

# State of Nevada Comprehensive Cancer Plan

2011-2015

Nevada Cancer Coalition

Nevada Comprehensive  
Cancer Control Program  
Bureau of Child, Family and  
Community Wellness  
Nevada State Health Division



Richard Whitley, M.S., Administrator  
Tracey D. Green, M.D., State Health Officer  
Nevada State Health Division

STATE OF NEVADA

BRIAN SANDOVAL  
*Governor*

MICHAEL J. WILLDEN  
*Director*



RICHARD WHITLEY, MS  
*Administrator*

TRACEY D. GREEN, M.D.  
*State Health Officer*

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
HEALTH DIVISION

4150 Technology Way, Suite 300  
Carson City, NV 89706

Telephone: (775) 684-4200 • Fax: (775) 684-4211

October 25, 2011

Dear Cancer Community:

The Nevada State Health Division is pleased to share with you the State of Nevada Comprehensive Cancer Plan 2011 - 2015. The Nevada Comprehensive Cancer Control Program produced this plan with the Nevada Cancer Coalition through funding from the Centers for Disease Control and Prevention. This five-year plan addresses the burden of cancer and the strategies to reduce cancer incidence and mortality in Nevada.

This year, approximately 12,800 Nevadans will be diagnosed with cancer and an additional 4,740 people will lose their lives because of this disease. There are things that each of us can do to help reduce cancer in Nevada. Each of us should strive for changes that eliminate tobacco use, improve dietary habits, increase physical activity, maintain a healthy weight, avoid harmful ultraviolet light, and increase the adherence to early detection cancer screening tests.

The battle against this disease will require the collective effort, cooperation, and collaboration of our communities, public and private organizations, and individuals. Our hope is that this plan will serve as a blueprint for action to achieve a statewide approach to cancer control.

I commend the Nevada Cancer Coalition members and the citizens of Nevada that contributed to this plan. This diverse group of statewide organizations, partners, and advocates are committed to the reduction of cancer burden in our state. Through the hard work and dedication of each member, the Nevada Cancer Coalition is making great strides in the areas of cancer prevention, early detection, treatment, support, and research to improve the quality of life for everyone in Nevada.

A handwritten signature in blue ink that reads "Tracey Green, M.D."

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

# Table of Contents

---

Letter from the Nevada State Health Officer.....	i
Executive Summary.....	ii
Nevada Cancer Coalition.....	1
The Burden of Cancer in Nevada.....	4
<b>Primary Prevention.....</b>	<b>12</b>
Goal 1: Reduce the Risk of Developing Cancer	
Tobacco.....	14
Obesity.....	16
Sun Exposure.....	19
<b>Screening, Early Detection, and Diagnosis.....</b>	<b>21</b>
Goal 2: Increase Early Detection and Appropriate Screening for Cancer	
Breast.....	22
Cervical.....	24
Prostate.....	24
Colorectal.....	25
<b>Treatment and Care.....</b>	<b>26</b>
Goal 3: Increase Consumer Awareness and Provider Education on the Access of Appropriate and Effective Cancer Treatment and Care.....	27
<b>Survivorship, Quality of Life, and Palliative Care.....</b>	<b>31</b>
Goal 4: Address Quality of Life Issues for Health Care Consumers Affected by Cancer.....	33
The Profile of Cancer in Nevada.....	36
Lung and Bronchus Cancer.....	37
Breast Cancer.....	39
Prostate Cancer.....	40
Colorectal Cancer.....	42
Childhood Cancer.....	43
Health Disparities in Cancer.....	46
Gaps and Barriers.....	47
Coordinating With Other Cancer-Related Initiatives.....	50
Locating Cancer and Prevention Services in Nevada.....	51
What You Can Do To Prevent Cancer.....	57
References.....	59
Acronyms.....	60
Dedication.....	61

# Executive Summary

---

Looking back five years and assessing what has taken place is an easier task than looking forward and planning for the next five years, especially when the subject matter involves potential health consequences for many Nevadans. One of the more reliable means of planning forward movement is to evaluate what has or has not occurred in the past. This document attempts to look back at 2006 through 2010 while moving forward with goals, objectives, and strategies for improving cancer control in Nevada.

Six years ago a diverse group of Nevadans volunteered to collaborate in developing the State of Nevada Comprehensive Cancer Plan 2006-2010. They represented hospitals, cancer centers, health professionals, community-based organizations, cancer survivors, cancer advocates, the Nevada Cancer Institute, and the American Cancer Society. The Plan they collectively developed had as its purpose: to improve coordination and collaboration among the various cancer programs; to attempt to avoid duplication; and to increase the overall opportunities in Nevada to prevent and control cancer.

An entity was needed to effectuate the Plan and what evolved was the Nevada Cancer Council (now known as the Nevada Cancer Coalition). The Nevada Cancer Coalition's (NCC) purpose was then and remains now to bring together and coordinate cancer prevention, early detection, treatment, and support, with research efforts to improve the quality of life for everyone throughout Nevada. The Coalition has also become an important advocate for Nevada's cancer needs.

The NCC and its underlying plan exist because of funding received by the Nevada State Health Division through a grant from the Centers for Disease Control and Prevention (CDC). The CDC funds similar plans in every state, territory, and tribal entities. As the CDC launched the National Comprehensive Cancer Control Program for these various jurisdictions, it created an operational definition to address cancer on a comprehensive scale, and provided guidance for Nevada in the past and continues to influence this current Plan.

*Comprehensive cancer control is an integrated and coordinated approach to reducing cancer incidence, morbidity and mortality through prevention, early detection, clinical trial enrollment, and quality of life palliative care.*

The Plan, both past and future, has and will continue to respond to the Silver State's geographic, economic, and racial disparities, which demonstrably impact cancer control outcomes. However, the most recent cancer registry statistics, which appear throughout this document, indicate disparity reduction efforts must be enhanced.

Evaluation of the Plan was to have occurred annually. However, the evaluation process has been inconsistent,

due to two key factors:

- There have been several personnel changes of the Comprehensive Cancer Program Coordinator at the Nevada State Health Division.
- The Coalition spent considerable time meeting to discuss organizational matters but not enough reviewing compliance with Plan goals.

As many measurable objectives were not met in the previous plan, some of the measurable data of past outcomes will be presented throughout this document to serve as vital components in laying the groundwork for moving forward with goals, objectives, and strategies over the next five years.

According to the American Cancer Society, sixty percent of today's cancer deaths can be prevented through early detection and increase access to health care. If caught early enough, many cancers can be stopped in their tracks. This statistic provided the NCC with additional guidance in creating the new Plan. Moreover, the Affordable Care Act of 2010 contains prevention and screening mandates during the Plan's new term and will assist the Coalition to better meet its goals.

In the following pages, the past Plan's effectiveness will be discussed more specifically but, in general, some progress has been made in achieving better coordination among Nevada's cancer community. Importantly, NCC has become a recognized health information resource by the Nevada State Legislature. Presentations on the state of cancer in Nevada were made at the request of the legislature during the 2009 and 2011 sessions.



The Nevada Cancer Coalition led the revision of the 2006 - 2010 Nevada Cancer Plan and the Advisory Committee, made up of 11 volunteer experts from the cancer control and medical fields, which helped provide oversight and guidance in identifying the areas of focus and setting overall goals. The Nevada Cancer Coalition Advisory Committee further reviewed and amended these objectives and strategies and also approved the draft of this Plan. The commitment of the Advisory Committee of Coalition leadership and volunteers from throughout the state and the Nevada State Health Division staff in developing the new plan provides the Nevada Cancer Coalition with new resolve and approaches on how best to control cancer in Nevada.

## Mission Statement

---

The Nevada Cancer Coalition is dedicated to bringing together and coordinating cancer prevention, early detection, treatment, support, and research efforts to improve the quality of life for everyone in Nevada. Our aim is to increase coordination and collaboration among cancer programs, to reduce duplication, and to increase opportunities for cancer prevention and control.

## Goals of the Nevada Cancer Coalition

---

- Reduce the risk for developing cancer.
- Increase early detection and appropriate screening for cancer.
- Increase access to clinical trial initiatives.
- Address quality of life issues for health care consumers affected by cancer.

## About the 2011-2015 Plan

---

This report contains the goals, objectives, and strategies for the Nevada Comprehensive Cancer Plan 2011-2015. This Plan is intended as a guide for communities and stakeholders to implement policy, environmental, and systems changes to reduce the burden of cancer and improve the overall health of all Nevadans. Many of the goals and objectives from the previous plan were simplified or consolidated. Additionally, most of the strategies used within this new Plan align with Healthy People 2020 guidelines. The Plan also contains a list of resources for users to consider when implementing strategies in their communities, as well as for patients and survivors as a useful guide for well informed decision making.

## A Special Comment: The Impact of the Patient Protection and Affordable Care Act (ACA) in Nevada

---

Throughout the content that follows, the Nevada Cancer Coalition establishes a series of key goals, objectives, and strategies that it will use for the next five years to help control cancer in the Silver State. During the term of the Plan, specific provisions of the federal *Patient Protection and Affordable Care Act (ACA)* are to take effect that will serve to benefit the overall climate of health care in Nevada and several of those important components within the ACA will positively affect cancer patients. Perhaps one of the more important components of the act's effect on the Plan involves the elimination of cost sharing for many preventive services inclusive of cancer screenings. ACA is already providing new options for cancer patients who have been denied insurance coverage due to pre-existing conditions as well as extending family health insurance coverage for adult children up to the age of 26.

While there are ongoing legal challenges on the constitutionality of the ACA, as of the Plan's publication date, it remains statutory law applicable to all states. In response to one of the major components of the act, the 76<sup>th</sup> Nevada State Legislature established the Silver State Health Exchange, which is part of the act's means of expanding access to health insurance to uninsured Nevadans. Additionally, changes in Medicaid coverage will substantially increase the opportunity for many of Nevada's uninsured to have health coverage.

## Acknowledgements

---

During the past 12 months, dozens of meetings were held and many hours were spent to create this new Plan for the residents of the state of Nevada. In special recognition, the NCC would like to extend a heartfelt note of appreciation to all of the dedicated support staff at the Nevada State Health Division for their contributions in helping make this document possible. We would also like to extend a special thank you to St. Rose Dominican Hospital in Las Vegas for generously providing printing services.

*"The health care team at Nevada Cancer Institute ... understands that comprehensive planning among all providers and partners is essential to ensure access to the latest information and best methods of prevention, detection and treatment for all Nevadans. As a state, investing in research and expansion of the knowledge base will also create an environment ready for new discoveries and better treatment methodologies. This planning process is invaluable to building collaborative efforts, erasing gaps in access that currently exist, and together, raising the quality of cancer-care available in our state."*

**Phillip J. Manno, MD, FACP**

**Interim Director, Nevada Cancer Institute**

**Page 2**

**Dr. Manno has practiced in Nevada for 19 years as a Medical Oncologist.**

## Nevada Cancer Coalition Advisory Committee

---

**Alicia Chancellor Hansen**, M.S., Former Chief Biostatistician, Nevada State Health Division

**Carla Brutico**, RN, OCN, Cancer Program Consulting

**Debbie Strickland**, Executive Director, Northern Nevada Children's Cancer Foundation

**Denise Dunning**, Comprehensive Cancer Control Program Coordinator (CCCP), Nevada State Health Division

**Holly Lyman**, Director, Barbara Greenspun Women's Care Centers & Community Outreach, St. Rose Dominican Hospital

**Ellen Hall**, Administrative Assistant II, Disease Education & Prevention Program, Nevada State Health Division

**James Symanowski**, PhD, Director, Biostatistics Core, Nevada Cancer Institute

**June Hunter**, B.S., Technical Writer, CCCP, Nevada State Health Division

**Karen Sartell**, MA, Program Administrator, Nevada Cancer Research Foundation

**Lew Musgrove**, Director and Nevada Coordinator, National Alliance of State Prostate Cancer Coalition

**Philip J. Manno**, M.D., FACP, Interim Director, Nevada Cancer Institute

**Rani Reed**, Health Resource Analyst II, CCCP, Nevada State Health Division

**Stacey Gross**, MPH, CHES, Health Educator, Barbara Greenspun Women's Care Centers, St. Rose Dominican Hospitals

**Tom McCoy**, Chairman, Nevada Cancer Coalition, Nevada Director of Government Relations, American Cancer Society  
Cancer Action Network

## Coalition Members

---

Christine Belle, *Sunrise Hospital and Medical Center, Sunrise Children's Hospital*

Christina Goodman, *Leukemia & Lymphoma Society*

Christy Smith, *Northern Nevada Children's Cancer Foundation*

Cindy Thomas, *Renown Regional Medical Center*

Denise Wiley, *Renown Regional Medical Center*

Doug Banghart, *Nevada State Health Division*

Heather Fryxell, *Sunrise Hospital and Medical Center, Sunrise Children's Hospital*

Jeanne Tremaine, Associate Director, *University of Nevada School of Medicine, Office of Continuing Medical Education*

John Gray M.D., FACG, AGAF, President, *Nevada Colon Cancer Partnership*

Juanamarie Harris, *Nevada State Health Division*

Kimberly Fahey, *Nevada State Health Division*

Krysten Clark, *Susan G. Komen for the Cure*

Leslie Katich, Programs & Services, *Northern Nevada Children's Cancer Foundation*

Lizzie Dalton, Programs & Services, *Northern Nevada Children's Cancer Foundation* Mark T. Hoepfner M.D., FACS, *Surgeons Chartered*

Marla McDade Williams, *Nevada State Health Division*

Mary Guinan, M.D., *University of Nevada, Las Vegas, School of Community Health Sciences*

Melissa Cipriano, *Candlelighters Childhood Cancer Foundation of Nevada*

Michael Brown, *Melanoma Education Foundation*

Monica Morales, *Nevada State Health Division*

Patty Elzy, Director of Public Affairs, *Planned Parenthood Mar Monte, Reno*

Sheila Baez, Past Chair, *Nevada Cancer Coalition*

Sher Todd, PhD, MSM, CNS, CTTS, Program Manager, *Operation Tobacco-Free Nevada, Tobacco-Free Babies Project*

Sherri Rice, Executive Director, *Access to Healthcare Network*

Stephanie Kirby, *Susan G. Komen for the Cure*

Tony Crispino, Chairman, *Las Vegas Chapter, Us TOO*



The Burden of Cancer in Nevada

# The Burden of Cancer in Nevada

---

The National Cancer Institute defines cancer as diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems. There are several main types of cancer.

- Carcinoma is a cancer that begins in the skin or in tissues that line or cover internal organs.
- Sarcoma is a cancer that begins in bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue.
- Leukemia is a cancer that starts in blood-forming tissue such as the bone marrow, and causes the production of large numbers of abnormal blood cells, which can enter the blood system.
- Lymphoma and multiple myeloma are cancers that begin in the cells of the immune system.
- Central nervous system cancers are cancers that begin in the tissues of the brain and spinal cord.

Cancer is caused by external factors, such as, tobacco, infectious organisms, chemicals and radiation, and internal factors including inherited mutations, hormones, immune conditions, and mutations that occur from metabolism. These causal factors may act together or in sequence to initiate or promote carcinogenesis. Cancer is treated with radiation, chemotherapy, hormone therapy, biological therapy, and targeted therapy.

The American Cancer Society estimates 12,800 Nevadans will be diagnosed with adult and pediatric cancer in 2011 and 4,740 people will die of this disease. Regular screening examinations by a health care professional can result in the detection and removal of precancerous growths, as well as the diagnosis of cancers at an early stage, when they are most treatable. Cancers of the cervix, colon, and rectum can be prevented by removal of precancerous tissue. Cancers which can be diagnosed early through screening include cancers of the breast, colon, rectum, cervix, prostate, oral cavity, and skin. However, screening has been shown to reduce mortality only for cancers of the breast, colon, rectum, and cervix. A heightened awareness of breast changes or skin changes may also result in detection of tumors at earlier stages. Cancers prevented or detected earlier by screening account for at least half of all new cancer cases.

Source: American Cancer Society Facts and Figures 2011

## Nevada Demographics

---

Nevada is the seventh largest state geographically in the United States, covering 110,540 square miles, with 2.7 million residents in 2010. The Nevada population increased 35.1% from 2000 to 2010. Of the 17 counties in Nevada, Clark, Washoe and Carson City are considered urban and account for 89% of the state's population. The remainder of the population is divided among the rural counties of Storey and Douglas, and frontier counties of Humboldt, Elko, Pershing, Lander, Lyon, Eureka, White Pine, Churchill, Mineral, Nye, Esmeralda and Lincoln. Frontier counties are defined as having populations of seven persons or less per square mile. Nevada's frontier and rural counties account for 11% of the state population, but 86.8% of the state land mass, which creates health care delivery challenges in serving the residents in these counties. The average distance between acute care hospitals in rural Nevada and the next level of care or tertiary care hospital is 115 miles. See Map: Health Care Resources in Nevada. Source: Nevada State Office of Rural Health, University of Nevada School of Medicine, Reno.

