Nevada State Health Needs Assessment

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Nevada Department of Health and Human Services

2019

Executive Summary

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Introduction

The 2019 Nevada State Health Needs Assessment report examines the many complex factors that influence and interact with our health, providing a point-in-time view of current health status, strengths, opportunities for improvement, and county-level priorities. The purpose of this assessment is to inform future social services and public health priorities across a multitude of programs implemented and funded by the various Divisions at the Nevada Department of Health and Human Services (DHHS). This assessment is intended to identify needs and priorities for Nevadans, recognizing that health behaviors and health outcomes are influenced by a dynamic, interrelated, and complex relationship of social, cultural, and systemic factors that cannot be evaluated or addressed in isolation.

Nevada Overview

Nevada is ranked 32nd in the United States (US) for population size[1] and comprised of 17 counties. For this assessment, counties are categorized as urban (Washoe, Clark and Carson City), rural (Douglas, Lyon, and Storey), and frontier (Churchill, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, and White Pine). Frontier counties are different than rural counties because they are more remote in terms of both travel time and distance from the nearest population center that has more specialized medical care/facilities.[2]

The population in Nevada in 2019 is 3,053,928[3], with nearly three fourths of the population (73%) residing in Clark County. Washoe County has the second largest population (16%). The four counties that follow Washoe as the third largest in the state (comprising 2% of the population each) are: Carson City, Douglas, Elko, and Lyon. The remaining counties, which represent <1% to 1% of the population, include: Churchill, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, Storey, and White Pine. The median age in Nevada (2013-2017 aggregate) is 38.7 years old. The county with the lowest median age was Elko (34.1 years old), while the county with the highest median age was Storey (54.7 years old).[4] Over half of the population in Nevada in 2019 was white, not Hispanic (51%). One fifth (20%) of the population was Hispanic, any race. The remaining races/ethnicities in 2019 included Asian/Pacific Islander (10%); black, not Hispanic (9%; and American Indian, Eskimo Aleut, not Hispanic (1%).

As of July 2019, Nevada was ranked 38th in the nation for unemployment rates with the monthly unemployment rate at 4.1%.[5] The median household income in Nevada for 2013-2017 (aggregate) was $55,434, which was $2,218 lower than the median household income in the US for this period, $57,652. The median annual earnings for females in Nevada for the 2013-2017 (aggregate) period was $37,184, which is $8,282 less than the median earnings for males, $45,466.[6]

Nevada is the 7th largest state in the US, with a land mass of approximately 109,781 square miles.[7] The driest state in the US, Nevada is a western state defined by its large areas of high desert and legalized gambling. Much of the land is sparsely populated, in part due to the climate and the rugged mountainous

[1] http://worldpopulationreview.com/states/nevada-population/
[2] Griswold, T. Packham, J, Etchegoyhen, L., Young, V., & Friend, J. (2019). Nevada Rural and Frontier Health Data Book - Ninth Edition. Reno, NV.
[3] Hardcastle, J. (2018). Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 200 to 2037: Estimates from 2000 to 2017 and Projections from 2018 to 2037. Carson City, NV.
[4] Source: US Census Bureau; American Community Survey, 2013-2017 American Community Survey 5-Year Estimates, Table B01002.
[5] US Bureau of Labor Statistics https://www.bls.gov/lau/. Retrieved Aug 2019.
[6] US Census Bureau, American Community Survey, 2013-2017 American Community Survey 1-Year Estimates. Table DP03.
[7] US Census Bureau, 2010 Census. Census 2010 Summary File 1, Geographic Header Record G001.

terrain. Many rural and frontier communities are located in sparsely populated counties which are considerable distances from urban communities and larger health care centers.

Special Populations

Special populations typically refer to populations who are disproportionately affected by social and health factors that put them at increased risk for health disparities. The select special populations included in this assessment are 1) American Indian and Tribal Populations, 2) Children Ages 0-18 Years Old, 3) People Experiencing Homelessness, 4) Incarcerated Populations, 5) Individuals with Disabilities, 6) Minority Populations, 7) Seniors Ages 65 and Older, 8) Sexual and Gender Minority Populations (often referred to as LGBTQ), 9) Transitional Aged Youth, and 10) Veterans. Although individuals with disabilities are a special population, they are included as a main section of this report, with indicator data summarized for this population.

