Heart Disease and Stroke in Nevada

Nationally, heart disease is the leading cause of death, and stroke is the fourth leading cause of death. One in three deaths in the United States is attributed to cardiovascular disease. The costly treatments for these conditions equate to $1 for every $6 spent in the U.S. for health services. Nevada demonstrates similar statistics with heart disease being the leading cause of death, however, stroke is the fifth leading cause of death.

High blood pressure, heart disease, and stroke affect one in three Nevada residents. These diseases are preventable, and acute events are avoidable, by leading heart-healthy lifestyles including not using tobacco products, limiting sodium in diets, partaking in at least 30 minutes of physical activity daily, limiting or eliminating alcohol consumption, and following prescribed medication regimens.

High blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps blood. Long term untreated high blood pressure leads to chronic disease of the heart including coronary artery disease, stroke, peripheral vascular disease, cardiomegaly, heart valve diseases, congestive heart failure, and myocardial infarctions (MI, heart attack).

Nevada’s overall population is 2,839,099. The population is disproportionately distributed with the vast majority, 2,069,681, residing in Clark County (Las Vegas), 440,078 within Washoe County (Reno) and 54,522 residing in the state capital Carson City. The remaining 274,818 residents reside in the rural/frontier communities of Nevada. Unfortunately, the specialty care services for Cardiology and Neurology follow similar demographics leaving the rural and frontier communities without access to these vital specialty services and the underserved social economic class, in all communities, with minimal access to providers that service their population.

Currently, Nevada dedicates $4.10 per capita in public health funding and is ranked 33rd in heart disease, 31st in stroke, and 17th in high blood pressure compared to other states.

- Nevada has 27 hospitals with a total of 5,339 staffed beds and 252,467 hospital discharges yearly.
- There are 170 cardiologists and a total of 2,807 physicians (MD) and doctors of osteopathy (DO) in Nevada.
- The allocated budget for Nevada Division of Public and Behavioral Health, Heart Disease and Stroke Prevention and Control Program (HDSPCP) is $459,735 for FYs 15, 16, and 17. All funds allocated to HDSPCP stem from Centers for Disease Control and Prevention (CDC) grants.
There are currently no state funds allocated to the HDSPCP.

- Currently, there is only one FTE Program Coordinator dedicated to the program with supportive roles from the administrative supervision, administrative assistants, fiscal manager, and a 1305 Evaluator. The FTE dedicated position for this program began in March 2015.

- The HDSPCP Coordinator leads the Heart Disease and Stroke Task Force with approximately 60 members throughout the state from clinical programs, organizations, FQHCs, and coalitions.

- The Nevada Stroke Registry is shared between the HDSPC program and the Office of Public Health Informatics and Epidemiology (OPHIE).

How does Nevada compare to other states?

**The State of New Mexico (NM)** demonstrates a similar demographic to Nevada, but dedicates $47.60 per capita in public health, ranks 15<sup>th</sup> in heart disease, 20<sup>th</sup> in stroke, and 10<sup>th</sup> in high blood pressure. The state of New Mexico is geographically and demographically comparable to Nevada. New Mexico has a population of 2,085,109, houses 37 hospitals, has 126 cardiologists and a total of 2,508 physicians. New Mexico’s hospitals recognize a total of 168,847 discharges among its 4,085 staffed beds.

Like Nevada, New Mexico, also has a dedicated stroke registry that is maintained by their Department of Health, Epidemiology and Response Division, Emergency Medical Systems Bureau. New Mexico does not have a dedicated heart disease and stroke prevention program and staff. The Department of Health focuses on preventable risks factors and improving qualities of clinical care to address its heart disease, stroke, and high blood pressure disparities, including tobacco cessation and obesity.

**The State of Utah (UT)** is one of the leading states for heart disease initiatives as reflective in rankings accordingly, 1<sup>st</sup> in high blood pressure and 2<sup>nd</sup> in heart disease and stroke. Utah has a population of 2,763,885 with 36 hospitals, 4,681 staffed beds and recognizes 205,069 discharges yearly.

Utah has a comparable provider population with a total of 159 cardiologists and 3,354 physicians.

The Henry J. Kaiser Family Foundation, [www.kff.org](http://www.kff.org)

Designated public health funding in Utah equates to $31.60 per capita. Utah has a stroke registry maintained by their Department of Health, Bureau of Emergency Medical Services. Like New Mexico, Utah no longer has a dedicated heart disease and stroke prevention program but instead, focuses on emergency standards of acute care and preventable risk factors. Utah’s public health program is aligned with the four key domains of chronic disease prevention as outlined by the CDC including Domain 1: Epidemiology and Surveillance; Domain 2: Environmental Approaches; Domain 3: Health Care System Interventions; and Domain 4: Community-Clinical Linkages.

**Potential in Nevada**

Nevada is one of the lowest CDC-funded states for public health. The Heart Disease and Stroke Prevention program receives and operates solely on the 1305 Enhanced funding from the CDC. The CDC sets strict guidelines for the expenditure of these funds.
funds that greatly limits the impact that can be made to improve the heart health of the population. Due to the limitations in funding, the Heart and Stroke Program has worked collaboratively with other programs, such as the Diabetes Prevention, the Community Health Workers Program and Women’s Health Connection. Regardless of the challenge, the Heart and Stroke Program has expanded dramatically over the past few years and made a significant impact on population health through implementation of health systems interventions and addressing awareness, prevention and control for mortality and morbidity related to heart disease and stroke. If the Heart and Stroke Program secured state funding in the future, Nevada would be able to prevent and reduce the number of citizens living with heart disease.

High blood pressure, heart disease, and stroke disparities can be improved by increasing the amount of emergency medical services (EMS) personnel and quality of training, improving communications between EMS, the hospitals, and primary care providers improving the quality of heart attack and stroke care. Increasing the utilization of Community Health Workers and Community Paramedics to complete screenings, education, prevention awareness, and assessments will help close the gap left by limited specialty provider access in rural communities and for those in the lower social economic class. Establishing quality reimbursement models for these programs will garner sustainability and contribute to improving the care continuum.

Gathering a picture of the disparities and data throughout Nevada is imperative. This could be achieved by adapting the Stroke Registry into a Heart and Stroke Registry that would be inclusive of high blood pressure, heart, and stroke measures. A state-funded registry would remove the cost-prohibitive barriers, allow for primary care and EMS providers to enter information, lend to painting a complete picture of care from the warning signs, through acute events and admissions, and ultimately 30-day post care unifying the continuum and allowing for identifying gaps and facilitating meaningful quality improvements.

Lastly, dedicating state funds to the Heart and Stroke Program would lead to better control over the chronic conditions in Nevada, as the program would take a lead on evidence-based interventions, such as the implementation of the Self-Monitoring Blood Pressure Program, reimbursement on CDC-recognized lifestyle programs and development of a sustainable plan that engages the population of Nevada to become active participants in their health care processes.

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4 American Hospital Directory, [www.ahd.com](http://www.ahd.com)
5 The Henry J. Kaiser Family Foundation, [www.kff.org](http://www.kff.org)
7 American’s Health Rankings, United Health Foundation, [www.amerashealthrankings.org](http://www.amerashealthrankings.org), accessed July 2016