

Nevada Chronic Disease Prevention and Health Promotion State Plan

Aligning the Agenda to Reduce Chronic Disease in Nevada

*Nevada State Health Division
Chronic Disease Prevention and Health Promotion Section*

7/1/2013



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PREFACE

Bill woke up one morning, and thought, “I’m tired of feeling sick all the time.”

It wasn’t always like this. When he was young, Bill was the star athlete in his high school. He spent his time outside of school in the outdoors, hunting and fishing. He used to weigh 165 pounds and could hike into the most rugged canyons carrying a 40 pound pack.

This morning, all he could do was put his slippers on and walk down the hall to the kitchen. His feet were numb, he was feeling light-headed, and felt like he was carrying that 40 pound pack around again.

After high school, Bill went on to college and then served a four-year tour in the Navy as a Personnel Officer. He was motivated and quickly learned that he had the ability to be a good manager. He left the Navy, and landed a great job in management with a high-end casino. He met a beautiful woman, got married, and had two kids.

As the years went by, he started to gain a little weight. It wasn’t too much at first, but by the time Bill was 35, his weight had increased to 215 pounds. He realized he was getting a little heavier, but he still felt pretty good, so he just chalked it up to “getting older.”

The morning of his 47th birthday, Bill was regretting not taking better care of himself. Two years ago, when he had been feeling “under the weather” for a month or so, he went to see the doctor. They weighed him in at 275 pounds, took his blood pressure (140/95), and took some blood to run some tests. When the results of the tests came back, the doctor came in and told him he had diabetes.

In trying to manage his diabetes, Bill started missing work. Even with his medical insurance, he was paying a significant amount of money out of pocket for medication and more frequent trips to the doctor. He started having problems with his teeth and gums. His feet were frequently in pain and it hurt to walk. This disease had taken a huge toll on his quality of life. The worst part was thinking about what the doctor had told him.

“With the proper attention to your health and lifestyle, this type of diabetes (Type 2 Diabetes Mellitus) is almost completely preventable.”

LETTER FROM STATE HEALTH OFFICER

Dear Colleagues and Fellow Nevadans,

Chronic disease affects everyone. We can all easily recall a family member, neighbor, or colleague who is afflicted with a chronic disease. Chronic disease is more prevalent now than ever in our state's history. Recent estimates show 6 out of 10 Nevadans live with some form of chronic disease. More Nevadans die each year from chronic disease than from all other causes of death ***combined***. In 2011, the estimated financial burden from chronic disease on the citizens of Nevada was in excess of \$20.3 billion. By 2023 this number is projected to increase to ***\$45.5 billion***.

The financial impact of chronic disease is alarming; however, financial impact is only part of the issue. The negative physical, psychological, and emotional impacts on Nevada's citizens heightens the problem to a near state of emergency. Perhaps the most upsetting issue relating to chronic disease is that most cases of illness and death are preventable! Everyone can do something to improve the health of Nevadans.

Seventy-five professionals working in the chronic disease field, from across the state, have volunteered their expertise, experience, and leadership to provide recommendations to decrease the burden of chronic disease in Nevada. The Fitness and Wellness Advisory Council, the Chronic Disease Leadership Team, and the Nevada State Health Division Chronic Disease Prevention and Health Promotion Section are dedicated to addressing the burden of chronic disease through the implementation of this plan.

This plan includes recommendations for actions that everyone from policy makers (members of congress, state and local board members) and educators, to medical and dental personnel can do to help reduce or eliminate chronic disease in Nevada. I believe that with concentrated and cooperative efforts, and by following the recommendations in this plan, the burden of chronic disease in Nevada can be greatly reduced.

This plan, [***Aligning the Agenda to Reduce Chronic Disease in Nevada***](#), represents the Nevada State Health Division dedication to reducing the burden of chronic disease on Nevada's citizens. With this letter, I pledge my service and support for this plan.

Sincerely,



Tracey D. Green, MD
State Health Officer
Nevada State Health Division

THE STATE PLAN PROCESS

Significant changes were made over the past two years in the Chronic Disease Prevention and Health Promotion Section (CDPHP) of the Nevada State Health Division (NSHD). The merging of three cancer control programs and the loss of approximately \$2 million in funding radically transformed the deliverables of our projects. Additionally, as funding for chronic disease continues to shrink at the local level and public health priorities shift at the national level, it is critical for Nevada to rethink the way the state conducts business and develop a plan that embodies the changing financial situation and health priorities affecting chronic disease. The CDPHP Section, Chronic Disease Leadership Team, and the Fitness and Wellness Advisory Council (FWAC) has spent the last twelve months building an integrated strategic chronic disease state plan in an effort to enhance efficiency and expand coordination and collaboration across the state. Between December 2011 and February 2012 several planning meetings and focus groups with the CDPHP leadership team, community partners, staff, and administration were held. Five focus areas were identified in these meetings as core functions requiring attention in the state:

1. Evaluation and Surveillance -

Gather, analyze, and disseminate data and information. Conduct evaluations to inform, prioritize, deliver, and monitor programs and population health.

2. Health Promotion -

Use all available resources to educate and inform the citizens of Nevada about the best strategies for preventing the development of chronic disease, the best practices for chronic disease management and the reversal of the chronic disease process.

3. Clinical and Health Systems -

Ensure that communities support and clinics refer patients to programs that improve management of chronic conditions. Implement interventions that ensure those with, or at high risk for chronic diseases have access to quality community resources to best manage disease conditions and risk.

4. Environmental and Systems Changes -

Promote change within the physical, cultural, and institutional environments that advance health and reinforce healthful behaviors (in schools, worksites, and communities).

5. Enhanced State Capacity -

Enhance health settings and staff to improve the effective delivery of clinical and preventive services for the early detection of disease and to reduce or eliminate risk factors that propagate disease.

Moving forward, the state will use this plan to expand efforts in these five domains. The NSHD CDPHP Section staff, leadership team, and FWAC will no longer focus efforts around a specific disease or program, but rather coordinate efforts that embrace integrated evidence-based strategies that address multiple risk factors and manifestations of chronic disease.

Challenges and Obstacles

Working collaboratively towards coordination has its challenges, and with limited resources and funding, Nevada must embrace coordination. The “one agency-one program” model is no longer effective. Further, by definition, systems change strategies require a more comprehensive and integrated approach. The following are some of the challenges and obstacles associated with the coordination path, and a brief description of the plan for overcoming obstacles:

Lack of Funding

Lack of funding is the largest obstacle faced. For Nevada, state public health funding ranks 51st in the nation (Robert Wood Johnson Foundation, 2011). To subsidize the lack of state funding, the NSHD has been successful in obtaining a number of federal grants. Nonetheless, five million dollars in federal funding is not enough to target population-based outcomes. As a result, current funding sources by categorical diseases will be leveraged for crosscutting efforts. In addition, we will work to leverage resources, expertise, and funding through our collaboration efforts with key community partners.

Lack of Collaboration and Coordination

Traditionally, state and community entities have operated in silos with a singular focus such as diabetes prevention and management or cancer prevention and management. To address this, the CDPHP leadership team, FWAC and the CDPHP Section staff will create internal workgroups focused on the five domains of the chronic disease state plan. In addition, funding and technical assistance will be provided to community

stakeholders to work on integration efforts related to the goals and objectives of the chronic disease state plan. Furthermore, community champions will be identified to steer strategies linked to the chronic disease state goals.

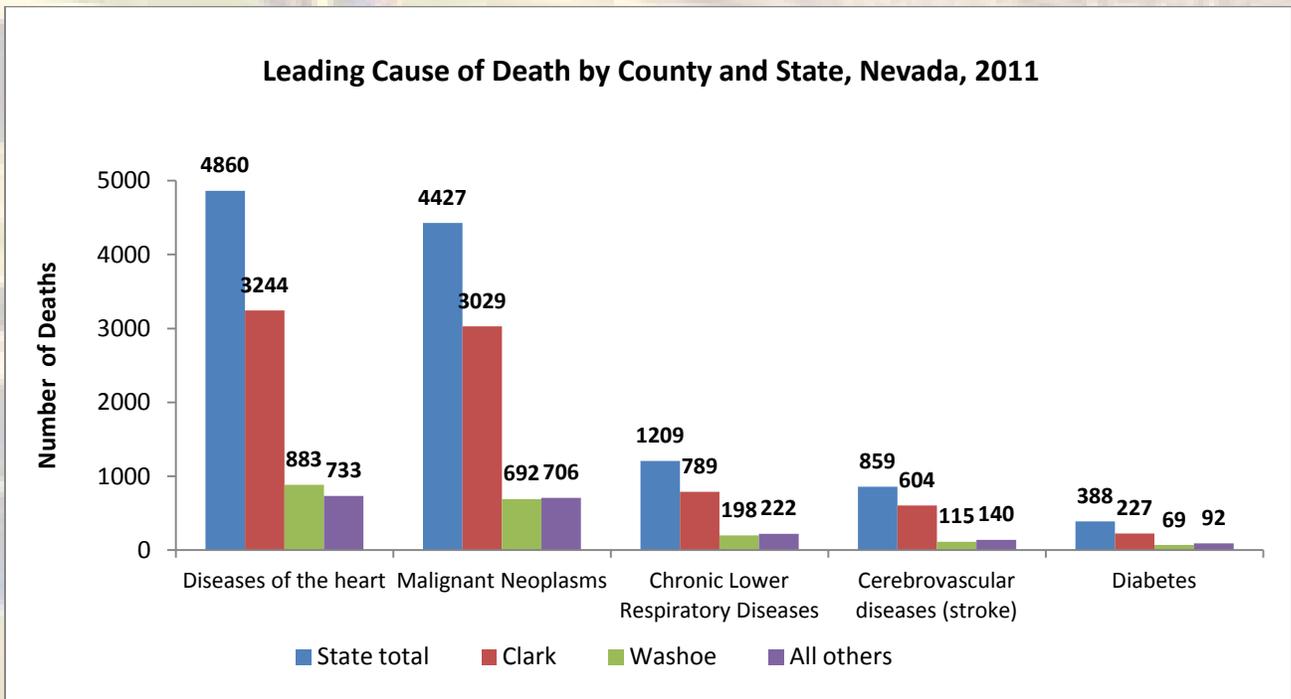
Coordination of Communication

Another major challenge is the lack of communication among state and community partners. The coordination and collaboration model brings a significant number of organizations and stakeholders to the table. The Nevada CDPHP Section developed a communication plan to enhance the procedure by which entities, particularly the NSHD, communicate data, resources, and funding announcements. Key communication strategies included in the plan are the development of a chronic disease electronic listserv, wellness websites, annual policy briefs, surveillance reports, and fiscal reports. Through these communication venues, state sister agencies and community partners will also have the ability to highlight and publish their own efforts as needed.

CHRONIC DISEASE IN NEVADA

Chronic disease has a palpable impact on the State of Nevada, its people, and its resources. Chronic disease develops gradually, but once it becomes a noticeable condition, it can be difficult to manage and can seriously limit individuals lifestyles. Chronic disease shortens life expectancy, and decreases quality of life. People with chronic disease live shorter lives spend that time unable to do the things they want to do.

In 2011, the leading cause of chronic disease death in Nevada was diseases of the heart, followed by malignant neoplasms, chronic lower respiratory diseases, accidents and cerebrovascular diseases (stroke).



