# Behavioral Health Epidemiologic Profile 2024: Northern Region, Nevada

Carson City, Churchill, Douglas, Lyon, and Storey Counties

March 2025



Department of Health and Human Services Office of Analytics

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# Table of Contents

Acknowledgements	
Executive Summary	5
Purpose	5
Key Findings 2024	5
Data Sources	
Terminology	
Data and Equity	
Demographic Snapshot	
Mental Health	
Hospital Emergency Department Encounters	
Hospital Inpatient Admissions	
State-Funded Adult Mental Health Services	
Youth Risk Behavior Survey	
Behavioral Risk Factor Surveillance System	
Suicide	
National Violent Death Reporting System	
Mental Health-Related Deaths	
Substance Use	
Opioids	
Hospital Emergency Department Encounters	
Hospital Inpatient Admissions	
Opioid Overdose Deaths	
Stimulants	
Hospital Emergency Department Encounters	
Hospital Inpatient Admissions	
Stimulant Overdose Deaths	
Chronic Alcohol Conditions	
Hospital Emergency Department Encounters	
Hospital Inpatient Admissions	
Chronic Alcohol Diseases Deaths	
Alcohol- and/or Drug-Related Overdoses	
Hospital Emergency Department Encounters	50
Hospital Inpatient Admissions	

Alcohol- and/or Drug-Related Overdose Deaths	54
Substance Use Treatment Centers	56
SUDORS	59
Youth Risk Behavior Survey	63
Behavioral Risk Factor Surveillance System (BRFSS)	69
Youth	72
Medicaid: Residential Treatment Centers	72
Child Protective Services	74
Foster Care	76
Youth Risk Behavior Survey (YRBS)	78
Behavioral Risk Factor Surveillance System	80
Maternal and Child Health	83
Substance Use Among Pregnant Nevadans (Births)	
Neonatal Abstinence Syndrome	
Lesbian, Gay, Bisexual, and Transgender Health	
Youth Risk Behavior Survey (YRBS)	
Behavioral Risk Factor Surveillance System	
Appendix	

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# **Executive Summary**

## Purpose

This report is intended to provide an overview of behavioral health in Nevada for public health authorities, Nevada legislators, behavioral health boards, and the public. The analysis can provide insights to inform policies, programs, and resource allocation to effectively address behavioral health needs.

By monitoring changes in behavioral health indicators, stakeholders can evaluate the impact of emerging trends and areas requiring attention.

## Key Findings 2024

### Mental Health

- Anxiety (46.5%) and depression (30.0%) are the leading diagnoses for mental healthrelated emergency department encounters for 2023. These diagnoses reached a peak increase in 2023, in contrast to the decline observed statewide in Nevada. (Mental Health - ER).
- Anxiety (35.3%) and depression (33.6%) are the leading diagnoses for mental healthrelated inpatient encounters for 2023. The Northern Region, in contrast with statewide data for Nevada, has been slowly increasing since 2021 (<u>Mental Health -</u> <u>IP</u>).
- In 2023, American Indian or Alaska Native non-Hispanics (77.2 per 100,000) and White non-Hispanics (72.7 per 100,000) had the highest age-adjusted rates of utilization for mental health services among Northern Region residents. (<u>Avatar -</u> <u>State-Funded Mental Health Services</u>).
- Northern Region adults reporting poor mental health for 14 or more days in the past 30 days increased from 11.0% in 2014 to 16.2% in 2023 (Mental Health BRFSS).
- Northern Region has had a higher prevalence than Nevada of those with a depressive disorder from 2014-2022, although it dropped below the state to a reporting period low in 2023 (Mental Health - BRFSS).

### National Violent Death Reporting System (NVDRS)

- Firearms were used in 63.5% of suicides and 78.3% of homicides among Northern Region residents from 2018-2022 (Firearm Deaths NVDRS).
- Males accounted for 77.1% of suicide cases and 69.6% of homicide cases from 2018-2022 (<u>Deaths by Sex - NVDRS</u>).
- The rate of suicide deaths among Northern Region residents from 2018-2022 was highest in the 35-44 age group at 57.3 per 100,000 population. This differs from the results for both Clark and Washoe Counties as well as the state where the rate is highest in the 75+ age group (Deaths by Age Group NVDRS).
- Among suicide deaths among Northern Region residents from 2018 to 2022, it was reported that 48.6% had been identified as currently having a mental health problem, and 38.2% had a history of ever being treated for mental health or substance abuse (Circumstances of Deaths - NVDRS).

#### Substance Use

- The rates of stimulant-related overdose deaths have steadily increased since 2014, resulting in a 323% overall increase from 2014 to 2023 (<u>Stimulant-Related Overdose Deaths</u>).
- American Indians and Alaska Natives suffer from emergency department encounters, inpatient admissions and deaths from diseases and chronic conditions related to longterm alcohol use at a higher rate than any other racial or ethnic demographic in the region (<u>Chronic Alcohol Diseases by Race/Ethnicity</u>).
- The rate of overdose deaths, when considering all substances including alcohol, has increased substantially since the start of the COVID-19 pandemic, from 22.2 per 100,000 population in 2020 to 31.9 per 100,000 in 2023. (<u>Alcohol- and/or Drug-Related Overdose Deaths</u>).

### State Unintentional Drug Overdose Reporting System (SUDORS)

 Of the 51 unintentional/undetermined intent drug overdose deaths among Northern Region residents in 2022, 52.9% had non-specified opioids and 56.9% had methamphetamines listed in the cause of death (<u>Toxicology - SUDORS</u>).

#### Youth – Adverse Childhood Experiences

- Combined data from 2019-2023 show that 16.3% of Northern Region adults have been touched sexually at least once during childhood (<u>ACEs BRFSS</u>).
- Northern Region adults with four or more Adverse Childhood Experiences (ACEs) were significantly more likely to have depression compared to those with no ACEs (<u>ACEs - BRFSS</u>).

### **Maternal and Child Health**

• The rate of neonatal abstinence syndrome among Northern Region residents has fluctuated between a low of 2.1 per 1,000 live births in 2019 to a high of 10.0 per 1,000 live births in 2023 (Rate of NAS).

## LGBT

 LGBT Northern Region adults were significantly more likely to report having worse mental health and marijuana use behaviors than non-LGBT Northern Region adults, including attempting suicide, poor or fair general health, depressive disorder diagnosis, 14+ days of poor mental health in a month, and marijuana use in past 30 days (LGBT Adults - BRFSS).

# **Data Sources**

### **Behavioral Risk Factor Surveillance System**

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, chronic health conditions, and use of preventive services. More than 400,000 adults in the United States are interviewed each year, making the BRFSS the largest telephone health survey in the world. For many states, the BRFSS is the only available source of timely and accurate data on health-related behaviors. The survey consists of a set of federally grant funded core questions and states may include and pay for their own questions in the survey. While the survey's focus is chronic disease and injury, topics covered by the survey include car safety, obesity, and exercise among many others. Since state-added questions are not asked nationwide, these questions are not comparable.

### **Hospital Emergency Department Billing**

The Hospital Emergency Department Billing (HEDB) data provides health billing data for emergency room patients for Nevada's non-federal hospitals. NRS 449.485 mandates all hospitals in Nevada to report all patients discharged in a form prescribed by the Director of the Department of Health and Human Services. The data are collected using a standard universal billing form. The data in this report are for patients who used emergency room and inpatient services. The data includes demographics such as age, gender, race/ethnicity and uses International Classification of Diseases-9-Clinical Modification (ICD-9-CM) diagnoses codes and International Classification of Diseases-10-Clinical Modification (ICD-10-CM) diagnoses (up to 33 diagnoses respectively). ICD-10-CM diagnoses codes replaced ICD-9-CM diagnoses codes in the last quarter of 2015. Therefore, data prior to last quarter in 2015 may not be directly comparable to data thereafter. In addition, the data includes billed hospital charges, procedure codes, length of hospital stay, discharge status, and external cause of injury codes. The billing data information is for billed charges and not the actual payment received by the hospital. Due to lag in the reporting of billing information, numbers may differ from prior reporting.

#### **Hospital Inpatient Billing**

The Hospital Inpatient Billing (HIB) data provide health billing data for patients discharged from Nevada's non-federal hospitals. NRS 449.485 mandates all hospitals in Nevada to report information as prescribed by the Director of the Department of Health and Human Services. The data are collected using a standard universal billing form. The data is for patients who spent at least 24 hours as an inpatient, but do not include patients who were discharged from the emergency room. The data include demographics such as age, gender, race/ethnicity and uses International Classification of Diseases-9-Clinical Modification (ICD-9-CM) diagnoses codes and International Classification of Diseases-10-Clinical Modification (ICD-10-CM) diagnoses (up to 33 diagnoses respectively). ICD-10-CM diagnoses codes replaced ICD-9-CM diagnoses codes in the last quarter of 2015. Therefore, data prior to last quarter of 2015 may not be directly comparable to data thereafter. In addition, the data includes billed hospital charges, procedure codes, length of hospital stay, discharge status, and external cause of injury codes. The billing data information is for billed charges and not the actual payment received by the hospital. Due to lag in the reporting of billing information, numbers may differ from prior reporting.

#### Medicaid Data Warehouse

The Medicaid Data Warehouse is a database which stores medical and pharmacy claims data for the Medicaid Managed Care and Fee-for-Service populations, at a claim line level. The data include provider information; member demographics such as age, gender, race/ethnicity; eligibility/enrollment information; and information of the diagnoses given to members and treatment received. It uses International Classification of Diseases-9-Clinical Modification (ICD-9-CM) diagnoses codes and International Classification of Diseases-10-Clinical Modification (ICD-10-CM) diagnoses, as well as standard billing and coding schemes such as CPT/HCPCS, NDC, etc.

#### National Violent Death Reporting System

The National Violent Death Reporting System (NVDRS) is a program funded by the Centers for Disease Control and Prevention (CDC) that collects information about violent deaths, including homicides, suicides, and deaths caused by law enforcement acting in the line of duty. Data are collected from death certificates, coroner/medical examiner reports (including toxicology), and law enforcement reports. Data elements collected provide valuable context about violent deaths, such as relationship problems, mental health conditions and treatment, toxicology results, and life stressors, including recent money- or work-related or physical health problems.

#### Nevada State Demographer – Nevada Population Data

The Nevada State Demographer's office is funded by the Nevada Department of Taxation and is part of the Nevada Small Business Development Center. It is responsible for conducting annual population estimates for Nevada's counties, cities, and towns.

#### **Prescription Drug Monitoring Program**

The Prescription Drug Monitoring Program (PDMP) is a state-operated, CDC-supervised electronic database that monitors the prescribing and dispensing of controlled substances. It serves as a tool to identify and prevent drug misuse while equipping health care providers and public health authorities with timely insights into patient prescription behaviors. For more information, see the following web links: <u>NV</u> PMP or CDC PDMP

#### State-Funded Mental Health Services: Avatar

Avatar is a database containing demographic, treatment, billing, and financial information for Nevada mental health facilities throughout the state. These data are representative of clients served at Nevada state-operated mental health facilities and are not generalizable to the rest of the population.

#### **Treatment Episode Data Sets**

Treatment Episode Data Sets (TEDS) are a compilation of demographic, substance use, mental health, clinical, legal, and socioeconomic characteristics of persons who are receiving publicly funded substance use and/or mental health services. State administrative data systems, claims, and encounter data are the primary data sources. The state role in submitting TEDS to the Substance Abuse and Mental Health Services Administration (SAMHSA) is critical, since TEDS is the only national data source for client-level information on persons who use substance use treatment services. TEDS also provide a mechanism for states to report treatment admissions and discharges of persons receiving mental health data set accessible (with appropriate confidentiality protection) by the public; local, state, and federal policymakers; researchers; and many others for comparisons and trends on the characteristics of persons receiving substance use and/or mental health treatment services. TEDS provides outcomes data in support of SAMHSA's program, performance measurement, and management goals.

#### **United States Census Bureau**

The United States Census Bureau is responsible for the official decennial (10-year period) count of people living in the United States of America. Collected data are disseminated through web-based tools, such as the American Community Survey, which provides quick facts on frequently requested data collected from population estimates, census counts, and surveys of population and housing for the nation, states, counties, and large cities. The Bureau also offers the American Fact Finder, which profiles the American population and economy every five years. For more information, visit <u>United States Census Bureau</u>.

#### UNITY

The Unified Nevada Information Technology for Youth (UNITY) is Nevada's Comprehensive Child Welfare Information System (CCWIS) which holds the official case record for child welfare-related case management activities in Nevada. This information system and its data are dynamic and constantly being modified or updated.

#### Web-Enabled Vital Records Registry Systems

Statewide births and deaths are collected by the Office of Vital Records, in the Division of Public and Behavioral Health. Web-Enabled Vital Records Registry Systems (WEVRRS) is a software utilized by physicians, registered nurses, midwives, informants or funeral directors, and other individuals to collect and consolidate birth and death-related information. WEVRRS includes the Nevada Electronic Birth Registry System and the Nevada Electronic Death Registry System.

#### Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is a national surveillance system that was established by the CDC to monitor the prevalence of health risk behaviors among youth. Every two years high schools from Nevada are randomly chosen by the CDC to represent Nevada. However, to ensure greater representation from schools in all Nevada districts, the Nevada Division of Public and Behavioral Health contracts with the University of Nevada, Reno School of Public Health to conduct the YRBS in all high schools throughout the state. The Nevada High School YRBS is a biennial, anonymous, and voluntary survey of students in 9th through 12th grade in regular public, charter, and alternative schools. Students self-report their behaviors in six major areas of health that directly lead to morbidity and mortality.

Nevada is among few states that collect data in middle schools. The Nevada Middle School YRBS is biennial, anonymous and voluntary survey of students in 6<sup>th</sup> through 8<sup>th</sup> grade in regular public, charter, and alternative schools. Students self-report their behaviors in five major areas of health that directly lead to morbidity and mortality.

For more information on CDC's Youth Risk Behavior Surveillance System (YRBSS): <u>CDC YRBSS</u> For more information on Nevada YRBS: <u>Nevada YRBS</u>

# Terminology

### **Age-Adjusted Rate**

A rate is a measure of the frequency of a specific event over a given period, divided by the total number of people within the population over the same period of time. An age-adjusted rate is a rate that has been adjusted, or weighted, to the same age distribution as a "standard" population. Throughout this report, rates are adjusted to the 11 standard age groups of the U.S. population in the year 2000 (Census table P25-1130 <u>Population Projections and Standard Age Groups</u>) and based on Nevada population per the 2023 vintage from the State Demographer. Rates are age-adjusted in order to eliminate any potential confounding effects, or biases, that may be a result of health factors that are associated with specific ages.

#### **Confidence Interval**

A confidence interval is a range of numbers defined to contain an estimated value with a specified probability. For example, a 95% confidence interval for the average in an observed population will contain the "true" average 95% of the time.

#### Crude Rate

A rate is a measure of the frequency of a specific event over a given period, divided by the total number of people within the population over the same period of time. A crude rate is the frequency with which an event or circumstance occurs per unit of population.

#### P-value

A p-value is the probability that an observed result could have occurred by chance alone given a specified statistical relationship. In practice, a p-value less than a defined level of significance (0.05 is used in this report) suggests that a result is unlikely to have occurred by chance and may be deemed statistically significant.

# **Data and Equity**

Demographic language may differ throughout this report depending on the sources from which data were retrieved. To report the data accurately, variables such as race, ethnicity, and sex are described in this report as they were in the source data. Every effort has been made to be inclusive and equitable across every demographic to provide a fair and accurate representation of the people of Nevada. The terms "female" and "woman" do not include all birthing people but are used as descriptors presented from source data. All sexual preferences and gender identities may not be present in the source data.

# **Demographic Snapshot**

### Table 1. Select Demographics for the Northern Region and Nevada, 2023.

Population, Northern Region, 2023 estimate*	205,296
Population, Northern Region, 2014 estimate*	184,943
Population, Northern Region, percent change*	9.9%
Female persons, Northern Region, 2023 estimate*	104,962
Male persons, Northern Region, 2023 estimate*	100,334
Median household income, Northern Region (2023) **	\$80,511
Median household income, Nevada (2023) **	\$75,561
Per capita income in the past 12 months, Northern Region (2023)**	\$43,269
Per capita income in the past 12 months, Nevada (2023)**	\$39,963
Percent of persons below poverty level, Northern Region (2023) **	9.3%
Percent of persons below poverty level, Nevada (2023)**	12.6%
Percent uninsured, Northern Region (2023)**	8.8%
Percent uninsured, Nevada (2023)**	11.4%

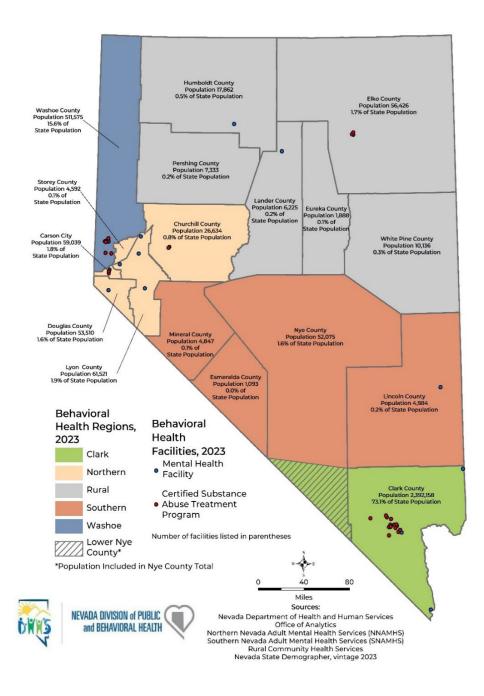
Source: \*Nevada State Demographer, Vintage 2023\*\*U.S. Census Bureau.

In 2023, the estimated population for the Northern Region was 205,296, a 9.9% increase from the 2014 estimated population. The median household income was \$80,511, which is higher than both the median household income of Nevada (\$75,561), and the United States (\$78,535). The percent of uninsured Northern Region residents in 2023 was 8.8%, which is lower than Nevada's percent (11.4%), but higher than the national percent (8.6%).