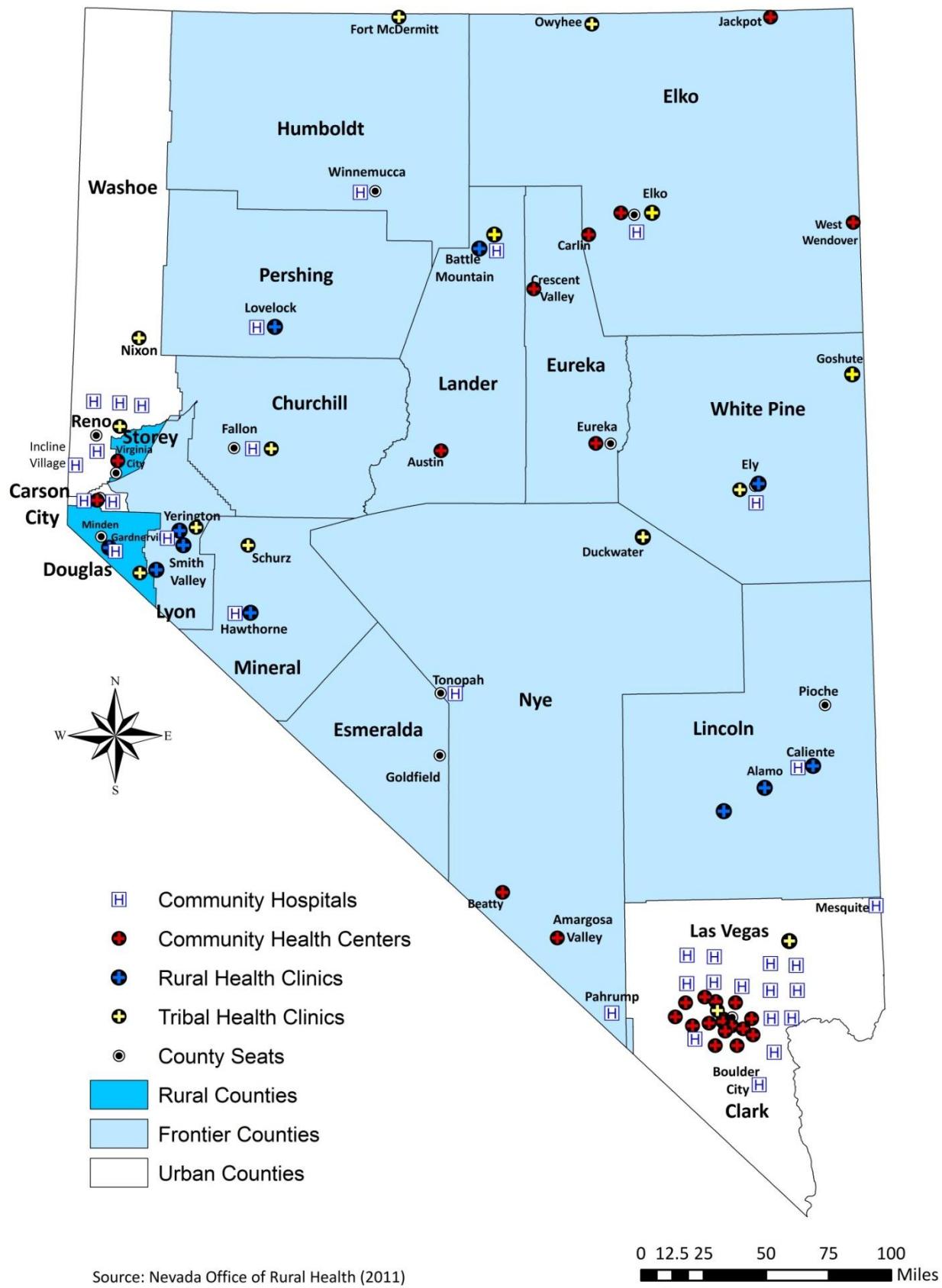
The majority of the population moved to Nevada in the last 20 years. Because of this, Nevada has a higher percentage of residents born out of the state than anywhere else in the country. According to 2010 U.S. Census Bureau data, Nevada's population is 54.1% non-Hispanic White, 26.5% Hispanic, 8.1% Black, 7.8% Asian and Pacific Islanders, 1.2% American Indian and Alaska Native persons and 4.7% who identify themselves as Multiracial.

The Nevada median household income in 2009 was \$53,310 with 12.4% of the state's population below poverty level. In 2010, it was estimated 1 in 6 working age adults in America were uninsured. From 2004 to 2009, the percentage of persons with health insurance within the United States was steady around 85%, at 85.6% in 2009. During the same period, 80% of Nevada residents carried some form of health insurance coverage. However, in recent years poor economic conditions have resulted in high unemployment rates and an increasing number of Nevada residents that are uninsured. Sources: U.S. Census Bureau, American Cancer Society.

*"It is critical that state policymakers and health care leaders not lose sight of the medical needs of rural Nevadans. The 280,000 residents of the state's fourteen rural and frontier counties face formidable financial and geographic barriers to accessing health care prevention services and treatment for cancer".*

*John Packham, PhD  
Director of Health Policy Research  
Nevada Office of Rural Health, University of Nevada School of Medicine.*

## Health Care Resources in Nevada



Source: Nevada Office of Rural Health (2011)

## **Update on Nevada's Progress & Challenges**

---

The following is a brief update on Nevada's progress on meeting the goals of the Comprehensive Cancer Control Program through the active leadership of the Nevada Cancer Coalition. Some of the major accomplishments during the first five years include:

### **Enhance Nevada Cancer Coalition Infrastructure & Build Strong Partnerships**

---

- Statewide Coalition membership is expanding and gaining new ground among a broad range of health and community sectors.
- Established collaborations with the Breast and Cervical Cancer Early Detection Program and the Colorectal Cancer Control Program.
- Coalition gained support from Nevada State Legislators, Senator Allison Copening, Assemblywomen Debbie Smith and Peggy Pierce, as well as the School of Community Health Sciences at the University of Nevada, Las Vegas.
- Nevada Urban Indians and the Latino Research Center at the University of Nevada, Reno, and the Center for Health Disparities at University of Nevada, Las Vegas are now represented in the Coalition.
- Statewide Annual Cancer Summits were held in 2008, 2009, 2010, and another is planned for 2012.

### **Improve Visibility of the Nevada Cancer Coalition**

---

- Launching of a new Nevada Cancer Coalition website in January 2011.
- Key television and radio Public Service Announcements (PSAs) and public affair programs aired during various "Cancer Awareness Month" campaigns throughout the state reached several hundred thousand viewers and listeners.

### **Assess the Burden of Cancer**

---

- Data and evaluation work group has been established with local experts in the field of biostatistics from the Nevada State Health Division's Office of Health Statistics & Surveillance, University of Nevada, Las Vegas, Epidemiology Department, and the Nevada Cancer Institute.

### **Nevada's Progress towards Healthy People 2010 Targets**

---

The Healthy People (HP) initiative is a national strategy designed to improve the overall health of Americans by providing a comprehensive set of national 10 year health promotion and disease prevention objectives. Here is a brief look at how Nevada has fared over the past decade under this guiding initiative.

- Surpassed the HP 2010 target of reducing prostate cancer death rate.
- Achieved the HP 2010 target of reducing the female breast cancer death rate.
- Improved in the HP 2010 targets of overall cancer death rates, including lung and colorectal cancer death rates.
- Decreased the trend in Nevada's overall cancer death rate between both genders from 2000 – 2008.
- Decreased lung cancer deaths overall from 2000-2008.

Source: Healthy People Nevada Moving from 2010 – 2020. Nevada State Office of Health Statistics & Surveillance 2011.

## Nevada's Challenges Ahead

---

One of the principal challenges facing cancer control efforts in Nevada has been historically low level of funding for state and local public health services. Despite growing proof in evidence of the relationship between comparatively modest public health investments and significant reductions in mortality from the leading preventable causes of death, including cancer, Nevada currently ranks last among all U.S. states in per capita public health expenditures. Nevada currently spends \$4 per capita on public health services, as compared to Hawaii with the highest level of per capita spending at \$171. Low levels of state support for health promotion and disease prevention programs have been compounded by the elimination of the Trust Fund for Public Health and other public health programs supported by revenue from the Tobacco Master Settlement Agreement and tobacco taxes. For example, in 2010, Nevada spent only 11 percent of the minimum CDC recommended amount for tobacco control and prevention despite the fact that one in five adult Nevadans currently smokes. That percentage continues to drop as millions of tobacco settlement dollars earmarked for tobacco control and other vital public health programs in Nevada have been used to pay for education, corrections, and other programs normally supported through the general fund and other revenue streams. As policy makers and cancer control advocates assess cost effective strategies to preserve and protect the public's health given the state's fiscal crisis, it is essential to note that cigarette smoking remains the most common cause of preventable death and avoidable health care costs in Nevada.

### Other Challenges Which Remain:

---

- Reduction of available funding for adult and youth tobacco prevention and cessation programs
- Legislative actions, which have hindered the progress in reducing tobacco use and exposure
- Shortage of physicians and registered nurses specializing in oncology and cancer-related care
- Shortage of prevention and treatment services in rural and frontier regions
- Shortage of a trained health care workforce in rural and frontier regions
- Worsening trend in the number of Nevada residents who are obese
- Increase in the number of indigent residents

*"Unfortunately, Nevada's rural cancer patients suffer many obstacles to obtaining appropriate cancer care, especially in the realm of preventive screening for the most common malignancies, such as breast, colon, prostate and lung cancers...as a group, rural patients generally present more advanced malignancies than their urban counterparts... "*

*Roger Miercort, M.D.*

*Radiation Oncologist, Radiation Oncology Associates, Chairman, Carson Tahoe Cancer Committee*

## How Nevada Ranks Among the 50 States

---

State rankings present a host of key indicators, such as demographics and the economy, health costs and budgets, and health status. Key indicators can help to identify how states are measuring up to one another in health related matters. Rankings show us that where we live matters to our health. The health of a state depends on many different factors – ranging from individual health behaviors, education and jobs, to quality of health care, to the environment. Source: The Kaiser Family Foundation, statehealthfacts.org. 2011.

### Health Care and Cancer Ranking - Out of the 50 states Nevada ranks:

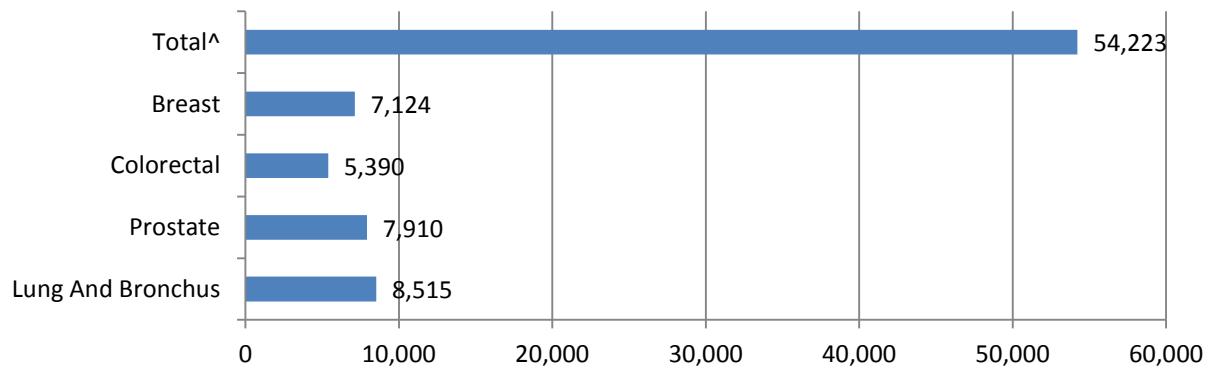
- **9<sup>th</sup>** in the number of adults who smoke
- **26<sup>th</sup>** in cancer mortality rates per 100,000 residents
- **37<sup>th</sup>** in total health care employment
- **42<sup>nd</sup>** in the total number of hospitals
- **42<sup>nd</sup>** in the number of rural health clinics
- **47<sup>th</sup>** in the number of hospital beds per 1,000 residents
- **49<sup>th</sup>** in the number of doctors per 10,000 residents
- **51<sup>st</sup>** in the number of registered nurses per 10,000 residents

## Cancer Cases

---

Cancer cases refers to the number of newly diagnosed cases of cancer occurring in a population in a given period of time.

### Cancer Cases by Selected Cancer Type, Nevada Residents, 2004-2008



Note: ^ Total refers to the total cancer incidence in Nevada and not only the total of the cancer types listed specifically.

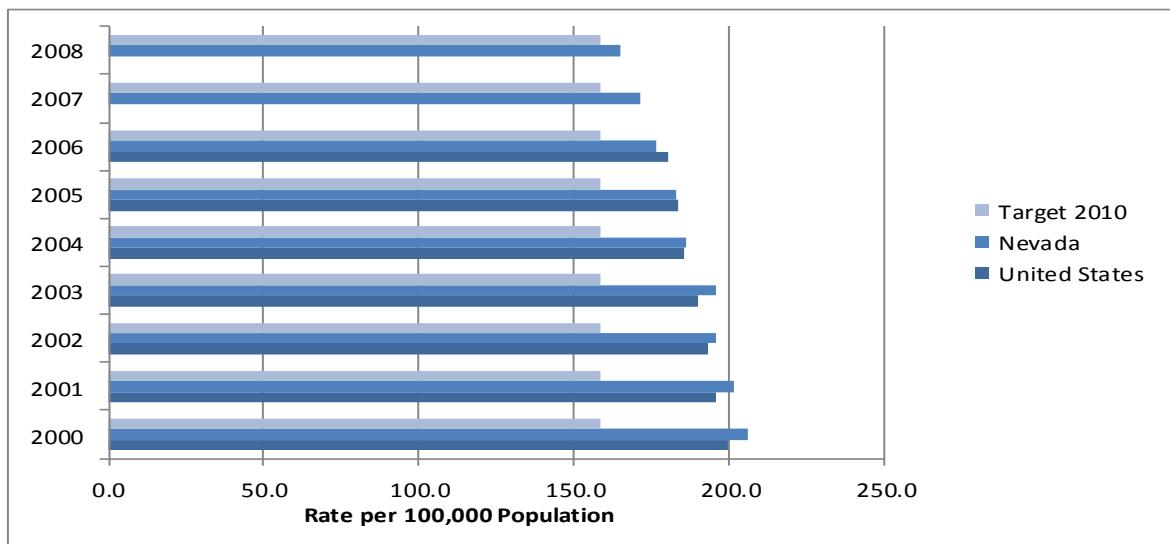
Source: Nevada State Office of Health Statistics and Surveillance, 2011.

## Cancer Mortality Rate

Cancer mortality rate is the number of deaths, with cancer as the underlying cause of death, occurring in a specified population during a given period of time. For the year 2008, Nevada's overall age-adjusted cancer death rate is 164.9 per 100,000 population. Source: Healthy People Nevada Moving From 2010 to 2020. Nevada State Office of Health Statistics and Surveillance. 2011.

\*The following rates are age-adjusted to the 2000 U.S. standard population. The Nevada data are from Nevada Vital Statistics Records. The U.S. data are from the National Vital Statistics System - Mortality.

**Age-Adjusted Overall Cancer Death Rate, Nevada Residents and United States, 2000 - 2008.\***



"It is discouraging to hear stories of Nevadans who traveled out of state in search of perceived higher quality cancer care... As a Harvard-trained radiation oncologist...I know that our patients receive the highest quality, most advanced and compassionate oncologic care possible anywhere...and are proud to provide Nevadans 'world class' radiation oncology right here in Las Vegas."

Brian D. Lawenda, M.D.

Radiation Oncologist & Clinical Director

21<sup>st</sup> Century Oncology, Las Vegas, Nevada



# Primary Prevention

# Primary Prevention

---

Primary prevention seeks to eliminate risk factors, which contribute to disease in asymptomatic or otherwise healthy people. A prime example of this is the work in the United States focused on getting people to stop smoking or keeping them from ever starting to smoke. In Nevada, prevention efforts need to focus on three primary areas; tobacco, obesity, and sun exposure. Being successful at preventing disease requires multiple levels of intervention and a corresponding understanding of risk behaviors, behavioral change, communications, health services, economics, and other social and political forces which influence health. Primary prevention focuses on eliminating risk factors to prevent the development of disease, injury or disability, as well as the adoption of health promoting behaviors and implementation of environments conducive to good health. Source: National Institute of Health Office of Disease Prevention

## *The "Affordable Health Care for America Act" is a New Commitment to Prevention*

The Patient Protection and Affordable Care Act (ACA) signed into law by President Barack Obama on March 23, 2010, created a National Prevention, Health Promotion, and Public Health Council. The Council, composed of senior government officials, will elevate and coordinate prevention activities and design a focused National Prevention and Health Promotion Strategy in conjunction with communities across the country to promote the nation's health. The Strategy will take a community health approach to prevention and well-being, identifying and prioritizing actions across government and between sectors.

*"A focus on prevention will offer our nation the opportunity to not only improve the health of Americans but also help reduce health care costs and improve quality of care. By concentrating on the underlying drivers of chronic disease, the Affordable Care Act (ACA) helps to move from today's sick-care system to a true –health care system that encourages health and well-being". Source: HealthCare.gov*

How the Affordable Care Act will assist the Nevada Cancer Coalition efforts in meeting its goals

The ACA ensures all Americans, and therefore all Nevadans, receive critical clinical and community preventive services and will make public health and prevention a permanent part of the health care system through the following:

- Eliminating cost sharing on preventive services delivered by Medicare and all new insurance plans.
- Providing coverage under Medicare with no co-payment or deductible for an annual wellness visit that includes a comprehensive health risk assessment and 5-10 year personalized prevention plan.
- Providing enhanced federal Medicaid matching funds to states which offer evidenced-based prevention services and requiring coverage of tobacco cessation services for pregnant women on Medicaid.
- Delivering community preventive services by investing in state, territorial, and local public health infrastructure and by providing grants to implement recommended services.

## GOAL 1: Reduce the Risk of Developing Cancer

### TOBACCO

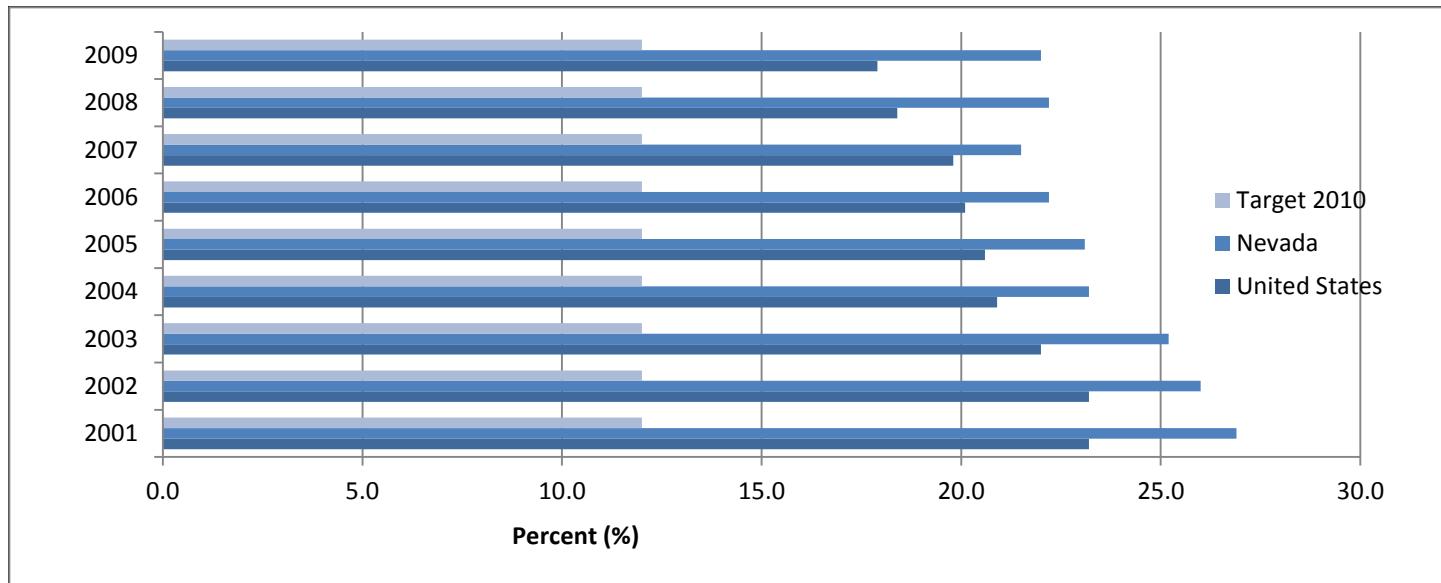
Tobacco use remains the leading preventable cause of death in the United States, causing more than 400,000 deaths each year resulting in more than \$96.7 billion in annual direct medical costs.

Currently, the smoking attributable cost for adults in Nevada, including annual health care costs (\$565 million) and costs related to loss of productivity (\$832 million), was estimated at approximately \$1.4 billion.