Statewide Assessment: Data Collected, Summarized, and Prioritized

This assessment included the collection of primary and secondary data. The primary data collected included survey data collected from community members and telephone interview data collected from key informants. The secondary data collected included health indicators, Nevada 2-1-1 services, health services utilization, and existing county priorities (based upon existing community health needs assessments, community health improvement plans and strategic plans). Secondary data is described first, as it contributed to the development of questions for key informant interviews and surveys.

Secondary Data: Health Indicators, Nevada 2-1-1, Health Services Utilization and County Priorities

This assessment included collection of over 250 indicators for the following topics: access to health care, behavioral health, health behaviors and preventive care, health outcomes, maternal and child health, individuals with disabilities, and social determinants of health. A summary of this data is provided below.

Health Indicators

Access to Health Care: According to the US Department of Health and Human Services (DHHS), access to health care is comprised of *availability* (adequate provider number, timely appointments and willingness to participate in insurance plans/Medicare/Medicaid); a*ccessibility* (proximity of providers to individuals in the population, based on geographic time, distance, ADA compliant physical access, ability to communicate in other languages); a*ccommodation* (includes hours of operation, appointment policies, language and cultural competencies, and the approach providers use to communicate to patients/enrollees in Medicare and Medicaid); a*cceptability* (extent to which patients and providers are comfortable with and relate well to one another); and *affordability* (costs that patients incur relative to their ability to pay).[8]

A total of 26 access to health care indicators were collected, by county, with Nevada and US comparisons, when available. Fourteen of the 17 Nevada counties have access in their top three priority rankings. Access to health care is ranked as the second priority for Nevada overall.

Behavioral health includes treatment encompassing services that help those with mental illness and/or substance use disorders (SUD).[9] The Affordable Care Act (ACA) has extended the impact of the Mental Health Parity and Addiction Equity Act (MHPAEA), requiring health plans to offer coverage for mental health and SUD with at least an equal level of benefits as the plans offer for the treatment of physical

[8] Lipson, Debra J., Jenna Libersky, Katharine Bradley, Corinne Lewis, Allison Wishon Siegwarth, and Rebecca Lester (2017). *Promoting Access in Medicaid and CHIP Managed Care: A Toolkit for Ensuring Provider Network Adequacy and Service Availability.* Baltimore, MD: Division of Managed Care Plans, Center for Medicaid and CHIP Services, CMS, US Department of Health and Human Services.

[9] Substance Abuse and Mental Health Services Administration (SAMHSA). 2019. www.samhsa.gov/find-help/treatment

health problems.[10] Comorbidity is when two or more disorders occur at the same time (e.g., mental illness and substance use disorder). Approximately half of the people who experience mental illness will experience substance use issues during their lifetime, and vice versa.[11]

A total of 36 behavioral health indicators were collected, by county, with Nevada and US comparisons, when available. Fourteen of the 17 Nevada counties have behavioral health in their top three priority rankings. Behavioral health is ranked as the first priority for Nevada overall.

Health behaviors and preventive care indicators that were included in this assessment are immunizations; nutrition, physical activity and sedentary lifestyles; and preventive health screenings. According to the CDC, one of the best steps parents can take to reduce the risk of fourteen serious childhood diseases is to vaccinate their children according to the recommended immunization schedule.[12]

A total of 19 *health behaviors and preventive care* indicators were collected, by county, with Nevada and US comparisons, when available. The counties with health behaviors and preventive care in their top three priority rankings are Elko, Humboldt, Lander, and Lincoln.

Health Outcomes indicators that were included in this assessment are chronic disease, cancer, communicable diseases, weight status and mortality. The key risk factors for most chronic diseases are tobacco use, poor nutrition and lack of physical activity resulting in obesity, and excessive alcohol use.[13] The 10 leading causes of death in the US in 2017 included heart disease, cancer, unintentional injuries, chronic lower respiratory diseases, stroke, Alzheimer's disease, diabetes, influenza and pneumonia, kidney disease and suicide.

A total of 68 *health outcomes* were collected, by county, with Nevada and US comparisons, when available. The counties with health outcomes in their top three priority rankings include Carson City (chronic disease), Douglas (chronic disease), Mineral (chronic and communicable diseases), Nye (chronic disease) and Washoe (chronic and communicable diseases).