According to the Nevada Behavioral Health Policy Boards: "Nevada is divided into five distinct behavioral health regions that are overseen by Regional Behavioral Health Policy Boards. These boards, composed of community leaders, law enforcement, healthcare and treatment providers, social services, family and peer advocates, and others, bring diverse perspectives to the table, and facilitate collaboration focused on improving the behavioral health system in Nevada." For more information on Behavioral Health Regions, see <u>nvbh.org</u>. The Northern Region comprises Carson City, Churchill, Douglas, Lyon, and Storey Counties.

Figure 1 below shows the population for each of Nevada's 17 counties, the percent of Nevada population each county represents, the behavioral health regions, and the locations of mental health and substance abuse facilities.





Source: Nevada State Demographer, Vintage 2023.

*Clark Region*: *Clark County and southern Nye County.* 

Northern Nevada Region: Carson City, Churchill, Douglas, Lyon, and Storey Counties.

Rural Nevada Region: Elko, Eureka, Humboldt, Lander, Pershing, and White Pine Counties.

Southern Nevada Region: Esmeralda, Lincoln, Mineral Counties, and northern Nye County. Washoe Region: Washoe County.

\*Nye County: Northern Nye County is included in Southern Region and southern Nye County is in part of Clark County Region. For data purposes, Nye County data is included in Southern Nevada Region Report and not in the Clark County Region report.

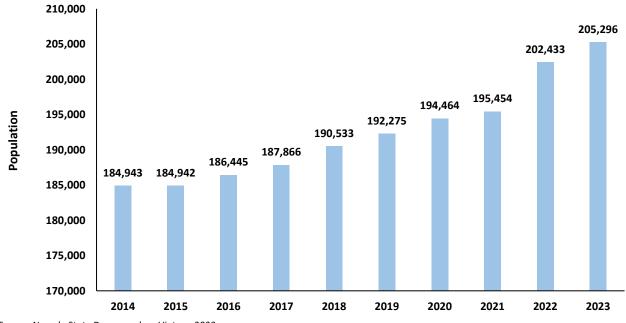
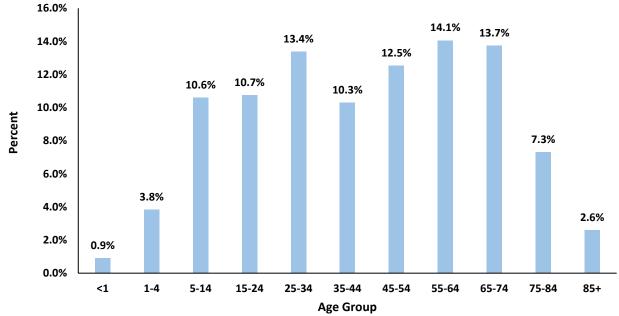


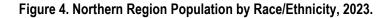
Figure 2. Northern Region Population, 2014-2023.

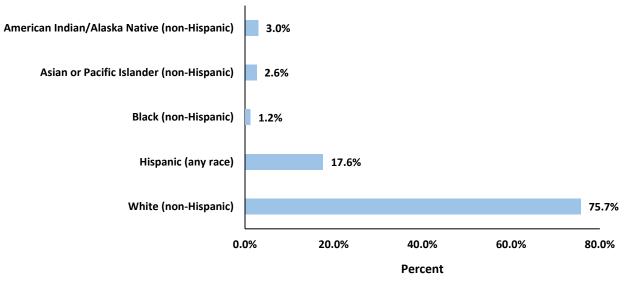
Source: Nevada State Demographer, Vintage 2023.





Source: Nevada State Demographer, Vintage 2023. Chart scaled to 16.0% to display differences among groups. White non-Hispanics comprise 75.7% of the Northern Region's population, followed by Hispanic (17.6%), American Indian/Alaska Native non-Hispanic (3.0%), Asian/Pacific Islander non-Hispanic (2.6%), and Black non-Hispanic (1.2%). The population was made up of approximately equal percent of females and males.





Source: Nevada State Demographer, Vintage 2023. Chart scaled to 80.0% to display differences among groups.

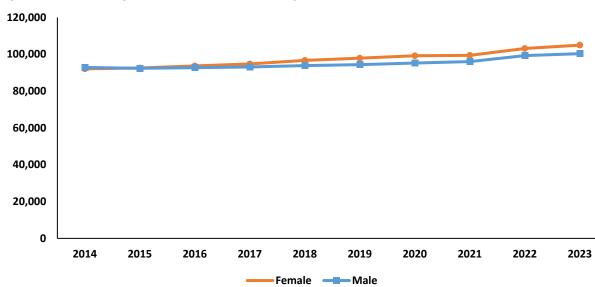


Figure 5. Northern Region Population Distribution by Sex, 2014-2023.

Source: Nevada State Demographer, Vintage 2023.

# **Mental Health**

Mental health data are collected by numerous data sources in Nevada, including YRBS, BRFSS, hospital billing, state-funded mental health facilities, and vital records.

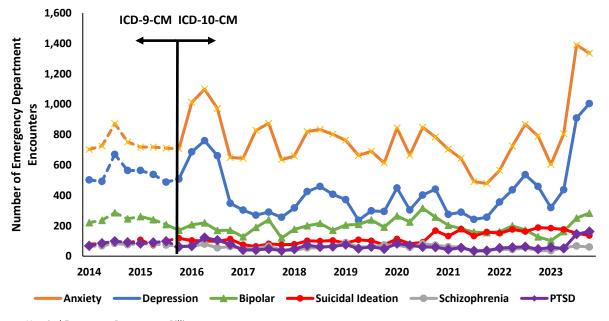
## Hospital Emergency Department Encounters

The hospital emergency department billing data include data for emergency room patients of all ages for Nevada's non-federal hospitals. There were 8,886 visits related to mental health disorders among Northern Region residents in 2023. Since an individual can have more than one diagnosis during a single emergency department encounter, the following numbers reflect the number of times a diagnosis in each of these categories was given, and therefore the following numbers are not mutually exclusive.

Anxiety has been the most common mental health-related diagnosis in emergency department encounters, followed by depression, with an average of 1,034 and 668 encounters per quarter in 2023, respectively. Both have had large spikes in 2023 and are the highest they have been.

For 2023, males (50.9%) had about an equal prevalence of schizophrenia as females (49.1%), whereas females had a higher prevalence of visits for anxiety (69.4%), depression (70.6%), bipolar (65.7%), suicidal ideation (52.0%), and PTSD (59.4%).





Source: Hospital Emergency Department Billing.

Categories are not mutually exclusive.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

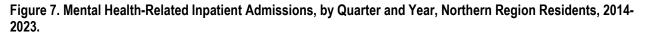
## Hospital Inpatient Admissions

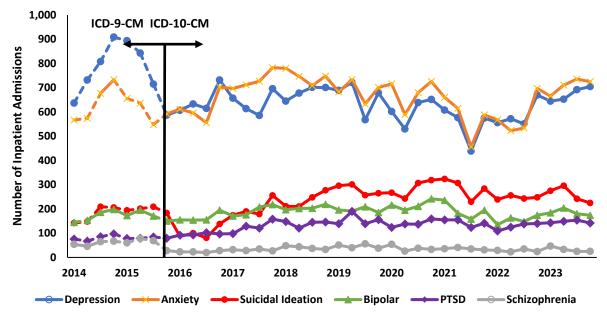
Hospital inpatient billing data includes data for patients of all ages discharged from Nevada's non-federal hospitals. There were 8,031 inpatient admissions related to mental health disorders among Northern Region residents in 2023. Since an individual can have more than one diagnosis during a single inpatient admission, the following numbers reflect the number of times a diagnosis was given, and therefore the following numbers are not mutually exclusive and do not represent unique visits.

Anxiety and depression are the top two diagnoses for mental health-related inpatient admissions from 2014 to 2023 with an average of 710 and 674 encounters per quarter in 2023, respectively.

For 2023, males had a higher prevalence of visits for schizophrenia (63.1%), whereas females had a higher prevalence of visits for anxiety (65.8%), depression (64.2%), PTSD (62.1%), suicidal ideation (56.7%), and bipolar (63.6%).

It should be noted that in 2016, inpatient admissions statewide dropped and then increased in 2017. This may be due to ICD-9-CM conversion to ICD-10-CM or other changes in medical billing.





Source: Hospital Inpatient Billing.

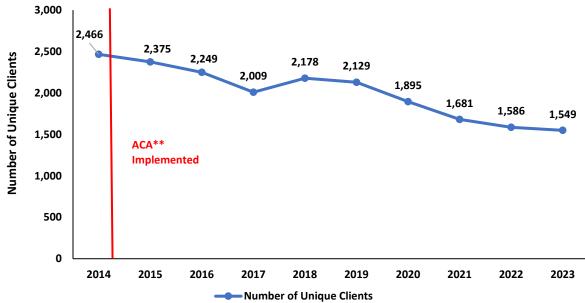
Categories are not mutually exclusive.

ICD-9-CM codes were replaced by ICD-10-CM codes in last guarter of 2015, therefore data prior to that may not be directly comparable.

# State-Funded Adult Mental Health Services

State-funded mental health facilities, those funded by Department of Health and Human Services' Division of Public and Behavioral Health, are divided into Northern Nevada Adult Mental Health Services (NNAMHS), Southern Nevada Adult Mental Health Services (SNAMHS), and Rural Clinic and Community Health Services. Services that state-funded mental health facilities provide include inpatient acute psychiatric, mobile crisis, outpatient counseling, service coordination, and case management. Services are not denied due to inability to pay.

The number of unique adult clients served by state-funded mental health facilities has declined since the implementation of the Affordable Care Act (ACA). The ACA helped insure a much larger proportion of Nevada's population, creating more avenues for the population to seek alternative mental health services covered through private insurance.





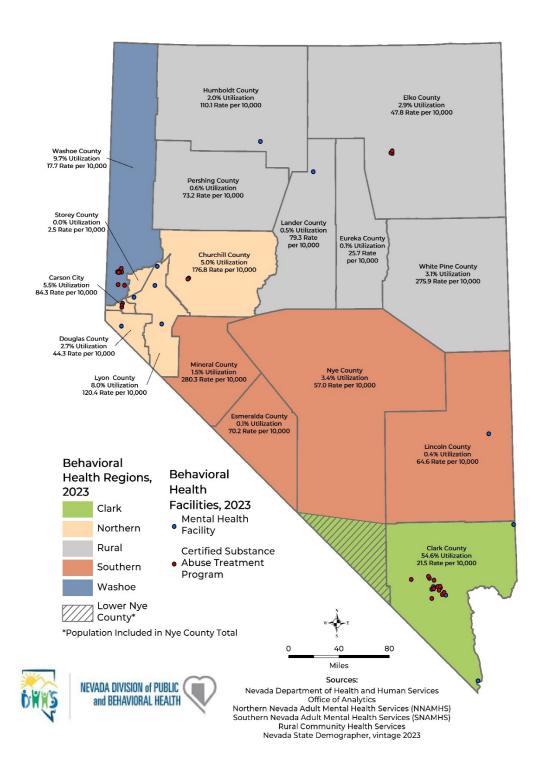
Source: Avatar.

\*A client is counted only once per year. Clients may be counted more than once across years.

\*\*Affordable Care Act.

Of the Nevada residents accessing state-funded adult mental health services in 2023, the Northern Region had a utilization of 21.2%.

Figure 9 below shows the percent of Nevada state-funded adult mental health utilization each county represents, the rate of utilization (per 10,000 population), the behavioral health regions, and the locations of mental health and substance abuse facilities.





Source: Avatar.

\*A client is counted only once per year. Clients may be counted more than once across years. **Percent (%)**: Number of clients who utilize mental health services in that county, divided by total utilization. **Rate**: Number of clients who utilize mental health services in that county divided by county population per 10,000 population. The Northern Region has had more females utilizing services than males. In 2023, 78.6 per 100,000 of the adult female population utilized the state-funded mental health clinics, compared to adult males at 43.4 per 100,000.

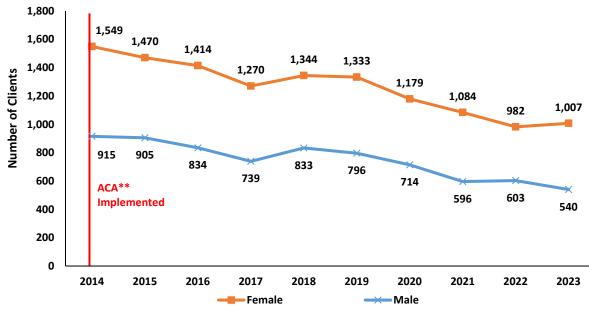
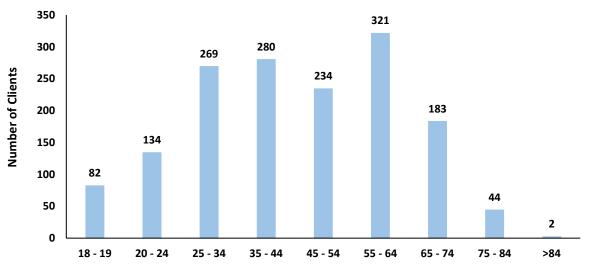


Figure 10. State-Funded Adult (Aged 18+\*) Mental Health Clinic Utilization\* by Sex, Northern Region Residents, 2014-2023.

Source: Avatar.

In 2023, the largest age group with mental health clinic utilization was 55-64, which differs from statewide trends where 25-34 was the largest age group.





Source: Avatar.

\*A client is counted only once per year. Clients may be counted more than once across years.

Department of Health and Human Services | March 2025

<sup>\*</sup>A client is counted only once per year. Clients may be counted more than once across years. \*\*Affordable Care Act Implemented in 2014.

Since 2014, the distribution of most racial and ethnic groups has remained relatively consistent. In 2023, American Indian or Alaska Native non-Hispanics (77.2 per 100,000) and White non-Hispanics (72.7 per 100,000) had the highest age-adjusted rates.

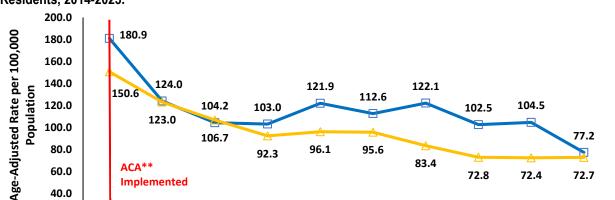


Figure 12. State-Funded Adult (Aged 18+\*) Mental Health Clinic Utilization\* by Race/Ethnicity, Northern Region Residents, 2014-2023.

20.0 0.0 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 White, non-Hispanic Black, non-Hispanic Hispanic ---Asian/ Pacific Islander, non-Hispanic

Source: Avatar.

Race "Unknown" not included in analysis.

\*A client is counted only once per year. Clients may be counted more than once across years.

\*\*Affordable Care Act Implemented in 2014

Table 2 below illustrates mental health services received from 2014-2023.

Table 2. Top Adult Mental Health Clinic Services by Number of Patients Served*, Northern Region Residents,	
2014-2023.	

Dregram	Year									
Program	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Carson Med Clinic	404	512	485	494	508	481	379	305	269	299
Carson OP Counseling	629	600	479	510	433	440	366	252	205	208
Carson OP Screening	58	268	315	358	328	370	146	2	1	146
Douglas Med Clinic	295	335	325	295	263	262	241	212	168	154
Douglas OP Counseling	405	375	336	245	194	243	203	160	108	111
Fallon Med Clinic	207	206	290	333	293	337	326	321	341	326
Fallon OP Counseling	324	231	329	344	285	242	175	132	160	145
Fernley Med Clinic	163	222	268	314	351	401	334	308	280	233

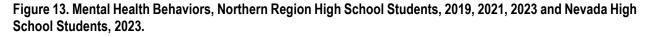
Source: Avatar.

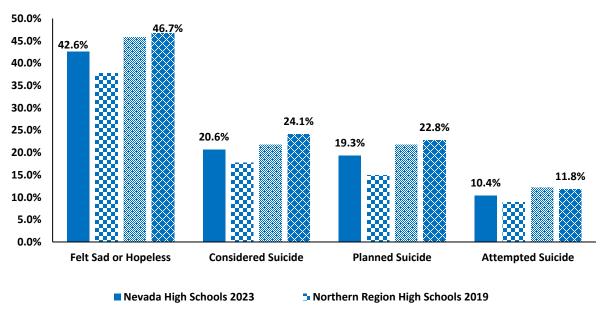
\*A client is counted only once per year. Clients may be counted more than once across years.

# Youth Risk Behavior Survey

The YRBS monitors six categories of health-related behaviors that contribute to leading causes of death and disabilities among youth and adults. Nevada high school and middle school students are surveyed during the odd years. In 2023, 1,145 high school students and 1,195 middle school students participated in the YRBS in the Northern Region. All data are self-reported. The University of Nevada, Reno, maintains the YRBS data and publishes data on each survey. For more information on the YRBS survey, refer to <u>UNR</u> <u>YRBS</u>.

The prevalence of all reported mental health outcomes for high school students was highest in 2023 except for attempted suicide, which was highest in 2021 at 12.1%. In 2023 the reported percents for all behaviors were higher for students in the Northern Region than for the state of Nevada in total. The trends are similar for Northern Region middle school students who also reported higher percents of all behaviors than those at the state level.



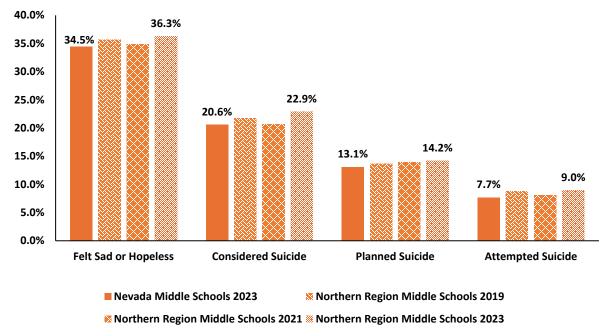


IN Northern Region High Schools 2021 IN Northern Region High Schools 2023

Chart scaled to 50.0% to display differences among groups.

Source: Nevada Youth Risk Behavior Survey (YRBS).





