vital Records Data	Utilizes death certificate information from the Nevada Electronic Death Registry System to report on overdose mortality in the State. This source relies on ICD-10 codes.	• Average 2 month–3 month delay after the death investigation to receive cause and manner of death data. • Use of ICD-10 codes that group multiple opioids together, making it difficult to separate specific opioids that may have been attributed to deaths. • Complete toxicology and information about the circumstances preceding death are unavailable.
Nevada SUDORS	Utilizes death certificates and coroner/medical examiner reports (including post-mortem toxicology testing results) to capture detailed information on toxicology, death scene investigations, route of drug administration, and other risk factors	• Reporting delays due to time required to abstract data from death records. • Incomplete data due to reliance on information documented at the time of death.

[271] University of Nevada, Reno, School of Public Health. *Forensic Toxicology & Nevada's Overdose Surveillance System: Needs Assessment & Recommendations*, 2020.

Source	Description	Limitations
	that may be associated with a fatal overdose.[272]	
ImageTrend	Statewide surveillance system utilized by the State Emergency Medical Services (EMS) program. ImageTrend is used to collect and analyze data for EMS and Fire and Rescue programs, which may include data regarding critical care transportation, hospital-based medical registries, overdose due to substance use, and integrated health care and community paramedicine. This system provides real-time location information that can be monitored by communities, as well as supporting data collection for Overdose Data Mapping Application Program (ODMAPS).	• Disconnect between EMS transport records and hospital care. • Used ad hoc and not for regular reporting.
ODMAPS	Nevada has been working toward implementation of HIDTA's ODMAPS to gain a better understanding of overdose morbidity and mortality rates. The program design requires participation by law enforcement and first responder agencies or an automated interface with ImageTrend to transfer the data.	• Slow uptake by law enforcement. • Lack of an automated interface with ImageTrend.

Based on the data source limitations and the lack of standardization, the data available is often inconsistent and does not allow for the most accurate picture of the current state of the opioid epidemic in Nevada. The lack of standardization and reporting hinders the accessibility of key information such as demographic information, which is needed to assess the challenges being faced by certain populations.

Different organizations within Nevada are also collecting and calculating different process and outcome metrics to assess the impact of the opioid epidemic and drive change. However, often metrics may be named similarly and appear to capture the same information but the data being used and the way the metric is calculated is different. The limitations and caveats may also vary, which does not allow for true comparison and aggregation of results. No data set is perfect, and there is always a trade-off between timeliness and accuracy, which could be the reason similar data is calculated differently. High quality data takes time to accurately collect, validate, and appropriately analyze. The quality assurance process can hinder programs that need data quickly to respond to changes in the system. There is some data that is available more quickly, but it has often not yet been adequately validated. This data can be used when immediate information is needed, but it is always important to go

[272] University of Nevada, Reno, School of Public Health. *Forensic Toxicology & Nevada's Overdose Surveillance System; Needs Assessment & Recommendations*, 2020.

back and check assumptions once the complete and validated data is available. The State will need to balance timeliness with accuracy based on the monitoring needs for each program. While data are available for the rates of opioid and benzodiazepine prescription within Nevada, limited data are available for other drugs being co-prescribed along with opioids. There is also a lack of demographic data made available for those receiving opioid prescriptions, such as race/ethnicity and indicators of membership in special populations. While PDMP also tracks high volume prescribers, analytics are not made available to understand factors behind high volume prescribing or the changes in prescribing habits following notice from the PDMP.

There are plans for the State to develop an all-payer claims database that will contain information relating to health claims from medical, dental, and pharmacy benefits provided in Nevada. An advisory committee will make recommendations on the analysis and reporting of the data, as well as data security and how it will be released. All public and private insurers will provide data for the database, with some exceptions. Data to directly identify the patient will be removed from the claim, and each claim will receive a unique identifier. Requests for data will be submitted to the DHHS.[273] This effort may help to reduce the gaps currently being seen regarding data.

[273] Senate Bill 40 Overview, 2021 81st Session. Available at: https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/7216/Overview

Appendix B

Reference Documents

Below is a list of the reference documents that were used to develop this report.

- Alegria, M.I., Carson, M., et al. “Disparities in Treatment for Substance Use Disorders and Co-Occurring Disorders for Ethnic/Racial Minority Youth,” *Journal of the American Academy of Child & Adolescent Psychiatry*, Volume 50 Issue 1 (2011).
- Alexander, G.C., Frattaroli, S., Gielen, A.C., eds. “The Opioid Epidemic: From Evidence to Impact,” *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland.* (2017). Available at: https://www.jhsph.edu/events/2017/americas-opioid-epidemic/report/2017-JohnsHopkins-Opioid-digital.pdf
- Assembly Bill 239. (2017). Available at: https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/6425/Overview
- Assembly Bill 236_EN. (2019). Available at: https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/6419/Overview
- Assembly Bill 310. (2019). Available at: https://nvdoctors.org/wp-content/uploads/AB310-Legislative-Report-.pdf
- Assembly Bill 374. (2021). Available at: https://www.leg.state.nv.us/Session/81st2021/Bills/AB/AB374.pdf
- Assembly Bill 474. (2017). Available at: https://www.nvopioidresponse.org/wp-content/uploads/2019/04/opioid-compendium-of-resources.pdf
- Batra, K, Cruz, P, et al. “Incidence of Neonatal abstinence syndrome epidemic and associated predictors in Nevada: A statewide audit,” *Int J Environ Res Public Health*, Volume 18 Issue 1 (2020).
- Bryant, D. J., Coman, E. N., & Damian, A. J. “Association of adverse childhood experiences (ACEs) and substance use disorders (SUDs) in a multi-site safety net healthcare setting,” *Addictive Behaviors Reports*, Volume 12 Issue 100293 (2020).
- CARE Coalition. *Comprehensive Community Action Plan*. 2019.
- Casado, F. “Cases of babies born with syphilis rise in Nevada in 2020.” Kolo TV, April 19, 2022, accessed May 2, 2022. Available at: https://www.kolotv.com/2022/04/19/cases-babies-born-with-syphilis-rise-nevada/
- Centers for Disease Control and Prevention. “About Social Determinants of Health (SDOH),” accessed May 2022. Available at: https://www.cdc.gov/socialdeterminants/about.html
- Centers for Disease Control and Prevention. “Drug Overdose, About OD2A.” Available at: https://www.cdc.gov/drugoverdose/od2a/about.html

