



# COMPREHENSIVE COMMUNITY SUBSTANCE ABUSE PREVENTION PLAN

2020-2021

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# Table of Contents

- NEEDS ASSESSMENT ..... 3**
- Demographic profile of Nevada & Clark County.....3**
- Nevada High Intensity Drug Trafficking Areas (HIDTA) Report: 2018 Threat Assessment .....3**
- Substance Abuse Statistics.....4**
- Tobacco Use ..... 4
- Alcohol Use ..... 5
- Marijuana Use..... 5
- Prescription Opioid Use ..... 6
- Other Illicit Drug Use..... 6
- Impact of substance abuse in Nevada and Clark County .....7**
- Overdose Deaths..... 7
- Pregnant Women & Dependent Newborns..... 8
- Alcohol/Drug Impaired Driving Deaths..... 8
- Co-occurring Infectious Diseases..... 9
- Teen Pregnancy..... 10
- Drug induced crime & Imprisonment ..... 10
- Economic Burden ..... 11
- Risk & Protective Factors of Substance Abuse .....11**
- Youth & Young Adults ..... 11
- Homelessness ..... 12
- Military Veterans & Substance Use ..... 13
- Pregnant Women..... 14
- Sexual Minorities ..... 15
- Mental Health ..... 16
- Treatment Needs & Availability ..... 17
- ASSESSMENT OF CAPACITY ..... 18**
- Methodology .....18**
- Questionnaire Development ..... 18
- Stakeholder Recruitment..... 19
- Conducting interviews ..... 19

Data Analysis.....	19
<b>Results.....</b>	<b>19</b>
Strengths of CARE Coalition.....	20
Opportunities for Improvement.....	20
Resources to Help CARE Coalition to Improve.....	21
At-Risk Population Requiring Greater Focus.....	21
The CARE Coalition Focus for next 5 years.....	23
Funding.....	24
Additional Consideration.....	24
<b>Conclusion &amp; Recommendations.....</b>	<b>25</b>
<b>References.....</b>	<b>27</b>

## **NEEDS ASSESSMENT**

### **Demographic profile of Nevada & Clark County**

The current population for Nevada in 2019 is estimated at 3.09 million reflecting one of the strongest growth rates in the country (7.05%) between 2010 and 2015. It is also one of the most diverse states in the country, ranking 9<sup>th</sup> in overall diversity and 2<sup>nd</sup> on cultural diversity. Over a quarter of Nevadans (27%) are of Hispanic origin, which is the 5<sup>th</sup> largest percentage of any state. While Nevada's population distribution by age as of 2016 is relatively close to the national average, the state has the second highest projected growth rate of its age 85+ population (95 percent) between 2015 and 2030 (CDC WONDER,2017). Among all the counties, Clark County in Nevada is the most populated county with over 2 million residents and highest growth rate (8.26%) (Nevada Population, 2019). The population is made up of approximately equal percentages of females and males. According to the most recent American community survey (ACS) (2013-2017), Non-Hispanics (69.3%) form the highest population living in Clark County with Whites (61.6%) comprising of majority population, followed by Blacks (11.2%) and Asians (9.6%)(U.S. Census Bureau, 2018). In terms of age distribution, about 50% of population is aged above 18 years, of which those aged 65 years and above consist of about 47% of population. Those under 18 years account for 23.7% of total population. Owing to presence of several military bases; Clark County is also home to an estimated 210,461 military veterans. More than half of population reported of having education above high school (U.S. Census Bureau, 2018).

### **Nevada High Intensity Drug Trafficking Areas (HIDTA) Report: 2018 Threat Assessment**

The 2018 Nevada HIDTA Drug Threat Assessment Survey (NHDTA) and Nevada HIDTA criminal investigations reveal critical information about Nevada's drug threat. Methamphetamine continues to be one of the deadliest street drugs abused in the Nevada and Mexico is the primary source country for methamphetamine, heroin and cocaine that enter Nevada. Clark County Coroner's Office statistics (2012-2017) indicate that methamphetamine is the most prevalent illicit drug encountered in overdose deaths in Nevada. The percentage of overdose deaths attributed at least partially to methamphetamine has increased twofold over the last five years (20% in 2012 vs. 45% in 2017). The demand for marijuana exceeds all other drug types, and California is the primary source of supply to Nevada of illegal amounts of marijuana. Prescription drug trafficking and abuse also continue to affect the citizens of Nevada, particularly in Clark County. Overdose deaths from prescription drug abuse continue to outpace all other drug types. Statistical data for prescription painkillers sold, units prescribed per 100,000 patients, show that Nevada is 2<sup>nd</sup> highest state in US for hydrocodone & oxycodone, 4<sup>th</sup> highest state in US for methadone and 7<sup>th</sup> highest state in US for codeine. Nevada ranks 4<sup>th</sup> highest state in US in terms of prescription drug overdose mortality rate (HIDTA, Chairman, Lombardo -Sheriff, & Carter, 2018). These prescription drugs diverted illegally through pharmacy break-ins continues to be a major concern for law enforcement. In 2017, 60% of reported prescription drug thefts occurred at pharmacies, while 32% occurred at hospitals. The remainder of thefts

occurred at practitioner offices and at the pharmaceutical distributor level (HIDTA, Chairman, Lombardo - Sheriff, & Carter, 2018).

## **Substance Abuse Statistics**

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. In 2018, about 53.2 million people in the U.S. used illicit drugs in past year. Among which, marijuana (43.5 million) was most commonly used drug followed by prescription pain relievers (9.9 million) (National Survey on Drug Use and Health | SAMHSA Publications, 2018). In a national comparison, Nevada ranks 13<sup>th</sup> for overall rank in drug use (Drug Use by State: 2019's Problem Areas, 2019). Between 2011 and 2016, 6.1% of Southern Nevada adults surveyed through BRFSS had used marijuana or hashish, 1.0% used pain killers and 1.8% had used other illegal drugs in the past 30 days (Nevada BRFSS, 2017).

### Tobacco use

An estimated 47.4 million U.S. adults (19.3%) currently used any tobacco product in 2017 with highest use seen among American Indians (Wang et al., 2018). About 14% of U.S. adults (34.3 million) were current cigarette smokers in 2017, representing a 67% decline since 1965 (CDC, 2018).

In Nevada, the cigarette smoking rate has been quite stable since 2014. In 2017, about 18% of adults in Nevada reported smoking at least once in past 30 days and 15.7% of adults reported smoking tobacco during 2016 in Clark County (Nevada Behavioral Risk Factor Surveillance System [BRFSS], 2018). Although cigarette use has decreased within the United States, the use of smokeless tobacco and electronic cigarettes has increased. In Nevada, use of smokeless tobacco increased from 2.5% in 2016 to 3.5% in 2017 (Centers for Disease Control & Prevention, 2019). In 2017, 5.4% of adults in Nevada used e-cigarettes compared to 2.8% in the US for the same year. According to the 2018 Nevada Behavioral Risk Factor Surveillance Survey, the use of e-cigarettes was highest (9.2%) among the Asian population living in Nevada. Current e-cigarette use has also increased considerably among U.S. middle and high school students during 2017–2018, reversing a decline observed in recent years and increasing overall tobacco product use (Wang et al., 2018). According to 2018 National Youth Tobacco Survey (NYTS) data, current e-cigarette use among high school students increased from 1.5% (220,000 students) in 2011 to 20.8% (3.05 million students) in 2018. During 2017–2018, current e-cigarette use increased by 78% (from 11.7% to 20.8%) among high school students and 48% (from 3.3% to 4.9%) among middle school students. According to Nevada 2017 Youth Risk Behavior Survey, current e-cigarette use among high school students is 15.5% (3.05 million students) and among middle school students was 5.8%. . However, the declining trend in e-cigarette use was seen in Nevada from 2015-2017 (2017 Nevada High School Youth Risk Behavior Survey (YRBS), 2017).

### Alcohol use

According to the 2015 National Survey on Drug Use and Health (NSDUH), 86.4 % of adult population reported that they drank alcohol at some point in their lifetime and 56% reported to be current alcohol users in United States. About 27% adults reported that they engaged in binge drinking in the past month; while 7% reported that they engaged in heavy alcohol use in the past month (National Survey on Drug Use and Health (NSDUH), 2018). About 51.8% of adults in Nevada reported that they drank alcohol in the past month; 15.9% reported that they engaged in binge drinking in the past month, and 5.9% percent reported that they engaged in heavy alcohol use in the past month in 2018 (Healthy Southern Nevada , 2018). In Clark County in 2016, 16.1% adults living in Las Vegas, 16.5% in North Las Vegas and 17.2% in Henderson reported that they engaged in binge drinking in the past month. About 17% reported heavy drinking in past 30 days. However, a decreasing trend in binge drinking of alcohol was seen among adolescent from 2009 (20.8%) to 2015 (14%) (“500 Cities Project: Local data for better health | CDC,” 2018).

### Marijuana Use

Marijuana is most commonly abused illicit drug in United States (National Institute on Drug Abuse (NIDA), 2019) . On January 1, 2017, the purchase, possession, and consumption of recreational marijuana for adults became legal in Nevada. As a result, by May 2018, there were 61 licensed recreational retail stores in the state and in August 2018; the revenue generated was about \$70 million. This was approximately 140 percent of the combined marijuana tax revenue that was projected for the entire fiscal year (Nevada’s Department of Taxation [NDT], 2018). In 2017, 16.8% of Nevada residents reported using marijuana. It is interesting to see, that the current marijuana use in Nevada is highest among Asians (27.7%) followed by Hispanic/Latino (21.3%) (National Survey on Drug Use and Health, 2017). However, marijuana use among high school students in Nevada has decreased between 2015 and 2017. In 2017, about 37% of high school students used marijuana at least once in their lifetime and 19.2% reported currently using marijuana. In addition, between 2015 and 2017, the use of synthetic marijuana (K2, Spice, fake weed, “King Kong”, “Yucatan Fire”, “Skunk”, or “Moon Rocks) increased from 7.7% to 10.9% among high school students in Nevada (Nevada High School Youth Risk Behavior Survey (YRBS), 2017).