Each year, smoking kills more people than AIDS, alcohol, drug abuse, car crashes, murders, suicides, and fires combined. Nationally, smoking results in more than 5 million years of potential life lost each year.

Approximately 80% of adult smokers started smoking before the age of 18. Every day, nearly 3,000 young people under the age of 18 become regular smokers and more than 5 million children living today will die prematurely because of a decision they will make as adolescents in the decision to smoke cigarettes. Source: Tobacco Free Kids.

**Proportion of Cigarette Smoking Adults, Nevada Residents and United States, BRFSS Data, 2001 - 2009.\***



\*Data Source: Behavioral Risk Factor Surveillance System (BRFSS). These percentages are weighted to survey population characteristics.

It is estimated that 22.0 percent of Nevada adults smoked in 2009. Although this value is higher than the U.S. proportion of 17.9 percent, smoking in Nevada declined from 2001 to 2009, when 26.9 percent of Nevada adults were smokers. Neither the state, nor the U.S., met the Healthy People 2010 target of 12.0 percent from 2001 to 2009. Source: Healthy People Nevada Moving from 2010 to 2020.

<b>Objective 1.1: Prevent the use of and exposure to tobacco products.</b>	<ul style="list-style-type: none"> <li>The Coalition will collaborate with the Nevada Tobacco Prevention Coalition and other smoke-free proponents including Carson City Health and Human Services, Nevada State Health Division, Washoe County Health District, and Southern Nevada Health District in educating the general public workers, and employers, on the health hazards of second and third-hand smoke.</li> <li>Through permissible advocacy efforts, the Coalition will continue to collaborate with others to strive for a truly smoke-free Nevada with all workplaces being smoke-free.</li> </ul>	Strategies
<b>Objective 1.2: Decrease incidence of Adolescent/Teen smoking.</b>	<p><b>Baseline:</b> 17.0%</p> <p><b>Source:</b> Campaign for Tobacco-Free Kids. 2011.</p> <p><b>Target:</b> 10%</p> <ul style="list-style-type: none"> <li>The Coalition will become more actively involved in prevention efforts and support and work with the Nevada Tobacco Prevention Coalition, Nevada State Health Division, Washoe County Health District, Southern Nevada Health District as well other tobacco control organizations to reduce usage of tobacco products in Nevada youth.</li> <li>The Coalition will support peer teaching programs such as TATU (Teens Against Tobacco Use) and N-O-T (Not On Tobacco) program designed for teenagers who want to quit smoking.</li> </ul>	Strategies
<b>Objective 1.3: Decrease incidence of adult smoking.</b>	<p><b>Baseline:</b> 21.3%</p> <p><b>Source:</b> Prevalence and Trends Data Nevada Tobacco Use. Behavioral Risk Factor Surveillance System, (BRFSS) 2010.</p> <p><b>Target:</b> 12%</p> <ul style="list-style-type: none"> <li>The Coalition will collaborate with stakeholders seeking an increase in the cigarette tax in the 2013 Nevada Legislature.</li> <li>Work with state and regional medical and dental organizations, encourage practitioners to discuss smoking and its toxic health hazards with their patients.</li> <li>Increase public awareness through the Coalition website and collaboration of smoking cessation resources available through insurance, health organizations, and state funded programs.</li> <li>Work with tobacco control organizations, support efforts working to reduce the adult smoking rate in Nevada to the Healthy People 2020 goal of 12 %.</li> </ul>	Strategies

## Strategies

<b>Objective 1.4:</b> <b>Promote “Smoke-Free” environments.</b>	<ul style="list-style-type: none"><li>The Coalition plans to increase public awareness on the facts surrounding smoking.</li><li>Collaborate with regional groups, which provide community programs to families and children on anti-smoking awareness.</li><li>Encourage organizations to display the smoke-free decals in their workplace windows and have literature on hand regarding tobacco use and its harmful effects.</li><li>Continue to recognize smoke-free establishments/businesses at the annual cancer summit with award recognition.</li></ul>
<b>Objective 1.5:</b> <b>Promote smoking cessation programs.</b>	<ul style="list-style-type: none"><li>The Coalition will collaborate with regional groups, which provide community programs to families and children on the latest information on smoking cessation programs and resources.</li><li>The Coalition will have cessation literature and phone numbers readily available to these organizations to be accessed by their clients. Thirty packets with appropriate material will be distributed to these groups twice a year.</li></ul>

## GOAL 1: Reduce the Risk of Developing Cancer

### OBESITY

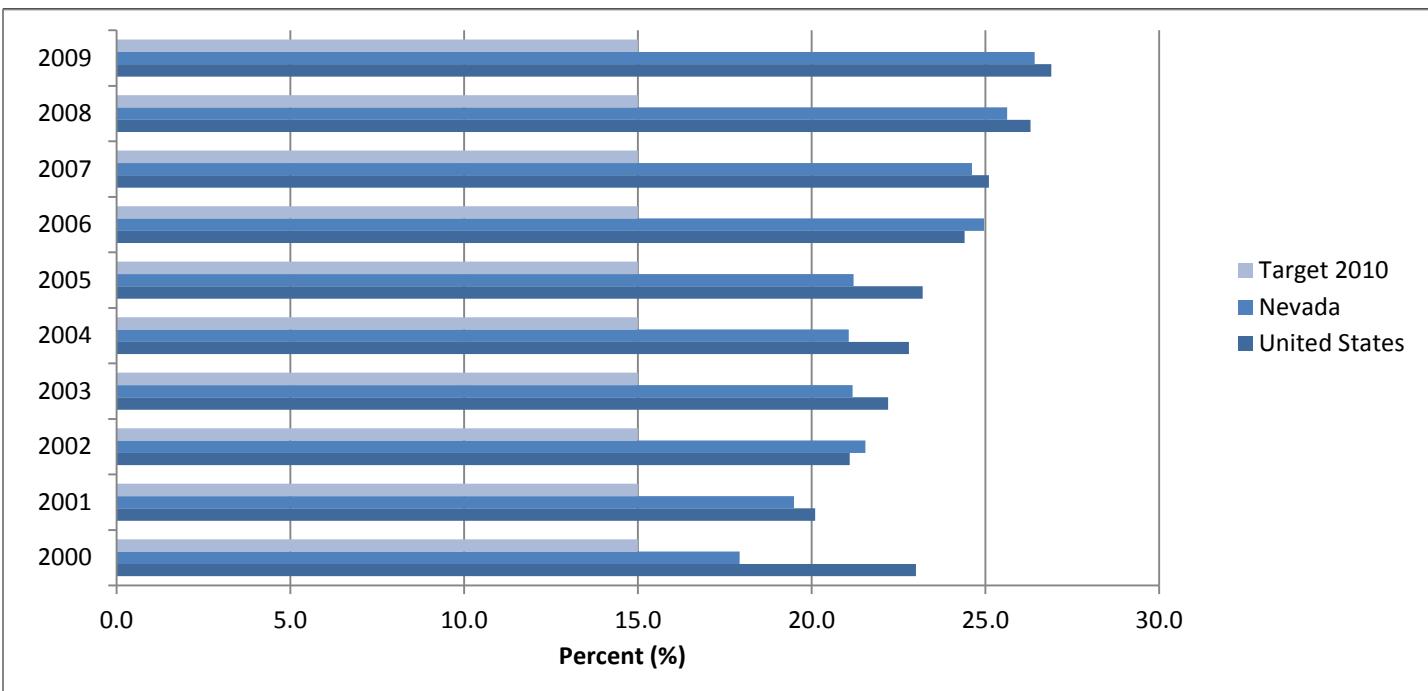
Obesity is a national epidemic and a major contributor to some of the leading causes of death in the United States, including heart disease, stroke, diabetes and some types of cancer. Obesity has been more precisely defined by the National Institutes of Health (NIH) as a Body Mass Index (BMI) of 30 and above. We need to change our communities into places that strongly support healthy eating and active living.

At its simplest, obesity results from people consuming more calories than their bodies' burn, but it is a more complex problem than that. People do not decide to become overweight. Their weight gain is a consequence of complicated changes in the environment, where food is more readily available and opportunities for physical activity are lacking.

There is no single or simple solution to the obesity epidemic. It is going to take solutions at many levels in order to resolve the epidemic. What can each of us do as individuals to be healthier? First, we can eat more fruits and vegetables and fewer foods that are higher in fat and sugar. We can also drink more water instead of sugared drinks. Everyone, including adults of all ages and ability levels and children, need to get the recommended amount of physical activity daily as recommended by the CDC. Source: CDC. The Obesity Epidemic, July 2011.

The increasing proportion of obese adults in Nevada roughly paralleled U.S. trends from 2001 to 2009. Obesity in Nevada and within the U.S. exceeds the Healthy People 2010 target of 15 percent, at 26.5 percent and 26.9 percent respectively in 2009. Obesity is having a BMI over 30.0. Source: Nevada State Health Division

### Proportion of Adults Who Are Obese, Nevada Residents and United States, BRFSS Data, 2000 - 2009.\*



\*These percentages are weighted to survey population characteristics.

Note: Body weight estimates from self-reported heights and weights tend to be lower than those from measured height and weight.

#### Objective 1.6: Decrease obesity rate in Nevada.

**Baseline:** 23.1% of Nevadans aged 20 years and older have a BMI equal to or greater than 30.0%  
**Data Source:** BRFSS, 2010.  
**Target:** 30.6% is the Healthy People 2020 goal

- The Coalition will encourage physical activity, healthy eating, and maintaining a healthy weight in all public education efforts as part of a cancer risk-reduction strategy.
- Ensure membership is diverse and includes individuals and organizations focused on decreasing obesity and other chronic diseases.
- Support legislative and advocacy efforts to address the prevalence of obesity.

#### Strategies

	<p><b>Strategies</b></p> <ul style="list-style-type: none"> <li>• The Coalition will identify and collaborate with various regional groups to provide community programs to families and children.</li> <li>• Increase the number of social marketing messages about the benefits of health eating.</li> <li>• Support the development and implementation of statewide physical activity initiatives, which employ effective interventions.</li> <li>• Support legislative efforts, which promote healthy lifestyle choices.</li> </ul>
<p><b>Objective 1.8:</b> <b>Identify and maximize collaborations amongst obesity-related programs and support their initiatives.</b></p>	<p><b>Strategies</b></p> <ul style="list-style-type: none"> <li>• The Coalition will work with state and local agencies and organizations to improve the quality of foods and beverages in schools and to increase participation in school and workplace physical activity programs.</li> <li>• Participate in legislative efforts to institute effective policies and public health programs to promote overall wellness, including nutrition.</li> </ul>
<p><b>Objective 1.9:</b> <b>Collaborate with public schools to plan and implement programs to increase physical activities and promote healthy diets.</b></p>	<p><b>Strategies</b></p> <ul style="list-style-type: none"> <li>• The Coalition will collaborate with regional elementary schools to hold assemblies featuring events, which communicate the importance of a healthy lifestyle. The children will leave with four tips to implement over the month. Teachers from the 4<sup>th</sup>, 5<sup>th</sup> &amp; 6<sup>th</sup> grades of those schools will ask their students to write letters explaining what tips they implemented as an assignment and send them to the Coalition as a measuring tool.</li> <li>• The Coalition will collaborate with local university athletes to initiate a challenge of regional high schools via a social media hub to take steps to employ four healthy lifestyle steps. Results generated from tracking the participation rates and outcomes will be made available through various social media sites.</li> </ul>

## GOAL 1: Reduce the Risk of Developing Cancer

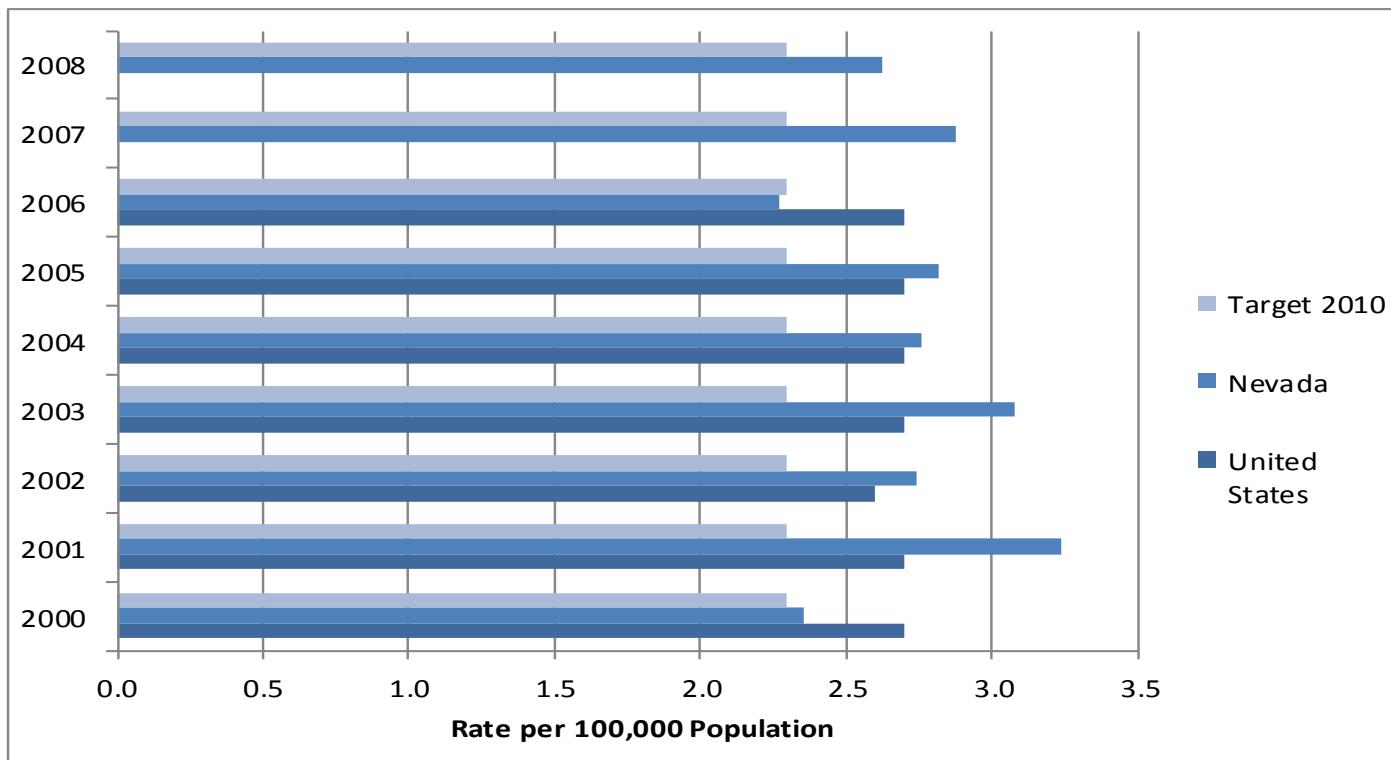
### SUN EXPOSURE

According to the American Dermatological Association (ADA), 1 in 20 Americans will be diagnosed with some level of skin cancer in their lives. The ADA further states that every hour in America a person dies from melanoma, the deadliest form of skin cancer. In Nevada, with nearly year-round sunshine, the stakes can be much higher. It is estimated that approximately 500 cases of melanoma were diagnosed in Nevada in 2010, with 75 of those cases resulting in death.

Source: Cover Up, Nevada! 2010.

Objective 1.10: <b>Provide education regarding sun exposure prevention and treatment.</b>	<b>Strategies</b> <ul style="list-style-type: none"><li>• Develop educational materials and website content to encourage protective measures that can reduce the risks of skin cancer for all ages.</li><li>• Use media partnerships to educate the public regarding the dangers of unprotected exposure to ultraviolet (UV) light, including indoor tanning and the recommended practices for decreasing melanoma risk, especially using the UV index to identify the strength of UV light when outdoors.</li><li>• Collaborate with the public school systems, parks and recreation departments, sports venues, childrens' camps, daycare centers and other child centered services to support integration of sun protection strategies into their activities, policies, and structures.</li><li>• Become a resource for the community by reporting UV radiation intensity level on the Nevada Cancer Coalition website.</li></ul>
Objective 1.11: <b>Increase the number of skin cancer screenings.</b>	<b>Strategies</b> <ul style="list-style-type: none"><li>• Track developments in medical knowledge and recommendations regarding skin cancer screenings.</li><li>• Promote skin cancer self-examination and routine skin screenings by a health care professional for those at high-risk.</li><li>• Conduct free or low-cost screening events for high-risk populations.</li><li>• Encourage the state of Nevada to track the number of children and adults reported as having had a sunburn and/or using a tanning bed in the previous 12 months and use the BRFSS system to create baseline data for future initiatives.</li><li>• Collaborate with Cover Up, Nevada! and other outreach screening campaigns and initiatives which promote awareness of melanoma and skin cancer prevention.</li></ul>

**Age-Adjusted Melanoma Cancer Death Rate, Nevada Residents and United States, 2000 - 2008\***



*"When I learned that this simple event, Cover Up, Nevada!, helped three people detect skin cancer before it was too late, it brought tears to my eyes," ... "I thought about my brother who didn't survive and then I thought about the hundreds that might be saved by creating greater awareness. These people are the inspiration behind the development of this campaign Cover Up, Nevada!"*



Screening, Early Detection and Diagnosis

# Screening, Early Detection, and Diagnosis

Screening tests have many goals. A screening test that works the way it should and is helpful does the following: assists in detecting cancer before symptoms appear; screens for a cancer that is easier to treat and cure when found early; decreases the chance of dying from cancer. Screening tests usually do not diagnose cancer. If a screening test result is abnormal, more tests may be done to check for cancer. For example, a screening mammogram may find a lump in the breast. A lump may be cancer or something else, such as a non-cancerous (benign) growth in the breast. More tests need to be done to find out if the lump is cancer. These are called diagnostic tests. Diagnostic tests may include a biopsy, in which cells or tissues are removed so a pathologist can check them under a microscope for signs of cancer.

Source: National Cancer Institute at the National Institute of Health. 2011.

## GOAL 2: Increase Early Detection and Appropriate Screening for Cancer

### BREAST CANCER

#### **Objective 2.1:**

**Increase the proportion of women age 40 and older reporting having had a mammogram in the past two years.**

**Baseline:** 69.9% in Nevada, 77.8% Nationwide (States, DC and Territories)

**Data Source:** BRFSS, 2010.

**Target:** 81.1% is the Healthy People 2020 target

- Promote the availability of no-cost/low-cost breast cancer screening services for the uninsured, underinsured through the Nevada Cancer Coalition website, and printed materials.
- Promote the availability of Medicare and insurance coverage for payment of mammography screening during outreach activities and through website.
- Collaborate with local organizations to educate about the importance of early detection at a minimum of four community events annually.
- Ensure NCC actively participates in events such as the Northern and Southern Nevada Susan G. Komen Race for the Cure to provide information and literature, which promotes cancer prevention awareness.