Maternal and Child Health indicators collected for this assessment include abortion, prenatal care, birth rate, low birth weight, breastfeeding, and infant and child mortality. The counties with MCH in their top three priority rankings are Esmeralda and Lander.

Individuals with Disabilities: The Americans with Disabilities Act (ADA) defines an individual with a disability as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has history or record of such an impairment, or a person who is perceived by others as having such an impairment.[14] According to the US Census Disability Report 2017, there were an estimated 57 million people (nearly 20% of the US population) living with one or more disabilities and more than 38 million had a severe disability.[15]

[10] Substance Abuse and Mental Health Services Administration (SAMHSA). 2018. https://blog.samhsa.gov/2018/04/23/release-of-hhs-mental-health-and-substance-use-disorder-parity-action-plan
[11] Kelly TM, Daley DC. Integrated Treatment of Substance Use and Psychiatric Disorders. *Soc Work Public Health.*2013;28(0):388-406. doi:10.1080/19371918.2013.774673
[12]Centers for Disease Control and Prevention. Vaccinate Your Baby for Best Protection. https://www.cdc.gov/features/infantimmunization/index.html. Retrieved August 2019.
[13] Centers for Disease Control and Prevention. Chronic Disease Prevention and Health Promotion. Accessed https://www.cdc.gov/chronicdisease/about/infographic.htm
[14] Americans with Disabilities Act, as Amended. 42 USC. § 12102(1).
[15]US Census Bureau. US Disability Statistics. Revised 6/28/17.

A total of 23 indicators for *Individuals with Disabilities* were collected, by County and the state overall. The counties with the highest percent or rate of individuals with disabilities are Carson City, Nye, and Storey.

The Social Determinants of Health indicators included in this report are access to care (included as a main topic area above), adverse childhood experiences (ACES), education, employment, environment and built environment (air/water quality, crime and violent related behaviors and quality of housing), food insecurity/hunger, incarceration and income/poverty.

A total of 70 indicators for *Social Determinants of Health* were collected for this assessment, by County, with comparisons to Nevada and the US, when available. Counties with SDOH in their top three priority rankings include: Carson City (income and poverty), Churchill (income, poverty and housing), Esmeralda (income and poverty), Lincoln (employment and job training), Lyon (poverty), Mineral (employment, jobs and poverty), Nye (income and poverty, employment and jobs), Pershing (employment and jobs), White Pine (education) and Nevada overall (employment and jobs).

Table 1 summarizes the health care indicator data collected for this assessment (described above).

Table 1: Health Care Indicator Data by Category, with Subcategories and Total Number for Each

Category	Subcategories	Total # of Indicators
Access to Health Care	Access to primary care (9), access to mental health care (3), access to dental care (7), access to insurance/health care affordability (7)	26
Behavioral Health	Mental health (8), suicide (4), substance use (24)	36
Health Behaviors & Preventive Care	Immunizations (5), nutrition (2), physical activity and sedentary behaviors (3), preventive health screenings (7), sexual health (2)	19
Health Outcomes	Chronic disease (9), cancer (13), communicable disease (13), weight status (6), mortality (22), crime/MVA/pedestrian deaths (3), perceived health status (2)	68
Maternal & Child Health	Abortion (1), prenatal care (1), pre-term births (1), birth rate (3), low birth weight (1), breastfeeding (1), infant mortality (1), child mortality (1)	10
Individuals with Disabilities	All populations (11), children (12)	23
Social Determinants of Health	Adult adverse childhood experiences (ACEs) (11), high school student ACEs (6), education (16), employment (3), food insecurity/hunger (5), income (5), poverty (8), air/water quality (2), crime/violent related behaviors (7), quality of housing (2), motor vehicle related (5)	70

Nevada 2-1-1 and Title XX Services per County

2-1-1 is the telephone number across North America that, when dialed or accessed online, provides information/referrals to health, human and social service organizations in the area a person is calling from. The 2-1-1 system includes places to find emergency food, housing and emergency shelter locations, children's services, support for seniors, older persons, and people with disabilities, and mental health and counseling services, among many others. The 2-1-1 data included for this report include the 28 service categories that are permissible to receive federal funding through the Title XX block grant. The resources in each county that fell under the 28 service categories were reviewed and combined into similar services.