Recently, there has been increase in Marijuana use among college-age adults aged 19-22 years in the past five years in United States, including vaping with marijuana. The past 30-day prevalence of vaping marijuana among college students doubled between 2017 and 2018, to 10.9% from 5.2%, While it was stable among non-college students (7.8%) (“National Institute on Drug Abuse (NIDA),” 2019). No change has been noticed among 10th and 12th graders but marijuana use declined among 8th graders compared to five years ago(Monitoring the Future Survey: High School and Youth Trends | National Institute on Drug Abuse (NIDA), 2019)

### Prescription opioid use

In 2018, an estimated 10.3 million people aged 12 or older misused opioids in the past year, including 9.9 million prescription pain reliever misusers and 808,000 heroin users in U.S.(2017 National Survey on Drug Use and Health," 2019). Person-level prescribing was highest among older age groups, with 26.8% of persons aged  $\geq 65$  years, 26.3% of persons aged 55–64, and 23.1% of persons aged 45–54 having filled at least one prescription for an opioid. According to the National Survey on Drug Use and Health (NSDUH), Nevada ranks fourth for the percentage of people aged 12 or older who used prescription pain relievers non-medically. Taking prescription opioids for longer periods of time or in higher dosages can increase the risk of opioid use disorder (addiction), overdose, and death. There was a more than 19% reduction in annual prescribing rate from 2006 to 2017 in United States. In 2017, however, there were still almost 58 opioid prescriptions written for every 100 Americans. More than 17% of Americans had at least one opioid prescription filled, with an average of 3.4 opioid prescriptions dispensed per patient. . About 6% Nevadans reported opioid misuse between 2015 and 2016 (Nevada Opioid Crisis Needs Assessment , 2018). In 2017, Nevada providers wrote 73.0 opioid prescriptions for every 100 persons compared to the average U.S. rate of 58.7 prescriptions.(“U.S. Opioid Prescribing Rate Maps | Drug Overdose | CDC Injury Center,” 2018) In Clark County, the opioid prescription rate per 100 residents was 70.6 in 2017, which was higher than national rate, but still lower than state prescribing rates. However, prescribing rate was lower in 2018 at 526.8 per 1000 Nevada residents compared to 2017 when the rate was 754 per 1000 Nevada residents (Healthy Southern Nevada, 2019) (Nevada Department of Health and Human Services, 2019). The proportion of high school students who self-reported ever using a prescription drug without a doctor’s prescription decreased, though not significantly, from 20.2% to 16.9% from 2011-2015 (Nevada Opioid Crisis Needs Assessment, 2018).

### Other illicit drug use

According to the National Survey on Drug Use and Health, in 2017 an estimated 5.5 million Americans reported using cocaine. About 808,000 Americans aged 12 or older used heroin, 19.9 million used methamphetamine, 5.6 million used hallucinogens (including LSD, PCP, peyote, mescaline, psilocybin mushrooms, “Ecstasy” (MDMA or “Molly”), ketamine, DMT/AMT/“Foxy,” and Salvia divinorum), 2 million used inhalants (including nitrous oxide, amyl nitrite, cleaning fluids, gasoline, spray paint, computer keyboard cleaner, other aerosol sprays, felt-tip pens, and glue) in 2017 (2018 National Survey on Drug Use and Health , 2019).

In Nevada, about 2.3% of total the population reported using cocaine, while about 0.5% of people reported using heroin in the year 2017. These rates were similar to the national rates. The use was highest among those 18-25 years old for both cocaine and heroin. According to the 2017 Nevada Youth Risk Behavior Survey, adolescent cocaine decreased from 7% in 2009 to 5.1% in 2017. About 7.7% of youth reported using inhalants, 3.3% used methamphetamine, 6.3% used ecstasy and 7.7% used synthetic

marijuana in 2017. Using pain medication illegally or without a prescription was highest (18.8%) among adolescents in Nevada. Alaska Natives showed highest rates of use for all illicit drugs among youth. About, 28.4% of students reported that they were offered or purchased illegal drugs in 2017 and the rates were highest among Hispanics (30.6%) followed by Asian/Hawaiian/Pacific Islanders (19.7%). In Clark County, about 4.3% of adolescents reported using cocaine, 6.9% reported using inhalants and 29% were offered or purchased illegal drugs on school property (2017 Nevada High School Youth Risk Behavior Survey (YRBS), 2018).

## **Impact of substance abuse in Nevada and Clark County**

### Overdose deaths

In 2017, more than 70,000 people died from drug overdoses, making it a leading cause of injury-related death in the United States. 68% of those deaths involved a prescription or illicit opioid (Opioid Overdose | CDC Injury Center, 2019). Rates of drug overdose deaths involving cocaine were 6.1 per 100,000 among persons aged 45 to 54, 6.0 among persons aged 35 to 44, 5.7 among persons aged 25 to 34, 4.2 among persons aged 55 to 64, 1.7 among persons aged 15 to 24, and 0.6 among persons aged 65 and older. Rates of deaths involving psychostimulants with abuse potential were 4.5 per 100,000 among persons aged 45 to 54, 4.5 among persons aged 35 to 44, 3.9 among persons aged 25 to 34, 3.0 among persons aged 55 to 64, 1.3 among persons aged 15 to 24, and 0.4 among persons aged 65 and older (Hoots et al., 2018).

In Nevada, the rate of overdose death per 100,000 people increased from 18.4 in 2014 to 21.7 in 2017 accounting for 676 drug overdose deaths in the year 2017. Opioid overdose deaths accounted for 61% (412) of all the drug overdose deaths. The highest number of deaths in 2017, 276, involved prescription opioids. Synthetic opioid other than methadone (predominantly fentanyl) accounted for 66 overdose deaths and semisynthetic opioids accounted for 239 deaths in 2017. Heroin-involved deaths more than doubled, from 45 to 94 since 2012. Non-Hispanic whites were more affected due to overdose deaths (80%) compared to Blacks (8%) and Hispanics (10%) (CDC WONDER, 2019). Death rate due to drug poisoning in Clark County between 2015 and 2017 was 21.4 per 100,000 populations. In 2018, opioid overdose death rate was 10.5 per 100,000 cases, lower than 2017 (12.3/100,000 cases) (Nevada Opioid Crisis Needs Assessment , 2018).

The National Council on Alcoholism and Drug Dependencies cites excessive alcohol use as the 3rd leading lifestyle-related cause of death for the nation. An estimated 88,000 people die from alcohol-related causes annually in U.S. (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2018). In 2017, 3,427 deaths were related to alcohol and drugs (147.8 age adjusted rate) in Nevada making up 19% of alcohol and/or drug-related deaths. In 2016, the 65-74 age group had a significant increase with 996 deaths compared to 2015. In 2017, the 65-74 years age group had the most deaths with 874 deaths reported,



followed by the 75-84 years age group with 729 drug and alcohol-related deaths (Substance Abuse Prevention and Treatment Agency (SAPTA), 2017).

An outbreak of lung injury associated with e-cigarette product use, or vaping has recently been identified nationwide. There have been 805 lung injury cases reported to be associated with e-cigarette use, or vaping, and 12 deaths have been confirmed in 10 states (CDC, 2019). Two cases of vaping related illness have been reported in Clark County; however, no deaths have been recorded (Las Vegas Review-Journal, 2019).

#### Pregnant women and dependent newborns

According to Substance Abuse Prevention and Treatment Agency (SAPTA), there were average of 26,828 live births each year to Southern Nevada residents between 2010 and 2017. In 2017, there were 145 births where the mother reported alcohol use, 228 with marijuana use, and 98 with polysubstance use. In 2017, a rate of 3.1 per 1,000 live births was reported for meth/amphetamines, which is higher than 2010 at 1.3 per 1,000 live births. For polysubstance use, 3.7 per 1,000 live births reported polysubstance use in 2017. There has been an increase in self-reported polysubstance use since 2014, up from 1.2 per 1,000 live births. Mothers who self-reported tobacco use, has decreased from 66.8 to 48.2 per 1,000 live births from 2010 to 2017 in Nevada ( Substance Abuse Prevention and Treatment Agency (SAPTA), 2017).

Increases in opioid use and misuse in pregnancy have paralleled the increases in the general population; there were 4 times as many women with an opioid use disorder in 2014 compared with 1999 (Haight, Ko, Van Tong, Bohm, & Callaghan, 2018). In 2016, the state reported 121 pregnant women receiving treatment for opioid abuse. Studies of opioid exposure in pregnancy suggest increased risk for adverse pregnancy outcomes, including neonatal abstinence syndrome [NAS] and birth defects (Broussard et al., 2011). A recent national study revealed a fivefold increase in the incidence of NAS between 2004 and 2014, from 1.5 cases per 1,000 hospital births to 8.0 cases per 1,000 hospital births (Haight et al., 2018). Cases of NAS in Nevada have increased from 145 in 2011 to 293 in 2017—a rate per 1,000 hospital births of 4.1 to 8.3, respectively (“Nevada Opioid Summary | National Institute on Drug Abuse (NIDA),” 2019).

#### Alcohol/Drugs impaired driving deaths

According to the 2017 National Survey on Drug Use and Health (NSDUH), in 2017, 21.4 million people aged 16 or older drove under the influence of alcohol in the past year and 12.8 million drove under the influence of illicit drugs (“DrugFacts: Drugged Driving | National Institute on Drug Abuse (NIDA),” 2019). According to the National Highway Traffic Safety Administration, motor vehicle crashes that involve an alcohol-impaired driver kill 28 people in the United States every day, which amount to one death every 53 minutes (“Impaired Driving: Get the Facts | Motor Vehicle Safety | CDC Injury Center,” 2019).

A higher percentage of adults aged 21 to 25 drive after taking drugs or drinking than do young adults aged 16 to 20 or adults 26 or older. The survey also showed that men are more likely than women

to drive under the influence of drugs or alcohol. (Center for Behavioral Health Statistics and Quality, 2017). According to Fatality Analysis Reporting System (FARS) from CDC, 1025 deaths were reported in Nevada between 2003 and 2011. Rate of death for people killed in crashes involving a driver with BAC  $\geq 0.08\%$  was higher among drivers below 20 years of age (4.6 per 100,000 population) compared to 21-34 years (3.2 per 100,000 population) and 35+ years (2.8 per 100,000 population) in 2012. The death rate for males (4.2 per 100,000) was much higher compared to females (1.4 per 100,000) ( Motor Vehicle Safety | CDC Injury Center, 2019). Alcohol impaired driving deaths accounted for 29.9% of total number of deaths in Clark county between 2013-2017 compared to Nevada (30.6%) and US (28.6) (County Health Rankings & Roadmaps,2019).

After alcohol, marijuana is the drug most often found in the blood of drivers involved in crashes. The vehicle crash risk associated with marijuana in combination with alcohol, cocaine, or benzodiazepines appears to be greater than that for each drug by itself (Wilson, Stimpson, & Pagán, 2014). NIDA mentioned that in 2016, about 44% of fatally injured drivers tested positive for drugs and more than half tested positive for two or more drugs in U.S. (“DrugFacts: Drugged Driving | National Institute on Drug Abuse (NIDA),” 2018).