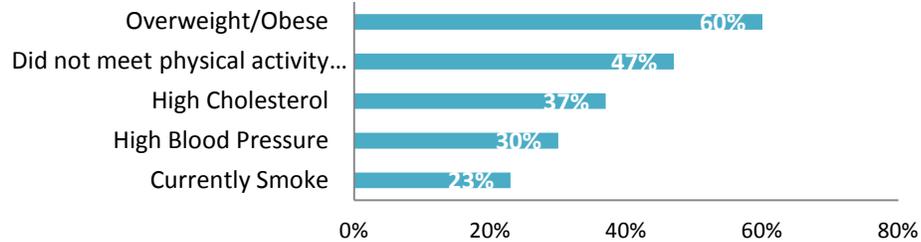
Source: Office of Public Health Informatics and Epidemiology, Nevada State Health Division, 2011
 Note: Numbers are preliminary and subject to change

Modifiable Risk Factors

Prevention is the most effective solution to the problem of chronic disease. Six modifiable risk factors or behaviors have been directly linked to chronic disease:

- 1) Physical inactivity
- 2) Overweight & obesity
- 3) Tobacco and nicotine use
- 4) Poor nutrition
- 5) Hypertension (high blood pressure)
- 6) Dyslipidemia (high cholesterol)

Prevalence of Risk Factors Associated with Chronic Disease in Nevada



Source: CDC. (2011). *Behavioral risk factor surveillance system questionnaire*. Atlanta, GA: Centers for Disease Control and Prevention.

The coordination model is ideally suited to reducing chronic disease by modifying risk factors, as these risk factors are associated with multiple diseases. For example, smoking and tobacco use puts a person at a much greater risk for heart disease and cancer than non-smokers. Likewise, inadequate physical activity increases a person's risk for heart disease, diabetes, pulmonary disease, and some cancers. Inadequate nutrition puts a person at higher risk for developing arthritis, heart disease, cancer, and diabetes. These modifiable risk factors are components of multiple manifestations of chronic disease. By modifying risk factors, chronic disease will be reduced.

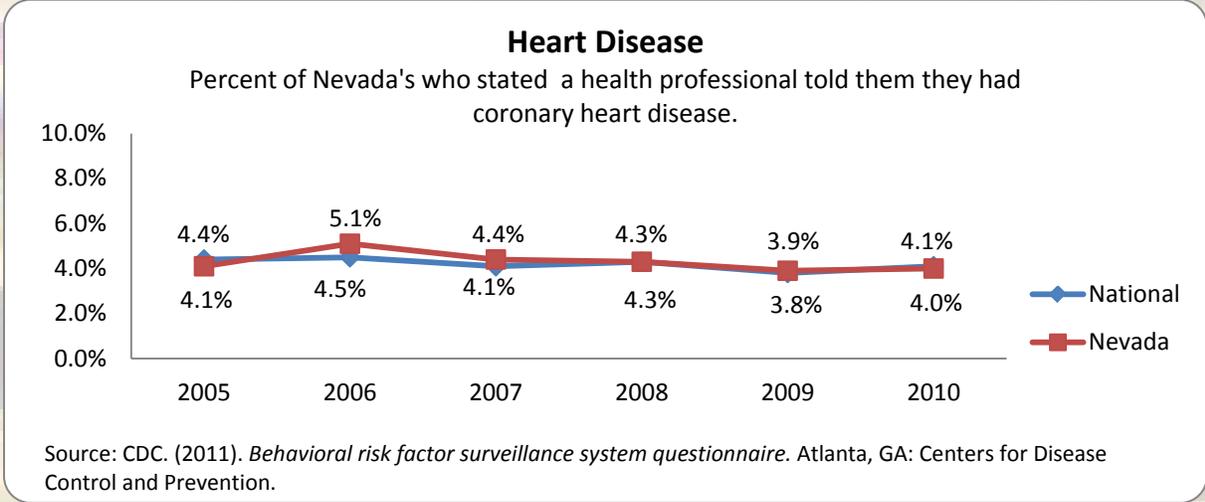
Reduction of Chronic Disease – Everyone Can Help!

The burden of chronic disease in the Silver State is alarming and frustrating. Chronic disease is largely preventable and everyone in the state can do something to reduce its negative impact. This plan includes a detailed, comprehensive list of actions that all Nevadans (from individuals to organizations/businesses) can take to help reduce the prevalence of chronic disease in the state (Page 32). With a strong coordinated effort and participation from all Nevadans, the burden of chronic disease can be greatly reduced in our state. This plan, *Aligning the Agenda to Reduce Chronic Disease in Nevada*, is a major step towards realizing our goal.

THE BURDEN OF CHRONIC DISEASE IN NEVADA

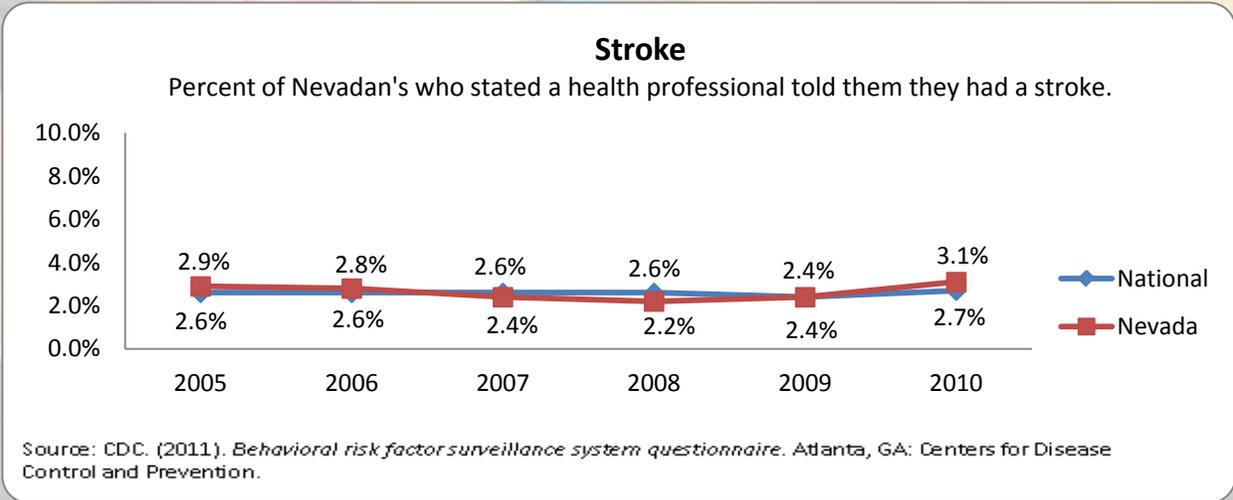
Heart Disease

Although the prevalence of heart disease in Nevada and nationally has not varied dramatically from 2005 to 2010, hovering around 4%, heart disease remains one of the most deadly chronic diseases and the number one cause of death in Nevada.



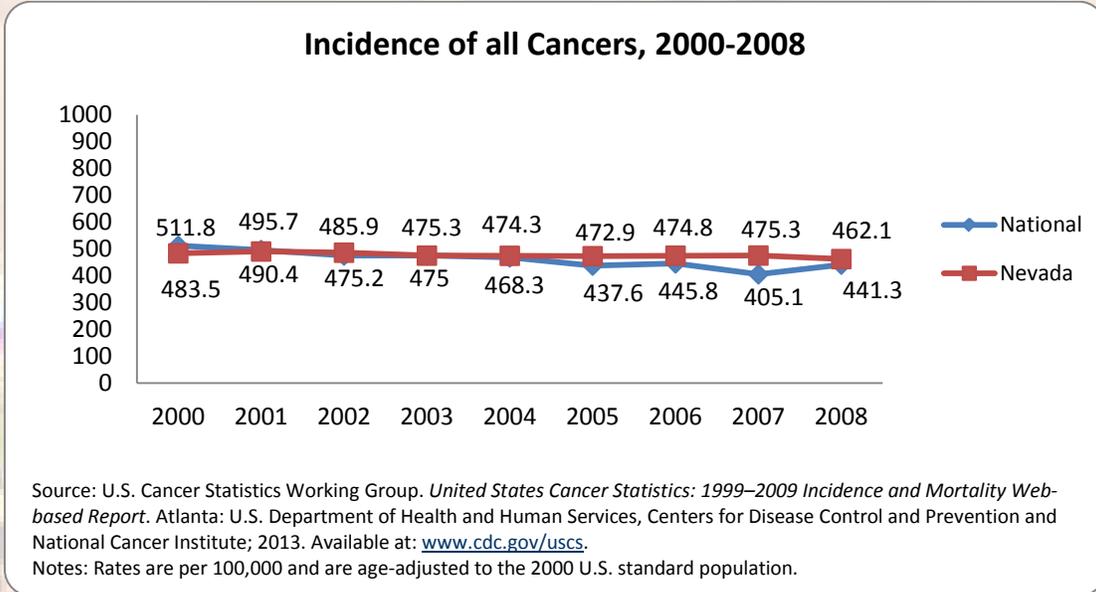
Stroke

Stroke prevalence in Nevada did not vary much from 2005 to 2010, hovering around 3%. However, from 2009 to 2010 there was a 22.6% increase in stroke prevalence.



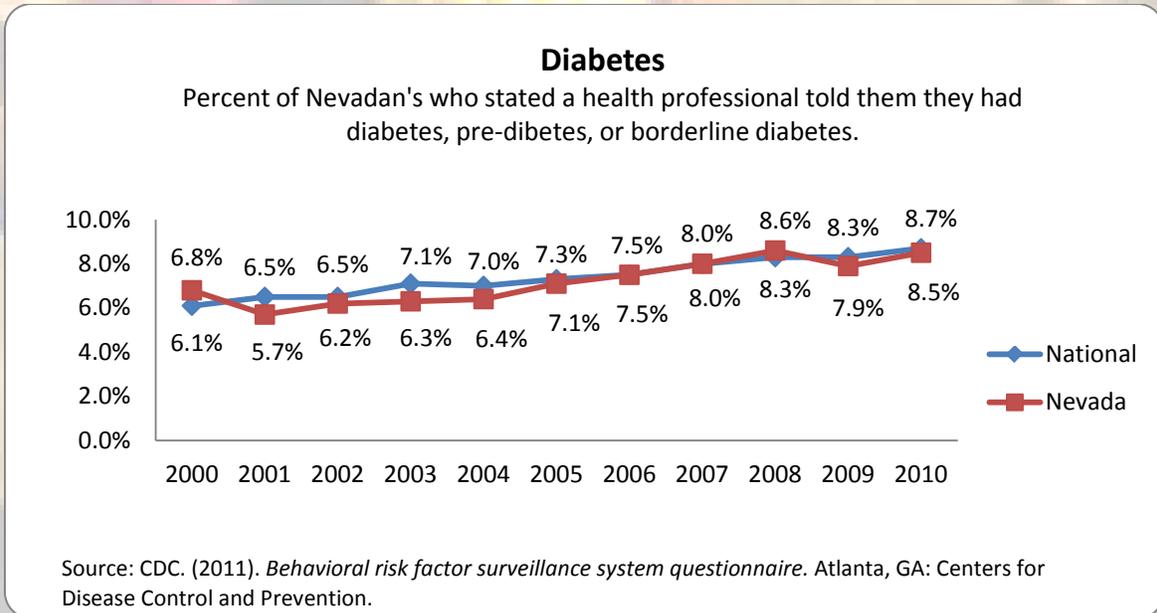
Cancer

The incidence of all cancers in Nevada appears to be decreasing from 2000 to 2008. However, Nevada appears to have a higher incidence of cancer than the nation.