According to Nevada 2-1-1 and DHHS data, 13 counties provide family planning or pregnancy/parenting services. The counties that do not have these services include Eureka, Esmeralda, Lander and Storey. Carson City has the highest ratio of family planning or pregnancy/parenting service locations per capita. Nevada 2-1-1 data indicate the majority of counties have at least one congregate meal or home delivery meal service provider. There were three counties without services in this category, Esmeralda, Storey, and Pershing counties. While the rate per capita is highest in Eureka, Lander, Lincoln, and Mineral those may be

misleading due to the small population living within those frontier counties. Nevada 2-1-1 services for health-related and home health/home-based services (combined) exist in nearly every county, except for Esmeralda and Pershing counties. Eureka County has the highest rate per capita, however with only one location, this is due to the small population residing in the county.

Health Services Utilization Data

All Payer Utilization: For this assessment, emergency department (ED) and inpatient utilization data for the period 2016-2018 (aggregate) were requested from the Nevada DHHS Office of Analytics. This data is provided to the state by the University of Nevada, Las Vegas (UNLV) Center for Health Information Analysis (CHIA).

These data were provided in two distinct sets for all payers: 1) emergency department visits and 2) inpatient hospitalizations. Behavioral health hospitals were excluded from this dataset. There are three counties in Nevada with no hospitals, Esmeralda, Eureka, and Storey. If a condition requires care in an emergency department or hospitalization, residents in these three counties must be transported or self-transport to a county to seek the level of care necessary.

From 2016 through 2018, the majority of ED visits were within the county of residence, except for the three counties without a hospital, and Lyon County (where only 15% of ED visits among residents of Lyon County were in Lyon County). Clark and Washoe counties had the greatest percent of residents of the county going to EDs within the county, 99.78% and 98%, respectively. Eureka, Esmeralda and Storey Counties do not have hospitals, so they did not have any ED visits.

Only six counties (Carson City, Clark, Elko, Humboldt, Washoe, and White Pine) had the majority of inpatient hospitalizations within the county of residence. The majority of inpatient hospitalizations among residents of the other 11 counties were in a county outside the county where the patient lived.

Medicaid Utilization data includes a summary of the main provider service types and the average monthly amount spent in SFY 2018 and 2019. The main service type with the greatest percent increase was optical (+22.6%), while behavioral health had the greatest percent decrease (-28.0).

County Priorities

This assessment included review of the priorities identified by ten Nevada counties that have Community Health Needs Assessments (CHNAs), Community Health Improvement Plans (CHIPs), and in some cases, strategic plans. These counties include Carson City, Churchill, Clark, Douglas, Elko, Lyon, Mineral, Nye, Storey and Washoe. These assessments were reviewed for priorities, which were either ranked or listed (without a ranking).

Primary Data: Key Informant Interviews and Community Survey

Key Informant Interviews

Seventy-five Key Informant (KI) interviews were conducted via phone to gather insight from a wide range of professionals working in health, social services, and other public service positions in each county across Nevada. Ten open-ended KI interview questions were designed to gather insight from various individuals in the following roles: county health officers; human or social services directors; county commissioners, (preferably one who is active in public health or health-related initiatives); sheriffs; medical provider in a hospital-based emergency department, either a charge nurse or physician; community clinical health providers (e.g. nurse or physician in a school health clinic, community clinic, or public health clinic); federally qualified health center CEOs; school superintendents; Community Health Improvement Plan coordinators; Behavioral Health Policy Board coordinators; statewide coalition directors; and individuals

referred by initial interviewee that did not fit one of the above roles (e.g. directors of community-based organizations, faculty for institutions of higher education).

Questions focused on priority populations, as well as health, education, and job-related strengths, weaknesses, existing assets, and potential solutions to issues identified. A closing question asked if there were additional individuals to contact about the needs within each county. Interviews were conducted over the phone and lasted approximately twenty minutes in length.

The counties with the most key informant interviewees were Clark and Elko (with 10 each). The counties with the least number of interviewees were Esmeralda and Eureka (with 1 each). Interview scripts were analyzed for thematic elements under the following categories: 1) Priority Populations; 2) Strengths; 3) Barriers; and 4) Solutions. The top three populations discussed by KIs as priorities across the state of Nevada, in priority order, include: individuals with behavioral health issues, seniors, and children. Most barriers and solutions discussed focused on behavioral health, with "lack of behavioral health services" as the number one barrier, and "more behavioral health services and providers" as the number one solution. Additional barriers and solutions centered around a greater need for access to health care services.