#### Co-occurring infectious diseases burden

Relation between drug use and transmission of infectious diseases is well known. Specifically, injection drug users are at increased risk of blood-borne infections, including viral hepatitis, human immunodeficiency virus (HIV), and bacterial and fungal infections (“Persons Who Inject Drugs (PWID) | CDC,” 2019). In addition, outbreaks of Hepatitis A have been reported among PWIDs; such outbreaks are believed to occur through both percutaneous and fecal-oral routes. Risky sexual practices, using and sharing contaminated injection drug equipment, unsanitary conditions and low vaccination rates contributes to the spread of these infections (Foster et al., 2019).

An estimated 189,600 people who inject drugs (PWID) had HIV in the 50 states and the District of Columbia at the end of 2016 (“Persons Who Inject Drugs (PWID) | CDC,” 2019). In 2017, there were more than 11,000 people living with HIV (PLWH) in Nevada of which 7% were intravenous drug users (IDU). Of all the counties, Clark County bears the highest burden (85%) of PLWH. The prevalence was highest among Whites (41%) followed by Blacks (29%) and Hispanics (25%) in Nevada (Sandoval, Whitley, Kotchevar, & Azzam, 2017). Hepatitis B (HBV) and hepatitis C (HCV) are the most common viral hepatitis infections transmitted through the risk taking behaviors of people who use drugs—particularly among people who inject drugs (PWID). Approximately 850,000–2.2 million people are living with HBV and an estimated 3.5 million people are living with HCV in the United States (“U.S. Department of Health & Human Resources,” 2018) .HBV infection is fairly common among people living with HIV. About 10 percent of people living with HIV in the United States are co-infected with HBV

There are currently widespread person-to-person outbreaks of hepatitis A affecting PWID across the United States (Foster et al., 2019).In Nevada, between 2011 and 2015, reported rates of acute hepatitis

A increased by 100% and acute hepatitis B decreased by 18%. In Clark County, there were 38 confirmed acute hepatitis A cases reported in 2018 vs. 13 cases reported in 2017 and 12 cases reported in 2016. Of the total cases reported in 2018, 53% were injection and/or non-injection drug users, compared to 39% who were not using drugs and 8% unknown. Additionally, 16 % of the total cases reported in 2018, were homeless (Public Health Update Increase of Hepatitis A Virus (HAV) Infections in Clark County, Nevada, 2019).

### Teen Pregnancy

Researchers have noted that early adolescents who are pregnant are more likely to use drugs as compared to late adolescents who are pregnant (Salas-Wright, Vaughn, Ugalde, & Todric, 2015). According to the National Survey on Drug Use and Health, between 2002 and 2012, more than one third (34%) of all pregnant early adolescents reported having used one or more substances over the previous 30 days (Salas-Wright et al., 2015).

In Nevada, the teen birth rate in 2017 was 21.9 per 1000 females. This rate is highest among Blacks (38%) followed by Hispanics (27%) and Whites (14%). In 2016, among sexually active high school students, about 19% of high school students reported that they drank alcohol or used drugs before last sexual intercourse and 10% of them reported that they have had sexual intercourse with 4 or more persons (U.S Department of Health & Human Services , 2016). In certain zip codes of Clark County, teen birth rates are above the national average of 24 births per 1,000 teen girls ages 15-19 (“Teen Pregnancy in Nevada – Southern Nevada Health District,” 2016).

### Drug induced crimes and imprisonment

Individuals who use illicit drugs are more likely to commit crimes, and it is common for many offenses, including violent crimes, to be committed by individuals who had used drugs or alcohol prior to committing the crime, or who were using at the time of the offense (National Institute on Drug Abuse (NIDA), 2014). According to 2012 statistics from the Department of Justice’s (DOJ’s) Bureau of Justice Statistics (BJS), the total correctional population is estimated to be 6,937,600, with 4,794,000 individuals on probation or under parole supervision, and drug law violations accounting for the most common type of criminal offense in United States (Glaze, Herberman, & Statisticians, 2013). In 2018, number of arrests made related to drug abuse violations (sale/manufacturing or possession of) was 434 among people aged 18-24years and 1284 among people aged 25-60 years in Nevada. Total of 152 juvenile arrests were made related to drug abuse violations in Clark County in the year 2017 (Sandoval, Wright, & Butler, 2017). According to the Las Vegas Metropolitan Police Department (LVMPD) (Clark County Detention Center) arrest data, white females account for over 60% of methamphetamine possession arrests involving females, while white males comprise almost 50% of male arrests for methamphetamine (Nevada High Intensity Drug Trafficking Area [HIDTA] Threat Assessment , 2018).

## Economic burden

Substance use disorders contribute heavily to the burden of disease in the United States and are costly to the nation as a whole because of lost productivity, health care, and crime (“Office of National Drug Control Policy, 2011). The economic cost of drug abuse in the United States was estimated at \$193 billion in 2007. This included estimates of \$120 billion in lost productivity, participation in drug abuse treatment, incarceration, and premature death; \$11 billion for drug treatment and drug-related medical consequences; and \$61 billion in criminal justice costs (Drug Intelligence Center, 2011). Studies show that substance use and substance use disorders are associated with use of high-cost services such as inpatient hospitalizations (Mark et al., 2013) and emergency department visits (Perron et al., 2011). The number of emergency department visits and inpatient hospitalization due to opioid overdose in 2018 was 12.5 and 11.1 (per 100,000 population) respectively in Nevada. In Clark County, the number of emergency department visits and inpatient hospitalization due to opioid overdose in 2018 was 13.3 and 10.3 (per 100,000 population) respectively (Nevada department of Health and Human services, 2019).

Alcohol visits were more common than drug visits in Nevada until 2014 where drugs visits to the emergency department surpassed. In 2017, there was a total of 19,162 alcohol and drug-related emergency department encounters. Out of this number, 11,612 were related to alcohol and 7,550 were drug-related. In 2017, there was a total of 35,969 alcohol and drug-related inpatient admissions in Clark County of which, 2,333 were related to alcohol (NV Opioid Dashboard, 2018). Underage drinking cost the United States an estimated \$24.3 billion in direct health care costs, treatment costs and lost productivity in 2010. There was an increase in inpatient admissions where marijuana/cannabis-related disorders and dependence were listed on the diagnosis in 2017 (Drug Intelligence Center, 2011). Care of babies diagnosed with NAS can be costly to the healthcare system. Among Medicaid-financed births, infants with NAS had an average hospital stay of 16.6 days, costing, on average, more than \$19,000 in United States (Centre for Disease Control and Prevention [CDC], 2019). Information at Nevada state and County level is limited to its incidence.

## **Risk/Protective Factors of Substance Abuse**

### Youth & Young Adults

Age is an extremely important factor in substance abuse vulnerability with younger age groups experiencing higher rates of substance use and dependence compared to older adults. Epidemiological evidence suggests that people who begin experimenting with drugs during early adolescence are more likely to develop substance use disorders (Surgeon General's Report, 2016) and has a significant impact on both physical and mental functioning of adolescents into adulthood (Steinberg, 2005). Results from the 2017 National YRBS indicated that about 30% of high school students reported current alcohol use, 20% reported current marijuana use, 14% of students had taken prescription pain medicine without a doctor's

prescription and 14% reported ever used select illicit or injection drugs (i.e. cocaine, inhalants, heroin, methamphetamines, hallucinogens, or ecstasy) (Kann et al., 2018).

Some people are more vulnerable to substance use disorder than others, due to a range of possible risk factors. Adolescents with a history of physical and/or sexual abuse are more likely to be diagnosed with substance use disorders (Shane, Diamond, Mensinger, Shera, & Wintersteen, 2006). In addition, students who report ever using prescription drugs without a doctor's prescription are more likely than other students to have been the victim of physical or sexual dating violence (Clayton, Lowry, Basile, Demissie, & Bohm, 2017). About 25% of children in Nevada aged 0-17 years experienced adverse childhood experiences (ACEs) in 2017 compared to 21% nationally (Downey, Gudmunson, Pang, & Lee, 2017). Out of all the ACEs that took place among middle schoolers in Nevada, about 26% of them drank alcohol during 30 days before survey, 17.8% used marijuana and 21.3% of them took prescription pain medication without doctor's prescription (Nevada Middle School Youth Risk Behavior Survey (YRBS), 2017). Adverse childhood experiences or "ACEs" include things like economic hardships; parental divorce or separation; living with someone who had an alcohol or drug problem; neighborhood violence victim or witness; living with someone who was mentally ill, suicidal or severely depressed; domestic violence witness; parent served jail time; treated or judged unfairly due to race/ethnicity; or death of parent. Research also suggests that adolescents who experienced ACEs have higher suicidal risks (Thompson, Kingree, & Lamis, 2019). According to CDC WONDER database, the teen suicide rate among adolescents aged 15-19 years in Nevada is 13.5 (per 100,000 populations) which is higher than national average. The risk is highest among Non-Hispanic (19.6) and White males (19.2) in Nevada. Adolescent substance use is also associated with sexual risk behaviors that put young people at risk for HIV, sexually transmitted diseases (STDs), and pregnancy (Department of Health and Human services & of the Surgeon General, 2015) According to the 2017 National Youth Risk Behavior Survey (YRBS), 40% of high school students have ever had intercourse and 29% of high school students are currently sexually active. Of the students who are currently sexually active, 19% drank alcohol or used drugs before last sexual intercourse (Kann et al., 2018).

### Homelessness

Homelessness is a critical issue to discuss when we are thinking about prevention of substance use disorders in any community. Communities throughout the U.S. are struggling to find solutions for serious and persistent homelessness. Alcohol and drug problems can be both causes and consequences of homelessness, as well as co-occurring disorders that complicate efforts to succeed in finding stable housing (Polcin, 2016). Homeless populations with substance abuse issues pose a higher risk of physical and psychiatric disorders, all of which complicate their ability to secure food, housing, employment, income assistance, and medical care. On an individual level, persons who have a problem with alcohol and/or other drugs, and who are in marginal economic circumstances, are at especially high risk for homelessness. Risk increases when use of alcohol and other drugs leads to the loss of a job, an eviction notice, or an incident of domestic violence. Moreover, displacement to a hotel, shelter, or the streets can exacerbate the problem;

homeless individuals may turn to alcohol and/or other drugs to numb their senses from the difficulties encountered in these settings (Koegel & Burnam, 1988). According to a recent count in 2018, more than 500,000 people in the United States experience homelessness on any given night. Among them, about 67% are single individuals and families with children represent the other 33%. (State of Homelessness - National Alliance to End Homelessness, 2019).