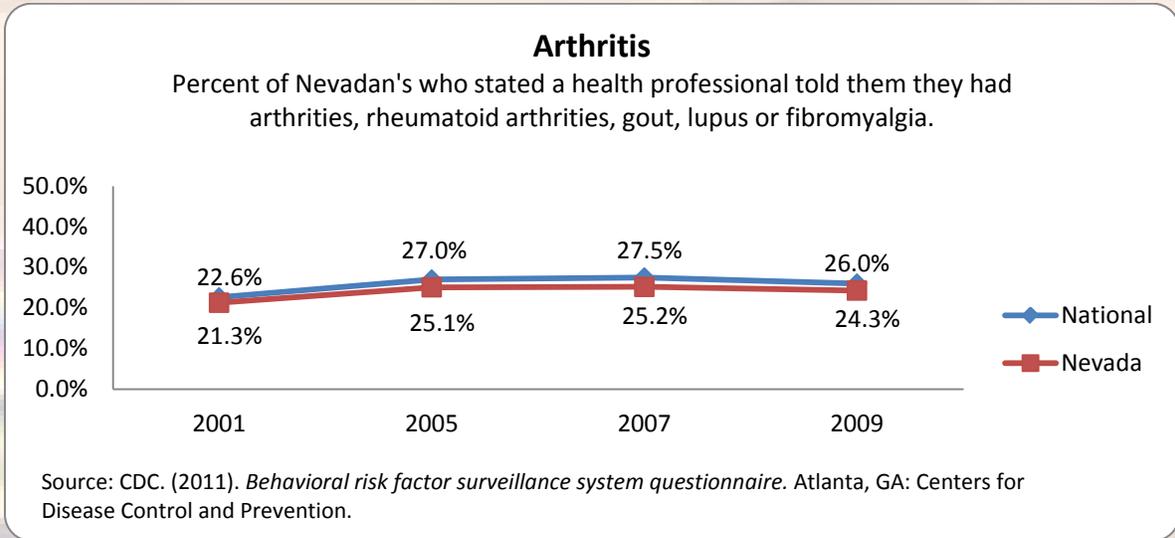
Diabetes

From 2000 to 2010, the prevalence of Nevadans diagnosed with diabetes increased by 2% compared to national prevalence, which increased by 3%.



Arthritis

Both nationally and in Nevada, the prevalence of arthritis went up 3% from 2001 to 2009. Mirroring national trends, arthritis is the most common cause of disability in Nevada.

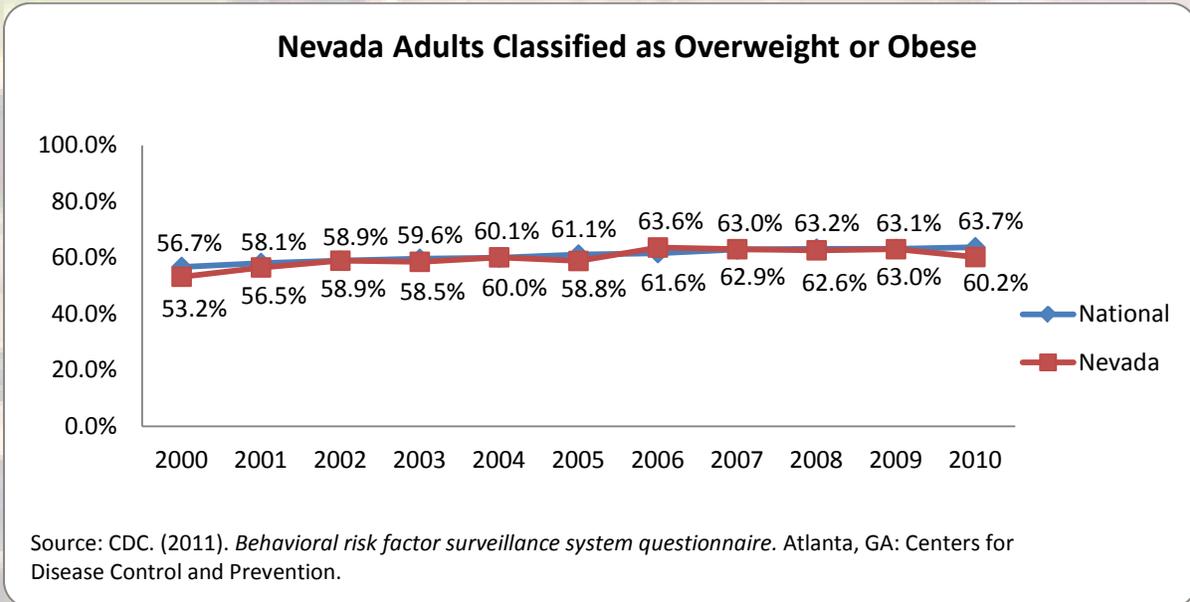


Chronic Disease Risk Factors

Modifiable risk factors are responsible for much of the illness, suffering, and early death related to chronic disease. The World Health Organization has estimated that if the major risk factors for chronic disease (listed below) were eliminated, at least 80% of all heart disease, stroke and type 2 diabetes would be prevented and more than 40% of cancer cases would be prevented (World Health Organization, 2005).

Obesity

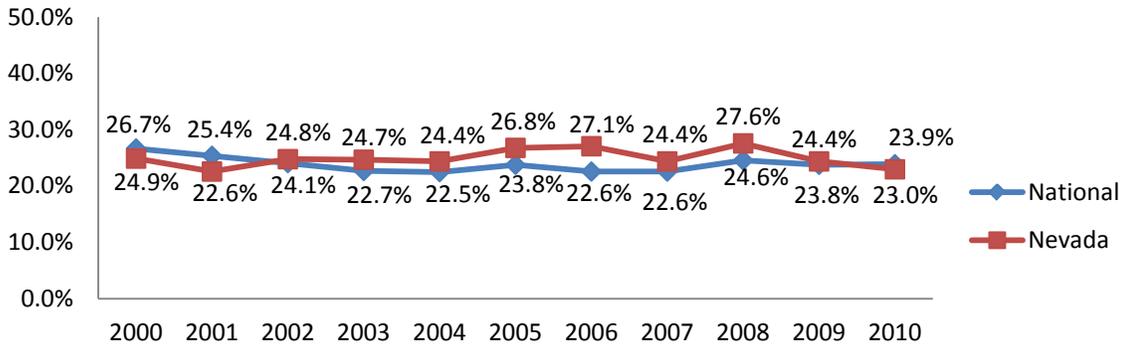
There was a steady climb from 2000 to 2010 in overweight and obesity trends both nationally and in Nevada. The prevalence of Nevadans who were overweight and/or obese rose 7% from 2000 to 2010.



Physical Inactivity

A risk factor associated with being overweight or obese is a lack of physical activity. In Nevada, more people were physically active from 2000 (53%) to 2010 by (60.2%). However, in 2010, 23% of Nevadans did not participate in any physical activity or exercise in the past 30 days that was not job related. This was in line with the national average (23%).

Percent of Nevada Adults not Participating in Physical Activity or Exercise in the Past 30 days, Non-Job Related

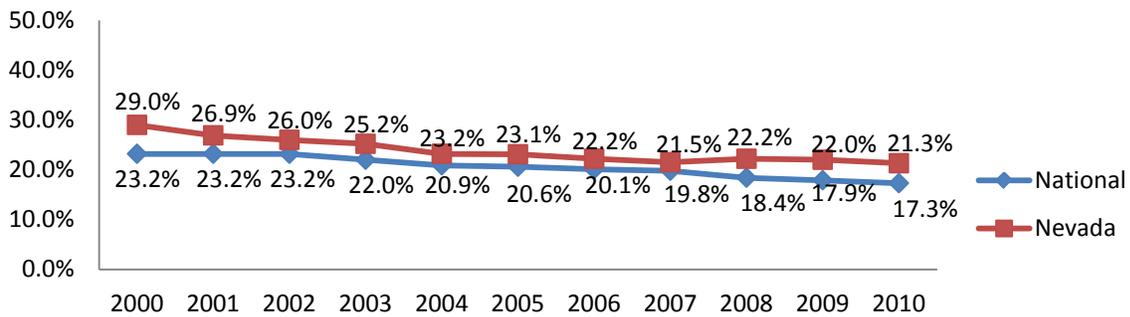


Source: CDC. (2011). *Behavioral risk factor surveillance system questionnaire*. Atlanta, GA: Centers for Disease Control and Prevention.

Tobacco

Tobacco prevalence nationally and among Nevadans steadily decreased over the last decade; however, Nevada is still above the national average (21%). Tobacco use prevalence decreased in Nevada 8% from 2000 to 2010

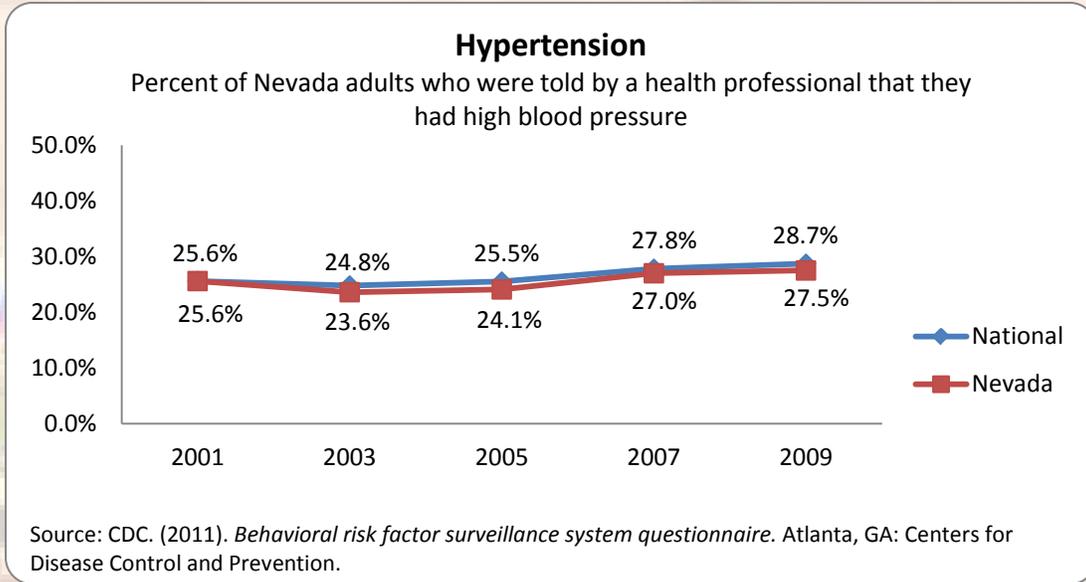
Percent of Nevada Adults who Smoke, Use Chewing Tobacco, Snuf or Snus



Source: CDC. (2011). *Behavioral risk factor surveillance system questionnaire*. Atlanta, GA: Centers for Disease Control and Prevention.