- Centers for Disease Control and Prevention. “Drug Overdose, U.S. State Opioid Dispensing Rates, 2020.” Available at: https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html
- Centers for Disease Control and Prevention. “High-Risk Substance Use Among Youth,” 2020. Available at: https://www.cdc.gov/healthyyouth/substance-use/index.htm
- Centers for Disease Control and Prevention. “Persons who Inject Drugs: Infections Diseases, Opioids, and Injection Drug Use.” Available at: https://www.cdc.gov/pwid/opioid-use.html#:~:text=A%20deadly%20consequence%20of%20the,cause%20heart%20infections%20(endocarditis%20)
- Centers for Disease Control and Prevention. *Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence*, 2019. Available at: https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf
- Centers for Disease Control and Prevention. “Sexually Transmitted Disease Surveillance 2019, Table 40. Congenital Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2019.” Available at: https://www.cdc.gov/std/statistics/2019/tables/40.htm
- Centers for Disease Control and Prevention. “Sexually Transmitted Disease Surveillance 2020, Table 20. Congenital Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2020.” Available at: https://www.cdc.gov/std/statistics/2020/tables/20.htm
- Cerda, M., Santaella, J., Marshall, B. D., Kim, J. H., & Martins, S. “Nonmedical Prescription Opioid Use in Childhood and Early Adolescence Predicts Transitions to Heroin Use in Young Adulthood: A National Study,” *Journal of Pediatrics*, Volume 167 Issue 3 (2016), pp. 605-12.e1-2.
- Churchill Community Coalition. *Churchill Community Coalition Comprehensive Community Prevention Plan*, 2018.
- County Health Rankings & Roadmaps. “Proper drug disposal programs,” 2017. Available at: https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/proper-drug-disposal-programs
- Crime and Justice Institute, Nevada Sentencing Commission Presentation: “Impact of COVID-19 on Nevada's Prison Population: Project Update,” September 2021.
- Davis, M.A., Lin, L.A., Liu, H. & Sites, B.D. “Prescription opioid use among adults with mental health disorders in the United States,” *Journal of the American Board of Family Medicine*, Volume 30 Issue 4 (2017), pp. 407–417.
- Diedrick, M., Lensch, T. Zhang, F., Peek, J., Clements-Nolle, K., Yang, W. *State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. 2019 Nevada High School Youth Risk Behavior Survey (YRBS) Report.*
- Felitti, V. J., Anda, R. F., Nordenberg, M. C., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. “Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences

(ACE) Study," *American Journal of Preventive Medicine*, Volume 13 Issue 4 (1998), pp. 245–258.

- Girouard, M., Goldhammer, H., Keuroghlian, A. "Understanding and treating opioid use disorders in lesbian, gay, bisexual, transgender, and queer populations," *Substance Abuse*, Volume 40 Issue 3 (2019), pp. 335–339
- Goldner EM, Lusted A, Roerecke M, Rehm J, & Fischer B. "Prevalence of Axis-1 psychiatric (with focus on depression and anxiety) disorder and symptomatology among non-medical prescription opioid users in substance use treatment: systematic review and meta-analyses," *Addict Behav*, Volume 39 Issue 3 (2014), pp. 520–531.
- Goldstick, J. E., Cunningham, R. M., & Carter, P. M. "Current Causes of Death in Children and Adolescents in the United States," *New England Journal of Medicine*, Volume 386 (2022), pp. 1955–1956.
- Griswold, T., Packham, J., Warner, J., & Etchegoyhen, L. *Nevada Rural and Frontier Health Data Book — Tenth Edition.* University of Nevada, Reno, 2021.
- Hartnett, K., Jackson, K., et al., "Bacterial and Fungal Infections in Persons Who Inject Drugs – Western New York, 2017" *MMWR Morb Mortal Wkly Rep*, Volume 68 Issue 26 (2019), pp. 583–586. Available at: https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6826a2-H.pdf
- Harvard Medical School, Blavatnik Institute for Health Care Policy. *Evidence Based Strategies for Abatement of Harms from the Opioid Epidemic*. Available at: https://www.lac.org/assets/files/TheOpioidEbatement-v3.pdf
- Health Resources & Services Administration Health Workforce. "Behavioral Health Workforce Projections," accessed April 2022. Available at: https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/behavioral-health
- Healthy Communities Coalition Lyon and Storey Counties. *Comprehensive Community Prevention Plan 2019–2021*.
- Impact and Frontier Community Coalition. *Comprehensive Community Prevention Plan 2020–2023*.
- Johns Hopkins Bloomberg School of Public Health. *Primer on Spending Funds from the Opioid Litigation: A Guide for State and Local Decision Makers,* 2021.
- Johns Hopkins School of Public Health. *Principles for the Use of Funds from the Opioid Litigation,* 2021. Available at: https://opioidprinciples.jhsph.edu/wp-content/uploads/2021/01/Litigation-Principles.pdf
- Johnson, J., Pulver, K., and Ross, J. *SNOAC Community Vision Board: Report Compiled Based on SNSMOPS World Café Community Session*, 2021.
- Join Together Northern Nevada. *Comprehensive Community Prevention Plan for Washoe County 2020–2022*.
- Kaiser Family Foundation. "Mental Health Care Professional Shortage Areas (HPSAs)," accessed for September 30, 2021. Available at: https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-

hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22desc%22%7D

- Keyes KM, Rutherford C, Hamilton A, Barocas JA, Gelberg KH, Mueller PP, Feaster DJ, El-Bassel N, Cerdá M. "What is the prevalence of and trend in opioid use disorder in the United States from 2010 to 2019? Using multiplier approaches to estimate prevalence for an unknown population size." *Drug and Alcohol Dependence Reports,* Volume 3, 100052 (2022).
- Larney S, Tran LT, Leung J, Santo T Jr, Santomauro D, Hickman M, Peacock A, Stockings E, Degenhardt L. "All-Cause and Cause-Specific Mortality Among People Using Extramedical Opioids: A Systematic Review and Meta-analysis," *JAMA Psychiatry*, Volume 55 Issue 5 (2020), pp. 493–502.
- Larson Institute/Nevada Overdose to Action. *2020 Hispanic/Latinx Overdose*, 2021.
- Longo, D. "Opioid Abuse in Chronic Pain – Misconceptions and Mitigation Strategies," *New England Journal of Medicine*, Issue 374 (2016), pp. 1253–1263. Available at: https://www.nejm.org/doi/pdf/10.1056/NEJMra1507771?articleTools=true
- McCarthy, N., Baggs, J., See, I., Reddy, S.C., Jernigan, J.A., Gokhale, R.H. & Fiore, A.A. "Bacterial Infections Associated With Substance Use Disorders, Large Cohort of United States Hospitals, 2012–2017." *Clinical Infectious Diseases*, Volume 71 Issue 7 (2020), pp. e37–e44. Available at: https://academic.oup.com/cid/article/71/7/e37/5697426
- McClellan C, Lambdin BH, Ali MM, Mutter R, Davis CS, Wheeler E, Pemberton M, Kral AH. "Opioid-overdose laws association with opioid use and overdose mortality," *Addict Behav*, Volume 86 (2018), pp. 90–95.
- Mental Health America. "The State of Mental Health in America," 2021. Available at: https://mhanational.org/issues/state-mental-health-america
- Monroy, E. *Nevada Public Health Crisis Response: Final Performance and Evaluation Report*, 2020
- National Institute on Drug Abuse. *Common Comorbidities with Substance Use Disorders Research Report,* 2020.
- National Institute on Drug Abuse. *Part 1: The Connection Between Substance Use Disorders and Mental Illness*, 2021. Retrieved from https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness
- National Institute on Drug Abuse. "Substance Use and SUDs in LGBTQ* Populations." Available at: https://nida.nih.gov/drug-topics/substance-use-suds-in-lgbtq-populations
- Nevada Center for the Application of Substance Abuse Technologies, Nevada State Opioid Response, and Nevada Department of Health and Human Services. *Nevada State Opioid Response Grant II, Year 1: September 20, 2020–September 29, 2021 Annual Performance Progress Report*, 2021.
- Nevada HIDTA Investigative Support Center. *2021 Threat Assessment*, 2021