As of January 2018, Nevada's count estimated 7,544 experiencing homelessness on any given day, as reported by Continuums of Care to the U.S. Department of Housing and Urban Development (HUD). Of that Total, 167 were family households, 723 were Veterans, 1,404 were unaccompanied young adults (aged 18-24), and 648 were individuals experiencing chronic homelessness(US Interagency Council on Homelessness, 2018). Homelessness disproportionately affects Whites and African Americans in Nevada. The top five causes reported for those experiencing homelessness, according to the survey of homeless on Clark County streets, are lost job or unemployment (56.2%) , mental health issues(44.7%), illness or medical problems (40.5%), alcohol or drug abuse (38.9%) and asked to leave family or friends' home ( Homeless Southern Nevada Comprehensive Report, 2018). According to the Southern Nevada homeless survey (2018), 63.9% of homeless persons in Southern Nevada were unsheltered. The majority (30.2%) of respondents were between the ages of 51 and 60 years of age. 44.7% survey respondents reported experiencing mental illness, depression (54.3%), or PTSD (21.2%). Of the respondents that reported mental illness, 75.5% indicated that it "prevented or limited" their capacity to obtain employment or housing. Another 38.9% of survey respondents reported to be currently experiencing alcohol or drug abuse at the time of the survey and 20% of survey respondents reported suffering from co-occurring depression and substance abuse(*Southern Nevada Homeless census and survey, 2018*) .

Military veterans and substance use

Nevada ranks 30th in total veteran population comprising of 2,219,901 (10%) of total veteran population in 2017. Of which majority of veteran population reside in Clark County (151,579) and majority (37.6%) of whom served in Vietnam War. Women veterans make up 9.69% of Nevada's heroes, and 46.47% of the current veteran population is over the age of 65, with the majority having served during the Vietnam era. About 46% of total veteran population in Nevada is above 65 years of age (Nevada department of veterans services, 2017) . Of all, about 20.6% of them are connected to disability services (Veterans data central, 2017). Table 1 provides the overview of the Nevada Veteran population in comparison to National level.

Table 1. Overview of the Nevada Veteran population

	<b>Nevada</b>	<b>National</b>
Number of Veterans	221,996	20,392,192
Percent of Adult Population that are Veterans	10.35%	6.60%
Number of Women Veterans	21,509	1,860,516
Percent of Women Veterans	9.69%	9.12%
Number of Military Retirees	28,983	2,129,774
Percent of Veterans that are Military Retirees	13.06%	10.44%
Number of Veterans Age 65 and Over	103,165	9,560,748
Percent of Veterans Age 65 and Over	46.47%	46.88%

The demands of military service, including the trauma of combat, may contribute to substance use among veterans (James, Van Kampen, Miller, & Engdahl, 2013). There is not much data specific to Veterans population regarding substance abuse at state level. But nationally, about 1.5 million (6.6 percent of this population) veterans aged 17 or older had a substance use disorder in the past year according to the 2013 National Survey on Drug Use and Health. The rate of substance use disorders among veterans ranged from 3.7 percent among pre-Vietnam-era veterans to 12.7 percent among those who served in the military since September 2001 (National survey on Drug use & Health, 2015). Studies show PTSD and substance use problems are strongly related in people who served in the military and in civilians (James et al., 2013).

Past research suggest that veterans with a diagnosis of PTSD or another mental health disorder are more likely to receive an opioid prescription than those without mental health diagnoses (Seal et al., 2012). From 2001 to 2009, in United States, the percent of veterans in the VA health care system receiving an opioid prescription increased from 17% to 24% (Bohnert et al., 2014). From 2003 to 2007, chronic opioid use (i.e., 6 months or longer) among young veterans in the VA health care system increased from 3.0% to 4.5% (Wu, Lang, Hasson, Linder, & Clark, 2010). Marijuana accounts for the vast majority of illicit drug use among veterans. From 2002 to 2009, cannabis use disorders increased >50% among veterans in the VA health care system (Bonn-Miller, Harris, & Trafton, 2012). Moreover, veterans are more likely to be smokers, and age-adjusted prevalence of smoking is higher among veterans than matched civilian groups (27% vs 21%). In addition to this, substance abuse and sexual assault are prevalent issues for female veterans. Those women who are at high risk of sexual trauma associated PTSD are also at higher risk of substance abuse (Davis & Wood, 1999).

#### Pregnant women

Studies suggest that women in their reproductive years (18-44 years) are at highest risk for developing a substance use disorder (Compton, Thomas, Stinson, & Grant, 2007). This means that women who are pregnant or soon to become pregnant are at increased risk for substance abuse. Negative birth outcomes due to drug use in pregnancy include increased risks of miscarriage, stillbirth and infant mortality, congenital anomalies, low birthweight, reduced gestational age, preterm delivery, and small-for-gestational age (Forry, 2016). Results from the 2017-2018 National Survey on Drug Use and Health depicts that about 5.4% of pregnant women reported of using illicit drug use in past month compared to 8.5% in 2017. The drug use was highest among pregnant women aged 18-25 years (10%). The use was high among pregnant women covered under Medicaid/CHIP health insurance. Marijuana was the most commonly abused drug among all the drug types (4.7%). More specifically, the past month marijuana use increased from 4 percent in 2009 to 7.1 percent in 2017(National Survey on Drug Use and Health, 2017). As maternal drug use has increased, so have neonatal admissions and adverse health outcomes in the first year of life. In a study of over 650,000 infants born in the United States between 2004 and 2013, neonatal abstinence syndrome

cases increased from 7 to 27 cases per 1000 neonatal intensive care units (NICU) admissions and median length of stay for these infants increased from 13 to 19 days (Tolia et al., 2015).

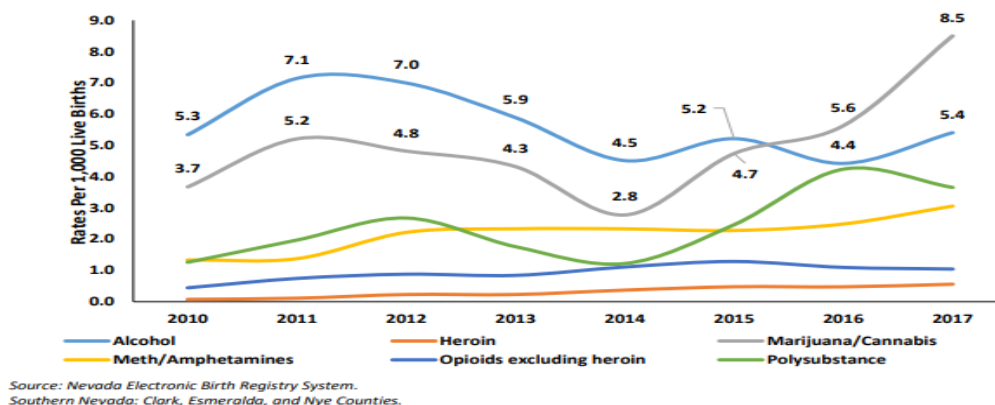


Figure 1. Prenatal Substance Abuse Birth Rates (self-reported) for Select Substances, Southern Nevada 2010-2017

In Nevada, between 2007 and 2009, the category of substance most abused by pregnant mothers is Narcotics (34.2%), followed by hallucinogenic agents (21.7%), cocaine (21.3%), other substances (16.2%), alcohol (3.6%), and unspecified substances (3.0%) (Tolia et al., 2015). Self-report marijuana/cannabis use in pregnant women has increased significantly from 3.7 per 1,000 live births in 2010, to 8.5 per 1,000 live births in 2017. Figure 1 shows the trend of prenatal substance abuse birth rates (per 1000 live births) in Nevada between 2010 and 2017. There was an increase in birth rates due to all the illicit substances. On average, there were 26,828 live births per year to Southern Nevada residents between 2010 and 2017. In 2017, there were 145 births were the mother reported alcohol use, 228 with marijuana use reported, and 98 with polysubstance use. The substance abuse birth rate was highest for Marijuana (8.5 per 1000 live births) followed by opiates (5.4 per 1000 live births) and methamphetamines (2.9 per 1000 live births). Of the self-reported substance use during pregnancy among Southern Nevada mothers who gave birth between 2010 and 2017, the highest rate was with marijuana use in 2017, at 8.5 per 1,000 live births. Since 2015, the marijuana use rate has surpassed the alcohol use rate, which was 5.4 per 1,000 births in 2017. In 2017, a rate of 3.1 per 1,000 live births was reported for meth/amphetamines, which higher than 2010 at 1.3 per 1,000 live births. For polysubstance use, 3.7 per 1,000 live births reported in 2017. There has been an increase in self-reported polysubstance use since 2014, up from 1.2 per 1,000 live births (Nevada Behavioral Health Policy Board, 2018).

### Sexual Minorities

Sexual minorities are two times more likely than heterosexual adults to have used any illicit drug according to 2015 National Survey on Drug Use and Health. Use of marijuana (30.7%) and prescription pain relievers (10.4%) was higher among sexual minority adults compared to 12.9% and 4.5% of heterosexual adults respectively (2015 National Survey on Drug Use and Health, 2016). Moreover



consumption of alcohol among LGBT adults is higher (Ward, Dahlhamer, Galinsky, & Joestl, 2014) and earlier (McCabe, Hughes, Bostwick, West, & Boyd, 2009) compared to non-LGBT counterparts. Disparities also exist in the subpopulation. In one meta-analysis, LGB adolescents were 90 percent more likely to use substances than heterosexual adolescents, and the difference was particularly pronounced in some subpopulations; bisexual adolescents used substances at 3.4 times the rate of heterosexual adolescents, and lesbian and bisexual females used at four times the rate of their heterosexual counterparts (Marshall et al., 2008). According to Nevada BRFSS, among the LGB population, 22.4% participated in binge drinking in 2017, compared to 17.74% of the non-LGB population (Substance Abuse Prevention & Treatment Agency, 2018).

Sexual minorities with substance use disorders are more likely to have additional (comorbid or co-occurring) psychiatric disorders (Gonzales & Henning-Smith, 2017). When the LGB population was asked how their general health was, 18.3% said their general health was fair or poor in 2017 as compared to non-LGB at 21.1% and reported of having depressive disorder, 37.4% responded yes, compared to non-LGB at 14.7% according to Nevada BRFSS (Substance Abuse Prevention & Treatment Agency, 2018). In the transgender population, 18.6% participated in binge drinking in 2016, and 22.2% said their general health is fair or poor. When asked if they have been told before that they have depressive disorder, 36.7% responded yes, and 44% had ten or more days of poor mental health (Substance Abuse Prevention & Treatment Agency, 2018). LGBTQ people are also at increased risks for human immunodeficiency virus (HIV) due to both intravenous drug use and risky sexual behaviors. Current research suggests that treatment should address unique factors in these patients' lives that may include homophobia/transphobia, family problems, violence, and social isolation ("Substance Use and SUDs in LGBTQ\* Populations | National Institute on Drug Abuse (NIDA)," 2019).