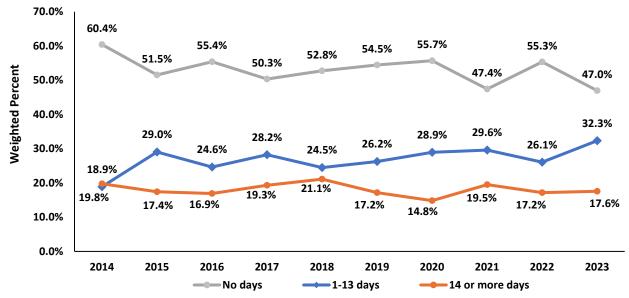
Source: Nevada Youth Risk Behavior Survey (YRBS). Chart scaled to 40.0% to display differences among groups.

## Behavioral Risk Factor Surveillance System

The BRFSS collects information on self-reported adult health-related risk behaviors. According to CDC, the BRFSS is a powerful tool for targeting and building health promotion activities.

Generally, adults who experience "no days" in which poor mental health or physical health prevented them from doing usual activities have decreased since 2014, while "1-13 days" days have increased. Adults who reported "14 or more days" have stayed relatively consistent compared to statewide trends.

Figure 15. Percent of Adult BRFSS Respondents Who Experienced Poor Mental or Physical Health that Prevented Them from Doing Usual Activities by Days Affected in Past Month, Northern Region Residents, 2014-2023.



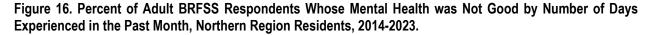
Source: Behavioral Risk Factor Surveillance System

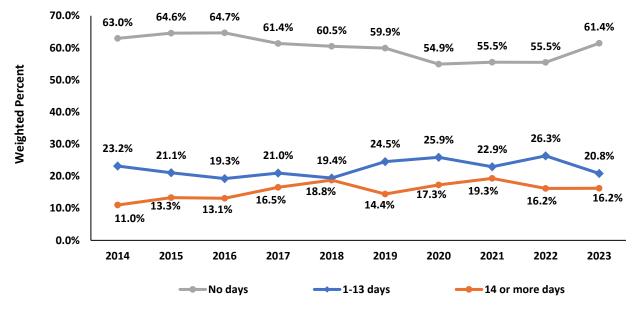
Chart scaled to 70.0% to display differences among groups.

Frequent physical or mental distress is defined as feeling emotionally unhealthy, very sad, anxious, or troubled for 14 or more days out of the past 30 days.

Specific question asked in survey: "During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?"

Generally, the number of adults who reported "14 or more" days in which their mental health was considered "not good" has increased, while "no days" has decreased with a spike in 2023. The prevalence of adults who experienced "14 or more days" reached its peak in 2021 at 19.3% but has remained below pandemic numbers since 2022.



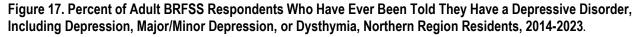


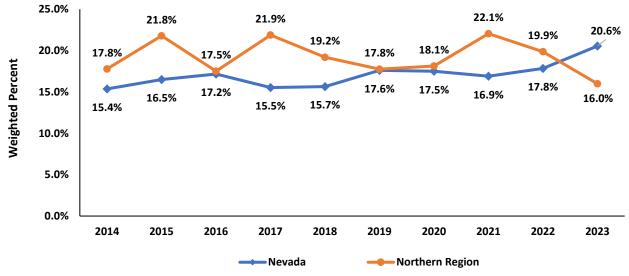
Source: Behavioral Risk Factor Surveillance System

Chart scaled to 70.0% to display differences among groups.

Frequent mental distress is defined as feeling emotionally unhealthy, very sad, anxious, or troubled for 14 or more days out of the past 30 days. Specific question asked in survey: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

The Northern Region has had a higher prevalence of those with depressive disorders than Nevada for all years up until an all-time low in 2023 (16.0%).





Source: Behavioral Risk Factor Surveillance System

Chart scaled to 25.0% to display differences among groups.

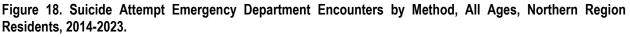
Specific question asked in survey: "(Ever told) you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?"

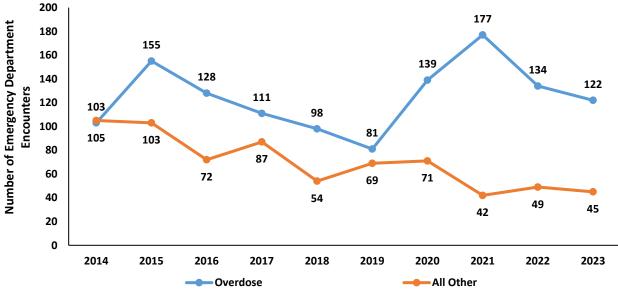
## Suicide

Mental health issues, along with factors such as adverse childhood experiences and substance use disorders, may disproportionally affect those who die by suicide.

The 988 Lifeline is available 24/7/365 for anyone dealing with mental health struggles, emotional distress, substance use concerns or thoughts of suicide. Call or text 988 or visit <u>988lifeline.org</u> to speak to a trained counsellor who can help to provide resources.

Emergency department encounters related to suicide attempts, where the patient did not die at the hospital, decreased from 2014 to 2019. The most common method for attempted suicide is substance or drug poisoning (including overdose), with a notable spike in such encounters in 2020 and 2021. All other methods include cutting/piercing, firearms, hanging/strangulation/suffocation, and jumping from heights.

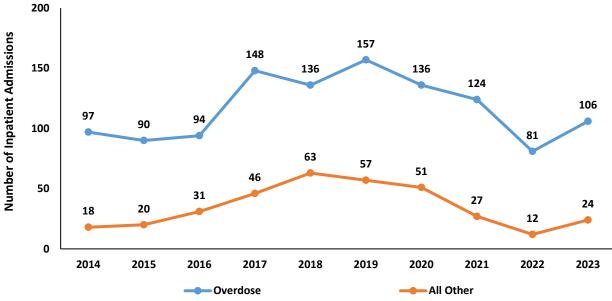




Source: Hospital Emergency Department Billing

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable. A person can be included in more than category and therefore the counts above are not mutually exclusive.

Inpatient admissions for non-fatal suicide attempts involving substances or drugs increased between 2014 and 2019, followed by a decline through 2022.





Source: Hospital Inpatient Billing

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable. A person can be included in more than category and therefore the counts above are not mutually exclusive.

The age-adjusted suicide rate for the Northern Behavioral Health Region in 2023 was 30.7 per 100,000 population. The rate for Nevada overall was 19.3 per 100,000 population and the national age-adjusted rate in 2022, the most recent year with complete CDC data, was 14.2 per 100,000 population.

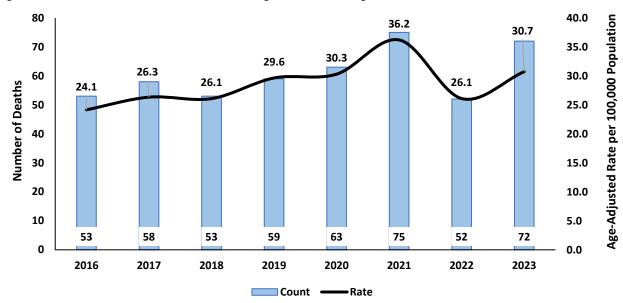


Figure 20. Number of Suicides and Rates, All Ages, Northern Region Residents, 2014-2023.

Source: Nevada Electronic Death Registry System.

# National Violent Death Reporting System

The National Violent Death Reporting System (NVDRS) is a CDC-funded program that collects information about violent deaths including homicides, suicides, and deaths caused by law enforcement acting in the line of duty (legal interventions). Data are collected from death certificates, coroner/medical examiner reports (including toxicology), and law enforcement reports. Data elements collected provide valuable context about violent deaths, such as relationship problems, mental health conditions and treatment, toxicology results, and life stressors, including recent money- or work-related or physical health problems.

From 2018-2022, there were 364 deaths among Northern Region residents reported in the Nevada Violent Death Reporting System (NVVDRS). Of those deaths, 82.7% (n=301) were suicides, 6.3% were homicides, 1.4% were legal interventions, and the remainder were categorized as undetermined.

Among the 301 suicides, the method was firearms in 63.5% of cases (n=191), 23.3% hanging/strangulation/suffocation, 8.3% overdose, 3.1% fall, 2.7% blunt/sharp instrument, and 1.0% other/unknown. About 77% of persons were male and 23% were female.

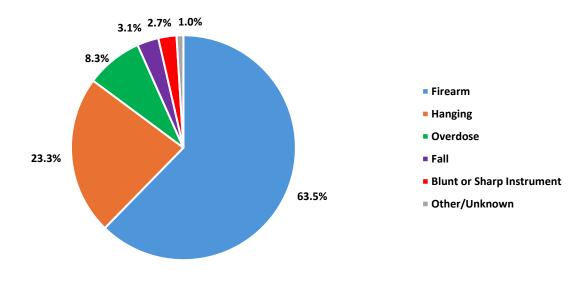
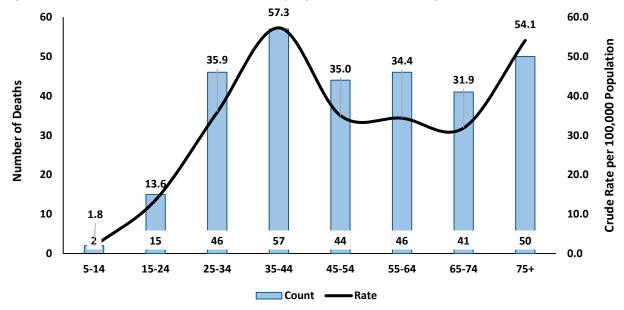


Figure 21. Method of Suicide Deaths, Northern Region Residents, 2018-2022.

Source: Nevada Violent Death Reporting System.

The rates of deaths by suicide were highest among the 35-44 age group (57.3 per 100,000 population) and the 75+ age group (54.1 per 100,000 population).





Source: Nevada Violent Death Reporting System

Of the 301 suicides among the Northern Region residents from 2018-2022 that were entered into NVDRS, 98.3% (n=296) had circumstantial information available. More than 38% of those suicides involved persons who had a history of ever being treated for a mental health or substance abuse problem; 34.8% had a history of suicidal thoughts or plans; 32.8% disclosed to another person their thoughts and/or plans to complete suicide within a month; 30.4% were perceived by self or others to be depressed at the time of injury; 28.0% had a physical health problem(s) that appeared to contribute to the death; 22.6% had a history of attempting suicide; and 19.3% had problems with a current or former intimate partner that appeared to contribute to the death.

## Figure 23. Circumstances Among Suicide Deaths, Northern Region Residents, 2018-2022.

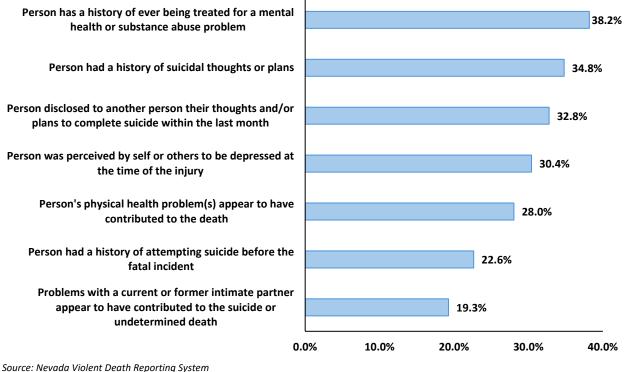
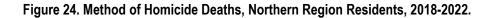
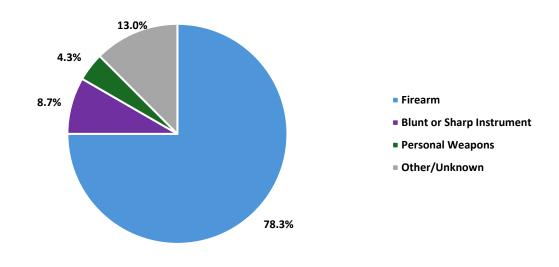


Chart scaled to 40.0% to display differences among groups.

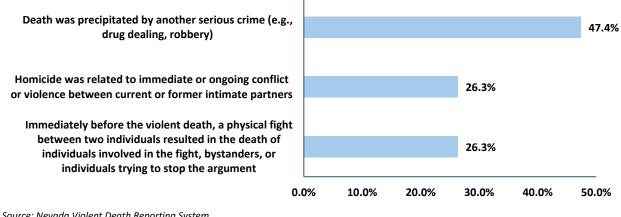
Among the 23 homicides, the method was firearms in 78.3% of cases; 8.7% blunt/sharp instrument; 4.3% personal weapons; and 13.0% other/unknown. Males accounted for 69.6% of homicide victims, and 30.4% were females.





Source: Nevada Violent Death Reporting System

Of the 23 homicides among the Northern Region residents from 2018-2022 that were entered into NVDRS, 82.6% (n=19) had circumstantial information available. Of those homicides, 47.4% were precipitated by another serious crime, such as drug dealing or robbery; 26.3% were related to immediate or ongoing conflict or violence between current or former intimate partners; and 26.3% involved a physical fight immediately before the homicide.



## Figure 25. Circumstances Among Homicide Deaths, Northern Region Residents, 2018-2022.

Source: Nevada Violent Death Reporting System Chart scaled to 50.0% to display differences among groups.

# Mental Health-Related Deaths

Mental health-related deaths are deaths with the following ICD-10 code groups listed as a contributing cause of death (F00-F99 excluding F10-F19):

- Organic, including symptomatic, mental disorders
- Schizophrenia, schizotypal and delusional disorders
- Mood [affective] disorders
- Neurotic, stress-related and somatoform disorders
- Behavioral syndromes associated with physiological disturbances and physical factors
- Disorders of adult personality and behavior
- Intellectual disabilities
- Disorders of psychological development
- Behavioral and emotional disorders with onset usually occurring in childhood and adolescence
- Unspecified mental disorder

Mental health-related deaths in the Northern Region for 2023 occurred at an age-adjusted rate of 61.7 per 100,000 population, with a death count of 211 persons. This rate is substantially higher than the rate for the state in total of 54.5 per 100,000.

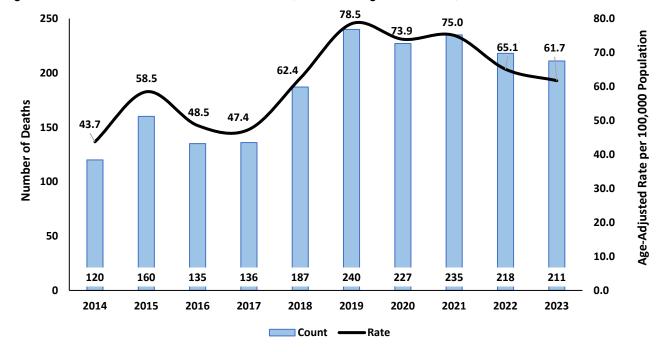


Figure 26. Mental Health-Related Deaths and Rates, Northern Region Residents, 2014-2023.

Source: Nevada Electronic Death Registry System.

# **Substance Use**

# Opioids

Opioids are a class of drugs that act on the nervous system to relieve pain. They work by binding to opioid receptors in the brain, spinal cord, and other areas of the body, reducing the intensity of pain signals and affecting areas of the brain that control emotion. This release of endorphins lessens in intensity the longer they are taken, as the body builds a tolerance.

Throughout the 1990s, overdose deaths nationwide shifted from being primarily driven by illegal street drugs, such as heroin, to prescription opioids. This was, at least partially, caused by the over-prescription of opioids for pain management.

In response to increased government oversight of these prescriptions, a second wave of overdose deaths emerged in 2010, mainly involving heroin. This was followed by another surge in overdose deaths, this time involving synthetic opioids including fentanyl and fentanyl analogs (IMFs). Synthetic opioids became the leading cause of overdose deaths in the United States starting 2016.<sup>1</sup>

In 2017, the U.S. Department of Health and Human Services (HHS) officially declared the opioid crisis a public health emergency. In response to this crisis, Nevada introduced <u>Assembly Bill 474</u>, which went into effect on January 1, 2018. This bill placed stricter requirements on the prescription of controlled substances. Additionally, the Nevada Board of Health adopted regulations requiring the reporting of drug overdoses by physicians, physician assistants, nurses, and veterinarians to the State's Chief Medical Officer.<sup>2</sup> Nevada AB 474 has led to measurable outcomes. Figures 27 and 28 below show the sharp decline in the number and rate of both opioid and controlled substance prescriptions in the state since 2017. These Nevada trends reflect the broader national picture of decreased prescription and utilization of opioids.

Per <u>NRS 453.226</u> (as revised by AB 474) prescribers with a controlled substance prescribing license are required to register with the Prescription Drug Monitoring Program (PDMP). The PDMP is a state-operated, CDC-supervised electronic database that monitors the prescribing and dispensing of controlled substances. It serves as a tool to identify and prevent drug misuse while equipping healthcare providers and public health authorities with timely insights into patient prescription behaviors.

In addition to opioids, Nevada's Prescription Drug Monitoring Program tracks information about all Schedule II–V prescriptions dispensed to patients in the state. These drugs are classified as having accepted medical use and, at minimum, a low potential for abuse and risk of dependence. Schedule I drugs, such as ecstasy, heroin, lysergic acid diethylamide (LSD), and marijuana, are not included in the PDMP because they are defined as having no accepted medical use and a high potential for abuse.

Note that PDMP rates are presented per 1,000 population, which is the standard for this measure, unlike most rates in this report, which are calculated per 100,000 population.

<sup>&</sup>lt;sup>1</sup> The Opioid Crisis | NIH HEAL Initiative

<sup>&</sup>lt;sup>2</sup> <u>Prescription Drug Abuse Prevention (nv.gov)</u>

PDMP total prescriptions among Northern Region residents have decreased markedly from a rate of 1,664.2 per 1,000 population in 2017 to 916.8 per 1,000 population in 2023.

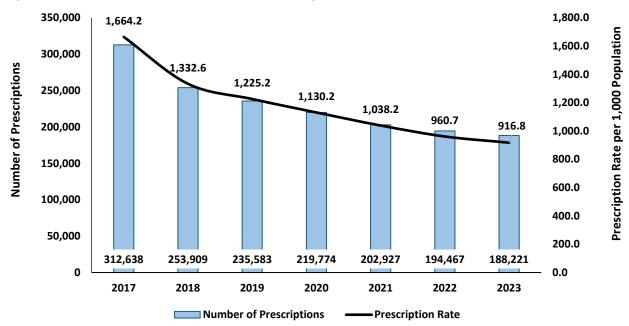


Figure 27. Total Prescriptions and Rates, Northern Region Residents 2017-2023.