- Nevada Institute for Children's Research and Policy. “Overdose Data to Action: Year 1 Progress Report.”
- Nevada Institute for Children’s Research and Policy and the Cannon Survey Center. *2020 Clark County Community Perceptions of Drug Use and Harm Reduction Survey Report*, 2020.
- Nevada Institute of Children’s Research and Policy, University of Nevada Las Vegas. *Care Coalition Comprehensive Community Substance Abuse Prevention Plan 2020–2021*, 2019
- Nevada Minority Health and Equity Coalition, School of Public Health, University of Nevada Las Vegas. *Voices of the Opioid Epidemic: Perspectives of Those with Lived Experience in Nevada*, 2022.
- Nevada Overdose to Action and University of Nevada Public Health Training Center, Johns Hopkins Bloomberg School of Public Health. *Recommendations: Current Efforts in Nevada — Summary*, 2021.
- Nevada Overdose to Action and University of Nevada School of Community Health Sciences. *Nevada's Overdose Landscape Presentations*, July 7, 2021.
- Nevada Prescription Drug Monitoring Dashboard. Available at: https://app.powerbigov.us/view?r=eyJrIjoiYjgyYzkyMzctNDg0OS00ZGY1LWJiMWYtM2E0NDlkZjI0MmEyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9
- Nevada Public Health Foundation, State of Nevada Department of Health and Human Services, and PACT Coalition. *Final Report of Nevada’s Summit Proceedings*, 2019.
- Nevada Public Health Training Center. *Overdose Data to Action (OD2A): Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations*, 2021.
- Nevada State Opioid Response. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Report, 2019–2020 — Statewide*, 2019. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors-polysubstance-report-2019-2020.pdf
- NRS 433.736. “Requirements and procedures for statewide needs assessment.” Available at: https://www.leg.state.nv.us/NRS/NRS-433.html#NRS433Sec736
- NyE Communities Coalition. *Comprehensive Community Prevention Plan, Nye, Lincoln & Esmeralda Counties, 2018–2021*.
- Overdose Detection Mapping Application Program by Nevada Counties. (2021). Accessed February 2022. Available at: https://odmap.net:4443/
- PACE Coalition Serving Elko, Eureka, and White Pine. *Comprehensive Community Prevention Plan 2020–2023.*
- PACT Coalition. *2019–2021 Comprehensive Community Substance Abuse Prevention Plan.*

- Partnership Carson City. *Comprehensive Community Prevention Plan 2019*.
- Partnership Douglas County. *Douglas County's Community Prevention Plan 2019*.
- Pearce L A, Min J E, Piske M, Zhou H, Homayra F, Slaunwhite A et al. “Opioid agonist treatment and risk of mortality during opioid overdose public health emergency: population based retrospective cohort study,” *BMJ*, 2020; 368:m772.
- Public Library of Science. “Gabapentin may increase risk of fatal opioid overdose.” (2017, October 3). Available at: https://medicalxpress.com/news/2017-10-gabapentin-co-use-fatal-opioid-overdose.html#:~:text=Gabapentin%20co-use%20may%20increase%20risk%20of%20fatal%20opioid,1.49%3B%2095%25%20confidence%20interval%201.18%20to%201.88%2C%20p%3C0.001%29.
- Rajbhandari-Thapa J, Zhang D, Padilla HM, Chung SR. “Opioid-Related Hospitalization and Its Association with Chronic Diseases: Findings from the National Inpatient Sample, 2011–2015,” *Prev Chronic Dis*, Volume 16 (2019).
- Rescigno, M., Allen, A., & Meyer, D. “Substance Use and Addiction Education For Northern Nevada Youth,” *Pediatrics*, Volume 147 (2021), pp. 222–223.
- Rogers, C. J., Pakdaman, S., Forster, M., Sussman, S., Grigsby, T. J., Victoria, J., & Unger, J. B. “Effects of multiple adverse childhood experiences on substance use in young adults: A review of the literature,” *Drug and Alcohol Dependence*, Volume 234 Issue 109407 (2022).
- Ruhm CJ. “Corrected US opioid-involved drug poisoning deaths and mortality rates, 1999–2015,” *Addiction*, Volume 113 Issue 7 (2018), pp. 1339–1344. Available at: https://www.ncbi.nlm.nih.gov/pubmed/29430760.
- Senate Bill 5 Overview, 2021 81st Session. Available at: https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/7180/Overview
- Senate Bill 40 Overview, 2021 81st Session. Available at: https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/7216/Overview
- Senate Bill 390 Overview, 2021. Available at: https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/8095/Overview
- Starcevich, K., Zhang, F., Clements-Nolle, K., Zhang, F., & Yang, W. University of Nevada, Reno. *2018 and 2020 Nevada Behavioral Risk Factor Surveillance System (BRFSS): Adverse Childhood Experiences (ACEs) Special Report.*
- State of Nevada Department of Health and Human Services. “Advisory Committee for a Resilient Nevada (ACRN).” Available at: https://dhhs.nv.gov/Programs/Grants/Advisory_Committees/ACRN/Home/
- State of Nevada Department of Health and Human Services. *Nevada’s Crisis Care Response System: 2020 Statewide Assets and Gaps Analysis*, 2020.
- State of Nevada Department of Health and Human Services. *Nevada State Unintentional Drug Overdose Reporting System: Report of Deaths 2019 to 2020 — Statewide*. Available at: https://nvopioidresponse.org/wp-content/uploads/2019/05/sudors_report_2019_2020.pdf