### Mental Health

Co-relation between co-occurring mental health illness and substance use disorder has been well established (Ross & Peselow, 2012). In 2017, an estimated 35.4 million adults (14.3 percent) in U.S. households had mental illness in the past year and 18.7 million had a substance use disorder while 8.5 million had both a mental and substance use disorder (co-occurring disorders) in United States (Lipari & Park-Lee, 2019). In 2018, the percentages of adults who used illicit drugs in the past year were higher among those with Serious Mental Illness (SMI) (49.4 %) and adults with Acute Mental Illness (AMI) (36.7 %) compared with those without any mental illness (15.7 %). Adults in 2018 who had AMI or SMI were more likely than those without any mental illness to be past year users of marijuana (29.2 or 38.9 vs. 13.2 percent) or past year misusers of opioids (9.2 or 14.6 vs. 2.6 percent). Among adults aged 18 or older in 2018, 28.1 percent of adults with AMI and 37.2 percent of adults with SMI were cigarette smokers in the past month compared with 16.3 percent of those without any mental illness. In addition, 31.3 percent of adults with AMI and 32.3 percent of adults with SMI were binge alcohol drinkers in the past month compared with 25.3 percent of adults with no mental illness.

Although there are fewer studies on comorbidity among youth, research suggests that adolescents with substance use disorders also have high rates of co-occurring mental illness; over 60 percent of adolescents in community-based substance use disorder treatment programs also meet diagnostic criteria for another mental illness. Approximately 1.5% of all adolescents had substance use disorder (SUD) and major depressive episode (MDE) in the past year, including 288,000 adolescents (1.2% of all adolescents) who had an SUD and an MDE with severe impairment.

In Nevada, mental health clinics serve people with a variety of diagnoses, including polysubstance dependence. As mentioned previously, mental health disorders and substance use disorders are often co-occurring. Almost one in five adults in Nevada have some kind of mental illness. This is comparable to other states where the percentage of adults with mental illness ranged from 16% to 21%. The most recent estimates of prevalence rate of any mental illness among adults was 18.52% by the Substance Abuse and Mental Health Services Administration in 2014. This is an increase since the 2011 estimate of 16.48%.

#### Treatment Needs and Availability

In Nevada, in a single-day count, 6,930 individuals in Nevada were enrolled in substance use treatment in 2015, an increase from 5,327 individuals in 2012. Among them, 47.5% were in treatment for a drug problem only, 18.3% were in treatment for an alcohol problem only, and 34.2% were in treatment for both drug and alcohol problems. Opioid-related hospitalizations have increased dramatically in recent years. Between 2010 and 2015, the emergency department encounters due to opioid related poisonings were fairly stable. However, opioid related inpatient admissions almost doubled between 2010 (440) and 2015 (705) (Nevada Opioid Surveillance Report, 2015), 2010). In 2015, about 1,555 individuals in Nevada were receiving methadone in opioid treatment programs as part of their substance use treatment (Abuse, Health Services Administration, & for Behavioral Health Statistics, 2015). According to the Treatment Episode Data Set (TEDS), the largest percentage of methamphetamine admissions were male (aged 26-30-year-old), increasing from 50% of the methamphetamine admission population in 2014 to 66% in 2017. The majority of persons admitted for methamphetamine are white; however, this percentage has decreased from 72% in 2014 to 54% in 2017 (*High Intensity Drug Trafficking Areas 2018 Threat Assessment [HIDTA]*, 2018). Although, individuals receiving specific treatments have increased due to improvements in recent years both nationally and statewide, gaps exist in providing unmet needs of the community. In Nevada, young adults needing but not receiving treatment for illicit drug use in 2016 was 6.5% and 1.6% for adults. People needing support for substance use may also have other major unmet needs including health insurance, affordable housing and access to transportation. These issues impact their ability to access and have successful outcomes from treatment and for recovery (Abuse, Health Services Administration, & for Behavioral Health Statistics, 2015).

## **ASSESSMENT OF CAPACITY**

To better understand the current status of substance abuse prevention services in the community and to identify future needs which could be incorporated in the comprehensive prevention plan, Nevada Institute for Children's Research & Policy (NICRP) conducted semi-structured interviews with relevant community organizations and agencies.

### **Methodology**

#### Questionnaire Development

NICRP staff met with the CARE Coalition on October 31st, 2019 to gain a better understanding of the type of information the CARE Coalition desires to obtain from stakeholders for use in the preparation of its comprehensive substance abuse prevention plan. At the meeting, six main areas of information were identified: (1) information on the affiliation of each organization with the CARE Coalition, (2) the organization's views on the strengths of the CARE Coalition, (3) any recommendations for how the CARE Coalition can improve, (4) identification of specific populations that require the highest focus, (5) the most important issues relating to substance abuse prevention during the next five years, and (6) any other priorities that the CARE Coalition should be aware of while developing a prevention plan for substance abuse. The questionnaire was framed to capture the above ideas and included the following seven questions:

1. Can you tell me a little about how you are affiliated with the CARE Coalition? (Board member, funder, etc.)
2. How long has your organization been working with the CARE Coalition?
3. What would you say are some of the biggest strengths of the CARE Coalition?
4. What are some things that you think the CARE Coalition could improve? What resources do you think the CARE Coalition needs to make those improvements?
5. What specific communities in Nevada do you see as needing additional outreach for substance abuse prevention? [for example, rural communities, homeless, veterans, LGBTQ] How can the CARE Coalition help in these communities?
6. What do you see as the biggest issue to be addressed in the next 5 years related to substance abuse prevention in Nevada?
7. Is there anything else you think the CARE Coalition should be aware of or consider in developing its prevention plan? (Focus areas, services, policies, etc.)

## Stakeholder Recruitment

The CARE Coalition was asked to identify key community partners from whom it would like to have feedback for purposes of preparing its comprehensive prevention plan. Eleven key stakeholders were identified by CARE Coalition and NICRP contacted them via email. Of all who were contacted, ten stakeholders confirmed their participation. NICRP interviewed representatives from:

- 1) The Fearless Kind
- 2) The Gay and Lesbian Community Center
- 3) Renew Therapeutic Enhancement Services
- 4) Community Counseling Center
- 5) West Care Foundation
- 6) Destination for Teens
- 7) Turning Point
- 8) Iron Sharpens Iron Mentoring
- 9) Nevada Minority Health and Equity Coalition
- 10) Las Vegas Veterans Center

## Conducting Interviews

Phone interviews were conducted according to the convenience of the stakeholders between November 15, 2019 and December 15, 2019. Participants were asked to consent to record the conversation to ensure an accurate representation of their responses. All of the stakeholder representatives were asked the same seven questions (plus relevant prompts to elicit more detailed feedback) in order to gain a full understanding of their perspectives regarding the services and focus of the CARE Coalition. The interviews typically lasted between 15 and 20 minutes.

## Data Analysis

The phone interviews were audio recorded and transcribed to accurately report the participants' thoughts and ideas as presented during the discussions. These transcriptions were combined with notes taken by the interviewer about the participants' responses during the discussion to provide a comprehensive picture of each participant's perspectives on substance abuse prevention. Finally, responses were compared across stakeholders to determine common views on needs in the community, and any unique suggestions provided by participating organizations were noted as well.

## **Results**

Each of the stakeholders interviewed was affiliated with the CARE Coalition either as a member of the board or as a community partner organization. These organizations have worked with the CARE Coalition for time periods varying from the inception of the CARE Coalition in 2011 to as little as one year. Information

gathered from the stakeholders is presented below. Many common themes emerged from the discussions and are presented below, along with individual ideas and suggestions offered by the stakeholders.

### Strengths of the CARE Coalition

Stakeholders were asked to discuss their perceptions on the major strengths of the CARE Coalition. Everyone indicated that the CARE Coalition's ability to seamlessly develop collaboration among stakeholders, as well as between community partners, and the community is one of its greatest strengths. More specifically, stakeholders mentioned that the CARE Coalition monthly meetings provide an opportunity for all the stakeholders to come together and work on the specific set of goals in promoting a drug-free environment. The monthly meetings help stakeholders learn about and network with other organizations, thereby allowing them to better serve their communities. Stakeholders agreed that the CARE Coalition's monthly meetings are vital for keeping stakeholders updated on information about the current statistics of substance abuse problems in the community, as well as the availability of new resources such as events, activities, services, training opportunities, and educational materials.

Another strength that stakeholders identified was the CARE Coalition's understanding of the unique needs of Nevada's diverse communities. Stakeholders believe that the CARE Coalition considers specific community needs while determining and allocating funds to different community partners. One of the stakeholders stated that the, "Coalition recognizes the need for services and resources among diverse communities and especially rural areas. For example, they provide funding to work with schools in rural areas."

Other strengths of the CARE Coalition that stakeholders identified are the (1) valuable support that partners receive in terms of funding and volunteering during community events, (2) ability to educate the community with the help of diverse and trained staff, (3) ability to represent the marginalized in the community, (4) wealth of training opportunities offered by the CARE Coalition, and (5) educational materials provided to community partners.

### Opportunities for Improvement

Stakeholders were asked to provide recommendations for improving the services provided by the CARE Coalition. Most stakeholders believe the CARE Coalition should provide more outreach services by recruiting more staff and community partners to work within diverse communities to reach the underserved populations. In addition, collaboration with local governmental agencies such as the Southern Nevada Health District could provide robust organizational and technical support in furtherance of the CARE Coalition's goals.

Stakeholders also stressed the importance of understanding the link between substance abuse and social determinants of health and recommended increasing collaboration with organizations that might not be

directly affiliated with substance abuse prevention but may serve as a necessary link in a successful prevention plan. By way of example, one of the participants stated, “I teach in the community about suicide prevention and I know there is link between substance abuse and suicide prevention.” For this reason, including mental health services as part of a substance abuse prevention plan might prove helpful.

The CARE Coalition’s monthly meetings provide invaluable information, but stakeholders noted that they could be better organized. Participants should receive a reminder in advance of the meetings and a handout reiterating the key issues of the meeting.

#### Resources to Help the CARE Coalition Improve

Stakeholders provided several suggestions of resources that the CARE Coalition could utilize to improve. First, recruiting leaders, speakers or community organizers that represent their specific population to donate their time in spreading awareness and available resources may prove helpful. Second, organizing monthly meetings at the offices of different community partners can help increase familiarity with the services other partners provide to the community and allow for greater collaboration. In addition, efforts should be made to educate community partners about the intensity of the problem, community needs, and available services, so that community partners are well positioned to develop a cohesive strategic plan to prevent substance abuse.

One stakeholder mentioned the need for improvement in terms of “population specific marketing techniques.” For example, trying to reach youth through television campaigns is no longer considered an effective strategy. Instead of using television, using social media and collaborating with primary and middle schools on campaigns targeted for younger populations could prove highly beneficial. Other ideas include providing resources to students and other at risk populations through websites with short educational videos, which could be interactive as well as informative to help facilitate resource seeking.