Strategies

## Strategies

<p><b>Objective 2.2:</b> <b>Develop resources and facilitate breast cancer screening opportunities for women in Nevada who lack access to mammography screening.</b></p>	<p><b>Baseline:</b> Screening resources are unknown or unavailable. <b>Data Source:</b> Existing cancer resource directories. <b>Target:</b> One page summary of available screening resources.</p> <ul style="list-style-type: none"><li>• Collect information about no-cost/low-cost programs from the State of Nevada Health Division, Nevada Cancer Coalition members, and other key partners and stakeholders.</li><li>• Develop resources of mammography programs available for those living in rural communities, the uninsured/underinsured and women who do not qualify for the Women's Health Connection Program.</li><li>• Distribute breast cancer screening resource listing to Nevada Cancer Coalition members, providers, and community partners, and make the listing available online.</li><li>• Support legislative efforts to expand the availability of screening services for the uninsured.</li></ul>
<p><b>Objective 2.3:</b> <b>Reduce the disproportionate percentage of late stage regional and distant diagnoses among disparate groups including Black, Hispanic, Native American, Uninsured and women on Medicaid by at least 5%.</b></p>	<p><b>Baseline:</b> Black = 38%, Hispanic = 33.8%, Native American = 31.8%, Uninsured = 60.2%, Medicaid = 50.1% compared to White = 28.3% and Insured = 29.4% <b>Data Sources:</b> Nevada State Health Division, Office of Health Statistics and Surveillance. 2011. Nevada Central Cancer Registry. <b>Target:</b> Decrease each by 5%.</p> <ul style="list-style-type: none"><li>• Collaborate with at least one organization targeting each of the disparate groups to educate about breast cancer early detection.</li><li>• Require cultural competence and diversity in the development of Nevada Cancer Coalition materials, marketing campaigns, and funded projects.</li><li>• Prioritize use of allowable sub-grant funding to organizations and programs, which target disparate populations.</li></ul>

*Nevada resident and breast cancer survivor, Terry Maurer, describes her fight against cancer as an "uphill battle...cancer beat up my body...I became hyper-focused on getting healthy just in case I had to combat breast cancer again". In this photo, Terry is at the helm as coach of the "Pink Paddlers" breast cancer survivor team. She strives to inspire others to stay afloat, get active, and take control of their health after breast cancer. Photo taken at the Rose Regatta Dragon Boat Festival, which raises funds for breast cancer programs at St. Rose Dominican Hospitals.*



## GOAL 2: Increase Early Detection and Appropriate Screening for Cancer

### CERVICAL CANCER

<p><b>Objective 2.4:</b> Increase the proportion of Nevada women who receive a cervical cancer screening based on the current screening guidelines.</p>	<p><b>Baseline:</b> 78.4% of Nevadan women have had a pap smear in the past three years compared to 84.5% nationwide. <b>Data Source:</b> BRFSS, 2010. <b>Target:</b> 93% is the target for Healthy People 2020.</p> <p><b>Strategies</b></p> <ul style="list-style-type: none"><li>• Support and promote programs, which increase the availability of no-cost/low-cost cervical cancer screening services for the uninsured and underinsured through the Nevada Cancer Coalition website.</li><li>• Promote the availability of government-funded programs providing benefits and insurance coverage for pap screening during outreach activities and through website.</li><li>• Collaborate with local organizations to educate about the importance of early detection at a minimum of four community events annually.</li><li>• Compile listing of cervical cancer screening resources and provide on the Nevada Cancer Coalition website.</li></ul>
---	--

### PROSTATE CANCER

<p><b>Objective 2.5:</b> Promote shared decision making for prostate cancer screening and treatment.</p>	<ul style="list-style-type: none"><li>• Develop culturally appropriate information to disseminate to educate men and providers on the latest evidence regarding prostate cancer screening, treatment, and shared decision-making.</li><li>• Track developments in medical knowledge and recommendations regarding prostate cancer screening.</li><li>• Coordinate collaboration among prostate cancer volunteer organizations.</li><li>• NCC will collaborate with organizations, which promote prostate cancer screening awareness events statewide.</li><li>• NCC will collaborate with media and marketing organizations to increase prostate cancer screening awareness statewide.</li></ul>
--	--

## GOAL 2: Increase Early Detection and Appropriate Screening for Cancer

### COLORECTAL CANCER

**Objective 2.6:**  
**Increase the proportion of people aged 50 or over who report receiving either a fecal occult blood test within 1 year or a lower endoscopy (flexible sigmoidoscopy or colonoscopy) within 10 years to 65%.**

**Baseline:** 60.5% of people ages 50 or over who report receiving either a fecal occult blood test within 1 year or a lower endoscopy (flexible sigmoidoscopy or colonoscopy) within 10 years.

**Data Source:** BRFSS, 2010.

**Target:** Increase to 65%.

- Pursue activities designed to increase the Primary Care Physician's (PCP) successful referral of their patients for approved methods of colon cancer screening including statewide distribution of the recently created Nevada Primary Care Physician's Toolkit on Colon Cancer Screening.
- Conduct regional presentations to PCPs on the Toolkit.
- Enhance membership of the Nevada Colon Cancer Partnership to include stakeholders from Las Vegas, and rural and frontier regions.
- Planning and implementation of a statewide Colon Cancer Summit in Las Vegas in spring 2012 whose purpose would be to develop a strategic plan to increase colon cancer screening throughout the state, taking into account regional differences.

### Strategies

*"We lose over 50,000 Americans annually to colon cancer, a disease that is preventable with screening. In our gastroenterology practice we view each diagnosis of colon cancer as particularly tragic, as we notice that most of them have never had colon cancer screening."*

*John Gray M.D. FACG, AGAF  
President, Nevada Colon Cancer Partnership*



# Treatment and Care

# Treatment and Care

When it comes to treating cancer, medical professionals have access to a diverse range of cancer fighting tools; surgery, chemotherapy, and radiation therapy have long been the mainstays of cancer treatment. Today, biological therapy, stem cell transplant and hormone therapy have been added to the oncology arsenal. These therapies not only decrease the side effects of cancer treatment but will ultimately, improve overall cancer survival rates.

As available cancer therapies become more diverse, the details of treatment plans become more individualized. Cancer patients and their team of providers work together to determine the best treatment plan depending on the type and stage of cancer, their general health status, and their personal preferences. Treatment can include removing a precancerous lesion or polyp, killing the cancer cells, managing the disease as a chronic illness, alleviating discomfort or suffering caused by cancer or the cancer treatment, or providing

comfort during the final months or days of life. In some cases, complementary and alternative medicine may be used in conjunction with more traditional treatment to minimize side effects and improve quality of life.

Whether the goal of cancer treatment is cure, control or comfort, innovative treatment and care options are available in the state of Nevada, particularly in the urban areas. Most treatment facilities offer an opportunity to participate in research and gain access to the latest treatments through clinical trials. Treatment centers often provide support services such as counseling, support groups, financial resources, cancer education classes, and health promotion strategies, which can improve nutrition plans, physical activity levels, and stress management skills. Community organizations frequently collaborate with cancer treatment providers to supplement clinical treatment with education, wellness, and support programs, which can significantly help improve patient outcomes.

## GOAL 3: Increase Consumer Awareness and Provider Education on the Access of Appropriate and Effective Cancer Treatment and Care

**Objective 3.1:**  
Develop opportunities to educate providers about current cancer screening guidelines.

- Offer Continuing Medical Education (CME) and Continuing Education Units (CEU) to encourage participation at annual Nevada Cancer Summit.
- Engage a multi-disciplinary clinical committee to assist with participant recruitment for the annual Nevada Cancer Summit.
- Include Nevada providers on regular e-newsletter mailings.
- Make available to providers via the website a quick reference cancer screening guidelines summary.
- Include cancer resource links on the website for providers and patients.

Strategies

**Objective 3.2:** Utilize electronic media to provide information on treatment and care issues.

- Link the Nevada Cancer Coalition's new website to at least ten national websites focused on cancer treatment and care.
- Link to or list current cancer clinical trials available in Nevada and provide contact information.
- Provide electronic resources for caregivers to learn about cancer treatment and care.

Strategies

## Strategies

<p><b>Objective 3.3:</b> <b>Increase health care provider involvement in education, screening, and treatment programs.</b></p>	<ul style="list-style-type: none"><li>• Provide opportunities for local experts to present at the annual Nevada Cancer Summit.</li><li>• Encourage providers to participate in programs, which target the underserved and uninsured such as the Women's Health Connection Program, the Colorectal Cancer Screening Program, and Access to Healthcare Network Screening Programs, and others through the website and e-newsletter mailings.</li></ul>
<p><b>Objective 3.4:</b> <b>Increase coalition memberships in rural and frontier Nevada.</b></p>	<ul style="list-style-type: none"><li>• The Nevada Cancer Coalition will conduct two meetings annually with community and regional medical staff, cancer survivors, and officials to be held in various communities and regions of rural Nevada to assess cancer treatment and care needs.</li><li>• Ensure rural and frontier programs, facilities, and organizations providing cancer services are listed in the resource section of the website.</li></ul>
<p><b>Objective 3.5:</b> <b>Increase information available statewide regarding clinical trials.</b></p>	<ul style="list-style-type: none"><li>• Identify clinical trials and sources of clinical trials for adult and childhood cancers.</li><li>• Establish relationships with investigators who conduct cancer treatment and cancer control and prevention studies in Nevada.</li><li>• Gather resource information available to patients and/or those at high risk from investigators who participate in clinical trials.</li><li>• The NCC will work with screening organizations to provide information regarding possible clinical trials to those individuals who are diagnosed with cancer.</li><li>• Gather information regarding financial support available to uninsured and underinsured so that patients who are screened and diagnosed with cancer are able to receive treatment and to decide if they wish to participate in clinical trials.</li><li>• Include speakers and presentations about clinical trials in the annual cancer summit.</li></ul>

## Strategies

## Strategies

*"The team at Saint Mary's Center for Cancer in Reno, Nevada is here to accomplish one singular goal: to lead members of our community in a spirit of collaboration towards a common goal. This goal is for each patient's journey to have the highest quality of care with the best possible outcome."*

*Patty Sredy, Administrative Director,  
Oncology Services  
St. Mary's Center for Cancer, Reno, Nevada*

## Strategies

<p><b>Objective 3.6:</b> <b>Enhance the Nevada Cancer Coalition website to provide resources to Nevadans.</b></p>	<ul style="list-style-type: none"><li>• Obtain permission from providers of clinical trials to link to the NCC website.</li><li>• Obtain permission from organizations providing financial support to uninsured and underinsured cancer patients to link to the NCC website.</li><li>• Commit resources to maintain up to date information on the NCC website.</li></ul>
<p><b>Objective 3.7:</b> <b>Establish and implement Coalition Advisory Board and regional committees.</b></p>	<ul style="list-style-type: none"><li>• The Coalition shall establish an Advisory Board comprised of representative selected from the cancer medical community and others. The Board will meet no less than annually and will be involved in the annual assessment of the current Plan and make recommendations for adjustments. Additionally, the Board will serve as a resource to the Coalition throughout the Plan's term.</li><li>• Three regional committees will be established and implemented during the current Plan. One committee will represent the greater Las Vegas area, another will be drawn from the greater Reno area, and the third will reflect the rural sections of the state. The purpose of each committee will be to assess and respond to the specific cancer needs in their geographic areas. The regional committees will report on a regular basis to the Coalition.</li></ul>
<p><b>Objective 3.8:</b> <b>Increase knowledge of pediatric cancer treatment and care among current pediatric physicians, other health care providers, and the general public.</b></p>	<ul style="list-style-type: none"><li>• Provide educational materials to health care professionals about the unique needs of childhood cancer survivors including physical effects, psychosocial impact, risk for long term effects, and secondary cancers.</li><li>• Provide educational materials to health care professionals about the availability of cancer treatment clinical trials for adolescents and young adults.</li><li>• Identify organizations, which advocate for childhood cancer funding focused on research and treatment.</li><li>• Provide electronic resources to keep the public apprised of national and local advocacy efforts.</li><li>• Provide opportunities for childhood cancer experts to present at the annual cancer summit.</li></ul>

*I am very proud to be part of Renown Institute for Cancer, where we provide leading-edge clinical trials that offer our patients the best opportunity to beat their disease."*

*Shannon White, Clinical Trial Nurse  
Renown Health Regional Medical Center, Reno Nevada*

## Strategies

<p><b>Objective 3.9:</b> <b>Increase awareness on the unique nature of cancer in children and adolescents and the need to develop resources within the state.</b></p>	<ul style="list-style-type: none"><li>Conduct efforts for outreach education using media, billboards, and directed education to schools, businesses, primary care practices, hospital emergency rooms, legislators, and the general public on incidence and type of cancers affecting children and adolescents, specialized treatment requirements, how to access care, and long term effects and outcomes.</li><li>Work with the Nevada Cancer Registry and the Children's Oncology Group Registry to isolate childhood cancer data in Nevada, by prevalence and mortality according to type of cancer, age, and geography within the state.</li><li>Focus awareness literature to the lay and medical communities on the differences between childhood and adult cancer with respect to types, location, treatment, survival, prevention, and early detection. Emphasize that resources for childhood cancer should focus more on treatment than prevention.</li><li>Collaborate with health care organizations to develop comprehensive coordinated care in Northern and Southern Nevada.</li><li>Participate in Annual Cancer Summit to provide and distribute data on evaluation, management, and outcomes of childhood cancer and invite primary care physicians (Pediatricians, Family Practitioners) and Adult Oncologists and Radiation Oncologists to participate.</li></ul>
<p><b>Objective 3.10:</b> <b>Increase efforts to support funding for childhood cancer research dedicated to improving prevention, enhanced diagnosis, and outcomes.</b></p>	<ul style="list-style-type: none"><li>Identify organizations that provide innovative research in the biology of cancer, new methods of diagnosis, and treatment of cancers unique to children and adolescents.</li><li>Promote awareness and fundraising in Nevada by aligning organizations in this effort on a local and national level.</li><li>Advocate for state and federal childhood cancer research fund appropriations.</li></ul>



# Survivorship, Quality of Life, and Palliative Care

# Survivorship, Quality of Life, and Palliative Care

---

**Survivorship** is defined by the CDC as that period of time from a persons' cancer diagnosis through the balance of his or her life, however long that may be. The number of persons in the U.S. living with cancer is growing and is now estimated to be 12 million. Due to advances in early detection and treatment of cancer, more people are living for many years after being diagnosed.

Survivors face numerous physical, emotional and psychological, social, spiritual, and financial challenges at diagnosis, during treatment, and for the remaining years of their lives. Many of these challenges can be successfully addressed through coordinated public health initiatives.

Persons undergoing cancer treatment should have the opportunity to be involved in treatment decisions when more than one treatment alternative exists. Participation in decision making is justified on humane grounds alone and physicians should endeavor to engage patients in this process, at whatever level the patient desires or with which the patient is most comfortable. This process allows patients to choose the course of action most consistent with their unique personal and cultural preferences.

**Quality of Life** is a concept, which encompasses spiritual, psychological, emotional, financial, and physical well-being. It is influenced by age, gender, sexual orientation, urban/rural location, and socioeconomic status, level of education, immigration status, culture, and access to health care.

**Palliative Care** addresses relieving pain and other symptoms associated with cancer or its treatment, especially as patients are nearing the end of life. While pain management is a key aspect of hospice care, it is important during any stage of cancer treatment when pain is present. Various methods of pain relief are available, depending on the source and severity of the pain. Treatment options include medication with non-opioids, opioids, steroids, and local anesthetics. Other treatments for pain may include surgery, radiation therapy, and chemotherapy. Palliative care and pain relief should be tailored to the needs of the patient and their assessed quality of life. Sources: State of Nevada Cancer Control Plan. 2005., Washington State Cancer Control Plan. 2009-2013., American Cancer Society Facts & Figures 2011. CDC Cancer survivors—United States, 2007., MMWR 2011. Guadagnoli, Wrd P. Patient Participation in Decision Making. Department of Health Care Policy, Harvard Medical School.

*"As an oncology nurse for over 30 years, I remember administering chemotherapy when we didn't have much to offer....Today, there is such hope for those diagnosed with cancer. Research is revealing the secrets of cancer cells allowing us to actually target those specific cells and extend the lives of those moving toward their new normal, which is survivorship."*

*Carla Brutico RN, OCN, Cancer Program Consultant, Carson City, Nevada*

## Goal 4: Address Quality of Life Issues for Health Care Consumers Affected by Cancer

Objective 4.1: Provide quality of life resources through social networking sites and coalition website.	Strategies
Objective 4.2: Increase access to survivorship services and resources.	Strategies
Objective 4.3: Advocate advantages of health care planning and inform patients of their right to participate in their cancer care and treatment as fully as they are comfortable.	Strategies

<b>Objective 4.4:</b> <b>Provide education to providers and patients regarding high quality palliative care and pain management.</b>	<ul style="list-style-type: none"> <li>Assist cancer patients and survivors in identifying and using cancer care and support services through telephone hotlines, information centers, medical facilities, and evidence-based websites.</li> <li>Develop a campaign to educate providers on the benefits of palliative care and effective pain management for cancer patients.</li> </ul>	Strategies
<b>Objective 4.5:</b> <b>Improve quality and access to state-of-the-art care for all children and adolescents diagnosed with cancer in Nevada.</b>	<ul style="list-style-type: none"> <li>Establish Regional Task Force, comprised of Pediatric PCPs, Oncologists, other Pediatric specialists, oncology nurses, hospitals, and regional childhood cancer organizations. Determine the resources necessary to provide Comprehensive Pediatric cancer care to children in a compassionate and culturally appropriate manner and ensure access to clinical trials and state-of-the-art assessment, treatment, and follow-up care.</li> <li>Identify government resources to participate in the task force that would be influential in obtaining data and implementing solutions.</li> <li>Conduct quarterly meetings for each region to gather data and review the needs unique to the region, and share findings.</li> <li>Work to remove barriers to care by provision in Comprehensive Pediatric Oncology centers of service such as social work, interpretive services, financial assistance, and assistance with navigation of insurance coverage.</li> </ul>	Strategies
<b>Objective 4.6:</b> <b>Increase knowledge of survivorship issues and provide new programs focused on improving quality of life in childhood cancer.</b>	<ul style="list-style-type: none"> <li>Identify channels and educate survivors, their families, and health care professionals on the health risks and needs of survivors. Enlist young cancer survivors to promote awareness in the schools and community.</li> <li>Create healthy lifestyles information geared towards survivors of childhood cancer, to reduce factors contributing to future health problems such as avoidance of smoking, alcohol consumption, sun exposure, and participating in exercise and nutritional programs.</li> <li>Promote and develop supportive programs, with assistance of local organizations that provide resources for survivors with respect to medical, cognitive, psychosocial, and educational/vocational needs.</li> </ul>	Strategies

***"No two patients are the same even if they have the same type of cancer.***

***That is why a nurse navigator is important to cancer patients. We help them survive as an individual."***

*Don Moore,  
Nurse Practitioner*

*Nurse Navigator, St. Mary's Center for Cancer, Reno, Nevada*

**Objective 4.7:**  
**Develop resources**  
**for palliative and**  
**end-of-life care for**  
**children and**  
**adolescents dying of**  
**cancer.**

- Work with local hospitals, health care organizations, and adult hospice programs to develop services that meet the need of children and adolescents dying of cancer in their respected communities.
- Integrate palliative and end-of-life (termed hospice in adult organizations) programs within the context of Comprehensive Pediatric Cancer centers.
- Identify the number of children in need of services within the state of Nevada, dying of cancer or other illness, and identify current resources and develop a gap analysis, as needed.