- State of Nevada Department of Health and Human Services Opioid Dashboard. Available at: https://app.powerbigov.us/view?r=eyJrIjoiODQ2MjJjMjktOWE5NC00MThmLTlkMmEtYzZjMDU0YWU3MmUyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9
- State of Nevada Department of Health and Human Services. *Overdose to Action Year 2 Annual Progress Report*, 2021.
- State of Nevada Department of Health and Human Services. *Perinatal Health Initiative & SUPPORT Act*, 2020.
- State of Nevada Department of Health and Human Services Prescription Drug Monitoring Program Dashboard, data for 2021. Available at: https://modi-dark.talusanalytics.com/resource/nevada-prescription-drug-monitoring-dashboard/
- State of Nevada Department of Health and Human Services. *Section 1115 Demonstration Waiver: Nevada's Treatment of Opioid Use Disorders (OUDs) and Substance Use Disorders (SUDs) Transformation Project*, September 2021. Available at: https://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Public/AdminSupport/MeetingArchive/PublicHearings/2021/SPA_PH_10_26_21_NV_1115_Waiver.pdf
- State of Nevada Department of Health and Human Services. *Suspected Nevada Drug Overdose Surveillance Monthly Report, January 2022: Statewide Report*, 2022.
- State of Nevada Department of Health and Human Services, Coordination Task Force. *2022 Operational and Planning Framework*, 2022.
- State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada 2020 HIV Fast Facts*, 2020.
- State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. *Nevada Substance Abuse Prevention and Treatment Agency Capacity Assessment Report: Nevada*, 2019.
- State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health. "Statewide Epidemiology Organization (SEOW) Workgroup DRAFT MEETING MINUTES Thursday, September 16, 2021," 2021.
- State of Nevada Department of Health and Human Services, Office of Analytics, *Nevada Vulnerability Assessment: Risk of Opioid Overdose and HIV*, January 2020.
- State of Nevada Department of Health and Human Services, Nevada Overdose To Action and Nevada Public Health Training Center. *Nevada Hospital Overdose Surveillance Quarterly Report, Quarter 2 (April 2021 to June 2021)*.
- State of Nevada Department of Health and Human Services, Nevada Overdose To Action and Nevada Public Health Training Center. *Nevada State Unintentional Drug Overdose Reporting System Polysubstance Trend Report, 2018–2019 Statewide.*
- State of Nevada Department of Health and Human Services, Nevada Overdose To Action and Nevada Public Health Training Center. *Nevada State Unintentional Drug Overdose Reporting System: Report of 2020 Deaths — Northern Nevada*, 2021.

- State of Nevada Department of Health and Human Services, Nevada Overdose to Action, Lawson Institute. *Suspected Nevada Drug Overdose Surveillance Monthly Report, October 2021: Statewide Report*, 2021.
- State of Nevada Department of Health and Human Services, Nevada State Opioid Response, University of Nevada Center for the Application of Substance Abuse Technologies. *Nevada State Opioid Response Grant Annual Progress Report*, 2021.
- State of Nevada Department of Health and Human Services, Office of Analytics. *Bureau of Behavioral Health Wellness and Prevention 2020 Epidemiologic Profile*, January 2021. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Office_of_Analytics/Bureau%20of%20Behavioral%20Health%20Wellness%20and%20Prevention,%20Epidemiologic%20Profile%20for%20Nevada,%202020.pdf
- State of Nevada Department of Health and Human Services, Office of Analytics. *Nevada Prescription Drug Monitoring Program Nevada 2017–2022*. Available at: https://app.powerbigov.us/view?r=eyJrIjoiYjgyYzkyMzctNDg0OS00ZGY1LWJiMWYtM2E0NDlkZjI0MmEyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9
- State of Nevada Department of Health and Human Services, Office of Analytics. *Special Surveillance Report Veteran Suicide*, November 2021. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Office_of_Analytics/Veteran%20Suicide%20Report%20November%202021.pdf
- State of Nevada Department of Health and Human Services, Office of Analytics. *Youth Suicide: Behaviors and Circumstances, Nevada, 2020*, February 2022. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Office_of_Analytics/Youth%20Suicide%20Behaviors%20and%20Circumstances%20Nevada%202020.pdf
- State of Nevada Department of Health and Human Services, Office of Analytics, Division of Health Care Financing and Policy. *Nevada Substance Use Disorder Data Book October 2019–March 2021*, 2021.
- State of Nevada Department of Health and Human Services, Office of Analytics, Methamphetamine and Stimulant Dashboard, data dated November 24, 2011. Available at: https://app.powerbigov.us/view?r=eyJrIjoiY2U2YzNlNmItZDI2OS00YTJlLTk2YmQtNzY1Nzk0MDFkZWMzIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9
- State of Nevada Department of Health and Human Services, Office of Analytics, Nevada Overdose to Action. *Hospital-based Overdose Data*, 2021.
- State of Nevada Department of Health and Human Services, Office of Analytics, Nevada Prescription Drug Monitoring Program Nevada 2017–2022. Accessed February 2022. Available at: https://app.powerbigov.us/view?r=eyJrIjoiYjgyYzkyMzctNDg0OS00ZGY1LWJiMWYtM2E0NDlkZjI0MmEyIiwidCI6ImU0YTM0MGU2LWI4OWUtNGU2OC04ZWFhLTE1NDRkMjcwMzk4MCJ9
- State of Nevada Department of Health and Human Services, Office of Minority Health and Equity. *Choice Point Thinking: A Guide to Applying Nevada's Health Equity Lens.*

2022. Available at: https://dhhs.nv.gov/uploadedFiles/dhhsnvgov/content/Programs/Grants/Advisory_Committees/ACRN/NOMHE's.HealthEquityLens%203_12April2022.pdf