#### At- Risk Populations Requiring Greater Focus

The young, members of the LGBTQ community, and the homeless community were identified as most at risk of substance abuse and therefore in need of additional outreach for substance abuse prevention services. In addition, stakeholders noted that the elderly, those living in rural communities, communities of color, veterans, women and Native Americans each require specialized focus. Each of these populations is considered in detail below:

##### *Youth*

Interviewees agreed that the young are the most vulnerable population in Nevada. There is an immense need to reach out to youth due to the increased use of drugs and new drug experimentation among members of this group. One stakeholder stated, “Vaping is a problem now but maybe something could have been done ahead of time. The best way to approach youth is reaching out to them before it becomes a

problem.” He suggested “school outreach” as the best approach. Access to mental health resources to fight post-traumatic shock disorder or depression due to bullying, and peer pressure before they start using substances is another approach. The CARE Coalition can also educate youth by hosting “open houses” where experts can share their knowledge on special topics like self-injuries, drug experimentation, safety issues related to drug use, family conflicts, addiction, and addictive behaviors. Awareness can be spread through blood drives, poster campaigns, after-school programs, and other interactive events in schools or through social media. All of this can be done by increasing partnerships with school districts and youth organizations to learn more about the needs of the youth, and develop programs specific to those needs. Stakeholders emphasized the importance of tackling co-existing problems like juvenile crimes related to substance abuse among youth, with one participant noting, for example, that there has been an increase in juvenile crime rates in rural areas since the marijuana law passed.

### *LGBTQ*

LGBTQ persons would benefit from additional focus as members of the LGBTQ community in Nevada often face ostracism and as a result, may use drugs, become homeless, or end up attempting suicide. Ensuring that members of the LGBTQ community who are “coming out” have adequate resources and support is critical to helping stem addiction. Stakeholders think the best way to approach this community is by providing services like mental health counseling to help LGBTQ persons cope with the unique challenges related to stigmatization that cause some LGBTQ persons to become drug reliant.

### *The Homeless*

The homeless were identified as another at risk population in Nevada that could benefit from additional focus. One stakeholder suggested that “consistent consultancy” is the best way to help the homeless population. The concept of consistent consultancy according to him is that if the same staff goes to the same homeless person at the same location during the same time consistently for a few weeks, then it might increase the curiosity of the homeless person and might provide opportunities to educate the homeless about drug use and the resources available to overcome drug addiction. The CARE Coalition can also help these communities by being more than a provider of prevention services. One stakeholder believes that “The CARE [Coalition] needs to come up with the comprehensive approach where the community can be benefitted as a unit and not individually to minimize the impact of substance abuse in the community.” This can be done by collaborating with other agencies providing benefits like housing, transportation, education, income, and others.

### *Elderly, Rural Communities, Communities of Color, Veterans, Women and Native Americans*

The elderly, those living in rural communities, communities of color, veterans, women and Native Americans are other communities that need additional outreach according to some stakeholders. Overcoming the barriers specific to each target population should be considered as part of a comprehensive prevention

plan. Stakeholders thought that outreach providing education and information focused on cultural competencies and challenges may prove helpful. Recruiting diverse staff which can help to develop effective interaction with them and understand the needs of specific community.

#### The CARE Coalition's Focus Area for the next 5 years

Stakeholders believe that the most important issues to be addressed over the next five years related to substance abuse prevention in Nevada. Three key suggestions were: (1) Education & awareness (2) Increase in Methamphetamine use (3) Research & Academics.

Education and awareness were the most commonly cited issue that need to be targeted. Stakeholders emphasized that an important element of combatting addiction is to decrease misinformation and instead provide education increase awareness about types of drugs, their effects, and resources available in the community to help overcome addiction. Specifically, one stakeholder stated that, "People taking two or three pain medication daily may not understand the dependency and might have a hard time focusing at the job, so educating them is important." Another stakeholder recommended including educational leaflets along with the harm reduction kits provided by TRAC-B (the needle exchange service in Las Vegas). Stakeholders also think that educating on topics like insurance coverage in terms of substance abuse treatment is also essential. One of the stakeholders stated, "One should educate people on what they think their insurance is providing and what actually the insurance covers- more transparency."

Another stakeholder mentioned that awareness and education can be increased if the State and the CARE Coalition work hand in hand. In particular, engaging more elected officials for particular zip codes or neighborhoods from the community who can be the voice of the people they serve could increase awareness of drug dependency. In addition, greater collaboration between the State and the CARE Coalition was cited as an important aspect of ensuring the achievement of the CARE Coalition's goals. Specifically, one stakeholder claimed that "being an organization that has leverage, and by leverage I mean has support of state to be able to support not only the needs of community but also be able to do organizational assessment would help them to better allocate the funding to meet their goals".

The other most commonly cited issue of importance during the next five years is addressing the increase in the use of methamphetamines in Nevada. Nationwide efforts to combat the opioid epidemic have resulted in a tightening supply of opioids as well as an increase in the cost of opioids. Unfortunately, those addicted to opioids are now turning to cheaper and more easily available drugs like methamphetamines. Recognizing that methamphetamine use is rising and focusing on ways to address this issue now is critical for preventing methamphetamine use from becoming the next epidemic. One interviewee remarked that "Preventive efforts focused on stimulant drugs right now can really help us in the next five years."

As an ancillary point one stakeholder noted that conducting community based participatory research and post intervention/project surveys in the community and organizations involved could provide useful insight



into what CARE Coalition should be focusing on for next five years. He suggested that CARE Coalition can act as a center for all the necessary information, statistics, and research from the community which will guide the community partners to direct their efforts towards underserved areas of prevention.

### Funding

Throughout the interview, stakeholders' emphasized lack of funding as the biggest barrier towards working effectively in providing preventive services in the community is having sufficient funding. One stakeholder stated, "They are doing what they can with what they have. Funding is the biggest challenge." While another said that, "If they had more funding and staffing then they could do more outreach, more promotion, and more advertisement in a harder to ignore way." Stakeholders acknowledged that increasing outreach in communities requires more staff and resources which in turn requires more funding. One stakeholder mentioned, "You can't let people know what you are doing if you don't have people to do it."

Other funding issues included the length of time between funding applications and the dispersal of funds which potentially affected some projects. The specific allocation of funding also concerns stakeholders, with one interviewee mentioning that funding is critical for the rural areas like Laughlin. Since Laughlin is a tristate area, funding is distributed to different communities such as veterans, schools and homeless but ultimately there are insufficient funds for each community.

Finally, stakeholders suggested that one way to obtain more funding would be to acquire funds directly from other agencies that are willing to help fight substance abuse. According to one stakeholder, the funding that the CARE Coalition receives from the state and federal governments is much less compared to other local coalitions, and that gaining political support might help overcome this challenge. As discussed previously under the CARE Coalition's Five-Year Plan Focus Areas, more state and political support would prove helpful in terms of reputation, marketing and funding.

### Additional Considerations

Stakeholders provided several additional recommendations for the CARE Coalition's consideration when developing its prevention plan. First, the CARE Coalition could consider adopting best practices that have been successfully implemented in other states and organizations. Second, the CARE Coalition could offer comprehensive preventive services that include focusing on a mental health approach to curb substance abuse, teaching coping strategies to youth, and developing more appealing strategies that attract young people to cope with the substance abuse problems. Finally, the CARE Coalition should consider the need for detox and long-term treatment facilities in Nevada. Currently Medicaid does not cover long-term treatment for drug addiction and according to one stakeholder efforts should be made to overcome such short comings to continue to provide clinically necessary inpatient stabilization to deal with increasing drug use.

## CONCLUSION AND RECOMMENDATIONS

Overall, stakeholders appreciate the efforts and services provided by the CARE Coalition. However, they believe that with changing trends and needs in the community, the CARE Coalition should expand its services to underserved populations by providing more comprehensive services and incorporate strategies that have been used successfully by other organizations. The stakeholders who were interviewed greatly appreciated the opportunity to contribute their experiences, opinions, and recommendations regarding preventive needs in Southern Nevada, and made it a point to mention that they would be willing to do it again. The following recommendations set forth potential areas of focus for the 2020-2021 community prevention plan based on information collected from the stakeholders:

1. Increase Funding

Expanding outreach efforts in the community requires more staff, more training, more community events, and most importantly, more funding. More state and political support might be helpful in terms of reputation, promotion, and funding. Efforts should be made to obtain direct funds from different agencies willing to help fight against substance abuse

2. Coalition Meetings and Trainings

Continue to be great collaborators and continue to hold monthly meetings which allow stakeholders to work simultaneously towards the same set of goals of drug-free environment. Stakeholders think that the CARE Coalition can serve as a leader in providing stakeholder level training and support community organizations in obtaining specialized training.

3. Efforts to Increase Partnership

Improving partnership in other sectors/organizations/agencies that could serve as an important link to address the social determinants of health, such as transportation, housing, job placements for the target population.

4. Target Specific Populations

Youth were identified as the most vulnerable population to substance abuse in Nevada. Increasing partnerships with school districts, learning more about the needs of youth and strategizing programs specific to those needs by connecting with youth organizations might be beneficial. LGBTQ and those experiencing homelessness are the other important communities identified by the stakeholders. These communities would benefit from counseling and other services to help them cope with the mental health challenges related to stigmatization. Finally, the elderly, rural communities, communities of color, veterans, women and Native Americans also need additional focus.

5. Academic and Research Needs

The CARE Coalition has the opportunity to expand beyond providing preventive services. Conducting post project/intervention surveys, community based participatory research, and within the community and with community partners will be useful in setting up a drug abuse prevention plan.