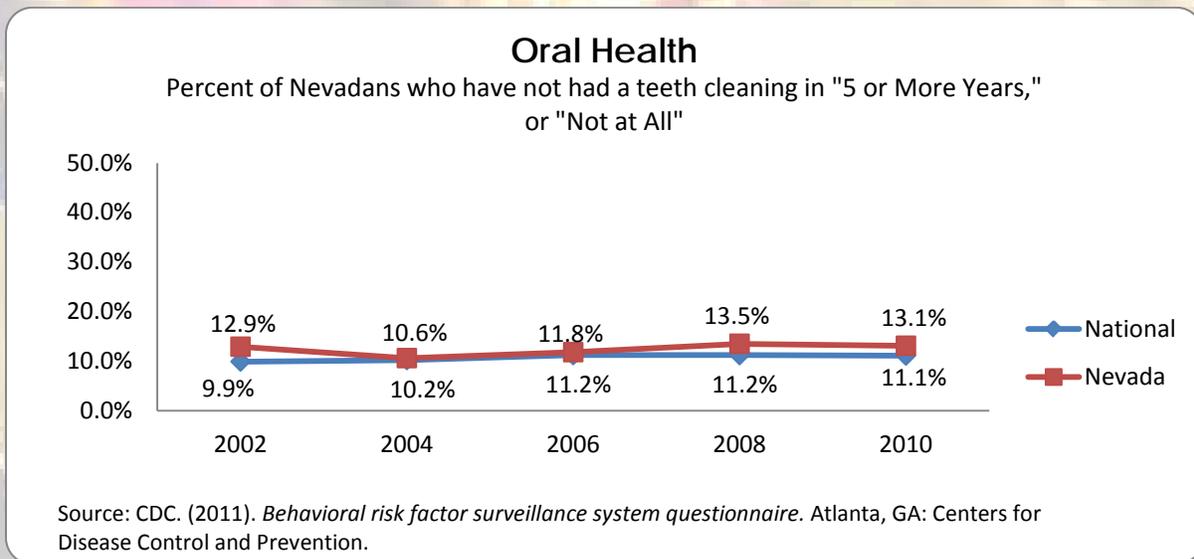
Hypertension

The prevalence of high blood pressure for Nevadans increased 2% from 2001 to 2009, which was slightly below the national average of 29%.



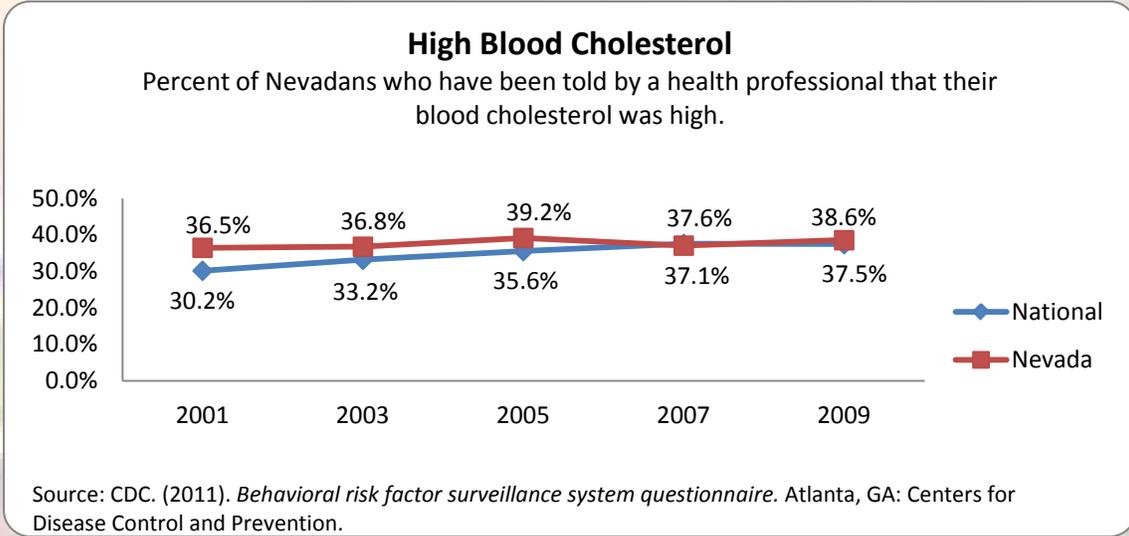
Oral Health

The prevalence of Nevadans who had not had a teeth cleaning in 5 or more years or not at all remained relatively consistent from 2002 to 2010 at 13%, which was above the national average.



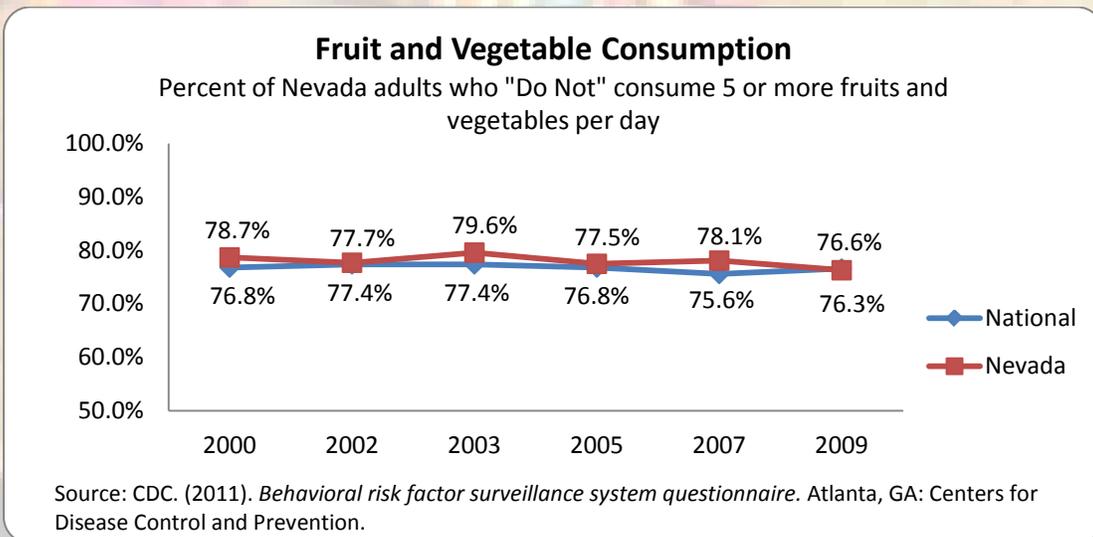
High Blood Cholesterol

The prevalence of high blood cholesterol in Nevada was slightly above the national average. Nevadans diagnosed with high blood cholesterol increased by 2% from 2001 to 2009 when compared nationally, which saw a steady increase, rising almost 8% from 2001 to 2009.



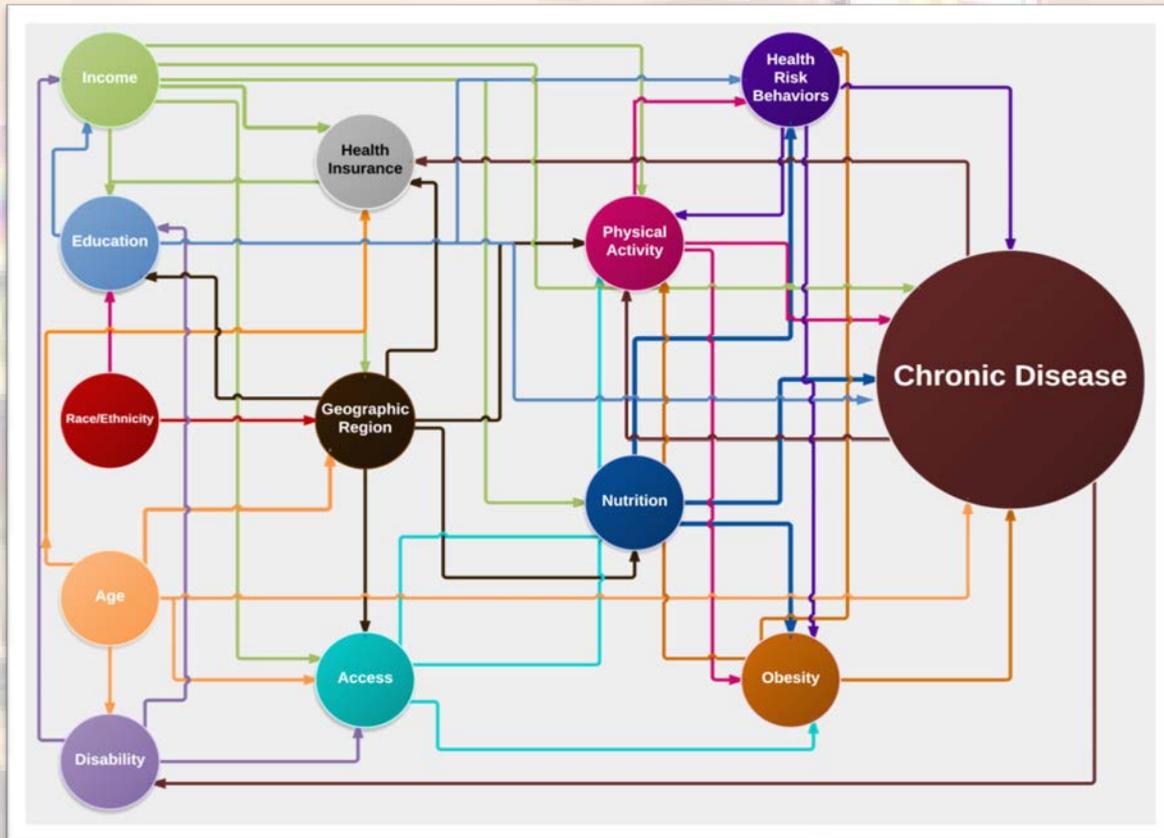
Poor Nutrition

Although the prevalence of adults consuming the recommended daily portions of fruits and vegetables increased by 3% from 2000 to 2009, 76% were still not getting the recommended portions which was slightly below the national prevalence of 77%.