# The Profile of Cancer in Nevada

# The Profile of Cancer in Nevada

---

Cancer addressed in the Plan was determined by incidence rates and by the availability of evidence-based interventions for prevention, early detection, and effective treatments. The most recent data 2004 – 2008 indicates that, in Nevada, the four leading cancers in order of incidence are: 1) lung, 2) prostate 3) breast, and 4) colorectal. These four cancers account for 53.4% of all cancer cases in Nevada. In terms of mortality, the most recent data 2004-2007 on cancer mortality rates in Nevada indicate the four leading cancer sites are: 1) lung and bronchus, 2) breast, 3) prostate, and 4) colon/rectum. These four cancers account for 58% of all cancer deaths in Nevada. In addition, a childhood cancer section has been added to the plan to acknowledge and address the unique challenges faced by children, families, and health care providers affected by childhood cancers. Since the Nevada State Cancer Registry does not track pediatric cancer data, comparable statistics have not been included in this report. Sources: NSHD, 2011 and NSHD Cancer Registry, 2011.

## MOST COMMON CANCERS IN NEVADA

---

It is estimated 12,800 new cancer cases will be diagnosed in Nevada this year and about 4,740 residents will die of this disease in 2011. Cancer incidence and mortality rates vary, depending on the site, age, gender, ethnicity, access to health care, and other factors. Source: ACS, Cancer Facts and Figures 2011.

## LUNG AND BRONCHUS CANCER

---

The original Plan reminded the cancer community and public that tobacco use is the most preventable cause of death in Nevada. This tragic reality has not changed. It also listed lung and bronchus cancer as the second most commonly diagnosed cancer in Nevada. That has changed but not for the better as lung cancer has the highest incidence of cancer among those cancers currently tracked, (non-melanoma skin cancers are not included in the cancer registry statistics but, if counted, they would be the highest number). Significantly, more Nevadans die from lung cancer than from breast, colorectal, and prostate cancers combined.

While progress had been made during the Plan's initial term, the decrease in smoking rates among youth and adults, in 2007 the state began reducing and in 2010 finally cut all tobacco control funding from the Tobacco Manufacturers' Master Settlement Agreement (MSA) which had been granted to community programs designed to prevent the start and assist in the cessation of smoking. The Affordable Care Act has a prevention component, which will provide adults with cessation assistance through insurance, Medicaid, and Medicare.

First-hand smoke is not the only tobacco-related cause of lung cancer. Smoke generated by the burning of tobacco products is a known carcinogen and toxic substance.

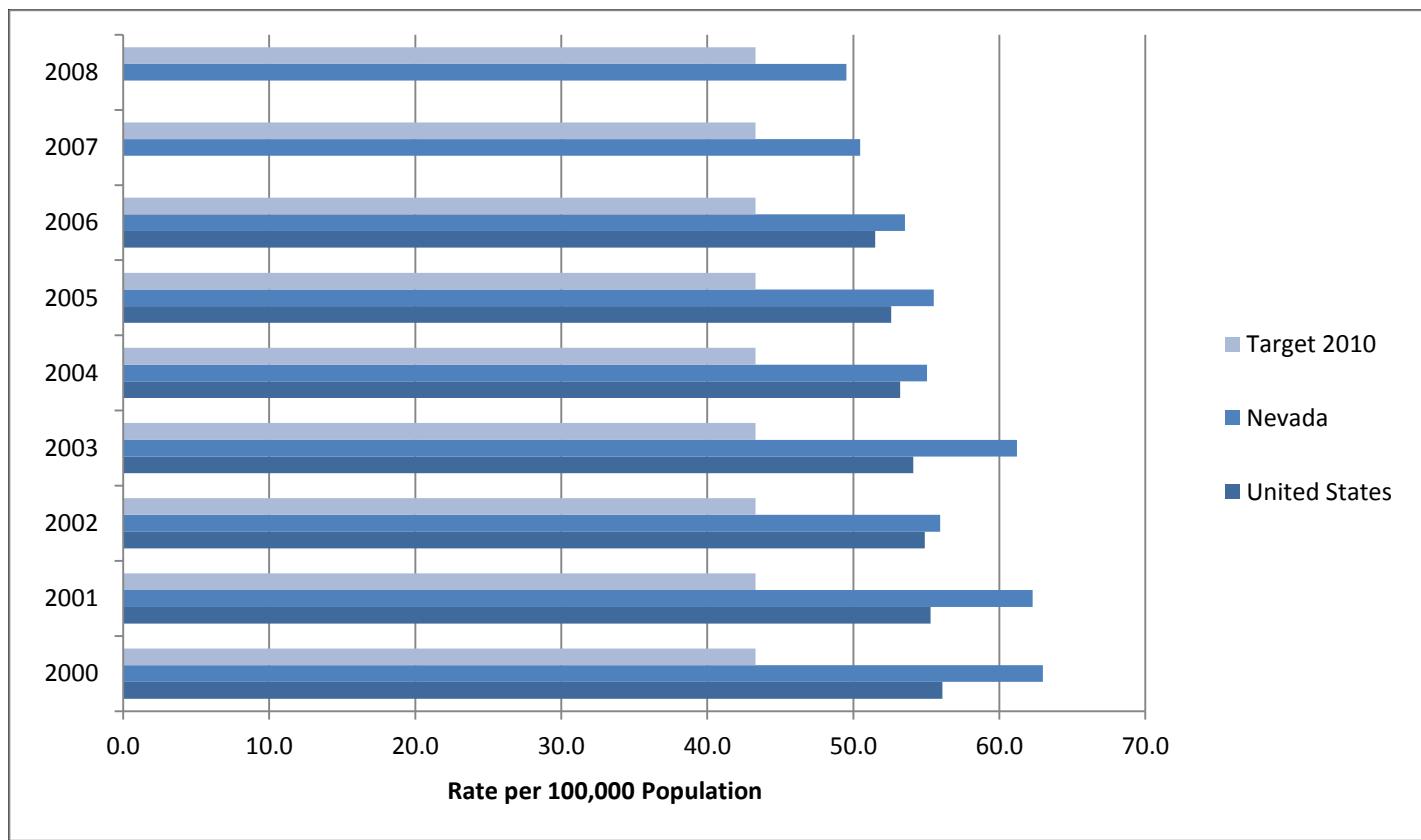
Cigarette smoke contains 4,000 chemicals and at least 60 of them are either scientifically known to or are suspected of causing cancer. More science-based evidence centered on the toxic effects of second hand smoke has become available and with it, more concern for the large numbers of Nevada workers who are exposed constantly during their typical workday. The United States Environmental Protection Agency classified second hand smoke as a Class A carcinogen.

The Nevada Clean Indoor Air Act, passed by the voters in 2006, statutorily made most workplaces in Nevada smoke-free. However, the largest group of non-governmental employee sectors in the state, which are casino workers, are exempt. The National Institute for Occupational Safety and Health (NIOSH), a division of the CDC, conducted an extensive study of casino workers in the Las Vegas area and identified tobacco-specific carcinogens to which the workers were exposed and the carcinogens increased in a worker's body as their shift went on. Additionally, those workers take third-hand smoke home to their families on their clothes and in their hair. The NIOSH study recommended all casinos in Nevada be smoke-free.

Exposure to second-hand smoke causes lung cancer, as well as cardiovascular and respiratory diseases in adults and children who do not smoke. It is estimated nationally nearly 50,000 heart disease and 3,400 lung cancer deaths can be directly related to exposure to second-hand smoke. Adult males in Las Vegas have three times the national average of asthma. The Surgeon General and CDC have made it clear there is no safe level of exposure to second-hand smoke. Moreover, there is no ventilation

system, which removes all of the harmful effects of second-hand smoke. While medical science is still evaluating studies, which indicate preliminary beneficial results, recent developments in helical CT scanning, suggest lung cancer screening may well become an accepted means of testing for lung cancer with potential lifesaving outcomes for some smokers. Sources: ACS, 2011. American Lung Association, 2011.

**Age-Adjusted Lung Cancer Death Rate, Nevada Residents and United States, 2000 - 2008.\***



\*This chart is age-adjusted to the 2000 U.S. standard population. The Nevada data are from Nevada Vital Statistics Records.  
The U.S. data are from the National Vital Statistics System - Mortality.

## BREAST CANCER

Breast cancer is the most common form of cancer in women in the United States and Nevada. According to the American Cancer Society, it is estimated there will be 1,420 new cases of breast cancer diagnosed in Nevada in 2011. Approximately 300 Nevada women will die from breast cancer in 2011. Although the breast cancer survival rate has been increasing continuously, breast cancer is still the second highest cause of cancer death among American women, after lung cancer.

The lifetime risk of a woman being diagnosed with breast cancer is 1 in 8. In the U.S., from 2004 -2008, the median age at diagnosis for cancer of the breast was 61 years of age. Most of the known risk factors for breast cancer such as age, gender, and family history cannot be changed, however, some are potentially modifiable including being obese or overweight, physical inactivity, smoking, and consumption of alcohol.

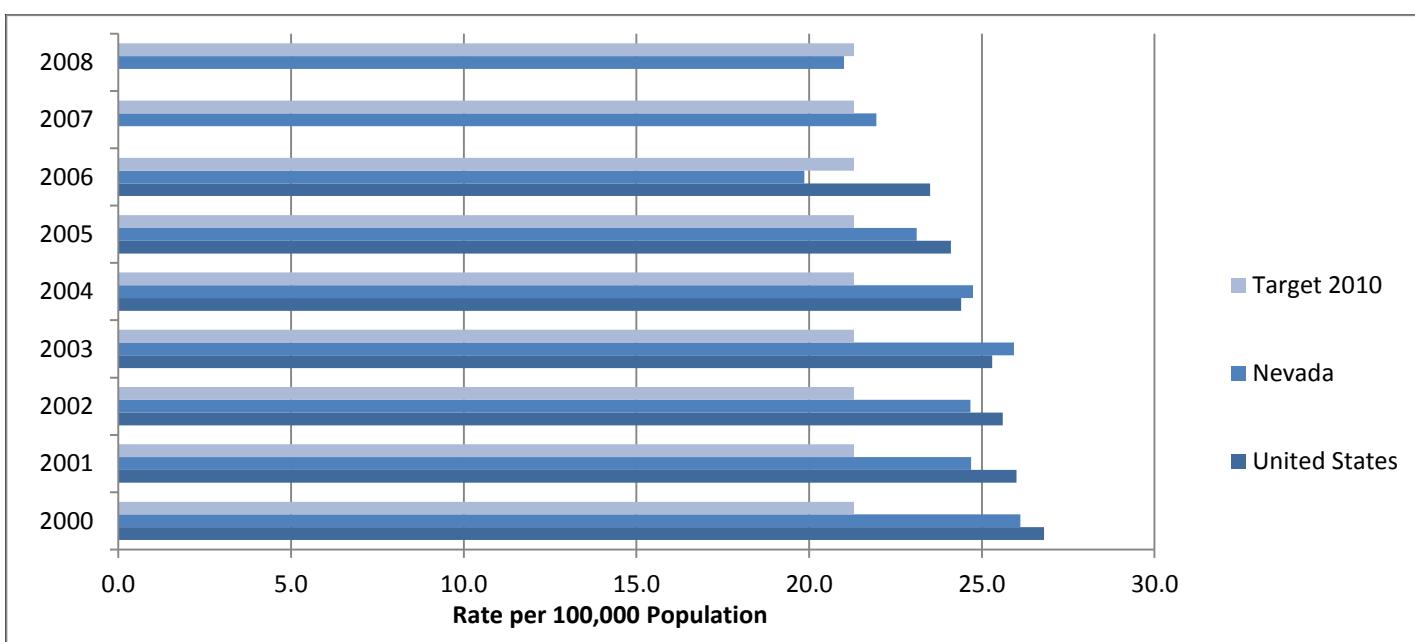
The American Cancer Society recommends annual mammograms for women beginning at age forty to detect breast cancer at an early stage. A high quality mammogram plus a clinical breast exam, an exam done by your doctor, is the most effective way to detect

breast cancer in its earliest stages, when it is the most easily treated and offers the best chance of survival. Finding breast cancer early greatly improves a woman's chances for successful treatment. Checking your own breasts for lumps or other changes is called a breast self-exam (BSE). Studies have shown BSE alone does not reduce the number of deaths from breast cancer. BSE should not take the place of routine clinical breast exams and mammograms but can be done in conjunction with these recommended screenings.

The 5 year relative survival rate for female breast cancer patients has improved from 63% in the early 1960s to 90% today. The survival rate for women diagnosed with localized breast cancer (cancer that has not spread to lymph nodes or other locations outside the breast) is 98%. If the cancer has spread to nearby lymph nodes (regional stage) or distant lymph nodes or organs (distant stage), the 5 year survival decreases to 84% or 23%, respectively.

Sources: American Cancer Society Breast Cancer Facts and Figures 2009-2010, SEER, CDC, Nevada Cancer Institute, HHS Office of Women's Health.

**Age-Adjusted Female Breast Cancer Death Rate, Nevada Residents and United States, 2000 - 2008.\***



\*This chart is age-adjusted to the 2000 U.S. standard population. The Nevada data are from Nevada Vital Statistics Records. The U.S. data are from the National Vital Statistics System - Mortality.

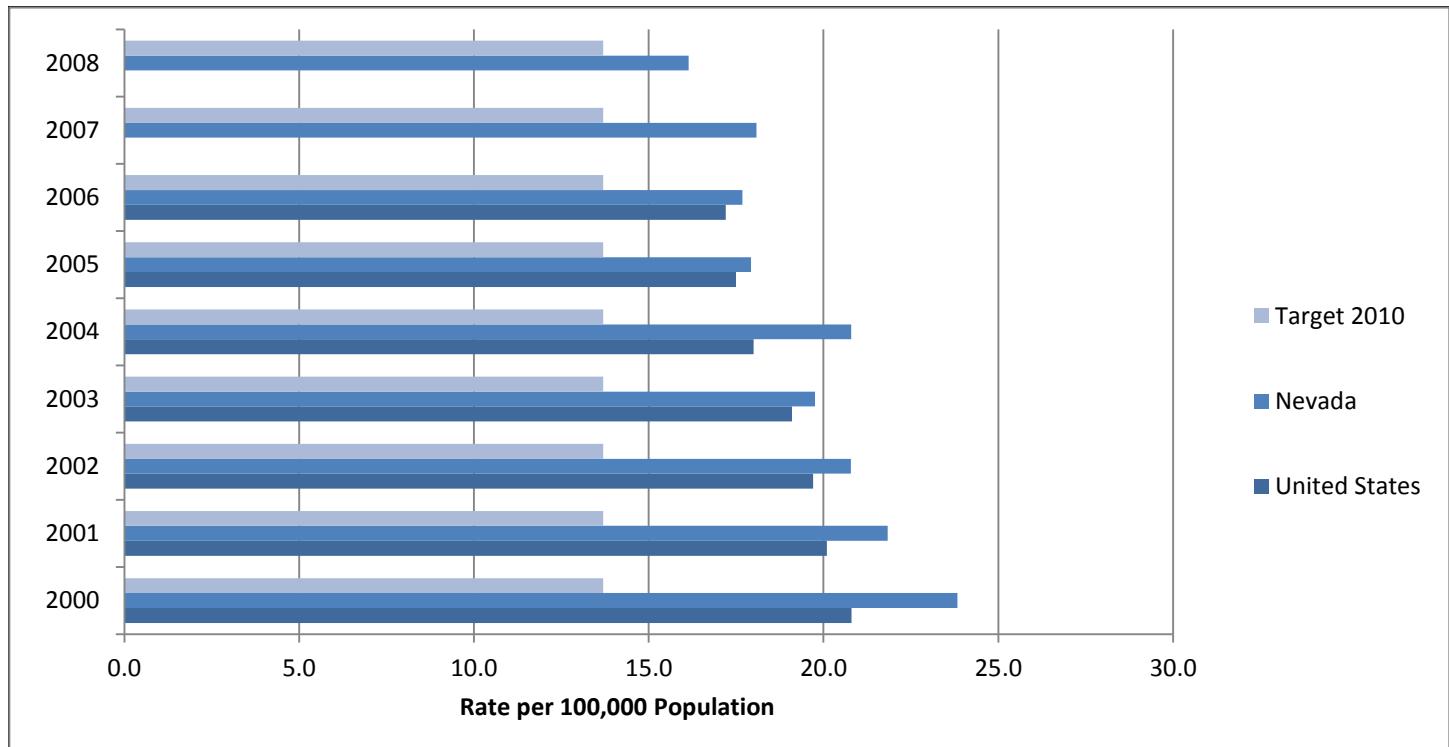
## PROSTATE CANCER

Prostate cancer is the most frequently diagnosed cancer among men in Nevada of all racial and ethnic groups. It is estimated 1,850 new cases of prostate cancer will be diagnosed in 2011 and 310 men will die from this disease. It is worth noting African American men in Nevada have higher mortality rates than any other race in the state. This trend is also observed nationally.

The most significant risk factors for developing prostate cancer are age, race/ethnicity, and family history. The American Urological Association (AUA) Foundation believes the decision to screen is one that a man should make with his doctor following a careful discussion of the benefits and risks of screening. In men who wish to be screened, the AUA recommends getting a baseline Prostate-Specific Antigen (PSA) test, along with a physical exam of the prostate known as a digital rectal exam (DRE) at age 40.

The American Cancer Society recommends that beginning at age 50, men who are at average risk of prostate cancer and have a life expectancy of at least 10 years receive information about the potential benefits and known limitations of testing for early prostate cancer detection and have an opportunity to make an informed decision about testing. Men at high risk of developing prostate cancer (African Americans or men with a close relative diagnosed with prostate cancer before age 65) should have this discussion with their health care provider earlier, beginning at age 45. Men at even higher risk (because they have several close relatives diagnosed with prostate cancer at an early age) should have this discussion with their provider at age 40. All men should be given sufficient information about the benefits and limitations of testing to allow them to make an informed decision based on their personal values and preferences. Sources: CDC, American Urological Association, American Cancer Society.

**Age-Adjusted Prostate Cancer Death Rate, Nevada Residents and United States, 2000 - 2008.\***



\*This chart is age-adjusted to the 2000 U.S. standard population. The Nevada data are from Nevada Vital Statistics Records. The U.S. data are from the National Vital Statistics System - Mortality.