## References

- 1 in 15 Veterans Had a Substance Use Disorder in the Past Year. (n.d.). Retrieved October 22, 2019, from [https://www.samhsa.gov/data/sites/default/files/report\\_1969/Spotlight-1969.html](https://www.samhsa.gov/data/sites/default/files/report_1969/Spotlight-1969.html)
- 2 new cases of vaping-related illness reported in Clark County | Las Vegas Review-Journal. (n.d.). Retrieved October 29, 2019, from <https://www.reviewjournal.com/life/health/2-new-cases-of-vaping-related-illness-reported-in-clark-county-1850855/>
- 2017 Nevada High School Youth Risk Behavior Survey (YRBS): Clark County Special Report ii. (2018). Retrieved from [https://www.unr.edu/Documents/public-health/2017\\_yrbs/2015-2017%20Nevada%20High%20School%20YRBS%20Comparison%20Report.pdf](https://www.unr.edu/Documents/public-health/2017_yrbs/2015-2017%20Nevada%20High%20School%20YRBS%20Comparison%20Report.pdf)
- 500 Cities Project: Local data for better health | Home page | CDC. (n.d.). Retrieved October 29, 2019, from <https://www.cdc.gov/500cities/>
- Alcohol Facts and Statistics | National Institute on Alcohol Abuse and Alcoholism (NIAAA). (n.d.). Retrieved October 29, 2019, from <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/alcohol-facts-and-statistics>
- American FactFinder - Community Facts. (n.d.). Retrieved October 29, 2019, from [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)
- Bohnert, A. S. B., Ilgen, M. A., Trafton, J. A., Kerns, R. D., Eisenberg, A., Ganoczy, D., & Blow, F. C. (2014). Trends and regional variation in opioid overdose mortality among Veterans Health Administration patients, fiscal year 2001 to 2009. *The Clinical Journal of Pain*, 30(7), 605–612. <https://doi.org/10.1097/AJP.0000000000000011>
- Bonn-Miller, M. O., Harris, A. H. S., & Trafton, J. A. (2012). Prevalence of cannabis use disorder diagnoses among veterans in 2002, 2008, and 2009. *Psychological Services*, 9(4), 404–416. <https://doi.org/10.1037/a0027622>
- BRFSS Prevalence & Trends Data: Explore by Location | DPH | CDC. (n.d.). Retrieved October 29, 2019, from [https://nccd.cdc.gov/brfssprevalence/rdPage.aspx?rdReport=DPH\\_BRFSS.ExploreByLocation&rdProcessAction=&SaveFileGenerated=1&irbLocationType=States&isLocation=32&isState=&isCounty=&isClass=CLASS17&isTopic=TOPIC55&isYear=2018&hidLocationType=States&hidLocation=32&hidClass=CLASS17&hidTopic=TOPIC55&hidTopicName=Smoker+Status&hidYear=2018&irbShowFootnotes=Show&rdICL-iclIndicators=\\_SMOKER3&iclIndicators\\_rdExpandedCollapsedHistory=&iclIndicators=\\_SMOKER3&hidPreviouslySelectedIndicators=&DashboardColumnCount=2&rdShowElementHistory=divClassUp](https://nccd.cdc.gov/brfssprevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByLocation&rdProcessAction=&SaveFileGenerated=1&irbLocationType=States&isLocation=32&isState=&isCounty=&isClass=CLASS17&isTopic=TOPIC55&isYear=2018&hidLocationType=States&hidLocation=32&hidClass=CLASS17&hidTopic=TOPIC55&hidTopicName=Smoker+Status&hidYear=2018&irbShowFootnotes=Show&rdICL-iclIndicators=_SMOKER3&iclIndicators_rdExpandedCollapsedHistory=&iclIndicators=_SMOKER3&hidPreviouslySelectedIndicators=&DashboardColumnCount=2&rdShowElementHistory=divClassUp)

dating%3DHide%2CisIClass%3DShow%2CdivTopicUpdating%3DHide%2CisITopic%3DShow%2CdivYearUpdating%3DHide%2CisIYear%3DShow%2C&rdScrollX=0&rdScrollY=300&rdRnd=43989

Broussard, C. S., Rasmussen, S. A., Reefhuis, J., Friedman, J. M., Jann, M. W., Riehle-Colarusso, T., Honein, M.A., National Birth Defects Prevention Study. (2011). Maternal treatment with opioid analgesics and risk for birth defects. *American Journal of Obstetrics and Gynecology*, 204(4), 314.e1-11. <https://doi.org/10.1016/j.ajog.2010.12.039>

Centers for Disease Control and Prevention. 2018 Annual Surveillance Report of Drug-Related Risks and Outcomes — United States. Surveillance Special Report. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. Published August 31, 2018. Accessed [date] from <https://www.cdc.gov/drugoverdose/pdf/pubs/2018-cdc-drug-surveillance-report.pdf>

Cigarette Smoking Among U.S. Adults Lowest Ever Recorded: 14% in 2017 | CDC Online Newsroom | CDC. (n.d.). Retrieved October 29, 2019, from <https://www.cdc.gov/media/releases/2018/p1108-cigarette-smoking-adults.html>

Clayton, H. B., Lowry, R., Basile, K. C., Demissie, Z., & Bohm, M. K. (2017). Physical and sexual dating violence and nonmedical use of prescription drugs. *Pediatrics*, 140(6). <https://doi.org/10.1542/peds.2017-2289>

Community Dashboard (n.d.) Healthy Southern Nevada Retrieved October 29, 2019, from <http://www.healthysouthernnevada.org/?module=indicators&controller=index&action=view&comparisonId=&indicatorId=8&localeTypeId=2&localeId=1800>

Compton, W. M., Thomas, Y. F., Stinson, F. S., & Grant, B. F. (2007). Prevalence, correlates, disability, and comorbidity of DSM-IV drug abuse and dependence in the United States: results from the national epidemiologic survey on alcohol and related conditions. *Archives of General Psychiatry*, 64(5), 566–576. <https://doi.org/10.1001/archpsyc.64.5.566>

County Health Rankings & Roadmaps. (n.d.). Retrieved October 29, 2019, from <https://www.countyhealthrankings.org/>

Data and Trends | HHS.gov. (n.d.). Retrieved October 29, 2019, from <https://www.hhs.gov/hepatitis/learn-about-viral-hepatitis/data-and-trends/index.html>

Davis, T. M., & Wood, P. S. (1999). Substance abuse and sexual trauma in a female veteran population. *Journal of Substance Abuse Treatment*, 16(2), 123–127. [https://doi.org/10.1016/S0740-5472\(98\)00014-2](https://doi.org/10.1016/S0740-5472(98)00014-2)

Downey, J. C., Gudmunson, C. G., Pang, Y. C., & Lee, K. (2017). Adverse Childhood Experiences Affect Health Risk Behaviors and Chronic Health of Iowans A statewide report on. *American Journal of*

*Preventive Medicine*, 14(4), 557–564. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)

Drug Use by State: 2019's Problem Areas. (2019). Retrieved October 28, 2019, from <https://wallethub.com/edu/drug-use-by-state/35150/>

DrugFacts: Drugged Driving | National Institute on Drug Abuse (NIDA). (2019). Retrieved October 29, 2019, from <https://www.drugabuse.gov/publications/drugfacts/drugged-driving>

DrugFacts: Monitoring the Future Survey: High School and Youth Trends | National Institute on Drug Abuse (NIDA). (2018). Retrieved October 29, 2019, from <https://www.drugabuse.gov/publications/drugfacts/monitoring-future-survey-high-school-youth-trends>

DrugFacts: Nationwide Trends | National Institute on Drug Abuse (NIDA). (2015). Retrieved October 29, 2019, from <https://www.drugabuse.gov/publications/drugfacts/nationwide-trends>

Drunk Driving State Data and Maps | Motor Vehicle Safety | CDC Injury Center. (2016). Retrieved October 29, 2019, from [https://www.cdc.gov/motorvehiclesafety/impaired\\_driving/states-data-tables.html](https://www.cdc.gov/motorvehiclesafety/impaired_driving/states-data-tables.html)

Forray A. (2016). Substance use during pregnancy. *F1000Research*, 5, F1000 Faculty Rev-887. doi:10.12688/f1000research.7645.1

Foster, M. A., Hofmeister, M. G., Kupronis, B. A., Lin, Y., Xia, G. L., Yin, S., & Teshale, E. (2019). Increase in Hepatitis A Virus Infections - United States, 2013-2018. *MMWR. Morbidity and Mortality Weekly Report*, 68(18), 413–415. <https://doi.org/10.15585/mmwr.mm6818a2>

Glaze, L. E., Herberman, E. J., & Statisticians, B. (2013). *Correctional Populations in the United States, 2012*.

Gonzales, G., & Henning-Smith, C. (2017). Health Disparities by Sexual Orientation: Results and Implications from the Behavioral Risk Factor Surveillance System. *Journal of Community Health*, 42(6), 1163–1172. <https://doi.org/10.1007/s10900-017-0366-z>

Haight, S. C., Ko, J. Y., Van Tong, V. T., Bohm, M. K., & Callaghan, W. M. (2018). Opioid use disorder documented at delivery hospitalization — United States, 1999–2014. *Morbidity and Mortality Weekly Report*, 67(31), 845–849. <https://doi.org/10.15585/mmwr.mm6731a1>

*High Intensity Drug Trafficking Areas 2018 Threat Assessment*. [HIDTA] (2018). Retrieved from [https://www.casatondemand.org/wp-content/uploads/2018/10/2018-nv-hidta-threat-assessment\\_final-1.pdf](https://www.casatondemand.org/wp-content/uploads/2018/10/2018-nv-hidta-threat-assessment_final-1.pdf)

Homeless in Nevada Statistics 2018. Homeless Estimation by State | US Interagency Council on

- Homelessness. (n.d.). Retrieved October 15, 2019, from <https://www.usich.gov/homelessness-statistics/nv/>
- How Illicit Drug Use Affects Business and the Economy | The White House. (n.d.). Retrieved October 14, 2019, from <https://obamawhitehouse.archives.gov/ondcp/ondcp-fact-sheets/how-illicit-drug-use-affects-business-and-the-economy>
- Impaired Driving: Get the Facts | Motor Vehicle Safety | CDC Injury Center. (2019). Retrieved October 29, 2019, Retrieved from [https://www.cdc.gov/motorvehiclesafety/impaired\\_driving/impaired-driv\\_factsheet.html](https://www.cdc.gov/motorvehiclesafety/impaired_driving/impaired-driv_factsheet.html)
- Introduction | National Institute on Drug Abuse (NIDA). (n.d.). Retrieved October 14, 2019, from <https://www.drugabuse.gov/publications/principles-drug-abuse-treatment-criminal-justice-populations/introduction>
- James, L. M., Van Kampen, E., Miller, R. D., & Engdahl, B. E. (2013). Risk and Protective Factors Associated With Symptoms of Post-Traumatic Stress, Depression, and Alcohol Misuse in OEF/OIF Veterans. *Military Medicine*, 178(2), 159–165. <https://doi.org/10.7205/milmed-d-12-00282>
- Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M., Brener, N., Ethier, K. A. (2018). Youth Risk Behavior Surveillance — United States, 2017. *MMWR. Surveillance Summaries*, 67(8), 1–114. <https://doi.org/10.15585/mmwr.ss6708a1>
- Koegel, P., & Burnam, M. A. (1988). Alcoholism among homeless adults in the inner city of Los Angeles. *Archives of General Psychiatry*, 45(11), 1011–1018. <https://doi.org/10.1001/archpsyc.1988.01800350045007>
- Lensch, T., Martin, H.K., Zhang, F., Peek, J., Larson, S., Clements-Nolle, K., Yang, W. State of Nevada, Division of Public and Behavioral Health and the University of Nevada, Reno. 2017 Nevada Middle school Youth Risk Behavior Survey (YRBS): Adverse Childhood Experiences (ACEs) Special Report. (2018). Retrieved from [https://scholarworks.unr.edu/bitstream/handle/11714/5008/2017%20Nevada%20Middle%20School%20YRBS%20-%20ACEs%20Report\\_acc.pdf?sequence=1&isAllowed=y](https://scholarworks.unr.edu/bitstream/handle/11714/5008/2017%20Nevada%20Middle%20School%20YRBS%20-%20ACEs%20Report_acc.pdf?sequence=1&isAllowed=y)
- Lipari, R. N., & Park-Lee, E. (2019). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health*. Retrieved from <https://www.samhsa.gov/data/>
- Mark, T. L., Mark, T., Tomic, K. S., Kowlessar, N., Chu, B. C., Vandivort-Warren, R., & Smith, S. (2013). Hospital readmission among medicaid patients with an index hospitalization for mental and/or

substance use disorder. *The Journal of Behavioral Health Services & Research*, 40(2), 207–221. <https://doi.org/10.1007/s11414-013-9323-5>