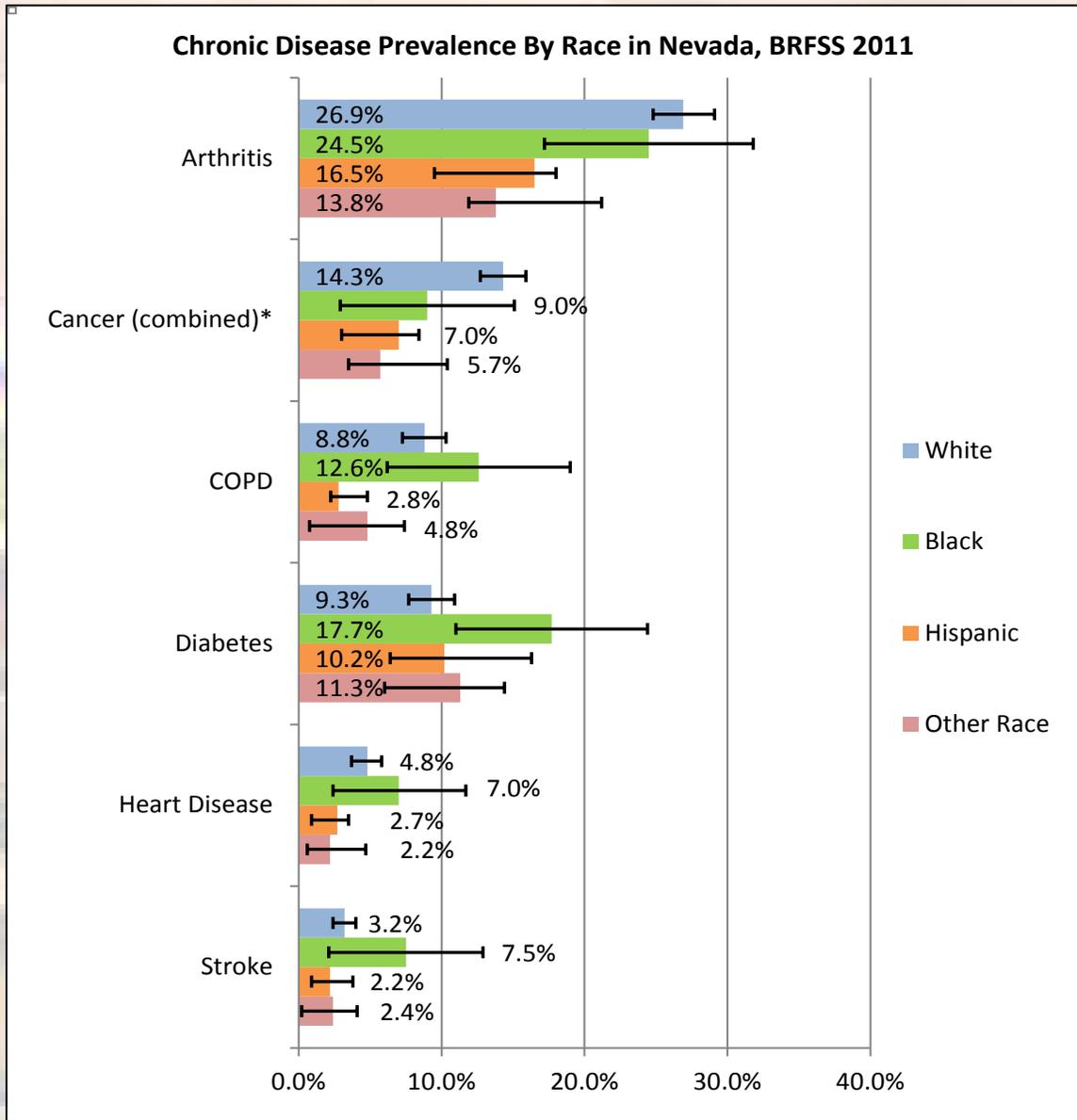
Chronic Disease Risk Disparities

Health disparities are differences in the burden of disease (incidence, prevalence, mortality, etc.) and other adverse health conditions or outcomes between specific population groups. The social factors affecting health are well known and the relationships can be complex, as the figure below shows.



Source: Whitehill, J., Flores, M., & Mburia-Mwalili, A. (2013). *The Burden of Chronic Disease in Nevada - 2013*. Chronic Disease Prevention and Health Promotion. Carson City: Nevada State Health Division.

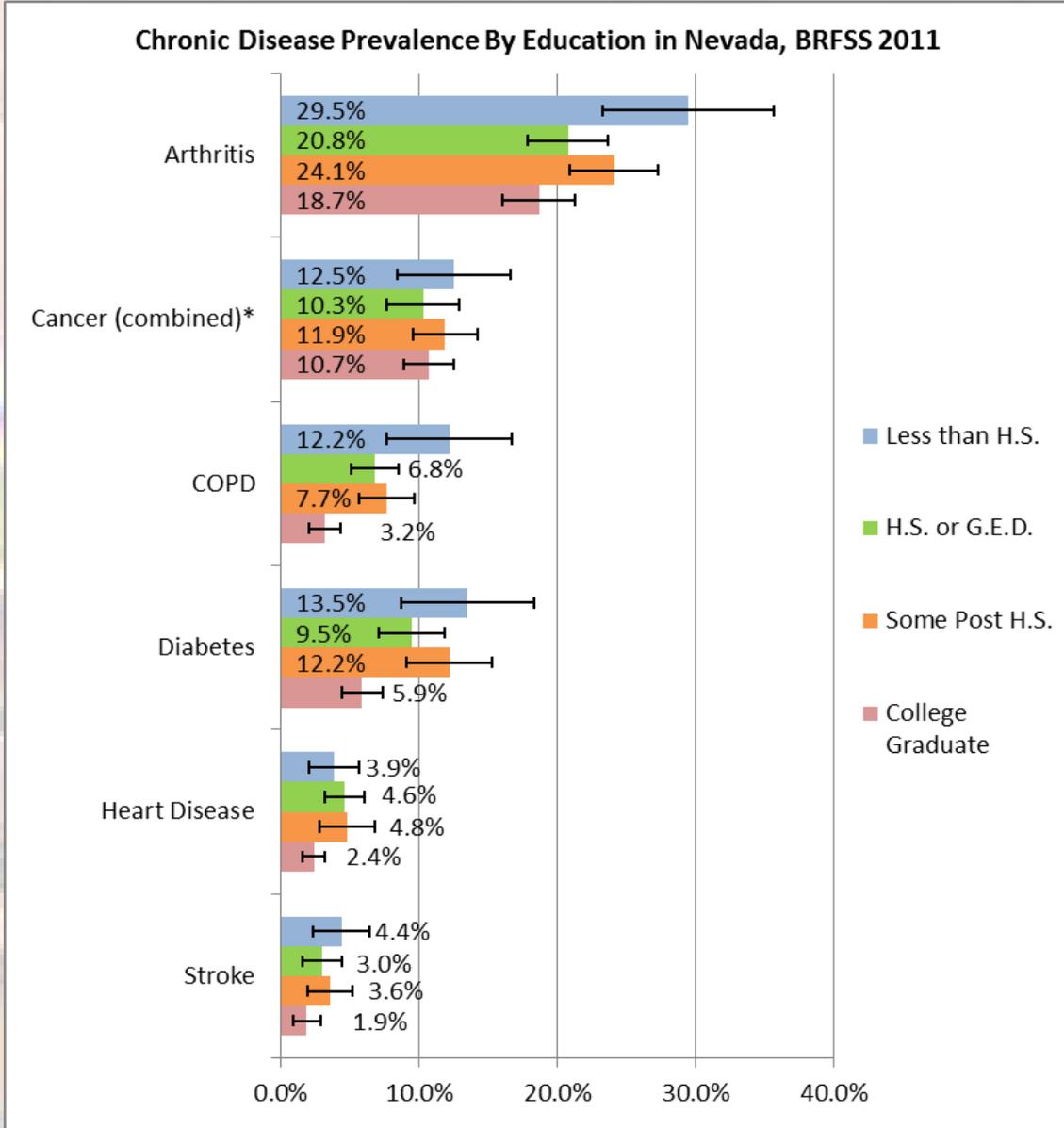
Despite improvement in overall U.S. health, disparities still exist among culturally diverse populations. Members of these groups tend to have poorer health or die prematurely and are more prone to certain chronic diseases, compared to Whites. Furthermore, there is a strong relationship between chronic disease prevalence and level of education. The more education an individual attains, the less likely they are to have a chronic disease. Conversely, the less education an individual attains, the more likely they are to have a chronic disease. Oddly, there is a higher prevalence of chronic disease among populations with some post high school education than in those with just a high school diploma or equivalent. Below are some key findings regarding health disparities and inequalities in Nevada.



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence and Trends Data, 2011

*Note: "Combined Cancer" refers to skin and other types of cancer.

In order to compare ethnic minority groups, data is weighted to reflect the total population. In Nevada, Whites represent 60% of the population followed by Hispanics (25%), other races (8%) and Blacks (7%). Therefore, there is a disproportionate prevalence of all chronic diseases among Blacks despite their low representation compared to Whites with the exception of arthritis and cancer.



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence and Trends Data, 2011

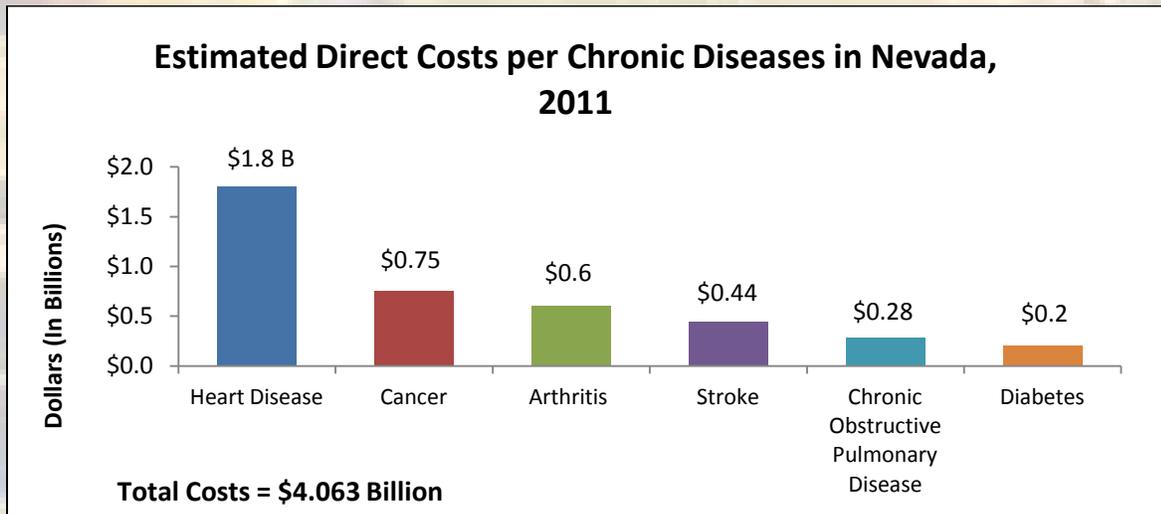
*Note: "Combined Cancer" refers to skin and other types of cancer.

THE ECONOMIC BURDEN OF CHRONIC DISEASE

The rising rate of chronic disease is a crucial but frequently ignored contributor to increasing medical expenditures. Nevada faces staggering financial costs associated with chronic disease despite the relatively low population density. This section estimates the current and future treatment costs and loss of productivity for six major chronic conditions: arthritis, combined cancers, chronic obstructive pulmonary disease, diabetes, heart disease, and stroke (DeVol & Bedroussian, 2007). The estimates are conservative because 1) the focus is only on the costs attributed directly to the treatment of each disease and ignores the costs of co-morbidities and secondary effects; and 2) the costs of related health conditions are excluded, as well as costs for individuals in nursing homes, prisons and other institutions (Wu & Green, 2000).

Direct Costs:

The direct costs associated with chronic disease are total charges incurred by an inpatient for the duration of their stay in a hospital.