Source: Prescription Drug Monitoring Program.

Mirroring total prescription trends, total opioid prescriptions have decreased from an age-adjusted rate of 1,032.5 per 1,000 population in 2017 to 549.8 per 1,000 population in 2023.

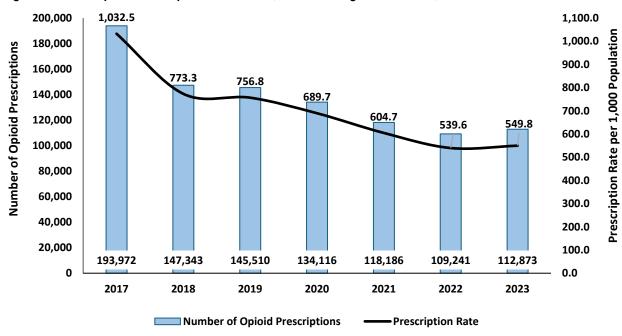
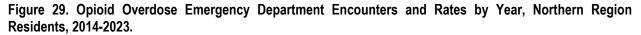


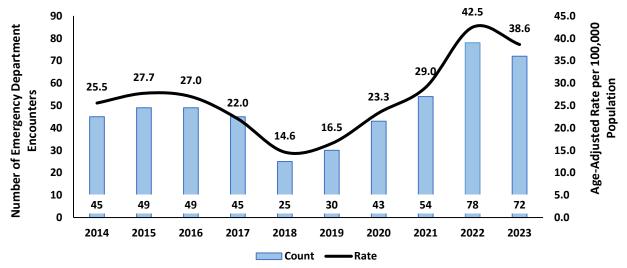
Figure 28. Total Opioid Prescriptions and Rates, Northern Region Residents, 2017-2023.

Source: Prescription Drug Monitoring Program.

## Hospital Emergency Department Encounters

While total opioid prescriptions among Nevada residents decreased since 2017, opioid overdose emergency department encounters have notably increased since 2018, with the highest rate in 2022, at 42.5 per 100,000 population. This trend suggests that there are other factors driving opioid misuse.

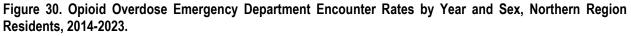


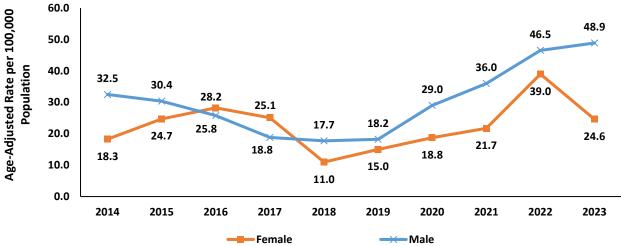


Source: Hospital Emergency Department Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Opioid overdose emergency department encounter rates for both females and males increased from 2018 through 2022.

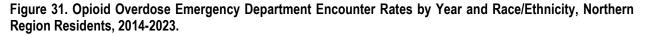


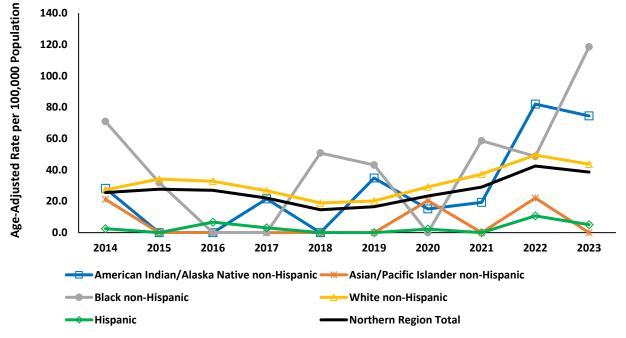


Source: Hospital Emergency Department Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Opioid overdose emergency department encounter rates among White non-Hispanics have been consistently higher than the overall regional rate. Note that the rate fluctuations among other racial/ethnic groups are a result of high volatility due to the relatively low population of these demographic in the region and should not be taken as a significant change from the other years in the reporting period.



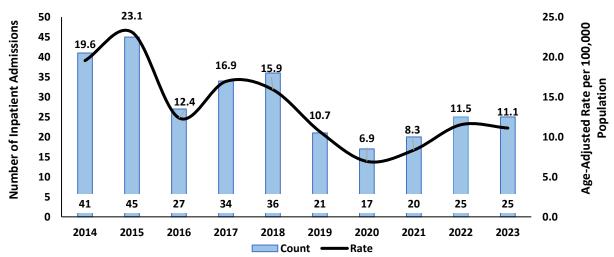


Source: Hospital Emergency Department Billing.

Categories are not mutually exclusive.

#### Hospital Inpatient Admissions

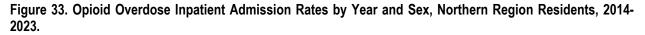
Opioid-related inpatient admission rates decreased between 2014 to 2023.

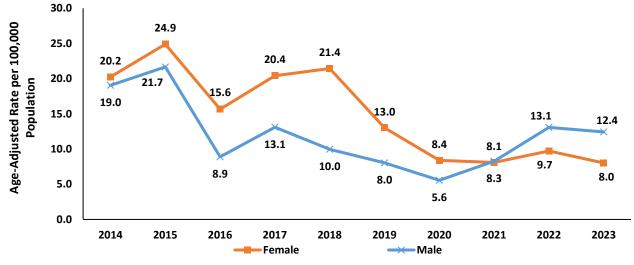




Source: Hospital Inpatient Billing. ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

The inpatient admission rate for opioid overdoses has decreased for both men and women since the start of the reporting period. The highest rate for both sexes was recorded in 2015 at 24.9 and 21.7 per 100,000 for female and male populations, respectively.





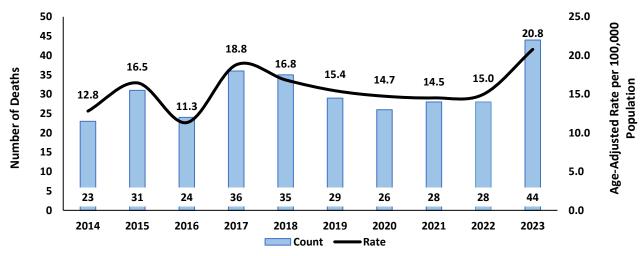
Source: Hospital Inpatient Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Due to volatility in rates of opioid overdose inpatient admissions by race/ethnicity because of the relatively smaller populations in the Northern Region, the associated figure has been omitted.

#### Opioid Overdose Deaths

Opioid overdose deaths have significantly increased from 2020 to 2023, mirroring the rise in emergency room encounters starting in 2019 and inpatient admissions starting in 2022. This sharp increase may reflect a worsening opioid epidemic, with the rise of emergency room encounters providing an early indicator of overdose trends.





Source: Nevada Electronic Death Registry System.

Opioid overdose deaths by sex in the Northern Region also reflect trends in emergency department encounters and impatient admissions. There is a notable increase among males starting in 2021. This suggests that while opioid crisis among females has not worsened, males have been disproportionately affected.

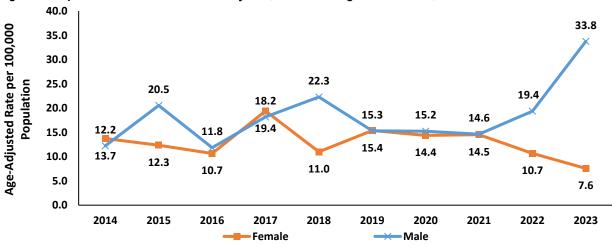


Figure 35. Opioid Overdose Death Rates by Sex, Northern Region Residents, 2014-2023.

Source: Nevada Electronic Death Registry System.

Due to volatility in rates of opioid overdose deaths by race/ethnicity because of the relatively smaller populations in the Northern Region, the associated figure has been omitted.

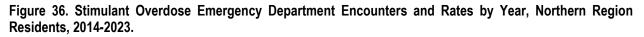
### Stimulants

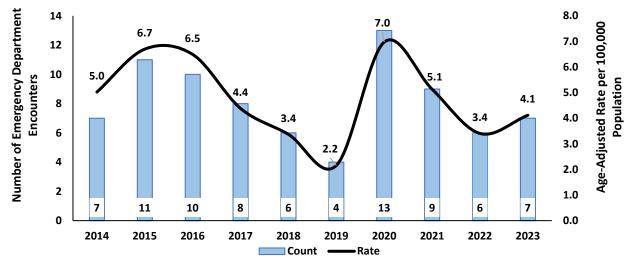
Stimulants are a class of drugs that accelerate communication between the brain and body, often making individuals feel more awake, alert, confident, or energetic. They include legal substances like caffeine and prescription medications such as dexamphetamines, Adderall, and methylphenidate (Ritalin), as well as illicit substances like methamphetamines, speed, and cocaine.

In addition to the risk of death from overdose, long term misuse of stimulants can lead to a variety of health effects including permanent damage to the heart and brain, high blood pressure, and damage to internal organs.<sup>3</sup>

#### Hospital Emergency Department Encounters

The rate of stimulant overdose emergency department encounters has varied over the reporting period, in part because the number of stimulant overdoses is relatively small compared to opioids.

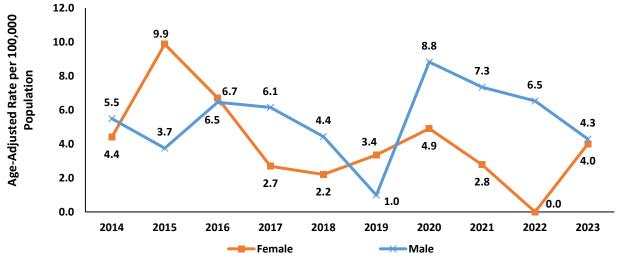




Source: Hospital Emergency Department Billing.

<sup>&</sup>lt;sup>3</sup> What are Stimulants? Side Effects, Short- and Long-Term Risks | SAMHSA

The rate of stimulant overdose emergency department encounters for both males and females are largely comparable throughout the reporting period. The high volatility is due to the low population in the Northern Region as well as the low count of emergency department instances.

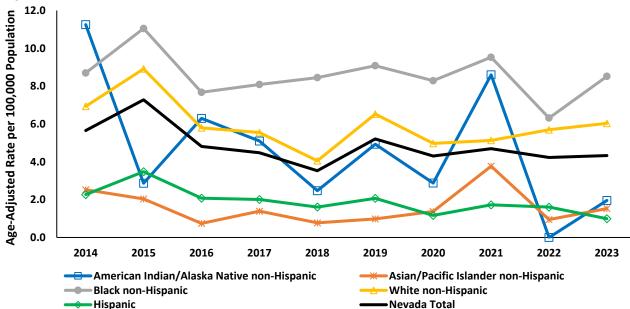




Source: Hospital Emergency Department Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Similar to opioids, White non-Hispanics and Black non-Hispanics experience higher rates of stimulant overdose-related emergency room encounters compared to the overall regional rates. However, unlike opioids, Black non-Hispanics have a higher rate of these encounters than White non-Hispanics.





Source: Hospital Emergency Department Billing.

#### Hospital Inpatient Admissions

Unlike opioid- or alcohol-related overdoses, which result in higher counts and rates of emergency department encounters, stimulant overdoses are more associated with higher inpatient admission rates. The rates for the Northern Region peaked in 2014 and 2015.

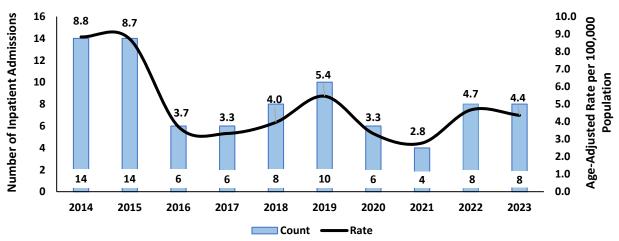


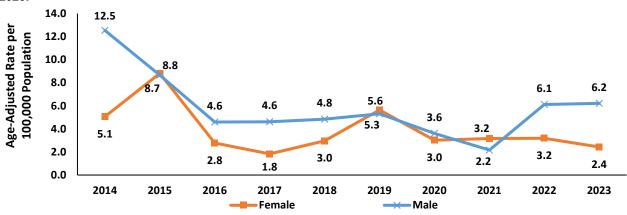
Figure 39. Stimulant Overdose Inpatient Admissions and Rates by Year, Northern Region Residents, 2014-2023.

Source: Hospital Inpatient Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

From 2014 to 2023 the inpatient admission rates for both males and females are largely comparable throughout the reporting period. The high volatility is due to the low population in the Northern Region as well as the low count of admissions.





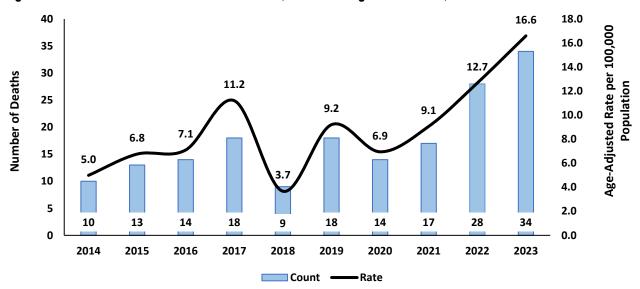
Source: Hospital Inpatient Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Due to volatility in rates by race/ethnicity because of the relatively smaller populations in the Northern Region, the associated figure for inpatient admissions has been omitted.

#### Stimulant Overdose Deaths

The rates of stimulant-related overdose deaths have increased since 2014, resulting in a 323% overall increase from 2014 to 2023.





Source: Nevada Electronic Death Registry System.

Since 2014, stimulant overdose death rates have increased among both males and females. The male death rate increased substantially from 2021 to 2023 to a high of 26.7 per 100,000 population.

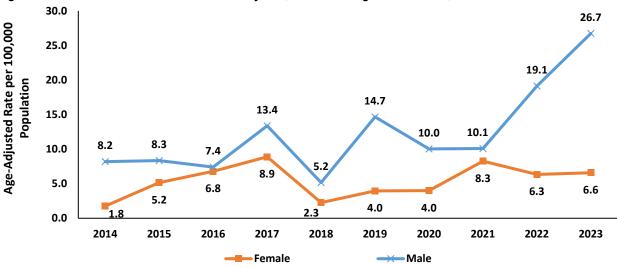


Figure 42. Stimulant Overdose Death Rates by Sex, Northern Region Residents, 2014-2023.

Source: Nevada Electronic Death Registry System.

Due to volatility in stimulant overdose death rates by race/ethnicity because of the relatively smaller populations in the Northern Region, the associated figure has been omitted.

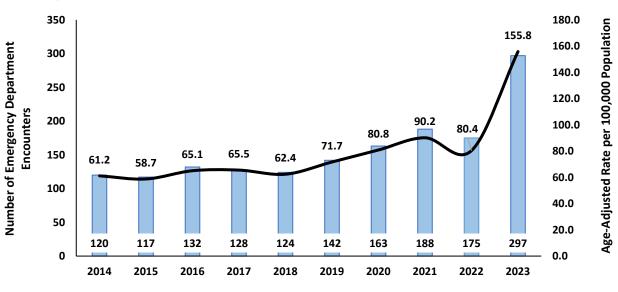
## Chronic Alcohol Conditions

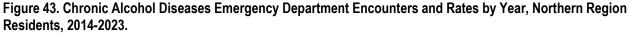
There are many chronic conditions and diseases that can occur from long-term misuse of alcohol and contribute to an increased mortality rate for those users. These include multiple types of cancer (throat, colon, liver, and breast cancer), heart disease, liver disease, high blood pressure, and strokes.

In contrast to the trends for alcohol overdoses, hospital encounters for chronic conditions related to alcohol use have consistently increased since 2016 with some notable high points in the years following the COVID-19 pandemic. Deaths attributable to diseases of chronic alcohol misuse also increased throughout the pandemic.

#### Hospital Emergency Department Encounters

Emergency department encounters for alcohol-related diseases have increased substantially over the reporting period, with the rate reaching a high in 2023 of 155.8 per 100,000 population.





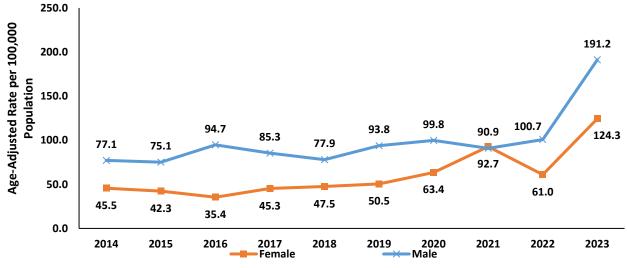
Source: Hospital Emergency Department Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Count — Rate

The rates for both females and males have increased over the reporting period, reflecting the overall trend. The rate for both sexes reached a high in 2023 of 191.2 per 100,000 and 124.3 per 100,000 for men and women, respectively.



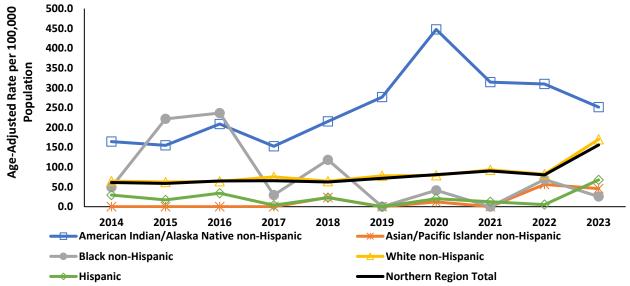


Source: Hospital Emergency Department Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

The rate of chronic alcohol diseases is higher for American Indian/Alaska Native non-Hispanics than for any other racial/ethnic group in the Northern Region or the overall rate for Nevada. Indigenous people are disproportionately likely to be seen in the ER or admitted inpatient for treatment for these conditions compared to other groups.