## *A Proclamation by the Governor*

**WHEREAS**, prostate cancer is the second leading cause of cancer-related deaths among Americans; and

**WHEREAS**, knowledgeable sources estimate that Nevada will experience 1,850 newly diagnosed cases of prostate cancer and 310 prostate cancer deaths during 2011; and

**WHEREAS**, deaths due to prostate cancer devastate families; and

**WHEREAS**, there is no current cure for advanced prostate cancer and there is no definitive test to identify indolent prostate cancer from aggressive prostate cancer, much additional medical research is needed to find a cure and to identify those variables that comprise the most lethal forms of this disease; and

**WHEREAS**, data from the National Center for Health Statistics shows a decline in prostate cancer mortality rate of 25% between 1990 and 2003, that correlates with the introduction of the prostate specific antigen "PSA test" in 1987, thus strongly suggesting the benefits of early detection and annual screening; and

**WHEREAS**, all men in Nevada should become aware of their own risks of prostate cancer, talk with their health care providers about these risks, and have the opportunity to be screened for prostate cancer at an appropriate age;

**NOW, THEREFORE, I, BRIAN SANDOVAL, GOVERNOR OF THE STATE OF NEVADA, do hereby proclaim September 2011, as**

### **PROSTATE CANCER AWARENESS MONTH**



*In Witness Whereof*, I have hereunto set my hand and caused the Great Seal of the State of Nevada to be affixed at the State Capitol in Carson City, this 29th day of August, 2011.

The signature of Brian Sandoval, Governor of Nevada.

By the Governor:

The signature of Ross Miller, Secretary of State.

Governor

Secretary of State

By \_\_\_\_\_ Deputy \_\_\_\_\_

## COLORECTAL CANCER

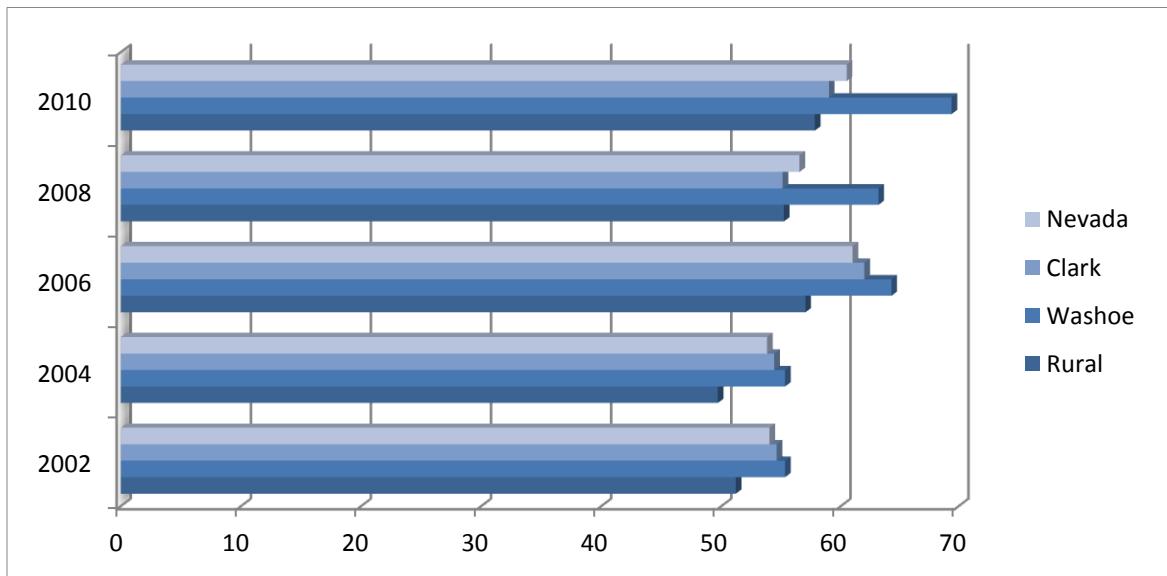
It is estimated in 2011, 1,080 colorectal cancers will be diagnosed in Nevada and 540 Nevada residents will die from this disease. Colorectal cancer is the third most common cancer in both men and women, after prostate and lung cancer in men and breast and lung cancer in women. In Nevada, colorectal cancer incidence and mortality rates are in line with the national average in men but above average in women, especially white women.

The United States Preventive Services Task Force (USPSTF) recommends colorectal cancer screening for men and women ages 50 to 75. Early detection and removal of precancerous adenomas and/or polyps is the key to decreased incidence and mortality rates. Screening with fecal immunochemical test (FIT), fecal occult blood test cards (FOBT), colonoscopy, flexible sigmoidoscopy, or double contrast barium enema (DCBE) can detect early stage cancers and precancerous polyps; these growths can be removed during colonoscopy or during more extensive surgery.

Nationwide mortality rates from colon cancer have fallen in recent years. This reduction is largely attributed to improved screening. In the data most recently reported, from years 2003-2007, Nevada's rate of being up to date on screening was 4th from the bottom of all states. In the same report, its reduction in colon cancer mortality was also 4th from the bottom of all states. However, while the overall statewide data indicates the need for improved screening rates, some progress was made in Washoe County as indicated in the chart below. To this point, the NCC anticipates further screening rate improvements in lieu of a new 5 year CDC grant awarded in 2011.

The strongest risk factors are those associated with medical or family history of the disease. Certain recognized modifiable risk factors include obesity, physical inactivity, and diets rich in red or processed meats, alcohol consumption, vitamin D deficiency, and long-term smoking. Sources: ACS, USPSTF, MMWR Weekly Report Vol 60 July 5, 2011.

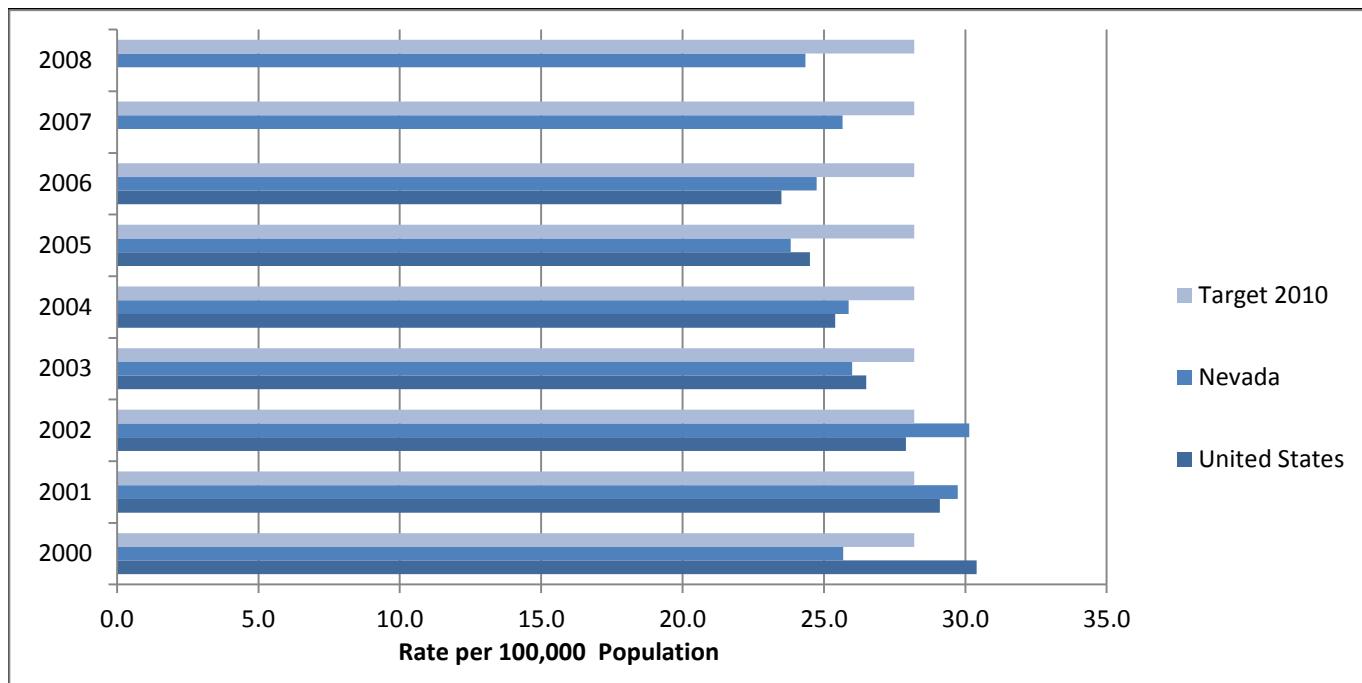
Percentage of people aged 50 or over who report receiving either a fecal occult blood test (FOBT) within 1 year or a lower endoscopy within 10 years, Nevada Residents 2002 – 2010\*



\*BRFSS 2002 – 2010, Office of Health Statistics and Surveillance

## COLORECTAL CANCER

Age-Adjusted Colorectal Cancer Death Rate, Nevada Residents and United States, 2000 - 2008.\*



*Nevada cancer champion Dr. John Gray M.D. and staff participate in a colorectal cancer awareness project featuring CoCo the Colossal Colon.*

*Photos courtesy of Nevada Colon Cancer Partnership.*



## CHILDHOOD CANCER

---

### *The following is a special section devoted to the unique needs of childhood cancer patients and their families*

Childhood cancer is often the forgotten child in discussions regarding cancer. This may be in part because only 1-2% of all cancers affect children and adolescents, a usually healthy population. However, cancer is the second leading cause of death by disease in children under the age of 15, and the fourth leading cause of death in adolescents. Unlike cancers that affect an older population in which environmental factors such as smoking and diet are implicated in causation, genetic predisposition in addition to a second hit, possibly environmental, is likely to contribute to the development of many childhood cancers.

The two cancers in children and adolescents that account for more than 60% of all cases are acute leukemias, and brain tumors. Other common childhood cancers include many tumors that appear to originate from embryonic or early developmental tissue, such as Neuroblastoma, Wilms' Tumor, Rhabdomyosarcoma, and Retinoblastoma. Additionally, bone tumors, germ cell tumors, and Lymphomas (Hodgkin and Non-Hodgkin's) feature prominently, particularly in the older child and adolescent groups. Common adult types of cancers such as those affecting the lung, colon, breast, prostate, and pancreatic, are not usually seen in the population under 20 years of age.

Given the marked differences in types of cancers, location, and factors such as age, developmental status, presence of comorbidities, and toxicity of therapy, the evaluation and treatment of childhood cancers is distinct and in many ways more complex, than that in the adult population. Additionally, the impact of therapy on a child affects the entire family unit with respect to jobs, schooling, sibling issues, childcare, and health insurance. Late effect issues such as emotional issues, depression, academic potential and completion of schooling and job opportunities, relationships, marriage, and parenting (fertility concerns) have marked and prolonged effects in the young population that may span a lifetime.

The importance of caring for our survivors of childhood cancer has become of significant importance lately as this decade proudly marks a new era in which most young cancer victims (80%) will be in remission for at least 5 years from diagnosis, many of whom will go on to becoming long term survivors. However, despite overcoming a major obstacle of beating cancer as a child, the long term effects of chemotherapy, surgery, site of the tumor with resultant effects (brain development in brain tumors, amputation or surgical resection in limb/bone tumors, etc.), and radiation will become significant new challenges in the future health of these individuals as young and maturing adults. The burden of childhood cancer raises medical and psychosocial issues, which will affect quality of life and provide new challenges to the health care system with respect to insurability and access to care and to society with the need to provide educational, vocational, and psychosocial support.

The American Cancer Society estimates that in 2011, there will be 11,210 new cases of cancer in children under the age of 15 years in the United States, and 1,320 are expected to die. While childhood cancers are rare, representing less than 1-2% of all new cancer diagnoses, overall, incidence rates have been increasing slightly by 0.6% per year since 1975. Mortality rates for childhood cancer have declined by 53% since 1975. Current survival rate of childhood cancer is 80-85%, up from less than 50% in the 1970s. The substantial progress in childhood cancer is largely attributable to improvements in diagnosis and treatment, early intervention and impact of participating in national clinical trials. Coordination of care at pediatric oncology centers provides children and adolescents the opportunity to receive comprehensive, compassionate, age appropriate care in addition to access to state of the art treatments employing the latest advances in clinical care and research. Unlike the adult cancer population, the majority of children participate in clinical trials and this approach to care has led to the impressive improvements in survival.

Given the enormous resources needed to support a complex program of low volume, this situation is also likely not ideal and may fragment care for the local population. Travel out of state is required for all Nevada children with the need for higher level therapies, such as bone marrow transplantation. Given the cost of development of such high complexity care and the low numbers of children in need, it is not likely this will change in the near future. Families that must travel out of state, or even a long distance within the state, incur the financial burden of travel expenses, childcare for siblings, loss of job income (and potentially health insurance tied to that job), and family separation. These factors present an added level of crisis to what already is a financially and emotionally devastating fight for families battling childhood cancer.

The various programs within Nevada Medicaid provide for differing levels of service and the current managed care plans lead to fragmentation of care amongst various health care providers, cities, and health care organizations. This results in the inability of children to participate in clinical trials and to be cared for at comprehensive pediatric cancer centers, and may ultimately impact outcomes such as survival. Patients that are medically indigent provide yet more challenges to the state and local providers and health care organizations, which are increasingly unable to provide free care for such high cost therapies, again prohibiting these children from access to state of the art care. The NCC will strive to ensure these young people are not forgotten. This will include the development of a plan for care of children and adolescents in comprehensive pediatric cancer programs. In northern Nevada, care is provided on an outpatient basis in coordination with a comprehensive Pediatric Oncology Center based at Children's Hospital & Research Center Oakland (CHRCO). The community is working with

Renown Children's Hospital and CHRCO to develop a more comprehensive center in Reno. However, limitation of resources and population needs has prohibited development of the complex infrastructure needed to support development of this center. In southern Nevada, children are treated by two local pediatric oncology groups in Las Vegas, who coordinate care, if needed at one of four different hospitals.

As the population of young families in Nevada continues to increase and the incidence of childhood cancer continues to rise, it is essential for the NCC to recognize and support the need for collaborative efforts in order to mitigate the challenges faced by families battling childhood cancer. The NCC is devoted to making this a priority in this cancer plan, recognizing that investing in a comprehensive pediatric cancer plan will be cost effective and be an important investment in the future of the state. Future goals of the NCC's comprehensive childhood cancer plan will include: development of centralized comprehensive pediatric oncology centers in both northern and southern Nevada; increasing the number of children and adolescents enrolled in clinical trials; ensuring access to support programs for all patients and survivors that address medical, psychosocial, cognitive, educational, and vocational challenges and needs; ensuring the adolescent population ages 15 – 19 years are treated at pediatric cancer centers to increase survivorship; and developing strategies to work with the state regarding government insured children and those with no insurance to assure access to care at comprehensive pediatric cancer centers. Source: American Childhood Cancer Organization, [www.acco.org](http://www.acco.org). Hoffman, Ruth, MPH. *Is Childhood Cancer Included in YOUR State Cancer Plan*. The Grassroots. Published, 3/2011.

***"Making an investment to diagnose, treat, and save children and adolescents with the potential for long, productive lives is a far more cost effective and meaningful way to manage limited resources when considering the number of years saved per individual patient. Rather than looking at this as the rarest of tumors, we ought to look at it as the investment with the largest return."***

***Caroline Hastings, M.D., Pediatric Hematologist, Oncologist  
Director, Fellowship Program Department of Hematology Oncology  
Children's Hospital & Research Center, Oakland California***

# Health Disparities in Cancer

Health disparities are differences in the incidence, prevalence, and mortality of a disease and the related adverse health conditions, which exist among specific population groups. Disparities affect many populations, including racial and ethnic minorities, residents of rural areas, women, children and adolescents, the elderly, and people with disabilities. Source: National Center for Chronic Disease Prevention and Health Promotion, Division of Cancer Prevention and Control, 2011.

Increasing early cancer detection, promoting healthy lifestyles, and expanding access to health care help reduce inequalities in cancer among groups at greatest risk. Public health agencies, health care providers, and communities must collaborate to reduce disparities.

According to the CDC, Office of Minority Health and Health Equity (OMHHE), life expectancy and overall health have improved for most Americans in recent years, but not all Americans have benefited equally. CDC and its partners monitor trends in cancer incidence (diagnosis) and mortality (deaths) to identify which groups are affected disproportionately.

The burden of cancer is not borne equally by all population groups in Nevada. Low income and medically underserved populations have higher risks of developing cancer and poorer chances of early diagnosis, optimal treatment, and survival. Moreover, these populations have not benefited equally from recent improvements in cancer prevention, early detection, and treatment. The Nevada Cancer Coalition is committed to working with researchers, health care professionals, community organizations, and others to determine the needs and priorities of our diverse populations.

## Nevada Facts on Health Disparities in Cancer:

- Black residents had higher overall cancer mortality rates than any other group, followed by white residents from 2000 to 2007.
- More whites and blacks died from lung cancer than other racial/ethnic groups from 2000 to 2007.
- Hispanic children and adolescents experience reduced health outcomes.
- Blacks had a higher rate of colorectal mortality than any other racial/ethnic group for six of the past eight years.
- Black males had a higher rate of prostate cancer mortality than any other racial/ethnic group, over twice that of males in other racial/ethnic groups for the combined years 2004 through 2008. Source: Healthy People Nevada, Moving from 2011 to 2020.

# The Economic Burden of Cancer

The National Institutes of Health (NIH) estimates overall costs of cancer in 2010 at \$263.8 billion: \$102.8 billion for direct medical costs (total of all health expenditures); \$20.9 billion for indirect morbidity costs (cost of lost productivity due to illness); and \$140.1 billion for indirect mortality costs (cost of lost productivity due to premature death). Lack of health insurance and other barriers prevents many Americans from receiving optimal health care. According to the U.S. Census Bureau, almost 51 million Americans were uninsured in 2009; almost one third of Hispanics (32%) and one in 10 children (17 years and younger) had no health insurance coverage. Uninsured patients and those from ethnic minorities are substantially more likely to be diagnosed with cancer at a later stage, when treatment can be more extensive and more costly. For more information on the relationship between health insurance and cancer, see *Cancer Facts & Figures 2008*, Special Section, available online at [cancer.org/statistics](http://cancer.org/statistics). Source: American Cancer Society. *Cancer Facts & Figures 2011*.

# Gaps and Barriers

---

There are both gaps and barriers in present cancer programs and services, which need to be addressed in implementing this Plan. Some will require the development of new infrastructure and additional resources. Others will require changes in public policy. Several gaps and barriers can be addressed by improving access to existing programs.

## GAPS

---

**CULTURAL SENSITIVITY** An educational approach could significantly narrow gaps, which affect the welfare of Nevada's diverse population groups. There is a need for more culturally and linguistically appropriate information and programs along the continuum of care, from health education, prevention and risk reduction to screening and diagnostic follow up, treatment, survivorship programs, and end-of-life care. At the screening and diagnostic stages alone, this could positively impact the unequal burden which African Americans, Hispanics, Native Americans, and Pacific Islander populations bear as a result of late stage diagnoses.