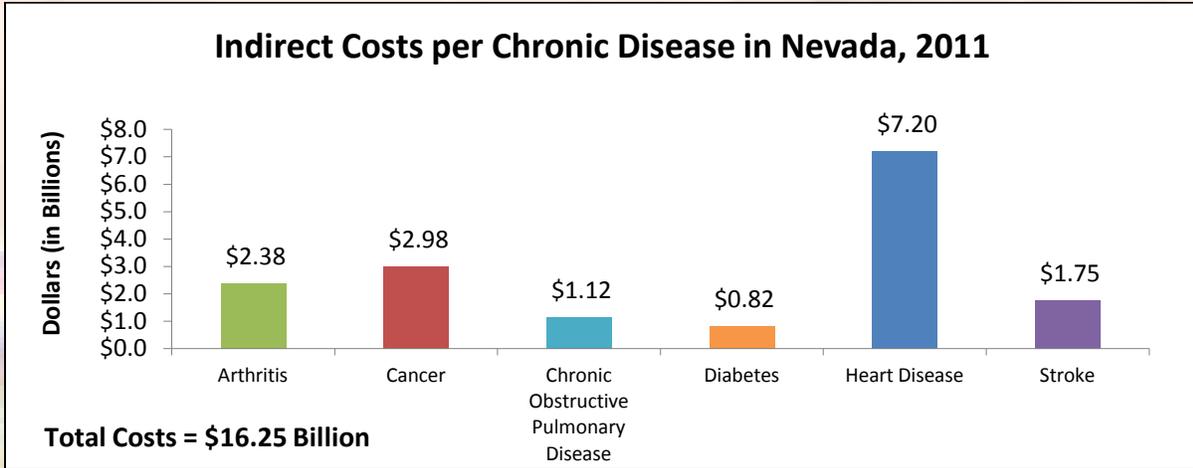


Source: Whitehill, J., Flores, M., & Mburia-Mwalili, A. (2013). *The Burden of Chronic Disease in Nevada - 2013*. Chronic Disease Prevention and Health Promotion. Carson City: Nevada State Health Division.

Indirect Costs

Direct costs are not the only representation of economic burden that chronic diseases place on Nevada; indirect costs represent the productivity losses due to illness and premature death (Nicholson, 2006). The DeVol, Ross and Bedroussian (2007) study, which is endorsed by the CDC and used by the Milken Institute, calculated that productivity losses are approximately four

times greater than the direct medical cost of chronic disease. Years of potential life lost (YPLL) for the state of Nevada was calculated for persons under the age of 75 for 2011. Diseases of the heart and malignant neoplasms account for over 64,000 total years lost in Nevada annually.



Source: Whitehill, J., Flores, M., & Mburia-Mwalili, A. (2013). *The Burden of Chronic Disease in Nevada - 2013*. Chronic Disease Prevention and Health Promotion. Carson City: Nevada State Health Division.

Presenteeism

Good health is a vital component of individual well-being, and it also plays a large role in employee productivity. Presenteeism is when ill or injured employees go to work to avoid taking sick leave, and do not perform well. Nicholson *et al* reported that output loss due to presenteeism is immense, and with some diseases it can be as high as fifteen times greater than absenteeism, which is defined as work missed due to sick days (Nicholson, 2006). Below is a chart depicting the estimated total economic burden: direct costs (calculated in previous burden document); indirect costs (using CDC-approved DeVol equation of four times direct costs); and total costs, the sum of direct and indirect costs. Also shown is the 2023 Nevada projected total burden if nothing is changed or implemented with respect to prevention efforts focused on reducing chronic diseases.

Total Economic Burden in Nevada [^]			
	Direct Costs	Indirect Costs	Total Estimated Economic Burden
2003	\$1,900,000,000	\$7,500,000,000	\$9,400,000,000
2011*	\$4,062,820,904	\$16,251,283,616	\$20,314,104,520
2023	\$9,100,000,000	\$36,400,000,000	\$45,500,000,000

Source: Milken Institute, *The Economic Burden of Chronic Disease on Nevada*, 2007.

[^]Analysis used the Medical Expenditure Panel Survey (MEPS) data from 2003, the most recent year available at time of analysis.

*Numbers calculated from Economic Burden of NV section

Implications

An individual's health is inextricably linked with their ability to be a productive member of society. This necessarily implies that investing in health with the intention of decreasing the burden of chronic disease means investing in Nevada's economic prosperity. Nevada's economy is linked to its ability to maintain an educated, highly trained, healthy work force. It is well understood among policy-makers that economic growth is dependent on investments in human capital; however, the importance of good health in maintaining a competitive work force is frequently overlooked. Better health leads to greater investments in education, resulting in a higher quality of human capital – which in turn causes wealth to increase in a virtual cycle of economic growth.

CHRONIC DISEASE STATE PLAN: GOALS, OBJECTIVES AND STRATEGIES

The FWAC and the CDPHP Section have identified goals to improve, manage, and prevent chronic disease in Nevada over the next five years. These goals are centered on the five core functions identified through our gap analysis:

1. Evaluation and Surveillance
2. Health Promotion and Marketing
3. Clinical and Health Services
4. Environmental and System Changes
5. Enhanced State Capacity

The CDPHP Section and its partners will incorporate clinical and preventive initiatives, environmental and system changes, health promotion, and surveillance efforts to eradicate the epidemic of chronic disease in Nevada. Since many reports tout the important roles staff and leadership play in ensuring the delivery of quality and culturally competent medical care and health promotion services, Nevada also seeks to foster training and capacity-building activities to support the infrastructure, development and sustainability of a strong and effective chronic disease workforce in Nevada.

Nevada will take a multipronged, comprehensive approach toward incorporating these five priorities into the state's healthcare systems following. We believe that our goals and strategies will have an impact across multiple chronic diseases and risk factors. For example, by enhancing clinical and health services we hope to increase access to services for all Nevadans struggling with any chronic disease.

The success of these efforts will be evaluated utilizing evaluation measures and surveillance activities that utilize local and national data sets such as Behavioral Risk Factor Surveillance System and Youth Risk Behavioral Surveillance System. The findings will be published and disseminated to community members through circulation strategies such as Listservs, newsletters, and educational briefs. Moreover, CDPHP staff will report quarterly to the FWAC for guidance. As our advisors and community champions, FWAC will ensure the state is moving forward in making progress towards these goals

Evaluation and Surveillance			
Goal	Objective	Strategy	Activity
Evaluation and surveillance data and information are widely used by policy makers, decision makers and practitioners to address the burden of chronic disease in Nevada.	<i>Increase the number of surveillance and evaluation products that enhance statewide reporting, programming, and community decision-making efforts to improve chronic disease.</i>	1. Establish, maintain, and/or enhance statewide chronic disease surveillance systems, including credible primary and secondary data sources such as BRFSS, YRBSS, and state cancer and stroke registry.	<ul style="list-style-type: none"> Strengthen internal and external protocols on the collection, analysis, and dissemination of chronic disease data Actively work with the local health authorities, hospitals, clinics, and other providers on data efforts Identify funding for core surveillance and evaluation activities Create a heart disease and stroke registry
		2. Support the use of and access to electronic health records to achieve improved outcomes in patient engagement, care coordination, and population health.	<ul style="list-style-type: none"> Engage local health authorities to establish protocols on data collection and dissemination Link with hospitals, clinics, and service providers to establish a plan for the use and dissemination of health data
		3. Create chronic disease information for use by key stakeholders to make the case for chronic disease.	<ul style="list-style-type: none"> Create data driven chronic disease and risk factor burden reports Create reports for taking action on social determinants of health to address health equity Create a statewide chronic disease surveillance plan

Health Promotion

Goal	Objective	Strategy	Activity
<p>Nevada will benefit from improvements in chronic disease risk factors (high blood pressure, obesity, smoking, caries, A1C, etc) by applying health education and promotion activities.</p>	<p><i>Increase the number of health promotion communication strategies that promote evidence-based healthy lifestyle changes that help reduce the burden of chronic disease in Nevada.</i></p>	<p>1. Integrate surveillance and evaluation information into programmatic and policy decision making to improve performance</p>	<p>Use surveillance, evaluation and research information for press releases, advocacy briefs, and publications that highlight chronic disease and key risk factors.</p>
		<p>2. Prioritize, integrate, and align health promotion tools into ongoing state activities to raise community awareness and build community demand for chronic disease action.</p>	<ul style="list-style-type: none"> • Create a statewide chronic disease Listserv • Engage in social media strategies such as Facebook, Twitter, etc. • Design a wellness website to promote worksite wellness among businesses and health establishments • Create and disseminate a chronic disease and risk factor burden reports (oral health, cancer, diabetes, etc) • Create and disseminate reports for taking action on social determinants of health to address healthy equity
		<p>3. Invest in statewide television, radio, and social media to address and highlight the burden of key chronic disease risk factors such as tobacco, nutrition, and physical activity.</p>	<ul style="list-style-type: none"> • Leverage resources and funding for health promotion activities • Conduct media campaigns to promote the use of age-appropriate screening and early detection of tooth decay, pre-diabetes, breast, cervical, and colorectal cancer • Conduct radio and television media campaigns that promote physical activity, nutrition, and tobacco cessation

Clinical and Health Services			
Goal	Objective	Strategy	Activity
The provision and quality of clinical and health preventive services will become institutionalized with gold standards and best practices throughout Nevada.	<i>Increase communication, funding, and collaboration among state and state-funded programs to facilitate the provision of the full range of preventive clinical and social services affecting chronic diseases</i>	1. Train community organizations and health entities to effectively recruit key population groups to receive clinical preventive services.	<ul style="list-style-type: none"> Promote and provide resources on the provisions of coaching, self-help materials and nicotine replacement medications to smokers trying to quite through the Helpline Promote and fund age appropriate oral health screenings; and breast, cervical, colorectal cancer screening services Conduct trainings on gold standards, evidence base practices, and promising practices for the health care and clinical workforce
		2. Convene experts, state agencies, insurers, community organizations, advocates and stakeholders to identify a process to expand self management classes and community health workers.	<ul style="list-style-type: none"> Promote utilization of chronic disease self-management classes Develop a quality & technical assistance center Establish school-based health centers Establish a statewide community health worker association
		3. Promote policy, system and environmental change within the health care system that endorse the chronic care model and patient-centered care.	<ul style="list-style-type: none"> Convene experts to identify a process to expand reimbursement mechanisms for disparate communities across Nevada Pursue policies that support clinician reimbursement for provisions of clinical and preventive services, including patient education and counseling Engage in the adoption and use of electronic health records to achieve improved outcomes in patient engagement, care coordination, and population health