- State of Nevada Division of Health Care Financing and Policy. *Nevada's Sustainability Plan to Support Expansion of SUD and OUD Treatment and Recovery Provider Capacity*, 2021.
- State of Nevada Division of Health Care Financing and Policy. *Substance Use Disorder & Opioid Use Disorder in Nevada: Policy Analysis and Infrastructure Assessment Report*, 2020.
- State of Nevada Division of Public and Behavioral Health. *Naloxone for Opioid Safety: A Nevada Provider's Guide to Prescribing Naloxone to Patients Who Use Opioids*, 2018. Available at: https://dpbh.nv.gov/uploadedFiles/dpbhnvgov/content/Resources/opioids/naloxone_toolkit_color.pdf
- Stein, M. D., Conti, M. T., Kenney, S., Anderson, B. J., Flori, J. N., Risi, M.M., & Bailey, G. L. "Adverse childhood experience effects on opioid use initiation, injection drug use, and overdose among persons with opioid use disorder," *Drug and Alcohol Dependence*, Volume 179 (2017), pp. 325–329.
- Strickland, J.C., Havens, J.R., & Stoops, W.W. "A Nationally Representative Analysis of 'Twin Epidemics': Rising rates of methamphetamine use among persons who use opioids," *Drug and Alcohol Dependence*, Volume 1, Issue 204 (2019).
- Substance Abuse and Mental Health Agency. "National Guidelines for Behavioral Health Crisis Care: Best Practice Toolkit," 2020.
- Substance Abuse and Mental Health Services Administration. *2019–2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia),* 2021. Available at: https://www.samhsa.gov/data/report/2019-2020-nsduh-state-prevalence-estimates
- Substance Abuse and Mental Health Services Administration. *2019 National Survey on Drug Use And Health: Lesbian, Gay, & Bisexual (LGB) Adults*, 2020. Available at: https://www.samhsa.gov/data/report/2019-nsduh-lesbian-gay-bisexual-lgb-adults
- Substance Abuse and Mental Health Services Administration. *A Guide to SAMHSA's Strategic Prevention Framework*, 2019. Available at: https://www.samhsa.gov/sites/default/files/20190620-samhsa-strategic-prevention-framework-guide.pdf
- Substance Abuse and Mental Health Services Administration. "Evidence-Based Practices Resource Center." Available at: https://www.samhsa.gov/resource-search/ebp
- Substance Abuse and Mental Health Services Administration. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*, 2021.
- Substance Abuse and Mental Health Agency. *National Guidelines for Behavioral Health Crisis Care: Best Practice Toolkit*, 2020.

- Substance Abuse and Mental Health Services Administration. *National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia)*, 2021.
- Substance Abuse and Mental Health Services Administration. "Opioid Overdose Prevention Toolkit," accessed February 2022. Available at: https://www.samhsa.gov/resource/ebp/opioid-overdose-prevention-toolkit
- Substance Abuse and Mental Health Services Administration. *Recovery-Oriented Systems of Care Resource Guide*, 2010. Available at: https://www.samhsa.gov/sites/default/files/rosc_resource_guide_book.pdf
- Substance Abuse and Mental Health Services Administration. *Treatment Improvement Protocol (TIP) 42: Substance Use Disorder Treatment for People with Co-Occurring Disorders*, 2020.
- Substance Abuse and Mental Health Services Administration, Center for the Application of Prevention Technologies. "Primary, Secondary and Tertiary Prevention Strategies & Interventions for Preventing NMUPD and Opioid Overdose across the IOM Continuum of Care," (n.d.). Available at: https://cadcaworkstation.org/public/DEA360/Shared%20Resources/Root%20Causes%20and%20other%20research/Crosswalk%20PST_USI_models%20with%20NMUPD_PDO__%20examples_9_27_2016_revised.pdf
- Tsai, A. C., Kiang, M. V., Barnett, M. L., Beletsky, L., Keyes, K. M., McGinty, E. E., Smith, L. R., Strathdee, S. A., Wakeman, S. E., & Venkataramani, A. S. "Stigma as a fundamental hindrance to the United States opioid overdose crisis response," *PLoS Medicine*, Volume 16 Issue 11 (2019), e1002969.
- University of Nevada, Las Vegas, Nevada Institute of Children's Research and Policy. *Comprehensive community substance abuse prevention plan*, 2019.
- University of Nevada Public Health Training Center. *Overdose Data to Action: Formative research to investigate barriers and facilitators to accessing services among current and former opioid users in Nevada: Report of Key Findings and Recommendations*, April 2021.
- University of Nevada, Reno, School of Medicine, *Nevada Rural and Frontier Health Data Book,* 2021.
- University of Nevada, Reno, School of Public Health. *Forensic Toxicology & Nevada's Overdose Surveillance System: Needs Assessment & Recommendations*, 2020.
- University of Washington, School of Social Work. "SDRG looks at ways to prevent opioid dependence among incarcerated youth, (2021, May 17). Available at: https://socialwork.uw.edu/news/sdrg-looks-ways-prevent-opioid-dependence-among-incarcerated-youth#:~:text=Nationally%2C%20nearly%2020%25%20of%20adolescents%20and%20young%20adults,which%20is%20a%20strong%20predictor%20of%20subsequent%20re-incarcerations.
- US Department of Health and Human Services, Office of the Surgeon General. *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*,

2016. Available at: https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf

- US Department of Labor, “Risk Factors for Opioid Misuse, Addiction, and Overdose.” Available at: https://www.dol.gov/agencies/owcp/opioids/riskfactors
- Welty, L., Harrison, M., Abram, K., et. al. “Health Disparities in Drug and Alcohol-Use Disorders: A 12-year Longitudinal Study of Youths After Detention,” *American Journal of Public Health*, Volume 16 (2016), pp. 872–880.
- Wilson, N., Mbabazi, K., Puja, S., “Drug and Opioid-Involved Overdose Deaths — United States, 2017–2018,” *MMWR Morb Mortal Wkly Rep*, Volume 69 (2020), pp. 290–297. Available at: https://www.cdc.gov/mmwr/volumes/69/wr/mm6911a4.htm
- Zhu, Y., Mooney, L.J., Yoo, C., Evans, E.A., Kelleghan, A., Saxon, A.J., Curtis, M.E., & Hser, Y. “Psychiatric comorbidity and treatment outcomes in patients with opioid use disorder: Results from a multisite trial of buprenorphine-naloxone and methadone,” *Drug Alcohol Dependence*, Volume 228 (2021).

Appendix C

Prior Work Toward Johns Hopkins Best Practice Recommendations

The State has been working to develop interventions that align with key areas of the Johns Hopkins Best Practices. In 2019, the Nevada Public Training Center, in partnership with Nevada OD2A, released a summary that included the current efforts being made in Nevada that coincide with the John's Hopkins Bloomberg School of Public Health Recommendations.

In 2017, the John's Hopkins Bloomberg School of Public Health published the report *The Opioid Epidemic, From Evidence to Impact*.[274] This report provides **specific, proven recommendations**, as well as resources to combat the opioid epidemic in the most effective way. The report includes 10 key recommendation areas that should serve as the foundation for an entity working to battle the opioid epidemic to ensure intervention design and implementation remain evidence-informed.

The 10 key recommendation areas are:

1. Optimizing the PDMP
2. Standardizing Clinical Guidelines
3. Engaging Pharmacy Benefit Managers (PBMs) and Pharmacies
4. Implementing Innovative Engineering Strategies
5. Engaging Patients and General Public
6. Improving Surveillance
7. Treating OUDs
8. Improving Naloxone Access and Use
9. Expanding Harm Reduction
10. Combating Stigma

The following table is a summary of Nevada's current efforts and alignment with the Johns Hopkins Recommendations.