**COLORECTAL CANCER** Although colorectal cancer is the second leading cause of cancer death in Nevada and regular screening has been shown to be effective in lowering mortality and morbidity from the disease, screening rates are still low in Nevada, as they are nationally. Nevada initiated the Nevada Colorectal Cancer Control Program in 2011 to screen underinsured or uninsured men and women ages 50 to 64, but the program is only available in northern Nevada at this time. The program will expand to southern Nevada and

the rural and frontier areas in 2012. There is also a need for increased public education campaigns to increase the number of Nevadans seeking screening. Source: Bureau of Child, Family, & Community Wellness, Nevada State Health Division.

**BREAST AND CERVICAL CANCER** The Women's Health Connection Program is funded by the National Breast and Cervical Cancer Early Detection Program of the Centers of Disease Control and Prevention (CDC) for the purpose of paying breast and cervical cancer screening costs for age-eligible women who are uninsured or underinsured and who meet the program's income guidelines. Additional resources are needed to expand this program in order to reach more women. The program is solely funded by federal funds made available through the CDC. With the lack of state level funding to augment federal funds, only 1 in 9 women who are eligible for the program are screened; this means 8 of 9 women who are eligible for this program are left behind. Source: Bureau of Child, Family, & Community Wellness, Nevada State Health Division.

## BARRIERS

---

A number of practical barriers sometimes prohibit or delay cancer care for some Nevadans. Practical problems can also affect treatment decisions and make compliance with regular screening, treatment plans, and follow-up care difficult.

**TRANSPORTATION AND HOUSING AT TREATMENT CENTERS** Transportation, in this largely rural state, is a significant barrier to cancer care with many of the state's residents living hundreds of

miles and several hours from metropolitan areas where most of the cancer care services are offered and can dramatically affect quality of life and survivorship. The Disabled American Veterans (DVA) organization operates an extensive, volunteer, statewide transportation system for Veterans Administration (VA) patients, and the American Cancer Society (ACS) offers its Road to Recovery program in some areas and Helping Hands of Las Vegas Valley and Henderson provide transportation to medical appointments, and

Angel Flight West provides free air transportation services to cancer patients and their families. Nevertheless, for many Nevadans transportation issues pose major problems to accessing cancer care. When a treatment plan requires regular, sometimes daily appointments at a cancer treatment facility far from their homes, housing can present major challenges to some rural cancer patients and family members.

**SOCIAL BARRIERS** Psychological and social barriers to cancer care affect all patient groups to some degree, regardless of culture, income level, or age. These barriers have been shown to lower screening rates, delay follow up of abnormal screening results, influence choices in treatment options, reduce compliance with treatment, and create emotional distress throughout the continuum of care.

One of the most prevalent psychological barriers is fear. Fear of the medical procedure itself can be a deterrent, but probably more common is fear of discovering the disease and its potential, real or perceived, for a devastating impact on the lives of the patient and family members. For some patients, mistrust of physicians, western medicine, and the health care system contribute significantly to fear.

Embarrassment and anxiety about loss of privacy are also issues for people of all cultures, although they may be more commonplace in certain cultures and specific age groups. Depression and shock are common emotional responses to a cancer diagnosis, which can be serious deterrents to receiving care, contributing to lack of follow-up and confusion surrounding decisions affecting medical care. For patients and family members who are isolated and without adequate social support, these common psychological barriers can be particularly troublesome. Lack of information and knowledge about cancer and the health care system can be a significant impediment to care for all groups of people. This may be more prevalent among patients with low socioeconomic status and lower education attainment. Some public health specialists believe low socioeconomic status is the most important risk factor for inadequate health care, regardless of culture or race or ethnicity.

Age also can be a barrier. Generally speaking, elderly patients from all cultural backgrounds are less comfortable than younger patients with the culture of high technology, which is so much a part of modern medical care, and are also more uncomfortable with the loss of privacy. In addition, elderly minorities are especially less likely to be acculturated to the dominant medical cultures in America.

**CULTURAL BARRIERS** Although none of the ethnic/racial groups in Nevada are homogeneous, and barriers to care vary widely within any group; some barriers to cancer care are more prevalent in certain population groups.

Language may be the easiest barrier to identify and is very real problem in Nevada, which has two major languages, English and Spanish, numerous Native American languages, as well as many residents who do not speak English, the dominant language in the medical system.

Differences in communication styles also vary from culture to culture. Simple translation from one language to another is often inadequate for clear communication and is especially the case in a medical setting where translation from providers to patient can be critical. Some Native American languages prevalent in the state do not even have a word for cancer.

Beliefs about illness in general and cancer specifically, also vary significantly. In some groups, cancer may be defined as a death sentence, believed to be contagious, or carry a stigma which makes talking about the disease difficult. Decisions about health care are always made within a cultural context. In Nevada, the rich diversity of cultures requires providers and health care systems to be knowledgeable about cultural differences and flexible about the many different approaches, which patients bring into health care settings.

*"My family's life changed...on the day of Isaac's diagnosis. We are stronger and better because of our ability to stick together on our journey and fight against his cancer. Always have hope, never give up, and make each day a little brighter, no matter what. My goal for Isaac's fight was to make EACH MOMENT better for him."*

*Kristi Young of Reno, Nevada, with her son Isaac diagnosed with Hepatoblastoma (Stage III liver cancer) at the age of 18 months. Isaac is now two.*



## SERVICE TO RURAL and FRONTIER

### AREAS

Rural health experts believe that metropolitan areas in the state have adequate numbers of service agencies. However, there is a shortage of agencies serving rural areas. Even in rural areas close to metropolitan centers, such as Pahrump and Tonopah (75 miles and 210 miles away from Las Vegas respectively); there is a shortage of services. This problem is exacerbated by the fact that agencies cannot afford to service those areas. The average distance from a rural hospital to the nearest incorporated town

is 46 miles and the average distance to the nearest tertiary care hospital in Reno or Las Vegas is 105 miles. In 28 of 33 health care occupations licensed by the state of Nevada, the per capita number of professionals is greater in urban counties than rural. For example, there are 185.4 physicians per 100,000 residents in urban areas of the state as compared to only 76.3 physicians per 100,000 residents in rural areas. Sources: Nevada Office of Rural Health, University of Nevada School of Medicine, Nevada Rural and Frontier Health Data Report 2011.

## NEED FOR POLICY CHANGES

---

**TOBACCO** - The Nevada Clean Indoor Air Act exempts casinos and bars from smoke-free compliance. Until all workplaces are smoke-free, the occupational diseases, which result from exposure to toxic environmental second-hand smoke, will continue to lead to respiratory illnesses and cancers. NCC will accelerate statewide activities and advocacy efforts towards a smoke-free Nevada.

## REIMBURSEMENT RATES

The delivery of health care in Nevada is adversely affected by Medicare reimbursement rates that are lower than rates in many other states. Compounding this is the high percentage of Nevadans relying on Medicare and Medicaid (23%) and those who are uninsured (20%). The percentage of Nevadans on Medicare and Medicaid has remained stable from 2004 to 2010. However, there was an increase in the state's population during that period consequently, increasing the number of residents enrolled. When the cost of providing care exceeds the amount Medicare reimburses, the cost is passed along to health care organizations, providers, and privately insured individuals. In addition, many other health care reimbursement systems match Medicare rates, further limiting the pool of resources to recoup extra costs. Medicare reimbursement rates are calculated by the Centers for Medicare & Medicaid Services and are based on a national formula. A change in legislation would be required to increase the rates of reimbursement as a means to keep up with the cost of providing health care in Nevada. Sources: Kaiser Family Foundation statehealthfacts.org, Centers for Medicare and Medicaid Services.

*"It's like cancer gave me a shiny new pair of glasses that showed me what living is all about; family, charity, faith, courage, gratitude, and hope. It was a high price, but even now, I am immensely grateful that I can just go outside and run a mile."*

*Kristin, diagnosed with Leukemia at age 17*



# Coordinating With Other Cancer-Related Initiatives

---

Several ongoing initiatives and programs have contributed to the goals and objectives in the Plan. They range from Healthy People 2020, a health promotion and disease prevention project of the U.S. Department of Health and Human Services, to several projects, which are specific to Nevada, such as Comprehensive Tobacco Control Efforts, Chronic Disease and Wellness efforts, and several community coalitions focusing on disparate minority populations. Many of the goals and objectives set by the members of the Nevada Cancer Coalition reflect goals and objective already determined by national and local programs.

## Healthy People 2020 Has Four Major Goals:

- 1) Attain high quality, longer lives free of preventable disease, disability, injury, and premature death.
- 2) Achieve health equity, eliminate disparities, and improve the health of all groups.
- 3) Create social and physical environments that promote good health for all.
- 4) Promote quality of life, healthy development, and healthy behaviors across all life stages.

Cancer is one of the 42 focus areas for Healthy People 2020. The goal for cancer is to decrease the number of new cancer cases as well as the illness, disability, and death caused by cancer. The initiative sets targets for improvements in 20 categories including overall cancer deaths, death rates from specific types of cancer, prevention and screening methods, surveillance, and five year cancer survival rates.

**Nevada State Health Division** (NSHD) promotes and protects the health of all Nevadans and visitors to the state through its leadership in public health and enforcement of laws and regulations pertaining to public health. The NSHD offers numerous programs designed to prevent, control, and ultimately eradicate communicable and chronic disease in Nevada. Growth in population and caseload has affected many of the programs of the Division, resulting in an increased need for collaborations and partnerships within the community.

**Breast and Cervical Cancer Early Detection Program** is called the Women's Health Connection Program in Nevada, which assesses public and professional needs related to breast and cervical cancer. This program provides screening, tracking, follow-up services and treatment referral; provides public education regarding breast and cervical cancer to high-risk groups; and provides professional education regarding diagnostic and therapeutic standards for breast and cervical cancer.

**Nevada Central Cancer Registry** obtains and summarizes information about cancer cases in Nevada; provides information that allows investigation of the distribution and causes of cancer; and assists in establishing the effectiveness of cancer prevention programs, and pinpointing problem areas that need further study and evaluation.

**Nevada Colorectal Cancer Control Program** (NCCCP) provides colorectal cancer screening and follow up care to low income men and women ages 50 to 64 years who are underinsured or uninsured. NCCCP also provides public education regarding colorectal cancer, and provides professional education regarding diagnostic and therapeutic standards for colorectal cancer.

**Nevada Cancer Institute** (NVCI) Nevada Cancer Institute is committed to reducing the burden of cancer by offering the best in high-quality patient care, research, education, early detection and prevention. The Institute's team of dedicated health care professionals not only provides compassionate and comprehensive oncology care, but also offers support services and educational resources in a unique campus environment. NVCI is both a partner and a resource to patients and their families, and to the entire state. Nevada Cancer Institute is also a partner in education,

helping to prepare a new generation of health care professionals. The Institute has teamed with the University of Nevada, School of Medicine to offer the state's first ever, medical oncology fellowship program, and with the College of Southern Nevada for a one of a kind professional training program for oncology nurses. The Institute is dedicated to advancing the frontiers of knowledge about cancer through research, and providing the latest in cancer prevention, education, detection and treatment options to patients and their families.

## **LOCATING CANCER and PREVENTION SERVICES IN NEVADA**

---

The following list of organizations and agencies is intended as a resource for locating cancer services throughout the state. This listing does not include all cancer control organizations, nor does it constitute an endorsement of these organizations or their programs by the Nevada State Health Division.

### **21<sup>st</sup> CENTURY C.A.R.E.**

<http://www.21stcenturycare.org/index.asp>

21st Century C.A.R.E. provides patients immediate financial assistance for incidental expenses related to active cancer treatments. This allows the patient to put their focus where it belongs – on beating the disease. C.A.R.E. provides community education on cancer related topics and prevention through local community events, which offer free screenings for breast, prostate, skin, and other cancers and will provide noted physicians for speaking engagements and lecture series.

### **ANGEL FLIGHT WEST**

(888) 4-AN-ANGEL or 888 426-2643

[www.angelflightwest.org](http://www.angelflightwest.org)

Angel Flight West provides free air transportation services to cancer patients and their families.

### **AMERICAN CANCER SOCIETY (ACS)**

Southern Nevada

6165 S. Rainbow Blvd. Las Vegas, NV 89118

702-798-6877

Northern Nevada

691 Sierra Rose Drive, Suite A, Reno, NV 89511

775-329-0600 [www.cancer.org](http://www.cancer.org)

The American Cancer Society is a volunteer-based health service organization dedicated to eliminating cancer. Support services include Cancer Information Line 800-ACS-2345; loan closet; gift closet; support groups, "Look Good Feel Better" Program, Road to Recovery and Reach to Recovery programs.

### **AMERICAN CANCER SOCIETY CANCER ACTION NETWORK**

691 Sierra Rose Drive, Suite A, Reno, NV 89511 775-828-2206

The American Cancer Society Cancer Action Network is the non-profit, non-partisan, advocacy affiliate of the American Cancer Society. ACS CAN assists the mission of ACS through advocacy efforts at all levels of government. You are encouraged to become a part of cancer's grassroots advocacy network in Nevada.

### **AMERICAN LUNG ASSOCIATION**

Reno Office - 10615 Double R Blvd. Reno, NV 89521

775-829-LUNG

Las Vegas Office – 3552 W Cheyenne Ave Ste. 130 North Las Vegas, NV 89032 702-431-6333

<http://www.lungnevada.org/>

The American Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease through education, advocacy and research. ALA fights lung disease in all its forms, with special emphasis on asthma, tobacco control, and environmental health.

### **CANCER MATTERS – SOUTHERN NEVADA RESOURCE GUIDE**

[www.cancermatters.com/index.php/localresources/las-vegas](http://www.cancermatters.com/index.php/localresources/las-vegas)

Cancer Matters is grass roots, community-based program whose mission is to enhance quality of life through information and education for those individuals touched by cancer.

### **CANDLELIGHTERS CHILDHOOD CANCER FOUNDATION OF NEVADA**

8990 Spanish Ridge Ave. Ste. 100, Las Vegas, NV 89148

702-737-1919 [www.candlelighters.org](http://www.candlelighters.org)

Candlelighters Childhood Cancer Foundation of Nevada is a non-profit organization that assists families with children who are diagnosed with cancer, ages, birth to 21 years of age. Programs and services include financial assistance for living expenses medical co-payments, travel costs associated with treatment and bereavement support. The organization also provides a variety of support groups, social functions for families, and a summer camp for the diagnosed child and siblings, counseling services, and much more.

**CARSON TAHOE REGIONAL MEDICAL CENTER –  
CARSON TAHOE CANCER RESOURCE CENTER**  
1600 Medical Parkway, Carson City, NV 89703 775-445-8000 [www.carsontahoe.com](http://www.carsontahoe.com)  
The Carson Tahoe Cancer Resource Center serves cancer patients as their guides to resources and services available to them within the Northern/Central Nevada area. Staff includes seven patient Navigators, many who are cancer survivors, and a Nurse Navigator. A lending library that includes a large variety of current literature on all cancers, treatment management, and recommended website information is free to the public. Services at the resource center include yoga, and exercise programs, massage therapy, monthly education seminars, educational and support meetings, one-on-one navigation, financial guidance, travel assistance, a housing program, wigs, head coverings, post-surgical garments and prosthetic assistance. Programs focus on quality of life and evolve as needed based on community needs. All services are free.

**CENTERS FOR DISEASE CONTROL AND PREVENTION**  
Cancer Prevention and Control Program  
Toll free - 1-888-842-6355 [www.cdc.gov/cancer](http://www.cdc.gov/cancer)

**CENTER TO REDUCE CANCER HEALTH DISPARITIES**  
<http://crchd.nci.nih.gov>  
National Cancer Institute created in 2001 to carry out NCI's Strategic Plan for Reducing Cancer Health Disparities. Research will investigate social, cultural, environmental, biological, and behavioral continuum from prevention to end-of-life care.

**COVER UP, NEVADA!**  
<http://www.coverupnevada.org>  
Cover Up, Nevada! is an outreach initiative, focused on saving lives through prevention. Cover Up, Nevada! was developed by Nevada State Senator Allison Copening, skin cancer advocates, and community organizations including the American Cancer Society Action Network. Cover Up, Nevada! conducts free community awareness events, skin cancer screenings, and skin cancer prevention materials.

**DISABLED AMERICAN VETERANS**  
The 1.2 million member Disabled American Veterans (DAV) is a non-profit 501(c) (4) charity dedicated to building better lives for America's disabled veterans and their families. The DAV's Voluntary Services Program operates a comprehensive network of volunteers who

provide veterans free rides to and from Veteran Administration (VA) medical facilities and improve care and morale for sick and disabled veterans.

**National Headquarters** 3725 Alexandria Pike Cold Spring, KY 41076 **Mailing Address** PO Box 14301 Cincinnati, OH 45250-0301 **Phone Numbers** 877-I Am A Vet (877-426-2838) (859) 441-7300 **National Service & Legislative Headquarters** 807 Maine Ave SW Washington, DC 20024 **Phone Number** 202-554-3501.  
<http://www.dav.org/>

The five Nevada Chapters can be found online at <http://www.davmembersportal.org/chapters/nv/default.aspx>

#### **HELP OF SOUTHERN NEVADA**

953 E Sahara Ave. 35B-208 Las Vegas, NV 89104-3013  
702-369-4357 [www.helpsonnv.org](http://www.helpsonnv.org)  
Housing, Emergency Services, Life Skills and Prevention (HELP) assists individuals and families to become self-sufficient through direct services, training and referrals to support services in the community.

#### **INTERCULTURAL CANCER COUNCIL (ICC)**

<http://iccnetwork.org>  
The ICC promotes policies, programs, partnerships, and research to eliminate the unequal cancer burden among racial and ethnic minorities and medically underserved populations in the United States, and its associated territories. It also prepares Cancer Fact Sheets that provide detailed information on cancer occurrence and risk factors.

#### **LANCE ARMSTRONG FOUNDATION LIVESTRONG SURVIVOR CARE**

Toll free – 1-866-235-7205 [www.livestrong.org](http://www.livestrong.org)  
**LIVESTRONG SURVIVOR CARE** helps survivors face the everyday physical, emotional and practical challenges of cancer through education, qualified referrals and counseling services. Cancer Care's oncology social workers provide survivors and their loved ones with emotional support, grief counseling and professional advice, while Patient Advocate Foundation's case managers are available to help with access to care, employment questions and financial concerns. All services are provided free of charge.

#### **LEUKEMIA & LYMPHOMA SOCIETY**

6280 S. Valley View Blvd. Suite 342 Las Vegas, NV 89118  
702-436-4220 [www.lls.org/snv](http://www.lls.org/snv)  
The Society's mission is to cure leukemia, lymphoma,

Hodgkin's disease and myeloma, and to improve the quality of life of patients and their families. LLS Co-Pay Assistance Program assists patients in meeting their private insurance or Medicare premiums and co-pay obligations for prescription medications and allowable costs. LLS also offer patient financial aid to help patients with significant financial needs that are under a doctor's care for a confirmed blood cancer diagnosis. LLS will also help you find additional sources of financial help.