Policy, System, and Environmental Changes

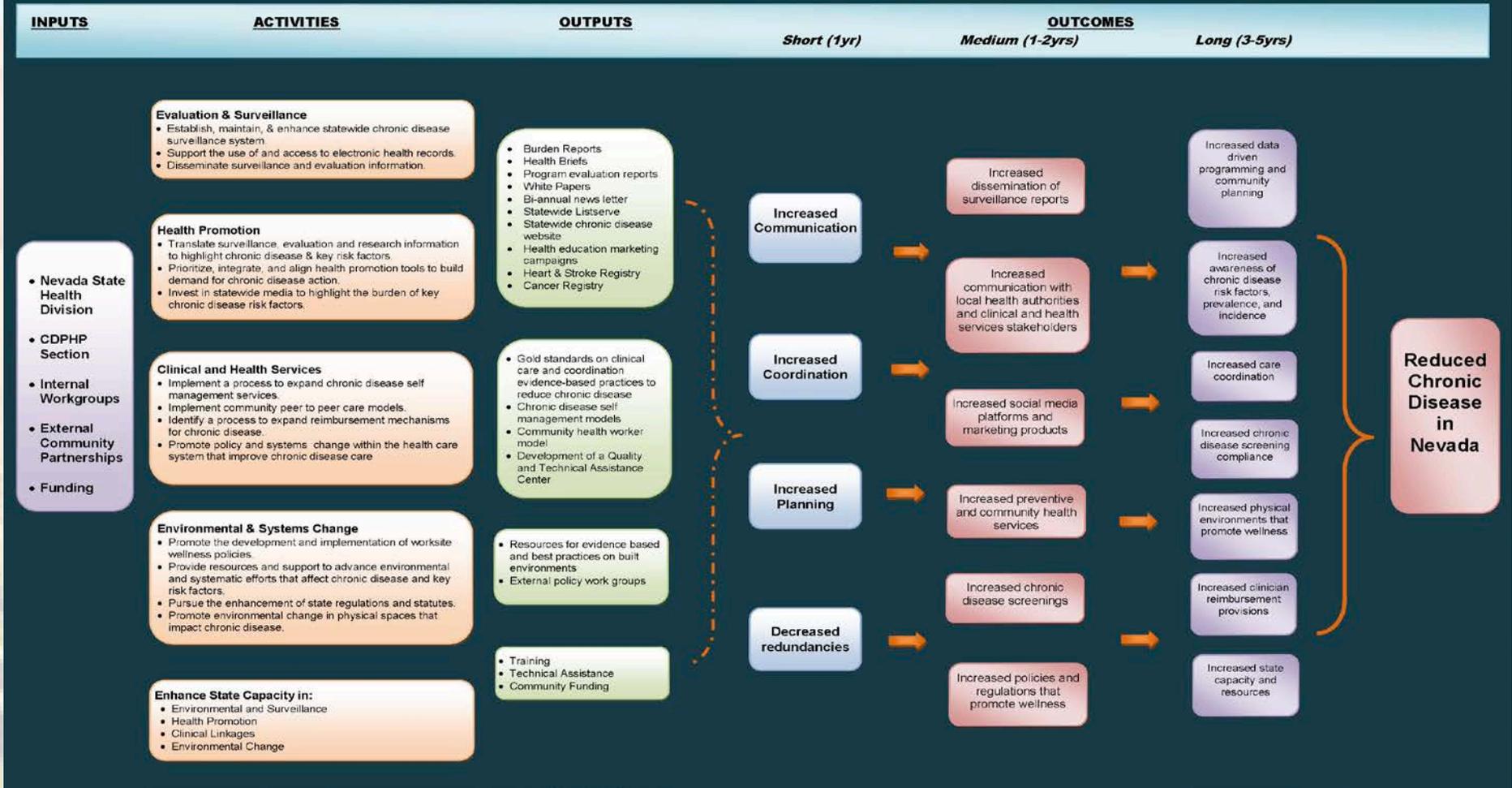
Goal	Objective	Strategy	Activity
<p>Nevada will have physical and social environments that promote healthy eating, physical activity, and denounce tobacco products.</p>	<p><i>Increase the number of regulations and policies that promote healthy and safe environments.</i></p>	<p>1. Promote the development and effective implementation of comprehensive worksite wellness policies that include tobacco-free and breastfeeding-friendly environments, healthy food and beverage choices, and physical activity opportunities.</p>	<ul style="list-style-type: none"> • Implement outreach activities with small business • Fund tobacco free business, parks and housing • Fund projects that promote physical activity <ul style="list-style-type: none"> ○ Community and school gardens ○ Walking, hiking, and biking ○ Fluoridated water facilities
		<p>2. Engage, convene, and provide resources and support to community members, policy and decision-makers, businesses, education leaders, health care leaders, and advocates to advance environmental and systematic efforts.</p>	<ul style="list-style-type: none"> • Provide data driven information on risk factors and social determinants of chronic disease to key advisories and councils • Provide training and resources that move forward evidence based and best practices on built environments <ul style="list-style-type: none"> ○ Land use agreements ○ Healthy housing ○ Utilization of electronic benefit transfers at farmers markets ○ Availability and marketing of healthy and affordable foods • Provide funding and training to early child care centers as a means to improve regulations that increase physical activity and nutrition efforts • Provide funding and training to schools as a means to improve regulations that increase physical activity and nutrition efforts • Convene and educate the health and regulatory entities

Leadership and Management Capacity

Goal	Objective	Strategy	Activity
<p>Nevada will have the human resources, leadership and infrastructure to implement the chronic disease plan.</p>	<p><i>Increase cross-cutting technical assistance activities, training and funding opportunities for chronic disease leaders in Nevada.</i></p>	<p>EXTERNAL:</p> <p>Build community capacity by providing funding, resources, training, and support to local health departments and high level community organizations.</p>	<ul style="list-style-type: none"> • Establish bi-annual trainings (in-person or via webinar) • Pursue funding opportunities on behalf of community partners • Align community stakeholders with the integrated chronic disease state plan
		<p>INTERNAL:</p> <p>Build internal capacity by providing staff training, resources, and enhancement of operations in the CDPHP Section and community services bureau.</p>	<ul style="list-style-type: none"> • Align NSHD staff with the integrated work plan • Establish large group quarterly trainings (in-person or via webinar) • Provide personalized training when possible

Logic Model

Chronic Disease Prevention and Health Promotion State Plan



CONCLUSIONS AND RECOMMENDATIONS

Chronic disease affects all Nevadans either directly or indirectly. These conditions are largely preventable, and can be significantly reduced if not eliminated completely. The physical, mental, and financial burden from these diseases is enormous. **Everyone** can help reduce the burden of chronic disease. Below is a list of the things different people and organizations can do to eliminate the burden of chronic disease in our state:

Individual	What you can do...
Policy Maker (elected or appointed official)	Adopt policies that target: <ul style="list-style-type: none"> • Increased infrastructure for physical activity (parks, recreation centers, sidewalks, bike lanes, etc.) • Increased venues that prohibit smoking • Decreased accessibility to tobacco • Easier access to healthy foods (e.g., subsidies to local farms)
Medical Professional (physician, dentist, etc)	<ul style="list-style-type: none"> • Spend more time on health education and prevention based medicine • Refer patients to programs with an emphasis on prevention (i.e., smoking cessation classes and nutrition programs) • Perform more health screenings (e.g., cancer) • Be sure your cancer cases are reported in a timely manner • Refer and provide access to clinical trials • Make earlier referrals to hospice for end of life care
Educator (professor, school teacher, etc)	Incorporate lessons on: <ul style="list-style-type: none"> • Various aspects of healthy living (physical activity, nutrition, sleep) • Detriments of behaviors that are harmful (smoking, excess use of alcohol and drugs)
Parent	<ul style="list-style-type: none"> • Encourage your children to be active and be active with them. • Get them excited about eating fresh foods, fruits, and vegetables • Discourage smoking, drug, and alcohol use
Employee	<ul style="list-style-type: none"> • Exercise with co-workers • Encourage people you work with to stop smoking • Encourage better nutrition at lunchtime (avoid fast food, etc.) • Provide healthier food options in employee gathering areas and events

Nevada Citizen	<ul style="list-style-type: none"> • Avoid tobacco and secondhand smoke • Eat a nutritious and balanced diet and maintain a healthy weight • Increase your daily physical activity • Be knowledgeable on health screenings
Organizations/Groups	
Educational Institution	<ul style="list-style-type: none"> • Improve access to healthy foods • Remove access to junk food • Expand the amount of time dedicated to physical activity/education • Include cancer prevention messages in health classes • Provide healthy foods in vending machines and cafeterias • Make entire campus a tobacco-free environment
Insurance Company	<p>Give financial incentives to individuals who:</p> <ul style="list-style-type: none"> • Exercise regularly • Don't smoke/use tobacco • Maintain a healthy weight <ul style="list-style-type: none"> • Work with businesses that have wellness/health promotion programs
Hospital/Medical/Dental Organization	<ul style="list-style-type: none"> • Case reporting in a timely manner (e.g. cancer, oral health) • Provide meeting space for cancer support groups • Collaborate to sponsor community screening and education programs • Reward providers who provide preventive services to patients • Work with insurance companies/Medicare & Medicaid to improve access to care
Employer	<ul style="list-style-type: none"> • Give incentives to employees who <ul style="list-style-type: none"> ▪ exercise regularly ▪ don't smoke ▪ maintain a healthy weight • Start a worksite wellness/health promotion program, • Allow employees extra time for exercise/physical activity • Establish a tobacco-free workplace policy • Provide healthy foods in vending machines and cafeterias • Collaborate with hospitals to host screening events • Provide health insurance coverage

Government Agency/Local Public Health Department	<ul style="list-style-type: none"> • Develop incentive programs for training/retaining qualified healthcare professionals, especially in rural Nevada • Fund programs that support health promotion/disease prevention, increase/improve infrastructure • Provide cancer awareness information and data to citizens and groups • Collaborate in community-based coalitions. • Work with physicians to promote screening programs and case reporting • Provide space for community survivor support groups • Access community needs and implement policy and environmental changes to reduce cancer risks • Assure access to care for uninsured and under insured
Professional Organization	<ul style="list-style-type: none"> • Provide continuing education credits on cancer topics • Include clinical trials' information in meeting agendas • Form speakers' bureaus to provide cancer education • Train facilitators for survivor support groups
Community-based Organization	<ul style="list-style-type: none"> • Provide cancer awareness information to constituents • Promote cancer screening among clients • Encourage participation in clinical trials • Collaborate to provide community prevention programs
Individual- What you can do...	
Policy Maker (publicly elected or appointed official)	<p>Adopt policies that target:</p> <ul style="list-style-type: none"> • Increased infrastructure for physical activity (parks, recreation centers, sidewalks, bike lanes, etc.) • Increased venues that prohibit smoking • Decreased accessibility to tobacco • Easier access to healthy foods (e.g. subsidies to local farms?)
Medical Professional (physician, dentist, etc)	<ul style="list-style-type: none"> • Spend more time on health education and prevention based medicine • Refer patients to programs with an emphasis on prevention (i.e. smoking cessation classes and nutrition programs) • Increase health screenings (e.g. cancer) • Be sure your cancer cases are reported in a timely manner • Refer and provide access to clinical trials • Make earlier referrals to hospice for end of life care