[274] Alexander GC, Frattaroli S, Gielen AC, eds. "The Opioid Epidemic: From Evidence to Impact," *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland.* (2017). Available at: https://www.jhsph.edu/events/2017/americas-opioid-epidemic/report/2017-JohnsHopkins-Opioid-digital.pdf

Table C1.1. 2019 Nevada Public Health Training Center, Johns Hopkins Bloomberg School of Public Health Recommendations, Current Efforts in Nevada — Summary

Recommendation	Current Efforts
Optimizing the PDMP	
• Mandate prescriber PDMP registration and use.	• Prescription monitoring programs have been in use in Nevada since 1995. • SB 459 (2015) was passed to require prescribers to review a patient utilization report from the PDMP for new patients or new prescriptions that are for more than seven days. • AB 474 revised Nevada statues to require prescribers to register for the PDMP when they receive or renew their controlled substance prescribing license.
• Proactively use PDMP data for education and enforcement.	• PDMPs can generate reports (e.g., doctor shopper reports, top RX count prescriber, top pill count prescriber, and top prescriber by drug) to monitor prescribing and report abnormal findings. — Letters are generated quarterly and sent licensing boards. Disciplinary action for inappropriate prescribing includes participating in continuing education.
• Authorize third-party payers to access PDMP data with a plan for appropriate use and proper protections.	• While the Nevada Board of Pharmacy shares data with the State Medicaid program, the Board is not able to share PDMP data with health plans or the PBMs.
• Empower law enforcement and licensing boards for health professions to investigate high-risk prescribers and dispensers.	• AB 239 (2019) allowed licensing boards to discipline health providers that violate AB 474.
• Work with industry and State lawmakers to require improved integration of PDMPs into Electronic Health Records systems.	• Nevada's NV-OD2A program partnered with the Board of Pharmacy to provide optional integration of the PDMP and Electronic Health Records to hospitals.
• Engage State health leadership to establish or enhance PDMP access across State lines.	• The State PDMP has interstate partnerships to share data with 34 states, as well as 80% of the State's boarding PDMPs. However due to California's data controls, the Nevada PDMP is not able to obtain data from that neighboring state.

Recommendation	Current Efforts
Standardizing Clinical Guidelines	
• Work with State medical boards and other stakeholders to enact policies reflecting the CDC's Guideline for Prescribing Opioids for Chronic Pain.	• AB 474/AB 239 (2017) were passed to ensure patients have the opportunity to discuss treatment options with their providers. Also mandates prescribers follow steps to reduce the risk associated with certain medications and provide alternative options.[275]
• Mandate electronic prescribing of opioids.	• AB 310 (2019) mandates electronic prescribing for all controlled substances prescriptions by January 1, 2021.[276]
• Standardize metrics for opioid prescriptions.	• AB 474 requires the tracking of prescriptions of more than 30 days through a provider-patient agreement updated yearly to include the goals of treatment, consent to testing for monitoring drug use, requirement to take controlled substances as prescribed, prohibition of sharing medications, requirements for notification of the provider with certain information, authorization for the provider to conduct random counts of the controlled substance, and reasons the provider may change treatment.
• Improve formulary coverage and reimbursement for non-pharmacologic treatments, as well as multidisciplinary and comprehensive pain management models.	• Requires one of Nevada's MCOs to cover psychotherapy, exercises/movement and manual services for non-pharmacological pain management.
Engaging PBMs and Pharmacies	
• Inform and support evaluation research of PBM and pharmacy interventions to address the opioid epidemic.	• While PBMs are currently required to submit transparency reports related to drug rebates for drugs determined to be essential to treating asthma and diabetes, no such requirements exist for opioids.
• Continue the development and enhancement of evidence-based criteria to identify individuals at elevated risk for OUDs	• In 2018, Opioid Stewardship and Safety: A Nevada Provider's Guide was distributed to providers to provide information regarding risk factors of opioid overdose, informed consent, prescription medication agreements, starting and tapering opioid therapy, and existing tools for assessing risk of opioid abuse. The

[275] Assembly Bill 474/Assembly Bill 239 (2017). Available at: https://www.nvopioidresponse.org/wp-content/uploads/2019/04/opioid-compendium-of-resources.pdf

[276] Assembly Bill 310 (2019). Available at: https://nvdoctors.org/wp-content/uploads/AB310-Legislative-Report-.pdf

Recommendation	Current Efforts
or overdose and offer additional assistance and care to these patients.	guide also included a Reference Guide for Reproductive Health Complicated by Substance Use and a Reference Guide for Labor and Delivery Complicated by Substance Use.
• Improve management and oversight of individuals who are prescribed opioids for chronic non-cancer pain.	• In Nevada, health care providers are not licensed by specialty or sub-specialty; therefore, all controlled substance prescriptions are subject to Prescribe 365 regulations and monitored through the PDMP regardless of specialty.
• Support restricted recipient (lock-in) programs among select high-risk patient populations.	• Lock-in programs are operated under the Nevada MCOs to help avoid potentially harmful overutilization of prescription drugs and to help promote continuity of care.
• Improve monitoring of pharmacies, prescribers, and beneficiaries.	• PDMP identifies prescribers with concerning prescribing practices and sends letters each quarter to the prescribers licensing boards and pharmacies alerting the concerns.
Implementing Innovative Engineering Strategies	
Recommendations in this section are for the Food and Drug Administration (FDA) and the Pharmaceutical Industry; therefore, they are not applicable to this report.	
Engaging Patients and the General Public	
• Convene a stakeholder meeting with broad representation to create guidance that will help communities undertake comprehensive approaches that address the supply of, and demand for, prescription opioids in their locales; implement and evaluate demonstration projects that model these approaches.	• Multiple stakeholders are meeting at the State and local levels, including the Southern Nevada Opioid Accountability Coalition, Washoe County Sheriff's Substance Abuse Taskforce, NV-OD2A, Regional Behavioral Health Policy Boards, SAPTA Advisory Boards, Nevada Opioid Treatment Association, Multidisciplinary Prevention Advisory Council, and the Substance Use Response Group.
• Convene an inter-agency task force to assure that current and future national public education campaigns about prescription opioids are informed by the available	• The CDC Prevention for States funds supported the Rx Awareness campaign *Wake Up Nevada* and the SNHD NV-OD2A project works in collaboration with the PACT Coalition on *Back to Life.*