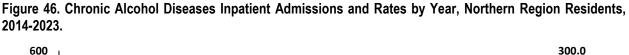


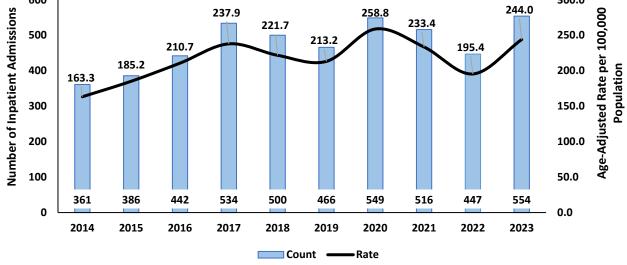


Source: Hospital Emergency Department Billing.

#### Hospital Inpatient Admissions

Following the trend seen in emergency departments, there has also been an increase over the reporting period in inpatient admissions for chronic conditions due to alcohol use.

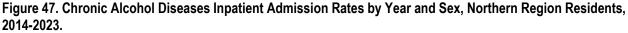


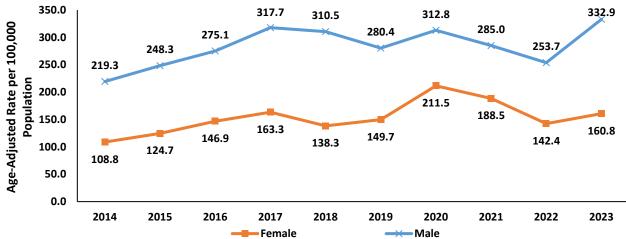


Source: Hospital Inpatient Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

The rate for men has remained significantly higher than that of women for the duration of the reporting period.

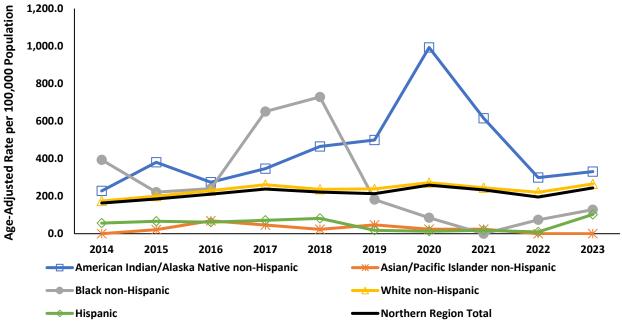




Source: Hospital Inpatient Billing.

As with emergency department encounters, American Indian/Alaska Native non-Hispanics had a rate of inpatient admissions that was higher than the total rate for the Northern Region in all years of the reporting period.





Source: Hospital Inpatient Billing.

#### Chronic Alcohol Diseases Deaths

Deaths related to chronic diseases from alcohol increased between 2014 and 2021 to a reporting period high of 31.3 per 100,000 population.

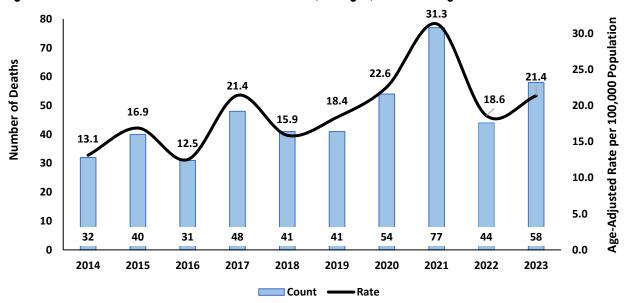


Figure 49. Chronic Alcohol Diseases Deaths and Rates, All Ages, Northern Region Residents 2014-2023.

Source: Nevada Electronic Death Registry System.

The rate of deaths from these conditions is higher for men than it is for women in all years of the reporting period except 2014.

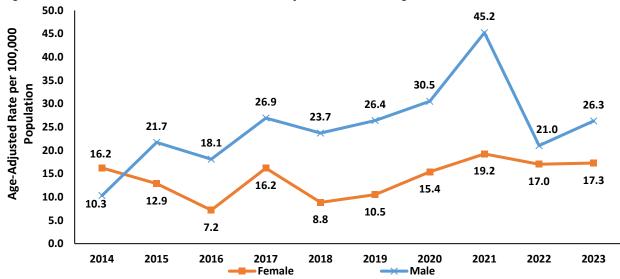


Figure 50. Chronic Alcohol Diseases Death Rates by Sex, Northern Region Residents 2014-2023.

Source: Nevada Electronic Death Registry System.

While it should again be noted that the relatively small population of indigenous people in the Northern Region population can lead to volatility in rates per 100,000, the rate of death for this demographic due to these chronic conditions is significantly higher than any other demographic the Northern Region as a whole for the years 2019-2023.

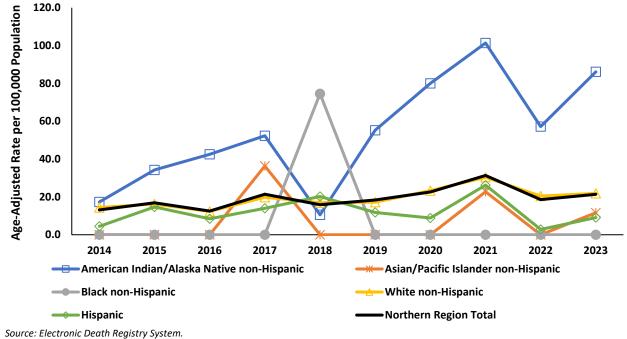


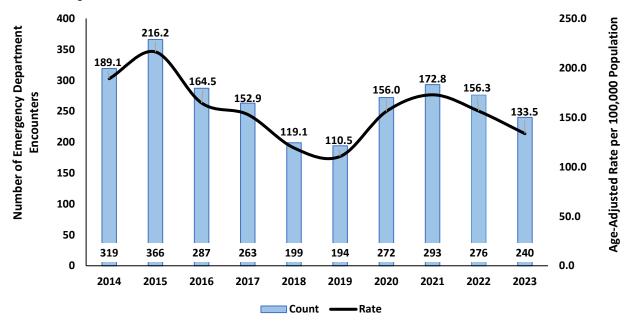
Figure 51. Chronic Alcohol Diseases Death Rates by Race/Ethnicity, Northern Region Residents 2014-2023.

## Alcohol- and/or Drug-Related Overdoses

This section combines alcohol with all other substances including opioids, stimulants, hallucinogens, and other prescription medications to present a broader picture of overdose-related hospitalizations and deaths across Nevada. Much like the data presented above, there is an overall decreasing trend in in the rate of emergency department encounters and inpatient admissions while associated deaths have increased.

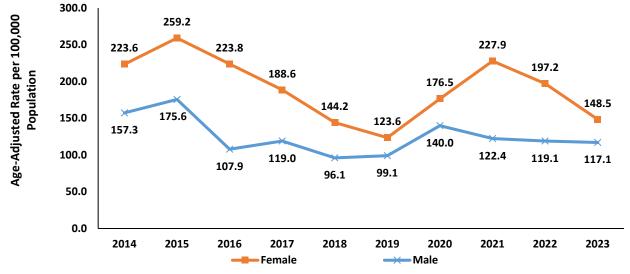
#### Hospital Emergency Department Encounters

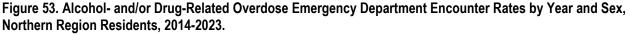
Figure 52. Alcohol- and/or Drug-Related Overdose Emergency Department Encounters and Rates by Year, Northern Region Residents, 2014-2023.



Source: Hospital Emergency Department Billing.

From 2014 to 2023, females consistently had higher rates of alcohol- and drug-related overdose emergency department encounters compared to males.

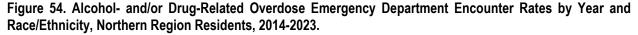


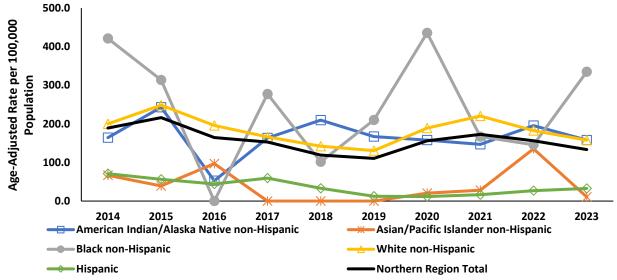


Source: Hospital Emergency Department Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

The White non-Hispanic population consistently had higher rates of alcohol- and drug-related overdose emergency department encounters compared to other race/ethnicities. Note that the rate fluctuations among other racial/ethnic groups are a result of high volatility due to the relatively low population of these demographic in the region and should not be taken as a significant change from the other years in the reporting period.

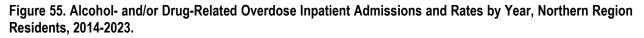


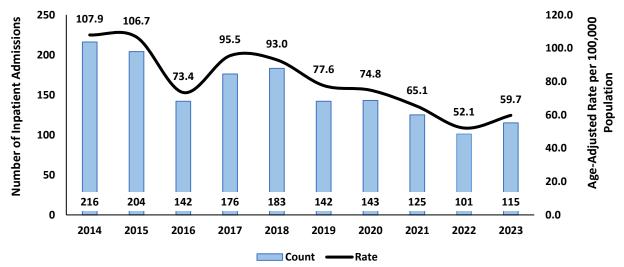


Source: Hospital Emergency Department Billing.

#### Hospital Inpatient Admissions

The rate of alcohol- and drug-related overdose inpatient admissions had experienced a downward trend since 2017, with the lowest rate occurring in 2022, at 52.1 per 100,000 population.

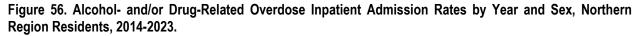


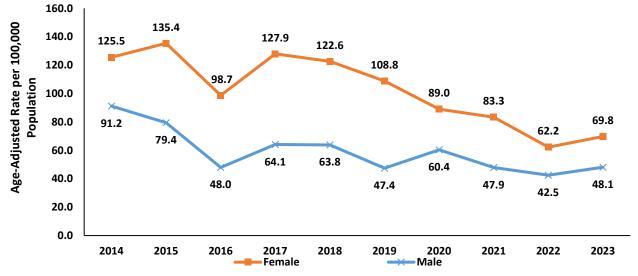


Source: Hospital Inpatient Billing.

ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

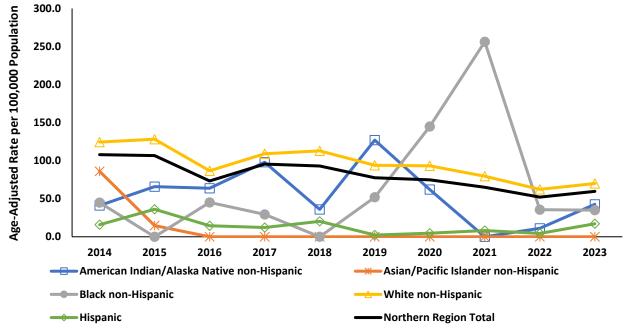
Following the same trend as emergency department encounters, females consistently had higher rates of alcohol- and drug-related inpatient admissions compared to males.

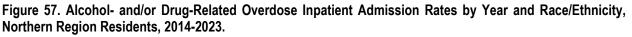




Source: Hospital Inpatient Billing.

Following the same trend as emergency department encounters, the White non-Hispanic population consistently had higher rates of alcohol- and drug-related overdose emergency department encounters compared to other race/ethnicities. Note that the rate fluctuations among other racial/ethnic groups are a result of high volatility due to the relatively low population of these demographic in the region and should not be taken as a significant change from the other years in the reporting period.





Source: Hospital Inpatient Billing.

## Alcohol- and/or Drug-Related Overdose Deaths

This section includes deaths of all ages where alcohol overdose or drug overdose is listed as the primary cause of death. In 2023, there were 68 such deaths in the Northern Region. Both the number of these deaths and the age-adjusted rate have been increasing since 2021

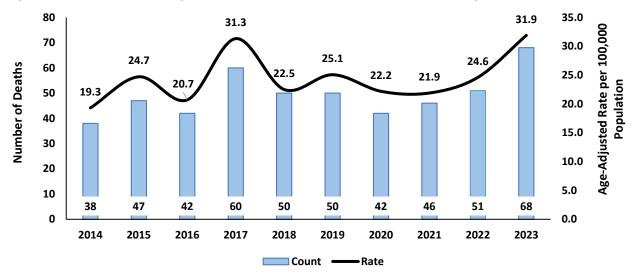


Figure 58. Alcohol- and/or Drug-Related Overdose Deaths and Rates, Northern Region Residents, 2014-2023.

Source: Electronic Death Registry System.

Historically, rates for both sexes have been comparable in the Northern Region. Between 2021 and 2023 a notable disparity has emerged with the rate for men increasing dramatically.

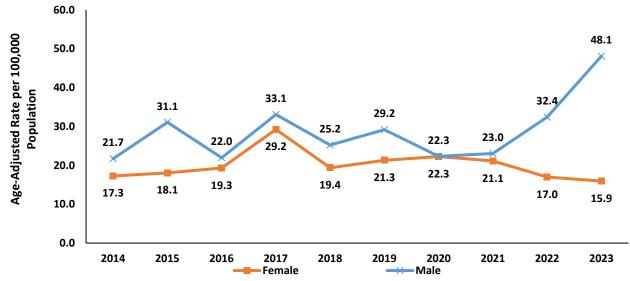


Figure 59. Overdose Death Rates by Sex, Northern Region Residents 2014-2023.

Source: Electronic Death Registry System.

The White non-Hispanic population consistently had higher rates of alcohol- and drug-related overdose deaths compared to other race/ethnicities. Note that the rate fluctuations among other racial/ethnic groups are a result of high volatility due to the relatively low population of these demographic in the region and should not be taken as a significant change from the other years in the reporting period.

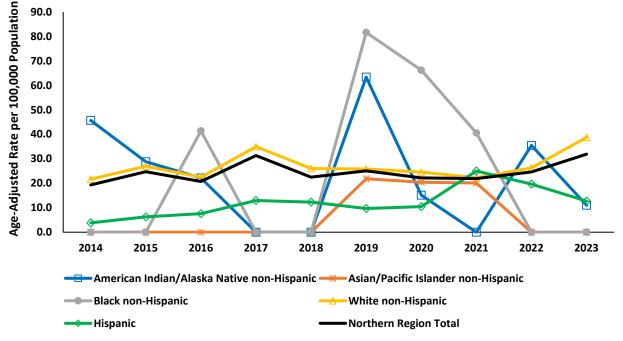


Figure 60. Overdose Death Rates by Race/Ethnicity, Northern Region Residents 2014-2023.

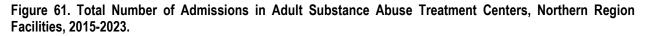
Source: Electronic Death Registry System.

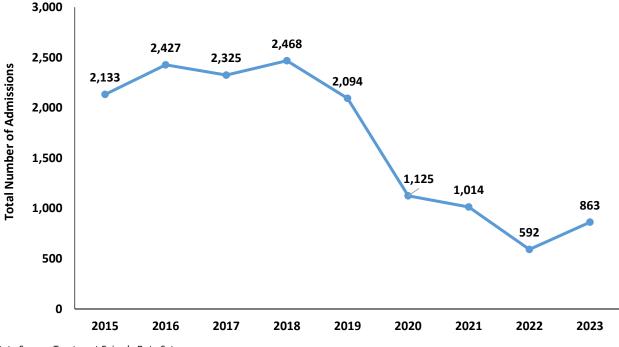
## Substance Use Treatment Centers

Treatment Episode Data Sets (TEDS) are a compilation of demographic and drug history information on adult persons who are receiving publicly funded substance use and/or mental health services. The state role in submitting TEDS to the Substance Abuse and Mental Health Services Administration (SAMHSA) is critical, since TEDS is the only national data source for client-level information on persons who use substance use treatment services.

The number of admissions to Northern Region state-funded substance use treatment facilities in the northern region peaked in 2018, decreased through 2022, and increased in 2023.

In 2021, Medicaid reduced copayment requirements for opioid use disorder (OUD) medications and expanded coverage to include all states covering buprenorphine, oral naltrexone, and injectable naltrexone. Additionally, utilization management policies, such as quantity limits and prior authorizations, were decreased. These changes from 2017 through 2021, along with policies from the Affordable Care Act, the Obama administration, and the 2018 SUPPORT Act, have significantly expanded Medicaid's role in substance use disorder (SUD) care<sup>4</sup>.

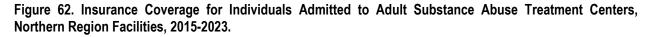


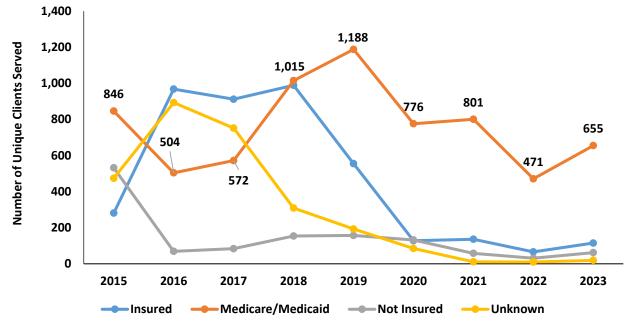


Data Source: Treatment Episode Data Sets.

Among all insured individuals admitted to state-funded substance use treatment facilities, 46% are covered by Medicaid or Medicare. This utilization rate is in line with expectations as TEDS data represents state-funded safety-net services.

<sup>&</sup>lt;sup>4</sup> SAMHSA - Medicaid Coverage of Medications, OUD)



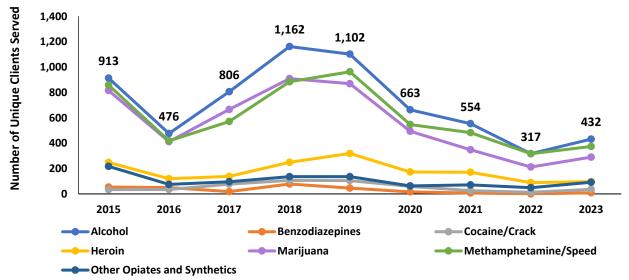


Data Source: Treatment Episode Data Sets.

Alcohol and methamphetamine/speed were the most frequently reported primary substances among individuals admitted to a Nevada state-funded substance use treatment facility in the Northern Region from 2015-2023, followed by marijuana.

These counts of primary substance at admission are not mutually exclusive as clients could be admitted with current use of multiple substances.