Community Member Survey

A five-question online and mobile phone community member survey was developed to solicit community member perceptions about the single most significant issue impacting health in their community. The target population was Nevada residents 18 years or older. The online and mobile phone survey was open for 31 days.

The community survey recruitment methods were a hybrid of: 1) convenience sampling, 2) email invitations to individuals who participated in key informant interviews and the contacts they provided; 3) email invitations to individuals whose email addresses were known or publicly available, 4) email/mobile text invitations to individuals who expressed interest in completing the survey, and 5) snowball sampling, which is when participants refer others for participation. Over 20,000 email invitations were sent to persons across the state inviting them to participate in the online community survey. Over 300 text messages were sent containing the link to the online survey. The Nevada DHHS provided the survey link on the social media platform Facebook.

A total of 2,879 surveys were completed, with representation from every county in Nevada. The online community survey was not designed to obtain a statistically reliable population sample and data were not weighted for age, race/ethnicity, or any other demographic variable. Results and findings from the online community survey are not considered representative of county or state populations nor are they generalizable to the population as a whole.

The survey was provided in both English and Spanish, including questions related to demographics and community member perceptions related to the health of their community. Respondents were asked to identify the primary county of residence and the primary county where they work. Respondents were asked to select how healthy they perceived their community to be on a Likert-scale ranging from Very Unhealthy to Very Healthy.

The main question asked respondents to select the *MOST SIGNIFICANT* health issue that impacts the health of their community. The initial health issue choices provided were broad and corresponded to the 2019 Nevada Health Assessment major sections. Once the respondent selected the single health issue perceived to impact their community most, they were routed to branching questions to select more specific reasons

why they perceive that issue to be the most significant in their community. The most significant health issues identified by the greatest percent of community members were 1) Behavioral/Mental Health Issues and/or Substance Use and Abuse (33%), 2) Access to Health Care (28%), and 3) Housing and Poverty (15%).

Prioritization Methodology

Three major types of data were collected for this report, 1) Secondary data; 2) Key Informant interview data; and 3) Online Community Survey data. All three of these data types were used to conduct the prioritization of health needs within each county. Given the large amount of information at the county level, a series of step were undertaken to determine highest needs within each county.

Prioritization resulted in the identification of top three needs for all counties, except for Eureka and Storey, where there was not enough primary and secondary data to determine the third highest need. Several of the secondary indicators were suppressed for Eureka County, making it challenging to clearly determine a third highest priority, additionally there were no county-identified CHNAs, CHIPs or strategic plans available for consideration.

Nevada and County Priorities

Nevada and County Priorities are summarized in Table 2. This includes the top three priorities for each county and Nevada overall. Two counties, Eureka and Storey, do not have a third priority since many secondary data were suppressed and there were too few primary data (interview and survey respondents) to determine a third top priority.

Table 2: Top Three Priorities for Counties and Nevada based on the 2019 State Health Needs Assessment

County/Region	Priority 1	Priority 2	Priority 3
Carson City	Behavioral health	Chronic & communicable diseases	Income, poverty & housing
Churchill	Behavioral health	Income, poverty & housing	Access to health care
Clark	Access to health care	Behavioral health	Housing & poverty
Douglas	Behavioral health	Access to health care	Chronic diseases
Elko	Access to health care	Behavioral health	Health behaviors & preventive care
Esmeralda	Access to health care	Maternal and Child Health	Income & poverty
Eureka	Access to health care	Behavioral health	No third priority
Humboldt	Behavioral health	Access to health care	Health behaviors & preventive care
Lander	Behavioral health	Health behaviors & preventive care (tie) Maternal & child health (tie)	Access to health care
Lincoln	Employment & job training	Access to health care	Health behaviors & preventive care
Lyon	Behavioral health	Access to health care	Employment & poverty
Mineral	Behavioral health	Chronic diseases	Employment & poverty
Nye	Access to health care	Employment, income, poverty & housing	Chronic diseases
Pershing	Access to health care	Employment & poverty	Behavioral health
Storey	Behavioral health	Access to health care	No third priority
Washoe	Behavioral health	Housing	Chronic & communicable diseases
White Pine	Access to health care	Education	Behavioral health
Nevada	Behavioral health	Access to health care	Poverty