Recommendation	Current Efforts
evidence, and that best practices are shared.	
• Provide clear and consistent guidance on safe storage of prescription opioids.	• The Office of Suicide Prevention has supported safe storage efforts, but currently there has not been a concerted effort to push out safe storage methods as a harm reduction effort to reduce overdoses.
• Provide clear and consistent guidance on safe disposal of prescription opioids and expand take-back programs.	• Grants have supported take-back programs in Nevada, while coalitions continue DEA take-backs twice a year with separate funding. Coalitions also provide training on safe disposal of medications to parents, school officials, health nurses, senior citizens, funeral homes, and hospice programs through partnerships with the Rx Abuse Leadership Initiative retail chain pharmacies. SOR funds are also used to purchase prescription medication drop boxes for tribal organizations.
Improving Surveillance	
Note: Detailed information regarding opportunities to improve data collection and reporting standardization, availability, and robustness are included at Section 4 of this report regarding Opioid Impact. Information excerpted below from the Nevada Public Health Training Center, John's Hopkins Bloomberg School of Public Health Recommendations, Current Efforts in Nevada — Summary. NV-OD2A does not include the same level of detail.	
• Invest in surveillance of opioid misuse and use disorders, including information about supply sources.	• Currently the NV-OD2A program and the Office of the Attorney Generals are working to increase the frequency of overdose data shared with stakeholders. However, at this time there are no public health efforts seeking to collect source data. The NV-OD2A program is working to obtain the seizure data from HIDTA and increase system capacity for surveillance sample testing.
• Develop and invest in real-time surveillance of fatal and non-fatal opioid overdose events.	• The NV-OD2A is working to create a centralized analysis and reporting hub for overdose data. Currently NV-OD2A is using ODMAP ImageTrend, Monthly Vital Records, Center for Health Information Analysis at University of Nevada, Las Vegas, and Syndromic Surveillance. Additionally, the program is working with the State Coroner/Medical Examiners to develop reporting for suspected overdoses. • SNHD is also participating and purchased software to house a repository of data for EMS and hospitals.

Recommendation	Current Efforts
• Use federal funding for interventions to address OUDs to incentivize inclusion of outcome data in those funded programs.	• Outcome data must be reported to SAMHSA by organizations supported by SOR and SOR II funds. Outcome data includes abstinence, criminal justice involvement, employment/education, health/behavioral/social consequences, social connectedness, and stability in housing.
• Support the linkage of public health, health care, and criminal justice data related to the opioid epidemic.	• Formal data sharing is limited with public health programs and primarily limited to the Office of Analytics. NV-OD2A is working to review data sharing between public safety and public health entities regarding how local jails collect/save/share data related to SUD.
Treating OUDs	
Some recommendations were at the federal level; therefore, they are not included in this report.	
• Require all State-licensed addiction treatment programs that admit patients with OUDs to permit access to buprenorphine or methadone.	• In 2017, the Division Criteria for the Certification of Programs through SAPTA per NAC 458 states that Certified treatment programs, private, public or funded **cannot deny** treatment services to clients that are on stable medication maintenance for the treatment of an OUD including FDA approved medications.
• Require all FQHCs to offer buprenorphine.	• SOR grants currently fund the Nevada Primary Care Association to expand MAT within FQHCs that are interested. All CCBHCs are required to provide FDA-approved MAT.
• Develop and disseminate a public education campaign about the role of treatment in addressing opioid addiction.	• There have been information and educational campaigns developed and deployed in Nevada over the last 10 years.
• Educate prescribers and pharmacists how to prevent, identify, and treat opioid addiction.	• SOR/STR has held provider education/academic detailing, as well as health care provider training. Project ECHO offered biweekly clinics on MAT. The University of Nevada School of Medicine Continuing Medical Education designed and recorded online trainings. SBIRT began an STR initiative that provides key resources to assist organizations to promote, prepare, adopt, and implement SBIRT in 2018.
• Establish access to opioid agonist treatment with buprenorphine and methadone maintenance in jails and prisons.	• Few jails currently participate in a naloxone program. Only two prisons provide access to MAT through outside agencies. Only one county jail provides induction and maintenance in MAT.

Recommendation	Current Efforts
• Incentivize initiation of buprenorphine in the ED and during hospital stays.	• Currently, SOR funded staff are working to discuss induction programs about implementation with the director of Nevada's induction program.
Improving Naloxone Access and Use	
Some recommendations were at the federal level: therefore, they not included in this report.	
• Work with insurers and other third-party payers to ensure coverage of naloxone products.	• Naloxone is currently available without a prescription and community-based organizations can distribute naloxone for free. Nevada Medicaid FFS and MCOs cover most FDA-approved medications.
• Work with community-based overdose education and naloxone distribution programs to identify stable funding sources to ensure program sustainability.	• Currently, all naloxone is purchased through federal grants. Sustainable community-based organization distribution has been established.
• Engage with the scientific community to assess the research needs related to naloxone distribution evaluations and identify high priority future directions for naloxone-related research.	• Some naloxone distribution programs have been evaluated by researchers at the University of Nevada, School of Community Health Sciences.
• Engage with the health care professional community to advance consensus guidelines on the co-prescription of naloxone.	• In 2018, the Naloxone for Opioid Safety: *A Providers Guide to Prescribing Naloxone* was developed and includes discussions on naloxone prescribing that were integrated into trainings on AB 474 in 2017 and 2018.
• Assess the effects of State laws expanding naloxone access to the public.	• Data for naloxone distribution has been collected through SOR/STR funded programs to understand the Good Samaritan law and to whom naloxone is being distributed.
Expanding Harm Reduction Strategies	
• Establish and evaluate supervised consumption spaces.	• A bill was brought forward during the 2021 legislative session regarding safe injection but did not move out of the first house committee.
• Work with State and local stakeholders to establish and support needle and SSPs.	• In 2013, SSPs were enacted, two of which serve Nevada's urban centers through mobile and storefront exchange, Trac B and Change Point. SNHD supports Trac B on efforts including vending expansion and technical assistance for other

Recommendation	Current Efforts
	jurisdictions to implement public health vending, collaboration on outreach, rural expansion of harm reduction initiatives, linkage to care and peer support services, and alliance work, but does not fund the purchase of syringes.
• Evaluate and disseminate the use of test kits for fentanyl-laced opioids.	• Trac B supports fentanyl test strip distribution and identified policy issues that are being addressed, so Nevada can expand future fentanyl test strip work.
Combating Stigma	
• Update employer human resources and benefits language to avoid stigmatizing language and include evidence about the effectiveness of treatment for OUDs.	• In 2018, a recovery-friendly workplace initiative began to promote individual wellness by creating work environments that support mental and physical wellbeing of employees, prevent substance misuse, and support recovery from addition.
• Avoid stigmatizing language and include information about the effectiveness of treatment and the structural barriers that exist to treatment when communicating with the public about OUDs.	• SOR program supported a campaign to reduce stigma by increasing awareness about addiction being a disease. NV-OD2A also partnered with Nevada Broadcasters Association to launch an anti-stigma campaign.
• Educate health care providers about the benefits associated with destigmatizing language.	• Three guides for health care providers discussing de-stigmatization language were created, and SNHD provides Harm Reduction 101 and Drug Related Stigma training to public health workforce and other related organizations