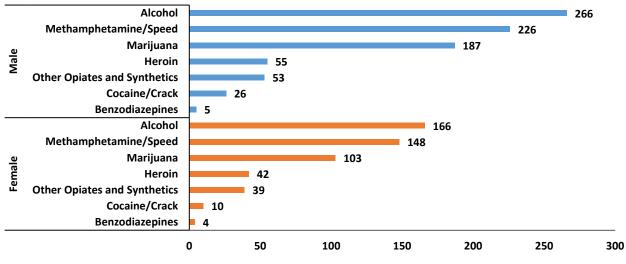




Data Source: Treatment Episode Data Sets.

Department of Health and Human Services | March 2025

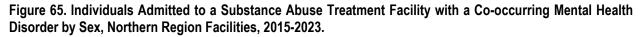
Alcohol was the primary substance reported for both males and females admitted from 2015-2023, followed by methamphetamine and then marijuana. This is in comparison to national TEDS data from 2018-2022 where the primary substances were alcohol followed by heroin. This indicates that methamphetamines have a higher utilization in the Northern Region compared to the U.S.

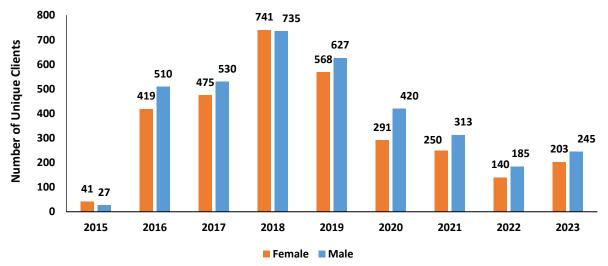




Data Source: Treatment Episode Data Sets.

Co-occurring mental health disorders are frequently observed among individuals admitted to substance use treatment facilities. Compared to statewide numbers, co-occurring mental health disorder admissions have decreased over time since peaking in 2018. Males still are predominantly diagnosed with a co-occurring mental health disorder than females.





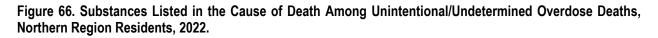
Data Source: Treatment Episode Data Sets.

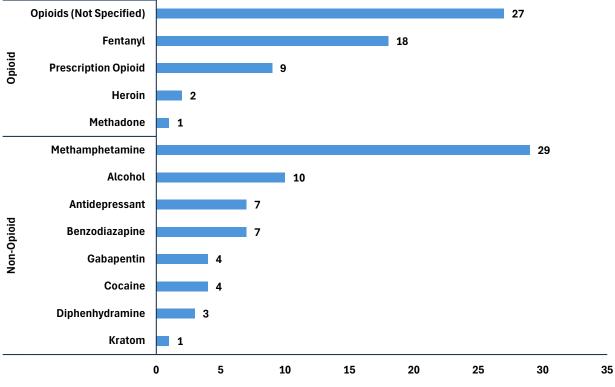
## SUDORS

The State Unintentional Drug Overdose Reporting System (SUDORS) tracks data related to fatal druginvolved overdoses in Nevada. SUDORS uses 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 that may be associated with a fatal overdose.

Of the 51 total drug overdose deaths of unintentional/undetermined intent among Northern Region residents in 2022, decedents were mostly male, white, and were a high school graduate or had a completed GED.

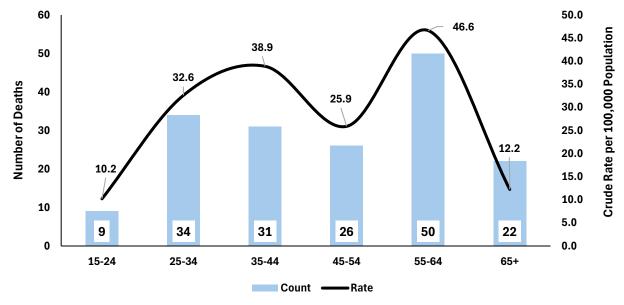
Overdose deaths have risen from 37 in 2019 to 51 in 2022. This represents an increase from around 19 such deaths per 100,00 population to a rate of over 25 per 100,000. Opioids were listed in the cause of death for 53% of cases (type not specified). Fentanyl was listed in about 35% of cases, prescription opioids were listed in the cause of death in 18% of cases, heroin was listed in about 4% of cases. Methamphetamine was also listed as one of the substances in the cause of death in 57% of cases reported.





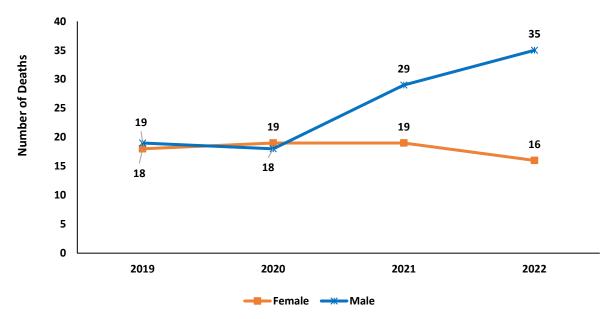
Source: SUDORS.





Source: SUDORS.

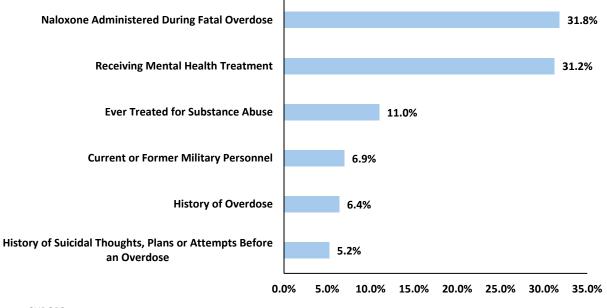
Figure 68. Total Number of Unintentional/Undetermined Overdose Deaths by Sex, Northern Region Residents, 2019-2022.



Source: SUDORS.

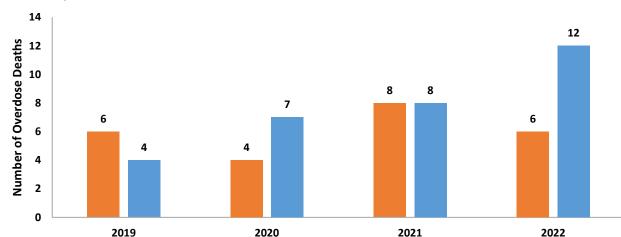
Roughly 32% of persons in the SUDORS dataset had naloxone administered during the fatal overdose, and over 31% had been receiving mental health treatment services. About 6.4% of cases had a documented prior history of overdose.

## Figure 69. Circumstances Preceding Unintentional/Undetermined Overdose Deaths, Northern Region Residents, 2019-2022.

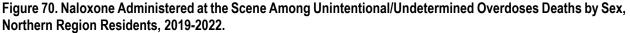


Source: SUDORS. Chart scaled to 35.0% to display differences among groups.

Narcan is a brand name for naloxone, a medication designed to quickly reverse the effects of an opioid overdose. It works by attaching to the same brain receptors that opioids, such as heroin, fentanyl, or prescription painkillers, target, thereby reversing life-threatening symptoms like slowed or halted breathing. Narcan can be administered via injection or nasal spray, and it is commonly used by first responders, healthcare professionals, and even bystanders during emergencies. By counteracting the dangerous respiratory depression caused by opioids, Narcan can help save lives.

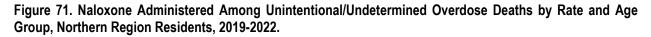


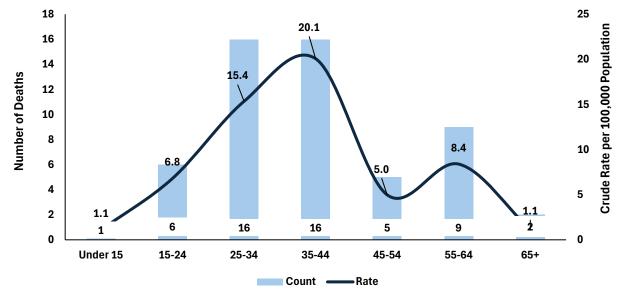
Female Male



Source: SUDORS.

The combined 25-44 age groups comprise the highest number of deaths and the highest rate of naloxone administered.





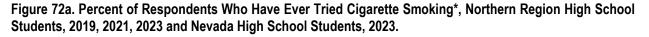
Source: SUDORS.

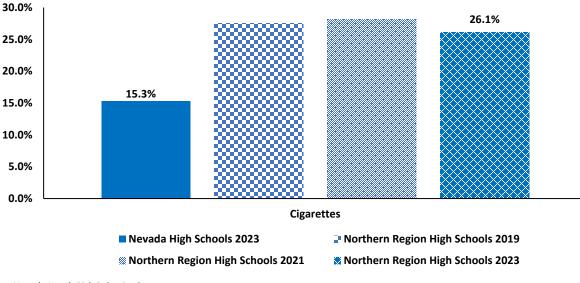
## Youth Risk Behavior Survey

The YRBS monitors six categories of health-related behaviors that contribute to leading causes of death and disabilities among youth and adults. Nevada high school and middle school students are surveyed during the odd years. In 2023, 1,145 high school students and 1,195 middle school students participated in the YRBS in the Northern Region. All data are self-reported. The University of Nevada, Reno maintains the YRBS data and publishes data on each survey. For more information on the YRBS survey, please go to the following site: UNR YRBS.

Among Nevada high school students in 2023, 2.8% currently smoke cigarettes, which is not significantly lower than 2021 at 3.4%. The percent of Nevada high school students who currently use smokeless tobacco has increased since 2021, but not significantly.

Northern Region high school students in 2023 had a significantly higher percent for ever having tried cigarettes compared to Nevada at 26.1% and 15.3% respectively. The middle school students in Northern Region also had a higher percent for ever trying cigarettes at 11.8% compared to Nevada at 7.6%.





Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 30.0% to display differences among groups.

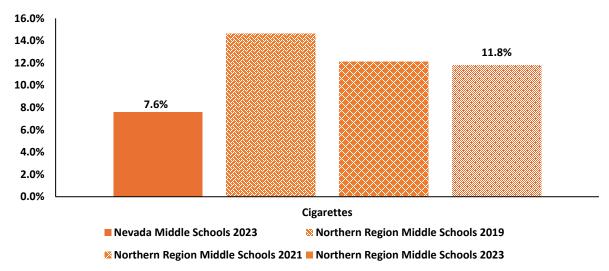


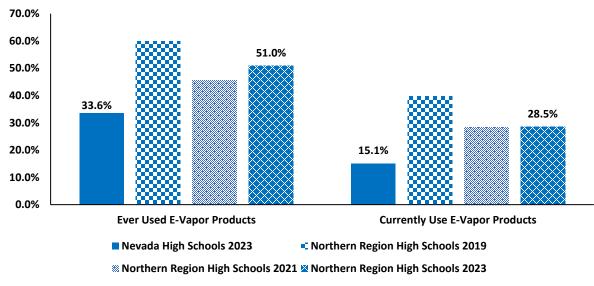
Figure 72b. Percent of Respondents Who Have Ever Tried Cigarette Smoking\*, Northern Region Middle School Students, 2019, 2021, 2023 and Nevada Middle School Students, 2023.

Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 16.0% to display differences among groups.

Northern Region high school students have a significantly higher percent for ever using an e-vapor product than Nevada in 2023 (51.0% and 33.6%, respectively) and currently using electronic vapor (e-vapor) products than Nevada in 2023 (28.5% and 15.1%, respectively). Northern Region middle school students also have a significantly higher percent for ever using an e-vapor product than Nevada in 2023 (26.8% and 17.6%, respectively) and a higher percent of students who currently use e-vapor products (11.3% and 8.4%, respectively).

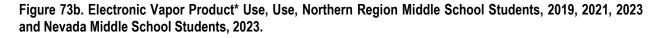


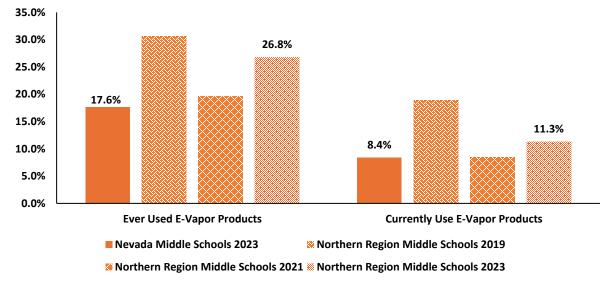


Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 70.0% to display differences among groups.

\*Includes e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods such as 'JUUL', 'SMOK', 'Suorin', 'Vuse', and 'blu'.



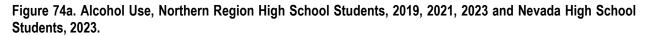


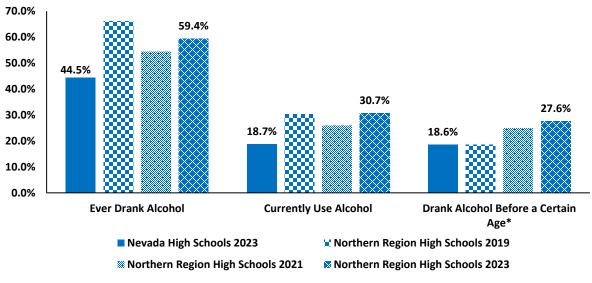
Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 35.0% to display differences among groups.

\*Includes e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods such as 'JUUL', 'SMOK', 'Suorin', 'Vuse', and 'blu'.

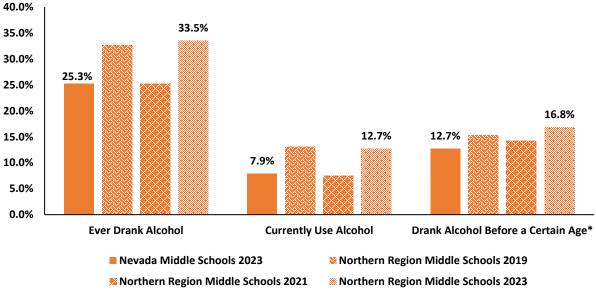
The percent of Northern Region high school students who reported ever drank alcohol, currently use alcohol, and drank alcohol before a certain age are all higher than Nevada high school student percents.

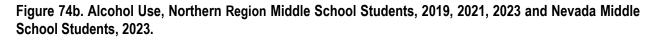




Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 70.0% to display differences among groups. \*Among high school students, if they ever drank before age 13. The percent of ever drank alcohol, currently use alcohol, and drank alcohol before certain age among Northern Region middle school students decreased from 2019 to 2021 before increasing in 2023. Northern Region middle school student percents for ever drinking alcohol, currently drink alcohol, and drank before a certain age are all higher than Nevada middle school student percents.



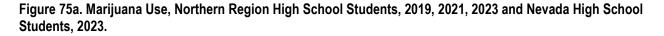


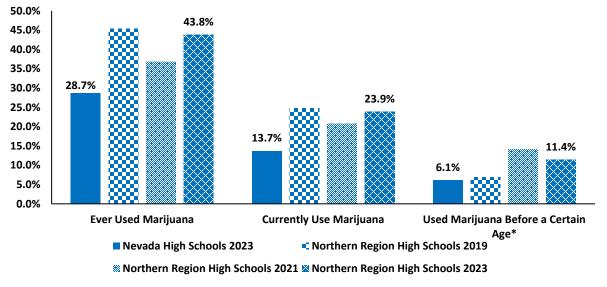
Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 40.0% to display differences among groups.

\*Among middle school students, if they ever drank before age 11.

The percents of Northern Region high school and middle school students who have reported to have ever used marijuana, currently use marijuana, or used marijuana before a certain age in 2023 are higher than Nevada high school percents.





Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 50.0% to display differences among groups.

\*Among high school students, if they ever used marijuana before age 13.

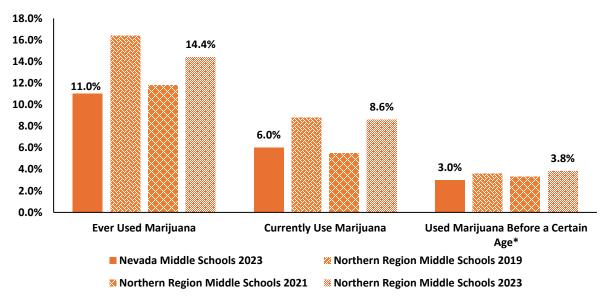


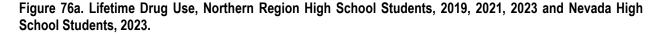
Figure 75b. Marijuana Use, Northern Region Middle School Students, 2019, 2021, 2023 and Nevada Middle School Students, 2023.

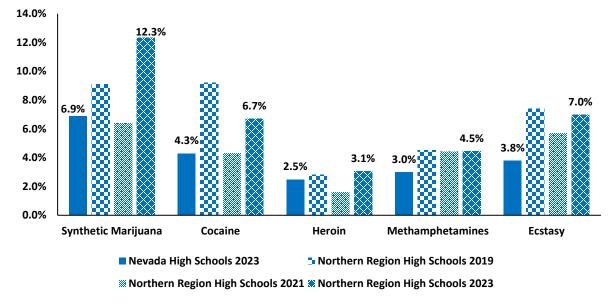
Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 18.0% to display differences among groups.

\*Among middle school students, if they ever used marijuana before age 11.

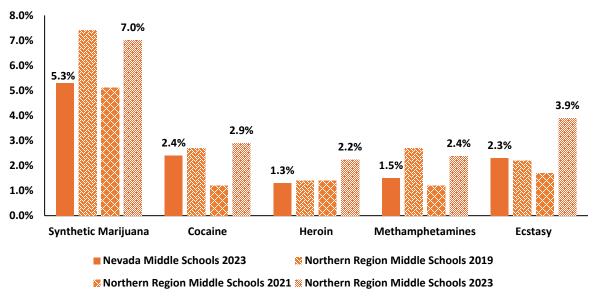
Of the illicit drugs listed in Figures 76a and 76b below, lifetime drug use percents among Northern Region high school and middle school students are higher for all substances than Nevada students in 2023.





Source: Nevada Youth Risk Behavior Survey. Chart scaled to 14.0% to display differences among groups.