#### **NATIONAL CANCER INSTITUTE (NCI)**

[www.cancer.gov](http://www.cancer.gov)

The NCI was established under the National Cancer Act of 1937 and is the Federal Government's principal agency for cancer research and training. It operates the Cancer Information Service, which includes a toll-free telephone system (1-800-4-CANCER) and a Partnership Program that offers help with local programming and health initiatives for community organizations and agencies. The National Cancer Institute coordinates the National Cancer Program, which conducts and supports research, training, health information dissemination, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients and the families of cancer patients.

#### **NEVADA CANCER INSTITUTE (NVCI)**

One Breakthrough Way, Las Vegas, NV 89135 702-822-LIFE [www.nevadacancerinstitute.org](http://www.nevadacancerinstitute.org)

Nevada Cancer Institute is the official cancer institute for Nevada, headquartered in Las Vegas. A non-profit organization, NVCI is committed to reducing the burden of cancer by offering the best in high quality patient care, research, education, early detection and prevention. NVCI has two locations in Southern Nevada, the main treatment and research center is located in Summerlin and a cancer treatment center at the University Medical Center. NVCI serves patients throughout the greater Las Vegas area, offering full service clinics in Summerlin, and at University Medical Center, in the downtown medical district. The Institute's mobile screening unit, the Hope Coach, provides mammography services throughout the state.

#### **NEVADA CANCER RESEARCH FOUNDATION**

601 S. Rancho Drive, Suite C-26, Las Vegas, NV 89106  
702-384-0013 [www.sncrf.org](http://www.sncrf.org)

The Nevada Cancer Research Foundation is a non-profit statewide organization. The Nevada Cancer Research

Foundation provides access to National Cancer Institute adult and pediatric treatment, cancer control, prevention, and biology clinical trials to its investigator members. Its investigator members include more than 90% of the oncologists, hematologists and radiation oncologists in the State of Nevada.

#### **NEVADA CHILDHOOD CANCER FOUNDATION**

6070 s. Eastern Ave., Suite 200, Las Vegas, NV 89119  
702-735-8434 [www.nvccf.org](http://www.nvccf.org)

The mission of the Nevada Childhood Cancer Foundation is to work side by side with the medical community to provide social, emotional, educational and psychological support services and programs to families of all children who are diagnosed with a life threatening or critical illness.

#### **NEVADA COLON CANCER PARTNERSHIP (NCCP)**

P.O. Box 2415, Reno, NV 89505 775-356-8800  
[www.nvccp.org](http://www.nvccp.org)

Nevada Colon Cancer Partnership, Inc. is a non-profit corporation based in Nevada. NCCP is comprised of dedicated volunteers who want to reduce the number of people who suffer from colon cancer by increasing screenings through education and patient navigation. These volunteers include gastroenterologists, primary care physicians, nurses, community outreach and patient navigators, hospital administrators, public health professionals as well as cancer survivors and their families.

#### **NEVADA COLORECTAL CONTROL PROGRAM – NEVADA STATE HEALTH DIVISION**

4150 Technology Way, Suite 210, Carson City, NV 89706 775-684-4285

The Nevada Colorectal Control Program is a colorectal cancer early detection program available to eligible Nevada men and women at no cost. This program is made possible by funding from the CDC. The program provides colorectal cancer screening and follow-up care to low-income men and women aged 50–64 years who are underinsured or uninsured for screening, provide public education regarding colorectal cancer, and provides professional education regarding diagnostic and therapeutic standards for colorectal cancer.

## **NEVADA TOBACCO USERS' HELPLINE 1-800-QUIT-NOW**

Toll free – 1-800-784-8669. For those outside of 702 or 775 area codes please dial Toll free 1-888-866-6642.  
[www.livingtobaccofree.com](http://www.livingtobaccofree.com)

The Helpline is a statewide nicotine dependence treatment program that treats all forms of tobacco dependence, both smoked and smokeless. Services include long term, intensive treatment; confidential and individualized treatment plans to meet individual's needs, and education and information to support people moving towards a tobacco-free lifestyle. The Helpline is a division of the University of Nevada School of Medicine, Reno.

## **NEVADA TOBACCO PREVENTION COALITION**

Amy Beaulieu, MHA Director of Tobacco Control Policy, American Lung Association in Nevada. 3552 W. Cheyenne Ave Ste. 130, North Las Vegas, NV. 89032. 702-948-4157. <http://notcolorado.org/ntpc/>. The NTPC coalition is not the single voice of tobacco control in Nevada. It is many voices speaking together. Through our organization, concerned Nevadans, and public health officials joined together in a statewide movement to end "Big Tobacco's" grip on our state. This organization strives to maximize public and private resources allocated to tobacco control by facilitating communication and networking among tobacco control efforts statewide. NTPC also assists in the expansion of cessation and prevention services across the state.

## **NORTHERN NEVADA CHILDREN'S CANCER FOUNDATION**

3550 Barron Way, #5A, Reno, NV 89511 **775-825-0888**  
[www.nvchildrenscancer.org](http://www.nvchildrenscancer.org)

The Northern Nevada Children's Cancer Foundation provides support and assistance with the financial burden and emotional strain that comes with the battle against childhood cancer, promotes public awareness, and promotes research and connecting families with national, regional and local resources.

## **RACIAL AND ETHNIC APPROACHES TO COMMUNITY HEALTH (REACH)**

<http://www.cdc.gov/reach2010>

The REACH program funds community coalitions to develop and implement activities to reduce the level of disparities in one or more of six priority areas, which include breast and cervical cancer screenings.

## **RENO CANCER FOUNDATION**

1155 Mill Street, Reno, NV 89502 775-329-1970  
Provider of multiple assistance programs which may provide financial assistance with prescriptions, insurance premiums, transportation and lodging.

## **RENOWN REGIONAL MEDICAL CENTER – RENOWN INSTITUTE FOR CANCER**

1155 Mill Street, L-11, Reno, NV 89502 775- 982-4000  
[www.renown.org](http://www.renown.org)

## **SAINT MARY'S REGIONAL MEDICAL CENTER – SAINT MARY'S CENTER FOR CANCER**

645 N. Arlington Avenue, Suite 120, Reno, NV 89503  
775-770-7410 [www.saintmarys.org](http://www.saintmarys.org)

## **SAINT MARY'S FOUNDATION**

<http://www.supportsaintmarys.org/index.htm>  
520 West Sixth Street Reno NV, 89503 775-770-3020  
Saint Mary's Foundation promotes charitable giving and community partnerships for the benefit of Saint Mary's Regional Medical Center and the northern Nevada community. Gifts to the Foundation support mission outreach programs for the underserved; enhancements and state-of-the-art technology in our facilities; and wellness and prevention programs for children, seniors and families.

## **ST. ROSE DOMINICAN HOSPITALS**

3001 St. Rose Parkway, Henderson, NV 89052 702-616-5750 <http://www.strosehospitals.org/index.htm>  
St. Rose Dominican Hospitals is the only not-for-profit, religiously-sponsored hospital system in southern Nevada. St. Rose has three campuses, Rose de Lima, Siena, and San Martin. St. Rose offers a variety of community outreach programs through the Barbara Greenspun WomansCare Centers including quality of life support services, nutrition consultation, and transportation assistance for seniors. The R.E.D. (Rapid Early Detection) Rose Program provides breast cancer screening, diagnostic care, treatment, and support services for the underserved and uninsured in the community. Bilingual services are available at 702-616-7525.

**SOUTHERN NEVADA HEALTH DISTRICT- CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION**  
400 Shadow Lane, Suite 101, Las Vegas, NV 89106, 702-759-2170 [www.gethealthyclarkcounty.org](http://www.gethealthyclarkcounty.org)

**SUNRISE HOSPITAL AND MEDICAL CENTER – COMPREHENSIVE CANCER PROGRAM**  
3186 Maryland Parkway, Las Vegas, NV 89109-2317  
702-731-8000 [www.sunrisehospital.com](http://www.sunrisehospital.com)

**SUSAN G. KOMEN FOR THE CURE®**  
Southern Nevada  
4850 W. Flamingo, Suite 27 Las Vegas, NV 89103 702-822-2324 [www.komensouthernnevada.org](http://www.komensouthernnevada.org)  
Northern Nevada  
P.O. Box 20868 Reno, NV 89515 775-355-7311  
[www.komennorthnv.org](http://www.komennorthnv.org)

The Susan G. Komen For The Cure® (SGK) was founded in 1982 on a promise made between two sisters – Susan Komen and Nancy Goodman Brinker. Almost 30 years later, SGK is a global leader in the fight against breast cancer through its support of innovative research and community based outreach programs. As the world's largest grassroots network of breast cancer survivors and activists, SGK is working to save lives, empower people, ensure quality care for all and energize science to find the cures.

**THE CARING PLACE**  
4425 S. Jones Blvd. Suite 1, Las Vegas, NV 89103  
702-871-7333  
<http://thecaringplacenv.org/TheCaringPlace/Welcome.html>  
The Caring Place is a nonprofit organization dedicated to easing the journey of those touched by cancer by providing no-cost programs and services to support, educate, and empower those who have or have had cancer.

**UNIVERSITY MEDICAL CENTER – TEACHING HOSPITAL PROGRAM**  
1800 West Charleston Boulevard, Las Vegas, NV 89102-2386 702-383-2000 [www.umc-cares.org](http://www.umc-cares.org)

**UsTOO**  
5003 Fairview Avenue Downers Grove, IL 60515 Toll Free – 800-808-7866 [www.ustoo.org](http://www.ustoo.org) or [www.ustoo.com](http://www.ustoo.com)  
Northern Nevada  
P.O. Box 19538 Reno, NV 89511 775-355-7311  
UsTOO is a grass roots organization started in 1990 by prostate cancer survivors to serve prostate cancer survivors, their spouses/partners and families. They are a 501(c) (3) not-for-profit charitable organization dedicated to communicating timely and reliable information enabling informed choices regarding detection and treatment of prostate cancer. Ultimately, UsTOO strives to enhance the quality of life for all those affected by prostate cancer.

**WASHOE COUNTY HEALTH DEPARTMENT**  
350 Center St., Reno, NV 89520 775-328-3724

**WIZDOM THRIFT STORE**  
630 Gentry Way, Reno, NV 89502 775-829-4482  
[www.wizdom.org](http://www.wizdom.org)  
Provides services for disabled cancer patients in northern Nevada with assistance such as durable medical equipment, financial assistance, wigs and other items.

**WOMEN'S HEALTH CONNECTION – NEVADA STATE HEALTH DIVISION**

4150 Technology Way, Suite 100, Carson City, NV 89706 775-684-4123 or Access to Healthcare Network 877-385-2345  
The Women's Health Connection is a breast and cervical cancer early detection program available to eligible Nevada women at no cost. The program is made possible by funding from the CDC. Women age 40 and above are eligible for annual pelvic exams and pap smears, clinical breast exams, and some diagnostic services. Women age 50 and above are eligible for an annual screening mammogram. Women age 40 and above who do not have Medicaid or Medicare Part B, or are not a member of an HMO, or are underinsured or uninsured, and meet the income guidelines are eligible.

# What You Can Do To Prevent Cancer

---

To accomplish the goals of the Nevada Cancer Plan, every member in the community needs to be involved.

## *If you are a Nevada Resident...You can reduce your cancer risk by:*

- Receiving regular medical care
- Avoiding all tobacco products
- Reducing your exposure to second-hand smoke
- Limiting alcohol use
- Avoiding excessive exposure to ultraviolet rays from the sun and tanning beds
- Eating a diet rich in fruits and vegetables
- Maintaining a healthy weight
- Being physically active
- Becoming an advocate for smoke-free environments

## *If you represent one of the following organizations, you can help reduce the risk of cancer in Nevada by:*

### *Employer in Nevada*

- Establish a smoke-free work place policy
- Provide healthy foods in vending machines and cafeterias
- Encourage employees to increase physical activity
- Collaborate with hospitals to host screening events
- Provide health insurance coverage

### *Hospital*

- Assure that your cancer cases are reported in a timely manner
- Provide meeting space for cancer support groups
- Collaborate to sponsor community screening and education programs

### *Physician, Nurse, Social Worker, or Other Health Care Provider*

- Make sure patients get appropriate information on screening tests
- Refer patients to smoking cessation classes and nutrition programs
- Be sure your cancer cases are reported in a timely manner
- Find out how to enroll patients in clinical trials
- Make earlier referrals to hospice for end of life care
- Encourage participation in cancer clinical trials

### *Faith Based Organization*

- Provide cancer prevention information to members
- Collaborate with other community-based groups
- Learn how to provide healthy potlucks and meeting meals
- Open your building for walking clubs
- Encourage members to get cancer screening tests on time

#### ***Public Health Department***

- Provide cancer awareness information and data to citizens and groups
- Collaborate with community-based coalitions
- Work with physicians and other health care providers to promote screening programs and case management
- Provide space for community survivor support group meetings
- Assess community needs and implement policy and environmental changes to reduce cancer risks
- Assure access to care for uninsured and underinsured
- Encourage participation in cancer clinical trials

#### ***Professional Health Organization***

- 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

#### ***School or University***

- Include cancer prevention messages in health classes
- Provide healthy foods in vending machines and cafeterias
- Increase physical education requirements
- Make your entire campus a smoke-free environment

## REFERENCES

---

- American Cancer Society  
American Cancer Society Breast Cancer Facts and Figures 2009-2010  
American Cancer Society Facts & Figures 2011  
American Lung Association  
American Urological Association  
Behavioral Risk Factor Surveillance System (BRFSS)  
Cancer Facts & Figures 2008, Special Section  
Cancer Survivors, United States, 2007 MMWR 2011  
Centers for Disease Control and Prevention  
Centers for Disease Control and Prevention, The Obesity Epidemic, July 2011  
Centers for Medicare and Medicaid Services  
Guadagnoli, Ward P. Patient Participation in Decision-Making. Department of Health Care Policy, Harvard Med. School  
HealthCare.gov  
Healthy People 2020  
Healthy People Nevada, Moving from 2010 to 2020  
Health and Human Services, Office of Women's Health  
Kaiser Family Foundation, State Health Facts  
Morbidity and Mortality Weekly Report  
National Cancer Institute at the National Institutes of Health, 2011  
National Center for Chronic Disease Prevention and Health Promotion, Division of Cancer Prevention and Control, 2011  
National Institute of Health Office of Disease Prevention  
National Institute for Occupational Safety and Health  
National Vital Statistics System  
Nevada Cancer Institute  
Nevada Cancer Registry  
Nevada Office of Rural Health, University of Nevada School of Medicine  
Nevada Rural and Frontier Health Data Book, 2011  
Nevada State Health Division, Bureau of Child, Family, & Community Wellness  
Nevada State Health Division, Office of Health Statistics & Surveillance  
Nevada Vital Statistics Records  
Surveillance, Epidemiology and End Results  
State of Nevada Cancer Control Plan, 2005  
Tobacco Free Kids  
United States Census Bureau  
United States Department of Health & Human Services  
United States Prevention Services Task Force  
Washington State Cancer Control Plan 2009-2013

## ACRONYMS

---

ACA	Patient Protection and Affordable Care Act
ACOS	American College of Surgeons
ACS	American Cancer Society
AUA	American Urological Association
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System
BSE	Breast Self-Exam
BCFCW	Bureau of Child, Family, & Community Wellness
CIS	Cancer Information Service
CAM	Complementary and Alternative Medicine
CCOP	Community Clinical Oncology Program
CDC	Centers for Disease Control and Prevention
CEU	Continuing Education Units
CME	Continuing Medical Education
COG	Clinical Oncology Group
DRE	Digital Rectal Exam
FIT	Fecal Immunochemical Test
FOBT	Fecal Occult Blood test
HP	Healthy People
NCC	Nevada Cancer Coalition
NCDB	National Cancer Data Base
NCI	National Cancer Institute
NHANES	National Health and Nutrition Examination Survey
NSHD	Nevada State Health Division
NTPC	Nevada Tobacco Prevention Coalition
NVCI	Nevada Cancer Institute
PCP	Primary Care Provider
PDQ	Physician Data Query
PSA	Prostate-Specific Antigen
SEER	Surveillance Epidemiology and End Results
SPF	Sun Protection Factor
USPSTF	United States Preventive Services Task Force
UV	Ultraviolet

# Dedication

---

The preceding pages are replete with diverse numbers, statistics, rankings, and graphs that reflect the state of cancer in the State of Nevada. While such data are required, of all comprehensive cancer control plans by the CDC and are necessary to show where the Coalition's past Plan has been effective and where it needs to go in the new Plan, cancer strikes people not numbers. Behind every number that has been cited herein, and what comprises the face of cancer in Nevada are people. It may be someone from our family, a friend, a neighbor, or that child playing in the park. Importantly, every incidence of cancer is unique because each of us is unique.

Our 2011-2015 Plan was initiated by both the Program Coordinator of the Comprehensive Cancer Control Program of the Nevada State Health Division and the Coalition's Chairman. Together they assembled the Plan Advisory Committee to assist and execute the Plan's development. The intensive process started evolving during the fall of 2010; but early in 2011, our Program Coordinator had to stop and deal with the personal reality of her own breast cancer. That cancer was not just another incidence number from the Plan; it was her own, unique, health challenge. Sadly, it was not her first but third battle with cancer.

As soon as physically able, she returned to her Health Division desk and to the looming challenge of the Plan's completion. At the April 2011 Cancer Awareness Day at the Nevada State Legislature, she spoke of her own cancer experiences and provided hope to several in the audience who were dealing with their cancers. However, cancer was not through with her. Shortly thereafter, a fourth cancer was discovered -- pancreatic cancer -- and ultimately that incidence of cancer won the nearly twenty-year cancer war that she had been fighting and had been winning.

You may have seen her name listed among the Advisory Committee in the front of this publication, *Denise Dunning*. You see Denise's picture on this page. Denise was our close friend as well as our professional collaborator. Denise gave twenty-five years of her professional life working for the people of Nevada, Employers' Insurance Company of Nevada, Department of Public Safety, Department of Administration, and Department of Health and Human Services Health Division. Upon learning of her fourth encounter with cancer, Denise commented to the Coalition Chairman, "*God gave me a lemon for a body but I am going to make lemonade out of it.*" And our Denise did just that up to her last moment.

*This Plan is dedicated to Denise and we will continue her fight to control cancer in Nevada.*



*Denise Faye Dunning  
June 22, 1963 - September 11, 2011*

State of Nevada  
Comprehensive Cancer Plan  
2011 – 2015

Permission to copy, disseminate, or otherwise use information from this Plan is hereby granted.

Appropriate acknowledgement of the source is requested.

An electronic version of this Plan is available on the Internet at

[www.nevadacancercoalition.org](http://www.nevadacancercoalition.org)

Published by the Nevada State Health Division, 2011

This publication was funded by the Nevada State Health Division  
through Cooperative Agreement Number 5U58DP000804-05,  
from the Centers for Disease Control and Prevention.

The contents are solely the responsibility of the authors  
and do not necessarily reflect the views or imply an endorsement of the publication  
by the National Cancer Control Program, Centers for Disease Control and Prevention.