Stakeholder Priorities for Johns Hopkins Recommendations

In July 2021, Nevada OD2A hosted a meeting discussing the priorities for action. Information was gathered from over 50 stakeholders representing regions, community coalitions, juvenile services, hospitals, law enforcement, service providers, medical examiners, analytics, human services, public health, Office of the Attorney General, tribes, coroner's office, pharmacies, and others to determine the highest priority areas needing to be addressed within the State based on 9 of the 10 Johns Hopkins Best Practices recommendation areas.[277]

Survey results from the 50 participating stakeholders were as follows:

- Priority Sections
  - When asked what the **primary** priority section of the best practice recommendations Johns Hopkins Opioid Report for the State to focus efforts on should be, the top three results included: Treating OUDs (20%), Expanding Harm Reduction (20%), and Engaging Patients and General Public (16%).
  - When asked what the **secondary** priority section of the Johns Hopkins Opioid Report for the State to focus efforts on should be, the top three results included: Treating OUDs (27%), Expanding Harm Reduction (22%), and Combating Stigma (13%).
- Priority Strategies
  - When asked what **primary** priority strategy the State should pursue, the top four results included: Expansion of Harm Reduction Strategies — Specifically Syringe, Naloxone, and Fentanyl Test Strip Distribution (32%), Increasing Treatment Capacity, Expansion of Recovery Programs, Address Social Determinants of Health, and Expanded Primary Prevention and Youth Education (13%).
  - When asked what **secondary** priority strategy the State should pursue, the top four results included: Expansion of Harm Reduction Strategies — Specifically Syringe, Naloxone, and Fentanyl Test Strip Distribution (24%), Increasing Treatment Capacity, Address Social Determinants of Health, and Expanded Primary Prevention (15%).

When results are combined, the top priorities based on the Johns Hopkins Best Practices include Treating OUDs, Expanding Harm Reduction, Engaging Patients and General Public, and Combating Stigma. The top strategies based on the Johns Hopkins Best Practices include Expansion of Harm Reduction Strategies — Specifically Syringe, Naloxone, and Fentanyl Test Strip Distribution, Increasing Treatment Capacity, Expansion of Recovery Programs, Address Social Determinants of Health, and Expanded Primary Prevention and Youth Education.

The next section of this report includes recommendations that fall within these identified priority sections, include the priority strategies identified by the stakeholders, and are in alignment with Johns Hopkins Best Practices.

[277] List of survey options was limited to State effort areas. The Best Practice area of "Implementing Innovative Engineering Strategies" was not included as a survey choice, due to its focus on efforts at the federal level.

Appendix D
Additional Data

ACEs Data

2019 Nevada Middle School YRBS ACEs Special Report[278]

A random sample of 5,341 youth from 113 schools completed the survey.

	Response	Total	Percentage
Ever physically forced to have sex	Yes	254	4.6%
	No	4,965	95.4%
Ever been hit, beaten, kicked, or physically hurt in any way by an adult	Yes	738	13.1%
	No	4,517	86.9%
Sometimes, mostly, or always have been sworn at, insulted by, or put down by an adult	Yes	1,749	34.3%
	No	3,438	65.7%
Ever seen adults in their home slap, hit, kick, punch, or beat each other up	Yes	886	16.2%
	No	4,356	83.8%
Ever lived with someone who was depressed, mentally ill, or suicidal	Yes	1,269	22.2%
	No	3,915	77.8%
Ever lived with someone who was a problem drinker, alcoholic, or abused street or prescription drugs	Yes	1,298	23.2%
	No	3,984	76.8%
ACE Score	0	2,345	44.4%
	1	1,258	24.8%
	2	813	15.9%
	3+	889	15.0%
Total		**5,341**	**100%**

[278] Starcevich, K., Zhang, F., Clements-Nolle, K., Zhang, F., & Yang, W. University of Nevada, Reno. 2018 and 2020 Nevada Behavioral Risk Factor Surveillance System (BRFSS): Adverse Childhood Experiences (ACEs) Special Report.

2019 Nevada Middle School YRBS ACEs Special Report

	Response	Total	Percentage
Ever physically forced to have sex	Yes	363	6.2%
	No	4488	93.8%
Ever been hit, beaten, kicked, or physically hurt in any way by an adult	Yes	941	18.7%
	No	3930	81.3%
Sometimes, mostly, or always have been sworn at, insulted by, or put down by an adult	Yes	1677	34.5%
	No	3243	65.5%
Ever seen adults in their home slap, hit, kick, punch, or beat each other up	Yes	892	18.2%
	No	3988	81.8%
Ever lived with someone who was depressed, mentally ill, or suicidal	Yes	1502	30.5%
	No	3200	69.5%
Ever lived with someone who was a problem drinker, alcoholic, or abused street or prescription drugs	Yes	1636	33.3%
	No	3058	66.7%
ACE Score	0	1765	35.9%
	1	1233	26.1%
	2	858	17.2%
	3+	1083	20.8%
Total		**4,939**	**100%**

2018 and 2020 Nevada BRFSS ACEs Special Report

ACE Category	Question	Response	Total	Percentage
Physical Abuse	Did a parent or adult in your home beat, kick, or physically hurt you in ever hit, anyway?	Yes	1,084	23.8%
		No	3,375	76.2%
Emotional Abuse	Did a parent or adult in your home ever sweat at you, insult you, or put you down?	Yes	1,447	31.2%
		No	2,990	68.8%
Sexual Abuse	Did anyone at least 5 years older than you or an adult, ever touch you sexually?	Yes	625	12.6%
		No	3804	87.4%
	Did anyone at least 5 years older than you or an adult, try to make you touch them sexually?	Yes	475	10.4%
		No	3953	89.6%
	Did anyone at least 5 years older than you or an adult, force you to have sex?	Yes	254	5.6%
		No	4179	94.4%
Household Mental Illness	Did you live with anyone who was depressed, mentally ill, or suicidal?	Yes	860	17.9%
		No	3593	82.1%
Household Substance Use	Did you live with anyone who was a problem drinker or alcoholic?	Yes	1331	27.3%
		No	3157	72.7%
	Did you live with anyone who used illegal street drugs or who abused prescription medications?	Yes	642	14.4%
		No	3842	85.6%
Household Domestic Violence	Did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?	Yes	901	21.4%
		No	3,520	78.6%
Incarcerated Household Member	Did you live with anyone who served time or was sentenced to service time in a prison, jail, or other correctional facility?	Yes	415	10.3%
		No	4,080	89.7%
Parental Separation or Divorce	Were your parents separated or divorced?	Yes	1,505	34.8%
		No	2,976	65.2%
ACE Score		**0**	**1,496**	**34.0%**
		1–2	**1,629**	**36.1%**
		3+	**1,393**	**29.9%**

Mercer Health & Benefits LLC
333 South 7th Street, Suite 1400
Minneapolis, MN 55402
www.mercer-government.mercer.com