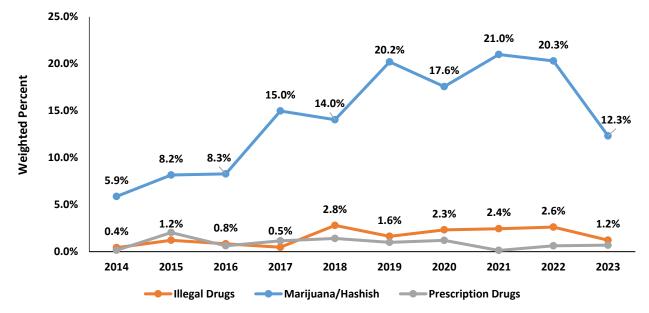
Source: Nevada Youth Risk Behavior Survey. Chart scaled to 8.0% to display differences among groups.

## Behavioral Risk Factor Surveillance System (BRFSS)

BRFSS collects information on adult self-reported health-related risk behaviors. According to the Centers for Disease Control and Prevention, BRFSS is a powerful tool for targeting and building health promotion activities. The survey has questions focusing on substance use including illegal drug use, e-cigarettes, and drunkenness.

Marijuana use has more than doubled since 2014. In 2023, 12.3% of respondents reported to have used marijuana in the past 30 days, up from 5.9% in 2014 and a high of 21.0% in 2021. Self-reported use of marijuana has increased, as expected, since recreational marijuana use was legalized in Nevada in 2017. Of Nevadans surveyed in 2023, 1.2% used illegal drugs to get high in the last 30 days and 0.7% used prescription drugs to get high in the last 30 days.

Figure 77. Percent of Adult BRFSS Respondents Who Used Marijuana/Hashish, Illegal Substances, or Painkillers to Get High in the Last 30 Days, Northern Region Residents, 2014-2023.



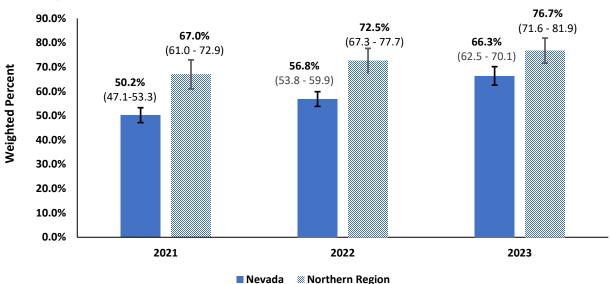
Source: Behavioral Risk Factor Surveillance System.

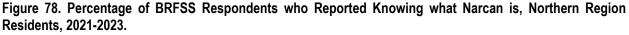
Chart scaled to 25.0% to display differences among groups.

Specific question asked in survey: "During the past 30 days, on how many days did you use marijuana or hashish/any other illegal drug/ prescription drugs without a doctor's order, just to "feel good," or to "get high"?"

An array of efforts have been put in place to tackle the opioid epidemic in Nevada. With the help of the State Opioid Response funding (<u>DPBH SOR</u>) and other community partners including the University of Nevada, Reno Center for the Application of Substance Abuse Technologies (<u>CASAT</u>), and the <u>Nevada</u> <u>Opioid Center of Excellence</u>, Nevada has launched an educational initiative to address opioid overdoses and promote harm reduction. This program offers free online training on opioid overdose recognition and naloxone (Narcan) administration, allowing students, faculty, and staff to earn a certificate and anonymously access harm reduction kits containing naloxone, test strips, CPR tools, and resource information. Additionally, the <u>Overdose Data to Action Program (OD2A</u>) is working to improve opioid-related data collection to guide prevention and intervention efforts, managed by the Division of Public and Behavioral Health with partnerships from organizations like the Nevada Board of Pharmacy and the University of Nevada, Reno School of Public Health.

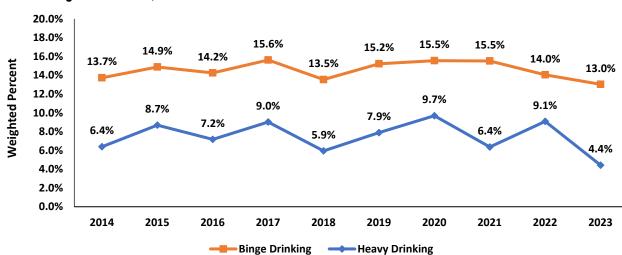
In the Northern Region, reported Narcan knowledge has increased by 9.7% since 2021 (the first year the question was added to BRFSS) and has been significantly higher than Nevada trends for all three years.





Source: Behavioral Risk Factor Surveillance System. Question added to BRFSS beginning in 2021. Chart scaled to 90.0% to display differences among groups.

Binge drinking is defined in men as having five or more alcoholic beverages and woman having four or more alcoholic beverages on the same occasion. Heavy drinking is defined in men as consuming more than two alcoholic beverages, and in women as consuming more than one alcoholic beverage per a day. Both reported heavy drinking and binge drinking was lowest in 2023.



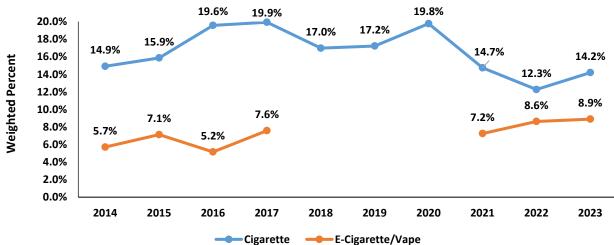
Heavy Drinking

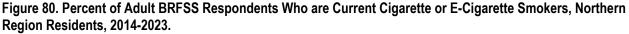
Figure 79. Percent of Adult BRFSS Respondents Who are Considered Binge Drinkers or Heavy Drinkers, Northern Region Residents, 2014-2023.

Source: Behavioral Risk Factor Surveillance System. Chart scaled to 20.0% to display differences among groups.

Department of Health and Human Services | March 2025

In 2023, 14.2% of adults were current cigarette smokers, which has decreased since 2014. E-cigarette use reached a high of 8.9% in 2023. In 2018 through 2020, the e-cigarette use question was asked differently compared to years prior, thus had to be excluded from the graph.





Source: Behavioral Risk Factor Surveillance System.

Chart scaled to 20.0% to display differences among groups.

E-cigarette use was not collected in 2018-2020.

Current cigarette smokers are defined as individuals who have smoked at least 100 cigarettes in their lifetime and currently smoke. Current ecigarette smokers are defined as individuals who currently have smoked on at least one day in the past 30 days or who currently report using ecigarettes or other electronic "vaping" products every day or some days.

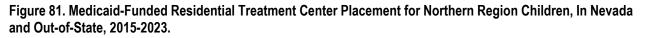
# Youth

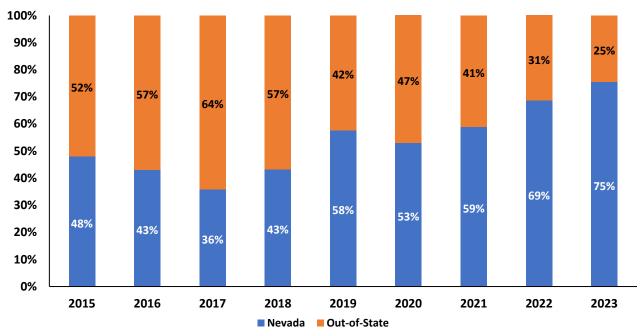
This section focuses on other factors that affect youth not directly related to substance use or mental health.

## Medicaid: Residential Treatment Centers

Residential treatment centers provide intensive behavioral, mental, and emotional health services for youth. These are typically 24-hour, inpatient facilities and may provide psychiatric oversight, medication management, and behavioral therapy among other services. The centers reported in this section include both state-run facilities and private centers that accept Medicaid reimbursement.

Since 2015 the percent of children residing in the Northern Region admitted to facilities in the state of Nevada (rather than out-of-state facilities) has increased by nearly thirty percent. This reflects statewide efforts to keep the treatment of Nevada youth in-state.





Source: Nevada Medicaid Data Warehouse. Children refers to those under the age of 18.

## Table 3. Medicaid Nevada and Out-of-State Residential Treatment Center Placement for Northern Region Children, 2015-2023.

Year	Provider State					
	Nevada	Out of State	Nevada %	Out of State %		
2015	36	39	48.0%	52.0%		
2016	37	49	43.0%	57.0%		
2017	28	50	35.9%	64.1%		
2018	29	38	43.3%	56.7%		
2019	34	25	57.6%	42.4%		
2020	45	40	52.9%	47.1%		
2021	59	41	59.0%	41.0%		
2022	70	32	68.6%	31.4%		
2023	77	25	75.5%	24.5%		

Source: Nevada Medicaid Data Warehouse.

Children refers to those under the age of 18.

For additional information, please see the <u>State of Nevada Youth Behavioral Health Services Dashboard</u> or <u>DCFS Residential Services</u>.

## Child Protective Services

Child Protective Services (CPS) exists to ensure the safety, well-being, and stability of children by investigating reports of abuse, neglect, or exploitation. CPS responds to reports of abuse or neglect involving children under the age of eighteen<sup>5</sup>.

Children exposed to abuse or neglect are at a higher risk of developing mental health conditions, such as anxiety, depression, PTSD, or behavioral disorders. Parental mental health challenges can contribute to situations of neglect or abuse as well. CPS workers can connect families with interventions such as therapy, parenting support, and substance abuse treatment to help parents provide safe homes.

In the reporting period 2018-2023, CPS in the Northern Region considered 14,660 reports. The prevalence of reported cases is relatively consistent year over year.

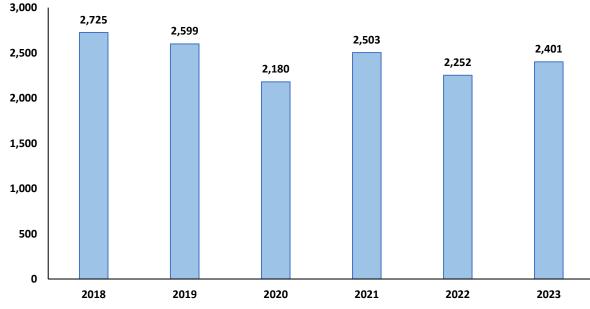


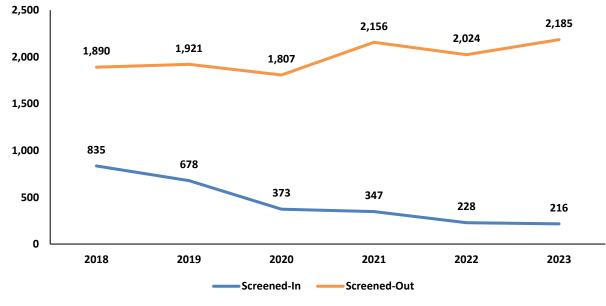
Figure 82. Child Protective Services Reports Received, Northern Region, 2018-2023.

Source: UNITY Database.

For each report, a screening decision is made determining whether an agency response (making contact with the family, assessing child safety, and providing child welfare agency services) is necessary. These "screened-in" reports reflect those where agency personnel responded and attempted to make face-to-face contact with the children and families to assess child safety and family functioning.

Of the 14,660 reports made between 2018 and 2023 roughly 18% (n=2,677) were screened-in resulting in agency response. This percent of screened-in reports has decreased over the reporting period.

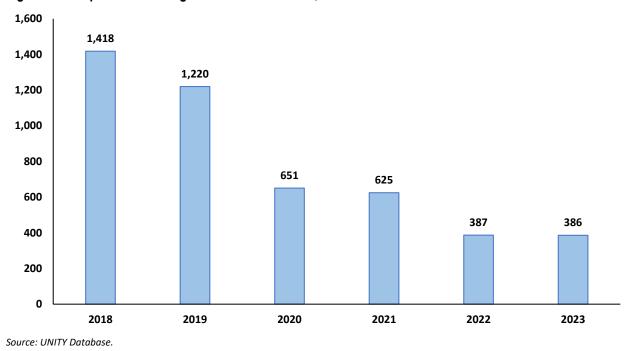
<sup>&</sup>lt;sup>5</sup> <u>Nevada's Child Welfare and Child Protective Services</u>





Source: UNITY Database.

During the reporting period, the 2,677 screened-in reports involved 4,687 youth—an average of nearly 800 per year participating in a CPS investigation, assessment, or response. These counts are distinct by year; some youth may be counted more than once in the reporting period (2018-2023) if they appeared on screened-in reports in more than one year.



#### Figure 84. Unique Northern Region Youth Screened-In, 2018-2023.

#### Foster Care

Some investigations reveal that a child cannot safely remain in the home and must be removed to foster care. This is a last resort option and part of the overall continuum of services provided by child welfare agencies.

From 2018 to 2023, a total of 629 unique youth were served in the foster care system in the Northern Region, accounting for 641 entries. Some youth entered, exited, and later re-entered the foster care system, with each entry counted separately.

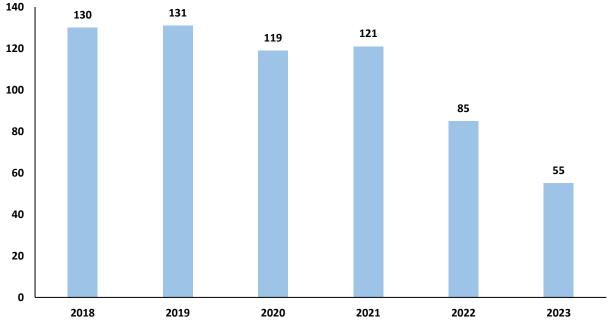


Figure 85. Foster Care Entries, Northern Region, 2018-2023.

Source: UNITY Database.

Neglect is the primary driver of Northern Region youth being placed into foster care. Youth may have multiple placements, and placements may have multiple reasons listed on the associated report. These entries are not mutually exclusive.

Entry Reason	2018	2019	2020	2021	2022	2023
NEGLECT	206	220	208	196	130	100
PARENTAL SUBSTANCE ABUSE	88	94	108	168	134	86
INCARCERATION OF PARENT(S)	78	70	42	80	70	50
ABUSE	40	58	58	24	48	20
DOMESTIC VIOLENCE	62	24	46	64	22	8
INADEQUATE HOUSING	26	28	14	44	24	26
ALL OTHERS Source: UNITY Database.	38	36	34	84	60	48

Table 4, Top Reason	for Foster Care Entries,	Northern Region	2018-2023
			LUIU LULU.

In most years of the reporting period, there were more exits from the foster care system in the Northern Region than entries to it. The overall utilization of the foster care system in the region has decreased since 2019.

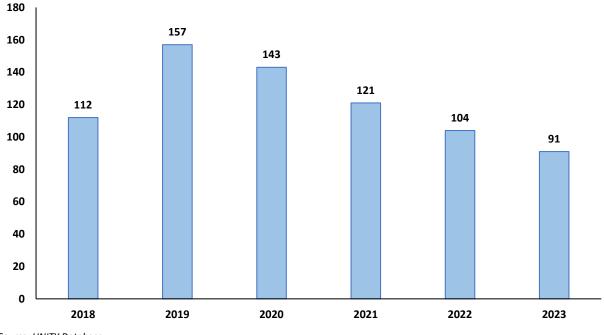


Figure 86. Foster Care Exits, Northern Region, 2018-2023.

Source: UNITY Database.

Reunification with family is the most common outcome for youth leaving foster care, accounting for over 50% of exits.

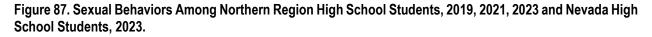
#### Table 5. Reason for Foster Care Exits, Northern Region, 2018-2023.

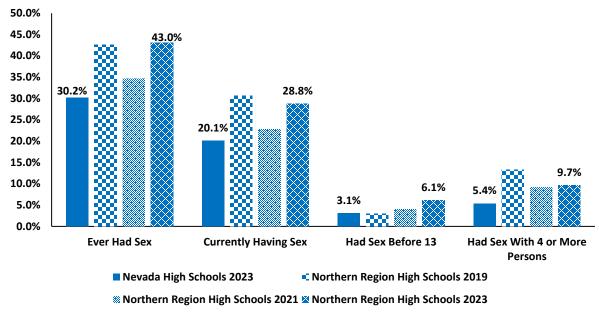
Exit Reason	2018	2019	2020	2021	2022	2023
REUNIFICATION	68	106	72	58	59	41
ADOPTION	23	37	42	27	19	32
GUARDIANSHIP	10	4	14	22	10	11
AGED OUT	9	7	12	12	12	4
TRANSFER TO OTHER AGENCY	1	2	2	2	2	3
OTHER	1	0	1	0	2	0

Source: UNITY Database.

## Youth Risk Behavior Survey (YRBS)

From 2019 to 2021 there was a decrease in the percent of Northern Region high school students that ever-had sex, are currently having sex, and had sex with 4 or more persons. From 2021 to 2023, there was an increase in the percent of Northern Region high school students who reported ever having sex, are currently having sex, had sex before 13, and had sex with 4 or more persons. The percents of all reported sexual behaviors are higher for Northern Region high school students compared to Nevada high school students.

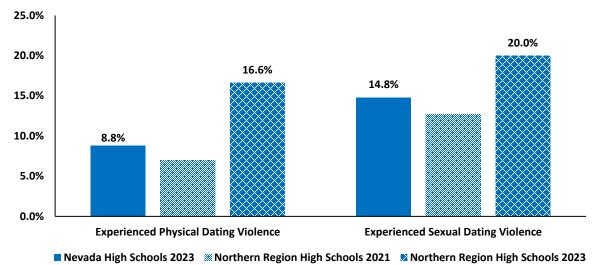




Source: Nevada Youth Risk Behavior Survey.

Chart scaled to 50.0% to display differences among groups.

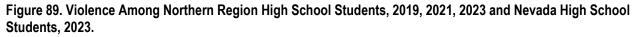
The percent of Northern Region high school students reporting physical or sexual dating violence increased significantly from 2021 to 2023. These percentages are higher compared to all Nevada high school students.

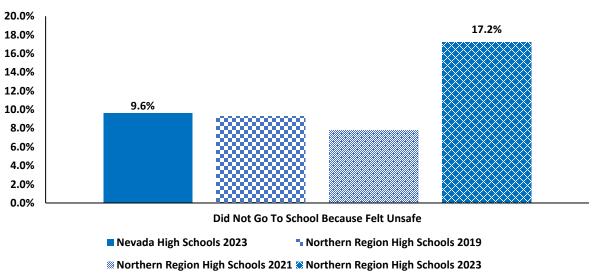




Source: Nevada Youth Risk Behavior Survey. Chart scaled to 25.0% to display differences among groups.