Marshal, M. P., Friedman, M. S., Stall, R., King, K. M., Miles, J., Gold, M. A., Bukstein, O.G., Morse, J. Q. (2008, April). Sexual orientation and adolescent substance use: A meta-analysis and methodological review. *Addiction*, Vol. 103, pp. 546–556. <https://doi.org/10.1111/j.1360-0443.2008.02149.x>

McCabe, S. E., Hughes, T. L., Bostwick, W. B., West, B. T., & Boyd, C. J. (2009). Sexual orientation, substance use behaviors and substance dependence in the United States. *Addiction*, 104(8), 1333–1345. <https://doi.org/10.1111/j.1360-0443.2009.02596.x>

Multiple Cause of Death Data on CDC WONDER. (n.d.). Retrieved October 29, 2019, from <https://wonder.cdc.gov/mcd.html>

National Drug Intelligence Center (2011). *The Economic Impact of Illicit Drug Use on American Society*. Retrieved from [www.justice.gov/ndicADNET](http://www.justice.gov/ndicADNET) <https://www.adnet.smil.mil/web/ndic/index.htm> <https://www.leo.gov/http://leowcs.leopriv.gov/lesig/ndic/index.htm> <http://www.intelink.ic.gov/sites/>

Nevada Adolescent Reproductive Health Facts | HHS.gov. (2019). Retrieved October 14, 2019, from <https://www.hhs.gov/ash/oah/facts-and-stats/national-and-state-data-sheets/adolescent-reproductive-health/nevada/index.html>

NEVADA DEPARTMENT OF VETERANS SERVICES 2017 Annual Report. (2018 ). Retrieved from <https://veterans.nv.gov/wp-content/uploads/2018/01/bb1eb56b-9280-4422-85d6-0ea2a380335c.pdf>

Nevada Opioid Crisis Needs Assessment (2018) Retrieved from <http://dpcb.nv.gov/uploadedFiles/dpbhngov/content/Resources/opioids/DHHS-data/NevadaOpioidCrisisNeedsAssessment061818.pdf>

NV Opioid Dashboard. (n.d.). Retrieved October 14, 2019, from <https://opioid.snhd.org/>

Nevada Opioid Summary | National Institute on Drug Abuse (NIDA). (2019). Retrieved October 29, 2019, from <https://www.drugabuse.gov/opioid-summaries-by-state/nevada-opioid-summary>

Nevada Opioid Surveillance (2016) Office of Public Health Informatics and Epidemiology Division of Public and Behavioral Health Department of Health and Human Services Retrieved from <http://dpcb.nv.gov/uploadedFiles/dpbhngov/content/Programs/OPHIE/dta/Publications/Nevada%20Opioid%20Surveillance%20%282010-2015%29.pdf>

Outbreak of Lung Injury Associated with E-Cigarette Use, or Vaping. (2019). Retrieved October 29, 2019, from [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html)



- Perron, B. E., Bohnert, A. S. B., Monsell, S. E., Vaughn, M. G., Epperson, M., & Howard, M. O. (2011). Patterns and correlates of drug-related ED visits: results from a national survey. *The American Journal of Emergency Medicine*, 29(7), 704–710. <https://doi.org/10.1016/j.ajem.2010.01.044>
- Persons Who Inject Drugs (PWID) | CDC. (n.d.). Retrieved October 29, 2019, from <https://www.cdc.gov/pwid/index.html>
- Polcin, D. L. (2016). Co-occurring substance abuse and mental health problems among homeless persons: Suggestions for research and practice. *Journal of Social Distress and the Homeless*, 26(1), 1–10. <https://doi.org/10.1179/1573658X15Y.0000000004>
- Public Health Update Increase of Hepatitis A Virus (HAV) Infections in Clark County, Nevada.* (2019). Retrieved from <https://www.cdc.gov/hepatitis/hav/afaq.htm>
- Ross, S., & Peselow, E. (2012). Co-occurring psychotic and addictive disorders: Neurobiology and diagnosis. *Clinical Neuropharmacology*. <https://doi.org/10.1097/WNF.0b013e318261e193>
- Salas-Wright, C. P., Vaughn, M. G., Ugalde, J., & Todic, J. (2015). Substance use and teen pregnancy in the United States: Evidence from the NSDUH 2002-2012. *Addictive Behaviors*, 45, 218–225. <https://doi.org/10.1016/j.addbeh.2015.01.039>
- Sandoval, B., Whitley, R., Kotchevar, J., & Azzam, I. (2017). *HIV/AIDS Surveillance Program 2017 HIV Fast Facts E Chief Medical Officer.*
- Seal, K. H., Shi, Y., Cohen, G., Cohen, B. E., Maguen, S., Krebs, E. E., & Neylan, T. C. (2012). Association of mental health disorders with prescription opioids and high-risk opioid use in US veterans of Iraq and Afghanistan. *JAMA - Journal of the American Medical Association*, 307(9), 940–947. <https://doi.org/10.1001/jama.2012.234>
- Sexual Orientation and Estimates of Adult Substance Use and Mental Health: Results from the 2015 National Survey on Drug Use and Health. (2016). Retrieved October 29, 2019, from [https://www.samhsa.gov/data/sites/default/files/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015.htm](https://www.samhsa.gov/data/sites/default/files/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015.htm)
- Shane, P., Diamond, G. S., Mensinger, J. L., Shera, D., & Wintersteen, M. B. (2006). *Impact of Victimization on Substance Abuse Treatment Outcomes for Adolescents in Outpatient and Residential Substance Abuse Treatment.* <https://doi.org/10.1080/10550490601003714>
- Southern Nevada Behavioral Health Annual Report Clark, Nye and Esmeralda Counties.*(2018). Southern Nevada Behavioral Health Policy Board. Retrieved from <http://dpbh.nv.gov/uploadedFiles/dpbhnavgov/content/Boards/CBH/Meetings/2019/SNBHPolicyBoardAnnualReport2018FINAL.pdf>

- State of Homelessness - National Alliance to End Homelessness. (2019). Retrieved October 15, 2019, from <https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-report/>
- State of Nevada Office of Traffic Safety Annual Report(2018). *Nevada Department of Public Safety* . Retrieved from [https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/nv\\_fy2018\\_ar.pdf](https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/nv_fy2018_ar.pdf)
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, Vol. 9, pp. 69–74. <https://doi.org/10.1016/j.tics.2004.12.005>
- Substance Use and SUDs in LGBTQ\* Populations | National Institute on Drug Abuse (NIDA). (2017). Retrieved October 29, 2019, from <https://www.drugabuse.gov/related-topics/substance-use-suds-in-lgbtq-populations>
- Substance Abuse and Mental Health Services Administration. Behavioral Health Barometer: Nevada, Volume 4: Indicators as measured through the 2015 National Survey on Drug Use and Health, the National Survey of Substance Abuse Treatment Services, and the Uniform Reporting System. HHS Publication No. SMA–17–Baro– 16–States–NV. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2017. Retrieved from <https://store.samhsa.gov>.
- Substance Abuse and Mental Health Services Administration. (2018). Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health (HHS Publication No. SMA 18-5068, NSDUH Series H-53). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- Substance Abuse and Mental Health Services Administration. (2019). Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health (HHS Publication No. PEP19-5068, NSDUH Series H-54). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- Teen Pregnancy in Nevada – Southern Nevada Health District. (2018). Retrieved October 14, 2019, from <https://www.southernnevadahealthdistrict.org/programs/teen-pregnancy-prevention-program/teen-pregnancy-in-nevada/>
- Thompson, M. P., Kingree, J. B., & Lamis, D. (2019). Associations of adverse childhood experiences and suicidal behaviors in adulthood in a U.S. nationally representative sample. *Child: Care, Health and Development*, 45(1), 121–128. <https://doi.org/10.1111/cch.12617>
- Tolia, V. N., Patrick, S. W., Bennett, M. M., Murthy, K., Sousa, J., Smith, P. B. Clark, R.H. Alan R. Spitzer,

- A. R. (2015). Increasing incidence of the neonatal abstinence syndrome in U.S. neonatal ICUs. *New England Journal of Medicine*, 372(22), 2118–2126. <https://doi.org/10.1056/NEJMsa1500439>
- U.S. Department of Health and Human Services (HHS), Office of the Surgeon General (2016) , Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. Washington, DC
- U.S. Opioid Prescribing Rate Maps | Drug Overdose | CDC Injury Center. (2018). Retrieved October 29, 2019, from <https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html>
- (US), S. A. and M. H. S. A., & (US), O. of the S. G. (2016). Early Intervention, Treatment, and Management of Substance Use Disorders. In *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/28252892>
- Wang, T. W., Gentzke, A., Sharapova, S., Cullen, K. A., Ambrose, B. K., & Jamal, A. (2018). Tobacco product use among middle and high school students — United states, 2011–2017. *Morbidity and Mortality Weekly Report*. <https://doi.org/10.15585/mmwr.mm6722a3>
- Ward, B. W., Dahlgamer, J. M., Galinsky, A. M., & Joestl, S. S. (2014). Sexual orientation and health among U.S. adults: National health interview survey, 2013. *National Health Statistics Reports*, (77).
- Washoe County Behavioral Health Summary (2016). Office of Public Health Informatics and Epidemiology Division of Public and Behavioral Health Department of Health and Human Services Retrieved from <http://dphh.nv.gov/uploadedFiles/dphhnavgov/content/Programs/OPHIE/dta/Publications/Washoe%20County%20BH%20Report%2008.16.pdf>
- Wilson, F. A., Stimpson, J. P., & Pagán, J. A. (2014). Fatal crashes from drivers testing positive for drugs in the U.S., 1993-2010. *Public Health Reports*. <https://doi.org/10.1177/003335491412900409>
- Wu, P. C., Lang, C., Hasson, N. K., Linder, S. H., & Clark, D. J. (2010). Opioid use in young veterans. *Journal of Opioid Management*, 6(2), 133–139. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20481178>