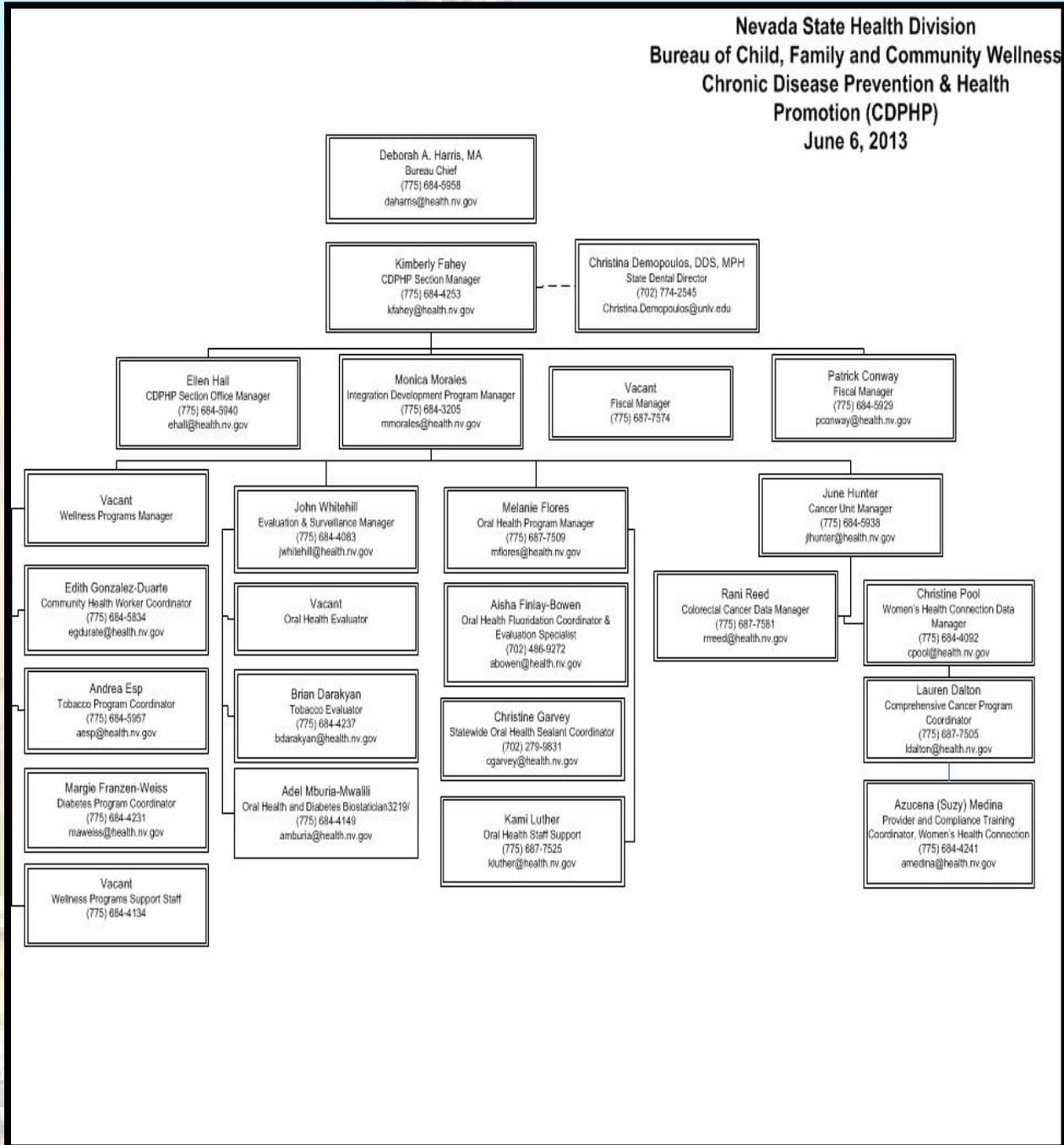
Educator (professor, school teacher, etc)	<p>Incorporate lessons on:</p> <ul style="list-style-type: none"> • Various aspects of healthy living (physical activity, nutrition, sleep etc.) • Detriments of behaviors that are harmful (smoking, excess use of alcohol and drugs)
Parent	<ul style="list-style-type: none"> • Encourage your children to be active and be active with them. • Get them excited about eating fresh foods, fruits, and vegetables • Discourage smoking, drug, and alcohol use
Employee	<ul style="list-style-type: none"> • Exercise with co-workers • Encourage people you work with to stop smoking • Encourage better nutrition at lunchtime (avoid fast food, etc.) • Provide healthier food options in employee gathering areas and events
Nevada Citizen	<ul style="list-style-type: none"> • Avoid tobacco and secondhand smoke • Eat a nutritious and balanced diet and maintain a healthy weight • Increase your daily physical activity • Be knowledgeable on health screenings
Organizations/Groups	
Educational Institution	<ul style="list-style-type: none"> • Improve access to healthy foods • Remove access to “junk food” • Expand the amount of time dedicated to physical activity/education • Include cancer prevention messages in health classes • Provide healthy foods in vending machines and cafeterias • Make entire campus a tobacco-free environment
Insurance Company	<p>Give financial incentives to individuals who:</p> <ul style="list-style-type: none"> • Exercise regularly • Don't smoke/use tobacco • Maintain a healthy weight <p>And to work with businesses that</p> <ul style="list-style-type: none"> • Have wellness/health promotion programs
Hospital/Medical/Dental Organization	<ul style="list-style-type: none"> • Prompt case reporting in a timely manner (e.g. cancer, oral health) • Provide meeting space for cancer support groups • Collaborate to sponsor community screening and education programs • Reward providers who provide preventive services to patients • Work with insurance companies/Medicare & Medicaid to improve access to care

Employer	<ul style="list-style-type: none"> • Give incentives to employees who <ul style="list-style-type: none"> ▪ exercise regularly, ▪ don't smoke, ▪ maintain a healthy weight • Start a worksite wellness/health promotion program, • Allow employees extra time for exercise/physical activity • Establish a tobacco-free workplace policy • Provide healthy foods in vending machines and cafeterias • Collaborate with hospitals to host screening events • Provide health insurance coverage
Government agency/Local Public Health Department	<ul style="list-style-type: none"> • Develop incentive programs for training/retaining qualified healthcare professionals, especially in rural Nevada • Fund programs that support health promotion/disease prevention, increase/improve infrastructure • Provide cancer awareness information and data to citizens and groups • Collaborate in community-based coalitions. • Work with physicians to promote screening programs and case reporting • Provide space for community survivor support groups. • Access community needs and implement policy and environmental changes to reduce cancer risks • Assure access to care for uninsured and under insured
Professional Organization	<ul style="list-style-type: none"> • Provide continuing education credits on cancer topics • Include clinical trials' information in meeting agendas • Form speakers' bureaus to provide cancer education • Train facilitators for survivor support groups
Community-Based Organization	<ul style="list-style-type: none"> • Provide cancer awareness information to constituents • Promote cancer screening among clients • Encourage participation in clinical trials • Collaborate to provide community prevention programs

COMMUNITY PARTNERS AND ASSOCIATES

<p>Networks</p>	<p>Access To Healthcare Network American Cancer Society American Lung Association Carson City Health District HAWC Community Health Centers Nevada Advisory Council – Diabetes Nevada Advisory Council – Fitness & Wellness Nevada Advisory Council – Oral Health Nevada Advisory Council – Stroke and Heart Nevada Cancer Coalition Nevada Statewide Coalition Partnership Nevada Colon Cancer Partnership Nevada Colorectal, Breast & Cervical Cancer Medical Advisory Board Nevada Tobacco Prevention Coalition Northern Nevada Children’s Cancer Foundation Reno Cancer Foundation Rural Hospital Association Southern Nevada Health District St. Rose Dominican Hospitals Washoe County Health District</p>
<p>Universities and Colleges</p>	<p>College of Southern Nevada Great Basin College</p> <p>University of Nevada – Las Vegas</p> <ul style="list-style-type: none"> • School of Community Health Sciences • School of Medicine <p>University of Nevada – Reno</p> <ul style="list-style-type: none"> • School of Community Health Sciences • School of Medicine
<p>State of Nevada</p>	<p>Bureau of Health Statistics, Planning, Epidemiology and Response, Nevada Central Cancer Registry Nevada Health Care Quality and Compliance Nevada Women’s Infants and Children Nevada Maternal and Children’s Health Nevada HIV/AIDS</p>

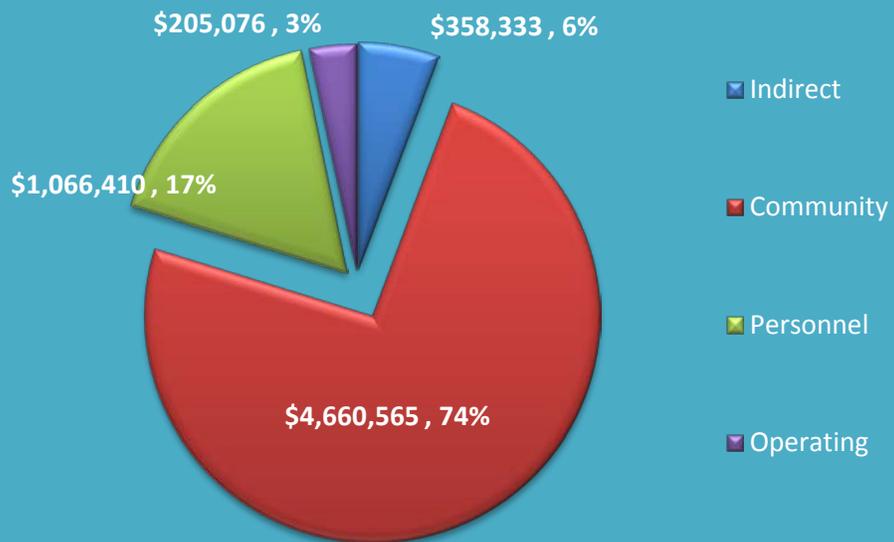
APPENDIX A- CDPHP SECTION ORG CHART



APPENDIX B- CDPHP 2012-2013 Funding

The pie chart below depicts the Chronic Disease Prevention and Health Promotion Section budget. The total budget is **\$6,290,383.93**.

Nevada State Health Division Chronic Disease Prevention and Health Promotion Section 2012-2013 Budget*



**Based on current grant awards and grant parameters, as of 5/2013.*

The table below provides the breakdown of each Chronic Disease Prevention and Health Promotion Section grant, and how they support these efforts.

Grant	Operating (travel, supplies, trainings)	Personnel (staff salaries)	Contractual (Community) (subgrants, contracts)	Indirect (internal charges)	Total
Tobacco Control and Prevention	\$ 46,361.95	\$179,595.00	\$ 609,540.00	\$ 22,416.05	\$1,857,913.00
Healthy Funding in Nevada	\$0	\$13,142.00	\$983,370.00	\$3,488.00	
Comprehensive Cancer Control	\$ 14,828.24	\$ 60,425.60	\$ 172,366.16	\$ 7,380.00	\$255,000.00
Colorectal Cancer	\$28,913.63	\$ 171,586.37	\$ 309,634.00	\$ 17,475.00	\$527,609.00
Oral Health	\$38,639.89	\$ 177,061.86	\$ 269,836.06	\$ 33,040.34	\$518,578.00
Diabetes Prevention and Control Program	\$5,511.00	\$38,087.00	\$ 36,496.00	\$ 6,007.00	\$86,101.00
Women’s Health Connection (Cancer Prevention and Control)	\$43,633.01	\$191,671.58	\$ 1,885,667.41	\$ 235,664.00	\$2,356,636.00
Public Health and Health Services	\$1,446.09	\$ 4,420.34	\$ 211,644.50	\$ 0	\$217,510.93
Coordinated Chronic Disease Prevention and Health Promotion	\$25,742.00	\$ 230,420.00	\$ 182,011.00	\$ 32,863.00	\$471,036.00
Total	\$ 205,075.81	\$ 1,066,409.75	\$ 4,660,565.13	\$ 358,333.39	\$6,290,383.93

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