The percent of Northern Region high school students who reported not going to school because they felt unsafe decreased from 2019 to 2021, then it increased significantly in 2023 to 17.2%.





Source: Nevada Youth Risk Behavior Survey.

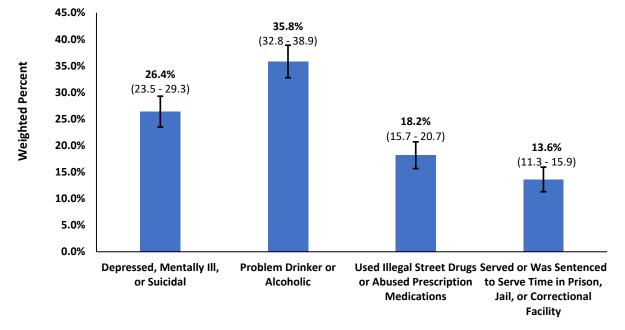
Chart scaled to 20.0% to display differences among groups.

### Behavioral Risk Factor Surveillance System

The following charts are from state-added BRFSS questions about adverse events that happened during childhood. This information is to better understand issues that may occur early in life. The question refers to living with a person and not to the actual person being interviewed. The CDC states that adverse childhood experiences (ACEs) are linked to multiple worse health outcomes in adulthood such as mental illness, substance misuse, and other chronic health problems<sup>6</sup>. Prevention of ACEs is vital to preventing worse health outcomes in the community.

Between 2019-2023, 35.8% of adults, before the age of 18, lived with someone who was a problem drinker or alcoholic, and 26.4% reported to living with someone who was depressed, mentally ill, or suicidal. These early exposures (ACEs) may be associated with increased adverse health outcomes later in life.





Source: Behavioral Risk Factor Surveillance System.

Chart scaled to 45.0% to display differences among groups.

Childhood refers to before the age of 18.

Questions: "Did you live with anyone who was depressed, mentally ill, or suicidal?"

"Did you live with anyone who was a problem drinker or alcoholic?"

"Did you live with anyone who used illegal street drugs or who abused prescription medications?"

"Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?" 95% Confidence Intervals.

<sup>&</sup>lt;sup>6</sup> About Adverse Childhood Experiences | Adverse Childhood Experiences (ACEs) | CDC

Using combined data from 2019-2023, 45.0% of adults reported that, before the age of 18, they had been sworn at, insulted, or put down at least once, 33.7% were "hit, beaten, kicked, or physically hurt" (not including spanking) at least once, and 16.3% of adults had been touched sexually at least once.

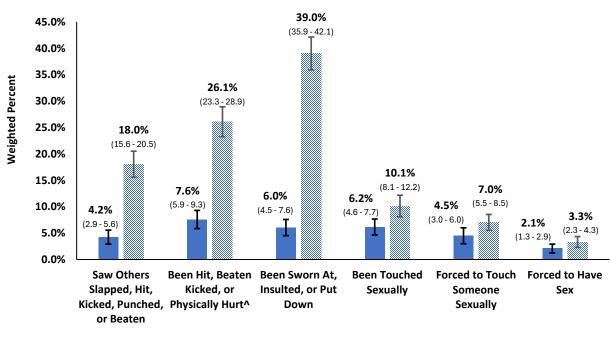


Figure 91. Adult BRFSS Respondents with Adverse Childhood Experiences, Northern Region Residents, 2019-2023.

Once More than Once

Source: Behavioral Risk Factor Surveillance System.

Chart scaled to 45.0% to display differences among groups.

Childhood refers to before the age of 18.

Questions: "How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?"

"Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?"

"How often did a parent or adult in your home ever swear at you, insult you, or put you down?"

"How often did anyone at least 5 years older than you or an adult, touch you sexually?"

"How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?"

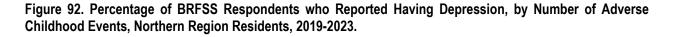
"How often did anyone at least 5 years older than you or an adult, force you to have sex?"

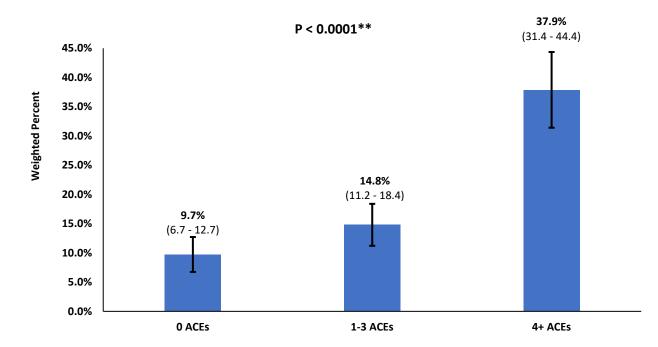
^Does not include spanking.

\*Someone at least 5 years older than you or an adult.

95% Confidence Intervals.

Higher exposure to ACEs is significantly associated with a greater prevalence of depression among adults. Among adults who reported experiencing at least four ACEs, 37.9% also reported having depression, compared to just 9.7% of those reporting depression who experienced no ACEs.





Source: Behavioral Risk Factor Surveillance System. Chart scaled to 45.0% to display differences among groups. Childhood refers to before the age of 18.

Questions for ACE score:

"How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?"

"Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?"

"How often did a parent or adult in your home ever swear at you, insult you, or put you down?"

"How often did anyone at least 5 years older than you or an adult, touch you sexually?"

"How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?"

"How often did anyone at least 5 years older than you or an adult, force you to have sex?"

\*Someone at least 5 years older than you or an adult.

0.05 test of significance.

\*\*Significant P-value.

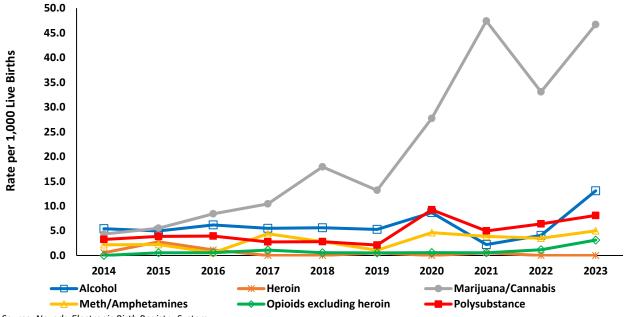
## **Maternal and Child Health**

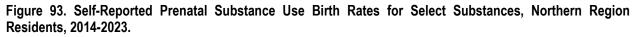
#### Substance Use Among Pregnant Nevadans (Births)

The data in this section is reflective of self-reported information provided by the mother on the birth record. Because alcohol and substance use during pregnancy is self-reported, rates are likely lower than actual rates due to underreporting, and pregnant Nevadans may be reluctant to be forthcoming on the birth record for a variety of reasons. On average, there were 1,782 live births per year to Northern Region residents between 2014 and 2023. In 2023, 75 birth certificates indicated marijuana use, 21 indicated alcohol use, 13 indicated polysubstance (more than one substance) use, 8 indicated meth/amphetamine use, and 5 indicated opiate use.

Of the self-reported substance use during pregnancy among Nevadans who gave birth between 2014 and 2023, the highest rate was with marijuana use in 2021, at 47.4 per 1,000 live births. Polysubstance use (more than one substance) rates have been highest during 2020-2023 while self-reported rates for alcohol, meth/amphetamine, and opioids (excluding heroin) were all highest in 2023.

The substance categories are mutually exclusive, with any instance of multiple substance classified as polysubstance use.





Source: Nevada Electronic Birth Registry System.

Due to the small counts, rates of prenatal marijuana use by race/ethnicity have been omitted.

Self-reported tobacco use during pregnancy has fluctuated over the years but shows an overall decline across all age groups. The rates among the 15-17 and 18-19 age groups fluctuate greatly due to small populations and are not statistically significant.

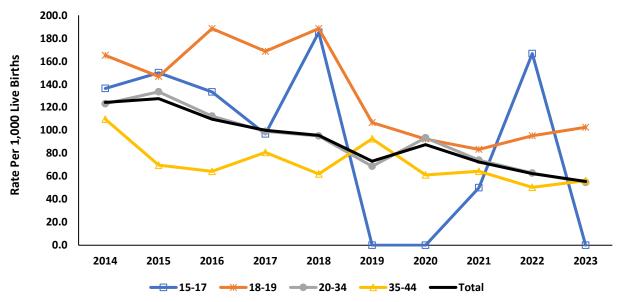


Figure 94. Self-Reported Prenatal Tobacco Use Birth Rates by Maternal Age, Northern Region Residents, 2014-2023.

Source: Nevada Electronic Birth Registry System.

### Neonatal Abstinence Syndrome

Neonatal abstinence syndrome (NAS) is a group of issues that occur in a newborn who was exposed to addictive, illegal, or prescription drugs while in the mother's womb. Withdrawal or abstinence symptoms develop shortly after birth.

Inpatient admissions for NAS have fluctuated from 2014 to 2023, peaking in 2023, with 16 admissions and a rate of 10.0 per 1,000 live births.

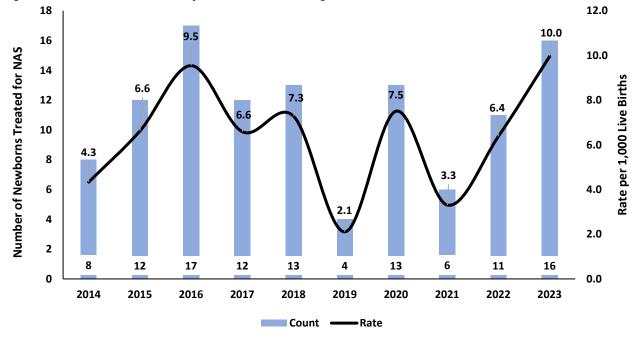


Figure 95. Neonatal Abstinence Syndrome, Northern Region Residents, 2014-2023.

Source: Hospital Inpatient Department Billing and Nevada Electronic Birth Registry System. ICD-9-CM codes were replaced by ICD-10-CM codes in last quarter of 2015, therefore data prior to that may not be directly comparable.

Due to the small counts, rates of neonatal abstinence syndrome by race/ethnicity have been omitted.

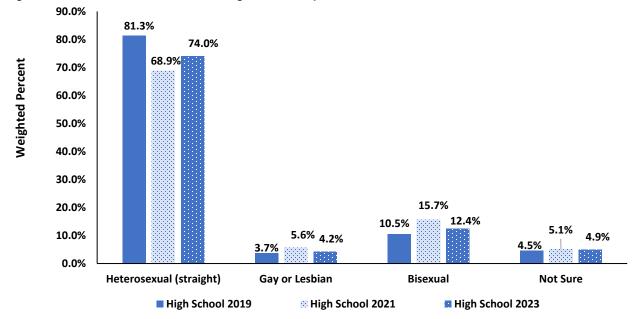
# Lesbian, Gay, Bisexual, and Transgender Health

Those who identify as LGBT are part of a vulnerable community that may face unique or worse health outcomes. This is especially important when considering LGBT youth who may be most at risk for health disparities. This section exists to better understand the unique risk factors that exist for this population.

## Youth Risk Behavior Survey (YRBS)

The YRBS monitors six categories of health-related behaviors that contribute to leading causes of death and disabilities among youth. LGB youth included in this report identify as gay or lesbian, bisexual, or not sure. For more detail information about YRBS and sexual orientation and gender identity, the University of Nevada, Reno produced a <u>Sexual and Gender Minority Special Report</u> that was released with 2021 data.

Among Nevada high school students, the percent of persons identifying as heterosexual decreased notably from 2019 to 2021 (81.3% and 68.9%, respectively), and the percent of persons identifying as gay/lesbian or bisexual both increased from 2019 to 2021.



#### Figure 96. Sexual Orientation, Nevada High School Population, 2019, 2021, and 2023.

Source: Nevada Youth Risk Behavior Survey.

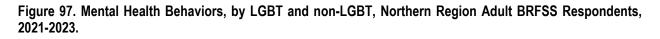
Chart scaled to 90.0% to display differences among groups.

### Behavioral Risk Factor Surveillance System

BRFSS collects information on adult health-related risk behaviors. According to the Centers for Disease Control and Prevention, BRFSS is a powerful tool for targeting and building health promotion activities. The survey has questions focusing on substance use including illegal drug use, alcohol use, and e-cigarette use.

Those in the LGBT community are considered a vulnerable community and may have worse health outcomes when compared to the non-LGBT population. A more in depth look at health outcomes is vital to ensure these health disparities are addressed and analyzed. LGBT data includes those that reported being Lesbian, Gay, Bisexual, Other, and/or Transgender (n=91). The non-LGBT comparison group consists of 1,303 Northern Region adults.

Adults that are part of the LGBT community were significantly more likely to report having any mental health behavior compared to non-LGBT adults from 2021-2023. LGBT adults were 4.6 times as likely to report seriously considering attempting suicide within the past 12 months and 2.5 times as likely to have a depressive disorder compared to non-LGBT adults.



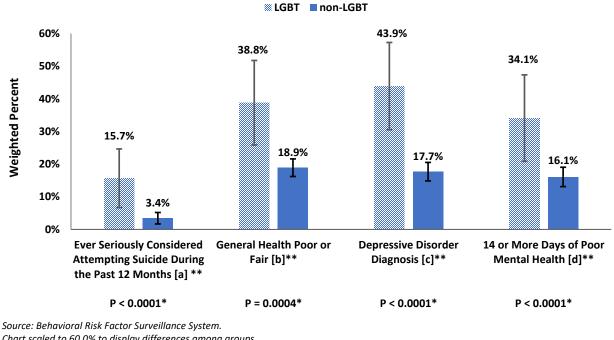


Chart scaled to 60.0% to display differences among groups.

\*\*Cell size small, take caution with interpretation

\* Significant (P < 0.05).

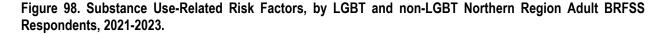
95% Confidence Intervals a. LGBT (6.7 - 24.7), non-LGBT (1.7 - 5.2)

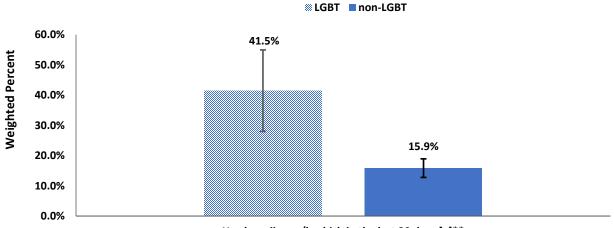
b. LGBT (25.9 - 51.8), non-LGBT (16.2 - 21.6)

c. LGBT (30.5 - 57.3), non-LGBT (14.9 - 20.5)

d. LGBT (20.8 - 47.3), non-LGBT (13.1 - 19.0)

Adults who are part of the LGBT community were significantly more likely to use marijuana with LGBT adults having 2.6 times the prevalence of marijuana usage than non-LGBT adults.





Used marijuana/hashish in the last 30 days [a]\*\*



Source: Behavioral Risk Factor Surveillance System.

Chart scaled to 60.0% to display differences among groups.

\*\*Cell size small, take caution with interpretation

\* Significant (P < 0.05).

95% Confidence Intervals

a. LGBT (28.0 - 55.0), non-LGBT (12.8 - 18.9)

## Appendix

Hospital billing data (emergency department encounters and inpatient admissions) and mortality data both utilize International Classification of Diseases codes (ICD). Hospital billing uses ICD-CM which is a 7-digit code verses mortality where the ICD codes are 4-digit. In hospital billing data, the ICD codes are provided in the diagnosis fields, while mortality data the ICD codes are coded from the literal causes of death provided on the death certificate.

In October 2015, ICD-10-CM codes were implemented nationwide. Before October 2015, ICD-9-CM codes were used for medical billing. Therefore, 2015 data consists of two distinct coding schemes, ICD-9-CM and ICD-10-CM respectively. Due to this change in coding schemes, hospital billing data from October 2015 forward may not be directly comparable to previous data.

For more detailed ICD-9-CM codes: <u>Legacy ICD-9-CM billing codes</u> For more detailed ICD-10-CM codes: <u>ICD-10-CM billing codes</u> For more detailed ICD-10 mortality codes: <u>ICD-10 mortality codes</u>

The following ICD-CM codes were used to define hospital encounters and admissions:

#### All Diagnosis:

Anxiety: 300.0 (9); F41 (10) Bipolar: 296.40-296.89 (9); F32.89, F31 (10) Depression: 296.20-296.36, 311 (9); F32.0-F32.5, F33.0-F33.4, F32.9, F32.A (10) Post-Traumatic Stress Disorder: 309.81 (9); F43.10, F43.12 (10) Schizophrenia: 295 V11.0 (9); F20, Z65.8 (10) Suicidal Ideation: V62.84 (9); R45.851 (10) Suicide Attempts: E95.0-E95.9 (9); X71-X83, T36-T65, T71 (10)

#### Primary and All Diagnosis:

 Alcohol: 291, 303, 980, 305.0, 357.5, 425.5, 535.3, 571.0, 571.1, 571.2, 571.3, 790.3 (9); F10, K70, G62.1, I42.6, K29.2, R78.0, T51 (10)

 Drug: 292, 304, 965, 967, 968, 969, 970, 305.2, 305.3, 305.4, 305.5, 305.6, 305.7, 305.8, 305.9 (9); F11- F16, T39, T40, T43, F18, F19 T410, T41.1, T41.2, T41.3, T41.4, T42.3, T43.4, T42.6, T42.7, T42.8 (10)

The following ICD-10 codes were used to define mortality causes:

Suicide-related deaths: X60-X84, Y87.0 (Initial cause of death is suicide) Mental and behavioral-related deaths: F00-F09, and F20-F99 (Initial or contributing cause of death) Alcohol-related deaths: F10, K70, Y90, Y91, X45, X65, Y15, T51, G31.2, G62.1, I42.6, K29.2, K86.0, K85.0, R78.0, E24.4, O35.4, Q86.0, and Z72.1 (Initial or contributing cause of death) Drug-overdose deaths: X40-X44, X60-S64, X85, Y10-Y14 (Initial cause of death) Other overdose deaths: T36-T65